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Teknik Destek ve Hizmet Kalitesi

1983'ten beri.

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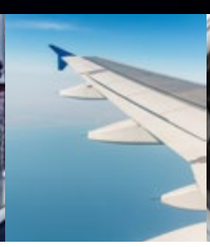
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Ayrıca bilişim teknolojilerine yaptığı yatırımlara ek olarak sektörünü veri sağlamada da başarılı bir şekilde temsil ederek hizmet vermeye devam etmekteyiz.










Ürün katagorilerimiz

- HSS Kesici Takımlar
- Karbür Kesici Takımlar
- Takim Tutucular
- İş Parçası Bağlama
- Ölçü Aletleri
- Kalıp Elemanları

1983 yılında Topkapı'da kesici takımlar üzerine kurulmuş ve 1998 yılına kadar bu sektör ve ürün gruplarında müşterilerine hizmet vermeye devam etmiştir.
1998 yılında İkitelli O.S.B. 'ne taşınan firmamız, Makine ve Kalıp sektörü başta olmak ve müşterilerinden gelen talep üzerine, Plastik, Sac Kalıp ve Endüstriyel Kimyasallar ürün gruplarını da bünyesine katmıştır.
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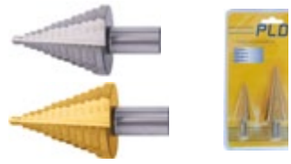

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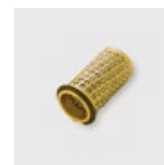

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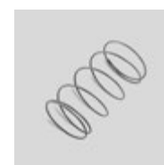

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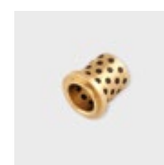

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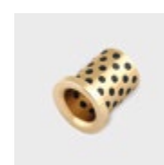

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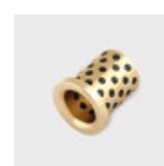

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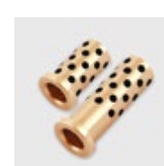

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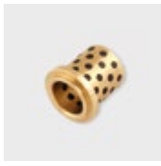

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4. KALIP ELEMANLARI


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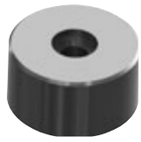
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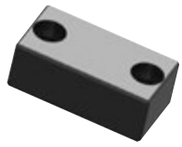
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4. KALIP ELEMANLARI


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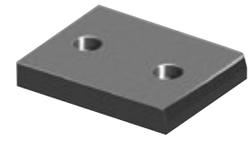

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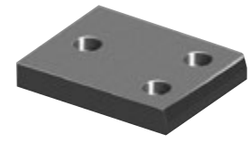

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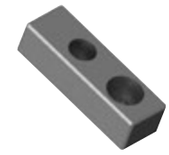

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5. İŞ PARÇASI BAĞLAMA


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5. İŞ PARÇASI BAĞLAMA


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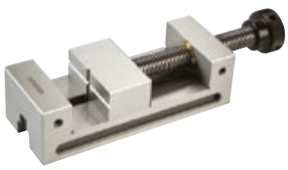
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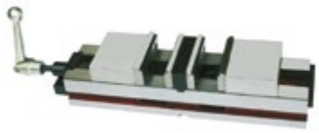
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5. İŞ PARÇASI BAĞLAMA


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6. ÖLÇÜ ALETLERİ


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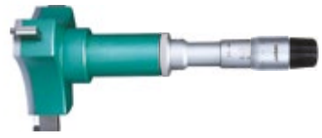

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6. ÖLÇÜ ALETLERİ



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7. MAKİNE VE AKSESUARLARI


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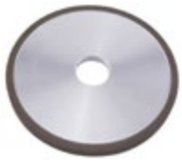

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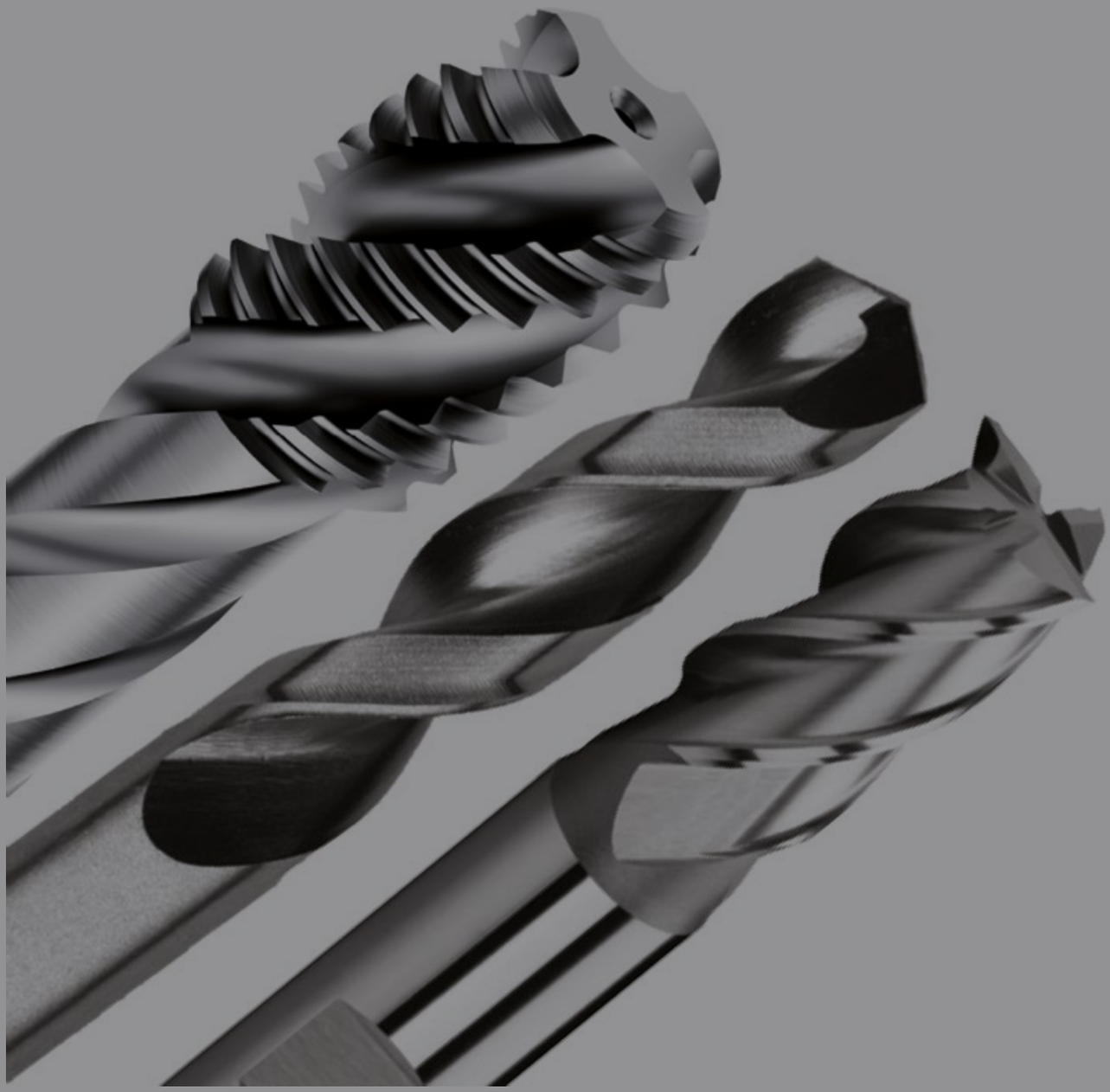

532

1.
HSS KESİCİ TAKIMLAR

Sy. 2/73

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
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MATKAP UÇLARI

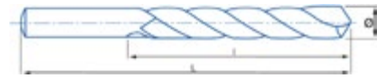
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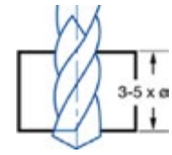
TAŞLANMIŞ MATKAP UCU

HSS

DIN 338N







Ø mm h8	L (mm)	l (mm)		Sip. No.
0,30	19	3	10	00973
0,40	20	5	10	00974
0,50	22	6	10	00975
0,60	24	7	10	00976
0,70	28	9	10	00977
0,80	30	10	10	00978
0,90	32	11	10	00979
1,00	34	12	10	00980
1,10	36	14	10	00981
1,20	38	16	10	00982
1,30	38	16	10	00983
1,40	40	18	10	00984
1,50	40	18	10	00985
1,60	43	20	10	00986
1,70	43	20	10	00987
1,80	46	22	10	00988
1,90	46	22	10	00989
2,00	49	24	10	00990
2,10	49	24	10	00991
2,20	53	27	10	00992
2,30	53	27	10	00993
2,40	57	30	10	00994
2,50	57	30	10	00995
2,60	57	30	10	00996
2,70	61	33	10	00997
2,80	61	33	10	00998
2,90	61	33	10	00999
3,00	61	33	10	01000
3,10	65	36	10	01001
3,20	65	36	10	01002
3,30	65	36	10	01003
3,40	70	39	10	01004
3,50	70	39	10	01005
3,60	70	39	10	01006
3,70	70	39	10	01007
3,80	75	43	10	01008
3,90	75	43	10	01009
4,00	75	43	10	01010
4,10	75	43	10	01011
4,20	75	43	10	01012
4,30	80	47	10	01013
4,40	80	47	10	01014
4,50	80	47	10	01015
4,60	80	47	10	01016
4,70	80	47	10	01017
4,80	86	52	10	01018
4,90	86	52	10	01019
5,00	86	52	10	01020
5,10	86	52	10	01021
5,20	86	52	10	01022
5,30	86	52	10	01023
5,40	93	57	10	01024
5,50	93	57	10	01025
5,60	93	57	10	01026
5,70	93	57	10	01027
5,80	93	57	10	01028
5,90	93	57	10	01029
6,00	93	57	10	01030
6,10	101	63	10	01031

Ø mm h8	L (mm)	l (mm)		Sip. No.
6,20	101	63	10	01032
6,30	101	63	10	01033
6,40	101	63	10	01034
6,50	101	63	10	01035
6,60	101	63	10	01036
6,70	101	63	10	01037
6,80	109	69	10	01038
6,90	109	69	10	01039
7,00	109	69	10	01040
7,10	109	69	10	01041
7,20	109	69	10	01042
7,30	109	69	10	01043
7,40	109	69	10	01044
7,50	109	69	10	01045
7,60	117	75	10	01046
7,70	117	75	10	01047
7,80	117	75	10	01048
7,90	117	75	10	01049
8,00	117	75	10	01050
8,10	117	75	10	01051
8,20	117	75	10	01052
8,30	117	75	10	01053
8,40	117	75	10	01054
8,50	117	75	10	01055
8,60	125	81	10	01056
8,70	125	81	10	01057
8,80	125	81	10	01058
8,90	125	81	10	01059
9,00	125	81	10	01060
9,10	125	81	10	01061
9,20	125	81	10	01062
9,30	125	81	10	01063
9,40	125	81	10	01064
9,50	125	81	10	01065
9,60	133	87	10	01066
9,70	133	87	10	01067
9,80	133	87	10	01068
9,90	133	87	10	01069
10,00	133	87	10	01070
10,10	133	87	5	01071
10,20	133	87	5	01072
10,30	133	87	5	01073
10,40	133	87	5	01074
10,50	133	87	5	01075
10,60	133	87	5	01076
10,70	142	94	5	01077
10,80	142	94	5	01078
10,90	142	94	5	01079
11,00	142	94	5	01080
11,10	142	94	5	01081
11,20	142	94	5	01082
11,30	142	94	5	01083
11,40	142	94	5	01084
11,50	142	94	5	01085
11,60	142	94	5	01086
11,70	142	94	5	01087
11,80	142	94	5	01088
11,90	151	101	5	01089
12,00	151	101	5	01090

Ø mm h8	L (mm)	l (mm)		Sip. No.
12,10	151	101	5	01091
12,20	151	101	5	01092
12,30	151	101	5	01093
12,40	151	101	5	01094
12,50	151	101	5	01095
12,60	151	101	5	01096
12,70	151	101	5	01097
12,80	151	101	5	01098
12,90	151	101	5	01099
13,00	151	101	5	01100
13,10	151	101	1	01101
13,20	151	101	1	01102
13,30	160	108	1	01103
13,40	160	108	1	01104
13,50	160	108	1	01105
13,60	160	108	1	01106
13,70	160	108	1	01107
13,80	160	108	1	01108
13,90	160	108	1	01109
14,00	160	108	1	01110
14,10	169	114	1	01111
14,20	169	114	1	01112
14,30	169	114	1	01113
14,40	169	114	1	01114
14,50	169	114	1	01115
14,60	169	114	1	01116
14,70	169	114	1	01117
14,80	169	114	1	01118
14,90	169	114	1	01119
15,00	169	114	1	01120
15,20	178	120	1	01121
15,25	178	120	1	01122
15,50	178	120	1	01123
15,60	178	120	1	01124
15,70	178	120	1	01125
15,75	178	120	1	01126
15,80	178	120	1	01127
15,90	178	120	1	01128
16,00	178	120	1	01129
16,20	184	125	1	01130
16,25	184	125	1	01131
16,50	184	125	1	01132
16,75	184	125	1	01133
16,80	184	125	1	01134
17,00	184	125	1	01135
17,25	191	130	1	01136
17,50	191	130	1	01137
17,75	191	130	1	01138
18,00	191	130	1	01139
18,25	198	135	1	01140
18,50	198	135	1	01141
18,75	198	135	1	01142
19,00	198	135	1	01143
19,25	205	140	1	01144
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19,75	205	140	1	01146
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MATKAP UÇLARI

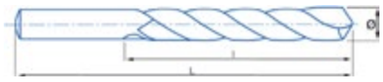
IZAR CUTTING TOOLS İSPANYA

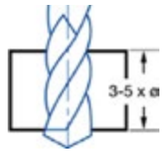
MATKAP UCU - ALTIN SERİ

HSSE Co5 | 135°

DIN 338N







Ø mm h8	L (mm)	l (mm)		Sip. No.
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0,60	27	7	10	01149
0,70	28	9	10	01150
0,80	30	10	10	01151
0,90	32	11	10	01152
1,00	34	12	10	01153
1,10	36	14	10	01154
1,20	38	16	10	01155
1,30	38	16	10	01156
1,40	40	18	10	01157
1,50	40	18	10	01158
1,60	43	20	10	01159
1,70	43	20	10	01160
1,80	46	22	10	01161
1,90	46	22	10	01162
2,00	49	24	10	01163
2,10	49	24	10	01164
2,20	53	27	10	01165
2,30	53	27	10	01166
2,40	57	30	10	01167
2,50	57	30	10	01168
2,60	57	30	10	01169
2,70	61	33	10	01170
2,80	61	33	10	01171
2,90	61	33	10	01172
3,00	61	33	10	01173
3,10	65	36	10	01174
3,20	65	36	10	01175
3,30	65	36	10	01176
3,40	70	39	10	01177
3,50	70	39	10	01178
3,60	70	39	10	01179
3,70	70	39	10	01180
3,80	75	43	10	01181
3,90	75	43	10	01182
4,00	75	43	10	01183
4,10	75	43	10	01184
4,20	75	43	10	01185
4,30	80	47	10	01186
4,40	80	47	10	01187
4,50	80	47	10	01188
4,60	80	47	10	01189
4,70	80	47	10	01190
4,80	86	52	10	01191
4,90	86	52	10	01192
5,00	86	52	10	01193
5,10	86	52	10	01194
5,20	86	52	10	01195
5,30	86	52	10	01196

Ø mm h8	L (mm)	l (mm)		Sip. No.
5,40	93	57	10	01197
5,50	93	57	10	01198
5,60	93	57	10	01199
5,70	93	57	10	01200
5,80	93	57	10	01201
5,90	93	57	10	01202
6,00	93	57	10	01203
6,10	101	63	10	01204
6,20	101	63	10	01205
6,30	101	63	10	01206
6,40	101	63	10	01207
6,50	101	63	10	01208
6,60	101	63	10	01209
6,70	101	63	10	01210
6,80	109	69	10	01211
6,90	109	69	10	01212
7,00	109	69	10	01213
7,10	109	69	10	01214
7,20	109	69	10	01215
7,30	109	69	10	01216
7,40	109	69	10	01217
7,50	109	69	10	01218
7,60	117	75	10	01219
7,70	117	75	10	01220
7,80	117	75	10	01221
7,90	117	75	10	01222
8,00	117	75	10	01223
8,10	117	75	10	01224
8,20	117	75	10	01225
8,30	117	75	10	01226
8,40	117	75	10	01227
8,50	117	75	10	01228
8,60	125	81	10	01229
8,70	125	81	10	01230
8,80	125	81	10	01231
8,90	125	81	10	01232
9,00	125	81	10	01233
9,10	125	81	10	01234
9,20	125	81	10	01235
9,30	125	81	10	01236
9,40	125	81	10	01237
9,50	125	81	10	01238
9,60	133	87	10	01239
9,70	133	87	10	01240
9,80	133	87	10	01241
9,90	133	87	10	01242
10,00	133	87	10	01243
10,10	133	87	5	01244
10,20	133	87	5	01245

Ø mm h8	L (mm)	l (mm)		Sip. No.
10,30	133	87	5	01246
10,40	133	87	5	01247
10,50	133	87	5	01248
10,60	133	87	5	01249
10,70	142	94	5	01250
10,80	142	94	5	01251
10,90	142	94	5	01252
11,00	142	94	5	01253
11,10	142	94	5	01254
11,20	142	94	5	01255
11,30	142	94	5	01256
11,40	142	94	5	01257
11,50	142	94	5	01258
11,60	142	94	5	01259
11,70	142	94	5	01260
11,80	142	94	5	01261
11,90	151	101	5	01262
12,00	151	101	5	01263
12,10	151	101	5	01264
12,20	151	101	5	01265
12,30	151	101	5	01266
12,40	151	101	5	01267
12,50	151	101	5	01268
12,60	151	101	5	01269
12,70	151	101	5	01270
12,80	151	101	5	01271
12,90	151	101	5	01272
13,00	151	101	5	01273
13,25	160	108	1	01274
13,50	160	108	1	01275
13,75	160	108	1	01276
14,00	160	108	1	01277
14,25	169	114	1	01278
14,50	169	114	1	01279
14,75	169	114	1	01280
15,00	169	114	1	01281
15,25	178	120	1	01282
15,50	178	120	1	01283
15,75	178	120	1	01284
16,00	178	120	1	01285
16,50	184	125	1	01286
17,00	184	125	1	01287
17,50	191	130	1	01288
18,00	191	130	1	01289
18,50	198	135	1	01290
19,00	198	135	1	01291
19,50	205	140	1	01292
20,00	205	140	1	01293

MATKAP UÇLARI

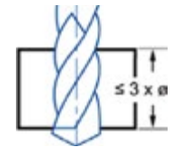
EKSTRA KISA MATKAP UCU (ALTIN SERİ)

HSSE Co5 | 135° | ISPANYA

DIN 1897







Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
1,00	26	6	10	01442
1,50	32	9	10	01443
1,60	34	10	10	01444
1,80	36	11	10	01445
2,00	38	12	10	01446
2,10	38	12	10	01447
2,20	40	13	10	01448
2,30	40	13	10	01449
2,40	43	14	10	01450
2,50	43	14	10	01451
2,60	43	14	10	01452
2,70	46	16	10	01453
2,80	46	16	10	01454
2,90	46	16	10	01455
3,00	46	16	10	01456
3,10	49	18	10	01457
3,20	49	18	10	01458
3,30	49	18	10	01459
3,40	52	20	10	01460
3,50	52	20	10	01461
3,60	52	20	10	01462
3,70	52	20	10	01463
3,80	55	22	10	01464
3,90	55	22	10	01465
4,00	55	22	10	01466
4,10	55	22	10	01467
4,20	55	22	10	01468
4,30	58	24	10	01469

Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
4,40	58	24	10	01470
4,50	58	24	10	01471
4,60	58	24	10	01472
4,70	58	24	10	01473
4,80	62	26	10	01474
4,90	62	26	10	01475
5,00	62	26	10	01476
5,10	62	26	10	01477
5,20	62	26	10	01478
5,30	62	26	10	01479
5,40	66	28	10	01480
5,50	66	28	10	01481
5,60	66	28	10	01482
5,70	66	28	10	01483
5,80	66	28	10	01484
5,90	66	28	10	01485
6,00	66	28	10	01486
6,10	70	31	10	01487
6,20	70	31	10	01488
6,30	70	31	10	01489
6,40	70	31	10	01490
6,50	70	31	10	01491
6,60	70	31	10	01492
6,70	70	31	10	01493
6,80	74	34	10	01494
7,00	74	34	10	01495
7,50	74	34	10	01496
7,80	79	37	10	01497

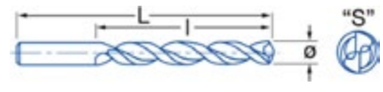
Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
8,00	79	37	10	01498
8,50	79	37	10	01499
9,00	84	40	10	01500
9,50	84	40	10	01501
10,00	89	43	10	01502
10,20	89	43	1	01503
10,50	89	43	1	01504
11,00	95	47	1	01505
11,50	95	47	1	01506
12,00	102	51	1	01507
12,50	102	51	1	01508
12,70	102	51	1	01509
13,00	102	51	1	01510
13,50	107	54	1	01511
14,00	107	54	1	01512
14,50	111	56	1	01513
15,00	111	56	1	01514
15,50	115	58	1	01515
16,00	115	58	1	01516
16,50	119	60	1	01517
17,00	119	60	1	01518
17,50	123	62	1	01519
18,00	123	62	1	01520
18,50	127	64	1	01521
19,00	127	64	1	01522
19,50	131	66	1	01523
20,00	131	66	1	01524

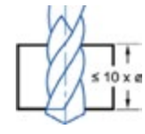
MATKAP UCU (“S” FORMU)

HSSE Co5 | Type TS | 135° | “S” | TIALN

DIN 338







Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
2,00	49	24	10	01368
2,10	49	24	10	01369
2,30	53	27	10	01370
2,50	57	30	10	01371
2,70	61	33	10	01372
3,00	61	33	10	01373
3,10	65	36	10	01374
3,20	65	36	10	01375
3,30	65	36	10	01376
3,50	70	39	10	01377
3,60	70	39	10	01378
3,70	70	39	10	01379
3,90	75	43	10	01380
4,00	75	43	10	01381
4,10	75	43	10	01382
4,20	75	43	10	01383
4,30	80	47	10	01384

Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
4,40	80	47	10	01385
4,50	80	47	10	01386
4,70	80	47	10	01387
4,80	86	52	10	01388
5,00	86	52	10	01389
5,10	86	52	10	01390
5,20	86	52	10	01391
5,30	86	52	10	01392
5,50	93	57	10	01393
5,60	93	57	10	01394
5,80	93	57	10	01395
5,90	93	57	10	01396
6,00	93	57	10	01397
6,20	101	63	5	01398
6,50	101	63	5	01399
6,80	109	69	5	01400
7,00	109	69	5	01401

Ø mm h8	L (mm)	l (mm)		Fiyat Kodu
7,20	109	69	5	01402
7,50	109	69	5	01403
8,00	117	75	5	01404
8,20	117	75	5	01405
8,50	117	75	5	01406
8,80	125	81	5	01407
9,00	125	81	5	01408
9,50	125	81	5	01409
9,80	133	87	5	01410
10,00	133	87	5	01411
10,50	133	87	1	01412
11,00	142	94	1	01413
11,50	142	94	1	01414
12,00	151	101	1	01415
13,00	151	101	1	01416

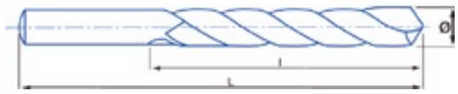
MATKAP UÇLARI

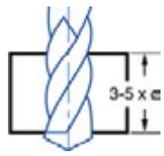
MULTI INOX MATKAP UCU (PASLANMAZ İÇİN)

HSSE Co5 | DIN 338 | Type W | 135° | 40°

DIN 338







Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	49	24	10	01294
2,50	57	30	10	01295
3,00	61	33	10	01296
3,20	65	36	10	01297
3,30	65	36	10	01298
3,50	70	39	10	01299
4,00	75	43	10	01300
4,20	75	43	10	01301
4,50	80	47	10	01302
5,00	86	52	10	01303

Ø mm h8	L (mm)	l (mm)		Sip. No.
5,20	86	52	10	01304
5,50	93	57	10	01305
6,00	93	57	10	01306
6,50	101	63	5	01307
6,80	109	69	5	01308
7,00	109	69	5	01309
7,50	109	69	5	01310
8,00	117	75	5	01311
8,50	117	75	5	01312
9,00	125	81	5	01313

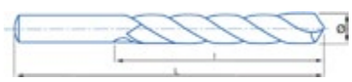
Ø mm h8	L (mm)	l (mm)		Sip. No.
9,50	125	81	5	01314
10,00	133	87	5	01315
10,20	133	87	1	01316
10,50	133	87	1	01317
11,00	142	94	1	01318
11,50	142	94	1	01319
12,00	151	101	1	01320
12,50	151	101	1	01321
13,00	151	101	1	01322

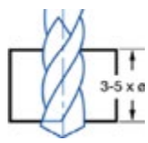
TAŞLANMIŞ MATKAP UCU (ALUMİNYUM İÇİN)

Type W | 135° | HSS

DIN 338







Ø mm h8	L (mm)	l (mm)		Sip. No.
1,00	34	12	10	01323
1,50	40	18	10	01324
2,00	49	24	10	01325
2,50	57	30	10	01326
2,80	61	33	10	01327
3,00	61	33	10	01328
3,10	65	36	10	01329
3,20	65	36	10	01330
3,30	65	36	10	01331
3,50	70	39	10	01332
3,60	70	39	10	01333
3,70	70	39	10	01334
3,80	75	43	10	01335
4,00	75	43	10	01336
4,10	75	43	10	01337

Ø mm h8	L (mm)	l (mm)		Sip. No.
4,20	75	43	10	01338
4,30	80	47	10	01339
4,50	80	47	10	01340
4,60	80	47	10	01341
4,80	86	52	10	01342
5,00	86	52	10	01343
5,10	86	52	10	01344
5,20	86	52	10	01345
5,50	93	57	10	01346
5,70	93	57	10	01347
5,90	93	57	10	01348
6,00	93	57	10	01349
6,50	101	63	10	01350
6,80	109	69	10	01351
7,00	109	69	10	01352

Ø mm h8	L (mm)	l (mm)		Sip. No.
7,40	109	69	10	01353
7,50	109	69	10	01354
8,00	117	75	10	01355
8,50	117	75	10	01356
9,00	125	81	10	01357
9,10	125	81	10	01358
9,50	125	81	10	01359
10,00	133	87	10	01360
10,50	133	87	5	01361
11,00	142	94	5	01362
11,10	142	94	5	01363
11,50	142	94	5	01364
12,00	151	101	5	01365
12,50	151	101	5	01366
13,00	151	101	5	01367

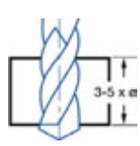
TAŞLANMIŞ MATKAP UCU (PİRİNÇ İÇİN)

HSS

DIN 338H







Ø mm h8	L (mm)	l (mm)		Sip. No.
1,00	34	12	10	01417
1,50	40	18	10	01418
2,00	49	24	10	01419
2,50	57	30	10	01420
3,00	61	33	10	01421
3,50	70	39	10	01422
4,00	75	43	10	01423
4,50	80	47	10	01424
5,00	86	52	10	01425

Ø mm h8	L (mm)	l (mm)		Sip. No.
5,50	93	57	10	01426
6,00	93	57	10	01427
6,50	101	63	10	01428
7,00	109	69	10	01429
7,50	109	69	10	01430
8,00	117	75	10	01431
8,50	117	75	10	01432
9,00	125	81	10	01433
9,50	125	81	10	01434

Ø mm h8	L (mm)	l (mm)		Sip. No.
10,00	133	87	10	01435
10,50	133	87	5	01436
11,00	142	94	5	01437
11,50	142	94	5	01438
12,00	151	101	5	01439
12,50	151	101	5	01440
13,00	151	101	5	01441

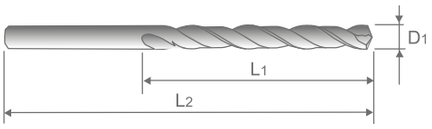
MATKAP UÇLARI

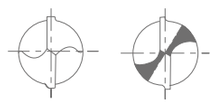
PRO-X GÜNEY KORE

HSS-E SİLİNDİRİK SAPLI, KAPLAMALI MATKAP UCU

DIN 340 | HSS Co8 | N 33° | h8 | 135°







1.6 mm altında 1.6 mm ve üzeri

Kesme Geometrisi: Sağ yönlü helis

Uç Açısı : 135° 1.6 mm altında Normal uç, 1.6 mm ve üzerinde Bölünmüş uç

Yüzey Uygulaması: Parlak gövde , sadece çalışan bölgenin TiN kaplaması

Kullanım Yerleri : paslanmaz çelikler , titanyum alaşımları veta inkonel gibi zor işlenen malzemelerde.

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Matkap Çapı D1	Kesme Kenarı Boyu L1	Tam Boy L2
PMA-2010	1,0	12	34
PMA-2011	1,1	14	36
PMA-2012	1,2	16	38
PMA-2013	1,3	16	38
PMA-2014	1,4	18	40
PMA-2015	1,5	18	40
PMA-2016	1,6	20	43
PMA-2017	1,7	20	43
PMA-2018	1,8	22	46
PMA-2019	1,9	22	46
PMA-2020	2,0	24	49
PMA-2021	2,1	24	49
PMA-2022	2,2	27	53
PMA-2023	2,3	27	53
PMA-2024	2,4	30	57
PMA-2025	2,5	30	57
PMA-2026	2,6	30	57
PMA-2027	2,7	33	61
PMA-2028	2,8	33	61
PMA-2029	2,9	33	61
PMA-2030	3,0	33	61
PMA-2031	3,1	36	65
PMA-2032	3,2	36	65
PMA-2033	3,3	36	65
PMA-2034	3,4	39	70
PMA-2035	3,5	39	70
PMA-2036	3,6	39	70
PMA-2037	3,7	39	70
PMA-2038	3,8	43	75
PMA-2039	3,9	43	75
PMA-2040	4,0	43	75
PMA-2041	4,1	43	75
PMA-2042	4,2	43	75
PMA-2043	4,3	47	80
PMA-2044	4,4	47	80
PMA-2045	4,5	47	80
PMA-2046	4,6	47	80
PMA-2047	4,7	47	80
PMA-2048	4,8	52	86
PMA-2049	4,9	52	86
PMA-2050	5,0	52	86

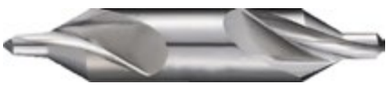
Sip. No.	Matkap Çapı D1	Kesme Kenarı Boyu L1	Tam Boy L2
PMA-2051	5,1	52	86
PMA-2052	5,2	52	86
PMA-2053	5,3	52	86
PMA-2054	5,4	57	93
PMA-2055	5,5	57	93
PMA-2056	5,6	57	93
PMA-2057	5,7	57	93
PMA-2058	5,8	57	93
PMA-2059	5,9	57	93
PMA-2060	6,0	57	93
PMA-2061	6,1	63	101
PMA-2062	6,2	63	101
PMA-2063	6,3	63	101
PMA-2064	6,4	63	101
PMA-2065	6,5	63	101
PMA-2066	6,6	63	101
PMA-2067	6,7	63	101
PMA-2068	6,8	69	109
PMA-2069	6,9	69	109
PMA-2070	7,0	69	109
PMA-2071	7,1	69	109
PMA-2072	7,2	69	109
PMA-2073	7,3	69	109
PMA-2074	7,4	69	109
PMA-2075	7,5	69	109
PMA-2076	7,6	75	117
PMA-2077	7,7	75	117
PMA-2078	7,8	75	117
PMA-2079	7,9	75	117
PMA-2080	8,0	75	117
PMA-2081	8,1	75	117
PMA-2082	8,2	75	117
PMA-2083	8,3	75	117
PMA-2084	8,4	75	117
PMA-2085	8,5	75	117
PMA-2086	8,6	81	125
PMA-2087	8,7	81	125
PMA-2088	8,8	81	125
PMA-2089	8,9	81	125
PMA-2090	9,0	81	125
PMA-2091	9,1	81	125

Sip. No.	Matkap Çapı D1	Kesme Kenarı Boyu L1	Tam Boy L2
PMA-2092	9,2	81	125
PMA-2093	9,3	81	125
PMA-2094	9,4	81	125
PMA-2095	9,5	81	125
PMA-2096	9,6	87	133
PMA-2097	9,7	87	133
PMA-2098	9,8	87	133
PMA-2099	9,9	87	133
PMA-2100	10,0	87	133
PMA-2101	10,1	87	133
PMA-2102	10,2	87	133
PMA-2103	10,3	87	133
PMA-2104	10,4	87	133
PMA-2105	10,5	87	133
PMA-2106	10,6	87	133
PMA-2107	10,7	94	142
PMA-2108	10,8	94	142
PMA-2109	10,9	94	142
PMA-2110	11,0	94	142
PMA-2111	11,1	94	142
PMA-2112	11,2	94	142
PMA-2113	11,3	94	142
PMA-2114	11,4	94	142
PMA-2115	11,5	94	142
PMA-2116	11,6	94	142
PMA-2117	11,7	94	142
PMA-2118	11,8	94	142
PMA-2119	11,9	101	151
PMA-2120	12,0	101	151
PMA-2121	12,1	101	151
PMA-2122	12,2	101	151
PMA-2123	12,3	101	151
PMA-2124	12,4	101	151
PMA-2125	12,5	101	151
PMA-2126	12,6	101	151
PMA-2127	12,7	101	151
PMA-2128	12,8	101	151
PMA-2129	12,9	101	151
PMA-2130	13,0	101	151

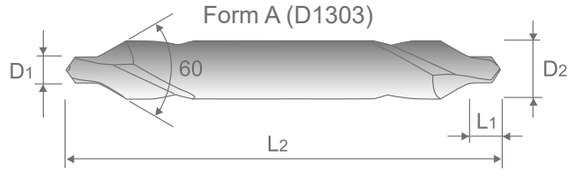
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎					○	○	○	○			

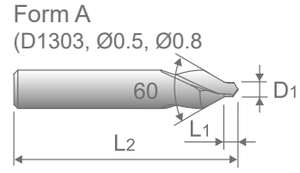
HSS, FORM A PUNTA MATKABI

DIN 333 | HSS | h8 | k12 | 120°



1 mm'nin altında tek taraflı olarak üretilir.





◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Matkap Çapı D1	Şaft Çapı D2	Kılavuz Boyu L1	Tam Boy L2
PMA-5010	1,0	3,15	1,3	31,5
PMA-5012	1,25	3,15	1,6	31,5
PMA-5016	1,6	4	2	35,5
PMA-5020	2,0	5	2,5	40
PMA-5025	2,5	6,3	3,1	45
PMA-5031	3,15	8	3,9	50

Sip. No.	Matkap Çapı D1	Şaft Çapı D2	Kılavuz Boyu L1	Tam Boy L2
PMA-5040	4,0	10	5	56
PMA-5050	5,0	12,5	6,3	63
PMA-5063	6,3	16	8	71
PMA-5080	8,0	20	10,1	80
PMA-5100	10,0	25	12,8	100

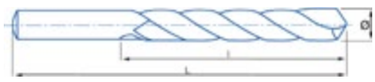
MATKAP UÇLARI

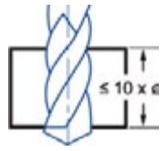
TAŞLANMIŞ UZUN MATKAP UCU (BUHAR MENEVİŞLİ)

HSS 118°

DIN 340







Ø mm h8	L (mm)	l (mm)		Sip. No.
0,50	32	12	10	01525
0,60	35	15	10	01526
0,70	42	21	10	01527
0,80	46	25	10	01528
0,90	51	29	10	01529
1,00	56	33	10	01530
1,10	60	37	10	01531
1,20	65	41	10	01532
1,30	65	41	10	01533
1,40	70	45	10	01534
1,50	70	45	10	01535
1,60	76	50	10	01536
1,70	76	50	10	01537
1,80	80	53	10	01538
1,90	80	53	10	01539
2,00	85	56	10	01540
2,10	85	56	10	01541
2,20	90	59	10	01542
2,30	90	59	10	01543
2,40	95	62	10	01544
2,50	95	62	10	01545
2,60	95	62	10	01546
2,70	100	66	10	01547
2,80	100	66	10	01548
2,90	100	66	10	01549
3,00	100	66	10	01550
3,10	106	69	10	01551
3,20	106	69	10	01552
3,30	106	69	10	01553
3,40	112	73	10	01554
3,50	112	73	10	01555
3,60	112	73	10	01556
3,70	112	73	10	01557
3,80	119	78	10	01558
3,90	119	78	10	01559
4,00	119	78	10	01560
4,10	119	78	10	01561
4,20	119	78	10	01562
4,30	126	82	10	01563
4,40	126	82	10	01564
4,50	126	82	10	01565
4,60	126	82	10	01566
4,70	126	82	10	01567
4,80	132	87	10	01568
4,90	132	87	10	01569
5,00	132	87	10	01570

Ø mm h8	L (mm)	l (mm)		Sip. No.
5,10	132	87	10	01571
5,20	132	87	10	01572
5,30	132	87	10	01573
5,40	139	91	10	01574
5,50	139	91	10	01575
5,60	139	91	10	01576
5,70	139	91	10	01577
5,80	139	91	10	01578
5,90	139	91	10	01579
6,00	139	91	10	01580
6,10	148	97	10	01581
6,20	148	97	10	01582
6,30	148	97	10	01583
6,40	148	97	10	01584
6,50	148	97	10	01585
6,60	148	97	10	01586
6,70	148	97	10	01587
6,80	156	102	10	01588
6,90	156	102	10	01589
7,00	156	102	10	01590
7,10	156	102	10	01591
7,20	156	102	10	01592
7,30	156	102	10	01593
7,40	156	102	10	01594
7,50	156	102	10	01595
7,60	165	109	10	01596
7,70	165	109	10	01597
7,80	165	109	10	01598
7,90	165	109	10	01599
8,00	165	109	10	01600
8,10	165	109	5	01601
8,20	165	109	5	01602
8,30	165	109	5	01603
8,40	165	109	5	01604
8,50	165	109	5	01605
8,60	175	115	5	01606
8,70	175	115	5	01607
8,80	175	115	5	01608
8,90	175	115	5	01609
9,00	175	115	5	01610
9,10	175	115	5	01611
9,20	175	115	5	01612
9,30	175	115	5	01613
9,40	175	115	5	01614
9,50	175	115	5	01615
9,60	184	121	5	01616

Ø mm h8	L (mm)	l (mm)		Sip. No.
9,70	184	121	5	01617
9,80	184	121	5	01618
9,90	184	121	5	01619
10,00	184	121	5	01620
10,20	184	121	1	01621
10,50	184	121	1	01622
10,80	195	128	1	01623
11,00	195	128	1	01624
11,10	195	128	1	01625
11,50	195	128	1	01626
11,80	195	128	1	01627
11,90	205	134	1	01628
12,00	205	134	1	01629
12,20	205	134	1	01630
12,30	205	134	1	01631
12,50	205	134	1	01632
12,75	205	134	1	01633
13,00	205	134	1	01634
13,25	214	140	1	01635
13,50	214	140	1	01636
13,75	214	140	1	01637
14,00	214	140	1	01638
14,25	220	144	1	01639
14,50	220	144	1	01640
14,75	220	144	1	01641
15,00	220	144	1	01642
15,25	227	149	1	01643
15,50	227	149	1	01644
15,75	227	149	1	01645
16,00	227	149	1	01646
16,25	235	154	1	01647
16,50	235	154	1	01648
16,75	235	154	1	01649
17,00	235	154	1	01650
17,25	241	158	1	01651
17,50	241	158	1	01652
17,75	241	158	1	01653
18,00	241	158	1	01654
18,25	241	158	1	01655
18,50	247	162	1	01656
19,00	247	162	1	01657
19,50	254	166	1	01658
19,75	254	166	1	01659
20,00	254	166	1	01660

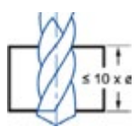
UZUN MATKAP UCU (ALTIN SERİ)

HSSE Co5 135°

DIN 340







Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	85	56	10	01661
2,50	95	62	10	01662
3,00	100	66	10	01663
3,10	106	69	10	01664
3,20	106	69	10	01665
3,30	106	69	10	01666
3,50	112	73	10	01667
3,70	112	73	10	01668
4,00	119	78	10	01669
4,20	119	78	10	01670
4,50	126	82	10	01671

Ø mm h8	L (mm)	l (mm)		Sip. No.
5,00	132	87	10	01672
5,50	139	91	10	01673
6,00	139	91	10	01674
6,50	148	97	5	01675
6,80	156	102	5	01676
7,00	156	102	5	01677
7,50	156	102	5	01678
8,00	165	109	5	01679
8,50	165	109	5	01680
8,60	175	115	5	01681
9,00	175	115	5	01682

Ø mm h8	L (mm)	l (mm)		Sip. No.
9,50	175	115	5	01683
10,00	184	121	5	01684
10,20	184	121	1	01685
10,50	184	121	1	01686
11,00	195	128	1	01687
11,50	195	128	1	01688
12,00	205	134	1	01689
12,50	205	134	1	01690
13,00	205	134	1	01691

MATKAP UÇLARI

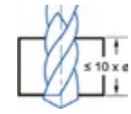
UZUN MATKAP UCU ("S" FORMU)

HSSE Co5 | 135° | "S" | TIALN

DIN 340 TS







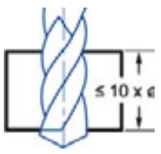
Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	85	56	1	01692
2,50	95	62	1	01693
3,00	100	66	1	01694
3,50	112	73	1	01695
4,00	119	78	1	01696
4,50	126	82	1	01697
5,00	132	87	1	01698
5,50	139	91	1	01699
6,00	139	91	1	01700
6,50	148	97	1	01701
7,00	156	102	1	01702
7,50	156	102	1	01703
8,00	165	109	1	01704
8,50	165	109	1	01705
9,00	175	115	1	01706
9,50	175	115	1	01707
10,00	184	121	1	01708
10,50	184	121	1	01709
11,00	195	128	1	01710
11,50	195	128	1	01711
12,00	205	134	1	01712
13,00	205	134	1	01713

TAŞLANMIŞ EXTRA UZUN MATKAP UCU (BUHAR MENEVİŞLİ)

HSS | DIN 1869N | 118°

DIN 1869 N





Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	125	85	1	01714
2,50	140	95	1	01715
3,00	150	100	1	01716
3,00	190	130	1	01717
3,50	165	115	1	01718
3,50	210	145	1	01719
3,50	265	180	1	01720
4,00	175	120	1	01721
4,00	220	150	1	01722
4,00	280	190	1	01723
4,50	185	125	1	01724
4,50	235	160	1	01725
4,50	295	220	1	01726
5,00	195	135	1	01727
5,00	245	170	1	01728
5,00	295	195	1	01729
5,00	315	210	1	01730
5,50	205	140	1	01731
5,50	260	180	1	01732
5,50	330	225	1	01733
6,00	205	140	1	01734
6,00	260	180	1	01735
6,00	330	225	1	01736
6,50	215	150	1	01737
6,50	275	190	1	01738
6,50	350	235	1	01739
7,00	225	155	1	01740
7,00	290	200	1	01741
7,00	370	250	1	01742
7,50	225	155	1	01743
7,50	290	200	1	01744
7,50	370	250	1	01745
8,00	240	165	1	01746
8,00	305	210	1	01747
8,00	390	265	1	01748
8,50	240	165	1	01749
8,50	305	210	1	01750
8,50	390	265	1	01751
9,00	250	175	1	01752
9,00	320	220	1	01753
9,00	410	280	1	01754
9,50	250	175	1	01755
9,50	320	220	1	01756
9,50	410	280	1	01757
10,00	265	185	1	01758
10,00	340	235	1	01759
10,00	430	295	1	01760
10,50	265	185	1	01761
10,50	340	235	1	01762
10,50	430	295	1	01763
11,00	280	195	1	01764
11,00	365	250	1	01765
11,00	455	310	1	01766
11,50	280	195	1	01767
11,50	365	250	1	01768
11,50	455	310	1	01769
12,00	295	205	1	01770
12,00	375	260	1	01771
12,00	480	330	1	01772
12,50	295	205	1	01773
12,50	375	260	1	01774
12,50	480	330	1	01775
13,00	295	205	1	01776
13,00	375	260	1	01777
13,00	480	330	1	01778
14,00	375	260	1	01779
14,00	480	330	1	01780
15,00	650	550	1	01781
16,00	650	550	1	01782
16,50	650	550	1	01783
17,00	650	550	1	01784
17,50	650	550	1	01785
18,00	650	550	1	01786
18,50	650	550	1	01787
19,00	650	550	1	01788
19,50	650	550	1	01789
20,00	650	550	1	01790

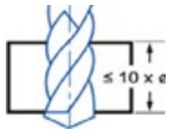
TAŞLANMIŞ EXTRA UZUN MATKAP UCU (S FORMU)

HSSE Co5 | 135° | "S"

DIN 1869







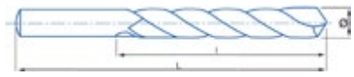
Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	125	85	1	01791
2,50	140	95	1	01792
3,00	150	100	1	01793
3,00	190	130	1	01794
3,50	165	115	1	01795
3,50	210	145	1	01796
3,50	265	180	1	01797
4,00	175	120	1	01798
4,00	220	150	1	01799
4,00	280	190	1	01800
4,50	185	125	1	01801
4,50	235	160	1	01802
4,50	295	220	1	01803
5,00	195	135	1	01804
5,00	245	170	1	01805
5,00	315	210	1	01806
5,50	205	140	1	01807
5,50	260	180	1	01808
5,50	330	225	1	01809
6,00	205	140	1	01810
6,00	260	180	1	01811
6,00	330	225	1	01812
6,50	215	150	1	01813
6,50	275	190	1	01814
6,50	350	235	1	01815
7,00	225	155	1	01816
7,00	290	200	1	01817
7,00	370	250	1	01818
7,50	225	155	1	01819
7,50	290	200	1	01820
7,50	370	250	1	01821
8,00	240	165	1	01822
8,00	305	210	1	01823
8,00	390	265	1	01824
8,50	240	165	1	01825
8,50	305	210	1	01826
8,50	390	265	1	01827
9,00	250	175	1	01828
9,00	320	220	1	01829
9,00	410	280	1	01830
9,50	250	175	1	01831
9,50	320	220	1	01832
9,50	410	280	1	01833
10,00	265	185	1	01834
10,00	340	235	1	01835
10,00	430	295	1	01836
10,50	265	185	1	01837
10,50	340	235	1	01838
10,50	430	295	1	01839
11,00	280	195	1	01840
11,00	365	250	1	01841
11,00	455	310	1	01842
11,50	280	195	1	01843
11,50	365	250	1	01844
11,50	455	310	1	01845
12,00	295	205	1	01846
12,00	375	260	1	01847
12,00	480	330	1	01848
12,50	295	205	1	01849
12,50	375	260	1	01850
12,50	480	330	1	01851
13,00	295	205	1	01852
13,00	375	260	1	01853
13,00	480	330	1	01854

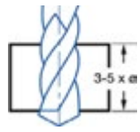
MATKAP UÇLARI

SİLİNDİRİK SAPLI MAT. UCU (HARDOX İÇİN)

DIN 1897 N







Ø mm h8	L (mm)	l (mm)		Sip. No.
2,00	38	12	1	01855
2,50	43	14	1	01856
3,00	46	16	1	01857
3,30	49	18	1	01858
3,50	52	20	1	01859
4,00	55	22	1	01860
4,20	55	22	1	01861
4,50	58	24	1	01862
5,00	62	26	1	01863
5,50	66	28	1	01864
6,00	66	28	1	01865

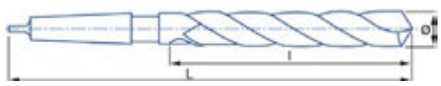
Ø mm h8	L (mm)	l (mm)		Sip. No.
6,50	70	31	1	01866
6,80	74	34	1	01867
7,00	74	34	1	01868
7,50	74	34	1	01869
8,00	79	37	1	01870
8,50	79	37	1	01871
9,00	84	40	1	01872
9,50	84	40	1	01873
10,00	89	43	1	01874
10,20	89	43	1	01875
10,50	89	43	1	01876

Ø mm h8	L (mm)	l (mm)		Sip. No.
11,00	95	47	1	01877
11,50	95	47	1	01878
12,00	102	51	1	01879
12,50	102	51	1	01880
13,00	102	51	1	01881
14,00	107	54	1	01882
15,00	111	56	1	01883
16,00	115	58	1	01884
18,00	123	62	1	01885

MORSKONİK SAPLI MAT. UCU (HARDOX İÇİN)

DIN 1412 C





Ø mm h8	L (mm)	l (mm)	MK		Sip. No.
18,00	175	77	2	1	01886
19,00	201	80	2	1	01887
20,00	204	83	2	1	01888
21,00	208	87	2	1	01889

Ø mm h8	L (mm)	l (mm)	MK		Sip. No.
22,00	211	90	2	1	01890
23,00	215	94	2	1	01891
24,00	219	98	3	1	01892
25,00	219	98	3	1	01893

Ø mm h8	L (mm)	l (mm)	MK		Sip. No.
26,00	224	103	3	1	01894
27,00	256	107	3	1	01895
28,00	256	107	3	1	01896
30,00	261	112	3	1	01897

MATKAP UÇLARI

TAŞLANMIŞ MORS KONİK MATKAP UCU

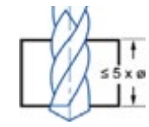
IZAR CUTTING TOOLS ISPANYA

HSS

DIN 345







Ø mm h8	L (mm)	l (mm)	MK	Sip. No.
5,00	133	52	1	01898
5,25	133	52	1	01899
5,50	138	57	1	01900
5,75	138	57	1	01901
6,00	138	57	1	01902
6,25	144	63	1	01903
6,50	144	63	1	01904
6,75	150	69	1	01905
7,00	150	69	1	01906
7,25	150	69	1	01907
7,50	150	69	1	01908
7,75	156	75	1	01909
8,00	156	75	1	01910
8,25	156	75	1	01911
8,50	156	75	1	01912
8,75	162	81	1	01913
9,00	162	81	1	01914
9,25	162	81	1	01915
9,50	162	81	1	01916
9,75	168	87	1	01917
10,00	168	87	1	01918
10,25	168	87	1	01919
10,50	168	87	1	01920
10,75	175	94	1	01921
11,00	175	94	1	01922
11,25	175	94	1	01923
11,50	175	94	1	01924
11,75	175	94	1	01925
12,00	182	101	1	01926
12,25	182	101	1	01927
12,50	182	101	1	01928
12,75	182	101	1	01929
13,00	182	101	1	01930
13,25	189	108	1	01931
13,50	189	108	1	01932
13,75	189	108	1	01933
14,00	189	108	1	01934
14,25	212	114	2	01935
14,50	212	114	2	01936
14,75	212	114	2	01937
15,00	212	114	2	01938
15,25	218	120	2	01939
15,50	218	120	2	01940
15,75	218	120	2	01941
16,00	218	120	2	01942
16,25	223	125	2	01943
16,50	223	125	2	01944
16,75	223	125	2	01945
17,00	223	125	2	01946
17,25	228	130	2	01947
17,50	228	130	2	01948
17,75	228	130	2	01949
18,00	228	130	2	01950
18,25	233	135	2	01951
18,50	233	135	2	01952
18,75	233	135	2	01953
19,00	233	135	2	01954
19,25	238	140	2	01955
19,50	238	140	2	01956
19,75	238	140	2	01957
20,00	238	140	2	01958
20,25	243	145	2	01959
20,50	243	145	2	01960
20,75	243	145	2	01961
21,00	243	145	2	01962

Ø mm h8	L (mm)	l (mm)	MK	Sip. No.
21,25	248	150	2	01963
21,50	248	150	2	01964
21,75	248	150	2	01965
22,00	248	150	2	01966
22,25	248	150	2	01967
22,50	253	155	2	01968
22,75	253	155	2	01969
23,00	253	155	2	01970
23,25	276	155	3	01971
23,50	276	155	3	01972
23,75	281	160	3	01973
24,00	281	160	3	01974
24,25	281	160	3	01975
24,50	281	160	3	01976
24,75	281	160	3	01977
25,00	281	160	3	01978
25,25	286	165	3	01979
25,50	286	165	3	01980
25,75	286	165	3	01981
26,00	286	165	3	01982
26,25	286	165	3	01983
26,50	286	165	3	01984
26,75	291	170	3	01985
27,00	291	170	3	01986
27,25	291	170	3	01987
27,50	291	170	3	01988
27,75	291	170	3	01989
28,00	291	170	3	01990
28,25	296	175	3	01991
28,50	296	175	3	01992
28,75	296	175	3	01993
29,00	296	175	3	01994
29,25	296	175	3	01995
29,50	296	175	3	01996
29,75	296	175	3	01997
30,00	296	175	3	01998
30,25	301	180	3	01999
30,50	301	180	3	02000
30,75	301	180	3	02001
31,00	301	180	3	02002
31,25	301	180	3	02003
31,50	301	180	3	02004
31,75	306	185	3	02005
32,00	334	185	4	02006
32,50	334	185	4	02007
33,00	334	185	4	02008
33,50	334	185	4	02009
34,00	339	190	4	02010
34,50	339	190	4	02011
35,00	339	190	4	02012
35,50	339	190	4	02013
36,00	344	195	4	02014
36,50	344	195	4	02015
37,00	344	195	4	02016
37,50	344	195	4	02017
38,00	349	200	4	02018
38,50	349	200	4	02019
39,00	349	200	4	02020
39,50	349	200	4	02021
40,00	349	200	4	02022
40,50	354	205	4	02023
41,00	354	205	4	02024
41,50	354	205	4	02025
42,00	354	205	4	02026
42,50	354	205	4	02027

Ø mm h8	L (mm)	l (mm)	MK	Sip. No.
43,00	359	210	4	02028
43,50	359	210	4	02029
44,00	359	210	4	02030
44,50	359	210	4	02031
45,00	359	210	4	02032
45,50	364	215	4	02033
46,00	364	215	4	02034
46,50	364	215	4	02035
47,00	364	215	4	02036
47,50	364	215	4	02037
48,00	369	220	4	02038
48,50	369	220	4	02039
49,00	369	220	4	02040
49,50	369	220	4	02041
50,00	369	220	4	02042
51,00	412	225	5	02043
52,00	412	225	5	02044
53,00	412	225	5	02045
54,00	417	230	5	02046
55,00	417	230	5	02047
56,00	417	230	5	02048
57,00	422	235	5	02049
58,00	422	235	5	02050
59,00	422	235	5	02051
60,00	422	235	5	02052
61,00	427	240	5	02053
62,00	427	240	5	02054
63,00	427	240	5	02055
64,00	432	245	5	02056
65,00	432	245	5	02057
66,00	432	245	5	02058
67,00	432	245	5	02059
68,00	437	250	5	02060
69,00	437	250	5	02061
70,00	437	250	5	02062
71,00	437	250	5	02063
72,00	442	255	5	02064
73,00	442	255	5	02065
74,00	442	255	5	02066
75,00	442	255	5	02067
76,00	447	260	5	02068
77,00	514	260	6	02069
78,00	514	260	6	02070
79,00	514	260	6	02071
80,00	514	260	6	02072
81,00	519	265	6	02073
82,00	519	265	6	02074
83,00	519	265	6	02075
84,00	519	265	6	02076
85,00	519	265	6	02077
86,00	524	270	6	02078
87,00	524	270	6	02079
88,00	524	270	6	02080
89,00	524	270	6	02081
90,00	524	270	6	02082
91,00	529	275	6	02083
92,00	529	275	6	02084
93,00	529	275	6	02085
94,00	529	275	6	02086
95,00	529	275	6	02087
96,00	534	280	6	02088
97,00	534	280	6	02089
98,00	534	280	6	02090
99,00	534	280	6	02091
100,00	534	280	6	02092

MATKAP UÇLARI

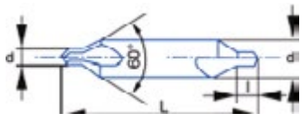
IZAR CUTTING TOOLS İSPANYA

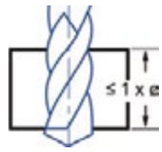
KISA PUNTA MATKABI

HSS 118°

DIN 333 A







Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
1,00	3,15	31,50	1,30	02093
1,25	3,15	31,50	1,60	02094
1,25	4,00	35,50	1,60	02095
1,60	4,00	35,50	2,00	02096
1,60	5,00	40,00	2,00	02097
2,00	5,00	40,00	2,50	02098
2,00	6,30	45,00	2,50	02099

Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
2,50	6,30	45,00	3,10	02100
2,50	8,00	50,00	3,10	02101
3,15	8,00	50,00	3,90	02102
3,15	10,00	56,00	3,90	02103
4,00	10,00	56,00	5,00	02104
4,00	12,50	63,00	5,00	02105
5,00	12,50	63,00	6,30	02106

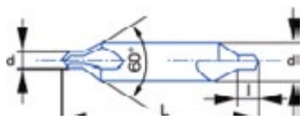
Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
5,00	16,00	71,00	6,30	02107
6,30	16,00	71,00	8,00	02108
6,30	20,00	80,00	8,00	02109
10,00	25,00	100,00	12,80	02110
12,50	31,50	125,00	16,50	02111

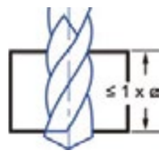
UZUN PUNTA MATKABI

HSS 118°

DIN 333 A







Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
1,00	4	60	1,30	02112
1,00	4	120	1,30	02113
1,50	5	60	2,00	02114
1,50	5	120	2,00	02115
2,00	6	80	2,50	02116
2,00	6	120	2,50	02117

Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
2,50	8	80	3,10	02118
2,50	8	120	3,10	02119
3,00	8	80	3,90	02120
3,00	8	120	3,90	02121
3,00	10	100	3,90	02122
3,00	10	120	3,90	02123

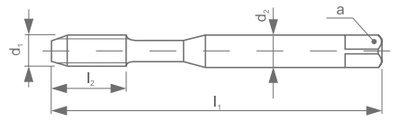
Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
4,00	10	100	5,00	02124
4,00	10	120	5,00	02125
4,00	12	100	5,00	02126
4,00	12	120	5,00	02127
5,00	14	120	6,30	02128

KILAVUZLAR

METRİK DIN 371C HSSE DÜZ KANAL

M | 60° P | DIN 13 | Type N | HSSE | DIN 371 | ISO 2 6H | C 2 - 3

DIN 371/C



Z=Ağız Sayısı



1000

1000 TiN



1000 TiALN

MAKINA KILAVUZU DIN 371C HSSE DÜZ KANAL								1000	1000	1000
								N-371D	N-371D TiN	N-371D TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	3,5	2,7	3	2,5	04950	04960	04970
M3,5	0,6	56	11	4	3	3	2,9	04951	04961	04971
M4	0,7	63	12	4,5	3,4	3	3,3	04952	04962	04972
M4,5	0,75	70	13	6	4,9	3	3,7	04953	04963	04973
M5	0,8	70	13	6	4,9	3	4,2	04954	04964	04974
M6	1	80	15	6	4,9	3	5	04955	04965	04975
M7	1	80	15	7	5,5	3	6	04956	04966	04976
M8	1,25	90	18	8	6,2	3	6,8	04957	04967	04977
M9	1,25	90	18	9	7	3	7,8	04958	04968	04978
M10	1,5	100	20	10	8	3	8,5	04959	04969	04979

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir
- Aluminyum alaşımları Silisyum miktarı min.10%

ANA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir

ANA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir

METRİK SOL YÖN DIN 376C HSSE DÜZ KANAL

M | 60° P | DIN 13 | Type N | HSSE | DIN 376 | ISO 2 6H | C 2 - 3

DIN 376/C



Z=Ağız Sayısı



1000

SOL MAKİNA KILAVUZU DIN 376C HSSE DÜZ KANAL								3000
								N-376LH
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M4	0,7	63	12	2,8	2,1	3	3,3	05061
M5	0,8	70	13	3,5	2,7	3	4,2	05062
M6	1	80	15	4,5	3,4	3	5	05063
M8	1,25	90	18	6	4,9	3	6,8	05064
M9	1,25	90	18	7	5,5	3	7,8	05065
M10	1,5	100	20	7	5,5	3	8,5	05066
M12	1,75	110	23	9	7	3	10,2	05067
M14	2	110	25	11	9	3	12	05068
M16	2	110	25	12	9	3	14	05069
M18	2,5	125	30	14	11	3	15,5	05070
M20	2,5	140	30	16	12	3	17,5	05071

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

KULLANIM ALANI

ANA KULLANIM
- Alaşımlı bakır, kısa talaş

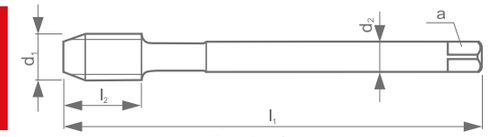
ARA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir
- Aluminyum alaşımları Silisyum miktarı min.10%

KILAVUZLAR

METRİK DIN 376C HSSE DÜZ KANAL

M | DIN 13 | Type N | HSSE | DIN 376 | ISO 2 6H | C 2 - 3

DIN 376/C



Z=Ağız Sayısı



3000

3000 TiN

3000 TiALN

MAKİNA KILAVUZU DIN 376C HSSE DÜZ KANAL								3000	3000	3000
								N-376D	N-376D TIN	N-376D TIALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	2,2	-	3	2,5	04980	05007	05034
M3,5	0,6	56	11	2,5	2,1	3	2,9	04981	05008	05035
M4	0,7	63	12	2,8	2,1	3	3,3	04982	05009	05036
M4,5	0,75	70	13	3,5	2,7	3	3,7	04983	05010	05037
M5	0,8	70	13	3,5	2,7	3	4,2	04984	05011	05038
M6	1	80	15	4,5	3,4	3	5	04985	05012	05039
M7	1	80	15	5,5	4,3	3	6	04986	05013	05040
M8	1,25	90	18	6	4,9	3	6,8	04987	05014	05041
M9	1,25	90	18	7	5,5	3	7,8	04988	05015	05042
M10	1,5	100	20	7	5,5	3	8,5	04989	05016	05043
M11	1,5	100	20	8	6,2	3	9,5	04990	05017	05044
M12	1,75	110	23	9	7	3	10,2	04991	05018	05045
M14	2	110	25	11	9	3	12	04992	05019	05046
M16	2	110	25	12	9	3	14	04993	05020	05047
M18	2,5	125	30	14	11	3	15,5	04994	05021	05048
M20	2,5	140	30	16	12	3	17,5	04995	05022	05049
M22	2,5	140	30	18	14,5	3	19,5	04996	05023	05050
M24	3	160	36	18	14,5	4	21	04997	05024	05051
M27	3	160	36	20	16	4	24	04998	05025	05052
M30	3,5	180	40	22	18	4	26,5	04999	05026	05053
M33	3,5	180	42	25	20	4	29,5	05000	05027	05054
M36	4	200	50	28	22	4	32	05001	05028	05055
M39	4	200	50	32	24	4	35	05002	05029	05056
M42	4,5	200	56	32	24	4	37,5	05003	05030	05057
M45	4,5	200	56	36	29	4	40,5	05004	05031	05058
M48	5	250	63	36	29	4	43	05005	05032	05059
M52	5	250	63	40	32	4	47	05006	05033	05060

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir
- Aluminyum alaşımları Silisyum miktarı min.10%

ANA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir

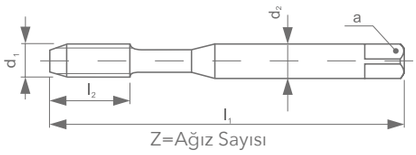
ANA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş
- Yapısal çelikler (max. 500N/mm²)
- Kolay işlenir çelikler (max. 800N/mm²)
- Gri dökme demir

KILAVUZLAR

METRİK DIN 371B HSSE DÜZ KANAL UÇ BILEMELI

M | 60° | DIN 13 | Type N | HSSE | DIN 371 | ISO 2 6H | B 3,5 - 6 | 1,5 l1

DIN 371/B



Z=Ağız Sayısı





MAKİNA KILAVUZU DIN 371B HSSE DÜZ KANAL UÇ BİLEMELİ								1500	1500	1500	1540
								N-371B	N-371B TiN	N-371B TiALN	N-371B OX
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M2	0,4	45	8	2,8	2,1	3	1,6	05072	05084	05096	05108
M2,5	0,45	50	9	2,8	2,1	3	2,05	05073	05085	05097	05109
M3	0,5	56	9	3,5	2,7	3	2,5	05074	05086	05098	05110
M3,5	0,6	56	11	4	3	3	2,9	05075	05087	05099	05111
M4	0,7	63	12	4,5	3,4	3	3,3	05076	05088	05100	05112
M4,5	0,75	70	13	6	4,9	3	3,7	05077	05089	05101	05113
M5	0,8	70	13	6	4,9	3	4,2	05078	05090	05102	05114
M6	1	80	15	6	4,9	3	5	05079	05091	05103	05115
M7	1	80	15	7	5,5	3	6	05080	05092	05104	05116
M8	1,25	90	18	8	6,2	3	6,8	05081	05093	05105	05117
M9	1,25	90	18	9	7	3	7,8	05082	05094	05106	05118
M10	1,5	100	20	10	8	3	8,5	05083	05095	05107	05119

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

OX → Oksidasyon

KULLANIM ALANI

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum laşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı max.10%
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

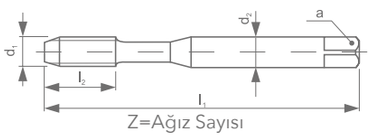
ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Çinko ve çinko alaşımları

ARA KULLANIM
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

METRİK DIN 371C HSSE 35 DERECE HELİS

M | 60° | DIN 13 | Type N | HSSE | DIN 371 | ISO 2 6H | C 2 - 3 | 35° | 1,5 l1

DIN 371/C



Z=Ağız Sayısı





MAKİNA KILAVUZU DIN 371C HSSE 35 DERECE HELİS								2050	2050	2050	2090
								N-371C	N-371C TiN	N-371C TiALN	N-371C OX
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M2	0,4	45	6	2,8	2,1	3	1,6	05208	05220	05232	05244
M2,5	0,45	50	7,5	2,8	2,1	3	2,05	05209	05221	05233	05245
M3	0,5	56	5	3,5	2,7	3	2,5	05210	05222	05234	05246
M3,5	0,6	56	6	4	3	3	2,09	05211	05223	05235	05247
M4	0,7	63	7	4,5	3,4	3	3,3	05212	05224	05236	05248
M4,5	0,75	70	8	6	4,	3	3,7	05213	05225	05237	05249
M5	0,8	70	8	6	4,9	3	4,2	05214	05226	05238	05250
M6	1	80	10	6	4,9	3	5	05215	05227	05239	05251
M7	1	80	10	7	5,5	3	6	05216	05228	05240	05252
M8	1,25	90	13	8	6,2	3	6,8	05217	05229	05241	05253
M9	1,25	90	13	9	7	3	7,8	05218	05230	05242	05254
M10	1,5	100	15	10	8	3	8,5	05219	05231	05243	05255

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

OX → Oksidasyon

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Çinko ve çinko alaşımları

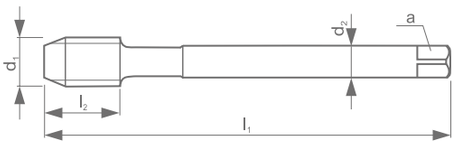
ARA KULLANIM
- Yapısal çelikler ve
- ısıl işlem görmüş
- çelikler
- (Max.800N/mm²)

KILAVUZLAR

METRİK DIN 376C HSSE DÜZ KANAL

M | 60° P | DIN 13 | Type N | HSSE | DIN 376 | ISO 2 6H | B 3,5 - 6 | 3,5 A

DIN 376/C



Z=Ağız Sayısı



3500

3500 TiN

3500 TiALN

3540 OX

MAKİNA KILAVUZU DIN 376C HSSE DÜZ KANAL								3500 N-376B	3500 N-376B TiN	3500 N-376B TIALN	3540 N-376B OX
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	2,2	-	3	2,5	05120	05142	05164	05186
M3,5	0,6	56	11	2,5	2,1	3	2,9	05121	05143	05165	05187
M4	0,7	63	12	2,8	2,1	3	3,3	05122	05144	05166	05188
M4,5	0,75	70	13	3,5	2,7	3	3,7	05123	05145	05167	05189
M5	0,8	70	13	3,5	2,7	3	4,2	05124	05146	05168	05190
M6	1	80	15	4,5	3,4	3	5	05125	05147	05169	05191
M7	1	80	15	5,5	4,3	3	6	05126	05148	05170	05192
M8	1,25	90	18	6	4,9	3	6,8	05127	05149	05171	05193
M9	1,25	90	18	7	5,5	3	7,8	05128	05150	05172	05194
M10	1,5	100	20	7	5,5	3	8,5	05129	05151	05173	05195
Mil	1,5	100	20	8	6,2	3	9,5	05130	05152	05174	05196
M12	1,75	110	23	9	7	3	10,2	05131	05153	05175	05197
M14	2	110	25	11	9	3	12	05132	05154	05176	05198
M16	2	110	25	12	9	3	14	05133	05155	05177	05199
M18	2,5	125	30	14	11	3	15,5	05134	05156	05178	05200
M20	2,5	140	30	16	12	3	17,5	05135	05157	05179	05201
M22	2,5	140	30	18	14,5	3	19,5	05136	05158	05180	05202
M24	3	160	36	18	14,5	4	21	05137	05159	05181	05203
M27	3	160	36	20	16	4	24	05138	05160	05182	05204
M30	3,5	180	40	22	18	4	26,5	05139	05161	05183	05205
M33	3,5	180	42	25	20	4	29,5	05140	05162	05184	05206
M36	4	200	50	28	22	4	32	05141	05163	05185	05207

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

OX → Oksidasyon

KULLANIM ALANI

ANAKULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANAKULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%

ARA KULLANIM
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANAKULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Yalın dökme demir (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı max.10%
- Aluminyum alaşımları,silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANAKULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yalın çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Çinko ve çinko alaşımları

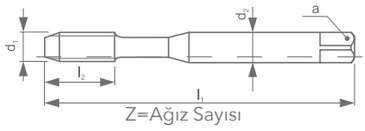
ARA KULLANIM
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

KILAVUZLAR

METRİK DIN 371B HSSE DÜZ KANAL UÇ BİLEMELİ

M | 60° | DIN 13 | Type VA | HSSE | DIN 371 | ISO 2 6H | B 3,5 - 6

DIN 371/B





1660 TiN

1690 OX

PM



1870 HL

PM

1870 HL IKZN

MAKİNA KILAVUZU DIN 371B HSSE DÜZ KANAL UÇ BİLEMELİ								1660	1690	1870	1870
								N-371BPS TiN	N-371BPS OX	N-371B HL	N-371B HLIKZN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M2	0,4	45	6	2,8	2,1	3	1,6	05348	05360	05372	05384
M2,5	0,45	50	7,5	2,8	2,1	3	2,05	05349	05361	05373	05385
M3	0,5	56	5	3,5	2,7	3	2,5	05350	05362	05374	05386
M3,5	0,6	56	6	4	3	3	2,09	05351	05363	05375	05387
M4	0,7	63	7	4,5	3,4	3	3,3	05352	05364	05376	05388
M4,5	0,75	70	8	6	4,	3	3,7	05353	05365	05377	05389
M5	0,8	70	8	6	4,9	3	4,2	05354	05366	05378	05390
M6	1	80	10	6	4,9	3	5	05355	05367	05379	05391
M7	1	80	10	7	5,5	3	6	05356	05368	05380	05392
M8	1,25	90	13	8	6,2	3	6,8	05357	05369	05381	05393
M9	1,25	90	13	9	7	3	7,8	05358	05370	05382	05394
M10	1,5	100	15	10	8	3	8,5	05359	05371	05383	05395

Type VA → Paslanmaz çelikler için Kılavuzlar

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

OX → Oksidasyon

IKZN → İçten soğutmalı Kılavuz kanallarından çift çıkışlı

KULLANIM ALANI

ANA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (600-1100N/mm²)
- Alaşımlı bakır, 1 kısa talaş

ARA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²)

ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²)
- Alaşımsız bakır
- Alaşımlı bakır, uzun talaş

ARA KULLANIM
- Takım çelikleri (Max.1100N/mm²)

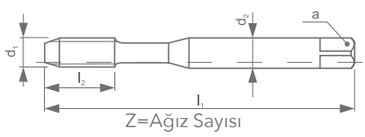
ANA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (600-1100N/mm²)
- Alaşımsız bakır Alaşımlı bakır, 1 uzun talaş

ARA KULLANIM
- Takım çelikleri 1 (Max.1100N/mm²)

METRİK DIN 371C HSSE 35 DERECE HELİS

M | 60° | DIN 13 | Type VA | HSSE | DIN 371 | ISO 2 6H | C 2 - 3 | 35° | 3

DIN 371/C





2660 TiN

2290 OX

PM



2320 HL

PM

2320 HL IKZN

MAKİNA KILAVUZU DIN 371C HSSE 35 DERECE HELİS								2260	2290	2320	2320
								N-371CPS TiN	N-371CPS OX	N-371C HL	N-371C HL IKZ
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	5	3,5	2,7	3	2,5	05484	05494	05504	05514
M3,5	0,6	56	6	4	3	3	2,9	05485	05495	05505	05515
M4	0,7	63	7	4,5	3,4	3	3,3	05486	05496	05506	05516
M4,5	0,75	70	8	6	4,9	3	3,7	05487	05497	05507	05517
M5	0,8	70	8	6	4,9	3	4,2	05488	05498	05508	05518
M6	1	80	10	6	4,9	3	5	05489	05499	05509	05519
M7	1	80	10	7	5,5	3	6	05490	05500	05510	05520
M8	1,25	90	13	8	6,2	3	6,8	05491	05501	05511	05521
M9	1,25	90	13	9	7	3	7,8	05492	05502	05512	05522
M10	1,5	100	15	10	8	3	8,5	05493	05503	05513	05523

Type VA → Paslanmaz çelikler için Kılavuzlar

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

OX → Oksidasyon

IKZN → İçten soğutmalı Kılavuz kanallarından çift çıkışlı

KULLANIM ALANI

ANA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm²)
- Takım çelikleri 1 (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (450-800N/mm²)
- Sfero dökme ve 1 siyah temper 1 dökme demir
- Alaşımsız bakır
- Alaşımlı bakır, 1 kısa talaş

ARA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (600-1100N/mm²)

ANA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm²)
- Takım çelikleri 1 (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (450-800N/mm²)
- Sfero dökme ve 1 siyah temper 1 dökme demir
- Alaşımsız bakır
- Alaşımlı bakır, 1 uzun talaş

ARA KULLANIM
- Yüzeyi sertleştirilmiş 1 çelikler ve 1 nitrürlenmiş çelikler 1 (Max.1100N/mm!l
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri 1 (600-1100N/mm²)

KILAVUZLAR

METRİK DIN 376B 35 DERECE HELİS

M | DIN 13 | Type N | HSSE | DIN 376 | ISO 2 6H | C 2 - 3

DIN 376/B

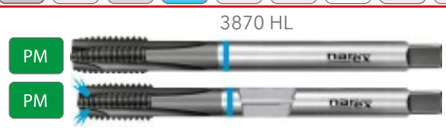


Z=Ağız Sayısı



3660 TiN

3690 OX



3870 HL

PM

PM

3870 HL IKZN

MAKİNA KILAVUZU DIN 376B 35 DERECE HELİS								3660	3690	3870	3870
								N-376BPS TiN	N-376BPS OX	N-376B HL	N-376B HLIKZN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	2,2	-	3	2,5	05396	05418	05440	05462
M3,5	0,6	56	11	2,5	2,1	3	2,9	05397	05419	05441	05463
M4	0,7	63	12	2,8	2,1	3	3,3	05398	05420	05442	05464
M4,5	0,75	70	13	3,5	2,7	3	3,7	05399	05421	05443	05465
M5	0,8	70	13	3,5	2,7	3	4,2	05400	05422	05444	05466
M6	1	80	15	4,5	3,4	3	5	05401	05423	05445	05467
M7	1	80	15	5,5	4,3	3	6	05402	05424	05446	05468
M8	1,25	90	18	6	4,9	3	6,8	05403	05425	05447	05469
M9	1,25	90	18	7	5,5	3	7,8	05404	05426	05448	05470
M10	1,5	100	20	7	5,5	3	8,5	05405	05427	05449	05471
M11	1,5	100	20	8	6,2	3	9,5	05406	05428	05450	05472
M12	1,75	110	23	9	7	3	10,2	05407	05429	05451	05473
M14	2	110	25	11	9	3	12	05408	05430	05452	05474
M16	2	110	25	12	9	3	14	05409	05431	05453	05475
M18	2,5	125	30	14	11	3	15,5	05410	05432	05454	05476
M20	2,5	140	30	16	12	3	17,5	05411	05433	05455	05477
M22	2,5	140	30	18	14,5	3	19,5	05412	05434	05456	05478
M24	3	160	36	18	14,5	4	21	05413	05435	05457	05479
M27	3	160	36	20	16	4	24	05414	05436	05458	05480
M30	3,5	180	40	22	18	4	26,5	05415	05437	05459	05481
M33	3,5	180	42	25	20	4	29,5	05416	05438	05460	05482
M36	4	200	50	28	22	4	32	05417	05439	05461	05483

Type VA → Paslanmaz çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

OX → Oksidasyon

HL → Balinit hardlube kaplama

IKZN → İçten soğutmalı Kılavuz kanallarından çift çıkışlı

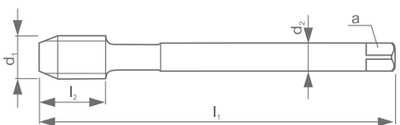
KULLANIM ALANI

3660	3690	3870	3870
ANA KULLANIM • Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²) • Alaşımsız bakır • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²)	ANA KULLANIM • Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²) • Alaşımsız bakır • Alaşımlı bakır, uzun talaş • Takım çelikleri (Max.1100N/mm²) ARA KULLANIM • Takım çelikleri (Max.1100N/mm²)	ANA KULLANIM • Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²) • Paslanmaz çelikler ve sıcak iş çelikleri (600-1100N/mm²) • Alaşımsız bakır • Alaşımlı bakır, uzun talaş ARA KULLANIM • Takım çelikleri (Max.1100N/mm²)

METRİK DIN 376C 35 DERECE HELİS

M | DIN 13 | Type VA | HSSE | DIN 376 | ISO 2 6H | C 2 - 3

DIN 376/C



Z=Ağız Sayısı



4260 Tin

4290 OX



4320 HL

PM

PM

4320 HL IKZ

MAKİNA KILAVUZU DIN 376C 35 DERECE HELİS								4260	4290	4320	4320
								N-376CPS TiN	N-376CPS OX	N-376C HL	N-376C HL IKZ
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	5	2,2	-	3	2,5	05524	05546	05568	05590
M3,5	0,6	56	6	2,5	2,1	3	2,9	05525	05547	05569	05591
M4	0,7	63	7	2,8	2,1	3	3,3	05526	05548	05570	05592
M4,5	0,75	70	8	3,5	2,7	3	3,7	05527	05549	05571	05593
M5	0,8	70	8	3,5	2,7	3	4,2	05528	05550	05572	05594
M6	1	80	10	4,5	3,4	3	5	05529	05551	05573	05595
M7	1	80	10	5,5	4,3	3	6	05530	05552	05574	05596

KILAVUZLAR

narex

MAKİNA KILAVUZU DIN 376C 35 DERECE HELİS								4260	4290	4320	4320
								N-376CPS TiN	N-376CPS OX	N-376C HL	N-376C HL IKZ
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M8	1,25	90	13	6	4,9	3	6,8	05531	05553	05575	05597
M9	1,25	90	13	7	5,5	3	7,8	05532	05554	05576	05598
M10	1,5	100	15	7	5,5	3	8,5	05533	05555	05577	05599
M11	1,5	100	15	8	6,2	3	9,5	05534	05556	05578	05600
M12	1,75	110	18	9	7	3	10,2	05535	05557	05579	05601
M14	2	110	20	11	9	3	12	05536	05558	05580	05602
M16	2	110	20	12	9	3	14	05537	05559	05581	05603
M18	2,5	125	25	14	11	4	15,5	05538	05560	05582	05604
M20	2,5	140	25	16	12	4	17,5	05539	05561	05583	05605
M22	2,5	140	25	18	14,5	4	19,5	05540	05562	05584	05606
M24	3	160	30	18	14,5	4	21	05541	05563	05585	05607
M27	3	160	30	20	16	4	24	05542	05564	05586	05608
M30	3,5	180	35	22	18	4	26,5	05543	05565	05587	05609
M33	3,5	180	35	25	20	4	29,5	05544	05566	05588	05610
M36	4	200	40	28	22	4	32	05545	05567	05589	05611

Type VA → Paslanmaz çelikler için Kılavuzlar
HSSE → Süper yüksek hız çeliği
TiN → Titanyum nitrür
OX → Oksidasyon
HL → Balinit hardlube kaplama
IKZN → İçten soğutmalı Kılavuz kanallarından çift çıkışlı

KULLANIM ALANI

ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Alaşımsız bakır
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri 1 (450-800N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri 1 (600-1100N/mm²)

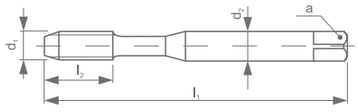
ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Alaşımsız bakır
- Alaşımlı bakır, uzun talaş

ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri(450-800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Alaşımsız bakır
- Alaşımlı bakır, uzun talaş

METRİK DIN 371 HSSE

M | P | DIN 13 | Type H | HSSE V3 | DIN 371 | ISO 2 6H

DIN 371



Z=Ağız Sayısı



1580 TiCN

1590 OX



2680 TiCN

2690 OX

MAKİNA KILAVUZU DIN 371 HSSE									1580	1590	2680	2690
									N-371BV TiCN	N-371B OX	N-371CV TiCN	N-371C OX
d_1	P	l_1	l_2	l_2(R40°)	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	5	3,5	2,7	3	2,5	05612	05622	05632	05642
M3,5	0,6	56	11	6	4	3	3	2,9	05613	05623	05633	05643
M4	0,7	63	12	7	4,5	3,4	3	3,3	05614	05624	05634	05644
M4,5	0,75	70	13	8	6	4,9	3	3,7	05615	05625	05635	05645
M5	0,8	70	13	8	6	4,9	3	4,2	05616	05626	05636	05646
M6	1	80	15	10	6	4,9	3	5	05617	05627	05637	05647
M7	1	80	15	10	7	5,5	3	6	05618	05628	05638	05648
M8	1,25	90	18	13	8	6,2	3	6,8	05619	05629	05639	05649
M9	1,25	90	18	13	9	7	3	7,8	05620	05630	05640	05650
M10	1,5	100	20	15	10	8	3	8,5	05621	05631	05641	05651

TEKNİK ÖZELLİKLER

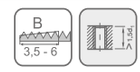
HSSE V3 → Vanadyumlu süper yüksek hız çeliği
Type H → Alaşımlı çelikler için
TiCN → Titanyum karbonitrür
OX → Oksidasyon

KULLANIM ALANI



ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Isıl işlem görmüş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Aluminyum alaşımları, **silisyum miktarı max.10%**

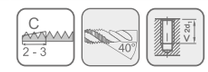
ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir



ARA KULLANIM

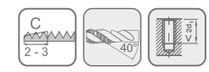
Aluminyum alaşımları,
- silisyum miktarı min.10%

ANA KULLANIM
- Isıl işlem görmüş çelikler **(Max.1100N/mm²)**



ANA KULLANIM
- Isıl işlem görmüş çelikler (Max.1100N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

ARA KULLANIM
- Yüzeyi sertleştirilmiş
- çelikler ve nitrürlenmiş
- çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Sfero dökme ve siyah temper dökme demir



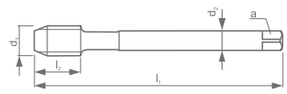
ARA KULLANIM
- Isıl işlem görmüş çelikler **(Max.1100N/mm²)**

KILAVUZLAR

METRİK DIN 376 HSSE

M | DIN 13 | Type H | HSSE V3 | DIN 376 | ISO 2 6H

DIN 376



Z=Ağız Sayısı



3580 TiCN

3590 OX



4680 TiCN

4690 OX

MAKİNA KILAVUZU DIN 376 HSSE									3580	3590	4680	4690
									N-376BV TiCN	N-376B OX	N-376CV TiCN	N-376C OX
d_1	P	l_1	l_2	l_2(R40°)	d_2	a	z/z(R40°)	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	9	5	2,2	-	3/3	2,5	05652	05674	05696	05718
M3,5	0,6	56	11	6	2,5	2,1	3/3	2,9	05653	05675	05697	05719
M4	0,7	63	12	7	2,8	2,1	3/3	3,3	05654	05676	05698	05720
M4,5	0,75	70	13	8	3,5	2,7	3/3	3,7	05655	05677	05699	05721
M5	0,8	70	13	8	3,5	2,7	3/3	4,2	05656	05678	05700	05722
M6	1	80	15	10	4,5	3,4	3/3	5	05657	05679	05701	05723
M7	1	80	15	10	5,5	4,3	3/3	6	05658	05680	05702	05724
M8	1,25	90	18	13	6	4,9	3/3	6,8	05659	05681	05703	05725
M9	1,25	90	18	13	7	5,5	3/3	7,8	05660	05682	05704	05726
M10	1,5	100	20	15	7	5,5	3/3	8,5	05661	05683	05705	05727
M11	1,5	100	20	15	8	6,2	3/3	9,5	05662	05684	05706	05728
M12	1,75	110	23	18	9	7	3/4	10,2	05663	05685	05707	05729
M14	2	110	25	20	11	9	3/4	12	05664	05686	05708	05730
M16	2	110	25	20	12	9	3/4	14	05665	05687	05709	05731
M18	2,5	125	30	25	14	11	3/4	15,5	05666	05688	05710	05732
M20	2,5	140	30	25	16	12	3/4	17,5	05667	05689	05711	05733
M22	2,5	140	30	25	18	14,5	3/4	19,5	05668	05690	05712	05734
M24	3	160	36	30	18	14,5	4/4	21	05669	05691	05713	05735
M27	3	160	36	30	20	16	4/4	24	05670	05692	05714	05736
M30	3,5	180	40	35	22	18	4/5	26,5	05671	05693	05715	05737
M33	3,5	180	42	35	25	20	4/5	29,5	05672	05694	05716	05738
M36	4	200	50	40	28	22	4/5	32	05673	05695	05717	05739

TEKNİK ÖZELLİKLER

HSSE V3 → Vanadyumlu süper yüksek hız çeliği

Type H → Alaşımlı çelikler için

TiCN → Titanyum karbonitrür

OX → Oksidasyon

KULLANIM ALANI



ANA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Isıl işlem görmüş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökmedemir



ARA KULLANIM
- Isıl işlem görmüş çelikler (Max.1100N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%



ANA KULLANIM
- Isıl işlem görmüş çelikler
- (Max.1100N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

ARA KULLANIM
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Sfero dökme ve siyah temper dökme demir

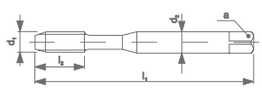


ARA KULLANIM
- Isıl işlem görmüş çelikler (Max.1100N/mm²)

METRİK DIN 371 HSSE

M | DIN 13 | Type H | HSSE PM | ISO 2 6H

DIN 371



Z=Ağız Sayısı



1920 FNT

2870 FNT

MAKİNA KILAVUZU DIN 371 HSSE									1920	2870
									N-371B TOZ FNT	N-371C TOZ FNT
d_1	P	l_1	l_2	l_2(R40°)	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.
M3	0,5	56	9	5	3,5	2,7	3	2,5	05740	05750
M3,5	0,6	56	11	6	4	3	3	2,9	05741	05751
M4	0,7	63	12	7	4,5	3,4	3	3,3	05742	05752
M4,5	0,75	70	13	8	6	4,9	3	3,7	05743	05753
M5	0,8	70	13	8	6	4,9	3	4,2	05744	05754
M6	1	80	15	10	6	4,9	3	5	05745	05755
M7	1	80	15	10	7	5,5	3	6	05746	05756
M8	1,25	90	18	13	8	6,2	3	6,8	05747	05757
M9	1,25	90	18	13	9	7	3	7,8	05748	05758

KILAVUZLAR

narex

MAKİNA KILAVUZU DIN 371 HSSE									1920	2870
									N-371B TOZ FNT	N-371C TOZ FNT
d_1	P	l_1	l_2	l_2(R40°)	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.
M10	1,5	100	20	15	10	8	3	8,5	05749	05759

TEKNİK ÖZELLİKLER

FNT → Balinit® futura nano top

Type H → Alaşımlı çelikler için

B 3,5 - 6 | C 2 - 3, 40°

KULLANIM ALANI

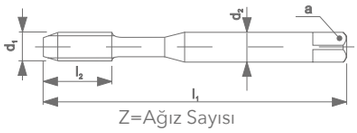
ANA KULLANIM
- Paslanmaz çelikler ve sıcak iş çelikleri (max.1400N/mm²)

ARA KULLANIM
- Yüksek alaşımlı çelikler çelikler ve nitrürlenmiş (max.1400N/mm²)

METRİK DIN 371 HSSE (ALUMİNYUM İÇİN)

M | DIN 13 | Type AL | HSSE | DIN 371 | ISO 2 6H

DIN 371



Z=Ağız Sayısı


1620 AluSpeed

2720 AluSpeed

MAKİNA KILAVUZU (ALUMİNYUM İÇİN) DIN 371 HSSE									1620	2720
									N-371BAS AluSpeed	N-371CAS AluSpeed
d_1	P	l_1	l_2	l_2(R45°)	d_2	a	z/z (R45°)	Matkap Çapı	Sip. No.	Sip. No.
M3	0,5	56	9	5	3,5	2,7	3/2	2,5	05762	05772
M3,5	0,6	56	11	6	4	3	3/2	2,9	05763	05773
M4	0,7	63	12	7	4,5	3,4	3/2	3,3	05764	05774
M4,5	0,75	70	13	8	6	4,9	3/2	3,7	05765	05775
M5	0,8	70	13	8	6	4,9	3/2	4,2	05766	05776
M6	1	80	15	10	6	4,9	3/2	5	05767	05777
M7	1	80	15	10	7	5,5	3/2	6	05768	05778
M8	1,25	90	18	13	8	6,2	3/2	6,8	05769	05779
M9	1,25	90	18	13	9	7	3/2	7,8	05770	05780
M10	1,5	100	20	15	10	8	3/2	8,5	05771	05781

TEKNİK ÖZELLİKLER

Type AL → Alaşımsız aluminyumlar için

AluSpeed → Aluminyum alaşımları için

HSSE → Süper yüksek hız çeliği

B 3,5 - 6 | C 2 - 3, 45°

KULLANIM ALANI

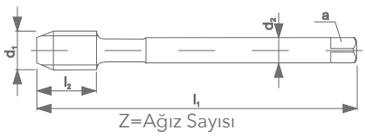
ANA KULLANIM
- Alaşımsız aluminyum

ANA KULLANIM
- Alaşımsız aluminyum

METRİK DIN 376 HSSE (ALUMİNYUM İÇİN)

M | DIN 13 | Type AL | HSSE | DIN 376 | ISO 2 6H

DIN 376



Z=Ağız Sayısı


620 AluSpeed

4720 AluSpeed

MAKİNA KILAVUZU (ALUMİNYUM İÇİN) DIN 376 HSSE									3620	4720
									N-376BAS AluSpeed	N-376CAS AluSpeed
d_1	P	l_1	l_2	l_2(R45°)	d_2	a	z/z (R45°)	Matkap Çapı	Sip. No.	Sip. No.
M3	0,5	56	9	5	2,2	-	3/2	2,5	05782	05804
M3,5	0,6	56	11	6	2,5	2,1	3/2	2,9	05783	05805
M4	0,7	63	12	7	2,8	2,1	3/2	3,3	05784	05806
M4,5	0,75	70	13	8	3,5	2,7	3/2	3,7	05785	05807
M5	0,8	70	13	8	3,5	2,7	3/2	4,2	05786	05808
M6	1	80	15	10	4,5	3,4	3/2	5	05787	05809
M7	1	80	15	10	5,5	4,3	3/2	6	05788	05810
M8	1,25	90	18	13	6	4,9	3/2	6,8	05789	05811
M9	1,25	90	18	13	7	5,5	3/2	7,8	05790	05812
M10	1,5	100	20	15	7	5,5	3/2	8,5	05791	05813
M11	1,5	100	20	15	8	6,2	3/2	9,5	05792	05814
M12	1,75	110	23	18	9	7	3/2	10,2	05793	05815
M14	2	110	25	20	11	9	3/2	12	05794	05816

KILAVUZLAR

narex

MAKİNA KILAVUZU (ALUMİNYUM İÇİN) DIN 376 HSSE									3620	4720
									N-376BAS AluSpeed	N-376CAS AluSpeed
d_1	P	l_1	l_2	l_2(R45°)	d_2	a	z/z (R45°)	Matkap Çapı	Sip. No.	Sip. No.
M16	2	110	25	20	12	9	3/2	14	05795	05817
M18	2,5	125	30	25	14	11	3/2	15,5	05796	05818
M20	2,5	140	30	25	16	12	3/2	17,5	05797	05819
M22	2,5	140	30	25	18	14,5	3/2	19,5	05798	05820
M24	3	160	36	30	18	14,5	4/3	21	05799	05821
M27	3	160	36	30	20	16	4/3	24	05800	05822
M30	3,5	180	40	35	22	18	4/3	26,5	05801	05823
M33	3,5	180	42	35	25	20	4/3	29,5	05802	05824
M36	4	200	50	40	28	22	4/3	32	05803	05825

TEKNİK ÖZELLİKLER





Type AL → Alaşımsız aluminyumlar için

AluSpeed → Aluminyum alaşımları için

HSSE → Süper yüksek hız çeliği

KULLANIM ALANI

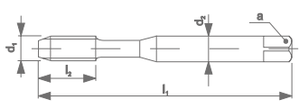
ANA KULLANIM
- Alaşımsız aluminyum

ANA KULLANIM
- Alaşımsız aluminyum

METRİK DIN 371C HSSE DÜZ KANAL (DÖKÜM İÇİN)

M | 60° | DIN 13 | Type GG | HSSE | DIN 371 | ISO 2 6HX | ≥1,5d | ≥2,5d | C 2 - 3

DIN 371/C



Z=Ağız Sayısı



1080 TiCN

MAKİNA KILAVUZU (DÖKÜM İÇİN) DIN 371C HSSE DÜZ KANAL								1080
								N-371DB TiCN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M3	0,5	56	9	3,5	2,7	3	2,5	05826
M3,5	0,6	56	11	4	3	3	2,9	05827
M4	0,7	63	12	4,5	3,4	3	3,3	05828
M4,5	0,75	70	13	6	4,9	3	3,7	05829
M5	0,8	70	13	6	4,9	3	4,2	05830
M6	1	80	15	6	4,9	3	5	05831
M7	1	80	15	7	5,5	3	6	05832
M8	1,25	90	18	8	6,2	4	6,8	05833
M9	1,25	90	18	9	7	4	7,8	05834
M10	1,5	100	20	10	8	4	8,5	05835

TiCN → Titanyum karbonitrür

Type GG → Dökme demirler için

HSSE → Süper yüksek hız çeliği

KULLANIM ALANI

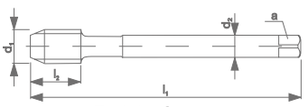
ANA KULLANIM
- Gri dökme demir

ARA KULLANIM
- Alüminyum alaşımları
- Silisyum miktarı min.10%

METRİK DIN 376C HSSE DÜZ KANAL (DÖKÜM İÇİN)

M | 60° | DIN 13 | Type GG | HSSE | DIN 376 | ISO 2 6HX | ≥1,5d | ≥2,5d | C 2 - 3

DIN 376/C



Z=Ağız Sayısı



3080 TiCN

MAKİNA KILAVUZU (DÖKÜM İÇİN) DIN 376C HSSE DÜZ KANAL								3080
								N-376DB TiCN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M3	0,5	56	9	2,2	-	3	2,5	05836
M3,5	0,6	56	11	2,5	2,1	3	2,9	05837
M4	0,7	63	12	2,8	2,1	3	3,3	05838
M4,5	0,75	70	13	3,5	2,7	3	3,7	05839
M5	0,8	70	13	3,5	3,4	3	4,2	05840
M6	1	80	15	4,5	4,3	3	5	05841
M7	1	80	15	5,5	4,9	3	6	05842

KILAVUZLAR

narex

MAKİNA KILAVUZU (DÖKÜM İÇİN) DIN 376C HSSE DÜZ KANAL								3080
								N-376DB TiCN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M8	1,25	90	18	6	5,5	4	6,8	05843
M9	1,25	90	18	7	5,5	4	7,8	05844
M10	1,5	100	20	7	6,2	4	8,5	05845
M11	1,5	100	20	8	7	4	9,5	05846
M12	1,75	110	23	9	9	4	10,2	05847
M14	2	110	25	11	9	4	12	05848
M16	2	110	25	12	11	4	14	05849
M18	2,5	125	30	14,5	12	4	15,5	05850
M20	2,5	140	30	14,5	14,5	4	17,5	05851
M22	2,5	140	30	16	14,5	4	19,5	05852
M24	3	160	36	18	16	4	21	05853
M27	3	160	36	20	16	4	24	05854
M30	3,5	180	40	22	18	4	26,5	05855
M33	3,5	180	42	25	20	4	29,5	05856
M36	4	200	50	28	22	4	32	05857

TiCN → Titanyum karbonitrür

Type GG → Dökme demirler için

HSSE → Süper yüksek hız çeliği

KULLANIM ALANI

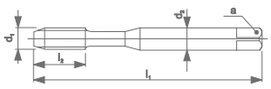
ANA KULLANIM
- Gri dökme demir

ARA KULLANIM
- Alüminyum alaşımları
- Silisyum miktarı min.10%

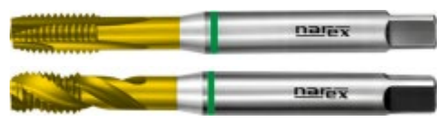
METRİK DIN 371 HSSE

M | ISO | DIN 13 | Type UNI | HSSE V3 | DIN 371 | ISO 2 6H

DIN 371



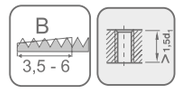
Z=Ağız Sayısı

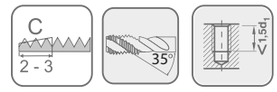


1710 TiCN

2210 TiCN

MAKINA KILAVUZU DIN 371 HSSE								1080	1710	2210
								N-371DB TiCN	N-371B UNI	N-371C UNI
d_1	P	l_1	l_2	l_2(r35°)	d_2	a	z/z(r35°)	Matkap Çapı	Sip. No.	Sip. No.
M3	0,5	56	9	5	3,5	2,7	3	2,5	05858	05868
M3,5	0,6	56	11	6	4	3	3	2,9	05859	05869
M4	0,7	63	12	7	4,5	3,4	3	3,3	05860	05870
M4,5	0,75	70	13	8	6	4,9	3	3,7	05861	05871
M5	0,8	70	13	8	6	4,9	3	4,2	05862	05872
M6	1	80	15	10	6	4,9	3	5	05863	05873
M7	1	80	15	10	7	5,5	3	6	05864	05874
M8	1,25	90	18	13	8	6,2	3	6,8	05865	05875
M9	1,25	90	18	13	9	7	3	7,8	05866	05876
M10	1,5	100	20	15	10	8	3	8,5	05867	05877





Type UNI → Genel kullanım için

HSSE V3 → Vanadyumlu süper

TiN → Titanyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yüzeyi sertleştirilmiş çelikler ve nitrürlenmiş çelikler (Max.1100N/mm²)
- Isıl işlem görmüş çelikler (Max.1100N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Alaşımlı bakır, uzun talaş

ARA KULLANIM
- Kolay işlenir çelikler (Max.800N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve sıcak iş çelikleri (450-800N/mm²)
- Gri dökme demir Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yalın çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Çinko ve çinko alaşımları

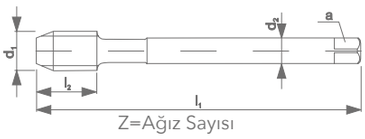
ARA KULLANIM
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

KILAVUZLAR

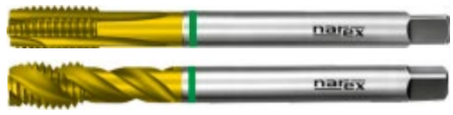
METRİK DIN 376 HSSE

M | ISO P | DIN 13 | Type UNI | HSSE V3 | DIN 376 | ISO 2 6H

DIN 376



Z=Ağız Sayısı

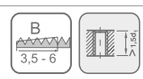


3710 TiN

4210 TiN

MAKİNA KILAVUZU DIN 376 HSSE									3710	4210
									N-376B UNI	N-376C UNI
d_1	P	l_1	l_2	l_2(R35°)	d_2	a	z/z(R35°)	Matkap Çapı	Sip. No.	Sip. No.
M3	0,5	56	9	5	2,2	-	3/3	2,5	05878	05894
M3,5	0,6	56	11	6	2,5	2,1	3/3	2,9	05879	05895
M4	0,7	63	12	7	2,8	2,1	3/3	3,3	05880	05896
M4,5	0,75	70	13	8	3,5	2,7	3/3	3,7	05881	05897
M5	0,8	70	13	8	3,5	2,7	3/3	4,2	05882	05898
M6	1	80	15	10	4,5	3,4	3/3	5	05883	05899
M7	1	80	15	10	5,5	4,3	3/3	6	05884	05900
M8	1,25	90	18	13	6	4,9	3/3	6,8	05885	05901
M9	1,25	90	18	13	7	5,5	3/3	7,8	05886	05902
M10	1,5	100	20	15	7	5,5	3/3	8,5	05887	05903
M11	1,5	100	20	15	8	6,2	3/3	9,5	05888	05904
M12	1,75	110	23	18	9	7	3/3	10,2	05889	05905
M14	2	110	25	20	11	9	3/3	12	05890	05906
M16	2	110	25	20	12	9	3/4	14	05891	05907
M18	2,5	125	30	25	14	11	3/4	15,5	05892	05908
M20	2,5	140	30	25	16	12	3/4	17,5	05893	05909

TEKNİK ÖZELLİKLER





Type UNI → Genel kullanım için

HSSE V3 → Vanadyumlu süper

TIN → Titanyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş 1 çelikler (Max.800N/mm²)
- Yüzeyi sertleştirilmiş 1 çelikler ve nitrürlenmiş 1 çelikler (Max.1100N/mm²)
- Isıl işlem görmüş çelikler 1 (Max.1100N/mm²)
- Alüminyum alaşımları, 1 silisyum miktarı max.10%
- Alaşımlı bakır, uzun talaş

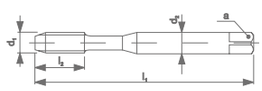
ARA KULLANIM
- Kolay işlenir çelikler (Max.800N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (600-1000N/mm²)
- Gri dökme demir
- Sfero dökme ve 1 siyah temper dökme demir
- Aluminyum alaşımları, 1 silisyum miktarı min.10%

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş 1 çelikler (Max.800N/mm²)
- Yüzeyi sertleştirilmiş 1 çelikler ve nitrürlenmiş 1 çelikler (Max.1100N/mm²)
- Isıl işlem görmüş çelikler 1 (Max.1100N/mm²)
- Aluminyum alaşımları, 1 silisyum miktarı max.10%
- Alaşımlı bakır, uzun talaş 1 ARA KULLANIM
- Kolay işlenir çelikler (Max.800N/mm²)
- Takım çelikleri (Max.1100N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (450-800N/mm²)
- Paslanmaz çelikler ve 1 sıcak iş çelikleri (600-1000N/mm²)
- Gri dökme demir
- Sfero dökme ve 1 siyah temper dökme demir
- Aluminyum alaşımları, 1 silisyum miktarı min.10%

METRİK DIN 376 HSSE

M | ISO P | DIN 13 | Type H | HSSE PM | ISO 2 6H

DIN 376



Z=Ağız Sayısı



3920 FNT

4870 FNT

MAKİNA KILAVUZU DIN 376 HSSE									3920	4870
									N-376B TOZ FNT	N-376C TOZ FNT
d_1	P	l_1	l_2	l_2(R40°)	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.
M12	1,75	110	23	18	9	7	3	10,2	05760	05761

TEKNİK ÖZELLİKLER





FNT → Balinit® futura nano top

Type H → Alaşımlı çelikler için

KULLANIM ALANI

ANA KULLANIM
- Paslanmaz çelikler ve sıcak iş çelikleri (max.1400N/mm²)

ARA KULLANIM
- Yüksek alaşımlı çelikler çelikler ve nitrürlenmiş (max.1400N/mm²)

ANA KULLANIM
- Paslanmaz çelikler ve sıcak iş çelikleri (max.1400N/mm²)

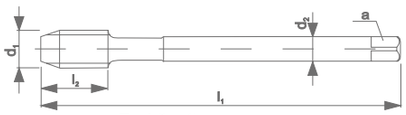
ARA KULLANIM
- Yüksek alaşımlı çelikler çelikler ve nitrürlenmiş (max.1400N/mm²)

KILAVUZLAR

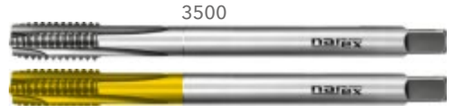
METRİK İNCE DİŞ DIN 374B HSSE DÜZ KANAL UÇ BİLEMELİ

MF | DIN 13 | Type N | HSSE | DIN 374 | ISO 2 6H | B 3,5 - 6

DIN 374/B



Z=Ağız Sayısı



3500

3500 TiN



3500 TiALN

3540 OX

MAKİNA KILAVUZU DIN 374B HSSE DÜZ KANAL UÇ BİLEMELİ								3500	3500	3500	3540
								N-374B	N-374B TiN	N-374B TiALN	N-374B OX
d1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,35	56	8	2,2	-	3	2,65	05910	05954	05998	06042
M3,5	0,35	56	8	2,5	2,1	3	3,15	05911	05955	05999	06043
M4	0,5	63	12	2,8	2,1	3	3,5	05912	05956	06000	06044
M4	0,35	63	12	2,8	2,1	3	3,65	05913	05957	06001	06045
M4,5	0,5	70	13	3,5	2,7	3	4	05914	05958	06002	06046
M5	0,5	70	13	3,5	2,7	3	4,5	05915	05959	06003	06047
M5,5	0,5	80	15	4	3	3	5	05916	05960	06004	06048
M6	0,75	80	15	4,5	3,4	3	5,2	05917	05961	06005	06049
M6	0,5	80	15	4,5	3,4	3	5,5	05918	05962	06006	06050
M7	0,75	80	15	5,5	4,3	3	6,2	05919	05963	06007	06051
M8	1	90	18	6	4,9	3	7	05920	05964	06008	06052
M8	0,75	80	15	6	4,9	3	7,2	05921	05965	06009	06053
M8	0,5	80	15	6	4,9	3	7,5	05922	05966	06010	06054
M9	1	90	18	7	5,5	3	8	05923	05967	06011	06055
M9	0,75	80	18	7	5,5	3	8,2	05924	05968	06012	06056
M10	1,25	100	20	7	5,5	3	8,8	05925	05969	06013	06057
M10	1	90	20	7	5,5	3	9	05926	05970	06014	06058
M10	0,75	90	20	7	5,5	3	9,2	05927	05971	06015	06059
M11	1	90	20	8	6,2	3	10	05928	05972	06016	06060
M11	0,75	90	20	8	6,2	3	10,2	05929	05973	06017	06061
M12	1,5	100	21	9	7	3	10,5	05930	05974	06018	06062
M12	1,25	100	21	9	7	3	10,8	05931	05975	06019	06063
M12	1	100	21	9	7	3	11	05932	05976	06020	06064
M13	1,5	100	21	11	9	3	11,5	05933	05977	06021	06065
M13	1,25	100	21	11	9	3	11,8	05934	05978	06022	06066
M13	1	100	21	11	9	3	12	05935	05979	06023	06067
M14	1,5	100	21	11	9	3	12,5	05936	05980	06024	06068
M14	1,25	100	21	11	9	3	12,8	05937	05981	06025	06069
M14	1	100	21	11	9	3	13	05938	05982	06026	06070
M15	1,5	100	21	12	9	3	13,5	05939	05983	06027	06071
M15	1	100	21	12	9	3	14	05940	05984	06028	06072
M16	1,5	100	21	12	9	3	14,5	05941	05985	06029	06073
M16	1	100	21	12	9	3	15	05942	05986	06030	06074
M17	1,5	100	21	12	9	3	15,5	05943	05987	06031	06075
M17	1	100	21	12	9	3	16	05944	05988	06032	06076
M18	2	125	24	14	11	3	16	05945	05989	06033	06077
M18	1,5	110	24	14	11	3	16,5	05946	05990	06034	06078
M18	1	110	24	14	11	3	17	05947	05991	06035	06079
M20	2	140	30	16	12	3	18	05948	05992	06036	06080
M20	1,5	125	24	16	12	3	18,5	05949	05993	06037	06081
M20	1	125	24	16	12	3	19	05950	05994	06038	06082
M22	2	140	30	18	14,5	3	20	05951	05995	06039	06083
M22	1,5	125	24	18	14,5	3	20,5	05952	05996	06040	06084
M22	1	140	24	18	14,5	3	21	05953	05997	06041	06085

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

OX → Oksidasyon

KULLANIM ALANI

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Çinko ve çinko alaşımları

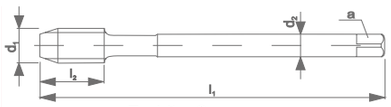
ARA KULLANIM
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%"

KILAVUZLAR

METRİK İNCE DİŞ DIN 374B HSSE DÜZ KANAL UÇ BİLEMELİ

MF | DIN 13 | Type N | HSSE | DIN 374 | ISO 2 6H

DIN 374/B



Z=Ağız Sayısı



3500



3500 TiALN



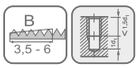
3500 TiN

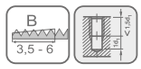


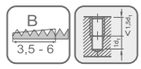
3540 OX

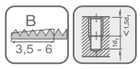
MAKİNA KILAVUZU DIN 374B HSSE DÜZ KANAL UÇ BİLEMELİ								3500	3500	3500	3540
								N-374B	N-374B TiN	N-374B TiALN	N-374B OX
d1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M24	2	140	26	18	14,5	4	22	06086	06130	06174	06218
M24	1,5	140	26	18	14,5	4	22,5	06087	06131	06175	06219
M24	1	140	26	18	14,5	4	23	06088	06132	06176	06220
M25	2	140	26	18	14,5	4	23	06089	06133	06177	06221
M25	1,5	140	26	18	14,5	4	23,5	06090	06134	06178	06222
M26	1,5	140	26	18	14,5	4	24,5	06091	06135	06179	06223
M27	2	140	26	20	16	4	25	06092	06136	06180	06224
M27	1,5	140	26	20	16	4	25,5	06093	06137	06181	06225
M27	1	140	26	20	16	4	26	06094	06138	06182	06226
M28	2	140	26	20	16	4	26	06095	06139	06183	06227
M28	1,5	140	26	20	16	4	26,5	06096	06140	06184	06228
M30	2	150	28	22	18	4	28	06097	06141	06185	06229
M30	1,5	150	28	22	18	4	28,5	06098	06142	06186	06230
M30	1	150	28	22	18	4	29	06099	06143	06187	06231
M32	1,5	150	28	22	18	4	30,5	06100	06144	06188	06232
M33	2	160	30	25	20	4	31	06101	06145	06189	06233
M33	1,5	160	30	25	20	4	31,5	06102	06146	06190	06234
M34	1,5	170	30	28	22	4	32,5	06103	06147	06191	06235
M35	1,5	170	30	28	22	4	33,5	06104	06148	06192	06236
M36	3	200	42	28	22	4	33	06105	06149	06193	06237
M36	2	170	30	28	22	4	34	06106	06150	06194	06238
M36	1,5	170	30	28	22	4	34,5	06107	06151	06195	06239
M38	1,5	170	30	28	22	4	36,5	06108	06152	06196	06240
M39	3	200	42	32	24	4	36	06109	06153	06197	06241
M39	2	170	30	32	24	4	37	06110	06154	06198	06242
M39	1,5	170	30	32	24	4	37,5	06111	06155	06199	06243
M40	3	200	42	32	24	4	37	06112	06156	06200	06244
M40	2	170	30	32	24	4	38	06113	06157	06201	06245
M40	1,5	170	30	32	24	4	38,5	06114	06158	06202	06246
M42	3	200	50	32	24	4	39	06115	06159	06203	06247
M42	2	170	30	32	24	4	40	06116	06160	06204	06248
M42	1,5	170	30	32	24	4	40,5	06117	06161	06205	06249
M45	3	200	50	36	249	4	42	06118	06162	06206	06250
M45	2	180	32	36	29	4	43	06119	06163	06207	06251
M45	1,5	180	32	36	29	4	43,5	06120	06164	06208	06252
M48	3	225	50	36	29	4	45	06121	06165	06209	06253
M48	2	190	32	36	29	4	46	06122	06166	06210	06254
M48	1,5	190	32	36	29	4	46,5	06123	06167	06211	06255
M50	3	225	50	36	29	4	47	06124	06168	06212	06256
M50	2	190	32	36	29	4	48	06125	06169	06213	06257
M50	1,5	190	32	36	29	4	48,5	06126	06170	06214	06258
M52	3	225	50	40	32	4	49	06127	06171	06215	06259
M52	2	190	32	40	32	4	50	06128	06172	06216	06260
M52	1,5	190	32	40	32	4	50,5	06129	06173	06217	06261

TEKNİK ÖZELLİKLERİ









Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

OX → Oksidasyon

KULLANIM ALANI

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüşçelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10% Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısılişlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah tempe dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10% Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10% Yapısal çelikler (Max.500N/mm²)
- Kolay işlenir çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10% Alaşımlı bakır, kısa talaş

ANA KULLANIM
- Yalın dökme demir (Max.500N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10% Çinko ve çinko alaşımları

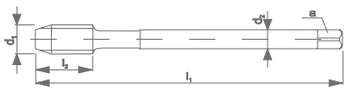
ARA KULLANIM
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı min.10%

KILAVUZLAR

METRİK İNCE DİŞ DIN 374C HSSE 35 DERECE HELİS

MF | DIN 13 | Type N | HSSE | DIN 374 | ISO 2 6H | C 2 - 3

DIN 374/C



Z=Ağız Sayısı

4050



4050 TiAlN



4050 TiN

4050 OX

MAKİNA KILAVUZU DIN 374C HSSE 35 DERECE HELİS								4050 N-374C	4050 N-374C TiN	4050 N-374C TiALN	4090 "N-374C OX
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,35	56	5	2,2	-	3	2,65	06262	06294	06326	06358
M3,5	0,35	56	6	2,5	2,1	3	3,15	06263	06295	06327	06359
M4	0,5	63	7	2,8	2,1	3	3,5	06264	06296	06328	06360
M4	0,35	63	7	2,8	2,1	3	3,65	06265	06297	06329	06361
M4,5	0,5	70	8	3,5	2,7	3	4	06266	06298	06330	06362
M5	0,5	70	8	3,5	2,7	3	4,5	06267	06299	06331	06363
M5,5	0,5	80	7	4	3	3	5	06268	06300	06332	06364
M6	0,75	80	10	4,5	3,4	3	5,2	06269	06301	06333	06365
M6	0,5	80	10	4,5	3,4	3	5,5	06270	06302	06334	06366
M7	0,75	80	10	5,5	4,3	3	6,2	06271	06303	06335	06367
M8	1	90	13	6	4,9	3	7	06272	06304	06336	06368
M8	0,75	80	10	6	4,9	3	7,2	06273	06305	06337	06369
M8	0,5	80	10	6	4,9	3	7,5	06274	06306	06338	06370
M9	1	90	13	7	5,5	3	8	06275	06307	06339	06371
M9	0,75	80	10	7	5,5	3	8,2	06276	06308	06340	06372
M10	1,25	100	15	7	5,5	3	8,8	06277	06309	06341	06373
M10	1	90	12	7	5,5	3	9	06278	06310	06342	06374
M10	0,75	90	12	7	5,5	3	9,2	06279	06311	06343	06375
M11	1	90	12	8	6,2	3	10	06280	06312	06344	06376
M11	0,75	90	12	8	6,2	3	10,2	06281	06313	06345	06377
M12	1,5	100	14	9	7	3	10,5	06282	06314	06346	06378
M12	1,25	100	14	9	7	3	10,8	06283	06315	06347	06379
M12	1	100	14	9	7	3	11	06284	06316	06348	06380
M13	1	100	15	11	9	3	12	06285	06317	06349	06381
M14	1,5	100	16	11	9	3	12,5	06286	06318	06350	06382
M14	1,25	100	16	11	9	3	12,8	06287	06319	06351	06383
M14	1	100	16	11	9	3	13	06288	06320	06352	06384
M 15	1,5	100	17	12	9	3	13,5	06289	06321	06353	06385
M 15	1	100	16	12	9	3	14	06290	06322	06354	06386
M16	1,5	100	16	12	9	4	14,5	06291	06323	06355	06387
M16	1	100	16	12	9	4	15	06292	06324	06356	06388
M17	1,5	100	17	12	9	4	15,5	06293	06325	06357	06389
M17	1	100	16	12	9	4	16	06390	06422	06454	06486
M18	2	125	20	14	11	4	16	06391	06423	06455	06487
M18	1,5	110	20	14	11	4	16,5	06392	06424	06456	06488
M18	1	110	20	14	11	4	17	06393	06425	06457	06489
M20	2	140	20	16	12	4	18	06394	06426	06458	06490
M20	1,5	125	20	16	12	4	18,5	06395	06427	06459	06491
M20	1	125	20	16	12	4	19	06396	06428	06460	06492
M22	2	140	20	18	14,5	4	20	06397	06429	06461	06493
M22	1,5	125	20	18	14,5	4	20,5	06398	06430	06462	06494
M22	1	125	20	18	14,5	4	21	06399	06431	06463	06495
M24	2	140	22	18	14,5	4	22	06400	06432	06464	06496
M24	1,5	140	22	18	14,5	4	22,5	06401	06433	06465	06497
M24	1	140	22	18	14,5	4	23	06402	06434	06466	06498
M25	2	140	22	18	14,5	4	23	06403	06435	06467	06499
M25	1,5	140	22	18	14,5	4	23,5	06404	06436	06468	06500
M26	1,5	140	22	18	14,5	4	24,5	06405	06437	06469	06501
M27	2	140	22	20	16	4	25	06406	06438	06470	06502
M27	1,5	140	22	20	16	4	25,5	06407	06439	06471	06503
M27	1	140	22	20	16	4	26	06408	06440	06472	06504
M28	2	140	22	20	16	4	26	06409	06441	06473	06505
M28	1,5	140	22	20	16	4	26,5	06410	06442	06474	06506
M30	2	150	26	22	18	4	28	06411	06443	06475	06507
M30	1,5	150	26	22	18	4	28,5	06412	06444	06476	06508

KILAVUZLAR

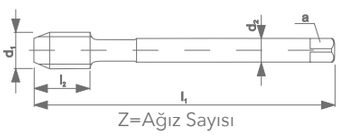
MAKİNA KILAVUZU DIN 374C HSSE 35 DERECE HELİS								4050	4050	4050	4090
								N-374C	N-374C TiN	N-374C TiALN	"N-374C OX
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M30	1	150	26	22	18	4	29	06413	06445	06477	06509
M32	1,5	150	26	22	18	4	30,5	06414	06446	06478	06510
M33	2	160	28	25	20	4	31	06415	06447	06479	06511
M33	1,5	160	28	25	20	4	31,5	06416	06448	06480	06512
M34	1,5	170	28	28	22	4	32,5	06417	06449	06481	06513
M35	1,5	170	30	28	22	4	33,5	06418	06450	06482	06514
M36	3	200	36	28	22	4	33	06419	06451	06483	06515
M36	2	170	28	28	22	4	34	06420	06452	06484	06516
M36	1,5	170	28	28	22	4	34,5	06421	06453	06485	06517
KULLANIM ALANI								ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir Alaşımlı bakır, uzun talaş	ARA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir Alaşımlı bakır, uzun talaş • Aluminyum alaşımları, silisyum miktarı min.10%	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% Sfero dökme ve siyah temper dökme demir Alaşımlı bakır, uzun talaş • Aluminyum alaşımları, silisyum miktarı min.10%	ANA KULLANIM • Çinko ve çinko alaşımları ARA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% • Aluminyum alaşımları, silisyum miktarı min.10%

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE → Süper yüksek hız çeliği
TiN → Titanyum nitrür
TiALN → Titanyum aluminyum nitrür
OX → Oksidasyon

GAZ DİŞ DIN 5156C HSSE DÜZ KANAL

G | DIN ISO 228 | Type N | HSSE | DIN 5156 | C 2 - 3

DIN 5156/C



Z=Ağız Sayısı



3002
3002 TiN



3002 TiALN

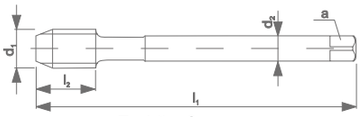
MAKİNA KILAVUZU DIN 5156C HSSE DÜZ KANAL								3002	3002	3002
								N-5156D	N-5156D TiN	N-5156D TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
G 1/16"	28	90	18	6	4,9	3	6,8	06518	06533	06548
G 1/8"	28	90	20	7	5,5	3	8,8	06519	06534	06549
G 1/4"	19	100	21	11	9	3	11,8	06520	06535	06550
G 3/8"	19	100	21	12	9	3	15,25	06521	06536	06551
G 1/2"	14	125	24	16	12	3	19	06522	06537	06552
G 5/8"	14	125	24	18	14,5	4	21	06523	06538	06553
G 3/4"	14	140	26	20	16	4	24,5	06524	06539	06554
G 7/8"	14	150	28	22	18	4	28,25	06525	06540	06555
G 1"	11	160	30	25	20	4	30,75	06526	06541	06556
G 1 1/8"	11	170	30	28	22	4	35,5	06527	06542	06557
G 1 1/4"	11	170	30	32	24	4	39,5	06528	06543	06558
G 1 3/8"	11	180	32	36	29	6	41,8	06529	06544	06559
G 1 1/2"	11	190	32	36	29	6	45,25	06530	06545	06560
G 1 3/4"	11	190	32	40	32	6	51,3	06531	06546	06561
G 2"	11	220	40	45	35	6	57,2	06532	06547	06562
KULLANIM ALANI								ANA KULLANIM • Alaşımlı bakır, kısa talaş ARA KULLANIM • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir • Aluminyum alaşımları Silisyum miktarı min.10%	ANA KULLANIM • Aluminyum alaşımları • Silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş ARA KULLANIM • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir	ANA KULLANIM • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE → Süper yüksek hız çeliği
TiN → Titanyum nitrür
TiALN → Titanyum aluminyum nitrür

GAZ DİŞ DIN 5156C HSSE 35 DERECE HELIS

G | DIN ISO 228 | Type N | HSSE | DIN 5156 | C 2 - 3 | 35

DIN 5156/C



Z=Ağız Sayısı



4052
4052 TiN



4052 TiALN

MAKİNA KILAVUZU DIN 5156C HSSE 35 DERECE HELIS								4052	4052	4052
								N-5156C	"N-5156C TiN"	N-5156C TiALN
d1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
G 1/16"	28	90	18	6	4,9	3	6,8	06563	06578	06593
G 1/8"	28	90	20	7	5,5	3	8,8	06564	06579	06594
G 1/4"	19	100	21	11	9	3	11,8	06565	06580	06595
G 3/8"	19	100	21	12	9	3	15,25	06566	06581	06596
G 1/2"	14	125	24	16	12	3	19	06567	06582	06597

KILAVUZLAR

MAKİNA KILAVUZU DIN 5156C HSSE 35 DERECE HELİS								4052	4052	4052
								N-5156C	"N-5156C TiN"	N-5156C TiALN
d1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
G 5/8"	14	125	24	18	14,5	4	21	06568	06583	06598
G 3/4"	14	140	26	20	16	4	24,5	06569	06584	06599
G 7/8"	14	150	28	22	18	4	28,25	06570	06585	06600
G 1"	11	160	30	25	20	4	30,75	06571	06586	06601
G 1 1/8"	11	170	30	28	22	4	35,5	06572	06587	06602
G 1 1/4"	11	170	30	32	24	4	39,5	06573	06588	06603
G 1 3/8"	11	180	32	36	29	6	41,8	06574	06589	06604
G 1 1/2"	11	190	32	36	29	6	45,25	06575	06590	06605
G 1 3/4"	11	190	32	40	32	6	51,3	06576	06591	06606
G 2"	11	220	40	45	35	6	57,2	06577	06592	06607

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

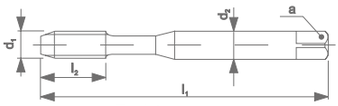
KULLANIM ALANI

4052	4052	4052
ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı max.10% • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı max.10% • Alaşımlı bakır, uzun talaş

UNC DİŞ DIN 371C HSSE DÜZ KANAL

UNC | 60° P | Type N | HSSE | ≈ DIN 371 | 2B | C 2 - 3 | B 3,5 - 6 | l_1 | l_2 d_2 a

DIN 371/C



Z=Ağız Sayısı


1004/1504

1004/1504 TiN


1004/1504 TiALN

MAKİNA KILAVUZU DIN 371C HSSE DÜZ KANAL								1004/1504	1004/1504	1004/1504
								N-371D N-2182B	N-371D TiN N-2182B TiN	N-371D TiALN N-2182B TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNC No. 5	40	56	9	3,5	2,7	3	2,6	06608	06616	06624
UNC No. 6	32	56	11	4	3	3	2,85	06609	06617	06625
UNC No. 8	32	63	12	4,5	3,4	3	3,5	06610	06618	06626
UNC No. 10	24	70	13	6	4,9	3	3,9	06611	06619	06627
UNC No. 12	24	80	15	6	4,9	3	4,5	06612	06620	06628
UNC 1/4	20	80	15	7	5,2	3	5,2	06613	06621	06629
UNC 5/16	18	90	18	8	6,2	3	6,6	06614	06622	06630
UNC 3/8	16	90	20	9	7	3	8	06615	06623	06631

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

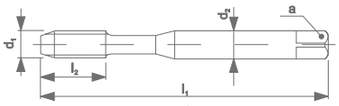
KULLANIM ALANI

1004/1504	1004/1504	1004/1504
ANA KULLANIM • Alaşımlı bakır, kısa talaş ARA KULLANIM • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir • Aluminyum alaşımları Silisyum miktarı min.10%	ANA KULLANIM • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş ARA KULLANIM • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir	ANA KULLANIM • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımı bakır, kısa talaş • Yapısal çelikler (max. 500N/mm²) • Kolay işlenir çelikler (max. 800N/mm²) • Gri dökme demir

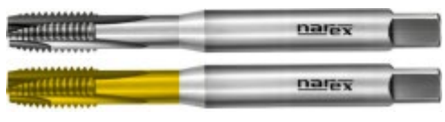
UNC DİŞ DIN 376B HSSE DÜZ KANAL UÇ BILEMELI

UNC | 60° P | Type N | HSSE | ≈ DIN 376 | 2B | B 3,5 - 6 | l_1

DIN 376/B



Z=Ağız Sayısı


3504

3504 TiN


3504 TiALN

MAKİNA KILAVUZU DIN 376B HSSE DÜZ KANAL UÇ BILEMELI								3504	3504	3504
								N-2183B	N-2183B TIN	N-2183B TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNC 7/16	14	100	20	8	6	3	9	06632	06640	06648
UNC 1/2	13	110	23	9	7	3	11	06633	06641	06649
UNC 9/16	12	110	25	11	9	3	12	06634	06642	06650
UNC 5/8	11	110	25	12	9	3	14	06635	06643	06651
UNC 3/4	10	125	30	14	11	3	17	06636	06644	06652
UNC 7/8	9	140	30	18	15	3	20	06637	06645	06653
UNC 1	8	160	36	18	15	3	22	06638	06646	06654
UNC 1 1/8	7	180	40	22	18	4	25	06639	06647	06655

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

KULLANIM ALANI

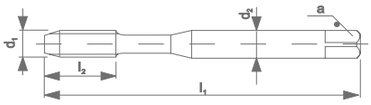
3504	3504	3504
ANA KULLANIM • Yalın dökme demir (Max.500N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% ARA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş	ANA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Yalın dökme demir (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.500N/mm²) • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları, silisyum miktarı max.10% ARA KULLANIM • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş	ANA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Yalın dökme demir (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.500N/mm²) • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları, silisyum miktarı max.10% • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş

KILAVUZLAR

UNC DİŞ DIN 2182C 35 DERECE HELIS

UNC | 60° | Type N | HSSE | DIN 371 | 2B | C 2 - 3 | 35° | 3 x d1

DIN 2182/C



Z=Ağız Sayısı



2054

2054 TiN



2054 TiALN

MAKİNA KILAVUZU DIN 2182C 35 DERECE HELIS								2054	2054	2054
								N-2182C	N-2182C TiN	N-2182C TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNC No. 5	40	56	5	3,5	2,7	3	2,6	06656	06664	06672
UNC No. 6	32	56	7	4	3	3	2,85	06657	06665	06673
UNC No. 8	32	63	7	4,5	3,4	3	3,5	06658	06666	06674
UNC No. 10	24	70	8	6	4,9	3	3,9	06659	06667	06675
UNC No. 12	24	80	10	6	4,9	3	4,5	06660	06668	06676
UNC 1/4	20	80	10	7	5,2	3	5,2	06661	06669	06677
UNC 5/16	18	90	13	8	6,2	3	6,6	06662	06670	06678
UNC 3/8	16	90	15	9	7	3	8	06663	06671	06679

Type N — Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE — Süper yüksek hız çeliği
TiN — Titanyum nitrür
TiALN — Titanyum aluminyum nitrür

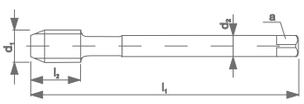
KULLANIM ALANI

2054	2054	2054
ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımlı bakır, uzun talaş

UNC DİŞ DIN 2183C HSSE 35 DERECE HELIS

UNC | 60° | Type N | HSSE | DIN 376 | 2B | C 2 - 3 | 35° | 3 x d1

DIN 2183/C



Z=Ağız Sayısı



4054



4054 TiN



4054 TiALN

MAKİNA KILAVUZU DIN 2183C HSSE 35 DERECE HELIS								4054	4054	4054
								N-2183C	"N-2183C TiN"	N-2183C TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNC 7/16	14	100	18	8	6,2	3	9,4	06680	06687	06694
UNC 1/2	13	110	20	9	7	3	10,75	06681	06688	06695
UNC 9/16	12	110	20	11	9	3	12,25	06682	06689	06696
UNC 5/8	11	110	20	12	9	3	13,5	06683	06690	06697
UNC 3/4	10	125	25	14	11	4	16,5	06684	06691	06698
UNC 7/8	9	140	25	18	14,5	4	19,5	06685	06692	06699
UNC 1	8	160	30	18	14,5	4	22,25	06686	06693	06700

Type N — Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE — Süper yüksek hız çeliği
TiN — Titanyum nitrür
TiALN — Titanyum aluminyum nitrür

KULLANIM ALANI

4054	4054	4054
ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% ARA KULLANIM • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı min.10%, • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Yalın dökme demir (Max.800N/mm²) • Aluminyum alaşımları Silisyum miktarı max.10% • Sfero dökme ve siyah temper dökme demir • Aluminyum alaşımları Silisyum miktarı min.10% • Alaşımlı bakır, uzun talaş

UNF DİŞ IN 374B HSSE DÜZ KANAL UÇ BILEMELI

UNF | 60° | Type N | HSSE | ≈ DIN 374 | DIN 2183 | 2B | B 3,5 - 6 | 1,5 x d1

DIN 374/B



Z=Ağız Sayısı



3505



3505 TiN



3505 TiALN

MAKİNA KILAVUZU DIN 374B HSSE DÜZ KANAL UÇ BILEMEL I								3505	3505	3505
								N-2183B	"N-2183B TiN"	N-2183B TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNF No. 5	44	56	9	2,2	-	3	2,7	06701	06717	06733
UNF No. 6	40	56	11	2,5	2,1	3	3	06702	06718	06734
UNF No. 8	36	63	12	2,8	2,1	3	3,5	06703	06719	06735
UNF No. 10	32	70	13	3,5	2,7	3	4,1	06704	06720	06736

KILAVUZLAR

narex

MAKİNA KILAVUZU DIN 374B HSSE DÜZ KANAL UÇ BİLEMEL I								3505	3505	3505
								N-2183B	"N-2183B TiN"	N-2183B TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNF No. 12	28	80	15	4	3	3	4,65	06705	06721	06737
UNF 1/4	28	80	15	4,5	3,4	3	5,5	06706	06722	06738
UNF 5/16	24	90	18	6	4,9	3	6,9	06707	06723	06739
UNF 3/8	24	90	20	7	5,5	3	8,5	06708	06724	06740
UNF 7/16	20	100	20	8	6,2	3	9,9	06709	06725	06741
UNF 1/2	20	100	21	9	7	3	11,5	06710	06726	06742
UNF 9/16	18	100	21	11	9	3	12,9	06711	06727	06743
UNF 5/8	18	100	21	12	9	3	14,5	06712	06728	06744
UNF 3/4	16	110	24	14	11	3	17,5	06713	06729	06745
UNF 7/8	14	125	24	18	14,5	3	20,5	06714	06730	06746
UNF 1	12	140	26	18	14,5	3	23,25	06715	06731	06747
UNF 1 1/8	12	150	28	22	18	4	26,5	06716	06732	06748

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları Silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Alaşımlı bakır, uzun talaş

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları Silisyum miktarı max.10%

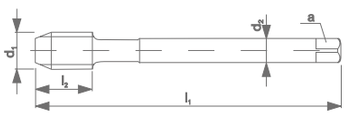
ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı min.10%,
- Alaşımlı bakır, uzun talaş

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları Silisyum miktarı max.10%
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı min.10%
- Alaşımlı bakır, uzun talaş

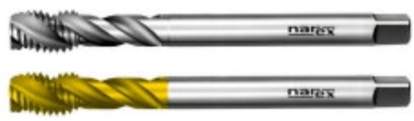
UNF DİŞ DIN 374C HSSE 35 DERECE HELIS

UNF | 60° | Type N | HSSE | ≈ DIN 374 | DIN 2183 | 2B | C 2 - 3 | 35° | 0,8 x 45°

DIN 374/B



Z=Ağız Sayısı



4054

4054 TiN



4054 TiALN

MAKİNA KILAVUZU DIN 374C HSSE 35 DERECE HELIS								4055	4055	4055
								N-2183C	"N-2183C TiN"	N-2183C TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
UNF No. 5	44	56	5	2,2	-	3	2,7	06749	06764	06779
UNF No. 6	40	56	7	2,5	2,1	3	3	06750	06765	06780
UNF No. 8	36	63	7	2,8	2,1	3	3,5	06751	06766	06781
UNF No. 10	32	70	8	3,5	2,7	3	4,1	06752	06767	06782
UNF No. 12	28	80	10	4	3	3	4,65	06753	06768	06783
UNF 1/4	28	80	10	4,5	3,4	3	5,5	06754	06769	06784
UNF 5/16	24	90	13	6	4,9	3	6,9	06755	06770	06785
UNF 3/8	24	90	15	7	5,5	3	8,5	06756	06771	06786
UNF 7/16	20	100	15	8	6,2	3	9,9	06757	06772	06787
UNF 1/2	20	100	14	9	7	3	11,5	06758	06773	06788
UNF 9/16	18	100	16	11	9	3	12,9	06759	06774	06789
UNF 5/8	18	100	16	12	9	3	14,5	06760	06775	06790
UNF 3/4	16	110	20	14	11	4	17,5	06761	06776	06791
UNF 7/8	14	125	20	18	14,5	4	20,5	06762	06777	06792
UNF 1	12	140	22	18	14,5	4	23,25	06763	06778	06793

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

HSSE → Süper yüksek hız çeliği

TiN → Titanyum nitrür

TiALN → Titanyum aluminyum nitrür

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Alaşımlı bakır, uzun talaş

ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%

ARA KULLANIM
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, uzun talaş

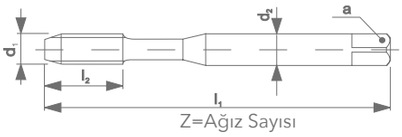
ANA KULLANIM
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (Max.800N/mm²)
- Aluminyum alaşımları, silisyum miktarı max.10%
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları, silisyum miktarı min.10%
- Alaşımlı bakır, uzun talaş

KILAVUZLAR

METRİK DIN 2174 HSSE (OVALAMA)

M | 60° | DIN 13 | Type N | HSSE | DIN 2174 | C 2 - 3 | 1,5d | 2,5d | ISO 2 6HX

DIN 2174



Z=Ağız Sayısı


2900
2950
2900 TiN


2950 TiN
2900 TiALN
2950 TiALN

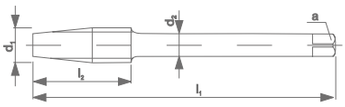
OVALAMA KILAVUZU DIN 2174 HSSE							2900	2950	2900	2950	2900	2950
							N-371F	N-371F	"N-371F TiN"	"N-371F TiN"	N-371F TiALN	N-371F TiALN
d_1	P	l_1	l_2	d_2	a	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M3	0,5	56	11	3,5	2,7	2,8	06794	06802	06810	06818	06826	06834
M3,5	0,6	56	12	4	3	3,3	06795	06803	06811	06819	06827	06835
M4	0,7	63	13	4,5	3,4	3,7	06796	06804	06812	06820	06828	06836
M5	0,8	70	16	6	4,9	4,7	06797	06805	06813	06821	06829	06837
M6	1	80	19	6	4,9	5,5	06798	06806	06814	06822	06830	06838
M8	1,25	90	22	8	6,2	7,4	06799	06807	06815	06823	06831	06839
M10	1,5	100	24	10	8	9,3	06800	06808	06816	06824	06832	06840
M12	1,75	110	28	9	7	11,2	06801	06809	06817	06825	06833	06841
TEMEL ÖZELLİKLER							YAĞ KANALSIZ	YAĞ KANALLI	YAĞ KANALSIZ	YAĞ KANALLI	YAĞ KANALSIZ	YAĞ KANALLI
KULLANIM ALANI							ANA KULLANIM • Çinko ve çinko alaşımları ARA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız aluminyum Aluminyum alaşımları, silisyum miktarı max.10%	ANA KULLANIM • Çinko ve çinko alaşımları ARA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız aluminyum Aluminyum alaşımları, silisyum miktarı max.10%	ANA KULLANIM • Çinko ve çinko alaşımları ARA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız aluminyum Aluminyum alaşımları, silisyum miktarı max.10%	ANA KULLANIM • Çinko ve çinko alaşımları ARA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (max.800/N mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız aluminyum Aluminyum alaşımları, silisyum miktarı max.10%	ANA KULLANIM • Çinko ve çinko alaşımları Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız aluminyum Aluminyum alaşımları, silisyum miktarı max.10%	ANA KULLANIM • Çinko ve çinko alaşımları Yapısal çelikler (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Alaşımsız alminyum Aluminyum alaşımları, silisyum miktarı max.10%

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE → Süper yüksek hız çeliği
TiN → Titanyum nitrür
TiALN → Titanyum aluminyum nitrür

METRİK DIN 357 HSS (SOMUN KLVZ.)

M | 60° | DIN 13 | Type N | HSS | DIN 357 | 0,7 l_1 | 1,5d | 2,5d

DIN 374/B



Z=Ağız Sayısı


5000
5000 TiN


5000 TiALN

SOMUN KILAVUZU DIN 357 HSS								5000	5000	5000
								N-357	"N-357 TiN"	N-357 TiALN
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.	Sip. No.	Sip. No.
M3	0,5	70	22	2,2	-	3	2,5	06842	06857	06872
M4	0,7	90	25	2,8	2,1	3	3,3	06843	06858	06873
M5	0,8	100	28	3,5	2,7	3	4,2	06844	06859	06874
M6	1	110	32	4,5	3,5	3	5	06845	06860	06875
M7	1	110	36	5,5	4,3	3	6	06846	06861	06876
M8	1,25	125	40	6	4,9	3	6,8	06847	06862	06877
M10	1,5	140	45	7	5,5	3	8,5	06848	06863	06878
M11	1,5	160	45	8	6,2	3	9,5	06849	06864	06879
M12	1,75	180	50	9	7	3	10,2	06850	06865	06880
M14	2	200	56	11	9	3	12	06851	06866	06881
M16	2	200	63	12	9	3	14	06852	06867	06882
M18	2,5	220	63	14	11	3	15,5	06853	06868	06883
M20	2,5	250	70	16	12	3	17,5	06854	06869	06884
M22	2,5	280	80	18	14,5	3	19,5	06855	06870	06885
M24	3	280	80	18	14,5	3	21	06856	06871	06886
KULLANIM ALANI								ANA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Yalın dökme demir (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) ARA KULLANIM • Aluminyum alaşımları, silisyum miktarı max.10% • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Yalın dökme demir (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) ARA KULLANIM • Aluminyum alaşımları, silisyum miktarı max.10% • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş • Alaşımlı bakır, uzun talaş	ANA KULLANIM • Yapısal çelikler (Max.500N/mm²) • Yalın dökme demir (Max.500N/mm²) • Kolay işlenir çelikler (Max.800N/mm²) • Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²) • Aluminyum alaşımları, silisyum miktarı max.10% • Aluminyum alaşımları, silisyum miktarı min.10% • Alaşımlı bakır, kısa talaş • Alaşımlı bakır, uzun talaş

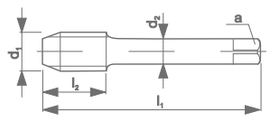
Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar
HSSE → Süper yüksek hız çeliği
TiN → Titanyum nitrür
TiALN → Titanyum aluminyum nitrür

KILAVUZLAR

METRİK İNCE DİŞ DIN2181 HSS (2'Lİ TK.)

MF | DIN 13 | Type N | HSS | DIN 2181 | ISO 2 6H

DIN 352



Z=Ağız Sayısı



0300
2'li Takım

EL TAKIM KILAVUZU DIN2181 HSS								0300 N-2181
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M3	0,35	40	2,7	8	3,5	3	2,65	06916
M3,5	0,35	45	3	8	4	3	3,15	06917
M4	0,5	45	3,4	9	4,5	3	3,5	06918
M4	0,35	45	3,4	9	4,5	3	3,65	06919
M4,5	0,5	50	4,9	10	6	3	4	06920
M5	0,5	50	4,9	10	6	3	4,5	06921
M5,5	0,5	56	4,9	11	6	3	5	06922
M6	0,75	56	4,9	11	6	3	5,2	06923
M6	0,5	56	4,9	11	6	3	5,5	06924
M7	0,75	56	4,9	11	6	3	6,2	06925
M8	1	63	4,9	18	6	3	7	06926
M8	0,75	56	4,9	14	6	3	7,2	06927
M8	0,5	56	4,9	14	6	3	7,5	06928
M9	1	63	5,5	18	7	3	8	06929
M9	0,75	56	5,5	14	7	3	8,2	06930
M10	1,25	70	5,5	20	7	3	8,8	06931
M10	1	63	5,5	18	7	3	9	06932
M10	0,75	63	5,5	18	7	3	9,2	06933
M11	1	63	6,2	18	8	3	10	06934
M11	0,75	63	6,2	18	8	3	10,2	06935
M12	1,5	70	7	20	9	3	10,5	06936
M12	1,25	70	7	20	9	3	10,8	06937
M12	1	70	7	18	9	3	11	06938
M13	1	70	9	18	11	3	12	06939
M14	1,5	70	9	20	11	4	12,5	06940
M14	1,25	70	9	20	11	4	12,8	06941
M14	1	70	9	18	11	4	13	06942
M 15	1,5	70	9	20	12	4	13,5	06943
M 15	1	70	9	18	12	4	14	06944
M16	1,5	70	9	20	12	4	14,5	06945
M16	1	70	9	18	12	4	15	06946
M17	1,5	70	9	20	12	4	15,5	06947
M17	1	70	9	18	12	4	16	06948
M18	2	80	11	22	14	4	16	06949
M18	1,5	80	11	22	14	4	16,5	06950
M18	1	80	11	18	14	4	17	06951
M20	2	80	12	22	16	4	18	06952
M20	1,5	80	12	22	16	4	18,5	06953
M20	1	80	12	18	16	4	19	06954
M22	2	80	14,5	22	18	4	20	06955
M22	1,5	80	14,5	22	18	4	20,5	06956
M22	1	80	14,5	18	18	4	21	06957
M24	2	90	14,5	22	18	4	22	06958
M24	1,5	90	14,5	22	18	4	22,5	06959
M24	1	90	14,5	18	18	4	23	06960
M25	2	90	14,5	22	18	4	23	06961
M25	1,5	90	14,5	22	18	4	23,5	06962

EL TAKIM KILAVUZU DIN2181 HSS								0300 N-2181
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M26	1,5	90	14,5	22	18	4	24,5	06963
M27	2	90	16	22	20	4	25	06964
M27	1,5	90	16	22	20	4	25,5	06965
M27	1	90	16	18	20	4	26	06966
M28	2	90	16	22	20	4	26	06967
M28	1,5	90	16	22	20	4	26,5	06968
M30	2	90	18	22	22	4	28	06969
M30	1,5	90	18	22	22	4	28,5	06970
M30	1	90	18	18	22	4	29	06971
M32	1,5	90	18	22	22	4	30,5	06972
M33	2	100	20	25	25	4	31	06973
M33	1,5	100	20	25	25	4	31,5	06974
M34	1,5	100	22	25	28	4	32,5	06975
M35	1,5	100	22	25	28	4	33,5	06976
M36	3	125	22	36	28	4	33	06977
M36	2	125	22	30	28	4	34	06978
M36	1,5	100	22	25	28	4	34,5	06979
M38	1,5	100	22	25	28	4	36,5	06980
M39	3	125	24	36	32	4	36	06981
M39	2	125	24	30	32	4	37	06982
M39	1,5	110	24	25	32	4	37,5	06983
M40	3	125	24	36	32	4	37	06984
M40	2	125	24	30	32	4	38	06985
M40	1,5	110	24	25	32	4	38,5	06986
M42	3	125	24	36	32	4	39	06987
M42	2	125	24	30	32	4	40	06988
M42	1,5	110	24	25	32	4	40,5	06989
M45	3	125	29	36	36	6	42	06990
M45	2	125	29	30	36	6	43	06991
M45	1,5	110	29	25	36	6	43,5	06992
M48	3	140	29	36	36	6	45	06993
M48	2	140	29	30	36	6	46	06994
M48	1,5	140	29	25	36	6	46,5	06995
M50	3	140	29	36	36	6	47	06996
M50	2	140	29	30	36	6	48	06997
M50	1,5	140	29	25	36	6	48,5	06998
M52	3	140	32	40	40	6	49	06999
M52	2	140	32	32	40	6	50	07000
M52	1,5	140	32	25	40	6	50,5	07001

HSS → Yüksek hız çeliği

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Yalın dökme demir (max.500N/mm²)
- Kolay işlenir çelikler (max.800N/mm²)
- Yalın dökme demir (max.800N/mm²)
- Gri dökme demir
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı max.10%
- Alaşımlı bakır, kısa talaş

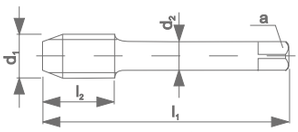
ARA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%

KILAVUZLAR

UNC DİŞ DIN352 HSS (3'LÜ TK.)

UNC | 60° P | Type N | HSS | ≈ DIN 352 | 2B | C 2 - 3 | 1,5 d | 2,5 d

DIN 352



Z=Ağız Sayısı



0204
3'li Takım

EL TAKIM KILAVUZU DIN352 HSS							0204 N-352
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
UNC No. 5	40	40	10	3,5	2,7	3	2,6	07017
UNC No. 6	32	45	11	4	3	3	2,85	07018
UNC No. 8	32	45	12	4,5	3,4	3	3,5	07019
UNC No. 10	24	50	14	6	4,9	3	3,9	07020
UNC No. 12	24	56	16	6	4,9	3	4,5	07021
UNC 1/4	20	56	16	6	4,9	3	5,2	07022
UNC 5/16	18	63	20	6	4,9	3	6,6	07023
UNC 3/8	16	70	22	7	5,5	3	8	07024
UNC 7/16	14	70	22	8	6,2	3	9,4	07025
UNC 1/2	13	75	25	9	7	3	10,75	07026
UNC 9/16	12	80	26	11	9	3	12,25	07027
UNC 5/8	11	80	27	12	9	3	13,5	07028

EL TAKIM KILAVUZU DIN352 HSS							0204 N-352
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
UNC 3/4	10	95	32	14	11	4	16,5	07029
UNC 7/8	9	100	32	18	14,5	4	19,5	07030
UNC 1	8	110	36	18	14,5	4	22,25	07031
UNC 1 3/8	6	150	50	28	22	4	30,75	07032

HSS → Yüksek hız çeliği

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

KULLANIM ALANI

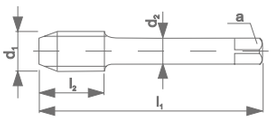
ANA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Yalın dökme demir (max.500N/mm²)
- Kolay işlenir çelikler (max.800N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (max.800N/mm²)
- Gri dökme demir
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı max.10%
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%

UNF DİŞ DIN2181 HSS (2'Lİ TK.)

UNF | 60° P | Type N | HSS | ≈ DIN 2181 | 2B | C 2 - 3 | 1,5 d | 2,5 d

DIN 2181



Z=Ağız Sayısı



0305
2'li Takım

EL TAKIM KILAVUZU DIN2181 HSS							0305/ N-2181 N-2181
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
UNF No. 5	44	40	10	3,5	2,7	3	2,7	07033
UNF No. 6	40	45	11	4	3	3	3	07034
UNF No. 8	36	45	12	4,5	3,4	3	3,5	07035
UNF No. 10	32	50	14	6	4,9	3	4,1	07036
UNF No. 12	28	56	16	6	4,9	3	4,65	07037
UNF 1/4	28	56	16	6	4,9	3	5,5	07038
UNF 5/16	24	63	18	6	4,9	3	6,9	07039
UNF 3/8	24	63	18	7	5,5	3	8,5	07040
UNF 7/16	20	70	20	8	6,2	3	9,9	07041
UNF 1/2	20	70	20	9	7	3	11,5	07042
UNF 9/16	18	70	20	11	9	3	12,9	07043
UNF 5/8	18	70	20	12	9	4	14,5	07044

EL TAKIM KILAVUZU DIN2181 HSS							0305/ N-2181 N-2181
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
UNF 3/4	16	80	22	14	11	4	17,5	07045
UNF 7/8	14	80	22	18	14,5	4	20,5	07046
UNF 1	12	80	22	18	14,5	4	23,25	07047

HSS → Yüksek hız çeliği

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

KULLANIM ALANI

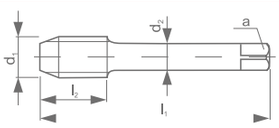
- ANA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Yalın dökme demir (max.500N/mm²)
- Kolay işlenir çelikler (max.800N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (max.800N/mm²)
- Gri dökme demir
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı max.10%
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%

WHITWORTH DİŞ DIN351 HSS (3'LÜ TK.)

W | 55° P | Type N | HSS | ≈ DIN 352 | 2B | C 2 - 3 | 1,5 d | 2,5 d

DIN 352



Z=Ağız Sayısı



3'lü Takım

EL TAKIM KILAVUZU DIN351 HSS							NB-351
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
W 3/32"	48	34	10	3,15	2,5	3	1,75	07048
W 1/8"	40	37	12	4	3,15	3	2,4	07049
W 5/32"	32	41	14	5	4	3	3,0	07050
W 3/16"	24	44	18	5	4	3	3,5	07051
W 7/32"	24	44	18	5,6	4,5	3	4,3	07052
W 1/4"	20	48	22	6,3	5	3	4,9	07053
W 5/16"	18	51	26	5,6	4,5	3	6,4	07054
W 3/8"	16	60	26	7,1	5,6	3	7,7	07055
W 7/16"	14	60	28	8	6,3	3	9,1	07056
W 1/2"	12	70	32	9	7,1	3	10,3	07057
W 9/16"	12	70	32	9	7,1	3	11,8	07058
W 5/8"	11	80	36	12,5	10	3	13,25	07059

EL TAKIM KILAVUZU DIN351 HSS							NB-351
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
W 3/4"	10	90	40	14	11,2	3	16,25	07060
W 7/8"	9	100	45	18	14	3	19	07061
W 1"	8	100	45	20	16	3	21,75	07062

HSS → Yüksek hız çeliği

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

KULLANIM ALANI

- ANA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Yalın dökme demir (max.500N/mm²)
- Kolay işlenir çelikler (max.800N/mm²)
- Yapısal çelikler ve ısıl işlem görmüş çelikler (Max.800N/mm²)
- Yalın dökme demir (max.800N/mm²)
- Gri dökme demir
- Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı max.10%
- Alaşımlı bakır, kısa talaş

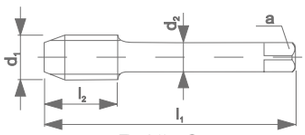
ARA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%

KILAVUZLAR

METRİK DIN352 HSS (3'LÜ TK.)

M | 60° | DIN 13 | Type N | HSS | DIN 352 | ISO 2 6H | C 2 - 3

DIN 352



Z=Ağız Sayısı



0200
3'li Takım

EL TAKIM KILAVUZU DIN352 HSS								0200
								N-352
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M2	0,4	40	9	2,8	2,1	3	1,6	06887
M2,5	0,45	40	9	2,8	2,1	3	2,05	06888
M3	0,5	40	9	3,5	2,7	3	2,5	06889
M3,5	0,6	45	11	4	3	3	2,9	06890
M4	0,7	45	12	4,5	3,4	3	3,3	06891
M4,5	0,75	50	13	6	4,9	3	3,7	06892
M5	0,8	50	13	6	4,9	3	4,2	06893
M6	1	56	15	6	4,9	3	5	06894
M7	1	56	15	6	4,9	3	6	06895
M8	1,25	63	18	6	4,9	3	6,8	06896
M9	1,25	63	18	7	5,5	3	7,8	06897
M10	1,5	70	20	7	5,5	3	8,5	06898
M11	1,5	70	20	8	6,2	3	9,5	06899
M12	1,75	75	23	9	7	3	10,2	06900
M14	2	80	25	11	9	4	12	06901
M16	2	80	25	12	9	4	14	06902
M18	2,5	95	30	14	11	4	15,5	06903
M20	2,5	95	30	16	12	4	17,5	06904
M22	2,5	100	30	18	14,5	4	19,5	06905

EL TAKIM KILAVUZU DIN352 HSS								0200
								N-352
d_1	P	l_1	l_2	d_2	a	z	Matkap Çapı	Sip. No.
M24	3	110	34	18	14,5	4	21	06906
M27	3	110	34	20	16	4	24	06907
M30	3,5	125	40	22	18	4	26,5	06908
M33	3,5	125	40	25	20	4	29,5	06909
M36	4	150	50	28	22	4	32	06910
M39	4	150	50	32	24	4	35	06911
M42	4,5	150	56	32	24	4	37,5	06912
M45	4,5	160	58	36	29	6	40,5	06913
M48	5	180	65	36	29	6	43	06914
M52	5	180	65	40	32	6	47	06915

HSS → Yüksek hız çeliği

Type N → Çekme dayanımı 800N/mm²'ye kadar olan çelikler için Kılavuzlar

KULLANIM ALANI

ANA KULLANIM
- Yapısal çelikler (max. 500N/mm²)
- Yalın dökme demir (max.500N/mm²)
- Kolay işlenir çelikler (max.800N/mm²)
- Yalın dökme demir (max.800N/mm²)
- Gri dökme demir Sfero dökme ve siyah temper dökme demir
- Aluminyum alaşımları Silisyum miktarı max.10%
- Alaşımlı bakır, kısa talaş

ARA KULLANIM
- Aluminyum alaşımları Silisyum miktarı min.10%

HELICOIL TAMİR TAKIMLARI

PLD

METRİK HELICOIL TAMİR TAKIMLARI



KIRMA APARATI



HELICOIL YAYLAR



KIRMA APARATI



HELICOIL KILAVUZU DÜZ



HELICOIL KILAVUZU HELİS

ÇAP	HATVESİ	HELICOIL YAY			DÜZ KILAVUZ	HELİS KILAVUZ	TAKMA APARATI	KIRMA APARATI	MATKAP ÇAPLARI
		1D Fiyat Kodu	1,5D Fiyat Kodu	2D Fiyat Kodu	Sip. No.	Sip. No.	Sip. No.	Sip. No.	Sip. No.
M2	0,40	08751	08797	08843	08889	08935	08981	09027	2,1
M2,5	0,45	08752	08798	08844	08890	08936	08982	09028	2,6
M3	0,50	08753	08799	08845	08891	08937	08983	09029	3,2
M4	0,70	08754	08800	08846	08892	08938	08984	09030	4,2
M5	0,80	08755	08801	08847	08893	08939	08985	09031	5,2
M6	1,00	08756	08802	08848	08894	08940	08986	09032	6,3
M7	1,00	08757	08803	08849	08895	08941	08987	09033	7,3
M8	1,00	08758	08804	08850	08896	08942	08988	09034	8,3
M8	1,25	08759	08805	08851	08897	08943	08989	09035	8,3
M9	1,25	08760	08806	08852	08898	08944	08990	09036	9,3
M10	1,00	08761	08807	08853	08899	08945	08991	09037	10,3
M10	1,25	08762	08808	08854	08900	08946	08992	09038	10,3
M10	1,50	08763	08809	08855	08901	08947	08993	09039	10,4
M12	1,25	08764	08810	08856	08902	08948	08994	09040	12,3
M12	1,50	08765	08811	08857	08903	08949	08995	09041	12,4
M12	1,75	08766	08812	08858	08904	08950	08996	09042	12,4
M14	1,00	08767	08813	08859	08905	08951	08997	09043	14,3
M14	1,25	08768	08814	08860	08906	08952	08998	09044	14,4
M14	1,50	08769	08815	08861	08907	08953	08999	09045	14,4
M14	2,00	08770	08816	08862	08908	08954	09000	09046	14,5
M16	1,00	08771	08817	08863	08909	08955	09001	09047	16,4
M16	1,50	08772	08818	08864	08910	08956	09002	09048	16,4
M16	2,00	08773	08819	08865	08911	08957	09003	09049	16,5
M18	1,00	08774	08820	08866	08912	08958	09004	09050	18,5
M18	1,50	08775	08821	08867	08913	08959	09005	09051	18,5
M18	2,00	08776	08822	08868	08914	08960	09006	09052	18,5
M18	2,50	08777	08823	08869	08915	08961	09007	09053	18,6
M20	1,00	08778	08824	08870	08916	08962	09008	09054	20,5
M20	1,50	08779	08825	08871	08917	08963	09009	09055	20,5
M20	2,00	08780	08826	08872	08918	08964	09010	09056	20,5
M20	2,50	08781	08827	08873	08919	08965	09011	09057	20,6
M22	1,50	08782	08828	08874	08920	08966	09012	09058	22,5
M22	2,50	08783	08829	08875	08921	08967	09013	09059	22,6
M24	1,50	08784	08830	08876	08922	08968	09014	09060	24,5
M24	3,00	08785	08831	08877	08923	08969	09015	09061	24,75
M26	1,50	08786	08832	08878	08924	08970	09016	09062	26,5
M26	3,00	08787	08833	08879	08925	08971	09017	09063	26,75
M27	1,50	08788	08834	08880	08926	08972	09018	09064	27,5
M27	3,00	08789	08835	08881	08927	08973	09019	09065	27,75
M28	1,50	08790	08836	08882	08928	08974	09020	09066	28,5
M28	3,00	08791	08837	08883	08929	08975	09021	09067	28,75
M30	1,50	08792	08838	08884	08930	08976	09022	09068	30,5
M30	3,50	08793	08839	08885	08931	08977	09023	09069	31
M32	3,50	08794	08840	08886	08932	08978	09024	09070	33
M33	3,50	08795	08841	08887	08933	08979	09025	09071	34
M36	4,00	08796	08842	08888	08934	08980	09026	09072	37

HELICOIL TAMİR TAKIMLARI

PLD

UNF HELICOIL TAMİR TAKIMLARI



HELICOIL YAYLAR



HELICOIL KILAVUZU DÜZ



HELICOIL KILAVUZU HELİS

Çap	Diş Sayısı	Unf 1,5D Fiyat Kodu	Unf 2D Fiyat Kodu	Unf Düz Kılavuz Fiyat Kodu	Unf Helis Kılavuz Fiyat Kodu	Matkap Çapları
UNF 1/4"	28	09073	09083	09093	09103	6,7
UNF 5/16"	24	09074	09084	09094	09104	8,3
UNF 3/8"	24	09075	09085	09095	09105	9,8
UNF 7/16"	20	09076	09086	09096	09106	11,5
UNF 1/2"	20	09077	09087	09097	09107	13
UNF 9/16"	18	09078	09088	09098	09108	14,8
UNF 5/8"	18	09079	09089	09099	09109	16,25
UNF 3/4"	16	09080	09090	09100	09110	19,5
UNF 7/8"	14	09081	09091	09101	09111	22,75
UNF 1"	12	09082	09092	09102	09112	26

UNC HELICOIL TAMİR TAKIMLARI

Çap	Diş Sayısı	Unc 1,5D Fiyat Kodu	Unc 2D Fiyat Kodu	Unc Düz Kılavuz Fiyat Kodu	Unc Helis Kılavuz Fiyat Kodu	Matkap Çapları
UNC 1/4"	20	09113	09123	09133	09143	6,7
UNC 5/16"	18	09114	09124	09134	09144	8,3
UNC 3/8"	16	09115	09125	09135	09145	9,9
UNC 7/16"	14	09116	09126	09136	09146	11,6
UNC 1/2"	13	09117	09127	09137	09147	13
UNC 9/16"	12	09118	09128	09138	09148	14,8
UNC 5/8"	11	09119	09129	09139	09149	16,5
UNC 3/4"	10	09120	09130	09140	09150	19,75
UNC 7/8"	9	09121	09131	09141	09151	23
UNC 1"	8	09122	09132	09142	09152	26,25

WİTHWORTH

Çap	Diş Sayısı	W 1,5D Fiyat Kodu	W 2D Fiyat Kodu	W Düz Kılavuz Fiyat Kodu	W Helis Kılavuz Fiyat Kodu	Matkap Çapları
W 1/8"	40	09153	09165	09177	09189	3,4
W 3/16"	24	09154	09166	09178	09190	5,1
W 1/4"	20	09155	09167	09179	09191	6,7
W 5/16"	18	09156	09168	09180	09192	8,3
W 3/8"	16	09157	09169	09181	09193	9,9
W 7/16"	14	09158	09170	09182	09194	11,5
W 1/2"	13	09159	09171	09183	09195	13
W 9/16"	12	09160	09172	09184	09196	14,8
W 5/8"	11	09161	09173	09185	09197	16,7
W 3/4"	10	09162	09174	09186	09198	20
W 7/8"	9	09163	09175	09187	09199	23
W 1"	8	09164	09176	09188	09200	26,5

G DİŞ

Çap	Diş Sayısı	G 1D Fiyat Kodu	G 2D Fiyat Kodu	G 2D Fiyat Kodu	G Düz Kılavuz Fiyat Kodu	G Helis Kılavuz Fiyat Kodu	Matkap Çapları
G 1/8"	28	09201	09209	09217	09225	09233	10
G 1/4"	19	09202	09210	09218	09226	09234	13,6
G 3/8"	19	09203	09211	09219	09227	09235	17,1
G 1/2"	14	09204	09212	09220	09228	09236	21,5
G 5/8"	14	09205	09213	09221	09229	09237	23,4
G 3/4"	14	09206	09214	09222	09230	09238	27
G 7/8"	14	09207	09215	09223	09231	09239	30,6
G 1"	11	09208	09216	09224	09232	09240	33,7

HELICOIL TAMİR TAKIMLARI-VİDA MASTARLARI

PLD

DİŞ TAMİR TAKIMLARI



ÜRÜN TANIMI:

Arızalı dişlerin tamirinin en etkili yöntemidir. Hasar görmüş ve aşınmış dişi Hızlı ve kalıcı biçimde orjinal ölçüsüne getirilmesini sağlar. Metrik/inç değişimini sağlar. Paslanmaya ve aşınmaya dayanıklı malzemesi ile uzun kullanım ömrü sağlar.

ÜRÜN KULLANIM ALANLARI:

Hemen hemen her türlü tapa yuvası ve vida deliğinde kullanılabildiği için otomotiv, uçak sanayi başta olmak üzere sağlamlık, kullanım ömrü ve yüksek operasyon hızı ile bütün sanayi kollarında kullanılabilir."

Sip. No.	Ölçü	Sip. No.
CH.TT .M04	M4X0,7	09241
CH.TT .M05	M5X0,8	09242
CH.TT .M06	M6X1	09243
CH.TT .M08	M8X1,25	09244
CH.TT .M10	M10X1,5	09245
CH.TT .M12	M12X1,75	09246
CH.TT .M14	M14X2	09247
CH.TT .M16	M16X2	09248
CH.TT .M18	M18X2,5	09249
CH.TT .M20	M20X2,5	09250

HELICOIL YAY SÖKME APARATI



ÜRÜN KULLANIM ALANLARI:

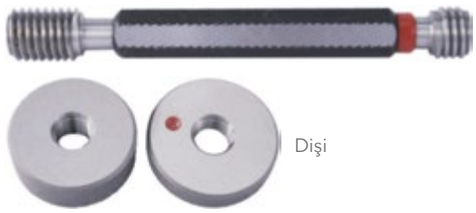
Hatalı takılmış yada önceden takılan deforme olmuş yayların çıkarılmasında kullanılır.

Sip. No.	Ölçü	Sip. No.
CH.YS-M3-10	M3-M10	09252
CH.YS-M11-24	M11-M24	09253

UNF DİŞ VİDA MASTARI

UNF

DIN 13



Erkek

Dişi

2 PARÇALI SET OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B) C998 Sip. No.	DİŞİ VİDA MASTARI (2A) C997 Sip. No.
UNF1/4	28	09470	09485
UNF5/16	24	09471	09486
UNF3/8	24	09472	09487
UNF7/16	20	09473	09488
UNF1/2	20	09474	09489
UNF9/16	18	09475	09490
UNF5/8	18	09476	09491
UNF3/4	16	09477	09492
UNF7/8	14	09478	09493
UNF1	12	09479	09494
UNF1	14	09480	09495
UNF1 1/16	12	09481	09496
UNF1 5/8	12	09482	09497
UNF1 7/8	12	09483	09498
UNF2	12	09484	09499

DİŞ TAMİR TAKIMLARI (HELICOIL SET)



ÜRÜN TANIMI:

Arızalı dişlerin tamirinin en etkili yöntemidir. Hasar görmüş ve aşınmış dişi Hızlı ve kalıcı biçimde orjinal ölçüsüne getirilmesini sağlar. Metrik/inç değişimini sağlar. Paslanmaya ve aşınmaya dayanıklı malzemesi ile uzun Kullanım ömrü sağlar.

ÜRÜN KULLANIM ALANLARI:

Hemen hemen her türlü tapa yuvası ve vida deliğinde kullanılabildiği için otomotiv, uçak sanayi başta olmak üzere sağlamlık, kullanım ömrü ve yüksek operasyon hızı ile bütün sanayi kollarında kullanılabilir.

Sip. No.	Ölçü	Sip. No.
CH.TT .M5-M12 SET	M5-M6-M8-M10-M12	09251

METRİK NORMAL DİŞ VİDA MASTARI

M

DIN 13



Erkek



Dişi

2 PARÇALI SET OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (6H) C998 Sip. No.	DİŞİ VİDA MASTARI (6G) C997 Sip. No.
M2	0,4	09254	09284
M2,5	0,45	09255	09285
M3	0,5	09256	09286
M3,5	0,6	09257	09287
M4	0,7	09258	09288
M5	0,8	09259	09289
M6	1	09260	09290
M7	1	09261	09291
M8	1,25	09262	09292
M9	1,25	09263	09293
M10	1,5	09264	09294
M12	1,75	09265	09295
M14	2	09266	09296
M16	2	09267	09297
M18	2,5	09268	09298

Ölçü	P (mm)	ERKEK VİDA MASTARI (6H) C998 Sip. No.	DİŞİ VİDA MASTARI (6G) C997 Sip. No.
M20	2,5	09269	09299
M22	2,5	09270	09300
M24	3	09271	09301
M26	3	09272	09302
M27	3	09273	09303
M30	3,5	09274	09304
M33	3,5	09275	09305
M36	4	09276	09306
M39	4	09277	09307
M42	4,5	09278	09308
M45	4,5	09279	09309
M48	5	09280	09310
M52	5	09281	09311
M56	5,5	09282	09312
M60	5,5	09283	09313

VİDA MASTARLARI

PLD

METRİK İNCE DİŞ VİDA MASTARI

MF

DIN 13



Erkek



Dişi

2 PARÇALI SET OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (6H)	DİŞİ VİDA MASTARI (6G)
		C998	C997
		Sip. No.	Sip. No.
M4	0,5	09320	09373
M5	0,5	09321	09374
M6	0,75	09322	09375
M8	1	09323	09376
M8	0,75	09324	09377
M9	1	09325	09378
M10	1,25	09326	09379
M10	1	09327	09380
M10	0,75	09328	09381
M12	1,5	09329	09382
M12	1,25	09330	09383
M12	1	09331	09384
M14	1,5	09332	09385
M14	1,25	09333	09386
M14	1	09334	09387
M16	1,5	09335	09388
M16	1	09336	09389
M18	1,5	09337	09390

Ölçü	P (mm)	ERKEK VİDA MASTARI (6H)	DİŞİ VİDA MASTARI (6G)
		C998	C997
		Sip. No.	Sip. No.
M18	1	09338	09391
M20	1,5	09339	09392
M20	1	09340	09393
M22	1,5	09341	09394
M22	1	09342	09395
M24	2	09343	09396
M24	1,5	09344	09397
M24	1	09345	09398
M26	1,5	09346	09399
M27	2	09347	09400
M27	1,5	09348	09401
M30	2	09349	09402
M30	1,5	09350	09403
M32	2	09351	09404
M32	1,5	09352	09405
M33	2	09353	09406
M33	1,5	09354	09407
M34	1,5	09355	09408

Ölçü	P (mm)	ERKEK VİDA MASTARI (6H)	DİŞİ VİDA MASTARI (6G)
		C998	C997
		Sip. No.	Sip. No.
M36	3	09356	09409
M36	2	09357	09410
M36	1,5	09358	09411
M38	1,5	09359	09412
M39	3	09360	09413
M40	2	09361	09414
M40	1,5	09362	09415
M40	1	09363	09416
M42	3	09364	09417
M42	2	09365	09418
M42	1,5	09366	09419
M48	3	09367	09420
M48	2	09368	09421
M48	1,5	09369	09422
M50	1,5	09370	09423
M52	2	09371	09424
M58	1,5	09372	09425

GAZ DİŞ VİDA MASTARI

G

DIN/ISO 228



Erkek



Dişi

2 PARÇALI SET OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B)	DİŞİ VİDA MASTARI (2A)
		C998	C997
		Sip. No.	Sip. No.
G1/8	28	09426	09438
G1/4	19	09427	09439
G3/8	19	09428	09440
G1/2	14	09429	09441

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B)	DİŞİ VİDA MASTARI (2A)
		C998	C997
		Sip. No.	Sip. No.
G5/8	14	09430	09442
G3/4	14	09431	09443
G7/8	14	09432	09444
G1	11	09433	09445

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B)	DİŞİ VİDA MASTARI (2A)
		C998	C997
		Sip. No.	Sip. No.
G1 1/4	11	09434	09446
G1 1/2	11	09435	09447
G2	11	09436	09448
G2 1/2	11	09437	09449

NPT DİŞ VİDA MASTARI

NPT

DIN/ISO 228



Dişi



Dişi

TEK PARÇA OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B)	DİŞİ VİDA MASTARI (2A)
		C998	C997
		Sip. No.	Sip. No.
NPT1/16	27	09450	09460
NPT1/8	27	09451	09461
NPT1/4	18	09452	09462
NPT3/8	18	09453	09463
NPT1/2	14	09454	09464
NPT3/4	14	09455	09465
NPT1	11,5	09456	09466
NPT1 1/4	11,5	09457	09467
NPT1 1/2	11,5	09458	09468
NPT2	11,5	09459	09469

UNC DİŞ VİDA MASTARI

UNC

DIN 13





Dişi

2 PARÇALI SET OLARAK TEMİN EDİLİR.

Ölçü	P (mm)	ERKEK VİDA MASTARI (2B)	DİŞİ VİDA MASTARI (2A)
		C998	C997
		Sip. No.	Sip. No.
UNC1/4	20	09500	09510
UNC5/16	18	09501	09511
UNC3/8	16	09502	09512
UNC7/16	14	09503	09513
UNC1/2	13	09504	09514
UNC9/16	12	09505	09515
UNC5/8	11	09506	09516
UNC3/4	10	09507	09517
UNC7/8	9	09508	09518
UNC1	8	09509	09519

SOL ERKEK VİDA MASTARI NORMAL DİŞ

M

DIN 13



Ölçü	P (mm)	C998L
		Sip. No.
M4	0,7	09314
M5	0,8	09315
M6	1	09316

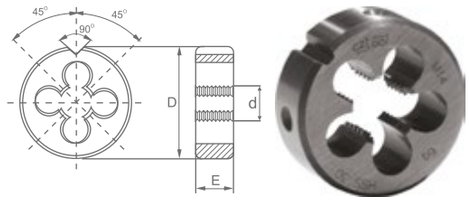
Ölçü	P (mm)	C998L
		Sip. No.
M8	1,25	09317
M10	1,5	09318
M12	1,75	09319

PAFTALAR

METRİK NORMAL DİŞ PAFTALAR

M | 60° | HSS | 1.5P

DIN 223



METRİK NORMAL DİŞ PAFTALAR 6G HSS (950)				NB-223M	NB-223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M2	0,4	16	5	08039	08068
M2,5	0,45	16	5	08040	08069
M3	0,5	20	5	08041	08070
M3,5	0,6	20	5	08042	08071
M4	0,7	20	5	08043	08072
M4,5	0,75	20	7	08044	08073
M5	0,8	20	7	08045	08074
M6	1	20	7	08046	08075
M7	1	25	9	08047	08076
M8	1,25	25	9	08048	08077
M9	1,25	25	9	08049	08078
M10	1,5	30	11	08050	08079
Mil	1,5	30	11	08051	08080
M12	1,75	38	14	08052	08081
M14	2	38	14	08053	08082
M16	2	45	18	08054	08083
M18	2,5	45	18	08055	08084
M20	2,5	45	18	08056	08085

METRİK NORMAL DİŞ PAFTALAR 6G HSS (950)				NB-223M	NB-223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M22	2,5	55	22	08057	08086
M24	3	55	22	08058	08087
M25	3	55	22	08059	08088
M26	3	55	22	08060	08089
M27	3	65	25	08061	08090
M30	3,5	65	25	08062	08091
M33	3,5	65	25	08063	08092
M36	4	65	25	08064	08093
M39	4	75	30	08065	08094
M42	4,5	75	30	08066	08095
M45	4,5	90	36	08067	08096

HSS → Yüksek hız çeliği

KULLANIM ALANI

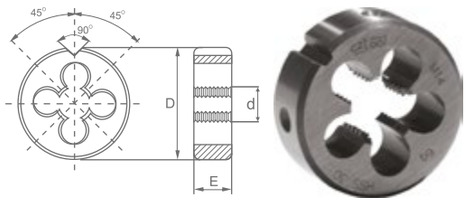
El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

METRİK İNCE DİŞ PAFTALAR

M | 60° | HSS | 1.5P

DIN 223



METRİK İNCE DİŞ PAFTA 6G HSS (950)				NB-223M	NB-223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M4	0,5	20	5	08097	08127
M4,5	0,5	20	5	08098	08128
M5	0,5	20	5	08099	08129
M5,5	0,5	20	5	08100	08130
M6	0,75	20	7	08101	08131
M6	0,5	20	7	08102	08132
M7	0,75	25	9	08103	08133
M8	1	25	9	08104	08134
M8	0,75	25	9	08105	08135
M8	0,5	25	9	08106	08136
M9	1	25	9	08107	08137
M9	0,75	25	9	08108	08138
M10	1,25	30	11	08109	08139
M10	1	30	11	08110	08140
M10	0,75	30	11	08111	08141
M11	1	30	11	08112	08142
M12	1,5	38	10	08113	08143
M12	1,25	38	10	08114	08144
M12	1	38	10	08115	08145
M14	1,5	38	10	08116	08146
M14	1,25	38	10	08117	08147
M14	1	38	10	08118	08148
M15	1,5	38	10	08119	08149
M15	1	38	10	08120	08150
M16	1,5	45	14	08121	08151
M16	1	45	14	08122	08152
M17	1,5	45	14	08123	08153
M17	1	45	14	08124	08154
M18	2	45	14	08125	08155
M18	1,5	45	14	08126	08156
M18	1	45	14	08157	08187
M20	2	45	14	08158	08188
M20	1,5	45	14	08159	08189
M20	1	45	13	08160	08190

METRİK İNCE DİŞ PAFTA 6G HSS (950)				NB-223M	NB-223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M22	2	55	16	08161	08191
M22	1,5	55	16	08162	08192
M22	1	55	15	08163	08193
M24	2	55	16	08164	08194
M24	1,5	55	16	08165	08195
M25	1,5	55	16	08166	08196
M26	1,5	55	16	08167	08197
M27	2	65	18	08168	08198
M27	1,5	65	18	08169	08199
M27	1	65	18	08170	08200
M28	2	65	18	08171	08201
M28	1,5	65	18	08172	08202
M30	3	65	25	08173	08203
M30	2	65	18	08174	08204
M30	1,5	65	18	08175	08205
M30	1	65	18	08176	08206
M32	1,5	65	18	08177	08207
M33	2	65	18	08178	08208
M33	1,5	65	18	08179	08209
M35	1,5	65	18	08180	08210
M36	3	65	25	08181	08211
M36	2	65	18	08182	08212
M36	1,5	65	18	08183	08213
M39	3	75	30	08184	08214
M39	2	75	20	08185	08215
M39	1,5	75	20	08186	08216

HSS → Yüksek hız çeliği

KULLANIM ALANI

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

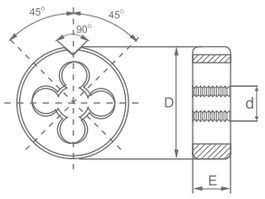
PAFTALAR

narex

GAZ DİŞ PAFTALAR

G | 60° | HSS | 1.5P

DIN 223





GAZ DİŞ PAFTA 6G HSS (9502)				NB-223G
d	P	D	E	Sip. No.
G 1/16	28	25	9	08217
G 1/8	28	30	11	08218
G 1/4	19	38	10	08219
G 3/8	19	45	14	08220
G 1/2	14	45	14	08221
G 5/8	14	55	16	08222
G 3/4	14	55	16	08223
G 7/8	14	65	18	08224
G 1	11	65	18	08225
G 1 1/8	11	75	20	08226
G 1 1/4	11	75	20	08227
G 1 3/8	11	90	22	08228
G 1 1/2	11	90	22	08229
G 1 3/4	11	105	22	08230
G 2	11	105	22	08231

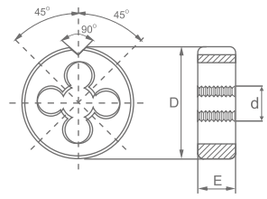
HSS → Yüksek hız çeliği

KULLANIM ALANI: El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

UNF DİŞ PAFTALAR

UNF | 60° | HSS | 1.5P

DIN 223





UNF PAFTA 6G HSS (9505)				NB-223UNF
d	P	D	E	Sip. No.
UNF NR5	44	20	5	08232
UNF NR6	40	20	5	08233
UNF NR8	36	20	7	08234
UNF NR10	32	20	7	08235
UNF NR12	28	20	7	08236
UNF 1/4	28	20	7	08237
UNF 5/16	24	25	9	08238
UNF 3/8	24	30	11	08239
UNF 7/16	20	30	11	08240
UNF 1/2	20	38	10	08241
UNF 9/16	18	38	10	08242
UNF 5/8	18	45	14	08243
UNF 3/4	16	45	14	08244
UNF 7/8	14	55	16	08245
UNF 1	12	55	16	08246

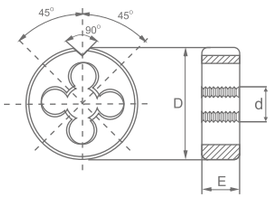
HSS → Yüksek hız çeliği

KULLANIM ALANI: El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

UNC PAFTALAR

UNC | 60° | HSS | 1.5P

DIN 223





UNC PAFTA 6G HSS (9505)				NB-223UNC
d	P	D	E	Sip. No.
UNC NR5	40	20	5	08247
UNC NR6	32	20	7	08248
UNC NR8	32	20	7	08249
UNC NR10	24	20	7	08250
UNC NR12	24	20	7	08251
UNC 1/4	20	20	7	08252
UNC 5/16	18	25	9	08253
UNC 3/8	16	30	11	08254
UNC 7/16	14	30	11	08255
UNC 1/2	13	38	14	08256
UNC 9/16	12	38	14	08257
UNC 5/8	11	45	18	08258
UNC 3/4	10	45	18	08259
UNC 7/8	9	55	22	08260
UNC 1	8	55	22	08261

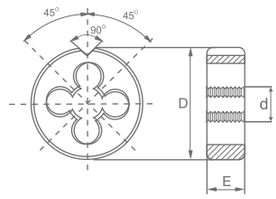
HSS → Yüksek hız çeliği

KULLANIM ALANI: El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

WHITHWORTH PAFTALAR

W | 60° | HSS | 1.5P

DIN 223





WHITHWORTH PAFTA 6G HSS (9501)				NB-223W
d	P	D	E	Sip. No.
W 1/8	40	20	5	08262
W 5/32	32	20	5	08263
W 3/16	24	20	7	08264
W 1/4	20	20	7	08265
W 5/16	18	25	9	08266
W 3/8	16	20	11	08267
W 7/16	14	30	11	08268
W 1/2	12	38	14	08269
W 9/16	12	38	14	08270
W 5/8	11	45	18	08271
W 3/4	10	45	18	08272
W 7/8	9	55	22	08273
W 1	8	55	22	08274

HSS → Yüksek hız çeliği

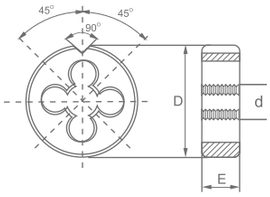
KULLANIM ALANI: El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

PG DİŞ PAFTALAR

PG | 60° | HSS | 1.5P

PLD

DIN 223





PG DİŞ PAFTA HSS				C.223PG
d	P	D	E	Sip. No.
PG 7	20	38	10	08676
PG 9	18	45	14	08677
PG 11	18	45	14	08678
PG 13,5	18	45	14	08679
PG 16	18	55	16	08680
PG 21	16	65	18	08681
PG 29	16	65	18	08682
PG 36	16	90	22	08683
PG 42	16	105	22	08684

HSS → Yüksek hız çeliği

KULLANIM ALANI: El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

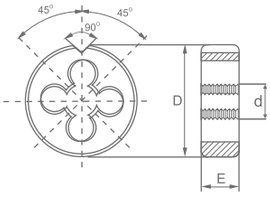
PAFTALAR

PLD

METRİK NORMAL DİŞ PAFTALAR

M | 60° | HSS | 1.5P

DIN 223





METRİK NORMAL DİŞ PAFTA 6G HSS (950)				C. 223M	C. 223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M2	0,4	16	5	08275	08303
M2,5	0,45	16	5	08276	08304
M3	0,5	20	5	08277	08305
M3,5	0,6	20	5	08278	08306
M4	0,7	20	5	08279	08307
M4,5	0,75	20	7	08280	08308
M5	0,8	20	7	08281	08309
M6	1	20	7	08282	08310
M7	1	25	9	08283	08311
M8	1,25	25	9	08284	08312
M9	1,25	25	9	08285	08313
M10	1,5	30	11	08286	08314
M11	1,5	30	11	08287	08315
M12	1,75	38	14	08288	08316
M14	2	38	14	08289	08317
M16	2	45	18	08290	08318
M18	2,5	45	18	08291	08319
M20	2,5	45	18	08292	08320
M22	2,5	55	22	08293	08321
M24	3	55	22	08294	08322
M27	3	65	25	08295	08323
M30	3,5	65	25	08296	08324
M33	3,5	65	25	08297	08325
M36	4	65	25	08298	08326
M39	4	75	30	08299	08327
M42	4,5	75	30	08300	08328
M45	4,5	90	36	08301	08329
M48	5	90	36	08302	08330

HSS → Yüksek hız çeliği

KULLANIM ALANI

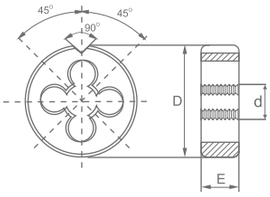
El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

METRİK İNCE DİŞ PAFTALAR

MF | 60° | HSS | 1.5P

DIN 223





METRİK İNCE DİŞ PAFTA 6G HSS (950)				C.223M	C.223ML SOL
d	P	D	E	Sip. No.	Sip. No.
M3	0,35	20	5	08331	08358
M3,5	0,35	20	5	08332	08359
M4	0,5	20	5	08333	08360
M4	0,35	20	5	08334	08361
M4,5	0,5	20	5	08335	08362
M5	0,5	20	5	08336	08363
M5,5	0,5	20	5	08337	08364
M6	0,5	20	7	08338	08365
M6	0,75	20	7	08339	08366
M7	0,75	25	9	08340	08367
M7	0,5	25	9	08341	08368
M8	1	25	9	08342	08369
M8	0,75	25	9	08343	08370
M8	0,5	25	9	08344	08371
M9	1	25	9	08345	08372
M9	0,75	25	9	08346	08373
M10	1,25	30	11	08347	08374
M10	1	30	11	08348	08375
M10	0,75	30	11	08349	08376
M10	0,5	30	11	08350	08377
M11	1,25	30	11	08351	08378
M11	1	30	11	08352	08379
M12	1,5	38	10	08353	08380
M12	1,25	38	10	08354	08381
M12	1	38	10	08355	08382
M12	0,75	38	10	08356	08383
M13	1,5	38	10	08357	08384
M13	1,25	38	10	08385	08412
M13	1	38	10	08386	08413
M14	1,5	38	10	08387	08414
M14	1,25	38	10	08388	08415
M14	1	38	10	08389	08416
M14	0,75	38	10	08390	08417
M15	1,5	38	10	08391	08418
M15	1,25	38	10	08392	08419
M15	1	38	10	08393	08420
M16	1,5	45	14	08394	08421
M16	1,25	45	14	08395	08422
M16	1	45	14	08396	08423
M17	1,5	45	14	08397	08424
M17	1	45	14	08398	08425
M18	2	45	14	08399	08426
M18	1,5	45	14	08400	08427
M18	1,25	45	14	08401	08428
M18	1	45	14	08402	08429
M19	1,5	45	14	08403	08430
M20	2	45	14	08404	08431
M20	1,5	45	14	08405	08432
M20	1	45	13	08406	08433
M21	1,5	55	16	08407	08434
M22	2	55	16	08408	08435
M22	1,5	55	16	08409	08436
M22	1,25	55	16	08410	08437
M22	1	55	16	08411	08438
M23	1,5	55	16	08439	08467
M24	2	55	16	08440	08468
M24	1,5	55	16	08441	08469
M24	1,25	55	16	08442	08470
M24	1	55	16	08443	08471
M25	2	55	16	08444	08472
M25	1,5	55	16	08445	08473
M25	1	55	16	08446	08474
M26	2	55	16	08447	08475
M26	1,5	55	16	08448	08476
M26	1	55	16	08449	08477
M27	2	65	18	08450	08478
M27	1,5	65	18	08451	08479
M27	1	65	18	08452	08480
M28	2	65	18	08453	08481
M28	1,5	65	18	08454	08482
M28	1	65	18	08455	08483
M29	1,5	65	18	08456	08484
M30	3	65	18	08457	08485
M30	2,5	65	18	08458	08486
M30	2	65	18	08459	08487
M30	1,5	65	18	08460	08488
M30	1	65	18	08461	08489
M32	3	65	18	08462	08490
M32	2	65	18	08463	08491
M32	1,5	65	18	08464	08492
M33	3	65	18	08465	08493
M33	2	65	18	08466	08494
M33	1,5	65	18	08495	08525
M34	2	65	18	08496	08526
M34	1,5	65	18	08497	08527
M35	1,5	65	18	08498	08528
M36	3	65	25	08499	08529
M36	2	65	18	08500	08530
M36	1,5	65	18	08501	08531
M38	2	75	20	08502	08532
M38	1,5	65	20	08503	08533
M39	3	75	30	08504	08534
M39	2	75	20	08505	08535
M39	1,5	75	20	08506	08536
M40	3	75	30	08507	08537
M40	2	75	20	08508	08538
M40	1,5	75	20	08509	08539
M42	3	75	30	08510	08540
M42	2	75	20	08511	08541
M42	1,5	75	20	08512	08542
M45	3	90	36	08513	08543
M45	2	90	22	08514	08544
M45	1,5	90	22	08515	08545
M48	3	90	36	08516	08546
M48	2	90	22	08517	08547
M48	1,5	90	22	08518	08548
M50	3	90	36	08519	08549
M50	2	90	22	08520	08550
M50	1,5	90	22	08521	08551
M52	3	90	36	08522	08552
M52	2	90	22	08523	08553
M52	1,5	90	22	08524	08554

HSS → Yüksek hız çeliği

KULLANIM ALANI

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

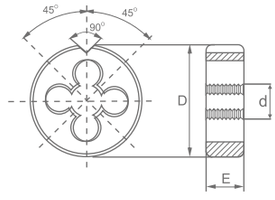
PAFTALAR

PLD

GAZ DİŞ PAFTALAR

G | 60° P | HSS | 1.5P

DIN 223





GAZ DİŞ PAFTA 6G HSS (9502)				C. 223G	C. 223GL SOL
d	P	D	E	Sip. No.	Sip. No.
G 1/16	28	25	9	08555	08570
G 1/8	28	30	11	08556	08571
G 1/4	19	38	10	08557	08572
G 3/8	19	45	14	08558	08573
G 1/2	14	45	14	08559	08574
G 5/8	14	55	16	08560	08575
G 3/4	14	55	16	08561	08576
G 7/8	14	65	18	08562	08577
G 1	11	65	18	08563	08578
G 1 1/8	11	75	20	08564	08579
G 1 1/4	11	75	20	08565	08580
G 1 3/8	11	90	22	08566	08581
G 1 1/2	11	90	22	08567	08582
G 1 3/4	11	105	22	08568	08583
G 2	11	105	22	08569	08584

HSS → Yüksek hız çeliği

KULLANIM ALANI

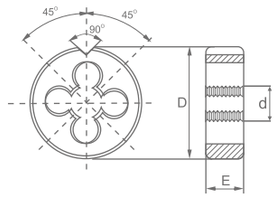
El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

UNC PAFTALAR

UNC | 60° P | HSS | 1.5P

DIN 223





UNC PAFTA 6G HSS (9505)				C. 223UNC	C. 223UNCL SOL
d	P	D	E	Sip. No.	Sip. No.
UNC NR4	40	20	5	08625	08644
UNC NR5	40	20	5	08626	08645
UNC NR6	32	20	7	08627	08646
UNC NR8	32	20	7	08628	08647
UNC NR10	24	20	7	08629	08648
UNC NR12	24	20	7	08630	08649
UNC 1/4	20	20	7	08631	08650
UNC 5/16	18	25	9	08632	08651
UNC 3/8	16	30	11	08633	08652
UNC 7/16	14	30	11	08634	08653
UNC 1/2	13	38	14	08635	08654
UNC 9/16	12	38	14	08636	08655
UNC 5/8	11	45	18	08637	08656
UNC 3/4	10	45	18	08638	08657
UNC 7/8	9	55	22	08639	08658
UNC 1	8	55	22	08640	08659
UNC 1 1/8	7	65	25	08641	08660
UNC 1 1/4	7	65	25	08642	08661
UNC 1 1/2	6	75	30	08643	08662

HSS → Yüksek hız çeliği

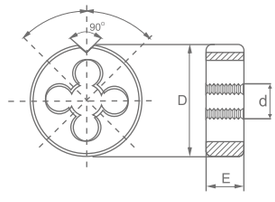
KULLANIM ALANI

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

NPT (KONİK) PAFTA

DIN 223

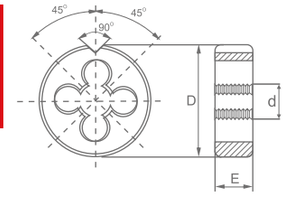




UNF PAFTALAR

UNF | 60° P | HSS | 1.5P

DIN 223





UNF PAFTA 6G HSS (9505)				C. 223UNF	C. 223UNFL SOL
d	P	D	E	Sip. No.	Sip. No.
UNF NR4	48	20	5	08585	08605
UNF NR5	44	20	5	08586	08606
UNF NR6	40	20	5	08587	08607
UNF NR8	36	20	7	08588	08608
UNF NR10	32	20	7	08589	08609
UNF NR12	28	20	7	08590	08610
UNF 1/4	28	20	7	08591	08611
UNF 5/16	24	25	9	08592	08612
UNF 3/8	24	30	11	08593	08613
UNF 7/16	20	30	11	08594	08614
UNF 1/2	20	38	10	08595	08615
UNF 9/16	18	38	10	08596	08616
UNF 5/8	18	45	14	08597	08617
UNF 3/4	16	45	14	08598	08618
UNF 7/8	14	55	16	08599	08619
UNF 1	12	55	16	08600	08620
UNF 1	14	55	16	08601	08621
UNF 1 1/8	12	65	18	08602	08622
UNF 1 1/4	12	65	18	08603	08623
UNF 1 1/2	12	75	20	08604	08624

HSS → Yüksek hız çeliği

KULLANIM ALANI

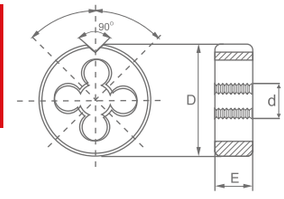
El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur. Sol diş açma işleminde kullanılır.

WİTHWORTH PAFTALAR

W | 60° P | HSS | 1.5P

DIN 223





WİTHWORTH PAFTA 6G HSS (9501)				C. 223W
d	P	D	E	Sip. No.
W 1/8	40	20	5	08663
W 5/32	32	20	5	08664
W 3/16	24	20	7	08665
W 1/4	20	20	7	08666
W 5/16	18	25	9	08667
W 3/8	16	20	11	08668
W 7/16	14	30	11	08669
W 1/2	12	38	14	08670
W 9/16	12	38	14	08671
W 5/8	11	45	18	08672
W 3/4	10	45	18	08673
W 7/8	9	55	22	08674
W 1	8	55	22	08675

HSS → Yüksek hız çeliği

KULLANIM ALANI

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

NPT | HSS | 1.5P | 1/16

NPT (KONİK) PAFTA HSS				C.223NPT
d	P	D	E	Sip. No.
NPT 1/16	27	25	10	08685
NPT 1/8	27	30	11	08686
NPT 1/4	18	38	16	08687
NPT 3/8	18	45	18	08688
NPT 1/2	14	45	20	08689
NPT 3/4	14	65	21	08690
NPT 1	11,5	65	25	08691
NPT 1 1/4	11,5	75	26	08692
NPT 1 1/2	11,5	90	27	08693
NPT 2	11,5	105	28	08694

HSS → Yüksek hız çeliği

KULLANIM ALANI

El ve makinalarda kullanmaya uygundur. Eğik ağız bileme özelliği ile temiz vida elde edilir. Tüm çelik türlerinde kullanıma uygundur.

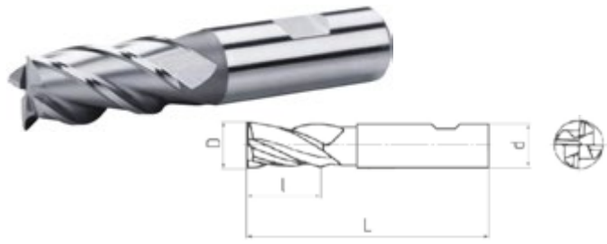
FREZELER

ZPS-fm ÇEKYA

KISA PARMAK FREZE

Type N | λ=30° γ=8°

DIN 844 ISO 1641



KISA PARMAK FREZE DIN 844					ZPS-fm
					ZPS120518
D k10	l	L	d h6	Z	HSSCo8 Sip. No.
2	7	51	6	3	09520
2,5	8	52	6	3	09521
3	8	52	6	4	09522
3,5	10	55	6	4	09523
4	11	55	6	4	09524
4,5	11	57	6	4	09525
5	13	57	6	4	09526
6	13	57	6	4	09527
7	16	66	10	4	09528
8	19	69	10	4	09529
9	19	69	10	4	09530
10	22	72	10	4	09531
11	22	79	12	4	09532
12	26	83	12	4	09533
13	26	83	12	4	09534
14	26	83	12	4	09535
15	26	83	12	4	09536
16	32	92	16	4	09537
17	32	92	16	4	09538
18	32	92	16	4	09539
20	38	104	20	4	09540
22	38	104	20	5	09541
24	45	121	25	5	09542
25	45	121	25	5	09543
26	45	121	25	5	09544
28	45	121	25	5	09545
30	45	121	25	5	09546
32	53	133	32	6	09547
35	53	133	32	6	09548
36	53	133	32	6	09549
40	53	133	32	6	09550

1TEKNİK ÖZELLİKLER

Type N — Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

HSS Co8 — Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Düşük alaşımlı çelikler (Sertlik:34,4 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Isıl işlem görmüş alaşımlı çelikler (Sertlik:34,4 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

UZUN PARMAK FREZE

Type N | λ=30° γ=8°

DIN 844 ISO 1641



UZUN PARMAK FREZE DIN 844					ZPS-fm
					ZPS121518
D	l	L	d h6	Z	HSSCo8 Sip. No.
3	12	56	6	4	09551
4	19	63	6	4	09552
5	24	68	6	4	09553
6	24	68	6	4	09554
7	30	80	10	4	09555
8	38	88	10	4	09556
9	38	88	10	4	09557
10	45	95	10	4	09558
11	45	110	12	4	09559
12	53	110	12	4	09560
13	53	110	12	4	09561
14	53	110	12	4	09562
15	53	123	12	4	09563
16	63	123	16	4	09564
18	63	123	16	4	09565
20	75	141	20	4	09566
22	75	141	20	5	09567
24	90	166	25	5	09568
25	90	166	25	5	09569
26	90	166	25	5	09570
28	90	166	25	5	09571
30	90	166	25	5	09572
32	106	186	32	6	09573
35	106	186	32	6	09574
36	106	186	32	6	09575
40	125	205	32	6	09576

1TEKNİK ÖZELLİKLER

Type N — Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

HSS Co8 — Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Düşük alaşımlı çelikler (Sertlik:34,4 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Isıl işlem görmüş alaşımlı çelikler (Sertlik:34,4 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

KISA KABATALAŞ FREZE

λ=30° γ=12° | Type NR

DIN 844 ISO 1641



KISA KABATALAŞ FREZE DIN 844 NR					ZPS-fm
					ZPS124518
D	l	L	d h6	Z	HSSCo8 Sip. No.
6	13	57	6	4	09577
7	16	66	10	4	09578
8	19	69	10	4	09579
9	19	69	10	4	09580
10	22	72	10	4	09581
11	22	79	12	4	09582
12	26	83	12	4	09583
13	26	83	12	4	09584
14	26	83	12	4	09585

1TEKNİK ÖZELLİKLER

Type N — Düşük ve orta dayanımlı malzemelerin (700 MPa'a kadar) NR kaba operasyonları için kullanılır Yüzey kalitesi Ra 12,5 ve daha yüksek

HSS Co8 — 12,5 ve daha yüksek Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon
- çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı
- çelikler (Sertlik:24,8 Hrc)

KISA KABATALAŞ FREZE DIN 844 NR					ZPS-fm
					ZPS124518
D	l	L	d h6	Z	HSSCo8 Sip. No.
15	26	83	12	4	09586
16	32	92	16	4	09587
17	32	92	16	4	09588
18	32	92	16	4	09589
20	38	104	20	4	09590
22	38	104	20	5	09591
24	45	121	25	5	09592
25	45	121	25	5	09593
26	45	121	25	5	09594
28	45	121	25	5	09595
30	45	121	25	5	09596
32	53	133	32	6	09597

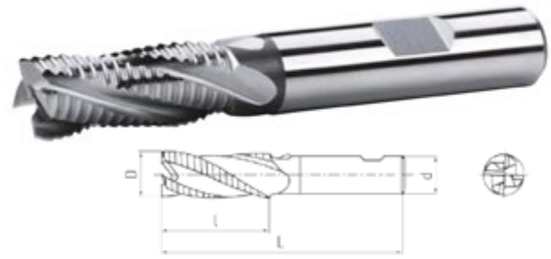
FREZELER

ZPS-fn ÇEKYA

UZUN KABATALAŞ FREZE

λ=30° γ=12° | Type NR

DIN 844 ISO 1641



1TEKNİK ÖZELLİKLER

Type NR → Düşük ve orta dayanımlı malzemelerin (700 MPa'a kadar) NR kaba operasyonları için kullanılır. Yüzey kalitesi Ra 12,5 ve daha yüksek

HSS Co8 → 12,5 ve daha yüksek Yüksek hız çeliği %8 kobaltlı

2

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)

UZUN KABATALAŞ FREZE DIN 844 NR					ZPS-fn
					ZPS125518
D	l	L	d h6	Z	HSSCo8 Sip. No.
6	24	68	6	4	09598
8	38	88	10	4	09599
10	45	95	10	4	09600
12	53	110	12	4	09601
14	53	110	12	4	09602
16	63	123	16	4	09603
18	63	123	16	4	09604
20	75	141	20	4	09605
22	75	141	20	5	09606
24	90	166	25	5	09607
25	90	166	25	5	09608
26	90	166	25	5	09609
28	90	166	25	5	09610
30	90	166	25	5	09611
32	106	186	32	6	09612
36	106	186	32	6	09613
40	125	186	32	6	09614

İKİ AĞIZLI KISA DELİK FREZESİ

λ=25° γ=12° | Type N

DIN 327 ISO 1641



1TEKNİK ÖZELLİKLER

Type N → Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

HSS Co8 → Yüksek hız çeliği %8 kobaltlı

2

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Düşük alaşımlı çelikler (Sertlik:34,4 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB

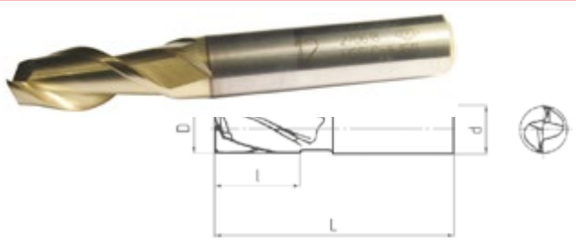
İKİ AĞIZLI KISA DELİK FREZESİ DIN 327					ZPS-fn
					ZPS220418
D	l	L	d h6	Z	HSSCo8 Sip. No.
2	4	48	6	2	09615
3	5	49	6	2	09616
4	7	51	6	2	09617
5	8	52	6	2	09618
6	8	52	6	2	09619
7	10	60	10	2	09620

İKİ AĞIZLI KISA DELİK FREZESİ DIN 327					ZPS-fn
					ZPS220418
D	l	L	d h6	Z	HSSCo8 Sip. No.
8	11	61	10	2	09621
9	11	61	10	2	09622
10	13	63	10	2	09623
11	13	70	12	2	09624
12	16	73	12	2	09625
13	16	73	12	2	09626
14	16	73	12	2	09627
15	16	73	12	2	09628
16	19	79	16	2	09629
17	19	79	16	2	09630
18	19	79	16	2	09631
19	19	79	16	2	09632
20	22	88	20	2	09633
22	22	88	20	2	09634
24	26	102	25	2	09635
25	26	102	25	2	09636
26	26	102	25	2	09637
28	26	102	25	2	09638
30	26	102	25	2	09639
32	32	112	32	2	09640
36	32	112	32	2	09641
40	38	118	32	2	09642

İKİ AĞIZLI KISA DELİK FREZESİ (ALUMİNYUM İÇİN)

λ=25° γ=12° | Type N | Type AL | ZrN

DIN 327 ISO 1641



1TEKNİK ÖZELLİKLER

Type N → Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

HSS Co8 → Yüksek hız çeliği %8 kobaltlı

Type AL → Alaşımsız aluminyumlar için

ZrN → Zirkonyum Nitrür

2

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Düşük alaşımlı çelikler (Sertlik:34,4 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Takım Çelikleri, Alaşımlı çelikler (Sertlik:34,4 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

İKİ AĞIZLI UZUN FREZE DIN 327					ZPS-fn
					ZPS270618
D k10	l	L	d h6	Z	HSSCo8 Sip. No.
2	7	51	6	2	09665
3	8	52	6	2	09666
4	11	55	6	2	09667
5	13	57	6	2	09668
6	13	57	6	2	09669
7	16	66	10	2	09670
8	19	69	10	2	09671

İKİ AĞIZLI UZUN FREZE DIN 327					ZPS-fn
					ZPS270618
D k10	l	L	d h6	Z	HSSCo8 Sip. No.
9	19	69	10	2	09672
10	22	72	10	2	09673
11	22	79	12	2	09674
12	26	83	12	2	09675
13	26	83	12	2	09676
14	26	83	12	2	09677
15	26	83	12	2	09678

İKİ AĞIZLI UZUN FREZE DIN 327					ZPS-fn
					ZPS270618
D k10	l	L	d h6	Z	HSSCo8 Sip. No.
16	32	92	16	2	09679
17	32	92	16	2	09680
18	32	92	16	2	09681
19	32	92	16	2	09682
20	38	104	20	2	09683

FREZELER

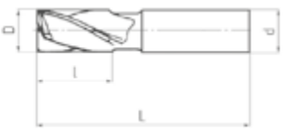
ZPS-fn ÇEKYA

İKİ AĞIZLI UZUN FREZE

λ=25° γ=12° | Type N

DIN 327
ISO 1641





1TEKNİK ÖZELLİKLER

Type N — Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

2 HSS Co8 — Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Düşük alaşımlı çelikler (Sertlik:34,4 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB

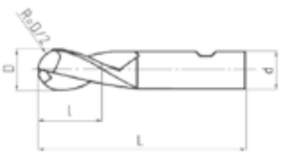
İKİ AĞIZLI UZUN FREZE DIN 327				ZPS-fn
				ZPS221418
D	l	L	d h6	HSSCo8
				Sip. No.
4	11	63	6	09643
5	13	68	6	09644
6	13	68	6	09645
7	16	80	10	09646
8	19	88	10	09647
9	19	88	10	09648
10	22	95	10	09649
11	22	102	12	09650
12	26	110	12	09651
13	26	110	12	09652
14	26	110	12	09653
15	26	110	12	09654
16	32	123	16	09655
18	32	123	16	09656
20	38	141	20	09657
22	38	141	20	09658
24	45	166	25	09659
25	45	166	25	09660
26	45	166	25	09661
28	45	166	25	09662
30	45	166	25	09663
32	53	186	32	09664

İKİ AĞIZLI KISA KÜRESEL FREZE

DIN 1835B | λ=25° γ=10°

DIN 1889





1TEKNİK ÖZELLİKLER

2 HSS Co8 — Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Bakır ve alaşımları(Sertlik:22,2 Hrc)

İKİ AĞIZLI KISA KÜRESEL FREZE DIN 1889				ZPS-fn
				ZPS510418
D k10	l	L	d h6	HSSCo8
				Sip. No.
4	7	51	6	09684
5	8	52	6	09685
6	8	52	6	09686
7	10	60	10	09687
8	11	61	10	09688
9	11	61	10	09689
10	13	63	10	09690
11	13	70	12	09691
12	16	73	12	09692
13	16	73	12	09693
14	16	73	12	09694
15	16	73	12	09695
16	19	79	16	09696
18	19	79	16	09697
20	22	88	20	09698
22	22	88	20	09699
24	26	102	25	09700
25	26	102	25	09701
28	26	102	25	09702
30	26	102	25	09703
32	32	112	32	09704

FREZELER

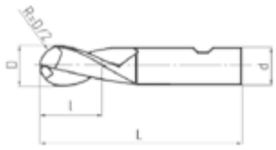
ZPS-fn ÇEKYA

İKİ AĞIZLI UZUN KÜRESEL FREZE

DIN 1835B | λ=25° | γ=10°

DIN 1835B





1TEKNİK ÖZELLİKLER

2 HSS Co8 ▸ Yüksek hız çeliği %8 kobaltlı

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Bakır ve alaşımları(Sertlik:22,2 Hrc)

İKİ AĞIZLI UZUN KÜRESEL FREZE				ZPS-fn
				ZPS511418
D k10	l	L	d h6	HSSCo8 Sip. No.
4	11	63	6	09705
5	13	68	6	09706
6	13	68	6	09707
7	16	80	10	09708
8	19	88	10	09709
9	19	88	10	09710
10	22	95	10	09711
11	22	102	12	09712
12	26	110	12	09713
13	26	110	12	09714
14	26	110	12	09715

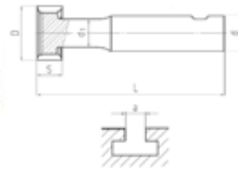
İKİ AĞIZLI UZUN KÜRESEL FREZE				ZPS-fn
				ZPS511418
D k10	l	L	d h6	HSSCo8 Sip. No.
15	26	110	12	09716
16	32	123	16	09717
18	32	123	16	09718
20	38	141	20	09719
22	38	141	20	09720
24	45	166	25	09721
25	45	166	25	09722
28	45	166	25	09723
30	45	166	25	09724
32	53	186	32	09725

T-KANAL FREZE, ÇAPRAZ DİŞLİ

DIN 1835B | λ=10° | γ=10° | Type N

DIN 851
ISO 3337





1TEKNİK ÖZELLİKLER

2 HSS Co5 ▸ Yüksek hız çeliği %5 kobaltlı

1KULLANIM ALANI
- 900 N/mm² mukavemetindeki alaşımlı dövme çelikler
- Takım çelikleri
- Toklaştırılmış çelikler
- Paslanmaz ve yüksek ısıya dayanıklı çelikler
- Döküm alaşımlı malzemeler
- Kama yuvalarının açılmasında

İKİ AĞIZLI UZUN KÜRESEL FREZE							ZPS-fn
							ZPS310215
D	S d11	L	d1 h12	d h6	Z	a	Sip. No.
11	4	53,5	4	10	6	5	09726
12,5	6	57	5	10	6	6	09727
16	8	62	7	10	6	8	09728
18	8	70	8	12	6	10	09729
19	9	71	8	12	6	> 8	09730
21	9	74	10	12	6	12	09731
22	10	75	10	12	6	> 10	09732
25	11	82	12	16	8	14	09733

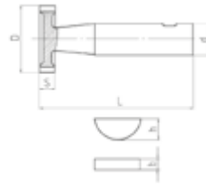
İKİ AĞIZLI UZUN KÜRESEL FREZE							ZPS-fn
							ZPS310215
D	S d11	L	d1 h12	d h6	Z	a	Sip. No.
28	12	85	13	16	8	> 13	09734
32	14	90	15	16	8	18	09735
36	16	103	17	25	8	> 17	09736
40	18	108	19	25	10	22	09737
45	20	113	21	25	10	> 21	09738
50	22	124	25	32	10	28	09739
60	28	139	30	32	10	36	09740

T-YARIK FREZE, ÇAPRAZ DİŞLİ

DIN 1835B | λ=10° | γ=10°

DIN 850





1TEKNİK ÖZELLİKLER

2 HSS Co5 ▸ Yüksek hız çeliği %5 kobaltlı

1KULLANIM ALANI
- 900 N/mm² mukavemetindeki alaşımlı dövme çelikler
- Takım çelikleri
- Toklaştırılmış çelikler
- Paslanmaz ve yüksek ısıya dayanıklı çelikler
- Döküm alaşımlı malzemeler
- Kama yuvalarının açılmasında

T-YARIK FREZE, ÇAPRAZ DİŞLİ DIN 850						ZPS-fn
						ZPS320015
D h12	S e 8	L	d h6	Z	bxh DIN 6888	Sip. No.
4,5	1	50	6	6	1x1,4	09741
7,5	1,5	50	6	6	1,5x2,6	09742
7,5	2	50	6	6	2x2,6	09743
10,5	2	50	6	6	2x3,7	09744
10,5	2,5	50	6	6	2,5x3,7	09745
10,5	3	50	6	6	3x3,7	09746
13,5	2	56	10	6	-	09747
13,5	3	56	10	6	3x5	09748
13,5	4	56	10	6	4x5	09749
16,5	3	56	10	6	3x6,5	09750
16,5	4	56	10	6	4x6,5	09751
16,5	5	56	10	6	5x6,5	09752
19,5	3	63	10	8	-	09753
19,5	4	63	10	8	4x7,5	09754
19,5	5	63	10	8	5x7,5	09755
19,5	6	63	10	8	6x7,5	09756

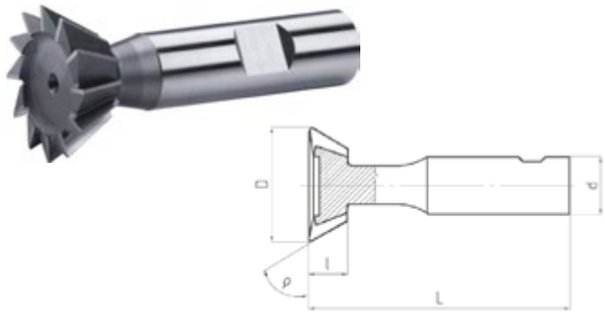
T-YARIK FREZE, ÇAPRAZ DİŞLİ DIN 850						ZPS-fn
						ZPS320015
D h12	S e 8	L	d h6	Z	bxh DIN 6888	Sip. No.
22,5	4	63	10	8	-	09757
22,5	5	63	10	8	5x9	09758
22,5	6	63	10	8	6x9	09759
22,5	8	63	10	8	8x9	09760
25,5	5	63	10	10	-	09761
25,5	6	63	10	10	6x10	09762
28,5	6	63	10	10	6x11	09763
28,5	8	63	10	10	8x11	09764
28,5	10	71	12	10	10x11	09765
32,5	6	71	12	10	-	09766
32,5	7	71	12	10	-	09767
32,5	8	71	12	10	8x13	09768
32,5	10	71	12	10	10x13	09769
38,5	8	71	12	10	-	09770
45,5	8	71	12	12	-	09771
45,5	10	71	12	12	10x16	09772

FREZELER

ZPS-fm ÇEKYA

KIRLANGIÇ FREZE

DIN 1833 A,C ISO 3859



KIRLANGIÇ FREZE DIN 1833 A						ZPS-fm
						ZPS330215
						HSSCo5
p ±30'	D js 16	I js 14	L	d h6	Z	Sip. No.
45°	16	4	60	12	10	09773
45°	20	5	63	12	10	09774
45°	25	6,3	67	12	10	09775
45°	32	8	71	16	12	09776
50°	16	5	60	12	10	09777
50°	20	6,3	63	12	10	09778
50°	25	8	67	12	10	09779
55°	16	5,6	60	12	10	09780
55°	20	7,1	63	12	10	09781
55°	25	9	67	12	10	09782
60°	16	6,3	60	12	10	09783
60°	20	8	63	12	10	09784
60°	25	10	67	12	10	09785
60°	32	12,5	71	16	12	09786
*65°	16	6,3	60	12	10	09787
*65°	25	10	67	12	12	09788
*70°	16	7	60	12	10	09789
*70°	20	9	63	12	10	09790
*70°	25	11	67	16	10	09791
*75°	16	8	60	12	10	09792
*75°	25	10	67	12	12	09793
*80°	16	8	60	12	10	09794
*80°	25	10	67	12	12	09795
*85°	16	8	60	12	10	09796
*85°	25	10	67	12	12	09797

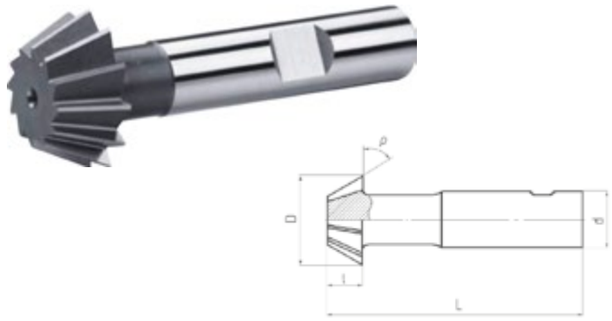
1TEKNİK ÖZELLİKLER

2 HSS Co5 → Yüksek hız çeliği %5 kobaltlı

1KULLANIM ALANI
- 45° ve 60°lik kırlangıç kuyruğu kanal- larının frezelenmesi için
- 900 N/mm² mukavemetindeki çelikler
- Toklaştırılmış çelikler
- Gri döküm metaller
- NE- metaller

KIRLANGIÇ FREZE

DIN 1833 B,D ISO 3859



KIRLANGIÇ FREZE DIN 1833 B						ZPS-fm
						ZPS350015
						HSSCo5
p ±30'	D js 16	I js 14	L	d h6	Z	Sip. No.
45°	16	4	60	12	10	09798
45°	20	5	63	12	10	09799
45°	25	6,3	67	12	10	09800
45°	32	8	71	16	12	09801
50°	16	5	60	12	12	09802
50°	20	6,3	63	12	12	09803
50°	25	8	67	12	12	09804
55°	16	5,6	60	12	10	09805
55°	20	7,1	63	12	10	09806
55°	25	9	67	12	12	09807
60°	16	6,3	60	12	10	09808
60°	20	8	63	12	10	09809
60°	25	10	67	12	10	09810
60°	32	12,5	71	16	12	09811
*65°	16	6,3	60	12	10	09812
*65°	25	10	67	12	12	09813
*70°	16	7	60	12	10	09814
*70°	20	9	63	12	10	09815
*70°	25	11	67	16	10	09816
*75°	16	8	60	12	10	09817
*75°	25	10	67	12	12	09818

1TEKNİK ÖZELLİKLER

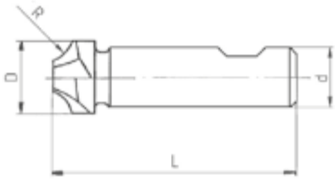
2 HSS Co5 → Yüksek hız çeliği %5 kobaltlı

1KULLANIM ALANI
- 45° ve 60°lik kırlangıç kuyruğu kanal- larının frezelenmesi için
- 900 N/mm² mukavemetindeki çelikler
- Toklaştırılmış çelikler
- Gri döküm metaller
- NE- metaller

KÖŞE YUVARLAMA FREZE

DIN 6518





TEKNİK ÖZELLİKLER

1 HSS Co8 → Yüksek hız çeliği %8 kobaltlı

KULLANIM ALANI
- İmalat çelikleri
- Dökme demirler
- Düşük alaşımlı çelikler

Not: Yukarıdaki malzemelerin keskin köşelerine radius oluşturmak için kullanılır.

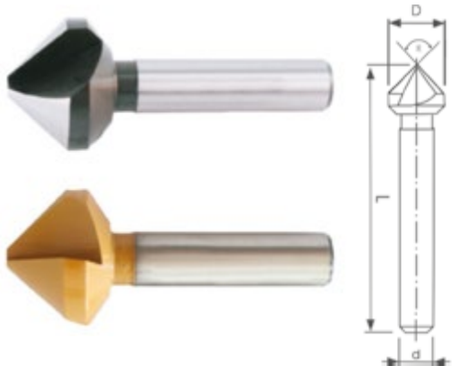
KÖŞE YUVARLAMA FREZE					ZPS-fm
					ZPS360018
					HSSCo8
R H11	D	L	D H6	Z	Sip. No.
1	8	60	10	4	09819
1,5	10	60	10	4	09820
1,6	10	60	10	4	09821
2	10	60	10	4	09822
2,5	10	60	10	4	09823
3	12	60	12	4	09824
3,5	14	60	12	4	09825
4	14	60	12	4	09826
4,5	15	60	12	4	09827
5	16	60	12	4	09828
5,5	21	67	16	4	09829
6	21	67	16	4	09830
6,5	24	71	16	4	09831
7	24	71	16	4	09832
7,5	24	71	16	4	09833

KÖŞE YUVARLAMA FREZE					ZPS-fm
					ZPS360018
					HSSCo8
R H11	D	L	D H6	Z	Sip. No.
8	24	71	16	4	09834
8,5	28	85	25	4	09835
9	28	85	25	4	09836
9,5	28	85	25	4	09837
10	28	85	25	4	09838
10,5	35	90	25	4	09839
11	35	90	25	4	09840
12	35	90	25	4	09841
12,5	42	100	25	6	09842
13	42	100	25	6	09843
14	42	100	25	6	09844
15	48	100	25	6	09845
16	48	100	25	6	09846
18	54	112	32	6	09847
20	58	112	32	6	09848

FREZELER

HAVŞA FREZE 90°

DIN 335/C



HAVŞA FREZE 90° DIN 335/C 3 AĞIZLI			BUČOVICE TOOLS NB-335 HSS	BUČOVICE TOOLS NB-335T HSS	PLD C.335 HSS
D	d	L	Sip. No.	Sip. No.	Sip. No.
6,3	5	45	09993	10011	10029
8	6	46/50	09994	10012	10030
10	6	46/50	09995	10013	10031
11,5	8	56	09996	10014	10032
12	8	46/54	09997	10015	10033
12,4	8	54	09998	10016	10034
16	8	46,5/60	09999	10017	10035
16,5	10	60	10000	10018	10036
20	10	47/63	10001	10019	10037
20,5	10	63	10002	10020	10038
23	10	67	10003	10021	10039
25	10	51/66	10004	10022	10040
25,5	10	66	10005	10023	10041
30	10	71	10006	10024	10042
31,5	12	71	10007	10025	10043
35	12	80	10008	10026	10044
40	12	80	10009	10027	10045
50	12	85	10010	10028	10046

1TEKNİK ÖZELLİKLER

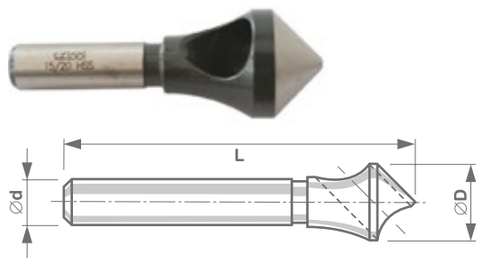
HSS → Yüksek hız çeliği

2TiN → Titanyum Nitrür

1KULLANIM ALANI
- Demir ve demir dışı metallerde
- Yumuşak malzemelerde
- Delme işlemlerinde
- Havşalama işlemlerinde

HAVŞA FREZE DELİKLİ

DIN 335/D



HAVŞA FREZE DELİKLİ (ZENKER) 90°				BUČOVICE TOOLS NB-334 HSS
Ölçü	D	d	L	Sip. No.
2/5	10	6	46	10053
5/10	14	8	46	10054
10/15	21,5	10	64,5	10055
15/20	28	12	80	10056
20/25	35	15	97	10057
25/30	44	15	115	10058

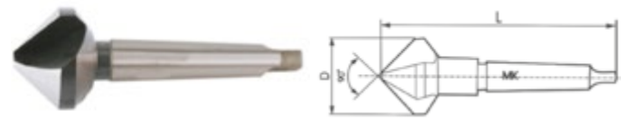
1TEKNİK ÖZELLİKLER

2HSS → Yüksek hız çeliği

1KULLANIM ALANI
- Demir ve demir dışı metallerde
- Yumuşak malzemelerde
- Delme işlemlerinde
- Havşalama işlemlerinde

HAVŞA FREZE MK

DIN 335/D



HAVŞA FREZE, KONİK SAPLI 90° DIN 335/D ÜÇ AĞIZLI			PLD C.335MK HSS
D	MK	L	Sip. No.
30	2	113	10047
34	2	118	10048
40	3	140	10049
50	3	150	10050
65	4	180	10051
80	4	190	10052

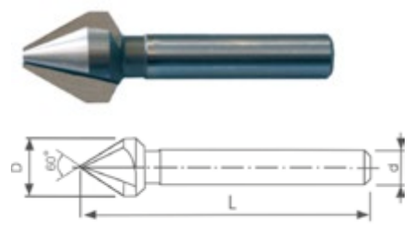
1TEKNİK ÖZELLİKLER

2HSS → Yüksek hız çeliği

1KULLANIM ALANI
- Demir ve demir dışı metallerde
- Yumuşak malzemelerde
- Delme işlemlerinde
- Havşalama işlemlerinde

HAVŞA FREZE 60°

DIN 334/C



HAVŞA FREZE 60° DIN 334/C ÜÇ AĞIZLI			PLD C.334 HSS
D	d	L	Sip. No.
6,3	6	45	10059
8	8	50	10060
10	8	56	10061
12	8	56	10062
12,5	8	56	10063
16	10	63	10064
20	10	67	10065
25	12	71	10066
30	12	84	10067
31,5	12	84	10068
35	12	90	10069
40	12	97	10070

1TEKNİK ÖZELLİKLER

2HSS → Yüksek hız çeliği

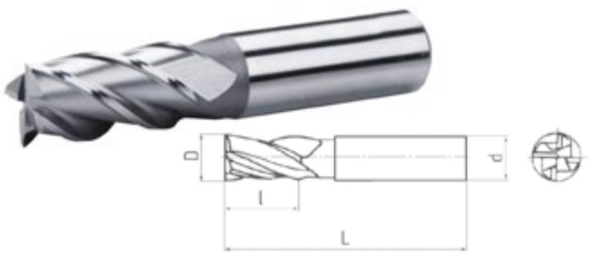
1KULLANIM ALANI
- Demir ve demir dışı metallerde
- Yumuşak malzemelerde
- Delme işlemlerinde
- Havşalama işlemlerinde

FREZELER

KISA PARMAK FREZE

Type N | λ=30° γ=8° | DIN 6835A

DIN 844
ISO 1641



KISA PARMAK FREZE DIN 844					C210	C210
D k10	l	L	d h6	Z	HSS	HSS TİN
					Sip. No.	Sip. No.
2	7	51	6	4	10074	10112
2,5	8	52	6	4	10075	10113
3	8	52	6	4	10076	10114
4	11	55	6	4	10077	10115
5	13	57	6	4	10078	10116
6	13	57	6	4	10079	10117
7	16	66	10	4	10080	10118
8	19	69	10	4	10081	10119
9	19	69	10	4	10082	10120
10	22	72	10	4	10083	10121
11	22	79	12	4	10084	10122
12	26	83	12	4	10085	10123
13	26	83	12	4	10086	10124
14	26	83	12	4	10087	10125
15	26	83	12	4	10088	10126
16	32	92	16	4	10089	10127
17	32	92	16	4	10090	10128
18	32	92	16	4	10091	10129
19	38	104	16	4	10092	10130
20	38	104	20	4	10093	10131
21	38	104	20	4	10094	10132
22	38	104	20	4	10095	10133
23	38	121	20	4	10096	10134
24	45	121	25	4	10097	10135
25	45	121	25	4	10098	10136
26	45	121	25	4	10099	10137
27	45	121	25	4	10100	10138
28	45	121	25	4	10101	10139
29	45	121	25	4	10102	10140
30	45	121	25	4	10103	10141
31	53	133	25	4	10104	10142
32	53	133	32	4	10105	10143
33	53	133	32	4	10106	10144
34	53	133	32	4	10107	10145
35	53	133	32	4	10108	10146
36	53	133	32	4	10109	10147
38	53	133	32	4	10110	10148
40	53	133	32	6	10111	10149

1TEKNİK ÖZELLİKLER

Type N — Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

HSS — Yüksek hız çeliği

2 TİN — Titanyum Nitrür

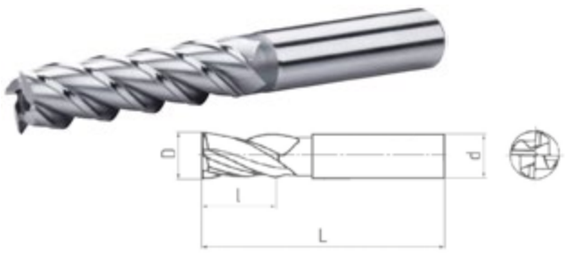
1KULLANIM ALANI

- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Aluminyum ve alaşımları (152 HB)

UZUN PARMAK FREZE

Type N | λ=30° γ=8° | DIN 6835A

DIN 844
ISO 1641



UZUN PARMAK FREZE DIN 844					C240
D	l	L	d h6	Z	HSS
					Sip. No.
3	12	56	6	4	10150
4	19	63	6	4	10151
5	24	68	6	4	10152
6	24	68	6	4	10153
7	30	80	10	4	10154
8	38	88	10	4	10155
9	38	88	10	4	10156
10	45	95	10	4	10157
11	45	110	12	4	10158
12	53	110	12	4	10159
14	53	110	12	4	10160
15	53	123	12	4	10161
16	63	123	16	4	10162
17	63	123	16	4	10163
18	63	123	16	4	10164
19	63	123	16	4	10165
20	75	141	20	4	10166
21	75	141	20	4	10167
22	75	141	20	4	10168
23	75	141	20	4	10169
24	90	166	25	4	10170
25	90	166	25	4	10171
26	90	166	25	4	10172
27	90	166	25	4	10173
28	90	166	25	4	10174
29	90	166	25	4	10175
30	90	166	25	4	10176
31	106	186	32	4	10177
32	106	186	32	4	10178
33	106	186	32	4	10179
34	106	186	32	4	10180
35	106	186	32	4	10181
36	106	186	32	4	10182
37	106	186	32	4	10183
38	106	186	32	4	10184
39	125	205	32	6	10185
40	125	205	32	6	10186

1TEKNİK ÖZELLİKLER

Type N — Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

2 HSS — Yüksek hız çeliği

1KULLANIM ALANI

- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

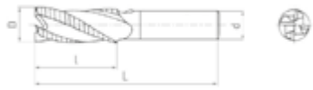
FREZELER

KISA KABATALAŞ FREZE

Type NR | λ=30° γ=12°

DIN 844





KISA KABATALAŞ FREZE DIN 844 NR					PLD
					C230
D k10	l	L	d h6	Z	HSS Sip. No.
4	13	57	6	4	10193
5	13	57	6	4	10194
6	13	57	6	4	10195
7	16	66	10	4	10196
8	19	69	10	4	10197
9	19	69	10	4	10198
10	22	72	10	4	10199
11	22	79	12	4	10200
12	26	83	12	4	10201
13	26	83	12	4	10202
14	26	83	12	4	10203
15	26	83	12	4	10204
16	32	92	16	4	10205
17	32	92	16	4	10206
18	32	92	16	4	10207
19	38	104	20	4	10208
20	38	104	20	4	10209
22	38	104	20	4	10210
24	45	121	25	4	10211
25	45	121	25	4	10212
26	45	121	25	4	10213
28	45	121	25	4	10214
30	45	121	25	4	10215
32	53	133	32	4	10216
36	53	133	32	4	10217
40	63	143	32	4	10218

1TEKNİK ÖZELLİKLER

Type NR → Düşük ve orta dayanımlı malzemelerin (700 MPa'a kadar) NR kaba operasyonları için kullanılır Yüzey kalitesi Ra 12,5 ve daha yüksek

2 HSS → Yüksek hız çeliği

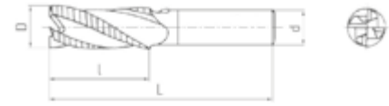
1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)

UZUN KABATALAŞ FREZE

Type NR | λ=30° γ=12°

DIN 844





UZUN KABATALAŞ FREZE DIN 844 NR					PLD
					C232
D k10	l	L	d h6	Z	HSS Sip. No.
6	24	68	6	4	10219
7	24	68	6	4	10220
8	38	88	10	4	10221
9	45	88	10	4	10222
10	45	95	10	4	10223
11	53	95	10	4	10224
12	53	110	12	4	10225
13	53	110	12	4	10226
14	53	110	12	4	10227
16	63	123	16	4	10228
17	63	123	16	4	10229
18	63	123	16	4	10230
20	75	141	20	4	10231
22	75	141	20	4	10232
24	90	166	25	4	10233
25	90	166	25	4	10234
26	90	166	25	4	10235
28	90	166	25	4	10236
30	90	166	25	4	10237
32	106	186	32	4	10238
36	106	186	32	4	10239
40	125	186	32	4	10240

1TEKNİK ÖZELLİKLER

Type NR → Düşük ve orta dayanımlı malzemelerin (700 MPa'a kadar) NR kaba operasyonları için kullanılır Yüzey kalitesi Ra 12,5 ve daha yüksek

2 HSS → Yüksek hız çeliği

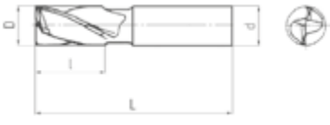
1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)

İKİ AĞIZLI KISA DELİK FREZE

Type N | λ=25° γ=12°

DIN327





İKİ AĞIZLI KISA DELİK FREZESİ DIN 327					
					C220
D k10	l	L	d h6	Z	HSS Sip. No.
1	4	48	6	2	10241
1,5	4	48	6	2	10242
2	4	48	6	2	10243
3	5	49	6	2	10244
4	7	51	6	2	10245
5	8	52	6	2	10246
6	8	52	6	2	10247
7	10	60	10	2	10248
8	11	61	10	2	10249
9	11	61	10	2	10250

1TEKNİK ÖZELLİKLER

Type N → Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

2 HSS → Yüksek hız çeliği

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Korozyona ve asite dayanıklı çelikler (Sertlik:24,8 Hrc)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

İKİ AĞIZLI KISA DELİK FREZESİ DIN 327					
					C220
D k10	l	L	d h6	Z	HSS Sip. No.
10	13	63	10	2	10251
11	13	70	12	2	10252
12	16	73	12	2	10253
13	16	73	12	2	10254
14	16	73	12	2	10255
15	16	73	12	2	10256
16	19	79	16	2	10257
18	19	79	16	2	10258
20	22	88	20	2	10259
22	22	88	20	2	10260
24	26	102	25	2	10261
25	26	102	25	2	10262
26	26	102	25	2	10263
28	26	102	25	2	10264
30	26	102	25	2	10265

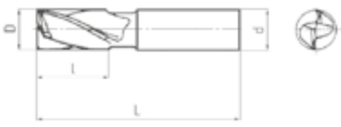
FREZELER

İKİ AĞIZLI UZUN FREZE

Type N | λ=25° γ=12°

DIN 327





1TEKNİK ÖZELLİKLER

Type N ▸ Genel kullanım içindir. Çekme dayanımı 900 MPa'a kadar olan malzemeler için.

2 HSS ▸ Yüksek hız çeliği

KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Aluminyum ve alaşımları (152 HB)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)
- Aluminyum ve alaşımları (152 HB)

İKİ AĞIZLI UZUN FREZE DIN 327					C222
D e8	l	L	d h6	Z	HSS Sip. No.
3	11	63	6	2	10266
4	11	63	6	2	10267
5	13	68	6	2	10268
6	13	68	6	2	10269
7	16	80	10	2	10270
8	19	88	10	2	10271

İKİ AĞIZLI UZUN FREZE DIN 327					C222
D e8	l	L	d h6	Z	HSS Sip. No.
9	19	88	10	2	10272
10	22	95	10	2	10273
11	22	102	12	2	10274
12	26	110	12	2	10275
13	26	110	12	2	10276
14	26	110	12	2	10277

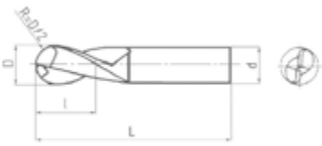
İKİ AĞIZLI UZUN FREZE DIN 327					C222
D e8	l	L	d h6	Z	HSS Sip. No.
15	26	110	12	2	10278
16	32	123	16	2	10279
18	32	123	16	2	10280
20	38	141	20	2	10281

İKİ AĞIZLI KISA KÜRESEL FREZE

λ=25° γ=10°

DIN 1889





1TEKNİK ÖZELLİKLER

2 HSS ▸ Yüksek hız çeliği

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)

İKİ AĞIZLI KISA KÜRESEL FREZE DIN 1889				C221
D k10	l	L	d h6	HSS Sip. No.
3	7	51	6	10282
4	7	51	6	10283
5	8	52	6	10284
6	8	52	6	10285
7	10	60	10	10286
8	11	61	10	10287
9	11	61	10	10288

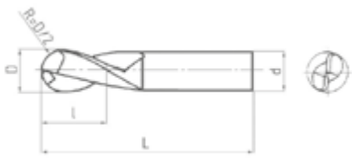
İKİ AĞIZLI KISA KÜRESEL FREZE DIN 1889				C221
D k10	l	L	d h6	HSS Sip. No.
10	13	63	10	10289
11	13	70	12	10290
12	16	73	12	10291
13	16	73	12	10292
14	16	73	12	10293
15	16	73	12	10294
16	19	79	16	10295

İKİ AĞIZLI KISA KÜRESEL FREZE DIN 1889				C221
D k10	l	L	d h6	HSS Sip. No.
17	19	79	16	10296
18	19	79	16	10297
19	19	79	16	10298
20	22	88	20	10299
22	22	88	20	10300
24	26	102	25	10301
25	26	102	25	10302

İKİ AĞIZLI UZUN KÜRESEL FREZE

λ=25° γ=10°





1TEKNİK ÖZELLİKLER

2 HSS ▸ Yüksek hız çeliği

1KULLANIM ALANI
- Alaşımsız çelikler (180 HB)
- Yapı çelikleri (Sertlik:24 Hrc)
- Semantasyon nitrürasyon çelikleri (Sertlik:27,1 Hrc)
- Dökme demir (Max.240 HB)
- Dökme demir (Min.240 HB)
- Bakır ve alaşımları (Sertlik:22,2 Hrc)

İKİ AĞIZLI UZUN KÜRESEL FREZE				C224
D e8	l	L	d h6	HSS Sip. No.
3	11	63	6	10303
4	11	63	6	10304
5	13	68	6	10305
6	13	68	6	10306
7	16	80	10	10307
8	19	88	10	10308
9	19	88	10	10309

İKİ AĞIZLI UZUN KÜRESEL FREZE				C224
D e8	l	L	d h6	HSS Sip. No.
10	22	95	10	10310
11	22	102	12	10311
12	26	110	12	10312
13	26	110	12	10313
14	26	110	12	10314
15	26	110	12	10315
16	32	123	16	10316

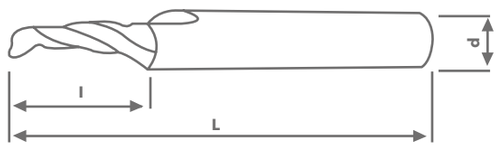
İKİ AĞIZLI UZUN KÜRESEL FREZE				C224
D e8	l	L	d h6	HSS Sip. No.
17	32	123	16	10317
18	32	123	16	10318
19	38	141	20	10319
20	38	141	20	10320
22	38	141	20	10321
24	45	166	25	10322
25	45	166	25	10323

TEK AĞIZLI ALUMİNYUM FREZESİ

Z 1 | 45°

DIN 6365-HA





1TEKNİK ÖZELLİKLER

2 HSS ▸ Yüksek hız çeliği

3 HSS Co5 ▸ Yüksek hız çeliği %5 kobaltlı

1KULLANIM ALANI
- Alüminyum ve plastik doğramaların tahliye kanallarının açılmasında ve diğer kanal açma işlemlerinde kullanılır

* MALZEME: HSS M2

TEK AĞIZLI ALÜMİNYUM FREZESİ				ZTM135
D	d	l	L	HSSCo5 Sip. No.
3	6	12	80	10324
3	8	30	80	10325
4	6	14	80	10326
4	8	14	60	10327
4	8	14	80	10328
5	6	14	80	10329

TEK AĞIZLI ALÜMİNYUM FREZESİ				ZTM135
D	d	l	L	HSSCo5 Sip. No.
5	8	14	60	10330
5	8	14	80	10331
5	8	40	100	10332
5*	8	35	120	10333
5*	8	50	120	10334
6	6	14	80	10335

TEK AĞIZLI ALÜMİNYUM FREZESİ				ZTM135
D	d	l	L	HSSCo5 Sip. No.
6	8	14	60	10336
6	8	18	80	10337
6	8	25	100	10338
8	8	14	80	10339
8	8	25	100	10340
8	8	25	120	10341

TEK AĞIZLI ALÜMİNYUM FREZELER

IZAR CUTTING TOOLS İSPANYA

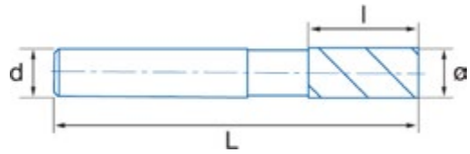
TEK AĞIZLI FREZE (ALUMİNYUM)

HSS | Type W | Y

REF 4417



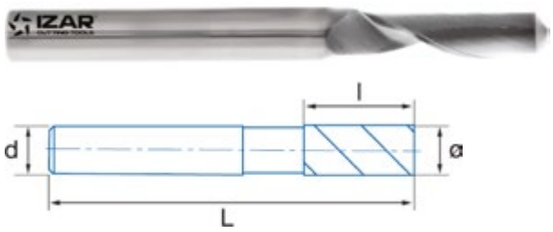
Ø mm h8	d (mm)	L (mm)	m	Y	Sip. No.
5,00	8	100	35	20	02252



TEK AĞIZLI FREZE - KARBÜR (ALUMİNYUM)

Type W | 30° | Tol. D (h10) d (h6)

REF 4417



Ø mm h8	d (mm)	L (mm)	m	Sip. No.
3,00	3	38	12	02253
4,00	4	40	15	02254
5,00	5	50	16	02255
6,00	6	50	18	02256
8,00	8	63	22	02257
10,00	10	72	30	02258

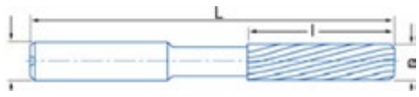
RAYBALAR

SİLİNDİR SAPLI MAKİNA RAYBASI

HSS Co5 | H7 | ISO 521

DIN 212D





Ø (mm)	L (mm)	l (mm)	d (mm)	Sip. No.
2,00	49	11	2,00	02129
2,50	57	14	2,50	02130
3,00	61	15	3,00	02131
3,50	70	18	3,50	02132
4,00	75	19	4,00	02133
4,50	80	21	4,50	02134
5,00	86	23	5,00	02135
5,50	93	26	5,60	02136

Ø (mm)	L (mm)	l (mm)	d (mm)	Sip. No.
6,00	93	26	5,60	02137
6,50	101	28	6,30	02138
7,00	109	31	7,10	02139
8,00	117	33	8,00	02140
9,00	125	36	9,00	02141
10,00	133	38	10,00	02142
11,00	142	41	10,00	02143
12,00	151	41	10,00	02144

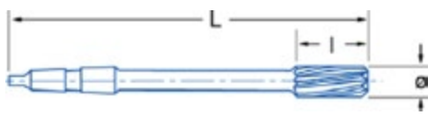
Ø (mm)	L (mm)	l (mm)	d (mm)	Sip. No.
13,00	151	44	10,00	02145
14,00	160	47	12,50	02146
15,00	162	50	12,50	02147
16,00	170	52	12,50	02148
17,00	175	54	14,00	02149
18,00	182	56	14,00	02150
19,00	189	58	16,00	02151
20,00	195	60	16,00	02152

MORS KONİK SAPLI MAKİNA RAYBASI

HSS Co5 | H7 | MK1-3 | ISO 521

DIN 208B





Ø (mm)	L (mm)	l (mm)	Z	MK	Sip. No.
6,00	138	26	6	1	02153
7,00	150	31	6	1	02154
8,00	156	33	6	1	02155
9,00	162	36	6	1	02156
10,00	168	38	6	1	02157
11,00	175	41	6	1	02158
12,00	182	44	6	1	02159
13,00	182	44	8	1	02160

Ø (mm)	L (mm)	l (mm)	Z	MK	Sip. No.
14,00	189	47	8	1	02161
15,00	204	50	8	2	02162
16,00	210	52	8	2	02163
17,00	214	54	8	2	02164
18,00	219	56	8	2	02165
19,00	223	58	8	2	02166
20,00	228	60	8	2	02167
21,00	232	62	8	2	02168

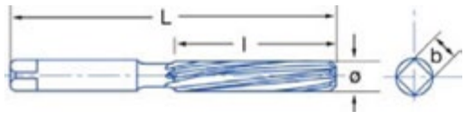
Ø (mm)	L (mm)	l (mm)	Z	MK	Sip. No.
22,00	237	64	8	2	02169
23,00	241	66	8	2	02170
24,00	268	68	10	3	02171
25,00	268	68	10	3	02172
26,00	273	70	10	3	02173
27,00	277	71	10	3	02174
28,00	277	71	10	3	02175
30,00	281	73	10	3	02176

SİLİNDİR SAPLI EL RAYBASI

HSS | H7 | ISO 236

DIN 206B





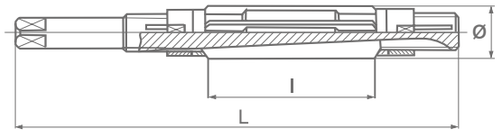
Ø (mm)	L (mm)	l (mm)	b	Sip. No.
2,00	50	25	1,60	02177
2,50	58	29	2,10	02178
3,00	62	31	2,10	02179
3,50	71	35	2,70	02180
4,00	76	38	3,00	02181
4,50	81	41	3,40	02182
5,00	87	44	3,80	02183
5,50	93	47	4,30	02184
6,00	93	47	4,30	02185
6,50	100	50	4,90	02186
7,00	107	54	5,50	02187
7,50	107	54	5,50	02188

Ø (mm)	L (mm)	l (mm)	b	Sip. No.
8,00	115	58	6,20	02189
8,50	115	58	6,20	02190
9,00	124	62	7,00	02191
10,00	133	66	8,00	02192
11,00	142	71	9,00	02193
12,00	152	76	10,00	02194
13,00	152	76	10,00	02195
14,00	163	81	11,00	02196
15,00	163	81	11,00	02197
16,00	175	87	12,00	02198
17,00	175	87	12,00	02199
18,00	188	93	14,50	02200

Ø (mm)	L (mm)	l (mm)	b	Sip. No.
19,00	188	93	14,50	02201
20,00	201	100	16,00	02202
21,00	201	100	16,00	02203
22,00	215	107	18,00	02204
23,00	215	107	18,00	02205
24,00	231	115	20,00	02206
25,00	231	115	20,00	02207
26,00	231	115	20,00	02208
27,00	247	124	22,40	02209
28,00	247	124	22,40	02210
30,00	247	124	22,40	02211

AYARLI KOVANSIZ EL RAYBASI HSS





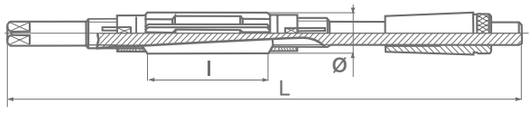
Ø (mm)	L (mm)	l (mm)	Z	Sip. No.
6,40 - 7,20	34	85	4	02212
7,20 - 8,00	35	90	4	02213
8,00 - 9,00	39	100	5	02214
9,00 - 10,00	45	120	5	02215
10,00 - 11,00	45	125	5	02216
11,00 - 12,00	46	130	5	02217

Ø (mm)	L (mm)	l (mm)	Z	Sip. No.
12,00 - 13,50	48	135	5	02218
13,50 - 15,50	58	140	5	02219
15,50 - 18,00	69	165	5	02220
18,00 - 21,00	75	185	5	02221
21,00 - 24,00	80	195	5	02222
24,00 - 27,50	90	215	6	02223

Ø (mm)	L (mm)	l (mm)	Z	Sip. No.
27,50 - 31,50	100	240	6	02224
31,50 - 37,00	110	265	6	02225
37,00 - 45,00	130	310	6	02226
45,00 - 55,00	145	380	6	02227

AYARLI KOVANLI EL RAYBASI HSS





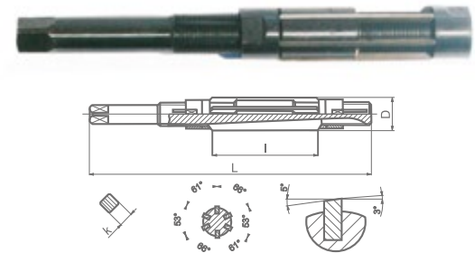
Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
8.00 - 9.00	39	175	5	02228
9.00 - 10.00	39	185	5	02229
10.00 - 11.00	45	195	5	02230
11.00 - 12.00	45	200	5	02231
12.00 - 13.50	48	220	5	02232

Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
13.50 - 15.50	58	243	5	02233
15.50 - 18.00	69	274	5	02234
18.00 - 21.00	75	300	5	02235
21.00 - 24.00	80	320	5	02236
24.00 - 27.50	90	350	6	02237

Ø (mm)	l (mm)	L (mm)	Z	Sip. No.
27.50 - 31.50	100	385	6	02238
31.50 - 37.00	110	424	6	02239
37.00 - 45.00	130	490	6	02240
45.00 - 55.00	145	600	6	02241

RAYBALAR

AYARLI KOVANSIZ EL RAYBASI



AYARLI KOVANSIZ EL RAYBASI-HSS						C.859
Ölçü (mm)	D (mm)	L (mm)	l (mm)	k (mm)	Bıçak AD.	Sip. No.
7,00-8,00	6	91	25	3	4	04910
8,00-8,70	7	96	30	3,5	4	04911
8,70-9,50	8	101	35	4	4	04912
9,50-10,25	9	106	40	5	4	04913
10,25-11,00	9,5	115	40	5	6	04914
11,00-12,00	10	118	40	5	6	04915
12,00-13,50	11	126	40	5	6	04916
13,50-15,00	12	142	45	6	6	04917
15,00-16,50	13	150	50	7	6	04918
16,5-18,25	15	157	55	8	6	04919
18,25-19,75	16	160	57	8	6	04920
19,75-21,50	18	162	57	9	6	04921
21,50-23,75	20	190	68	10	6	04922
23,75-27,00	22	200	68	12	6	04923
27,00-30,00	24	210	70	14	6	04924
30,00-34,00	28	246	85	16	6	04925
34,00-38,75	32	292	100	18	6	04926
38,75-46,00	38	311	100	22	6	04927
46,00-56,00	42	333	105	24	6	04928

Kullanım Alanı

Matkap ile oluşturalan deliklerin yüzey kalitesini artırmak, ovallik ve konikliğini gidermek ve istenilen oranda konik oluşturmak için kullanılır.

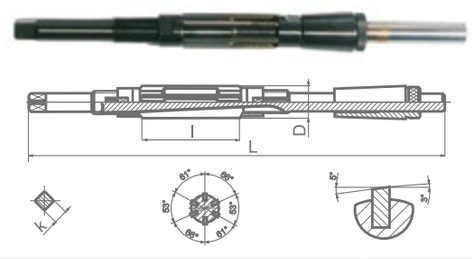


11 PARÇA AYARLI KOVANSIZ RAYBA SETİ HSS		
Sip. No.	Ebat	Sip. No.
C.859SET	12,00-38,75 mm	04929

Kullanım Alanı

Matkap ile oluşturalan deliklerin yüzey kalitesini artırmak, ovallik ve konikliğini gidermek ve istenilen oranda konik oluşturmak için kullanılır.

AYARLI KOVANLI EL RAYBASI



AYARLI KOVANLI EL RAYBASI-HSS						C.859K
Ölçü (mm)	D (mm)	L (mm)	l (mm)	k (mm)	Bıçak AD.	Sip. No.
7,00-8,00	6	140	25	3	4	04930
8,00-8,70	7	150	30	3,5	4	04931
8,70-9,50	8	160	35	4	4	04932
9,50-10,25	9	165	40	5	4	04933
10,25-11,00	9,5	170	40	5	6	04934
11,00-12,00	10	180	40	5	6	04935
12,00-13,50	11	185	40	5	6	04936
13,50-15,00	12	190	45	6	6	04937
15,00-16,50	13	220	50	7	6	04938
16,5-18,25	15	245	55	8	6	04939
18,25-19,75	16	247	57	8	6	04940
19,75-21,50	18	255	57	9	6	04941
21,50-23,75	20	295	68	10	6	04942
23,75-27,00	22	315	68	12	6	04943
27,00-30,00	24	335	70	14	6	04944
30,00-34,00	28	375	85	16	6	04945
34,00-38,75	32	405	100	18	6	04946
38,75-46,00	38	425	100	22	6	04947
46,00-56,00	42	425	105	24	6	04948

Kullanım Alanı

Matkap ile oluşturalan deliklerin yüzey kalitesini artırmak, ovallik ve konikliğini gidermek ve istenilen oranda konik oluşturmak için kullanılır.



11 PARÇA AYARLI KOVANSIZ RAYBA SETİ HSS		
Sip. No.	Ebat	Sip. No.
C.860SET	12,00-38,75 mm	04949

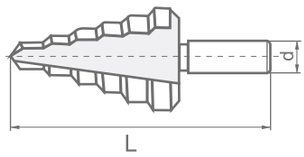
Kullanım Alanı

Matkap ile oluşturalan deliklerin yüzey kalitesini artırmak, ovallik ve konikliğini gidermek ve istenilen oranda konik oluşturmak için kullanılır.

FREZELER - MATKAP UÇLARI

KADEMELİ SAC DELME MATKAPLARI

HSS | Standard





4-20 / 4-39 / 5-35mm



6-52mm[4]



C339-SET

KADEMELİ SAC DELME MATKABI HSS				C339
Ebat	L (mm)	d (mm)	Kademe Ölçüleri	Sip. No.
4-20mm x 2mm	76	8	4-6-8-10-12-16-18-20	04652
5-35mm x 2-3mm	100	13	5-8-10-12-15-18-20-22-25-27-30-32-35	04653
4-39mm x 2mm	107	13	4-6-9-12-15-18-21-24-27-30-33-36-39	04654
6-52mm x 4mm	100	10	6-12-16-20-24-28-32-36-40-44-48-52	04655

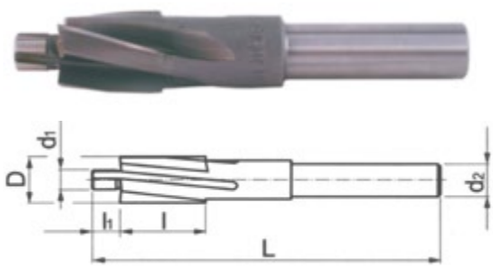
KADEMELİ SAC DELME MATKABI HSS		C339
Sip. No.	Set İçeriği	Sip. No.
C339-SET	4-12/4-20/4-32	04656

Her kademede sabit bir çapa sahip olduğu için, kademeler arasındaki geçiş pahı ile delinen deliğin aynı anda çapağını da almak mümkündür.

SABİT PİLOTLU HAVŞA FREZE

HSS | Z 3/4

DIN 373



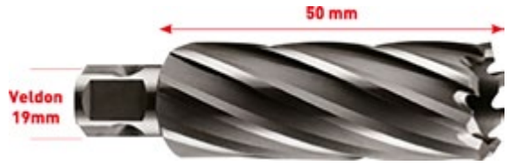
KULLANIM ALANI
Deliklere silindirik havşa yuvası oluşturmaya yarar.

SABİT PİLOTLU HAVŞA FREZE DIN 373 HSS							IAT373	PLD C373
Civata	D (mm)	d1 (mm)	d2 (mm)	L (mm)	l (mm)	l1 (mm)	Sip. No.	Sip. No.
M3	6	3,2	5	71	14	4	04657	04668
M4	8	4,3	5	71	14	4	04658	04669
M5	10	5,3	8	80	18	6	04659	04670
M6	11	6,4	8	80	18	6	04660	04671
M8	15	8,4	12,5	100	22	8	04661	04672
M10	18	10,5	12,5	100	22	10	04662	04673
M12	20	13,0	12,5	100	22	12	04663	04674
M14	24	15,0	12,5	100	22	14	04664	04675
M16	26	17,0	12,5	100	22	16	04665	04676
M18	30	19,0	12,5	100	22	18	04666	04677
M20	33	20,0	12,5	100	22	20	04667	04678

MANYETİK MATKAP UCU

HSSE | M2 Al





Çap (mm)	Sip. No.	Çap (mm)	Sip. No.	Çap (mm)	Sip. No.	Çap (mm)	Sip. No.
12	04679	37	04704	25	04692	50	04717
13	04680	38	04705	26	04693	51	04718
14	04681	39	04706	27	04694	52	04719
15	04682	40	04707	28	04695	53	04720
16	04683	41	04708	29	04696	54	04721
17	04684	42	04709	30	04697	55	04722
18	04685	43	04710	31	04698	56	04723
19	04686	44	04711	32	04699	57	04724
20	04687	45	04712	33	04700	58	04725
21	04688	46	04713	34	04701	59	04726
22	04689	47	04714	35	04702	60	04727
23	04690	48	04715	36	04703		
24	04691	49	04716				

Çap (mm)	Sip. No.	Çap (mm)	Sip. No.	Çap (mm)	Sip. No.	Çap (mm)	Sip. No.
12	04728	37	04753	25	04741	50	04766
13	04729	38	04754	26	04742	51	04767
14	04730	39	04755	27	04743	52	04768
15	04731	40	04756	28	04744	53	04769
16	04732	41	04757	29	04745	54	04770
17	04733	42	04758	30	04746	55	04771
18	04734	43	04759	31	04747	56	04772
19	04735	44	04760	32	04748	57	04773
20	04736	45	04761	33	04749	58	04774
21	04737	46	04762	34	04750	59	04775
22	04738	47	04763	35	04751	60	04776
23	04739	48	04764	36	04752		
24	04740	49	04765				

MANYETİK MATKAP SABİTLEME PİMİ (30MM)



Boy	Sip. No.
25 mm	04777

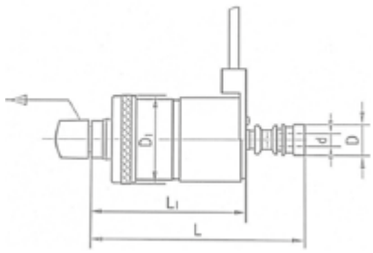
MANYETİK MATKAP SABİTLEME PİMİ (50MM)



Boy	Sip. No.
55 mm	04778

OTOMATİK KILAVUZ ÇEKME TERS KILAVUZ TAKIM I- PAFTA KOLLARI

OTOMATİK KILAVUZ ÇEKME APARATI





Ölçü	d (mm)	D (mm)	D1 (mm)	L (mm)	L1 (mm)	MK	C006 Sip. No.
M2-M7	2.5-6.5	23	55	135	95	MK2-MK3	08708
M5-M12	3.5-10	28	75	164	114,5	MK3-MK4	08709
M8-M20	6.3-14	38	90,5	205	135	MK3-MK4	08710

OTOMATİK KILAVUZ ÇEKME APARATININ MONTAJI:

1. Kılavuz çekme aparatı mors konik kısmından matkap fener miline bağlanır
2. Kılavuz uygun pens kullanılarak kılavuz çekme aparatına monte edilir. Bu işlem sırasında kılavuzun kare kesitli kısmının mekanik kılavuz çekme aparatı üzerindeki yuvasına allen anahtar yardımıyla bağlanması gerekmektedir.
3. Dayama pimi matkap tezgahı çalıştığında sabit kalacak şekilde başka bir dayama pimine (matkap tezgahı gövdesindeki bir dayamaya, matkap tablasına bağlanan 2- saplamaya vs.) dayanır.

OTOMATİK KILAVUZ ÇEKME APARATIYLA DİŞ ÇEKME:

4. İş parçası matkap tablasına, kılavuz ekseni ve diş çekilecek delik ekseni çakışacak şekilde sabitlenir.
5. Matkap tezgahı diş çekme yönünde çalıştırılır.
6. Matkap talaş verme kolu kılavuz diş çekilecek deliği ağızlayıncaya kadar aşağı doğru çevrilir.
7. Kılavuz istenilen boyda diş çekme işlemini tamamlayıncaya kadar matkap talaş verme kolu aşağı doğru çevrilmeye devam edilir.
8. Kılavuz istenilen boyda diş çekme işlemini tamamlayınca matkap talaş verme kolu yukarı doğru çevrilir. Bu işlem sırasında mekanik kılavuz çekme aparatının pens kısmı aparattan dışarı doğru çıkacaktır ve sadece pens kısmı diş çekme yönünün tersi yönde dönmeye başlayacaktır.
9. Kılavuz delikten kurtulunca pens kısmı yaylı mekanizması sayesinde eski konumunu alacaktır ve tekrar diş çekme yönünde dönecektir

OTOMATİK KILAVUZ ÇEKME YEDEK PENSLER		
Sip. No.	ÖLÇÜ	Sip. No.
C006-207P	M2-M7 İÇİN YEDEK PENS (2'Lİ SET)	08711
C006-512P	M5-M12 İÇİN YEDEK PENS (2'Lİ SET)	08712
C006-820P	M8-M20 İÇİN YEDEK PENS (2'Lİ SET)	08713

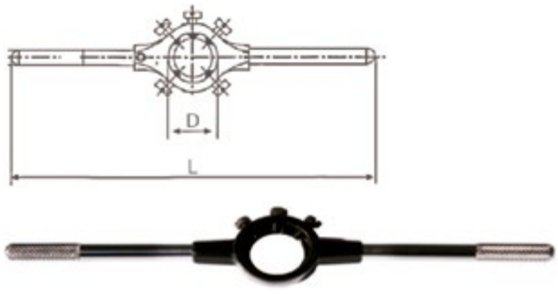


TERS KILAVUZ TAKIMLARI HSS



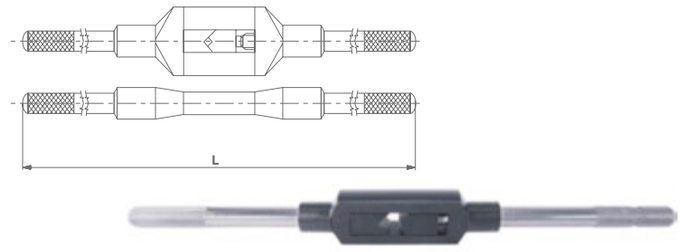
Sip. No.	Adet	Ölçü	Sip. No.
C345-5	5 PARÇA	M3-M6/M6-M8/M8-M11/ M11-14/M14-M18	08714
C345-6	6 PARÇA	M3-M6/M6-M8/M8-M11/M11-14/M14-M18/ M18-24	08715
C345-8	8 PARÇA	M3-M6/M6-M8/M8-M11/M11-14/M14-M18/ M18-24/M24-M30/ M30-M40	08716

PAFTA KOLU



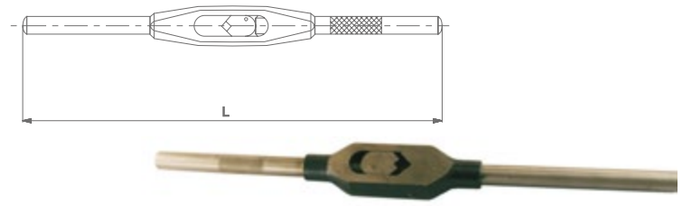
Sip. No.	D (mm)	L (mm)	PLD Sip. No.
C351-20	20	175	08741
C351-25	25	210	08742
C351-30	30	255	08743
C351-38	38	300	08744
C351-45	45	450	08745
C351-55	55	490	08746
C351-65	65	550	08747
C351-75	75	550	08748
C351-90	90	800	08749
C351-105	105	900	08750

ÇELİK KILAVUZ KOLU



Sip. No.	L (mm)	Ölçü (mm)	PLD Sip. No.
C350-00S	170	0 (M1 - M8)	08717
C350-15S	200	1-1/2 (M1 - M12)	08718
C350-20S	255	2 (M4 - M12)	08719
C350-30S	345	3 (M5 - M20)	08720
C350-40S	425	4 (M9 - M27)	08721
C350-50S	765	5 (M13 - M32)	08722
C350-60S	870	6 (M20 - M40)	08723

ÇELİK KILAVUZ KOLU



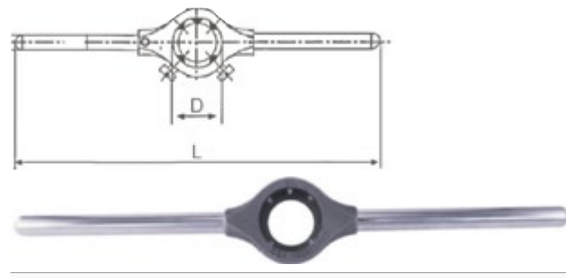
Sip. No.	L (mm)	Ölçü (mm)	KINEX Sip. No.
NB-350-15S	125	1-1/2 (M2 - M7)	08724
NB-350-20S	210	2 (M3 - M12)	08725
NB-350-30S	310	3 (M6 - M14)	08726
NB-350-40S	400	4 (M9 - M27)	08727
NB-350-50S	400	5 (M10 - M30)	08728
NB-350-60S	500	6 (M24 - M52)	08729

CIRCIRLI KILAVUZ KOLU



Sip. No.	L (mm)	Ölçü (mm)	KINEX Sip. No.
C341-10	85	1 (M3 - M8)	08730
C341-20	110	2 (M5 -M12)	08731
C341-100	250	10 (M3 - M8)	08732
C341-200	310	20 (M5 -M12)	08733

PAFTA KOLU



Sip. No.	D (mm)	L (mm)	BUČOVICE TOOLS Sip. No.
NB-40320	20	170	08734
NB-40325	25	210	08735
NB-40330	30	270	08736
NB-40338	38	325	08737
NB-40345	45	400	08738
NB-40355	55	475	08739
NB-40365	65	555	08740

DAİRE TESTERELER

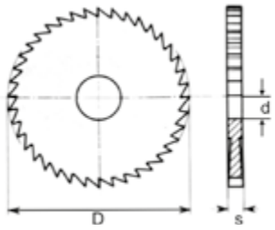
PLD GSP

METAL DAİRE TESTERE

HSS | DIN 1837A

DIN 1837A







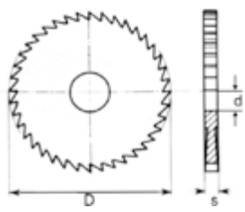
DxS (mm)	d (mm)	Z Diş Sayısı	GSP Sip. No.	PLD C700 Sip. No.
25X0,4	8	48	12141	12182
25X0,6	8	48	12142	12183
25X1,0	8	48	12143	12184
25X1,2	8	48	12144	12185
25X1,5	8	48	12145	12186
25X1,6	8	48	12146	12187
25X2,0	8	48	12147	12188
32X1,0	8	48	12148	12189
32X1,2	8	48	12149	12190
32X1,5	8	48	12150	12191
32X1,6	8	48	12151	12192
32X2,0	8	48	12152	12193
32X4,0	8	32	12153	12194
32X5,0	8	32	12154	12195
40X0,2	10	128/160	12155	12196
40X0,25	10	100/160	12156	12197
40X0,3	10	100/160	12157	12198
40X0,4	10	128/160	12158	12199
40X0,5	10	80	12159	12200
40X0,6	10	80	12160	12201
40X0,7	10	80	12161	12202
40X0,8	10	80	12162	12203
40X0,9	10	80	12163	12204
40X1,0	10	64	12164	12205
40X1,2	10	64	12165	12206
40X1,5	10	64	12166	12207
40X1,6	10	64	12167	12208
40X2,0	10	48	12168	12209
40X2,5	10	48	12169	12210
40X3,0	10	48	12170	12211
50X0,2	13	128/200	12171	12212
50X0,25	13	128/200	12172	12213
50X0,3	10/13	128/160/200	12173	12214
50X0,4	13	100/200	12174	12215
50X0,5	13	100/200	12175	12216
50X0,6	13	100	12176	12217
50X0,7	13	100	12177	12218
50X0,8	13	80	12178	12219
50X0,9	13	80	12179	12220
50X1,0	13	80	12180	12221
50X1,2	13	80	12181	12222
50X1,5	13	64	12223	12264
50X1,6	13	64	12224	12265
50X2,0	13	64	12225	12266
50X2,5	13	64	12226	12267
50X3,0	13	48	12227	12268
50X4,0	13	48	12228	12269
50X5,0	13	48	12229	12270
63X0,2	10/13/16	128/200	12230	12271
63X0,25	13/16	150/200	12231	12272
63X0,3	10/13/16	128/200	12232	12273
63X0,4	10/13/16	128/200	12233	12274
63X0,5	13/16	128/200	12234	12275
63X0,6	16	100	12235	12276
63X0,7	16	100	12236	12277
63X0,8	16	100	12237	12278
63X0,9	16	100	12238	12279
63X1,0	16	100	12239	12280
63X1,2	16	100	12240	12281
63X1,5	16	80	12241	12282
63X1,6	16	80	12242	12283
63X2,0	16	80	12243	12284
63X2,5	16	64	12244	12285
63X3,0	16	64	12245	12286
63X3,5	16	64	12246	12287
63X4,0	16	64	12247	12288
63X5,0	16	48	12248	12289
63X6,0	16	48	12249	12290
80X0,3	22	160	12250	12291
80X0,4	22	160	12251	12292
80X0,5	22	128	12252	12293
80X0,6	22	128	12253	12294
80X0,7	22	128	12254	12295
80X0,8	22	128	12255	12296
80X0,9	22	128	12256	12297
80X1,0	22	100	12257	12298
80X1,2	22	100	12258	12299
80X1,4	22	100	12259	12300
80X1,5	22	100	12260	12301
80X1,6	22	100	12261	12302
80X2,0	22	80	12262	12303
80X2,5	22	80	12263	12304
80X3,0	22	80	12305	12340
80X3,5	22	80	12306	12341
80X4,0	22	64	12307	12342
80x5,0	22	64	12308	12343
80x6,0	22	64	12309	12344
100X0,5	22	160	12310	12345
100X0,6	22	160	12311	12346
100X0,7	22	160	12312	12347
100X0,8	22	128	12313	12348
100X0,9	22	128	12314	12349
100X1,0	22	128	12315	12350
100X1,2	22	128	12316	12351
100X1,5	22	128	12317	12352
100X1,6	22	100	12318	12353
100X2,0	22	100	12319	12354
100X2,5	22	100	12320	12355
100X3,0	22	80	12321	12356
100X3,5	22	80	12322	12357
100X4,0	22	80	12323	12358
100X5,0	22	80	12324	12359
100X6,0	22	64	12325	12360
125X0,6	22/27	160	12326	12361
125X0,8	22/27	160	12327	12362
125X1,0	22/27	160	12328	12363
125X1,2	22/27	128	12329	12364
125X1,5	22/27	128	12330	12365
125X1,6	22/27	128	12331	12366
125X2,0	22/27	64/128	12332	12367
125X2,5	22/27	64/100	12333	12368
125X3,0	22/27	100	12334	12369
125X3,5	22/27	100	12335	12370
125X4,0	22/27	100	12336	12371
125X5,0	22/27	80	12337	12372
125X6,0	22/27	80	12338	12373
160X1,0	32	160	12339	12374
160X1,2	32	80/100/160	12375	12409
160X1,4	32	80	12376	12410
160X1,6	32	80/100/160	12377	12411
160X2,0	32	128	12378	12412
160X2,5	32	128	12379	12413
160X3,0	32	128	12380	12414
160X3,5	32	64/128	12381	12415
160X4,0	32	64/100	12382	12416
160X5,0	32	100	12383	12417
160X6,0	32	100	12384	12418
200X1,0	32	100/200	12385	12419
200X1,2	32	100/200	12386	12420
200X1,5	32	160/200	12387	12421
200X1,6	32	100/160/200	12388	12422
200X2,0	32	80/160	12389	12423
200X2,5	32	160	12390	12424
200X3,0	32	128	12391	12425
200X3,5	32	128	12392	12426
200X4,0	32	128	12393	12427
200X4,5	32	128	12394	12428
200X5,0	32	128	12395	12429
200X6,0	32	100	12396	12430
250X2,0	32	200	12397	12431
250X2,5	32	160/200	12398	12432
250X3,0	32	160/200	12399	12433
250X4,0	32	160	12400	12434
250X5,0	32	160	12401	12435
275X2,5	32	220	12402	12436
275X3,0	32	160	12403	12437
275X4,0	32	160	12404	12438
275X5,0	32	160	12405	12439
300X3,0	32	160	12406	12440
300X4,0	32	160	12407	12441
300X5,0	32	160	12408	12442

KARBÜR DAİRE TESTERELER

VHM | DIN 1837A

DIN 1837A





DxS (mm)	d (mm)	Z Diş Sayısı	C702 Sip. No.
30x0,5	10	80	12443
30x0,6	10	80	12444
30x0,7	10	80	12445
30x0,8	10	80	12446
30x0,9	10	80	12447
30x1.0	10	64	12448
30x1.2	10	64	12449
30X1,5	10	64	12450
30X1,6	10	64	12451
30X2,0	10	48	12452
30X2,5	10	48	12453
30X3,0	10	48	12454
40X0,2	10	128	12455
40X0,3	10	100	12456
40X0,4	10	100	12457
40X0,5	10	80	12458
40X0,6	10	80	12459
40X0,7	10	80	12460
40X0,8	10	80	12461
40X1,0	10	64	12462
40X1,2	10	64	12463
40X1,5	10	64	12464
40X1,6	10	64	12465
40X2,0	10	48	12466
40X2,5	10	48	12467
40X3,0	10	48	12468
50X1,0	13	80	12469
50X1,5	13	64	12470
50X2,0	13	64	12471
50X2,5	13	64	12472
50X3,0	13	48	12473
63X1,0	16	100	12474
63X1,5	16	80	12475
63X2,0	16	64	12476
63X2,5	16	64	12477
63X3,0	16	64	12478
63X3,5	16	64	12479
80X1,0	22	100	12480
80X1,5	22	100	12481
80X2,0	22	80	12482
80X2,5	22	80	12483
80X3,0	22	80	12484
80X3,5	22	80	12485
100X1,0	22	128	12486
100X1,5	22	128	12487
100X2,0	22	100	12488
100X2,5	22	100	12489
100X3,0	22	80	12490
100X3,5	22	80	12491

PRO-X KILAVUZ SEÇME TABLOSU

PRO-X GÜNEY KORE



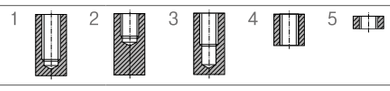
MAKİNA KILAVUZLARI

ÖNERİ TABLOSU

KULLANABİLİRLİK

◎ = MÜKEMMEL

○ = İYİ



MALZEME GRUPLARI			MU	MU
DIN 371/376	M	Ürün Kodu	PKI-3MC	
DIN 371/376	EG-M	Ürün Kodu		
DIN 352	M	Ürün Kodu		
DIN 374	MF	Ürün Kodu		PKI-3MCF
DIN 371/376	UNC	Ürün Kodu		
DIN 371/376	EG-UNC	Ürün Kodu		
DIN 371/374	UNF	Ürün Kodu		
DIN 371/376	EG-UNF	Ürün Kodu		
DIN 2182/2183	BSW	Ürün Kodu		
DIN 357/5156	M/G(BSP)	Ürün Kodu		
LONG	M	Ürün Kodu		
YÜZEY İŞLEMİ / KAPLAMA			Bright	Bright
HELİS AÇISI			R40	R40
GİRİŞ AÇISI			C	C
DELİK TİPİ			1-2-3	1-2-3

SOĞUTMA

A = Kesme Yağı
T = Bor Yağı
X = Kesme Yağı / Bor Yağı
S = Kuru Çalışma (Hava ile)
Z = Kuru Çalışma / Bor Yağı

MALZEME GRUPLARI			MALZEME GRUPLARI	SERTLİK HB	KOPMA MUKAVEMETİ Rm N/mm²	TALAŞ TİPİ	KESME HIZI Vc m/min	SOĞUTMA TİPİ		
10. ÇELİK	11	Steel < 400	Manyetik Yumuşak çelikler	< 120	< 400	Çok Uzun	15-20	T	◎	◎
	12	Steel < 700	Yapı Çelikleri	< 200	< 700	Orta/Uzun	15-20	T	◎	◎
	13	Steel < 850	Karbon Çelikleri	< 250	< 850	Uzun	12-18	T	◎	◎
	14	St. Alloy < 850	Alaşımlı Çelikler	< 250	< 850	Uzun	10-15	X	◎	◎
	15	St. Alloy < 1,200	Alaşımlı Çelikler, Sertleştirilmiş Çelikler	< 350	≤ 1,200	Uzun	6-10	X	◎	◎
	16	St. Alloy > 1,200	Alaşımlı Çelikler, Sertleştirilmiş Çelikler	> 350	> 1,200	Uzun	3-5	A		
20. PASLANMAZ ÇELİK	21	INOX Free < 850	Kolay İşlenebilir Paslanmaz Çelikler	< 250	< 850	Orta	7-10	A	◎	◎
	22	INOX Aust.< 850	Ostenetik Paslanmaz Çelikler	< 250	< 850	Uzun	5-8	A	◎	◎
	23	INOX < 1,100	Fer., F.+Ost., Martenzetik Pas. Çel.	< 300	< 1,100	Uzun	4-6	A	◎	◎
30. DÖKME DEMİR	31	GG Cast < 500	Gri Dökme Demir (Pik Döküm)	< 150	< 500	Çok Kısa	10-15	X	◎	◎
	32	GG Cast < 1,000	Gri Dökme Demir (Pik Döküm)	< 300	< 1,000	Çok Kısa	5-8	T	◎	◎
	33	GGG Cast < 700	Sfero Döküm	< 200	< 700	Kısa	10-15	X	◎	◎
	34	GGG Cast < 1,000	Sfero Döküm	< 300	< 1,000	Kısa	5-8	X	◎	◎
40. TİTANYUM	41	Ti < 700	Alaşımsız Titanyum	< 200	< 700	Çok Uzun	10-15	T	◎	◎
	42	Ti Alloy < 900	Alaşımlı Titanyum	< 270	< 900	Orta/Kısa	8-12	A	○	○
	43	Ti Alloy ≤ 1,300	Alaşımlı Titanyum	< 350	≤ 1,300	Orta/Kısa	4-6	A		
50. NİKEL	51	Ni < 500	Alaşımsız Nikel	< 150	< 500	Çok Uzun	8-12	A	◎	◎
	52	Ni Alloy < 900	Alaşımlı Nikel	< 270	< 900	Uzun	10-15	A	○	○
	53	Ni Alloy ≤ 1,400	Alaşımlı Nikel	< 410	≤ 1,400	Uzun	2-4	A		
60. BAKIR, PİRİNÇ, BRONZ	61	Cu < 350	Alaşımsız Bakır	< 100	< 350	Çok Uzun	8-12	T	◎	◎
	62	Cu Alloy (Short)	Kısa Talaş veren Pirinç, Bronz, Bakır	< 200	< 700	Orta/Kısa	25-35	T	◎	◎
	63	Cu Alloy (Long)	Uzun Talaş veren Pirinç, Bronz, Bakır	< 200	< 700	Uzun	15-20	T	◎	◎
	64	Cu-Al-Fe < 1,500	Bakır, Alüminyum, Demir Alaşımları	< 470	< 1,500	Kısa	3-5	A		
70. ALÜMİNYUM	71	Al/Mg < 350	Alaşımsız Alüminyum, Magnezyum	< 100	< 350	Çok Uzun	10-15	T		
	72	Al Wrought	Alaşımlı Alüminyum	< 150	< 500	Orta	25-35	T	◎	◎
	73	Al (Si ≤ 10%)	Alaşımlı Alüminyum (Düşük Silisyumlu)	< 120	< 400	Orta/Kısa	15-20	T	◎	◎
	74	Al (Si > 10%)	Alaşımlı Alüminyum (Yüksek Silisyumlu)	< 120	< 400	Kısa	10-15	T	◎	◎
80. PLASTİK	81	Thermosoft.	Termoplastikler			Çok Uzun	20-30	T		
	82	Thermoset.	Termoset Plastikleri			Kısa	8-12	Z		
	83	FRP	Fiberle Güçlendirilmiş Plastikler			Çok Kısa	5-7	Z		

PRO-X KILAVUZ SEÇME TABLOSU

PRO-X GÜNEY KORE

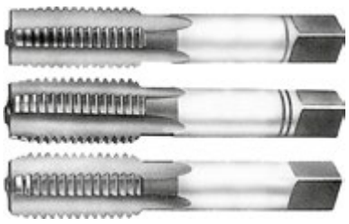
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		PKI-2MC							PKI-3M	PKI-4M		PKI-2M	PKI-5M
			PKI-2MCF								PKI-4MF		
PKI-73				PKI-72									
	PKI-83				PKI-82								
							PKI-93						
						PKI-92		PKI-93					
Bright	Bright	Bright	Bright	Bright	Bright	Bright	Bright	Bright	TiN	NI	NI	TiN	Bright
R40	R40						R40	R40	R40				
C	C	B	B	B	B	B	C	C	C	C	C	C	C
1-2-3	1-2-3	4-5	4-5	4-5	4-5	4-5	1-2-3	1-2-3	1-2-3	1-2-3 4-5	1-2-3 4-5	1-2-3 4-5	1-2-3 4-5
													
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PRO-X KESİCİ TAKIMLAR

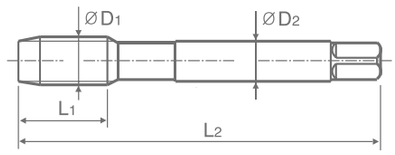
PRO-X GÜNEY KORE

3'LÜ TAKIM EL KILAVUZU

HSS | DIN 352 | 6H | 60° | I / II / III | Parlak

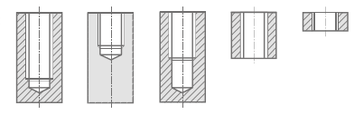


No 1
No 2
No 3





Delik Tipi



• Ön, orta ve son kılavuzdan oluşan el kılavuzu setidir. • Son kılavuz makina kılavuzu olarak da kullanılır.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M2	X	0,4	PKI-1M2	8	36	2,8	2,1	1,6
M2,2	X	0,45	PKI-1M2N2	9	36	2,8	2,1	1,75
M2,3	X	0,4	PKI-1M2N3	9	36	2,8	2,1	1,9
M2,5	X	0,45	PKI-1M2N5	9	40	2,8	2,1	2,05
M2,6	X	0,45	PKI-1M2N6	9	40	2,8	2,1	2,1
M3	X	0,5	PKI-1M3	11	40	3,5	2,7	2,5
M3,5	X	0,6	PKI-1M3N5	13	45	4	3	2,9
M4	X	0,7	PKI-1M4	13	45	4,5	3,4	3,3
M4,5	X	0,75	PKI-1M4N5	16	50	6	4,9	3,7
M5	X	0,8	PKI-1M5	16	52	6	4,9	4,2
M5,5	X	0,9	PKI-1M5N5	18	56	6	4,9	4,6
M6	X	1	PKI-1M6	18	56	6	4,9	5
M7	X	1	PKI-1M7	18	56	6	4,9	6
M8	X	1,25	PKI-1M8	20	63	6	4,9	6,8
M9	X	1,25	PKI-1M9	20	63	7	5,5	7,8
M10	X	1,5	PKI-1M10	22	70	7	5,5	8,5
M11	X	1,5	PKI-1M11	22	70	8	6,2	9,5

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M12	X	1,75	PKI-1M12	24	80	9	7	10,2
M14	X	2	PKI-1M14	26	80	11	9	12
M16	X	2	PKI-1M16	27	80	12	9	14
M18	X	2,5	PKI-1M18	30	95	14	11	15,5
M20	X	2,5	PKI-1M20	32	95	16	12	17,5
M22	X	2,5	PKI-1M22	32	100	18	14,5	19,5
M24	X	3	PKI-1M24	34	110	18	14,5	21
M27	X	3	PKI-1M27	36	110	20	16	24
M30	X	3,5	PKI-1M30	40	125	22	18	26,5
M33	X	3,5	PKI-1M33	40	125	25	20	29,5
M36	X	4	PKI-1M36	50	150	28	22	32
M39	X	4	PKI-1M39	50	150	32	24	35
M42	X	4,5	PKI-1M42	56	150	32	24	37,5
M45	X	4,5	PKI-1M45	58	160	36	29	40,5
M48	X	5	PKI-1M48	65	180	36	29	43
M52	X	5	PKI-1M52	65	180	40	32	47

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	○

Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
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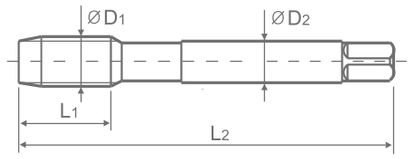
DÜZ MAKİNE KILAVUZU

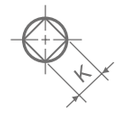
HSS-E | DIN 371/376 | 6H | 60° | B | BRIGHT TiN



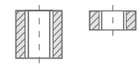
• Çelik ve dökme demirin işlenmesi için uygundur.
• İsteğe göre kaplama seçeneği

Çok amaçlı seri





Delik Tipi
Combo TAP



◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M2	×	0,4	PKI-2M2C	8	45	2,8	2,1	1,6
M3	×	0,5	PKI-2M3C	11	56	3,5	2,7	2,5
M4	×	0,7	PKI-2M4C	13	63	4,5	3,4	3,3
M5	×	0,8	PKI-2M5C	15	70	6	4,9	4,2
M6	×	1,0	PKI-2M6C	17	80	6	4,9	5
M8	×	1,25	PKI-2M8C	20	90	8	6,2	6,8
M10	×	1,5	PKI-2M10C	22	100	10	8	8,5

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M12	×	1,75	PKI-2M12C	24	110	9	7	10,2
M14	×	2,0	PKI-2M14C	26	110	11	9	12
M16	×	2,0	PKI-2M16C	27	110	12	9	14
M18	×	2,5	PKI-2M18C	30	125	14	11	15,5
M20	×	2,5	PKI-2M20C	32	140	16	12	17,5
M22	×	2,5	PKI-2M22C	32	140	18	14,5	18,5
M24	×	3,0	PKI-2M24C	34	160	18	14,5	21

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	○

Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
	◎	◎		◎	◎	◎	◎		◎	◎	◎			◎

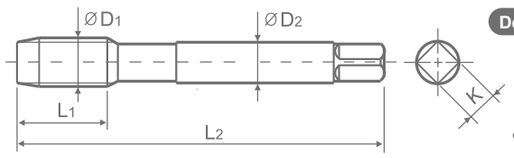
PRO-X KESİCİ TAKIMLAR

PRO-X GÜNEY KORE

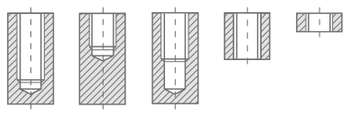
DÜZ MAKİNE KILAVUZU

HSS-E | DIN 371/376 | 6HX | 60° | C | TiN





Delik Tipi



• Çelik ve dökme demirin işlenmesi için uygundur.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M2	×	0,4	PKI-2M2	8	45	2,8	2,1	1,6
M2,2	×	0,45	PKI-2M2N2	8	45	2,8	2,1	1,75
M2,3	×	0,4	PKI-2M2N3	8	45	2,8	2,1	1,9
M2,5	×	0,45	PKI-2M2N5	9	50	2,8	2,1	2,05
M2,6	×	0,45	PKI-2M2N6	9	50	2,8	2,1	2,1
M3	×	0,5	PKI-2M3	11	56	3,5	2,7	2,5
M3,5	×	0,6	PKI-2M3N5	12	56	4	3	2,9
M4	×	0,7	PKI-2M4	13	63	4,5	3,4	3,3
M4,5	×	0,75	PKI-2M4N5	14	70	6	4,9	3,7
M5	×	0,8	PKI-2M5	15	70	6	4,9	4,2
M6	×	1	PKI-2M6	17	80	6	4,9	5
M7	×	1	PKI-2M7	17	80	7	5,5	6
M8	×	1,25	PKI-2M8	20	90	8	6,2	6,8

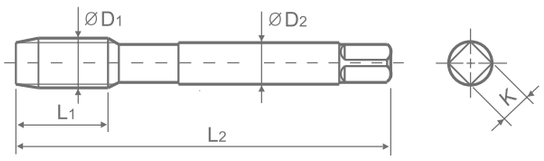
ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M9	×	1,25	PKI-2M9	20	90	9	7	7,8
M10	×	1,5	PKI-2M10	22	100	10	8	8,5
M11	×	1,5	PKI-2M11	22	100	8	6,2	9,5
M12	×	1,75	PKI-2M12	24	110	9	7	10,2
M14	×	2	PKI-2M14	26	110	11	9	12
M16	×	2	PKI-2M16	27	110	12	9	14
M18	×	2,5	PKI-2M18	30	125	14	11	15,5
M20	×	2,5	PKI-2M20	32	140	16	12	17,5
M22	×	2,5	PKI-2M22	32	140	18	14,5	19,5
M24	×	3	PKI-2M24	34	160	18	14,5	21
M27	×	3	PKI-2M27	36	160	20	16	24
M30	×	3,5	PKI-2M30	40	180	22	18	26,5

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
									◎	◎				
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
					◎									◎

DÜZ İNCE DİŞ MAKİNE KILAVUZU

HSS-E | DIN 374 | 6H | 60° | C | BRIGHT TiN





Delik Tipi

Combo

• Çelik ve dökme demirin işlenmesi için uygundur.
• İsteğe göre kaplama seçeneği

Çok amaçlı seri

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M4	×	0,5	PKI-2M4CF	10	63	2,8	2,1	3,5
M5	×	0,5	PKI-2M5CF	11	70	3,5	2,7	4,5
M6	×	0,75	PKI-2M6N75CF	13	80	4,5	3,4	5,2
M6	×	0,5	PKI-2M6N5CF	13	80	4,5	3,4	5,5
M8	×	1,0	PKI-2M8CF	17	90	6	4,9	7
M10	×	1,25	PKI-2M10N25CF	22	100	7	5,5	8,8
M10	×	1,0	PKI-2M10CF	18	90	7	5,5	9

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M12	×	1,5	PKI-2M12N5CF	22	100	9	7	10,8
M12	×	1,0	PKI-2M12CF	18	100	9	7	11
M14	×	1,5	PKI-2M14N5CF	22	100	11	9	12,5
M14	×	1,25	PKI-2M14N25CF	22	100	11	9	12,8
M14	×	1,0	PKI-2M14CF	18	100	11	9	13
M16	×	1,5	PKI-2M16N5CF	15	100	12	9	14,5
M16	×	1	PKI-2M16CF	12	100	12	9	15

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	○
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
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PRO-X KESİCİ TAKIMLAR

PRO-X GÜNEY KORE

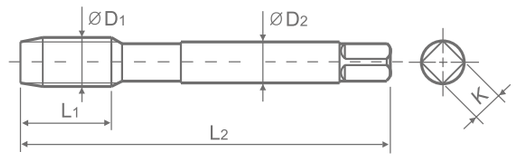
HELİS MAKİNE KILAVUZU

HSS-E | DIN 371/376 | 6H | 60° | C | TiN | R40

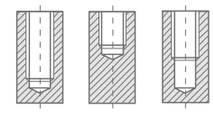


DIN 371

DIN 376



Delik Tipi



• Mükemmel talaş atımı ve özel kesme geometrisi sayesinde kör deliklerde diş açımı için uygundur.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M2	×	0,4	PKI-3M2	8	45	2,8	2,1	1,6
M2,2	×	0,45	PKI-3M2N2	8	45	2,8	2,1	1,75
M2,3	×	0,4	PKI-3M2N3	8	45	2,8	2,1	1,9
M2,5	×	0,45	PKI-3M2N5	9	50	2,8	2,1	2,05
M2,6	×	0,45	PKI-3M2N6	9	50	2,8	2,1	2,1
M3	×	0,5	PKI-3M3	6	56	3,5	2,7	2,5
M3,5	×	0,6	PKI-3M3N5	7	56	4	3	2,9
M4	×	0,7	PKI-3M4	7	63	4,5	3,4	3,3
M4,5	×	0,75	PKI-3M4N5	8	70	6	4,9	3,7
M5	×	0,8	PKI-3M5	8	70	6	4,9	4,2
M6	×	1	PKI-3M6	10	80	6	4,9	5
M7	×	1	PKI-3M7	10	80	7	5,5	6
M8	×	1,25	PKI-3M8	13	90	8	6,2	6,8

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M9	×	1,25	PKI-3M9	13	90	9	7	7,8
M10	×	1,5	PKI-3M10	15	100	10	8	8,5
M11	×	1,5	PKI-3M11	17	100	8	6,2	9,5
M12	×	1,75	PKI-3M12	18	110	9	7	10,2
M14	×	2	PKI-3M14	20	110	11	9	12
M16	×	2	PKI-3M16	20	110	12	9	14
M18	×	2,5	PKI-3M18	25	125	14	11	15,5
M20	×	2,5	PKI-3M20	25	140	16	12	17,5
M22	×	2,5	PKI-3M22	25	140	18	14,5	19,5
M24	×	3	PKI-3M24	30	160	18	14,5	21
M27	×	3	PKI-3M27	30	160	20	16	24
M30	×	3,5	PKI-3M30	35	180	22	18	26,5

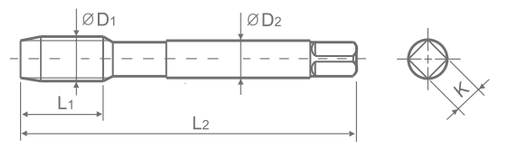
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
	◎	◎	◎								◎	◎	○	
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
	○			○		◎		○	○	○	◎	○		

HELİS MAKİNE KILAVUZU

HSS-E | DIN 371/376 | 6H | 60° | C | BRIGHT TiN | R40

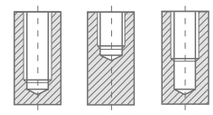


DIN 371



Delik Tipi

Combo TAP



• Mükemmel talaş atımı ve özel kesme geometrisi sayesinde kör deliklerde diş açımı için uygundur.

• İsteğe göre kaplama seçeneği

Çok amaçlı seri

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P	P		L1	L2	D2	K	d1
M2	x	0,4	PKI-3M2C	8	45	2,8	2, 1	1,6
M3	x	0,5	PKI-3M3C	6	56	3,5	2,7	2,5
M4	x	0,7	PKI-3M4C	7	63	4,5	3,4	3,3
M4,5	x	0,75	PKI-3M4N5C	8	70	6	4,8	3,7
M5	x	0,8	PKI-3M5C	8	70	6	4,8	4,2
M6	x	1,0	PKI-3M6C	10	80	6	4,8	5
M8	x	1,25	PKI-3M8C	13	80	8	6,2	6,8
M10	x	1,5	PKI-3M10C	15	100	10	8	8,5

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P	P		L1	L2	D2	K	d1
M12	x	1,75	PKI-3M12C	18	110	8	7	10,2
M14	x	2,0	PKI-3M14C	20	110	11	8	12
M16	x	2,0	PKI-3M16C	20	110	12	8	14
M18	x	2,5	PKI-3M18C	25	125	14	11	15,5
M20	x	2,5	PKI-3M20C	25	140	16	12	17,5
M22	x	2,5	PKI-3M22C	25	140	18	14,5	18,5
M24	x	3,0	PKI-3M24C	30	160	18	14,5	21

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
	◎	○	◎	◎	◎				◎	◎	◎			◎

PRO-X KESİCİ TAKIMLAR

PRO-X GÜNEY KORE

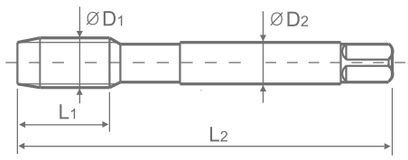
HELİS İNCE DİŞ MAKİNE KILAVUZU

HSS-E | DIN 374 | 6H | 60° | C | BRIGHT TiN | R40



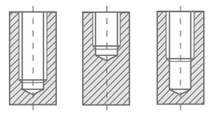
- Çelik ve dökme demirin işlenmesi için uygundur.
- İsteğe göre kaplama seçeneği

Çok amaçlı seri



Delik Tipi

Combo TAP



◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P	P		L1	L2	D2	K	d1
M4	X	0,5	PKI-3M4CF	5	63	2,8	2,1	3,5
M5	X	0,5	PKI-3M5CF	5	70	3,5	2,7	4,5
M6	X	0,75	PKI-3M6N75CF	8	80	4,5	3,4	5,2
M6	X	0,5	PKI-3M6M5CF	5	80	4,5	3,4	5,5
M8	X	1,0	PKI-3M8CF	10	90	6	4,9	7
M10	X	1,25	PKI-3M10N25CF	16	100	7	5,5	8,8
M10	X	1,0	PKI-3M10CF	10	90	7	5,5	9

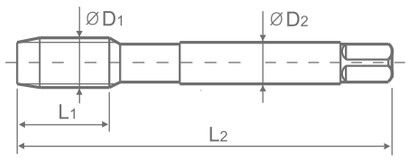
ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P	P		L1	L2	D2	K	d1
M12	X	1,5	PKI-3M12N5CF	15	100	9	7	10,8
M12	X	1,0	PKI-3M12CF	11	100	9	7	11
M14	X	1,5	PKI-3M14N5CF	15	100	11	8	12,5
M14	X	1,25	PKI-3M14N25CF	15	100	11	9	12,8
M14	X	1,0	PKI-3M14CF	11	100	11	9	13
M16	X	1,5	PKI-3M16N5CF	16	100	12	9	14,5
M16	X	1,0	PKI-3M16CF	12	100	12	9	15

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	◎	○
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
	◎	○		◎	◎	◎			◎	◎	◎			◎

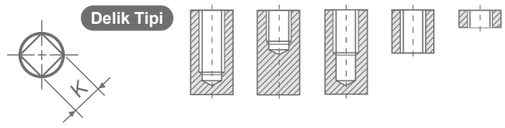
OVALAMA KILAVUZU - YAĞ KANALLI

HSS-E | DIN 371/376 | 6HX | 60° | C | NI





Delik Tipi



◎ Mükemmel ○ İyi Ölçü:mm

- Yumuşak malzemeler ve min %8-10 elastiklik modülüne sahip malzemelerin işlenmesi için uygundur.
- Matkap çapı normal kılavuzların çapından daha büyüktür.

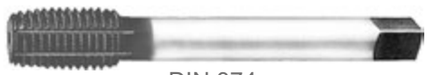
ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M2	-	0,4	PKI-4M2	8	45	2,8	2,1	1,83
M3	-	0,5	PKI-4M3	11	56	3,5	2,7	2,8
M4	-	0,7	PKI-4M4	13	63	4,5	3,4	3,7
M5	-	0,8	PKI-4M5	15	70	6	4,9	4,65
M6	-	1	PKI-4M6	17	80	6	4,9	5,55

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M8	-	1,25	PKI-4M8	20	90	8	6,2	7,4
M10	-	1,5	PKI-4M10	22	100	10	8	9,3
M12	-	1,75	PKI-4M12	24	110	9	7	11,2
M14	-	2	PKI-4M14	26	110	11	9	13
M16	-	2	PKI-4M16	27	110	12	9	15

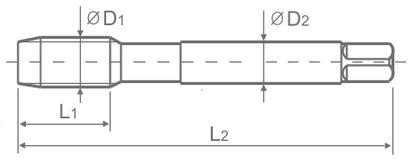
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎			○	○						○	
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
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İNCE DİŞ OVALAMA KILAVUZU - YAĞ KANALLI

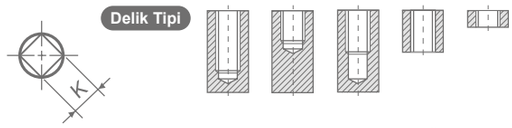
HSS-E | DIN 374 | 6HX | 60° | C | NI



- Çelik ve dökme demirin işlenmesi için uygundur.



Delik Tipi



◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M4	×	0,5	PKI-4M4F	10	63	2,8	2,1	3,75
M5	×	0,5	PKI-4M5F	11	70	3,5	2,7	4,75
M6	×	0,75	PKI-4M6F	13	80	4,5	3,4	5,65
M6	×	0,5	PKI-4M6F1	13	80	4,5	3,4	5,75
M8	×	1	PKI-4M8F	17	90	6	4,9	7,50
M8	×	0,75	PKI-4M8F1	14	80	6	4,9	7,65
M10	×	1,25	PKI-4M10F	22	100	7	5,5	9,4

ÖLÇÜ		Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1		P		L1	L2	D2	K	d1
M10	×	1	PKI-4M10F1	18	90	7	5,5	9,5
M10	×	0,75	PKI-4M10F5	18	90	7	5,5	9,65
M12	×	1,5	PKI-4M12F	22	100	9	7	11,25
M12	×	1,25	PKI-4M12F1	22	100	9	7	11,4
M12	×	1	PKI-4M12F5	18	100	9	7	11,5
M14	×	1,5	PKI-4M14F	22	100	11	9	13,25
M16	×	1,5	PKI-4M16F1	22	100	12	9	15,25

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎			○	○						○	
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
	◎			○		○		◎		○				

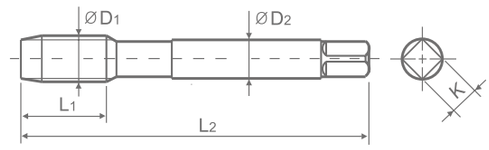
PRO-X KESİCİ TAKIMLAR

PRO-X GÜNEY KORE

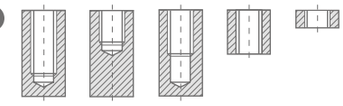
KARBÜR DÜZ KILAVUZ

HM | DIN 371/376 | 6HX | 60° | C | Parlak





Delik Tipi



- Çelik ve dökme demirin işlenmesi için uygundur.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
M3	× 0,5	PKI-5M3	11	56	3,5	2,7	2,5
M4	× 0,7	PKI-5M4	13	63	4,5	3,4	3,3
M5	× 0,8	PKI-5M5	15	70	6	4,9	4,2
M6	× 1	PKI-5M6	17	80	6	4,9	5

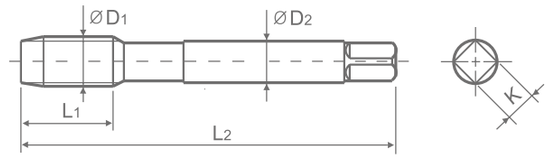
ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
M8	× 1,25	PKI-5M8	20	90	8	6,2	6,8
M10	× 1,5	PKI-5M10	22	100	10	8	8,5
M12	× 1,75	PKI-5M12	24	110	9	7	10,2

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
										◎	◎			
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
					◎					◎				◎

UNC HELİS KILAVUZ

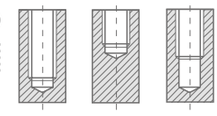
HSS-E | DIN 371/376 | 2B | 60° | C | BRIGHT TiN | R40





Delik Tipi

Combo TAP



- Çok amaçlı kullanım ve doğru adım profiller, özel kılavuz geometrisi ile uzun takım ömrü.
- İsteğe göre kaplama seçeneği

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
#4	- 40 UNC	PKI-73440	6	56	3,5	2,7	2,3
#5	- 40 UNC	PKI-73540	7	56	3,5	2,7	2,6
#6	- 32 UNC	PKI-73632	7	56	4	3	2,85
#8	- 32 UNC	PKI-73832	8	63	4,5	3,4	3,5
#10	- 24 UNC	PKI-731024	10	70	6	4,9	3,9
#12	- 24 UNC	PKI-731224	10	80	6	4,9	4,5
1/4"	- 20 UNC	PKI-731420	13	80	7	5,5	5,2
5/16"	- 18 UNC	PKI-7351618	14	90	8	6,2	6,6

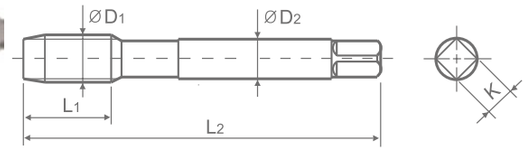
ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
3/8"	- 16 UNC	PKI-733816	16	100	9	7	8
7/16"	- 14 UNC	PKI-7371614	17	100	8	6,2	9,4
1/2"	- 13 UNC	PKI-731213	20	110	9	7	10,75
9/16"	- 12 UNC	PKI-7391612	20	110	11	9	12,25
5/8"	- 11 UNC	PKI-735811	22	110	12	9	13,5
3/4"	- 10 UNC	PKI-733410	25	125	14	11	16,5
7/8"	- 9 UNC	PKI-73789	27	140	18	14,5	19,5
1"	- 8 UNC	PKI-7318	30	160	20	16	22,25

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
										◎	◎			
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP

UNC DÜZ KILAVUZ

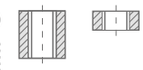
HSS-E | DIN 371/376 | 2B | 60° | B | BRIGHT TiN





Delik Tipi

Combo TAP



- Çok amaçlı kullanım ve doğru adım profiller, özel kılavuz geometrisi ile uzun takım ömrü.
- İsteğe göre kaplama seçeneği

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
#4	- 40 UNC	PKI-72440	11	56	3,5	2,7	2,3
#5	- 40 UNC	PKI-72540	11	56	3,5	2,7	2,6
#6	- 32 UNC	PKI-72632	12	56	4	3	2,85
#8	- 32 UNC	PKI-72832	13	63	4,5	3,4	3,5
#10	- 24 UNC	PKI-721024	15	70	6	4,9	3,9
#12	- 24 UNC	PKI-721224	16	80	6	4,9	4,5
1/4"	- 20 UNC	PKI-721420	17	80	7	5,5	5,2
5/16"	- 18 UNC	PKI-7251618	20	90	8	6,2	6,6

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
3/8"	- 16 UNC	PKI-723816	22	100	9	7	8
7/16"	- 14 UNC	PKI-7271614	22	100	8	6,2	9,4
1/2"	- 13 UNC	PKI-721213	25	110	9	7	10,75
9/16"	- 12 UNC	PKI-7291612	26	110	11	9	12,25
5/8"	- 11 UNC	PKI-725811	27	110	12	9	13,5
3/4"	- 10 UNC	PKI-723410	30	125	14	11	16,5
7/8"	- 9 UNC	PKI-72789	32	140	18	14,5	19,5
1"	- 8 UNC	PKI-7218	36	160	20	16	22,25

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
	◎	○			◎	◎			◎	◎	◎			

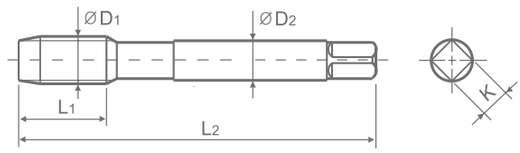
PRO-X KESİCİ TAKIMLAR

PRO-X GÜNEY KORE

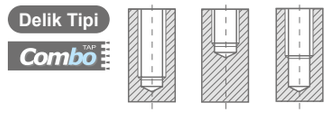
UNF HELİS KILAVUZ

HSS-E | DIN 371/374 | 2B | 60° | C | Bright TiN | R40





Delik Tipi



- Çelik ve dökme demirin işlenmesi için uygundur.
- İsteğe göre kaplama seçeneği

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
#4	- 48UNF	PKI-83448	6	56	3,5	2,7	2,4
#5	- 44UNF	PKI-83544	7	56	3,5	2,7	2,7
#6	- 40UNF	PKI-83640	7	56	4	3	3
#8	- 36UNF	PKI-83836	8	63	4,5	3,4	3,5
#10	- 32UNF	PKI-831032	10	70	6	4,9	4,1
#12	- 28UNF	PKI-831228	10	80	6	4,9	4,7
1/4"	- 28UNF	PKI-831428	10	80	7	5,5	5,5
5/16"	- 24UNF	PKI-8351624	10	90	8	6,2	6,9

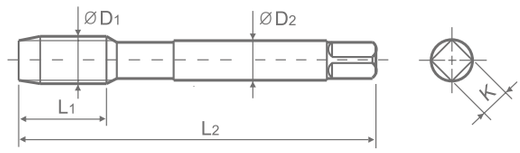
ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
3/8"	- 24UNF	PKI-833824	10	100	9	7	8,5
7/16"	- 20UNF	PKI-8371620	13	100	8	6,2	9,9
1/2"	- 20UNF	PKI-831220	13	100	9	7	11,5
9/16"	- 18UNF	PKI-8391618	15	100	11	9	12,9
5/8"	- 18UNF	PKI-835818	15	100	12	9	14,5
3/4"	- 16UNF	PKI-833416	17	110	14	11	17,5
7/8"	- 14UNF	PKI-837814	17	125	18	14,5	20,5
1"	- 12UNF	PKI-83112	20	140	20	16	23,25

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
					◎									

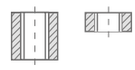
UNF DÜZ KILAVUZ

HSS-E | DIN 371/374 | 2B | 60° | B | Bright TiN





Delik Tipi



- Çok amaçlı kullanım ve doğru adım profiller, özel kılavuz geometrisi ile uzun takım ömrü.
- İsteğe göre kaplama seçeneği

◎ Mükemmel ○ İyi Ölçü:mm

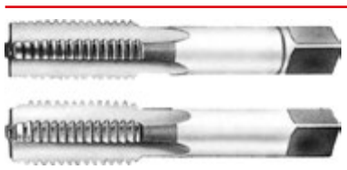
ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
#4	- 48UNF	PKI-82448	11	56	3,5	2,7	2,4
#5	- 44UNF	PKI-82544	11	56	3,5	2,7	2,7
#6	- 40UNF	PKI-82640	12	56	4	3	3
#8	- 36UNF	PKI-82836	13	63	4,5	3,4	3,5
#10	- 32UNF	PKI-821032	15	70	6	4,9	4,1
#12	- 28UNF	PKI-821228	16	80	6	4,9	4,7
1/4"	- 28UNF	PKI-821428	17	80	7	5,5	5,5
5/16"	- 24UNF	PKI-8251624	17	90	8	6,2	6,9

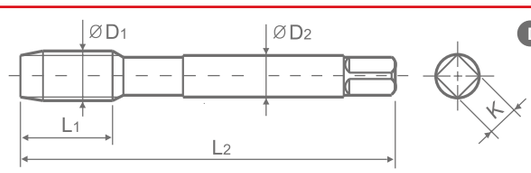
ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
3/8"	- 24UNF	PKI-823824	18	100	9	7	8,5
7/16"	- 20UNF	PKI-8271620	22	100	8	6,2	9,9
1/2"	- 20UNF	PKI-821220	22	100	9	7	11,5
9/16"	- 18UNF	PKI-8291618	22	100	11	9	12,9
5/8"	- 18UNF	PKI-825818	22	100	12	9	14,5
3/4"	- 16UNF	PKI-823416	25	110	14	11	17,5
7/8"	- 14UNF	PKI-827814	26	125	18	14,5	20,5
1"	- 12UNF	PKI-82112	28	140	20	16	23,25

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si≤10%	Al Si>10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
	◎	○		◎	◎	◎			◎	◎	◎			

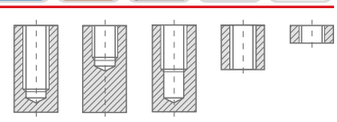
WITHWORTH BORU DİŞ BSP EL KILAVUZU

HSS | DIN 5157 | 55° | I/III | Parlak





Delik Tipi



◎ Mükemmel ○ İyi Ölçü:mm

- El kılavuzu seri setlerinde İlk kılavuz ve Son kılavuz. Setin Sonkılavuzu sadece delik içi final ölçüsü içindir.

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
G1/16"	- 28	PKI-6G11628	17	63	6	4,9	6,8
G1/8"	- 28	PKI-6G1828	18	63	7	5,5	8,8
G1/4"	- 19	PKI-6G1419	20	70	11	9	11,8
G3/8"	- 19	PKI-6G3819	20	70	12	9	15,25
G1/2"	- 14	PKI-6G1214	22	80	16	12	19

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
G3/4"	- 14	PKI-6G3414	22	90	20	16	24,5
G1"	- 11	PKI-6G111	25	100	25	20	30,75
G1-1/4"	- 11	PKI-6G11411	30	125	32	24	39,5
G1-1/2"	- 11	PKI-6G11211	30	140	36	29	45,20

PRO-X KESİCİ TAKIMLAR

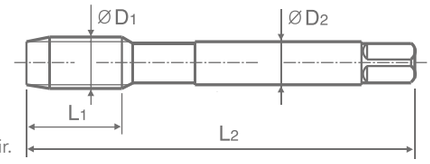
PRO-X GÜNEY KORE

WITHWORTH BSP BORU DİŞ DÜZ KILAVUZ

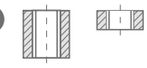
HSS-E | DIN 5156 | 55° | B | Parlak



DIN 5156



Delik Tipi



- Güçlü geometrisi sayesinde açık deliklerde diğer kılavuzlara göre çok daha hızlı kesme hızlarına çıkılabilir.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
G1/8"	- 28	PKI-921828	20	90	7	5,5	8,8
G1/4"	- 19	PKI-921419	22	100	11	9	11,8
G3/8"	- 19	PKI-923819	22	100	12	9	15,25
G1/2"	- 14	PKI-921214	25	125	16	12	19
G3/4"	- 14	PKI-923414	28	140	20	16	24,5
G1"	- 11	PKI-92111	30	160	25	20	30,75

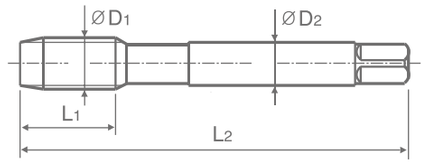
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
	◎	◎	◎								◎	◎	○	
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
	○			○		◎		○	○	○	◎	○		

WITHWORTH BSP BORU DİŞ HELİSEL KILAVUZ

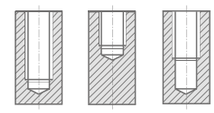
HSS-E | DIN 5156 | 55° | C | Parlak | R40



DIN 5156



Delik Tipi



- Güçlü geometrisi sayesinde açık deliklerde diğer kılavuzlara göre çok daha hızlı kesme hızlarına çıkılabilir.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
G1/8"	- 28	PKI-931828	20	90	7	5,5	8,8
G1/4"	- 19	PKI-931419	22	100	11	9	11,8
G3/8"	- 19	PKI-933819	22	100	12	9	15,25
G1/2"	- 14	PKI-931214	25	125	16	12	19
G3/4"	- 14	PKI-933414	28	140	20	16	24,5
G1"	- 11	PKI-93111	30	160	25	20	30,75

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
	◎	◎	◎								◎	◎	○	
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
	○			○		◎		○	○	○	◎	○		

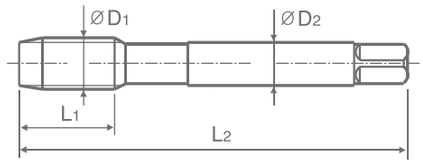
WITHWORTH BSW HELİSEL KILAVUZ DIN2182



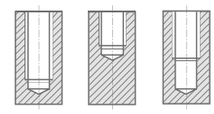
DIN 2182



DIN 2183



Delik Tipi



- Güçlü geometrisi sayesinde açık deliklerde diğer kılavuzlara göre çok daha hızlı kesme hızlarına çıkılabilir.

◎ Mükemmel ○ İyi Ölçü:mm

ÖLÇÜ	Adım	Sip. No.	Diş Boyu	Tam Boy	Şaft Çapı	Dört Köşe Ölçüsü	Kılavuz Matkap Çapı
D1	P		L1	L2	D2	K	d1
W1/8"	- 40	PKI-931840	7	56	3,5	2,7	2,5
W5/32"	- 32	PKI-9353232	7	63	4,5	3,4	3,1
W3/16"	- 24	PKI-9331624	10	70	6	4,9	3,6
W1/4"	- 20	PKI-931420	13	80	7	5,5	5,1
W5/16"	- 18	PKI-9351618	14	90	8	6,2	6,5
W3/8"	- 16	PKI-933816	16	100	9	7	7,9
W1/2"	- 12	PKI-931212	20	110	9	7	10,5
W5/8"	- 11	PKI-935811	22	110	12	9	13,5
W3/4"	- 10	PKI-933410	25	125	14	11	16,5
W7/8"	- 9	PKI-93789	27	140	18	14,5	19,25
W1"	- 8	PKI-9318	30	160	20	16	22

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○	○									○	○	
Ti Alloy ≤ 1300	**Ni < 500**	**Ni Alloy < 900**	**Ni Alloy ≤ 1400**	**Cu < 350**	**Cu Alloy Short**	**Cu Alloy Long**	**Cu-Al-Fe < 1500**	**Al / Mg < 350**	**Al Wrought**	**Al Si≤10%**	**Al Si>10%**	**Plastic Thermosoft**	**Plastic Thermoset**	**Plastic FRP**
					○	○					○			

ŞERİT TESTERELER

ŞERİT TESTERELER DEKUPAJ BI-METAL M42 - MATRIX



Dekupaj dikey veya yatay tezgahlarda çelik veya hafif metalleri,plaka, lama, kütle, yuvarlak veya profil halinde keser "H" işaretli dişler (kanca formlu) sadece aluminyum, bakır bronz gibi hafif metaller ve döküm malzemeler içindir.

Demir ve çelik için uygun değildir.

** İşaretli dişler Matrix Bi-Metal dir

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)	Kesme Açısı
6.4 x 0.64mm	TB06060600H	6H**	30,5 M
6.4 x 0.64mm	TB06061400	14**	30,5 M
6.4 x 0.64mm	TB06061014	10/14	30,5 M
6.4 X 0.9mm	TB06091000	10	30,5 M
6.4 X 0.9mm	TB06091400	14	30,5 M
6.4 X 0.9mm	TB06091014	10/14	30,5 M
9.5 x 0.64mm	TB10060400H	4H**	30,5 M
9.5 x 0.64mm	TB10060800	8**	30,5 M
9.5 x 0.64mm	TB10061000	10**	30,5 M
9.5 x 0.64mm	TB10061400	14**	30,5 M
9.5 x 0.64mm	TB10061014	10/14**	30,5 M
9.5 x 0.9mm	TB10090400H	4H	30,5 M
9.5 x 0.9mm	TB10091000	10	30,5 M
9.5 x 0.9mm	TB10091014	10/14	30,5 M
12,7 x 0.50mm	TB12051014	10/14**	30,5 M
12,7 x 0.50mm	TB12051418	14/18**	30,5 M
12,7 x 0.50mm	TB12052024	20/24**	30,5 M
12,7 x 0.50mm	TB12051000	10**	30,5 M
12,7 x 0.50mm	TB12051400	14**	30,5 M
12,7 x 0.50mm	TB12051800	18**	30,5 M
12,7 x 0.50mm	TB12052400	24**	30,5 M
12,7 x 0.64mm	TB12060300H	3H**	30,5 M
12,7 x 0.64mm	TB12060400H	4H**	30,5 M
12,7 x 0.64mm	TB12060600H	6H	30,5 M
12,7 x 0.64mm	TB12060600	6**	30,5 M
12,7 x 0.64mm	TB12061000	10**	30,5 M
12,7 x 0.64mm	TB12061400	14**	30,5 M
12,7 x 0.64mm	TB12061800	18**	30,5 M
12,7 x 0.64mm	TB12060610	6/10**	30,5 M
12,7 x 0.64mm	TB12060812	8/12	30,5 M
12,7 x 0.64mm	TB12061014	10/14**	30,5 M
12,7 x 0.64mm	TB12061418	14/18**	30,5 M
12,7 x 0.9mm	TB12090400H	4H	30,5 M
12,7 x 0.9mm	TB12090600H	6H	30,5 M
12,7 x 0.9mm	TB12091000	10	30,5 M
12,7 x 0.9mm	TB12091400	14	30,5 M
12,7 x 0.9mm	TB12090610	6/10**	30,5 M
12,7 x 0.9mm	TB12091014	10/14	30,5 M
16 x 0.9mm	TB16090610	6/10**	30,5 M

ŞERİT TESTERELER BI-METAL M42 - MATRIX



Her türlü çelik ve türlerinin, hafif metallerin, Yuvarlak, profil, lama ve paket kesimlerinde kullanılır.

"H" işaretli dişler (kanca formlu) sadece aluminyum, bakır bronz gibi hafif metaller ve döküm malzemeler içindir. Demir ve çelik için uygun değildir.

Dişlere "0°" düz kesme açısı veya "posi" positif kesme açısı uygulanmıştır. Diş açısını tercih ederken : "0°" düz kesme açılı testere sert malzemelerede ve ince etli malzemelerde ve kesme koşullarının çok rijit olmadığı hallerde tercih edilmelidir.

"posi" pozitif kesme açılı testere hızlı kesim istenen yerlerde daha agresif kesim için dolu ve kalın etli malzemelerde tercih edilmelidir Posi testere ayrıca paslanmaz alaşımları, benzeri sünek malzemeler, aluminyum bronz bakır ve alaşımları ve diğer hafif metaller ve dökümler için uygundur. Kesme koşulları sağlıklı ve rijit olduğu hallerde kullanılmalıdır aksi halde agresif kesimden dolayı dişler daha kırılgan olabilir.

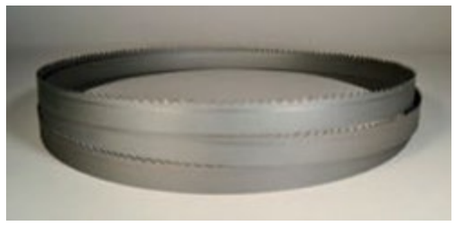
**İşaretli dişler Matrix Bi-Metal dir.

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)	Kesme Açısı
19 x 0.9mm	TB19090300H	3H	posi
19 x 0.9mm	TB19090600	6**	0°
19 x 0.9mm	TB19060800	8**	0°
19 x 0.9mm	TB19091000	10**	0°
19 x 0.9mm	TB19091200	12**	0°
19 x 0.9mm	TB19091400	14**	0°
19 x 0.9mm	TB19090304P	3/4**	posi
19 x 0.9mm	TB19090406P	4/6	posi
19 x 0.9mm	TB19090507P	5/7	posi
19 x 0.9mm	TB19090610	6/10	0°
19 x 0.9mm	TB19090812	8/12	0°
19 x 0.9mm	TB19091014	10/14	0°
27 x 0.9mm	TB27090200H	2H	posi
27 x 0.9mm	TB27090300H	3H	posi
27 x 0.9mm	TB27090400	4	0°
27 x 0.9mm	TB27090600	6	0°
27 x 0.9mm	TB27090800	8	0°
27 x 0.9mm	TB27091000	10	0°
27 x 0.9mm	TB27091400	14**	0°
27 x 0.9mm	TB27090203P	2/3	posi
27 x 0.9mm	TB27090304P	3/4	posi
27 x 0.9mm	TB27090406P	4/6	posi
27 x 0.9mm	TB27090507P	5/7	posi
27 x 0.9mm	TB27090610	6/10	0°
27 x 0.9mm	TB27090812	8/12	0°
27 x 0.9mm	TB27091014	10/14	0°
34 x 1.1mm	TB34110110H	1.14H	posi
34 x 1.1mm	TB34110200H	2H	posi
34 x 1.1mm	TB34110300H	3H	posi
34 x 1.1mm	TB34110400H	4H	posi
34 x 1.1mm	TB34110400	4	0°
34 x 1.1mm	TB34110600	6	0°
34 x 1.1mm	TB34110203P	2/3	posi
34 x 1.1mm	TB34110304P	3/4	posi
34 x 1.1mm	TB34110406P	4/6	posi
34 x 1.1mm	TB34110507P	5/7	posi
34 x 1.1mm	TB34110610	6/10**	0°
34 x 1.1mm	TB34110812	8/12	0°
41 x 1.3mm	TB41130142P	1.4/2.5	posi
41 x 1.3mm	TB41130200H	2H	posi
41 x 1.3mm	TB41130203P	2/3	posi
41 x 1.3mm	TB41130304P	3/4	posi
41 x 1.3mm	TB41130406P	4/6	posi
41 x 1.3mm	TB41130507P	5/7	posi
54 x 1.6mm	TB54160100	1H	posi
54 x 1.6mm	TB54160102	1.4/2.5	posi
54 x 1.6mm	TB54160203	2/3	posi
54 x 1.6mm	TB54160304	3/4	posi

İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir.

ŞERİT TESTERELER

HAZIR KAYNAKLI BI-METAL ŞERİT TESTERELER



Tabloda belirtilen ölçüler dışında istenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir. Ayrıca kaynak ücreti alınmaz.

kaynaklı testere fiyatı = testere metre fiyatı x testere boyu (metre)

Genişlik x Kalınlık	Sip. No.	Boy (metre)
19 x 0.9mm	TBM42K19208	2,08 M.
19 x 0.9mm	TBM42K19236	2,36 M.
27 x 0.9mm	TBM42K27248	2.48 M.
27 x 0.9mm	TBM42K27320	3,20 M.
27 x 0.9mm	TBM42K27366	3,66 M.
27 x 0.9mm	TBM42K27385	3,85 M.
27 x 0.9mm	TBM42K27416	4,16 M.
34 x 1.1mm	TBM42K34426	4,26 M.
34 x 1.1mm	TBM42K34432	4,32 M.
34 x 1.1mm	TBM42K34486	4,86 M.
34 x 1.1mm	TBM42K34504	5,04 M.
41 x 1.3mm	TBM42K41504	5.04 M.
41 x 1.3mm	TBM42K41550	5.50 M.
41 x 1.3mm	TBM42K41610	6,10 M.
54 x 1,6mm	TBM42K54610	6.10 M.
54 x 1,6mm	TBM42K54833	8.33 M.
54 x 1,6mm	TBM42K54940	9,40 M.

"CHALLENGER" BORU PROFİL PERFORMANS TESTERESİ



Boru ve profil için özel diş geometrisi ile diş kırılmalarına karşı daha güvenli, daha az ses ve vibrasyon ile daha uzun testere ömrü ve düzgün kesim yüzeyi.

BORU PROFİL VE BENZER MALZEMEDE UZUN ÖMÜR DÜZ KESİM TEMİZ YÜZEY

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)
12 x 0,64mm	TB12060811CH	8/11
19 x 0.9mm	TB19090507CH	5/7
19 x 0.9mm	TB19090811CH	8/11
27 x 0.9mm	TB27090406CH	4/6
27 x 0.9mm	TB27090507CH	5/7
27 x 0.9mm	TB27090811CH	8/11
34 x 1.1mm	TB34110203CH	2/3
34 x 1.1mm	TB34110304CH	3/4
34 x 1.1mm	TB34110406CH	4/6
34 x 1.1mm	TB34110507CH	5/7
34 x 1.1mm	TB34110811CH	8/11
41 x 1.3mm	TB41130203CH	2/3
41 x 1.3mm	TB41130304CH	3/4
41 x 1.3mm	TB41130406CH	4/6
41 x 1.3mm	TB41130507CH	5/7
41 x 1.3mm	TB41130811CH	8/11
54 x 1.6mm	TB54160203CH	2/3
54 x 1.6mm	TB54160304CH	3/4
54 x 1.6mm	TB54160406CH	4/6
67 x 1.6mm	TB67160203CH	2/3
67 x 1.6mm	TB67160304CH	3/4
67 x 1.6mm	TB67160406CH	4/6

"ACHIEVER" YÜKSEK ALAŞIM BI-METAL TESTERELER



EXTRA UZUN ÖMÜR EXTRA PERFORMANS

Standart M42 testere performansının üzerinde ömür ve kesme performansı arandığında, zor malzemelerede veya durmaksızın kesim yapıldığı hallerde uygundur.

Yüksek alaşımlı Bi-Metal Achiever, metal yorgunluğuna ısıya ve zor kesim şartlarına ve aşınmaya karşı extra dirençlidir.

Aşağıdaki malzemelerde kullanılabilir.

Aluminyum alaşımları ve hafif alaşımlı çelikler, alaşımlı çelikler. Paslanmaz çelikler, kalıp çelikleri, takım çelikleri

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)
19 x 0.9mm	TB19090406AC	4/6
19 x 0.9mm	TB19090508AC	5/8
19 x 0.9mm	TB19090610AC	6/10
19 x 0.9mm	TB19090812AC	8/12
19 x 0.9mm	TB19091014AC	10/14
27 x 0.9mm	TB27090203AC	2/3
27 x 0.9mm	TB27090304AC	3/4
27 x 0.9mm	TB27090406AC	4/6
27 x 0.9mm	TB27090507AC	5/7
27 x 0.9mm	TB27090610AC	6/10
27 x 0.9mm	TB27090812AC	8/12
27 x 0.9mm	TB27091014AC	10/14
34 x 1.1mm	TB34110102AC	1.4/2.5
34 x 1.1mm	TB34110203AC	2/3
34 x 1.1mm	TB34110304AC	3/4
34 x 1.1mm	TB34110406AC	4/6
34 x 1.1mm	TB34110507AC	5/7
34 x 1.1mm	TB34110610AC	6/10
41 x 1.3mm	TB41130102AC	1.4/2.5
41 x 1.3mm	TB41130203AC	2/3
41 x 1.3mm	TB41130304AC	3/4
41 x 1.3mm	TB41130406AC	4/6
54 x 1.6mm	TB54160102AC	1.4/2.5
54 x 1.6mm	TB54160203AC	2/3
54 x 1.6mm	TB54160304AC	3/4
67 x 1.6mm	TB67160071AC	0.75/1.1
67 x 1.6mm	TB67160111AC	1.1/1.5
67 x 1.6mm	TB67160152AC	1.5/2.0
67 x 1.6mm	TB67160203AC	2/3
67 x 1.6mm	TB67160304AC	3/4
80 x 1.6mm	TB80160071AC	0.75/1.1
80 x 1.6mm	TB80160111AC	1.1/1.5
80 x 1.6mm	TB80160152AC	1.5/2.0

İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir.

ŞERİT TESTERELER

XP 51 EXTRA YÜKSEK PERFORMANS



Büyük çaplı dolu malzeme takım çelikleri, paslanmaz çelikler nikel alaşımlı çelikler, inconel, waspalloy, monel ve titanyum alaşımları

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090203XP	2/3
27 x 0.9mm	TB27090304XP	3/4
27 x 0.9mm	TB27090406XP	4/6
34 x 1.1mm	TB34110203XP	2/3
34 x 1.1mm	TB34110304XP	3/4
34 x 1.1mm	TB34110406XP	4/6
41 x 1.3mm	TB41130102XP	1.4/2
41 x 1.3mm	TB41130203XP	2/3
41 x 1.3mm	TB41130304XP	3/4
41 x 1.3mm	TB41130406XP	4/6
54 x 1.6mm	TB54160102XP	1.4/2
54 x 1.6mm	TB54160203XP	2/3
54 x 1.6mm	TB54160304XP	3/4
54 x 1.6mm	TB54160406XP	4/6
67 x 1.6mm	TB67160071XP	0.75/1.25
67 x 1.6mm	TB67160101XP	1.1/1.6
67 x 1.6mm	TB67160102XP	1.4/2
67 x 1.6mm	TB67160203XP	2/3

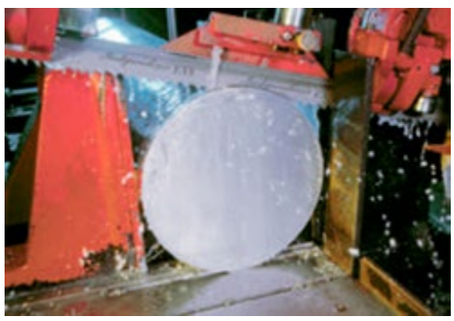
INDEPENDENCE II: EXTRA YÜKSEK PERFORMANS SÜREKLİ KESİM



Dolu malzeme takım çelikleri , paslanmaz çelikler, nikel alaşımlı çelikler ve tüm talaş kaldırılabilen çelikler.

Testere Genişlik x Kalınlık	Kod	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090203IN2	2/3
27 x 0.9mm	TB27090304IN2	3/4
27 x 0.9mm	TB27090406IN2	4/6
27 x 0.9mm	TB27090507IN2	5/7
34 x 1.1mm	TB34110203IN2	2/3
34 x 1.1mm	TB34110304IN2	3/4
34 x 1.1mm	TB34110406IN2	4/6
34 x 1.1mm	TB34110507IN2	5/7
41 x 1.3mm	TB41130203IN2	2/3
41 x 1.3mm	TB41130304IN2	3/4
41 x 1.3mm	TB41130406IN2	4/6
41 x 1.3mm	TB41130507IN2	5/7
54 x 1.6mm	TB54160203IN2	2/3
54 x 1.6mm	TB54160304IN2	3/4
54 x 1.6mm	TB54160406IN2	4/6
54 x 1.6mm	TB54160507IN2	5/7

INDEPENDENCE EXS : EXTRA YÜKSEK PERFORMANS SÜREKLİ KESİM



Büyük çaplı dolu malzeme takım çelikleri , paslanmaz çelikler nikel alaşımlı çelikler, inconel, waspalloy, monel ve titanyum alaşımları

Testere Genişlik x Kalınlık	Kod	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090203INE	2/3
27 x 0.9mm	TB27090304INE	3/4
27 x 0.9mm	TB27090406INE	4/6
34 x 1.1mm	TB34110203INE	2/3
34 x 1.1mm	TB34110304INE	3/4
34 x 1.1mm	TB34110406INE	4/6
41 x 1.3mm	TB41130101INE	1/1.5
41 x 1.3mm	TB41130203INE	2/3
41 x 1.3mm	TB41130304INE	3/4
54 x 1.6mm	TB54160101INE	1.1/1.5
54 x 1.6mm	TB54160203INE	2/3
54 x 1.6mm	TB54160304INE	3/4

İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir.

ŞERİT TESTERELER

"M FACTOR" SERT METAL UÇLU ŞERİT TESTERELER



Dolu malzeme alaşımlı çelikler, paslanmaz çelikler takım çelikleri, kalıp çelikleri karbon çelikler.

Dolu malzeme Egzotik malzemeler kesimi zor alaşımlı çelikler ve tüm paslanmaz alaşımları inconel, titanyum, takım çelikleri. Extra uzun ömürlü testere

Isıl işlem uygulanmış (yüzeyi sertleştirilmiş) krom kaplanmış malzemeler, yüzeyi sert kalın etli borular, profiller. Extra uzun ömürlü testere

Aluminyum döküm, Aşındırıcı ahşap, plywood ve türevi kompozit malzemeler, grafit, sıkıştırılmış ahşap. Extra uzun ömürlü testere

İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir ayrıca kaynak ücreti alınmaz

M FACTOR GP (GENEL MAKSATLI)

Testere (Genişlik x Kalınlık)	Sip. No.	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090203MFG	2/3
27 x 0.9mm	TB27090304MFG	3/4
34 x 1.1mm	TB34110071MFG	0.75/1.0
34 x 1.1mm	TB34110102MFG	1.5/2.0
34 x 1.1mm	TB34110203MFG	2/3
34 x 1.1mm	TB34110304MFG	3/4
41 x 1.3mm	TB41130102MFG	1.5/2.0
41 x 1.3mm	TB41130203MFG	2/3
41 x 1.3mm	TB41130304MFG	3/4
54 x 1.6mm	TB54160071MFG	0.75/1.0
54 x 1.6mm	TB54160102MFG	1.5/2.0
54 x 1.6mm	TB54160203MFG	2/3
67 x 1.6mm	TB67160071MFG	0.75/1.0
67 x 1.6mm	TB67160102MFG	1.5/2.0
80 x 1.6mm	TB80160071MFG	0.75/1.0
80 x 1.6mm	TB80160102MFG	1.5/2.0

M FACTOR EX (EGZOTİKLER)

Testere (Genişlik x Kalınlık)	Sip. No.	Diş sayısı (1 inç'te)
34 x 1.1mm	TB34110102MFE	1.5/2.0
34 x 1.1mm	TB34110203MFE	2/3
34 x 1.1mm	TB34110304MFE	3/4
41 x 1.3mm	TB41130102MFE	1.5/2.0
41 x 1.3mm	TB41130203MFE	2/3
41 x 1.3mm	TB41130304MFE	3/4
54 x 1.6mm	TB54160102MFE	1.5/2.0
54 x 1.6mm	TB54160203MFE	2/3
67 x 1.6mm	TB67160071MFE	0.75/1.0
67 x 1.6mm	TB67160102MFE	1.5/2.0
80 x 1.6mm	TB80160071MFE	0.75/1.0

M FACTOR CH (YÜZEYİ SERTLEŞTİRİLMİŞ)

Testere (Genişlik x Kalınlık)	Sip. No.	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090003MFC	3
27 x 0.9mm	TB27090304MFC	3/4
34 x 1.1mm	TB34110003MFC	3
34 x 1.1mm	TB34110304MFC	3/4
41 x 1.3mm	TB41130102MFC	1.5/2.0
41 x 1.3mm	TB41130203MFC	2/3
41 x 1.3mm	TB41130304MFC	3/4
54 x 1.6mm	TB54160102MFC	1.5/2.0
54 x 1.6mm	TB54160203MFC	2/3

M FACTOR FB (DÖKÜMHANE)

Testere (Genişlik x Kalınlık)	Sip. No.	Diş sayısı (1 inç'te)
12,7 x 0,60mm	TB12060003MFF	3
19 x 0.9mm	TB19090003MFF	3

Testere (Genişlik x Kalınlık)	Sip. No.	Diş sayısı (1 inç'te)
27 x 0.9mm	TB27090003MFF	3
34 x 1.1mm	TB34110003MFF	3

İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir.

ŞERİT TESTERELER

KARBON ŞERİT TESTERELER



* işaretli dişler ("H" tipi) sadece aluminyum, bakır bronz gibi hafif metaller, döküm malzemeler ve ahşap içindir. Demir ve çelik için uygun değildir.

** İşaretli dişler ("S" tipi) ağaç plastik , pirinç bakır bronze ve aluminyum içindir. Demir ve çelik için uygun değildir.

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)	Ambalaj Şekli: Top Halinde
4,8x0,64mm	TC040604S	4S**	30,5 M
6 x 0.64mm	TC060604H	4H*	30,5 M
6 x 0.64mm	TC060606H	6H*	30,5 M
6 x 0.64mm	TC060604S	4S**	30,5 M
6 x 0.64mm	TC060606S	6S**	30,5 M
6 x 0.64mm	TC060610	10	30,5 M
6 x 0.64mm	TC060614	14	30,5 M
6 x 0.64mm	TC060618	18	30,5 M
6 x 0.64mm	TC060624	24	30,5 M
6 x 0.64mm	TC060632	32	30,5 M
10x0.64mm	TC100603S	3S**	30,5 M
10x0.64mm	TC100604S	4S**	30,5 M
10x0.64mm	TC100603H	3H*	30,5 M
10x0.64mm	TC100604H	4H*	30,5 M
10x0.64mm	TC100606H	6H*	30,5 M
10x0.64mm	TC100608	8	30,5 M
10x0.64mm	TC100610	10	30,5 M
10x0.64mm	TC100614	14	30,5 M
10x0.64mm	TC100618	18	30,5 M

Testere Genişlik x Kalınlık	Sip. No.	Diş sayısı (1 inç'te)	Ambalaj Şekli: Top Halinde
12,5x0,5mm	TC120514	14	30,5 M
12,5x0,64mm	TC120604S	4S**	30,5 M
12,5x0,64mm	TC120603H	3H*	30,5 M
12,5x0,64mm	TC120604H	4H*	30,5 M
12,5x0,64mm	TC120606H	6H*	30,5 M
12,5x0,64mm	TC120606	6	30,5 M
12,5x0,64mm	TC120608	8	30,5 M
12,5x0,64mm	TC120610	10	30,5 M
12,5x0,64mm	TC120614	14	30,5 M
12,5x0,64mm	TC120618	18	30,5 M
12,5x0,64mm	TC120624	24	30,5 M
16x0.80mm	TC160808	8	30,5 M
19x0,80mm	TC190803S	3S**	30,5 M
19x0,80mm	TC190804S	4S**	30,5 M
19x0,80mm	TC190802H	2H*	30,5 M
19x0,80mm	TC190803H	3H*	30,5 M
19x0,80mm	TC190806H	6H*	30,5 M
19x0,80mm	TC190806H	6H*	30,5 M
19x0,80mm	TC190806	6	30,5 M
19x0,80mm	TC190808	8	30,5 M
19x0,80mm	TC190810	10	30,5 M
19x0,80mm	TC190814	14	30,5 M
19x0,80mm	TC190818	18	30,5 M
27x0.90mm	TC270901H	1.3H*	30,5 M
27x0.90mm	TC270902H	2H*	30,5 M
27x0.90mm	TC270903H	3H*	30,5 M
27x0.90mm	TC270904H	4H*	30,5 M
27x0.90mm	TC270906	6	30,5 M
27x0.90mm	TC270908	8	30,5 M
27x0.90mm	TC270910	10	30,5 M
27x0.90mm	TC270914	14	30,5 M
32X1,1mm	TC321101H	1.3H*	30,5 M
32X1,1mm	TC321106	6	30,5 M

TEKNİK BİLGİLER - ŞERİT TESTERELER

Bi-Metal Şerit testere diş seçim tablosu (Malzeme çap ve et kalınlığına göre)

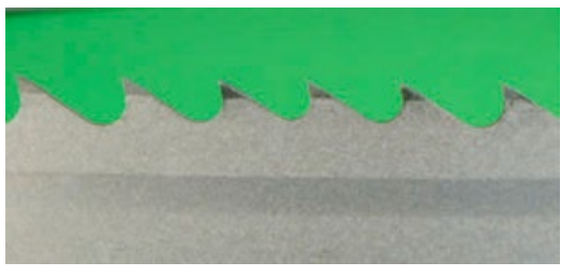
Dolu Ø	Diş
2-5 mm	14 - 10/14
6-12 mm	10 - 8/12
13-20 mm	8 - 6/10
20-30 mm	6 - 5/7
30-50 mm	4/6
50-90 mm	4 - 3/4
90-120 mm	3/4
120-200 mm	2/3
200-400 mm	1.3 - 1,4 /2.5

Boru profil vs. et kalınlığı	Diş
1,5-3mm	14 - 10/14
3-5mm	10 - 8/12
5-7 mm	6/10
7-10 mm	5/7
10-20 mm	4/6
20-40 mm	3/4
40 - + mm	2/3

Not: Diş seçimi genel olarak belirtilmiş olup kesilen malzeme evsafı ve kesim şartları bu seçimi değiştirebilir. Ayrıntılı bilgi için lütfen firmamızla irtibata geçiniz.

Performans: Yeni testerenizi taktığınızda devir sabit kalmak koşulu ile normal testere iniş hızınızı (ilerleme) yarıya düşürünüz.

15 dk. kesim yaptıktan sonra yavaş yavaş eski haline getiriniz ve normal ilerlemenizle devam ediniz. Yeni testerenizin çok keskin diş uçlarında küçük kırılmalar engellenecek ve testerenizin ömrü artacaktır.



TALAŞLARI İZLEYEREK PROBLEM ÇÖZME

Kesim esnasında çıkan talaşları inceleyerek problemleri bulabilir ve çözebilirsiniz.

Talaş : ince kıvrılmı ve gri metal renkte
Devir : uygun
İlerleme : uygun
Diğer : devir ilerleme ve diş seçiminiz uygundur

Talaş : Kısa, kalın, sert ve mavi veya kahve renkte
Devir : düşürün
İlerleme : düşürün
Diğer : kesme yağını kontrol edin.

Talaş : Toz halinde ve gri
Devir : düşürün
İlerleme : arttırın

Talaş : ince ve çok sıkı kıvrımlı ve gri renkte
Devir : kesme hızı uygun
İlerleme : düşürün.
Diğer : yanlış diş seçimi olabilir.

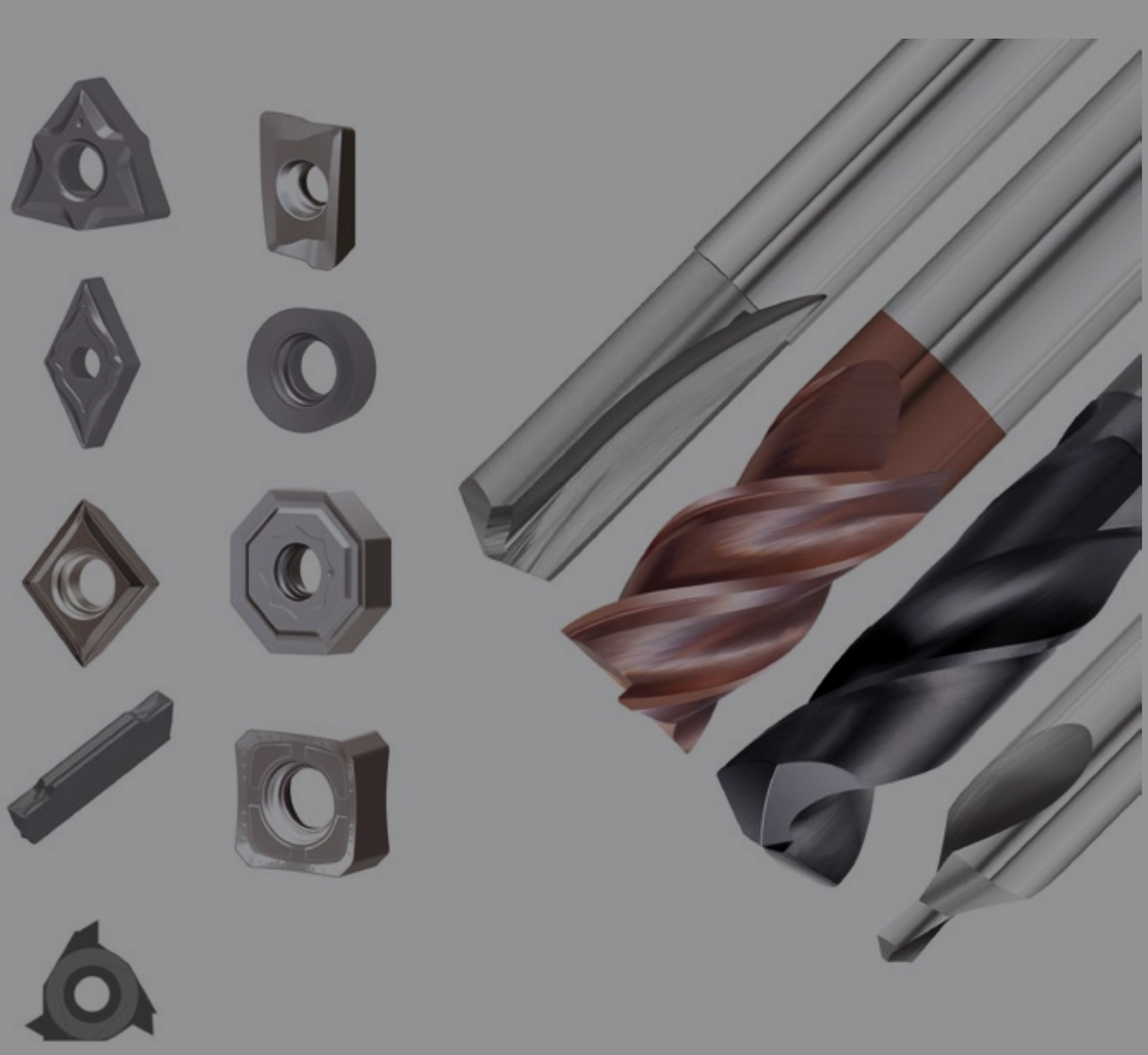
İstenilen uzunlukta şerit testereler hazır kaynatılmış olarak teslim edilir.

2. KARBÜR KESİCİ TAKIMLAR

Sy. 74/147

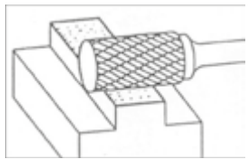
ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
Başakşehir / İstanbul

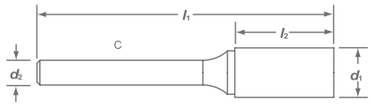
Gsm: +90 533 554 72 40 – +90 555 988 00 53
Tel: +90 (212) 549 46 62 – 671 50 76
Faks: +90 (212) 549 54 27



KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







SA

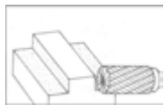
*KOMLPE KARBUR

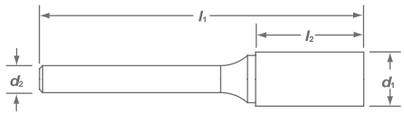
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SA-41M*	1,5	6	3	38	M00101	10342	M00100	10363	M00102	10405
SA-42M*	2,5	11	3	38	M00201	10343	M00200	10364	M00202	10406
SA-43M*	3	14	3	38	M00301	10344	M00300	10365	M00302	10407
SA-51M	6,3	12,7	3	50	M00401	10345	M00400	10366	M00402	10408
SA-12M*	3	12,7	6	60	M00601	10346	M00600	10367	M00602	10409
SA-14M*	5	16	6	50	M00701	10347	M00700	10368	M00702	10410
SA-1M*	6	16	6	50	M00801	10348	M00800	10369	M00802	10411
SA-1ML6	6	12,7	6	162	M00861	10349	M00860	10370	M00862	10412
SA-1MA*	6	25	6	50	M00901	10350	M00900	10371	M00902	10413
SA-2M	8	19	6	63	M01001	10351	M01000	10372	M01002	10414
SA-2MA	8	25	6	64	M01101	10352	M01100	10373	M01102	10415
SA-3M	9,5	19	6	63	M01201	10353	M01200	10374	M01202	10416
SA-3ML6	9,5	19	6	169	M01261	10354	M01260	10375	M01262	10417
SA-3MA	9,5	25	6	69	M01301	10355	M01300	10376	M01302	10418
SA-3MB	9,5	38	6	70	M01401	10356	M01400	10377	M01402	10419
SA-4M	11	25	6	69	M01501	10357	M01500	10378	M01502	10420
SA-5M	12,7	25	6	69	M01601	10358	M01600	10379	M01602	10421
SA-5ML6	12,7	25	6	175	M01661	10359	M01660	10380	M01662	10422
SA-6M	16	25	6	69	M01701	10360	M01700	10381	M01702	10423
SA-7M	19	25	6	69	M01901	10361	M01900	10382	M01902	10424
SA-9M	25	25	6	69	M02001	10362	M02000	10383	M02002	10425

KULLANIM ALANI

Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
• Pirinç	• Karbon Nikel Çelik	• Pirinç	• Karbon Nikel Çelik	• Aluminyum
• Bakır	• Paslanmaz Çelik	• Bakır	• Paslanmaz Çelik	• Magnezyum
• Bronz	• Kaynaklı Çelik	• Bronz	• Kaynaklı Çelik	• Pirinç
• Dökme Demir	• Titanyum	• Dökme Demir	• Titanyum	• Çinko
• Çelik (HrC 40-60)		• Çelik (HrC 40-60)		• Plastikler
				• Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







SB

*KOMLPE KARBUR
^ÇİFT TARAFLI

Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SB-4MECO*^	1,5	6	3	38	M02201	10426	-	10451	-	10501
SB-41M*	1,5	6	3	38	M02301	10427	M02300	10452	M02302	10502
SB-42M*	2	11	3	63	M02401	10428	M02400	10453	M02402	10503
SB-42M*	2,5	11	3	38	M02401	10429	M02400	10454	M02402	10504
SB-42ML2,5*	2,5	13	3	65	M02401	10430	M02400	10455	M02402	10505
SB-43M*	3	14	3	38	M02501	10431	M02500	10456	M02502	10506
SB-43ML2,5*	3	14	3	63	M02501	10432	M02500	10457	M02502	10507
SB-51M	6,3	12,7	3	43	M02601	10433	M02600	10458	M02602	10508
SB-12M*	3	12,7	6	60	M02801	10434	M02800	10459	M02802	10509
SB-14M*	5	16	6	50	M02901	10435	M02900	10460	M02902	10510
SB-1M*	6	16	6	50	M03001	10436	M03000	10461	M03002	10511
SB-1MA*	6	25	6	50	M03051	10437	M03050	10462	M03052	10512
SB-1ML6	6	12,7	6	162	M03061	10438	M03060	10463	M03062	10513
SB-2M	8	19	6	63	M03101	10439	M03100	10464	M03102	10514
SB-2MA	8	25	6	64	M03201	10440	M03200	10465	M03202	10515
SB-3M	9,5	19	6	63	M03301	10441	M03300	10466	M03302	10516
SB-3ML6	9,5	19	6	169	M03361	10442	M03360	10467	M03362	10517
SB-3MA	9,5	25	6	69	M03401	10443	M03400	10468	M03402	10518
SB-3BM	9,5	38	6	70	M03501	10444	M03500	10469	M03502	10519
SB-4M	11	25	6	69	M03601	10445	M03600	10470	M03602	10520
SB-5M	12,7	25	6	69	M03701	10446	M03700	10471	M03702	10521
SB-5ML6	12,7	25	6	175	M03761	10447	M03760	10472	M03762	10522
SB-6M	16	25	6	69	M03801	10448	M03800	10473	M03802	10523
SB-7M	19	25	6	69	M04001	10449	M04000	10474	M04002	10524
SB-9M	25	25	6	69	M04101	10450	M04100	10475	M04102	10525

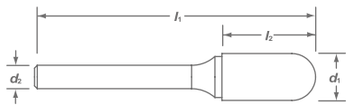
KULLANIM ALANI

Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
• Pirinç	• Karbon Nikel Çelik	• Pirinç	• Karbon Nikel Çelik	• Aluminyum
• Bakır	• Paslanmaz Çelik	• Bakır	• Paslanmaz Çelik	• Magnezyum
• Bronz	• Kaynaklı Çelik	• Bronz	• Kaynaklı Çelik	• Pirinç
• Dökme Demir	• Titanyum	• Dökme Demir	• Titanyum	• Çinko
• Çelik (HrC 40-60)		• Çelik (HrC 40-60)		• Plastikler
				• Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







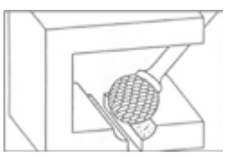
*KOMLPE KARBUR

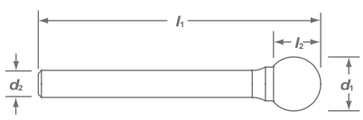
SC

Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SC-41M*	2,5	11	3	38	M04401	10526	M04400	10547	M04402	10589
SC-42M*	3	14	3	38	M04501	10527	M04500	10548	M04502	10590
SC-42ML2*	3	14	3	50	M04521	10528	M04520	10549	M04522	10591
SC-42ML3*	3	14	3	75	M04531	10529	M04530	10550	M04532	10592
SC-51M	6,3	12,7	3	50	M04601	10530	M04600	10551	M04602	10593
SC-12M*	3	16	6	60	M04801	10531	M04800	10552	M04802	10594
SC-14M*	5	16	6	50	M04901	10532	M04900	10553	M04902	10595
SC-1M*	6	16	6	50	M05001	10533	M05000	10554	M05002	10596
SC-1MA*	6	25	6	50	M05051	10534	M05050	10555	M05052	10597
SC-1ML6	6	12,7	6	162	M05061	10535	M05060	10556	M05062	10598
SC-2M	8	19	6	63	M05201	10536	M05200	10557	M05202	10599
SC-2MA	8	25	6	64	M05301	10537	M05300	10558	M05302	10600
SC-3M	9,5	19	6	63	M05401	10538	M05400	10559	M05402	10601
SC-3ML6	9,5	19	6	169	M05461	10539	M05460	10560	M05462	10602
SC-3MA	9,5	25	6	69	M05501	10540	M05500	10561	M05502	10603
SC-4M	11	25	6	69	M05801	10541	M05800	10562	M05802	10604
SC-5M	12,7	25	6	69	M05901	10542	M05900	10563	M05902	10605
SC-5ML6	12,7	25	6	175	M05961	10543	M05960	10564	M05962	10606
SC-6M	16	25	6	69	M06001	10544	M06000	10565	M06002	10607
SC-7M	19	25	6	69	M06201	10545	M06200	10566	M06202	10608
SC-9M	25	25	6	69	M06301	10546	M06300	10567	M06302	10609

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

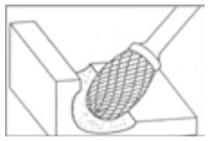
SD

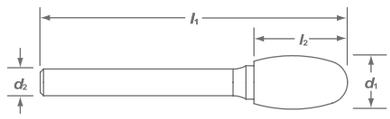
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SD-41M*	2,5	2,3	3	38	M06601	10610	M06600	10628	M06602	10664
SD-42M*	3	2,5	3	38	M06701	10611	M06700	10629	M06702	10665
SD-42ML2*	3	2,5	3	50	M06721	10612	M06720	10630	M06722	10666
SD-42ML3*	3	2,5	3	75	M06731	10613	M06730	10631	M06732	10667
SD-51M	6,3	5	3	44	M06801	10614	M06800	10632	M06802	10668
SD-12M*	3	2	6	50	M07001	10615	M07000	10633	M07002	10669
SD-14M*	5	4	6	50	M07101	10616	M07100	10634	M07102	10670
SD-1M*	6	5	6	50	M07201	10617	M07200	10635	M07202	10671
SD-1ML6	6	5	6	155	M07261	10618	M07260	10636	M07262	10672
SD-2M	8	6,4	6	50	M07301	10619	M07300	10637	M07302	10673
SD-3M	9,5	8	6	52	M07401	10620	M07400	10638	M07402	10674
SD-3ML6	9,5	8	6	158	M07461	10621	M07460	10639	M07462	10675
SD-4M	11	9,5	6	54	M07501	10622	M07500	10640	M07502	10676
SD-5M	12,7	11	6	55	M07601	10623	M07600	10641	M07602	10677
SD-5ML6	12,7	11	6	161	M07661	10624	M07660	10642	M07662	10678
SD-6M	16	14	6	58	M07701	10625	M07700	10643	M07702	10679
SD-7M	19	16	6	62	M07801	10626	M07800	10644	M07802	10680
SD-9M	25	21	6	72	M07901	10627	M07900	10645	M07902	10681

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SE

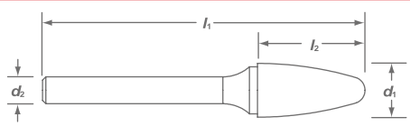
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SE-41M*	3	5,5	3	38	M08101	10682	M08100	10694	M08102	10718
SE-41ML2*	3	5,5	3	50	M08121	10683	M08120	10695	M08122	10719
SE-41ML3*	3	5,5	3	75	M08131	10684	M08130	10696	M08132	10720
SE-51M	6,3	9,5	3	47	M08201	10685	M08200	10697	M08202	10721
SE-1M*	6	9,5	6	50	M08501	10686	M08500	10698	M08502	10722
SE-1ML6	6	9,5	6	160	M08561	10687	M08560	10699	M08562	10723
SE-3M	9,5	16	6	60	M08601	10688	M08600	10700	M08602	10724
SE-3ML6	9,5	16	6	166	M08661	10689	M08660	10701	M08662	10725
SE-5M	12,7	22	6	66	M08701	10690	M08700	10702	M08702	10726
SE-5ML6	12,7	22	6	172	M08761	10691	M08760	10703	M08762	10727
SE-6M	16	25	6	69	M08801	10692	M08800	10704	M08802	10728
SE-7M	19	25	6	69	M08901	10693	M08900	10705	M08902	10729

KULLANIM ALANI

Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
• Pirinç	• Karbon Nikel Çelik	• Pirinç	• Karbon Nikel Çelik	• Aluminyum
• Bakır	• Paslanmaz Çelik	• Bakır	• Paslanmaz Çelik	• Magnezyum
• Bronz	• Kaynaklı Çelik	• Bronz	• Kaynaklı Çelik	• Pirinç
• Dökme Demir	• Titanyum	• Dökme Demir	• Titanyum	• Çinko
• Çelik (HrC 40-60)		• Çelik (HrC 40-60)		• Plastikler
				• Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

^ÇİFT TARAFLI

SF

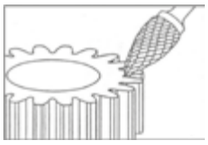
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SF-41M*	3	6	3	38	M09101	10730	M09100	10747	M09102	10781
SF-42M*	3	12,7	3	38	M09201	10731	M09200	10748	M09202	10782
SF-42ML2*	3	12,7	3	50	M09221	10732	M09220	10749	M09222	10783
SF-42ML3*	3	12,7	3	75	M09231	10733	M09230	10750	M09232	10784
SF-51M	6,3	12,7	3	50	M09401	10734	M09400	10751	M09402	10785
SF-1M*	6	16	6	50	M09701	10735	M09700	10752	M09702	10786
SF-1ML6	6	16	6	163	M09761	10736	M09760	10753	M09762	10787
SF-3M	9,5	19	6	63	M09801	10737	M09800	10754	M09802	10788
SF-3ML6	9,5	19	6	169	M09861	10738	M09860	10755	M09862	10789
SF-4M	11	25	6	69	M09901	10739	M09900	10756	M09902	10790
SF-13M	12,7	19	6	63	M10001	10740	M10000	10757	M10002	10791
SF-5M	12,7	25	6	69	M10101	10741	M10100	10758	M10102	10792
SF-5ML6	12,7	25	6	175	M10161	10742	M10160	10759	M10162	10793
SF-6M	16	25	6	69	M10201	10743	M10200	10760	M10202	10794
SF-7M	19	25	6	69	M10301	10744	M10300	10761	M10302	10795
SF-14M	19	32	6	76	M10401	10745	M10400	10762	M10402	10796
SF-15M	19	38	6	82	M10501	10746	M10500	10763	M10502	10797

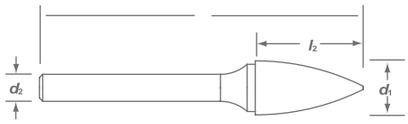
KULLANIM ALANI

Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
• Pirinç	• Karbon Nikel Çelik	• Pirinç	• Karbon Nikel Çelik	• Aluminyum
• Bakır	• Paslanmaz Çelik	• Bakır	• Paslanmaz Çelik	• Magnezyum
• Bronz	• Kaynaklı Çelik	• Bronz	• Kaynaklı Çelik	• Pirinç
• Dökme Demir	• Titanyum	• Dökme Demir	• Titanyum	• Çinko
• Çelik (HrC 40-60)		• Çelik (HrC 40-60)		• Plastikler
				• Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SG



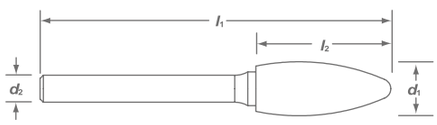


Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SG-41M*	3	6	3	38	M10801	10798	M10800	10814	M10802	10846
SG-43M*	3	9,5	3	38	M10901	10799	M10900	10815	M10902	10847
SG44M*	3	12,7	3	38	M11001	10800	M11000	10816	M11002	10848
SG-44ML2*	3	12,7	3	50	M11021	10801	M11020	10817	M11022	10849
SG-44ML3*	3	12,7	3	75	M11031	10802	M11030	10818	M11032	10850
SG-51M	6,3	12,7	3	50	M11101	10803	M11100	10819	M11102	10851
SG-1M*	6	16	6	50	M11301	10804	M11300	10820	M11302	10852
SG-1ML6	6	12,7	6	163	M11361	10805	M11360	10821	M11362	10853
SG-2M	8	19	6	63	M11401	10806	M11400	10822	M11402	10854
SG-3M	9,5	19	6	63	M11501	10807	M11500	10823	M11502	10855
SG-3ML6	9,5	19	6	169	M11561	10808	M11560	10824	M11562	10856
SG-13M	12,7	19	6	63	M11601	10809	M11600	10825	M11602	10857
SG-5M	12,7	25	6	69	M11701	10810	M11700	10826	M11702	10858
SG-5ML6	12,7	25	6	175	M11761	10811	M11760	10827	M11762	10859
SG-6M	16	25	6	69	M11801	10812	M11800	10828	M11802	10860
SG-7M	19	25	6	69	M11901	10813	M11900	10829	M11902	10861

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SH





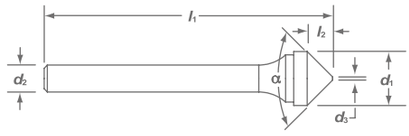
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SH-41M*	3	6,3	3	38	M12101	10862	M12100	10873	M12102	10895
SH-41ML2*	3	6,3	3	50	M12121	10863	M12120	10874	M12122	10896
SH-41ML3*	3	6,3	3	75	M12131	10864	M12130	10875	M12132	10897
SH-1M*	6	9,5	6	50	M12201	10865	M12200	10876	M12202	10898
SH-1ML6	6	9,5	6	160	M12261	10866	M12260	10877	M12262	10899
SH-2M	8	19	6	63	M12301	10867	M12300	10878	M12302	10900
SH-2ML6	8	19	6	169	M12361	10868	M12360	10879	M12362	10901
SH-5M	12,7	32	6	76	M12401	10869	M12400	10880	M12402	10902
SH-5ML6	12,7	32	6	182	M12461	10870	M12460	10881	M12462	10903
SH-6M	16	36	6	80	M12501	10871	M12500	10882	M12502	10904
SH-7M	19	41	6	85	M12601	10872	M12600	10883	M12602	10905

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







SJ

*KOMLPE KARBUR

^ÇİFT TARAFLI



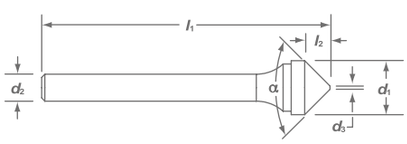


Sip. No.	d_1	l_2	d_2	l_1	α	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SJ-42M*	3	2,5	3	38	60°	M12801	10906	M12800	10915	M12802	10933
SJ-42MDE*^	3	2,5	3	38	60°	M12811	10907	M12810	10916	M12812	10934
SJ-1M*	6	4	6	50	60°	M13001	10908	M13000	10917	M13002	10935
SJ-1MDE*^	6	4	6	50	60°	M13011	10909	M13010	10918	M13012	10936
SJ-3M	9,5	8	6	55	60°	M13201	10910	M13200	10919	M13202	10937
SJ-5M	12,7	11	6	58	60°	M13301	10911	M13300	10920	M13302	10938
SJ-6M	16	14,5	6	61	60°	M13401	10912	M13400	10921	M13402	10939
SJ-7M	19	17,5	6	65	60°	M13501	10913	M13500	10922	M13502	10940
SJ-9M	25	24,5	6	68	60°	M13601	10914	M13600	10923	M13602	10941

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







SK

*KOMLPE KARBUR

^ÇİFT TARAFLI





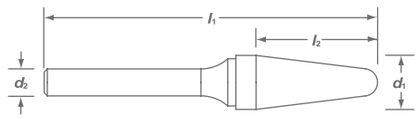
Sip. No.	d_1	l_2	d_2	l_1	α	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SK-42M*	3	1,5	3	38	90°	M13801	10942	M13800	10951	M13802	10969
SK-42MDE*^	3	1,5	3	38	90°	M13811	10943	M13810	10952	M13812	10970
SK-1M*	6	3	6	50	90°	M14001	10944	M14000	10953	M14002	10971
SK-1MDE*^	6	3	6	50	90°	M14011	10945	M14010	10954	M14012	10972
SK-3M	9,5	4,7	6	52	90°	M14201	10946	M14200	10955	M14202	10973
SK-5M	12,7	6,3	6	54	90°	M14401	10947	M14400	10956	M14402	10974
SK-6M	16	8	6	57	90°	M14501	10948	M14500	10957	M14502	10975
SK-7M	19	9,5	6	58	90°	M14601	10949	M14600	10958	M14602	10976
SK-9M	25	12,7	6	60	90°	M14701	10950	M14700	10959	M14702	10977

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SL

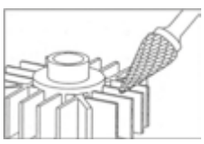


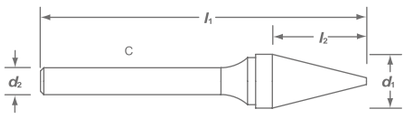


Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SL-41M*	3	9,5	3	38	M14901	10978	M14900	10990	M14902	11014
SL-42M*	3	12,7	3	38	M15001	10979	M15000	10991	M15002	11015
SL-1M*	6	16	6	50	M15101	10980	M15100	10992	M15102	11016
SL-1ML6	6	16	6	166	M15161	10981	M15160	10993	M15162	11017
SL-2M	8	22	6	69	M15201	10982	M15200	10994	M15202	11018
SL-3M	9,5	27	6	74	M15301	10983	M15300	10995	M15302	11019
SL-3ML6	9,5	27	6	177	M15361	10984	M15360	10996	M15362	11020
SL-4M	12,7	28	6	76	M15401	10985	M15400	10997	M15402	11021
SL-4ML6	12,7	28	6	178	M15461	10986	M15460	10998	M15462	11022
SL-5M	16	30	6	77	M15501	10987	M15500	10999	M15502	11023
SL-6M	16	33	6	80	M15601	10988	M15600	11000	M15602	11024
SL-7M	19	38	6	85	M15701	10989	M15700	11001	M15702	11025

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SM





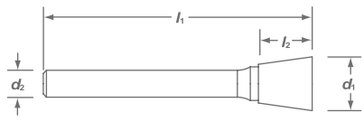
Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SM-41M*	3	8,9	3	38	M15901	11026	M15900	11038	M15902	11062
SM-42M*	3	11	3	38	M16001	11027	M16000	11039	M16002	11063
SM-42ML2*	3	11	3	50	M16021	11028	M16020	11040	M16022	11064
SM-42ML3*	3	11	3	75	M16031	11029	M16030	11041	M16032	11065
SM-43M*	3	16	3	38	M16101	11030	M16100	11042	M16102	11066
SM-51M	6,3	12,7	3	54	M16201	11031	M16200	11043	M16202	11067
SM-1M*	6	12,7	6	50	M16401	11032	M16400	11044	M16402	11068
SM-2M	6	19	6	50	M16501	11033	M16500	11045	M16502	11069
SM-3M*	6	25	6	50	M16601	11034	M16600	11046	M16602	11070
SM-4M	9,5	16	6	63	M16901	11035	M16900	11047	M16902	11071
SM-5M	12,7	22	6	69	M17001	11036	M17000	11048	M17002	11072
SM-6M	16	25	6	73	M17101	11037	M17100	11049	M17102	11073

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER







*KOMLPE KARBUR

SN







Sip. No.	d_1	l_2	d_2	l_1	Düz	Sip. No.	Çapraz	Sip. No.	Aluminyum	Sip. No.
SN-41M*	2,5	3	3	38	M17301	11074	M17300	11082	M17302	11098
SN-42M*	3	4	3	38	M17401	11075	M17400	11083	M17402	11099
SN-51M	6,3	6	3	44	M17501	11076	M17500	11084	M17502	11100
SN-1M* ,	6	8	6	50	M17701	11077	M17700	11085	M17702	11101
SN-2M	9,5	9,5	6	53	M17801	11078	M17800	11086	M17802	11102
SN-4M	12,7	12,7	6	57	M18001	11079	M18000	11087	M18002	11103
SN-6M	16	19	6	63	M18201	11080	M18200	11088	M18202	11104
SN-7M	19	16	6	60	M18301	11081	M18300	11089	M18302	11105

KULLANIM ALANI	Yüksek yüzey kalitesi istenilen durumlarda		Hızlı İlerleme İstendiğinde		Demir dışı malzemeler
	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Pirinç • Bakır • Bronz • Dökme Demir • Çelik (HrC 40-60)	• Karbon Nikel Çelik • Paslanmaz Çelik • Kaynaklı Çelik • Titanyum	• Aluminyum • Magnezyum • Pirinç • Çinko • Plastikler • Kurşun

KARBÜR KALIPÇI FREZELER

SERT METAL (KARBÜR) KALIPÇI FREZELER

	Tip No	Sip. No.	Çap (mm)	Kes. Boy (mm)	Sap (mm)	Tam Boy (mm)	Sip. No.
	SA-021006	C170-A0210X06F	2	10	6	38	11686
	SA-43M-DC	C170-A0313X03F	3	13	3	38	11687
	SA-12M-DC	C170-A0313X06F	3	13	6	38	11688
	SA-041306	C170-A0413X06F	4	13	6	38	11689
	SA-51M-DC	C170-A0613X03F	6	13	3	56	11690
	SA-1M-DC	C170-A0616X06F	6	16	6	56	11691
	SA-2M-DC	C170-A0820X06F	8	20	6	60	11692
	SA-3M-DC	C170-A1020X06F	10	20	6	60	11693
	SA-5M-DC	C170-A1225X06F	12	25	6	65	11694
	SA-6M-DC	C170-A1625X06F	16	25	6	65	11695
	SA-7M-DC	C170-A1925X06F	19	25	6	65	11696
	SB-42M-DC	C170-B0210X06F	2	10	6	38	11697
	SB-43M-DC	C170-B0313X03F	3	13	3	38	11698
	SB-12M-DC	C170-B0313X06F	3	13	6	38	11699
	SB-041303	C170-B0413X03F	4	13	3	38	11700
	SB-041306	C170-B0413X06F	4	13	6	38	11701
	SB-51M-DC	C170-B0613X03F	6	13	3	56	11702
	SB-1M-DC	C170-B0616X06F	6	16	6	56	11703
	SB-2M-DC	C170-B0820X06F	8	20	6	60	11704
	SB-3M-DC	C170-B1020X06F	10	20	6	60	11705
	SB-5M-DC	C170-B1225X06F	12	25	6	65	11706
	SB-6M-DC	C170-B1625X06F	16	25	6	65	11707
	SB-7M-DC	C170-B1925X06F	19	25	6	65	11708
	SB-9M-DC	C170-B2525X06F	25	25	6	65	11709
	SC-021006	C170-C0210X06F	2	10	6	38	11710
	SC-42M-DC	C170-C0313X03F	3	13	3	38	11711
	SB-041303	C170-C0413X03F	4	13	3	38	11712
	SC-041306	C170-C0413X06F	4	13	6	38	11713
	SC-51M-DC	C170-C0613X03F	6	13	3	38	11714
	SC-1M-DC	C170-C0616X06F	6	16	6	56	11715
	SC-2M-DC	C170-C0820X06F	8	20	6	60	11716
	SC-3M-DC	C170-C1020X06F	10	20	6	60	11717
	SC-5M-DC	C170-C1225X06F	12	25	6	65	11718
	SC-6M-DC	C170-C1625X06F	16	25	6	65	11719
	SC-7M-DC	C170-C1925X06F	19	25	6	65	11720
	SC-9M-DC	C170-C2525X06F	25	25	6	65	11721
	SD-42M-DC	C170-D0302X03F	3	2	3	38	11722
	SD-12M-DC	C170-D0302X06F	3	2	6	38	11723
	SD-040303	C170-D0403X03F	4	3	3	38	11724
	SD-040306	C170-D0403X06F	4	3	6	38	11725
	SD-51M-DC	C170-D0605X03F	6	5	3	33	11726
	SD-1M-DC	C170-D0605X06F	6	5	6	45	11727
	SD-2M-DC	C170-D0807X06F	8	7	6	47	11728
	SD-3M-DC	C170-D1009X06F	10	9	6	49	11729
	SD-5M-DC	C170-D1210X06F	12	10	6	51	11730
	SD-6M-DC	C170-D1614X06F	16	14	6	54	11731
	SD-7M-DC	C170-D1914X06F	19	14	6	54	11732
	SD-9M-DC	C170-D2521X06F	25	21	6	54	11733
	SE-41M-DC	C170-E0307X03F	3	7	3	38	11734
	SE-12M-DC	C170-E0307X06F	3	7	6	38	11735
	SE-51M-DC	C170-E0610X03F	6	10	3	33	11736
	SE-1M-DC	C170-E0610X06F	6	10	6	50	11737
	SE-2M-DC	C170-E0813X06F	8	13	6	53	11738
	SE-3M-DC	C170-E1016X06F	10	16	6	56	11739
	SE-5M-DC	C170-E1220X06F	12	20	6	60	11740
	SE-6M-DC	C170-E1625X06F	16	25	6	65	11741
	SE-7M-DC	C170-E1925X06F	19	25	6	65	11742
	SF-42M-DC	C170-F0313X03F	3	13	3	38	11743
	SF-51M-DC	C170-F0613X03F	6	13	3	41	11744
	SF-1M-DC	C170-F0618X06F	6	18	6	58	11745
	SF-2M-DC	C170-F0820X06F	8	20	6	65	11746
	SF-3M-DC	C170-F1020X06F	10	20	6	60	11747
	SF-5M-DC	C170-F1225X06F	12	25	6	65	11748
	SF-6M-DC	C170-F1625X06F	16	25	6	70	11749
	SF-7M-DC	C170-F1925X06F	19	25	6	70	11750

	Tip No	Sip. No.	Çap (mm)	Kes. Boy (mm)	Sap (mm)	Tam Boy (mm)	Sip. No.
	SG-43M-DC	C170-G0313X03F	3	13	3	38	11751
	SG-51M-DC	C170-G0613X03F	6	13	3	41	11752
	SG-1M-DC	C170-G0618X06F	6	18	6	58	11753
	SG-2M-DC	C170-G0820X06F	8	20	6	65	11754
	SG-3M-DC	C170-G1020X06F	10	20	6	60	11755
	SG-5M-DC	C170-G1225X06F	12	25	6	65	11756
	SG-6M-DC	C170-G1625X06F	16	25	6	70	11757
	SG-7M-DC	C170-G1925X06F	19	7	6	70	11758
	SH-41M-DC	C170-H0307X03F	3	7	3	38	11759
	SH-1M-DC	C170-H0618X06F	6	18	6	58	11760
	SH-2M-DC	C170-H0820X06F	8	20	6	60	11761
	SH-3M-DC	C170-H1025X06F	10	25	6	65	11762
	SH-5M-DC	C170-H1232X06F	12	32	6	72	11763
	SH-6M-DC	C170-H1636X06F	16	36	6	76	11764
	SH-7M-DC	C170-H1936X06F	19	36	6	76	11765
	SJ-42M-DC	C170-J0302X03F	3	2	3	42	11766
	SJ-12M-DC	C170-J0302X06F	3	2	6	42	11767
	SJ-1M-DC	C170-J0605X06F	6	5	6	48	11768
	SJ-2M-DC	C170-J0807X06F	8	7	6	47	11769
	SJ-3M-DC	C170-J1008X06F	10	8	6	52	11770
	SJ-5M-DC	C170-J1210X06F	12	10	6	54	11771
	SJ-6M-DC	C170-J1613X06F	16	13	6	56	11772
	SJ-7M-DC	C170-J1913X06F	19	13	6	56	11773
	SK-42M-DC	C170-K0301X03F	3	1	3	42	11774
	SK-1M-DC	C170-K0603X06F	6	3	6	45	11775
	SK-2M-DC	C170-K0804X06F	8	4	6	47	11776
	SK-3M-DC	C170-K1005X06F	10	5	6	48	11777
	SK-5M-DC	C170-K1206X06F	12	6	6	48	11778
	SK-6M-DC	C170-K1608X06F	16	8	6	50	11779
	SK-7M-DC	C170-K1908X06F	19	8	6	50	11780
	SK-9M-DC	C170-K2512X06F	25	12	6	50	11781
	SL-021306	C170-L0213X06F	2	13	6	38	11782
	SL-42M-DC	C170-L0313X03F	3	13	3	38	11783
	SL-12M-DC	C170-L0313X06F	3	13	6	38	11784
	SL-041306	C170-L0413X06F	4	13	6	38	11785
	SL-51M-DC	C170-L0613X03F	6	13	3	41	11786
	SL-1M-DC	C170-L0616X06F	6	16	6	56	11787
	SL-2M-DC	C170-L0822X06F	8	22	6	62	11788
	SL-3M-DC	C170-L1025X06F	10	25	6	65	11789
	SL-5M-DC	C170-L1228X06F	12	28	6	68	11790
	SL-6M-DC	C170-L1633X06F	16	33	6	73	11791
	SL-7M-DC	C170-L1933X06F	19	33	6	73	11792
	SM-42M-DC	C170-M0311X03F	3	11	3	38	11793
	SM-12M-DC	C170-M0311X06F	3	11	6	38	11794
	SM-51M-DC	C170-M0618X03F	6	18	3	46	11795
	SM-1M-DC	C170-M0618X06F	6	18	6	58	11796
	SM-2M-DC	C170-M0820X06F	8	20	6	65	11797
	SM-3M-DC	C170-M1020X06F	10	20	6	60	11798
	SM-5M-DC	C170-M1225X06F	12	25	6	65	11799
	SM-6M-DC	C170-M1625X06F	16	25	6	65	11800
	SM-7M-DC	C170-M1925X06F	19	25	6	65	11801
	SN-42M-DC	C170-N0307X03F	3	7	3	38	11802
	SN-12M-DC	C170-N0307X06F	3	7	6	38	11803
	SN-1M-DC	C170-N0607X06F	6	7	6	47	11804
	SN-2M-DC	C170-N0807X06F	8	7	6	50	11805
	SN-3M-DC	C170-N1010X06F	10	10	6	55	11806
	SN-4M-DC	C170-N1213X06F	12	13	6	53	11807
	SN-6M-DC	C170-N1613X06F	16	13	6	58	11808

KARBÜR KALIPÇI FREZELER

EKONOMİK TİP SERT METAL (KARBÜR) KALIPÇI FREZELER

	Tip No	Sip. No.	Çap (mm)	Kes. Boy (mm)	Sap (mm)	Tam Boy (mm)	Sip. No.
	SA-43M-DC	C175-A0313X03	3	13	3	38	11809
	SA-1M-DC	C175-A0616X06	6	16	6	56	11810
	SA-2M-DC	C175-A0820X06	8	20	6	60	11811
	SA-3M-DC	C175-A1020X06	10	20	6	60	11812
	SA-5M-DC	C175-A1225X06	12	25	6	65	11813
	SA-6M-DC	C175-A1625X06	16	25	6	65	11814
	SB-43M-DC	C175-B0313X03	3	13	3	38	11815
	SB-1M-DC	C175-B0616X06	6	16	6	56	11816
	SB-2M-DC	C175-B0820X06	8	20	6	60	11817
	SB-3M-DC	C175-B1020X06	10	20	6	60	11818
	SB-5M-DC	C175-B1225X06	12	25	6	65	11819
	SB-6M-DC	C175-B1625X06	16	25	6	65	11820
	SC-42M-DC	C175-C0313X03	3	13	3	38	11821
	SC-1M-DC	C175-C0616X06	6	16	6	56	11822
	SC-2M-DC	C175-C0820X06	8	20	6	60	11823
	SC-3M-DC	C175-C1020X06	10	20	6	60	11824
	SC-5M-DC	C175-C1225X06	12	25	6	65	11825
	SC-6M-DC	C175-C1625X06	16	25	6	65	11826
	SD-42M-DC	C175-D0302X03	3	2	3	38	11827
	SD-1M-DC	C175-D0605X06	6	5	6	45	11828
	SD-2M-DC	C175-D0807X06	8	7	6	47	11829
	SD-3M-DC	C175-D1009X06	10	9	6	49	11830
	SD-5M-DC	C175-D1210X06	12	10	6	51	11831
	SD-6M-DC	C175-D1614X06	16	14	6	54	11832
	SE-41M-DC	C175-E0307X03	3	7	3	38	11833
	SE-1M-DC	C175-E0610X06	6	10	6	50	11834
	SE-2M-DC	C175-E0813X06	8	13	6	53	11835
	SE-3M-DC	C175-E1016X06	10	16	6	56	11836
	SE-5M-DC	C175-E1220X06	12	20	6	60	11837
	SE-6M-DC	C175-E1625X06	16	25	6	65	11838
	SF-42M-DC	C175-F0313X03	3	13	3	38	11839
	SF-1M-DC	C175-F0618X06	6	18	6	58	11840
	SF-2M-DC	C175-F0820X06	8	20	6	65	11841
	SF-3M-DC	C175-F1020X06	10	20	6	60	11842
	SF-5M-DC	C175-F1225X06	12	25	6	65	11843
	SF-6M-DC	C175-F1625X06	16	25	6	70	11844
	SG-43M-DC	C175-G0313X03	3	13	3	38	11845
	SG-1M-DC	C175-G0618X06	6	18	6	58	11846
	SG-2M-DC	C175-G0820X06	8	20	6	65	11847
	SG-3M-DC	C175-G1020X06	10	20	6	60	11848
	SG-5M-DC	C175-G1225X06	12	25	6	65	11849
	SG-6M-DC	C175-G1625X06	16	25	6	70	11850

	Tip No	Sip. No.	Çap (mm)	Kes. Boy (mm)	Sap (mm)	Tam Boy (mm)	Sip. No.
	SH-41M-DC	C175-H0307X03	3	7	3	38	11851
	SH-1M-DC	C175-H0618X06	6	18	6	58	11852
	SH-2M-DC	C175-H0820X06	8	20	6	60	11853
	SH-3M-DC	C175-H1025X06	10	25	6	65	11854
	SH-5M-DC	C175-H1232X06	12	32	6	72	11855
	SH-6M-DC	C175-H1636X06	16	36	6	76	11856
	SJ-42M-DC	C175-J0302X03	3	2	3	42	11857
	SJ-1M-DC	C175-J0605X06	6	5	6	48	11858
	SJ-2M-DC	C175-J0807X06	8	7	6	47	11859
	SJ-3M-DC	C175-J1008X06	10	8	6	52	11860
	SJ-5M-DC	C175-J1210X06	12	10	6	54	11861
	SJ-6M-DC	C175-J1613X06	16	13	6	56	11862
	SK-42M-DC	C175-K0301X03	3	1	3	42	11863
	SK-1M-DC	C175-K0603X06	6	3	6	45	11864
	SK-2M-DC	C175-K0804X06	8	4	6	47	11865
	SK-3M-DC	C175-K1005X06	10	5	6	48	11866
	SK-5M-DC	C175-K1206X06	12	6	6	48	11867
	SK-6M-DC	C175-K1608X06	16	8	6	50	11868
	SL-42M-DC	C175-L0313X03	3	13	3	38	11869
	SL-1M-DC	C175-L0616X06	6	16	6	56	11870
	SL-2M-DC	C175-L0822X06	8	22	6	62	11871
	SL-3M-DC	C175-L1025X06	10	25	6	65	11872
	SL-5M-DC	C175-L1228X06	12	28	6	68	11873
	SL-6M-DC	C175-L1633X06	16	33	6	73	11874
	SM-42M-DC	C175-M0311X03	3	11	3	38	11875
	SM-1M-DC	C175-M0618X06	6	18	6	58	11876
	SM-2M-DC	C175-M0820X06	8	20	6	65	11877
	SM-3M-DC	C175-M1020X06	10	20	6	60	11878
	SM-5M-DC	C175-M1225X06	12	25	6	65	11879
	SM-6M-DC	C175-M1625X06	16	25	6	65	11880
	SM-7M-DC	C175-M1925X06	19	25	6	65	11881
	SN-42M-DC	C175-N0307X03	3	7	3	38	11882
	SN-1M-DC	C175-N0607X06	6	7	6	47	11883
	SN-2M-DC	C175-N0807X06	8	7	6	50	11884
	SN-3M-DC	C175-N1010X06	10	10	6	55	11885
	SN-4M-DC	C175-N1213X06	12	13	6	53	11886
	SN-6M-DC	C175-N1613X06	16	13	6	58	11887

TORNA UÇLARI

CCMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CCMT 060204 NN	LT 1000		PVD		T0001888
CCMT 09T304 NN	LT 1000		PVD		T0001889
CCMT 09T308 NN	LT 1000		PVD		T0001890
CCMT 120404 NN	LT 1000		PVD		T0001891
CCMT 120408 NN	LT 1000		PVD		T0001892
CCMT 120412 NN	LT 1000		PVD		T0001893

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CCMT 060204 NN	LT 10		PVD		T0000055
CCMT 09T304 NN	LT 10		PVD		T0000056
CCMT 09T308 NN	LT 10		PVD		T0000117
CCMT 120404 NN	LT 10		PVD		T0001456
CCMT 120408 NN	LT 10		PVD		T0001457
CCMT 120412 NN	LT 10		PVD		T0001776

CNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CNMG 120404 NN	LT 1000		PVD		T0001895
CNMG 120408 NX	LT 1000		PVD		T0002741
	LT 1005		CVD		T0004055
	LT 1025		CVD		T0004113
CNMG 120408 NN	LT 1000		PVD		T0001896
	LT 1005		CVD		T0004054
	LT 1025		CVD		T0004112
CNMG 120408 NM	LT 1000		PVD		T0001968
	LT 1005		CVD		T0004053
	LT 1025		CVD		T0004111
CNMG 120412 NN	LT 1000		PVD		T0001897
	LT 1005		CVD		T0004056
	LT 1025		CVD		T0004114

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CNMG 120404 NN	LT 10		PVD		T0000491
CNMG 120408 NN	LT 10		PVD		T0000059
CNMG 120408 NM	LT 10		PVD		T0001966
CNMG 120412 NN	LT 10		PVD		T0000061

CNMM



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CNMM 120408 NR	LT 1025		PVD		T0004115
CNMM 120412 NR	LT 1000		PVD		T0001899
	LT 1025		CVD		T0004116

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CNMM 120408 NR	LT 10		PVD		T0000669
CNMM 120412 NR	LT 10		PVD		T0000671

TORNA UÇLARI

CNMP



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CNMP 120408 NN	LT 1000	●	○		PVD		T0001900
	LT 1025	●	○		CVD		T0004117
CNMP 120412 NN	LT 1000	●	○		PVD		T0001901
	LT 1025	●	○		CVD		T0004118

CPMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
CPMT 060204 NN	LT 1000	●	○		PVD		T0003088
CPMT 060208 NN	LT 1000	●	○		PVD		T0003144
CPMT 09T304 NN	LT 1000	●	○		PVD		T0003145
CPMT 09T308 NN	LT 1000	●	○		PVD		T0003146

DCMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DCMT 070204 NN	LT 1000	●	○		PVD		T0001902
DCMT 11T304 NN	LT 1000	●	○		PVD		T0001903
DCMT 11T308 NN	LT 1000	●	○		PVD		T0001904

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DCMT 070204 NN	LT 10	●	◐		PVD		T0000064
DCMT 11T304 NN	LT 10	●	◐		PVD		T0000065
DCMT 11T308 NN	LT 10	●	◐		PVD		T0000721

DNMA



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DNMA 150608	LT 1005	●	●		CVD		T0003241
DNMA 150612	LT 1005	●	●		CVD		T0003242

DNUX



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DNUX 150608 R11	LT 1000	●	◐		PVD		T0002793

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DNUX 150608 R11	LT 10	●	◐		PVD		T0002157

KNUX



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
KNUX 160405 L	LT 10	●	◐		PVD		T0003884
KNUX 160405 R	LT 10	●	◐		PVD		T0000951

TORNA UÇLARI

DNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DNMG 110404 NN	LT 1000		PVD		T0001905
DNMG 110408 NN	LT 1000		PVD		T0001906
	LT 1005		CVD		T0004059
	LT 1025		CVD		T0004119
DNMG 150404 NN	LT 1000		PVD		T0001907
DNMG 150408 NX	LT 1000		PVD		T0003097
	LT 1005		CVD		T0004062
	LT 1025		CVD		T0004122
DNMG 150408 NN	LT 1000		PVD		T0001908
	LT 1005		CVD		T0004061
	LT 1025		CVD		T0004121
DNMG 150412 NN	LT 1000		PVD		T0001909
	LT 1005		CVD		T0004064
	LT 1025		CVD		T0004124
DNMG 150604 NN	LT 1000		PVD		T0001910
DNMG 150608 NX	LT 1000		PVD		T0003220
	LT 1005		CVD		T0004063
	LT 1025		CVD		T0004123
DNMG 150608 NN	LT 1000		PVD		T0001911
	LT 1005		CVD		T0004067
	LT 1025		CVD		T0004126
DNMG 150612 NN	LT 1000		PVD		T0001912
	LT 1005		CVD		T0004068
	LT 1025		CVD		T0004127

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
DNMG 110404 NN	LT 10		PVD		T0000066
DNMG 110408 NN	LT 10		PVD		T0000675
DNMG 150404 NN	LT 10		PVD		T0000476
DNMG 150408 NN	LT 10		PVD		T0000475
DNMG 150412 NN	LT 10		PVD		T0001021
DNMG 150604 NN	LT 10		PVD		T0000583
DNMG 150608 NN	LT 10		PVD		T0000067
DNMG 150612 NN	LT 10		PVD		T0000672

RCMT



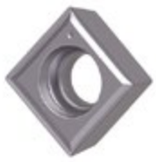
MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
RCMT 0602 M0	LT 1000		PVD		T0001914
RCMT 0803 M0	LT 1000		PVD		T0001915
RCMT 10T3 M0	LT 1000		PVD		T0001916
RCMT 1204 M0	LT 1000		PVD		T0001917

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
RCMT 0602 M0	LT 10		PVD		T0000090
RCMT 0803 M0	LT 10		PVD		T0000091
RCMT 10T3 M0	LT 10		PVD		T0000092
RCMT 1204 M0	LT 10		PVD		T0000093

SCMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
SCMT 09T304 NN	LT 1000		PVD		T0001918
SCMT 09T308 NN	LT 1000		PVD		T0001919

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
SCMT 09T304 NN	LT 10		PVD		T0001459
SCMT 09T308 NN	LT 10		PVD		T0001458

TORNA UÇLARI

SNMA



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
SNMA 120408	LT 1005	●	CVD		T0003239
SNMA 120412	LT 1005	●	CVD		T0003240

SNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
SNMG 120408 NX	LT 1000	◐	PVD		T0003011
	LT 1005	○	CVD		T0004077
	LT 1025	●	CVD		T0004134
SNMG 120408 NN	LT 1000	◐	PVD		T0001921
	LT 1005	○	CVD		T0004076
	LT 1025	●	CVD		T0004133
SNMG 120412 NN	LT 1000	◐	PVD		T0001922
	LT 1005	○	CVD		T0004078
	LT 1025	●	CVD		T0004136

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
SNMG 120408 NN	LT 10	◐	PVD		T0000322
SNMG 120412 NN	LT 10	◐	PVD		T0000323

TCMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TCMT 110204 NN	LT 1000	◐	PVD		T0001924
TCMT 110208 NN	LT 1000	◐	PVD		T0001925
TCMT 16T304 NN	LT 1000	◐	PVD		T0001927
TCMT 16T308 NN	LT 1000	◐	PVD		T0001928
TCMT 16T312 NN	LT 1000	◐	PVD		T0001929

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TCMT 110204 NN	LT 10	◐	PVD		T0000477
TCMT 110208 NN	LT 10	◐	PVD		T0000478
TCMT 16T304 NN	LT 10	◐	PVD		T0000479
TCMT 16T308 NN	LT 10	◐	PVD		T0000068
TCMT 16T312 NN	LT 10	◐	PVD		T0001774

TNMA



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNMA 160408	LT 1005	●	CVD		T0002837
TNMA 160412	LT 1005	●	CVD		T0003238

TNMP



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNMP 160408 NN	LT 1000	○	PVD		T0001937
	LT 1025	○	CVD		T0004145

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNMP 160408 NN	LT 10	○	PVD		T0000492

TORNA UÇLARI

TNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNMG 160404 NN	LT 1000		PVD		T0001931
TNMG 160408 NX	LT 1000		PVD		T0003012
	LT 1005		CVD		T0004083
	LT 1025		CVD		T0004139
TNMG 160408 NN	LT 1000		PVD		T0001932
	LT 1005		CVD		T0004082
	LT 1025		CVD		T0004138
TNMG 160412 NN	LT 1000		PVD		T0001933
	LT 1005		CVD		T0004084
	LT 1025		CVD		T0004140
TNMG 220404 NN	LT 1000		PVD		T0001934
TNMG 220408 NX	LT 1000		PVD		T0003013
	LT 1005		CVD		T0004087
	LT 1025		CVD		T0004143
TNMG 220408 NN	LT 1000		PVD		T0001935
	LT 1005		CVD		T0004086
	LT 1025		CVD		T0004142
TNMG 220412 NN	LT 1000		PVD		T0001936
	LT 1005		CVD		T0004088
	LT 1025		CVD		T0004144

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNMG 160404 NN	LT 10		PVD		T0000457
TNMG 160408 NN	LT 10		PVD		T0000069
TNMG 160412 NN	LT 10		PVD		T0001734
TNMG 220404 NN	LT 10		PVD		T0001873
TNMG 220408 NN	LT 10		PVD		T0000113
TNMG 220412 NN	LT 10		PVD		T0001735

TNUX



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNUX 160404 L	LT 1000		PVD		T0002794
TNUX 160404 R	LT 1000		PVD		T0001938
TNUX 160408 L	LT 1000		PVD		T0002795
TNUX 160408 R	LT 1000		PVD		T0001939

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TNUX 160404 L	LT 10		PVD		T0001877
TNUX 160404 R	LT 10		PVD		T0001125
TNUX 160408 L	LT 10		PVD		T0003385
TNUX 160408 R	LT 10		PVD		T0001137

TPMR



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
TPMR 160304 NN	LT 10		PVD		T0001638
TPMR 160308 NN	LT 10		PVD		T0001535

TORNA UÇLARI

WNMP



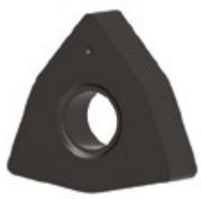
MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
WNMP 060404 NN	LT 1000	●	PVD		T0001954
WNMP 060408 NN	LT 1000	●	PVD		T0001955
WNMP 080408 NN	LT 1000	●	PVD		T0001956
	LT 1005	●	CVD		T0004106
	LT 1025	●	CVD		T0004157

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
WNMP 060404 NN	LT 10	●	PVD		T0000306
WNMP 060408 NN	LT 10	●	PVD		T0000307
WNMP 080408 NN	LT 10	●	PVD		T0000308

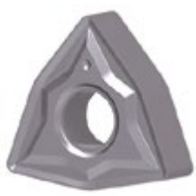
WNMA



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
WNMA 080408	LT 1005	●	CVD		T0002840
WNMA 080412	LT 1005	●	CVD		T0002841

WNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
WNMG 060404 NN	LT 1000	◐	PVD		T0001949
WNMG 060408 NX	LT 1000	◐	PVD		T0003014
	LT 1005	○	CVD		T0004100
	LT 1025	●	CVD		T0004151
WNMG 060408 NN	LT 1000	◐	PVD		T0001950
	LT 1005	○	CVD		T0004099
	LT 1025	●	CVD		T0004150
WNMG 080404 NN	LT 1000	◐	PVD		T0001951
WNMG 080408 NX	LT 1000	◐	PVD		T0002742
	LT 1005	○	CVD		T0004104
	LT 1025	●	CVD		T0004155
WNMG 080408 NN	LT 1000	◐	PVD		T0001952
	LT 1005	○	CVD		T0004103
	LT 1025	●	CVD		T0004154
WNMG 080408 NM	LT 1000	◐	PVD		T0001969
	LT 1005	○	CVD		T0004102
	LT 1025	●	CVD		T0004153
WNMG 080412 NN	LT 1000	◐	PVD		T0001953
	LT 1005	○	CVD		T0004105
	LT 1025	●	CVD		T0004156

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
WNMG 060404 NN	LT 10	◐	PVD		T0000133
WNMG 060408 NN	LT 10	◐	PVD		T0000137
WNMG 080404 NN	LT 10	◐	PVD		T0000584
WNMG 080408 NN	LT 10	◐	PVD		T0000075
WNMG 080408 NM	LT 10	◐	PVD		T0001967
WNMG 080412 NN	LT 10	◐	PVD		T0000077

TORNA UÇLARI

VBMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VBMT 110304 NN	LT 1000	●	◐		PVD		T0001942
VBMT 160404 NN	LT 1000	●	◐		PVD		T0001943
VBMT 160408 NN	LT 1000	●	◐		PVD		T0001944

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VBMT 110304 NN	LT 10	●	◐		PVD		T0001460
VBMT 160404 NN	LT 10	●	◐		PVD		T0000070
VBMT 160408 NN	LT 10	●	◐		PVD		T0000071

VCMT



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VCMT 160404 NN	LT 1000	●	◐		PVD		T0001945
VCMT 160408 NN	LT 1000	●	◐		PVD		T0001946

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VCMT 160404 NN	LT 10	●	◐		PVD		T0001102
VCMT 160408 NN	LT 10	●	◐		PVD		T0001103

VNMG



MAGIA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VNMG 160404 NN	LT 1000	●	◐		PVD		T0001947
VNMG 160408 NN	LT 1000	●	◐		PVD		T0001948
	LT 1005	●	○		CVD		T0004095
	LT 1025	●	●		CVD		T0004149

ALPHA

Ürün Tanımı	Kalite	Kesme Hızı	PVD/CVD	Önerilen Malzemeler	Sip. No.
VNMG 160404 NN	LT 10	●	◐		PVD		T0000072
VNMG 160408 NN	LT 10	●	◐		PVD		T0000073

ALÜMİNYUM TORNA UÇLARI

CCGT



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
CCGT 060204 ALU	LT 05	■	T0004162
CCGT 09T304 ALU	LT 05		T0004163

CNGG



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
CNGG 09T304 ALU	LT 05		T0003298
CNGG 120404 ALU	LT 05	■	T0001025
CNGG 120408 ALU	LT 05		T0001019

DCGT



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
DCGT 11T304 ALU	LT 05	■	T0004164

DNGG



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
DNGG 110404 ALU	LT 05	■	T0001026
DNGG 110408 ALU	LT 05		T0001010

TNGG



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
TNGG 160404 ALU	LT 05	■	T0001105

VNGG



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
VNGG 160404 ALU	LT 05	■	T0001006
VNGG 160408 ALU	LT 05		T0001032

WNGG



Ürün Tanımı	Kalite	Önerilen Malzemeler	Sip. No.
WNGG 060404 ALU	LT 05	■	T0003299
WNGG 080404 ALU	LT 05		T0003300

KESME VE KANAL AÇMA UÇLARI

GCTX



MAGIA

Ürün Tanımı	Kalite	W	R	Önerilen Malzemeler	Sip. No.
GCTX 2002 NN	LT 1000	2.00	0.18		T0002825
GCTX 3003 NN	LT 1000	3.00	0.25		T0002826
GCTX 3003 PP	LT 1000	3.00	0.25		T0002828

MGMN



ALPHA

Ürün Tanımı	Kalite	W	R	Önerilen Malzemeler	Sip. No.
MGMN 200 G	LT 10	2.00	0.2		T0003909
MGMN 300 M	LT 10	3.00	0.4		T0003910
MGMN 400 M	LT 10	4.00	0.4		T0003911
MGMN 500 M	LT 10	5.00	0.8		T0003921

WGE

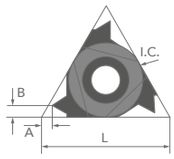


ALPHA

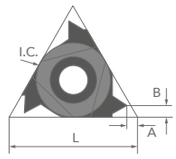
Ürün Tanımı	Kalite	W	R	Önerilen Malzemeler	Sip. No.
WGE 2000	LT 10	2.00	0.2		T0003932
WGE 3000	LT 10	3.00	0.4		T0003933
WGE 4000	LT 10	4.00	0.4		T0003934
WGE 5000	LT 10	5.00	0.8		T0003935

DİŞ ÇEKME UÇLARI

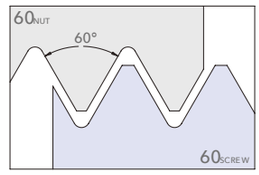
PARTIAL PROFILE 60°



DIŞ SAĞ

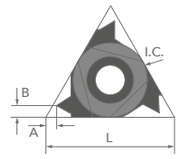


İÇ SOL

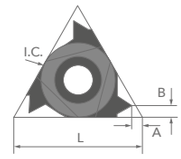


		VİDA ADIMI		ÖLÇÜLER				
Ürün Tanımı	Kalite	mm	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ								
A60 ER16	LT 10	0.5-1.5	48-16	16	9.5	0.8	0.9	TH000004
G60 ER16	LT 10	1.75-3.0	14-8	16	9.5	1.2	1.7	TH000010
AG60 ER16	LT 10	0.5-3.0	48-8	16	9.5	1.2	1.7	TH000016
N60 ER 22	LT 10	3.5-5.0	7-5	22	12.7	1.7	2.5	TH000116
İÇ								
A60 IR11	LT 10	0.5-1.5	48-16	11	6.3	0.8	0.9	TH000001
A60 IR16	LT 10	0.5-1.5	48-16	16	9.5	0.8	0.9	TH000007
G60 IR16	LT 10	1.75-3.0	14-8	16	9.5	1.2	1.7	TH000013
AG60 IR16	LT 10	0.5-3.0	48-8	16	9.5	1.2	1.7	TH000019
N60 IR 22	LT 10	3.5-5.0	7-5	22	12.7	1.7	2.5	TH000119

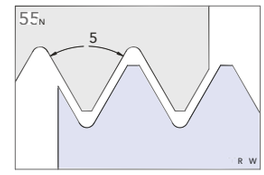
PARTIAL PROFILE 55°



DIŞ SAĞ

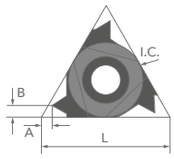


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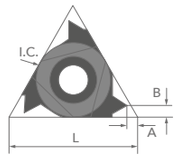


		VİDA ADIMI		ÖLÇÜLER				
Ürün Tanımı	Kalite	mm	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ								
AG55 ER16	LT 10	0.5-3.0	48-8	16	9.5	1.2	1.7	TH000022
N55 ER22	LT 10	3.5-5.0	7-5	22	12.7	1.7	2.5	TH000120
İÇ								
AG55 IR16	LT 10	0.5-3.0	48-8	16	9.5	1.2	1.7	TH000025
N55 IR22	LT 10	3.5-5.0	7-5	22	12.7	1.7	2.5	TH000121

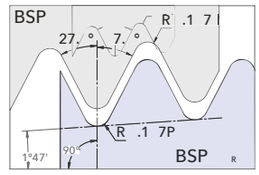
NPT



DIŞ SAĞ



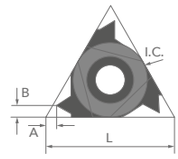
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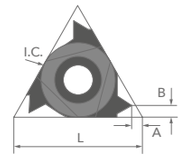
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	ÖLÇÜLER						
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
NPT 8 ER16	LT 10	8	16	9.525	1.3	1.8	TH000145
NPT 11.5 ER16	LT 10	11.5	16	9.525	1.1	1.5	TH000144
NPT 14 ER16	LT 10	14	16	9.525	0.9	1.2	TH000143
NPT 18 ER16	LT 10	18	16	9.525	0.8	1.0	TH000142
İÇ							
NPT 8 IR16	LT 10	8	16	9.525	1.3	1.8	TH000148
NPT 11.5 IR16	LT 10	11.5	16	9.525	1.1	1.5	TH000147
NPT 14 IR16	LT 10	14	16	9.525	0.9	1.2	TH000146

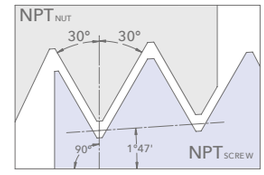
BSPT



DIŞ SAĞ



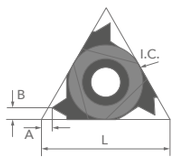
İÇ SOL



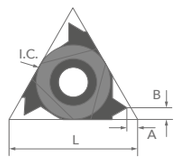
ANSI/ASME B 1.20.1-1983

	ÖLÇÜLER						
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
BSPT11 ER16	LT 10	11	16	9.525	1.1	1.5	TH000138
BSPT14 ER16	LT 10	14	16	9.525	1.0	1.2	TH000137
BSPT19 ER16	LT 10	19	16	9.525	0.8	0.9	TH000136
İÇ							
BSPT11 IR16	LT 10	11	16	9.525	1.1	1.5	TH000141
BSPT14 IR16	LT 10	14	16	9.525	1.0	1.2	TH000140
BSPT19 IR16	LT 10	19	16	9.525	0.8	0.9	TH000139

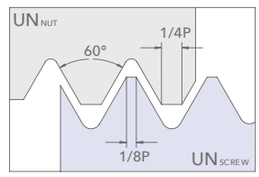
TRAPEZ



DIŞ SAĞ



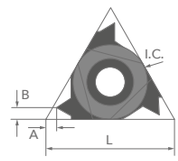
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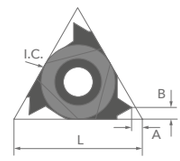
ANSI B1.1-1982

	ÖLÇÜLER						
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
TR 3.0 ER16	LT 10	3.00	16	9.525	1.3	1.5	TH000149
TR 4.0 ER22	LT 10	4.00	22	12.70	1.7	1.9	TH000150
İÇ							
TR 3.0 IR16	LT 10	3.00	16	9.525	1.3	1.5	TH000151
TR 4.0 IR22	LT 10	4.00	22	12.70	1.7	1.9	TH000152

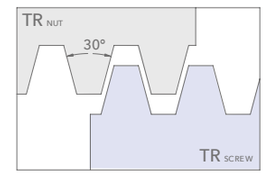
UN



DIŞ SAĞ



İÇ SOL

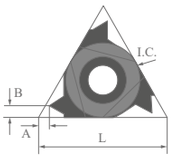


DIN 103:1977
ISO 2901:1993

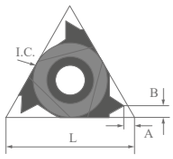
	ÖLÇÜLER						
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
UN12ER16	LT 10	20	16	9.525	0.8	0.9	TH000088
UN16ER16	LT 10	16	16	9.525	0.9	1.1	TH000082
UN 20 ER16	LT 10	12	16	9.525	1.1	1.4	TH000076
İÇ							
UN 12 IR16	LT 10	20	16	9.525	0.8	0.9	TH000091
UN 16 IR16	LT 10	16	16	9.525	0.9	1.1	TH000085
UN 20 IR16	LT 10	12	16	9.525	1.1	1.4	TH000079

DİŞ ÇEKME UÇLARI

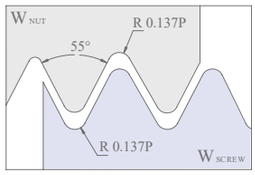
WHITWORTH



DIŞ SAĞ



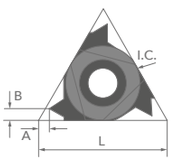
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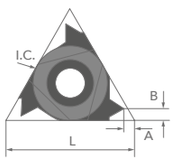
B.S.84: 1956
ISO228-1: 1994

			ÖLÇÜLER				
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
W 11 ER16	LT 10	11	16	9.525	1.1	1.5	TH000100
W 14 ER16	LT 10	14	16	9.525	1.0	1.2	TH000094
W 19 ER16	LT 10	19	16	9.525	0.8	1.0	TH000134
İÇ							
W 11 IR16	LT 10	11	16	9.525	1.1	1.5	TH000103
W 14 IR16	LT 10	14	16	9.525	1.0	1.2	TH000097
W 19 IR16	LT 10	19	16	9.525	0.8	1.0	TH000135

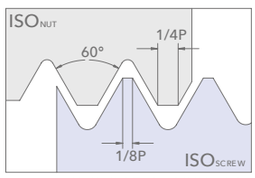
ISO



DIŞ SAĞ



İÇ SOL



ISO 965-1: 1999-11
DIN13: 2005-08

			ÖLÇÜLER				
Ürün Tanımı	Kalite	TPI	L mm	I.C.	A	B	Sip. No.
DIŞ							
ISO 0.5 ER16	LT 10	0.5	16	9.525	0.6	0.4	TH000122
ISO 0.6 ER16	LT 10	0.6	16	9.525	0.6	0.6	TH000123
ISO 0.7 ER16	LT 10	0.7	16	9.525	0.6	0.6	TH000124
ISO 0.75 ER16	LT 10	0.75	16	9.525	0.6	0.6	TH000125
ISO 0.8 ER16	LT 10	0.8	16	9.525	0.6	0.6	TH000036
ISO 1.0 ER16	LT 10	1.0	16	9.525	0.7	0.7	TH000037
ISO 1.25 ER16	LT 10	1.25	16	9.525	0.8	0.9	TH000043
ISO 1.5 ER16	LT 10	1.5	16	9.525	0.8	1.0	TH000049
ISO 1.75 ER16	LT 10	1.75	16	9.525	0.9	1.2	TH000055
ISO 2.0 ER16	LT 10	2.0	16	9.525	1.0	1.3	TH000058
ISO 2.5 ER16	LT 10	2.5	16	9.525	1.1	1.5	TH000064
ISO 3.0 ER16	LT 10	3.0	16	9.525	1.2	1.3	TH000070
ISO 3.5 ER22	LT 10	3.5	22	12.70	1.6	1.5	TH000126
ISO 4.0 ER22	LT 10	4.0	22	12.70	1.6	1.5	TH000127
İÇ							
ISO 1.0 IR11	LT 10	1.0	11	6.35	0.7	07	TH000028
ISO 1.5 IR11	LT 10	1.5	11	6.35	0.8	1.0	TH000031
ISO 2.0 IR11	LT 10	2.0	11	6.35	0.8	0.9	TH000034
ISO 0.5 IR16	LT 10	0.5	16	9.525	0.6	0.4	TH000128
ISO 0.6 IR16	LT 10	0.6	16	9.525	0.6	0.6	TH000129
ISO 0.7 IR16	LT 10	0.7	16	9.525	0.6	0.6	TH000130
ISO 0.75 IR16	LT 10	0.75	16	9.525	0.6	0.6	TH000131
ISO 0.8 IR16	LT 10	0.8	16	9.525	0.6	0.6	TH000132
ISO 1.0 IR16	LT 10	1.0	16	9.525	0.7	07	TH000040
ISO 1.25 IR16	LT 10	1.25	16	9.525	0.8	0.9	TH000046
ISO 1.5 IR16	LT 10	1.5	16	9.525	0.8	1.8	TH000052
ISO 1.75 IR16	LT 10	1.75	16	9.525	0.9	1.2	TH000056
ISO 2.0 IR16	LT 10	2.0	16	9.525	1.0	1.3	TH000061
ISO 2.5 IR16	LT 10	2.5	16	9.525	1.1	1.5	TH000067
ISO 3.0 IR16	LT 10	3.0	16	9.525	1.2	1.5	TH000073
ISO 4.0 IR22	LT 10	4.0	22	12.70	1.6	2.3	TH000133

FREZELEME UÇLARI

SEKT



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKT 1204 AFTN	LT 3130	-	4	LT 600		M0004486
SEKT 12T3 AGSN	LT 3130	-	4	LT 610		M0004487

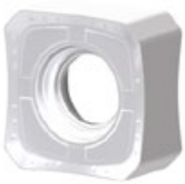
MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKT 1204 AFTN	LT 3000	-	4	LT 600		M0002230
SEKT 12T3 AGSN	LT 3000	-	4	LT 610		M0002231

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKT 1204 AFTN	LT 30	-	4	LT 600		M00000045
SEKT 12T3 AGSN	LT 30	-	4	LT 610		M00000455

SNKX-45



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SNKX 1205-45	LT 3130	-	8	LT 946		M0004490
SNKX 1607-45	LT 3130	-	8	LT 947		M0004491

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SNKX 1205-45	LT 3000	-	8	LT 946		M0003415
SNKX 1607-45	LT 3000	-	8	LT 947		M0002237

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SNKX 1205-45	LT 30	-	8	LT 946		M0003221
SNKX 1607-45	LT 30	-	8	LT 947		M0002205

HNKX-45



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
HNKX 0604-45*	LT 3130	-	12	LT 645		M0004473

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
HNKX 0604-45*	LT 3000	-	12	LT 645		M0004364

ONKX



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ONKX 0806-45	LT 3130	0.8	16	LT 987		M0004475

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ONKX 0806-45	LT 3000	0.8	16	LT 987		M0002211

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ONKX 0806-45	LT 30	0.8	16	LT 987		M0003673

FREZELEME UÇLARI

SDKT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKT 1204 AETN	LT 3000	-	4	LT 670		M0003411

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKT 1204 AETN	LT 30	-	4	LT 670		M0000171

SPUN



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPUN 120308	LT 3000	0.80	4	LT 750		M0004039

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPUN 120308	LT 30	0.80	4	LT 750		M0000050

SEKN



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKN 1203 AFTN	LT 3000	-	4	LT 550		M0004031
SEKN 1204 AFTN	LT 3000	-	4	-		M0004032
SEKN 1504 AFTN	LT 3000	-	4	-		M0004033

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKN 1203 AFTN	LT 30	-	4	LT 550		M0000041
SEKN 1204 AFTN	LT 30	-	4	-		M0000042
SEKN 1504 AFTN	LT 30	-	4	-		M0000450

SEKR



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKR 1203 AFTN	LT 3000	-	4	LT 550		M0004034
SEKR 1204 AFTN	LT 3000	-	4	-		M0004035

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEKR 1203 AFTN	LT 30	-	4	LT 550		M0000043
SEKR 1204 AFTN	LT 30	-	4	-		M0000044

SPKN



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPKN 1203 EDTR	LT 3000	-	4	LT 750		M0004036
SPKN 1204 EDTR	LT 3000	-	4	-		M0004181
SPKN 1504 EDTR	LT 3000	-	4	-		M0004037

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPKN 1203 EDTR	LT 30	-	4	LT 750		M0000046
SPKN 1204 EDTR	LT 30	-	4	-		M0000047
SPKN 1504 EDTR	LT 30	-	4	-		M0001673

FREZELEME UÇLARI

SPKR



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPKR 1203 EDTR	LT 3000	-	4	LT 750		M0004038
SPKR 1204 EDTR	LT 3000	-	4	-		M0004182

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPKR 1203 EDTR	LT 30	-	4	LT 750		M0000048
SPKR 1204 EDTR	LT 30	-	4	-		M0000049

ODMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ODMT 0504 ZZTR	LT 3000	0.80	8	-		M0003399
ODMT 060508 TN	LT 3000	0.80	8	LT 820		M0002219

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ODMT 0504 ZZTR	LT 30	0.80	8	-		M0000664
ODMT 060508 TN	LT 30	0.80	8	LT 820		M0001104

ODMW



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ODMW 060508 TN	LT 3000	0.80	8	LT 820		M0003400

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ODMW 060508 TN	LT 30	0.80	8	LT 820		M0000451

OFMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
OFMT 050405 TR	LT 3000	0.8	8	LT 805		M0002220
OFMT 05T305 TN	LT 3000	0.5	8	LT 800		M0002221
OFMT 070405 TN	LT 3000	0.5	8	-		M0002222

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
OFMT 050405 TR	LT 30	0.8	8	LT 805		M0000034
OFMT 05T305 TN	LT 30	0.5	8	LT 800		M0000591
OFMT 070405 TN	LT 30	0.5	8	-		M0000592

OFER



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
OFER 070405 TN	LT 3000	0.80	8	LT 880		M0003401

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
OFER 070405 TN	LT 30	0.80	8	LT 880		M0000033

FREZELEME UÇLARI

APKT



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APKT 060204 PDTR	LT 3130	0.40	2	LT 752		M0004468
APKT 100308 PDTR	LT 3130	0.80	2	LT 741		M0004470
APKT 160408 PDTR	LT 3130	0.80	2	LT 731		M0004471

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APKT 060204 PDTR	LT 3000	0.40	2	LT 752		M0004026
APKT 100304 PDTR	LT 3000	0.40	2	LT 741		M0003389
APKT 100308 PDTR	LT 3000	0.80	2	LT 741		M0003388
APKT 100312 PDTR	LT 3000	1.20	2	LT 741		M0003391
APKT 100316 PDTR	LT 3000	1.60	2	LT 741		M0003392
APKT 100332 PDTR	LT 3000	3.20	2	LT 745		M0003394
APKT 100340 PDTR	LT 3000	4.00	2	LT 745		M0003395
APKT 160408 PDTR	LT 3000	0.80	2	LT 731		M0002182
APKT 160416 PDTR	LT 3000	1.60	2	LT 731		M0004027
APKT 160424 PDTR	LT 3000	2.40	2	LT 731		M0004029
APKT 160432 PDTR	LT 3000	3.20	2	LT 737		M0004030
APKT 1705 PETR	LT 3000	0.80	2	LT 737		M0002212

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APKT 100304 PDTR	LT 30	0.40	2	LT 741		M0002920
APKT 100308 PDTR	LT 30	0.80	2	LT 741		M0002918
APKT 100312 PDTR	LT 30	1.20	2	LT 741		M0002921
APKT 100316 PDTR	LT 30	1.60	2	LT 741		M0003094
APKT 100332 PDTR	LT 30	3.20	2	LT 745		M0002922
APKT 100340 PDTR	LT 30	4.00	2	LT 745		M0002923
APKT 1604 PDTR	LT 30	0.95	2	-		M0000021
APKT 160408 PDTR	LT 30	0.80	2	LT 731		M0000022
APKT 160416 PDTR	LT 30	1.60	2	LT 731		M0000172
APKT 160424 PDTR	LT 30	2.40	2	LT 731		M0003833
APKT 160432 PDTR	LT 30	3.20	2	LT 737		M0001569
APKT 1705 PETR	LT 30	0.80	2	LT 737		M0001810

ADKT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ADKT 1505 PDTR	LT 3000	0.96	2	LT 790		M0002209

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
ADKT 1505 PDTR	LT 30	0.96	2	LT 790		M0001573

AOMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
AOMT 123608 PETR	LT 3000	0.70	2	LT 720		M0002210

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
AOMT 123608 PETR	LT 30	0.70	2	LT 720		M0001640

FREZELEME UÇLARI

APMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APMT 0903 PDTR	LT 3000	0.40	2	-		M0004161
APMT 1135 PDTR	LT 3000	0.70	2	LT 755		M0002216
APMT 1604 PDTR	LT 3000	0.66	2	LT 760		M0002183
APMT 160408 PDTR	LT 3000	0.70	2	LT 760		M0002218

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APMT 0903 PDTR	LT 30	0.40	2	-		M0000663
APMT 1135 PDTR	LT 30	0.70	2	LT 755		M0001133
APMT 1604 PDTR	LT 30	0.66	2	LT 760		M0001134
APMT 160408 PDTR	LT 30	0.70	2	LT 760		M0001733

TPKN



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPKN 1603 PDTR	LT 3000	1.2	3	LT 310		M0004040
TPKN 2204 PDTR	LT 3000	1.2	3	LT 320		M0004041

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPKN 1603 PDTR	LT 30	1.2	3	LT 310		M0000051
TPKN 2204 PDTR	LT 30	1.2	3	LT 320		M0000052

TPKR



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPKR 1603 PDTR	LT 3000	1.20	3	LT 310		M0004042
TPKR 2204 PDTR	LT 3000	1.20	3	LT 320		M0004043

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPKR 1603 PDTR	LT 30	1.20	3	LT 310		M0000053
TPKR 2204 PDTR	LT 30	1.20	3	LT 320		M0000983

TPUN



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPUN 160308	LT 3000	0.80	3	LT 310		M0004044

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
TPUN 160308	LT 30	0.80	3	LT 310		M0000054

LDMT



ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
LDMT 1504 PDSR	LT 30	0.74	2	LT 770		M0001772

SPMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPMT 12T308	LT 3000	0.80	4	-		M0003420

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPMT 12T308	LT 30	0.80	4	-		M0001226

FREZELEME UÇLARI

XPKT - HIGH FEED



MAGIA PRO

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
XPKT 0602-HF	LT 3130	1.20	2	LT 752		M0005548

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
XPKT 0602-HF	LT 3000	1.20	2	LT 752		M0005549

XPKW - HIGH FEED



MAGIA PRO

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
XPKW 0602-HF	LT 3130	1.20*	2	LT 752		M0005544

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
XPKW 0602-HF	LT 3000	1.20	2	LT 752		M0005545

SDKW - HIGH FEED



MAGIA PRO

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKW 0904-HF	LT 3130	2.0	4	LT 902		M0004482
SDKW 1205-HF	LT 3130	2.5	4	LT 903		M0004483

MAGIA

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKW 0904-HF	LT 3000	2.0	4	LT 902		M0004263
SDKW 1205-HF	LT 3000	2.5	4	LT 903		M0004224

SDKX - HIGH FEED



MAGIA PRO

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKX 0904-HF	LT 3130	2.0	4	LT 902		M0004484
SDKX 1205-HF	LT 3130	2.5	4	LT 903		M0004485

MAGIA

Ürün Tanımı	Kalite	R PROG	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SDKX 0904-HF	LT 3000	2.0	4	LT 902		M0003412
SDKX 1205-HF	LT 3000	2.5	4	LT 903		M0003413

RDMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMT 0602 M0	LT 3000	-	-	LT 060		M0003403
RDMT 0702 M0	LT 3000	-	-	LT 070		M0003404
RDMT 0803 M0	LT 3000	-	-	LT 080		M0003405
RDMT 1003 M0	LT 3000	-	-	-		M0002224
RDMT 10T3 M0	LT 3000	-	-	LT 100		M0002225
RDMT 1204 M0	LT 3000	-	-	LT 120		M0002226
RDMT 12T3 M0	LT 3000	-	-	-		M0002227
RDMT 1604 M0	LT 3000	-	-	LT 160		M0003407

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMT 0602 M0	LT 30	-	-	LT 060		M0000035
RDMT 0702 M0	LT 30	-	-	LT 070		M0001882
RDMT 0803 M0	LT 30	-	-	LT 080		M0000037
RDMT 1003 M0	LT 30	-	-	-		M0001875
RDMT 10T3 M0	LT 30	-	-	LT 100		M0000038
RDMT 1204 M0	LT 30	-	-	LT 120		M0000039
RDMT 12T3 M0	LT 30	-	-	-		M0001876
RDMT 1604 M0	LT 30	-	-	LT 160		M0001881

FREZELEME UÇLARI

RDMW



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMW 1003 M0	LT 3000	-	-	-		M0004424
RDMW 10T3 M0	LT 3000	-	-	LT 100		M0002228
RDMW 1204 M0	LT 3000	-	-	LT 120		M0003408
RDMW 12T3 M0	LT 3000	-	-	-		M0004425

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMW 1003 M0	LT 30	-	-	-		M0004452
RDMW 10T3 M0	LT 30	-	-	LT 100		M0001550
RDMW 1204 M0	LT 30	-	-	LT 120		M0001551
RDMW 12T3 M0	LT 30	-	-	-		M0004453

RDMX



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMX 1003 M0	LT 3000	-	-	-		M0004426
RDMX 10T3 M0	LT 3000	-	-	LT 100		M0003409
RDMX 1204 M0	LT 3000	-	-	LT 120		M0003410
RDMX 12T3 M0	LT 3000	-	-	-		M0004427

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RDMX 1003 M0	LT 30	-	-	-		M0004454
RDMX 10T3 M0	LT 30	-	-	LT 100		M0001552
RDMX 1204 M0	LT 30	-	-	LT 120		M0001553
RDMX 12T3 M0	LT 30	-	-	-		M0004455

RXMT



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMT 10T3 M0	LT 3130	-	4	LT 101		M0004476
RXMT 1204 M0	LT 3130	-	4	LT 121		M0004477

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMT 10T3 M0	LT 3000	-	4	LT 101		M0004171
RXMT 1204 M0	LT 3000	-	4	LT 121		M0004366

RXMW



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMW 10T3 M0	LT 3130	-	4	LT 101		M0004478
RXMW 1204 M0	LT 3130	-	4	LT 121		M0004479

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMW 10T3 M0	LT 3000	-	4	LT 101		M0004371
RXMW 1204 M0	LT 3000	-	4	LT 121		M0004375

RXMX



MAGIA PRO

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMX 10T3 M0	LT 3130	-	4	LT 101		M0004480
RXMX1204 M0	LT 3130	-	4	LT 121		M0004481

MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
RXMX 10T3 M0	LT 3000	-	4	LT 101		M0004373
RXMX1204 M0	LT 3000	-	4	LT 121		M0004377

FREZELEME UÇLARI

SPMT



MAGIA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPMT 060304 TN	LT 3000	0.40	4	LT 400		M0003416
SPMT 09T308 TN	LT 3000	0.80	4	LT 400		M0003417
SPMT 120408 TN	LT 3000	0.80	4	LT 400		M0003419

ALPHA

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SPMT 060304 TN	LT 30	0.40	4	LT 400		M0003100
SPMT 09T308 TN	LT 30	0.80	4	LT 400		M0003063
SPMT 120408 TN	LT 30	0.80	4	LT 400		M0003105

APGT



ALÜMİNYUM

Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
APGT 100304 PDER - ALU	LT 05	0.4	2	LT 741		M0003089
APGT 160408 PDER - ALU	LT 05	0.8	2	LT 731		M0001010

SEGT



ALÜMİNYUM

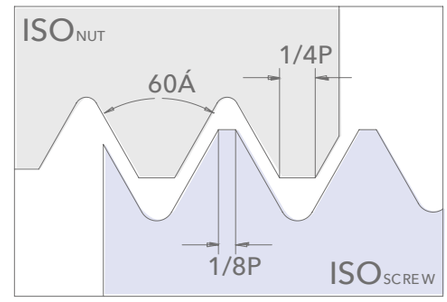
Ürün Tanımı	Kalite	Radüs (mm)	Kenar Sayısı	Cutter Line	Önerilen Malzemeler	Sip. No.
SEGT 1204 AFEN - ALU	LT 05	0.84	4	LT 600		M0001008

DİŞ ÇEKME FREZELERİ

ISO



ISO 965-1:1999-11
DIN13 : 2005-08



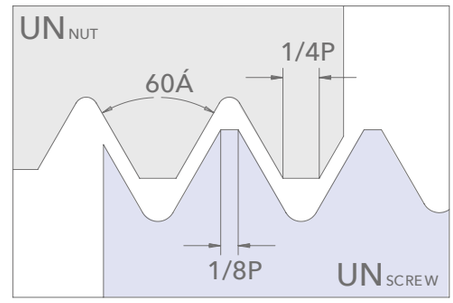
ISO METRIC - INTERNAL MINIATURE TOOL

Ürün Tanımı	Diş Ölçüsü	Hatve	L	L1	D1	D2	Z	Sip. No.
TMC03012L5 0.35 ISO	M1 .6X0.35	0.35	39	5.1	3	1.20	3	TH400001
TMC06015L6 04 ISO	M2.0X040	040	39	6.1	3	1.54	3	TH400019
TMC06019L7 045 ISO	M2.5X045	045	39	7.6	4	1.96	3	TH400016
TMC06024L9 0.5 ISO	M3.0X0.50	0.50	51	9.3	4	240	3	TH400013
TMC06031L 12 0.7 ISO	M4.0X0.70	0.70	51	124	6	3.15	3	TH400004
TMC06040L 15 0.8 ISO	M5.0X0.80	0.80	57	15.6	6	4.00	3	TH400010
TMC06047L191.0 ISO	M6.0X1.00	1.00	57	19.0	6	4.75	3	TH400007
TMC06059L24 1.25 ISO	MS 0X1.25	1.25	57	24.3	6	5.95	3	TH400022
TMC08079L31 1.5 ISO	M10X1.50	1.50	63	31.0	8	7.90	3	TH400025

UN



ANSI B1.1-1982



UN - INTERNAL MINIATURE TOOL

Ürün Tanımı	Diş Ölçüsü		Hatve	L	L1	D1	D2	Z	Sip. No.
	UNC	UNF							
TMC03011L3 80 UN		0-B0UNF	80	39	3.9	3	118	3	TH400052
TMC03014L5 72 UN	-	1-72UNF	72	39	5.8	3	1.44	3	TH400040
TMC03016L6 56 UN	2-56UNC	3-56UNF	56	39	6.8	3	1.66	3	TH400034
TMC06021 LB 40 UN	4-40UNC	-	40	51	8.1	6	2.12	3	TH400028
TMC06024L9 40 UN	5-40UNC	6-40UNF	40	51	9.8	6	2.46	3	TH400055
TMC06025L 10 32 UN	6-32UNC		32	51	10.7	6	2.57	3	TH400031
TMC06032L 12 32 UN	8-32UNC	10-32UNF	32	57	12.7	6	3.22	3	TH400037
TMC06048L 19 20 UN	1/4-20UNC	7/16-20UNF	20	57	19.4	6	4.85	3	TH400046
TMC06052L 19 28 UN	-	1/4-28UNF	28	57	19.3	6	5.20	3	TH400043
TMC08066L24 24 UN	-	5/16-24UNF	24	63	24.2	8	6.65	3	TH400049

U-DRILL (DELME UÇLARI)

SPMG



Ürün Tanımı	Kalite	Önerilen Malzemeler	L	S	R	Direction	Sip. No.
SPMG 050204 NN	LT 30		5.0	2.38	0.40	NEUTRAL	M3003882
SPMG 060204 NN	LT 30		6.0	2.38	0.40	NEUTRAL	M3002913
SPMG 07T308 NN	LT 30		7.94	3.97	0.80	NEUTRAL	M3002914
SPMG 090408 NN	LT 30		9.80	4.30	0.80	NEUTRAL	M3002915
SPMG 110408 NN	LT 30		11.50	4.80	0.80	NEUTRAL	M3003883

WCMX



Ürün Tanımı	Kalite	Önerilen Malzemeler	L	S	R	Direction	Sip. No.
WCMX 040208 NN	LT 30		4.0	2.38	0.8	NEUTRAL	M3001122
WCMX 050308 NN	LT 30		5.0	3.18	0.8	NEUTRAL	M3001121
WCMX 06T308 NN	LT 30		6.0	3.97	0.8	NEUTRAL	M3000953
WCMX 080412 NN	LT 30		8.0	4.76	1.2	NEUTRAL	M3000954

KARBÜR MATKAPLAR

PRO-X GÜNEY KORE

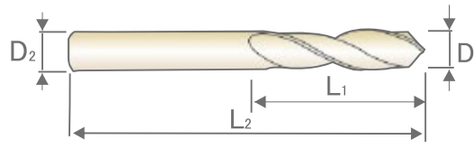
KARBÜR MATKAPLAR (KAPLAMASIZ)

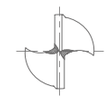
DIN 6539 | MG | N 30° | h6 | h7 | 118°



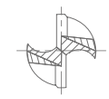
Kullanım Yerleri :

- Çelik, dökme çelik, dökme demir, kır döküm, dövülebilir dökme demir, demir dışı ağır ve hafif metaller, sert plastik.
- İsteğe göre kaplama seçeneği





3 mm altında



3 mm ve üzeri

$D_1=D_2$

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7010	1,0	6	26
PMA-7011	1,1	7	28
PMA-7012	1,2	8	30
PMA-7013	1,3	9	30
PMA-7014	1,4	9	32
PMA-7015	1,5	10	32
PMA-7016	1,6	10	34
PMA-7017	1,7	10	34
PMA-7018	1,8	11	36
PMA-7019	1,9	11	36
PMA-7020	2,0	12	38
PMA-7021	2,1	12	38
PMA-7022	2,2	13	40
PMA-7023	2,3	13	40
PMA-7024	2,4	14	43
PMA-7025	2,5	14	43
PMA-7026	2,6	14	43
PMA-7027	2,7	16	46
PMA-7028	2,8	16	46
PMA-7029	2,9	16	46
PMA-7030	3,0	16	46
PMA-7031	3, 1	18	49
PMA-7032	3,2	18	49
PMA-7033	3,3	18	49
PMA-7034	3,4	20	52
PMA-7035	3,5	20	52
PMA-7036	3,6	20	52
PMA-7037	3,7	20	52
PMA-7038	3,8	20	52
PMA-7039	3,9	22	55
PMA-7040	4,0	22	55
PMA-7041	4,1	22	55
PMA-7042	4,2	22	55
PMA-7043	4,3	24	58
PMA-7044	4,4	24	58
PMA-7045	4,5	24	58
PMA-7046	4,6	24	58
PMA-7047	4,7	24	58
PMA-7048	4,8	26	62
PMA-7049	4,9	26	62
PMA-7050	5,0	26	62
PMA-7051	5,1	26	62
PMA-7052	5,2	26	62
PMA-7053	5,3	26	62
PMA-7054	5,4	28	66
PMA-7055	5,5	28	66
PMA-7056	5,6	28	66
PMA-7057	5,7	28	66

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7058	5,8	28	66
PMA-7059	5,9	28	66
PMA-7060	6,0	28	66
PMA-7061	6,1	31	70
PMA-7062	6,2	31	70
PMA-7063	6,3	31	70
PMA-7064	6,4	31	70
PMA-7065	6,5	31	70
PMA-7066	6,6	31	70
PMA-7067	6,7	31	70
PMA-7068	6,8	34	74
PMA-7069	6,8	34	74
PMA-7070	6,0	34	74
PMA-7071	7,1	34	74
PMA-7072	7,2	34	74
PMA-7073	7,3	34	74
PMA-7074	7,4	34	74
PMA-7075	7,5	34	74
PMA-7076	7,6	37	78
PMA-7077	7,7	37	78
PMA-7078	7,8	37	78
PMA-7079	7,8	37	78
PMA-7080	8,0	37	79
PMA-7081	8,1	37	79
PMA-7082	8,2	37	78
PMA-7084	8,4	37	79
PMA-7085	8,5	37	79
PMA-7086	8,6	40	84
PMA-7087	8,7	40	84
PMA-7088	8,8	40	84
PMA-7089	8,9	40	84
PMA-7090	9,0	40	84
PMA-7091	9,1	40	84
PMA-7092	9,2	40	84
PMA-7093	9,3	40	84
PMA-7094	9,4	40	84
PMA-7095	9,5	40	84
PMA-7096	9,6	43	89
PMA-7097	9,7	43	89
PMA-7098	9,8	43	89
PMA-7099	9,9	43	89
PMA-7100	10,0	43	89
PMA-7102	10,2	43	89
PMA-7105	10,5	43	89
PMA-7110	11	47	95
PMA-7115	11,5	47	95
PMA-7120	12	51	102
PMA-7130	13	51	102

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
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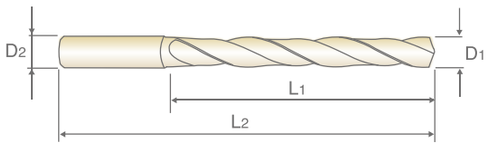
KARBÜR MATKAPLAR

PRO-X GÜNEY KORE

KAPLAMALI KARBÜR MATKAPLAR

DIN 6539 | MG | N 30° | h6 | h7 | 118° | TiAlN







Kullanım Yerleri :

- Çelik, dökme çelik, dökme demir, kır döküm, dövülebilir dökme demir, demir dışı ağır ve hafif metaller, sert plastik.

$D_1=D_2$

Ölçü:mm

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7010C	1,0	6	26
PMA-7011C	1,1	7	28
PMA-7012C	1,2	8	30
PMA-7013C	1,3	9	30
PMA-7014C	1,4	9	32
PMA-7015C	1,5	10	32
PMA-7016C	1,6	10	34
PMA-7017C	1,7	10	34
PMA-7018C	1,8	11	36
PMA-7019C	1,9	11	36
PMA-7020C	2,0	12	38
PMA-7021C	2,1	12	38
PMA-7022C	2,2	13	40
PMA-7023C	2,3	13	40
PMA-7024C	2,4	14	43
PMA-7025C	2,5	14	43
PMA-7026C	2,6	14	43
PMA-7027C	2,7	16	46
PMA-7028C	2,8	16	46
PMA-7029C	2,9	16	46
PMA-7030C	3,0	16	46
PMA-7031C	3,1	18	49
PMA-7032C	3,2	18	49
PMA-7033C	3,3	18	49
PMA-7034C	3,4	20	52

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7035C	3,5	20	52
PMA-7036C	3,6	20	52
PMA-7037C	3,7	20	52
PMA-7038C	3,8	20	52
PMA-7039C	3,9	22	55
PMA-7040C	4,0	22	55
PMA-7041C	4,1	22	55
PMA-7042C	4,2	22	55
PMA-7043C	4,3	24	58
PMA-7044C	4,4	24	58
PMA-7045C	4,5	24	58
PMA-7046C	4,6	24	58
PMA-7047C	4,7	24	58
PMA-7048C	4,8	26	62
PMA-7049C	4,9	26	62
PMA-7050C	5,0	26	62
PMA-7051C	5,1	26	62
PMA-7052C	5,2	26	62
PMA-7053C	5,3	26	62
PMA-7054C	5,4	28	66
PMA-7055C	5,5	28	66
PMA-7056C	5,6	28	66
PMA-7057C	5,7	28	66
PMA-7058C	5,8	28	66
PMA-7059C	5,9	28	66

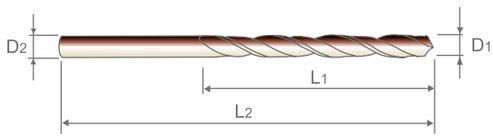
Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7060C	6,0	28	66
PMA-7061C	6,1	31	70
PMA-7062C	6,2	31	70
PMA-7063C	6,3	31	70
PMA-7064C	6,4	31	70
PMA-7065C	6,5	31	70
PMA-7066C	6,6	31	70
PMA-7067C	6,7	31	70
PMA-7068C	6,8	34	74
PMA-7069C	6,8	34	74
PMA-7070C	6,0	34	74
PMA-7071C	7,1	34	74
PMA-7072C	7,2	34	74
PMA-7073C	7,3	34	74
PMA-7074C	7,4	34	74
PMA-7075C	7,5	34	74
PMA-7076C	7,6	37	78
PMA-7077C	7,7	37	78
PMA-7078C	7,8	37	78
PMA-7079C	7,8	37	78
PMA-7080C	8,0	37	79
PMA-7081C	8,1	37	79
PMA-7082C	8,2	37	78
PMA-7083C	8,3	37	78
PMA-7084C	8,4	37	79

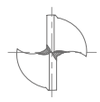
Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-7085C	8,5	37	79
PMA-7086C	8,6	40	84
PMA-7087C	8,7	40	84
PMA-7088C	8,8	40	84
PMA-7089C	8,9	40	84
PMA-7090C	9,0	40	84
PMA-7091C	9,1	40	84
PMA-7092C	9,2	40	84
PMA-7093C	9,3	40	84
PMA-7094C	9,4	40	84
PMA-7095C	9,5	40	84
PMA-7096C	9,6	43	89
PMA-7097C	9,7	43	89
PMA-7098C	9,8	43	89
PMA-7099C	9,9	43	89
PMA-7100C	10,0	43	89
PMA-7102C	10,2	43	89
PMA-7105C	10,5	43	89
PMA-7110C	11	47	95
PMA-7115C	11,5	47	95
PMA-7120C	12	51	102
PMA-7130C	13	51	102

UZUN KARBÜR MATKAPLAR (KAPLAMASIZ)

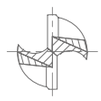
DIN 338 | MG | N 30° | h6 | h7 | 118°







3 mm altında



3 mm ve üzeri

Kullanım Yerleri :

- Çelik, dökme çelik, dökme demir, kır döküm, dövülebilir dökme demir, demir dışı ağır ve hafif metaller, sert plastik.
- İsteğe göre kaplama seçeneği

$D_1=D_2$

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-6010	1	12	34
PMA-6011	1,1	14	36
PMA-6012	1,2	16	38
PMA-6013	1,3	16	38
PMA-6014	1,4	18	40
PMA-6015	1,5	18	40
PMA-6016	1,6	20	43
PMA-6017	1,7	20	43
PMA-6018	1,8	22	46
PMA-6018	1,8	22	46
PMA-6020	2	24	49
PMA-6021	2,1	24	49
PMA-6022	2,2	27	53
PMA-6023	2,3	27	53
PMA-6024	2,4	30	57
PMA-6025	2,5	30	57
PMA-6026	2,6	30	57
PMA-6027	2,7	33	61

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-6028	2,8	33	61
PMA-6028	2,8	33	61
PMA-6030	3	33	61
PMA-6031	3,1	36	65
PMA-6032	3,2	36	65
PMA-6033	3,3	36	65
PMA-6034	3,4	39	70
PMA-6035	3,5	39	70
PMA-6036	3,6	39	70
PMA-6037	3,7	39	70
PMA-6038	3,8	43	75
PMA-6038	3,9	43	75
PMA-6040	4	43	75
PMA-6041	4,1	43	75
PMA-6042	4,2	43	75
PMA-6043	4,3	47	80
PMA-6044	4,4	47	80
PMA-6045	4,5	47	80

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-6046	4,6	47	80
PMA-6047	4,7	47	80
PMA-6048	4,8	52	86
PMA-6048	4,9	52	86
PMA-6050	5	52	86
PMA-6051	5,1	52	86
PMA-6052	5,2	52	86
PMA-6053	5,3	52	86
PMA-6054	5,4	57	93
PMA-6055	5,5	57	93
PMA-6056	5,6	57	93
PMA-6057	5,7	57	93
PMA-6058	5,8	57	93
PMA-6059	5,9	57	93
PMA-6060	6	57	93
PMA-6061	6,1	63	101
PMA-6062	6,2	63	101
PMA-6063	6,3	63	101

Sip. No.	Matkap Çapı D_1	Kesme Kenarı Boyu L_1	Tam Boy L_2
PMA-6064	6,4	63	101
PMA-6065	6,5	63	101
PMA-6068	6,8	69	109
PMA-6070	7,0	69	109
PMA-6075	7,5	69	109
PMA-6080	8,0	75	117
PMA-6085	8,5	75	117
PMA-6090	9,0	81	125
PMA-6095	9,5	81	125
PMA-6100	10,0	87	133
PMA-6102	10,2	87	133
PMA-6105	10,5	87	133
PMA-6110	11	94	142
PMA-6115	11,5	94	142
PMA-6120	12	101	151
PMA-6130	13	101	151

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎				○	○	○	○	○			

KARBÜR MATKAPLAR

PRO-X GÜNEY KORE

TAVSİYE EDİLEN KESME DEĞERLERİ

PMA - 6000 / 7000 SERİSİ

MALZEME	ALAŞIMSIZ ÇELİKLER		ALAŞIMLI ÇELİKLER		YUMUŞAK GRİ DÖKME DEMİR		SERT GERİ DÖKME DEMİR	
SERTLİK	< 700 N/mm²		< 1000 N/mm2		< HB240, GG25		< HB300, GG40	
DELME HIZI	65 ~ 75 m/min		45 ~ 55 m/min		80 ~ 100 m/min		50 ~ 70 m/min	
ÇAP	N	S	N	S	N	S	N	S
1	23000	0,03	17200	0,03	32000	0,04	23000	0,04
2	11500	0,04	8600	0,04	16000	0,05	11500	0,05
3	7800	0,05	5750	0,05	10500	0,06	7600	0,06
4	5800	0,06	4300	0,06	7800	0,07	5700	0,07
5	4700	0,07	3450	0,07	6200	0,08	4550	0,08
6	3900	0,08	2850	0,08	5200	0,09	3800	0,09
7	3350	0,09	2450	0,09	4500	0,1	3250	0,1
8	2900	0,1	2150	0,1	3900	0,12	2850	0,12
9	2600	0,11	1900	0,11	3450	0,14	2550	0,14
10	2350	0,12	1700	0,12	3100	0,16	2300	0,16
11	2150	0,13	1600	0,13	2850	0,18	2100	0,18
12	1950	0,14	1450	0,14	2600	0,2	1900	0,2
13	1800	0,16	1350	0,16	2400	0,2	1750	0,2

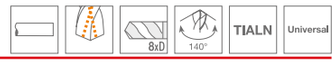
MALZEME	PASLANMAZ ÇELİK		AL-Si ALAŞIMLARI, Si<10%		AL-Si ALAŞIMLARI, Si>10%		Ti, Ni ALAŞIMLI ÇELİKLER	
SERTLİK	-		-		-		-	
DELME HIZI	30 ~ 40 m/min		150 ~ 170 m/min		110 ~ 130 m/min		33 ~ 38 m/min	
ÇAP	N	S	N	S	N	S	N	S
1	12000	0,04	54000	0,05	42000	0,05	11800	0,02
2	6000	0,03	27000	0,06	21000	0,06	5900	0,03
3	4000	0,04	18000	0,07	14000	0,07	3900	0,04
4	3000	0,05	13000	0,08	10500	0,08	2950	0,05
5	2400	0,06	10500	0,09	8500	0,09	2350	0,06
6	2000	0,07	8800	0,11	7100	0,11	1950	0,07
7	1700	0,08	7600	0,13	6100	0,13	1700	0,08
8	1500	0,09	6600	0,15	5350	0,15	1450	0,09
9	1350	0,1	5900	0,17	4750	0,17	1300	0,1
10	1200	0,11	5300	0,19	4250	0,19	1200	0,11
11	1100	0,12	4850	0,21	3900	0,21	1050	0,12
12	1000	0,13	4450	0,23	3550	0,23	980	0,13
13	950	0,13	4100	0,25	3300	0,25	905	0,13

N = Devir S= Devir başına ilerleme (mm/devir)

KARBÜR MATKAPLAR

MAKİNA TAKIM

MATKAP UCU 8XD İÇTEN SOĞUTMALI - 4 FAZLI





Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0107080100001	1.0	3	11	55	9.0
K0107080110001	1.1	3	17	55	13.5
K0107080120001	1.2	3	17	55	13.5
K0107080130001	1.3	3	17	55	13.5
K0107080140001	1.4	3	17	55	13.5
K0107080150001	1.5	3	22	65	17.5
K0107080160001	1.6	3	22	65	17.5
K0107080170001	1.7	3	22	65	17.5
K0107080180001	1.8	3	22	65	17.5
K0107080190001	1.9	3	22	65	17.5
K0107080200001	2.0	3	28	74	22.5
K0107080210001	2.1	3	28	74	22.5
K0107080220001	2.2	3	28	74	22.5
K0107080230001	2.3	3	28	74	22.5
K0107080240001	2.4	3	28	74	22.5
K0107080250001	2.5	3	32	81	22.5
K0107080260001	2.6	3	32	81	22.5
K0107080270001	2.7	3	32	81	22.5
K0107080280001	2.8	3	32	81	22.5
K0107080290001	2.9	3	32	81	22.5
K0107080300001	3.0	6	34	72	27.0
K0107080310001	3.1	6	34	72	27.0
K0107080320001	3.2	6	34	72	27.0
K0107080330001	3.3	6	34	72	27.0
K0107080340001	3.4	6	34	72	27.0
K0107080350001	3.5	6	34	72	27.0
K0107080360001	3.6	6	34	72	27.0
K0107080370001	3.7	6	34	72	27.0
K0107080380001	3.8	6	43	81	35.0
K0107080390001	3.9	6	43	81	35.0
K0107080400001	4.0	6	43	81	35.0
K0107080410001	4.1	6	43	81	35.0
K0107080420001	4.2	6	43	81	35.0
K0107080430001	4.3	6	43	81	35.0
K0107080440001	4.4	6	43	81	35.0
K0107080450001	4.5	6	43	81	35.0
K0107080460001	4.6	6	43	81	35.0
K0107080470001	4.7	6	57	95	35.0
K0107080480001	4.8	6	57	95	45.0
K0107080490001	4.9	6	57	95	45.0
K0107080500001	5.0	6	57	95	45.0
K0107080510001	5.1	6	57	95	45.0
K0107080520001	5.2	6	57	95	45.0
K0107080530001	5.3	6	57	95	45.0
K0107080540001	5.4	6	57	95	45.0
K0107080550001	5.5	6	57	95	45.0
K0107080560001	5.6	6	57	95	45.0
K0107080570001	5.7	6	57	95	45.0
K0107080580001	5.8	6	57	95	45.0
K0107080590001	5.9	6	57	95	45.0
K0107080600001	6.0	6	57	95	45.0
K0107080610001	6.1	8	76	114	52.0
K0107080620001	6.2	8	76	114	52.0
K0107080630001	6.3	8	76	114	52.0
K0107080640001	6.4	8	76	114	52.0
K0107080650001	6.5	8	76	114	52.0
K0107080660001	6.6	8	76	114	52.0
K0107080670001	6.7	8	76	114	52.0
K0107080680001	6.8	8	76	114	52.0
K0107080690001	6.9	8	76	114	52.0
K0107080700001	7.0	8	76	114	60.0
K0107080710001	7.1	8	76	114	60.0
K0107080720001	7.2	8	76	114	60.0
K0107080730001	7.3	8	76	114	60.0
K0107080740001	7.4	8	76	114	60.0
K0107080750001	7.5	8	76	114	60.0
K0107080760001	7.6	8	76	114	60.0
K0107080770001	7.7	8	76	114	60.0
K0107080780001	7.8	8	76	114	60.0
K0107080790001	7.9	8	76	114	60.0
K0107080800001	8.0	8	76	114	60.0

Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0107080810001	8.1	10	95	142	68.0
K0107080820001	8.2	10	95	142	68.0
K0107080830001	8.3	10	95	142	68.0
K0107080840001	8.4	10	95	142	68.0
K0107080850001	8.5	10	95	142	68.0
K0107080860001	8.6	10	95	142	68.0
K0107080870001	8.7	10	95	142	68.0
K0107080880001	8.8	10	95	142	68.0
K0107080890001	8.9	10	95	142	68.0
K0107080900001	9.0	10	95	142	68.0
K0107080910001	9.1	10	95	142	76.0
K0107080510001	5.1	6	57	95	45.0
K0107080520001	5.2	6	57	95	45.0
K0107080530001	5.3	6	57	95	45.0
K0107080540001	5.4	6	57	95	45.0
K0107080550001	5.5	6	57	95	45.0
K0107080560001	5.6	6	57	95	45.0
K0107080570001	5.7	6	57	95	45.0
K0107080580001	5.8	6	57	95	45.0
K0107080590001	5.9	6	57	95	45.0
K0107080600001	6.0	6	57	95	45.0
K0107080610001	6.1	8	76	114	52.0
K0107080620001	6.2	8	76	114	52.0
K0107080630001	6.3	8	76	114	52.0
K0107080640001	6.4	8	76	114	52.0
K0107080650001	6.5	8	76	114	52.0
K0107080660001	6.6	8	76	114	52.0
K0107080670001	6.7	8	76	114	52.0
K0107080680001	6.8	8	76	114	52.0
K0107080690001	6.9	8	76	114	52.0
K0107080700001	7.0	8	76	114	60.0
K0107080710001	7.1	8	76	114	60.0
K0107080720001	7.2	8	76	114	60.0
K0107080730001	7.3	8	76	114	60.0
K0107080740001	7.4	8	76	114	60.0
K0107080750001	7.5	8	76	114	60.0
K0107080760001	7.6	8	76	114	60.0
K0107080770001	7.7	8	76	114	60.0
K0107080780001	7.8	8	76	114	60.0
K0107080790001	7.9	8	76	114	60.0
K0107080800001	8.0	8	76	114	60.0
K0107080810001	8.1	10	95	142	68.0
K0107080820001	8.2	10	95	142	68.0
K0107080830001	8.3	10	95	142	68.0
K0107080840001	8.4	10	95	142	68.0
K0107080850001	8.5	10	95	142	68.0
K0107080860001	8.6	10	95	142	68.0
K0107080870001	8.7	10	95	142	68.0
K0107080880001	8.8	10	95	142	68.0
K0107080890001	8.9	10	95	142	68.0
K0107080900001	9.0	10	95	142	68.0
K0107080910001	9.1	10	95	142	76.0
K0107081110001	11.1	12	114	162	90.0
K0107081120001	11.2	12	114	162	90.0
K0107081130001	11.3	12	114	162	90.0
K0107081140001	11.4	12	114	162	90.0
K0107081150001	11.5	12	114	162	90.0
K0107081160001	11.6	12	114	162	90.0
K0107081170001	11.7	12	114	162	90.0
K0107081180001	11.8	12	114	162	90.0
K0107081190001	11.9	12	114	162	90.0
K0107081200001	12.0	12	114	162	90.0
K0107081250001	12.5	14	133	178	106.0
K0107081280001	12.8	14	133	178	106.0
K0107081300001	13.0	14	133	178	106.0
K0107081350001	13.5	14	133	178	106.0
K0107081400001	14.0	14	133	178	106.0
K0107081450001	14.5	16	152	203	122.0
K0107081500001	15.0	16	152	203	122.0
K0107081550001	15.5	16	152	203	122.0
K0107081600001	16.0	16	152	203	122.0

KARBÜR MATKAPLAR

MAKİNA TAKIM

MATKAP UCU 12XD İÇTEN SOĞUTMALI - 4 FAZLI



Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0107100100001	1.0	3	15	55	12.0
K0107100110001	1.1	3	23	55	18.5
K0107100120001	1.2	3	23	55	18.5
K0107100130001	1.3	3	23	55	18.5
K0107100140001	1.4	3	23	55	18.5
K0107100150001	1.5	3	23	65	18.5
K0107100160001	1.6	3	30	65	24.0
K0107100170001	1.7	3	30	65	24.0
K0107100180001	1.8	3	30	65	24.0
K0107100190001	1.9	3	30	65	24.0
K0107100200001	2.0	3	30	74	24.0
K0107100210001	2.1	3	38	74	30.5
K0107100220001	2.2	3	38	74	30.5
K0107100230001	2.3	3	38	74	30.5
K0107100240001	2.4	3	38	74	30.5
K0107100250001	2.5	3	38	81	30.5
K0107100260001	2.6	3	44	81	35.0
K0107100270001	2.7	3	44	81	35.0
K0107100280001	2.8	3	44	81	35.0
K0107100290001	2.9	3	44	81	35.0

Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0107100300001	3.0	6	54	92	48.0
K0107100330001	3.3	6	54	92	48.0
K0107100350001	3.5	6	54	92	48.0
K0107100380001	3.8	6	64	102	58.0
K0107100400001	4.0	6	64	102	58.0
K0107100420001	4.2	6	64	102	58.0
K0107100450001	4.5	6	64	102	58.0
K0107100480001	4.8	6	78	116	70.0
K0107100500001	5.0	6	78	116	70.0
K0107100550001	5.5	6	78	116	70.0
K0107100580001	5.8	6	78	116	70.0
K0107100600001	6.0	6	78	116	70.0
K0107100650001	6.5	8	108	146	94.0
K0107100680001	6.8	8	108	146	94.0
K0107100700001	7.0	8	108	146	94.0
K0107100750001	7.5	8	108	146	94.0
K0107100780001	7.8	8	108	146	94.0
K0107100800001	8.0	8	108	146	94.0
K0107100850001	8.5	10	120	162	110.0
K0107100880001	8.8	10	120	162	110.0

Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0107100900001	9.0	10	120	162	110.0
K0107100950001	9.5	10	120	162	110.0
K0107100980001	9.8	10	120	162	110.0
K0107101000001	10.0	10	120	162	110.0
K0107101020001	10.2	12	156	204	142.0
K0107101050001	10.5	12	156	204	142.0
K0107101080001	10.8	12	156	204	142.0
K0107101100001	11.0	12	156	204	142.0
K0107101150001	11.5	12	156	204	142.0
K0107101180001	11.8	12	156	204	142.0
K0107101200001	12.0	12	156	204	142.0
K0107101250001	12.5	14	182	230	166.0
K0107101280001	12.8	14	182	230	166.0
K0107101300001	13.0	14	182	230	166.0
K0107101350001	13.5	14	182	230	166.0
K0107101400001	14.0	14	182	230	166.0
K0107101450001	14.5	16	208	260	192.0
K0107101500001	15.0	16	208	260	192.0
K0107101550001	15.5	16	208	260	192.0
K0107101600001	16.0	16	208	260	192.0

MATKAP UCU 15XD İÇTEN SOĞUTMALI - 4 FAZLI



Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0109150100001	1.0	3	20	60	15
K0109150110001	1.1	3	22	60	17
K0109150120001	1.2	3	24	60	18
K0109150130001	1.3	3	25	60	21
K0109150140001	1.4	3	27	60	21
K0109150150001	1.5	3	27	60	23
K0109150160001	1.6	3	32	65	24
K0109150170001	1.7	3	32	65	26
K0109150180001	1.8	3	35	65	27
K0109150190001	1.9	3	35	65	29
K0109150200001	2.0	3	35	65	30
K0109150210001	2.1	3	40	75	32
K0109150220001	2.2	3	40	75	33
K0109150230001	2.3	3	40	75	35
K0109150240001	2.4	3	45	75	36
K0109150250001	2.5	3	45	75	38
K0109150260001	2.6	3	48	80	39
K0109150270001	2.7	3	48	80	41
K0109150280001	2.8	3	50	80	42
K0109150290001	2.9	3	50	80	44
K0109150300001	3.0	6	60	100	45
K0109150310001	3.1	6	60	100	47
K0109150320001	3.2	6	60	100	48
K0109150330001	3.3	6	60	100	50
K0109150340001	3.4	6	60	100	51
K0109150350001	3.5	6	60	100	53
K0109150360001	3.6	6	68	108	54
K0109150370001	3.7	6	68	108	56
K0109150380001	3.8	6	68	108	57

Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0109150390001	3.9	6	68	108	59
K0109150400001	4.0	6	68	108	60
K0109150410001	4.1	6	78	115	62
K0109150420001	4.2	6	78	115	63
K0109150430001	4.3	6	78	115	65
K0109150440001	4.4	6	78	115	66
K0109150450001	4.5	6	78	115	68
K0109150460001	4.6	6	84	125	69
K0109150470001	4.7	6	84	125	71
K0109150480001	4.8	6	84	125	72
K0109150490001	4.9	6	84	125	74
K0109150500001	5.0	6	84	125	75
K0109150510001	5.1	6	92	130	77
K0109150520001	5.2	6	92	130	78
K0109150530001	5.3	6	92	130	80
K0109150540001	5.4	6	92	130	81
K0109150550001	5.5	6	92	130	83
K0109150560001	5.6	6	100	140	84
K0109150570001	5.7	6	100	140	86
K0109150580001	5.8	6	100	140	87
K0109150590001	5.9	6	100	140	90
K0109150600001	6.0	6	100	140	90
K0109150610001	6.1	8	108	145	92
K0109150620001	6.2	8	108	145	93
K0109150630001	6.3	8	108	145	96
K0109150640001	6.4	8	108	145	96
K0109150650001	6.5	8	108	145	97
K0109150660001	6.6	8	130	170	99
K0109150670001	6.7	8	130	170	101

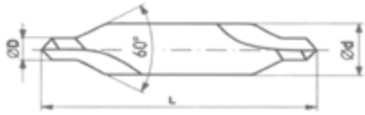
Sip. No.	d1 mm	d2 mm	L2 mm	L1 mm	UÇB mm
K0109150680001	6.8	8	130	170	102
K0109150690001	6.9	8	130	170	104
K0109150700001	7.0	8	130	170	105
K0109150750001	7.5	8	130	170	115
K0109150780001	7.8	8	130	170	117
K0109150800001	8.0	8	130	170	120
K0109150850001	8.5	10	163	208	128
K0109150880001	8.8	10	163	208	132
K0109150900001	9.0	10	163	208	135
K0109150950001	9.5	10	163	208	143
K0109150980001	9.8	10	163	208	147
K0109151000001	10.0	10	163	208	150
K0109151020001	10.2	12	195	245	153
K0109151050001	10.5	12	195	245	158
K0109151080001	10.8	12	195	245	162
K0109151100001	11.0	12	195	245	165
K0109151120001	11.2	12	195	245	168
K0109151150001	11.5	12	195	245	173
K0109151180001	11.8	12	195	245	177
K0109151200001	12.0	12	195	245	180
K0109151250001	12.5	14	230	280	188
K0109151300001	13.0	14	230	280	195
K0109151380001	13.8	14	230	280	207
K0109151400001	14.0	14	230	280	210
K0109151480001	14.8	16	260	310	222
K0109151500001	15.0	16	260	310	225
K0109151580001	15.8	16	260	310	237
K0109151600001	16.0	16	260	310	240

SERT METAL (KARBÜR) PUNTA MATKABI VE RAYBA

SERT METAL (KARBÜR) PUNTA MATKABI

HM KARBÜR | DIN 333 | Type A | Standard | 60° | 82° | 90°





D	d	L	Kod 60 Derece	Kod 82 Derece	Kod 90 Derece	Sip. No.
1,6	4	35,5	89200	89201	89202	11427
2	5	40	89203	89204	89205	11428
2,5	6,3	45	89206	89207	89208	11429
3,15	8	50	89209	89210	89211	11430
4	10	56	89212	89213	89214	11431
5	12,5	63	89215	89216	89217	11432
6,3	16	71	89218	89219	89220	11433
8	20	80	89221	89222	89223	11434

SERT METAL (KARBÜR) NC PUNTA MATKABI

HM KARBÜR | Type N | Standard | 30° | Z 2 | DIN 6535-HA | 90° | 120°



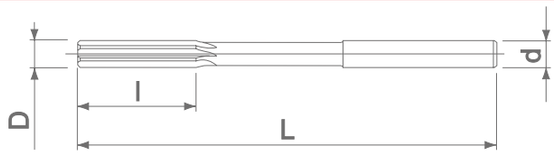


D	l	d	L	Açı	Ürün Kodu	Sip. No.
3	10	3	38	90°	89250	11435
4	18	4	63	90°	89251	11436
6	20	6	63	90°	89252	11437
10	25	10	75	90°	89253	11438
12	25	12	75	90°	89254	11439
3	10	3	38	120°	89255	11440
4	18	4	63	120°	89256	11441
6	20	6	63	120°	89257	11442
10	25	10	75	120°	89258	11443
12	25	12	75	120°	89259	11444

SERT METAL (KARBÜR) RAYBALAR

HM KARBÜR | Standard | Z 4/6 | DIN 6535-HA | H7 | DIN 212



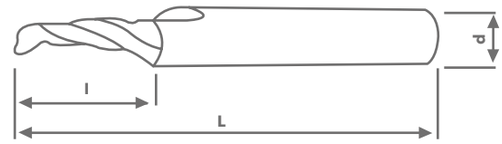


D	l	d	L	Z	Ürün Kodu	Sip. No.
2	12	2	58	4	A-30-1025	11445
2,5	12	2,5	58	4	A-30-1050	11446
3	12	3	58	4	A-30-1181	11447
3,5	15	3,5	63	4	A-30-1378	11448
4	18	4	63	4	A-30-1575	11449
4,5	20	4,5	70	6	A-30-1772	11450
5	22	5	75	6	A-30-1969	11451
5,5	22	5,5	75	6	A-30-2125	11452
6	25	6	75	6	A-30-2362	11453
6,5	25	6,5	75	6	A-30-2559	11454
7	25	7	75	6	A-30-2756	11455
8	28	8	82	6	A-30-3150	11456
9	35	9	100	6	A-30-3543	11457
10	35	10	100	6	A-30-3937	11458
11	35	11	100	6	A-30-4331	11459
12	35	12	100	6	A-30-4724	11460

KARBÜR FREZELER

TEK AĞIZLI SERT METAL (KARBÜR) PARMAK FREZE





Aluminyum ve Sert Plastik İçin

Ø	l	d	L	Ürün Kodu	Sip. No.
2	8	2	50	901-1101	11461
2	8	6	64	901-1102	11462
2,5	8	2,5	50	901-1103	11463
2,5	8	6	64	901-1104	11464
3	8	3	50	901-1105	11465
3	8	6	64	901-1106	11466
3	12	3	64	901-1107	11467
3	12	6	64	901-1108	11468
4	8	4	64	901-1109	11469
4	12	4	64	901-1110	11470
4	20	4	64	901-1111	11471
4	20	6	64	901-1112	11472
4	30	4	64	901-1113	11473
5	16	5	64	901-1114	11474
5	16	6	64	901-1115	11475
5	30	5	64	901-1116	11476
6	8	6	64	901-1117	11477
6	12	6	64	901-1118	11478
6	20	6	64	901-1119	11479
6	30	6	76	901-1120	11480
6	38	6	76	901-1121	11481
8	25	8	64	901-1122	11482
8	38	8	76	901-1123	11483
10	30	10	76	901-1124	11484

SERT METAL (KARBÜR) FREZELERİN KULLANIM DEĞERLERİ

Devir Sayısı (Rpm)										
MALZEME	İlerleme (m/dakika)		6,5 mm'e kadar		6,5 - 12,5 mm		12,6 - 19 mm		19,1 - 25 mm	
Alüminyum / Alaşımları	183	366	9168	17912	8956	9295	4620	6128	3048	4657
Bronz / Pirinç	91	168	4584	8210	4478	4269	2310	2809	1524	2135
Bakır / Alaşımları	152	274	7640	13435	7463	6986	3850	4596	2540	3493
Demir Döküm (Y umuşak ± 195 bhn)	61	152	3056	7464	2985	3881	1540	2553	1016	1941
Demir Döküm (Orta ± 255 bhn)	38	107	1910	5225	1866	2717	963	1787	635	1358
Demir Döküm (Sert ±275 bhn)	24	91	1222	4478	1194	2329	616	1532	406	1164
Magnezyum	244	427	12224	20898	11942	10867	6161	7149	4064	5436
Krom Nikel Alaşımları	20	53	993	2612	970	1358	500	894	330	679
Plastikler	183	366	9168	17913	8956	9315	4620	6128	3048	4657
Sıcak İş Çelikleri (35-40 Rc)	46	107	2292	5225	2239	2717	1155	1787	762	1358
Sıcak İş Çelikleri (40-45 Rc)	38	84	1910	4105	1866	2135	963	1404	635	1067
Sıcak İş Çelikleri (45+ Rc)	15	61	764	2985	746	1552	385	1021	254	776
Çelik - Karbon	53	107	2674	5225	2612	2717	1348	1787	889	1358
Çelik - Kalıp	15	76	764	3732	746	1941	385	1277	254	970
Çelik - T akım	46	76	2292	3732	2239	1941	1155	1277	762	970
Paslanmaz Çelik - Yumuşak	76	122	3820	5971	3731	3105	1925	2043	770	1552
Paslanmaz Çelik - Sert	23	76	1146	3732	1119	1941	578	1277	381	970
Titanyum Alaşımları	27	63	1375	3359	1343	1747	693	1149	457	873

KARBÜR FREZELER

PRO-X GÜNEY KORE

4 AĞIZLI KISA KAPLAMALI





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- 4 ağızlı parmak freze daha iyi yüzey kalitesi verir.

Freze Çapı Tolerans (mm)	Şaft Çapı Tolerans
0~0.03	h6

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14010	1.0	3	3	39
PPF-14015	1.5	3	5	39
PPF-14020	2.0	3	7	39
PPF-14025	2.5	3	7	39
PPF-14030	3.0	3	10	39
PPF-14040	4.0	4	14	51

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14050	5.0	5	16	51
PPF-14060	6.0	6	19	64
PPF-14070	7.0	7	16	60
PPF-14080	8.0	8	21	64
PPF-14090	9.0	9	19	67
PPF-14100	10.0	10	22	70

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14110	11.0	11	26	83
PPF-14120	12.0	12	25	76
PPF-14130	13.0	13	26	83
PPF-14140	14.0	14	26	83
PPF-14160	16.0	16	32	89
PPF-14200	20.0	20	38	102

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎				○		○	○	○	○	○		

4 AĞIZLI EXTRA UZUN KAPLAMALI





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- 4 ağızlı parmak freze daha iyi yüzey kalitesi verir.

Freze Çapı Tolerans (mm)	Şaft Çapı Tolerans
0~0.03	h6

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14030-EX	3.0	3	20	60
PPF-14040-EX	4.0	4	20	60
PPF-14050-EX	5.0	5	25	75
PPF-14060-EX	6.0	6	30	75

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14080-EX	8.0	8	30	75
PPF-14100-EX	10.0	10	40	100
PPF-14120-EX	12.0	12	45	100
PPF-14140-EX	14.0	14	45	100

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14160-EX	16.0	16	45	100
PPF-14200-EX	20.0	20	45	100

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎				○		○	○	○	○	○		

4 AĞIZLI KISA KAPLAMALI KÖŞE RADÜSLÜ





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- 4 ağızlı parmak freze daha iyi yüzey kalitesi verir.

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Corner Radius R	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14020-02R	R0.2	2,0	4	4	50
PPF-14020-03R	R0.3	2,0	4	4	50
PPF-14020-05R	R0.5	2,0	4	4	50
PPF-14025-02R	R0.2	2,5	4	5	50
PPF-14030-02R	R0.2	3,0	4	6	50
PPF-14030-03R	R0.3	3,0	4	6	50
PPF-14030-05R	R0.5	3,0	4	6	50
PPF-14030-1R	R1.0	4,O	4	8	50
PPF-14040-02R	R0.2	4,0	4	8	50
PPF-14040-03R	R0.3	4,0	4	8	50
PPF-14040-05R	R0.5	4,0	4	8	50
PPF-14040-1R	R1.0	5,0	6	10	50
PPF-14050-02R	R0.2	5,0	6	10	50

Sip. No.	Corner Radius R	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14050-03R	R0.3	5,0	6	10	50
PPF-14050-05R	R0.5	5,0	6	10	50
PPF-14050-1R	R1.0	6,0	6	12	50
PPF-14060-02R	R0.2	6,0	6	12	50
PPF-14060-03R	R0.3	6,0	6	12	50
PPF-14060-05R	R0.5	6,0	6	12	50
PPF-14060-1R	R1.0	8,0	8	16	60
PPF-14080-05R	R0.5	8,0	8	16	60
PPF-14080-1R	R1.0	8,0	10	20	7'5
PPF-14100-05R	R0.5	10,0	10	20	75
PPF-14100-1R	R1.0	10,0	10	20	75
PPF-14120-05R	R0.5	12,0	12	24	75
PPF-14120-1R	R1.0	12,0	12	24	75

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎				○		○	○	○	○	○		

KARBÜR FREZELER

PRO-X GÜNEY KORE

4 AĞIZLI UZUN KAPLAMALI KÖŞE RADÜSLÜ

MG HM | 4 | 30° | DIN 6535HA





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- 4 ağızlı parmak freze daha iyi yüzey kalitesi verir.

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Corner Radius R	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14030-05RL	R0.5	3.0	4	6	75
PPF-14030-1RL	R1.0	3.0	4	6	75
PPF-14040-05RL	R0.5	4.0	4	8	75
PPF-14040-1RL	R1.0	4.0	4	8	75
PPF-14050-05RL	R0.5	5.0	6	10	75
PPF-14050-1RL	R1.0	5.0	6	10	75
PPF-14060-05RL	R0.5	6.0	6	12	75

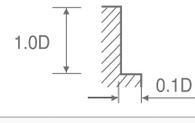
Sip. No.	Corner Radius R	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-14060-1RL	R1.0	6.0	6	12	75
PPF-14080-05RL	R0.5	8.0	8	16	100
PPF-14080-1RL	R1.0	8.0	8	16	100
PPF-14100-05RL	R0.5	10.0	12	24	100
PPF-14100-1RL	R1.0	10.0	12	24	100
PPF-14120-05RL	R1.5	12.0	12	24	100
PPF-14120-1RL	R2.0	12.0	12	24	100

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎				○		○	○	○	○	○		

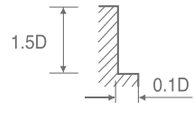
TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 14 SERİSİ

MALZEME	ALAŞIMSIZ ÇELİKLER ALAŞIMLI ÇELİKLER TAKIM ÇELİKLERİ				ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				PASLANMAZ ÇELİKLER			
SERTLİK	~ HRc 30				HRc 30 ~ HRc 45							
GÜÇ	~1000N/mm²				1000~1500N/mm²							
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	17600	150	55	0.002	10250	85	30	0.002	8650	75	25	0.002
1.5	11800	215	55	0.005	7050	115	35	0.004	7050	120	35	0.004
2.0	9850	240	60	0.006	6450	145	40	0.006	5350	120	35	0.006
3.0	7600	270	70	0.009	4750	170	45	0.009	3950	145	35	0.009
4.0	6450	485	80	0.019	3950	300	50	0.019	3300	240	40	0.018
5.0	5350	510	85	0.024	3200	305	50	0.024	2700	255	40	0.024
6.0	4750	560	90	0.029	2850	350	55	0.031	2400	280	45	0.029
8.0	3550	605	90	0.043	2150	325	55	0.038	1800	300	45	0.042
10.0	2750	520	85	0.047	1700	255	55	0.038	1450	255	45	0.044
12.0	2350	440	90	0.047	1450	215	55	0.037	1150	205	45	0.045
14.0	2100	395	90	0.047	1300	195	55	0.038	1050	190	45	0.045
16.0	1850	350	95	0.047	1150	170	60	0.037	950	170	50	0.045
20.0	1450	270	90	0.047	900	135	55	0.038	700	130	45	0.046



MALZEME	DÖKME DEMİR				ALUMİNYUM ALAŞIMLARI				BAKIR, PİRİNÇ DEMİR DIŞI METALLER			
SERTLİK	HRc 30 ~ HRc 45											
GÜÇ	1000~1500N/mm²											
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	18700	620	60	0.008	44000	1050	140	0.006	24700	605	80	0.006
1.5	12100	620	55	0.013	27500	1160	130	0.011	20300	910	95	0.011
2.0	9350	640	60	0.017	22000	1320	140	0.015	16500	1035	105	0.016
3.0	6050	640	55	0.026	15400	1320	145	0.021	11000	1035	105	0.024
4.0	4600	640	60	0.035	11000	1320	140	0.030	8800	1035	110	0.029
5.0	3650	640	55	0.044	9150	1320	145	0.036	6800	1035	105	0.038
6.0	2950	770	55	0.065	7600	1430	145	0.047	5700	1100	105	0.048
8.0	2200	815	55	0.093	5700	1430	145	0.063	4400	1100	110	0.063
10.0	1850	860	60	0.116	4600	1430	145	0.078	3400	1100	105	0.081
12.0	1450	900	55	0.155	3750	1430	140	0.095	2850	1100	105	0.096
14.0	1300	945	55	0.182	3300	1430	145	0.108	2400	1100	105	0.115
16.0	1100	970	55	0.220	2850	1430	145	0.125	2200	1100	110	0.125
20.0	900	1035	55	0.288	2200	1430	140	0.163	1700	1100	105	0.162



- DEVİR = dev/dak
- İLERLEME = mm/dak
- Vc = m/dak
- fz = mm/ağız

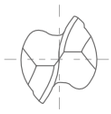
* İlerleme L & EX kodlu uzun frezelerde %50 oranında azaltılmalıdır.

KARBÜR FREZELER

PRO-X GÜNEY KORE

2 AĞIZLI KÜRESEL





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- Profil ve kontor işleme için dizayn edilmiştir.

Freze Çapı Tolerans (mm)	Şaft Çapı Tolerans
0~0.03	h6

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22010	R 0.5	1.0	3	3	39
PPF-22015	R 0.75	1.5	3	5	39
PPF-22020	R 1.0	2.0	3	7	39
PPF-22025	R 1.25	2.5	3	8	39
PPF-22030	R 1.5	3.0	3	9	39

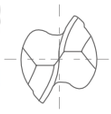
Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22040	R 2.0	4.0	4	14	51
PPF-22050	R 2.5	5.0	5	16	51
PPF-22060	R 3.0	6.0	6	19	64
PPF-22080	R 4.0	8.0	8	21	64
PPF-22100	R 5.0	10.0	10	22	70

Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22110	R 5.5	11.0	11	25	70
PPF-22120	R 6.0	12.0	12	25	76
PPF-22160	R 8.0	16.0	16	32	89
PPF-22200	R 10.0	20.0	20	38	102

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎	○			○		○	○	○	○	○		

2 AĞIZLI UZUN KÜRESEL





- Yüksek sıcaklıklarda kuru işlemler için uygundur.
- Mükemmel, yüksek performanslı parmak frezedir.
- Profil ve kontor işleme için dizayn edilmiştir.

Freze Çapı Tolerans (mm)	Şaft Çapı Tolerans
0~0.03	h6

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22030-L	R 1.5	3.0	3	5	75
PPF-22040-L	R 2.0	4.0	4	8	75
PPF-22050-L	R 2.5	5.0	5	9	75

Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22060-L	R 3.0	6.0	6	10	100
PPF-22080-L	R 4.0	8.0	8	12	100
PPF-22100-L	R 5.0	10.0	10	14	100

Sip. No.	Corner Radius R (±0.02)	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Tam Boy
PPF-22120-L	R 6.0	12.0	12	16	100
PPF-22140-L	R 7.0	14.0	14	18	100
PPF-22160-L	R 8.0	16.0	16	22	150

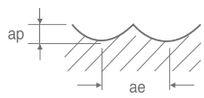
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎	○			○		○	○	○	○	○		

TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 22 SERİSİ

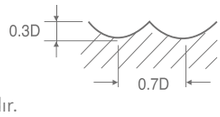
MALZEME			ALAŞIMSIZ ÇELİKLER ALAŞIMLI ÇELİKLER TAKIM ÇELİKLERİ				ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				PASLANMAZ ÇELİKLER			
SERTLİK			~ HRc 30				HRc 30 ~ HRc 45				HRc 45 ~ HRc 50			
GÜÇ			~1000N/mm²				1000~1500N/mm²				1500N/mm²~			
ÇAP			Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
R1.0	x	2.0	12350	640	80	0.026	9150	415	55	0.023	4000	125	25	0.016
R1.5	x	3.0	11400	575	105	0.025	8550	390	80	0.023	3800	125	35	0.016
R2.0	x	4.0	8950	630	110	0.035	7150	450	90	0.031	3600	150	45	0.021
R2.5	x	5.0	7800	700	125	0.045	6200	490	95	0.040	3100	150	50	0.024
R3.0	x	6.0	7250	870	135	0.060	5900	705	110	0.060	2700	160	50	0.030
R4.0	x	8.0	6100	1090	155	0.089	4900	785	125	0.080	2050	190	50	0.046
R5.0	x	10.0	5450	1330	170	0.122	4350	870	135	0.100	1750	190	55	0.054
R6.0	x	12.0	4990	1500	190	0.150	3950	950	150	0.120	1500	210	55	0.070
R7.0	x	14.0	4530	1495	200	0.165	3600	925	160	0.128	1300	210	55	0.081
R8.0	x	16.0	4085	1470	205	0.180	3200	905	160	0.141	1150	210	60	0.091
R9.0	x	18.0	3800	1425	215	0.188	3000	890	170	0.148	1050	210	60	0.100
R10.0	x	20.0	3550	1425	225	0.201	2800	885	175	0.158	950	210	60	0.111

ap : D1~D6=0.2mm
D8~D20=0.3mm
ae : 0.2D



MALZEME			DÖKME DEMİR				ALUMİNYUM ALAŞIMLARI			
SERTLİK										
GÜÇ										
ÇAP			Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
R1.0	x	2.0	10500	220	65	0.010	30800	395	195	0.006
R1.5	x	3.0	7050	230	65	0.016	20500	395	195	0.010
R2.0	x	4.0	5150	285	65	0.028	15400	395	195	0.013
R2.5	x	5.0	4150	330	65	0.040	12100	470	190	0.019
R3.0	x	6.0	3400	360	65	0.053	10300	470	195	0.023
R4.0	x	8.0	2500	460	65	0.092	7900	540	200	0.034

MALZEME			DÖKME DEMİR				ALUMİNYUM ALAŞIMLARI			
SERTLİK										
GÜÇ										
ÇAP			Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
R5.0	x	10.0	2050	460	65	0.112	6150	540	195	0.044
R6.0	x	12.0	1750	460	65	0.131	5150	630	195	0.061
R7.0	x	14.0	1400	460	60	0.164	4300	630	190	0.073
R8.0	x	16.0	1300	460	65	0.177	3850	540	195	0.070
R9.0	x	18.0	1100	460	60	0.209	3400	540	190	0.079
R10.0	x	20.0	1050	420	65	0.200	2950	540	185	0.092



- DEVİR = dev/dak
- İLERLEME = mm/dak
- Vc = m/dak
- fz = mm/ağız

* Ilerleme L & EX kodlu uzun frezelerde %50 oranında azaltılmalıdır.

KARBÜR FREZELER

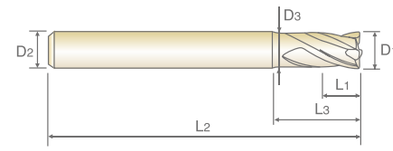
PRO-X GÜNEY KORE

4 AĞIZLI KAPLAMALI (50-70 HRC)

NG HM | 4 | BLUE | 30° | PLAIN







- Yüksek sertlikteki malzemelerin işlenmesi için tasarlanmıştır
- Yeni geliştirilmiş ham madde ve kaplama yapısı ile yüksek hızlarda ve kuru kesimde çalışmaya uygundur
- Mükemmel son kesim
- Yüksek hassasiyetli frezeleme operasyonları için uygunluk
- Yüksek aşınma direnci

Boy	Freze Çapı Tolerans (mm)	Şaft Çapı Tolerans
ø6'ya kadar	0~0.03	h6
ø6 sonra		

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	D1	D2	L1	L3	L2	D3
PPF-414010	1.0	6	1.5	3	50	0.95
PPF-414020	2.0	6	2	5	50	1.95
PPF-414030	3.0	6	3	8	55	2.85
PPF-414040	4.0	6	4	10	55	3.85
PPF-414050	5.0	6	5	13	55	4.85

Sip. No.	Freze Çapı	Şaft Çapı	Kesme Kenarı Boyu	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	D1	D2	L1	L3	L2	D3
PPF-414060	6.0	6	6	15	55	5.85
PPF-414080	8.0	8	8	20	65	7.7
PPF-414100	10.0	10	10	25	75	9.7
PPF-414120	12.0	12	12	28	85	11.7
PPF-414160	16.0	16	16	32	90	15.7

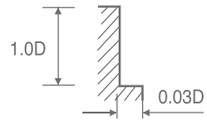
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
		○	○	◎	◎									

TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 414 SERİSİ

MALZEME	ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				SERTLEŞTİRİLMİŞ ÇELİKLER							
SERTLİK	HRc 30 ~ HRc 40				HRc 40 ~ HRc 50				HRc 50 ~ HRc 55			
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	48000	1480	150	0.008	38000	1050	120	0.007	25500	710	80	0.007
2.0	33300	1750	210	0.013	26000	1250	165	0.012	17500	840	110	0.012
3.0	21800	1750	205	0.020	17300	1250	165	0.018	11500	840	110	0.018
4.0	16700	1800	210	0.027	13200	1300	165	0.025	8800	880	110	0.025
5.0	15700	2000	245	0.032	12500	1500	195	0.030	8300	1000	130	0.030
6.0	13100	1950	245	0.037	10350	1400	195	0.034	6900	950	130	0.034
8.0	9880	1880	250	0.048	7800	1350	195	0.043	5200	900	130	0.043
10.0	7800	1750	245	0.056	6150	1260	195	0.051	4100	840	130	0.051
12.0	6650	1750	250	0.066	5250	1260	200	0.060	3500	840	130	0.060
16.0	4900	1500	245	0.077	3900	1100	195	0.071	2600	730	130	0.070
20.0	3900	1300	245	0.083	3100	970	195	0.078	2050	650	130	0.079

MALZEME	SERTLEŞTİRİLMİŞ ÇELİKLER											
SERTLİK	HRc 55 ~ HRc 60				HRc 60 ~ HRc 65				HRc 65 ~ HRc 70			
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	20500	430	65	0.005	16000	270	50	0.004	12500	175	40	0.875
2.0	14500	520	90	0.009	11000	320	70	0.007	9500	230	60	0.821
3.0	9500	520	90	0.014	7500	320	70	0.011	6400	230	60	0.821
4.0	7200	540	90	0.019	5600	335	70	0.015	4750	240	60	0.857
5.0	6400	580	100	0.023	5100	370	80	0.018	4450	270	70	0.844
6.0	5300	560	100	0.026	4200	350	80	0.021	3700	260	70	0.813
8.0	4000	520	100	0.033	3200	330	80	0.026	2800	240	70	0.750
10.0	3200	480	100	0.038	2550	310	80	0.030	2200	220	70	0.688
12.0	2650	480	100	0.045	2100	300	80	0.036	1860	220	70	0.688
16.0	2000	420	100	0.053	1600	270	80	0.042	1400	200	70	0.625
20.0	1600	380	100	0.059	1300	250	80	0.048	1100	180	70	0.563



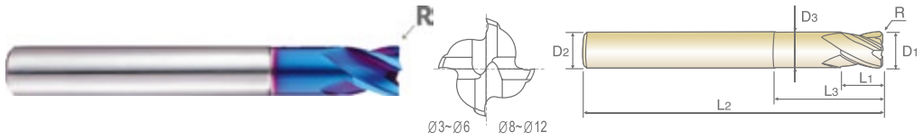
- DEVİR = dev/dak
- İLERLEME = mm/dak
- Vc = m/dak
- fz = mm/ağız

KARBÜR FREZELER

PRO-X GÜNEY KORE

4 AĞIZLI KAPLAMALI KÖŞE RADÜSLÜ (50-70 HRC)

NG HM | 4 | BLUE | 30° | R ±0.010 | R ±0.015 | PLAIN



Boy	Köşe Radüsü Toleransı (mm)	Freze Çapı Toleransı (mm)	Boyun Çapı Toleransı
Ø6'a kadar	±0.010	0~-0.012	h6
Ø6 sonrası	±0.015	0~-0.015	

- Yüksek sertlikteki malzemelerin işlenmesi için tasarlanmıştır
- Yeni geliştirilmiş ham madde ve kaplama yapısı ile yüksek hızlarda ve kuru kesimde çalışmaya uygundur
- Mükemmel son kesim
- Daraltılmış boğaz ile derin yerlere inmek mümkündür
- Yüksek hızlı işlemlerde talaş birikimini engellemek için köşe radyüsü
- Yüksek aşınma direnci

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Küresel Freze Çapı	Freze Çapı	Şaft Çapı	Keme Kenarı Boy	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-414030-05R	R0.5	3.0	6	4	10	55	2.85
PPF-414030-05R-16L	R0.5	3.0	6	4	16	55	2.85
PPF-414030-05R-20L	R0.5	3.0	6	4	20	55	2.85
PPF-414040-05R	R0.5	4.0	6	5	12	55	3.85
PPF-414040-05R-16L	R0.5	4.0	6	5	16	55	3.85
PPF-414040-05R-20L	R0.5	4.0	6	5	20	55	3.85
PPF-414060-05R	R0.5	6.0	6	7	20	60	5.85

Sip. No.	Küresel Freze Çapı	Freze Çapı	Şaft Çapı	Keme Kenarı Boy	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-414080-05R	R0.5	8.0	8	9	25	60	7.7
PPF-414080-1R	R1.0	8.0	8	9	25	60	7.7
PPF-414100-05R	R0.5	10.0	10	11	32	70	9.7
PPF-414100-1R	R1.0	10.0	10	11	32	70	9.7
PPF-414120-05R	R0.5	12.0	12	12	38	80	11.7
PPF-414120-1R	R0.5	12.0	12	12	38	80	11.7

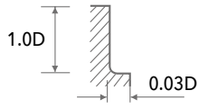
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
		○	○	◎	◎									

TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 414 (R) SERİSİ

MALZEME	ALAŞIMLI ÇELİKLER				SERTLEŞTİRİLMİŞ ÇELİKLER							
SERTLİK	HRc 30 ~ HRc 40				HRc 40 ~ HRc 50				HRc 50 ~ HRc 55			
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	48000	1184	150	0.006	38000	840	120	0.006	25500	568	80	0.006
2.0	33300	1400	210	0.011	26000	1000	165	0.010	17500	672	110	0.010
3.0	21800	1400	205	0.016	17300	1000	165	0.014	11500	672	110	0.015
4.0	16700	1440	210	0.022	13200	1040	165	0.020	8800	704	110	0.020
5.0	15700	1600	245	0.025	12500	1200	195	0.024	8300	800	130	0.024
6.0	13100	1560	245	0.030	10350	1120	195	0.027	6900	760	130	0.028
8.0	9880	1504	250	0.038	7800	1080	195	0.035	5200	720	130	0.035
10.0	7800	1400	245	0.045	6150	1008	195	0.041	4100	672	130	0.041
12.0	6650	1400	250	0.053	5250	1008	200	0.048	3500	672	130	0.048
16.0	4900	1200	245	0.061	3900	880	195	0.056	2600	584	130	0.056
20.0	3900	1040	245	0.067	3100	776	195	0.063	2050	520	130	0.063

MALZEME	ALAŞIMLI ÇELİKLER				SERTLEŞTİRİLMİŞ ÇELİKLER							
SERTLİK	HRc 55 ~ HRc 60				HRc 60 ~ HRc 65				HRc 65 ~ HRc 70			
ÇAP	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
1.0	20500	344	65	0.004	16000	216	50	0.003	12500	140	40	0.700
2.0	14500	416	90	0.007	11000	256	70	0.006	9500	184	60	0.657
3.0	9500	416	90	0.011	7500	256	70	0.009	6400	184	60	0.657
4.0	7200	432	90	0.015	5600	268	70	0.012	4750	192	60	0.686
5.0	6400	464	100	0.018	5100	296	80	0.015	4450	216	70	0.675
6.0	5300	448	100	0.021	4200	280	80	0.017	3700	208	70	0.650
8.0	4000	416	100	0.026	3200	264	80	0.021	2800	192	70	0.600
10.0	3200	384	100	0.030	2550	248	80	0.024	2200	176	70	0.550
12.0	2650	384	100	0.036	2100	240	80	0.029	1860	176	70	0.550
16.0	2000	336	100	0.042	1600	216	80	0.034	1400	160	70	0.500
20.0	1600	304	100	0.048	1300	200	80	0.038	1100	144	70	0.450



- DEVİR = dev/dak
- Vc = m/dak
- İLERLEME = mm/dak
- fz = mm/ağız

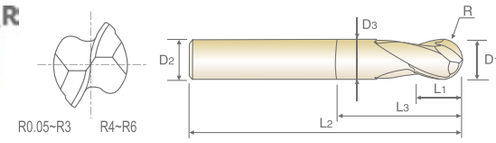
KARBÜR FREZELER

PRO-X GÜNEY KORE

2 AĞIZLI KÜRESEL KAPLAMALI (50-70 HRC)

NG HM | 2 | BLUE | 30° | R ±0.005 | R ±0.010 | PLAIN





Boy	Köşe Radüsü Toleransı (mm)	Freze Çapı Toleransı (mm)	Boyun Çapı Toleransı
Ø6'a kadar	±0.010	0~-0.012	h6
Ø6 sonrası	±0.015	0~-0.015	

- Yüksek sertlikteki malzemelerin işlenmesi için tasarlanmıştır
- Yeni geliştirilmiş ham madde ve kaplama yapısı ile yüksek hızlarda ve kuru kesimde çalışmaya uygundur
- Mükemmel son kesim
- Daraltılmış boğaz ile derin yerlere inmek mümkündür
- Yüksek hızlı işlemlerde talaş birikimini engellemek için köşe radyüsü
- Yüksek aşınma direnci

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Küresel Freze Çapı	Freze Çapı	Şaft Çapı	Keme Kenarı Boy	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-422010	R0.05	1.0	6	1,5	3	50	0.95
PPF-422015	R0.75	1.5	6	2	4	50	1.45
PPF-422020	R1.0	2.0	6	2.5	5	50	1.95
PPF-422025	R1.25	2.5	6	3	7	50	2.4
PPF-422030	R1.5	3.0	6	4	10	60	2.85
PPF-422040	R2.0	4.0	6	5	10	60	3.85

Sip. No.	Küresel Freze Çapı	Freze Çapı	Şaft Çapı	Keme Kenarı Boy	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-422050	R2.5	5.0	6	6	12	60	4.85
PPF-422060	R3.0	6.0	6	7	15	60	5.85
PPF-422080	R4.0	8.0	8	9	15	80	7.7
PPF-422100	R5.0	10.0	10	11	25	80	9.7
PPF-422120	R6.0	12.0	12	14	25	80	11.7

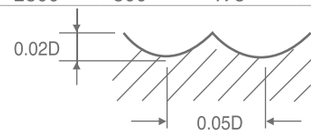
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
		○	○	◎	◎									

TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 422 SERİSİ

MALZEME			ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				SERTLEŞTİRİLMİŞ ÇELİKLER							
SERTLİK			HRc 30 ~ HRc 40				HRc 40 ~ HRc 50				HRc 50 ~ HRc 55			
ÇAP			Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
R0.1	x	0.2	50000	1200	30	0.012	50000	1050	30	0.011	45000	960	30	0.011
R0.15	x	0.3	50000	1500	45	0.015	50000	1350	45	0.014	45000	1200	40	0.013
R0.2	x	0.4	50000	1900	65	0.019	50000	1700	65	0.017	45000	1500	55	0.017
R0.25	x	0.5	50000	2400	80	0.024	50000	2100	80	0.021	45000	1900	70	0.021
R0.3	x	0.6	50000	2900	95	0.029	50000	2500	95	0.025	45000	2200	85	0.024
R0.4	x	0.8	50000	3900	125	0.039	50000	3300	125	0.033	45000	3000	115	0.033
R0.5	x	1.0	50000	4800	155	0.048	50000	4200	155	0.042	45000	3800	140	0.042
R0.6	x	1.2	50000	5100	190	0.051	48000	4300	180	0.045	43000	3850	160	0.045
R0.75	x	1.5	50000	5400	235	0.054	48000	4500	225	0.047	43000	4000	205	0.047
R1.0	x	2.0	49700	5700	310	0.057	47800	4800	300	0.050	40000	4000	250	0.050
R1.5	x	3.0	33100	6000	310	0.091	31800	5300	300	0.083	26500	4000	250	0.075
R2.0	x	4.0	24900	6000	315	0.120	23900	5300	300	0.111	20000	4000	250	0.100
R2.5	x	5.0	18600	5800	290	0.156	17800	4900	280	0.138	15000	3750	235	0.125
R3.0	x	6.0	13900	4850	260	0.174	13400	4100	255	0.153	11000	3100	205	0.141
R4.0	x	8.0	11100	4200	280	0.189	10700	3500	270	0.164	9000	2700	225	0.150
R5.0	x	10.0	9300	3700	290	0.199	8900	3100	280	0.174	7500	2400	235	0.160
R6.0	x	12.0	6950	2950	260	0.212	6680	2500	250	0.187	5600	1900	210	0.170
R8.0	x	16.0	5570	2650	280	0.238	5350	2200	270	0.206	4500	1700	225	0.189
R10.0	x	20.0	4450	2350	280	0.264	4300	1950	270	0.227	3600	1500	225	0.208

MALZEME			SERTLEŞTİRİLMİŞ ÇELİKLER											
SERTLİK			HRc 55 ~ HRc 60				HRc 60 ~ HRc 65				HRc 65 ~ HRc 70			
ÇAP			Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz	Devir	İlerleme	Vc	fz
R0.1	x	0.2	40000	770	25	0.010	35000	674	20	0.010	31500	570	20	0.009
R0.15	x	0.3	40000	965	40	0.012	35000	840	35	0.012	31500	700	30	0.011
R0.2	x	0.4	40000	1200	50	0.015	35000	1050	45	0.015	31500	890	40	0.014
R0.25	x	0.5	40000	1500	65	0.019	35000	1300	55	0.019	31500	1100	50	0.017
R0.3	x	0.6	40000	1800	75	0.023	35000	1600	65	0.023	31500	1400	60	0.022
R0.4	x	0.8	40000	2400	100	0.030	35000	2100	90	0.030	31500	1800	80	0.029
R0.5	x	1.0	40000	3000	125	0.038	35000	2600	110	0.037	35000	2300	110	0.033
R0.6	x	1.2	38000	3000	145	0.039	34000	2700	130	0.040	30600	2300	115	0.038
R0.75	x	1.5	37000	3100	175	0.042	33000	2700	155	0.041	29700	2300	140	0.039
R1.0	x	2.0	35000	3150	220	0.045	32000	2800	200	0.044	28500	2300	180	0.040
R1.5	x	3.0	23500	3150	220	0.067	21000	2800	200	0.067	19000	2300	180	0.061
R2.0	x	4.0	17500	3150	220	0.090	16000	2800	200	0.088	14500	2300	180	0.079
R2.5	x	5.0	13500	3050	210	0.113	11500	2550	180	0.111	10500	2100	165	0.100
R3.0	x	6.0	10000	2500	190	0.125	8800	2150	165	0.122	8000	1750	150	0.109
R4.0	x	8.0	8000	2150	200	0.134	7000	1850	175	0.132	6500	1550	165	0.119
R5.0	x	10.0	6600	1900	205	0.144	5800	1650	180	0.142	5300	1380	165	0.130
R6.0	x	12.0	5000	1550	190	0.155	4400	1250	165	0.142	4000	1050	150	0.131
R8.0	x	16.0	4000	1350	200	0.169	3500	1000	175	0.143	3200	850	160	0.133
R10.0	x	20.0	3200	1200	200	0.188	2800	800	175	0.143	2550	660	160	0.129



- RPM = rev./min.
- Vc = m/min.
- FEED = mm/min.
- fz = mm/t

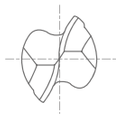
KARBÜR FREZELER

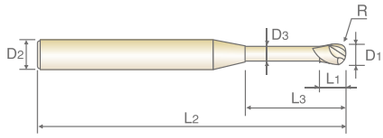
PRO-X GÜNEY KORE

2 AĞIZLI KÜRESEL KARBÜR RİB TAKIM

MG HM | 2 | 30° | R ±0.02 | DIN 6535HA







- Yüksek sıcaklıklarda kuru işlemeler için uygundur.
- Mükemmel , yüksek performanslı parmak freze
- Profil ve kontor işleme için dizayn edilmiştir.

◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Küresel Freze	Freze Çapı	Şaft Çapı	Kesme Kenarı	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R (±0.02)	D1	D2	L1	L3	L2	D3
PPF-32204	R0.2	0.4	4	0.7	2	50	0.37
PPF-32205	R0.25	0.5	4	0.75	2	50	0.45
PPF-32206	R0.3	0.6	4	0.9	2	50	0.55
PPF-32206-4L	R0.3	0.6	4	0.9	4	50	0.55
PPF-32206-6L	R0.3	0.6	4	0.9	6	50	0.55
PPF-32208	R0.4	0.8	4	1.2	4	50	0.75
PPF-32208-8L	R0.4	0.8	4	1.2	8	50	0.75
PPF-32210	R0.5	1.0	4	1.5	6	50	0.95
PPF-32210-10L	R0.5	1.0	4	1.5	10	50	0.95
PPF-32210-12L	R0.5	1.0	4	1.5	12	50	0.95
PPF-32212	R0.6	1.2	4	1.8	8	50	1.15
PPF-32215	R0.75	1.5	4	2.3	6	50	1.45
PPF-32215-12L	R0.75	1.5	4	2.3	12	50	1.45
PPF-32215-20L	R0.75	1.5	4	2.3	20	50	1.45

Sip. No.	Küresel Freze	Freze Çapı	Şaft Çapı	Kesme Kenarı	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R (±0.02)	D1	D2	L1	L3	L2	D3
PPF-32216	R0.8	1.6	4	2.4	8	50	1.55
PPF-32216-16L	R0.8	1.6	4	2.4	16	50	1.55
PPF-32220	R1.0	2.0	4	3	8	50	1.95
PPF-32220-10L	R1.0	2.0	4	3	10	50	1.95
PPF-32220-12L	R1.0	2.0	4	3	12	50	1.95
PPF-32220-16L	R1.0	2.0	4	3	16	50	1.95
PPF-32220-20L	R1.0	2.0	4	3	20	50	1.95
PPF-32230	R1.5	3.0	6	4.5	10	50	2.85
PPF-32230-16L	R1.5	3.0	6	4.5	16	60	2.85
PPF-32230-20L	R1.5	3.0	6	4.5	20	60	2.85
PPF-32230-25L	R1.5	3.0	6	4.5	25	75	2.85
PPF-32240	R2.0	4.0	6	6	12	50	3.85
PPF-32240-20L	R2.0	4.0	6	6	20	75	3.85
PPF-32240-30L	R2.0	4.0	6	6	30	75	3.85

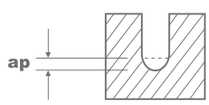
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎				○		○	○	○				

TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 322 SERİSİ

MALZEME	ALAŞIMSIZ ÇELİKLER ALAŞIMLI ÇELİKLER				
SERTLİK	~ HRc30				
ÇAP	Devir	İlerleme	ap (mm)	Vc	fz
0.4	26350~34000	150~415	0.018~0.036	33~43	0.003~0.006
0.5	26350~34000	150~415	0.023~0.045	41~53	0.003~0.006
0.6	26350~34000	190~535	0.027~0.054	50~64	0.004~0.008
0.8	26350~34000	190~535	0.036~0.072	66~85	0.004~0.008
1.0	24650~31000	210~595	0.045~0.090	77~97	0.004~0.010
1.2	20500~26000	210~665	0.055~0.100	77~98	0.005~0.013
1.4	18000~22000	210~665	0.062~0.125	79~97	0.006~0.015
1.5	16000~20500	210~665	0.070~0.135	75~97	0.007~0.016
1.6	15500~20000	210~665	0.075~0.145	78~101	0.007~0.017
1.8	14500~18200	210~665	0.080~0.160	82~103	0.007~0.018
2.0	13000~16000	210~665	0.090~0.180	82~101	0.008~0.021
3.0	9000~11000	210~665	0.135~0.270	85~104	0.012~0.030
4.0	7200~9350	210~665	0.180~0.360	90~117	0.015~0.036

MALZEME	ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				
SERTLİK	HRc30 ~ HRc45				
ÇAP	Devir	İlerleme	ap (mm)	Vc	fz
0.4	19100~24200	75~230	0.018~0.036	24~30	0.002~0.005
0.5	19100~24200	75~230	0.023~0.045	30~38	0.002~0.005
0.6	19100~24200	95~300	0.027~0.054	36~46	0.002~0.006
0.8	19100~24200	95~300	0.036~0.072	48~61	0.002~0.006
1.0	17400~22100	105~330	0.045~0.090	55~69	0.003~0.007
1.2	14500~18300	105~330	0.055~0.100	55~69	0.004~0.009
1.4	12800~15300	105~330	0.062~0.125	56~67	0.004~0.011
1.5	11500~14900	105~330	0.070~0.135	54~70	0.005~0.011
1.6	11200~14000	105~330	0.075~0.145	56~70	0.005~0.012
1.8	10200~12800	105~330	0.080~0.160	58~72	0.005~0.013
2.0	9400~11500	105~330	0.090~0.180	59~72	0.006~0.014
3.0	6000~11500	105~330	0.135~0.270	57~108	0.009~0.014
4.0	5000~6600	105~330	0.180~0.360	63~83	0.011~0.025



- DEVİR=dev/dak
- Vc=m/dak
- ILERLEME=mm/dak
- fz=mm/ağız

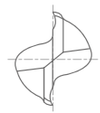
KARBÜR FREZELER

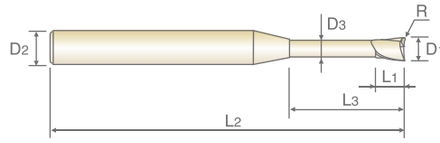
PRO-X GÜNEY KORE

2 AĞIZLI KÖŞE RADÜSLÜ KARBÜR RİB TAKIM

MG HM | 2 | 30° | PLAIN







◎ Mükemmel ○ İyi Ölçü:mm

Sip. No.	Küresel Freze	Freze Çapı	Şaft Çapı	Kesme Kenarı	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-31206	RO.05	0.6	4	0.9	2	45	0.55
PPF-31206-4L	RO.05	0.6	4	0.9	4	45	0.55
PPF-31208	RO.01	0.8	4	1.2	4	45	0.75
PPF-31208-8L	RO.01	0.8	4	1.2	8	45	0.75
PPF-31208-12L	RO.01	0.8	4	1.2	12	45	0.75
PPF-31210	RO.01	1.0	4	1.5	6	45	0.95
PPF-31210-8L	RO.01	1.0	4	1.5	8	45	0.95
PPF-31210-10L	RO.01	1.0	4	1.5	10	45	0.95
PPF-31210-12L	RO.01	1.0	4	1.5	12	45	0.95
PPF-31210-16L	RO.01	1.0	4	1.5	16	50	0.95
PPF-31210-20L	RO.01	1.0	4	1.5	20	55	0.95
PPF-31215	RO.02	1.5	4	2.3	6	45	1.45
PPF-31215-8L	RO.02	1.5	4	2.3	8	45	1.45
PPF-31215-10L	RO.02	1.5	4	2.3	10	45	1.45
PPF-31215-12L	RO.02	1.5	4	2.3	12	45	1.45
PPF-31215-16L	RO.02	1.5	4	2.3	16	50	1.45
PPF-31215-20L	RO.02	1.5	4	2.3	20	55	1.45
PPF-31220	RO.02	2.0	4	3	8	45	1.95
PPF-31220-6L	RO.02	2.0	4	3	10	45	1.95

Sip. No.	Küresel Freze	Freze Çapı	Şaft Çapı	Kesme Kenarı	Arka Boyun Çapı	Tam Boy	Boyun Çapı
	R	D1	D2	L1	L3	L2	D3
PPF-31220-10L	RO.02	2.0	4	3	10	45	1.95
PPF-31220-12L	RO.02	2.0	4	3	12	45	1.95
PPF-31220-16L	RO.02	2.0	4	3	16	50	1.95
PPF-31220-20L	RO.02	2.5	4	3.7	20	55	1.95
PPF-31225-8L	RO.02	2.5	4	3.7	8	45	2.40
PPF-31225	RO.02	2.5	4	3.7	10	45	2.40
PPF-31225-16L	RO.03	3.0	6	4.5	16	55	2.40
PPF-31230	RO.03	3.0	6	4.5	8	45	2.85
PPF-31230-10L	RO.03	3.0	6	4.5	10	45	2.85
PPF-31230-12L	RO.03	3.0	6	4.5	12	45	2.85
PPF-31230-16L	RO.03	3.0	6	4.5	16	55	2.85
PPF-31230-20L	RO.03	3.0	6	4.5	20	60	2.85
PPF-31240	RO.03	3.0	6	4.5	12	50	3.85
PPF-31240-16L	RO.03	4.0	6	6	16	50	3.85
PPF-31240-20L	RO.03	4.0	6	6	20	60	3.85
PPF-31230-30L	RO.03	3.0	6	4.5	30	70	2.85
PPF-31230-40L	RO.03	4.0	6	6	40	90	2.85
PPF-31240-30L	RO.03	4.0	6	6	30	70	3.85
PPF-31240-40L	RO.03	4.0	6	6	40	90	3.85

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel	Acrylic	CFRP
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
○	◎	◎	◎	○				○						

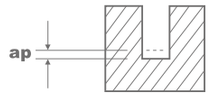
TAVSİYE EDİLEN KESME DEĞERLERİ

PPF - 312 SERİSİ

MALZEME	ALAŞIMSIZ ÇELİKLER ALAŞIMLI ÇELİKLER DÖKME DEMİR					ALAŞIMLI ÇELİKLER ISI DAYANIMLI ÇELİKLER				
SERTLİK	~ HRc30					HRc30 ~ HRc45				
GÜÇ	~ 1000N/mm²					1000 ~ 1500N/mm²				
ÇAP	Devir	İlerleme	ap (mm)	Vc	fz	Devir	İlerleme	ap (mm)	Vc	fz
0.4	31000~40000	200~440	0.007~0.018	39~50	0.003~0.006	22500~28000	85~340	0.007~0.018	28~35	0.002~0.006
0.5	31000~40000	200~440	0.009~0.022	49~63	0.003~0.006	22500~28000	85~340	0.009~0.022	35~44	0.002~0.006
0.6	31000~40000	250~570	0.011~0.026	58~75	0.004~0.007	22500~28000	110~430	0.011~0.026	42~53	0.002~0.008
0.7	31000~40000	250~570	0.012~0.031	68~88	0.004~0.007	22500~28000	110~430	0.012~0.031	49~62	0.002~0.008
0.8	27000~35000	280~630	0.014~0.035	68~88	0.005~0.009	19500~24500	120~480	0.014~0.035	49~62	0.003~0.010
0.9	25000~31500	280~720	0.030~0.060	71~98	0.006~0.010	17500~22500	160~540	0.030~0.060	49~64	0.005~0.012
1.0	22500~28000	280~810	0.045~0.090	71~88	0.006~0.014	15700~20000	190~600	0.045~0.090	49~63	0.006~0.015
1.2	18500~22500	280~900	0.055~0.100	70~85	0.008~0.020	13000~16500	190~600	0.055~0.100	49~62	0.007~0.018
1.4	16000~20000	280~900	0.062~0.125	70~88	0.009~0.023	11500~14000	190~600	0.062~0.125	51~62	0.008~0.021
1.5	14500~18500	280~900	0.070~0.135	68~87	0.010~0.024	10500~13500	190~600	0.070~0.135	49~64	0.009~0.022
1.6	14000~18000	280~900	0.075~0.145	70~90	0.010~0.025	10200~12800	190~600	0.075~0.145	51~64	0.009~0.023
1.8	13000~16500	280~900	0.080~0.160	74~93	0.011~0.027	9200~11500	190~600	0.080~0.160	52~65	0.010~0.026
2.0	12000~14500	280~900	0.090~0.180	75~91	0.012~0.031	8300~10500	190~600	0.090~0.180	52~66	0.011~0.029
2.5	9500~12000	280~900	0.112~0.235	75~94	0.015~0.038	6700~8500	190~600	0.112~0.235	53~67	0.014~0.035
3.0	8000~10000	280~900	0.135~0.270	75~94	0.018~0.045	5500~7000	190~600	0.135~0.270	52~66	0.017~0.043
4.0	6000~7500	280~900	0.180~0.360	75~94	0.023~0.060	4100~5300	190~600	0.180~0.360	52~67	0.023~0.057
5.0	4800~6000	280~900	0.225~0.450	75~94	0.029~0.075	3300~4200	190~600	0.225~0.450	52~66	0.029~0.071
6.0	4000~5000	280~900	0.270~0.540	75~94	0.035~0.090	2800~3500	190~600	0.270~0.540	53~66	0.034~0.086

MALZEME	SERTLEŞTİRİLMİŞ ÇELİKLER				
SERTLİK	HRc45 ~ HRc55				
GÜÇ	1500 ~ 2000N/mm²				
ÇAP	Devir	İlerleme	ap (mm)	Vc	fz
0.4	14300~17000	30~90	0.004~0.008	18~21	0.001~0.003
0.5	14300~17000	30~90	0.004~0.009	22~27	0.001~0.003
0.6	14300~17000	40~110	0.005~0.011	27~32	0.001~0.003
0.7	14300~17000	40~110	0.006~0.013	31~37	0.001~0.003
0.8	12500~14800	45~125	0.007~0.015	31~37	0.002~0.004
0.9	11000~12500	55~130	0.008~0.016	31~35	0.003~0.005
1.0	10000~12500	65~130	0.009~0.018	31~39	0.003~0.005
1.2	8300~10500	65~130	0.010~0.022	31~40	0.004~0.006
1.4	7200~9000	65~130	0.012~0.025	32~40	0.005~0.007

MALZEME	SERTLEŞTİRİLMİŞ ÇELİKLER				
SERTLİK	HRc45 ~ HRc55				
GÜÇ	1500 ~ 2000N/mm²				
ÇAP	Devir	İlerleme	ap (mm)	Vc	fz
1.5	6700~8200	65~130	0.014~0.028	32~39	0.005~0.008
1.6	6400~8000	65~130	0.015~0.030	32~40	0.005~0.008
1.8	5700~7200	65~130	0.016~0.032	32~41	0.006~0.009
2.0	5300~6600	65~130	0.018~0.035	33~41	0.006~0.010
2.5	4300~5300	65~130	0.022~0.045	34~42	0.008~0.012
3.0	3500~4400	65~130	0.028~0.055	33~41	0.009~0.015
4.0	2600~3300	65~130	0.036~0.072	33~41	0.013~0.020
5.0	2100~2600	65~130	0.045~0.090	33~41	0.015~0.025
6.0	1750~2600	65~130	0.054~0.108	33~49	0.019~0.025



- DEVİR=dev/dak
- Vc=m/dak
- ILERLEME=mm/dak
- fz=mm/ağız

I+ / A+ / S+ Endmill (Solid Endmill)
General purpose

C-Max (Solid Endmill)
Copper machining

H / Z Endmill
(Solid Endmill)
For high hardness

HRM / HRMDouble
High feed machining

MSD / MSD+ (Mach solid Drill)
Precision drilling

AM (Alpha Mill)
Multi-function

DAMPING PRO
Anti-Vibration Tool

CE
(Multi-functional chamfer Tool)
Grooving, Centering, Chamfering

Pro-XL Mill
Extra Long Edge for Aluminum machining

Pro-L Mill
Long Edge for Aluminum machining

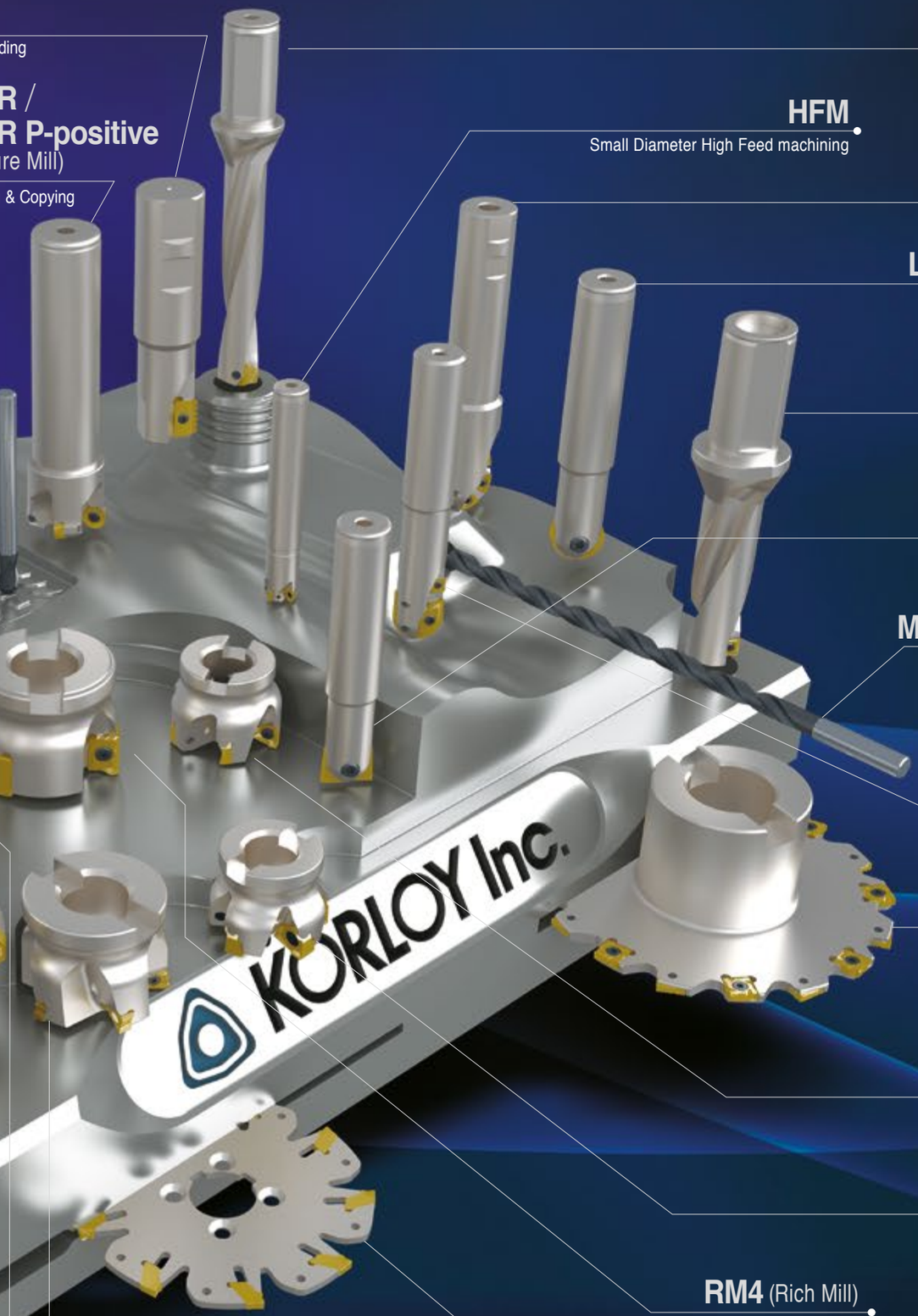
RM8 (Rich Mill)
8 Cutting edges

TP2P (Tangen-Pro)
Tangential Milling Tool

TFE (T-Cutter)
T-slotting

PBA (Power Buster)
High efficient milling

RM16 (Rich Mill)
16 Cutting edges



ding

R /
R P-positive
re Mill)

& Copying

TPDB (Top solid Drill_Blade)
High efficient precision drilling

HFM
Small Diameter High Feed machining

BRE (Mach Mill)
Ball nose-roughing

LBE-LBH / LBS (Laser Mill)
Ball nose-finishing

King Drill
High efficient drilling

LRE-LRH / LR (Laser Mill)
Corner radius mill

MLD / MLD⁺ (Mach long Drill)
Precision deep hole drilling

GBE (Mach Mill)
Ball nose-medium & roughing

WFSB (WIND Mill)
Slitting

RM3 (Rich Mill)
Multifunctional milling

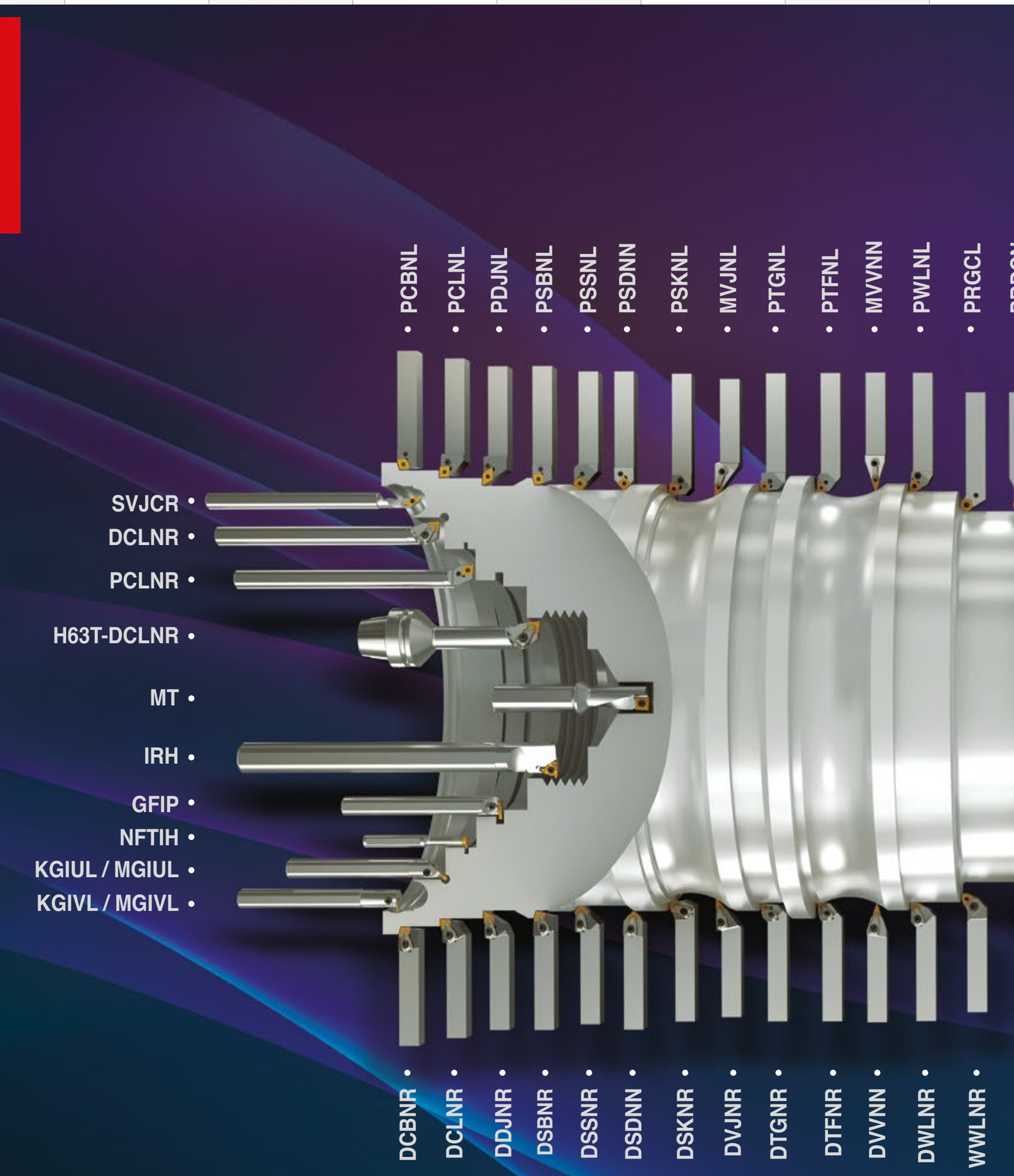
RM6 (Rich Mill)
Multifunctional Milling

RM4 (Rich Mill)
Double sides shouldering

RM4Z (Rich Mill)
Plunging

SPS (Side Cutter)
Slitting

Pro-X Mill
High speed aluminum machining


• PCBNL
• PCLNL
• PDJNL
• PSBNL
• PSSNL
• PSDNN
• PSKNL
• MVJNL
• PTGNL
• PTFNL
• MVVNN
• PWLNL
• PRGCL
SVJCR •
DCLNR •
PCLNR •
H63T-DCLNR •
MT •
IRH •
GFIP •
NFTIH •
KGIUL / MGIUL •
KGIVL / MGIVL •
DCBNR •
DCLNR •
DDJNR •
DSBNR •
DSSNR •
DSDNN •
DSKNR •
DVJNR •
DTGNR •
DTFNR •
DVVNN •
DWLNR •
WWLNR •

• PRDCN
• SVJBL
• SVVBN
• H63T-DDNNN
• H63T-DDJNL
• H63T-MCHNL
• MCHL
• MCVL
• SWUBL
• STFCL
• PTFNL
• MDUNL
• MVUNL
• SVQBR
• SVUBR
• DDUNR
• DSKNR
• DWLNR
• DTFNR
• KGFHR / MGFHR
• WTENN
• CKJNR
• KGEUR / MGEUR
• KGEVR / MGEVR
• FGVH
• KGFVR / MGFVR
• ERH
• KGEHR / MGEHR
• TBH
• SPH
• KGTB / SPB

AUTO TOOLS (KGT/MGT TİP)

KORLOY GÜNEY KORE

TALAŞ KIRICI SERİSİ

- Otomatik tezgahlar için kanal açma uçları
- Otomatik tezgahlar için özel kater
- Ekonomik çift taraflı uç
- Güçlü bağlama sistemi ile istirarlı işleme ve hassasiyet
- Düşük/yüksek ilerleme, sürekli/darbeli kesim gibi farklı kesme koşullarına göre bol talaş kırıcı çeşidi

KGT TİP

KGMN-L



- Keskin kesme kenarı
- Düşük ilerlemeli işleme için
- Küçük çaplı parçalar için

KGMN-R



- Güçlendirilmiş kesme kenarı
- Yüksek ilerlemeli işleme için
- Darbeli kesim için

KGMN-T



- Keskin kesme kenarı
- Daha güçlü talaş kontrolü
- Tornalama ve kanal kanal açma için

KGMR/L-LP



- Keskin kesme kenarı
- Düşük ilerleme için
- Küçük çaplı parçalar
- Sağ / Sol yönlü
- Düşük karbonlu çelik

KGMR/L-LP



- Güçlü kesme kenarı
- Yüksek ilerleme için
- Darbeli kesim için
- Sağ / Sol yönlü

KRMN-C



- Artan talaş kontrolü
- Kopyalama
- Rölyef

MGT TİP

MGM(G)N-M



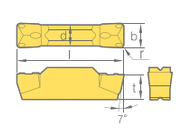
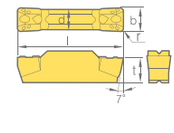
- Talas yüzeyinin merkezindeki talaş kırıcı ile talaş genişiğinin daralması sayesinde daha kolay talaş kontrolü
- Dış cap işlemede, küçük noktalar sayesinde düzgün tlaş akılı
- Hem dış çap işleme, hem de kanal açma için uygundur

MGMN-G



- Daha iyi talaş akışı için, daha dar talaş çıkaran, merkez noktaları kullanılmış özel tasarımlı talaş kırıcı
- Kanal açma için özel talaş kırıcı

MGT KESİCİ UÇ

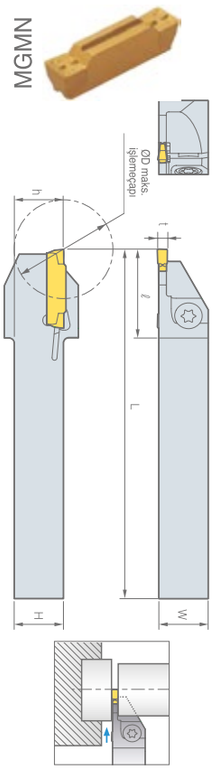
Uygulama	Resim	Kod		Kaplamalı							Kaplamasız			Boyutlar (mm)					Şekil
				NC3120	NC3225	NC5330	NC6315	NC3030	PC5300	PC9030	H01	G10	ST30A	b	r	l	d	t	
Kanal Açma	MGMN-G	MGMN	150-G					●	●	●	●			1.5	0.15	16.0	1.2	3.5	
			200-G	●				●		●	●			2.0	0.2	16.0	1.6	3.5	
			250-G					●	●	●				2.5	0.2	18.5	2.0	3.85	
Kanal Açma	MGMN-M	MGMN	200-M	●		●		●	●	●	●			2.0	0.2	16.0	1.6	3.5	
			250-M	●				●	●	●				2.5	0.2	18.5	2.0	3.85	

● : Stok ürün

AUTO TOOLS (MGT TİP)

KORLOY GÜNEY KORE

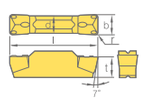
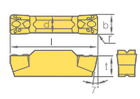
MGEHR/L



• R tipi kesici uçlar (mm)

Sip. No.	ØD	H = (h)	W	L	ℓ	t	Kesici uç	Vida	Anahtar
MGEHR/L 1010-X15A	20	10	10	125	18	1.5	MGMN150-G	ETNA0412	TW15L
MGEHR/L 1212-X15A	25	12	12	125	19.5	1.5			
MGEHR/L 1010-X20A	20	10	10	125	18	2	MGMN200-M MGMN200-G	ETNA0412	TW 15L
MGEHR/L 1212-X20A	25	12	12	125	19.5	2			
MGEHR/L 1616-X20A	32	16	16	125	25	2			
MGEHR/L 1010-X25A	20	10	10	125	20	2.5	MGMN250-M MGMN250-G	ETNA0412	TW15L
MGEHR/L 1212-X25A	25	12	12	125	20	2.5			
MGEHR/L 1616-X25A	32	16	16	125	25	2.5			

MGT KESİCİ UÇ

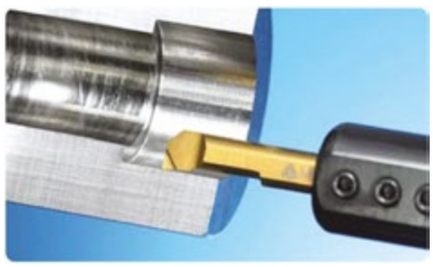
Uygulama	Resim	Kod		Kaplamalı							Kaplamasız			Boyutlar (mm)					Şekil
				NC3120	NC3225	NC5330	NC6315	NC3030	PC5300	PC9030	H01	G10	ST30A	b	r	l	d	t	
Kanal Açma	MGMN-G	MGMN	150-G					●	●	●	●			1.5	0.15	16.0	1.2	3.5	
			200-G	●				●		●	●			2.0	0.2	16.0	1.6	3.5	
			250-G					●	●	●				2.5	0.2	18.5	2.0	3.85	
Kanal Açma	MGMN-M	MGMN	200-M	●		●		●	●	●	●			2.0	0.2	16.0	1.6	3.5	
			250-M	●				●	●	●				2.5	0.2	18.5	2.0	3.85	

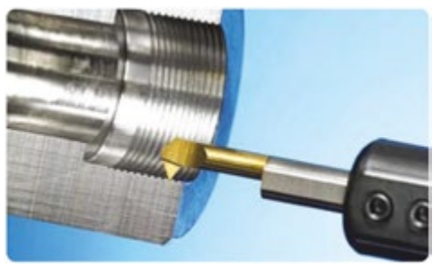
AUTO TOOLS (MSB TAKIMLAR)

KALİTELER

Kalite	Kaplama	Uygulama ve Özellikler
Z12M	Karbür	Ultra ince tanecikli iç yapı üstün aşınma direnci ve tokluğu garanti ediyor. Uygulama : Dökme demir, Alüminyum alaşımları ve demir dışı metallerin işlenmesi
PC30M	TiN kaplama	TiN kaplamalı ultra ince tanecikli yapı uzun takım ömrü sağlar. Uygulama : Paslanmaz çelik, ısıl dirençli alaşımlar ve kesmesi zor malzemelerin işlenmesi

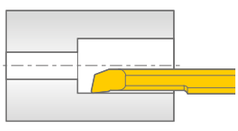
İŞLEME TİPLERİ



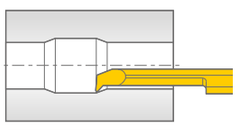


İŞLEME TİPLERİ

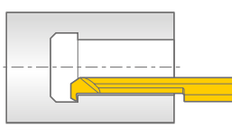
DELİK İŞLEME



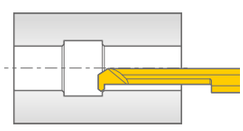
Delik
Min. işleme çapı: Çap 3.2



Kopyalama
Min. işleme çapı: Çap 4.2

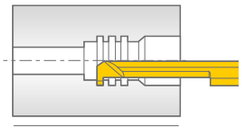


Yanal Delik Işleme
Min. işleme çapı: Ø3.2

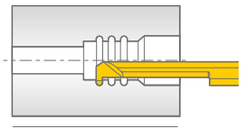


Pah kırma
Min. işleme çapı: Ø4.2

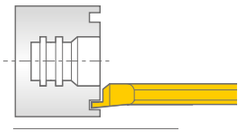
KANAL AÇMA



Kare kanal açma
Min. işleme çapı: Ø3.2

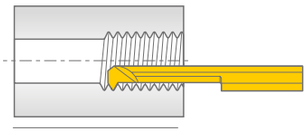


Dairesel kanal açma
Min. işleme çapı: Ø3.2



Alın işleme
Min. işleme çapı: Ø6.0

DİŞ ÇEKME



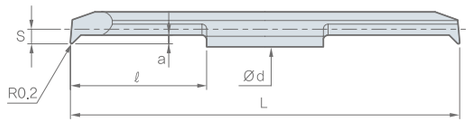
Diş çekme
Min. işleme çapı: Ø3.3

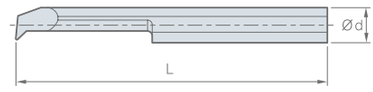
AUTO TOOLS (MSB TAKIMLAR)

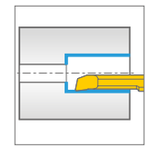
KORLOY GÜNEY KORE

DELİK İŞLEME







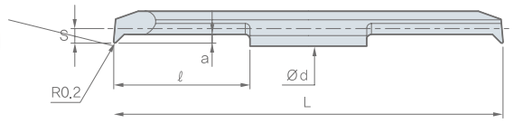


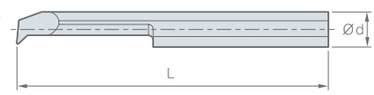
• Stok Ürün

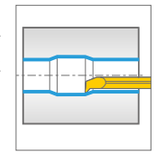
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	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	a	S
MBR 0310	•		MBR 0310-1			3.0	3.2	10	40	35	0.5	1.4
MBR 0315	•		MBR 0315-1					15	50	45		
MBR 0410	•		MBR 0410-1			4.0	4.2	10	40	35	0.6	1.9
MBR 0415	•		MBR 0415-1					15	50	45		
MBR 0420	•		MBR 0420-1					20	60	50		
MBR 0610			MBR 0610-1			6.0	6.2	10	45	40	0.75	2.9
MBR 0615	•		MBR 0615-1					15	55	45		
MBR 0620	•		MBR 0620-1					20	65	50		
MBR 0810			MBR 0810-1			8.0	8.2	10	50	45	0.8	3.9
MBR 0820	•		MBR 0820-1					20	70	60		
MBR 0830			MBR 0830-1					30	80	70		
MBR 1015			MBR 1015-1			10.0	10.2	15	60	60	1.0	4.9
MBR 1025	•		MBR 1025-1					25	80	70		
MBR 1035			MBR 1035-1					35	100	80		

KOPYALAMA







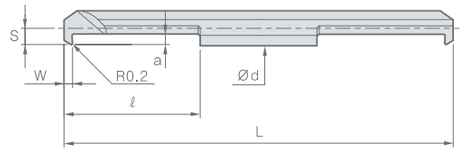


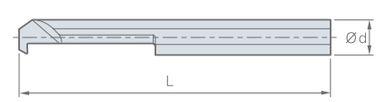
• Stok Ürün

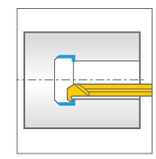
Sip. No.	İki taraflı		Sip. No.	Tek taraflı		Ø d	Min. Çalışma Çapı	ℓ	Uzunluk L		Kesme Kenarının Detayı	
	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	a	S
MBCR 0410			MBCR 0410-1			4.0	4.2	10	40	35	1.0	1.9
MBCR 0415	•		MBCR 0415-1					15	50	45		
MBCR 0420	•		MBCR 0420-1					20	60	50		
MBCR 0610			MBCR 0610-1			6.0	6.2	10	45	40	1.3	2.9
MBCR 0615	•		MBCR 0615-1					15	55	45		
MBCR 0620	•		MBCR 0620-1					20	60	50		

YANAL DELİK İŞLEME









• Stok Ürün

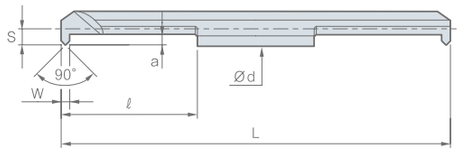
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	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	W	a	S
MBBR 0310			MBBR 0310-1			3.0	3.2	10	40	35	1.5	0.8	1.4
MBBR 0315			MBBR 0315-1					15	50	45			
MBBR 0410			MBBR 0410-1			4.0	4.2	10	40	35	2.0	1.3	1.9
MBBR 0415			MBBR 0415-1					15	50	45			
MBBR 0420			MBBR 0420-1					20	60	50			
MBBR 0610			MBBR 0610-1			6.0	6.2	10	45	40	2.0	1.9	2.9
MBBR 0615			MBBR 0615-1					15	55	45			
MBBR 0620			MBBR 0620-1					20	65	50			

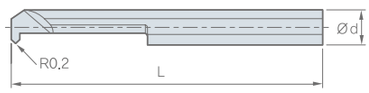
AUTO TOOLS (MSB TAKIMLAR)

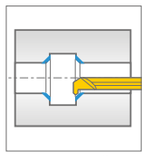
KORLOY GÜNEY KORE

PAH TAKIMI







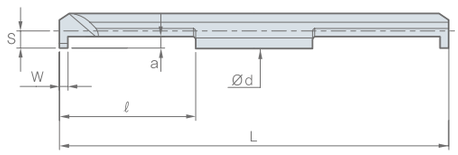


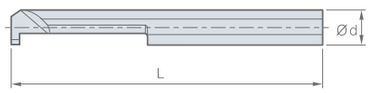
• Stok Ürün

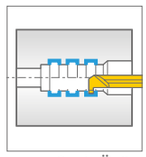
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	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	W	a	S
MBFR 0410			MBFR 0410-1			4.0	4.2	10	40	35	0.8	1.0	1.9
MBFR 0415			MBFR 0415-1					15	50	45			
MBFR 0420			MBFR 0420-1					20	60	50			
MBFR 0610			MBFR 0610-1			6.0	6.2	10	45	40	1.4	1.2	2.9
MBFR 0615			MBFR 0615-1					15	55	45			
MBFR 0620			MBFR 0620-1					20	65	50			

KARE KANAL AÇMA







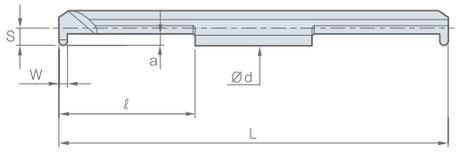


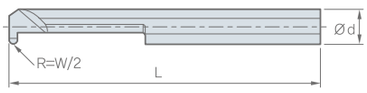
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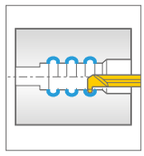
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	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	W	a	S
MGR 0310-1.0			MGR 0310-1.0-1			3.0	3.2	10	40	35	1.0	0.8	1.4
MGR 0315-1.0			MGR 0315-1.0-1					15	50	45			
MGR 0310-1.5			MGR 0310-1.5-1					10	40	35	1.5		
MGR 0315-1.5			MGR 0315-1.5-1					15	50	45			
MGR 0410-1.0			MGR 0410-1.0-1			4.0	4.2	10	40	35	1.0	1.4	1.9
MGR 0420-1.0			MGR 0420-1.0-1					20	60	50			
MGR 0410-1.5			MGR 0410-1.5-1					10	40	35	1.5		
MGR 0420-1.5			MGR 0420-1.5-1					20	60	50			
MGR 0410-2.0			MGR 0410-2.0-1					10	40	35	2.0		
MGR 0420-2.0			MGR 0420-2.0-1					20	60	50			
MGR 0610-1.0	•		MGR 0610-1.0-1			6.0	6.2	10	45	40	1.0	1.8	2.9
MGR 0620-1.0	•		MGR 0620-1.0-1					20	65	50			
MGR 0610-1.5			MGR 0610-1.5-1					10	45	40	1.5		
MGR 0620-1.5			MGR 0620-1.5-1					20	65	50			
MGR 0610-2.0			MGR 0610-2.0-1					10	45	40	2.0		
MGR 0620-2.0			MGR 0620-2.0-1					20	65	50			
MGR 0610-2.5			MGR 0610-2.5-1					10	45	40	2.5	2.0	
MGR 0620-2.5			MGR 0620-2.5-1					20	65	50			
MGR 0820-1.5			MGR 0820-1.5-1			8.0	8.2	20	70	60	1.5	2.5	3.9
MGR 0820-2.0			MGR 0820-2.0-1								2.0		
MGR 0820-2.5			MGR 0820-2.5-1								2.5	3.5	
MGR 0820-3.0			MGR 0820-3.0-1								3.0		
MGR 1025-1.5			MGR 1025-1.5-1			10.0	10.2	25	80	70	1.5	2.5	4.9
MGR 1025-2.0			MGR 1025-2.0-1								2.0		
MGR 1025-2.5			MGR 1025-2.5-1								2.5	3.5	
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DAİRESEL KANAL AÇMA









• Stok Ürün

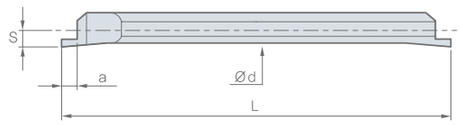
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	Kaplamalı PC30M	Kaplamasız Z12M		Kaplamalı PC30M	Kaplamasız Z12M				İki taraflı	Tek taraflı	W	a	S
MGRR 0310-0.8			MGRR 0310-0.8-1			3.0	3.2	10	40	35	0.8	0.8	1.4
MGRR 0315-0.8			MGRR 0315-0.8-1					15	50	45			
MGRR 0410-1.0			MGRR 0410-1.0-1			4.0	4.2	10	40	35	1.0	1.0	1.9
MGRR 0420-1.0			MGRR 0420-1.0-1					20	60	50			
MGRR 0610-1.0			MGRR 0610-1.0-1			6.0	6.2	10	45	40	1.0	2.0	2.9
MGRR 0620-1.0			MGRR 0620-1.0-1					20	65	50			
MGRR 0610-1.5			MGRR 0610-1.5-1					10	45	40	1.5		
MGRR 0620-1.5			MGRR 0620-1.5-1					20	65	50			
MGRR 0610-2.0			MGRR 0610-2.0-1					10	45	40	2.0		
MGRR 0620-2.0			MGRR 0620-2.0-1					20	65	50			
MGRR 0820-1.0			MGRR 0820-1.0-1			8.0	8.2	20	70	60	1.0	2.3	3.9
MGRR 0820-1.5			MGRR 0820-1.5-1								1.5		
MGRR 0820-2.0			MGRR 0820-2.0-1								2.0		
MGRR 1025-1.0			MGRR 1025-1.0-1			10.0	10.2	25	80	70	1.0	2.8	4.9
MGRR 1025-1.5			MGRR 1025-1.5-1								1.5		
MGRR 1025-2.0			MGRR 1025-2.0-1								2.0		

AUTO TOOLS (MSB TAKIMLAR)

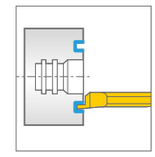
KORLOY GÜNEY KORE

ALIN KANAL AÇMA







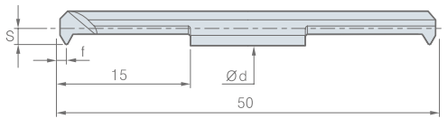


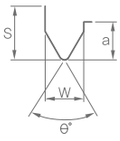
• Stok Ürün

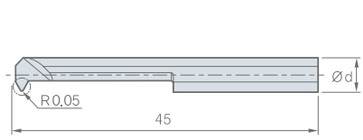
Sip. No.	İki taraflı		Sip. No.	Tek taraflı		Ø d	Min. Çalışma Çapı	Uzunluk L		Kesme Kenarının Detayı		
	Kaplamalı	Kaplamasız		Kaplamalı	Kaplamasız			İki taraflı	Tek taraflı	W	a	S
	PC30M	Z12M		PC30M	Z12M							
MGFR 0400-1.0			MGFR 0400-1.0-1			4.0	6.0	50	45	1.0	1.5	1.8
MGFR 0400-1.5			MGFR 0400-1.5-1							1.5	2.0	
MGFR 0600-1.0			MGFR 0600-1.0-1			6.0	8.5	50	45	1.0	1.5	2.9
MGFR 0600-1.5			MGFR 0600-1.5-1							1.5	2.0	
MGFR 0600-2.0	•		MGFR 0600-2.0-1							2.0	2.5	
MGFR 0800-1.0			MGFR 0800-1.0-1			8.0	10.4	70	60	1.0	1.5	3.9
MGFR 0800-1.5			MGFR 0800-1.5-1							1.5	2.0	
MGFR 0800-2.0			MGFR 0800-2.0-1							2.0	2.5	
MGFR 1000-2.0			MGFR 1000-2.0-1			10.0	12.4	80	70	2.0	2.5	4.9
MGFR 1000-2.5			MGFR 1000-2.5-1							2.5	3.0	
MGFR 1000-3.0			MGFR 1000-3.0-1							3.0	3.5	
MGFR 1000-3.5			MGFR 1000-3.5-1							3.5	4.0	
MGFR 1000-4.0			MGFR 1000-4.0-1							4.0	4.5	
MGFR 1000-4.5			MGFR 1000-4.5-1							4.5	5.0	

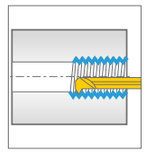
DİŞ ÇEKME





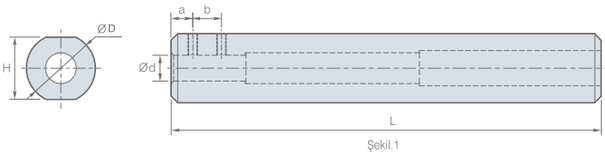




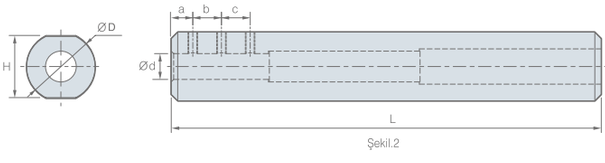


Sip. No.	İki taraflı		Sip. No.	Tek taraflı		Ø d	Min. Çalışma Çapı	Diş Çekme			Kesme Kenarının Detayı		
	Kaplamalı	Kaplamasız		Kaplamalı	Kaplamasız			W	Hatve/tpi	θ°	S	a	f
	PC30M	Z12M		PC30M	Z12M								
MTR 0315-F60			MTR 0315-F60-1			3.0	3.3	0.5~1.0	60°	1.2	1.45	1.2	0.6
MTR 0415-F60			MTR 0415-F60-1			4.0	4.3				1.95		
MTR 0615-A60			MTR 0615-A60-1			6.0	6.2	0.5~1.5		2.0	2.90	2.2	1.0
MTR 0315-F55			MTR 0315-F55-1			3.0	3.3	48~24	55°	1.2	1.45	1.2	0.6
MTR 0415-F55			MTR 0415-F55-1			4.0	4.3				1.95		
MTR 0615-A55			MTR 0615-A55-1			6.0	6.2	28~16		2.0	2.9	2.2	1.0

SL (YATAK)



Şekil.1



Şekil.2

(mm)

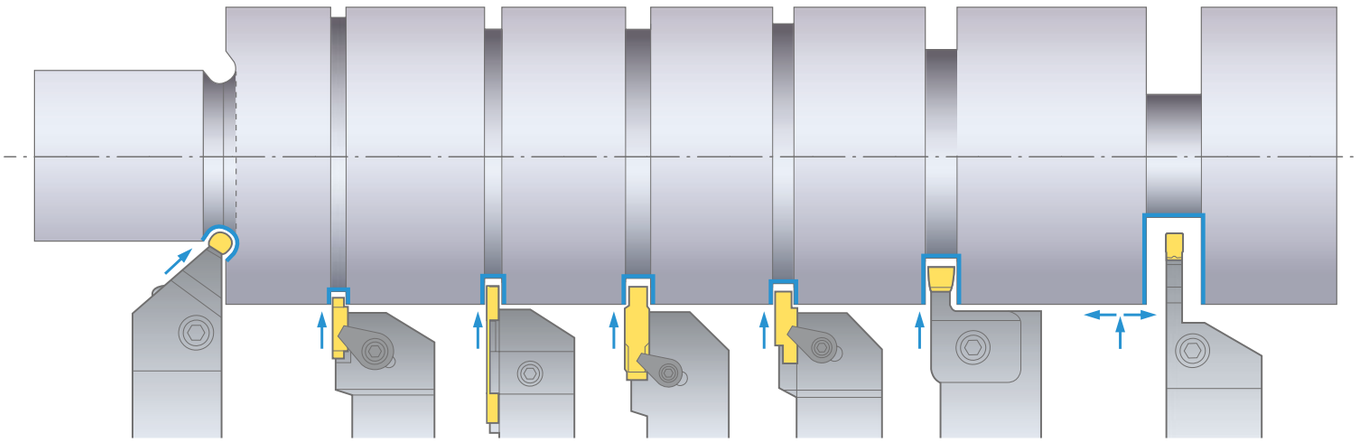
Sip. No.	Ød	a	b	c	ØD	H	L	Vida	Anahtar	Şekil
SL1603	3	5	-	-	16	14	100	M3	HW15L	1
SL1604	4	5	6	-	16	14	100	M4	HW20L	
SL1605	5	5	8	-	16	14	100	M4	HW20L	
SL1606	6	5	6	6	16	14	100	M4	HW20L	2
SL1607	7	5	6	8	16	14	100	M4	HW20L	
SL2008	8	5	10	10	20	18	100	M4	HW20L	2
SL2010	10	5	10	10	20	18	100	M5	HW20L	

* Hassas tolerans ve yüzey bilemesi

UYGULAMA ÖRNEKLERİ

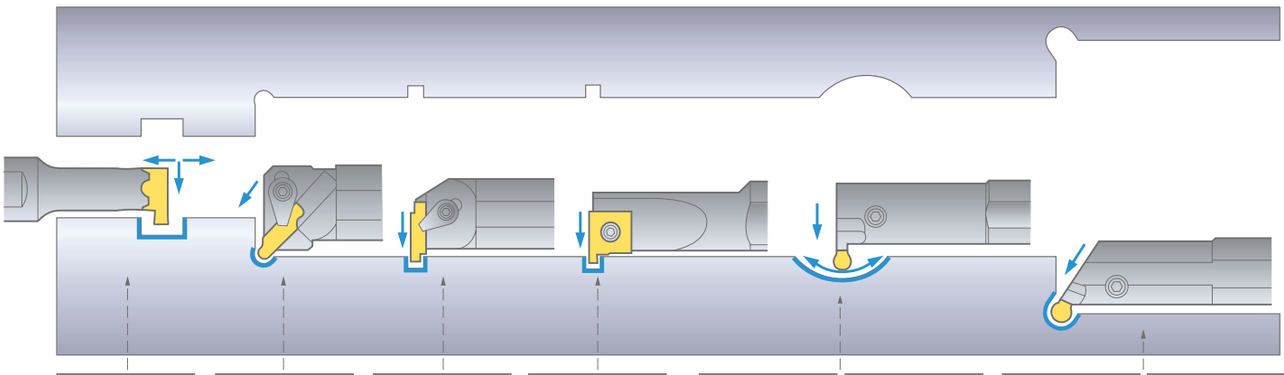
KORLOY GÜNEY KORE

DIŞ ÇAP TORNALAMA İÇİN



KGEUR/L	MGEUR/L	TBH	PH	GH	GFT	DBH	KGEHR/L	MGEHR/L
Genişlik: 2.5 T-Maks: 3.0	Genişlik: 3.0~8.0 T-Maks: 3.0~5.0	Genişlik: 1.25~4.5 T-Maks: 1.5~5.0	Genişlik: 3.0~5.0 ØD-Maks: 30~50	Genişlik: 1.23~4.28 T-Maks: .5~4.0	Genişlik:1.1~8.0 T-Maks:2.1~9.0	Genişlik: 3.0~8.0 T-Maks: 14	Genişlik: 2.0~8.0 T-Maks: 17~20	Genişlik: 1.5~8.0 T-Maks: 10~28
KRMN	MRMN	TB TB-M	POB	GO GS	GW BF	DC DB	KGMN KRMN KGGN KRGN	MGMN MRMN MGGN MRGN

DELİK İŞLEME İÇİN

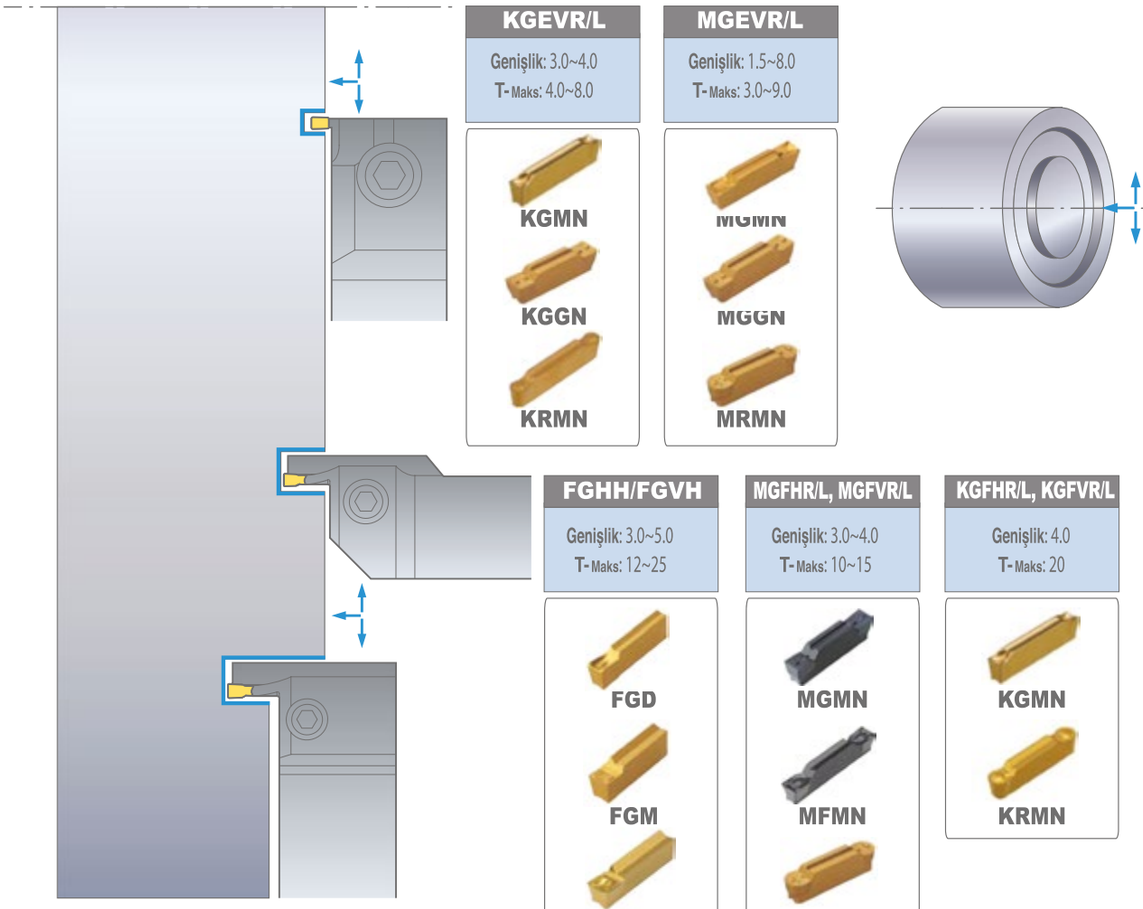


NFTIH	GFIK	GFIP	IGH	KGIVR/L	MGIVR/L	KGIUR/L	MGIUR/L
Genişlik: 0.75~4.02 T-Maks: 1.3~4.6	Genişlik: 2.0~8.0 T-Maks: 2.0~8.0	Genişlik: 1.1~8.0 T-Maks: 2.1~9.0	Genişlik: 1.25~2.8 T-Maks: 1.5~2.3	Genişlik: 2.0~4.0 T-Maks: 7.0~8.0	Genişlik: 1.5~8.0 T-Maks: 4.0~10	Genişlik: 3.0 T-Maks: 3.0	Genişlik: 3.0~8.0 T-Maks: 3.5~6.5
NFTG NFTF NFTT	GR	GW BF	IG	KGMI KRMN	MGMN MRMN MGGN MRGN	KRMN	MRMN

UYGULAMA ÖRNEKLERİ

KORLOY GÜNEY KORE

DIŞ ÇAP TORNALAMA İÇİN



KGEVR/L
Genişlik: 3.0~4.0
T-Maks: 4.0~8.0

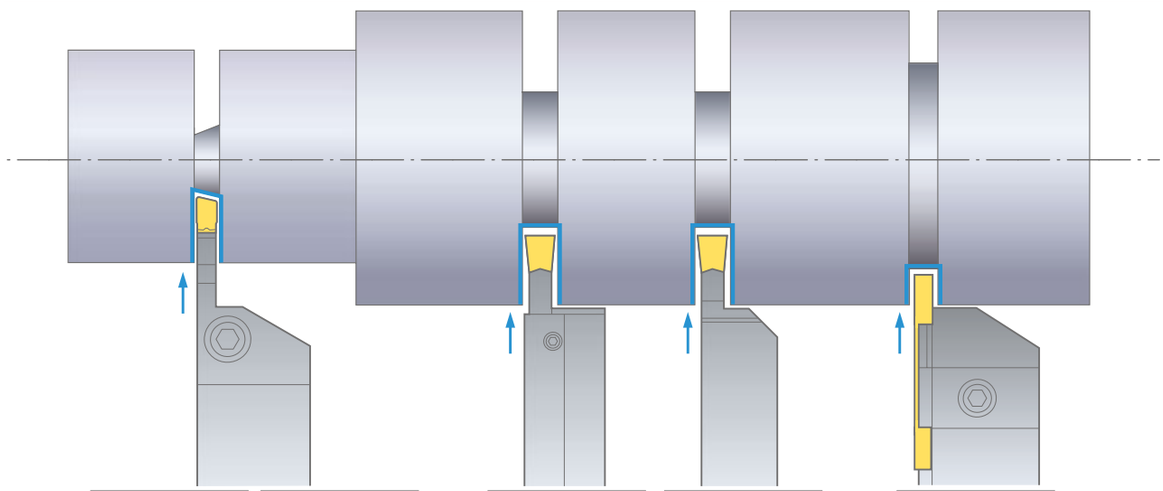
MGEVR/L
Genişlik: 1.5~8.0
T-Maks: 3.0~9.0

FGHH/FGVH
Genişlik: 3.0~5.0
T-Maks: 12~25

MGFHR/L, MGFVR/L
Genişlik: 3.0~4.0
T-Maks: 10~15

KGFHR/L, KGFVR/L
Genişlik: 4.0
T-Maks: 20

DELİK İŞLEME İÇİN



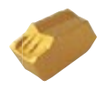
KGEHR/L
Genişlik: 3.0
T-Maks: 20



MGEHR/L
Genişlik: 2.0~5.0
T-Maks: 10~28



SPB-(S)
Genişlik: 2.0~6.0
ØD-Maks: 35~125



KGTB
Genişlik: 1.5~8.0
ØD-Maks: 26~120



PH
Genişlik: 3.0~5.0
ØD-Maks: 30~50



C/B TALAŞ KIRICI SEÇİMİ

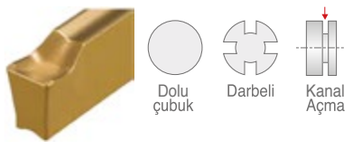
KORLOY GÜNEY KORE

HAFİF KANAL AÇMA L



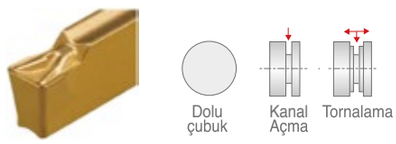
- Keskin kesme kenarı
- Düşük ilerleme hızlarında
- Küçük çaplı parçalarda
- Düşük karbonlu çelikler
- Alaşımlı çelikler
- Paslanmaz

KABA KANAL AÇMA R



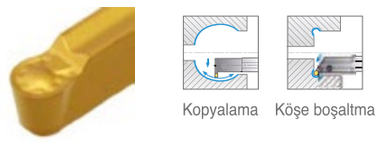
- Güçlü kesme kenarı
- Yüksek ilerleme hızında işlemede
- Darbeli kesimde
- Karbon çelikleri
- Alaşımlı çelikler
- Paslanmaz
- Dökme demir

TORNALAMA VE ÇOKLU KANAL AÇMA T



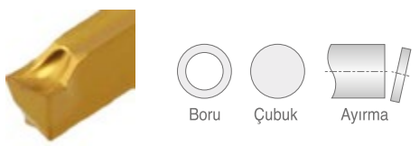
- Keskin kesme kenarı
- İyileştirilmiş talaş kontrolü
- Tornalama & kanal açmada
- Karbon çelikleri
- Alaşımlı çelikler
- Paslanmaz
- Dökme demir

KOPYALAMA VE KÖŞE BOŞALTMALARI İÇİN C



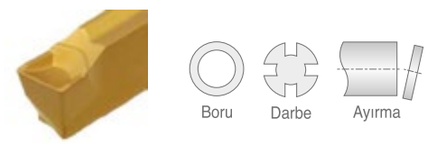
- İyileştirilmiş talaş kontrolü
- Kopyalama
- Köşe boşaltma
- Karbon çelikleri
- Alaşımlı çelikler
- Paslanmaz
- Dökme demir

HAİFİF KESME İÇİN L.P



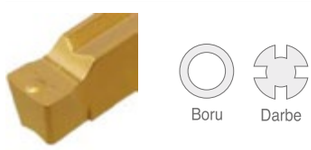
- Keskin kesici kenar
- Düşük ilerleme işleme
- Küçük çaplı parça
- Sağ/sol yönlü
- Düşük karbon çelik
- Karbon çelik
- Alaşımlı çelik
- Paslanmaz

KABA İŞLEME KESME İÇİN RP



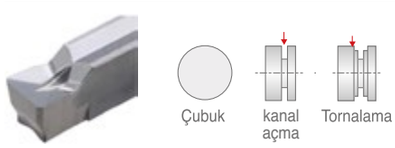
- Keskin kesici kenar
- Yüksek ilerleme işleme
- Darbeli kesim
- Sağ/sol yönlü
- Karbon çelik
- Alaşımlı çelik
- Döküm demir

HASSAS KANAL AÇMA İÇİN B



- Taşlanmış uç
- Hassas tolerans
- Çeşitli kesim kenarları uzunluk, uç radüsü
- Karbon çelik
- Alaşımlı çelik
- Paslanmaz
- Döküm demir

ALÜMİNYUM KANAL AÇMA İÇİN A



- Keskin kesici kenar
- Hassas tolerans
- Alüminyum alaşım
- Bakır alaşım

TAVSİYE EDİLEN UYGULAMA ARALIĞI İÇİN KALİTELER

İş Parçası		Kalite	Uygun kalite seçimi	Önerilen Kesme Hızı (m/dak) 50 100 150 200 800
P	Çelik	PC5300	1	70 – 120
P	Çelik	NC3225	2	130 – 220
P	Çelik	NC5330	3	120 – 200
P	Alaşımlı çelikler	PC5300	1	80 – 105
P	Alaşımlı çelikler	NC3225	2	130 – 200
P	Alaşımlı çelikler	NC5330	3	90 – 180
M	Paslanmaz çelik	PC5300	1	70 – 120
M	Paslanmaz çelik	PC9030	2	70 – 115
M	Paslanmaz çelik	NC5330	3	75 – 125
K	Dökme demir	PC5300	1	55 – 90
K	Dökme demir	NC5330	2	95 – 160
N	Demir dışı metal	H01	1	200 – 790
S	HRSA	PC5300	1	20 – 35

DİŞ ÇEKME İLE İLGİLİ TEKNİK BİLGİLER

KORLOY GÜNEY KORE

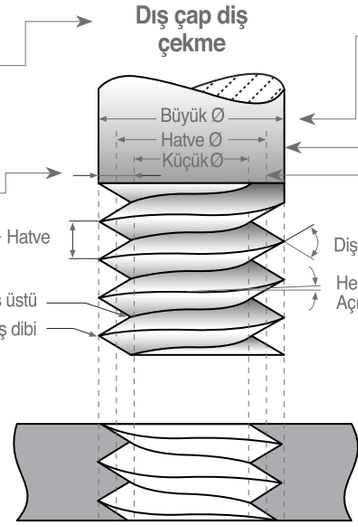
ÖZEL ÖZELLİKLERİ

Dış çap diş çekme
Konik yada silindir şeklindeki dış çap yüzeylerde diş çekme

Dişin derinliği
Diş üstü ile diş dibi arasındaki çap farkı

Hatve
Diş eksenine paralel sıralı iki diş formunun benzer noktaları arasındaki mesafedir. Bu mesafe milimetre veya tpi (inç başı diş miktarı) olarak belirtilebilir

Nominal Çap
Sapma payı ve tolerans uygulanmış çap sınırlamaları ile elde edilen çaptır



Delik diş çekme
İç yüzeyde veya konik yüzeyde bulunan diştir.

Vida Anma Çapı
Diş formundaki en büyük çapı

Hatve Çapı
Düz bir dişte, diş dibi çapı ile diş üstü çapının tam ortasından geçen hayali silindirin çapıdır

Teorik Vida Özçapı
Bir diş formundaki en küçük çaptır

Helis Açısı
Düz bir dişte, dişin sarmal eksen boyu ve hatve çaplı dairenin çevresi bir üçgen oluşturur, helis açısı sarmal eksene ters yönlü açıdır

Düz diş çekme
Silindir biçimli yüzey üzerinden diş formu işlenir

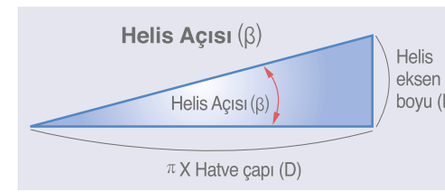
Konik diş çekme
Konik biçimli yüzey üzerinden diş formu işlenir



Bir diş formunun eksenel görünüşüne bakıldığında saat yönünün tersine derinleşen bir eğim söz konusudur. Bütün sol dişler LH koduna sahiptir



Bir diş formunun eksenel görünüşüne bakıldığında saat yönüne derinleşen bir eğim söz konusudur. Dişler belirtilmediği sürece sağ dişlir

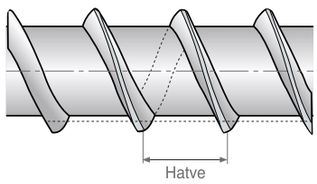


Düz bir dişte, dişin sarmal eksen boyu ve hatve çaplı dairenin çevresi bir üçgen oluşturur, helis açısı sarmal eksene ters yönlü açıdır

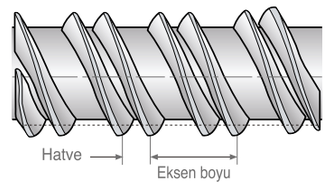
ÇOK AĞIZLI VİDA İŞLEME

Birden çok hatve ve çoklu sarmal eksen boyuna sahip vidalardır. Çok ağızlı vida kaba diş formuna gerek kalmadan hızlı bir şekilde sıkılabilir

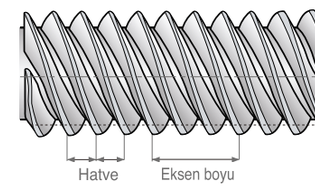
Tek Ağızlı Vida



İki Ağızlı Vida

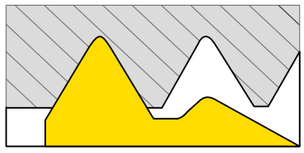


Üç Ağızlı Vida



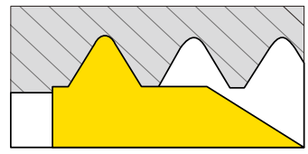
KESİCİ UÇ PROFİLİ

V Profil



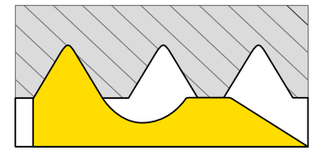
Profilin V kısmı diş üstü çapının tepe kısmı hariç diğer tüm kısımları işler. Aynı diş açısına sahip değişik hatveli dişlerde kullanılabilir

Tam Profil



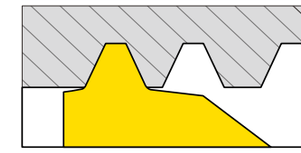
Tam profilli kesici uç diş dibi kısmı dahil tüm diş profilini işleyebilir. Her hatve ve standart için farklı bir uç gereklidir

İnce dişler için tam Profil



İnce dişler için tam profiller tüm dişi işleyebilir. Diş üstü çapının işlenmesi ikinci ağız tarafından yapılır

Yarım Profil



Yarım profilli kesici uçlar diş dibi radyüsü dahil diş formunu işleyebiir ancak diş üstü ve diş dibi çapını işleyemez bu yüzden trapez dişlerde

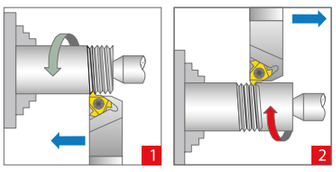
DİŞ ÇEKME İLE İLGİLİ TEKNİK BİLGİLER

KORLOY GÜNEY KORE

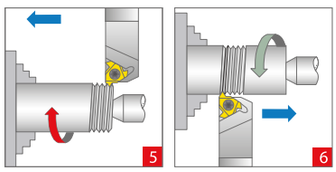
DİŞ ÇEKME TORNALAMA METODU

Diş Çekme	Kesici uç & Takım Kateri	Dönme Yönü	İlerleme yönü	Helis Durumu	Çizim Numarası
Sağ Diş Dış Çap İşleme	EX RH	Saat Yönünün Tersinde	Ayna Yönünde	Düz	1
	EX LH	Saat Yönünde	Punta Yönünde	Ters	2
Sağ Diş Delik İşleme	IN LH	Saat Yönünün Tersinde	Ayna Yönünde	Düz	3
	IN LH	Saat Yönünde	Punta Yönünde	Ters	4
Sol Diş Dış Çap İşleme	EX LH	Saat Yönünde	Ayna Yönünde	Düz	5
	EX RH	Saat Yönünün Tersinde	Punta Yönünde	Ters	6
Sol Diş Delik İşleme	IN LH	Saat Yönünde	Ayna Yönünde	Düz	7
	IN RH	Saat Yönünün Tersinde	Punta Yönünde	Ters	8

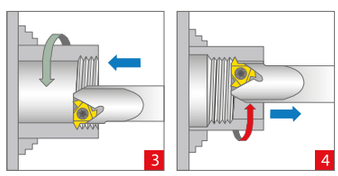
Dış Çap Sağ Yönde Vida Çekme



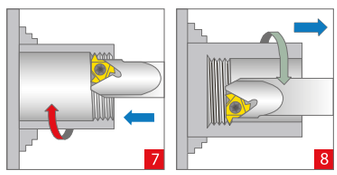
Dış Çap Sol Yönde Vida Çekme



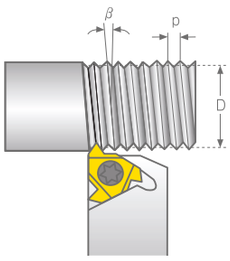
Delik Sağ Yönde Vida Çekme



Delik Sol Yönde Vida Çekme



HELİS AÇISININ HESAPLANMASI (β)



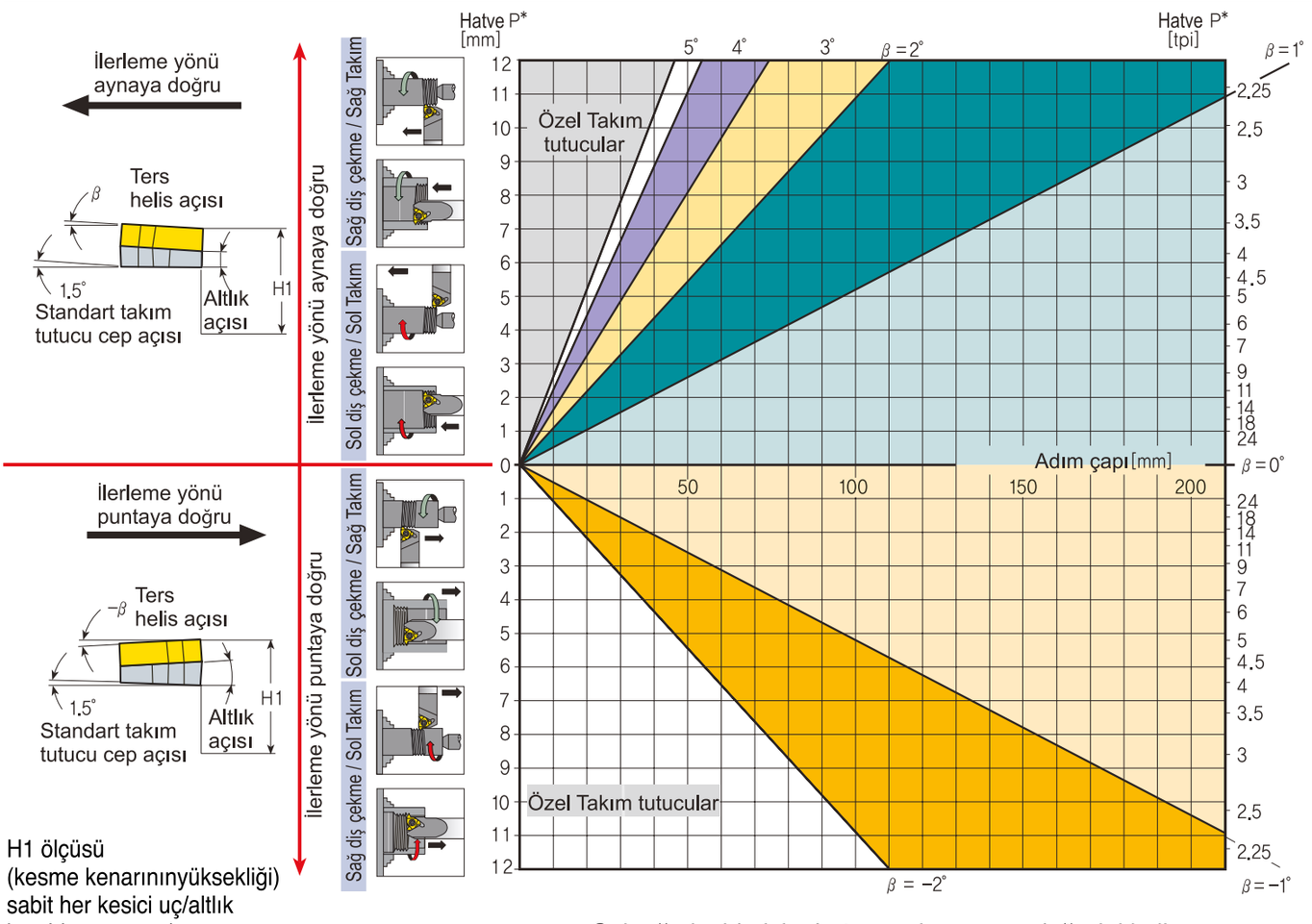
• Helis açısı aşağıdaki formülle hesaplanır:

$$\beta = \tan^{-1} \frac{P \times N}{\pi \times D}$$

β: Helis açısı (°)
P: Hatve (mm)
N: Başlama Sayısı
D: Hatve çap (mm)
Avans = P x N

• Aynı zamanda helis açısıhelis diyagramından bulunabilir

HELİS AÇISI DİYAGRAMI



H1 ölçüsü (kesme kenarınınyüksekliği) sabit her kesici uç/altlık kombinasyonunda

* Çok ağızlı vida için, hatve yerine avans değerini kullanın

DİŞ FREZELEME İLE İLGİLİ TEKNİK BİLGİLER

KORLOY GÜNEY KORE

DİŞ FREZE

İŞLEME GÖRE DOĞRU TAKIMLAR

KÜÇÜK ÇAPLI TİP



Takım: TMSR
Kesici uç: TM L = 10.4 .....
9.5mm'ye kadar küçük delik çapları işleme

UZUN TİP



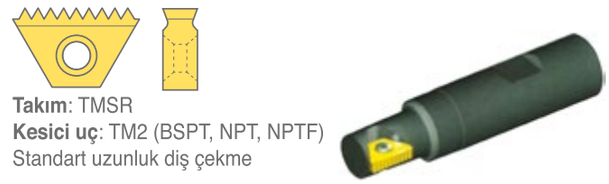
Takım: TMSR
Kesici uç: TM2
Uzun ve küçük diş çekme

STANDART TİP



Takım: TMSR
Kesici uç: TM2
Standart uzunluk diş çekme

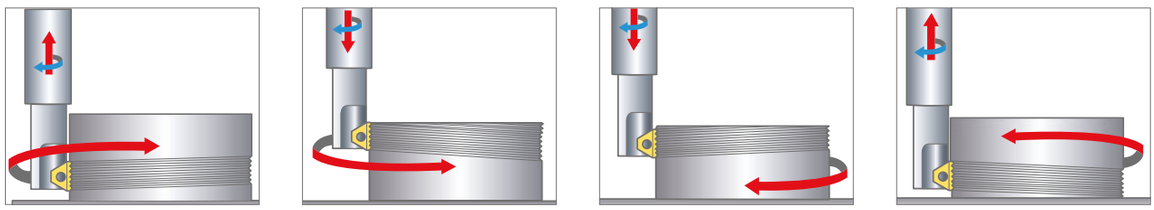
KONİK TİP



Takım: TMSR
Kesici uç: TM2 (BSPT, NPT, NPTF)
Standart uzunluk diş çekme

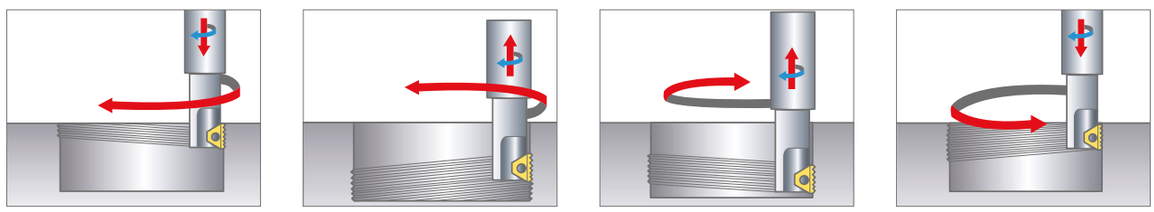
DİŞ FREZELEME METODLARI

DIŞ ÇAP DİŞ FREZELEME



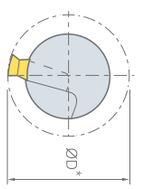
Sağ diş çekme - Konvensiyonel frezeleme | Sol diş çekme - Konvensiyonel frezeleme | Sağ diş çekme - Konvensiyonel frezeleme | Sol diş çekme - Konvensiyonel frezeleme

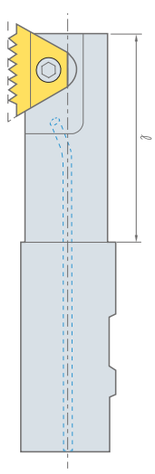
DELİK DİŞ FREZELEME



Sağ diş çekme - Konvensiyonel frezeleme | Sol diş çekme - Konvensiyonel frezeleme | Sağ diş çekme - Konvensiyonel frezeleme | Sol diş çekme - Konvensiyonel frezeleme

VERİLEN DELİK DİŞ ÇEKME SPESİFİKASYONLARI İÇİN ÖNERİLEN TAKIMLAR





Hatve	Nominal Çap (mm)	Takım	Kesici Uç	ℓ-Takım tutucu işleme boyu	D-Takım işleme çapı.*	Min.diş çekme derinliği (Profil derinliği)
0.75	11	TMSR 12-10	TM2I 10-0.75ISO	12.0	9.0	0.43
	12-14	TMSR 12-10	TM2I 10-1.0ISO	12.0	9.0	
	15-18	TMSR 12-11	TM2I 11-1.0ISO	12.0	11.5	
1.0	20	TMSR 16-16	TM2I 16-1.0ISO	22.0	17.0	0.58
	22	TMSR 20-22	TM2I 22-1.0ISO	29.0	19.0	
	24	TMSR 20-16	TM2I 16-1.0ISO	43.0	20.0	
	25-28	TMSRL 25-16	TM2I 16-1.0ISO	25.0	22.0	
1.25	14	TMSR 12-10	TM2I 10-1.25ISO	12.0	9.0	0.72
	14-15	TMSR 12-10	TM2I 10-1.5ISO	12.0	9.0	
	16-20	TMSR 12-11	TM2I 11-1.5ISO	12.0	11.5	
	22	TMSR 16-16	TM2I 16-1.5ISO	22.0	17.0	
1.5	24	TMSR 20-22	TM2I 22-1.5ISO	29.0	19.0	0.87
	25-26	TMSR 20-16	TM2I 16-1.5ISO	43.0	20.0	
	27-30	TMSRL 25-16	TM2I 16-1.5ISO	25.0	22.0	
	35-42	TMSR 25-27	TM2I 27-1.5ISO	52.0	30.0	
	45	TMSR 32-27	TM2I 27-1.5ISO	58.0	37.0	
	22	TMSRT 16-16	TM2I16-2.0ISO	22.0	15.5	
	24	TMSR 16-16	TM2I 16-2.0ISO	22.0	17.0	
	25	TMSR 20-22	TM2I 22-2.0ISO	29.0	19.0	
2.0	27	TMSR 20-16	TM2I 16-2.0ISO	43.0	20.0	1.15
	28-32	TMSRL 25-16	TM2I 16-2.0ISO	25.0	22.0	
	39-42	TMSR 25-27	TM2I 27-2.0ISO	52.0	30.0	
	45-48	TMSR 32-27	TM2I 27-2.0ISO	58.0	37.0	
3.0	42-48	TMSR 25-27	TM2I 27-3.0ISO	52.0	30.0	1.73
	50-52	TMSR 32-27	TM2I 27-3.0ISO	58.0	37.0	
	45-52	TMSR 25-27	TM2I 27-4.0ISO	52.0	30.0	
4.0	55	TMSR 32-38	TM2I 38-4.0ISO	55.0	35.0	2.31
	56-58	TMSR 32-27	TM2I 27-4.0ISO	58.0	37.0	
	60-65	TMSR 40-38	TM2I 38-4.0ISO	65.0	46.0	
5.0	48-52	TMSR 32-38	TM2I 38-5.0ISO	55.0	35.0	2.89
5.5	56	TMSR 32-38	TM2I 38-5.5ISO	55.0	35.0	3.17
	60	TMSR 40-38	TM2I 38-5.5ISO	65.0	46.0	
6.0	64-68	TMSR 40-38	TM2I 38-6.0ISO	65.0	46.0	3.46

* Verilen diş çekme spesifikasyonları için önerilen en geniş takım

* Takımla küçük yada eşit kesme çapında (D2) kullanılabilir

HRMDOUBLE İÇİN TEKNİK BİLGİLER

KORLOY GÜNEY KORE

HRMDOUBLE

- 6 kesme kenarı kullanan HRMD, 3 kenarlı pozitif uçlu HRM takıma göre daha ekonomiktir
- Yüksek eğim açılı kesme köşesi ve talaş kırıcı formu kesme yüklemesini azaltır
- Negatif geometrisi kesme köşesinin esnemezliğini ve çift taraflı çalışabilmesini sağlar
- Vidalı bağlama ve dengeli destek sistemi güçlü baskılama kuvveti verir
- Eşsiz Kesici uç tasarımı yüksek ilerleme ve çok fonksiyonlu İşleme yapabilir
- HRMD kesici ucun simetrik kesme köşesi sağ tip ve sol tip işlemelerde kullanılabilir

KESİCİ UÇ ÖZELLİKLERİ



1 Köşe Radyüsü -R
- Rampalama cep işleminde esnemeyen kenar güvenliği
- Dairesel köşesi yüksek ilerleme için uygundur
- Sağ ve sol tip işlemeler için uygundur

2 Baskı Parçası Yüzü
- Sabit baskılama için dizayn edilmittir
- Talaş sürtünmesini engeller

3 Küçük Kesme Kenarı
- Yüksek ilerlemede yüzey kaliyesi artırılmıştır
- İtme kuvvetini azaltan özel dizayn
- Sağ ve sol tip takımları için simetrik kesici uç dizaynı

4 Talaş Kırıcı Formu
- Yüksek eğimli açısı sayesinde kesme yükü azaltılmıştır
- Bir çok çeştli uygulamalarda talaş boşaltımı ve talaş tahliyesi geliştirilmiştir
- Kesici ucun baskı parçası bölümüne gelebilicek zararı engeller

5 Ana Kesme Kenarı
- Sağ ve sol tip takımları için simetrik kesici uç dizaynı
- Yüksek eğimli kesme kenarı sayesinde mükemmel kesme performansı
- Yüksek ilerlemede düşük kesme direnci
- İtme kuvvetini azaltan özel tasarım

KESİCİ TAKIMIN ÖZELLİKLERİ



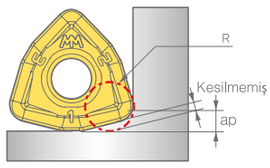
İçten Soğutma Sistemi
- Talaş boşaltımı ve talaş tahliyesi geliştirilmiştir
- Düşürülmüş kesme ısı derecesi sayesinde daha uzun takım ömrü

Basit Vidalı Sıkma Sistemi
- Vidalı sıkma sisteminde güçlü baskı
- Kullanışlı baskılama sistemi
- Talaş tahliyesi için geniş talaş cebi

3-Yüzeyden Kısıtlama Sistemi
- Güçlü baskılama sistemi
- Değişik işleme uygulamalarındaki farklı kesme direncine karşı dengeli baskılama sistemi

KÖŞE RADYÜS PROGRAMLAMA

Sip. No.	Kesme Koşulu		Yaklaşık R (mm)	
	EnYüksekap(mm)	EnYüksekfz (mm/diş)	Radyüs Girdisi	Kesilemeyen Kısım
WNMX060312ZNN-DD	1.0	1.2	1.8	0.4
WNMX09T316ZNN-DD	1.5	2.0	2.5	0.6
WNMX130520ZNN-DD	2.0	3.0	3.0	0.8
WNMX160720ZNN-DD	2.5	3.5	3.5	1.2

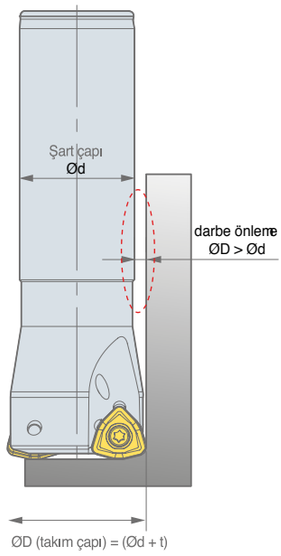


- CAM programında kesilemeyen kısımlar için "Radyüs Girdisi"
- Kötü işleme koşulu veya iş parçasının zayıf bağlanması kesilemeyen kısımları artırır

TİTREŞİM ÖNLEME SİSTEMİ

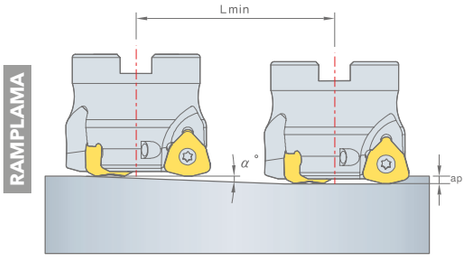
Sip. No.	0D (mm)	0d (mm)	t (mm)
HRMDS0617HR-2□16	17	16	1
HRMDS0618HR-2□16	18	16	2
HRMDS0621HR-2□20	21	20	1
HRMDS0626HR-3□25	26	25	1
HRMDS0633HR-4□32	33	32	1
HRMDS0926HR-2□25	26	25	1
HRMDS0933HR-3□32	33	32	1
HRMDS0935HR-4□32	35	32	3
HRMDS0940HR-4□32	40	32	8
HRMDS0950HR-5□32	50	32	18
HRMDS0950HR-5□40	50	40	10

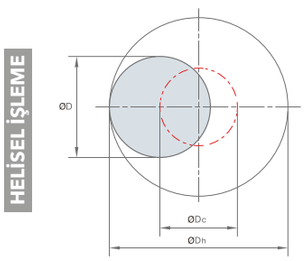
Sip. No.	0D (mm)	0d (mm)	t (mm)
HRMDS0950HR-5□42	50	42	8
HRMDS1333HR-3□32	33	32	1
HRMDS1335HR-4□32	35	32	3
HRMDS1340HR-4□30	40	30	8
HRMDS1350HR-4□32	50	32	18
HRMDS1350HR-4□40	50	40	10
HRMDS1350HR-4□42	50	42	8
HRMDS1363HR-5□32	63	32	31
HRMDS1363HR-5□40	63	40	23
HRMDS1363HR-5□42	63	42	21



- Kenar boşluğu,derin delik işlemelerde dahi takım ve iş parçası arasındaki etkileşimi engeller

RAMPALAMA&HELİSEL İŞLEME İÇİN TEKNİK BİLGİ



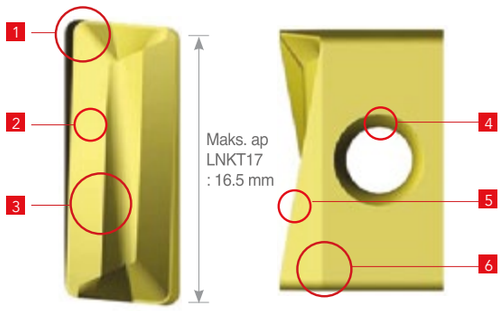


TP2P İÇİN TEKNİK BİLGİ

KORLOY GÜNEY KORE

TP2P İÇİN TEKNİK BİLGİ

UÇ ÖZELLİKLERİ



1 O takoz tipi baskılama alanı
- Uç yatağına takoz tipi bağlaması
  ⇨ Güçlü baskı kuvveti oluşturur

2 Yüksek kesme açılı talaş kırıcı
- Yüksek kesme açısı uygulanmıştır
- Düzgün talaş akışı sağlar
  ⇨ Attan uç ömrü

3 Dışbükey izdüşüm
- İyileştirilmiş talaş tahliyesi
- Bükülmezliğin artması

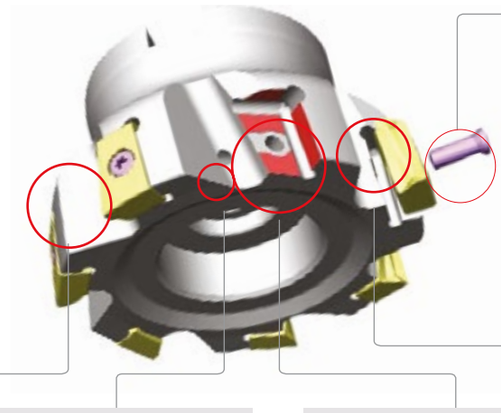
4 Yandan delik (tanjantiyel tip)
- Daha yüksek baskılama dengesi

5 Yüksek kesme açılı kesme kenarları
- Kesme yükünün azalması ve kesme performansının artması

6 2 Kademeli yan boşluk yüzeyi
- 1'inci ters pozitif serbest yüzey rijitliği artırır
- 2'inci negatif serbest yüzey dengeli baskılama sağlar
  ⇨ Artan talaşlanma direnci ve yüzey finişi

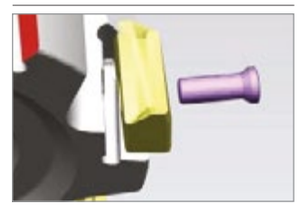
TAKIMIN ÖZELLİKLERİ

- Tanjantiyel baskılama sistemi, takoz şekilli uçlar ve geniş yatak alanı
  ⇨ Daha yüksek baskılama istikrarı
  ⇨ Daha düşük titreme ve kesme direnci
- Düzgün talaş akışı sağlayan kıvrımlı tasarım
  ⇨ Rampalama veya derin dik kenar işlemede mükemmel talaş tahliyesi



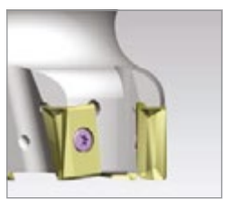
Tanjantiyel bağlama

- Çok kenarlı kullanım
  ⇨ Yüksek ilerlemeli işleme imkanı



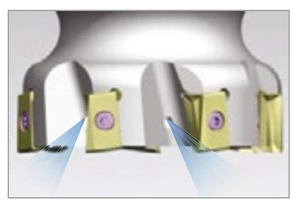
Etkin tutucu tasarımı

- Kanal açma veya derin dik kenar işlemede daha düzgün talaş tahliyesi



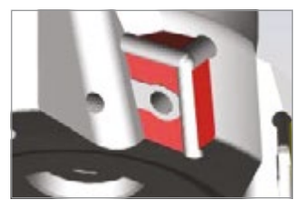
İçten soğutma sistemi

- Artan talaş tahliyesi
- Ucun soğutulması ile daha uzun takım ömrü



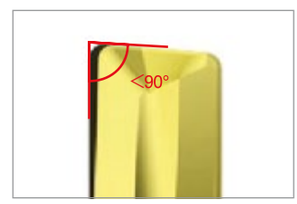
Geniş uç yatak alanı

- Güçlü baskılama kuvveti



Takoz tipi baskılama

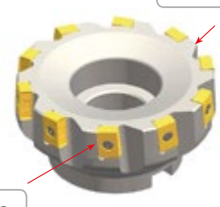
- İstikrarlı uç ömrü



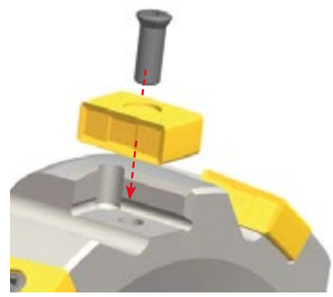
STORM MİLL

- Geniş Kapsama alanı ile geleneksel bir Kesici Takımdır
- 4 Köşesinide kullanır (R/Ltipi kesici ile birlikte Maksimum 8 Köşeye kadar çıkabilir)
- Uzun kesme kenarı sayesinde büyük kesme derinliği olan uygulamalarda etkindir
- Her türlü çalışma koşuluna uygun çok çeşitli kaliteleri mükemmel takım ömrü sağlar
- 1 Kesicinin içinde 2 farklı Kesici Uç tipi (Pah/Burun R)

KESİCİ TAKIM



KESİCİ UCUN BAĞLANMASI



ÖNERİLEN KESME KOŞULU

Sip.No / Kalite	Gri Dökme Demir GC		Dövme Dökme Demir GCD	
	vc (m/dak)	fz (mm/diş)	vc (m/dak)	fz (mm/diş)
PC3500	150-250	0.08-0.28	100-180	0.08-0.28
PC6510	150-300	0.10-0.28	100-200	0.10-0.28
PC5400	150-250	0.08-0.22	100-180	0.08-0.22

Sip.No / Kalite	Gri Dökme Demir GC		Dövme Dökme Demir GCD	
	vc (m/dak)	fz (mm/diş)	vc (m/dak)	fz (mm/diş)
H01	100-200	0.08-0.22	70-140	0.08-0.22
G10	90-120	0.08-0.28	60-130	0.08-0.28

STORM MİLL İÇİN TEKNİK BİLGİLER

KORLOY GÜNEY KORE

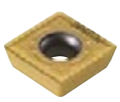
KİNG DRİLL

ÖZELLİKLER



- Maksimum delme verimliliği için en iyi tasarımlı uç
- Merkez ve çevredeki uçların talaş kırıcıları ve en uygun geometri ile mükemmel kesme performansı
- Merkez ve çevrede kullanılan farklı uçlar uçdan makimum ömür elde etmek için tasarlanmıştır
- Merkez soğutma deliği sistemi talaş yuvalarında aşınmayı önlemeye ve talaş kontrolü sağlamaya yardımcı olur
- En uygun şekildeki talaş boşluğu takım rijitliğini arttırır ve talaş tahliyesine yardımcı olur.

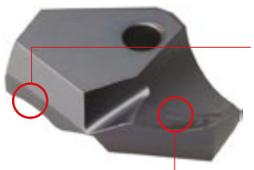
TALAŞ KIRICININ ÖZELLİKLERİ

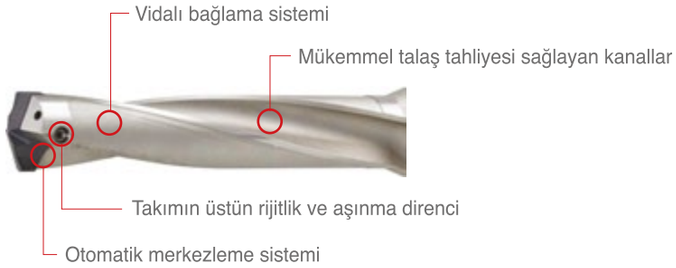
Talaş Kırıcı	PD		LD		ND		RD
Özellikler	Genel kullanım Orta hız ve orta ilerlemede		Yumuşak çelik ve paslanmaz çeliği işlemede üstün talaş kontrolü Hafif kesme (düşük ~orta hız ve düşük ilerlemede)		Alüminyum işleme için keskin kesim kenarı Yüksek kalite sonuç için perdahlı uç yüzeyi E sınıf toleransı		Alüminyum işleme için keskin kesim kenarı Yüksek kalite sonuç için perdahlı uç yüzeyi E sınıf toleransı
Kesici Uç	Çevredeki uç	Merkezdeki uç	Çevredeki uç	Merkezdeki uç	Çevredeki uç	Merkezdeki uç	Merkezdeki uç
Şekil							
İş parçası için kaliteler	NC5330: P, M, K PC3500: P PC5300: P, M, K, S PC6510: K	PC5300: P, M, K, S	PC5335 P,M		H01 : N		PC5300: P, M, K, S

TPDB

- Yüksek hassasiyette bağlama sistemi
- Yüksek hassasiyetde taşlama ve kendinden merkezleme sistemiyle üstün bağlama hassasiyeti
- Civata ile bağlama - kolay uç bağlama sistemi
- Keskin kesici kenar
- Geliştirilmiş talaş tahliyesi, düşük kesme kuvveti, ultra fine tane yapısı ve özel kaplamasıyla uzun uç ömrü
- Mükemmel takım dayanıklılığı - Özel yüzey ısıl işlemi sayesinde yüksek aşınma direnci ve yüksek rijit takım

ÖZELLİKLER

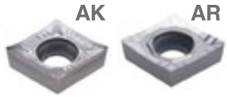


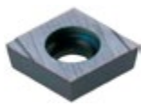


TORNALAMA UÇLARI

KORLOY GÜNEY KORE

TORNALAMA

CCGT-AKAR


CCGT-KF


CCGT-VP1


CCMT-C25


CCMT-HMP


CCMT-MP


CNGG-VP1


CNMA


CNMG-B25


CNMG-GR


CNMG-HA

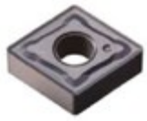

CNMG-MM


CNMG-MP


CNMG-VM


CNMG-VP2


CNMG-VP3


CNMG-VP4


CPGT-HMP


CPMT-VF

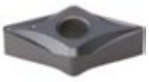

DCGT-AK/AR


DCGT-KF


DCGT-VP1


DCMT-HMP


DCMT-MP


DNGG-VP1


DNMA


DNMG-B25


DNMG-LP


DNMG-MM


DNMG-MP


DNMG-RM


DNMG-VF


DNMG-VL


DNMG-VM


DNMG-VP2


DNMG-VP3


DNMG-RM


DNMG-VF


DNMG-VL


DNMG-VM


DNMG-VP2

DNMG-VP3

DNMG-VR

DNMG-VW

KNUX-11

KNUX-12

RCGT-AK/AR

RCMX

RNMG-B25

SCGT-AK/AR

SCMT-C25

SCMT-HMP

SCMT-MP

SCMT-VF

SCMT-VL

SNGA

SNGG

SNMA

SNMG-B25

SNMG-HA

SNMG-LP

SNMG-MM

SNMG-MP

SNMG-RM

SNMG-VP2

SNMG-VK

TORNALAMA UÇLARI

KORLOY GÜNEY KORE

TORNALAMA

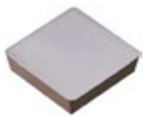
SNMG-VP3



SNMG-VP4



SPUN



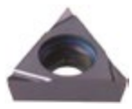
TBGT



TCGT-AK/AR



TCGT/KF



TCMT-HMP



TCMT-MP



TNMG-HA



TNMG-LP



TNMG-MM



TNMG-MP



TNMG-VP3



TNMG-VP4



TPGN



TPGR-F



TPGR-M



TPGX



TPMR-F



TPMR-M



TPMT-MP



TPUN



VBMT



VBMT-HMP



VBMT-MP



VBMT-VB



VBMT-VF



VCGT-AK/AR



VCGX-VP1



VCMT-HMP



VCMT-MP



VCMT-VF



WNMA



WNMG-B25



WNMG-GR



WNMG-HA



WNMG-LP



WNMG-MM



WNMG-PP



WNMG-RM



WNMG-VP2

WNMG-VP3

WNMG-VP4

WNMG-VR

WNMG-VW

FREZELEME UÇLARI

KORLOY GÜNEY KORE

FREZELEME

APKT



APKT-MA



APKT-MA2



APKT-MA3



APKT-MF



APKT-MM



APKT-MM1



APKT-X22



APLT



APMT-MA



APMT-MF



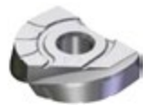
APMT-ML



APMT-MM



LBH



LBH-KF



LBH-KH



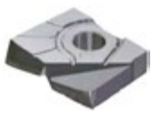
LBS



LCF



LFH



LPEW



LPMT-MF



LPMW



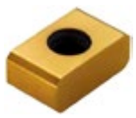
LRH/LR



LNCS



LNE



LNME(E)X-MF



LNM(E)X-MF



LNM(E)X-MM



LNM(E)X-MM



LNEX-MA



OFKR-MA



OFKR-MF



OFKT-MA



OFKT-MF



ONHX-MF



ONHX-MM



ONMX-MM



RDCT-MA



RDHW



RDHW



RDKT-ML

RDKT-MM

SDKN-MU

SDKN-SU

SDKR-MX

SDMT-MM

SEET-MA

SEET-MF

SEKN-SU

SEKR-MF1

SNCN

SNKN

SNM(E)X-MF

SNM(E)X-MF

FREZELEME UÇLARI

KORLOY GÜNEY KORE

FREZELEME

SNM(E)X-MF



SNM(E)X-MM



SNM(E)X-MM



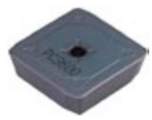
SNM(E)X-MM



SNEX-W



SPKN-MU



SPKN-SU



SPKR-MX



TNMX-NM



TPKN-MU



TPKN-SU



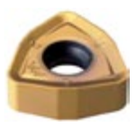
TPKR-MX



WDKT-MH



WNMX-MM



WNMX-MF



XEKT-MA



XNCT-MA



XNKT-ML



XNKT-MM



SPET-ND



SPMT-DF



SPMT-DM



SPMT-DS



SPMT-LD



SPMT-PD



WCKT-C21



WCMT-C20N



WCMT-C21N



XOET-ND



XOMT-LD



XOMT-PD



XOMT-RD



ALÜMİNYUM İŞLEME UÇLARI

KORLOY GÜNEY KORE

TORNALAMA

CCGT-AK/AR

AK



AR



DCGT-AK/AR

AK



AR



RCGT-AK/AR

AK



AR



SCGT-AK/AR

AK



AR



TCGT-AK/AR

AK



AR



VBGT-AK/AR

AK



AR



VCGT-AK/AR

AK



AR



KANAL AÇMA

KGGN-A



KRGN-A



MGGN-A



MRGN-A



MRGN-A



MRGN-45



MRGN-AM



MRGN-AP



MVGN



DELİK DELME

SPET-ND



XOET-ND



FREZELEME

APKT-MA



APKT-MA2



APKT-MA3



APMT-MA



LNEX-MA



OFKR-MA



OFKT-MA



ONHX-MA



RDCT-MA



RPCT-MA



SDET-MA



SDXT-MA



SEET-MA



SNEX-MA



VCKT-MA



VDKT-MA

XEKT-MA

XNCT-MA

ÇOK AMAÇLI TAKIMLAR UÇLARI

KORLOY GÜNEY KORE

KGT

KGMN-L



KGMN-R



KGMN-T



KRMN-C



KGMI-T



KGMR-LP



KGMR-RP



KGML-LP



KGML-RP



KGGN-B



KGGN-R



KGGN-R



KGGN-A



KRGN-A



MIKRO DELIK İŞLEME TAKIMLARI







MGT

MFMN



MGGN-M



MGMN-G



MGMN-M



MGMN-L,R,T



MGNN-A



MGMR/L-PS



MGMR/L-PT



MRGN-A



MRMN-M



MVGN



KANAL AÇMA

DB



DC



FGD/FGM/FMM



GO



GS



GW



IG



GR



TB



TB-M



DİŞ AÇMA

ER



ERM



ERM-U

IR

IRM

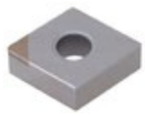
IRM-U

CBN VE PCD UÇLAR

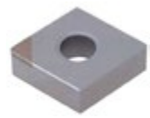
KORLOY GÜNEY KORE

TEKRAR BİLENEBİLİR TİP (NEGATİF/POZİTİF)

CNMA



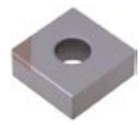
T-CNMA



DNMA



SNMA



TNMA



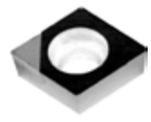
VBMW



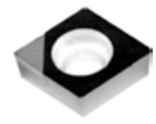
T-VNMA



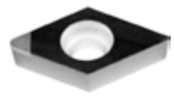
CCMW



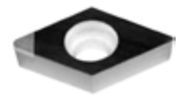
CPMW



DCGW



T-DCGW

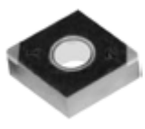


TPGB

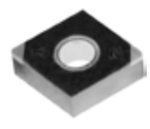


ÇOK KÖŞELİ TİP (NEGATİF/POZİTİF)

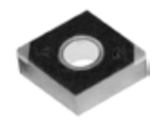
2NU-CNGA



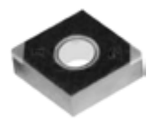
T-2NU-CNGA



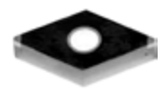
2NU-CNMA



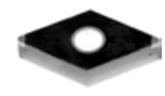
2NS-CNGA



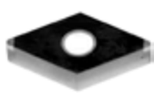
2NU-DNGA



T-2NU-DNGA



2NS-DNGA



4NU-SNGA



2NS-SNGA



3NU-TNGA



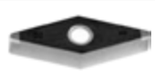
2NS-TNGA



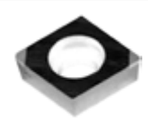
2NU-VNGA



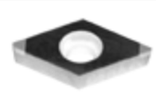
2NS-VNGA



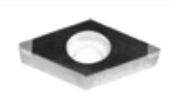
2NU-CCGW



2NU-DCGW



T-2NU-DCGW



3NU-TCGW



3NU-TPGB



3NU-TPGN



3NU-TPGW



2NU-VBGW



2NU-VCGW



3NU-TPGN



3NU-TPGW



PCD UÇLAR (NEGATİF/POZİTİF)

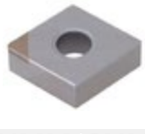
2NU-VBGW



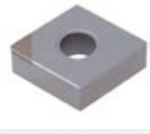
2NU-VCGW



CNMA



T-CNMA



DNMA

SNMA

TNMA

VNMA

CNMM/CNMX

DNMM/DNMX

TNMX

VNMX

CCMT-CPMT

DCMT

SCMT/SPGW

TPGW/TCMT

TPGB/TPGW/TPGT

VBMT/VCMT

TPGN

SPGN

TAKMA UÇLU MAKTAPLAR

KORLOY GÜNEY KORE

TAKMA UÇLU MATKAP SERİSİ

KING DRILL (2D/3D/4D/5D)



KING DRILL/HP(2D/3D/4D)



KING DRILL (K2D/K3D/K4D)



TPDC(3D/5D/8D)



TPDB(3D/5D/8D)



WPDC(5D/6.5D/8D)



WPDC(5D/6.5D/8D)



WPDC(5D/6.5D/8D)



KING DRILL UÇLAR

	(Genel)	(Yumuşak Çelik, Paslanmaz)	(Alüminyum)
İç	 SPMT-PD	 SPMT-LD	 SPET-ND

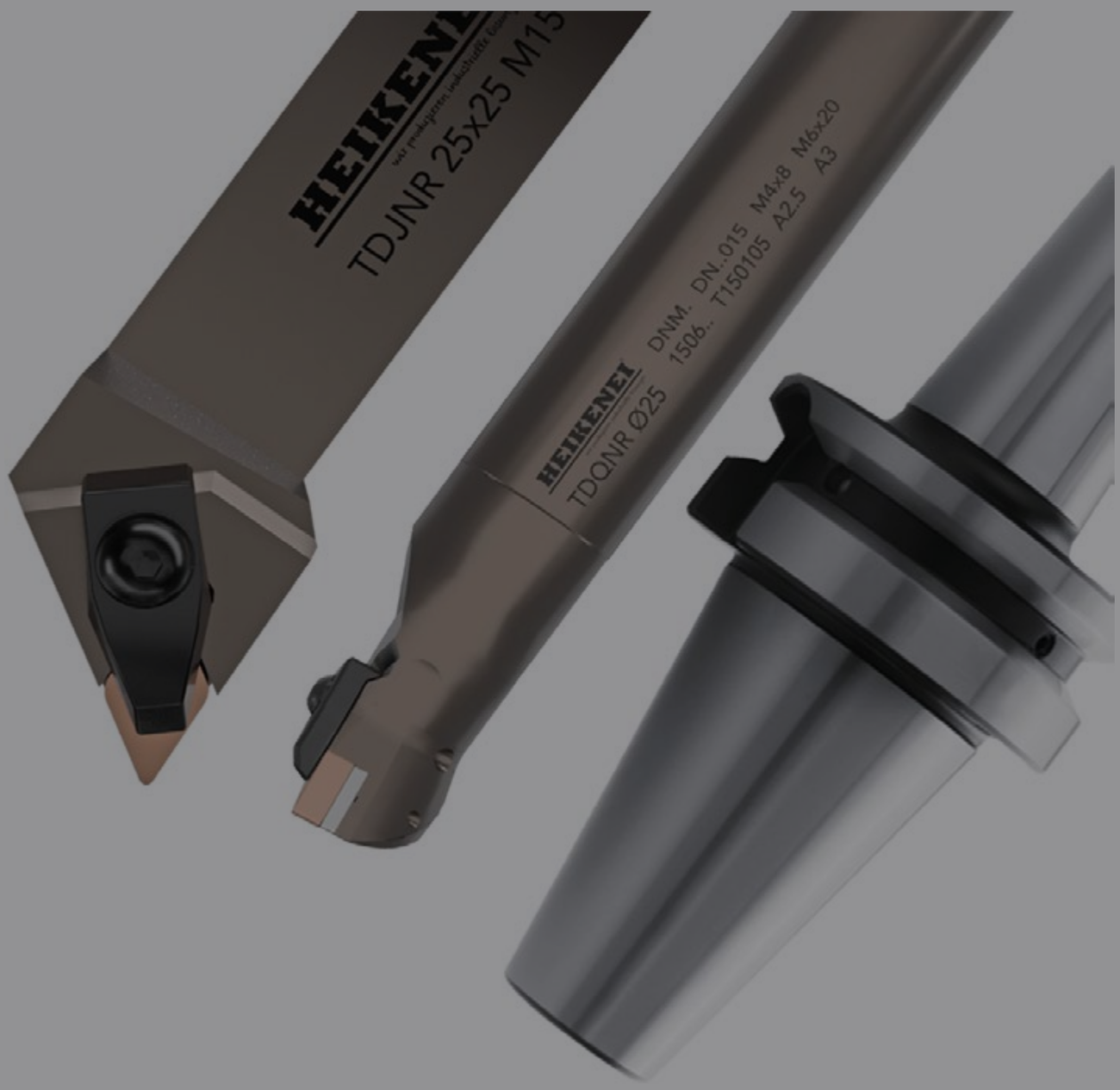
	(Genel)	(Yumuşak Çelik, Paslanmaz)	(Alüminyum)
Dış	 XOMT-PD	 XOMT-LD	 XOET-ND

3. TAKIM TUTUCULAR

Sy. 148/277

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
Başakşehir / İstanbul

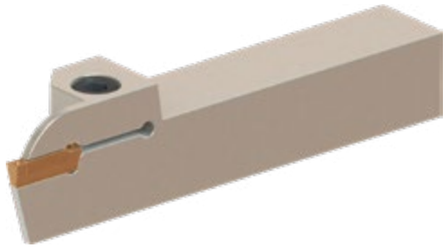
Gsm: +90 533 554 72 40 – +90 555 988 00 53
Tel: +90 (212) 549 46 62 – 671 50 76
Faks: +90 (212) 549 54 27

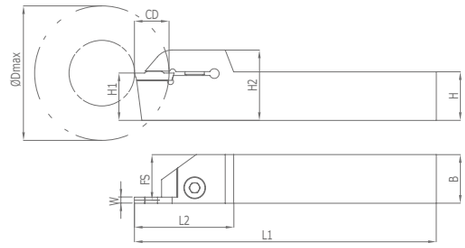

TDJNR 25x25 M15
TDQNR Ø25
DNM. DN..015 M4x8 M6x20
1506.. T150105 A2.5 A3

DIŞ ÇAP KANAL KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

DKT I - DIŞ ÇAP KANAL KATERLERİ DGN ISCR

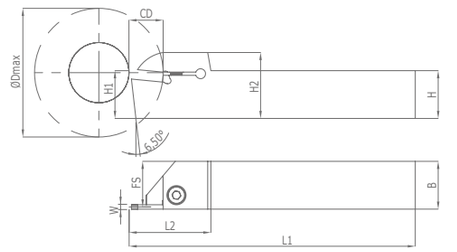




DGN ISCR	R	L	Dmax	W	H	B	FS	L1	L2	H1	H2	CD	Uç	Vida	Anahtar
1000000	•	•	62	2	12	12	11	90	31	12	24	16	DGN-2	M5X16	A4
1000100	•	•	62	2	16	16	15	125	43	16	28,5	16		M6X26	
1000200	•	•	62	2	20	20	19	125	43	20	28,5	18			
1000300	•	•	62	2	25	25	24	150	47	25	35	22			
1000400	•	•	62	3	12	12	10,5	90	31	12	24	18	DGN-3	M5X16	
1000500	•	•	62	3	16	16	14,5	125	43	16	28,5	18			
1000600	•	•	62	3	20	20	18,5	125	43	20	28,5	18			
1000700	•	•	62	3	25	25	23,5	150	47	25	35	22			
1000800	•	•	62	3	32	32	30,5	170	47	32	42	22			
1000900	•	•	62	4	16	16	14	125	43	16	28,5	18	DGN-4		
1001000	•	•	62	4	20	20	18	125	43	20	28,5	18			
1001100	•	•	62	4	25	25	23	150	47	25	35	22			
1001200	•	•	62	4	32	32	30	170	47	32	42	22		M6X26	
1001300	•	•	62	5	20	20	17,5	125	43	20	28,5	18			
1001400	•	•	62	5	25	25	22,5	150	47	25	35	22	DGN-5		
1001500	•	•	62	5	32	32	29,5	170	47	32	42	22			
1001600	•	•	62	6	25	25	22,5	150	47	25	35	22	DGN-6		
1001700	•	•	62	6	32	32	29,5	170	47	32	42	22			
1001800	•	•	62	3	25	25	23,5	150	47	25	35	40	DGN-3		
1001900	•	•	62	4	25	25	23	150	47	25	35	40	DGN-4		

DKT H - DIŞ ÇAP KANAL KATERLERİ S229 HRN





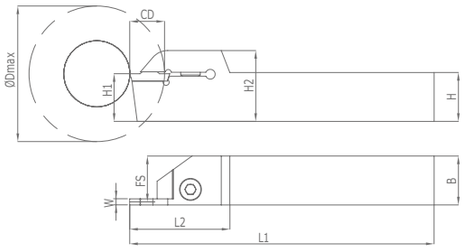
S229 HRN	R	L	Dmax	W	H	B	FS	L1	L2	H1	H2	CD	Uç	Vida	Anahtar
1002000	•	•	62	3	16	16	14,5	125	46	16	24	17	S229-3	M6X26	A4
1002100	•	•	62	3	20	20	18,5	125	46	20	28,5	22			
1002200	•	•	62	3	25	25	23,5	150	46	25	35	23			
1002300	•	•	62	3	32	32	30,5	170	46	32	42	24			
1002400	•	•	62	4	20	20	18	125	46	20	28,5	22	S229-4		
1002500	•	•	62	4	25	25	23	150	46	25	35	23			
1002600	•	•	62	4	32	32	30	170	46	32	42	24			
1002700	•	•	62	5	20	20	17,5	125	46	20	28,5	22	S229-5		
1002800	•	•	62	5	25	25	22,5	150	46	25	35	23			
1002900	•	•	62	5	32	32	27,5	170	46	32	42	24			
1003000	•	•	62	6	25	25	22	150	46	25	35	23	S229-6		

DIŞ ÇAP KANAL KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

DKT K - DIŞ ÇAP KANAL KATERLERİ MGM. KRLY

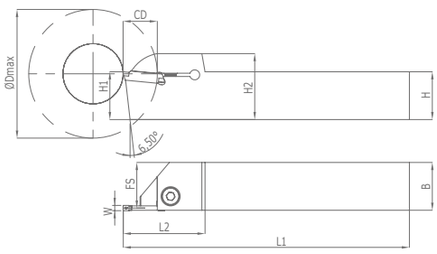




MGM. KRLY	R	L	Dmax	W	H	B	FS	L1	L2	H1	H2	CD	Uç	Vida	Anahtar
1003100	•	•	62	2	12	12	11	90	31	12	24	16	MGM.2	M5x16	A4
1003200	•	•	62	2	16	16	15	125	41	16	28,5	17		M6X26	
1003300	•	•	62	2	20	20	19	125	41	20	28,5	17			
1003400	•	•	62	2	25	25	24	150	45	25	35	18			
1003500	•	•	62	2	32	32	31	170	45	32	42	21			
1003600	•	•	62	3	12	12	10,5	90	31	12	24	16	MGM.3	M5x16	
1003700	•	•	62	3	16	16	14,5	125	41	16	28,5	21			
1003800	•	•	62	3	20	20	18,5	125	41	20	28,5	21			
1003900	•	•	62	3	25	25	23,5	150	45	25	35	21			
1004000	•	•	62	3	32	32	30,5	170	45	32	42	22			
1004100	•	•	62	4	16	16	14	125	41	16	28,5	21	MGM.4	M6X26	
1004200	•	•	62	4	20	20	18	125	41	20	28,5	21			
1004300	•	•	62	4	25	25	23	150	45	25	35	21			
1004400	•	•	62	4	32	32	30	170	45	32	42	21			
1004500	•	•	62	5	20	20	17,5	125	41	20	28,5	21	MGM.5		
1004600	•	•	62	5	25	25	22,5	150	45	25	35	22			
1004700	•	•	62	5	32	32	29,5	170	45	32	42	22			
1004800	•	•	62	6	25	25	22	150	45	25	35	23	MGM.6		
1004900	•	•	62	6	32	32	29	170	45	32	42	23			
1005000	•	•	62	4	25	25	23	150	45	25	35	40	MGM.4		
1005100	•	•	62	3	25	25	23,5	150	45	25	35	40	MGM.3		

DKT HK - DIŞ ÇAP KANAL KATERLERİ S224 HRN



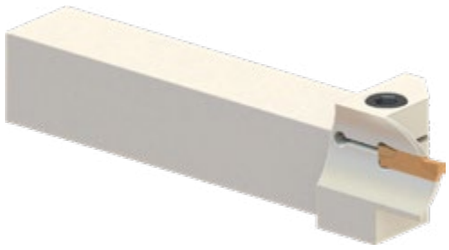


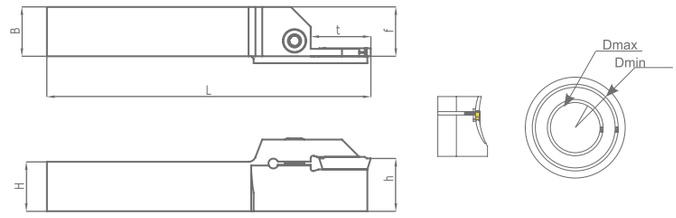
S224 HRN	R	L	Dmax	W	H	B	FS	L1	L2	H1	H2	CD	Uç	Vida	Anahtar
1005200	•	•	62	2	16	16	15	125	43	16	28	18	S224-2	M6X26	A4
1005300	•	•	62	2	20	20	19	125	43	20	28	18			
1005400	•	•	62	2	25	25	24	150	43	25	35	21			
1005500	•	•	62	3	16	16	14,5	125	43	16	28	18	S224-3		
1005600	•	•	62	3	20	20	18,5	125	43	20	28	18			
1005700	•	•	62	3	25	25	23,5	150	43	25	35	21			
1005800	•	•	62	3	32	32	30,5	170	46	32	42	24			
1005900	•	•	62	4	16	16	14	125	43	16	28	18	S224-4		
1006000	•	•	62	4	20	20	18	125	43	20	28	18			
1006100	•	•	62	4	25	25	23	150	43	25	35	21			
1006200	•	•	62	4	32	32	30	170	46	32	42	24			

ALIN KANAL KATERLERİ - İÇ ÇAP KANAL KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

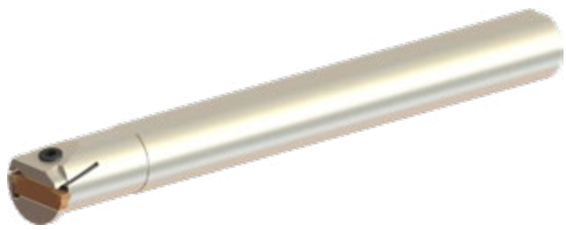
AKT K - ALIN KANAL KATERLERİ KRLY MGM

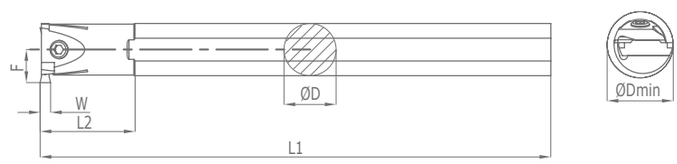




KRLY MGM	R	L	Dmin	Dmax	H	B	f	L1	h	t max	Uç	Vida	Anahtar
1014100	•	○	30	40	25	25	26,7	150	25	17,5	KRLY MGM. 300	M6x26 A4	A4
1014200	•	○	35	50	25	25	26,7	150	25	17,5			
1014300	•	○	45	70	25	25	26,7	150	25	17,5			
1014400	•	○	65	105	25	25	26,7	150	25	17,5			
1014500	•	○	100	150	25	25	26,7	150	25	17,5			
1014600	•	○	30	40	25	25	26,8	150	25	17,5	KRLY MGM. 400		
1014700	•	○	35	50	25	25	26,8	150	25	17,5			
1014800	•	○	45	70	25	25	26,8	150	25	17,5			
1014900	•	○	65	105	25	25	26,8	150	25	17,5			
1015000	•	○	100	150	25	25	26,8	150	25	17,5			
1015100	•	○	75	110	25	25	27	150	25	17,5	KRLY MGM. 500		
1015200	•	○	105	150	25	25	27	150	25	17,5			
1015300	•	○	145	200	25	25	27	150	25	17,5			

IKT K - İÇ ÇAP KANAL KATERLERİ KRLY MGM



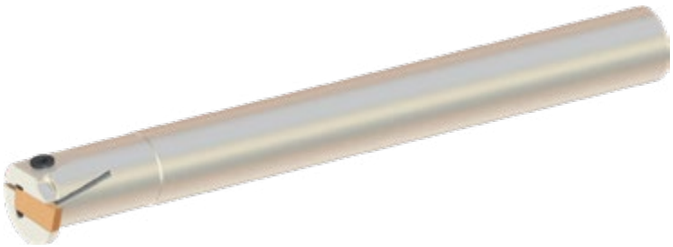


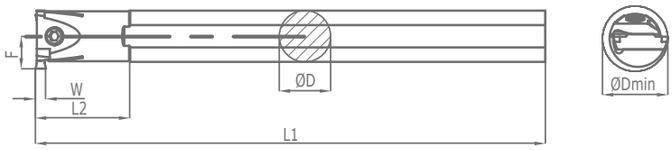
MGM KRLY	Stok	D	D min	F	L1	L2	W	Uç	Vida	Anahtar
1018400	•	16	20	12	180	25	2	MGM.-2	M4X12	A3
1018500	•	20	25	14	200	30	2			
1018600	•	25	31	18	250	35	2			
1018700	•	32	39	22	250	30	2			
1018800	•	20	25	14,5	200	30	3	MGM.-3	M6X16	A5
1018900	•	25	32	18,5	250	35	3			
1019000	•	32	42	25	250	35	3			
1019100	•	20	25	14,5	200	30	4	MGM.-4		
1019200	•	25	32	18,5	250	30	4			
1019300	•	32	42	25	250	35	4			
1019400	•	40	52	30	400	60	3	MGM.-3		
1019500	•	40	52	30	400	60	4	MGM.-4		
1019600	•	40	52	30	400	60	5	MGM.-5		
1019700	•	32	42	25	250	35	5			
1019800	•	25	32	18,5	250	30	5			

İÇ ÇAP KANAL KATERLERİ

HEIKENEI® wir produzieren industrielle Lösungen

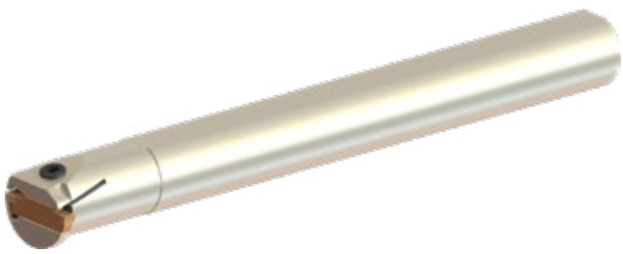
IKT I - İÇ ÇAP KANAL KATERLERİ ISCR DGN.

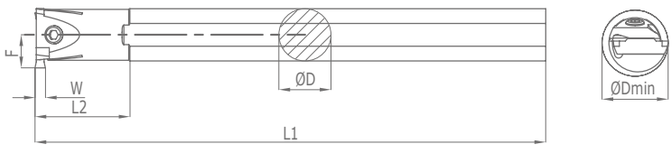




DGN. ISCR	Stok	D	D min	F	L1	L2	W	Uç	Vida	Anahtar
1019900	•	16	20	12	180	25	1,5	DGN-1.5	M4X12	A3
1020000	•	20	25	14	200	30	2	DGN-2		
1020100	•	25	32	18,5	250	40	2		M6X16	A5
1020200	•	32	41	24,5	250	45	2			
1020300	•	20	25	14	200	30	3	DGN-3	M4X12	A3
1020400	•	25	32	18,5	250	40	3		M6X16	A5
1020500	•	32	41	24,5	250	45	3			
1020600	•	20	25	14	200	30	4	DGN-4	M4X12	A3
1020700	•	25	32	18,5	250	40	4		M6X16	A5
1020800	•	32	41	24,5	350	45	4			

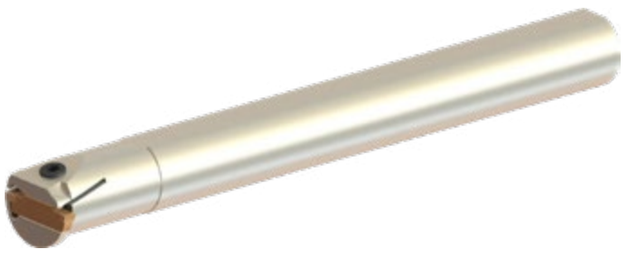
IKT HK - İÇ ÇAP KANAL KATERLERİ S224 HRN

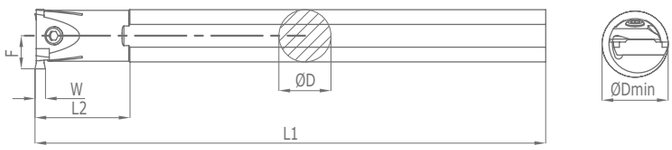




HRN S224	Stok	D	D min	F	L1	L2	W	Uç	Vida	Anahtar
1020900	•	20	25	14	200	30	2	S224-2	M4X12	A3
1021000	•	25	33	19	250	40	2		M6X16	A5
1021100	•	32	40	23	250	45	2			
1021200	•	20	25	14	200	30	3	S224-3	M4X12	A3
1021300	•	25	33	19	250	40	3		M6X16	A5
1021400	•	32	40	23	250	45	3			
1021500	•	20	25	14	200	30	4	S224-4	M4X12	A3
1021600	•	25	33	19	250	40	4		M6X16	A5
1021700	•	32	40	23	250	45	4			

IKT H - İÇ ÇAP KANAL KATERLERİ S229 HRN



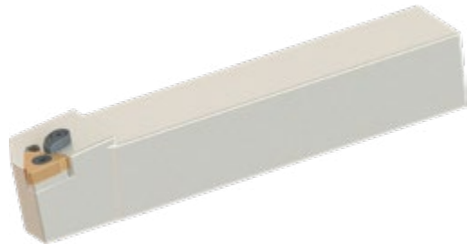


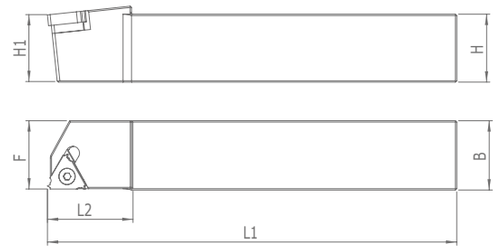
HRN S229	Stok	D	D min	F	L1	L2	W	Uç	Vida	Anahtar
1021800	•	25	34	20,5	250	40	3	S229-3	M6X16	A5
1021900	•	32	43	26	250	45	3			
1022000	•	40	52	30	400	60	3			
1022100	•	25	34	20,5	250	40	4	S229-4		
1022200	•	32	43	26	250	45	4			
1022300	•	40	52	30	400	60	4			
1022400	•	25	34	20,5	250	40	5	S229-5		
1022500	•	32	43	26	250	45	5			
1022600	•	40	52	30	400	60	5			

DİŞ AÇMA KATERLERİ - S SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI wir produzieren industrielle lösungen

SER ISO - DIŞ ÇAP DİŞ AÇMA KATERLERİ

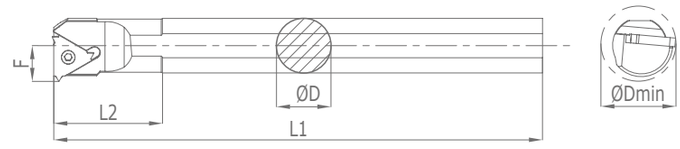




ISO SER	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar	Baskı P.	Vida
1035600	•	•	8	8		100	20	-5.5	0	11 ER/L	-	-	M2,5X7	T08	-	-
1035700	•	•	12	12		100	20	-5.5	0	11 ER/L	-	-	M2,5X7	T08	-	-
1035800	•	•	12	12		100	20	-5.5	0	16 ER/L	ER/L..016	M5X0.5XM3.5	M3,5X14	T15	CK15	M4X12
1035900	•	•	16	16		125	30	-5,5	0	11 ER/L	-	-	M2,5X7	T08	-	-
1036000	•	•	16	16		125	30	-5,5	0							
1036100	•	•	20	20		125	35	-5,5	0	16 ER/L	ER/L..016	M5X0.5XM3.5	M3,5X14	T15	CK15	M4X12
1036200	•	•	25	25		150	40	-5,5	0							
1036300	•	•	25	25		150	40	-5,5	0	22 ER/L	ER/L..022	-	M4X17	T20	-	-
1036400	•	•	32	32		170	40	-5,5	0	16 ER/L	ER/L..016	M5X0.5XM3.5	M3,5X14	T15	CK15	M4X12
1036500	•	•	32	32		170	40	-5,5	0	22 ER/L	ER/L..022	-	M4X15	T20	-	-

SIR ISO - İÇ ÇAP DİŞ AÇMA KATERLERİ

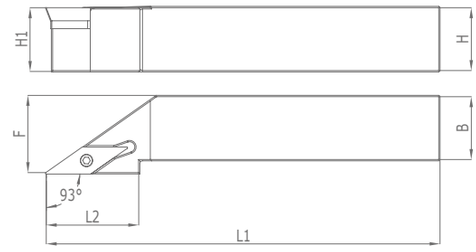




ISO SIR	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar	Baskı P.	Vida
1036600	•	•	10	13	7,5	125	25	-15	-1,5		-	-			-	-
1036700	•	•	12	15	8,5	150	25	-15	-1,5		-	-			-	-
1036800	•	•	16	13	7,5	180	40	-15	-1,5	11 IR/ER	-	-	M2,5X6	T08	-	-
1036900	•	•	16	20	11	180	30	-15	-1,5		-	-			-	-
1037000	•	•	16	20	11	180	30	-15	-1,5		-	-			-	-
1037100	•	•	20	25	13	200	35	-15	-1,5		-	-	M3,5X8		-	-
1037200	•	•	25	32	17	250	35	-15	-1,5	16 IR/ER			M3.5X11	T15		
1037300	•	•	32	40	21	300	40	-15	-1,5		IR/ER 016	M5X0.5XM3.5				
1037400	•	•	40	50	26	400	50	-15	-1,5				M3.5X14			
1037500	•	•	25	32	17	250	35	-15	-1,5			-			CK15	M4X12
1037600	•	•	32	40	21	300	40	-15	-1,5			-				
1037700	•	•	40	50	26	400	50	-15	-1,5	22 IR/ER	IR/ER 022	-	M4X17	T20		
1037800	•	○	50	63	35	450	70	-15	-1,5			-				

SVJBR ISO DIŞ ÇAP TORNALAMA KATERLERİ



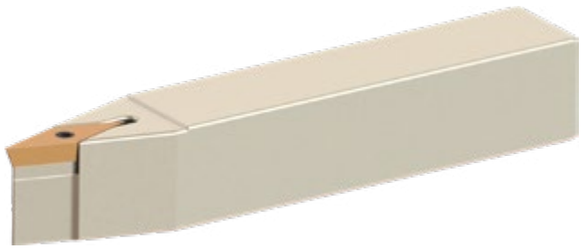


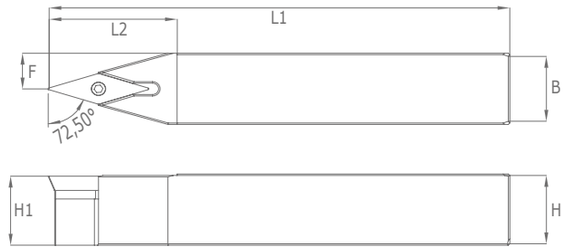
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1024200	•	•	12	12	20	100	20	0	0	VBM. 1103..	-	-	M2,5X7	T08
1024300	•	•	16	16	20	100	25	0	0		-	-		
1024400	•	•	16	16	20	100	25	0	0	VBM. 1604..	-	-	M3,5X11	T15
1024500	•	•	20	20	25	125	35	0	0	VBM. 1103..	-	-	M2,5X7	T08
1024600	•	•	20	20	25	125	35	0	0					
1024700	•	•	25	25	32	150	40	0	0	VBM. 1604..	VB..016	M5X0.5XM3.5	M3,5X14	T15
1024800	•	•	32	32	40	170	40	0	0					
1024900	•	•	25	25	32	150	40	0	0	VBM. 1103..	-	-	M2,5X7	T08

S SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

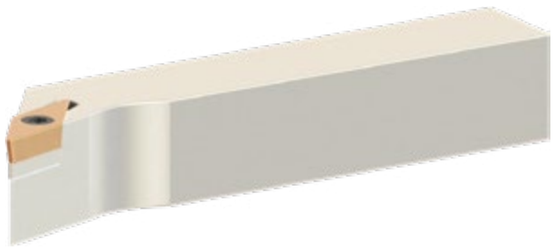
SVVBN ISO DIŞ ÇAP TORNALAMA KATERLERİ

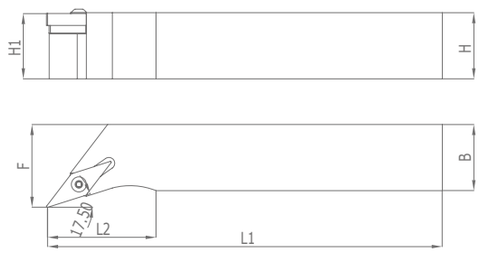




ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1025000	•	12	12	6	100	20	0	0	VBM. 1103..			M2,5X7	T08
1025100	•	16	16	8	100	25	0	0					
1025200	•	20	20	10	125	35	0	0					
1025300	•	16	16	8	100	25	0	0	VBM. 1604..	VB..016	M5X0.5XM3.5	M3,5X11	T15
1025400	•	20	20	10	125	35	0	0				M3,5X14	
1025500	•	25	25	12,5	150	40	0	0					
1025600	•	32	32	16	170	40	0	0					

SVHBR ISO DIŞ ÇAP TORNALAMA KATERLERİ

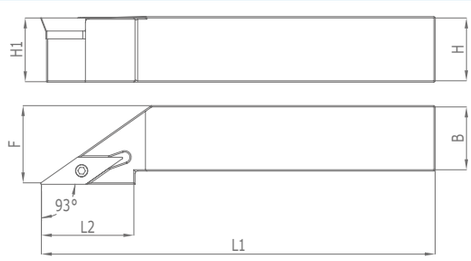




ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1025700	•	•	12	12	20	100	25	0	0	VBM. 1103..	-	-	M2.5X7	T08
1025800	•	•	16	16	20	100	25	0	0		-	-		
1025900	•	•	20	20	25	125	30	0	0		-	-		
1026000	•	•	20	20	25	125	35	0	0	VBM. 1604..	VB..016	M5X0.5XM3.5	M3.5X14	T15
1026100	•	•	25	25	32	150	40	0	0					
1026200	•	•	32	32	40	170	40	0	0					

SVJCR ISO DIŞ ÇAP TORNALAMA KATERLERİ



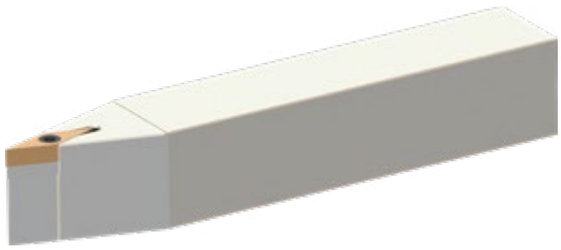


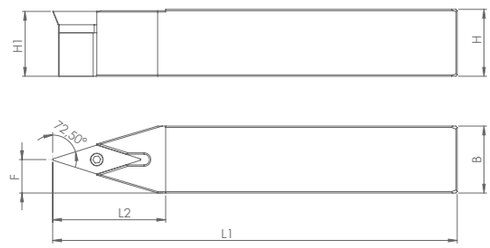
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1026300	•	•	12	12	20	100	20	0	0	VC.T 1103..			M2,5X7	T08
1026400	•	•	16	16	20	100	25	0	0					
1026500	•	•	16	16	20	100	25	0	0	VC.T 1604..			M3,5X11	T15
1026600	•	•	20	20	25	125	35	0	0	VC.T 1103..			M2,5X7	T08
1026700	•	•	20	20	25	125	35	0	0	VC.T 1604..	VC..016	M5X0.5XM3.5	M3,5X14	T15
1026800	•	•	25	25	32	150	40	0	0					
1026900	•	•	32	32	40	170	40	0	0					

S SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

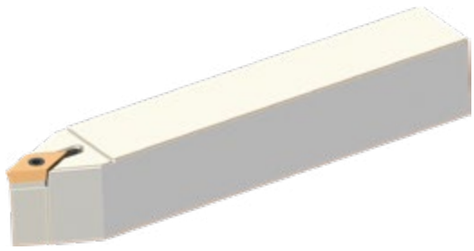
SVVCN ISO DIŞ ÇAP TORNALAMA KATERLERİ

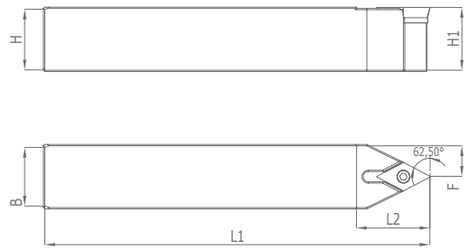




ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1027000	•	12	12	6	100	20	0	0	VC.T 1103..			M2,5X7	T08
1027100	•	16	16	8	100	25	0	0					
1027200	•	20	20	10	125	35	0	0					
1027300	•	16	16	8	100	25	0	0	VC.T 1604..	VB..016	M5X0.5XM3.5	M3,5X11	T15
1027400	•	20	20	10	125	35	0	0				M3,5X14	
1027500	•	25	25	12,5	150	40	0	0					
1027600	•	32	32	16	170	40	0	0					

SDNCN ISO DIŞ ÇAP TORNALAMA KATERLERİ

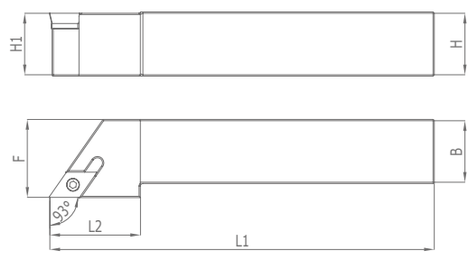




ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1027700	•	8	8	4	100	16	0	0	DC.T 0702..			M2,5X7	T08
1027800	•	10	10	5	100	16	0	0					
1027900	•	12	12	6	100	20	0	0					
1028000	•	16	16	8	100	25	0	0					
1028100	•	16	16	8	100	25	0	0					
1028200	•	20	20	10	125	35	0	0	DC.T 11T3..	DC..011	M5X0.5XM3.5	M3,5X14	T15
1028300	•	25	25	12,5	150	40	0	0					
1028400	•	32	32	16	170	40	0	0					
1028500	•	12	12	6	100	20	0	0					

SDJCR ISO DIŞ ÇAP TORNALAMA KATERLERİ



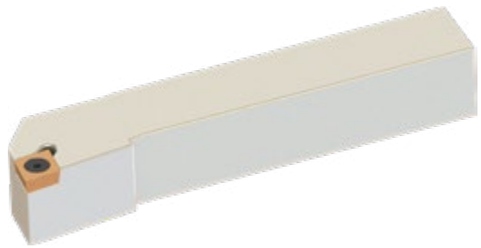


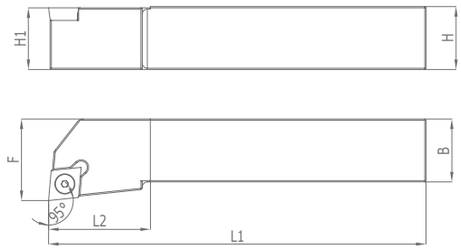
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1028600	•	•	8	8	10	100	16	0	0	DC.T 0702..			M2,5X7	T08
1028700	•	•	10	10	12	100	16	0	0					
1028800	•	•	12	12	16	100	20	0	0					
1028900	•	•	16	16	20	100	25	0	0					
1029000	•	•	16	16	20	100	25	0	0	DC.T 11T3..	DC..011	M5X0.5XM3.5	M3,5X14	T15
1029100	•	•	20	20	25	125	35	0	0					
1029200	•	•	25	25	32	150	40	0	0					
1029300	•	•	32	32	40	170	40	0	0					

S SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

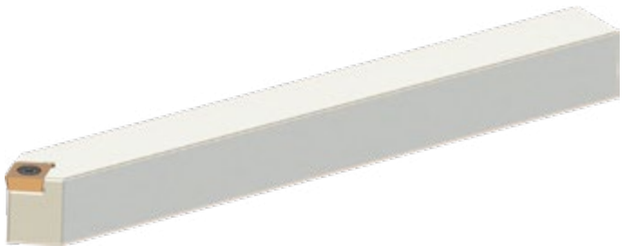
SCLCR ISO DIŞ ÇAP TORNALAMA KATERLERİ

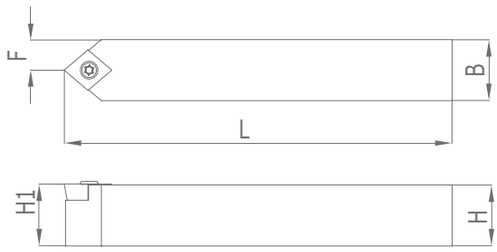




ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1029400	•	•	8	10	6	100	30	-10	0	CC.T 0602..	-	-	M2,5x5	T8
1029500	•	•	8	11	6	100	25	-10	0					
1029600	•	•	10	13	7	125	25	-10	0					
1029700	•	•	12	16	9	150	30	-8	0					
1029800	•	•	12	16	9	150	30	-8	0	CC.T 09T3..	-	-	M3,5x6	T15
1029900	•	•	16	20	11	180	35	-8	0	CC.T 0602..	-	-	M2,5x7	T8
1030000	•	•	16	20	11	180	35	-8	0	CC.T 09T3..	-	-	M3,5x8	T15
1030100	•	•	20	25	13	200	40	-8	0					
1030200	•	•	25	32	17	250	50	-8	0					
1030300	•	•	32	40	23	300	60	-8	0					
1030400	•	•	25	32	17	250	50	-8	0	CC.T 1204.	CC..12	M6xM4	M4x14	
1030500	•	•	32	40	23	300	60	-8	0					
1030600	•	•	40	50	27	400	70	-8	0					
1030700	•	•	25	32	17	250	50	-8	0	CC.T 09T3..	-	-	M3,5x8	

SCNCN ISO DIŞ ÇAP TORNALAMA KATERLERİ



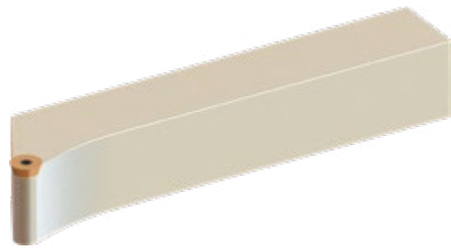


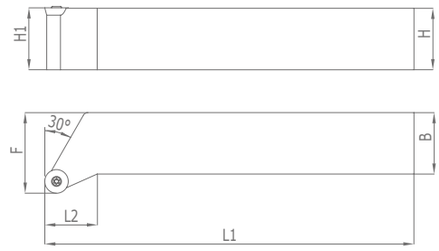
ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1030800	•	8	8	4	100	16	0	0	CC.T 0602..	-	-	M2,5X7	T08
1030900	•	10	10	5	100	16	0	0		-	-		
1031000	•	16	16	8	100	25	0	0	CC.T 09T3..	-	-	M3,5X11	T15
1031100	•	20	20	10	125	35	0	0	CC.T 1204..	CC..012	M6XM4	M4X12	T20
1031200	•	25	25	12,5	150	40	0	0	CC.T 0602..	-	-	M2,5X7	T08
1031300	•	12	12	6	100	20	0	0	CC.T 0602..	-	-	M2,5X7	T15
1031400	•	12	12	6	150	40	0	0	CC.T 09T3..	-	-	M3,5X11	

S SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

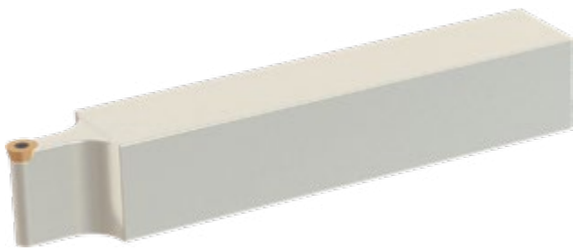
SRGCR ISO DIŞ ÇAP TORNALAMA KATERLERİ

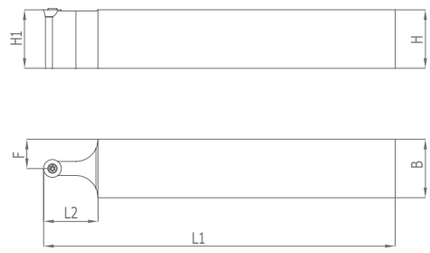




ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Vida	Anahtar
1031500	•	•	16	16	21	125	25	0	0	RC.T 0803..	M3X9	T10
1031600	•	•	20	20	25	125	35	0	0			
1031700	•	•	25	25	32	150	40	0	0			
1031800	•	•	16	16	21	100	25	0	0	RC.T 10T3..	M4X11	T15
1031900	•	•	20	20	25	125	35	0	0			
1032000	•	•	25	25	32	150	40	0	0			
1032100	•	•	32	32	40	170	40	0	0			
1032200	•	•	16	16	21	100	25	0	0	RC.T 1204..		
1032300	•	•	20	20	25	125	35	0	0			
1032400	•	•	25	25	32	150	40	0	0			
1032500	•	•	32	32	40	170	40	0	0			

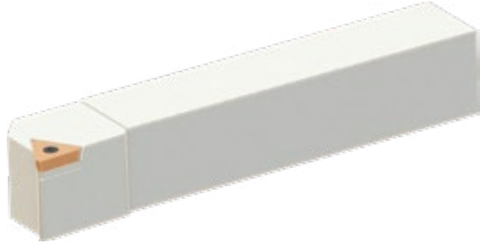
SRDCN ISO DIŞ ÇAP TORNALAMA KATERLERİ

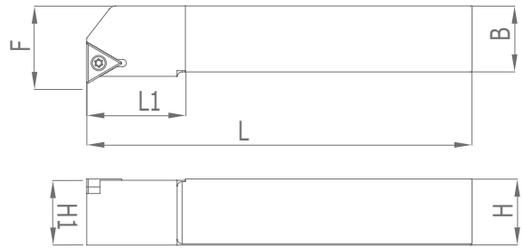




ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Vida	Anahtar
1032600	•	16	16	8	125	25	0	0	RC.T 0803..	M3X9	T10
1032700	•	20	20	10	125	30	0	0			
1032800	•	25	25	12,5	150	35	0	0			
1032900	•	20	20	10	125	30	0	0	RC.T 10T3..	M4X11	T15
1033000	•	25	25	12,5	150	35	0	0			
1033100	•	20	20	10	125	30	0	0	RC.T 1204..		
1033200	•	25	25	12,5	150	35	0	0			
1033300	•	25	25	12,5	150	35	0	0	RC.T 1604..	M5X12	T20
1033400	•	16	16	8	100	20	0	0	RC.T 10T3..	M4X11	T15
1033500	•	32	32	16	170	40	0	0			
1033600	•	32	32	16	170	40	0	0	RC.T 1204..		

STFCR ISO DIŞ ÇAP TORNALAMA KATERLERİ



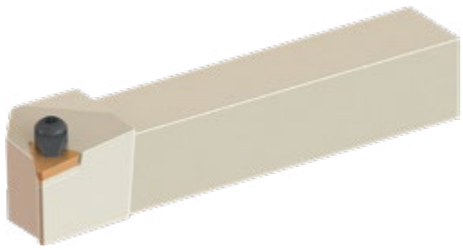


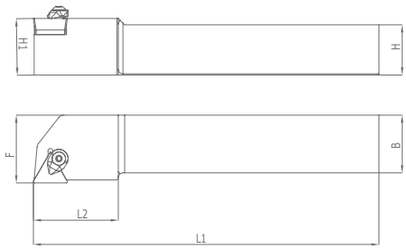
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Vida	Anahtar
1034600	•	•	16	16	20	100	25	0	0	TC.T 16T3..	-	-	M3.5X11	T10
1034700	•	•	20	20	25	125	35	0	0		TC..016	M5XM3.5	M3.5X14	
1034800	•	•	25	25	32	150	40	0	0					
1034900	•	•	12	12	16	100	25	0	0	TC.T 11..	-	-	M2,5	T8
1035000	•	•	16	16	20	100	25	0	0		-	-	M2,5	T8

C SİSTEM - T SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

CTGPR ISO DIŞ ÇAP TORNALAMA KATERLERİ

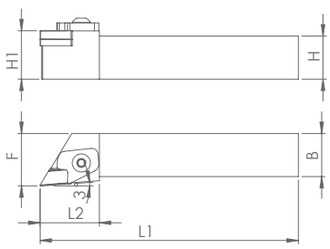




ISO	R	L	H1-H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1037900	•	○	16	16	16	100	30	-6	-6	TP.. 1103			TP11	M5X12	A3
1038000	•	•	16	16	20	100	30	-6	-6	TP.. 1603..	-	-	-		
1038100	•	•	20	20	25	125	35	-6	-6		TP16	M5X12	TP16	-	
1038200	•	•	25	25	32	150	40	-6	-6					-	
1038300	•	•	25	25	32	150	40	-6	-6	TP.. 2204..	-	-	TP22	M6X22	A4

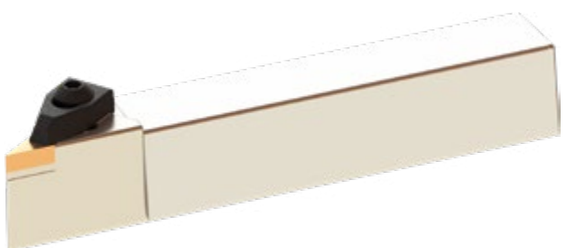
CKJNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

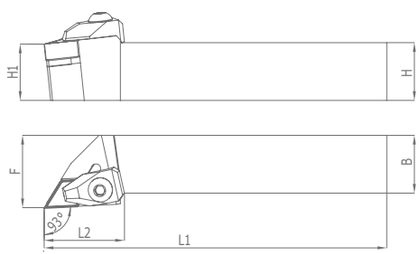




ISO	R	L	H1-H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1038400	•	•	20	20	25	125	35	-6	-6	KNUX 11	-	-	C110105	M4X12	A5
1038500	•	•	25	25	32	150	40	-6	-6						
1038600	•	•	20	20	25	125	35	-6	-6	KNUX 1604..	KN..016	M3X10	C160105	M6X22	
1038700	•	•	25	25	32	150	40	-6	-6						
1038800	•	•	32	32	40	170	40	-6	-6						
1038900	•	•	40	40	50	200	45	-6	-6						

TDJNR ISO DIŞ ÇAP TORNALAMA KATERLERİ



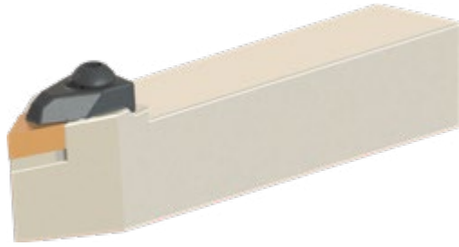


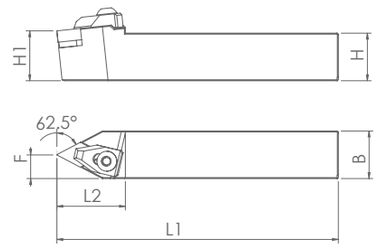
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1039000	•	•	16	16	21	125	30	-6	-6	DNM. 1104..	DN..011	M4X11 T15	T110105	M5X23	A3
1039100	•	•	20	20	25	125	35	-6	-6						
1039200	•	•	25	25	32	150	40	-6	-6						
1039300	•	•	20	20	25	125	35	-6	-6	DNM. 1506..	DN..015	M4X8 A2,5	T150105	M6X27	
1039400	•	•	25	25	32	150	40	-6	-6						
1039500	•	•	32	32	40	170	40	-6	-6						
1039600	•	•	40	40	50	200	45	-6	-6						
1039700	•	•	16	16	21	125	30	-6	-6						

T SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

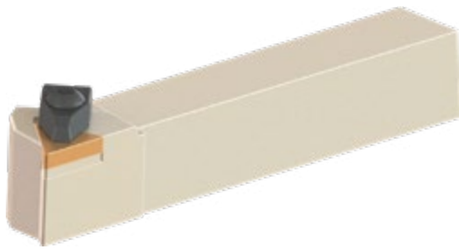
TDNNN ISO DIŞ ÇAP TORNALAMA KATERLERİ

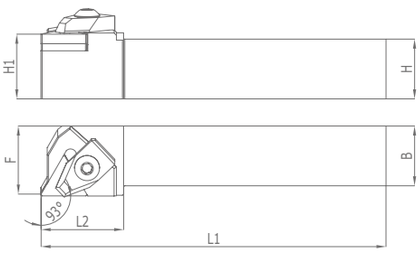




ISO	Stok	H1 H	B	F	L1	L2	λS	Y'0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1039800	•	16	16	8	125	30	-10	0						
1039900	•	20	20	10	125	35	-10	0	DNM. 1104..	DN..011	M4X8 T15	T110105	M5X23	
1040000	•	25	25	12.5	150	40	-10	0						A3
1040100	•	20	20	10	125	35	-10	0						
1040200	•	25	25	12.5	150	40	-10	0	DNM. 1506..	DN..015	M4X8 A2,5	T150105	M6X27	
1040300	•	32	32	16	170	40	-10	0						
1040400	•	40	40	20	200	45	-10	0						

TTJNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

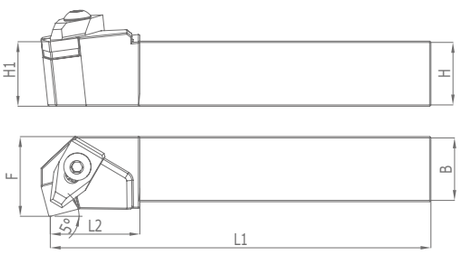




ISO	R	L	H1-H	B	F	L1	L2	λS	Y'0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1041100	•	•	16	16	21	125	35	-6	-6						
1041200	•	•	20	20	25	125	35	-6	-6	TNMG 1604	TN..016(H)		T110105	M5X23	
1041300	•	•	25	25	32	150	40	-6	-6						
1041400	•	•	20	20	25	125	35	-6	-6			M4X8 A2,5			A3
1041500	•	•	25	25	32	150	40	-6	-6	TNMG 2204	TN..022(H)		T150105	M6X27	
1041600	•	•	32	32	40	170	40	-6	-6						
1041700	•	•	40	40	50	200	45	-6	-6						

TSLNR ISO DIŞ ÇAP TORNALAMA KATERLERİ



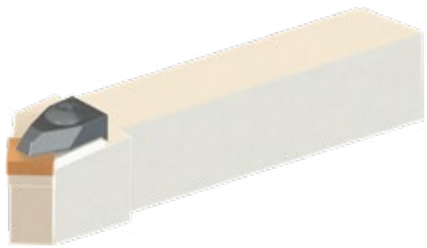


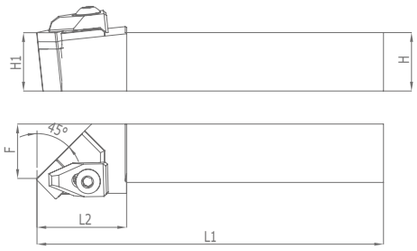
ISO	R	L	H1 H	B	F	L1	L2	λS	Y'0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1041800	•	•	20	20	25	125	35	-6	-6						
1041900	•	•	25	25	32	150	40	-6	-6	SNMG 1204	SN..012	M4X8 A2,5	T120105	M6X27	A3
1042000	○	○	32	32	40	170	40	-6	-6						
1042100	•	○	32	32	40	170	40	-6	-6	SNMG 1506	SN..015	M5X10	T160105		
1042200	•	○	40	40	50	170	40	-6	-6						
1042300	•	○	32	32	40	170	40	-6	-6	SNMG 1906	SN..019		T190105	M8X25	A5
1042400	•	○	40	40	50	200	45	-6	-6						

T SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

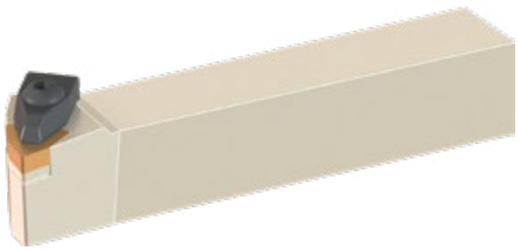
TSSNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

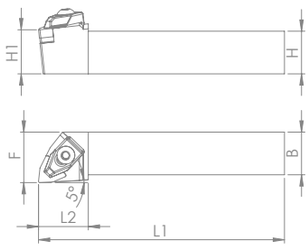




ISO	R	L	H1-H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1044300	•	•	20	20	19	125	35	-6	-6	SNMG 1204	SN..012	M4X8 A2,5	T120105	M6X27	A3
1044400	•	•	25	25	24	150	40	-6	-6						
1044500	•	•	32	32	30	170	40	-6	-6	SNMG 1506	SN..015	M5X10	T160105		
1044600	•	•	40	40	38	200	45	-6	-6	SNMG 1906	SN..019	M5X10	T190105	M8X25	A5
1044700	•	•	32	32	30	170	40	-6	-6	SNMG 1204	SN..012	M4X8 A2,5	T120105	M6X27	A3
1044800	•	•	32	32	30	170	40	-6	-6	SNMG 1906	SN..019	M5X10	T190105	M8X25	A5
1044900	•	•	32	32	30	170	40	-6	-6	SNMG 1506	SN..015	M5X10	T160105	M6X27	A3

TWLNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

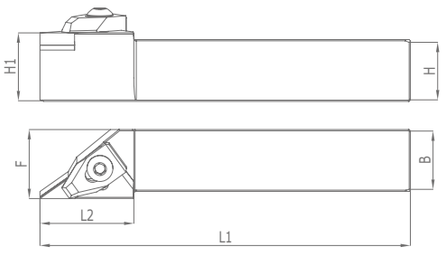




ISO	R	L	H1-H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1045000	•	•	16	16	21	125	30	-6	-6	WNM.0602..	-	-	T060105	M5X15	A3
1045100	•	•	20	20	25	125	35	-6	-6						
1045200	•	•	25	25	32	150	40	-6	-6						
1045300	•	•	20	20	25	125	35	-6	-6	WNM.0804..	WN..008(H)	M4X8 A2.5	T080105	M6X27	
1045400	•	•	25	25	32	150	40	-6	-6						
1045500	•	•	32	32	40	170	40	-6	-6						
1045600	•	•	40	40	50	200	45	-6	-6						
1045700	•	•	32	32	40	170	40	-6	-6	WNM.10	-	-	T100105		
1045800	•	•	40	40	50	200	45	-6	-6	WNM.10	-	-	T100105		

TVJNR ISO DIŞ ÇAP TORNALAMA KATERLERİ



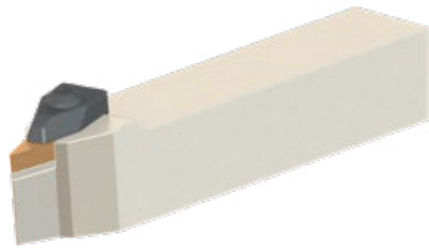


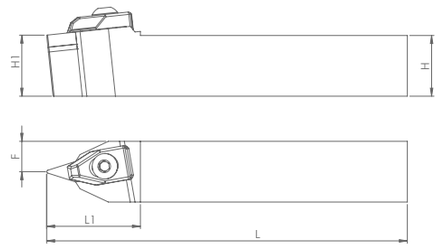
ISO	R	L	H1-H	B	F	L1	L2	λS	Y0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1045900	•	•	16	16	25	125	35	-6	-6	VNMG 1604	VN..016	M4X11 T15	T160105	M6X27	A3
1046000	•	•	20	20	25	125	35	-6	-6						
1046100	•	•	25	25	32	150	40	-6	-6						
1046200	•	•	32	32	40	170	40	-6	-6						
1046300	•	•	40	40	50	200	45	-6	-6						

T SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

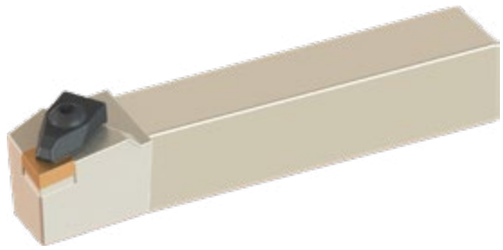
TVNNN ISO DIŞ ÇAP TORNALAMA KATERLERİ

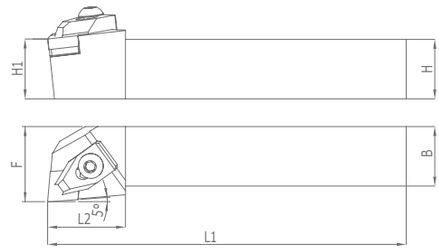




ISO	Stok	H1-H	B	F	L1	L2	λS	γ0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1046400	•	20	20	10	125	30	-10	0	VNMG 1604	VN..016	M4X11 T15	T160105	M6X27	A3
1046500	•	25	25	12.5	150	35	-10	0						
1046600	•	32	32	16	170	40	-10	0						
1046700	•	40	40	16	170	40	-10	0						

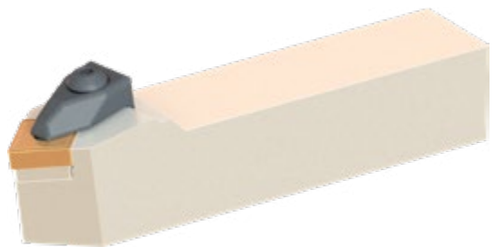
TCLNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

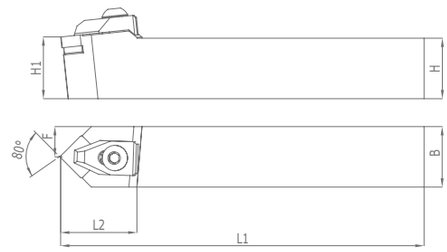




ISO	R	L	H1 H	B	F	L1	L2	λS	γ0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1046800	•	•	20	20	25	125	35	-6	-6	CNM. 1204..	CN..012	M4X8 A2,5	T120105	M6X27	A3
1046900	•	•	25	25	32	150	40	-6	-6						
1047000	•	•	32	32	40	170	40	-6	-6						
1047100	•	•	25	25	32	150	40	-6	-6	CNM. 1606..	CN..016	M5X10	T160105	M6X27	A3
1047200	•	•	32	32	40	170	40	-6	-6						
1047300	•	•	32	32	40	170	40	-6	-6	CNM. 1906..	CN..019	M5X10	T190105	M8X25	A5
1047400	•	•	40	40	50	200	45	-6	-6						
1047500	•	○	40	40	50	200	45	-6	-6	CNM. 1606..	CN..016	M5X10	T160105	M6X27	A3
1047600	•	•	16	16	25	100	35	-6	-6	CNM. 1204..	CN..012	M4X8 A2,5	T120105	M6X27	A3

TCZNN ISO DIŞ ÇAP TORNALAMA KATERLERİ



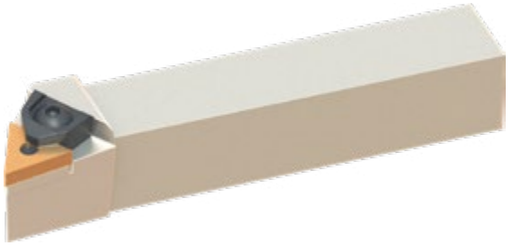


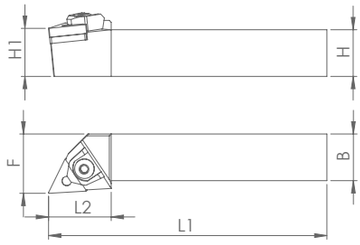
ISO	Stok	H1 H	B	F	L1	L2	λS	γ0	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1047700	•	20	20	10	125	35	-10	0	CNM. 1204..	CN..012	M4X8 A2,5	T120105	M6X27	A3
1047800	•	25	25	12,5	150	40	-10	0						
1047900	•	32	32	16	170	40	-10	0						
1048000	•	32	32	16	200	40	-10	0	CNM. 1906..	CN..019	M5X8 A2,5	T190105	M8X27	A5
1048100	•	40	40	16	250	40	-10	0						

M SİSTEM DIŞ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

MTJNR ISO DIŞ ÇAP TORNALAMA KATERLERİ

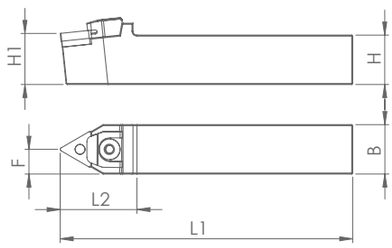




ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Altlık Pimi	Baskı P.	Vida	Anahtar
1048500	•	•	16	16	20	125	35	-6	-6						
1048600	•	•	20	20	25	125	35	-6	-6	TNM.1604	TN..016 (P)	5X3.6X15	M160105	M6X27	
1048700	•	•	25	25	32	150	40	-6	-6						
1048800	•	•	32	32	40	170	40	-6	-6						A3
1048900	•	•	25	25	32	150	40	-6	-6						
1049000	•	•	32	32	40	170	40	-6	-6	TNM.2204	TN..022 (P)	6X5X18	M220105	M6X27	
1049100	•	•	40	40	50	200	45	-6	-6						

MTENN ISO DIŞ ÇAP TORNALAMA KATERLERİ

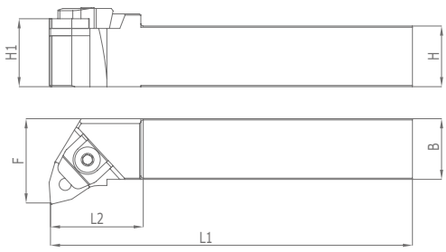




ISO	Stok	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Altlık Pimi	Baskı P.	Vida	Anahtar
1049200	•	16	16	8	125	35	-10	0						
1049300	•	20	20	10	125	35	-10	0	TNM.1604	TN..016 (P)	5X3.6X15	M160105	M5X23	
1049400	•	25	25	12,5	150	40	-10	0						
1049500	•	32	32	16	170	40	-10	0						A3
1049600	•	25	25	12,5	150	40	-10	0						
1049700	•	32	32	16	170	40	-10	0	TNM.2204	TN..022 (P)	6X5X18	M220105	M6X27	
1049800	•	40	40	20	200	45	-10	0						

MWLNR ISO DIŞ ÇAP TORNALAMA KATERLERİ





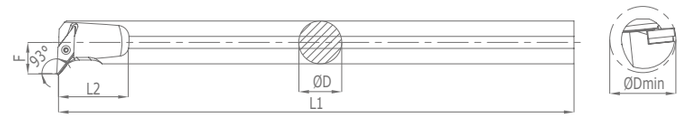
ISO	R	L	H1 H	B	F	L1	L2	λS	Y0	Uç	Altlık	Altlık Pimi	Baskı P.	Vida	Anahtar
1049900	•	•	16	16	20	125	35	-6	-6						
1050000	•	•	20	20	25	125	35	-6	-6	WNM.0604	-	5X3.6X15	M060105	M5X23	
1050100	•	•	25	25	32	150	40	-6	-6						
1050200	•	•	20	20	25	125	35	-6	-6						A3
1050300	•	•	25	25	32	150	40	-6	-6	WNM.0804	WN.008(P)	6X5X18	M080105	M6X27	
1050400	•	•	32	32	40	170	40	-6	-6						
1050500	•	•	40	40	50	200	45	-6	-6						

S SİSTEM İÇ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

SVUBR ISO İÇ ÇAP TORNALAMA KATERLERİ

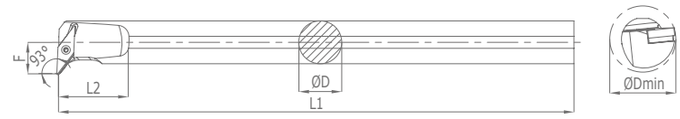




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1051200	•	•	16	20	11	180	40	-8	0	VBM. 1103..	-	-	M2.5X7	T08
1051300	•	•	20	25	13	200	40	-8	0		-	-		
1051400	•	•	25	32	17	250	50	-9	0	VBM. 1604..	VB..016	M5X0.5XM3.5	M3.5X10	T15
1051500	•	•	32	40	22	300	60	-9	0					
1051600	•	•	40	50	27	400	70	-9	0					

SVUCR ISO İÇ ÇAP TORNALAMA KATERLERİ

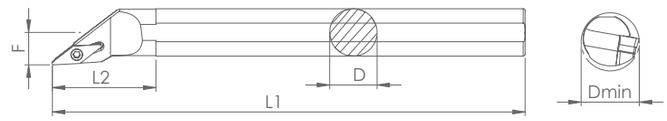




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1051700	•	•	16	20	11	180	40	-8	0	VCM. 1103..	-	-	M2.5X7	T08
1051800	•	•	20	25	13	200	40	-8	0		-	-		
1051900	•	•	25	32	17	250	50	-9	0	VCM. 1604..	VC..016	M5X0.5XM3.5	M3.5X10	T15
1052000	•	•	32	40	22	300	60	-9	0					
1052100	•	•	40	50	27	400	70	-9	0					

SVJBR ISO İÇ ÇAP TORNALAMA KATERLERİ





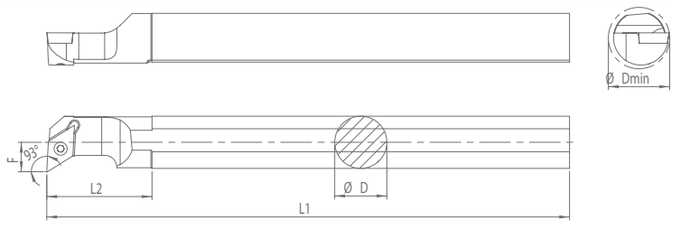
ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1052200	•	•	25	32	17	250	50	-	-	VCM. 1604..	VC..016	M5X0.5XM3.5	M3.5X10	T15
1052300	•	•	32	40	23	300	80	-	-					
1052400	•	•	40	50	27	400	80	-	-					

S SİSTEM İÇ ÇAP TORNALAMA KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

SDUCR ISO İÇ ÇAP TORNALAMA KATERLERİ

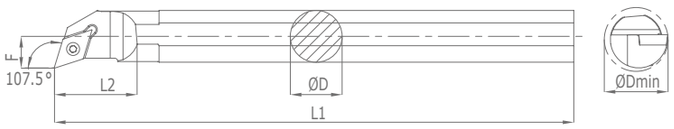




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1053100	•	•	10	13	7,5	125	25	-11	0	DC.T 0702..	-	-	M2,5X5	T08
1053200	•	•	12	16	9	150	30	-9	0					
1053300	•	•	16	20	11	180	35	-9	0				M2,5X7	
1053400	•	•	16	20	11	180	35	-9	0	DC.T 11T3..			M3.5X8	T15
1053500	•	•	20	25	13	200	40	-8	0	DC.T 0702..			M2,5X7	T08
1053600	•	•	20	25	13	200	40	-8	0	DC.T 11T3..			M3.5X8	T15
1053700	•	•	25	32	17,5	250	50	-8	0					
1053800	•	•	25	32	17,5	250	50	-8	0	DC.T 0702..			M2,5X7	T08
1053900	•	•	32	40	23	300	60	-8	0	DC.T 11T3..	DC..011	M5X0.5XM3.5	M3.5X10	T15
1054000	•	•	40	50	27	400	60	-8	0					

SDQCR ISO İÇ ÇAP TORNALAMA KATERLERİ

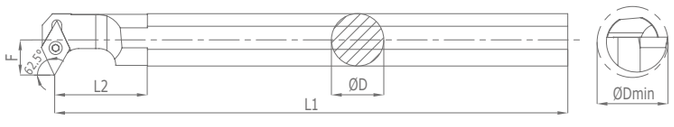




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1054100	•	•	10	13	7,5	125	25	-11	0	DC.T 0702..	-	-	M2,5X5	T08
1054200	•	•	12	16	9	150	30	-9	0					
1054300	•	•	16	20	11	180	35	-9	0				M2,5X7	
1054400	•	•	20	25	13	200	40	-8	0					
1054500	•	•	16	20	11	180	35	-9	0	DC.T 11T3..			M3.5X8	T15
1054600	•	•	20	25	13	200	40	-8	0					
1054700	•	•	25	32	17,5	250	50	-8	0	DC.T 0702..			M2,5X7	T08
1054800	•	•	25	32	17,5	250	50	-8	0	DC.T 11T3..	DC..011	M5X0.5XM3.5	M3.5X10	T15
1054900	•	•	32	40	23	300	60	-8	0					

SD-CR ISO İÇ ÇAP TORNALAMA KATERLERİ





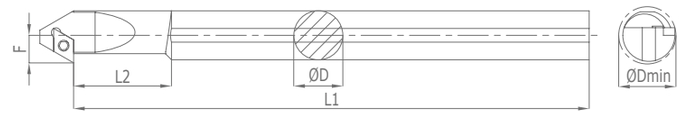
ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1055000	•	•	10	14	8,5	125	28	-9	0	DC.T 0702..	-	-	M2.5X7	T08
1055100	•	•	12	16	9	150	30	-9	0		-	-		
1055200	•	•	16	23	14	180	40	-8	0		-	-		
1055300	•	•	16	23	14	180	40	-8	0	DC.T 11T3..	-	-	M3.5X8	T15
1055400	•	•	20	25	14,5	200	45	-8	0		-	-		
1055500	•	•	25	32	19	250	55	-8	0					
1055600	•	•	32	40	23	300	60	-12	0		DC..011	M5X0.5XM3.5	M3.5X10	
1055700	•	○	32	50	27	400	70	-10	0					

S SİSTEM İÇ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

SDXCR ISO İÇ ÇAP TORNALAMA KATERLERİ

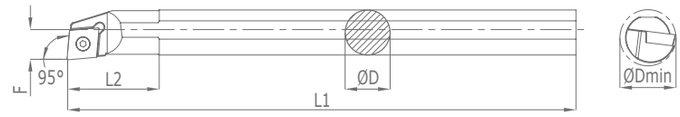




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1055800	•	•	12	16	9	150	30	-7	0	DC.T 0702..	-	-	M2,5X5	T08
1055900	•	•	16	22	12,5	180	40	-9	0		-	-	M2,5X7	
1056000	•	•	16	22	12,5	180	40	-9	0	DC.T 11T3..	-	-	M3.5X8	T15
1056100	•	•	20	25	14	200	55	-9	0		DC..011	M5X0.5XM3.5	M3.5X10	
1056200	•	•	25	32	17,5	250	65	-10	0					
1056300	•	•	32	40	23	300	80	-13	0					
1056400	•	•	40	50	27	400	80	-13	0					

SCLCR ISO İÇ ÇAP TORNALAMA KATERLERİ

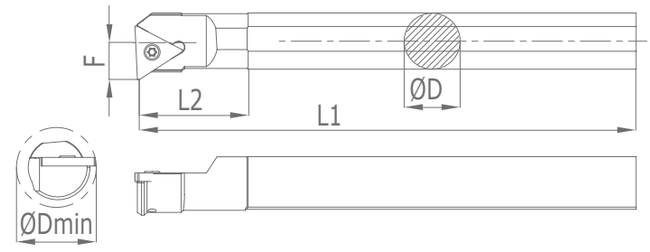




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1056500	•	•	8	10	6	100	30	-10	0	CC.T 0602..	-	-	M2,5X5	T08
1056600	•	•	8	11	6	100	25	-10	0					
1056700	•	•	10	13	7	125	25	-10	0					
1056800	•	•	8	11	6	100	25	-10	0					
1056900	•	•	12	16	9	150	30	-8	0					
1057000	•	•	16	20	11	180	35	-8	0				M2,5X7	
1057100	•	•	16	20	11	180	35	-8	0	CC.T 09T3..			M3,5X8	T15
1057200	•	•	20	25	13	200	40	-8	0				M3,5X11	
1057300	•	•	25	32	17	250	50	-8	0					
1057400	•	•	32	40	23	300	60	-8	0				M3,5X6	
1057500	•	•	25	32	17	250	50	-8	0	CC.T 1204..	CC..12	M6XM4	M4X14	T20
1057600	•	•	32	40	23	300	60	-8	0					
1057700	•	○	40	50	27	400	70	-8	0					

STFCR ISO İÇ ÇAP TORNALAMA KATERLERİ





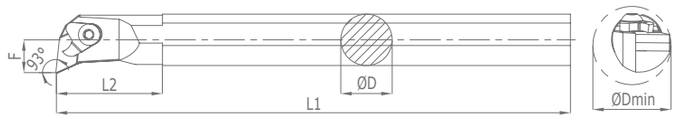
ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Vida	Anahtar
1057800	•	•	16	20	11	180	35	-9	0	TC.T 16T3..	-	-	M3.5X8	T15
1057900	•	•	20	25	13	200	40	-8	0		TC..016	M5X0.5XM3.5	M3.5X10	
1058000	•	•	25	32	17,5	250	50	-8	0					
1058100	•	•	32	40	23	300	60	-8	0					

C SİSTEM - T SİSTEM İÇ ÇAP TORNALAMA KATERLERİ

HEIKENEI® wir produzieren industrielle lösungen

CKUNR ISO İÇ ÇAP TORNALAMA KATERLERİ

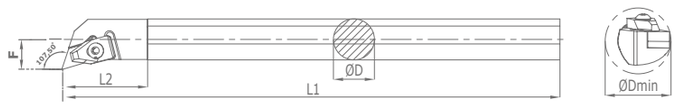




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1058200	•	•	25	32	17	250	50	-12	-5	KNUX 1604..	KN..016 (R/L)	M3X8 A2.5	C160105	M6X27	A3
1058300	•	•	32	40	22	300	60	-12	-5						
1058400	•	•	40	50	27	400	65	-9	-5						
1058500	•	○	50	63	35	450	70	-7	-5						
1058600	•	○	60	75	35	450	70	-7	-5						

TDQNR ISO İÇ ÇAP TORNALAMA KATERLERİ

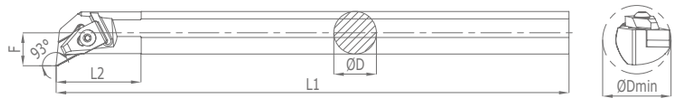




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1058900	•	○	25	32	17	250	50	-13	-5	DNM. 1506..	DN..015	M4X8 A2.5	T150105	M6X20	A3
1059000	•	○	32	40	22	300	60	-12	-5					M6X27	
1059100	•	○	40	50	27	400	70	-12	-5						
1059200	•	○	50	63	35	450	75	-12	-5						

TDUNR ISO İÇ ÇAP TORNALAMA KATERLERİ

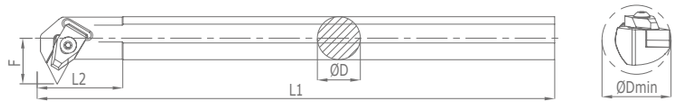




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1059300	•	•	20	25	13	200	40	-11	-5	DNM. 1104..	-	-	T110105	M5X15	A3
1059400	•	•	25	32	17	250	50	-13	-5	DNM. 1506..	DN..015	M4X8 A2.5	T150105	M6X20	
1059500	•	•	32	40	22	300	60	-12	-5					M6X27	
1059600	•	•	40	50	27	400	70	-12	-5						
1059700	•	•	50	63	35	450	75	-12	-5						
1059800	•	○	60	75	40	450	75	-12	-5						

TD-NR ISO İÇ ÇAP TORNALAMA KATERLERİ





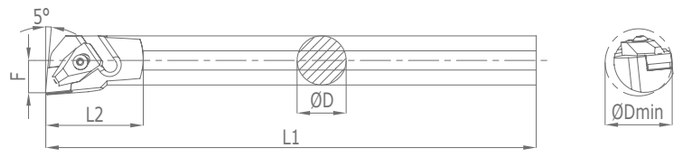
ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1059900	•	○	32	43	26,5	300	60	-15	0	DNM. 1506..	DN..015	M4X8 A2.5	T150105	M6X27	A3
1060000	•	○	40	50	29,5	400	70	-13	0						
1060100	•	○	50	62	35	450	70	-13	0						

T SİSTEM - M SİSTEM İÇ ÇAP TORNALAMA KATERLERİ

HEIKENEI
wir produzieren industrielle lösungen

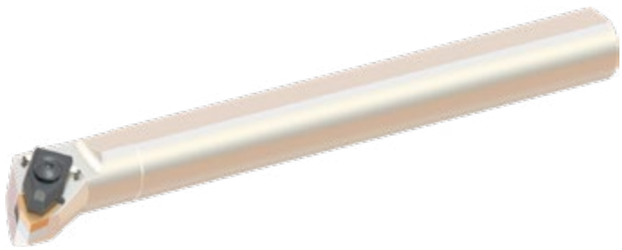
TCLNR ISO İÇ ÇAP TORNALAMA KATERLERİ

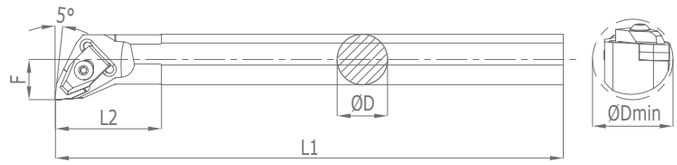




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1060200	•	•	25	32	17	250	50	-12	-5	CNM. 1204..	CN..012	M4X8 A2,5	T120105	M6X20	A3
1060300	•	•	32	40	22	300	60	-12	-5						
1060400	•	○	40	50	27	400	70	-12	-5	CNM. 1606..	CN..016	M5X8 A3	T160105	M6X27	
1060500	•	○	50	63	35	450	75	-12	-5						
1060600	•	•	32	40	22	300	60	-12	-5						
1060700	•	○	40	40	27	400	70	-12	-5	CNM. 1204..	CN..012	M4X8 A2,5	T120105		
1060800	•	○	60	75	40	450	75	-12	-5	CNM. 1606..	CN..016	M5X8 A3	T160105		

TWLNR ISO İÇ ÇAP TORNALAMA KATERLERİ

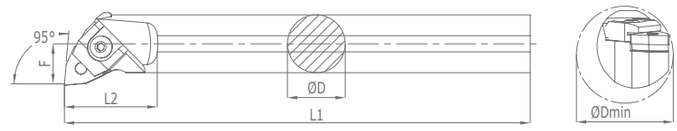




ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Vida	Baskı P.	Vida	Anahtar
1060900	•	○	16	20	11	180	35	-11	-5	WNM. 0602..	-	-	T060105	M5X15	A3
1061000	•	•	20	25	13	200	40	-11	-5						
1061100	•	•	25	32	17	250	50	-13	-5	WNM. 0804..	WN.008(H)	M4X8 A2.5	T080105	M6X20	
1061200	•	•	32	40	22	300	60	-12	-5						
1061300	•	○	40	50	27	400	70	-12	-5					M6X27	
1061400	•	○	50	63	35	450	75	-12	-5						
1061500	•	○	60	75	40	450	75	-12	-5						

MWLNR ISO İÇ ÇAP TORNALAMA KATERLERİ





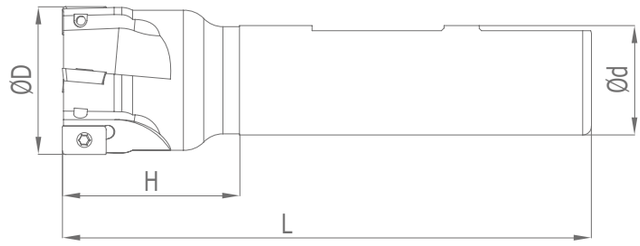
ISO	R	L	D	D min	F	L1	L2	λF	YP	Uç	Altlık	Altlık Pimi	Baskı P.	Vida	Anahtar
1063500	•	○	16	20	11	180	-5	-13	-5	WNM. 0604..	-	5x3,6x15	M060105	M5X15	A3
1063600	•	○	20	25	13	200	-5	-13	-5						
1063700	•	•	25	32	17	250	-5	-13	-5	WNM. 0804..	WN..008	6x5x15	M080105	M6X20	
1063800	•	•	32	40	22	300	-5	-12	-5						
1063900	•	•	40	50	27	400	-5	-14	-5					M6X27	
1064000	•	○	50	63	35	450	-5	-12	-5						
1064100	•	○	60	75	40	450	-5	-12	-5						

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI® wir produzieren industrielle lösungen

APKT 1003 ISO SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR



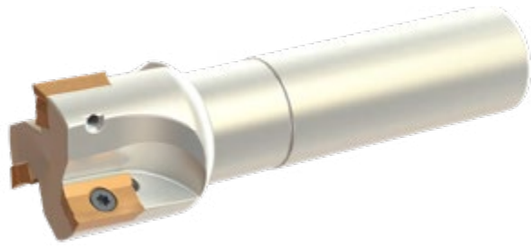


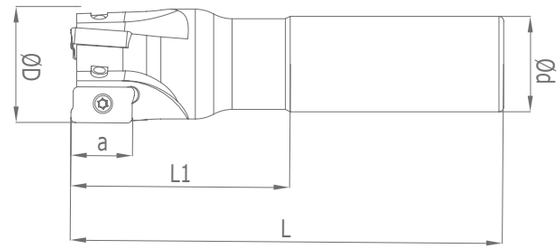
ISO AP..1003	Stok	İçten S.	D	Z	H	L	d	Uç	Vida	Anahtar
1064200	•	•	12	1	30	120	12		M2.5X6	
1064300	•	○	14	1	30	120	12		M2.5X6	
1064400	•	•	16	2	30	100	16		M2.5X6	
1064500	•	○	16	2	30	120	16		M2.5X6	
1064600	•	•	16	2	40	150	16		M2.5X6	
1064700	•	○	16	2	50	200	16		M2.5X6	
1064800	•	•	16	2	50	250	16		M2.5X6	
1064900	•	○	18	2	30	100	16		M2.5X6	
1065000	•	•	18	2	30	120	16		M2.5X6	
1065100	•	○	18	2	40	150	16		M2.5X6	
1065200	•	○	18	2	50	200	16		M2.5X6	
1065300	•	•	20	3	30	100	20		M2.5X7	
1065400	•	○	20	3	30	120	20		M2.5X7	
1065500	•	•	18	2	50	250	16		M2.5X6	
1065600	•	○	20	3	40	150	20		M2.5X7	
1065700	•	•	20	3	60	200	20		M2.5X7	
1065800	•	○	20	3	70	250	20		M2.5X7	
1065900	•	•	22	3	30	100	20		M2.5X7	
1066000	•	○	22	3	30	120	20		M2.5X7	
1066100	•	○	22	3	40	150	20		M2.5X7	
1066200	•	•	22	3	50	200	20		M2.5X7	
1066300	•	○	22	3	50	250	20		M2.5X7	
1066400	•	•	25	3	30	100	25		M2.5X7	
1066500	•	○	25	3	30	120	25		M2.5X7	
1066600	•	•	25	3	40	150	25		M2.5X7	
1066700	•	○	25	3	60	200	25		M2.5X7	
1066800	•	•	25	3	70	250	25		M2.5X7	
1066900	•	○	28	4	35	150	25	AP..1003..	M2.5X7	T08
1067000	•	○	26	3	35	150	25		M2.5X7	
1067100	•	•	26	3	35	200	25		M2.5X7	
1067200	•	○	26	3	35	250	25		M2.5X7	
1067300	•	•	30	4	30	100	25		M2.5X7	
1067400	•	○	30	4	30	120	25		M2.5X7	
1067500	•	•	30	3	40	150	25		M2.5X7	
1067600	•	○	30	4	40	150	25		M2.5X7	
1067700	•	○	30	4	40	200	25		M2.5X7	
1067800	•	○	30	3	40	300	25		M2.5X7	
1067900	•	•	32	4	40	150	25		M2.5X7	
1068000	•	○	32	4	60	150	32		M2.5X7	
1068100	•	•	32	4	60	200	32		M2.5X7	
1068200	•	○	35	4	30	100	25		M2.5X7	
1068300	•	•	35	4	30	120	25		M2.5X7	
1068400	•	○	35	4	30	150	25		M2.5X7	
1068500	•	•	35	4	30	200	25		M2.5X7	
1068600	•	○	35	4	35	100	32		M2.5X7	
1068700	•	○	35	4	35	120	32		M2.5X7	
1068800	•	○	35	4	35	150	32		M2.5X7	
1068900	•	○	40	5	40	100	25		M2.5X7	
1069000	•	○	40	5	40	120	25		M2.5X7	
1069100	•	○	40	5	40	150	25		M2.5X7	
1069200	•	○	40	5	40	200	25		M2.5X7	
1069300	•	○	40	5	40	100	32		M2.5X7	
1069400	•	•	40	5	40	120	32		M2.5X7	
1069500	•	○	40	5	40	150	32		M2.5X7	

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI
wir produzieren industrielle lösungen

APKT 1604 SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR





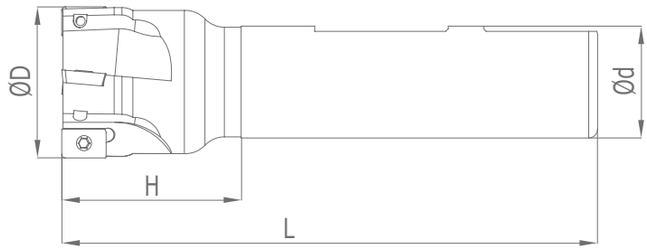
AP..1604..	Stok	İçten S.	D	Z	H	L	d	Uç	Vida	Anahtar
1069600	●	●	25	2	37	100	25			
1069700	●	○	25	2	41	120	25			
1069800	●	●	25	2	50	150	25			
1069900	●	○	25	2	70	200	25		M3.5X8	
1070000	●	●	25	2	70	250	25			
1070100	●	○	25	2	70	300	25			
1070200	●	●	30	3	41	100	25			
1070300	●	○	30	3	41	120	25			
1070400	●	○	30	3	41	150	25			
1070500	●	○	30	3	41	200	25			
1070600	●	○	30	3	41	250	25			
1070700	●	●	30	3	41	300	25			
1070800	●	○	32	3	41	100	25			
1070900	●	●	32	3	41	120	25			
1071000	●	○	32	3	41	150	25			
1071100	●	●	32	3	41	200	25			
1071200	●	○	32	3	35	100	32			
1071300	●	●	32	3	35	120	32			
1071400	●	○	32	3	50	150	32			
1071500	●	○	32	3	60	200	32			
1071600	●	○	32	3	70	250	32			
1071700	●	●	32	3	70	300	32			
1071800	●	○	32	3	100	350	32	AP..1604..		T15
1071900	●	●	35	3	41	100	25			
1072000	●	○	35	3	41	120	25			
1072100	●	●	35	3	55	150	25		M3.5X10	
1072200	●	○	35	3	41	100	32			
1072300	●	●	35	3	41	120	32			
1072400	●	○	35	3	41	150	32			
1072500	●	●	35	3	41	200	32			
1072600	●	○	35	3	41	250	32			
1072700	●	●	35	3	41	300	32			
1072800	●	○	35	3	41	350	32			
1072900	●	○	40	4	41	100	25			
1073000	●	●	40	4	41	120	25			
1073100	●	●	40	4	41	150	25			
1073200	●	○	40	4	41	200	25			
1073300	●	○	40	4	46	100	32			
1073400	●	○	40	4	46	120	32			
1073500	●	○	40	4	46	150	32			
1073600	●	●	40	4	46	200	32			
1073700	●	○	40	4	46	250	32			
1073800	●	●	40	4	46	300	32			
1073900	●	○	40	4	46	350	32			

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI® wir produzieren industrielle lösungen

APMT 11T3.. SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

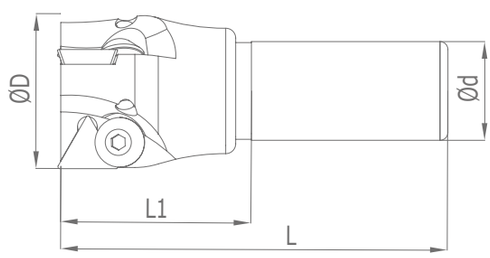




APMT 11T3..	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1074000	•	○	16	2	30	90	16	APMT 11T3..	M2.5X6	T08
1074100	•	○	16	2	30	120	16			
1074200	•	○	16	2	30	150	16			
1074300	•	○	17	2	30	120	16			
1074400	•	○	17	2	30	200	16			
1074500	•	○	18	2	30	100	16			
1074600	•	○	18	2	30	120	16			
1074700	•	○	20	3	30	120	20			
1074800	•	○	20	3	40	150	20			
1074900	•	○	21	3	40	120	20			
1075000	•	○	21	3	40	140	20			
1075100	•	○	22	3	40	120	20			
1075200	•	○	22	3	40	150	20			
1075300	•	○	25	3	40	150	25		M2.5X7	
1075400	•	○	25	3	40	150	25			
1075500	•	○	25	3	50	200	25			
1075600	•	○	30	4	30	120	25			
1075700	•	○	30	4	40	150	25			
1075800	•	○	32	4	50	200	32			

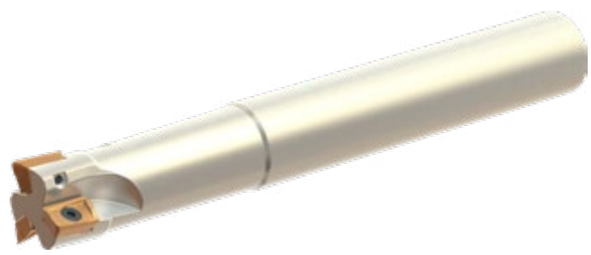
TPKN 1603 ISO SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

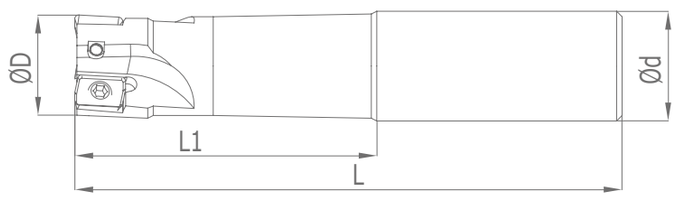




ISO	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1075900	•	○	35	2	50	100	25	TPKN 1603	M6X0,75	A4
1076000	•	○	40	3	50	100	25			
1076100	•	○	50	3	50	100	25			

XO.. 0903 SCO SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR





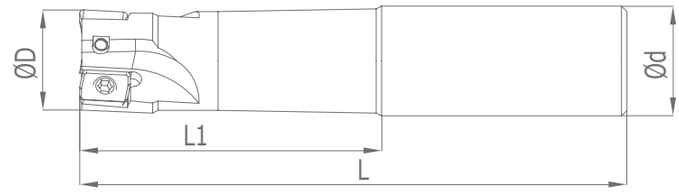
SCO XO..0903..	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1076200	•	○	16	2	30	100	16	XO..0903..	M2.5X8	T08
1076300	•	○	16	2	30	130	16			
1076400	•	○	16	2	40	150	16			
1076500	•	○	16	2	50	200	16			
1076600	•	○	20	3	30	120	20			
1076700	•	○	20	3	40	150	20			
1076800	•	○	20	3	50	200	20			
1076900	•	○	25	3	50	150	25			

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI
wir produzieren industrielle lösungen

XOMX 1204 SCO SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

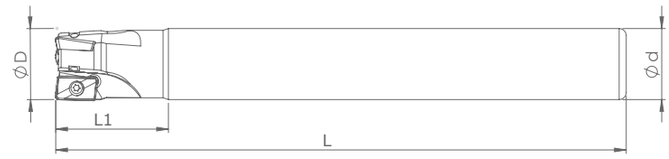




SCO XOMX 1204..	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1077000	•	○	16	1	30	120	16	XOMX 1204..	M3,5X6	T15
1077100	•	○	16	1	40	150	16			
1077200	•	○	20	2	30	100	20			
1077300	•	○	20	2	40	120	20			
1077400	•	○	20	2	50	150	20			
1077500	•	○	22	2	30	150	20			
1077600	•	○	25	3	40	120	25		M3,5X8	
1077700	•	○	25	3	50	150	25			
1077800	•	○	32	4	30	150	25			

APKT 11T3 ZCC SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

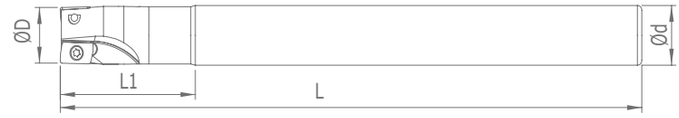




ZCC APKT 11T3	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1078700	•	•	16	2	40	160	16	APKT 11T3	M2.5X6	T08
1078800	•	•	16	2	50	200	16			
1078900	•	•	17	2	30	160	16			
1079000	•	•	17	2	30	200	16			
1079100	•	•	17	2	30	250	16			
1079200	•	•	18	2	30	160	16			
1079300	•	•	20	3	40	160	20			
1079400	•	•	21	3	30	160	20			
1079500	•	•	21	3	30	200	20			
1079600	•	•	21	3	30	250	20			
1079700	•	•	25	3	40	160	25			
1079800	•	•	26	3	30	150	25			
1079900	•	•	26	3	30	200	25			
1080000	•	•	26	3	30	250	25			

APKT 0702 ZCC SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR





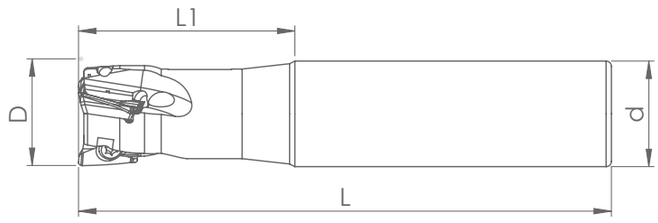
ZCC APKT 0702	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1084100	•	○	10	2	30	130	10	APKT 0702	M1,8x3,5	T06
1084200	•	○	12	2	30	130	10			
1084300	•	○	12	2	30	130	12			
1084400	•	○	14	3	30	130	12			
1084500	•	○	16	3	30	150	14			

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI® wir produzieren industrielle lösungen

AXMT 1235 SMTM SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

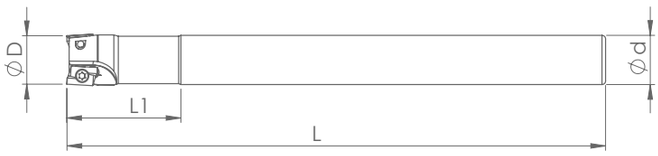




SMTM AXMT 1235	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1084900	•	○	12	1	30	100	12	AXMT 1235..	M3X6	T10
1085000	•	○	14	1	30	100	12			
1085100	•	○	16	1	30	100	16			
1085200	•	○	18	2	35	100	16			
1085300	•	○	20	3	40	100	20			

AXMT 0602 SMTM SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

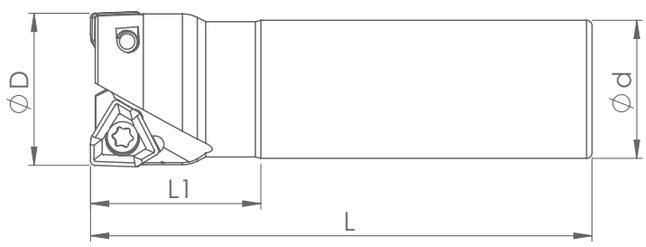




SMTM AXMT 0602	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1085400	•	○	10	2	15	75	10	AXMT 0602..	M1,8x3,5	T06
1085500	•	○	12	2	20	120	12			
1085600	•	○	12	3	20	90	12			
1085700	•	○	14	3	25	100	16			

XNKT 0604 / 0805 KRLY SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR





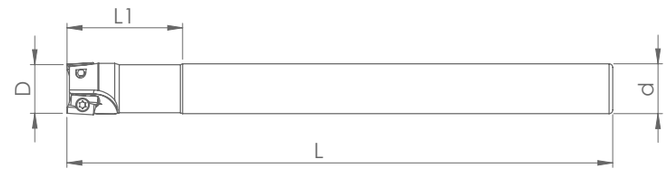
KRLY 060405 / 080508 XNKT	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1090900	•	•	18	2	30	150	20	XNKT 0604	M3X8	T10
1091000	•	•	20	2	30	150	20			
1091100	•	•	22	2	30	150	20			
1091200	•	•	25	3	50	150	25			
1091300	•	•	26	4	30	150	25			
1091400	•	•	32	4	50	150	32			
1091500	•	•	32	3	50	150	32	XNKT 0805	M4X10	T15

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI
wir produzieren industrielle lösungen

AXMT 0602 TT SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

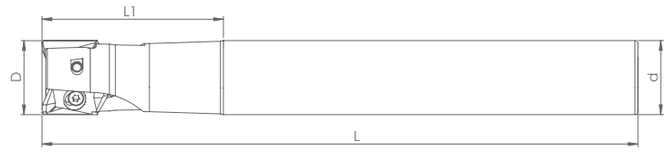




TT AXMT 0602	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1093400	●	●	10	2	30	120	9	AXMT 0602	M1,8X3,5	T6
1093500	●	●	11	2	30	120	10			
1093600	●	●	12	2	30	120	11			

EDPT 1404 KNNMTL SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

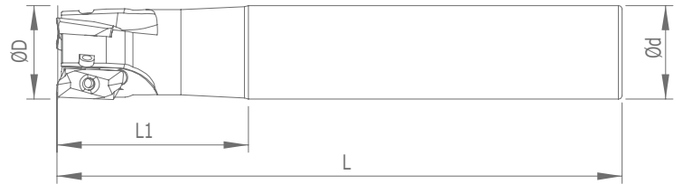




KNNMTL EDPT 1404	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1095500	●	●	20	2	25	120	20	EDPT 1404	M3x9	T10
1095600	●	●	20	2	25	150	20			
1095700	○	●	25	3	25	120	25			
1095800	●	●	25	3	25	150	25			

EDPT 10T3/1805 KNNMTL SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR





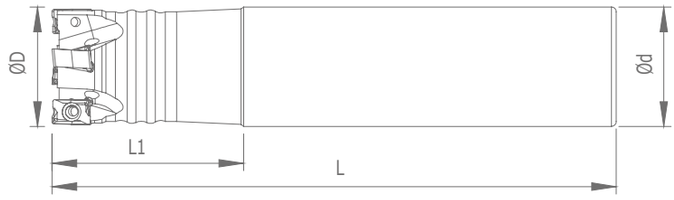
KNNMTL EDPT 10T3/1805	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1095900	●	○	16	2	45	150	16	EDPT 10T3	M2,5x6	T8
1096000	●	○	18	2	30	150	16			
1096100	●	○	20	3	50	150	20			
1096200	●	○	25	3	50	150	25			
1096300	○	○	17	2	30	150	16			
1096400	○	○	21	3	50	150	20			
1096500	○	○	16	2	30	120	14			
1096600	○	○	25	2	50	200	25	EDPT 1805	M3,5x8	T15
1096700	○	○	32	3	50	200	32			

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI wir produzieren industrielle lösungen

LNMX 1006 KLP SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

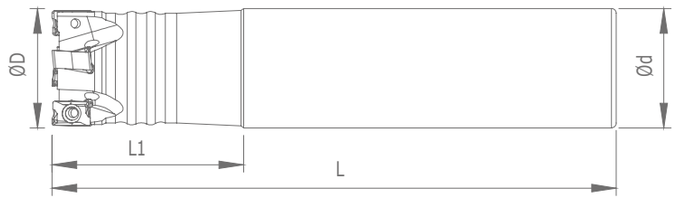




KLP LNMX 1006	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1111500	•	•	18	2	25	120	16	LNMX 1006	M3x9	T10
1111600	•	•	20	2	40	150	20			
1111700	•	•	26	3	35	150	25			
1111800	•	•	32	4	50	150	32			
1111900	•	•	40	3	50	150	32			

LNMX 1510 KLP SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

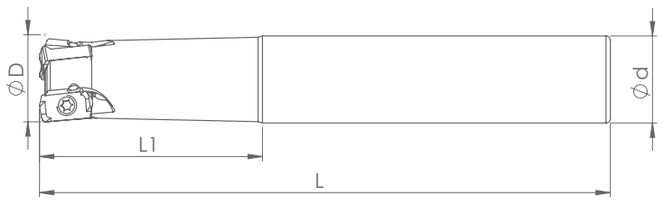




KLP LNMX 1510	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1112000	•	•	32	3	40	150	32	LNMX 1510	M4X10	T15
1112100	•	•	32	3	40	200	25			
1112100	•	•	32	3	40	200	32			

LOGU 0303 KYCR SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR (HIGH FEED)





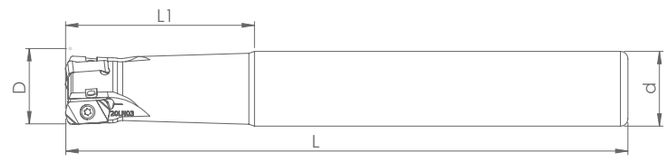
KYCR LOGU 030310	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1120100	•	•	16	2	30	100	16	LOGU 0303	M3X8	T10
1120200	•	•	16	2	60	160	16			
1120300	•	•	16	2	60	200	16			
1120400	•	•	17	2	25	160	16			
1120500	•	•	17	2	25	200	16			
1120600	•	•	18	2	25	160	16			
1120700	•	•	20	3	50	130	20			
1120800	•	•	20	3	60	160	20			
1120900	•	•	20	3	60	220	20			
1121000	•	•	21	3	25	160	20			
1121100	•	•	22	3	25	160	20			
1121200	•	•	22	3	25	180	20			
1121300	•	•	25	4	50	160	25			
1121400	•	•	25	4	50	180	25			
1121500	•	•	26	4	30	180	25			
1121600	•	•	26	4	30	160	25		M3X10	
1121700	•	•	26	2	30	300	25			
1121800	•	•	28	5	30	160	25			
1121900	•	•	28	5	30	180	25			
1122000	•	•	32	5	60	160	32			
1122100	•	•	32	5	60	200	32			
1122200	•	•	33	5	35	160	32			
1122300	•	•	25	4	50	150	25			

SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR

HEIKENEI
wir produzieren industrielle lösungen

LNMU 0303 TNGLY SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR (HIGH FEED)

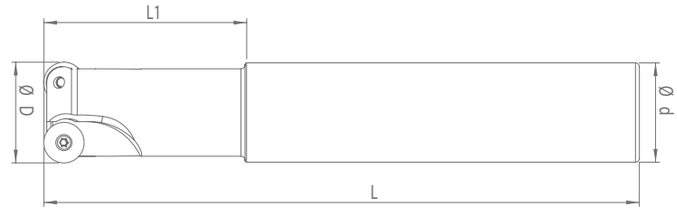




TNGLY LNMU 0303	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1126400	•	•	16	2	40	160	16	LNMU 0303	M2,5X8	T8
1126500	•	•	18	2	35	150	16			
1126600	•	•	20	3	60	160	20			
1126700	•	•	21	3	35	160	20			
1126800	•	•	22	3	35	150	20			
1126900	•	•	25	4	50	160	25			
1127000	•	•	32	4	60	160	32			

RD.. 05/07/08/10/12 ISO SİLİNDİRİK ŞAFTLI SAPLI TARAMALAR (HIGH FEED)



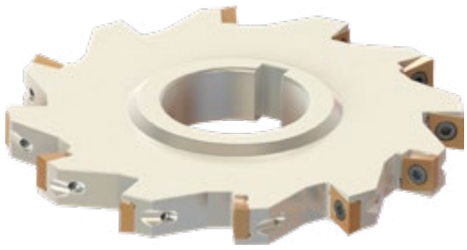


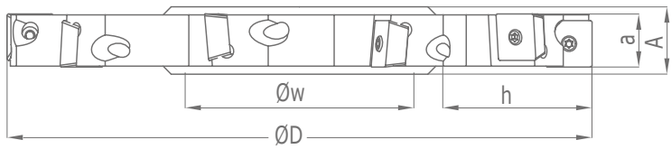
ISO	Stok	İçten S.	D	Z	L1	L	d	Uç	Vida	Anahtar
1129300	•	○	10	2	40	100	10	RD..0501	M2X5	T6
1129400	•	○	10	2	40	100	12			
1129500	•	○	12	2	40	100	12			
1129600	•	•	12	2	20	100	12	RD..07T1		
1129700	•	•	12	2	80	140	16			
1129800	•	•	15	2	60	110	16	RD..0702	M2,5X6	T8
1129900	•	○	16	2	40	120	16	RD..0803	M3X6	T10
1130000	•	○	16	2	40	150	16			
1130100	•	○	20	2	40	120	20	RD..1003		
1130200	•	•	20	2	50	150	20			
1130300	•	○	20	2	50	200	20			
1130400	•	○	25	2	50	150	25			
1130500	•	○	25	2	60	200	25			
1130600	•	○	32	3	60	150	32			
1130700	•	○	32	2	100	250	32			
1130800	•	○	32	3	100	250	32			
1130900	•	○	40	4	55	150	32			
1131000	•	○	40	2	55	250	32			
1131100	•	○	40	4	55	250	32			
1131200	•	○	20	2	50	150	20	RD..10T3	M3,5X8	T15
1131300	•	○	25	2	50	150	25			
1131400	•	○	25	2	70	200	25			
1131500	•	○	32	3	70	150	32			
1131600	•	○	32	2	100	250	32			
1131700	•	○	40	4	55	150	32			
1131800	•	○	40	2	55	250	32			
1131900	•	○	40	4	55	250	32			
1132000	•	○	25	2	50	150	25	RD..1204		
1132100	•	○	32	3	30	150	25			
1132200	•	○	32	3	60	150	32			
1132300	•	○	40	4	55	150	25	RD..1003		
1132400	•	○	40	4	55	150	32			

DİSK FREZE - HAVŞA MATKABI

HEIKENEI
wir produzieren industrielle lösungen

CCMT 06/09/12 TAKMA UÇLU DİSK FREZE

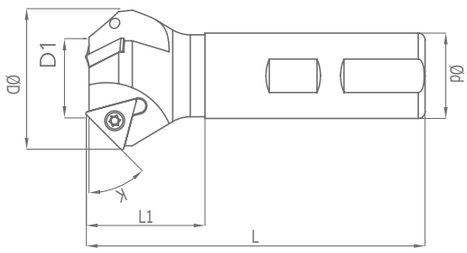




ISO CCMT 06/09/12	Stok	İçten S.	D	a	A	Z	h	w	Uç	Vida	Anahtar
1136000	•	○	80	8	12	10	16	27	CC.. 0602..	M2.5X6	T08
1136100	•	○	100	8	12	12	24	32			
1136200	•	○	125	8	12	14	34	40			
1136300	•	○	160	8	12	16	50	40			
1136400	•	○	80	10	14	10	16	27			
1136500	•	○	100	10	14	12	24	32			
1136600	•	○	125	10	14	14	34	40			
1136700	•	○	160	10	14	16	50	40			
1136800	•	○	80	12	16	8	16	27	CC..09T3..	M3.5X9	T15
1136900	•	○	100	12	16	10	24	32			
1137000	•	○	125	12	16	12	34	40			
1137100	•	○	160	12	16	14	50	40			
1137200	•	○	80	14	18	8	16	27			
1137300	•	○	100	14	18	10	24	32			
1137400	•	○	125	14	18	12	34	40			
1137500	•	○	160	14	18	14	50	40			
1137600	•	○	80	16	20	8	16	27	CC..1204..	M5X10	T20
1137700	•	○	100	16	20	8	24	32			
1137800	•	○	125	16	20	10	34	40			
1137900	•	○	160	16	20	12	50	40			

TCMT 11/16 ISO TAKMA UÇLU HAVŞA MATKABI





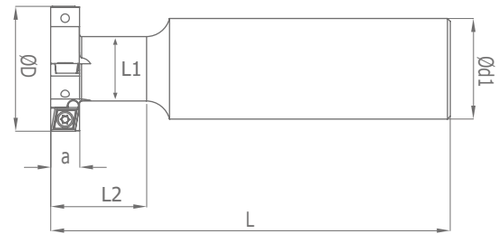
ISO TCMT 11/16	Stok	K	D	D1	d	L	L1	Uç	Vida	Anahtar
1138700	•	45°	15	4	16	L100	35	TC..11	M2,5X7	T8
1138800	•	45°	25	14	25	L100	35			
1138900	•	45°	30	16	12	L100	35			
1139000	•	45°	35	21	12	L100	35			
1139100	•	45°	23	5	16	L100	35	TC..16	M3,5X8	T15
1139200	•	45°	31	10	16	L100	35			
1139300	•	45°	35	14	20	L100	35			
1139400	•	45°	70	25	25	L100	35			
1139500	•	45°	43	22	25	L100	35			
1139600	•	45°	50	30	25	L100	35			
1139700	•	45°	64	35	32	L100	35	TC..22	M5X12	T20
1139800	•	60°	20	6	16	L100	35	TC..16	M3,5X8	T15
1139900	•	60°	35	20	16	L100	35			
1140000	•	60°	40	24	25	L100	35			

T FREZE - TARAMA BAŞLIKLARI

HEIKENEI
wir produzieren industrielle lösungen

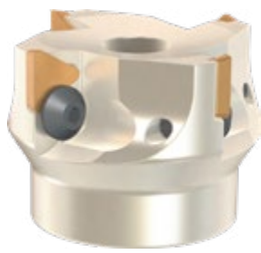
CCMT 06/09 ISO TAKMA UÇLU T FREZE

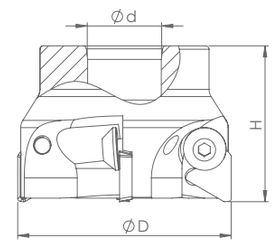




ISO CCMT 06/09	Stok	D	Z	a	L	L1	L2	d1	Uç	Vida	Anahtar
1140100	•	17	2	8	85	8	20	16			
1140200	•	20	2	9	85	10	20	16			
1140300	•	21	2	9	85	10	20	16			
1140400	•	24	2	10	100	12	25	20			
1140500	•	25	2	11	100	12	25	25	CC..0602	M2,5x7	T08
1140600	•	25	4	12	100	12	25	25			
1140700	•	32	4	8	100	16	25	25			
1140800	•	32	4	10	100	16	30	25			
1140900	•	63	8	8	125	31	40	32			
1141000	•	30	2	12	100	16	30	25			
1141100	•	32	2	14	100	16	30	25			
1141200	•	40	4	16	120	18	30	32		M3,5x8	
1141300	•	40	4	18	120	18	30	32			
1141400	•	32	2	12	100	16	30	25	CC..09T3		T15
1141500	•	40	4	12	120	18	30	32			
1141600	•	50	4	12	120	18	30	32		M3,5x9	
1141700	•	50	4	16	120	18	30	32			

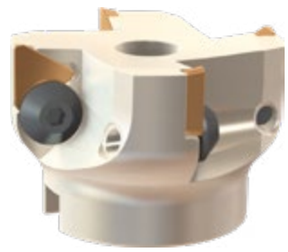
90° TPKN 16 ISO TARAMA BAŞLIKLARI

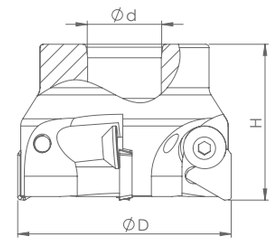




ISO TPKN 1603	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1142100	•	○	50	3	41	22			
1142200	•	○	63	4	48	22	TPKN 16	M6X0,75	A4
1142300	•	○	80	5	52	32			
1142400	•	○	100	6	52	32			

90° TPKN 22 ISO TARAMA BAŞLIKLARI





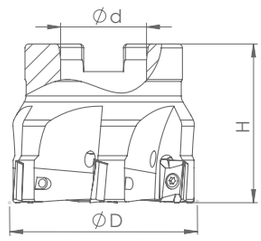
ISO TP.. 2204	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1142500	•	○	63	3	48	22			
1142600	•	○	80	4	52	27			
1142700	•	○	80	4	52	32			
1142800	•	○	100	5	52	32			
1142900	•	○	125	6	62	32	TPKN 22	M8X1	A5
1143000	•	○	125	6	62	40			
1143100	•	○	160	7	62	40			
1143200	•	○	200	8	62	60			
1143300	•	○	250	10	62	60			

TARAMA BAŞLIKLARI

HEIKENEI® wir produzieren industrielle lösungen

90° AP.. 1003 ISO TARAMA BAŞLIKLARI

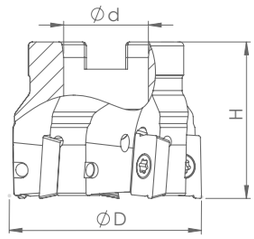




ISO AP.. 1003	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1143400	•	•	40	5	45	16	AP..1003	M2.5X7	T08
1143500	•	•	50	6	45	22			
1143600	•	•	63	7	45	22			
1143700	•	•	80	8	52	27			
1143800	•	•	100	9	52	32			

90° APKT 16 ISO TARAMA BAŞLIKLARI

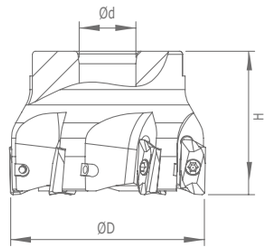




ISO APKT 1604	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1143900	•	•	40	4	45	16	AP..1604	M3.5X11	T15
1144000	•	•	50	4	45	22			
1144100	•	•	50	5	45	22			
1144200	•	•	63	5	45	22			
1144300	•	•	80	6	52	27			
1144400	•	•	80	6	52	32			
1144500	•	•	80	7	52	27			
1144600	•	•	100	8	52	32			
1144700	•	•	100	9	52	32			
1144800	•	○	125	8	62	40			
1144900	•	○	125	9	62	40			
1145000	•	○	160	10	62	40			
1145100	•	○	200	12	62	60			
1145200	•	○	250	14	62	60			

90° EDPT 1404/1805 KNNMTL TARAMA BAŞLIKLARI





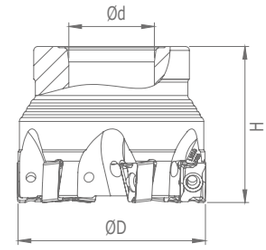
KNNMTL EDPT 1404/1805	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1152500	•	•	40	4	40	16	EDPT 1404	M3X8	T10
1152600	•	•	50	5	40	22			
1152700	•	•	63	6	50	22			
1152800	•	•	80	7	50	27			
1152900	•	•	100	8	50	32			
1153000	•	•	50	4	40	22	EDPT 1805	M3,5x10	T15
1153100	•	•	63	5	50	22			
1153200	•	•	80	6	50	27			

TARAMA BAŞLIKLARI

HEIKENEI
wir produzieren industrielle lösungen

90° LOMU 1004 KYCR TARAMA BAŞLIKLARI

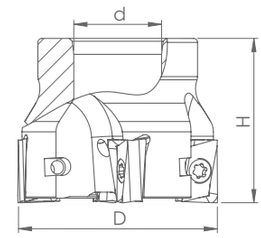




KYCR LOMU 1004	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1157200	•	•	50	5	45	22	LOMU 1004	M3,5X8	T15
1157300	•	•	63	6	50	22			
1157400	•	•	80	8	50	27			

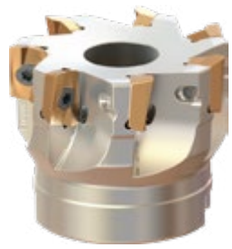
90° LOMU 1505 KYCR TARAMA BAŞLIKLARI

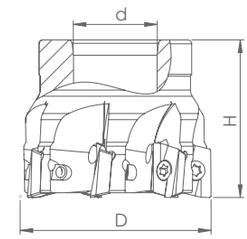




KYCR LOMU 1505	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1157700	•	•	50	4	40	22	LOMU 1505	M4X11	T15
1157800	•	•	63	5	40	22			
1157900	•	•	80	6	52	27			

90° BOMT 1304 INGRSL TARAMA BAŞLIKLARI

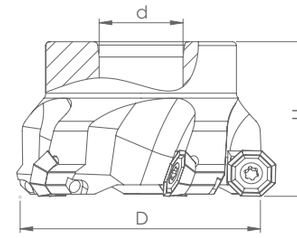




INGRSL BOMT 1304	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1158900	•	○	50	7	40	22	BOMT 1304	M3,5X8	T15
1159000	•	○	63	5	40	22			
1159100	•	○	63	8	40	22			
1159200	•	○	80	10	50	27			

45° OFKT 05T3 ZCC TARAMA BAŞLIKLARI



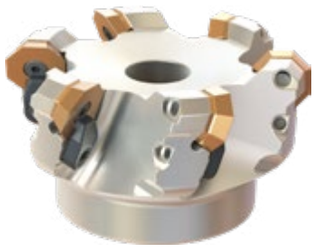


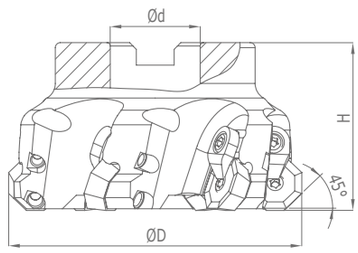
ZCC OFKT 05T3	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1166700	•	•	50	4	40	22	OFKT 05T3	M4X11	T15
1166800	•	•	63	5	40	22			
1166900	•	•	80	6	50	27			
1167000	•	•	100	7	50	32			

TARAMA BAŞLIKLARI

HEIKENEI® wir produzieren industrielle lösungen

45° OFMT 0706 ISO TARAMA BAŞLIKLARI

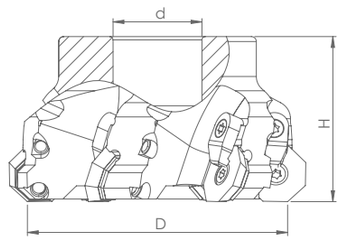




ISO OFMT 0706	Stok	İçten S.	D	Z	H	d	Uç	Vida	Baskı P.	Vida	Anahtar
1167700	•	•	63	5	43	22	OFMT 0706	M5X12	C110105	M4X12	T20
1167800	•	•	80	6	50	27					
1167900	•	•	100	7	50	32					
1168000	•	○	125	8	62	40					
1168100	•	○	160	12	62	40					
1168200	•	○	160	12	62	40	OFPT 0706				

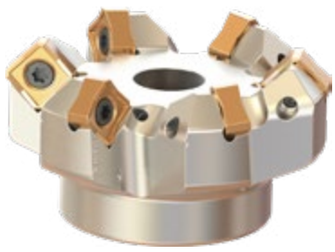
45° OFER 0704 LMN TARAMA BAŞLIKLARI

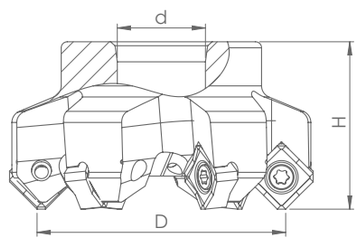




LMN OFER 0704	Stok	İçten S.	D	Z	H	d	Uç	Vida	Baskı P.	Vida	Anahtar
1168300	•	•	80	6	50	27	OFER 0704	M5X12	C110105	M4X12	T20
1168400	•	•	100	7	50	32					

45° SNKX 1205 LMN TARAMA BAŞLIKLARI

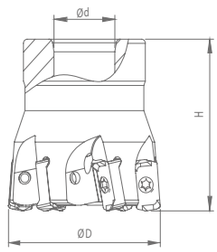




LMN SNKX 1205	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1172300	•	•	50	5	40	22	SNKX 1205	M4X11	T15
1172400	•	•	63	6	40	22			
1172500	•	•	80	7	50	27			
1172600	•	•	100	8	50	32			

LOGU 0303 KYCR TARAMA BAŞLIKLARI (HIGH FEED)





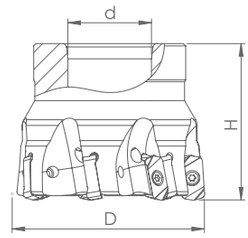
KYCR LOGU 0303	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1184000	•	•	40	6	40	17	LOGU 0303	M3X7	T8
1184100	•	•	50	7	50	22			
1184200	•	•	52	7	50	22			

TARAMA BAŞLIKLARI

HEIKENEI
wir produzieren industrielle lösungen

LNMU 0303 TNGLY TARAMA BAŞLIKLARI (HIGH FEED)

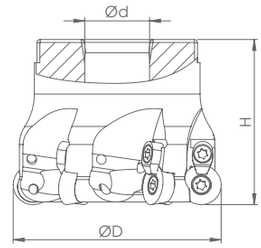




TNGLY LNMU 0303	Stok	İçten S.	D	Z	H	d	Uç	Vida	Anahtar
1184900	•	•	50	7	40	22	LNMU 0303	M2,5X8	T8
1185000	•	•	63	8	40	22			

RDKW 1003/12T3/1204/1604/2006 ISO TARAMA BAŞLIKLARI (HIGH FEED)





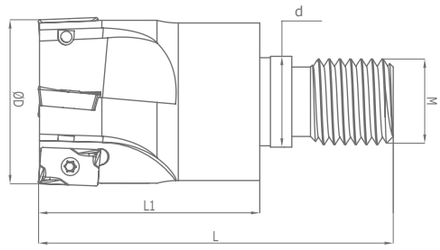
ISO RDKW 1003/12T3/1204/1604/2006	Stok	İçten S.	D	Z	H	d	Uç	Vida	Baskı P.	Vida	Anahtar
1188100	•	•	40	4	40	16	RDKW 1003	M3,5X10	CK14	M3,5X8	T15
1188200	•	•	50	5	46	22					
1188300	•	•	63	6	50	22					
1188400	•	•	80	7	52	27					
1188500	•	•	100	8	52	32					
1188600	•	•	40	4	40	16	RDKW 12T3	M3,5X10	CK14	M3,5X8	T15
1188700	•	•	50	5	46	22					
1188800	•	•	52	5	46	22					
1188900	•	•	63	6	50	22					
1189000	•	•	80	7	52	27					
1189100	•	•	100	8	52	32					
1189200	•	•	40	4	40	16	RDKW 1204	M3,5X10	CK14	M3,5X8	T15
1189300	•	•	50	5	46	22					
1189400	•	•	63	6	50	22					
1189500	•	•	80	7	52	27					
1189600	•	•	100	8	52	32					
1189700	•	•	52	4	50	22	RDKW 1604	M5X12	TP11	M4X11	T20
1189800	•	•	63	4	50	22					
1189900	•	○	66	5	50	27					
1190000	•	○	80	5	52	27					
1190100	•	○	100	6	52	32					
1190200	•	○	125	7	62	40					
1190300	•	○	160	8	62	40					
1190400	•	○	180	11	62	60					
1190500	•	○	200	12	62	60					

VİDALI TARAMA BAŞLIKLARI

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90° AP.. 1003/1604 ISO VİDALI TARAMA BAŞLIKLARI

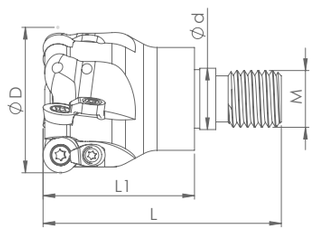




ISO AP.. 1003/1604	Stok	İçten S.	D	Z	L1	L	d	M	Uç	Vida	Anahtar
1191200	•	•	25	3	28	50	12.5	M12	AP..1003	M2,5X7	T08
1191300	•	•	32	4	35	60	17	M16			
1191400	•	•	35	4	35	60	17	M16			
1191500	•	•	35	5	35	60	17	M16			
1191600	•	•	40	5	35	60	17	M16			
1191700	•	•	42	5	35	60	17	M16			
1191800	•	•	25	2	28	50	12.5	M12	AP..1604	M3,5X9	T15
1191900	•	•	32	3	35	60	17	M16			
1192000	•	•	40	4	35	60	17	M16			

RD.. 1003/12T3/1604 ISO VİDALI TARAMA BAŞLIKLARI

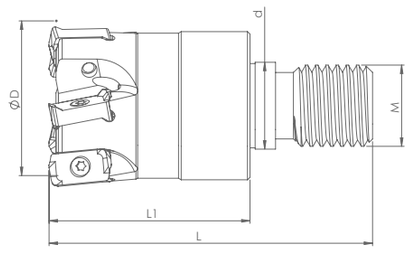




ISO RD.. 1003/12T3/1604	Stok	İçten S.	D	Z	L1	L	d	M	Uç	Vida	Baskı P.	Vida	Anahtar
1195300	•	•	25	2	28	52	12.5	M12	RD..1003	M3,5X8	Ck14	M3,5X10	T15
1195400	•	•	32	3	40	64	17	M16					
1195500	•	•	32	4	40	64	17	M16					
1195600	•	•	35	4	40	64	17	M16					
1195700	•	•	40	4	43	67	17	M16					
1195800	•	•	42	5	43	67	17	M16					
1195900	•	•	25	2	28	52	12.5	M12	RD..12T3				
1196000	•	•	32	3	40	64	17	M16					
1196100	•	•	35	3	40	64	17	M16					
1196200	•	•	40	4	40	64	17	M16					
1196300	•	•	42	4	43	67	17	M16					
1196400	•	•	32	2	40	64	17	M16	RD..1604	M4,5X15			T20
1196500	•	•	40	2	40	67	17	M16					

LOGU 0303 KYCR VİDALI TARAMA BAŞLIKLARI





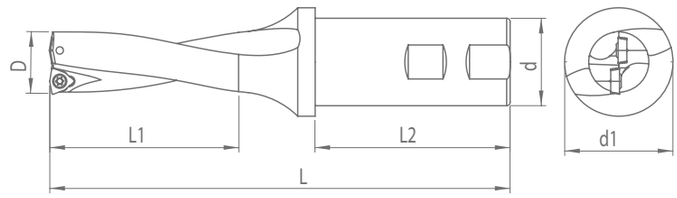
KYCR LOGU 030310	Stok	İçten S.	D	Z	L1	L	d	M	Uç	Vida	Anahtar
1205100	•	•	20	3	36	60	10.5	M10	LOGU 0303	M3X8	T08
1205200	•	•	25	4	36	60	12.5	M12			
1205300	•	•	32	5	38	62	17	M16			
1205400	•	•	40	6	40	65	17	M16			
1205500	•	•	42	6	40	65	17	M16			

U-DRILL MATKAPLAR

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DRILL WCM. D2 U-DRILL MATKAPLAR



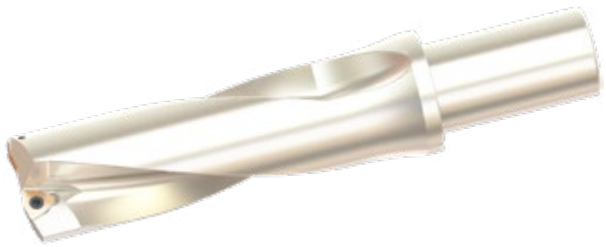


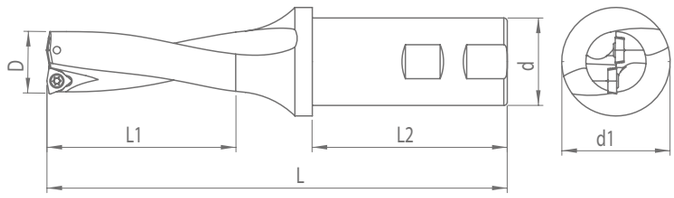
WCM	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1207600	•	•	16	25	34	110	32	50			
1207700	•	•	17	25	34	112	34	56	WCM 030208	M2,5X5	T08
1207800	•	•	18	25	34	114	36	56			
1207900	•	•	19	25	34	116	38	56			
1208000	•	•	20	25	34	119	40	56			
1208100	•	•	21	25	34	122	42	56	WCM 040208	M2,5X5	T08
1208200	•	•	22	25	34	125	44	56			
1208300	•	•	23	25	34	128	46	56			
1208400	•	•	24	25	34	129	48	56			
1208500	•	•	25	25	34	131	50	56			
1208600	•	•	26	25	34	134	52	56	WCM 050308	M3X9	T10
1208700	•	•	27	25	34	137	54	56			
1208800	•	•	28	25	34	140	56	56			
1208900	•	•	29	25	34	143	58	56			
1209000	•	•	30	32	44	150	60	60			
1209100	•	•	31	32	44	153	62	60			
1209200	•	•	32	32	44	156	64	60			
1209300	•	•	33	32	44	159	66	60			
1209400	•	•	34	32	44	162	68	60			
1209500	•	•	35	32	44	165	70	60			
1209600	•	•	36	32	44	168	72	60			
1209700	•	•	37	32	44	171	74	60	WCM 06T308	M3,5X9	T15
1209800	•	•	38	32	44	174	76	60			
1209900	•	•	39	32	44	177	78	60			
1210000	•	•	40	32	44	180	80	60			
1210100	•	•	41	32	44	183	82	60			
1210200	•	•	42	32	44	186	84	60			
1210300	•	•	43	32	44	189	86	60			
1210400	•	•	44	32	44	192	88	60			
1210500	•	•	45	40	54	195	90	70			
1210600	•	•	46	40	54	198	92	70			
1210700	•	•	47	40	54	201	94	70	WCM 080412	M4X11	T15
1210800	•	•	48	40	54	204	96	70			
1210900	•	•	49	40	54	207	98	70			
1211000	•	•	50	40	54	210	100	70			

U-DRILL MATKAPLAR

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DRILL WCM. D3 U-DRILL MATKAPLAR





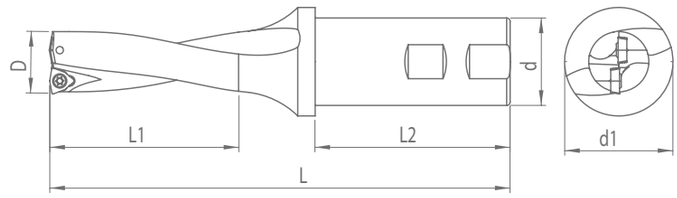
WCM	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1211100	•	•	15.5	25	34	126	46.5	56	WCM 030208	M2.5X5	T08
1211200	•	•	16	25	34	126	48	56			
1211300	•	•	16.5	25	34	129	49.5	56			
1211400	•	•	17	25	34	129	51	56			
1211500	•	•	17.5	25	34	132	52.5	56			
1211600	•	•	18	25	34	132	54	56			
1211700	•	•	18.5	25	34	135	55.5	56			
1211800	•	•	19	25	34	135	57	56			
1211900	•	•	19.5	25	34	139	58.5	56			
1212000	•	•	20	25	34	139	60	56	WCM 040208	M2.5X5	T08
1212100	•	•	20.5	25	34	143	61.5	56			
1212200	•	•	21	25	34	143	63	56			
1212300	•	•	21.5	25	34	147	64.5	56			
1212400	•	•	22	25	34	147	66	56			
1212500	•	•	22.5	25	34	151	67.5	56			
1212600	•	•	23	25	34	151	69	56			
1212700	•	•	23.5	25	34	153	70.5	56			
1212800	•	•	24	25	34	153	72	56	WCM 050308	M3X9	T10
1212900	•	•	24.5	25	34	156	73.5	56			
1213000	•	•	25	25	34	156	75	56			
1213100	•	•	25.5	25	34	160	76.5	56			
1213200	•	•	26	25	34	160	78	56			
1213300	•	•	26.5	25	34	164	79.5	56			
1213400	•	•	27	25	34	164	81	56			
1213500	•	•	27.5	25	34	168	82.5	56			
1213600	•	•	28	25	34	168	84	56			
1213700	•	•	28.5	25	34	172	85.5	56			
1213800	•	•	29	25	34	172	87	56			
1213900	•	•	29.5	25	34	180	88.5	56			
1214000	•	•	30	32	44	180	90	60	WCM 06T308	M3.5X9	T15
1214100	•	•	31	32	44	184	93	60			
1214200	•	•	32	32	44	188	96	60			
1214300	•	•	33	32	44	192	99	60			
1214400	•	•	34	32	44	192	102	60			
1214500	•	•	35	32	44	200	105	60			
1214600	•	•	36	32	44	204	108	60			
1214700	•	•	37	32	44	208	111	60			
1214800	•	•	38	32	44	212	114	60			
1214900	•	•	39	32	44	216	117	60			
1215000	•	•	40	32	44	220	120	60			
1215100	•	•	41	32	44	223	123	60			
1215200	•	•	42	32	44	226	126	60			
1215300	•	•	43	32	44	229	129	60			
1215400	•	•	44	32	44	232	132	60			
1215500	•	•	45	40	54	245	135	70	WCM 080412	M4X11	T15
1215600	•	•	46	40	54	248	138	70			
1215700	•	•	47	40	54	251	141	70			
1215800	•	•	48	40	54	254	144	70			
1215900	•	•	49	40	54	257	147	70			
1216000	•	•	50	40	54	260	150	70			

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DRILL WCM. D4 U-DRILL MATKAPLAR

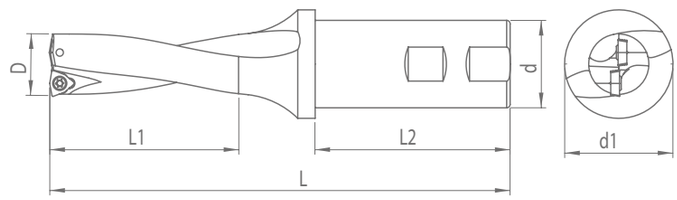




WCM	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1216100	•	•	16	25	34	142	64	56			
1216200	•	•	17	25	34	146	68	56			
1216300	•	•	17.5	25	34	150	72	56	WCM.030208		
1216400	•	•	18	25	34	150	72	56			
1216500	•	•	19	25	34	154	76	56		M2,5X5	T08
1216600	•	•	19.5	25	34	159	80	56			
1216700	•	•	20	25	34	159	80	56			
1216800	•	•	21	25	34	164	84	56	WCM.040208		
1216900	•	•	22	25	34	169	88	56			
1217000	•	•	23	25	34	174	92	56			
1217100	•	•	24	25	34	177	96	56			
1217200	•	•	25	25	34	181	100	56			
1217300	•	•	26	25	34	186	104	56			
1217400	•	•	27	25	34	191	108	56	WCM.050308	M3X9	T10
1217500	•	•	28	25	34	196	112	56			
1217600	•	•	29	25	34	201	116	56			
1217700	•	•	30	32	44	210	120	60			
1217800	•	•	31	32	44	215	124	60		M3,5X9	
1217900	•	•	32	32	44	220	128	60			
1218000	•	•	33	32	44	225	132	60			
1218100	•	•	34	32	44	230	136	60			
1218200	•	•	35	32	44	235	140	60			
1218300	•	•	36	32	44	238	144	60			
1218400	•	•	37	32	44	241	148	60	WCM.06T308		T15
1218500	•	•	38	32	44	244	152	60		M3,5X11	
1218600	•	•	39	32	44	247	166	60			
1218700	•	•	40	32	44	250	160	60			
1218800	•	•	41	32	44	253	164	60			
1218900	•	•	42	32	44	256	168	60			
1219000	•	•	43	32	44	259	172	60			
1219100	•	•	44	32	44	262	176	60			

DRILL WCM. D5 U-DRILL MATKAPLAR





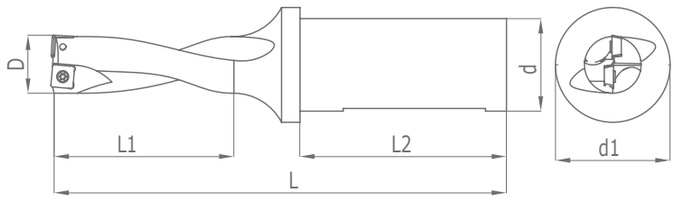
WCM	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1219200	•	•	16	25	34	153	80	56			
1219300	•	•	17	25	34	158	85	56	WCM.030208		
1219400	•	•	18	25	34	163	90	56			
1219500	•	•	19	25	34	168	95	56		M2,5X5	T08
1219600	•	•	20	25	34	174	100	56			
1219700	•	•	21	25	34	180	105	56	WCM.040208		
1219800	•	•	22	25	34	186	110	56			
1219900	•	•	23	25	34	192	115	56			
1220000	•	•	24	25	34	196	120	56			
1220100	•	•	25	25	34	200	125	56			
1220200	•	•	26	25	34	206	130	56	WCM.050308	M3X9	T10
1220300	•	•	27	25	34	212	135	56			
1220400	•	•	28	25	34	218	140	56			
1220500	•	•	29	25	34	224	145	56			
1220600	•	•	30	32	44	233	150	60	WCM.06T308	M3,5X9	T15

U-DRILL MATKAPLAR

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DRILL SP.. D2 U-DRILL MATKAPLAR



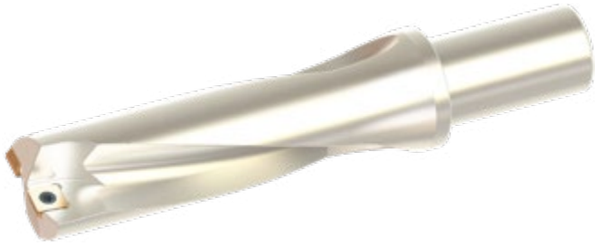


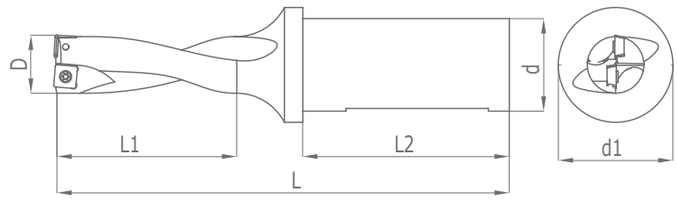
TGTC / PLBT / ZCC / KLP	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1220700	•	•	13	20	25	94	26	50			
1220800	•	•	14	20	25	97	28	50	SP..050204	M2X5	
1220900	•	•	15	20	25	100	30	50			
1221000	•	•	16	25	34	110	32	50			
1221100	•	•	17	25	34	112	34	56			
1221200	•	•	18	25	34	114	36	56			T06
1221300	•	•	19	25	34	116	38	56			
1221400	•	•	19.5	25	34	119	40	56	SP..060204	M2.2X5	
1221500	•	•	20	25	34	119	40	56			
1221600	•	•	20.5	25	34	122	42	56			
1221700	•	•	21	25	34	122	42	56			
1221800	•	•	22	25	34	125	44	56			
1221900	•	•	23	25	34	128	46	56			
1222000	•	•	24	25	34	129	48	56			
1222100	•	•	25	25	34	131	50	56	SP..07T308	M2.5X7	T08
1222200	•	•	26	25	34	134	52	56			
1222300	•	•	27	25	34	137	54	56			
1222400	•	•	27.5	25	34	140	56	56			
1222500	•	•	28	25	34	140	56	56			
1222600	•	•	29	25	34	143	58	56			
1222700	•	•	30	32	44	150	60	60	SP..090408	M3,5X8	
1222800	•	•	31	32	44	153	62	60			
1222900	•	•	32	32	44	156	64	60			
1223000	•	•	33	32	44	159	66	60			
1223100	•	•	34	32	44	162	68	60			T15
1223200	•	•	35	32	44	165	70	60			
1223300	•	•	36	32	44	168	72	60			
1223400	•	•	37	32	44	171	74	60			
1223500	•	•	38	32	44	174	76	60	SP..110408	M4X11	
1223600	•	•	39	32	44	177	78	60			
1223700	•	•	40	32	44	180	80	60			
1223800	•	•	41	32	44	183	82	60			
1223900	•	•	42	32	44	186	84	60			
1224000	•	•	42.5	32	44	189	86	60			
1224100	•	•	43	32	44	189	86	60			
1224200	•	•	44	32	44	192	88	60			
1224300	•	•	45	40	54	195	90	70			
1224400	•	•	46	40	54	198	92	70	SP..140512	M5X11	T20
1224500	•	•	47	40	54	201	94	70			
1224600	•	•	48	40	54	204	96	70			
1224700	•	•	49	40	54	207	98	70			
1224800	•	•	50	40	54	210	100	70			

U-DRILL MATKAPLAR

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DRILL SP.. D3 U-DRILL MATKAPLAR





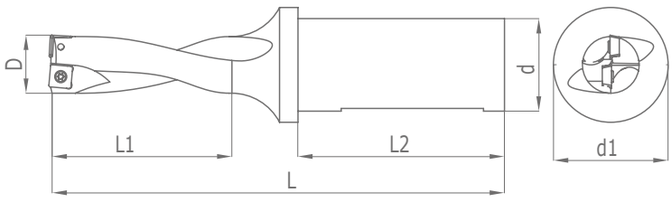
TGTC / PLBT / ZCC / KLP	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1224900	•	•	13	20	25	101	39	50	SP..050204	M2X5	T06
1225000	•	•	14	20	25	105	42	50			
1225100	•	•	14.5	20	25	109	45	50			
1225200	•	•	15	20	25	109	45	50			
1225300	•	•	15.5	20	34	126	48	50			
1225400	•	•	16	20	34	126	48	50	SP..060204	M2.2X5	
1225500	•	•	16.5	25	34	129	51	50			
1225600	•	•	17	25	34	129	51	56			
1225700	•	•	17.5	25	34	132	54	56			
1225800	•	•	18	25	34	132	54	56			
1225900	•	•	18.5	25	34	135	57	56			
1226000	•	•	19	25	34	135	57	56			
1226100	•	•	19.5	25	34	139	60	56			
1226200	•	•	20	25	34	139	60	56			
1226300	•	•	20.5	25	34	143	63	56			
1226400	•	•	21	25	34	143	63	56			
1226500	•	•	21.5	25	34	147	66	56			
1226600	•	•	22	25	34	147	66	56	SP..07T308	M2.5X7	T08
1226700	•	•	22.5	25	34	151	69	56			
1226800	•	•	23	25	34	151	69	56			
1226900	•	•	23.5	25	34	153	72	56			
1227000	•	•	24	25	34	153	72	56			
1227100	•	•	24.5	25	34	156	75	56			
1227200	•	•	25	25	34	156	75	56			
1227300	•	•	25.5	25	34	160	78	56			
1227400	•	•	26	25	34	160	78	56			
1227500	•	•	26.5	25	34	164	81	56			
1227600	•	•	27	25	34	164	81	56			
1227700	•	•	27.5	25	34	168	84	56			
1227800	•	•	28	25	34	168	84	56	SP..090408	M3,5X8	T15
1227900	•	•	28.5	25	34	172	87	56			
1228000	•	•	29	25	34	172	87	56			
1228100	•	•	29.5	25	44	180	90	56			
1228200	•	•	30	32	44	180	90	60			
1228300	•	•	31	32	44	184	93	60			
1228400	•	•	32	32	44	188	96	60			
1228500	•	•	33	32	44	192	99	60			
1228600	•	•	34	32	44	192	102	60	SP..110408	M4X11	
1228700	•	•	35	32	44	200	105	60			
1228800	•	•	36	32	44	204	108	60			
1228900	•	•	37	32	44	208	111	60			
1229000	•	•	38	32	44	212	114	60			
1229100	•	•	39	32	44	216	117	60			
1229200	•	•	40	32	44	220	120	60			
1229300	•	•	41	32	44	223	123	60			
1229400	•	•	42	32	44	226	126	60	SP..140512	M5X11	T20
1229500	•	•	43	32	44	229	129	60			
1229600	•	•	44	32	44	232	132	60			
1229700	•	•	45	40	54	245	135	70			
1229800	•	•	46	40	54	248	138	70			
1229900	•	•	47	40	54	251	141	70			
1230000	•	•	48	40	54	254	144	70			
1230100	•	•	49	40	54	257	147	70			
1230200	•	•	50	40	54	260	150	70			

U-DRILL MATKAPLAR

HEIKENEI
wir produzieren industrielle lösungen

DRILL SP.. D4 U-DRILL MATKAPLAR





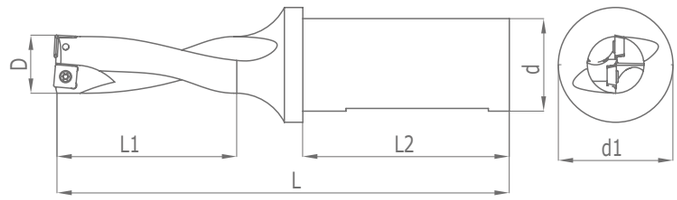
TGTC / PLBT / ZCC / KLP	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1230300	•	•	13	20	25	120	52	50	SP..050204	M2X5	T06
1230400	•	•	14	20	25	124	56	50			
1230500	•	•	14.5	20	25	128	60	50			
1230600	•	•	15	20	25	128	60	50			
1230700	•	•	16	25	34	142	64	50	SP..060204	M2.2X5	
1230800	•	•	17	25	34	146	68	56			
1230900	•	•	18	25	34	150	72	56			
1231000	•	•	19	25	34	154	76	56			
1231100	•	•	19.5	25	34	159	80	56			
1231200	•	•	20	25	34	159	80	56			
1231300	•	•	21	25	34	164	84	56			
1231400	•	•	22	25	34	169	88	56	SP..070204		
1231500	•	•	23	25	34	174	92	56			
1231600	•	•	24	25	34	177	96	56	SP..07T308	M2.5X7	T08
1231700	•	•	23.5	25	34	181	100	56			
1231800	•	•	25	25	34	181	100	56			
1231900	•	•	26	25	34	186	104	56			
1232000	•	•	27	25	34	191	108	56			
1232100	•	•	27.5	25	34	196	112	56			
1232200	•	•	28	25	34	196	112	56	SP..090408	M3,5X8	T15
1232300	•	•	29	25	34	201	116	56			
1232400	•	•	30	32	44	210	120	60			
1232500	•	•	31	32	44	215	124	60			
1232600	•	•	32	32	44	220	128	60			
1232700	•	•	33	32	44	225	132	60			
1232800	•	•	33.5	32	44	230	136	60			
1232900	•	•	34	32	44	230	136	60	SP..110408	M4X11	
1233000	•	•	35	32	44	235	140	60			
1233100	•	•	36	32	44	238	144	60			
1233200	•	•	37	32	44	241	148	60			
1233300	•	•	38	32	44	244	152	60			
1233400	•	•	38.5	32	44	247	156	60			
1233500	•	•	39	32	44	247	156	60			
1233600	•	•	40	32	44	250	160	60			
1233700	•	•	41	32	44	253	164	60			

U-DRILL MATKAPLAR

HEIKENEI
wir produzieren industrielle lösungen

DRILL SP.. D5 U-DRILL MATKAPLAR





TGTC / PLBT / ZCC / KLP	Stok	İçten S.	D	d	d1	L	L1	L2	Uç	Vida	Anahtar
1233800	○	•	13	20	25	120	65	50	SP..050204	M2X5	T06
1233900	○	•	14	20	25	124	70	50			
1234000	○	•	15	20	25	128	75	50			
1234100	•	•	16	25	34	153	80	50	SP..060204	M2.2X5	
1234200	•	•	17	25	34	158	85	56			
1234300	•	•	18	25	34	163	90	56			
1234400	•	•	19	25	34	168	95	56			
1234500	•	•	20	25	34	174	100	56			
1234600	•	•	21	25	34	180	105	56			
1234700	•	•	22	25	34	186	110	56	SP..070204		
1234800	•	•	23	25	34	192	115	56			
1234900	•	•	24	25	34	196	120	56	SP..07T308	M2.5X7	T08
1235000	•	•	25	25	34	200	125	56			
1235100	•	•	26	25	34	206	130	56			
1235200	•	•	27	25	34	212	135	56			
1235300	•	•	28	25	34	218	140	56	SP..090408	M3,5X8	T15
1235400	•	•	29	25	34	224	145	56			
1235500	•	•	30	32	44	233	150	60			

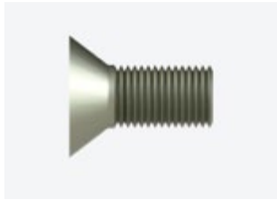
YEDEK PARÇALAR

HEIKENEI® wir produzieren industrielle lösungen

VİDALAR



VİDA
M5X23 A3
M6X27 A3



VİDA
M3X10
M4X10
M5X10



BUKSE VİDA
M5X0.5X3.5
M6X0.5X4



VİDA
M2X4
M2X5
M2X6
M2.2X5
M2.2X6
M2.5X5
M2.5X6
M2.5X7
M2.5X8
M2.5X10
M3X6
M3X7
M3X8
M3X10
M3.5X8
M3.5X9
M3.5X10
M3.5X11
M3.5X14
M4X11
M4X12
M4.5X12
M4.5X16
M5X12



VİDA
M6X0.75 TPKN 16



VİDA
M8X1 TPKN 22



VİDA
M6X27 A4



VİDA
M3X7 D8
M4X9 D10
M5X10 D12
M5X12 D16
M5X16 D20
M6X22 D25
M8X25 D30

YEDEK PARÇALAR

HEIKENEI® wir produzieren industrielle lösungen

ALTLIKLAR



ALTLIKLAR
DNMG 15
DNMG 11



ALTLIKLAR
CNMG 12
CNMG 16
CNMG 19



ALTLIKLAR
TNMG 16
TNMG 22



ALTLIKLAR
WNMG 08



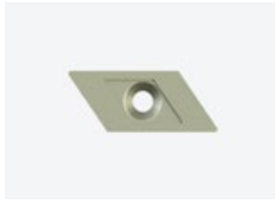
ALTLIKLAR
DCMT 11



ALTLIKLAR
VBMT 16
VCMT 16



ALTLIKLAR
KNUX 16 SAG



ALTLIKLAR
KNUX 16 SOL



ALTLIKLAR
SIR/SER 16
SIR/SER 22



ALTLIKLAR
SNMG 12
SNMG 15
SNMG 19



ALTLIKLAR
CCMT 12

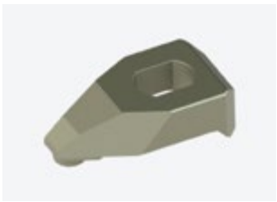


ALTLIKLAR
TCMT 16

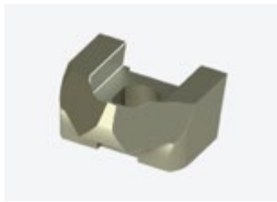
YEDEK PARÇALAR

HEIKENEI® wir produzieren industrielle lösungen

BASKI PABUÇLARI



BASKI PABUÇLARI
T190105 CNMG 19
T190105 SNMG 19



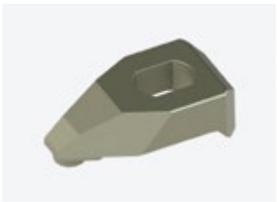
BASKI PABUÇLARI
M220105 TNMG 22



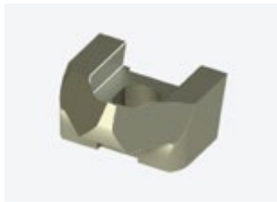
BASKI PABUÇLARI
T110105 DNMG 11
T160105 TNMG 16
T060105 WNMG 06



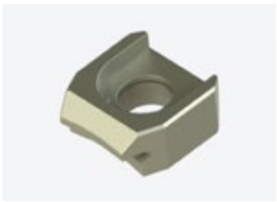
BASKI PABUÇLARI
T120105 SNMG 12
T120105 CNMG 12
T150105 DNMG 15
T220105 TNMG 22
T060105 WNMG 08



BASKI PABUÇLARI
T160105 CNMG 16
T160105 SNMG 16



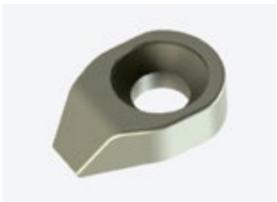
BASKI PABUÇLARI
M160105 TNMG 16



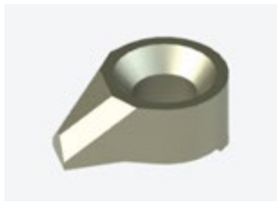
BASKI PABUÇLARI
M060105 WNMG 06



BASKI PABUÇLARI
C160105 KNUX 16 SAG
C160105 KNUX 16 SOL
C160105 KNUX 16 SOL VE SAG



BASKI PABUÇLARI
C110105 TPKN 11
C110105 SNHX 12
C110105 SER/SEL 16
C110105 SER/SEL 22



BASKI PABUÇLARI
C160105 TPKN 16



ALTLIK PİMİ
5X3.6X15 TNMG 16
5X3.6X15 WNMG 06



BASKI PABUÇLARI
M080105 WNMG 08



BASKI YAYI



BASKI VİDA PULU
10X6X1 MM



ALTLIK PİMİ
6X5X18 TNMG 22
6X5X18 WNMG 08

AÇILI KAFALAR

Gisstec MOTION LINE

ANGLE HEADS



GA Series

90° -Winkelkopf

Bis zu 8.000 U/min
Von ER11 bis ER40
Drehmoment bis zu 80 Nm

90° Right Angle Head

Up to 8.000 RPM
Size from ER11 to ER40
Torque up to 80 Nm



GA-X Series

90° -Winkelkopf XL

SK30/SK40/HSK63 Ausgangsspindel
Drehmoment bis zu 137 Nm

90° Angle Head XL

SK30/SK40/HSK63 Output Spindle
Torque up to 137 Nm

GS Series

90° -Winkelkopf Schmale Bauform

Bis zu Ø7 Werkzeugschaft
Beabeitung in Bohrungen ab Ø32 möglich

90° Slim Angle Head

Up to Ø7 Cutting Tool Shaft
Machining in small bores starting from Ø32





GA-L Series

90° -Winkelkopf Verlängert

Bis zu 1000 mm Länge
Von ER11 bis ER32
Drehmoment bis zu 52 Nm

90° Extended Angle Head

Up to 1000 mm Length
Size from ER11 to ER32
Torque up to 52 Nm

GT Series

Schwenkkopf

+/- 90° einstellbar
Von ER11 bis ER32

Tilting Head

+/- 90° adjustable
Size from ER11 to ER32



SPINDLE HIZLANDIRICILARI

Gisstec MOTION LINE

SPINDLE SPEEDERS

SC Series

SC16 bis zu 30.000 U/min - ER16 - Verhältnis 1:4,8
SC20 bis zu 24.000 U/min - ER20 - Verhältnis 1:4,8
SC25 bis zu 18.000 U/min - ER25 - Verhältnis 1:4,8
S32 bis zu 9.600 U/min - ER32 - Verhältnis 1:4,8

SC16 up to 30.000 RPM - ER16 Ratio 1:4,8
SC20 up to 24.000 RPM - ER20 - Ratio 1:4,8
SC25 up to 18.000 RPM - ER25 - Ratio 1:4,8
S32 up to 9.600 RPM - ER32 - Ratio 1:4,8



SE Series

SE11 Elektrische Schnelllaufspindel bis zu 60.000 U/min - ER11

SE11 Electrical Spindle Speeder up to 60.000 RPM - ER11

DRIVEN TOOLS



Angetriebene Werkzeuge

Axial, Radial, Achsversetzt, Einstellbar

Driven Tools

Axial, Radial, Offset, Adjustable



Angetriebene Sonderwerkzeuge

Radial Bohr- und Fräskopf
360° drehbar, Teilung durch Skalenring

Special Driven Tools

Radial Drilling and Milling Head
360° rotatable with graduated ring

ÇOKLU SPINDLE KAFALARI

Gisstec MOTION LINE

MULTISPINDLE HEADS



MS Series

Einstellbare Mehrspindelköpfe

ER8, ER11, ER16, ER20, ER25, ER32

Adjustable Multispindle Heads

ER8, ER11, ER16, ER20, ER25, ER32



Mehrspindelkopf mit zwei einstellbaren Spindeln

Multispindle Head with two adjustable spindles

Mehrspindelkopf mit drei einstellbaren Spindeln

Multispindle Head with three adjustable spindles



Sonder-Mehrspindelköpfe

Für Bearbeitungszentren

Bohrmaschinen

Transferanlagen

Sondermaschinen

Special Multispindle Heads

For Machining Centres

Drilling Machines

Transfer Machines

Custom-made Machines



İSVİÇRE TİPİ VE DİĞER PENSLER

Gisstec MOTION LINE

CLAMPING - LATHES & SWISS TYPE LATHES

Bechler
Citizen
DMG
Gildemeister
Goodway
Hanwha
Index
Maier

Miyano
Nexturn
Schütte
Star
Tornos
Traub
Tsugami
Wickman



Führungsbuchse
Guide Bush

F37 - 1536E Spannzange
F37 - 1536E Collet

F25 - 145E Spannzange
F25 - 145E Collet



Spannhülsenlagerung
Revolving End

Spannhülse
Bar Feed Collet

Vorschubzange
Feed Collet

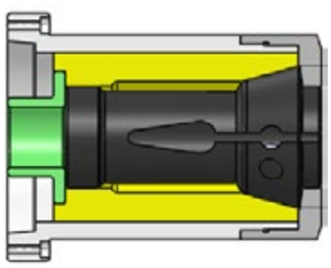
Kroko-Spannzangen

Verhindert Riefenbildung auf Werkstück
0,005 Rundlaufgenauigkeit
Sechskant und Vierkantspannung möglich

Kroko Collets

Prevents leaving marks on material
0,005 Runout accuracy
Clamps Hexagon and Square material





Kraftspannfutter

KSF-40 - mit 173E - F48 Spannzangen
KSF-60 - mit 185E - F66 Spannzangen

Power Collet Chuck

KSF-40 - with 173E - F48 collets
KSF-60 - with 185E - F66 collets

KANAL AÇMA TAKIMLARI

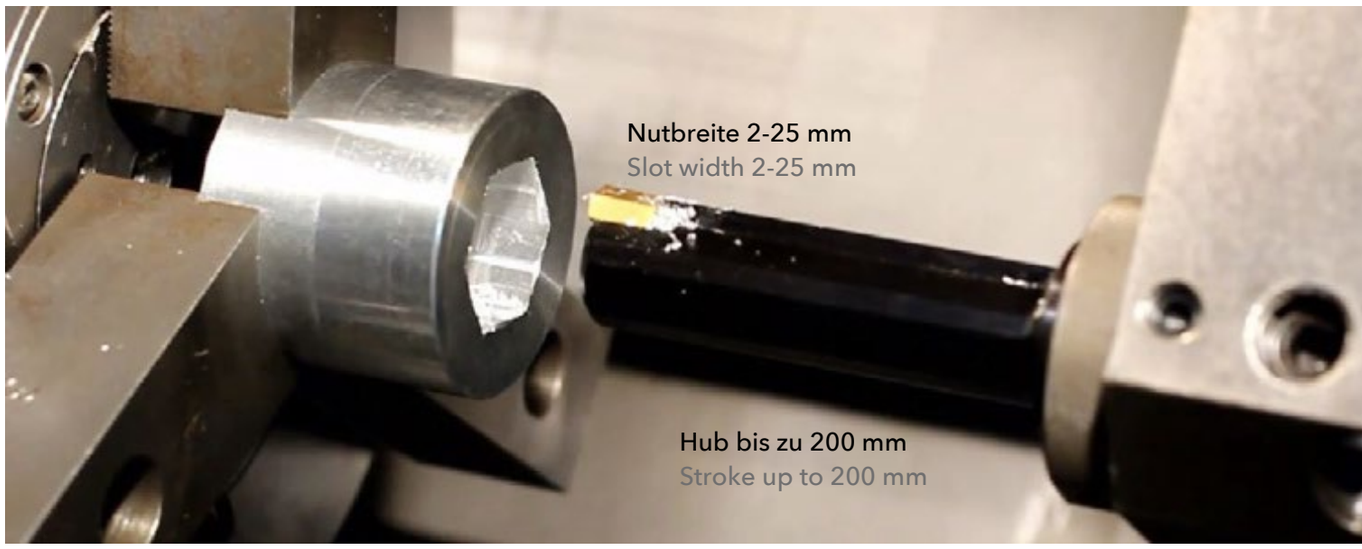
Gisstec MOTION LINE

SLOTTING TOOLS



Anwendung auf Drehmaschinen, Bearbeitungszentren, Räummaschinen, angetriebenen Nutstoßgeräten

For applications on Lathes, Machining Centres, Broaching Machines, Driven Slotting Tools



Material	m/mina	p(mm)	Standzeit / Life
Aluminium	1 00	,15/0,25	1500 m
GG	60	,10/0,20	300 m
AISI 1040	60	,05/0,12	200 m
Inox	50	,03/0,05	80 m

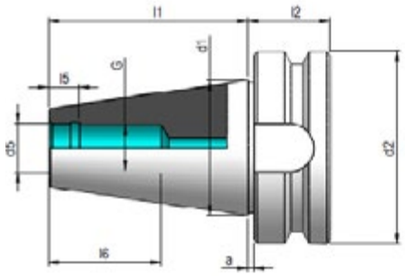
Beispiel / ExampleP	arameter
Nutbreite / Slot width	8 mm
Tiefe / Depth	4 mm
Länge / Length	10 mm
Material	1040
a_p	0,1 mm
m/min	6
Zeit / Time	24 sec

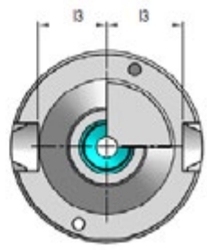
BT TAKIM TUTUCU SİSTEMLERİ

Gisstec®

KONİK ŞAFT ÖLÇÜLERİ

Form AD/B

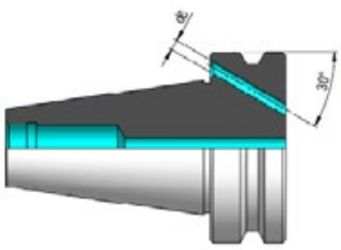


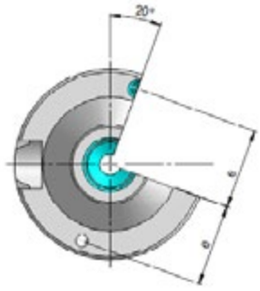


BT	d1	G	d5	d2	a	l1	l2	l3	l5	l6	d6	e
30	31,75	M12	12,5	46	2	48,4	22	16,3	7,0	24	-	-
40	44,45	M16	17,0	63	2	65,4	27	22,5	8,2	32	M4	27
50	69,85	M24	25,0	100	3	101,8	38	35,3	11,0	47	M6	42

MERKEZDEN VE FLANŞTAN SU KANALLI

Form AD/B





1Malzeme :

- Alaşımlı semente çeliği çekme mukavemeti min. 950 N/mm2

2Teknik Özelliği :

- Sertlik HRC 58 ± 2 sertlik derinliği 0,6 mm ± 0,2 mm, karartılmış

3Hassasiyeti :

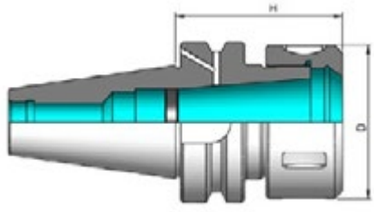
- Konik açı tolerans kalitesi DIN 2080 normuna göre AT3
- Konik yüzey kalitesi max. 0,001 mm

OZ PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6357





Sip. No.	Açıklama	H	Kapasite	D
340.01.116	BT40 MAS403 H70 OZ16	70	2-16	43
340.01.125	BT40 MAS403 H70 OZ25	70	2-25	60
340.01.132	BT40 MAS403 H80 OZ32	80	4-32	72
340.01.225	BT40 MAS403 H100 OZ25	100	2-25	60

Sip. No.	Açıklama	H	Kapasite	D
350.01.116	BT50 MAS403 H70 OZ16	70	2-16	43
350.01.125	BT50 MAS403 H85 OZ25	85	2-25	60
350.01.132	BT50 MAS403 H90 OZ32	90	4-32	72

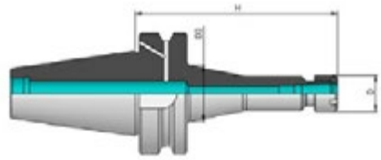
ER MİNİ PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6499







Sip. No.	Açıklama	H	Kapasite	D	D3
340.2M.207	BT40 MAS403 H100 ER11Mini	100	1-7	16	20
340.2M.210	BT40 MAS403 H100 ER16Mini	100	1-10	22	26
340.2M.213	BT40 MAS403 H100 ER20Mini	100	1-13	28	28
340.2M.307	BT40 MAS403 H130 ER11Mini	130	1-7	16	22
340.2M.310	BT40 MAS403 H130 ER16Mini	130	1-10	22	28
340.2M.407	BT40 MAS403 H160 ER11Mini	160	1-7	16	28

Sip. No.	Açıklama	H	Kapasite	D	D3
340.2M.410	BT40 MAS403 H160 ER16Mini	160	1-10	22	26
340.2M.510	BT40 MAS403 H200 ER16Mini	200	1-10	22	32
350.2M.210	BT50 MAS403 H100 ER16Mini	100	1-10	22	26
350.2M.410	BT50 MAS403 H160 ER16Mini	160	1-10	22	28
350.2M.510	BT50 MAS403 H200 ER16Mini	200	1-10	22	35

BİLYALI PENS BAŞLIĞI SETİ

Form AD



Sip. No.	Açıklama	Pensler
340.03.K20	BT40 MAS403 H75 6-20	Ø6, Ø8, Ø10, Ø12, Ø16
340.03.K32	BT40 MAS403 H105 6-32	Ø6, Ø8, Ø10, Ø12, Ø16, Ø20, Ø25
350.03.K32	BT50 MAS403 H85 6-32	Ø6, Ø8, Ø10, Ø12, Ø16, Ø20, Ø25

BT TAKIM TUTUCU SİSTEMLERİ

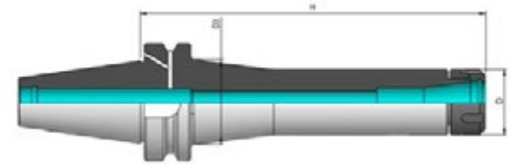
Gisstec

ER PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6499





Sip. No.	Açıklama	H	Kapasite	D	D3
330.02.110	BT30 MAS403 H70 ER16	70	1-10	32	-
330.02.116	BT30 MAS403 H70 ER25	70	2-16	42	-
330.02.120	BT30 MAS403 H70 ER32	70	2-20	50	-
330.02.126	BT30 MAS403 H70 ER40	70	3-26	63	-
330.02.210	BT30 MAS403 H100 ER16	100	2-10	32	-
330.02.216	BT30 MAS403 H100 ER25	100	2-16	42	-
330.02.220	BT30 MAS403 H100 ER32	100	2-20	50	-
340.02.110	BT40 MAS403 H 70 ER16	70	1-10	32	-
340.02.113	BT40 MAS403 H 70 ER20	70	1-13	35	-
340.02.116	BT40 MAS403 H 70 ER25	70	2-16	42	-
340.02.120	BT40 MAS403 H 70 ER32	70	2-20	50	-
340.02.126	BT40 MAS403 H 70 ER40	70	3-26	63	-
340.02.210	BT40 MAS403 H100 ER16	100	1-10	32	-
340.02.213	BT40 MAS403 H100 ER20	100	1-13	35	-
340.02.216	BT40 MAS403 H100 ER25	100	2-16	42	-
340.02.220	BT40 MAS403 H100 ER32	100	2-20	50	-
340.02.226	BT40 MAS403 H100 ER40	100	3-26	63	-
340.02.310	BT40 MAS403 H130 ER16	130	1-10	32	-
340.02.316	BT40 MAS403 H130 ER25	130	2-16	42	-
340.02.320	BT40 MAS403 H130 ER32	130	2-20	50	-
340.02.326	BT40 MAS403 H130 ER40	130	3-26	63	-
340.02.410	BT40 MAS403 H160 ER16	160	1-10	32	-
340.02.416	BT40 MAS403 H160 ER25	160	2-16	42	-
340.02.420	BT40 MAS403 H160 ER32	160	2-20	50	-
340.02.426	BT40 MAS403 H160 ER40	160	3-26	63	-

Sip. No.	Açıklama	H	Kapasite	D	D3
340.02.510	BT40 MAS403 H200 ER16	200	1-10	32	38
340.02.516	BT40 MAS403 H200 ER25	200	2-16	42	-
340.02.520	BT40 MAS403 H200 ER32	200	2-20	50	-
340.02.526	BT40 MAS403 H200 ER40	200	3-26	63	-
350.02.110	BT50 MAS403 H80 ER16	80	1-10	32	-
350.02.113	BT50 MAS403 H80 ER20	80	1-13	35	-
350.02.116	BT50 MAS403 H80 ER25	80	2-16	42	-
350.02.120	BT50 MAS403 H80 ER32	80	2-20	50	-
350.02.126	BT50 MAS403 H80 ER40	80	3-26	63	-
350.02.210	BT50 MAS403 H100 ER16	100	1-10	32	-
350.02.213	BT50 MAS403 H100 ER20	100	1-13	35	-
350.02.216	BT50 MAS403 H100 ER25	100	2-16	42	-
350.02.220	BT50 MAS403 H100 ER32	100	2-20	50	-
350.02.226	BT50 MAS403 H100 ER40	100	3-26	63	-
350.02.310	BT50 MAS403 H130 ER16	130	1-10	32	-
350.02.316	BT50 MAS403 H130 ER25	130	2-16	42	-
350.02.320	BT50 MAS403 H130 ER32	130	2-20	50	-
350.02.326	BT50 MAS403 H130 ER40	130	3-26	63	-
350.02.410	BT50 MAS403 H160 ER16	160	1-10	32	-
350.02.416	BT50 MAS403 H160 ER25	160	2-16	42	-
350.02.420	BT50 MAS403 H160 ER32	160	2-20	50	-
350.02.426	BT50 MAS403 H160 ER40	160	3-26	63	-
350.02.510	BT50 MAS403 H200 ER16	200	1-10	32	-
350.02.516	BT50 MAS403 H200 ER25	200	2-16	42	-
350.02.520	BT50 MAS403 H200 ER32	200	2-20	50	-
350.02.526	BT50 MAS403 H200 ER40	200	3-26	63	-

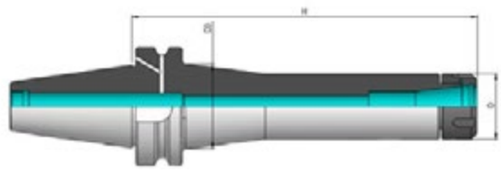
ULTRA HASSAS PENS BAŞLIĞI

Form AD/B | G2.5 20.000 RPM

DIN 6499



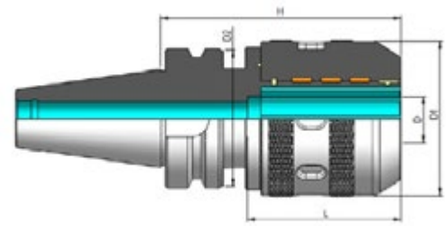
Sıkma Kuvveti+ 25%
Salgı0,003 mm



Sip. No.	Açıklama	H	Kapasite	D
340.2U.110	BT40 MAS403 H70 ER16	70	1-10	30
340.2U.116	BT40 MAS403 H70 ER25	70	1-16	40
340.2U.120	BT40 MAS403 H70 ER32	70	1-20	50
340.2U.210	BT40 MAS403 H100 ER16	100	1-10	30
340.2U.316	BT40 MAS403 H120 ER25	120	1-16	40
340.2U.320	BT40 MAS403 H120 ER32	120	1-20	50
340.2U.410	BT40 MAS403 H150 ER16	150	1-10	30
350.2U.110	BT50 MAS403 H70 ER16	70	1-10	30
350.2U.120	BT50 MAS403 H70 ER32	70	1-20	50
350.2U.320	BT50 MAS403 H130 ER32	130	1-20	50
350.2U.410	BT50 MAS403 H150 ER16	150	1-10	30

BİLYALI PENS BAŞLIĞI

Form AD | G6.3 12.000 RPM

Sip. No.	Açıklama	H	L	D	D1	D2
340.03.120	BT40 MAS403 Ø20 H90 6-20	90	60	20	53	52
340.03.132	BT40 MAS403 Ø32 H85 6-32	85	70	32	69	63
340.03.332	BT40 MAS403 Ø32 H135 6-32	135	70	32	69	63

Sip. No.	Açıklama	H	L	D	D1	D2
350.03.220	BT50 MAS403 Ø20 H100 6-20	100	60	20	53	52
350.03.232	BT50 MAS403 Ø32 H105 6-32	105	80	32	69	63
350.03.332	BT50 MAS403 Ø32 H135 6-32	135	80	32	69	63
350.03.432	BT50 MAS403 Ø32 H165 6-32	165	80	32	69	63

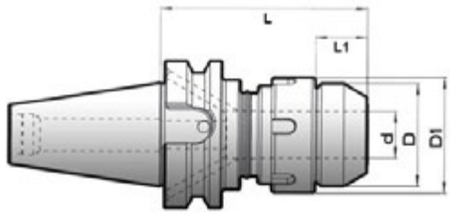
BT TAKIM TUTUCU SİSTEMLERİ

Gisstec®

ULTRA CLAMP BİLYALI TUTUCU 800 Nm

Form AD/B | G2.5 20.000 RPM





- Sıkma Kuvveti 800 Nm
- Salgı 0,003 mm
- Silindirik ve veldon şaftlı kesiciler için
- Vibrasyon sönümleme
- Kesici boy ayarı
- 100 bara kadar içten su verme

Sip. No.	Açıklama	d	L	D1	D	L1	Nm
340.3U.106	BT40 Ø6 x 74	6	74	32	26	11	150
340.3U.108	BT40 Ø8 x 75	8	75	32	27	11	180
340.3U.110	BT40 Ø10 x 79	10	79	37	32	13	320
340.3U.112	BT40 Ø12 x 85	12	85	37	35	20	380
340.3U.116	BT40 Ø16 x 88	16	88	44	40	21	400
340.3U.120	BT40 Ø20 x 90	20	90	49	46	23	520
340.3U.125	BT40 Ø25 x 97	25	97	54	52	26	550
340.3U.132	BT40 Ø32 x 105	32	105	68	67	33	800
340.3U.420	BT40 Ø20 x 150	20	150	49	46	23	520
340.3U.432	BT40 Ø32 x 150	32	150	68	67	33	800

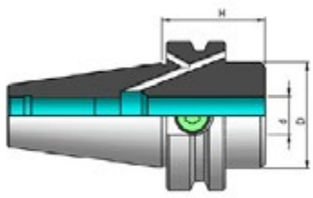
Sip. No.	Açıklama	d	L	D1	D	L1	Nm
350.3U.106	BT50 Ø6 x 74	6	74	32	26	11	150
350.3U.108	BT50 Ø8 x 75	8	75	32	27	11	180
350.3U.110	BT50 Ø10 x 79	10	79	37	32	13	320
350.3U.112	BT50 Ø12 x 85	12	85	37	35	20	380
350.3U.116	BT50 Ø16 x 88	16	88	44	40	21	400
350.3U.120	BT50 Ø20 x 90	20	90	49	46	23	520
350.3U.125	BT50 Ø25 x 97	25	97	54	52	26	550
350.3U.132	BT50 Ø32 x 105	32	103	68	67	33	800
350.3U.420	BT50 Ø20 x 150	20	150	49	46	23	520
350.3U.432	BT50 Ø32 x 150	32	150	68	67	33	800

VELDON TUTUCU KISA

Form AD/B | G6.3 12.000 RPM

DIN 6359 / 1835 B





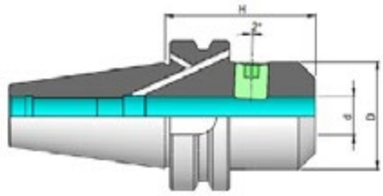
Sip. No.	Açıklama	H	d	D
340.04.016	BT40 MAS403 H35 d16	35	16	44
340.04.020	BT40 MAS403 H35 d20	35	20	44
340.04.025	BT40 MAS403 H35 d25	35	25	44
340.04.032	BT40 MAS403 H70 d32	70	32	72
350.04.016	BT50 MAS403 H44 d16	44	16	70
350.04.020	BT50 MAS403 H44 d20	44	20	70
350.04.025	BT50 MAS403 H44 d25	44	25	70
350.04.032	BT50 MAS403 H44 d32	44	32	80
350.04.040	BT50 MAS403 H44 d40	44	40	80

VELDON TUTUCU, 2° AÇILI

Form AD/B | G6.3 12.000 RPM

DIN 6359 / 1835 E





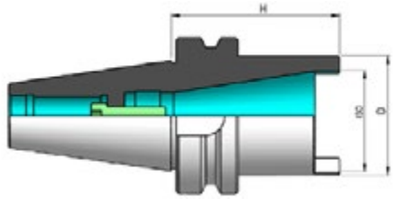
Sip. No.	Açıklama	H	d	D
340.05.106	BT40 MAS403 H 50 d 6	50	6	25
340.05.108	BT40 MAS403 H 50 d 8	50	8	28
340.05.110	BT40 MAS403 H 63 d10	63	10	35
340.05.112	BT40 MAS403 H 63 d12	63	12	42
340.05.114	BT40 MAS403 H 63 d14	63	14	44
340.05.116	BT40 MAS403 H 63 d16	63	16	48
340.05.118	BT40 MAS403 H 63 d18	63	18	50
340.05.120	BT40 MAS403 H 63 d20	63	20	52
340.05.125	BT40 MAS403 H100 d25	90	25	65
340.05.132	BT40 MAS403 H100 d32	100	32	72
340.05.140	BT40 MAS403 H105 d40	105	40	80

Sip. No.	Açıklama	H	d	D
350.05.106	BT50 MAS403 H 63 d 6	63	6	25
350.05.108	BT50 MAS403 H 63 d 8	63	8	28
350.05.110	BT50 MAS403 H 70 d10	70	10	35
350.05.112	BT50 MAS403 H 80 d12	80	12	42
350.05.114	BT50 MAS403 H 80 d14	80	14	44
350.05.116	BT50 MAS403 H 80 d16	80	16	48
350.05.118	BT50 MAS403 H 80 d18	80	18	50
350.05.120	BT50 MAS403 H 80 d20	80	20	52
350.05.125	BT50 MAS403 H100 d25	100	25	65
350.05.132	BT50 MAS403 H105 d32	105	32	72
350.05.140	BT50 MAS403 H120 d40	120	40	80

REDÜKSİYON ÇEKTİRMELİ

Form A | G6.3 12.000 RPM





Sip. No.	Açıklama	H	D	ISO
340.09.140	BT40 MAS403 H 100 ISO40	100	68	40
340.09.130	BT40 MAS403 H 70 ISO30	70	50	30

Sip. No.	Açıklama	H	D	ISO
350.09.140	BT50 MAS403 H 70 ISO40	70	78	40
350.09.150	BT50 MAS403 H 120 ISO50	120	100	50

BT TAKIM TUTUCU SİSTEMLERİ

Gisstec®

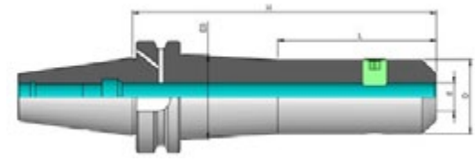
VELDON TUTUCU

Form AD/B | G6.3 12.000 RPM

DIN 6359 / 1835 B







Sip. No.	Açıklama	H	d	D	D3
340.04.106	BT40 MAS403 H 60 d 6	60	6	25	-
340.04.108	BT40 MAS403 H 60 d 8	60	8	28	-
340.04.110	BT40 MAS403 H 65 d10	65	10	35	-
340.04.112	BT40 MAS403 H 65 d12	65	12	42	-
340.04.114	BT40 MAS403 H 65 d14	65	14	44	-
340.04.116	BT40 MAS403 H 70 d16	70	16	48	-
340.04.118	BT40 MAS403 H 70 d18	70	18	50	-
340.04.120	BT40 MAS403 H 70 d20	70	20	52	-
340.04.125	BT40 MAS403 H100 d25	100	25	65	-
340.04.132	BT40 MAS403 H110 d32	110	32	72	-
340.04.140	BT40 MAS403 H120 d40	120	40	80	-
340.04.206	BT40 MAS403 H100 d 6	100	6	25	-
340.04.208	BT40 MAS403 H100 d 8	100	8	28	-
340.04.210	BT40 MAS403 H100 d10	100	10	35	-
340.04.212	BT40 MAS403 H100 d12	100	12	42	-
340.04.214	BT40 MAS403 H100 d14	100	14	44	-
340.04.216	BT40 MAS403 H100 d16	100	16	48	-
340.04.218	BT40 MAS403 H100 d18	100	18	50	-
340.04.220	BT40 MAS403 H100 d20	100	20	52	-
340.04.306	BT40 MAS403 H130 d 6	130	6	25	-
340.04.308	BT40 MAS403 H130 d 8	130	8	28	-
340.04.310	BT40 MAS403 H130 d10	130	10	35	-
340.04.312	BT40 MAS403 H130 d12	130	12	42	-
340.04.314	BT40 MAS403 H130 d14	130	14	44	-
340.04.316	BT40 MAS403 H130 d16	130	16	48	-
340.04.318	BT40 MAS403 H130 d18	130	18	50	-
340.04.320	BT40 MAS403 H130 d20	130	20	52	-
340.04.406	BT40 MAS403 H160 d 6	160	6	25	-
340.04.408	BT40 MAS403 H160 d 8	160	8	28	-
340.04.410	BT40 MAS403 H160 d10	160	10	35	-
340.04.412	BT40 MAS403 H160 d12	160	12	42	-
340.04.414	BT40 MAS403 H160 d14	160	14	44	-
340.04.416	BT40 MAS403 H160 d16	160	16	48	-
340.04.418	BT40 MAS403 H160 d18	160	18	50	-
340.04.420	BT40 MAS403 H160 d20	160	20	52	-
340.04.425	BT40 MAS403 H160 d25	160	25	65	-
340.04.432	BT40 MAS403 H160 d32	160	32	72	-
340.04.506	BT40 MAS403 H200 d 6	200	6	25	-
340.04.508	BT40 MAS403 H200 d 8	200	8	28	-
340.04.510	BT40 MAS403 H200 d10	200	10	35	-
340.04.512	BT40 MAS403 H200 d12	200	12	42	-
340.04.514	BT40 MAS403 H200 d14	200	14	44	-
340.04.516	BT40 MAS403 H200 d16	200	16	48	-
340.04.518	BT40 MAS403 H200 d18	200	18	50	-
340.04.520	BT40 MAS403 H200 d20	200	20	52	-
340.04.525	BT40 MAS403 H200 d25	200	25	65	-
340.04.532	BT40 MAS403 H200 d32	200	32	72	-

Sip. No.	Açıklama	H	d	D	D3
350.04.106	BT50 MAS403 H63 d 6	63	6	25	-
350.04.108	BT50 MAS403 H63 d 8	63	8	28	-
350.04.110	BT50 MAS403 H63 d10	63	10	35	-
350.04.112	BT50 MAS403 H80 d12	80	12	42	-
350.04.114	BT50 MAS403 H80 d14	80	14	44	-
350.04.116	BT50 MAS403 H80 d16	80	16	48	-
350.04.118	BT50 MAS403 H80 d18	80	18	50	-
350.04.120	BT50 MAS403 H80 d20	80	20	52	-
350.04.125	BT50 MAS403 H100 d25	100	25	65	-
350.04.132	BT50 MAS403 H105 d32	105	32	72	-
350.04.140	BT50 MAS403 H120 d40	120	40	80	-
350.04.206	BT50 MAS403 H100 d 6	100	6	25	-
350.04.208	BT50 MAS403 H100 d 8	100	8	28	-
350.04.210	BT50 MAS403 H100 d10	100	10	35	-
350.04.212	BT50 MAS403 H100 d12	100	12	42	-
350.04.214	BT50 MAS403 H100 d14	100	14	44	-
350.04.216	BT50 MAS403 H100 d16	100	16	48	-
350.04.218	BT50 MAS403 H100 d18	100	18	50	-
350.04.220	BT50 MAS403 H100 d20	100	20	52	-
350.04.306	BT50 MAS403 H130 d 6	130	6	25	-
350.04.308	BT50 MAS403 H130 d 8	130	8	28	-
350.04.310	BT50 MAS403 H130 d10	130	10	35	-
350.04.312	BT50 MAS403 H130 d12	130	12	42	-
350.04.314	BT50 MAS403 H130 d14	130	14	44	-
350.04.316	BT50 MAS403 H130 d16	130	16	48	-
350.04.318	BT50 MAS403 H130 d18	130	18	50	-
350.04.320	BT50 MAS403 H130 d20	130	20	52	-
350.04.325	BT50 MAS403 H130 d25	130	25	65	-
350.04.332	BT50 MAS403 H130 d32	130	32	72	-
350.04.340	BT50 MAS403 H130 d40	130	40	80	-
350.04.406	BT50 MAS403 H160 d 6	160	6	25	-
350.04.408	BT50 MAS403 H160 d 8	160	8	28	-
350.04.410	BT50 MAS403 H160 d10	160	10	35	-
350.04.412	BT50 MAS403 H160 d12	160	12	42	-
350.04.414	BT50 MAS403 H160 d14	160	14	44	-
350.04.416	BT50 MAS403 H160 d16	160	16	48	-
350.04.418	BT50 MAS403 H160 d18	160	18	50	-
350.04.420	BT50 MAS403 H160 d20	160	20	52	-
350.04.425	BT50 MAS403 H160 d25	160	25	65	-
350.04.432	BT50 MAS403 H160 d32	160	32	72	-
350.04.440	BT50 MAS403 H160 d40	160	40	80	-
350.04.506	BT50 MAS403 H200 d 6	200	6	25	-
350.04.508	BT50 MAS403 H200 d 8	200	8	28	-
350.04.510	BT50 MAS403 H200 d10	200	10	35	-
350.04.512	BT50 MAS403 H200 d12	200	12	42	-
350.04.514	BT50 MAS403 H200 d14	200	14	44	-
350.04.516	BT50 MAS403 H200 d16	200	16	48	-
350.04.518	BT50 MAS403 H200 d18	200	18	50	-
350.04.520	BT50 MAS403 H200 d20	200	20	52	-
350.04.525	BT50 MAS403 H200 d25	200	25	65	-
350.04.532	BT50 MAS403 H200 d32	200	32	72	-
350.04.540	BT50 MAS403 H200 d40	200	40	80	-

BT TAKIM TUTUCU SİSTEMLERİ

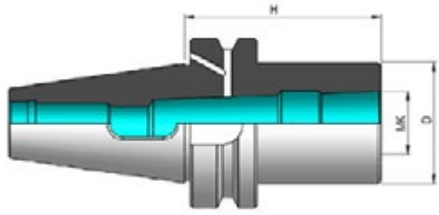
Gisstec®

MORS ADAPTÖRÜ

Form AD/B | G2.5 20.000 RPM

DIN 6383





Sip. No.	Açıklama	H	D	MK
340.07.101	BT40 MAS403 H 50 MK1	50	25	1
340.07.102	BT40 MAS403 H 50 MK2	50	32	2
340.07.103	BT40 MAS403 H 70 MK3	70	40	3
340.07.104	BT40 MAS403 H 95 MK4	95	48	4

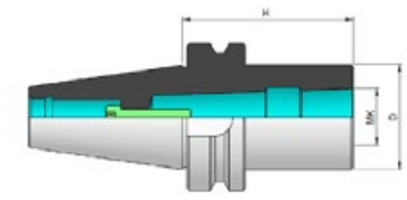
Sip. No.	Açıklama	H	D	MK
350.07.101	BT50 MAS403 H 45 MK1	45	25	1
350.07.102	BT50 MAS403 H 60 MK2	60	32	2
350.07.103	BT50 MAS403 H 65 MK3	65	40	3
350.07.104	BT50 MAS403 H 95 MK4	95	48	4
350.07.105	BT50 MAS403 H105 MK5	105	63	5

ÇEKTİRMELİ MORS ADAPTÖRÜ

Form A | G6.3 12.000 RPM

DIN 6364





Sip. No.	Açıklama	H	D	MK
340.08.101	BT40 MAS403 H 50 CMK1	50	25	1
340.08.102	BT40 MAS403 H 50 CMK2	50	32	2
340.08.103	BT40 MAS403 H 70 CMK3	70	40	3
340.08.104	BT40 MAS403 H 95 CMK4	95	48	4

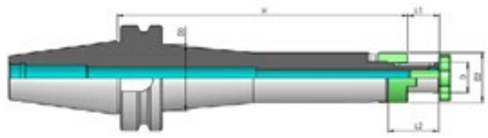
Sip. No.	Açıklama	H	D	MK
350.08.101	BT50 MAS403 H 50 CMK1	50	25	1
350.08.102	BT50 MAS403 H 50 CMK2	50	32	2
350.08.103	BT50 MAS403 H 65 CMK3	65	40	3
350.08.104	BT50 MAS403 H 70 CMK4	70	48	4
350.08.105	BT50 MAS403 H100 CMK5	100	63	5

KOMBİNE MALAFA

Form AD | G6.3 12.000 RPM

DIN 6358





Sip. No.	Açıklama	H	L1	L2	D	D2	D3
330.10.116	BT30 MAS403 H 55 D16	55	17	27	16	32	-
330.10.122	BT30 MAS403 H 55 D22	55	19	31	22	40	-
330.10.127	BT30 MAS403 H 55 D27	55	21	33	27	48	-
340.10.116	BT40 MAS403 H 55 D16	55	17	27	16	32	-
340.10.122	BT40 MAS403 H 55 D22	55	19	31	22	40	-
340.10.127	BT40 MAS403 H 55 D27	55	21	33	27	48	-
340.10.132	BT40 MAS403 H 60 D32	60	24	38	32	58	-
340.10.140	BT40 MAS403 H 60 D40	60	27	41	40	70	-
340.10.216	BT40 MAS403 H100 D16	100	17	27	16	32	-
340.10.222	BT40 MAS403 H100 D22	100	19	31	22	40	-
340.10.227	BT40 MAS403 H100 D27	100	21	33	27	48	-
340.10.232	BT40 MAS403 H100 D32	100	24	38	32	58	-
340.10.240	BT40 MAS403 H100 D40	100	27	41	40	70	-
340.10.316	BT40 MAS403 H130 D16	130	17	27	16	32	-
340.10.322	BT40 MAS403 H130 D22	130	19	31	22	40	-
340.10.327	BT40 MAS403 H130 D27	130	21	33	27	48	-
340.10.332	BT40 MAS403 H130 D32	130	24	38	32	58	-
340.10.340	BT40 MAS403 H130 D40	130	27	41	40	70	-
340.10.416	BT40 MAS403 H160 D16	160	17	27	16	32	40
340.10.422	BT40 MAS403 H160 D22	160	19	31	22	40	-
340.10.427	BT40 MAS403 H160 D27	160	21	33	27	48	-
340.10.432	BT40 MAS403 H160 D32	160	24	38	32	58	-
340.10.440	BT40 MAS403 H160 D40	160	27	41	40	70	-
340.10.516	BT40 MAS403 H200 D16	200	17	27	16	32	40
340.10.522	BT40 MAS403 H200 D22	200	19	31	22	40	50
340.10.527	BT40 MAS403 H200 D27	200	21	33	27	48	-
340.10.532	BT40 MAS403 H200 D32	200	24	38	32	58	-
340.10.540	BT40 MAS403 H200 D40	200	27	41	40	70	-

Sip. No.	Açıklama	H	L1	L2	D	D2	D3
350.10.116	BT50 MAS403 H 70 D16	70	17	27	16	32	-
350.10.122	BT50 MAS403 H 70 D22	70	19	31	22	40	-
350.10.127	BT50 MAS403 H 70 D27	70	21	33	27	48	-
350.10.132	BT50 MAS403 H 70 D32	70	24	38	32	58	-
350.10.140	BT50 MAS403 H 70 D40	70	27	41	40	70	-
350.10.216	BT50 MAS403 H100 D16	100	17	27	16	32	-
350.10.222	BT50 MAS403 H100 D22	100	19	31	22	40	-
350.10.227	BT50 MAS403 H100 D27	100	21	33	27	48	-
350.10.232	BT50 MAS403 H100 D32	100	24	38	32	58	-
350.10.240	BT50 MAS403 H100 D40	100	27	41	40	70	-
350.10.316	BT50 MAS403 H130 D16	130	17	27	16	32	-
350.10.322	BT50 MAS403 H130 D22	130	19	31	22	40	-
350.10.327	BT50 MAS403 H130 D27	130	21	33	27	48	-
350.10.332	BT50 MAS403 H130 D32	130	24	38	32	58	-
350.10.340	BT50 MAS403 H130 D40	130	27	41	40	70	-
350.10.416	BT50 MAS403 H160 D16	160	17	27	16	32	40
350.10.422	BT50 MAS403 H160 D22	160	19	31	22	40	-
350.10.427	BT50 MAS403 H160 D27	160	21	33	27	48	-
350.10.432	BT50 MAS403 H160 D32	160	24	38	32	58	-
350.10.440	BT50 MAS403 H160 D40	160	27	41	40	70	-
350.10.516	BT50 MAS403 H200 D16	200	17	27	16	32	40
350.10.522	BT50 MAS403 H200 D22	200	19	31	22	40	50
350.10.527	BT50 MAS403 H200 D27	200	21	33	27	48	-
350.10.532	BT50 MAS403 H200 D32	200	24	38	32	58	-
350.10.540	BT50 MAS403 H200 D40	200	27	41	40	70	-

BT TAKIM TUTUCU SİSTEMLERİ

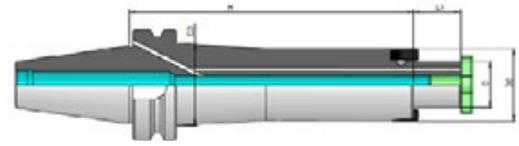
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Form AD/B | G6.3 12.000 RPM

DIN 6357





Sip. No.	Açıklama	H	L1	D	D2	D3
340.11.016	BT40 MAS403 H 35 D16	35	17	16	38	-
340.11.022	BT40 MAS403 H 35 D22	35	19	22	48	-
340.11.027	BT40 MAS403 H 35 D27	35	21	27	58	-
340.11.116	BT40 MAS403 H 45 D16	45	17	16	38	-
340.11.122	BT40 MAS403 H 45 D22	45	19	22	48	-
340.11.127	BT40 MAS403 H 45 D27	45	21	27	58	-
340.11.132	BT40 MAS403 H 50 D32	50	24	32	78	-
340.11.140	BT40 MAS403 H 55 D40	55	27	40	88	-
340.11.216	BT40 MAS403 H100 D16	100	17	16	38	-
340.11.222	BT40 MAS403 H100 D22	100	19	22	48	-
340.11.227	BT40 MAS403 H100 D27	100	21	27	58	-
340.11.232	BT40 MAS403 H100 D32	100	24	32	78	-
340.11.240	BT40 MAS403 H100 D40	100	27	40	88	-
340.11.316	BT40 MAS403 H130 D16	130	17	16	38	-
340.11.322	BT40 MAS403 H130 D22	130	19	22	48	-
340.11.327	BT40 MAS403 H130 D27	130	21	27	58	-
340.11.332	BT40 MAS403 H130 D32	130	24	32	78	-
340.11.340	BT40 MAS403 H130 D40	130	27	40	88	-
340.11.416	BT40 MAS403 H160 D16	160	17	16	38	45
340.11.422	BT40 MAS403 H160 D22	160	19	22	48	-
340.11.427	BT40 MAS403 H160 D27	160	21	27	58	-
340.11.432	BT40 MAS403 H160 D32	160	24	32	78	-
340.11.440	BT40 MAS403 H160 D40	160	27	40	88	-
340.11.516	BT40 MAS403 H200 D16	200	17	16	38	45
340.11.522	BT40 MAS403 H200 D22	200	19	22	48	-
340.11.527	BT40 MAS403 H200 D27	200	21	27	58	-
340.11.532	BT40 MAS403 H200 D32	200	24	32	78	-
340.11.540	BT40 MAS403 H200 D40	200	27	40	88	-
350.11.116	BT50 MAS403 H 60 D16	60	17	16	38	-
350.11.122	BT50 MAS403 H 60 D22	60	19	22	48	-
350.11.127	BT50 MAS403 H 60 D27	60	21	27	58	-
350.11.132	BT50 MAS403 H 60 D32	60	24	32	78	-
350.11.140	BT50 MAS403 H 60 D40	60	27	40	88	-

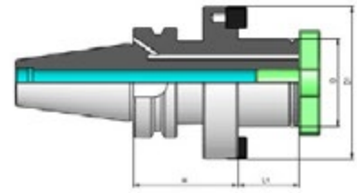
Sip. No.	Açıklama	H	L1	D	D2	D3
350.11.216	BT50 MAS403 H100 D16	100	17	16	38	-
350.11.222	BT50 MAS403 H100 D22	100	19	22	48	-
350.11.227	BT50 MAS403 H100 D27	100	21	27	58	-
350.11.232	BT50 MAS403 H100 D32	100	24	32	78	-
350.11.240	BT50 MAS403 H100 D40	100	27	40	88	-
350.11.316	BT50 MAS403 H130 D16	130	17	16	38	-
350.11.322	BT50 MAS403 H130 D22	130	19	22	48	-
350.11.327	BT50 MAS403 H130 D27	130	21	27	58	-
350.11.332	BT50 MAS403 H130 D32	130	24	32	78	-
350.11.340	BT50 MAS403 H130 D40	130	27	40	88	-
350.11.416	BT50 MAS403 H160 D16	160	17	16	38	45
350.11.422	BT50 MAS403 H160 D22	160	19	22	48	-
350.11.427	BT50 MAS403 H160 D27	160	21	27	58	-
350.11.432	BT50 MAS403 H160 D32	160	24	32	78	-
350.11.440	BT50 MAS403 H160 D40	160	27	40	88	-
350.11.516	BT50 MAS403 H200 D16	200	17	16	38	46
350.11.522	BT50 MAS403 H200 D22	200	19	22	48	60
350.11.527	BT50 MAS403 H200 D27	200	21	27	58	78
350.11.532	BT50 MAS403 H200 D32	200	24	32	78	78
350.11.540	BT50 MAS403 H200 D40	200	27	40	88	-
350.11.616	BT50 MAS403 H250 D16	250	17	16	38	52
350.11.622	BT50 MAS403 H250 D22	250	19	22	48	62
350.11.627	BT50 MAS403 H250 D27	250	21	27	58	72
350.11.632	BT50 MAS403 H250 D32	250	24	32	78	-
350.11.640	BT50 MAS403 H250 D40	250	27	40	88	-
350.11.716	BT50 MAS403 H300 D16	300	17	16	38	54
350.11.722	BT50 MAS403 H300 D22	300	19	22	48	65
350.11.727	BT50 MAS403 H300 D27	300	21	27	58	76
350.11.732	BT50 MAS403 H300 D32	300	24	32	78	-
350.11.740	BT50 MAS403 H300 D40	300	27	40	88	-
350.11.816	BT50 MAS403 H350 D16	350	17	16	38	56
350.11.822	BT50 MAS403 H350 D22	350	19	22	48	66
350.11.827	BT50 MAS403 H350 D27	350	21	27	58	76
350.11.832	BT50 MAS403 H350 D32	350	24	32	78	-
350.11.840	BT50 MAS403 H350 D40	350	27	40	88	-

ALIN KAMALI MALAFA

Form AD/B | G6.3 12.000 RPM

DIN 6357





Sip. No.	Açıklama	H	L1	D	D1	D2	D3	b
340.13.140	BT40 MAS403 H55 D40	55	30	40	89	66,7	M12	15,9
340.13.240	BT40 MAS403 H100 D40	100	30	40	89	66,7	M12	15,9
350.13.140	BT50 MAS403 H60 D40	60	30	40	89	66,7	M12	15,9
350.13.160	BT50 MAS403 H80 D60	80	40	60	129	101,6	M16	25,4

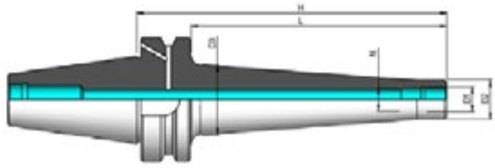
BT TAKIM TUTUCU SİSTEMLERİ

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VİDALI FREZE TAKIMI

Form AD/B | G2.5 20.000 RPM





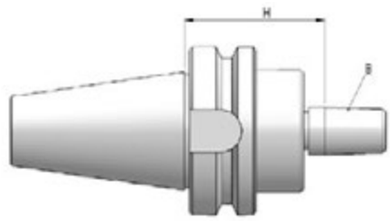
Sip. No.	Açıklama	H	L	D1	D2	D3	M
330.12.212	BT30 MAS403 M12x83	83	56	12,5	21	24	M12
330.12.216	BT30 MAS403 M16x83	83	56	17	29	34	M16
340.12.106	BT40 MAS403 M 6x63	63	36	6,5	9,7	13	M 6
340.12.108	BT40 MAS403 M 8x63	63	36	8,5	13	15	M 8
340.12.110	BT40 MAS403 M10x63	63	36	10,5	18	19,5	M10
340.12.112	BT40 MAS403 M12x63	63	36	12,5	21	24	M12
340.12.116	BT40 MAS403 M16x63	63	36	17	29	34	M16
340.12.206	BT40 MAS403 M 6x83	83	56	6,5	9,7	20	M 6
340.12.208	BT40 MAS403 M 8x83	83	56	8,5	13	23	M 8
340.12.210	BT40 MAS403 M10x83	83	56	10,5	18	25	M10
340.12.212	BT40 MAS403 M12x83	83	56	12,5	21	24	M12
340.12.216	BT40 MAS403 M16x83	83	56	17	29	34	M16
340.12.308	BT40 MAS403 M 8x103	103	76	8,5	13	23	M 8
340.12.310	BT40 MAS403 M10x103	103	76	10,5	18	28	M10
340.12.312	BT40 MAS403 M12x103	103	76	12,5	21	31	M12
340.12.316	BT40 MAS403 M16x103	103	76	17	29	34	M16
340.12.410	BT40 MAS403 M10x123	123	96	10,5	18	28	M10
340.12.412	BT40 MAS403 M12x123	123	96	12,5	21	31	M12
340.12.416	BT40 MAS403 M16x123	123	96	17	29	39	M16
340.12.516	BT40 MAS403 M16x153	153	126	17	29	39	M16
350.12.112	BT50 MAS403 M12x64	64	26	12,5	21	24	M12
350.12.116	BT50 MAS403 M16x64	64	26	17	29	34	M16
350.12.212	BT50 MAS403 M12x104	104	66	12,5	21	32	M12
350.12.216	BT50 MAS403 M16x104	104	66	17	29	36	M16
350.12.312	BT50 MAS403 M12x154	154	116	12,5	21	32	M12
350.12.316	BT50 MAS403 M16X154	154	116	17	29	40	M16
350.12.412	BT50 MAS403 M12X204	204	166	12,5	21	36	M12
350.12.416	BT50 MAS403 M16x204	204	166	17	29	42	M16
350.12.512	BT50 MAS403 M12x254	254	216	12,5	21	42	M12
350.12.516	BT50 MAS403 M16x254	254	216	17	29	44	M16

MANDREN MALAFASI

Form A | G6.3 12.000 RPM

DIN 238





Sip. No.	Açıklama	H	B
340.14.112	BT40 MAS403 H45 B12	45	12
340.14.116	BT40 MAS403 H45 B16	45	16
340.14.118	BT40 MAS403 H45 B18	45	18

Sip. No.	Açıklama	H	B
350.14.112	BT50 MAS403 H45 B12	45	12
350.14.116	BT50 MAS403 H45 B16	45	16
350.14.118	BT50 MAS403 H45 B18	45	18

ROHLİNG, ÖZEL TAKIM AMAÇLI

Form AD





Sip. No.	Açıklama	H	D
340.17.263	BT40 MAS403 Ø63 x 250	250	63

Sip. No.	Açıklama	H	D
350.17.397	BT50 MAS403 Ø97 x 315	315	97

BT TAKIM TUTUCU SİSTEMLERİ

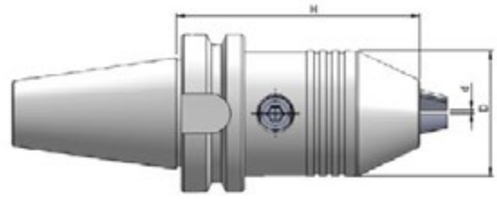
Gisstec®

NC-MANDREN MALAFASI, SAĞ-SOL DÖNÜŞLÜ

Form AD/B | G6.3 12.000 RPM

DIN 238





★ Form AD

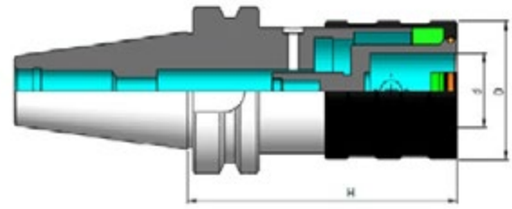
Sip. No.	Açıklama	H	D	d
340.15.213	BT40 MAS403 H100,5 d13	100,5	50	1-13
340.15.216	BT40 MAS403 H106 d16	106	50	2,5-16
350.15.213	BT50 MAS403 H106,5 d13	106,5	50	1-13
350.15.216	BT50 MAS403 H112 d16	112	50	2,5-16

Sip. No.	Açıklama	H	D	d
★ 340.15.108	BT40 MAS403 H 83 d 8	83	36	0-8
★ 340.15.113	BT40 MAS403 H 95,5 d13	95,5	50	1-13
★ 340.15.116	BT40 MAS403 H101 d16	101	50	2,5-16
★ 350.15.113	BT50 MAS403 H106,5 d13	106,5	50	1-13
★ 350.15.116	BT50 MAS403 H112 d16	112	50	2,5-16

KILAVUZ ÇEKME BAŞLIĞI, KOMPANZELİ

Form A



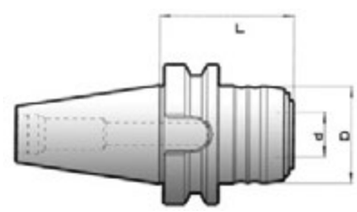


Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
330.16.112	BT30 MAS403 H 63 GR1	63	19	38	M 3-M14	9 - 9
330.16.120	BT30 MAS403 H 96 GR2	96	31	55	M 5-M24	15 - 15
340.16.112	BT40 MAS403 H 68 GR1	68	19	38	M 3-M14	9 - 9
340.16.120	BT40 MAS403 H 93 GR2	93	31	55	M 5-M24	15 - 15
340.16.136	BT40 MAS403 H138 GR3	138	48	79	M 14-M36	24 - 24
350.16.112	BT50 MAS403 H 80 GR1	80	19	38	M 3-M14	9 - 9
350.16.120	BT50 MAS403 H102 GR2	102	31	55	M 5-M24	15 - 15
350.16.136	BT50 MAS403 H133 GR3	133	48	79	M 14-M36	24 - 24

SENKRONİZE KILAVUZ ÇEKME BAŞLIĞI

Form AD





Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
340.26.112	BT40 MAS403 H61 ER16	61	20	43	M3-M12	0,2 - 1
340.26.120	BT40 MAS403 H82 ER25	82	32	60	M6-M20	0,2 - 1
350.26.112	BT50 MAS403 H72 ER16	72	20	43	M3-M12	0,2 - 1
350.26.120	BT50 MAS403 H93 ER25	93	32	60	M6-M20	0,2 - 1
350.26.133	BT50 MAS403 H124 ER40 AD/B	124	20	43	M14-M33	0,2 - 1

KONTROL MASTARI

Form A





• Açıklama : Tezgah fener milinin ISO normu R-230'a göre uygunluğunu kontrol etmek için

Sip. No.	Açıklama	d1	l1	l2	
340.18.300	BT40 MAS403 Ø40 x 300	40	300	269	0,003

Sip. No.	Açıklama	d1	l1	l2	
350.18.300	BT50 MAS403 Ø50 x 300	50	300	267	0,003

BT TAKIM TUTUCU SİSTEMLERİ

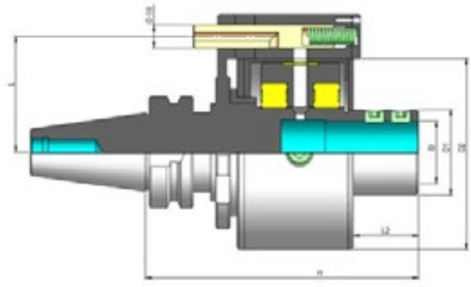
Gisstec®

DIŞTAN SOĞUTMALI TAKIM TUTUCU

Form A | max. 2.500 RPM



P max.= 20 bar



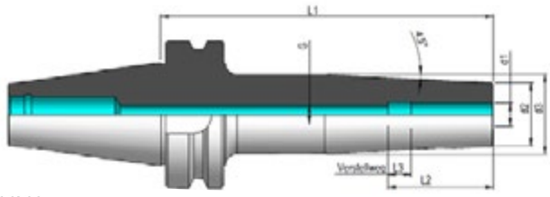
Sip. No.	Açıklama	H	L	L2	D	D1	D2
340.22.132	BT40 MAS403 D32	150	65	34	32	48	95
340.22.140	BT40 MAS403 D40	160	65	44	40	58	110

Sip. No.	Açıklama	H	L	L2	D	D1	D2
350.22.140	BT50 MAS403 D40	165	80	49	40	58	110

ISITMALI TAKIM TUTUCU

Form AD/B | G2.5 25.000 RPM





• Açıklama : Şaftı karbür ve HSS takımlar için şaft toleransı Ø6 -Ø32 arası h6 Ø3-4-5 arası h4 tolerans

Sip. No.	BT	d1	l1	d2	d3	l2	l3	g
340.25.103	BT40	3	80	11	15	10	-	-
340.25.104	BT40	4	80	14	22	20	5	M3
340.25.105	BT40	5	80	16	22	20	-	M4
340.25.106	BT40	6	90	21	27	36	10	M5
340.25.108	BT40	8	90	21	27	36	-	M6
340.25.110	BT40	10	90	24	32	41	-	M8x1
340.25.112	BT40	12	90	24	32	47	-	M10x1
340.25.114	BT40	14	90	27	34	47	-	M10x1
340.25.116	BT40	16	90	27	34	50	-	M12x1
340.25.118	BT40	18	90	33	42	50	-	M12x1
340.25.120	BT40	20	90	33	42	52	-	M16x1
340.25.125	BT40	25	100	44	53	58	-	M16x1
340.25.306	BT40	6	120	21	27	36	-	M5
340.25.308	BT40	8	120	21	27	36	-	M6
340.25.310	BT40	10	120	24	32	41	-	M8x1
340.25.312	BT40	12	120	24	32	47	-	M10x1
340.25.314	BT40	14	120	27	34	47	-	M10x1
340.25.316	BT40	16	120	27	34	50	-	M12x1
340.25.318	BT40	18	120	33	42	50	-	M12x1
340.25.320	BT40	20	120	33	42	52	-	M16x1
340.25.325	BT40	25	120	44	53	58	-	M16x1
340.25.406	BT40	6	160	21	27	36	-	M5
340.25.408	BT40	8	160	21	27	36	-	M6
340.25.410	BT40	10	160	24	32	41	-	M8x1
340.25.412	BT40	12	160	24	32	47	-	M10x1
340.25.414	BT40	14	160	27	34	47	-	M10x1
340.25.416	BT40	16	160	27	34	50	-	M12x1
340.25.418	BT40	18	160	33	42	50	-	M12x1
340.25.420	BT40	20	160	33	42	52	-	M16x1
340.25.425	BT40	25	160	44	53	58	-	M16x1
340.25.432	BT40	32	160	44	62	58	-	M16x1

Sip. No.	BT	d1	l1	d2	d3	l2	l3	g
350.25.106	BT50	6	100	21	27	36	10	M5
350.25.108	BT50	8	100	21	27	36	-	M6
350.25.110	BT50	10	100	24	32	41	-	M8x1
350.25.112	BT50	12	100	24	32	47	-	M10x1
350.25.114	BT50	14	100	27	34	47	-	M10x1
350.25.116	BT50	16	100	27	34	50	-	M12x1
350.25.118	BT50	18	110	33	42	50	-	M12x1
350.25.120	BT50	20	110	33	42	52	-	M16x1
350.25.125	BT50	25	120	44	53	58	-	M16x1
350.25.132	BT50	32	120	44	53	62	-	M16x1
350.25.406	BT50	6	160	21	27	36	10	M5
350.25.408	BT50	8	160	21	27	36	-	M6
350.25.410	BT50	10	160	24	32	41	-	M8x1
350.25.412	BT50	12	160	24	32	47	-	M10x1
350.25.414	BT50	14	160	27	34	47	-	M10x1
350.25.416	BT50	16	160	27	34	50	-	M12x1
350.25.418	BT50	18	160	33	42	50	-	M12x1
350.25.420	BT50	20	160	33	42	52	-	M16x1
350.25.425	BT50	25	160	44	53	58	-	M16x1
350.25.432	BT50	32	160	44	62	58	-	M16x1

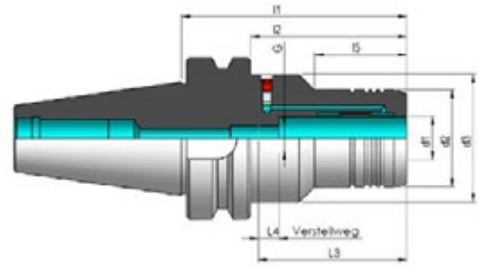
BT TAKIM TUTUCU SİSTEMLERİ

Gisstec®

HİDROLİK TAKIM TUTUCU

Form AD/B | G2.5 25.000 RPM





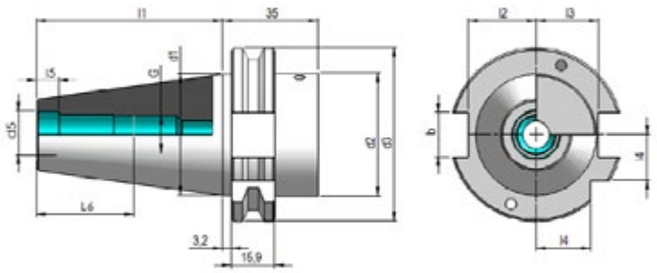
Sip. No.	BT	d1	d2	d3	l1	l2	l3	l4	l5	g
340.30.106	BT40	6	26	50	90	63	37	10	43,0	M5
340.30.108	BT40	8	28	50	90	63	37	10	43,5	M6
340.30.110	BT40	10	30	50	90	63	42	10	44,0	M8x1
340.30.112	BT40	12	32	50	90	63	47	10	44,5	M10x1
340.30.114	BT40	14	34	50	90	63	47	10	47,5	M10x1
340.30.116	BT40	16	38	50	90	63	52	10	47,5	M12x1
340.30.118	BT40	18	40	50	90	63	52	10	47,5	M12x1
340.30.120	BT40	20	42	50	90	63	52	10	47,5	M16x1
340.30.125	BT40	25	50	63	90	51	58	10	51,0	M16x1
340.30.132	BT40	32	60	60	110	81,5	62	10	81,5	M16x1
350.30.106	BT50	6	26	80	110	72	37	10	43,0	M5
350.30.108	BT50	8	28	80	110	72	37	10	43,5	M6
350.30.110	BT50	10	30	80	110	72	42	10	44,0	M8x1
350.30.112	BT50	12	32	80	110	72	47	10	42,0	M10x1
350.30.114	BT50	14	34	80	110	72	47	10	42,0	M10x1
350.30.116	BT50	16	38	80	110	72	52	10	45,0	M12x1
350.30.118	BT50	18	40	80	110	72	52	10	45,0	M12x1
350.30.120	BT50	20	42	80	110	72	52	10	47,5	M16x1
350.30.125	BT50	25	50	80	110	72	58	10	47,5	M16x1
350.30.132	BT50	32	60	80	110	72	62	10	47,5	M16x1
350.30.140	BT50	40	70	92	130	92	72	10	92	M16x1

SK TAKIM TUTUCU SİSTEMLERİ

Gisstec®

KONİK ŞAFT ÖLÇÜLERİ

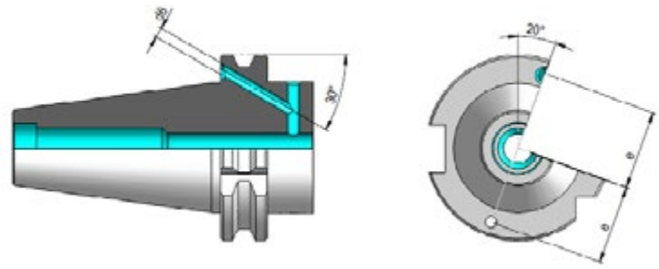
Form AD



SK	d1	G	d5	d2	d3	l1	l2	l3	l4	l5	l6	d6	e	b
30	31,75	M12	13	45	50,00	47,80	16,4	19,0	15,0	5,5	24	M4	21	16,1
40	44,45	M16	17	50	63,55	68,40	22,8	25,0	18,5	8,2	32	M4	27	16,1
50	69,85	M24	25	80	97,50	101,75	35,5	37,7	30,0	11,5	47	M6	42	25,7

Merkezden ve Flanştan Su Kanallı

Form AD/B



1Malzeme :

- Alaşımlı semente çeliği çekme mukavemeti min. 950 N/mm²

2Teknik Özelliği :

- Sertlik HRC 58 ± 2 sertlik derinliği 0,6 mm ± 0,2 mm, karartılmış

3Hassasiyeti :

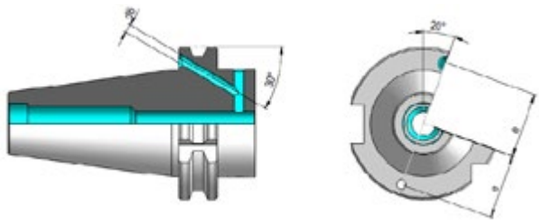
- Konik açı tolerans kalitesi DIN 2080 normuna göre AT3
- Konik yüzey kalitesi max. 0,001 mm

OZ PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6391





Sip. No.	Açıklama	H	Kapasite	D
140.01.116	SK40 DIN69871 H70 OZ16	70	2-16	43
140.01.125	SK40 DIN69871 H70 OZ25	70	2-25	60
140.01.132	SK40 DIN69871 H80 OZ32	80	4-32	72
140.01.225	SK40 DIN69871 H100 OZ25	100	2-25	60

Sip. No.	Açıklama	H	Kapasite	D
150.01.116	SK50 DIN69871 H70 OZ16	70	2-16	43
150.01.125	SK50 DIN69871 H70 OZ25	70	2-15	60
150.01.132	SK50 DIN69871 H80 OZ32	80	4-32	72
150.01.232	SK50 DIN69871 H100 OZ32	100	4-32	72

ER MİNİ PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6499



Sip. No.	Açıklama	H	Kapasite	D	D3
140.2M.110	SK40 DIN69871 H70 ER16Mini	70	1-10	22	26
140.2M.207	SK40 DIN69871 H100 ER11Mini	100	1-7	16	21
140.2M.210	SK40 DIN69871 H100 ER16Mini	100	1-10	22	27
140.2M.213	SK40 DIN69871 H100 ER20Mini	100	1-13	28	28
140.2M.307	SK40 DIN69871 H130 ER11Mini	130	1-7	16	22
140.2M.310	SK40 DIN69871 H130 ER16Mini	130	1-10	22	27

Sip. No.	Açıklama	H	Kapasite	D	D3
140.2M.407	SK40 DIN69871 H160 ER11Mini	160	1-7	16	22
140.2M.410	SK40 DIN69871 H160 ER16Mini	160	1-10	22	27
140.2M.510	SK40 DIN69871 H200 ER16Mini	200	1-10	22	32
150.2M.210	SK50 DIN69871 H100 ER16Mini	100	1-10	22	28
150.2M.410	SK50 DIN69871 H160 ER16Mini	160	1-10	22	30
150.2M.510	SK50 DIN69871 H200 ER16Mini	200	1-10	22	30

BİLYALI PENS BAŞLIĞI SETİ

Form AD



Sip. No.	Açıklama	Pensler
140.03.K20	SK40 DIN69871 H75 6-20	Ø6, Ø8, Ø10, Ø12, Ø16
140.03.K32	SK40 DIN69871 H105 6-32	Ø6, Ø8, Ø10, Ø12, Ø16, Ø20, Ø25
150.03.K32	SK50 DIN69871 H85 6-32	Ø6, Ø8, Ø10, Ø12, Ø16, Ø20, Ø25

SK TAKIM TUTUCU SİSTEMLERİ

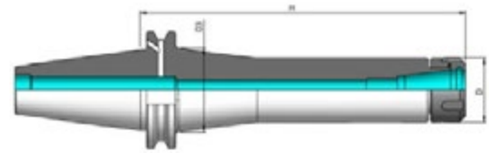
Gisstec

ER PENS BAŞLIĞI

Form AD/B | G6.3 12.000 RPM

DIN 6499



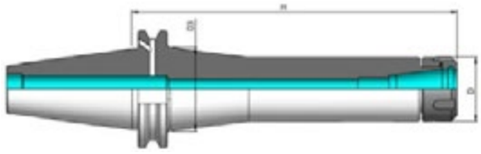


Sip. No.	Açıklama	H	Kapasite	D	D3
140.02.110	SK40 DIN69871 H70 ER16	70	1-10	32	-
140.02.113	SK40 DIN69871 H70 ER20	70	1-13	35	-
140.02.116	SK40 DIN69871 H70 ER25	70	2-16	42	-
140.02.120	SK40 DIN69871 H70 ER32	70	2-20	50	-
140.02.126	SK40 DIN69871 H70 ER40	70	3-26	63	-
140.02.210	SK40 DIN69871 H100 ER16	100	1-10	32	-
140.02.213	SK40 DIN69871 H100 ER20	100	1-13	35	-
140.02.216	SK40 DIN69871 H100 ER25	100	2-16	42	-
140.02.220	SK40 DIN69871 H100 ER32	100	2-20	50	-
140.02.226	SK40 DIN69871 H100 ER40	100	3-26	63	-
140.02.310	SK40 DIN69871 H130 ER16	130	1-10	32	-
140.02.316	SK40 DIN69871 H130 ER25	130	2-16	42	-
140.02.320	SK40 DIN69871 H130 ER32	130	2-20	50	-
140.02.326	SK40 DIN69871 H130 ER40	130	3-26	63	-
140.02.410	SK40 DIN69871 H160 ER16	160	1-10	32	-
140.02.416	SK40 DIN69871 H160 ER25	160	2-16	42	-
140.02.420	SK40 DIN69871 H160 ER32	160	2-20	50	-
140.02.426	SK40 DIN69871 H160 ER40	160	3-26	63	-
140.02.510	SK40 DIN69871 H200 ER16	200	1-10	32	38
140.02.516	SK40 DIN69871 H200 ER25	200	2-16	42	-
140.02.520	SK40 DIN69871 H200 ER32	200	2-20	50	-
140.02.526	SK40 DIN69871 H200 ER40	200	3-26	63	-

Sip. No.	Açıklama	H	Kapasite	D	D3
150.02.110	SK50 DIN69871 H80 ER16	80	1-10	32	-
150.02.113	SK50 DIN69871 H80 ER20	80	1-13	35	-
150.02.116	SK50 DIN69871 H80 ER25	80	2-16	42	-
150.02.120	SK50 DIN69871 H80 ER32	80	2-20	50	-
150.02.126	SK50 DIN69871 H80 ER40	80	3-26	63	-
150.02.210	SK50 DIN69871 H100 ER16	100	1-10	32	-
150.02.213	SK50 DIN69871 H100 ER20	100	1-13	35	-
150.02.216	SK50 DIN69871 H100 ER25	100	2-16	42	-
150.02.220	SK50 DIN69871 H100 ER32	100	2-20	50	-
150.02.226	SK50 DIN69871 H100 ER40	100	3-26	63	-
150.02.310	SK50 DIN69871 H130 ER16	130	1-10	32	-
150.02.316	SK50 DIN69871 H130 ER25	130	2-16	42	-
150.02.320	SK50 DIN69871 H130 ER32	130	2-20	50	-
150.02.326	SK50 DIN69871 H130 ER40	130	3-26	63	-
150.02.410	SK50 DIN69871 H160 ER16	160	1-10	32	-
150.02.416	SK50 DIN69871 H160 ER25	160	2-16	42	-
150.02.420	SK50 DIN69871 H160 ER32	160	2-20	50	-
150.02.426	SK50 DIN69871 H160 ER40	160	3-26	63	-
150.02.510	SK50 DIN69871 H200 ER16	200	1-10	32	38
150.02.516	SK50 DIN69871 H200 ER25	200	2-16	42	-
150.02.520	SK50 DIN69871 H200 ER32	200	2-20	50	-
150.02.526	SK50 DIN69871 H200 ER40	200	3-26	63	-

ULTRA HASSAS PENS BAŞLIĞI

Form AD/B | G2.5 20.000 RPM

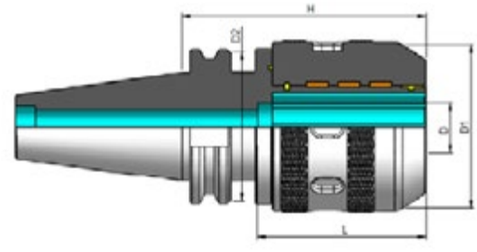
- Sıkma Kuvveti+ 25%
- Salgı0,003 mm

Sip. No.	Açıklama	H	Kapasite	D
140.2U.110	SK40 DIN69871 H70 ER16	70	1-10	30
140.2U.116	SK40 DIN69871 H70 ER25	70	1-16	40
140.2U.120	SK40 DIN69871 H70 ER32	70	1-20	50
140.2U.210	SK40 DIN69871 H100 ER16	100	1-10	30
140.2U.316	SK40 DIN69871 H120 ER25	120	1-16	40
140.2U.320	SK40 DIN69871 H120 ER32	120	1-20	50
140.2U.410	SK40 DIN69871 H150 ER16	150	1-10	30

Sip. No.	Açıklama	H	Kapasite	D
150.2U.110	SK50 DIN69871 H70 ER16	70	1-10	30
150.2U.120	SK50 DIN69871 H70 ER32	70	1-20	50
150.2U.320	SK50 DIN69871 H130 ER32	130	1-20	50
150.2U.410	SK50 DIN69871 H150 ER16	150	1-10	30

BİLYALI PENS BAŞLIĞI

Form AD | G6.3 12.000 RPM

Sip. No.	Açıklama	H	D	D1	D2	L
140.03.120	SK40 DIN69871 H75 6-20	75	20	46	47	60
140.03.132	SK40 DIN69871 H105 6-32	105	32	62	63	80
140.03.332	SK40 DIN69871 H135 6-32	135	32	62	63	80

Sip. No.	Açıklama		H	D	D1	D2	L
150.03.120	SK50 DIN69871 H85	6-20	85	20	46	47	60
150.03.132	SK50 DIN69871 H85	6-32	85	32	62	63	80
150.03.332	SK50 DIN69871 H135	6-32	135	32	62	63	80

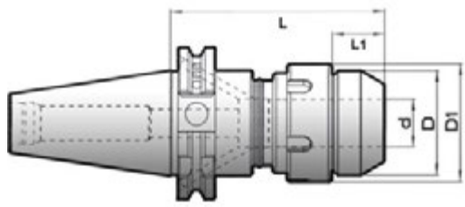
SK TAKIM TUTUCU SİSTEMLERİ

Gisstec®

ULTRA CLAMP BİLYALI TUTUCU 800 Nm

Form AD/B | G2.5 20.000 RPM





- Sıkma Kuvveti 800 Nm
- Salgı 0,003 mm
- Silindirik ve veldon şaftlı kesiciler için
- Vibrasyon sönümleme
- Kesici boy ayarı
- 100 bara kadar içten su verme

Sip. No.	Açıklama	d	L	D1	D	L1	Nm
140.3U.106	SK40 Ø6 x 74	6	74	32	26	11	150
140.3U.108	SK40 Ø8 x 75	8	75	32	27	11	180
140.3U.110	SK40 Ø10 x 79	10	79	37	32	13	320
140.3U.112	SK40 Ø12 x 85	12	85	37	35	20	380
140.3U.116	SK40 Ø16 x 88	16	88	44	40	21	400
140.3U.120	SK40 Ø20 x 90	20	90	49	46	23	520
140.3U.125	SK40 Ø25 x 97	25	97	54	52	26	550
140.3U.132	SK40 Ø32 x 105	32	105	68	67	33	800
140.3U.420	SK40 Ø20 x 150	20	150	49	46	23	520
140.3U.432	SK40 Ø32 x 150	32	150	68	67	33	800

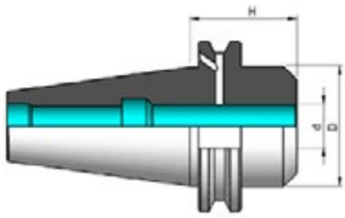
Sip. No.	Açıklama	d	L	D1	D	L1	Nm
150.3U.106	SK50 Ø6 x 74	6	74	32	26	11	150
150.3U.108	SK50 Ø8 x 75	8	75	32	27	11	180
150.3U.110	SK50 Ø10 x 79	10	79	37	32	13	320
150.3U.112	SK50 Ø12 x 85	12	85	37	35	20	380
150.3U.116	SK50 Ø16 x 88	16	88	44	40	21	400
150.3U.120	SK50 Ø20 x 90	20	90	49	46	23	520
150.3U.125	SK50 Ø25 x 97	25	97	54	52	26	550
150.3U.132	SK50 Ø32 x 105	32	103	68	67	33	800
150.3U.420	SK40 Ø20 x 150	20	150	49	46	23	520
150.3U.432	SK40 Ø32 x 150	32	150	68	67	33	800

VELDON TUTUCU KISA

Form AD/B | G6.3 12.000 RPM

DIN 6391 / 1835 B



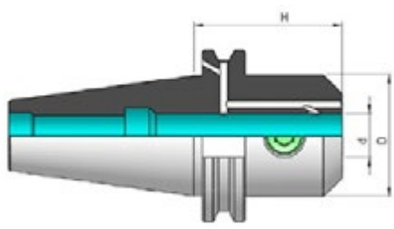


Sip. No.	Açıklama	H	d	D
140.04.016	SK40 DIN69871 H35 d16	35	16	44
140.04.020	SK40 DIN69871 H35 d20	35	20	44
140.04.025	SK40 DIN69871 H35 d25	35	25	50
140.04.032	SK40 DIN69871 H70 d32	70	32	72
150.04.016	SK50 DIN69871 H35 d16	35	16	70
150.04.020	SK50 DIN69871 H35 d20	35	20	70
150.04.025	SK50 DIN69871 H35 d25	35	25	70
150.04.032	SK50 DIN69871 H35 d32	35	32	80
150.04.040	SK50 DIN69871 H35 d40	35	40	80

VELDON TUTUCU İÇTEN SOĞUTMALI

DIN 6359 / 1835B





Sip. No.	Açıklama	H	d	D
140.4K.106	SK40 DIN69871 H 50 d 6	50	6	25
140.4K.108	SK40 DIN69871 H 50 d 8	50	8	28
140.4K.110	SK40 DIN69871 H 50 d10	50	10	35
140.4K.112	SK40 DIN69871 H 50 d12	50	12	42
140.4K.114	SK40 DIN69871 H 50 d14	50	14	44
140.4K.116	SK40 DIN69871 H 63 d16	63	16	48
140.4K.118	SK40 DIN69871 H 63 d18	63	18	50
140.4K.120	SK40 DIN69871 H 63 d20	63	20	52
140.4K.125	SK40 DIN69871 H100 d25	100	25	63
140.4K.132	SK40 DIN69871 H100 d32	100	32	72

Sip. No.	Açıklama	H	d	D
150.4K.106	SK50 DIN69871 H 63 d 6	63	6	25
150.4K.108	SK50 DIN69871 H 63 d 8	63	8	28
150.4K.110	SK50 DIN69871 H 63 d10	63	10	35
150.4K.112	SK50 DIN69871 H 63 d12	63	12	42
150.4K.114	SK50 DIN69871 H 63 d14	63	14	44
150.4K.116	SK50 DIN69871 H 63 d16	63	16	48
150.4K.118	SK50 DIN69871 H 63 d18	63	18	50
150.4K.120	SK50 DIN69871 H 63 d20	63	20	52
150.4K.125	SK50 DIN69871 H 80 d25	80	25	65
150.4K.132	SK50 DIN69871 H100 d32	100	32	72
150.4K.140	SK50 DIN69871 H120 d40	120	40	80

SK TAKIM TUTUCU SİSTEMLERİ

Gisstec®

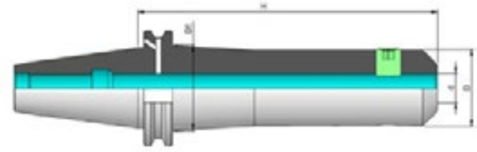
VELDON TUTUCU

Form AD/B | G6.3 12.000 RPM

DIN 6359 / 1835 B







Sip. No.	Açıklama	H	d	D	D1
140.04.406	SK40 DIN69871 H160 d 6	160	6	25	-
140.04.408	SK40 DIN69871 H160 d 8	160	8	28	-
140.04.410	SK40 DIN69871 H160 d10	160	10	35	-
140.04.412	SK40 DIN69871 H160 d12	160	12	42	-
140.04.414	SK40 DIN69871 H160 d14	160	14	44	-
140.04.416	SK40 DIN69871 H160 d16	160	16	48	-
140.04.418	SK40 DIN69871 H160 d18	160	18	50	-
140.04.420	SK40 DIN69871 H160 d20	160	20	50	-
140.04.425	SK40 DIN69871 H160 d25	160	25	65	-
140.04.432	SK40 DIN69871 H160 d32	160	32	72	-
140.04.506	SK40 DIN69871 H200 d 6	200	6	25	-
140.04.508	SK40 DIN69871 H200 d 8	200	8	28	-
140.04.510	SK40 DIN69871 H200 d10	200	10	35	-
140.04.512	SK40 DIN69871 H200 d12	200	12	42	-
140.04.514	SK40 DIN69871 H200 d14	200	14	44	-
140.04.516	SK40 DIN69871 H200 d16	200	16	48	-
140.04.518	SK40 DIN69871 H200 d18	200	18	50	-
140.04.520	SK40 DIN69871 H200 d20	200	20	50	-
140.04.525	SK40 DIN69871 H200 d25	200	25	65	-
140.04.532	SK40 DIN69871 H200 d32	200	32	72	-
140.04.132	SK40 DIN69871 H100 d32	100	32	72	-
140.04.140	SK40 DIN69871 H120 d40	120	40	80	-
140.04.206	SK40 DIN69871 H100 d 6	100	6	25	-
140.04.208	SK40 DIN69871 H100 d 8	100	8	28	-
140.04.210	SK40 DIN69871 H100 d10	100	10	35	-
140.04.212	SK40 DIN69871 H100 d12	100	12	42	-
140.04.214	SK40 DIN69871 H100 d14	100	14	44	-
140.04.216	SK40 DIN69871 H100 d16	100	16	48	-
140.04.218	SK40 DIN69871 H100 d18	100	18	50	-
140.04.220	SK40 DIN69871 H100 d20	100	20	50	-
140.04.306	SK40 DIN69871 H130 d 6	130	6	25	-
140.04.308	SK40 DIN69871 H130 d 8	130	8	28	-
140.04.310	SK40 DIN69871 H130 d10	130	10	35	-
140.04.312	SK40 DIN69871 H130 d12	130	12	42	-
140.04.314	SK40 DIN69871 H130 d14	130	14	44	-
140.04.316	SK40 DIN69871 H130 d16	130	16	48	-
140.04.318	SK40 DIN69871 H130 d18	130	18	50	-
140.04.320	SK40 DIN69871 H130 d20	130	20	50	-
140.04.325	SK40 DIN69871 H130 d25	130	25	65	-
150.04.106	SK50 DIN69871 H63 d 6	63	6	25	-
150.04.108	SK50 DIN69871 H63 d 8	63	8	28	-
150.04.110	SK50 DIN69871 H63 d10	63	10	35	-
150.04.112	SK50 DIN69871 H63 d12	63	12	42	-
150.04.114	SK50 DIN69871 H63 d14	63	14	44	-
150.04.116	SK50 DIN69871 H63 d16	63	16	48	-
150.04.118	SK50 DIN69871 H63 d18	63	18	50	-
150.04.120	SK50 DIN69871 H63 d20	63	20	52	-
150.04.125	SK50 DIN69871 H80 d25	80	25	65	-
150.04.132	SK50 DIN69871 H100 d32	100	32	72	-
150.04.140	SK50 DIN69871 H120 d40	120	40	80	-

Sip. No.	Açıklama	H	d	D	D1
150.04.406	SK50 DIN69871 H160 d 6	160	6	25	-
150.04.408	SK50 DIN69871 H160 d 8	160	8	28	-
150.04.410	SK50 DIN69871 H160 d10	160	10	35	-
150.04.412	SK50 DIN69871 H160 d12	160	12	42	-
150.04.414	SK50 DIN69871 H160 d14	160	14	44	-
150.04.416	SK50 DIN69871 H160 d16	160	16	48	-
150.04.418	SK50 DIN69871 H160 d18	160	18	50	-
150.04.420	SK50 DIN69871 H160 d20	160	20	52	-
150.04.425	SK50 DIN69871 H160 d25	160	25	65	-
150.04.432	SK50 DIN69871 H160 d32	160	32	65	-
150.04.440	SK50 DIN69871 H160 d40	160	40	80	-
150.04.506	SK50 DIN69871 H200 d 6	200	6	25	-
150.04.508	SK50 DIN69871 H200 d 8	200	8	28	-
150.04.510	SK50 DIN69871 H200 d10	200	10	35	-
150.04.512	SK50 DIN69871 H200 d12	200	12	42	-
150.04.514	SK50 DIN69871 H200 d14	200	14	44	-
150.04.516	SK50 DIN69871 H200 d16	200	16	48	-
150.04.518	SK50 DIN69871 H200 d18	200	18	50	-
150.04.520	SK50 DIN69871 H200 d20	200	20	52	-
150.04.525	SK50 DIN69871 H200 d25	200	25	65	-
150.04.532	SK50 DIN69871 H200 d32	200	32	72	-
150.04.540	SK50 DIN69871 H200 d40	200	40	80	-
140.04.106	SK40 DIN69871 H50 d 6	50	6	25	-
140.04.108	SK40 DIN69871 H50 d 8	50	8	28	-
140.04.110	SK40 DIN69871 H50 d10	50	10	35	-
140.04.112	SK40 DIN69871 H50 d12	50	12	42	-
140.04.114	SK40 DIN69871 H50 d14	50	14	44	-
140.04.116	SK40 DIN69871 H63 d16	63	16	48	-
140.04.118	SK40 DIN69871 H63 d18	63	18	50	-
140.04.120	SK40 DIN69871 H63 d20	63	20	52	-
140.04.125	SK40 DIN69871 H100 d25	100	25	65	-
150.04.206	SK50 DIN69871 H100 d 6	100	6	25	-
150.04.208	SK50 DIN69871 H100 d 8	100	8	28	-
150.04.210	SK50 DIN69871 H100 d10	100	10	35	-
150.04.212	SK50 DIN69871 H100 d12	100	12	42	-
150.04.214	SK50 DIN69871 H100 d14	100	14	44	-
150.04.216	SK50 DIN69871 H100 d16	100	16	48	-
150.04.218	SK50 DIN69871 H100 d18	100	18	50	-
150.04.220	SK50 DIN69871 H100 d20	100	20	52	-
150.04.225	SK50 DIN69871 H100 d25	100	25	65	-
150.04.306	SK50 DIN69871 H130 d 6	130	6	25	-
150.04.308	SK50 DIN69871 H130 d 8	130	8	28	-
150.04.310	SK50 DIN69871 H130 d10	130	10	35	-
150.04.312	SK50 DIN69871 H130 d12	130	12	42	-
150.04.314	SK50 DIN69871 H130 d14	130	14	44	-
150.04.316	SK50 DIN69871 H130 d16	130	16	48	-
150.04.318	SK50 DIN69871 H130 d18	130	18	50	-
150.04.320	SK50 DIN69871 H130 d20	130	20	52	-
150.04.325	SK50 DIN69871 H130 d25	130	25	65	-
150.04.332	SK50 DIN69871 H130 d32	130	32	72	-

SK TAKIM TUTUCU SİSTEMLERİ

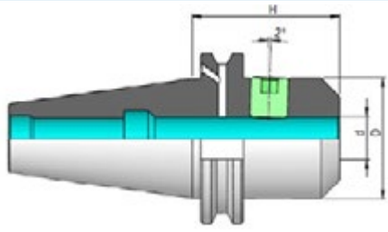
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VELDON TUTUCU, 2° AÇILI

Form AD/B | G2.5 20.000 RPM

DIN 6359 / 1835 E





Sip. No.	Açıklama	H	d	D
140.05.106	SK40 DIN69871 H 50 d 6	50	6	25
140.05.108	SK40 DIN69871 H 50 d 8	50	8	28
140.05.110	SK40 DIN69871 H 50 d10	50	10	35
140.05.112	SK40 DIN69871 H 50 d12	50	12	42
140.05.114	SK40 DIN69871 H 50 d14	50	14	44
140.05.116	SK40 DIN69871 H 63 d16	63	16	48
140.05.118	SK40 DIN69871 H 63 d18	63	18	50
140.05.120	SK40 DIN69871 H 63 d20	63	20	52
140.05.125	SK40 DIN69871 H100 d25	100	25	65
140.05.132	SK40 DIN69871 H100 d32	100	32	72
140.05.140	SK40 DIN69871 H115 d40	115	40	80

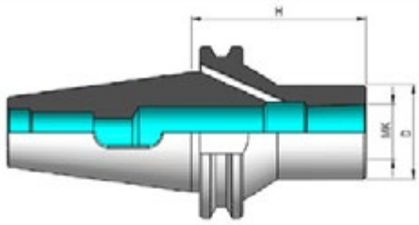
Sip. No.	Açıklama	H	d	D
150.05.106	SK50 DIN69871 H 63 d 6	63	6	25
150.05.108	SK50 DIN69871 H 63 d 8	63	8	28
150.05.110	SK50 DIN69871 H 63 d10	63	10	35
150.05.112	SK50 DIN69871 H 63 d12	63	12	42
150.05.114	SK50 DIN69871 H 63 d14	63	14	44
150.05.116	SK50 DIN69871 H 63 d16	63	16	48
150.05.118	SK50 DIN69871 H 63 d18	63	18	50
150.05.120	SK50 DIN69871 H 63 d20	63	20	52
150.05.125	SK50 DIN69871 H 80 d25	80	25	65
150.05.132	SK50 DIN69871 H100 d32	100	32	72
150.05.140	SK50 DIN69871 H120 d40	120	40	80

MORS ADAPTÖRÜ

Form AD/B | G2.5 20.000 RPM

DIN 6383





Sip. No.	Açıklama	H	D	MK
140.07.101	SK40 DIN69871 H 50 MK1	50	25	1
140.07.102	SK40 DIN69871 H 50 MK2	50	32	2
140.07.103	SK40 DIN69871 H 70 MK3	70	40	3
140.07.104	SK40 DIN69871 H 95 MK4	95	48	4

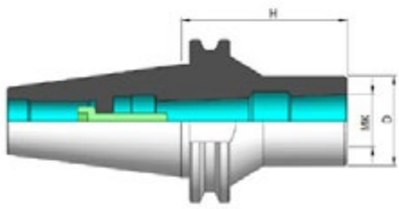
Sip. No.	Açıklama	H	D	MK
150.07.101	SK50 DIN69871 H 45 MK1	45	25	1
150.07.102	SK50 DIN69871 H 60 MK2	60	32	2
150.07.103	SK50 DIN69871 H 65 MK3	65	40	3
150.07.104	SK50 DIN69871 H 95 MK4	95	48	4
150.07.105	SK50 DIN69871 H105 MK5	105	63	5

ÇEKTİRMELİ MORS ADAPTÖRÜ

Form A | G6.3 12.000 RPM

DIN 6364





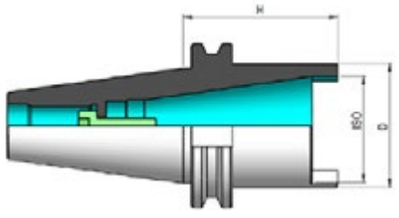
Sip. No.	Açıklama	H	D	MK
140.08.101	SK40 DIN69871 H 50 CMK1	50	25	1
140.08.102	SK40 DIN69871 H 50 CMK2	50	32	2
140.08.103	SK40 DIN69871 H 70 CMK3	70	40	3
140.08.104	SK40 DIN69871 H 95 CMK4	95	48	4
150.08.101	SK50 DIN69871 H 50 CMK1	50	25	1

Sip. No.	Açıklama	H	D	MK
150.08.102	SK50 DIN69871 H 50 CMK2	50	32	2
150.08.103	SK50 DIN69871 H 65 CMK3	65	40	3
150.08.104	SK50 DIN69871 H 95 CMK4	95	48	4
150.08.105	SK50 DIN69871 H100 CMK5	100	63	5

REDÜKSİYON ÇEKTİRMELİ

Form A | G6.3 12.000 RPM





Sip. No.	Açıklama	H	D	ISO
140.09.130	SK40 DIN69871 H 70 ISO30	70	49	30
150.09.140	SK50 DIN69871 H 70 ISO40	70	68	40

Sip. No.	Açıklama	H	D	ISO
150.09.140	SK50 DIN69871 H 70 ISO40	70	68	40
150.09.150	SK50 DIN69871 H 120 ISO50	120	100	50

SK TAKIM TUTUCU SİSTEMLERİ

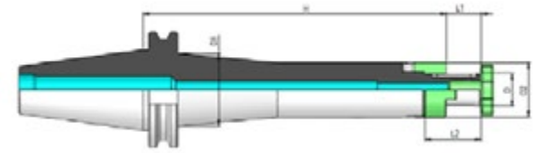
Gisstec®

KOMBİNE MALAFA

Form AD | G6.3 12.000 RPM

DIN 6358





Sip. No.	Açıklama	H	L1	L2	D	D2	D3
140.10.116	SK40 DIN69871 H55 D16	55	17	27	16	32	-
140.10.122	SK40 DIN69871 H55 D22	55	19	31	22	40	-
140.10.127	SK40 DIN69871 H55 D27	55	21	33	27	48	-
140.10.132	SK40 DIN69871 H60 D32	60	24	38	32	58	-
140.10.140	SK40 DIN69871 H60 D40	60	27	41	40	70	-
140.10.216	SK40 DIN69871 H100 D16	100	17	27	16	32	-
140.10.222	SK40 DIN69871 H100 D22	100	19	31	22	40	-
140.10.227	SK40 DIN69871 H100 D27	100	21	33	27	48	-
140.10.232	SK40 DIN69871 H100 D32	100	24	38	32	58	-
140.10.240	SK40 DIN69871 H100 D40	100	27	41	40	70	-
140.10.316	SK40 DIN69871 H130 D16	130	17	27	16	32	-
140.10.322	SK40 DIN69871 H130 D22	130	19	31	22	40	-
140.10.327	SK40 DIN69871 H130 D27	130	21	33	27	48	-
140.10.332	SK40 DIN69871 H130 D32	130	24	38	32	58	-
140.10.340	SK40 DIN69871 H130 D40	130	27	41	40	70	-
140.10.416	SK40 DIN69871 H160 D16	160	17	27	16	32	40
140.10.422	SK40 DIN69871 H160 D22	160	19	31	22	40	-
140.10.427	SK40 DIN69871 H160 D27	160	21	33	27	48	-
140.10.432	SK40 DIN69871 H160 D32	160	24	38	32	58	-
140.10.440	SK40 DIN69871 H160 D40	160	27	41	40	70	-
140.10.516	SK40 DIN69871 H200 D16	200	17	27	16	32	40
140.10.522	SK40 DIN69871 H200 D22	200	19	31	22	40	50
140.10.527	SK40 DIN69871 H200 D27	200	21	33	27	48	-
140.10.532	SK40 DIN69871 H200 D32	200	24	38	32	58	-
140.10.540	SK40 DIN69871 H200 D40	200	27	41	40	70	-

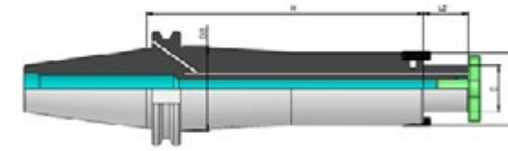
Sip. No.	Açıklama	H	L1	L2	D	D2	D3
150.10.116	SK50 DIN69871 H55 D16	55	17	27	16	32	-
150.10.122	SK50 DIN69871 H55 D22	55	19	31	22	40	-
150.10.127	SK50 DIN69871 H55 D27	55	21	33	27	48	-
150.10.132	SK50 DIN69871 H55 D32	55	24	38	32	58	-
150.10.140	SK50 DIN69871 H55 D40	55	27	41	40	70	-
150.10.216	SK50 DIN69871 H100 D16	100	17	27	16	32	-
150.10.222	SK50 DIN69871 H100 D22	100	19	31	22	40	-
150.10.227	SK50 DIN69871 H100 D27	100	21	33	27	48	-
150.10.232	SK50 DIN69871 H100 D32	100	24	38	32	58	-
150.10.240	SK50 DIN69871 H100 D40	100	27	41	40	70	-
150.10.316	SK50 DIN69871 H130 D16	130	17	27	16	32	-
150.10.322	SK50 DIN69871 H130 D22	130	19	31	22	40	-
150.10.327	SK50 DIN69871 H130 D27	130	21	33	27	48	-
150.10.332	SK50 DIN69871 H130 D32	130	24	38	32	58	-
150.10.340	SK50 DIN69871 H130 D40	130	27	41	40	70	-
150.10.416	SK50 DIN69871 H160 D16	160	17	27	16	32	40
150.10.422	SK50 DIN69871 H160 D22	160	19	31	22	40	-
150.10.427	SK50 DIN69871 H160 D27	160	21	33	27	48	-
150.10.432	SK50 DIN69871 H160 D32	160	24	38	32	58	-
150.10.440	SK50 DIN69871 H160 D40	160	27	41	40	70	-
150.10.516	SK50 DIN69871 H200 D16	200	17	27	16	32	40
150.10.522	SK50 DIN69871 H200 D22	200	19	31	22	40	50
150.10.527	SK50 DIN69871 H200 D27	200	21	33	27	48	-
150.10.532	SK50 DIN69871 H200 D32	200	24	38	32	58	-
150.10.540	SK50 DIN69871 H200 D40	200	27	41	40	70	-

ALIN KAMALI MALAFA

Form AD/B | G6.3 12.000 RPM

DIN 6357





Sip. No.	Açıklama	H	L2	D	D2	D3
140.11.116	SK40 DIN69871 H 45 D16	45	17	16	38	-
140.11.122	SK40 DIN69871 H 45 D22	45	19	22	48	-
140.11.127	SK40 DIN69871 H 50 D27	50	21	27	58	-
140.11.132	SK40 DIN69871 H 55 D32	55	24	32	78	-
140.11.140	SK40 DIN69871 H 55 D40	55	27	40	88	-
140.11.216	SK40 DIN69871 H100 D16	100	17	16	38	-
140.11.222	SK40 DIN69871 H100 D22	100	19	22	48	-
140.11.227	SK40 DIN69871 H100 D27	100	21	27	58	-
140.11.232	SK40 DIN69871 H100 D32	100	24	32	78	-
140.11.240	SK40 DIN69871 H100 D40	100	27	40	88	-
140.11.316	SK40 DIN69871 H130 D16	130	17	16	38	-
140.11.322	SK40 DIN69871 H130 D22	130	19	22	48	-
140.11.327	SK40 DIN69871 H130 D27	130	21	27	58	-
140.11.332	SK40 DIN69871 H130 D32	130	24	32	78	-
140.11.340	SK40 DIN69871 H130 D40	130	27	40	88	-
140.11.416	SK40 DIN69871 H160 D16	160	17	16	38	45
140.11.422	SK40 DIN69871 H160 D22	160	19	22	48	-
140.11.427	SK40 DIN69871 H160 D27	160	21	27	58	-
140.11.432	SK40 DIN69871 H160 D32	160	24	32	78	-
140.11.440	SK40 DIN69871 H160 D40	160	27	40	88	-
140.11.516	SK40 DIN69871 H200 D16	200	17	16	38	45
140.11.522	SK40 DIN69871 H200 D22	200	19	22	48	-
140.11.527	SK40 DIN69871 H200 D27	200	21	27	58	-
140.11.532	SK40 DIN69871 H200 D32	200	24	32	78	-
140.11.540	SK40 DIN69871 H200 D40	200	27	40	88	-

Sip. No.	Açıklama	H	L2	D	D2	D3
150.11.116	SK50 DIN69871 H 45 D16	45	17	16	38	-
150.11.122	SK50 DIN69871 H 45 D22	45	19	22	48	-
150.11.127	SK50 DIN69871 H 45 D27	45	21	27	58	-
150.11.132	SK50 DIN69871 H 55 D32	55	24	32	78	-
150.11.140	SK50 DIN69871 H 55 D40	55	27	40	88	-
150.11.216	SK50 DIN69871 H100 D16	100	17	16	38	-
150.11.222	SK50 DIN69871 H100 D22	100	19	22	48	-
150.11.227	SK50 DIN69871 H100 D27	100	21	27	58	-
150.11.232	SK50 DIN69871 H100 D32	100	24	32	78	-
150.11.240	SK50 DIN69871 H100 D40	100	27	40	88	-
150.11.316	SK50 DIN69871 H130 D16	130	17	16	38	-
150.11.322	SK50 DIN69871 H130 D22	130	19	22	48	-
150.11.327	SK50 DIN69871 H130 D27	130	21	27	58	-
150.11.332	SK50 DIN69871 H130 D32	130	24	32	78	-
150.11.340	SK50 DIN69871 H130 D40	130	27	40	88	-
150.11.416	SK50 DIN69871 H160 D16	160	17	16	38	45
150.11.422	SK50 DIN69871 H160 D22	160	19	22	48	-
150.11.427	SK50 DIN69871 H160 D27	160	21	27	58	-
150.11.432	SK50 DIN69871 H160 D32	160	24	32	78	-
150.11.440	SK50 DIN69871 H160 D40	160	27	40	88	-

SK TAKIM TUTUCU SİSTEMLERİ

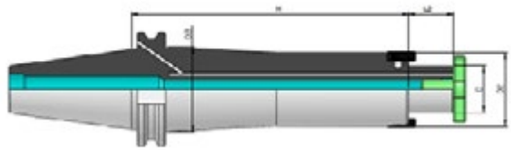
Gisstec®

ALIN KAMALI MALAFA - UZUN BOY

Form AD | G6.3 12.000 RPM

DIN 6357





Sip. No.	Açıklama	H	L2	D	D2	D3
150.11.516	SK50 DIN69871 H200 D16	200	17	16	38	46
150.11.522	SK50 DIN69871 H200 D22	200	19	22	48	60
150.11.527	SK50 DIN69871 H200 D27	200	21	27	58	78
150.11.532	SK50 DIN69871 H200 D32	200	24	32	78	78
150.11.540	SK50 DIN69871 H200 D40	200	27	40	88	88
150.11.616	SK50 DIN69871 H250 D16	250	17	16	38	52
150.11.622	SK50 DIN69871 H250 D22	250	19	22	48	62
150.11.627	SK50 DIN69871 H250 D27	250	21	27	58	72
150.11.632	SK50 DIN69871 H250 D32	250	24	32	78	78
150.11.640	SK50 DIN69871 H250 D40	250	27	40	88	88

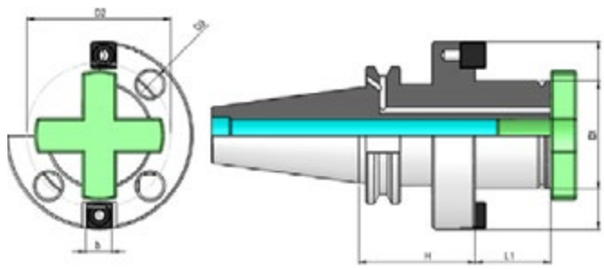
Sip. No.	Açıklama	H	L2	D	D2	D3
150.11.716	SK50 DIN69871 H300 D16	300	17	16	38	54
150.11.722	SK50 DIN69871 H300 D22	300	19	22	48	65
150.11.727	SK50 DIN69871 H300 D27	300	21	27	58	76
150.11.732	SK50 DIN69871 H300 D32	300	24	32	78	78
150.11.740	SK50 DIN69871 H300 D40	300	27	40	88	88
150.11.816	SK50 DIN69871 H350 D16	350	17	16	38	56
150.11.822	SK50 DIN69871 H350 D22	350	19	22	48	66
150.11.827	SK50 DIN69871 H350 D27	350	21	27	58	76
150.11.832	SK50 DIN69871 H350 D32	350	24	32	78	78

ALIN KAMALI MALAFA

Form AD/B | G6.3 12.000 RPM

DIN 6357





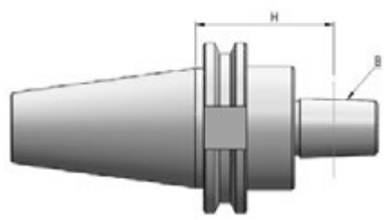
Sip. No.	Açıklama	H	D	D1	D2	D3	L1	b
140.13.140	SK40 DIN69871 H60 D40	60	40	89	66,7	M12	30	15,9
150.13.140	SK50 DIN69871 H70 D40	70	40	89	66,7	M12	30	15,9
150.13.160	SK50 DIN69871 H70 D60	70	60	129	101,6	M16	40	25,4

MANDREN MALAFASI

Form A | G6.3 12.000 RPM

DIN 238





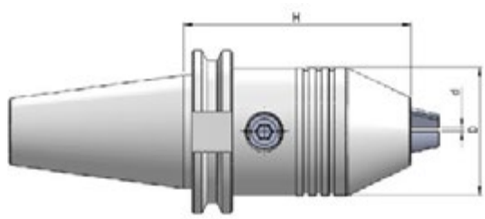
Sip. No.	Açıklama	H	B
140.14.112	SK40 DIN69871 H40 B12	40	12
140.14.116	SK40 DIN69871 H40 B16	40	16
140.14.118	SK40 DIN69871 H40 B18	40	18

Sip. No.	Açıklama	H	B
150.14.112	SK50 DIN69871 H40 B12	40	12
150.14.116	SK50 DIN69871 H40 B16	40	16
150.14.118	SK50 DIN69871 H40 B18	40	18

NC-MANDREN MALAFASI, SAĞ-SOL DÖNÜŞLÜ

Form AD/B | G6.3 12.000 RPM





★ Form AD

Sip. No.	Açıklama	H	D	d	
140.15.213	SK40 DIN69871 H87,5	d13	87,5	50	1-13
140.15.216	SK40 DIN69871 H93	d16	93	50	2,5-16
150.15.213	SK50 DIN69871 H87,5	d13	87,5	50	1-13
150.15.216	SK50 DIN69871 H93	d16	93	50	2,5-16

Sip. No.	Açıklama	H	D	d	
★ 140.15.108	SK40 DIN69871 H78	d13	78	36	1-13
★ 140.15.113	SK40 DIN69871 H87,5	d13	87,5	50	1-13
★ 140.15.116	SK40 DIN69871 H93	d16	93	50	3-16
★ 150.15.113	SK50 DIN69871 H87,5	d13	87,5	50	1-13
★ 150.15.116	SK50 DIN69871 H93	d16	93	50	3-16

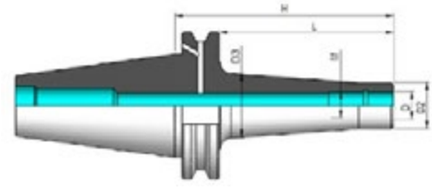
SK TAKIM TUTUCU SİSTEMLERİ

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VİDALI FREZE TAKIMI

Form AD/B | G2.5 20.000 RPM



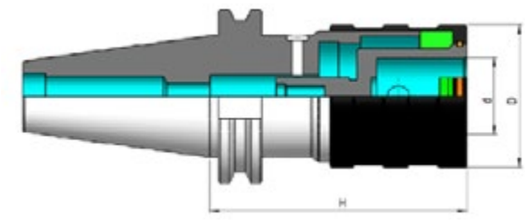


Sip. No.	Açıklama	D	D2	D3	H	L	M
140.12.108	SK40 DIN69871 M8X55	8,5	13	15	55	36	M 8X1,25
140.12.110	SK40 DIN69871 M10x55	10,5	18	19,5	55	36	M10X1,5
140.12.112	SK40 DIN69871 M12x55	12,5	21	24	55	36	M12X1,75
140.12.116	SK40 DIN69871 M16X55	17	29	34	55	36	M16X2
140.12.208	SK40 DIN69871 M 8x75	8,5	13	23	75	56	M 8X1,25
140.12.210	SK40 DIN69871 M10x75	10,5	18	25	75	56	M10X1,5
140.12.212	SK40 DIN69871 M12x75	12,5	21	24	75	56	M12X1,75
140.12.216	SK40 DIN69871 M16x75	17	29	34	75	56	M16X2
140.12.308	SK40 DIN69871 M 8x95	8,5	13	23	95	76	M 8X1,25
140.12.310	SK40 DIN69871 M10x95	10,5	18	28	95	76	M10X1,5
140.12.312	SK40 DIN69871 M12x95	12,5	21	31	95	76	M12X1,75
140.12.316	SK40 DIN69871 M16x95	17	29	34	95	76	M16X2
140.12.410	SK40 DIN69871 M10x115	10,5	18	28	115	96	M10X1,5
140.12.412	SK40 DIN69871 M12x115	12,5	21	31	115	96	M12X1,75
140.12.416	SK40 DIN69871 M16x115	17	29	39	115	96	M16X2
140.12.510	SK40 DIN69871 M10x145	10,5	18	34	145	126	M10X1,5
140.12.512	SK40 DIN69871 M12x145	12,5	21	38	145	126	M12X1,75
140.12.516	SK40 DIN69871 M16x145	17	29	39	145	126	M16X2
150.12.110	SK50 DIN69871 M10X65	10,5	18	19,5	65	46	M10X1,5
150.12.112	SK50 DIN69871 M12X65	12,5	21	24	65	46	M12X1,75
150.12.116	SK50 DIN69871 M16X65	17	29	34	65	46	M16X2
150.12.210	SK50 DIN69871 M10x85	10,5	18	28	85	66	M10X1,5
150.12.212	SK50 DIN69871 M12x85	12,5	21	32	85	66	M12X1,75
150.12.216	SK50 DIN69871 M16x85	17	29	36	85	66	M16X2
150.12.310	SK50 DIN69871 M10x135	10,5	18	28	135	116	M10X1,5
150.12.312	SK50 DIN69871 M12x135	12,5	21	32	135	116	M12X1,75
150.12.316	SK50 DIN69871 M16x135	17	29	36	135	116	M16X2
150.12.410	SK50 DIN69871 M10x185	10,5	18	32	185	166	M10X1,5
150.12.412	SK50 DIN69871 M12x185	12,5	21	36	185	166	M12X1,75
150.12.416	SK50 DIN69871 M16x185	17	29	42	185	166	M16X2
150.12.512	SK50 DIN69871 M12x235	12,5	21	42	235	216	M12X1,75
150.12.516	SK50 DIN69871 M16x235	17	29	44	235	216	M16X2

KILAVUZ ÇEKME BAŞLIĞI, KOMPANZELİ

Form A





Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
140.16.112	SK40 DIN69871 H60 GR1	60	19	38	M3-M14	9-9
140.16.120	SK40 DIN69871 H100 GR2	100	31	55	M5-M24	15-15
140.16.136	SK40 DIN69871 H138 GR3	138	48	79	M14-M36	24-24
150.16.112	SK50 DIN69871 H62 GR1	62	19	38	M3-M14	9-9
150.16.120	SK50 DIN69871 H83 GR2	83	31	55	M5-M24	15-15
150.16.136	SK50 DIN69871 H133 GR3	133	48	79	M14-M36	24-24

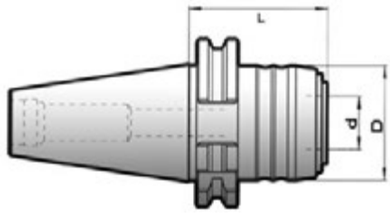
SK TAKIM TUTUCU SİSTEMLERİ

Gisstec®

SENKRONİZE KILAVUZ ÇEKME BAŞLIĞI

Form AD





Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
140.26.112	SK40 DIN69871 H53 ER16	53	20	43	M3-M12	0,2 - 1
140.26.120	SK40 DIN69871 H90 ER25	90	32	60	M6-M20	0,2 - 1
150.26.112	SK50 DIN69871 H53 ER16	53	20	43	M3-M12	0,2 - 1
150.26.120	SK50 DIN69871 H74 ER25	74	32	60	M6-M20	0,2 - 1
150.26.133	SK50 DIN69871 H115 ER40 AD/B	115	20	43	M14-M33	0,2 - 1

ROHLING, ÖZEL TAKIM AMAÇLI

Form AD





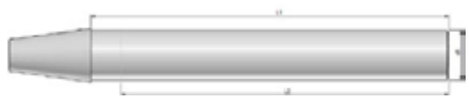
Sip. No.	Açıklama	H	D
140.17.263	SK40 DIN69871 Ø63 x 250	250	63

Sip. No.	Açıklama	H	D
150.17.397	SK50 DIN69871 Ø97 x 315	315	97

KONTROL MASTARI

Form A





• Açıklama : Tezgah fener milinin ISO normu R-230'a göre uygunluğunu kontrol etmek için

Sip. No.	Açıklama	d1	l1	l2	
140.18.300	SK40 DIN69871 Ø40 x 300	40	300	269	0,003

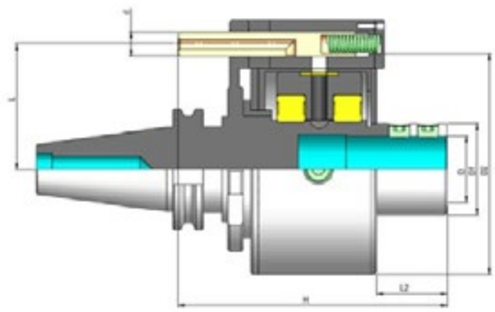
Sip. No.	Açıklama	d1	l1	l2	
150.18.300	SK50 DIN69871 Ø50 x 300	50	300	267	0,003

DIŞTAN SOĞUTMALI TAKIM TUTUCU

Form A | max. 2.500 RPM

P max.= 20 bar





Sip. No.	Açıklama	H	L	L2	D	D1	D2	d
140.22.132	SK40 DIN69871 D32	150	65	33,8	32	48	95	18
150.22.140	SK50 DIN69871 D40	160	80	49	40	58	110	18

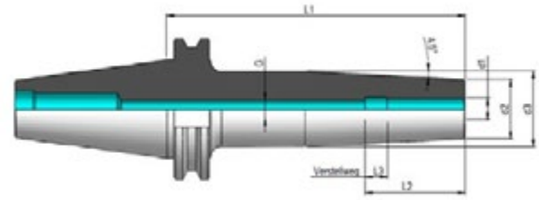
SK TAKIM TUTUCU SİSTEMLERİ

Gisstec®

ISITMALI TAKIM TUTUCU

Form AD/B | G2.5 25.000 RPM





- Açıklama : Şaftı karbür ve HSS takımlar için şaft toleransı Ø6 -Ø32 arası h6 Ø3-4-5 arası h4 tolerans

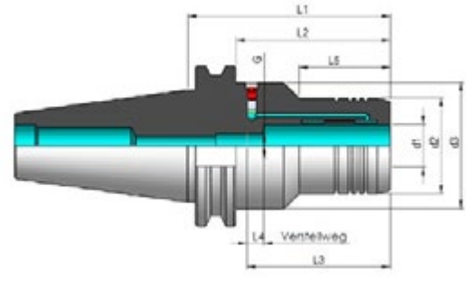
Sip. No.	SK	d1	l1	d2	d3	l2	l3	g
140.25.103	SK40	3	80	11	15	10	-	-
140.25.104	SK40	4	80	14	22	20	5	M3
140.25.105	SK40	5	80	16	22	20	-	M4
140.25.106	SK40	6	80	21	27	36	10	M5
140.25.108	SK40	8	80	21	27	36	-	M6
140.25.110	SK40	10	80	24	32	41	-	M8x1
140.25.112	SK40	12	80	24	32	47	-	M10x1
140.25.114	SK40	14	80	27	34	47	-	M10x1
140.25.116	SK40	16	80	27	34	50	-	M12x1
140.25.118	SK40	18	80	33	42	50	-	M12x1
140.25.120	SK40	20	80	33	42	52	-	M16x1
140.25.125	SK40	25	100	44	53	58	-	M16x1
140.25.132	SK40	32	100	44	53	62	-	M16x1
140.25.306	SK40	6	120	21	27	36	10	M5
140.25.308	SK40	8	120	21	27	36	-	M6
140.25.310	SK40	10	120	24	32	41	-	M8x1
140.25.312	SK40	12	120	24	32	47	-	M10x1
140.25.314	SK40	14	120	27	34	47	-	M10x1
140.25.316	SK40	16	120	27	34	50	-	M12x1
140.25.318	SK40	18	120	33	42	50	-	M12x1
140.25.320	SK40	20	120	33	42	52	-	M16x1
140.25.325	SK40	25	120	44	53	58	-	M16x1
140.25.332	SK40	32	120	44	53	62	-	M16x1
140.25.406	SK40	6	160	21	27	36	10	M5
140.25.408	SK40	8	160	21	27	36	-	M6
140.25.410	SK40	10	160	24	32	41	-	M8x1
140.25.412	SK40	12	160	24	32	47	-	M10x1
140.25.414	SK40	14	160	27	34	47	-	M10x1
140.25.416	SK40	16	160	27	34	50	-	M12x1
140.25.418	SK40	18	160	33	42	50	-	M12x1
140.25.420	SK40	20	160	33	42	52	-	M16x1
140.25.425	SK40	25	160	44	53	58	-	M16x1
140.25.432	SK40	32	160	33	42	52	-	M16x1

Sip. No.	SK	d1	l1	d2	d3	l2	l3	g
150.25.106	SK50	6	80	21	27	36	-	M5
150.25.108	SK50	8	80	21	27	36	-	M6
150.25.110	SK50	10	80	24	32	41	-	M8x1
150.25.112	SK50	12	80	24	32	47	-	M10x1
150.25.114	SK50	14	80	27	34	47	-	M10x1
150.25.116	SK50	16	80	27	34	50	-	M12x1
150.25.118	SK50	18	80	33	42	50	-	M12x1
150.25.120	SK50	20	80	33	42	52	-	M16x1
150.25.125	SK50	25	100	44	53	58	-	M16x1
150.25.132	SK50	32	100	44	53	62	-	M16x1
150.25.306	SK50	6	120	21	27	36	10	M5
150.25.308	SK50	8	120	21	27	36	-	M6
150.25.310	SK50	10	120	24	32	41	-	M8x1
150.25.312	SK50	12	120	24	32	47	-	M10x1
150.25.314	SK50	14	120	27	34	47	-	M10x1
150.25.316	SK50	16	120	27	34	50	-	M12x1
150.25.318	SK50	18	120	33	42	50	-	M12x1
150.25.320	SK50	20	120	33	42	52	-	M16x1
150.25.325	SK50	25	120	44	53	58	-	M16x1
150.25.332	SK50	32	120	44	53	62	-	M16x1
150.25.406	SK50	6	160	21	27	36	10	M5
150.25.408	SK50	8	160	21	27	36	-	M6
150.25.410	SK50	10	160	24	32	41	-	M8x1
150.25.412	SK50	12	160	24	32	47	-	M10x1
150.25.414	SK50	14	160	27	34	47	-	M10x1
150.25.416	SK50	16	160	27	34	50	-	M12x1
150.25.418	SK50	18	160	33	42	50	-	M12x1
150.25.420	SK50	20	160	33	42	52	-	M16x1
150.25.425	SK50	25	160	44	53	58	-	M16x1
150.25.432	SK50	32	160	44	53	62	-	M16x1

HİDROLİK TAKIM TUTUCU

Form AD/B | G2.5 25.000 RPM





Sip. No.	SK	d1	d2	d3	l1	l2	l3	l4	l5	g
140.30.106	SK40	6	26	50	68	49	37	10	33	M5
140.30.108	SK40	8	28	50	68	49	37	10	33	M6
140.30.110	SK40	10	30	50	72	53	42	10	37	M8x1
140.30.112	SK40	12	32	50	77	58	47	10	42	M10x1
140.30.114	SK40	14	34	50	77	58	47	10	42	M10x1
140.30.116	SK40	16	38	50	80	61	52	10	43	M12x1
140.30.118	SK40	18	40	50	80	61	52	10	43	M12x1
140.30.120	SK40	20	42	50	82	63	52	10	47	M12x1
140.30.125	SK40	25	50	63	117	98	58	10	51	M16x1
140.30.132	SK40	32	60	63	117	98	62	10	56	M16x1

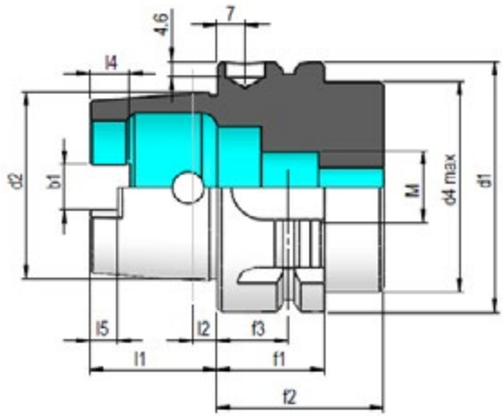
Sip. No.	SK	d1	d2	d3	l1	l2	l3	l4	l5	g
150.30.106	SK50	6	26	80	68	49	37	10	33	M5
150.30.108	SK50	8	28	80	68	49	37	10	33	M6
150.30.110	SK50	10	30	80	72	53	42	10	37	M8x1
150.30.112	SK50	12	32	80	77	58	47	10	42	M10x1
150.30.114	SK50	14	34	80	77	58	47	10	42	M10x1
150.30.116	SK50	16	38	80	80	61	52	10	45	M12x1
150.30.118	SK50	18	40	80	80	61	52	10	45	M12x1
150.30.120	SK50	20	42	80	82	63	52	10	47	M16x1
150.30.125	SK50	25	50	80	87	68	58	10	52	M16x1
150.30.132	SK50	32	60	80	91	72	62	10	56	M16x1
150.30.140	SK50	40	70	70	120	101	74	10	101	M16x1

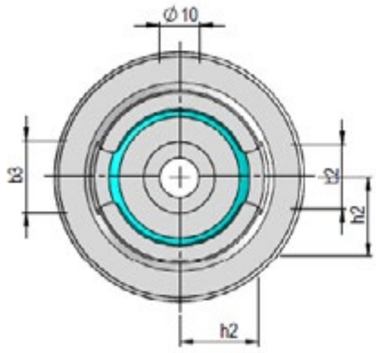
HSK-A TAKIM TUTUCU SİSTEMLERİ

Gisstec®

KONİK ŞAFT ÖLÇÜLERİ

Form A





1Malzeme :

- Alaşımlı semente çeliği çekme mukavemeti min. 950 N/mm2

2Teknik Özelliği :

- Sertlik HRC 58 ± 2 sertlik derinliği 0,6 mm ± 0,2 mm, karartılmış

3Hassasiyeti :

- Konik açı tolerans kalitesi
- AT3Konik yüzey kalitesi max. 0,001 mm

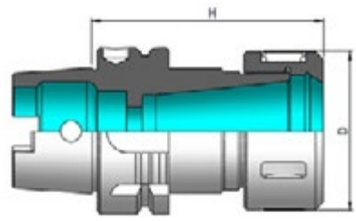
d1	d2	d4	l1	l2	l4	l5	M	f1	f2	f3	b1	b2	b3	h2
32	24	26	16	3,2	5,0	3,0	M10x1	20	35	16	7,05	7	9	9,5
40	30	34	20	4,0	6,0	3,5	M12x1	20	35	16	8,05	9	11	12
50	38	42	25	5,0	7,5	4,5	M16x1	26	42	18	10,54	12	14	15,5
63	48	53	32	6,3	10,0	6,0	M18x1	26	42	18	12,54	16	18	20
80	60	67	40	8,0	12,0	8,0	M20x1,5	26	42	18	16,04	18	20	25
100	75	85	50	10,0	15,0	10,0	M24x1,5	29	45	20	20,02	20	22	31,5

OZ PENS BAŞLIĞI

Form A | G6.3 20.000 RPM

DIN 238





Sip. No.	Açıklama	H	Kapasite	D
63A.01.216	HSK63A DIN69893 H100 OZ16	100	2-16	43
63A.01.225	HSK63A DIN69893 H100 OZ25	100	2-25	60
63A.01.232	HSK63A DIN69893 H120 OZ32	120	4-32	72

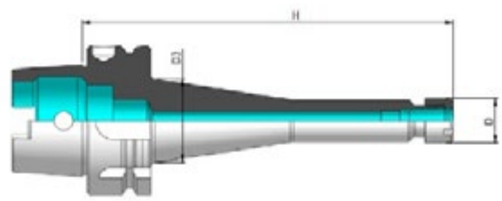
Sip. No.	Açıklama	H	Kapasite	D
100A.01.216	HSK100A DIN69893 H100 OZ16	110	2-16	43
100A.01.225	HSK100A DIN69893 H120 OZ25	120	2-25	60
100A.01.232	HSK100A DIN69893 H130 OZ32	130	4-32	72

ER MİNİ PENS BAŞLIĞI

Form A | G6.3 20.000 RPM

DIN 6499





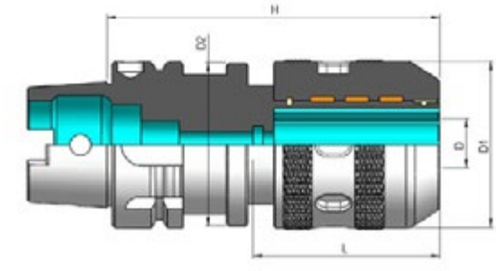
Sip. No.	Açıklama	H	Kapasite	D	D3
63A.2M.207	HSK63A DIN69893 H100 ER11Mini	100	1-7	16	19
63A.2M.210	HSK63A DIN69893 H100 ER16Mini	100	1-10	22	25
63A.2M.213	HSK63A DIN69893 H100 ER20Mini	100	1-13	28	31

Sip. No.	Açıklama	H	Kapasite	D	D3
63A.2M.407	HSK63A DIN69893 H160 ER11Mini	160	1-7	16	23
63A.2M.410	HSK63A DIN69893 H160 ER16Mini	160	1-10	22	28
63A.2M.413	HSK63A DIN69893 H160 ER20Mini	160	1-13	28	35

BİLYALI PENS BAŞLIĞI

Form A | G6.3 12.000 RPM





Sip. No.	Açıklama	H	D	D1	D2	L
63A.03.120	HSK 63A DIN69893 H85 6-20	85	20	46	47	60
63A.03.232	HSK 63A DIN69893 H110 6-32	110	32	62	63	80

Sip. No.	Açıklama	H	D	D1	D2	L
100A.03.220	HSK100A DIN69893 H105 6-20	105	20	46	47	60
100A.03.232	HSK100A DIN69893 H115 6-32	115	32	62	63	80

HSK-A TAKIM TUTUCU SİSTEMLERİ

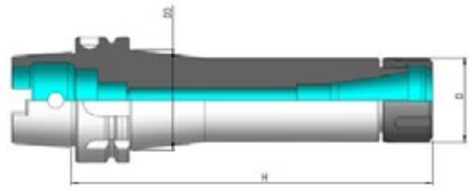
Gisstec

ER PENS BAŞLIĞI

Form A

DIN 6499







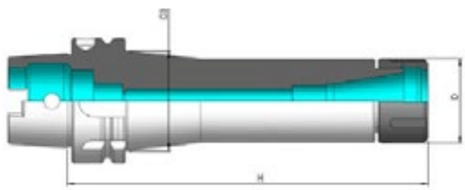
Sip. No.	Açıklama	H	Kapasite	D	D3
63A.02.116	HSK63A DIN69893 H 75 ER25	75	2-16	42	-
63A.02.120	HSK63A DIN69893 H 75 ER32	75	2-20	50	-
63A.02.126	HSK63A DIN69893 H 80 ER40	80	3-26	63	-
63A.02.210	HSK63A DIN69893 H100 ER16	100	1-10	32	-
63A.02.213	HSK63A DIN69893 H100 ER20	100	1-13	35	-
63A.02.216	HSK63A DIN69893 H100 ER25	100	2-16	42	-
63A.02.220	HSK63A DIN69893 H100 ER32	100	2-20	50	-
63A.02.226	HSK63A DIN69893 H100 ER40	100	3-26	63	-
63A.02.310	HSK63A DIN69893 H130 ER16	130	1-10	32	-
63A.02.316	HSK63A DIN69893 H130 ER25	130	2-16	42	-
63A.02.320	HSK63A DIN69893 H130 ER32	130	2-20	50	-
63A.02.326	HSK63A DIN69893 H130 ER40	130	3-26	63	-
63A.02.410	HSK63A DIN69893 H160 ER16	160	1-10	32	32
63A.02.416	HSK63A DIN69893 H160 ER25	160	2-16	42	-
63A.02.420	HSK63A DIN69893 H160 ER32	160	2-20	50	-
63A.02.426	HSK63A DIN69893 H160 ER40	160	3-26	63	-

Sip. No.	Açıklama	H	Kapasite	D	D3
63A.02.510	HSK63A DIN69893 H200 ER16	200	1-10	32	32
63A.02.516	HSK63A DIN69893 H200 ER25	200	2-16	42	42
63A.02.520	HSK63A DIN69893 H200 ER32	200	2-20	50	50
63A.02.526	HSK63A DIN69893 H200 ER40	200	3-26	63	63
100A.02.210	HSK100A DIN69893 H100 ER16	100	1-10	32	-
100A.02.216	HSK100A DIN69893 H100 ER25	100	2-16	42	-
100A.02.220	HSK100A DIN69893 H100 ER32	100	2-20	50	-
100A.02.226	HSK100A DIN69893 H100 ER40	100	3-26	63	-
100A.02.410	HSK100A DIN69893 H160 ER16	160	1-10	32	32
100A.02.416	HSK100A DIN69893 H160 ER25	160	2-16	42	42
100A.02.420	HSK100A DIN69893 H160 ER32	160	2-20	50	50
100A.02.426	HSK100A DIN69893 H160 ER40	160	3-26	63	63

ULTRA HASSAS PENS BAŞLIĞI

Form A | G2.5 20.000 RPM





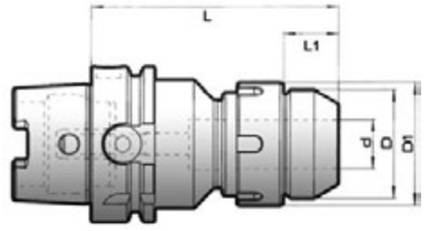
- Sıkma Kuvveti+ 25%
- Salgı0,003 mm

Sip. No.	Açıklama	H	Kapasite	D
63A.2U.210	HSK 63A DIN69893 H100 ER16	100	1-10	30
63A.2U.216	HSK 63A DIN69893 H100 ER25	100	1-16	40
63A.2U.220	HSK 63A DIN69893 H100 ER32	100	1-20	50
63A.2U.416	HSK 63A DIN69893 H160 ER25	160	1-16	40
63A.2U.420	HSK 63A DIN69893 H160 ER32	160	1-20	50
100A.2U.220	HSK 100A DIN69893 H100 ER32	100	1-20	50
100A.2U.410	HSK 100A DIN69893 H160 ER16	160	1-10	30
100A.2U.420	HSK 100A DIN69893 H160 ER32	160	1-20	50

HSK-A ULTRA CLAMP BİLYALI TUTUCU 800 Nm

Form AD/B | G2.5 20.000 RPM





- Sıkma Kuvveti 800 Nm
- Salgı 0,003 mm
- Silindirik ve veldon şaftlı kesiciler için
- Vibrasyon sönümleme
- Kesici boy ayarı
- 100 bara kadar içten su verme

Sip. No.	Açıklama	d	H	D1	D	L1	Nm
63A.3U.106	HSK63A Ø6 x 74	6	74	32	26	11	150
63A.3U.108	HSK63A Ø8 x 75	8	75	32	27	11	180
63A.3U.110	HSK63A Ø10 x 79	10	79	37	32	13	320
63A.3U.112	HSK63A Ø12 x 85	12	85	37	35	20	380
63A.3U.116	HSK63A Ø16 x 88	16	88	44	40	21	400
63A.3U.120	HSK63A Ø20 x 90	20	90	49	46	23	520
63A.3U.125	HSK63A Ø25 x 97	25	97	54	52	26	550
63A.3U.132	HSK63A Ø32 x 105	32	105	68	67	33	800
63A.3U.420	HSK63A Ø20 x 150	20	150	49	46	23	520
63A.3U.432	HSK63A Ø32 x 150	32	150	68	67	33	800
100A.3U.120	HSK100A Ø20 x 90	20	90	49	46	23	520
100A.3U.132	HSK100A Ø32 x 105	32	103	68	67	33	800

HSK-A TAKIM TUTUCU SİSTEMLERİ

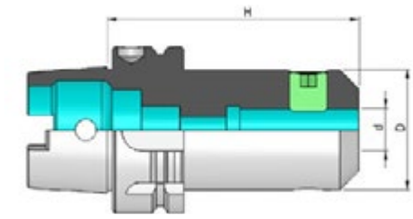
Gisstec®

VELDON TUTUCU

Form A | G6.3 20.000 RPM

DIN 6359 / 1835 B





Sip. No.	Açıklama	H	D	d
63A.04.106	HSK63A DIN69893 H 65 d 6	65	25	6
63A.04.108	HSK63A DIN69893 H 65 d 8	65	28	8
63A.04.110	HSK63A DIN69893 H 65 d10	65	35	10
63A.04.112	HSK63A DIN69893 H 80 d12	80	42	12
63A.04.114	HSK63A DIN69893 H 80 d14	80	44	14
63A.04.116	HSK63A DIN69893 H 80 d16	80	48	16
63A.04.118	HSK63A DIN69893 H 80 d18	80	50	18
63A.04.120	HSK63A DIN69893 H 80 d20	80	52	20
63A.04.125	HSK63A DIN69893 H110 d25	110	65	25
63A.04.132	HSK63A DIN69893 H110 d32	110	72	32
63A.04.140	HSK63A DIN69893 H125 d40	125	80	40
63A.04.206	HSK63A DIN69893 H100 d 6	100	25	6
63A.04.208	HSK63A DIN69893 H100 d 8	100	28	8
63A.04.210	HSK63A DIN69893 H100 d10	100	35	10
63A.04.212	HSK63A DIN69893 H100 d12	100	42	12
63A.04.214	HSK63A DIN69893 H100 d14	100	44	14
63A.04.216	HSK63A DIN69893 H100 d16	100	48	16
63A.04.218	HSK63A DIN69893 H100 d18	100	50	18
63A.04.220	HSK63A DIN69893 H100 d20	100	52	20
63A.04.406	HSK63A DIN69893 H160 d 6	160	25	6
63A.04.408	HSK63A DIN69893 H160 d 8	160	28	8
63A.04.410	HSK63A DIN69893 H160 d10	160	35	10
63A.04.412	HSK63A DIN69893 H160 d12	160	42	12
63A.04.414	HSK63A DIN69893 H160 d14	160	44	14
63A.04.416	HSK63A DIN69893 H160 d16	160	48	16
63A.04.418	HSK63A DIN69893 H160 d18	160	50	18

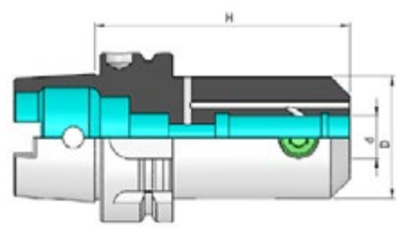
Sip. No.	Açıklama	H	D	d
63A.04.420	HSK63A DIN69893 H160 d20	160	52	20
63A.04.425	HSK63A DIN69893 H160 d25	160	65	25
63A.04.432	HSK63A DIN69893 H160 d32	160	72	32
63A.04.440	HSK63A DIN69893 H160 d40	160	80	40
100A.04.106	HSK100A DIN69893 H 65 d 6	80	25	6
100A.04.108	HSK100A DIN69893 H 80 d 8	80	28	8
100A.04.110	HSK100A DIN69893 H 80 d10	80	35	10
100A.04.112	HSK100A DIN69893 H 80 d12	80	42	12
100A.04.114	HSK100A DIN69893 H 80 d14	80	44	14
100A.04.116	HSK100A DIN69893 H100 d16	100	48	16
100A.04.118	HSK100A DIN69893 H100 d18	100	50	18
100A.04.120	HSK100A DIN69893 H100 d20	100	52	20
100A.04.125	HSK100A DIN69893 H100 d25	100	65	25
100A.04.132	HSK100A DIN69893 H100 d32	100	72	32
100A.04.140	HSK100A DIN69893 H105 d40	105	80	40
100A.04.406	HSK100A DIN69893 H160 d 6	160	25	6
100A.04.408	HSK100A DIN69893 H160 d 8	160	28	8
100A.04.410	HSK100A DIN69893 H160 d10	160	35	10
100A.04.412	HSK100A DIN69893 H160 d12	160	42	12
100A.04.414	HSK100A DIN69893 H160 d14	160	44	14
100A.04.416	HSK100A DIN69893 H160 d16	160	48	16
100A.04.418	HSK100A DIN69893 H160 d18	160	50	18
100A.04.420	HSK100A DIN69893 H160 d20	160	52	20
100A.04.425	HSK100A DIN69893 H160 d25	160	65	25
100A.04.432	HSK100A DIN69893 H160 d32	160	72	32
100A.04.440	HSK100A DIN69893 H160 d40	160	80	40

VELDON TUTUCU ALINDAN SOĞUTMALI

Form A | G6.3 20.000 RPM

DIN 6359 / 1835 B





Sip. No.	Açıklama	H	D	d
63A.4K.106	HSK63A DIN69893 H 65 d 6	65	25	6
63A.4K.108	HSK63A DIN69893 H 65 d 8	65	28	8
63A.4K.110	HSK63A DIN69893 H 65 d10	65	35	10
63A.4K.112	HSK63A DIN69893 H 80 d12	80	42	12
63A.4K.114	HSK63A DIN69893 H 80 d14	80	44	14
63A.4K.116	HSK63A DIN69893 H 80 d16	80	48	16
63A.4K.118	HSK63A DIN69893 H 80 d18	80	50	18
63A.4K.120	HSK63A DIN69893 H 80 d20	80	52	20
63A.4K.125	HSK63A DIN69893 H110 d25	110	65	25
63A.4K.132	HSK63A DIN69893 H110 d32	110	72	32
63A.4K.140	HSK63A DIN69893 H125 d40	125	80	40

Sip. No.	Açıklama	H	D	d
100A.4K.106	HSK100A DIN69893 H 65 d 6	80	25	6
100A.4K.108	HSK100A DIN69893 H 80 d 8	80	28	8
100A.4K.110	HSK100A DIN69893 H 80 d10	80	35	10
100A.4K.112	HSK100A DIN69893 H 80 d12	80	42	12
100A.4K.114	HSK100A DIN69893 H 80 d14	80	44	14
100A.4K.116	HSK100A DIN69893 H100 d16	100	48	16
100A.4K.118	HSK100A DIN69893 H100 d18	100	50	18
100A.4K.120	HSK100A DIN69893 H100 d20	100	52	20
100A.4K.125	HSK100A DIN69893 H100 d25	100	65	25
100A.4K.132	HSK100A DIN69893 H100 d32	100	72	32
100A.4K.140	HSK100A DIN69893 H105 d40	105	80	40

ROHLİNG, ÖZEL TAKIM AMAÇLI

Form A





Sip. No.	Açıklama	H	D
63A.17.363	HSK63A DIN69893 Ø63 x 250	250	63

Sip. No.	Açıklama	H	D
100A.17.397	HSK100A DIN69893 Ø97 x 315	315	97

HSK-A TAKIM TUTUCU SİSTEMLERİ

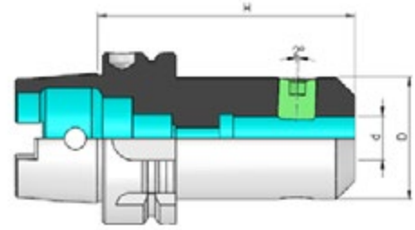
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VELDON TUTUCU, 2° AÇILI

Form A | G6.3 20.000 RPM

DIN 6359 / 1835 E





Sip. No.	Açıklama	H	D	d
63A.05.106	HSK63A DIN69893 H 80 d 6	80	25	6
63A.05.108	HSK63A DIN69893 H 80 d 8	80	28	8
63A.05.110	HSK63A DIN69893 H 80 d10	80	35	10
63A.05.112	HSK63A DIN69893 H 90 d12	90	42	12
63A.05.114	HSK63A DIN69893 H 90 d14	90	44	14
63A.05.116	HSK63A DIN69893 H100 d16	100	48	16
63A.05.118	HSK63A DIN69893 H100 d18	100	50	18
63A.05.120	HSK63A DIN69893 H100 d20	100	52	20
63A.05.125	HSK63A DIN69893 H110 d25	110	65	25
63A.05.132	HSK63A DIN69893 H110 d32	110	72	32

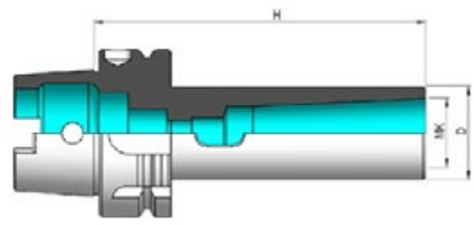
Sip. No.	Açıklama	H	D	d
100A.05.106	HSK100A DIN69893 H 80 d 6	90	25	6
100A.05.108	HSK100A DIN69893 H 90 d 8	90	28	8
100A.05.110	HSK100A DIN69893 H 90 d10	90	35	10
100A.05.112	HSK100A DIN69893 H100 d12	100	42	12
100A.05.114	HSK100A DIN69893 H100 d14	100	44	14
100A.05.116	HSK100A DIN69893 H100 d16	100	48	16
100A.05.118	HSK100A DIN69893 H100 d18	100	50	18
100A.05.120	HSK100A DIN69893 H110 d20	110	52	20
100A.05.125	HSK100A DIN69893 H120 d25	120	65	25
100A.05.132	HSK100A DIN69893 H120 d32	120	72	32
100A.05.140	HSK100A DIN69893 H120 d40	120	80	40

MORS ADAPTÖRÜ

Form A | G6.3 20.000 RPM

DIN 6383





Sip. No.	Açıklama	H	D	MK
63A.07.101	HSK63A DIN69893 H100 MK1	100	1	25
63A.07.102	HSK63A DIN69893 H120 MK2	120	2	32
63A.07.103	HSK63A DIN69893 H140 MK3	140	3	40
63A.07.104	HSK63A DIN69893 H160 MK4	160	4	48

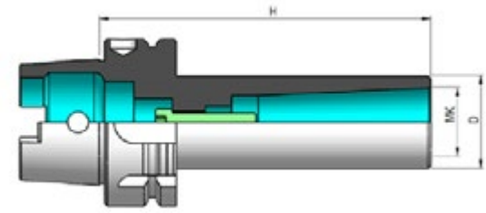
Sip. No.	Açıklama	H	D	MK
100A.07.101	HSK100A DIN69893 H100 MK1	100	1	25
100A.07.102	HSK100A DIN69893 H120 MK2	120	2	32
100A.07.103	HSK100A DIN69893 H150 MK3	150	3	40
100A.07.104	HSK100A DIN69893 H170 MK4	170	4	48
100A.07.105	HSK100A DIN69893 H200 MK5	200	5	63

ÇEKTİRMELİ MORS ADAPTÖRÜ

Form A | G6.3 12.000 RPM

DIN 6364





Sip. No.	Açıklama	H	D	MK
63A.08.101	HSK63A DIN69893 H100 CMK1	100	1	25
63A.08.102	HSK63A DIN69893 H120 CMK2	120	2	32
63A.08.103	HSK63A DIN69893 H140 CMK3	140	3	40
63A.08.104	HSK63A DIN69893 H160 CMK4	160	4	48

Sip. No.	Açıklama	H	D	MK
100A.08.101	HSK100A DIN69893 H100 CMK1	110	1	25
100A.08.102	HSK100A DIN69893 H120 CMK2	120	2	32
100A.08.103	HSK100A DIN69893 H140 CMK3	150	3	40
100A.08.104	HSK100A DIN69893 H160 CMK4	170	4	48
100A.08.105	HSK100A DIN69893 H200 CMK5	200	5	63

KONTROL MASTARI

Form A





• Açıklama : Tezgah fener milinin ISO normu R-230'a göre uygunluğunu kontrol etmek için

Sip. No.	Açıklama	d1	l1	l2	l3	
63A.18.250	HSK63 A DIN69893 Ø40 x 250	40	250	224	200	0,003
100A.18.349	HSK100 A DIN69893 Ø50 x 349	50	349	320	300	0,003

HSK-A TAKIM TUTUCU SİSTEMLERİ

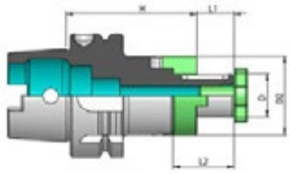
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KOMBİNE MALAFA

Form A | G6.3 20.000 RPM

DIN 6358







Sip. No.	Açıklama	H	D	D2	L1	L2
63A.10.116	HSK63A DIN69893 H 60 D16	60	16	32	17	27
63A.10.122	HSK63A DIN69893 H 60 D22	60	22	40	19	31
63A.10.127	HSK63A DIN69893 H 60 D27	60	27	48	21	33
63A.10.132	HSK63A DIN69893 H 60 D32	60	32	58	24	38
63A.10.140	HSK63A DIN69893 H 70 D40	70	40	70	27	41
63A.10.216	HSK63A DIN69893 H100 D16	100	16	32	17	27
63A.10.222	HSK63A DIN69893 H100 D22	100	22	40	19	31
63A.10.227	HSK63A DIN69893 H100 D27	100	27	48	21	33
63A.10.232	HSK63A DIN69893 H100 D32	100	32	58	24	38
63A.10.240	HSK63A DIN69893 H100 D40	100	40	70	27	41
63A.10.416	HSK63A DIN69893 H160 D16	160	16	32	17	27
63A.10.422	HSK63A DIN69893 H160 D22	160	22	40	19	31
63A.10.427	HSK63A DIN69893 H160 D27	160	27	48	21	33
63A.10.432	HSK63A DIN69893 H160 D32	160	32	58	24	38
63A.10.440	HSK63A DIN69893 H160 D40	160	40	70	27	41

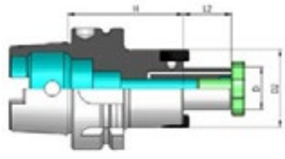
Sip. No.	Açıklama	H	D	D2	L1	L2
100A.10.116	HSK100A DIN69893 H 60 D16	60	16	32	17	27
100A.10.122	HSK100A DIN69893 H 60 D22	60	22	40	19	31
100A.10.127	HSK100A DIN69893 H 60 D27	60	27	48	21	33
100A.10.132	HSK100A DIN69893 H 60 D32	60	32	58	24	38
100A.10.140	HSK100A DIN69893 H 70 D40	70	40	70	27	41
100A.10.216	HSK100A DIN69893 H100 D16	100	16	32	17	27
100A.10.222	HSK100A DIN69893 H100 D22	100	22	40	19	31
100A.10.227	HSK100A DIN69893 H100 D27	100	27	48	21	33
100A.10.232	HSK100A DIN69893 H100 D32	100	32	58	24	38
100A.10.240	HSK100A DIN69893 H100 D40	100	40	70	27	41
100A.10.416	HSK100A DIN69893 H160 D16	160	16	32	17	27
100A.10.422	HSK100A DIN69893 H160 D22	160	22	40	19	31
100A.10.427	HSK100A DIN69893 H160 D27	160	27	48	21	33
100A.10.432	HSK100A DIN69893 H160 D32	160	32	58	24	38
100A.10.440	HSK100A DIN69893 H160 D40	160	40	70	27	41

ALIN KAMALI MALAFA

Form A | G6.3 20.000 RPM

DIN 6357







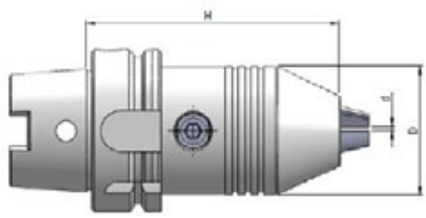
Sip. No.	Açıklama	H	D	D2	L2
63A.11.116	HSK63A DIN69893 H 50 D16	50	16	38	17
63A.11.122	HSK63A DIN69893 H 50 D22	50	22	48	19
63A.11.127	HSK63A DIN69893 H 60 D27	60	27	58	21
63A.11.132	HSK63A DIN69893 H 60 D32	60	32	78	24
63A.11.140	HSK63A DIN69893 H 60 D40	60	40	88	27
63A.11.216	HSK63A DIN69893 H100 D16	100	16	38	17
63A.11.222	HSK63A DIN69893 H100 D22	100	22	48	19
63A.11.227	HSK63A DIN69893 H100 D27	100	27	58	21
63A.11.232	HSK63A DIN69893 H100 D32	100	32	78	24
63A.11.240	HSK63A DIN69893 H100 D40	100	40	88	27
63A.11.416	HSK63A DIN69893 H160 D16	160	16	38	17
63A.11.422	HSK63A DIN69893 H160 D22	160	22	48	19
63A.11.427	HSK63A DIN69893 H160 D27	160	27	58	21
63A.11.432	HSK63A DIN69893 H160 D32	160	32	78	24
63A.11.440	HSK63A DIN69893 H160 D40	160	40	88	27

Sip. No.	Açıklama	H	D	D2	L2
100A.11.116	HSK100A DIN69893 H50 D16	50	16	38	17
100A.11.122	HSK100A DIN69893 H50 D22	50	22	48	19
100A.11.127	HSK100A DIN69893 H50 D27	50	27	58	21
100A.11.132	HSK100A DIN69893 H50 D32	50	32	78	24
100A.11.140	HSK100A DIN69893 H60 D40	60	40	88	27
100A.11.216	HSK100A DIN69893 H100 D16	100	16	38	17
100A.11.222	HSK100A DIN69893 H100 D22	100	22	48	19
100A.11.227	HSK100A DIN69893 H100 D27	100	27	58	21
100A.11.232	HSK100A DIN69893 H100 D32	100	32	78	24
100A.11.240	HSK100A DIN69893 H100 D40	100	40	88	27
100A.11.416	HSK100A DIN69893 H160 D16	160	16	38	17
100A.11.422	HSK100A DIN69893 H160 D22	160	22	48	19
100A.11.427	HSK100A DIN69893 H160 D27	160	27	58	21
100A.11.432	HSK100A DIN69893 H160 D32	160	32	78	24
100A.11.440	HSK100A DIN69893 H160 D40	160	40	88	27

NC-MANDREN MALAFASI, SAĞ-SOL DÖNÜŞLÜ

Form A | G6.3 20.000 RPM





Sip. No.	Açıklama	H	D	d
63A.15.113	HSK63A DIN69893 H123,5 d13	123,5	50	1-13
63A.15.116	HSK63A DIN69893 H129 d16	129	50	2,5-16
100A.15.113	HSK100A DIN69893 H130 d13	130	50	1-13
100A.15.116	HSK100A DIN69893 H135,5 d16	135,5	50	2,5-16

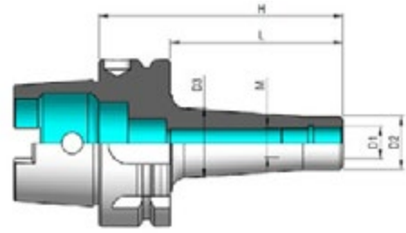
HSK-A TAKIM TUTUCU SİSTEMLERİ

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VİDALI FREZE TAKIMI

Form A | G2.5 20.000 RPM



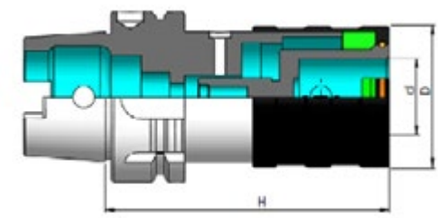


Sip. No.	Açıklama	H	D1	D2	D3	L	M
63A.12.108	HSK63A DIN69893 M 8x59	59	8,5	13	15	33	M 8
63A.12.110	HSK63A DIN69893 M10x59	59	10,5	18	19,5	33	M10
63A.12.112	HSK63A DIN69893 M12x59	59	12,5	21	24	33	M12
63A.12.116	HSK63A DIN69893 M16x59	59	17	29	34	33	M16
63A.12.208	HSK63A DIN69893 M 8x84	84	8,5	13	23	58	M 8
63A.12.210	HSK63A DIN69893 M10x84	84	10,5	18	25	58	M10
63A.12.212	HSK63A DIN69893 M12x84	84	12,5	21	24	58	M12
63A.12.216	HSK63A DIN69893 M16x84	84	17	29	34	58	M16
63A.12.308	HSK63A DIN69893 M 8x109	109	8,5	13	23	83	M 8
63A.12.310	HSK63A DIN69893 M10x109	109	10,5	18	28	83	M10
63A.12.312	HSK63A DIN69893 M12x109	109	12,5	21	31	83	M12
63A.12.316	HSK63A DIN69893 M16x109	109	17	29	34	83	M16
63A.12.408	HSK63A DIN69893 M 8x134	134	8,5	13	25	108	M 8
63A.12.410	HSK63A DIN69893 M10x134	134	10,5	18	28	108	M10
63A.12.412	HSK63A DIN69893 M12x134	134	12,5	21	31	108	M12
63A.12.416	HSK63A DIN69893 M16x134	134	17	29	39	108	M16
63A.12.510	HSK63A DIN69893 M10x159	159	10,5	18	31	133	M10
63A.12.512	HSK63A DIN69893 M12x159	159	12,5	21	34	133	M12
63A.12.516	HSK63A DIN69893 M16x159	159	17	29	39	133	M16
63A.12.612	HSK63A DIN69893 M12x184	184	12,5	21	34	158	M12
63A.12.616	HSK63A DIN69893 M16x184	184	17	29	39	158	M16
63A.12.712	HSK63A DIN69893 M12x209	209	12,5	21	42	183	M12
63A.12.716	HSK63A DIN69893 M16x209	209	17	29	42	183	M16
100A.12.212	HSK100A DIN69893 M12X 84	87	12,5	21	24	58	12
100A.12.216	HSK100A DIN69893 M16X 87	87	17	29	34	58	16
100A.12.312	HSK100A DIN69893 M12X137	137	12,5	21	31	108	12
100A.12.316	HSK100A DIN69893 M16X137	137	17	29	34	108	16
100A.12.412	HSK100A DIN69893 M12X187	187	12,5	21	31	158	12
100A.12.416	HSK100A DIN69893 M16X187	187	17	29	39	158	16
100A.12.516	HSK100A DIN69893 M16X237	237	17	29	39	208	16

KILAVUZ ÇEKME BAŞLIĞI, KOMPANZELİ

Form A





Sip. No.	Açıklama	H	D	d	Kapasite	Giriş - Çıkış
63A.16.112	HSK63A DIN69893 H 72 GR1	72	41	19	M3-M14	7,5-7,5
63A.16.120	HSK63A DIN69893 H110 GR2	110	60	31	M5-M24	10-10
100A.16.112	HSK100A DIN69893 H 80 GR1	80	41	19	M3-M14	7,5-7,5
100A.16.120	HSK100A DIN69893 H100 GR2	100	60	31	M5-M24	10-10

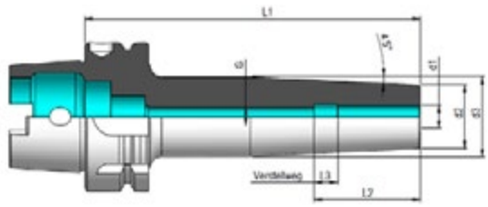
HSK-A TAKIM TUTUCU SİSTEMLERİ

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ISITMALI TAKIM TUTUCU

Form A | G2.5 25.000 RPM





Açıklama : Şaftı karbür ve HSS takımlar için şaft toleransı Ø6-Ø32 arası h6 Ø3-4-5 arası h4 tolerans

Sip. No.	HSK-A	d1	l1	d2	d3	l2	l3	g
63A.25.103	HSK63A	3	80	11	15	10	-	-
63A.25.104	HSK63A	4	80	14	22	20	5	M 3
63A.25.105	HSK63A	5	80	16	22	20	-	M 4
63A.25.106	HSK63A	6	80	21	27	36	10	M 5
63A.25.108	HSK63A	8	80	21	27	36	-	M 6
63A.25.110	HSK63A	10	85	24	32	42	-	M 8x1
63A.25.112	HSK63A	12	90	24	32	47	-	M10x1
63A.25.114	HSK63A	14	90	27	34	47	-	M10x1
63A.25.116	HSK63A	16	95	27	34	50	-	M12x1
63A.25.118	HSK63A	18	95	33	42	50	-	M12x1
63A.25.120	HSK63A	20	100	33	42	52	-	M16x1
63A.25.125	HSK63A	25	115	44	53	58	-	M16x1
63A.25.132	HSK63A	32	120	44	53	61	-	M16x1
63A.25.306	HSK63A	6	120	21	27	36	10	M 5
63A.25.308	HSK63A	8	120	21	27	36	-	M 6
63A.25.310	HSK63A	10	120	24	32	42	-	M 8x1
63A.25.312	HSK63A	12	120	24	32	47	-	M10x1
63A.25.314	HSK63A	14	120	27	34	47	-	M10x1
63A.25.316	HSK63A	16	120	27	34	50	-	M12x1
63A.25.318	HSK63A	18	120	33	42	50	-	M12x1
63A.25.320	HSK63A	20	120	33	42	52	-	M16x1
63A.25.403	HSK63A	3	160	11	15	10	-	-
63A.25.404	HSK63A	4	160	14	22	20	5	M 3
63A.25.405	HSK63A	5	160	16	22	20	-	M 4
63A.25.406	HSK63A	6	160	21	27	36	10	M 5
63A.25.408	HSK63A	8	160	21	27	36	-	M 6
63A.25.410	HSK63A	10	160	24	32	42	-	M 8x1
63A.25.412	HSK63A	12	160	24	32	47	-	M10x1
63A.25.414	HSK63A	14	160	27	34	47	-	M10x1
63A.25.416	HSK63A	16	160	27	34	50	-	M12x1
63A.25.418	HSK63A	18	160	33	42	50	-	M12x1
63A.25.420	HSK63A	20	160	33	42	52	-	M16x1
63A.25.425	HSK63A	25	160	44	53	58	-	M16x1
100A.25.106	HSK100A	6	85	21	27	36	10	M 5
100A.25.108	HSK100A	8	85	21	27	36	-	M 6
100A.25.110	HSK100A	10	90	24	32	42	-	M 8x1
100A.25.112	HSK100A	12	95	24	32	47	-	M10x1
100A.25.114	HSK100A	14	95	27	34	47	-	M10x1
100A.25.116	HSK100A	16	100	27	34	50	-	M12x1
100A.25.118	HSK100A	18	100	33	42	50	-	M12x1
100A.25.120	HSK100A	20	105	33	42	52	-	M16x1
100A.25.125	HSK100A	25	120	44	53	56	-	M16x1
100A.25.132	HSK100A	32	120	44	53	62	-	M16x1
100A.25.306	HSK100A	6	120	21	27	36	10	M 5
100A.25.308	HSK100A	8	120	21	27	36	-	M 6
100A.25.310	HSK100A	10	120	24	32	42	-	M 8x1
100A.25.312	HSK100A	12	120	24	32	47	-	M10x1
100A.25.314	HSK100A	14	120	27	34	47	-	M10x1
100A.25.316	HSK100A	16	120	27	34	50	-	M12x1
100A.25.318	HSK100A	18	120	33	42	50	-	M12x1
100A.25.320	HSK100A	20	120	33	42	52	-	M16x1
100A.25.406	HSK100A	6	160	21	27	36	10	M 5
100A.25.408	HSK100A	8	160	21	27	36	-	M 6
100A.25.410	HSK100A	10	160	24	32	42	-	M 8x1
100A.25.412	HSK100A	12	160	24	32	47	-	M10x1
100A.25.414	HSK100A	14	160	27	34	47	-	M10x1
100A.25.416	HSK100A	16	160	27	34	50	-	M12x1
100A.25.418	HSK100A	18	160	33	42	50	-	M12x1
100A.25.420	HSK100A	20	160	33	42	52	-	M16x1
100A.25.425	HSK100A	25	160	44	53	56	-	M16x1
100A.25.432	HSK100A	32	160	44	53	62	-	M16x1

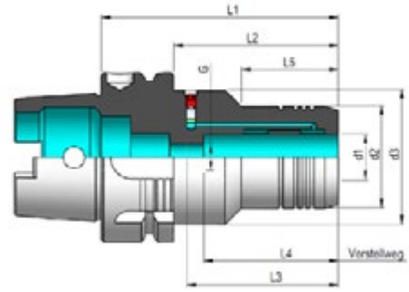
HSK-A TAKIM TUTUCU SİSTEMLERİ

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HİDROLİK TAKIM TUTUCU

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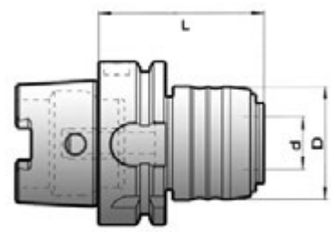


Sip. No.	Hsk-A	d1	d2	d3	l1	l2	l3	l4	l5	g
63A.30.106	HSK 63	6	26	50	80	54	37	10	33	M 5
63A.30.108	HSK 63	8	28	50	80	54	37	10	33	M 6
63A.30.110	HSK 63	10	30	50	85	59	42	10	39	M 8x1
63A.30.112	HSK 63	12	32	50	90	64	47	10	44	M10x1
63A.30.114	HSK 63	14	34	50	90	64	47	10	46	M10x1
63A.30.116	HSK 63	16	38	50	95	69	52	10	52	M12x1
63A.30.118	HSK 63	18	40	50	95	69	52	10	52	M12x1
63A.30.120	HSK 63	20	42	50	100	74	52	10	58	M12X1
63A.30.125	HSK 63	25	50	50	120	94	58	10	94	M16X1
63A.30.132	HSK 63	32	60	50	125	99	62	10	83	M16x1
100A.30.106	HSK 100	6	26	50	85	56	37	10	29	M 5
100A.30.108	HSK 100	8	28	50	85	56	37	10	29	M 6
100A.30.110	HSK 100	10	30	50	90	61	42	10	35	M 8x1
100A.30.112	HSK 100	12	32	50	95	66	49	10	40	M10x1
100A.30.114	HSK 100	14	34	50	95	66	49	10	42	M10x1
100A.30.116	HSK 100	16	38	50	100	71	52	10	47	M12x1
100A.30.118	HSK 100	18	40	50	100	71	52	10	48	M12x1
100A.30.120	HSK 100	20	42	63	105	76	52	10	54	M12x1
100A.30.125	HSK 100	25	50	63	115	86	58	10	51	M16x1
100A.30.132	HSK 100	32	60	63	120	91	62	10	59	M16x1
100A.30.140	HSK 100	40	70	70	120	91	62	10	91	M16x1

SENKRONİZE KILAVUZ ÇEKME BAŞLIĞI

Form A



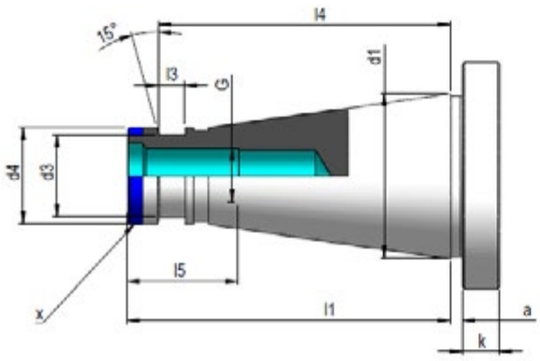


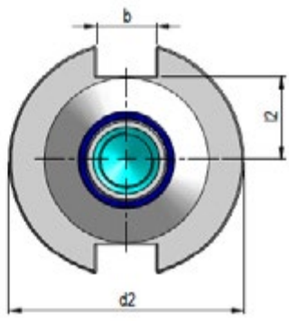
Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
63A.26.112	HSK63A DIN69893 H64 ER16	64	20	43	M3-M12	0,2 - 1
63A.26.120	HSK63A DIN69893 H97 ER25	97	32	60	M6-M20	0,2 - 1
100A.26.112	HSK100A DIN69893 H70 ER16	70	20	43	M3-M12	0,2 - 1
100A.26.120	HSK100A DIN69893 H91 ER25	91	32	60	M6-M20	0,2 - 1
100A.26.133	HSK100A DIN69893 H115 ER40	115	50	87	M14-M33	0,2 - 1

ISO TAKIM TUTUCU SİSTEMLERİ

Gisstec®

KONİK ŞAFT ÖLÇÜLERİ





alzeme :

aşımlı semente çeliği çekme mukavemeti in. 950 N/mm²

knik Özelliği :

ertlik HRC 58 ± 2 sertlik derinliği 0,6 mm 0,2 mm, karartılmış

assasiyeti :

onik açı tolerans kalitesi DIN 2080 ormuna göre AT3

onik yüzey kalitesi max. 0,001 mm

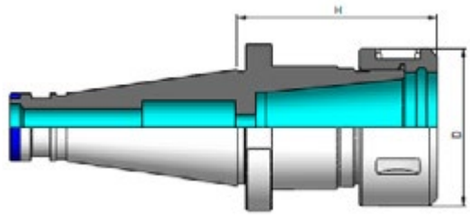
★ Plastik köşe koruma, ringli

SK	d1	a	b	k	G	d2	d3	d4	l1	l2	l3	l4	l5
30	31,75	1,6	16,1	8	M12	50	-	17,2	68,4	16,2	-	-	24,0
★ 40	44,45	1,6	16,1	10	M16	63	21,1	25,0	93,4	22,5	7,0	82,0	32,0
★ 50	69,85	3,2	25,7	12	M24	97,5	32,0	39,2	126,8	35,3	13,0	115,0	47,0

OZ PENS BAŞLIĞI

DIN 6391





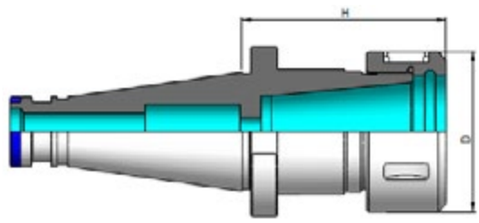
Sip. No.	Açıklama	H	D	Kapasite
540.01.116	ISO40 DIN2080 H70 OZ16	70	43	2-16
540.01.125	ISO40 DIN2080 H70 OZ25	70	60	3-25
540.01.132	ISO40 DIN2080 H85 OZ32	85	72	4-32

Sip. No.	Açıklama	H	D	Kapasite
550.01.125	ISO50 DIN2080 H70 OZ25	70	60	3-25
550.01.132	ISO50 DIN2080 H80 OZ32	80	72	4-32

ER PENS BAŞLIĞI

DIN 6499





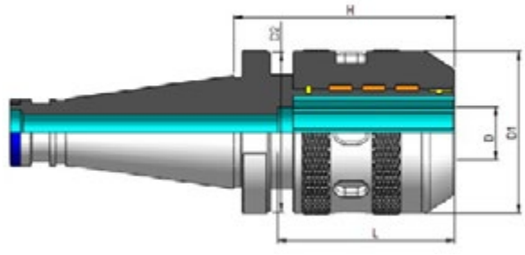
Sip. No.	Açıklama	H	D	Kapasite
540.02.110	ISO40 DIN2080 H70 ER16	70	32	1-10
540.02.116	ISO40 DIN2080 H70 ER25	70	42	2-16
540.02.120	ISO40 DIN2080 H70 ER32	70	50	2-20
540.02.126	ISO40 DIN2080 H70 ER40	70	63	3-26

Sip. No.	Açıklama	H	D	Kapasite
550.02.110	ISO50 DIN2080 H80 ER16	80	32	1-10
550.02.116	ISO50 DIN2080 H80 ER25	80	42	2-16
550.02.120	ISO50 DIN2080 H80 ER32	80	50	2-20
550.02.126	ISO50 DIN2080 H80 ER40	80	63	3-26

BİLYALI PENS BAŞLIĞI

DIN 6499





Sip. No.	Açıklama						
540.03.120	ISO40 DIN2080 H65 6-20	65	60	20	46	47	6-20
540.03.132	ISO40 DIN2080 H80 6-32	80	80	32	62	63	6-32
550.03.120	ISO50 DIN2080 H70 6-20	70	60	20	46	47	6-20
550.03.132	ISO50 DIN2080 H75 6-32	75	80	32	62	63	6-32

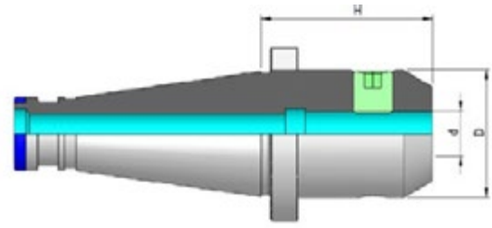
ISO TAKIM TUTUCU SİSTEMLERİ

Gisstec®

VELDON TUTUCU

DIN 6359 / 1835 B





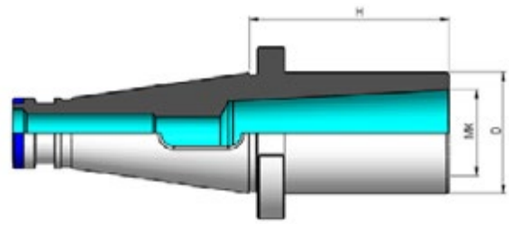
Sip. No.	Açıklama	H	D	D1
540.04.106	ISO40 DIN2080 H50 D 6	50	6	25
540.04.108	ISO40 DIN2080 H50 D 8	50	8	28
540.04.110	ISO40 DIN2080 H50 D10	50	10	35
540.04.112	ISO40 DIN2080 H50 D12	50	12	42
540.04.114	ISO40 DIN2080 H50 D14	50	14	44
540.04.116	ISO40 DIN2080 H63 D16	63	16	48
540.04.118	ISO40 DIN2080 H63 D18	63	18	50
540.04.120	ISO40 DIN2080 H63 D20	63	20	52
540.04.125	ISO40 DIN2080 H90 D25	90	25	65
540.04.132	ISO40 DIN2080 H90 D32	90	32	72
540.04.140	ISO40 DIN2080 H90 D40	90	40	78

Sip. No.	Açıklama	H	D	D1
550.04.106	ISO50 DIN2080 H50 D 6	50	6	25
550.04.108	ISO50 DIN2080 H50 D 8	50	8	28
550.04.110	ISO50 DIN2080 H63 D10	63	10	35
550.04.112	ISO50 DIN2080 H63 D12	63	12	42
550.04.114	ISO50 DIN2080 H63 D14	63	14	44
550.04.116	ISO50 DIN2080 H63 D16	63	16	48
550.04.118	ISO50 DIN2080 H63 D18	63	18	50
550.04.120	ISO50 DIN2080 H63 D20	63	20	52
550.04.125	ISO50 DIN2080 H80 D25	80	25	65
550.04.132	ISO50 DIN2080 H85 D32	85	32	72
550.04.140	ISO50 DIN2080 H95 D40	95	40	78

MORS ADAPTÖRÜ

DIN 6383





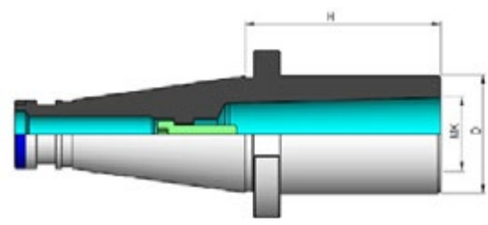
Sip. No.	Açıklama	H	D	MK
540.07.101	ISO40 DIN2080 H 50 MK1	50	25	1
540.07.102	ISO40 DIN2080 H 50 MK2	50	32	2
540.07.103	ISO40 DIN2080 H 65 MK3	65	40	3
540.07.104	ISO40 DIN2080 H 95 MK4	95	48	4

Sip. No.	Açıklama	H	D	MK
550.07.101	ISO50 DIN2080 H 45 MK1	45	25	1
550.07.102	ISO50 DIN2080 H 60 MK2	60	32	2
550.07.103	ISO50 DIN2080 H 65 MK3	65	40	3
550.07.104	ISO50 DIN2080 H 70 MK4	70	48	4
550.07.105	ISO50 DIN2080 H105 MK5	105	63	5

ÇEKTİRMELİ MORS ADAPTÖRÜ

DIN 6364



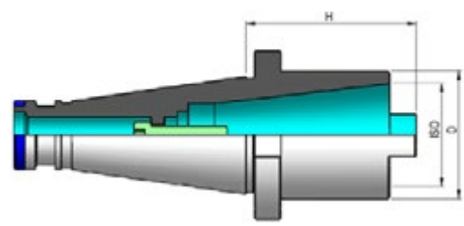


Sip. No.	Açıklama	H	D	MK
540.08.101	ISO40 DIN2080 H 50 CMK1	50	25	1
540.08.102	ISO40 DIN2080 H 50 CMK2	50	32	2
540.08.103	ISO40 DIN2080 H 65 CMK3	65	40	3
540.08.104	ISO40 DIN2080 H 95 CMK4	95	48	4

Sip. No.	Açıklama	H	D	MK
550.08.101	ISO50 DIN2080 H 45 CMK1	45	25	1
550.08.102	ISO50 DIN2080 H 60 CMK2	60	32	2
550.08.103	ISO50 DIN2080 H 65 CMK3	65	40	3
550.08.104	ISO50 DIN2080 H 65 CMK4	65	48	4
550.08.105	ISO50 DIN2080 H120 CMK5	120	63	5

REDÜKSİYON ÇEKTİRMELİ





Sip. No.	Açıklama	H	D	Iso
540.09.130	ISO40-ISO30 H 50	50	50	30
540.09.140	ISO40-ISO40 H100	100	68	40

Sip. No.	Açıklama	H	D	Iso
550.09.130	ISO50-ISO30 H 16	16	50	30
550.09.140	ISO50-ISO40 H 63	63	78	40
550.09.150	ISO50-ISO50 H100	100	100	50

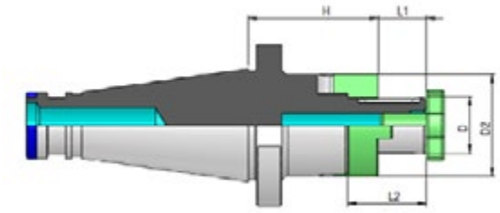
ISO TAKIM TUTUCU SİSTEMLERİ

Gisstec®

KOMBİNE MALAFA

DIN 6358





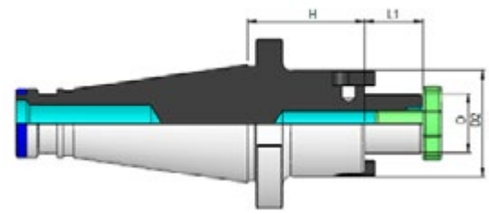
Sip. No.	Açıklama	H	D	D2	L1	L2
540.10.116	ISO40 DIN2080 H52 D16	52	16	32	17	27
540.10.122	ISO40 DIN2080 H52 D22	52	22	40	19	31
540.10.127	ISO40 DIN2080 H52 D27	52	27	48	21	33
540.10.132	ISO40 DIN2080 H52 D32	52	32	58	24	38
540.10.140	ISO40 DIN2080 H52 D40	52	40	70	27	41

Sip. No.	Açıklama	H	D	D2	L1	L2
550.10.116	ISO50 DIN2080 H55 D16	55	16	32	17	27
550.10.122	ISO50 DIN2080 H55 D22	55	22	40	19	31
550.10.127	ISO50 DIN2080 H55 D27	55	27	48	21	33
550.10.132	ISO50 DIN2080 H55 D32	55	32	58	24	38
550.10.140	ISO50 DIN2080 H55 D40	55	40	70	27	41

ALIN KAMALI MALAFA

DIN 6357





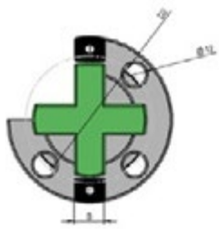
Sip. No.	Açıklama	H	D	D1	L1
540.11.116	ISO40 DIN2080 H45 D16	45	16	38	17
540.11.122	ISO40 DIN2080 H45 D22	45	22	48	19
540.11.127	ISO40 DIN2080 H45 D27	45	27	58	21
540.11.132	ISO40 DIN2080 H50 D32	50	32	78	24
540.11.140	ISO40 DIN2080 H55 D40	55	40	88	27

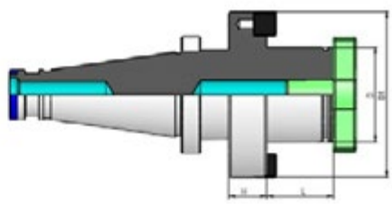
Sip. No.	Açıklama	H	D	D1	L1
550.11.116	ISO50 DIN2080 H45 D16	45	16	38	17
550.11.122	ISO50 DIN2080 H45 D22	45	22	48	19
550.11.127	ISO50 DIN2080 H45 D27	45	27	58	21
550.11.132	ISO50 DIN2080 H50 D32	50	32	78	24
550.11.140	ISO50 DIN2080 H50 D40	50	40	88	27

ALIN KAMALI MALAFA

DIN 6357





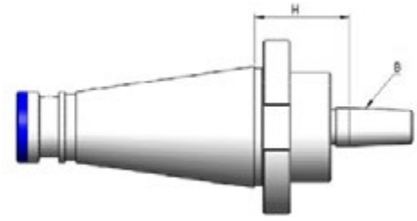


Sip. No.	Açıklama	H	L	D	D1	D2	D3	b
540.13.140	ISO40 DIN2080 H20 D40	20	30	40	89	66,7	M12	15,9
550.13.140	ISO50 DIN2080 H30 D40	30	30	40	89	66,7	M12	15,9
550.13.160	ISO50 DIN2080 H30 D60	30	40	60	129	102	M16	25,4

MANDREN MALAFASI

DIN 238





Sip. No.	Açıklama	H	B
540.14.112	ISO40 DIN2080 B12 H18	18	12
540.14.116	ISO40 DIN2080 B16 H18	18	16
540.14.118	ISO40 DIN2080 B18 H18	18	18

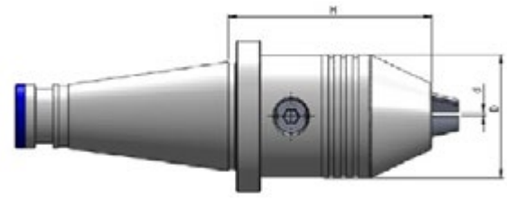
Sip. No.	Açıklama	H	B
550.14.112	ISO50 DIN2080 B12 H20	20	12
550.14.116	ISO50 DIN2080 B16 H20	20	16
550.14.118	ISO50 DIN2080 B18 H20	20	18

ISO TAKIM TUTUCU SİSTEMLERİ

Gisstec®

NC-MANDREN MALAFASI, SAĞ-SOL DÖNÜŞLÜ



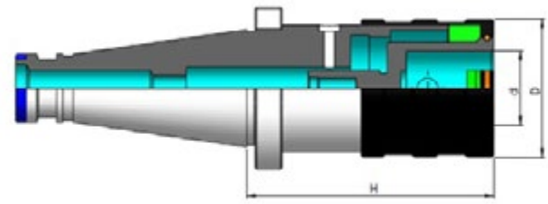


Sip. No.	Açıklama	H	D	d
540.15.113	ISO40 DIN2080 H80 d13	80	50	1-13
540.15.116	ISO40 DIN2080 H85,5 d16	85,5	56	2,5-16

Sip. No.	Açıklama	H	D	d
550.15.113	ISO50 DIN2080 H83,5 d13	83,5	50	1-13
550.15.116	ISO50 DIN2080 H89 d16	89	56	2,5-16

KILAVUZ ÇEKME BAŞLIĞI, KOMPANZELİ

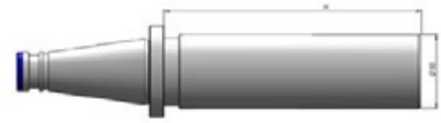




Sip. No.	Açıklama	H	d	D	Kapasite	Giriş - Çıkış
540.16.112	ISO40 DIN2080 H53 GR1	53	19	38	M3-M12	9 - 9
540.16.120	ISO40 DIN2080 H77 GR2	77	31	55	M6-M20	15 - 15
550.16.120	ISO50 DIN2080 H79 GR2	79	31	55	M5-M24	15 - 15

ROHLİNG ÖZEL TAKIM AMAÇLI



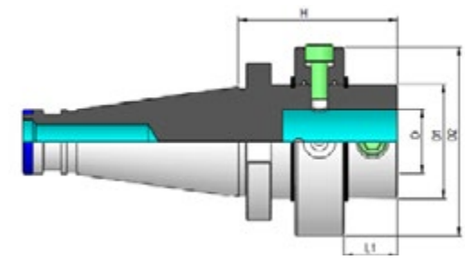


Sip. No.	Açıklama	H	D
540.17.263	ISO40 Ø63 x 250	250	63

Sip. No.	Açıklama	H	D
550.17.397	ISO50 Ø97 x 315	315	97

DIŞTAN SOĞUTMALI TAKIM TUTUCU





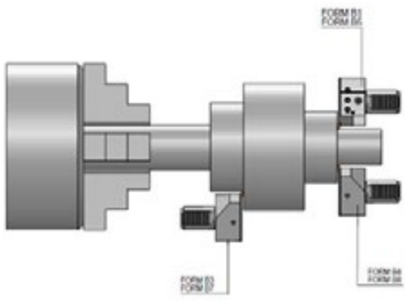
Sip. No.	Açıklama	H	L1	D	D1	D2
540.22.140	ISO40 DIN2080 D40	100	35	40	80	118

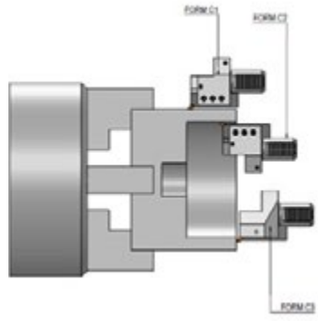
Sip. No.	Açıklama	H	L1	D	D1	D2
550.22.140	ISO50 DIN2080 D40	100	36	40	80	118

VDI TAKIM TUTUCU SİSTEMLERİ DIN69880

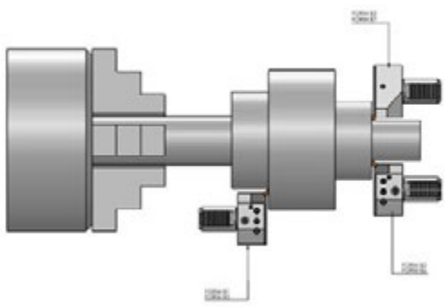
Gisstec®

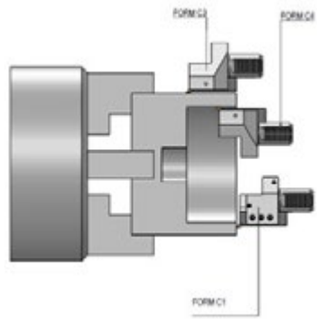
FENER MİLİNİN SOL DÖNÜŞ YÖNÜ İÇİN RADIAL TUTUCU



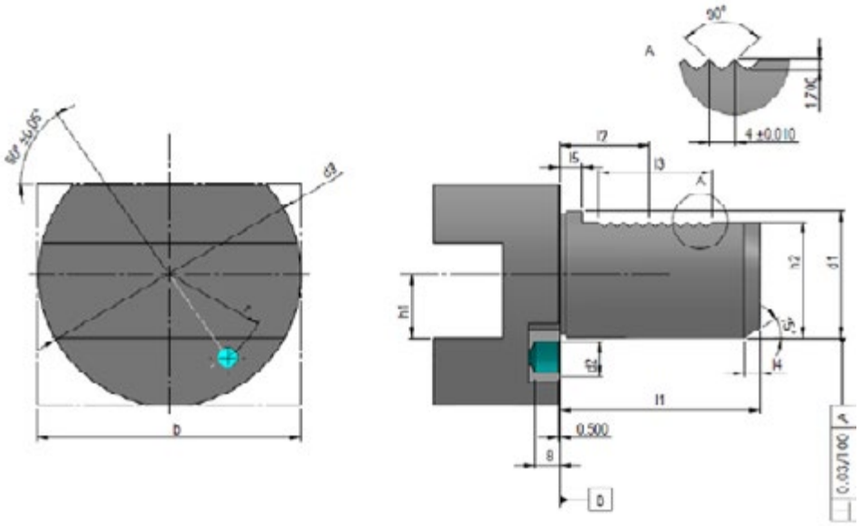


FENER MİLİNİN SAĞ DÖNÜŞ YÖNÜ İÇİN RADIAL TUTUCU





VDI NORM ÖLÇÜLERİ



1Teknik Özelliği :

- Takım tutucular alaşımlı çelikten yapılmaktadır. HRC 58 ± 2.
- Tamamen siyahlaştırılmıştır ve hassas taşlanmıştır.
- Bütün takımlarda ayarlanabilir soğutucu gözler mevcuttur.
- Aynı zamanda dıştan soğutma borularının bağlantı dişleri mevcuttur.

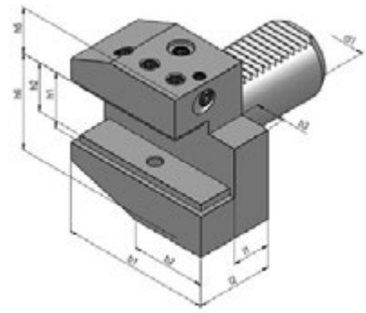
d1	b	h1 max.	d2	d3	h2 ± 0,1	r ± 0,02	L1 max.	L2 ± 0,05	L3 max.	L4 max.	L5
16	42	12	8	40	15,0	14,5	32	12,7	16	2	3,5
20	52	16	10	50	18,0	18,0	40	21,7	24	2	7,0
25	60	16	10	58	23,5	21,0	48	21,7	24	2	7,0
30	70	20	14	68	27,0	25,0	55	29,7	40	2	7,0
40	85	25	14	83	36,0	32,0	63	29,7	40	3	7,0
50	100	32	16	98	45,0	37,0	78	35,7	48	3	8,0

VDI TAKIM TUTUCU SİSTEMLERİ DIN69880

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RADIAL KATER TUTUCU FORM B1 SAĞ, KISA

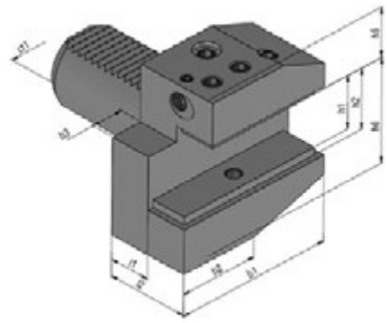




Sip. No.	Açıklama	d1	h1	h2	l2	l1	b1	b2	b3	h5	h6
730.31.120	VDI30 B1 30x20	30	20	16	40	22	70	35	10	28	38
740.31.125	VDI40 B1 40x25	40	25	20	44	22	85	42,5	12,5	32,5	48

RADIAL KATER TUTUCU FORM B2 SOL, KISA

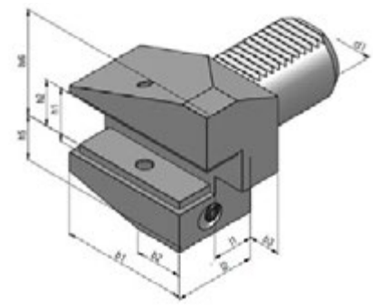




Sip. No.	Açıklama	d1	h1	h2	l2	l1	b1	b2	b3	h5	h6
730.32.120	VDI30 B2 30x20	30	20	16	40	22	70	35	10	28	38
740.32.125	VDI40 B2 40x25	40	25	20	44	22	85	42,5	12,5	32,5	48

RADIAL KATER TUTUCU FORM B3 TERS SAĞ, KISA

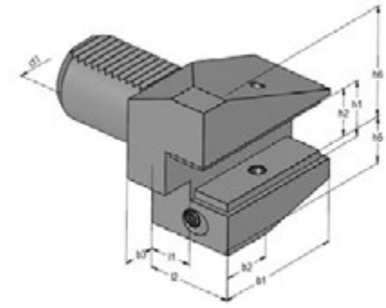




Sip. No.	Açıklama	d1	h1	h2	l2	l1	b1	b2	b3	h5	h6
730.33.120	VDI30 B3 30x20	30	20	16	40	22	70	35	10	35	38
740.33.125	VDI40 B3 40x25	40	25	20	44	22	85	42,5	12,5	42,5	48

RADIAL KATER TUTUCU FORM B4 TERS SOL, KISA





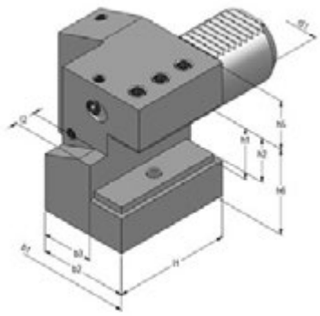
Sip. No.	Açıklama	d1	h1	h2	l2	l1	b1	b2	b3	h5	h6
730.34.120	VDI30 B4 30x20	30	20	16	40	22	70	35	10	35	38
740.34.125	VDI40 B4 40x25	40	25	20	44	22	85	42,5	12,5	42,5	48

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RADIAL KATER TUTUCU FORM C1 SAĞ

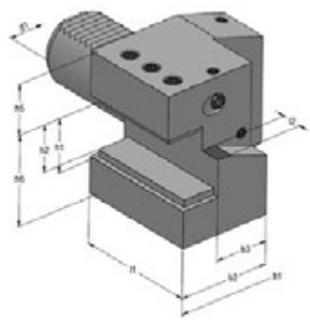




Sip. No.	Açıklama	d1	h1	h2	b1	b2	b3	l1	l2	h5	h6
730.41.120	VDI30 C1 30x20	30	20	16	70	35	17	70	10	28	38
740.41.125	VDI40 C1 40x25	40	25	20	85	42,5	21	85	12,5	32,5	48

AXIAL KATER TUTUCU FORM C2 SOL

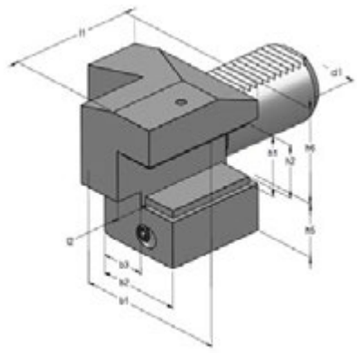




Sip. No.	Açıklama	d1	h1	h2	b1	b2	b3	l1	l2	h5	h6
730.42.120	VDI30 C2 30x20	30	20	16	70	35	17	70	10	28	38
740.42.125	VDI40 C2 40x25	40	25	20	85	42,5	21	85	12,5	32,5	48

AXIAL KATER TUTUCU FORM C3 TERS SAĞ, KISA

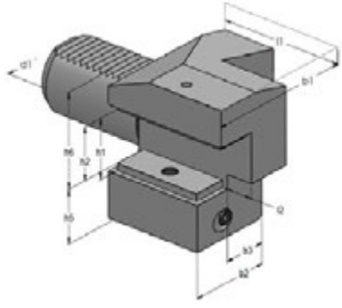




Sip. No.	Açıklama	d1	h1	h2	b1	b2	b3	l1	l2	h5	h6
730.43.120	VDI30 C3 30x20	30	20	16	70	35	17	70	10	35	38
740.43.125	VDI40 C3 40x25	40	25	20	85	42,5	21	85	12,5	42,5	48

AXIAL KATER TUTUCU FORM C4 TERS SOL, KISA





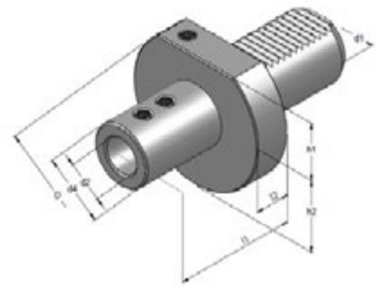
Sip. No.	Açıklama	d1	h1	h2	b1	b2	b3	l1	l2	h5	h6
730.44.120	VDI30 C4 30x20	30	20	16	70	35	17	70	10	38	35
740.44.125	VDI40 C4 40x25	40	25	20	85	42,5	21	85	12,5	48	42,5

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TAKMA UÇLU U-DRİLL TUTUCU FORM E1



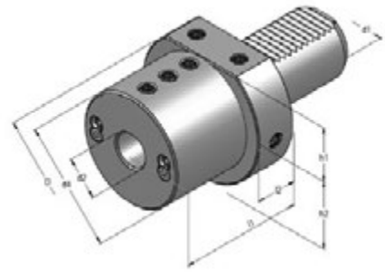


Sip. No.	Açıklama	d1	d2	d4	D	h1	h2	l1	l2
730.51.116	VDI30 E1 30x16	30	16	36	68	28	30	64	22
730.51.120	VDI30 E1 30x20	30	20	40	68	28	30	67	22
730.51.125	VDI30 E1 30x25	30	25	45	68	28	30	71	22
730.51.132	VDI30 E1 30x32	30	32	52	68	28	30	75	22
730.51.140	VDI30 E1 30x40	30	40	60	68	28	30	95	22

Sip. No.	Açıklama	d1	d2	d4	D	h1	h2	l1	l2
740.51.116	VDI40 E1 40x16	40	16	36	83	32,5	-	64	22
740.51.120	VDI40 E1 40x20	40	20	40	83	32,5	-	67	22
740.51.125	VDI40 E1 40x25	40	25	45	83	32,5	-	75	22
740.51.132	VDI40 E1 40x32	40	32	52	83	32,5	-	75	22
740.51.140	VDI40 E1 40x40	40	40	60	83	32,5	-	90	22

DELİK KATER TUTUCU FORM E2



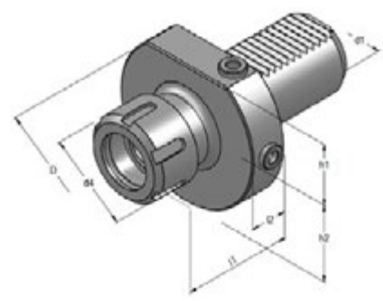


Sip. No.	Açıklama	d1	d2	d4	D	h1	h2	l1	l2
730.52.108	VDI30 E2 30x8	30	8	68	55	28	30	60	22
730.52.110	VDI30 E2 30x10	30	10	68	55	28	30	60	22
730.52.112	VDI30 E2 30x12	30	12	68	55	28	30	60	22
730.52.116	VDI30 E2 30x16	30	16	68	55	28	30	60	22
730.52.120	VDI30 E2 30x20	30	20	68	55	28	30	60	22
730.52.125	VDI30 E2 30x25	30	25	68	55	28	30	60	22
730.52.132	VDI30 E2 30x32	30	32	68	55	28	30	75	22

Sip. No.	Açıklama	d1	d2	d4	D	h1	h2	l1	l2
740.52.108	VDI40 E2 40x8	40	8	83	55	32,5	-	75	22
740.52.110	VDI40 E2 40x10	40	10	83	55	32,5	-	75	22
740.52.112	VDI40 E2 40x12	40	12	83	55	32,5	-	75	22
740.52.116	VDI40 E2 40x16	40	16	83	55	32,5	-	75	22
740.52.120	VDI40 E2 40x20	40	20	83	55	32,5	-	75	22
740.52.125	VDI40 E2 40x25	40	25	83	55	32,5	-	75	22
740.52.132	VDI40 E2 40x32	40	32	83	55	32,5	-	75	22
740.52.140	VDI40 E2 40x40	40	40	83	55	32,5	-	90	22

ER PENS BAŞLIĞI FORM E4





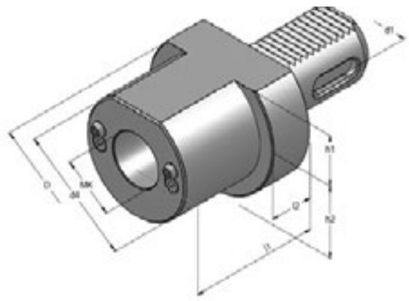
Sip. No.	Açıklama	d1	Kapasite	D	d4	h1	h2	l1	l2
730.02.116	VDI30 E4 30 ER25	30	2-16 (ER 25)	68	42	28	30	57	22
730.02.120	VDI30 E4 30 ER32	30	2-20 (ER 32)	68	50	28	30	75	22
730.02.126	VDI30 E4 30 ER40	30	3-26 (ER 40)	68	63	28	30	75	22
740.02.116	VDI40 E4 40 ER25	40	2-16 (ER 25)	83	42	32,5	-	75	22
740.02.120	VDI40 E4 40 ER32	40	2-20 (ER 32)	83	50	32,5	-	75	22
740.02.126	VDI40 E4 40 ER40	40	3-26 (ER 40)	83	63	32,5	-	75	22

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MORS KONİK ADAPTÖRÜ FORM F1

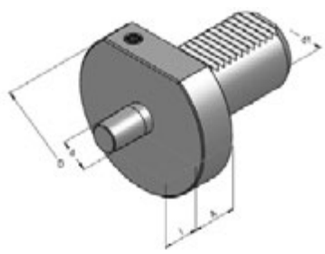




Sip. No.	Açıklama	d1	MK	d4	D	l1	l2	h1	h2
730.07.101	VDI30 F1 30xMK1	30	1	-	68	27	-	28	30
730.07.102	VDI30 F1 30xMK2	30	2	-	68	27	-	28	30
730.07.103	VDI30 F1 30xMK3	30	3	58	68	66	22	28	30
740.07.101	VDI40 F1 40xMK1	40	1	55	83	32,5	22	32,5	-
740.07.102	VDI40 F1 40xMK2	40	2	55	83	32,5	22	32,5	-
740.07.103	VDI40 F1 40xMK3	40	3	55	83	32,5	22	32,5	-
740.07.104	VDI40 F1 40xMK4	40	4	68	83	32,5	22	32,5	-

MANDREN MALAFASI DIN238



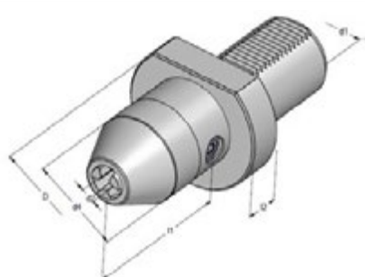


Sip. No.	Açıklama	d1	d	D	A	l
730.14.116	VDI30 B16	30	B16	68	27	24

Sip. No.	Açıklama	d1	d	D	A	l
740.14.116	VDI40 B16	40	B16	83	27	24

NC-MANDREN MALAFASI MERKEZDEN SU VERMELİ



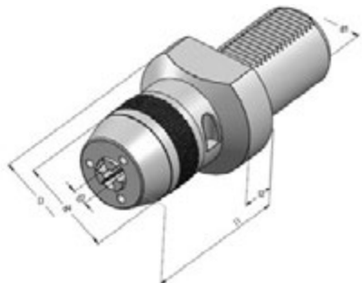


Sip. No.	Açıklama	d1	Kapasite (d2)	d4	D	l1	l2
730.15.113	VDI30 1-13	30	1,0-13	50	68	93	22
730.15.116	VDI30 2,5-16	30	2,5-16	50	68	98	22

Sip. No.	Açıklama	d1	Kapasite (d2)	d4	D	l1	l2
740.15.113	VDI40 1-13	40	1,0-13	50	83	93	22
740.15.116	VDI40 2,5-16	40	2,5-16	50	83	98	22

NC-MANDREN MALAFASI MERKEZDEN SU VERMELİ





Sip. No.	Açıklama	d1	Kapasite (d2)	d4	D	l1	l2
730.15.213	VDI30 1-13	30	1,0-13	50	68	87	22
730.15.216	VDI30 2,5-16	30	2,5-16	55	68	93	22

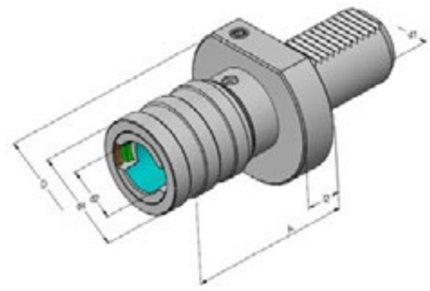
Sip. No.	Açıklama	d1	Kapasite (d2)	d4	D	l1	l2
740.15.213	VDI40 1-13	40	1,0-13	50	83	88	22
740.15.216	VDI40 2,5-16	40	2,5-16	55	83	93	22

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KILAVUZ ÇEKME BAŞLIĞI GİRİŞ-ÇIKIŞ KOMPANZELİ

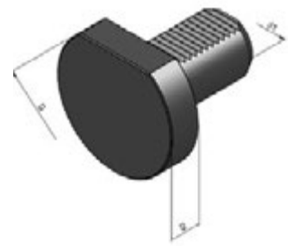




Sip. No.	Açıklama	d1	Kapasite	D	A	d4	d2	C	T
730.16.112	VDI30 M3-M12	30	M3-M14	68	55	38	19	9	9
730.16.120	VDI30 M5-M24	30	M5-M24	83	77	55	31	15	15
740.16.112	VDI40 M3-M12	40	M3-M14	68	55	38	19	9	9
740.16.120	VDI40 M5-M24	40	M5-M24	83	77	55	31	15	15

KILAVUZ ÇEKME BAŞLIĞI GİRİŞ-ÇIKIŞ KOMPANZELİ





Sip. No.	Açıklama	d1	D	L2
730.28.120	VDI30 Z2 30x20	30	68	16

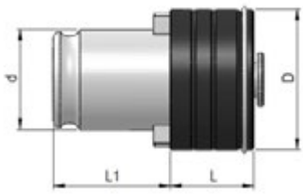
Sip. No.	Açıklama	d1	D	L2
740.28.120	VDI40 Z2 40x20	40	83	20

TAKIM TUTUCU AKSESUARLARI

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KILAVUZ TUTUCU - EMNİYETLİ



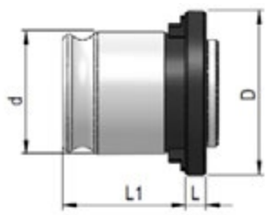


Sip. No.	Açıklama	d	D	L	L1	M	Şaft		DIN
116.11.3527	KTE1 3,5 M3	19	32	25	21,5	M 3	3,5	2,7	371
116.11.4534	KTE1 4,5 M4	19	32	25	21,5	M 4	4,5	3,4	371
116.11.649	KTE1 6 M5	19	32	25	21,5	M 5	6	4,9	371
116.11.649	KTE1 6 M6	19	32	25	21,5	M 6	6	4,9	371
116.11.862	KTE1 8 M8	19	32	25	21,5	M 8	8	6,2	371
116.11.755	KTE1 7 M10	19	32	25	21,5	M10	7	5,5	376
116.11.108	KTE1 10 M10	19	32	25	21,5	M10	10	8	371
116.11.97	KTE1 9 M12	19	32	25	21,5	M12	9	7	376
116.11.119	KTE1 11 M14	19	32	25	21,5	M14	11	9	376
116.12.649	KTE2 6 M6	31	50	34	35	M 6	6	4,9	371
116.12.862	KTE2 8 M8	31	50	34	35	M 8	8	6,2	371
116.12.755	KTE2 7 M10	31	50	34	35	M10	7	5,5	376
116.12.108	KTE2 10 M10	31	50	34	35	M10	10	8	371
116.12.97	KTE2 9 M12	31	50	34	35	M12	9	7	376
116.12.119	KTE2 11 M14	31	50	34	35	M14	11	9	376

Sip. No.	Açıklama	d	D	L	L1	M	Şaft		DIN
116.12.129	KTE2 12 M16	31	50	34	35	M16	12	9	376
116.12.1411	KTE2 14 M18	31	50	34	35	M18	14	11	376
116.12.1612	KTE2 16 M20	31	50	34	35	M20	16	12	376
116.12.1814	KTE2 18 M24	31	50	34	35	M24	18	14,5	376
116.13.97	KTE3 9 M12	48	72	45	55,5	M12	9	7	376
116.13.119	KTE3 11 M14	48	72	45	55,5	M14	11	9	376
116.13.129	KTE3 12 M16	48	72	45	55,5	M16	12	9	376
116.13.1411	KTE3 14 M18	48	72	45	55,5	M18	14	11	376
116.13.1612	KTE3 16 M20	48	72	45	55,5	M20	16	12	376
116.13.1814	KTE3 18 M24	48	72	45	55,5	M24	18	14,5	376
116.13.2016	KTE3 20 M27	48	72	45	55,5	M27	20	16	376
116.13.2218	KTE3 22 M30	48	72	45	55,5	M30	22	18	376
116.13.2520	KTE3 25 M33	48	72	45	55,5	M33	25	20	376
116.13.2822	KTE3 28 M36	48	72	45	55,5	M36	28	22	376

KILAVUZ TUTUCU - EMNİYETSİZ



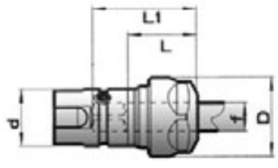


Sip. No.	Açıklama	d	D	L	L1	M	Şaft		DIN
116.01.2821	KT1 2,8 M2	19	30	7	21,5	M 2	2,8	2,1	371
116.01.3527	KT1 3,5 M3	19	30	7	21,5	M 3	3,5	2,7	371
116.01.4534	KT1 4,5 M4	19	30	7	21,5	M 4	4,5	3,4	371
116.01.649	KT1 6 M6	19	30	7	21,5	M 6	6	4,9	371
116.01.862	KT1 8 M8	19	30	7	21,5	M 8	8	6,2	371
116.01.755	KT1 7 M10	19	30	7	21,5	M10	7	5,5	376
116.01.108	KT1 10 M10	19	30	7	21,5	M10	10	8	371
116.01.97	KT1 9 M12	19	30	7	21,5	M12	9	7	376
116.01.119	KT1 11 M14	19	30	7	21,5	M14	11	9	376
116.02.649	KT2 6 M6	31	46	11	35	M 6	6	4,9	371
116.02.755	KT2 7 M10	31	46	11	35	M10	7	5,5	376
116.02.862	KT2 8 M8	31	46	11	35	M 8	8	6,2	371
116.02.97	KT2 9 M12	31	46	11	35	M12	9	7	376
116.02.108	KT2 10 M10	31	46	11	35	M10	10	8	371

Sip. No.	Açıklama	d	D	L	L1	M	Şaft		DIN
116.02.119	KT2 11 M14	31	46	11	35	M14	11	9	376
116.02.129	KT2 12 M16	31	46	11	35	M16	12	9	376
116.02.1411	KT2 14 M18	31	46	11	35	M18	14	11	376
116.02.1612	KT2 16 M20	31	46	11	35	M20	16	12	376
116.02.1814	KT2 18 M24	31	46	11	35	M24	18	14,5	376
116.03.119	KT3 11 M14	48	68	14	55,5	M14	11	9	376
116.03.129	KT3 12 M16	48	68	14	55,5	M16	12	9	376
116.03.1411	KT3 14 M18	48	68	14	55,5	M18	14	11	376
116.03.1612	KT3 16 M20	48	68	14	55,5	M20	16	12	376
116.03.1814	KT3 18 M24	48	68	14	55,5	M24	18	14,5	376
116.03.2016	KT3 20 M27	48	68	14	55,5	M27	20	16	376
116.03.2218	KT3 22 M30	48	68	14	55,5	M30	22	18	376
116.03.2520	KT3 25 M33	48	68	14	55,5	M33	25	20	376
116.03.2822	KT3 28 M36	48	68	14	55,5	M36	28	22	376

SENKRONİZE KILAVUZ ÇEKME ADAPTÖRÜ





Sip. No.	Açıklama	d	D	L	L1
126.02.110	M3-M12 ER16	20	28	24	37
126.02.116	M6-M20 ER25	32	42	28	52
126.02.126	M14-M33 ER40	50	63	32	75

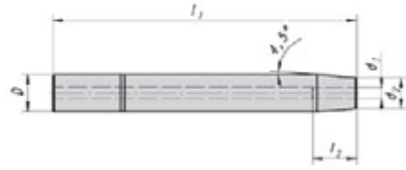
Sip. No.	Açıklama	d	D	L	L1
126.02.210	M3-M12 ER16	20	28	55	38
126.02.216	M6-M20 ER25	32	42	86	63
126.02.226	M14-M33 ER40	50	63	95	73

TAKIM TUTUCU AKSESUARLARI

Gisstec

SHRINK UZATMA





Sip. No.	Açıklama	D	d1	d2	l1	l2
612.25.403	d12-160 Ø3	12	3	8	160	10
612.25.404	d12-160 Ø4	12	4	8	160	12
612.25.406	d12-160 Ø6	12	6	8	160	12
616.25.403	d16-160 Ø3	16	3	10	160	9
616.25.404	d16-160 Ø4	16	4	10	160	12
616.25.405	d16-160 Ø5	16	5	10	160	15
616.25.406	d16-160 Ø6	16	6	10	160	28
620.25.405	d20-160 Ø5	20	5	14	160	15
620.25.406	d20-160 Ø6	20	6	14	160	28
620.25.408	d20-160 Ø8	20	8	14	160	34

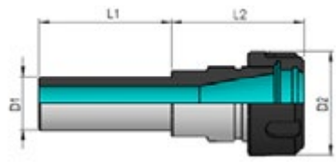
Sip. No.	Açıklama	D	d1	d2	l1	l2
625.25.405	d25-160 Ø8	25	8	19	160	34
625.25.406	d25-160 Ø10	25	10	20	160	42
625.25.408	d25-160 Ø12	25	12	20	160	47
625.25.406	d25-160 Ø14	25	14	20	160	47
625.25.408	d25-160 Ø16	25	16	22	160	50
632.25.410	d32-160 Ø10	32	10	27	160	42
632.25.412	d32-160 Ø12	32	12	27	160	47
632.25.414	d32-160 Ø14	32	14	27	160	47
632.25.416	d32-160 Ø16	32	16	27	160	50
632.25.420	d32-160 Ø20	32	20	27	160	52

SİLİNDİRİK ŞAFTLI PENS BAŞLIKLARI

Form ER

DIN 6499





Sip. No.	Açıklama	D1	D2	L2	L1
610.2M.205	d10-100 ER8 Mini 1-5	10	12	20	100
612.2M.207	d12-100 ER11 Mini 1-7	12	16	30	100
616.2M.307	d16-160 ER11 Mini 1-7	16	16	22	160
616.02.110	d16-60 ER16 1-10	16	28	35	60
616.02.310	d16-160 ER16 1-10	16	28	35	160

Sip. No.	Açıklama	D1	D2	L2	L1
620.02.116	d20-70 ER25 2-16	25	42	45	70
620.02.316	d20-160 ER25 2-16	25	42	45	160
625.02.116	d25-70 ER25 2-16	25	42	45	70
625.02.316	d25-160 ER25 2-16	25	42	45	160
632.02.120	d32-70 ER32 3-20	32	50	53	70
632.02.320	d32-160 ER32 3-20	32	50	53	160
640.02.126	d40-80 ER40 4-26	40	63	56	80

SİLİNDİRİK ŞAFTLI KILAVUZ ÇEKME BAŞLIKLARI

Form B-E

DIN 1835



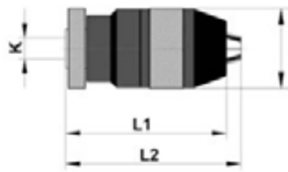


Sip. No.	Açıklama	d	D	D1	L	L1
620.16.120	Ø20 M3-M12	19	38	20	50	41
620.16.125	Ø25 M3-M12	19	38	25	56	41
620.16.132	Ø32 M3-M12	19	38	32	61	41
620.16.140	Ø40 M3-M12	19	38	40	72	41

Sip. No.	Açıklama	d	D	D1	L	L1
620.16.225	Ø25 M5-M20	31	55	25	56	63
620.16.232	Ø32 M5-M20	31	55	32	61	63
620.16.240	Ø40 M5-M20	31	55	40	72	63

SUPRA MANDREN



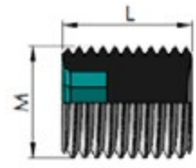


Sip. No.	Açıklama K	L1	L2	D
240.14.12	B12 0-10	79	86	40
240.14.16	B16 1-13	93	103	47
240.14.26	B16 3-16	93	103	47
240.14.18	B18 3-16	95	105	52

VELDON SIKMA CİVATASI

DIN 1835 B





Sip. No.	Açıklama	M	L
210.04.06	d 6	M6	10
210.04.08	d 8	M8	10
210.04.10	d10	M10	12
210.04.12	d12	M12	16
210.04.16	d16	M14	16
210.04.20	d20	M16	16
210.04.25	d25	M18x2	20
210.04.32	d32	M20x2	20
210.04.40	d40	M20x2	20

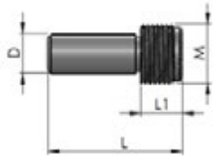
TAKIM TUTUCU AKSESUARLARI

Gisstec®

SOĞUTMA SUYU ÜNİTESİ

HSK için





Sip. No.	Açıklama	Hsk	D	L	L1
63A.20.205	HSK 63	63A	12	36,6	11,5
100A.20.205	HSK100	100A	16	44	15,5

SOĞUTMA ÜNİTESİ ANAHTARI





Sip. No.	Açıklama	D
63A.20.202	HSK63	16,5
100A.20.202	HSK100	22

KONİK TEMİZLEME



Sip. No.	Açıklama
226.01.101	MK1
226.01.102	MK2
226.01.103	MK3
226.01.104	MK4
226.01.105	MK5



Sip. No.	Açıklama
226.02.130	SK30
226.02.140	SK40
226.02.150	SK50
226.03.163	HSK63
226.03.100	HSK100

ÇELİK MONTAJ APARATI, ÜNİVERSAL





- SK-ISO-BT-HSK Takımların tamamında kullanılabilir
- 45 ° ve 90 ° - pozisyonda kullanılabilir özellikte

Sip. No.	Açıklama
228.04.200	SK40 - ISO40 - BT40 - HSK63
228.04.250	SK50 - ISO50 - BT50 - HSK100

MONTAJ APARATI, ALÜMİNYUM



Sip. No.	Açıklama
228.01.130	SK30
228.01.140	SK40
228.01.150	SK50

İÇTEN ÇEKTİRMELİ TUTUCULAR

KOJEX

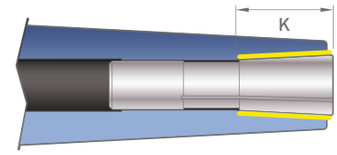
EXCELLENT DODGE

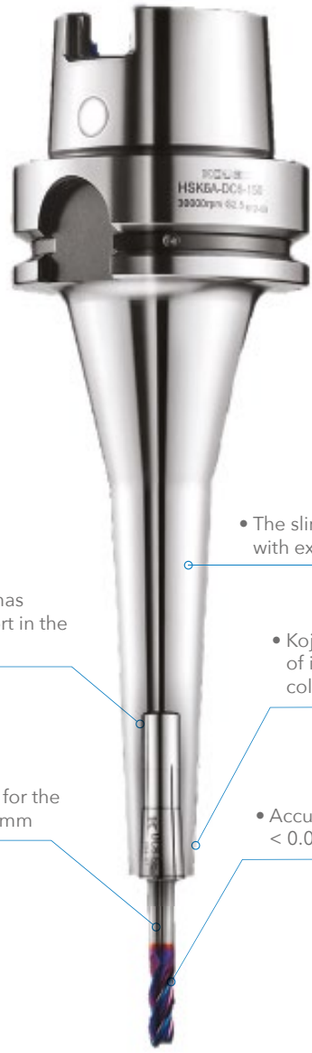
The design of the slim chuck support sufficient length. The five-axis machining or mold processing are very suitable.



SPECIALLY FOR END MILL

This is a one-to-one special collet. 95% taper area of the collet [K] is covered the collet chuck, during the milling process to achive excellent vibration damping effect.





KOJEX IS THE INITIATOR OF INNER-HOLDING COLLET CHUCKS

The simple structure can reduces interference and more stable when the cutting processing.



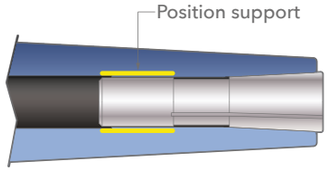
SPECIALLY DESIGNED FOR THE SMALL TOOLS UNDER 6MM

The clamping range from 1mm to 6mm for choice any type tools, there are 33 size collet for choice.



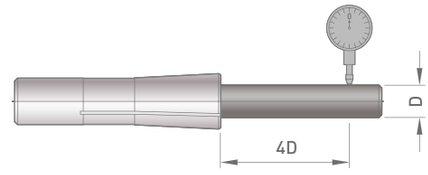
THE END OF COLLET HAS POSITIONING SUPPORT IN THE COLLET CHUCK.

Kojex'swell-designed to reduce vibration during the milling cutter processing.



RUN OUT

Accuracy within 0.005mm at 4 times length of cutter edge to ensure uniform an even cutting action, increasing cutting speed and tool life.

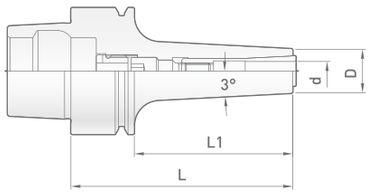


İÇTEN ÇEKTİRMELİ TUTUCULAR

KOJEX

DC SLIM CHUCK — HSK E32/40/50







Dual face contact | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

The tool shank under 2mm must to use 3Nm torque wrench.

Collet chuck designed without nut and with inner-holding collet. This has strong rigidity and high stability. Torque wrench is recommended for chuck stability.

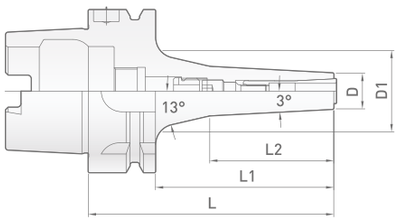
Torque wrench must be ordered separately.

The recommended torsion and correct torque wrench prevents deformation of the tool holder.

Order Code	Range (d)	L	L1	D	Min^{-1} G2.5	Spanner ○	Recommended Torsion	Fixed Torque Spanner
HSK32E-DC6 -70	1~6	70	50	14	42,000	M4	5Nm	30294-5144
HSK40E-DC6 -70	1~6	70	50	14	42,000	M4	5Nm	30294-5144
HSK50E-DC6 -75	1~6	75	49	14	36,000	M4	5Nm	30294-5144

DC SLIM CHUCK — HSK A63







Dual face contact | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

The tool shank under 2mm must to use 3Nm torque wrench.

Collet chuck designed without nut and with inner-holding collet. This has strong rigidity and high stability. Torque wrench is recommended for chuck stability.

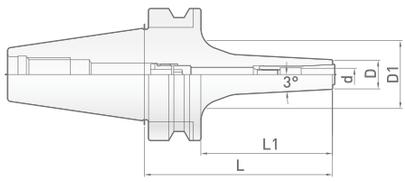
Torque wrench must be ordered separately.

The recommended torsion and correct torque wrench prevents deformation of the tool holder.

Order Code	Range (d)	L	L1	L2	D	Min^{-1} G2.5	Spanner ○	Recommended Torsion	Fixed Torque Spanner
HSK63A-DC6-95	1~6	95	69	45	14	30,000	M4	5Nm	30294-5144
HSK63A-DC6-120	1~6	120	94	65	14	30,000	M4	5Nm	30294-5146
HSK63A-DC6-120	1~6	150	124	82	14	30,000	M4	5Nm	30294-5146

DC SLIM CHUCK — BT 30/40







Taper tolerance | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

The tool shank under 2mm must to use 3Nm torque wrench.

Collet chuck designed without nut and with inner-holding collet. This has strong rigidity and high stability. Torque wrench is recommended for chuck stability.

Torque wrench must be ordered separately.

The recommended torsion and correct torque wrench prevents deformation of the tool holder.

Order Code	Range (d)	L	L1	D	D2	Min^{-1} G2.5	Spanner ○	Recommended Torsion	Fixed Torque Spanner
BT30-DC6-60	1~6	60	38	14	-	30,000	M4	5Nm	30294-5144
BT30-DC6-90	1~6	90	68	14	28	30,000	M4	5Nm	30294-5144
BT30-DC6-120	1~6	120	98	14	38	30,000	M4	5Nm	30294-5144
BT40-DC6-90	1~6	90	63	14	26	30,000	M4	5Nm	30294-5146
BT40-DC6-120	1~6	120	93	14	32	30,000	M4	5Nm	30294-5146
BT40-DC6-150	1~6	150	123	14	41	30,000	M4	5Nm	30294-5146

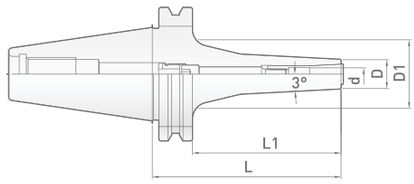
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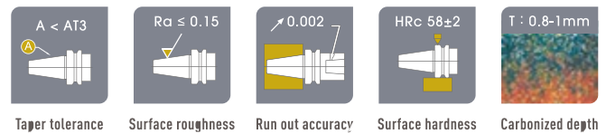
KOJEX

DC SLIM CHUCK

SK 40







Taper tolerance | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

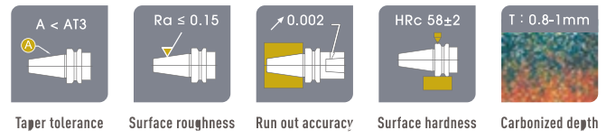
The tool shank under 2mm must to use 3Nm torque wrench.
Collet chuck designed without nut and with inner-holding collet. This has strong rigidity and high stability.
Torque wrench is recommended for chuck stability.
Torque wrench must be ordered separately.
The recommended torsion and correct torque wrench prevents deformation of the tool holder.

Order Code	Range (d)	L	L1	D	D1	Min^{-1} G6.3	Spanner	Recommended Torsion	Fixed Torque Spanner
SK40-DC6-90	1-6	90	71	14	30	20.000	M4	5Nm	30294-5146
SK40-DC6-120	1-6	120	101	14	40	20,000	M4	5Nm	30294-5144
SK40-DC6-150	1-6	150	131	14	42	20,000	M4	5Nm	30294-5146

DC EXTENSION SLIM CHUCK



The tool shank under 2mm mustto use 3Nm torque wrench.
Extension adaptor includes one hexagon spanner and spanner(A),



Taper tolerance | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

Fig 1

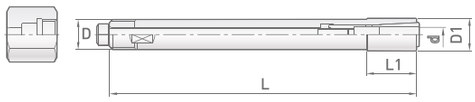


Fig 2



Order Code	d	L	L1	L2	D	D1	Fig	Stop Nut	Spanner	Recommended Torsion	Collect
ST10-DC4-90	2-4	90	14	-	10	9	1	TP-M8	30194-632(M3)	4Nm	DC4
ST12-DC4-120	2-4	120	38	-	12	9	2	-	30194-632(M3)	4Nm	DC4
ST12-DC6-120	1-6	120	40	-	12	14	1	TP-M12	30194-643(M4)	5Nm	DC6
ST16-DC6-150	1-6	150	35	24	16	14	2	-	30194-643(M4)	5Nm	DC6
ST20-DC6-200	1-6	200	70	74	20	14	2	-	30194-643(M4)	5Nm	DC6
ST25-DC6-250	1-6	250	115	124	25	14	2	-	30194-644(M4)	5Nm	DC6

SD13 EXTENSION SLIM CHUCK

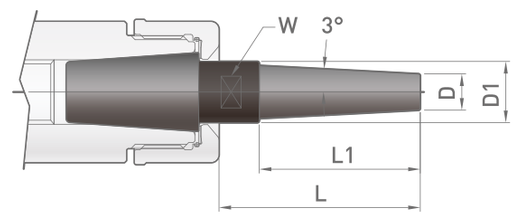
DC6



DC4







The tool shank under 2mm must to use 3Nm torque wrench.
The users can more choose for the extension rod of SD13 collet chuck.
Extension adaptor includes one hexagon spanner and spanner(A).

Order Code	Holder	Range (d)	L	L1	D	D1	Spanner	W	Collet
SD13-DC4-50	SD13	2~4	50	40	9	15	30194-632	13mm	DC4
SD13-DC6-50	SD13	1~6	50	40	14	15	30194-643	13mm	DC6

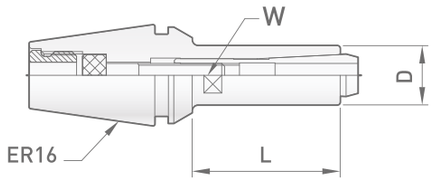
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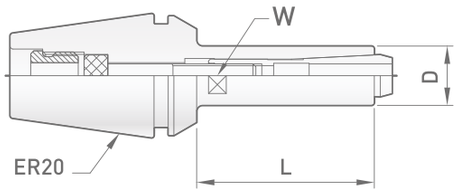
KOJEX

ER EXTENSION SLIM CHUCK









The tool shank under 2mm must to use 3Nm torque wrench.
The users can more choose for the extension rod of ER collet chuck.
Extension adaptor includes one hexagon spanner and spanner(A).

Order Code	Holder	Range (d)	L	D	Spanner	W	Collet
ER16-DC4-25	ER16	2-4	25	9	30194-632	8	DC4
ER20-DC6-35	ER20	1-6	35	14	30194-643	13	DC6

SET OF DC EXTENSION SLIM CHUCK



DC4

Order Code	Collet Chuck	Collet	Spanner (A)	Spanner (B)
SST10-DC4-90	ST10-DC4-90	DC4-2E x 1pc DC4-3E x 1pc DC4-4E x 1pc	30194~002	30m~632(M3]
SST12-DC4-120	ST12-0C4-120			

DC6

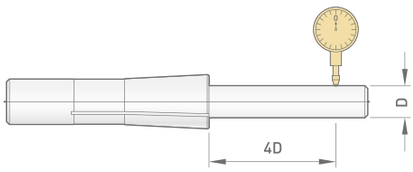
Order Code	Collet Chuck	Collet	Spanner (A)	Spanner (B)
SST12-DC6-120	ST12-DC6-120	DC6-3E x 1pc DC6-4E x 1pc DC6-6E x 1pc	30194~002	30194~6403(M4)
SST16-DC6-150	ST16-DC6-150			30194~643(M4)



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KOJEX

DC COLLET RUNOUT — E-TYPE

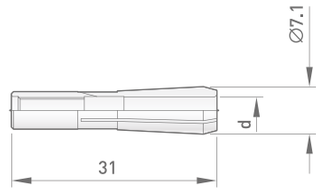


Runout < 5µm (4xD)

The design of E Type collets is emphasized on increase the clamping force of end mills.
Special designed for end mill.

DC 4 COLLET — E-TYPE



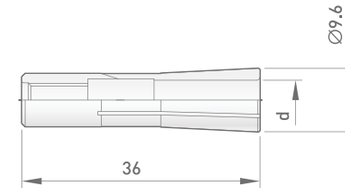


Order Code	(d)
DC4-2E	2
DC4-3E	3

Order Code	(d)
DC4-4E	4
DC4-1/8 E	3.175

DC 6 COLLET — E-TYPE

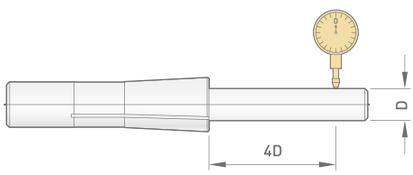




Order Code	(d)
DC6-3E	3
DC6-4E	4
DC6-5E	5

Order Code	(d)
DC6-6E	6
DC6-1/8 E	3.175
DC6-1/4E	6.35

DC COLLET RUNOUT — K-TYPE

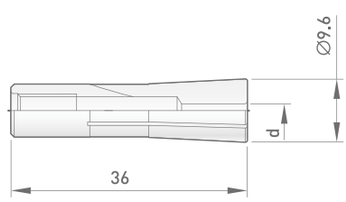


Runout < 5µm (4xD)

K Type collets can clamp any type of drlls, reamers and taps below Ø1.9mm.
Gripping range of each type of collets is 0.1mm.

DC 6 COLLET FOR SMALL SHANK — K-TYPE

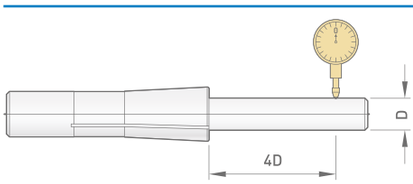




Order Code	d	(d)
DC6-1.0K	1.0	0.9~1.0
DC6-1.1K	1.1	1.0~1.1
DC6-1.2K	1.2	1.1~1.2
DC6-1.3K	1.3	1.2~1.3
DC6-1.4K	1.4	1.3~1.4

Order Code	d	(d)
DC6-1.5K	1.5	1.4~1.5
DC6-1.6K	1.6	1.5~1.6
DC6-1.7K	1.7	1.6~1.7
DC6-1.8K	1.8	1.7~1.8
DC6-1.9K	1.9	1.8~1.9

DC COLLET RUNOUT — D-TYPE

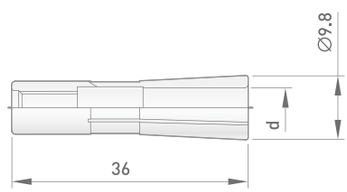


Runout < 5µm (4xD)

D Type collets can clamp any type of drlls, reamers and taps below Ø6mm.
Gripping range of each type of collets is 0.25mm.

DC 6-D COLLET — D-TYPE





Order Code	d	(d)
DC6-2D	2	1.75~2.00
DC6-2.25D	2.25	2.00~2.25
DC6-2.5D	2.5	2.25~2.50
DC6-2.75D	2.75	2.50~2.75
DC6-3D	3	2.75~3.00
DC6-3.25D	3.25	3.00~3.25
DC6-3.5D	3.5	3.25~3.50
DC6-3.75D	3.75	3.50~3.75
DC6-4D	4	3.75~4.00

Order Code	d	(d)
DC6-4.25D	4.25	4.00~4.25
DC6-4.5D	4.5	4.25~4.50
DC6-4.75D	4.75	4.50~4.75
DC6-5D	5	4.75~5.00
DC6-5.25D	5.25	5.00~5.25
DC6-5.5D	5.5	5.25~5.50
DC6-5.75D	5.75	5.50~5.75
DC6-6D	6	5.75~6.00

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KOJEX

SPANNER



Order Code	⬡	L
30194-632	3	100
30194-643	4	150
30194-644	4	200

FIXED TORQUE SPANNER





Order Code
30194-002

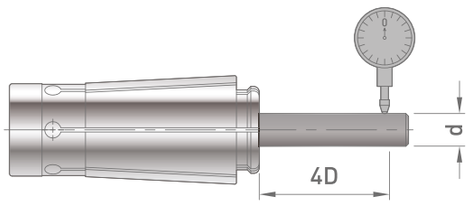
Order Code	Torque	⬡	L	Tool Size
30294-5134	3Nm	4	70	Collet under 2mm
30294-5144	5Nm	4	70	DC6
30294-5146	5Nm	4	115	

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KOJEX

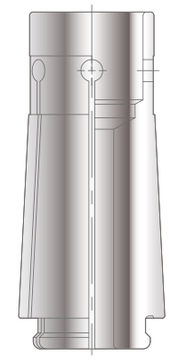
RUN OUT

Accuracy within 0.005mm at U times length of cutter edge to ensure uniform an even cutting action, increasing cutting speed and tool life.



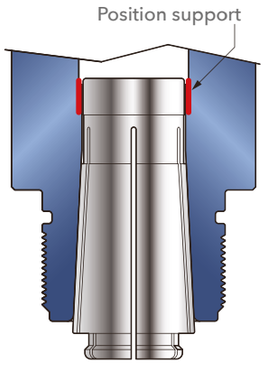
COLLETS SPECIALLY DESIGNED FOR MILLING

The design of the small angle collet can increase the clamping force of the tool and milling is more stable during the processing.



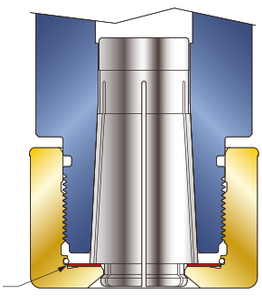
THE END OF COLLET HAS POSITIONING SUPPORT IN THE COLLET CHUCK.

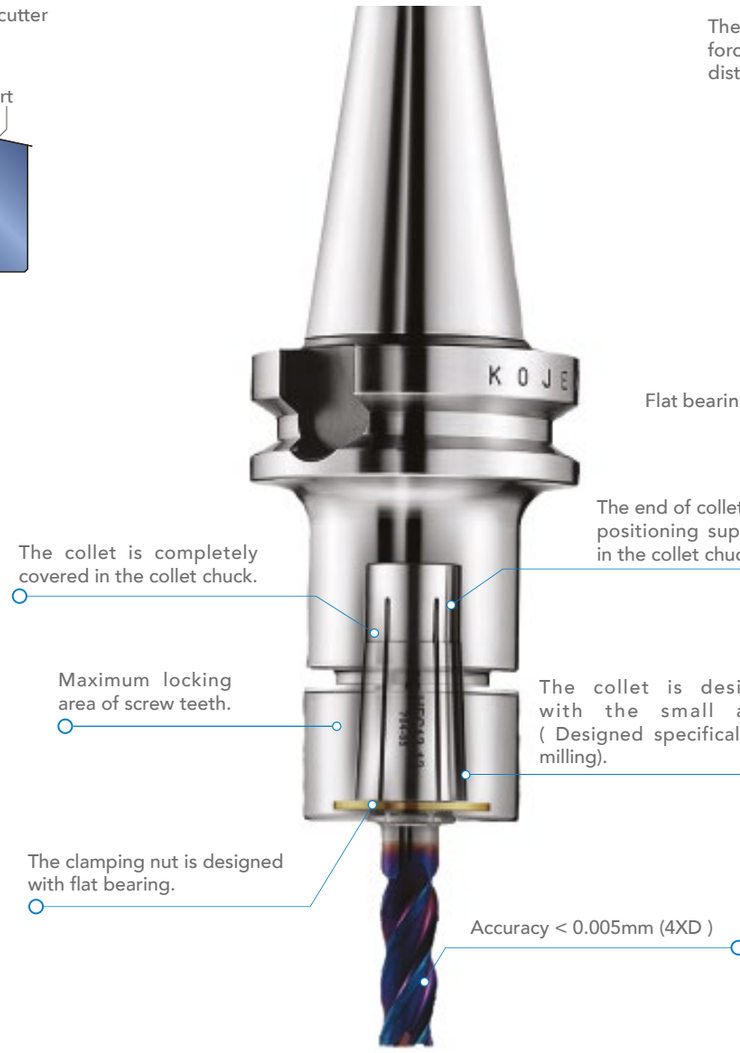
Kojex's well-designed to reduce vibration during the milling cutter processing.



THE CLAMPING NUT IS DESIGNED WITH FLAT BEARING

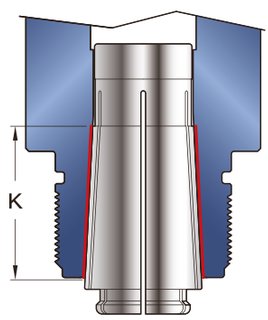
The bearing nut can increase the clamping force more than 30% and avoid the distortion and deformation of the collet.





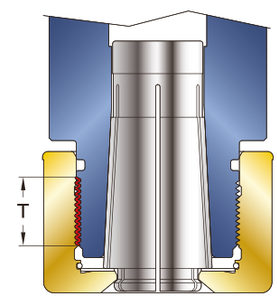
THE COLLET IS COMPLETELY COVERED IN THE COLLET CHUCK

95% taper area of the collet [K] is covered the collet chuck during the milling processing to arrive excellent vibration damping of performance.



MAXIMUM LOCKING AREA OF SCREW TEETH [T]

The maximum locking area of the screw teeth can increase stability and avoid cutting vibration caused by the nut loosening.

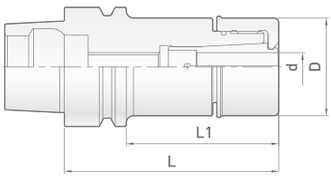


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KOJEX

HEC MILLING CHUCK (AM TYPE) — HSK E 40/50







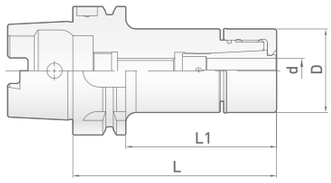
Dual face contact | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

The circular nuts can be replaced with the hexagonal nuts.
Clamping nut design by circular cylinder. Bearing spanner must be used.
End mill chuck specially designed for hard cutting material
Superior surface finish for mold tools and 3-D work,
Bearing spanner and stop screw must be ordered separately.

Order Code	Range (d)	L	L1	D	Min^{-1} G2.5	Nut	Spanner
HSK40E-HEC8-70AM	3~8	70	50	30	42,000	CN-HEC8AM	30194-830
HSK40E-HEC12-75AM	4~12	75	55	42	42,000	CN-HEC12AM	30194-842
HSK50E-HEC8-70AM	3~8	70	44	30	36,000	CN-HEC8AM	30194-830
HSK50E-HEC12-70AM	4~12	70	44	42	36,000	CN-HEC12AM	30194-842

HEC MILLING CHUCK (AM TYPE) — HSK A 63







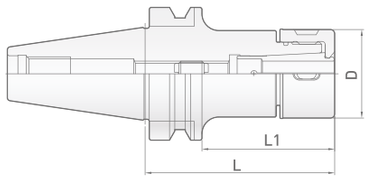
Dual face contact | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

The circular nuts can be replaced with the hexagonal nuts.
Clamping nut design by circular cylinder. Bearing spanner must be used.
End mill chuck specially designed for hard cutting material.
Superior surface finish for mold tools and 3-D work.
Bearing spanner and stop screw must be ordered separately.

Order Code	Range (d)	L	L1	D	Min^{-1} G2.5	Nut	Spanner
HSK63A-H EC8-10OAM	3~8	100	74	30	30,000	CN-HEC8AM	30194-830
HSK63A-HEC12-100AM	4~12	100	74	42	30.000	CN-HEC12AM	30194-842

HEC MILLING CHUCK (AC TYPE) — BT 30/40/50







Taper tolerance | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

End milt chuck specially designed for hard catting material.
Superior surface finish for mold toots and 3-D work.
Spanner and stop screw must be ordered separately.

Order Code	L	L1	D	Min^{-1} G6.3	Nut	Spanner	Collet
BT30-HEC8-75	75	53	30	30,000	CN-HEC8AC	30194-724	HEC8
BT30-HEC12-75	75	53	42	30,000	CN-HEC12AC	30194-702	HEC12
BT40-HEC8-90	90	63	30	30,000	CN-HEC8AC	30194-724	HEC8
BT40-HEC12-90	90	63	42	30,000	CN-HEC12AC	30194-702	HEC12
BT50-HEC12-100	100	62	42	10,000	CN-HEC12AC	30194-702	HEC12

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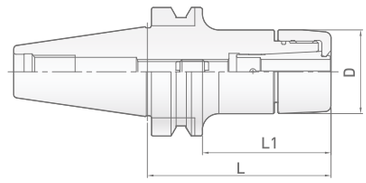
KOJEX

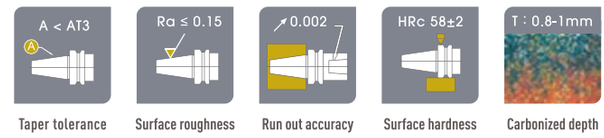
HEC MILLING CHUCK (AM TYPE)

BT 30/40









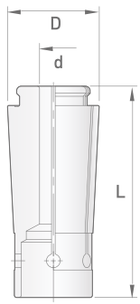
Taper tolerance | Surface roughness | Run out accuracy | Surface hardness | Carbonized depth

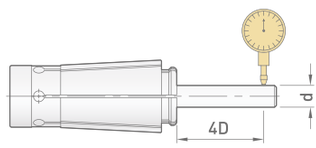
Clamping nut design hy circular cylinder. Bearing spanner must be used.
End mill chuck specially designed for hard cutting material.
Superior surface finish for mold tools and 3-D work.
Bearing spanner and stop screw must be ordered separately.

Order Code	L	L1	D	Min^{-1} G2.5	Nut	Spanner	Collet
BT30-H EC8-75AM	75	53	30	30,000	CN-HEC8AM	30194-830	HEC8
BT30-HEC12-75AM	75	53	42	30,000	CN-HEC12AM	30194-842	HEC12
BT40-HEC8-90AM	90	63	30	30,000	CN-HEC8AM	30194-830	HEC8
BT40-HEC12-90AM	90	63	42	30,000	CN-HEC12AM	30194-842	HEC12

HEC COLLECT







Runout < 5µm (4xD)

Order Code	d	(d)	L	D
HEC8-3	3	3	35	16
HEC8-4	4	4		
HEC8-5	5	5		
HEC8-6	6	6		
HEC8-8	8	8		

Order Code	d	(d)	L	D
HEC12-4	4	4	46	20
HEC12-6	6	6		
HEC12-8	8	8		
HEC12-10	10	10		
HEC12-12	12	12		

HEC NUT (AC TYPE)



Order Code	Outside Did	Collet
CN-HEC8AC	30	HEC8
CN-HEC12AC	42	HEC12

HEC NUT (AM TYPE)



Order Code	Outside Dla	Collet
CN-HEC8AM	30	HEC8
CN-HEC 12 AM	42	HEC12

SPANNER



Order Code	Type
30194-724	SP-HEC8
30194-702	SP-HEC12



Order Code	Nut	Inside Dia
30194-830	CN-HEC8AM	30
30194-842	CN-HEC12AM	42

USER MANUAL

KOJEX

SD/HEC

CLEAN

To maintain high precisian, you must always clean the damping nut, collet and collet chuck prior to assembly.

INSTALL

1. Stand the collet on a table.



2. Push the clamping nut onto the collet until you hear a “click” sound.



3. Put the cutting toot into the collet and tighten until the tool fixed.



4. Put the chuck in the toot locking fixture and use the spanner to lock the clamping nut.



DISASSEMBLE

1. Position the chuck in the tool locking fixture and use the spanner on the clamping nut to loosen.



2. Loosen the clamping nut by hand until you can remove it from the chuck completely.



3. Remove the tool and separate the collet from the clamping nut hy hand.



4. Clean the dust and metal filings from the clamping nut, collet and holder with an air gun.



5. Apply anti-corrosion agent for longevity of the collet.



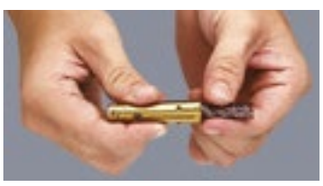
UC/DC

CLEAN

To maintain high precisian, you must always clean the damping nut, collet and collet chuck prior to assembly.

INSTALL

1. Insert the cutting tool into the collet.



2. Rotate the hexagonal spanner clockwise to fix the toot and collet.



3. Put the chuck in the toot lucking fixture and lock the toot with a torque wrench, (for recommended torque value please check the catalogue)



DISASSEMBLE

1. Position the chuck in the toot locking fixture. Then Rotate the hexagonal spanner counter-clockwise two times to loosen the toot and collet.



2. Remove the cutting tool and collet.



3. Clean the dust and metal filings from the collet and holder with an air gun.



4. Apply anti-corrosion agent for longevity of the collet.

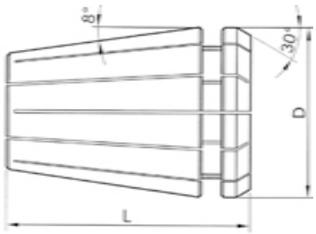


PENSLER

ER 8 PENSLER

DIN 6499 / ISO 15488-B





ER 8 CLASS 2

Sip. No.	Sıkma çapı mm
ER080102	1.0-0.5
ER080152	1.5-1.0
ER080202	2.0-1.5
ER080252	2.5-2.0
ER080302	3.0-2.5
ER080352	3.5-3.0
ER080402	4.0-3.5
ER080452	4.5-4.0
ER080502	5.0-4.5

D	8.5mm
L	13mm

ER 8 CLASS 1

Sip. No.	Sıkma çapı mm
ER080101	1.0-0.5
ER080151	1.5-1.0
ER080201	2.0-1.5
ER080251	2.5-2.0
ER080301	3.0-2.5
ER080351	3.5-3.0
ER080401	4.0-3.5
ER080451	4.5-4.0
ER080501	5.0-4.5

TUTMA ARALIĞI	1.0-5.0mm

ER 8 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER08010T	1.0-0.5
ER08015T	1.5-1.0
ER08020T	2.0-1.5
ER08025T	2.5-2.0
ER08030T	3.0-2.5
ER08035T	3.5-3.0
ER08040T	4.0-3.5
ER08045T	4.5-4.0
ER08050T	5.0-4.5

TUTMA DARALMA KAPASİTESİ	0.5mm

ER 8 PENS TAKIMLARI (Ø1-5MM 9AD.)



ER 8 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER08SET2	9ad. ER8 pens Class 2 Ø1-5mm arası 0.5mm atlamalı plastik kutuda

ER 8 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER08SET1	9ad. ER8 pens Class 1 Ø1-5mm arası 0.5mm atlamalı plastik kutuda

ER 8 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER08SETT	9ad. ER8 pens TOPAC Ø1-5mm arası 0.5mm atlamalı plastik kutuda

HASSASİYET STANDARTLARI

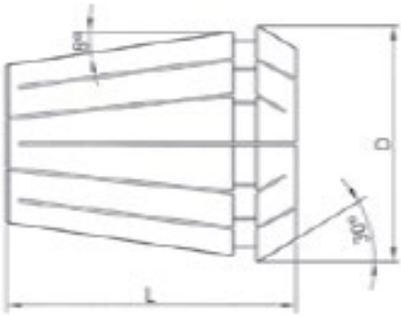
3 ayrı hassasiyet sınıfı:	
CLASS 2	**Hassas ve ekonomik, DİN 6499 Class 2 standardında max. 15-20 mikron salgı.**
CLASS 1	**Daha Hassas, DİN 6499 Class 1 standardında max. 10 mikron salgı.**
TOPAC	**Süper Hassas, max 5 mikron salgı. Çok hassas takımlar, dar toleranslı işler, yüksek hızlı işlemeye uygun.**

Ø d	L	DIN 6499 CLASS2	DIN 6499 CLASS 1	TOPAC
1 - 1.6	6	0.015	0.010	0.005
1.6 - 3	10	0.015	0.010	0.005
3 - 7	16	0.015	0.010	0.005
7 - 10	25	0.015	0.010	0.005
10 - 18	40	0.020	0.010	0.005
18 - 25	50	0.020	0.010	0.005
25 - 34	60	0.020	0.015	0.010

ER 11 PENSLER

DIN 6499 / ISO 15488-B





ER 11 CLASS 2

Sip. No.	Sıkma Çapı Ømm
ER110102	1.0-0.5
ER110152	1.5-1.0
ER110202	2.0-1.5
ER110252	2.5-2.0
ER110302	3.0-2.5
ER110352	3.5-3.0
ER110402	4.0-3.5
ER110452	4.5-4.0
ER110502	5.0-4.5
ER110552	5.5-5.0
ER110602	6.0-5.5
ER110652	6.5-6.0
ER110702	7.0-6.5
ER110752*	7.5-7.3
ER110802*	8.0-7.8

D	11.5mm
L	18mm

ER 11 CLASS 1

Sip. No.	Sıkma Çapı Ømm
ER110101	1.0-0.5
ER110151	1.5-1.0
ER110201	2.0-1.5
ER110251	2.5-2.0
ER110301	3.0-2.5
ER110351	3.5-3.0
ER110401	4.0-3.5
ER110451	4.5-4.0
ER110501	5.0-4.5
ER110551	5.5-5.0
ER110601	6.0-5.5
ER110651	6.5-6.0
ER110701	7.0-6.5
ER110751*	7.5-7.3
ER110801*	8.0-7.8

TUTMA ARALIĞI	1.0-8.0mm

ER 11 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER11010T	1.0-0.5
ER11015T	1.5-1.0
ER11020T	2.0-1.5
ER11025T	2.5-2.0
ER11030T	3.0-2.5
ER11035T	3.5-3.0
ER11040T	4.0-3.5
ER11045T	4.5-4.0
ER11050T	5.0-4.5
ER11055T	5.5-5.0
ER11060T	6.0-5.5
ER11065T	6.5-6.0
ER11070T	7.0-6.5
ER11075T*	7.5-7.3
ER11080T*	8.0-7.8

TUTMA DARALMA KAPASİTESİ	0.5mm

* Ø>7 (Ø7mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm

ER 11 PENS TAKIMLARI (Ø1-7MM 13AD.)



ER 11 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER11SET2	13ad. ER11 pens Class 2 Ø1-7mm arası 0.5mm atlamalı plastik kutuda

ER 11 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER11SET1	13ad. ER11 pens Class 1 Ø1-7mm arası 0.5mm atlamalı plastik kutuda

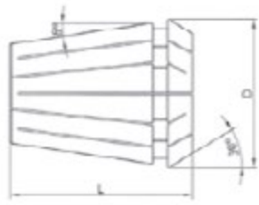
ER 11 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER11SETT	13ad. ER11 pens TOPAC Ø1-7mm arası 0.5mm atlamalı plastik kutuda

PENSLER

ER 16 PENSLER



DIN 6499 / ISO 15488-B



ER 16 CLASS 2

Sip. No.	Sıkma çapı Ømm
ER160102	1.0-0.5
ER160152	1.5-1.0
ER160202	2.0-1.5
ER160252	2.5-2.0
ER160302	3.0-2.5
ER160352	3.5-2.5
ER160402	4.0-3.0
ER160452	4.5-3.5
ER160502	5.0-4.0
ER160552	5.5-4.5
ER160602	6.0-5.0
ER160652	6.5-5.5
ER160702	7.0-6.0
ER160752	7.5-6.5
ER160802	8.0-7.0

ER 16 CLASS 1

Sip. No.	Sıkma çapı Ømm
ER160101	1.0-0.5
ER160151	1.5-1.0
ER160201	2.0-1.5
ER160251	2.5-2.0
ER160301	3.0-2.5
ER160351	3.5-2.5
ER160401	4.0-3.0
ER160451	4.5-3.5
ER160501	5.0-4.0
ER160551	5.5-4.5
ER160601	6.0-5.0
ER160651	6.5-5.5
ER160701	7.0-6.0
ER160751	7.5-6.5
ER160801	8.0-7.0

ER 16 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER16010T	1.0-0.5
ER16015T	1.5-1.0
ER16020T	2.0-1.5
ER16025T	2.5-2.0
ER16030T	3.0-2.5
ER16035T	3.5-2.5
ER16040T	4.0-3.0
ER16045T	4.5-3.5
ER16050T	5.0-4.0
ER16055T	5.5-4.5
ER16060T	6.0-5.0
ER16065T	6.5-5.5
ER16070T	7.0-6.0
ER16075T	7.5-6.5
ER16080T	8.0-7.0

* Ø>10 (Ø10mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.
* Ø1-3mm arası penslerde daralma kapasitesi Ø -0.5 mm dir

D	17.0mm
L	27.5mm

TUTMA ARALIĞI	1.0-12.0mm

TUTMA DARALMA KAPASİTESİ	1.0mm

ER 16 PENS TAKIMLARI (Ø1-10MM 10AD.)



ER 16 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER16SET2	10ad. ER16 pens Class 2 Ø1-10mm arası 1.0mm atlamalı plastik kutuda

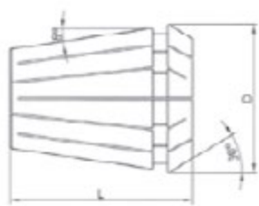
ER 16 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER16SET1	10ad. ER16 pens Class 1 Ø1-10mm arası 1.0mm atlamalı plastik kutuda

ER 16 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER16SETT	10ad. ER16 pens TOPAC Ø1-10mm arası 1.0mm atlamalı plastik kutuda

ER 20 PENSLER



DIN 6499 / ISO 15488-B



* Ø>13 (Ø13mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.
* Ø1-3mm arası penslerde daralma kapasitesi Ø -0.5 mm dir

D	21.0mm
L	31.5mm
TUTMA ARALIĞI	1.0-16.0mm
TUTMA DARALMA KAPASİTESİ	1.0mm

ER 20 CLASS 2

Sip. No.	Sıkma çapı Ømm
ER200102	1.0-0.5
ER200152	1.5-1.0
ER200202	2.0-1.5
ER200252	2.5-2.0
ER200302	3.0-2.5
ER200352	3.5-2.5
ER200402	4.0-3.0
ER200452	4.5-3.5
ER200502	5.0-4.0
ER200552	5.5-4.5
ER200602	6.0-5.0
ER200652	6.5-5.5
ER200702	7.0-6.0
ER200752	7.5-6.5
ER200802	8.0-7.0
ER200852	8.5-7.5
ER200902	9.0-8.0
ER200952	9.5-8.5
ER201002	10.0-9.0
ER201052	10.5-9.5
ER201102	11.0-10.0
ER201152	11.5-10.5
ER201202	12.0-11.0
ER201252	12.5-11.5
ER201302	13.0-12.0
ER201352*	13.5-13.3
ER201402*	14.0-13.8
ER201452*	14.5-14.3
ER201502*	15.0-14.8
ER201552*	15.5-15.3
ER201602*	16.0-15.8

ER 20 CLASS 1

Sip. No.	Sıkma çapı Ømm
ER200101	1.0-0.5
ER200151	1.5-1.0
ER200201	2.0-1.5
ER200251	2.5-2.0
ER200301	3.0-2.5
ER200351	3.5-2.5
ER200401	4.0-3.0
ER200451	4.5-3.5
ER200501	5.0-4.0
ER200551	5.5-4.5
ER200601	6.0-5.0
ER200651	6.5-5.5
ER200701	7.0-6.0
ER200751	7.5-6.5
ER200801	8.0-7.0
ER200851	8.5-7.5
ER200901	9.0-8.0
ER200951	9.5-8.5
ER201001	10.0-9.0
ER201051	10.5-9.5
ER201101	11.0-10.0
ER201151	11.5-10.5
ER201201	12.0-11.0
ER201251	12.5-11.5
ER201301	13.0-12.0
ER201351*	13.5-13.3
ER201401*	14.0-13.8
ER201451*	14.5-14.3
ER201501*	15.0-14.8
ER201551*	15.5-15.3
ER201601*	16.0-15.8

ER 20 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER20010T	1.0-0.5
ER20015T	1.5-1.0
ER20020T	2.0-1.5
ER20025T	2.5-2.0
ER20030T	3.0-2.5
ER20035T	3.5-2.5
ER20040T	4.0-3.0
ER20045T	4.5-3.5
ER20050T	5.0-4.0
ER20055T	5.5-4.5
ER20060T	6.0-5.0
ER20065T	6.5-5.5
ER20070T	7.0-6.0
ER20075T	7.5-6.5
ER20080T	8.0-7.0
ER20085T	8.5-7.5
ER20090T	9.0-8.0
ER20095T	9.5-8.5
ER20100T	10.0-9.0
ER20105T	10.5-9.5
ER20110T	11.0-10.0
ER20115T	11.5-10.5
ER20120T	12.0-11.0
ER20125T	12.5-11.5
ER20130T	13.0-12.0
ER20135T*	13.5-13.3
ER20140T*	14.0-13.8
ER20145T*	14.5-14.3
ER20150T*	15.0-14.8
ER20155T*	15.5-15.3
ER20160T*	16.0-15.8

PENSLER

ER 20 PENS TAKIMLARI (Ø2-13MM 12 AD.)



ER 20 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER20SET2	12Ad. ER20 pens Class 2 Ø2-13mm arası 1.0mm atlamalı plastik kutuda

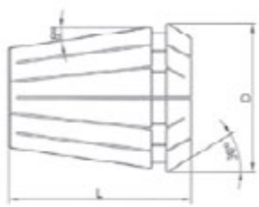
ER 20 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER20SET1	12Ad. ER20 pens Class 1 Ø2-13mm arası 1.0mm atlamalı plastik kutuda

ER 20 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER20SETT	12Ad. ER20 pens TOPAC Ø2-13mm arası 1.0mm atlamalı plastik kutuda

ER 25 PENSLER



DIN 6499 / ISO 15488-B



* Ø>16 (Ø16mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.

*Ø1-3mm arası penslerde daralma kapasitesi Ø -0.5 mm dir

D	26.0mm
L	34.0mm
TUTMA ARALIĞI	1.0-20.0mm
TUTMA DARALMA KAPASİTESİ	1.0mm

ER 25 CLASS 2	
Sip. No.	Sıkma çapı Ømm
ER250102	1.0-0.5
ER250152	1.5-1.0
ER250202	2.0-1.5
ER250252	2.5-2.0
ER250302	3.0-2.5
ER250352	3.5-2.5
ER250402	4.0-3.0
ER250452	4.5-3.5
ER250502	5.0-4.0
ER250552	5.5-4.5
ER250602	6.0-5.0
ER250652	6.5-5.5
ER250702	7.0-6.0
ER250752	7.5-6.5
ER250802	8.0-7.0
ER250852	8.5-7.5
ER250902	9.0-8.0
ER250952	9.5-8.5
ER251002	10.0-9.0
ER251052	10.5-9.5
ER251102	11.0-10.0
ER251152	11.5-10.5
ER251252	12.0-11.0
ER251252	12.5-11.5
ER251302	13.0-12.0
ER251352	13.5-12.5
ER251402	14.0-13.0
ER251452	14.5-13.5
ER251502	15.0-14.0
ER251552	15.5-14.5
ER251602	16.0-15.0
ER251652*	16.5-16.3
ER251702*	17.0-16.8
ER251752*	17.5-17.3
ER251802*	18.0-17.8
ER251852*	18.5-18.3
ER251902*	19.0-18.8
ER251952*	19.5-19.3
ER252002*	20.0-19.8

ER 25 CLASS 1	
Sip. No.	Sıkma çapı Ømm
ER250101	1.0-0.5
ER250151	1.5-1.0
ER250201	2.0-1.5
ER250251	2.5-2.0
ER250301	3.0-2.5
ER250351	3.5-2.5
ER250401	4.0-3.0
ER250451	4.5-3.5
ER250501	5.0-4.0
ER250551	5.5-4.5
ER250601	6.0-5.0
ER250651	6.5-5.5
ER250701	7.0-6.0
ER250751	7.5-6.5
ER250801	8.0-7.0
ER250851	8.5-7.5
ER250901	9.0-8.0
ER250951	9.5-8.5
ER251001	10.0-9.0
ER251051	10.5-9.5
ER251101	11.0-10.0
ER251151	11.5-10.5
ER251251	12.0-11.0
ER251251	12.5-11.5
ER251301	13.0-12.0
ER251351	13.5-12.5
ER251401	14.0-13.0
ER251451	14.5-13.5
ER251501	15.0-14.0
ER251551	15.5-14.5
ER251601	16.0-15.0
ER251651*	16.5-16.3
ER251701*	17.0-16.8
ER251751*	17.5-17.3
ER251801*	18.0-17.8
ER251851*	18.5-18.3
ER251901*	19.0-18.8
ER251951*	19.5-19.3
ER252001*	20.0-19.8

ER 25 TOPAC (5 micron)	
Sip. No.	Sıkma Çapı Ømm
ER25010T	1.0-0.5
ER25015T	1.5-1.0
ER25020T	2.0-1.5
ER25025T	2.5-2.0
ER25030T	3.0-2.5
ER25035T	3.5-2.5
ER25040T	4.0-3.0
ER25045T	4.5-3.5
ER25050T	5.0-4.0
ER25055T	5.5-4.5
ER25060T	6.0-5.0
ER25065T	6.5-5.5
ER25070T	7.0-6.0
ER25075T	7.5-6.5
ER25080T	8.0-7.0
ER25085T	8.5-7.5
ER25090T	9.0-8.0
ER25095T	9.5-8.5
ER25100T	10.0-9.0
ER25105T	10.5-9.5
ER25110T	11.0-10.0
ER25115T	11.5-10.5
ER25125T	12.0-11.0
ER25125T	12.5-11.5
ER25130T	13.0-12.0
ER25135T	13.5-12.5
ER25140T	14.0-13.0
ER25145T	14.5-13.5
ER25150T	15.0-14.0
ER25155T	15.5-14.5
ER25160T	16.0-15.0
ER25165T*	16.5-16.3
ER25170T*	17.0-16.8
ER25175T*	17.5-17.3
ER25180T*	18.0-17.8
ER25185T*	18.5-18.3
ER25190T*	19.0-18.8
ER25195T*	19.5-19.3
ER25200T*	20.0-19.8

ER 25 PENS TAKIMLARI (Ø2-16MM 15AD.)



ER 25 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER25SET2	15Ad. ER25 pens Class 2 Ø2-16mm arası 1.0mm atlamalı plastik kutuda

ER 25 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER25SET1	15Ad. ER25 pens Class 1 Ø2-16mm arası 1.0mm atlamalı plastik kutuda

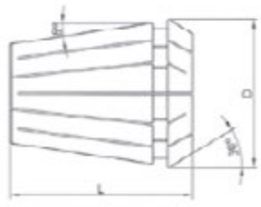
ER 25 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER25SETT	15Ad. ER25 pens TOPAC Ø2-16mm arası 1.0mm atlamalı plastik kutuda

PENSLER

ER 32 PENSLER



DIN 6499 / ISO 15488-B



* Ø>20 (Ø20mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.
* Ø1-3mm arası penslerde daralma kapasitesi Ø -0.5 mm dir

D	33.0mm
L	40.0mm
TUTMA ARALIĞI	1.0-25.0mm
TUTMA DARALMA KAPASİTESİ	1.0mm

ER 32 CLASS 2

Sip. No.	Sıkma çapı Ømm
ER320102	1.0-0.5
ER320152	1.5-1.0
ER320202	2.0-1.5
ER320252	2.5-2.0
ER320302	3.0-2.5
ER320352	3.5-2.5
ER320402	4.0-3.0
ER320452	4.5-3.5
ER320502	5.0-4.0
ER320552	5.5-4.5
ER320602	6.0-5.0
ER320652	6.5-5.5
ER320702	7.0-6.0
ER320752	7.5-6.5
ER320802	8.0-7.0
ER320852	8.5-7.5
ER320902	9.0-8.0
ER320952	9.5-8.5
ER321002	10.0-9.0
ER321052	10.5-9.5
ER321102	11.0-10.0
ER321152	11.5-10.5
ER321252	12.0-11.0
ER321252	12.5-11.5
ER321302	13.0-12.0
ER321352	13.5-12.5
ER321402	14.0-13.0
ER321452	14.5-13.5
ER321502	15.0-14.0
ER321552	15.5-14.5
ER321602	16.0-15.0
ER321652	16.5-15.5
ER321702	17.0-16.0
ER321752	17.5-16.5
ER321802	18.0-17.0
ER321852	18.5-17.5
ER321902	19.0-18.0
ER321952	19.5-18.5
ER322002	20.0-19.0
ER322102*	21.0-20.8
ER322202*	22.0-21.8
ER322302*	23.0-22.8
ER322402*	24.0-23.8
ER322502*	25.0-24.8

ER 32 CLASS 1

Sip. No.	Sıkma çapı Ømm
ER320101	1.0-0.5
ER320151	1.5-1.0
ER320201	2.0-1.5
ER320251	2.5-2.0
ER320301	3.0-2.5
ER320351	3.5-2.5
ER320401	4.0-3.0
ER320451	4.5-3.5
ER320501	5.0-4.0
ER320551	5.5-4.5
ER320601	6.0-5.0
ER320651	6.5-5.5
ER320701	7.0-6.0
ER320751	7.5-6.5
ER320801	8.0-7.0
ER320851	8.5-7.5
ER320901	9.0-8.0
ER320951	9.5-8.5
ER321001	10.0-9.0
ER321051	10.5-9.5
ER321101	11.0-10.0
ER321151	11.5-10.5
ER321251	12.0-11.0
ER321251	12.5-11.5
ER321301	13.0-12.0
ER321351	13.5-12.5
ER321401	14.0-13.0
ER321451	14.5-13.5
ER321501	15.0-14.0
ER321551	15.5-14.5
ER321601	16.0-15.0
ER321651	16.5-15.5
ER321701	17.0-16.0
ER321751	17.5-16.5
ER321801	18.0-17.0
ER321851	18.5-17.5
ER321901	19.0-18.0
ER321951	19.5-18.5
ER322001	20.0-19.0
ER322101*	21.0-20.8
ER322201*	22.0-21.8
ER322301*	23.0-22.8
ER322401*	24.0-23.8
ER322501*	25.0-24.8

ER 32 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER32010T	1.0-0.5
ER32015T	1.5-1.0
ER32020T	2.0-1.5
ER32025T	2.5-2.0
ER32030T	3.0-2.5
ER32035T	3.5-2.5
ER32040T	4.0-3.0
ER32045T	4.5-3.5
ER32050T	5.0-4.0
ER32055T	5.5-4.5
ER32060T	6.0-5.0
ER32065T	6.5-5.5
ER32070T	7.0-6.0
ER32075T	7.5-6.5
ER32080T	8.0-7.0
ER32085T	8.5-7.5
ER32090T	9.0-8.0
ER32095T	9.5-8.5
ER32100T	10.0-9.0
ER32105T	10.5-9.5
ER32110T	11.0-10.0
ER32115T	11.5-10.5
ER32125T	12.0-11.0
ER32125T	12.5-11.5
ER32130T	13.0-12.0
ER32135T	13.5-12.5
ER32140T	14.0-13.0
ER32145T	14.5-13.5
ER32150T	15.0-14.0
ER32155T	15.5-14.5
ER32160T	16.0-15.0
ER32165T	16.5-15.5
ER32170T	17.0-16.0
ER32175T	17.5-16.5
ER32180T	18.0-17.0
ER32185T	18.5-17.5
ER32190T	19.0-18.0
ER32195T	19.5-18.5
ER32200T	20.0-19.0
ER32210T*	21.0-20.8
ER32220T*	22.0-21.8
ER32230T*	23.0-22.8
ER32240T*	24.0-23.8
ER32250T*	25.0-24.8

ER 32 PENS TAKIMLARI (Ø3-20MM 18AD.)



ER 32 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER32SET2	18Ad. ER32 pens Class 2 Ø3-20mm arası 1.0mm atlamalı plastik kutuda

ER 32 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER32SET1	18Ad. ER32 pens Class 1 Ø3-20mm arası 1.0mm atlamalı plastik kutuda

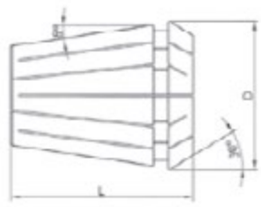
ER 32 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER32SETT	18Ad. ER32 pens TOPAC Ø3-20mm arası 1.0mm atlamalı plastik kutuda

PENSLER

ER 40 PENSLER



DIN 6499 / ISO 15488-B



* Ø>26(Ø26mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.
* Ø1-3mm arası penslerde daralma kapasitesi Ø -0.5 mm dir.

D	41.0mm
L	46.0mm
TUTMA ARALIĞI	1.0-32.0mm
TUTMA DARALMA KAPASİTESİ	1.0mm

ER 40 CLASS 2		ER 40 CLASS 1		ER 40 TOPAC (5 micron)	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ER400102	1.0-0.5	ER400101	1.0-0.5	ER40010T	1.0-0.5
ER400152	1.5-1.0	ER400151	1.5-1.0	ER40015T	1.5-1.0
ER400202	2.0-1.5	ER400201	2.0-1.5	ER40020T	2.0-1.5
ER400252	2.5-2.0	ER400251	2.5-2.0	ER40025T	2.5-2.0
ER400302	3.0-2.5	ER400301	3.0-2.5	ER40030T	3.0-2.5
ER400352	3.5-2.5	ER400351	3.5-2.5	ER40035T	3.5-2.5
ER400402	4.0-3.0	ER400401	4.0-3.0	ER40040T	4.0-3.0
ER400452	4.5-3.5	ER400451	4.5-3.5	ER40045T	4.5-3.5
ER400502	5.0-4.0	ER400501	5.0-4.0	ER40050T	5.0-4.0
ER400602	6.0-5.0	ER400601	6.0-5.0	ER40060T	6.0-5.0
ER400702	7.0-6.0	ER400701	7.0-6.0	ER40070T	7.0-6.0
ER400802	8.0-7.0	ER400801	8.0-7.0	ER40080T	8.0-7.0
ER400902	9.0-8.0	ER400901	9.0-8.0	ER40090T	9.0-8.0
ER401002	10.0-9.0	ER401001	10.0-9.0	ER40100T	10.0-9.0
ER401102	11.0-10.0	ER401101	11.0-10.0	ER40110T	11.0-10.0
ER401202	12.0-11.0	ER401201	12.0-11.0	ER40120T	12.0-11.0
ER401302	13.0-12.0	ER401301	13.0-12.0	ER40130T	13.0-12.0
ER401402	14.0-13.0	ER401401	14.0-13.0	ER40140T	14.0-13.0
ER401502	15.0-14.0	ER401501	15.0-14.0	ER40150T	15.0-14.0
ER401602	16.0-15.0	ER401601	16.0-15.0	ER40160T	16.0-15.0
ER401702	17.0-16.0	ER401701	17.0-16.0	ER40170T	17.0-16.0
ER401802	18.0-17.0	ER401801	18.0-17.0	ER40180T	18.0-17.0
ER401902	19.0-18.0	ER401901	19.0-18.0	ER40190T	19.0-18.0
ER402002	20.0-19.0	ER402001	20.0-19.0	ER40200T	20.0-19.0
ER402102	21.0-20.0	ER402101	21.0-20.0	ER40210T	21.0-20.0
ER402202	22.0-21.0	ER402201	22.0-21.0	ER40220T	22.0-21.0
ER402302	23.0-22.0	ER402301	23.0-22.0	ER40230T	23.0-22.0
ER402402	24.0-23.0	ER402401	24.0-23.0	ER40240T	24.0-23.0
ER402502	25.0-24.0	ER402501	25.0-24.0	ER40250T	25.0-24.0
ER402602	26.0-25.0	ER402601	26.0-25.0	ER40260T	26.0-25.0
ER402702*	27.0-26.8	ER402701*	27.0-26.8	ER40270T*	27.0-26.8
ER402802*	28.0-27.8	ER402801*	28.0-27.8	ER40280T*	28.0-27.8
ER402902*	29.0-28.8	ER402901*	29.0-28.8	ER40290T*	29.0-28.8
ER403002*	30.0-29.8	ER403001*	30.0-29.8	ER40300T*	30.0-29.8
ER403102*	31.0-30.8	ER403101*	31.0-30.8	ER40310T*	31.0-30.8
ER403202*	32.0-31.8	ER403201*	32.0-31.8	ER40320T*	32.0-31.8

ER 40 PENS TAKIMLARI (Ø4-26MM 23AD.)



ER 40 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER40SET2	23Ad. ER40 pens Class 2 Ø4-26mm arası 1.0mm atlamalı plastik kutuda

ER 40 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER40SET1	23Ad. ER40 pens Class 1 Ø4-26mm arası 1.0mm atlamalı plastik kutuda

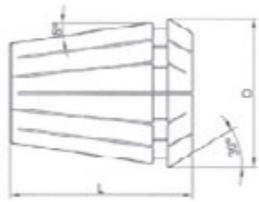
ER 40 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER40SETT	23Ad. ER40 pens TOPAC Ø4-26mm arası 1.0mm atlamalı plastik kutuda

PENSLER

ER 50 PENSLER



DIN 6499 / ISO 15488-B



* Ø>34(Ø34mm üstü çap) penslerin boyu standarttan daha kısadır. Daralma kapasitesi sadece Ø -0,2mm dir.

D	52.0mm
L	60.0mm
TUTMA ARALIĞI	6.0-40.0mm
TUTMA DARALMA KAPASİTESİ	2.0mm

ER 50 CLASS 2

Sip. No.	Sıkma çapı Ømm
ER500602	6.0-5.0
ER500802	8.0-7.0
ER501002	10.0-9.0
ER501202	12.0-11.0
ER501402	14.0-12.0
ER501602	16.0-14.0
ER501802	18.0-16.0
ER502002	20.0-18.0
ER502202	22.0-20.0
ER502402	24.0-22.0
ER502502	25.0-23.0
ER502602	26.0-24.0
ER502802	28.0-26.0
ER503002	30.0-28.0
ER503202	32.0-30.0
ER503402	34.0-32.0
ER503602*	36.0-35.8
ER503802*	38.0-37.8
ER504002*	40.0-39.8

ER 50 CLASS 1

Sip. No.	Sıkma çapı Ømm
ER500601	6.0-5.0
ER500801	8.0-7.0
ER501001	10.0-9.0
ER501201	12.0-11.0
ER501401	14.0-12.0
ER501601	16.0-14.0
ER501801	18.0-16.0
ER502001	20.0-18.0
ER502201	22.0-20.0
ER502401	24.0-22.0
ER502501	25.0-23.0
ER502601	26.0-24.0
ER502801	28.0-26.0
ER503001	30.0-28.0
ER503201	32.0-30.0
ER503401	34.0-32.0
ER503601*	36.0-35.8
ER503801*	38.0-37.8
ER504001*	40.0-39.8

ER 50 TOPAC (5 micron)

Sip. No.	Sıkma Çapı Ømm
ER50060T	6.0-5.0
ER50080T	8.0-7.0
ER50100T	10.0-9.0
ER50120T	12.0-11.0
ER50140T	14.0-12.0
ER50160T	16.0-14.0
ER50180T	18.0-16.0
ER50200T	20.0-18.0
ER50220T	22.0-20.0
ER50240T	24.0-22.0
ER50250T	25.0-23.0
ER50260T	26.0-24.0
ER50280T	28.0-26.0
ER50300T	30.0-28.0
ER50320T	32.0-30.0
ER50340T	34.0-32.0
ER50360T*	36.0-35.8
ER50380T*	38.0-37.8
ER50400T*	40.0-39.8

ER 50 PENS TAKIMLARI (Ø12-34MM 12AD.)



ER 50 COLLET SET CLASS 2	
Sip. No.	İçeriği
ER50SET2	12Ad. ER50 pens Class 2 Ø12-34mm arası 2.0mm atlamalı plastik kutuda

ER 50 COLLET SET CLASS 1	
Sip. No.	İçeriği
ER50SET1	12Ad. ER50 pens Class 1 Ø12-34mm arası 2.0mm atlamalı plastik kutuda

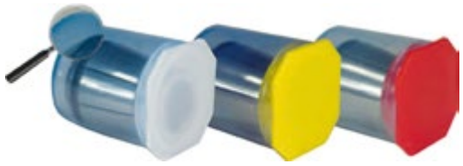
ER 50 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
ER50SETT	12Ad. ER50 pens TOPAC Ø12-34mm arası 2.0mm atlamalı plastik kutuda

Normalde ER50 pens takımlarında 25mm pens yoktur. Bu pens sipariş esnasında istendiğinde 26mm nin yerine takıma konulabilir.

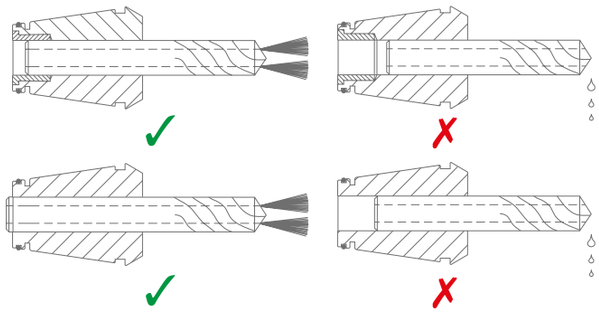
PENSLER

SIZDIRMAZ ER PENSLER (İÇTEN SOĞUTMALI TAKIMLAR İÇİN)

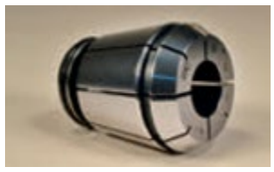


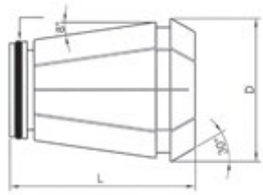


- Sızdırmaz özelliği sadece kendi çapını sıktığında geçerlidir. Takım sapı pensin arkasına kadar sokulmalıdır.
- 0.2mm daralma yapabilir, ancak alt ölçüyü sıkarken sızdırır. Her türlü ER pens tutucusuna uygundur.
- Nominal çapta standart pens olarak ta kullanılabilir.
- Daha sert gövde yapısıyla standart ER penslere göre daha az esnektir. Diğer çaplar şiparişe yapılabilir.



ERC11 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC110302	3	ERC110301	3	ERC11030T	3
ERC110402	4	ERC110401	4	ERC11040T	4
ERC110502	5	ERC110501	5	ERC11050T	5
ERC110602	6	ERC110601	6	ERC11060T	6

ERC11 SIZDIRMAZ PENS TAKIMLARI

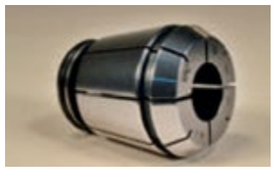


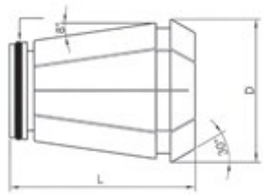
ERC11 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC11SET2	4ad. ERC11 sızdırmaz pens Class 2 Ø3-6mm arası 1.0mm atlamalı plastik kutuda

ERC11 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC11SET1	4ad. ERC11 sızdırmaz pens Class 1 Ø3-6mm arası 1.0mm atlamalı plastik kutuda

ERC11 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC11SETT	4ad. ERC11 sızdırmaz pens TOPAC Ø3-6mm arası 1.0mm atlamalı plastik kutuda

ERC16 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC160302	3	ERC160301	3	ERC16030T	3
ERC160402	4	ERC160401	4	ERC16040T	4
ERC160502	5	ERC160501	5	ERC16050T	5
ERC160602	6	ERC160601	6	ERC16060T	6
ERC160702	7	ERC160701	7	ERC16070T	7
ERC160802	8	ERC160801	8	ERC16080T	8
ERC160902	9	ERC160901	9	ERC16090T	9
ERC161002	10	ERC161001	10	ERC16100T	10

ERC16 SIZDIRMAZ PENS TAKIMLARI



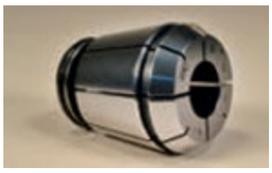
ERC16 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC16SET2	8ad. ERC16 sızdırmaz pens Class 2 Ø3-10mm arası 1.0mm atlamalı plastik kutuda

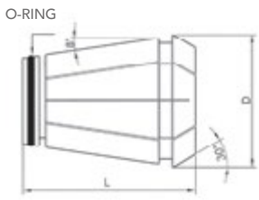
ERC16 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC16SET1	8ad. ERC16 sızdırmaz pens Class 1 Ø3-10mm arası 1.0mm atlamalı plastik kutuda

ERC16 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC16SETT	8ad. ERC16 sızdırmaz pens TOPAC Ø3-10mm arası 1.0mm atlamalı plastik kutuda

PENSLER

ERC20 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC200302	3	ERC200301	3	ERC20030T	3
ERC200402	4	ERC200401	4	ERC20040T	4
ERC200502	5	ERC200501	5	ERC20050T	5
ERC200602	6	ERC200601	6	ERC20060T	6
ERC200702	7	ERC200701	7	ERC20070T	7
ERC200802	8	ERC200801	8	ERC20080T	8
ERC200902	9	ERC200901	9	ERC20090T	9
ERC201002	10	ERC201001	10	ERC20100T	10
ERC201102	11	ERC201101	11	ERC20110T	11
ERC201202	12	ERC201201	12	ERC20120T	12
ERC201302	13	ERC201301	13	ERC20130T	13

ERC20 SIZDIRMAZ PENS TAKIMLARI

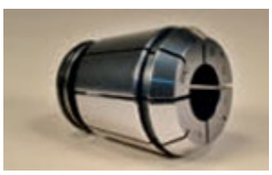


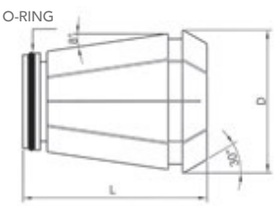
ERC20 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC20SET2	11ad. ERC20 sızdırmaz pens Class 2 Ø3-13mm arası 1.0mm atlamalı plastik kutuda

ERC20 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC20SET1	11ad. ERC20 sızdırmaz pens Class 1 Ø3-13mm arası 1.0mm atlamalı plastik kutuda

ERC20 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC20SETT	11ad. ERC20 sızdırmaz pens TOPAC Ø3-13mm arası 1.0mm atlamalı plastik kutuda

ERC25 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC250302	3	ERC250301	3	ERC25030T	3
ERC250402	4	ERC250401	4	ERC25040T	4
ERC250502	5	ERC250501	5	ERC25050T	5
ERC250602	6	ERC250601	6	ERC25060T	6
ERC250702	7	ERC250701	7	ERC25070T	7
ERC250802	8	ERC250801	8	ERC25080T	8
ERC250902	9	ERC250901	9	ERC25090T	9
ERC251002	10	ERC251001	10	ERC25100T	10
ERC251102	11	ERC251101	11	ERC25110T	11
ERC251202	12	ERC251201	12	ERC25120T	12
ERC251302	13	ERC251301	13	ERC25130T	13
ERC251402	14	ERC251401	14	ERC25140T	14
ERC251502	15	ERC251501	15	ERC25150T	15
ERC251602	16	ERC251601	16	ERC25160T	16

ERC25 SIZDIRMAZ PENS TAKIMLARI



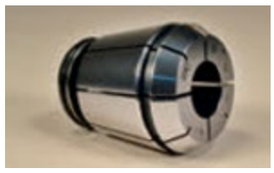
ERC25 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC25SET2	14Ad. ERC25 sızdırmaz pens Class 2 Ø3-16mm arası 1.0mm atlamalı plastik kutuda

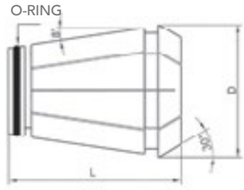
ERC25 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC25SET1	14Ad. ERC25 sızdırmaz pens Class 1 Ø3-16mm arası 1.0mm atlamalı plastik kutuda

ERC25 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC25SETT	14Ad. ERC25 sızdırmaz pens TOPAC Ø3-16mm arası 1.0mm atlamalı plastik kutuda

PENSLER

ERC32 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC320302	3	ERC320301	3	ERC32030T	3
ERC320402	4	ERC320401	4	ERC32040T	4
ERC320502	5	ERC320501	5	ERC32050T	5
ERC320602	6	ERC320601	6	ERC32060T	6
ERC320702	7	ERC320701	7	ERC32070T	7
ERC320802	8	ERC320801	8	ERC32080T	8
ERC320902	9	ERC320901	9	ERC32090T	9
ERC321002	10	ERC321001	10	ERC32100T	10
ERC321102	11	ERC321101	11	ERC32110T	11
ERC321202	12	ERC321201	12	ERC32120T	12
ERC321302	13	ERC321301	13	ERC32130T	13
ERC321402	14	ERC321401	14	ERC32140T	14
ERC321502	15	ERC321501	15	ERC32150T	15
ERC321602	16	ERC321601	16	ERC32160T	16
ERC321702	17	ERC321701	17	ERC32170T	17
ERC321802	18	ERC321801	18	ERC32180T	18
ERC321902	19	ERC321901	19	ERC32190T	19
ERC322002	20	ERC322001	20	ERC32200T	20

ERC32 SIZDIRMAZ PENS TAKIMLARI



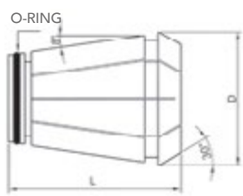
ERC32 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC32SET2	18Ad. ERC32 sızdırmaz pens Class 2 Ø3-20m arası 1.0mm atlamalı plastik kutuda

ERC32 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC32SET1	18Ad. ERC32 sızdırmaz pens Class 1 Ø3-20m arası 1.0mm atlamalı plastik kutuda

ERC32 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC32SETT	18Ad. ERC32 sızdırmaz pens TOPAC Ø3-20m arası 1.0mm atlamalı plastik kutuda

ERC40 SIZDIRMAZ PENSLER





CLASS 2		CLASS 1		TOPAC	
Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma çapı Ømm	Sip. No.	Sıkma Çapı Ømm
ERC400302	3	ERC400301	3	ERC40030T	3
ERC400402	4	ERC400401	4	ERC40040T	4
ERC400502	5	ERC400501	5	ERC40050T	5
ERC400602	6	ERC400601	6	ERC40060T	6
ERC400702	7	ERC400701	7	ERC40070T	7
ERC400802	8	ERC400801	8	ERC40080T	8
ERC400902	9	ERC400901	9	ERC40090T	9
ERC401002	10	ERC401001	10	ERC40100T	10
ERC401102	11	ERC401101	11	ERC40110T	11
ERC401202	12	ERC401201	12	ERC40120T	12
ERC401302	13	ERC401301	13	ERC40130T	13
ERC401402	14	ERC401401	14	ERC40140T	14
ERC401502	15	ERC401501	15	ERC40150T	15
ERC401602	16	ERC401601	16	ERC40160T	16
ERC401702	17	ERC401701	17	ERC40170T	17
ERC401802	18	ERC401801	18	ERC40180T	18
ERC401902	19	ERC401901	19	ERC40190T	19
ERC402002	20	ERC402001	20	ERC40200T	20
ERC402102*	21	ERC402101*	21	ERC40210T*	21
ERC402202*	22	ERC402201*	22	ERC40220T*	22
ERC402302*	23	ERC402301*	23	ERC40230T*	23
ERC402402*	24	ERC402401*	24	ERC40240T*	24
ERC402502	25	ERC402501	25	ERC40250T	25
ERC402602*	26	ERC402601*	26	ERC40260T*	26

PENSLER

ERC40 SIZDIRMAZ PENS TAKIMLARI

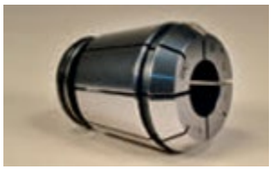


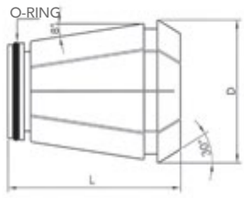
ERC40 COOLANT SEALED COLLET SET CLASS 2	
Sip. No.	İçeriği
ERC40SET2	19Ad. ERC40 sızdırmaz pens Class 2 Ø3-25m arası plastik kutuda

ERC40 COOLANT SEALED COLLET SET CLASS 1	
Sip. No.	İçeriği
ERC40SET1	19Ad. ERC40 sızdırmaz pens Class 1 Ø3-25m arası plastik kutuda

ERC40 COOLANT SEALED COLLET SET TOPAC	
Sip. No.	İçeriği
ERC40SETT	19Ad. ERC40 sızdırmaz pens TOPAC Ø3-25m arası plastik kutuda

ERC50 SIZDIRMAZ PENSLER





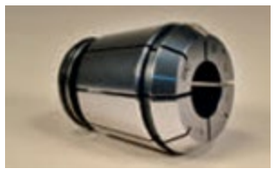
CLASS 2	
Sip. No.	Sıkma çapı Ømm
ERC501202	12
ERC501402	14
ERC501602	16
ERC501802	18
ERC502002	20
ERC502502	25
ERC503202	32

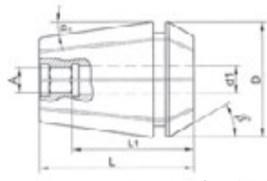
CLASS 1	
Sip. No.	Sıkma çapı Ømm
ERC501201	12
ERC501401	14
ERC501601	16
ERC501801	18
ERC502001	20
ERC502501	25
ERC503201	32

TOPAC	
Sip. No.	Sıkma Çapı Ømm
ERC50120T	12
ERC50140T	14
ERC50160T	16
ERC50180T	18
ERC50200T	20
ERC50250T	25
ERC50320T	32

ER KILAVUZ PENSLERİ

ERT16





D=16.5 / L=27.5

Sip. No.	d1	Kare Ölçüsü ☐ mm	Kılavuz Detayı
ERT16028	2.8	2.1	DIN371 M2-M2,5 - DIN376 M4
ERT16035	3.5	2.7	DIN371 M3 - DIN376 M5
ERT16040	4	3.15/3.2	ISO M4/M5 - JIS M3/M3.5
ERT16045	4.5	3.4	DIN371 M4 - DIN376 M6
ERT16050	5	4	ISO M5 - JIS M4
ERT16055	5.5	4.3	DIN374/376 M7
ERT16060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERT16063	6.3	5	ISO M6-M8-1/4"-5/16"
ERT16070	7	5.5	DIN371 M7 DIN374/376 M9-M10 JIS M9-M10
ERT16080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"

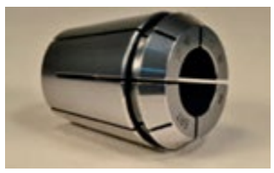
ERT 16 KILAVUZ PENSİ TAKIMI

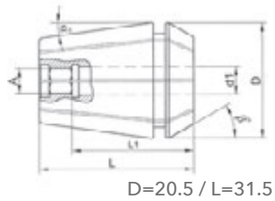


Sip. No.	İçeriği
ERT16SET	10 adet ERT16 kılavuz pensi, Ø2.8-8.0 saplı kılavuzlara uygun, plastik kutuda

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ERT20





D=20.5 / L=31.5

Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERT20035	3.5	2.7	DIN371 M3 - DIN376 M5
ERT20040	4	3.15/3.2	ISO M4/M5 - JIS M3/M3.5
ERT20045	4.5	3.4	DIN371 M4 - DIN376 M6
ERT20050**	5**	4	ISO M5 - JIS M4
ERT20055	5.5	4.3	DIN374/376 M7
ERT20060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERT20063	6.3	5	ISO M6-M8-1/4"-5/16"
ERT20070	7	5.5	DIN371 M7 DIN374/376 M9-M10 JIS M9-M10
ERT20080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERT20090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERT20100	10	8	DIN371 M10 ISO M10 - 3/8"
ERT20110	11	9	DIN 374/376 M14 - 9/16"
ERT20120	12	9	DIN 374/376 M16 - 5/8"

*Bu ürün setin içinde yoktur .

ERT 20 KILAVUZ PENSİ TAKIMI

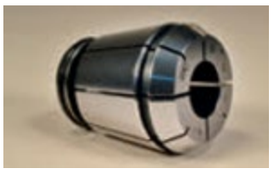


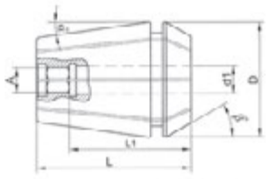
Sip. No.	İçeriği
ERT20SET	12 adet ERT20 kılavuz pensi, Ø3.5-12.0 saplı kılavuzlara uygun, plastik kutuda

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ER KILAVUZ PENSLERİ

ERT25





D=25.5 / L=34

Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERT25035	3.5	2.7	DIN371 M3 - DIN376 M5
ERT25040	4	3.15/3.2	ISO M4/M5 - JIS M3/M3.5
ERT25045	4.5	3.4	DIN371 M4 - DIN376 M6
ERT25050	5	4	ISO M5 - JIS M4
ERT25055	5.5	4.3	DIN374/376 M7
ERT25060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERT25063	6.3	5	ISO M6-M8-1/4"-5/16"
ERT25070	7	5.5	DIN371 M7 DIN374/376 M9-M10 JIS M9-M10
ERT25080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERT25090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERT25100	10	8	DIN371 M10 ISO M10 - 3/8"
ERT25110	11	9	DIN 374/376 M14 - 9/16"
ERT25120	12	9	DIN 374/376 M16 - 5/8"
ERT25125**	12.5	10	ISO M16 - 5/8" JIS M16
ERT25140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18/M20 3/4"
ERT25160	16	12	DIN 374/376 M20

*Bu ürün setin içinde yoktur .

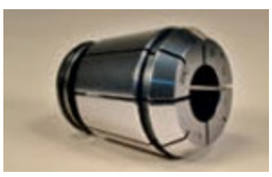
ERT 25 KILAVUZ PENSİ TAKIMI

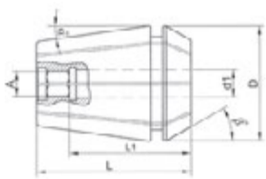


Sip. No.	İçeriği
ERT25SET	15 adet ERT25 kılavuz pensi, Ø3.5-16.0 saplı kılavuzlara uygun, plastik kutuda

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ERT32





D=32.5 / L=40

Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERT32035	3.5	2.7	DIN371 M3 - DIN376 M5
ERT32040	4	3.15/3.2	ISO M4/M5 - JIS M3/M3.5
ERT32045	4.5	3.4	DIN371 M4 - DIN376 M6
ERT32050	5	4	ISO M5 - JIS M4
ERT32055	5.5	4.3	DIN374/376 M7
ERT32060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERT32063	6.3	5	ISO M6-M8-1/4"-5/16"
ERT32070	7	5.5	DIN371 M7 DIN374/376 M9-M10 JIS M9-M10
ERT32080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERT32090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERT32100	10	8	DIN371 M10 ISO M10 - 3/8"
ERT32110	11	9	DIN 374/376 M14 - 9/16"
ERT32120	12	9	DIN 374/376 M16 - 5/8"
ERT32125	12.5	10	ISO M16 - 5/8" JIS M16
ERT32140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18-M20 3/4"
ERT32160	16	12	DIN 374/376 M20
ERT32180	18	14.0/14.5	DIN 374/376 M22- M24 -7/8" ISO M24 - 1"
ERT32200	20	16	DIN 374/376 M27 - 1" ISO M27-M30 - 1 1/8"

*Bu ürün setin içinde yoktur .

ERT 32 KILAVUZ PENSİ TAKIMI

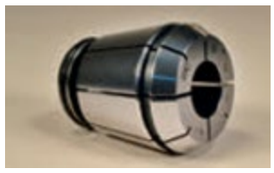


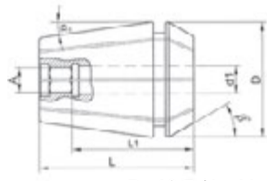
Sip. No.	İçeriği
ERT32SET	18 adet ERT32 kılavuz pensi, Ø3.5-20.0 saplı kılavuzlara uygun, plastik kutuda

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ER KILAVUZ PENSLERİ

ERT40





D=40.5 / L=46

Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERT40040	4	3.15/3.2	ISO M4/M5 - JIS M3/M3.5
ERT40045	4.5	3.4	DIN371 M4 - DIN376 M6
ERT40050	5	4	ISO M5 - JIS M4
ERT40055	5.5	4.3	DIN374/376 M7
ERT40060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERT40063	6.3	5	ISO M6-M8-1/4"-5/16"
ERT40070	7	5.5	DIN371 M7 DIN374/376 M9-M10 JIS M9-M10
ERT40080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16 - 5/16"
ERT40090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERT40100	10	8	DIN371 M10 ISO M10 - 3/8"
ERT40110	11	9	DIN 374/376 M14 - 9/16"
ERT40120	12	9	DIN 374/376 M16 - 5/8"
ERT40125	12.5	10	ISO M16 - 5/8 JIS M16
ERT40140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18/M20 3/4"
ERT40160	16	12	DIN 374/376 M20
ERT40180	18	14.0/14.5	DIN 374/376 M22- M24 -7/8" ISO M24 - 1"
ERT40200	20	16	DIN 374/376 M27 - 1" ISO M27-M30 - 1 1/8"
ERT40220	22	18	DIN 374/376 M30 - 1 1/8"
ERT40250	25	20	DIN 374/376 M33 - 1 1/4" ISO M36

*Bu ürün setin içinde yoktur .

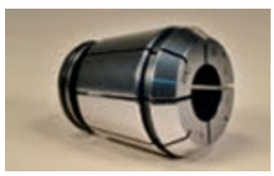
ERT 40 KILAVUZ PENSİ TAKIMI

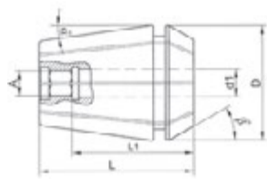


Sip. No.	İçeriği
ERT40SET	19 adet ERT40 kılavuz pensi, Ø4.0-25.0 saplı kılavuzlara uygun, plastik kutuda

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ERT50





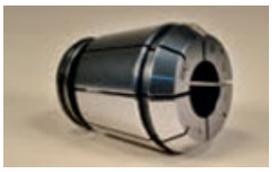
D=51.5 / L=60

Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERT50160	16	12	DIN 374/376 M20
ERT50180	18	14.0/14.5	DIN 374/376 M22- M24 -7/8" ISO M24 - 1"
ERT50200	20	16	DIN 374/376 M27 - 1" ISO M27-M30 - 1 1/8"
ERT50220	22	18	DIN 374/376 M30 - 1 1/8"
ERT50250	25	20	DIN 374/376 M33 - 1 1/4" ISO M36
ERT50280	28	22	DIN 374/376 M36 - 1 3/8" -1 1/2"
ERT50320	32	24	DIN 374/376 M39-M42 - 1 1/2"

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir.
Ambalajları yeşil kapaklıdır.

ERTC İÇTEN SOĞUTMALI SIZDIRMAZ KILAVUZ PENSLERİ

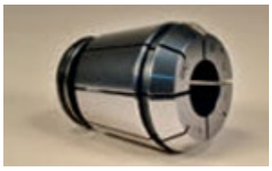
ERTC16 — DIN 6499 / ISO 15488



Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERTC16045	4.5	3.4	DIN371 M4 - DIN376 M6
ERTC16060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERTC16080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir. Ambalajları yeşil kapaklıdır.

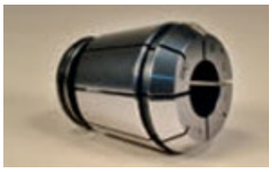
ERTC20 — DIN 6499 / ISO 15488



Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERTC20045	4.5	3.4	DIN371 M4 - DIN376 M6
ERTC20060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERTC20080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERTC20090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERTC20100	10	8	DIN371 M10 ISO M10 - 3/8"
ERTC20110	11	9	DIN 374/376 M14 - 9/16"
ERTC20120	12	9	DIN 374/376 M16 - 5/8"

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir. Ambalajları yeşil kapaklıdır.

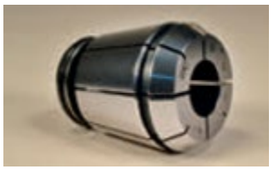
ERTC25 — DIN 6499 / ISO 15488



Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERTC25060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERTC25080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERTC25090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERTC25100	10	8	DIN371 M10 ISO M10 - 3/8"
ERTC25110	11	9	DIN 374/376 M14 - 9/16"
ERTC25120	12	9	DIN 374/376 M16 - 5/8"
ERTC25140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18/M20 3/4"
ERTC25160	16	12	DIN 374/376 M20

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir. Ambalajları yeşil kapaklıdır.

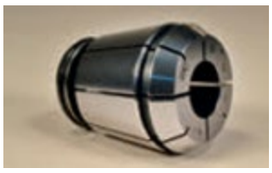
ERTC32 — DIN 6499 / ISO 15488



Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERTC32060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERTC32080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERTC32090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERTC32100	10	8	DIN371 M10 ISO M10 - 3/8"
ERTC32110	11	9	DIN 374/376 M14 - 9/16"
ERTC32120	12	9	DIN 374/376 M16 - 5/8"
ERTC32140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18-M20 3/4"
ERTC32160	16	12	DIN 374/376 M20
ERTC32180	18	14.0/14.5	DIN 374/376 M22- M24 -7/8" ISO M24 - 1"
ERTC32200	20	16	DIN 374/376 M27 - 1" ISO M27-M30 - 1 1/8"

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir. Ambalajları yeşil kapaklıdır.

ERTC40 — DIN 6499 / ISO 15488



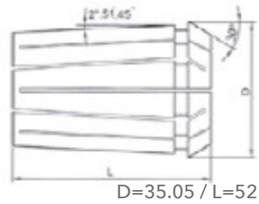
Sip. No.	d1	Kare Ölçüsü □ mm	Kılavuz Detayı*
ERTC40060	6	4.9	DIN371 M4,5/M5/M6 DIN374/376 M8
ERTC40080	8	6.2/6.3	DIN371 M8 ISO M8 - M10 - 7/16" - 5/16"
ERTC40090	9	7.0/7.1	DIN 374/376 M12 ISO M12 - 1/2"
ERTC40100	10	8	DIN371 M10 ISO M10 - 3/8"
ERTC40110	11	9	DIN 374/376 M14 - 9/16"
ERTC40120	12	9	DIN 374/376 M16 - 5/8"
ERTC40140	14	11.0/11.2	DIN 374/376 M18 - JIS M18 ISO M18-M20 3/4"
ERTC40160	16	12	DIN 374/376 M20
ERTC40180	18	14.0/14.5	DIN 374/376 M22- M24 -7/8" ISO M24 - 1"
ERTC40200	20	16	DIN 374/376 M27 - 1" ISO M27-M30 - 1 1/8"
ERTC40220	22	18	DIN 374/376 M30 - 1 1/8"
ERTC40250	25	20	DIN 374/376 M33 - 1 1/4" ISO M36

* Belirtilen kılavuz detaylarında uygun ölçülerin sadece bir kısmı belirtilmiştir.
Tüm kılavuz pensleri CL1 (Class 1 - 10 Micron) hassasiyet sınıfına göre üretilmiştir. Ambalajları yeşil kapaklıdır.

ISO40 / OZ25 / OTOMAT PENSLERİ

DIN 6388 / ISO 10897-B COLLETS





D=35.05 / L=52

D	52.0mm
L	60.0mm
α	2° 51'45"
ß	30°
TUTMA ARALIĞI	2.0-25.4
TUTMA KAPASİTESİ	0.5mm

OZ25	CLASS 2	CLASS 1	TOPAC (5 micron)
SıkmaÇapı Ømm	Sip. No.	Sip. No.	Sip. No.
2.0-1.5	OZ250202	OZ250201	OZ25020T
2.5-2.0	OZ250252	OZ250251	OZ25025T
3.0-2.5	OZ250302	OZ250301	OZ25030T
3.5-3.0	OZ250352	OZ250351	OZ25035T
4.0-3.5	OZ250402	OZ250401	OZ25040T
4.5-4.0	OZ250452	OZ250451	OZ25045T
5.0-4.5	OZ250502	OZ250501	OZ25050T
5.5-5.0	OZ250552	OZ250551	OZ25055T
6.0-5.5	OZ250602	OZ250601	OZ25060T
1/4" (6.35)	OZ250632	OZ250631	OZ25063T
6.5-6.0	OZ250652	OZ250651	OZ25065T
7.0-6.5	OZ250702	OZ250701	OZ25070T
7.5-7.0	OZ250752	OZ250751	OZ25075T
8.0-7.5	OZ250802	OZ250801	OZ25080T
8.5-8.0	OZ250852	OZ250851	OZ25085T
9.0-8.5	OZ250902	OZ250901	OZ25090T
9.5-9.0	OZ250952	OZ250951	OZ25095T
3/8" (9.53)	OZ250962	OZ250961	OZ25096T
10.0-9.5	OZ251002	OZ251001	OZ25100T
10.5-10.0	OZ251052	OZ251051	OZ25105T
11.0-10.5	OZ251102	OZ251101	OZ25110T
11.5-11.0	OZ251152	OZ251151	OZ25115T
12.0-11.5	OZ251202	OZ251201	OZ25120T
12.5-12.0	OZ251252	OZ251251	OZ25125T
1/2" (12.70)	OZ251272	OZ251271	OZ25127T
13.0-12.5	OZ251302	OZ251301	OZ25130T
13.5-13.0	OZ251352	OZ251351	OZ25135T

OZ25	CLASS 2	CLASS 1	TOPAC (5 micron)
SıkmaÇapı Ømm	Sip. No.	Sip. No.	Sip. No.
14.0-13.5	OZ251402	OZ251401	OZ25140T
14.5-14.0	OZ251452	OZ251451	OZ25145T
15.0-14.5	OZ251502	OZ251501	OZ25150T
15.5-15.0	OZ251552	OZ251551	OZ25155T
5/8" (15.87)	OZ251582	OZ251581	OZ25158T
16.0-15.5	OZ251602	OZ251601	OZ25160T
16.5-16.0	OZ251652	OZ251651	OZ25165T
17.0-16.5	OZ251702	OZ251701	OZ25170T
17.5-17.0	OZ251752	OZ251751	OZ25175T
18.0-17.5	OZ251802	OZ251801	OZ25180T
18.5-18.0	OZ251852	OZ251851	OZ25185T
19.0-18.5	OZ251902	OZ251901	OZ25190T
3/4" (19.05)	OZ251912	OZ251911	OZ25191T
19.5-19.0	OZ251952	OZ251951	OZ25195T
20.0-19.5	OZ252002	OZ252001	OZ25200T
20.5-20.0	OZ252052	OZ252051	OZ25205T
21.0-20.5	OZ252102	OZ252101	OZ25210T
21.5-21.0	OZ252152	OZ252151	OZ25215T
22.0-21.5	OZ252202	OZ252201	OZ25220T
22.5-22.0	OZ252252	OZ252251	OZ25225T
23.0-22.5	OZ252302	OZ252301	OZ25230T
23.5-23.0	OZ252352	OZ252351	OZ25235T
24.0-23.5	OZ252402	OZ252401	OZ25240T
24.5-24.0	OZ252452	OZ252451	OZ25245T
25.0-24.5	OZ252502	OZ252501	OZ25250T
1" (25.40)	OZ252542	OZ252541	OZ25254T

DIN6388B-25 PENS TAKIMLARI



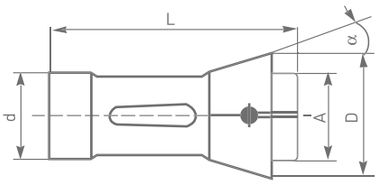
OZ25 COLLET SET CLASS 2	
Sip. No.	İçeriği
OZ25SET2	24 Ad. DIN6388-25 Pens Class2 Ø2-25mm 1mm atlamalı plastik kutuda

OZ25 COLLET SET CLASS 1	
Sip. No.	İçeriği
OZ25SET1	24 Ad. DIN6388-25 Pens Class1 Ø2-25mm 1mm atlamalı plastik kutuda

OZ25 COLLET SET TOPAC (5 micron)	
Sip. No.	İçeriği
OZ25SETT	24 Ad. DIN6388-25 Pens TOPAC Ø2-25mm 1mm atlamalı plastik kutuda

DIN 6343 CNC TORNA, OTOMAT, ROVELVER PENSLERİ





- Sipariş kodu örnek : FC173E100R - 173E pens 10mm Yuvarlak
- Kod sonundaki R=Yuvarlak H=Altıköşe S=Kare
- Özel ölçüler siparişe üretilir.

Sip. No.	TİP	d	L	D	A	α	Yuvarlak	Altıköşe	Kare
FC140E....	A16 140E F22 TRAUB A15 INDEX 12	22	55	30	21	15°	Ø3-16mm	Ø5-13mm	Ø5-10mm
FC148E....	A20 148E F28 TRAUB A20 INDEX 18	28	70	38	28	15°	Ø3-22mm	Ø5-19mm	Ø5-15mm
FC161E....	A25 161E F32 TRAUB A25 INDEX 20	32	75	45	34	15°	Ø3-26mm	Ø5-22mm	Ø5-18mm
FC162E....	A25-1 162E F35 INDEX 25	35	70	43	34	15°	Ø3-25mm	Ø5-22mm	Ø5-18mm

Sip. No.	TİP	d	L	D	A	α	Yuvarlak	Altıköşe	Kare
FC163E....	A30 163E F35 TRAUB A30 INDEX 24	35	80	48	38	15°	Ø3-30mm	Ø5-26mm	Ø5-20mm
FC171E....	A36 171E F42 TRAUB A36 INDEX 30	42	94	55	42	15°	Ø3-36mm	Ø5-30mm	Ø5-25mm
FC173E....	A42 173E F48 TRAUB A42 INDEX 36	48	94	60	50	15°	Ø3-42mm	Ø5-36mm	Ø5-29mm
FC185E....	A60 185E F66 TRAUB A60 INDEX 52	66	110	84	73	15°	Ø4-60mm	Ø10-52mm	Ø7-42mm

ANAHTARLAR

ER STANDART ANAHTAR



Sip. No.	ER ÖLÇÜSÜ
SPER16S	ER 16
SPER20S	ER 20
SPER25S	ER 25
SPER32S	ER 32
SPER40S	ER 40
SPER50S	ER 50

ER AY TİPİ ANAHTAR



Sip. No.	ER ÖLÇÜSÜ
SPER25C	ER 25
SPER32C	ER 32
SPER40C	ER 40

ER MINI ANAHTAR



Sip. No.	ER ÖLÇÜSÜ
SPER08M	ER 8 MINI
SPER11M	ER 11 MINI
SPER16M	ER 16 MINI
SPER20M	ER 20 MINI
SPER25M	ER 25 MINI

ER ALTIKÖŞE ANAHTAR



Sip. No.	ER ÖLÇÜSÜ
SPER11H	ER 11
SPER16H	ER 16
SPER20H	ER 20

OZ AY ANAHTAR DIN 6388/ISO 10897



Sip. No.	SOMUN TİPİ
SPOZ25	DIN6388B-25 (OZ25)

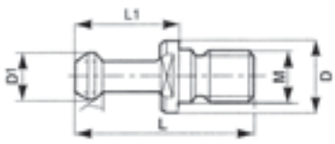
ALIN FREZE TUTUCU ANAHTARI



Sip. No.	TİP
SPFM16	FM16
SPFM22	FM22
SPFM27	FM27
SPFM32	FM32
SPFM40	FM40

MAS 403 BT

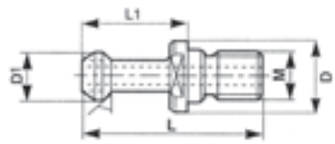




Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PSBT3045	BT30	M12	16.5	11	43	23	45°
PSBT4045	BT40	M16	23	15	60	35	45°
PSBT4060	BT40	M16	23	15	60	35	60°
PSBT4090	BT40	M16	23	15	60	35	90°
PSBT5045	BT50	M24	38	23	85	45	45°

MAS 403 BT - İÇTEN SOĞUTMA DELİKLİ

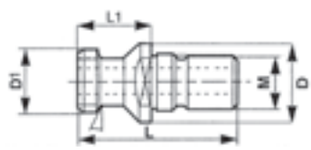




Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PSBT4045B	BT40	M16	23	15	60	35	45°
PSBT5045B	BT50	M24	38	23	85	45	45°

DIN 69872A - İÇTEN SOĞUTMA DELİKLİ

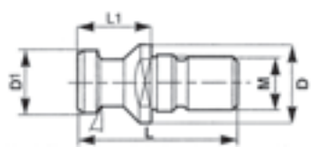




Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PS698724A	DIN40 (69871)	M16	23	19	54	26	15°
PS698725A	DIN50 (69871)	M24	36	28	74	34	15°

DIN 69872B

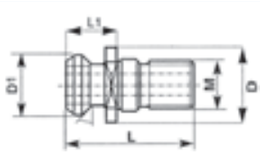




Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PS698724B	DIN40 (69871)	M16	23	19	54	26	15°
PS698725B	DIN50 (69871)	M24	36	28	74	34	15°

ISO 7388/2 (1984/B) - İÇTEN SOĞUTMA DELİKLİ

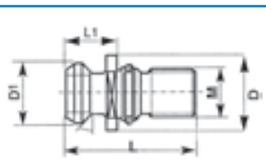




Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PS738840A	DIN40 (69871)	M16	22.5	18.9	44.5	16.3	45°
PS738850A	DIN50 (69871)	M24	36	29.1	65.5	25.6	45°

ISO 7388/2 (1984/B)





Sip. No.	Tutucu Konik	M	D	D1	L	L1	α
PS738840B	DIN40 (69871)	M16	22.5	18.9	44.5	16.3	45°
PS738850B	DIN50 (69871)	M24	36	29.1	65.5	25.6	45°

TAKIM BAĞLAMA / SÖKME ÜNİTELERİ

ÜNİVERSAL TAKIM BAĞLAMA / SÖKME SETİ



Sip. No.	İçeriği
TBAUNI	Hepsi bir arada, üniversal tasarım, masif çelik yapı, dikey ve yatay kullanım ve bağlama imkanı takılan konikler BT-DIN-ISO-SK-CAT 30-40-50 HSK A 40-50-63-80-100 Boyutlar:174x191x169mm

TAKIM BAĞLAMA / SÖKME APARATI 30-40-50 KONİK



Sip. No.	İçeriği
TBA304050	Masif çelik yapı, dikey ve yatay konumda bağlama imkanı, Bağladığı konikler: BT-DIN-ISO-SK-CAT 30-40-50 Boyutlar: 165x190x165mm

TAKIM BAĞLAMA / SÖKME APARATI TEK KONİKLİ





Sip. No.	İçeriği
TBA30	Takım bağlama aparatı 30 konik BT-DIN-ISO-SK-CAT 30 Boyutlar: 75x95x75mm"
TBA40	Takım bağlama aparatı 40 konik BT-DIN-ISO-SK-CAT 40 Boyutlar: 90x110x105mm
TBA50	Takım bağlama aparatı 50 konik BT-DIN-ISO-SK-CAT 50 Boyutlar: 110x148x150mm
Masif çelik yapı, dikey ve yatay bağlama imkanı	

TAKIM BAĞLAMA / SÖKME APARATI HSK-A KONİKLER İÇİN





Sip. No.	İçeriği
TBAHSK40	Takım bağlama aparatı HSK-A 40 konik Boyutlar: 60x80x60mm
TBAHSK50	Takım bağlama aparatı HSK-A 50 konik Boyutlar: 75x90x65mm
TBAHSK63	Takım bağlama aparatı HSK-A 63 konik Boyutlar: 85x100x70mm
TBAHSK80	Takım bağlama aparatı HSK-A 80 konik Boyutlar: 100x120x70mm
TBAHSK100	Takım bağlama aparatı HSK-A 100 konik Boyutlar: 120x130x70mm
Masif çelik yapı, dikey ve yatay bağlama imkanı	

ÇOK AMAÇLI GÖNYE APARATI



Sip. No.	İçeriği
MITFIX	Masif çelik yapı, dikey ve yatay konumda kullanım ve her tür iş parçası ve aparat bağlamaya uygun, ayrıca takım bağlama aparat ve setlerimize de uygundur Boyutlar: EnxBoyxYükseklik 100x190x140mm

TAKIM TUTUCU STANDI



Sip. No.	İçeriği
TSUNI16	Takım tutucu standı 16 hazneli Universal tasarım tüm koniklere uygun BT-DIN-ISO-SK-CAT 30-40-50 HSK A 32-40-50-63-80 Boyutlar: EnxBoyxYükseklik 57x50x30mm

FREZELEME TAKIM TUTUCU YEDEKLERİ

AHŞAP PENS STANTLARI



Sip. No.	Uygun pens tipi
WCS08	ER 8
WCS11	ER 11
WCS16	ER 16
WCS20	ER 20
WCS25	ER 25
WCS32	ER 32
WCS40	ER 40
WCS50	ER 50
WCSOZ	OZ25 DIN6388-25

ALIN FREZE TUTUCU SABİTLEME CİVATASI



Sip. No.	TUTUCU REF.	ÖLÇÜ
SCFM16	FACE MILL Ø16MM	M8
SCFM22	FACE MILL Ø22MM	M10
SCFM27	FACE MILL Ø27MM	M12
SCFM32	FACE MILL Ø32MM	M16
SCFM40	FACE MILL Ø40MM	M20

VELDON TUTUCU SABİTLEME CİVATASI



Sip. No.	TUTUCU REF.	ÖLÇÜ
SCW06	VELDON Ø6MM	M6X10
SCW08	VELDON Ø8MM	M8X10
SCW10	VELDON Ø10MM	M10X12
SCW12	VELDON Ø12MM	M12X16
SCW14	VELDON Ø14MM	M12X16
SCW16	VELDON Ø16MM	M14X16
SCW18	VELDON Ø18MM	M14X16
SCW20	VELDON Ø20MM	M16X16
SCW25	VELDON Ø25MM	M18X2X20
SCW32	VELDON Ø32MM	M20X2X20
SCW40	VELDON Ø40MM	M20X2X20

4. KALIP ELEMANLARI

Sy. 278/365

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
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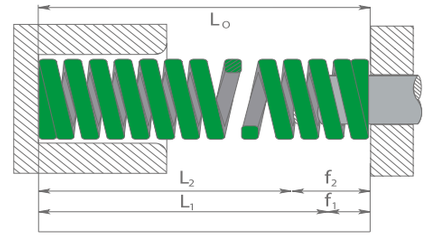

DELTA
DELTA

KALIP YAYLARI

YEŞİL YAY



Hafif Yük



DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	PSE.YAYY1025	10	5	25	10	13	1,7	17	3,9	39	5,8	58	8,0	80	10,3	103	100
	PSE.YAYY1032			32	8,5	16	2,1	18	4,9	42	7,4	63	10,2	86	13,1	111	100
	PSE.YAYY1038			38	6,8	20	2,5	17	5,9	40	8,8	60	12,1	82	15,6	106	100
	PSE.YAYY1044			44	6	23	2,9	18	6,8	41	10,1	61	14,0	84	18,0	108	100
	PSE.YAYY1051			51	5	26	3,4	17	7,8	39	11,8	59	16,2	81	20,9	105	100
	PSE.YAYY1064			64	4,3	33	4,2	18	9,8	42	14,6	63	20,2	87	26,0	112	100
	PSE.YAYY1076			76	3,2	39	5,1	16	11,7	37	17,6	56	24,2	77	31,2	100	100
	PSE.YAYY10305			305	1,1	156	20,3	22	46,9	52	70,3	77	96,9	107	125,0	138	10
13	PSE.YAYY1325	12,5	6,3	25	17,9	13	1,7	30	3,9	69	5,8	104	8,0	143	10,3	184	100
	PSE.YAYY1332			32	16,4	16	2,1	35	4,9	81	7,4	121	10,2	167	13,1	215	100
	PSE.YAYY1338			38	13,6	20	2,5	34	5,9	80	8,8	119	12,1	164	15,6	212	100
	PSE.YAYY1344			44	12,1	23	2,9	35	6,8	82	10,1	123	14,0	169	18,0	218	100
	PSE.YAYY1351			51	11,4	26	3,4	39	7,8	89	11,8	134	16,2	185	20,9	238	100
	PSE.YAYY1364			64	9,3	33	4,3	40	9,9	92	14,8	138	20,4	190	26,3	245	100
	PSE.YAYY1376			76	7,1	39	5,1	36	11,7	83	17,6	125	24,2	172	31,2	222	100
	PSE.YAYY1389			89	5,4	46	5,9	32	13,7	74	20,5	111	28,3	153	36,5	197	100
	PSE.YAYY13305			305	1,4	156	20,3	28	46,9	66	70,3	98	96,9	136	125,0	175	10
16	PSE.YAYY1625	16	8	25	23,4	13	1,7	39	3,9	90	5,8	136	8,0	187	10,3	241	100
	PSE.YAYY1632			32	22,9	16	2,1	49	4,9	112	7,4	169	10,2	232	13,1	300	100
	PSE.YAYY1638			38	19,3	20	2,5	49	5,9	113	8,8	169	12,1	233	15,6	301	100
	PSE.YAYY1644			44	17,1	23	2,9	50	6,8	115	10,1	173	14,0	239	18,0	308	100
	PSE.YAYY1651			51	15,7	26	3,4	53	7,8	123	11,8	185	16,2	254	20,9	328	100
	PSE.YAYY1664			64	10,7	33	4,3	46	9,9	106	14,8	158	20,4	218	26,3	281	100
	PSE.YAYY1676			76	10	39	5,1	51	11,7	117	17,6	176	24,2	242	31,2	312	100
	PSE.YAYY1689			89	8,6	46	5,9	51	13,7	118	20,5	177	28,3	243	36,5	314	100
	PSE.YAYY16102			102	7,8	52	6,8	53	15,7	122	23,5	183	32,4	253	41,8	326	50
	PSE.YAYY16305			305	2,5	156	20,3	51	46,9	117	70,3	176	96,9	242	125,0	313	10
20	PSE.YAYY2025	20	10	25	55,8	13	1,7	92	3,8	213	5,7	320	7,9	441	10,2	569	100
	PSE.YAYY2032			32	45	16	2,0	91	4,7	211	7,0	316	9,7	436	12,5	563	100
	PSE.YAYY2038			38	33,3	19	2,4	81	5,6	187	8,4	281	11,6	387	15,0	500	100
	PSE.YAYY2044			44	30	22	2,9	86	6,6	198	9,9	297	13,6	409	18,0	540	100
	PSE.YAYY2051			51	24,5	25	3,3	80	7,5	184	11,3	276	15,5	380	20,0	490	100
	PSE.YAYY2064			64	20	31	4,1	81	9,4	188	14,1	281	19,4	388	25,0	500	100
	PSE.YAYY2076			76	16	37	4,8	77	11,1	178	16,7	266	22,9	367	30,0	480	100
	PSE.YAYY2089			89	14	44	5,7	80	13,1	184	19,7	276	27,1	380	35,0	490	50
	PSE.YAYY20102			102	12	51	6,7	80	15,4	185	23,1	277	31,8	381	41,0	492	50
	PSE.YAYY20115			115	10,9	58	7,5	81	17,3	188	25,9	282	35,7	389	46,0	501	50
	PSE.YAYY20127			127	9,5	64	8,3	79	19,1	182	28,7	273	39,5	375	51,0	485	50
	PSE.YAYY20140			139	8,4	70	9,1	76	21,0	176	31,5	265	43,4	365	56,0	470	50
	PSE.YAYY20152			152	7,5	76	9,9	74	22,9	172	34,3	257	47,3	355	61,0	458	50
	PSE.YAYY20305			305	4	153	19,8	79	45,8	183	68,6	275	94,6	378	122,0	488	10
25	PSE.YAYY2525	25	12,5	25	100	13	1,7	166	3,8	383	5,7	574	7,9	791	10,2	1020	100
	PSE.YAYY2532			32	80,3	16	2,0	163	4,7	376	7,0	565	9,7	778	12,5	1004	100
	PSE.YAYY2538			38	62	19	2,4	151	5,6	349	8,4	523	11,6	721	15,0	930	100
	PSE.YAYY2544			44	52,9	22	2,9	151	6,6	349	9,9	524	13,6	722	18,0	952	100
	PSE.YAYY2551			51	44	25	3,3	143	7,5	330	11,3	495	15,5	682	20,0	880	100
	PSE.YAYY2564			64	35,2	31	4,1	143	9,4	330	14,1	495	19,4	682	25,0	880	100
	PSE.YAYY2576			76	28	37	4,8	135	11,1	311	16,7	466	22,9	642	30,0	840	50
	PSE.YAYY2589			89	24	44	5,7	137	13,1	315	19,7	473	27,1	651	35,0	840	50
	PSE.YAYY25102			102	21,1	51	6,7	141	15,4	324	23,1	487	31,8	670	41,0	865	50
	PSE.YAYY25115			115	18,7	58	7,5	140	17,3	323	25,9	484	35,7	667	46,0	860	25
	PSE.YAYY25127			127	16,7	64	8,3	138	19,1	319	28,7	479	39,5	660	51,0	852	25
	PSE.YAYY25140			139	15,3	70	9,1	139	21,0	321	31,5	482	43,4	664	56,0	857	25
	PSE.YAYY25152			152	14	76	9,9	139	22,9	320	34,3	480	47,3	662	61,0	854	20
	PSE.YAYY25178			178	12,5	89	11,5	144	26,6	333	39,9	499	55,0	688	71,0	888	20
	PSE.YAYY25203			203	10,4	101	13,2	137	30,4	316	45,6	474	62,8	653	81,0	842	20
	PSE.YAYY25305			305	7,0	153	19,8	139	45,8	320	68,6	480	94,6	662	122,0	854	5

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YEŞİL YAY



Hafif Yük

Kalite: ISO 10243



Renk: YEŞİL RAL 6002

Performans: 80%

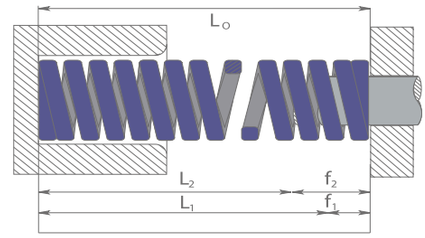
DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
	PSE.YAYY3238			38	94,0	19	2,4	229	5,6	529	8,4	793	11,6	1093	15,0	1410	50
	PSE.YAYY3244			44	79,5	23	2,9	233	6,8	537	10,1	805	14,0	1109	18,0	1431	50
	PSE.YAYY3251			51	67,0	25	3,3	218	7,5	503	11,3	754	15,5	1039	20,0	1340	50
	PSE.YAYY3264			64	53,0	31	4,1	215	9,4	497	14,1	745	19,4	1027	25,0	1325	50
	PSE.YAYY3276			76	44,0	38	4,9	215	11,3	495	16,9	743	23,3	1023	30,0	1320	25
	PSE.YAYY3289			89	37,2	44	5,7	212	13,1	488	19,7	732	27,1	1009	35,0	1302	25
	PSE.YAYY32102			102	32,0	51	6,7	213	15,4	492	23,1	738	31,8	1017	41,0	1312	20
32	PSE.YAYY32115	32	16	115	29,0	58	7,5	217	17,3	500	25,9	750	35,7	1034	46,0	1334	20
	PSE.YAYY32127			127	25,0	64	8,3	207	19,1	478	28,7	717	39,5	988	51,0	1275	20
	PSE.YAYY32139			139	23,0	70	9,1	209	21,0	483	31,5	725	43,4	998	56,0	1288	10
	PSE.YAYY32152			152	21,5	76	9,9	213	22,9	492	34,3	738	47,3	1016	61,0	1312	10
	PSE.YAYY32178			178	18,2	89	11,5	210	26,6	485	39,9	727	55,0	1001	71,0	1292	10
	PSE.YAYY32203			203	15,8	101	13,2	208	30,4	480	45,6	720	62,8	992	81,0	1280	10
	PSE.YAYY32254			254	12,5	128	16,6	207	38,3	478	57,4	717	79,1	988	102,0	1275	5
	PSE.YAYY32305			305	10,3	153	19,8	204	45,8	471	68,6	707	94,6	974	122,0	1257	5
	PSE.YAYY4051			51	92,0	25	3,3	299	7,5	690	11,3	1035	15,5	1426	20,0	1840	25
	PSE.YAYY4064			64	73,0	31	4,1	297	9,4	684	14,1	1027	19,4	1414	25,0	1825	25
	PSE.YAYY4076			76	63,0	38	4,9	307	11,3	709	16,9	1063	23,3	1465	30,0	1890	25
	PSE.YAYY4089			89	51,0	44	5,7	290	13,1	669	19,7	1004	27,1	1383	35,0	1785	25
	PSE.YAYY40102			102	43,0	51	6,7	286	15,4	661	23,1	992	31,8	1366	41,0	1763	20
	PSE.YAYY40115			115	39,6	58	7,5	296	17,3	683	25,9	1025	35,7	1412	46,0	1822	20
40	PSE.YAYY40127	40	20	127	37,0	64	8,3	307	19,1	708	28,7	1061	39,5	1462	51,0	1887	10
	PSE.YAYY40139			139	32,0	70	9,1	291	21,0	672	31,5	1008	43,4	1389	56,0	1792	10
	PSE.YAYY40152			152	28,0	76	9,9	278	22,9	641	34,3	961	47,3	1324	61,0	1708	10
	PSE.YAYY40178			178	25,2	89	11,5	291	26,6	671	39,9	1006	55,0	1387	71,0	1789	5
	PSE.YAYY40203			203	22,7	101	13,2	299	30,4	690	45,6	1034	62,8	1425	81,0	1839	5
	PSE.YAYY40254			254	17,0	128	16,6	282	38,3	650	57,4	975	79,1	1344	102,0	1734	5
	PSE.YAYY40305			305	14,8	153	19,8	293	45,8	677	68,6	1016	94,6	1399	122,0	1806	5
	PSE.YAYY5064			64	156,0	31	4,1	634	9,4	1463	14,1	2194	19,4	3023	25,0	3900	10
	PSE.YAYY5076			76	125,0	38	4,9	609	11,3	1406	16,9	2109	23,3	2906	30,0	3750	10
	PSE.YAYY5089			89	109,0	44	5,7	620	13,1	1431	19,7	2146	27,1	2957	35,0	3815	10
	PSE.YAYY50102			102	94,0	51	6,7	626	15,4	1445	23,1	2168	31,8	2987	41,0	3854	10
	PSE.YAYY50115			115	81,0	58	7,5	605	17,3	1397	25,9	2096	35,7	2888	46,0	3726	4
50	PSE.YAYY50127	50	25	127	71,0	64	8,3	588	19,1	1358	28,7	2037	39,5	2806	51,0	3621	4
	PSE.YAYY50139			139	66,5	70	9,1	605	21,0	1397	31,5	2095	43,4	2886	56,0	3724	4
	PSE.YAYY50152			152	60,0	76	9,9	595	22,9	1373	34,3	2059	47,3	2837	61,0	3660	4
	PSE.YAYY50178			178	52,0	89	11,5	600	26,6	1385	39,9	2077	55,0	2861	71,0	3692	4
	PSE.YAYY50203			203	44,0	101	13,2	579	30,4	1337	45,6	2005	62,8	2762	81,0	3564	4
	PSE.YAYY50254			254	35,0	128	16,6	580	38,3	1339	57,4	2008	79,1	2767	102,0	3570	4
	PSE.YAYY50305			305	28,5	153	19,8	565	45,8	1304	68,6	1956	94,6	2695	122,0	3477	4
	PSE.YAYY6376			76	189,0	38	4,9	921	11,3	2126	16,9	3189	23,3	4394	30,0	5670	10
	PSE.YAYY6389			89	158,0	44	5,7	899	13,1	2074	19,7	3111	27,1	4286	35,0	5530	10
	PSE.YAYY63102			102	131,0	51	6,7	873	15,4	2014	23,1	3021	31,8	4163	41,0	5371	10
	PSE.YAYY63115			115	116,0	58	7,5	867	17,3	2001	25,9	3002	35,7	4135	46,0	5336	4
63	PSE.YAYY63127	63	38	127	103,0	64	8,3	854	19,1	1970	28,7	2955	39,5	4071	51,0	5253	4
	PSE.YAYY63152			152	84,3	76	9,9	836	22,9	1928	34,3	2893	47,3	3985	61,0	5142	4
	PSE.YAYY63178			178	71,5	89	11,5	825	26,6	1904	39,9	2856	55,0	3934	71,0	5077	4
	PSE.YAYY63203			203	61,7	101	13,2	812	30,4	1874	45,6	2811	62,8	3873	81,0	4998	4
	PSE.YAYY63254			254	47,0	128	16,6	779	38,3	1798	57,4	2697	79,1	3715	102,0	4794	4
	PSE.YAYY63305			305	38,2	153	19,8	757	45,8	1748	68,6	2621	94,6	3612	122,0	4660	4

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DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme ⚠	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	PSE.YAYM1025	10	5	25	16,0	12	1,5	25	3,6	57	5,3	86	7,4	118	9,5	152	100
	PSE.YAYM1032			32	13,0	15	2,0	26	4,6	59	6,9	89	9,5	123	12,2	159	100
	PSE.YAYM1038			38	11,9	18	2,3	28	5,4	64	8,1	96	11,2	133	14,4	171	100
	PSE.YAYM1044			44	10,3	21	2,7	28	6,3	65	9,4	97	12,9	133	16,7	172	100
	PSE.YAYM1051			51	8,9	24	3,2	28	7,3	65	10,9	97	15,0	134	19,4	173	100
	PSE.YAYM1064			64	7,5	30	3,9	30	9,1	68	13,7	103	18,8	141	24,3	182	100
	PSE.YAYM1076			76	5,3	36	4,7	25	10,8	57	16,3	86	22,4	119	28,9	153	100
	PSE.YAYM10305			305	1,6	145	18,9	30	43,5	70	65,3	104	89,9	144	116,0	186	10
13	PSE.YAYM1025	12,5	6,3	25	30,0	12	1,5	46	3,6	107	5,3	160	7,4	221	9,5	285	100
	PSE.YAYM1032			32	24,8	15	2,0	49	4,6	113	6,9	170	9,5	234	12,2	303	100
	PSE.YAYM1038			38	21,4	18	2,3	50	5,4	116	8,1	173	11,2	239	14,4	308	100
	PSE.YAYM1044			44	18,5	21	2,7	50	6,3	116	9,4	174	12,9	239	16,7	309	100
	PSE.YAYM1051			51	15,5	24	3,2	49	7,3	113	10,9	169	15,0	233	19,4	301	100
	PSE.YAYM1064			64	12,1	30	3,9	48	9,1	110	13,7	165	18,8	228	24,3	294	100
	PSE.YAYM1076			76	10,2	36	4,7	48	10,8	111	16,3	166	22,4	228	28,9	295	100
	PSE.YAYM10305			89	8,4	42	5,5	46	12,7	106	19,0	160	26,2	220	33,8	284	100
	PSE.YAYM13305			305	2,1	145	18,9	40	43,5	91	65,3	137	89,9	189	116,0	244	10
16	PSE.YAYM1625	16	8	25	49,4	12	1,5	76	3,6	176	5,3	264	7,4	364	9,5	469	100
	PSE.YAYM1632			32	37,1	15	2,0	74	4,6	170	6,9	255	9,5	351	12,2	453	100
	PSE.YAYM1638			38	33,9	18	2,3	79	5,4	183	8,1	275	11,2	378	14,4	488	100
	PSE.YAYM1644			44	30,0	21	2,7	81	6,3	188	9,4	282	12,9	388	16,7	501	100
	PSE.YAYM1651			51	26,4	24	3,2	83	7,3	192	10,9	288	15,0	397	19,4	512	100
	PSE.YAYM1664			64	20,5	30	3,9	81	9,1	187	13,7	280	18,8	386	24,3	498	100
	PSE.YAYM1676			76	17,8	36	4,7	84	10,8	193	16,3	289	22,4	399	28,9	514	100
	PSE.YAYM1689			89	15,2	42	5,5	83	12,7	193	19,0	289	26,2	398	33,8	514	100
	PSE.YAYM16102			102	13,5	49	6,3	85	14,6	196	21,8	295	30,1	406	38,8	524	50
	PSE.YAYM16305			305	4,8	145	18,9	90	43,5	209	65,3	313	89,9	432	116,0	557	10
20	PSE.YAYM2025	20	10	25	98,0	12	1,5	150	3,5	345	5,3	518	7,3	714	9,4	921	100
	PSE.YAYM2032			32	72,6	15	2,0	142	4,5	327	6,8	490	9,3	675	12,0	871	100
	PSE.YAYM2038			38	56,0	18	2,3	127	5,3	294	7,9	441	10,9	608	14,0	784	100
	PSE.YAYM2044			44	47,5	21	2,7	127	6,2	294	9,3	441	12,8	607	16,5	784	100
	PSE.YAYM2051			51	41,7	24	3,1	129	7,1	297	10,7	446	14,7	614	19,0	792	100
	PSE.YAYM2064			64	32,3	30	3,9	126	9,0	291	13,5	436	18,6	601	24,0	775	100
	PSE.YAYM2076			76	25,1	35	4,6	114	10,5	264	15,8	395	21,7	545	28,0	703	100
	PSE.YAYM2089			89	22,0	41	5,4	118	12,4	272	18,6	408	25,6	563	33,0	726	50
	PSE.YAYM20102			102	19,8	48	6,2	122	14,3	282	21,4	423	29,5	583	38,0	752	50
	PSE.YAYM20115			115	18,1	54	7,0	126	16,1	292	24,2	438	33,3	603	43,0	778	50
	PSE.YAYM20127			127	16,6	60	7,8	129	18,0	299	27,0	448	37,2	618	48,0	797	50
	PSE.YAYM20139			139	15,1	65	8,5	128	19,5	294	29,3	442	40,3	609	52,0	785	50
	PSE.YAYM20152			152	13,2	71	9,3	122	21,4	282	32,1	423	44,2	583	57,0	752	50
	PSE.YAYM20305			305	6,1	143	18,5	113	42,8	261	64,1	391	88,4	539	114,0	695	10
25	PSE.YAYM2525	25	12,5	25	147,0	12	1,5	225	3,5	518	5,3	777	7,3	1071	9,4	1382	100
	PSE.YAYM2532			32	118,0	15	2,0	230	4,5	531	6,8	797	9,3	1097	12,0	1416	100
	PSE.YAYM2538			38	93,0	18	2,3	212	5,3	488	7,9	732	10,9	1009	14,0	1302	100
	PSE.YAYM2544			44	80,8	21	2,7	217	6,2	500	9,3	750	12,8	1033	16,5	1333	100
	PSE.YAYM2551			51	68,6	24	3,1	212	7,1	489	10,7	733	14,7	1010	19,0	1303	100
	PSE.YAYM2564			64	53,0	30	3,9	207	9,0	477	13,5	716	18,6	986	24,0	1272	100
	PSE.YAYM2576			76	43,2	35	4,6	197	10,5	454	15,8	680	21,7	937	28,0	1210	50
	PSE.YAYM2589			89	38,2	41	5,4	205	12,4	473	18,6	709	25,6	977	33,0	1261	50
	PSE.YAYM25102			102	33,0	48	6,2	204	14,3	470	21,4	705	29,5	972	38,0	1254	50
	PSE.YAYM25115			115	28,0	54	7,0	196	16,1	452	24,2	677	33,3	933	43,0	1204	25
	PSE.YAYM25127			127	25,9	60	7,8	202	18,0	466	27,0	699	37,2	963	48,0	1243	25
	PSE.YAYM25139			139	23,2	65	8,5	196	19,5	452	29,3	679	40,3	935	52,0	1206	25
	PSE.YAYM25152			152	20,8	71	9,3	193	21,4	445	32,1	667	44,2	919	57,0	1186	20
	PSE.YAYM25178			178	17,8	84	10,9	194	25,1	447	37,7	671	51,9	924	67,0	1193	20
	PSE.YAYM25203			203	15,8	95	12,4	195	28,5	450	42,8	675	58,9	931	76,0	1201	20
	PSE.YAYM25305			305	10,2	143	18,5	189	42,8	436	64,1	654	88,4	901	114,0	1163	5

KALIP YAYLARI

MAVİ YAY



Orta Ağır Yük

Kalite: ISO 10243



Renk: MAVİ RAL 5003

Performans: 80%

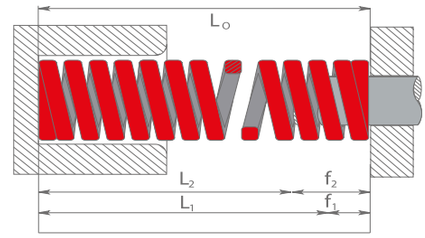
DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
	PSE.YAYM3238			38	185,0	18	2,3	421	5,3	971	7,9	1457	10,9	2007	14,0	2590	50
	PSE.YAYM3244			44	158,0	21	2,7	424	6,2	978	9,3	1466	12,8	2020	16,5	2607	50
	PSE.YAYM3251			51	134,0	24	3,1	414	7,1	955	10,7	1432	14,7	1973	19,0	2546	50
	PSE.YAYM3264			64	99,0	30	3,9	386	9,0	891	13,5	1337	18,6	1841	24,0	2376	50
	PSE.YAYM3276			76	80,5	35	4,6	366	10,5	845	15,8	1268	21,7	1747	28,0	2254	25
	PSE.YAYM3289			89	69,1	41	5,4	371	12,4	855	18,6	1283	25,6	1767	33,0	2280	25
	PSE.YAYM32102			102	58,8	48	6,2	363	14,3	838	21,4	1257	29,5	1732	38,0	2234	20
32	PSE.YAYM32115	32	16	115	51,5	54	7,0	360	16,1	830	24,2	1246	33,3	1716	43,0	2215	20
	PSE.YAYM32127			127	44,8	60	7,8	349	18,0	806	27,0	1210	37,2	1667	48,0	2150	20
	PSE.YAYM32139			139	42,3	65	8,5	357	19,5	825	29,3	1237	40,3	1705	52,0	2200	10
	PSE.YAYM32152			152	37,8	71	9,3	350	21,4	808	32,1	1212	44,2	1670	57,0	2155	10
	PSE.YAYM32178			178	32,5	84	10,9	354	25,1	817	37,7	1225	51,9	1688	67,0	2178	10
	PSE.YAYM32203			203	28,9	95	12,4	357	28,5	824	42,8	1235	58,9	1702	76,0	2196	10
	PSE.YAYM32254			254	21,4	119	15,4	330	35,6	762	53,4	1144	73,6	1576	95,0	2033	5
	PSE.YAYM32305			305	18,3	143	18,5	339	42,8	782	64,1	1173	88,4	1617	114,0	2086	5
	PSE.YAYM4051			51	181,6	24	3,1	561	7,1	1294	10,7	1941	14,7	2674	19,0	3450	25
	PSE.YAYM4064			64	140,0	30	3,9	546	9,0	1260	13,5	1890	18,6	2604	24,0	3360	25
	PSE.YAYM4076			76	108,0	35	4,6	491	10,5	1134	15,8	1701	21,7	2344	28,0	3024	25
	PSE.YAYM4089			89	90,7	41	5,4	486	12,4	1122	18,6	1684	25,6	2320	33,0	2993	25
	PSE.YAYM40102			102	81,0	48	6,2	500	14,3	1154	21,4	1731	29,5	2385	38,0	3078	20
	PSE.YAYM40115			115	71,8	54	7,0	502	16,1	1158	24,2	1737	33,3	2393	43,0	3087	20
40	PSE.YAYM40127	40	20	127	62,7	60	7,8	489	18,0	1129	27,0	1693	37,2	2332	48,0	3010	10
	PSE.YAYM40139			139	57,5	65	8,5	486	19,5	1121	29,3	1682	40,3	2317	52,0	2990	10
	PSE.YAYM40152			152	51,6	71	9,3	478	21,4	1103	32,1	1654	44,2	2279	57,0	2941	10
	PSE.YAYM40178			178	44,1	84	10,9	480	25,1	1108	37,7	1662	51,9	2290	67,0	2955	5
	PSE.YAYM40203			203	36,7	95	12,4	453	28,5	1046	42,8	1569	58,9	2162	76,0	2789	5
	PSE.YAYM40254			254	30,1	119	15,4	465	35,6	1072	53,4	1608	73,6	2216	95,0	2860	5
	PSE.YAYM40305			305	24,6	143	18,5	456	42,8	1052	64,1	1577	88,4	2173	114,0	2804	5
	PSE.YAYM5064			64	209,0	30	3,9	815	9,0	1881	13,5	2822	18,6	3887	24,0	5016	10
	PSE.YAYM5076			76	168,0	35	4,6	764	10,5	1764	15,8	2646	21,7	3646	28,0	4704	10
	PSE.YAYM5089			89	140,0	41	5,4	751	12,4	1733	18,6	2599	25,6	3581	33,0	4620	10
	PSE.YAYM50102			102	119,0	48	6,2	735	14,3	1696	21,4	2544	29,5	3505	38,0	4522	10
	PSE.YAYM50115			115	106,0	54	7,0	741	16,1	1709	24,2	2564	33,3	3532	43,0	4558	4
	PSE.YAYM50127			127	97,0	60	7,8	757	18,0	1746	27,0	2619	37,2	3608	48,0	4656	4
50	PSE.YAYM50139	50	25	139	87,0	65	8,5	735	19,5	1697	29,3	2545	40,3	3506	52,0	4524	4
	PSE.YAYM50152			152	80,0	71	9,3	741	21,4	1710	32,1	2565	44,2	3534	57,0	4560	4
	PSE.YAYM50178			178	69,5	84	10,9	757	25,1	1746	37,7	2619	51,9	3609	67,0	4657	4
	PSE.YAYM50203			203	59,8	95	12,4	739	28,5	1704	42,8	2556	58,9	3522	76,0	4545	4
	PSE.YAYM50229			229	50,9	108	14,0	711	32,3	1642	48,4	2462	66,7	3392	86,0	4377	4
	PSE.YAYM50254			254	43,9	119	15,4	678	35,6	1564	53,4	2346	73,6	3232	95,0	4171	4
	PSE.YAYM50305			305	38,6	143	18,5	715	42,8	1650	64,1	2475	88,4	3410	114,0	4400	4
	PSE.YAYM6376			76	312,0	35	4,6	1420	10,5	3276	15,8	4914	21,7	6770	28,0	8736	10
	PSE.YAYM6389			89	260,0	41	5,4	1394	12,4	3218	18,6	4826	25,6	6650	33,0	8580	10
	PSE.YAYM63102			102	221,0	48	6,2	1365	14,3	3149	21,4	4724	29,5	6508	38,0	8398	10
	PSE.YAYM63115			115	187,0	54	7,0	1307	16,1	3015	24,2	4523	33,3	6232	43,0	8041	4
	PSE.YAYM63127			127	168,0	60	7,8	1310	18,0	3024	27,0	4536	37,2	6250	48,0	8064	4
63	PSE.YAYM63152	63	38	152	136,0	71	9,3	1260	21,4	2907	32,1	4361	44,2	6008	57,0	7752	4
	PSE.YAYM63178			178	114,0	84	10,9	1241	25,1	2864	37,7	4296	51,9	5919	67,0	7638	4
	PSE.YAYM63203			203	100,0	95	12,4	1235	28,5	2850	42,8	4275	58,9	5890	76,0	7600	4
	PSE.YAYM63229			229	89,2	108	14,0	1247	32,3	2877	48,4	4315	66,7	5945	86,0	7671	4
	PSE.YAYM63254			254	78,4	119	15,4	1210	35,6	2793	53,4	4190	73,6	5772	95,0	7448	4
	PSE.YAYM63305			305	64,7	143	18,5	1199	42,8	2766	64,1	4149	88,4	5716	114,0	7376	4

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DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme ⚠	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	PSE.YAYK1025	10	5	25	22,1	9	1,2	27	2,8	62	4,2	93	5,8	129	7,5	166	100
	PSE.YAYK1032			32	17,5	12	1,6	27	3,6	63	5,4	95	7,4	130	9,6	168	100
	PSE.YAYK1038			38	17,1	14	1,9	32	4,3	73	6,4	110	8,8	151	11,4	195	100
	PSE.YAYK1044			44	15,0	17	2,1	32	5,0	74	7,4	111	10,2	153	13,2	198	100
	PSE.YAYK1051			51	12,8	19	2,5	32	5,7	73	8,6	110	11,9	152	15,3	196	100
	PSE.YAYK1064			64	10,7	24	3,1	33	7,2	77	10,8	116	14,9	159	19,2	205	100
	PSE.YAYK1076			76	7,5	29	3,7	28	8,6	64	12,8	96	17,7	133	22,8	171	100
	PSE.YAYK10305			305	2,1	114	14,9	31	34,3	72	51,5	108	70,9	149	91,5	192	10
13	PSE.YAYK1325	12,5	6,3	25	42,1	9	1,2	51	2,8	118	4,2	178	5,8	245	7,5	316	100
	PSE.YAYK1332			32	33,2	12	1,6	52	3,6	120	5,4	179	7,4	247	9,6	319	100
	PSE.YAYK1338			38	29,3	14	1,9	54	4,3	125	6,4	188	8,8	259	11,4	334	100
	PSE.YAYK1344			44	24,6	17	2,1	53	5,0	122	7,4	183	10,2	252	13,2	325	100
	PSE.YAYK1351			51	19,6	19	2,5	49	5,7	113	8,6	169	11,9	232	15,3	300	100
	PSE.YAYK1364			64	15,0	24	3,1	47	7,2	108	10,8	162	14,9	223	19,2	288	100
	PSE.YAYK1376			76	13,2	29	3,7	49	8,6	113	12,8	169	17,7	233	22,8	301	100
	PSE.YAYK1389			89	11,4	33	4,3	50	10,0	114	15,0	171	20,7	236	26,7	304	100
	PSE.YAYK13305			305	2,8	114	14,9	42	34,3	96	51,5	144	70,9	199	91,5	256	10
16	PSE.YAYK1625	16	8	25	75,7	9	1,2	92	2,8	213	4,2	319	5,8	440	7,5	568	100
	PSE.YAYK1632			32	52,8	12	1,6	82	3,6	190	5,4	285	7,4	393	9,6	507	100
	PSE.YAYK1638			38	48,5	14	1,9	90	4,3	207	6,4	311	8,8	429	11,4	553	100
	PSE.YAYK1644			44	42,8	17	2,1	92	5,0	212	7,4	318	10,2	438	13,2	565	100
	PSE.YAYK1651			51	37,1	19	2,5	92	5,7	213	8,6	319	11,9	440	15,3	568	100
	PSE.YAYK1664			64	30,3	24	3,1	95	7,2	218	10,8	327	14,9	451	19,2	582	100
	PSE.YAYK1676			76	25,7	29	3,7	95	8,6	220	12,8	330	17,7	454	22,8	586	100
	PSE.YAYK1689			89	21,7	33	4,3	94	10,0	217	15,0	326	20,7	449	26,7	579	100
	PSE.YAYK16102			102	19,3	38	5,0	96	11,5	222	17,2	332	23,7	458	30,6	591	50
	PSE.YAYK16305			305	7,1	114	14,9	106	34,3	244	51,5	365	70,9	504	91,5	650	10
20	PSE.YAYK2025	20	10	25	216,0	9	1,2	263	2,8	608	4,2	911	5,8	1256	7,5	1620	100
	PSE.YAYK2032			32	168,0	12	1,6	262	3,6	605	5,4	907	7,4	1250	9,6	1613	100
	PSE.YAYK2038			38	129,0	14	1,8	231	4,1	532	6,2	798	8,5	1100	11,0	1419	100
	PSE.YAYK2044			44	112,0	16	2,1	237	4,9	546	7,3	819	10,1	1128	13,0	1456	100
	PSE.YAYK2051			51	94,0	19	2,4	229	5,6	529	8,4	793	11,6	1093	15,0	1410	100
	PSE.YAYK2064			64	72,1	24	3,1	223	7,1	514	10,7	771	14,7	1062	19,0	1370	100
	PSE.YAYK2076			76	59,7	29	3,7	223	8,6	515	12,9	772	17,8	1064	23,0	1373	100
	PSE.YAYK2089			89	50,5	34	4,4	222	10,1	511	15,2	767	20,9	1057	27,0	1364	50
	PSE.YAYK20102			102	44,2	39	5,0	223	11,6	514	17,4	771	24,0	1062	31,0	1370	50
	PSE.YAYK20115			115	38,4	44	5,7	218	13,1	504	19,7	756	27,1	1042	35,0	1344	50
	PSE.YAYK20127			127	34,1	48	6,2	211	14,3	486	21,4	729	29,4	1004	38,0	1296	50
	PSE.YAYK20139			139	31,0	53	6,8	212	15,8	488	23,6	732	32,5	1009	42,0	1302	50
	PSE.YAYK20152			152	28,2	58	7,5	211	17,2	486	25,9	730	35,6	1005	46,0	1297	50
	PSE.YAYK20305			305	15,0	114	14,8	222	34,1	512	51,2	768	70,5	1058	91,0	1365	10
25	PSE.YAYK2525	25	12,5	25	375,0	9	1,2	457	2,8	1055	4,2	1582	5,8	2180	7,5	2813	100
	PSE.YAYK2532			32	297,0	12	1,6	463	3,6	1069	5,4	1604	7,4	2210	9,6	2851	100
	PSE.YAYK2538			38	219,0	14	1,8	392	4,1	903	6,2	1355	8,5	1867	11,0	2409	100
	PSE.YAYK2544			44	187,0	16	2,1	395	4,9	912	7,3	1367	10,1	1884	13,0	2431	100
	PSE.YAYK2551			51	156,0	19	2,4	380	5,6	878	8,4	1316	11,6	1814	15,0	2340	100
	PSE.YAYK2564			64	123,0	24	3,1	380	7,1	876	10,7	1315	14,7	1811	19,0	2337	100
	PSE.YAYK2576			76	99,0	29	3,7	370	8,6	854	12,9	1281	17,8	1765	23,0	2277	50
	PSE.YAYK2589			89	84,0	34	4,4	369	10,1	851	15,2	1276	20,9	1758	27,0	2268	50
	PSE.YAYK25102			102	73,0	39	5,0	368	11,6	849	17,4	1273	24,0	1754	31,0	2263	50
	PSE.YAYK25115			115	65,0	44	5,7	370	13,1	853	19,7	1280	27,1	1764	35,0	2276	25
	PSE.YAYK25127			127	57,7	48	6,2	356	14,3	822	21,4	1233	29,4	1699	38,0	2193	25
	PSE.YAYK25139			139	52,7	53	6,8	360	15,8	830	23,6	1245	32,5	1715	42,0	2213	25
	PSE.YAYK25152			152	47,8	58	7,5	357	17,2	825	25,9	1237	35,6	1704	46,0	2199	20
	PSE.YAYK25178			178	41,0	66	8,6	353	19,9	815	29,8	1222	41,1	1684	53,0	2173	20
	PSE.YAYK25203			203	35,8	76	9,9	355	22,9	819	34,3	1228	47,3	1692	61,0	2184	20
	PSE.YAYK25305			305	22,9	114	14,8	339	34,1	782	51,2	1172	70,5	1615	91,0	2084	5

KALIP YAYLARI

KIRMIZI YAY



Ağır Yük

Kalite: ISO 10243



Renk: KIRMIZI RAL 3000

Performans: 80%

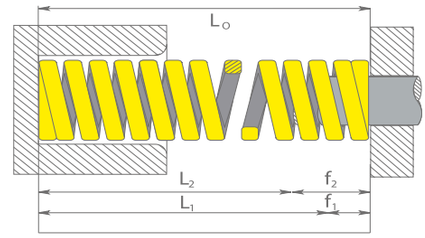
DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
	PSE.YAYK3238			38	388,0	14	1,8	694	4,1	1601	6,2	2401	8,5	3308	11,0	4268	50
	PSE.YAYK3244			44	324,0	16	2,1	685	4,9	1580	7,3	2369	10,1	3264	13,0	4212	50
	PSE.YAYK3251			51	272,0	19	2,4	663	5,6	1530	8,4	2295	11,6	3162	15,0	4080	50
	PSE.YAYK3264			64	212,0	24	3,1	655	7,1	1511	10,7	2266	14,7	3122	19,0	4028	50
	PSE.YAYK3276			76	172,0	29	3,7	643	8,6	1484	12,9	2225	17,8	3066	23,0	3956	25
	PSE.YAYK3289			89	141,0	34	4,4	619	10,1	1428	15,2	2141	20,9	2950	27,0	3807	25
	PSE.YAYK32102			102	122,0	39	5,0	615	11,6	1418	17,4	2127	24,0	2931	31,0	3782	20
32	PSE.YAYK32115	32	16	115	107,0	44	5,7	609	13,1	1404	19,7	2107	27,1	2902	35,0	3745	20
	PSE.YAYK32127			127	93,0	48	6,2	574	14,3	1325	21,4	1988	29,4	2739	38,0	3534	20
	PSE.YAYK32139			139	86,0	53	6,8	587	15,8	1355	23,6	2032	32,5	2799	42,0	3612	10
	PSE.YAYK32152			152	78,0	58	7,5	583	17,2	1346	25,9	2018	35,6	2781	46,0	3588	10
	PSE.YAYK32178			178	67,2	66	8,6	579	19,9	1336	29,8	2003	41,1	2760	53,0	3562	10
	PSE.YAYK32203			203	59,1	76	9,9	586	22,9	1352	34,3	2028	47,3	2794	61,0	3605	10
	PSE.YAYK32254			254	46,4	95	12,4	573	28,5	1322	42,8	1984	58,9	2733	76,0	3526	5
	PSE.YAYK32305			305	38,0	114	14,8	562	34,1	1297	51,2	1945	70,5	2680	91,0	3458	5
	PSE.YAYK4051			51	350,0	19	2,4	853	5,6	1969	8,4	2953	11,6	4069	15,0	5250	25
	PSE.YAYK4064			64	269,0	24	3,1	831	7,1	1917	10,7	2875	14,7	3961	19,0	5111	25
	PSE.YAYK4076			76	219,0	29	3,7	819	8,6	1889	12,9	2833	17,8	3904	23,0	5037	25
	PSE.YAYK4089			89	190,0	34	4,4	834	10,1	1924	15,2	2886	20,9	3976	27,0	5130	25
	PSE.YAYK40102			102	163,0	39	5,0	821	11,6	1895	17,4	2842	24,0	3916	31,0	5053	20
	PSE.YAYK40115			115	142,0	44	5,7	808	13,1	1864	19,7	2796	27,1	3852	35,0	4970	20
40	PSE.YAYK40127	40	20	127	128,0	48	6,2	790	14,3	1824	21,4	2736	29,4	3770	38,0	4864	10
	PSE.YAYK40139			139	115,0	53	6,8	785	15,8	1811	23,6	2717	32,5	3743	42,0	4830	10
	PSE.YAYK40152			152	105,0	58	7,5	785	17,2	1811	25,9	2717	35,6	3743	46,0	4830	10
	PSE.YAYK40178			178	89,0	66	8,6	767	19,9	1769	29,8	2653	41,1	3656	53,0	4717	5
	PSE.YAYK40203			203	77,0	76	9,9	763	22,9	1761	34,3	2642	47,3	3640	61,0	4697	5
	PSE.YAYK40254			254	61,0	95	12,4	753	28,5	1739	42,8	2608	58,9	3593	76,0	4636	5
	PSE.YAYK40305			305	51,0	114	14,8	754	34,1	1740	51,2	2611	70,5	3597	91,0	4641	5
	PSE.YAYK5064			64	413,0	24	3,1	1275	7,1	2943	10,7	4414	14,7	6081	19,0	7847	10
	PSE.YAYK5076			76	339,0	29	3,7	1267	8,6	2924	12,9	4386	17,8	6043	23,0	7797	10
	PSE.YAYK5089			89	288,0	34	4,4	1264	10,1	2916	15,2	4374	20,9	6026	27,0	7776	10
	PSE.YAYK50102			102	245,0	39	5,0	1234	11,6	2848	17,4	4272	24,0	5886	31,0	7595	10
	PSE.YAYK50115			115	215,0	44	5,7	1223	13,1	2822	19,7	4233	27,1	5832	35,0	7525	4
50	PSE.YAYK50127	50	25	127	192,0	48	6,2	1186	14,3	2736	21,4	4104	29,4	5654	38,0	7296	4
	PSE.YAYK50139			139	168,0	53	6,8	1147	15,8	2646	23,6	3969	32,5	5468	42,0	7056	4
	PSE.YAYK50152			152	154,0	58	7,5	1151	17,2	2657	25,9	3985	35,6	5490	46,0	7084	4
	PSE.YAYK50178			178	134,0	66	8,6	1154	19,9	2663	29,8	3995	41,1	5504	53,0	7102	4
	PSE.YAYK50203			203	117,0	76	9,9	1160	22,9	2676	34,3	4015	47,3	5531	61,0	7137	4
	PSE.YAYK50254			254	89,0	95	12,4	1099	28,5	2537	42,8	3805	58,9	5242	76,0	6764	4
	PSE.YAYK50305			305	73,0	114	14,8	1080	34,1	2491	51,2	3737	70,5	5148	91,0	6643	4
	PSE.YAYK6376			76	618,0	29	3,7	2310	8,6	5330	12,9	7995	17,8	11016	23,0	14214	10
	PSE.YAYK6389			89	515,0	34	4,4	2260	10,1	5214	15,2	7822	20,9	10776	27,0	13905	10
	PSE.YAYK63102			102	438,0	39	5,0	2206	11,6	5092	17,4	7638	24,0	10523	31,0	13578	10
	PSE.YAYK63115			115	370,0	44	5,7	2104	13,1	4856	19,7	7284	27,1	10036	35,0	12950	4
63	PSE.YAYK63127	63	38	127	333,0	48	6,2	2056	14,3	4745	21,4	7118	29,4	9807	38,0	12654	4
	PSE.YAYK63152			152	269,0	58	7,5	2011	17,2	4640	25,9	6960	35,6	9590	46,0	12374	4
	PSE.YAYK63178			178	226,0	66	8,6	1946	19,9	4492	29,8	6738	41,1	9283	53,0	11978	4
	PSE.YAYK63203			203	198,0	76	9,9	1963	22,9	4529	34,3	6794	47,3	9361	61,0	12078	4
	PSE.YAYK63254			254	155,0	95	12,4	1914	28,5	4418	42,8	6626	58,9	9130	76,0	11780	4
	PSE.YAYK63305			305	128,0	114	14,8	1893	34,1	4368	51,2	6552	70,5	9027	91,0	11648	4

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Çok Ağır Yük



DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	PSE.YAYS1025	10	5	25	36,8	8	1,0	37	2,3	86	3,5	128	4,8	177	6,2	228	100
	PSE.YAYS1032			32	27,9	10	1,3	36	3,0	84	4,5	126	6,2	173	8,0	223	100
	PSE.YAYS1038			38	23,7	12	1,5	37	3,6	84	5,3	127	7,4	175	9,5	225	100
	PSE.YAYS1044			44	19,2	14	1,8	34	4,1	79	6,2	119	8,5	164	11,0	211	100
	PSE.YAYS1051			51	16,5	16	2,1	35	4,9	80	7,3	121	10,1	166	13,0	215	100
	PSE.YAYS1064			64	13,2	20	2,6	34	6,0	79	9,0	119	12,4	164	16,0	211	100
	PSE.YAYS1076			76	10,9	24	3,1	34	7,1	78	10,7	117	14,7	161	19,0	207	100
	PSE.YAYS10305			305	2,6	95	12,4	32	28,5	74	42,8	111	58,9	153	76,0	198	10
13	PSE.YAYS1325	12,5	6,3	25	58,5	8	1,0	59	2,3	136	3,5	204	4,8	281	6,2	363	100
	PSE.YAYS1332			32	43,9	10	1,3	57	3,0	132	4,5	198	6,2	272	8,0	351	100
	PSE.YAYS1338			38	36,0	12	1,5	56	3,6	128	5,3	192	7,4	265	9,5	342	100
	PSE.YAYS1344			44	30,3	14	1,8	54	4,1	125	6,2	188	8,5	258	11,0	333	100
	PSE.YAYS1351			51	26,2	16	2,1	55	4,9	128	7,3	192	10,1	264	13,0	341	100
	PSE.YAYS1364			64	21,2	20	2,6	55	6,0	127	9,0	191	12,4	263	16,0	339	100
	PSE.YAYS1376			76	17,1	24	3,1	53	7,1	122	10,7	183	14,7	252	19,0	325	100
	PSE.YAYS1389			89	14,5	28	3,6	52	8,3	120	12,4	179	17,1	247	22,0	319	100
	PSE.YAYS13305			305	4,3	95	12,4	53	28,5	123	42,8	184	58,9	253	76,0	327	10
16	PSE.YAYS1625	16	8	25	118,0	8	1,0	119	2,3	274	3,5	412	4,8	567	6,2	732	100
	PSE.YAYS1632			32	89,0	10	1,3	116	3,0	267	4,5	401	6,2	552	8,0	712	100
	PSE.YAYS1638			38	72,1	12	1,5	111	3,6	257	5,3	385	7,4	531	9,5	685	100
	PSE.YAYS1644			44	60,9	14	1,8	109	4,1	251	6,2	377	8,5	519	11,0	670	100
	PSE.YAYS1651			51	52,3	16	2,1	111	4,9	255	7,3	382	10,1	527	13,0	680	100
	PSE.YAYS1664			64	41,2	20	2,6	107	6,0	247	9,0	371	12,4	511	16,0	659	100
	PSE.YAYS1676			76	34,1	24	3,1	105	7,1	243	10,7	364	14,7	502	19,0	648	100
	PSE.YAYS1689			89	29,5	28	3,6	106	8,3	243	12,4	365	17,1	503	22,0	649	100
	PSE.YAYS16102			102	25,6	33	4,2	108	9,8	250	14,6	374	20,1	516	26,0	666	50
	PSE.YAYS16305			305	8,4	95	12,4	104	28,5	239	42,8	359	58,9	495	76,0	638	10
20	PSE.YAYS2025	20	10	25	293,0	8	1,0	295	2,3	681	3,5	1022	4,8	1408	6,2	1817	100
	PSE.YAYS2032			32	224,0	10	1,3	291	3,0	672	4,5	1008	6,2	1389	8,0	1792	100
	PSE.YAYS2038			38	177,0	12	1,5	273	3,6	631	5,3	946	7,4	1303	9,5	1682	100
	PSE.YAYS2044			44	149,0	14	1,8	266	4,1	615	6,2	922	8,5	1270	11,0	1639	100
	PSE.YAYS2051			51	128,0	16	2,1	270	4,9	624	7,3	936	10,1	1290	13,0	1664	100
	PSE.YAYS2064			64	99,0	20	2,6	257	6,0	594	9,0	891	12,4	1228	16,0	1584	100
	PSE.YAYS2076			76	81,7	24	3,1	252	7,1	582	10,7	873	14,7	1203	19,0	1552	100
	PSE.YAYS2089			89	69,5	28	3,6	249	8,3	573	12,4	860	17,1	1185	22,0	1529	50
	PSE.YAYS20102			102	60,6	33	4,2	256	9,8	591	14,6	886	20,1	1221	26,0	1576	50
	PSE.YAYS20115			115	53,0	36	4,7	250	10,9	576	16,3	865	22,5	1191	29,0	1537	50
	PSE.YAYS20127			127	47,5	40	5,2	247	12,0	570	18,0	855	24,8	1178	32,0	1520	50
	PSE.YAYS20139			139	43,0	44	5,7	245	13,1	564	19,7	847	27,1	1166	35,0	1505	50
	PSE.YAYS20152			152	39,0	48	6,2	241	14,3	556	21,4	834	29,4	1149	38,0	1482	50
	PSE.YAYS20305			305	21,2	95	12,4	262	28,5	604	42,8	906	58,9	1249	76,0	1611	10
26	PSE.YAYS2525	25	12,5	25	459,0	8	1,0	462	2,3	1067	3,5	1601	4,8	2206	6,2	2846	100
	PSE.YAYS2532			32	374,4	10	1,3	487	3,0	1123	4,5	1685	6,2	2321	8,0	2995	100
	PSE.YAYS2538			38	346,0	12	1,5	534	3,6	1233	5,3	1849	7,4	2547	9,5	3287	100
	PSE.YAYS2544			44	244,0	14	1,8	436	4,1	1007	6,2	1510	8,5	2080	11,0	2684	100
	PSE.YAYS2551			51	207,5	16	2,1	438	4,9	1012	7,3	1517	10,1	2091	13,0	2698	100
	PSE.YAYS2564			64	161,0	20	2,6	419	6,0	966	9,0	1449	12,4	1996	16,0	2576	100
	PSE.YAYS2576			76	130,8	24	3,1	404	7,1	932	10,7	1398	14,7	1926	19,0	2485	50
	PSE.YAYS2589			89	110,5	28	3,6	395	8,3	912	12,4	1367	17,1	1884	22,0	2431	50
	PSE.YAYS25102			102	96,3	33	4,2	407	9,8	939	14,6	1408	20,1	1940	26,0	2504	50
	PSE.YAYS25115			115	85,7	36	4,7	404	10,9	932	16,3	1398	22,5	1926	29,0	2485	25
	PSE.YAYS25127			127	76,3	40	5,2	397	12,0	916	18,0	1373	24,8	1892	32,0	2442	25
	PSE.YAYS25139			139	68,9	44	5,7	392	13,1	904	19,7	1357	27,1	1869	35,0	2412	20
	PSE.YAYS25152			152	63,5	48	6,2	392	14,3	905	21,4	1357	29,4	1870	38,0	2413	20
	PSE.YAYS25178			178	53,9	55	7,2	385	16,5	889	24,8	1334	34,1	1838	44,0	2372	20
	PSE.YAYS25203			203	47,0	64	8,3	390	19,1	899	28,7	1348	39,5	1858	51,0	2397	20
	PSE.YAYS25305			305	30,9	95	12,4	382	28,5	881	42,8	1321	58,9	1820	76,0	2348	5

KALIP YAYLARI

SARI YAY



Çok Ağır Yük

Kalite: ISO 10243



Renk: SARI RAL 1004

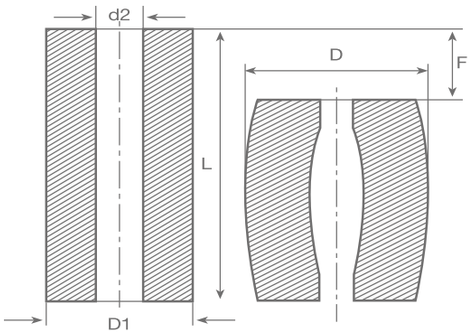
Performans: 80%

DH	Ürün	DH Dış Çap	DS İç Çap	LO Serbest Uzunluk	RG Yük Katsayısı	fBL Max. Esneme	A 13%fBL		B 30%fBL		C 45%fBL		D 62%fBL		E 80%fBL		PCS
mm	Sip. No.	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
32	PSE.YAYS3238	32	16	38	528,2	12	1,5	815	3,6	1882	5,3	2823	7,4	3889	9,5	5018	50
	PSE.YAYS3244			44	424,4	14	1,8	759	4,1	1751	6,2	2626	8,5	3618	11,0	4668	50
	PSE.YAYS3251			51	353,0	16	2,1	746	4,9	1721	7,3	2581	10,1	3557	13,0	4589	50
	PSE.YAYS3264			64	269,2	20	2,6	700	6,0	1615	9,0	2423	12,4	3338	16,0	4307	50
	PSE.YAYS3276			76	218,5	24	3,1	675	7,1	1557	10,7	2335	14,7	3217	19,0	4152	25
	PSE.YAYS3289			89	180,3	28	3,6	645	8,3	1488	12,4	2231	17,1	3074	22,0	3967	25
	PSE.YAYS32102			102	155,0	33	4,2	655	9,8	1511	14,6	2267	20,1	3123	26,0	4030	20
	PSE.YAYS32115			115	140,0	36	4,7	660	10,9	1523	16,3	2284	22,5	3147	29,0	4060	20
	PSE.YAYS32127			127	124,0	40	5,2	645	12,0	1488	18,0	2232	24,8	3075	32,0	3968	20
	PSE.YAYS32139			139	112,3	44	5,7	639	13,1	1474	19,7	2211	27,1	3046	35,0	3931	10
	PSE.YAYS32152			152	102,0	48	6,2	630	14,3	1454	21,4	2180	29,4	3004	38,0	3876	10
	PSE.YAYS32178			178	88,2	55	7,2	631	16,5	1455	24,8	2183	34,1	3008	44,0	3881	10
	PSE.YAYS32203			203	76,0	64	8,3	630	19,1	1454	28,7	2180	39,5	3004	51,0	3876	10
	PSE.YAYS32254			254	60,8	80	10,4	632	24,0	1459	36,0	2189	49,6	3016	64,0	3891	5
	PSE.YAYS32305			305	49,0	95	12,4	605	28,5	1397	42,8	2095	58,9	2886	76,0	3724	5
40	PSE.YAYS4051	40	20	51	628,0	16	2,1	1327	4,9	3062	7,3	4592	10,1	6327	13,0	8164	25
	PSE.YAYS4064			64	487,0	20	2,6	1266	6,0	2922	9,0	4383	12,4	6039	16,0	7792	25
	PSE.YAYS4076			76	379,0	24	3,1	1170	7,1	2700	10,7	4051	14,7	5581	19,0	7201	25
	PSE.YAYS4089			89	321,0	28	3,6	1148	8,3	2648	12,4	3972	17,1	5473	22,0	7062	25
	PSE.YAYS40102			102	281,0	33	4,2	1187	9,8	2740	14,6	4110	20,1	5662	26,0	7306	20
	PSE.YAYS40115			115	245,0	36	4,7	1155	10,9	2664	16,3	3997	22,5	5506	29,0	7105	20
	PSE.YAYS40127			127	221,0	40	5,2	1149	12,0	2652	18,0	3978	24,8	5481	32,0	7072	10
	PSE.YAYS40139			139	190,0	44	5,7	1081	13,1	2494	19,7	3741	27,1	5154	35,0	6650	10
	PSE.YAYS40152			152	168,0	48	6,2	1037	14,3	2394	21,4	3591	29,4	4948	38,0	6384	10
	PSE.YAYS40178			178	146,0	55	7,2	1044	16,5	2409	24,8	3614	34,1	4979	44,0	6424	5
	PSE.YAYS40203			203	132,0	64	8,3	1094	19,1	2525	28,7	3787	39,5	5217	51,0	6732	5
	PSE.YAYS40254			254	107,0	80	10,4	1113	24,0	2568	36,0	3852	49,6	5307	64,0	6848	5
	PSE.YAYS40305			305	87,8	95	12,4	1084	28,5	2502	42,8	3753	58,9	5171	76,0	6673	5
50	PSE.YAYS5064	50	25	64	709,0	20	2,6	1843	6,0	4254	9,0	6381	12,4	8792	16,0	11344	10
	PSE.YAYS5076			76	572,0	24	3,1	1766	7,1	4076	10,7	6113	14,7	8423	19,0	10868	10
	PSE.YAYS5089			89	475,0	28	3,6	1698	8,3	3919	12,4	5878	17,1	8099	22,0	10450	10
	PSE.YAYS50102			102	405,0	33	4,2	1711	9,8	3949	14,6	5923	20,1	8161	26,0	10530	10
	PSE.YAYS50115			115	352,0	36	4,7	1659	10,9	3828	16,3	5742	22,5	7911	29,0	10208	4
	PSE.YAYS50127			127	316,0	40	5,2	1643	12,0	3792	18,0	5688	24,8	7837	32,0	10112	4
	PSE.YAYS50139			139	274,0	44	5,7	1558	13,1	3596	19,7	5394	27,1	7432	35,0	9590	4
	PSE.YAYS50152			152	239,0	48	6,2	1476	14,3	3406	21,4	5109	29,4	7039	38,0	9082	4
	PSE.YAYS50178			178	215,0	55	7,2	1537	16,5	3548	24,8	5321	34,1	7332	44,0	9460	4
	PSE.YAYS50203			203	187,0	64	8,3	1550	19,1	3576	28,7	5365	39,5	7391	51,0	9537	4
	PSE.YAYS50254			254	153,0	80	10,4	1591	24,0	3672	36,0	5508	49,6	7589	64,0	9792	4
	PSE.YAYS50305			305	127,0	95	12,4	1569	28,5	3620	42,8	5429	58,9	7480	76,0	9652	4
63	PSE.YAYS6376	63	38	76	952,0	24	3,1	2939	7,1	6783	10,7	10175	14,7	14018	19,0	18088	10
	PSE.YAYS6389			89	819,0	28	3,6	2928	8,3	6757	12,4	10135	17,1	13964	22,0	18018	10
	PSE.YAYS63102			102	700,0	33	4,2	2958	9,8	6825	14,6	10238	20,1	14105	26,0	18200	10
	PSE.YAYS63115			115	620,0	36	4,7	2922	10,9	6743	16,3	10114	22,5	13935	29,0	17980	4
	PSE.YAYS63127			127	565,0	40	5,2	2938	12,0	6780	18,0	10170	24,8	14012	32,0	18080	4
	PSE.YAYS63152			152	458,0	48	6,2	2828	14,3	6527	21,4	9790	29,4	13488	38,0	17404	4
	PSE.YAYS63178			178	384,0	55	7,2	2746	16,5	6336	24,8	9504	34,1	13094	44,0	16896	4
	PSE.YAYS63203			203	337,0	64	8,3	2793	19,1	6445	28,7	9668	39,5	13320	51,0	17187	4
	PSE.YAYS63254			254	263,0	80	10,4	2735	24,0	6312	36,0	9468	49,6	13045	64,0	16832	4
	PSE.YAYS63305			305	218,0	95	12,4	2692	28,5	6213	42,8	9320	58,9	12840	76,0	16568	4

VULKOLON - TABAK YAYLAR

VULKOLON DELİKLİ

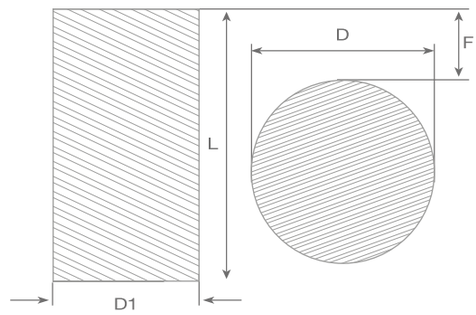




Sip. No.	D1	d2	L (mm)
VYD20	20	8.5	310
VYD25	25	10.5	
VYD32	32	13.5	
VYD40	40		
VYD50	50	17	
VYD63	63		
VYD80	80	21	
VYD100	100		
VYD125	125	27	

VULKOLON DELİKSİZ





Sip. No.	D1	L (mm)
VYID16	16	310
VYID20	20	
VYID25	25	
VYID32	32	
VYID40	40	
VYID50	50	
VYID63	63	
VYID80	80	
VYID100	100	
VYID125	125	

TABAK (DİSK) YAYLAR





- Tabak Yayları DIN 2093 ve Avrupa Üretim Standartlarına göre üretilmiştir. Ayrıca müşteri isteklerine göre değişik ölçülerde üretimi yapılmaktadır.
- Kalınlığı 0,5 mm ve yüksek yaylar bilya kurşun ışınlanmasıyla üretildiğinden ömür süreleri uzun olmaktadır.

POLIURETAN YAYLAR

POLIURETAN YAY DELIKLI SARI



POLİÜRETAN YAYLAR TEKNİK ÖZELLİKLERİ

- Teknik veri tablosuna gore L (Tam Boy) kullanılması tavsiye edilen uzunluktur.
- Shore sertliklerine göre esneme payları aşağıdaki tabloda belirtilmiştir.

Sip. No.	D1 (Dış Çap)	d2 (Delik Çap)	L (Tam Boy)	P (Yük/ Kg)	D (Esn. Max.Ç.)	F (Esn. Max.Boy)
PYDESHK20310	20	8.5	12	274	26	3.6
			16	270		4.8
			20	260		6
			25	254		7.5
			32	250		9.6
PYDESHK25310	25	10.5	16	437	33	4.8
			20	425		6
			25	412		7.5
			32	400		9.6
			40	380		12
			50	365		15
PYDESHK32310	32	13.5	16	730	42	4.8
			20	720		6
			25	690		7.5
			32	670		9.6
			40	650		12
			50	635		15
PYDESHK40310	40	13.5	20	1280	52	6
			25	1260		7.5
			32	1180		9.6
			40	1170		12
			50	1120		15
			69	1100		18.9
PYDESHK50310	50	17	25	1980	65	7.5
			32	1910		9.6
			40	1850		12
			50	1810		15
			63	1760		18.9
			80	1730		24
PYDESHK63310	63	17	32	3400	82	9.6
			40	3200		12
			50	3100		15
			63	3000		18.9
			80	2900		24
			100	2800		30
PYDESHK80310	80	21	40	5500	104	12
			50	5250		15
			63	5050		18.9
			80	4900		24
			100	4750		30
			125	4650		37.5
PYDESHK100310	100	21	50	9000	130	15
			63	8600		18.9
			80	8250		24
			100	8000		30
			125	7600		37.5
			160	7500		48
PYDESHK125310	125	27	63	14200	160	18.9
			80	13200		24
			100	12800		30
			125	12400		37.5
			160	12000		48

POLIURETAN YAY ICI DOLU SARI

80 Shore
Maksimum esneme payı %30



POLİÜRETAN YAYLAR TEKNİK ÖZELLİKLERİ

- Teknik veri tablosuna göre L (Tam Boy) kullanılması tavsiye edilen uzunluktur.
- Shore sertliklerine göre esneme payları aşağıdaki tabloda belirtilmiştir.

Sip. No.	D1 (Dış Çap)	L (Tam Boy)	P (Yük/ Kg)	D (Esn. Max.Ç.)	F (Esn. Max.Boy)
PYDOSHK16310	16	12	179	21	3.6
		16	173		4.8
		20	170		6
		25	165		7.5
		32	160		9.6
PYDOSHK20310	20	12	274	26	3.6
		16	270		4.8
		20	260		6
		25	254		7.5
		32	250		9.6
PYDOSHK25310	25	16	437	33	4.8
		20	425		6
		25	412		7.5
		32	400		9.6
		40	380		12
		50	365		15
PYDOSHK32310	32	16	730	42	4.8
		20	720		6
		25	690		7.5
		32	670		9.6
		40	650		12
		50	635		15
PYDOSHK40310	40	20	1280	52	6
		25	1260		7.5
		32	1180		9.6
		40	1170		12
		50	1120		15
		69	1100		18.9
PYDOSHK50310	50	25	1980	65	7.5
		32	1910		9.6
		40	1850		12
		50	1810		15
		63	1760		18.9
		80	1730		24
PYDOSHK63310	63	32	3400	82	9.6
		40	3200		12
		50	3100		15
		63	3000		18.9
		80	2900		24
		100	2800		30
PYDOSHK80310	80	40	5500	104	12
		50	5250		15
		63	5050		18.9
		80	4900		24
		100	4750		30
		125	4650		37.5
PYDOSHK100310	100	50	9000	130	15
		63	8600		18.9
		80	8250		24
		100	8000		30
		125	7600		37.5
		160	7500		48
PYDOSHK125310	125	63	14200	160	18.9
		80	13200		24
		100	12800		30
		125	12400		37.5
		160	12000		48

POLIURETAN YAYLAR

POLIURETAN YAY DELIKLI KIRMIZI



POLİÜRETAN YAYLAR TEKNİK ÖZELLİKLERİ

- Teknik veri tablosuna göre L (Tam Boy) kullanılması tavsiye edilen uzunluktur.
- Shore sertliklerine göre esneme payları aşağıdaki tabloda belirtilmiştir.

Sip. No.	D1 (Dış Çap)	d2 (Delik Çapı)	L (Tam Boy)	P (Yük/ Kg)	D (Esn. Max.Çap)	F (Esn. Max. Boy)
PYDEKHK20310	20	8.5	12	334	25	3
			16	330		5
			20	324		5
			25	320		6.25
			32	308		8
PYDEKHK25310	25	10.5	16	540	31	4
			20	530		5
			25	520		6.25
			32	510		8
			40	500		10
			50	480		12.5
PYDEKHK32310	32	13.5	16	930	40	4
			20	900		5
			25	880		6.25
			32	850		8
			40	820		10
			50	810		12.5
PYDEKHK40310	40	13.5	20	1620	50	5
			25	1550		6.25
			32	1500		8
			40	1450		10
			50	1410		12.5
			69	1380		15.75
PYDEKHK50310	50	17	25	2500	62	6.25
			32	2400		8
			40	2300		10
			50	2250		12.5
			63	2200		15.75
			80	2150		20
PYDEKHK63310	63	17	32	4200	78	9
			40	4050		10
			50	3900		12.5
			63	3800		15.75
			80	3700		20
			100	3600		25
PYDEKHK80310	80	21	40	6900	99	10
			50	6600		12.5
			63	6400		15.75
			80	6200		20
			100	6000		25
			125	5800		31.25
PYDEKHK100310	100	21	50	1300	125	12.5
			63	10800		15.75
			80	10400		20
			100	1000		25
			125	9700		31.25
			160	9500		40
PYDEKHK125310	125	27	63	17600	156	15.75
			80	16800		20
			100	16000		25
			125	15300		31.25
			160	15000		40

POLIURETAN YAY ICI DOLU KIRMIZI

80 Shore
Maksimum esneme payı %30



POLİÜRETAN YAYLAR TEKNİK ÖZELLİKLERİ

- Teknik veri tablosuna göre L (Tam Boy) kullanılması tavsiye edilen uzunluktur.
- Shore sertliklerine göre esneme payları aşağıdaki tabloda belirtilmiştir.

Sip. No.	D1 (Dış Çap)	L (Tam Boy)	P (Yük/ Kg)	D (Esn. Max.Çap)	F (Esn. Max.Boy)
PYDOKHK16310	16	12	226	20	3
		16	218		5
		20	212		5
		25	208		6.25
		32	200		8
PYDOKHK20310	20	12	334	25	3
		16	330		5
		20	324		5
		25	320		6.25
		32	308		8
PYDOKHK25310	25	16	540	31	4
		20	530		5
		25	520		6.25
		32	510		8
		40	500		10
		50	480		12.5
PYDOKHK32310	32	16	930	40	4
		20	900		5
		25	880		6.25
		32	850		8
		40	820		10
		50	810		12.5
PYDOKHK40310	40	20	1620	50	5
		25	1550		6.25
		32	1500		8
		40	1450		10
		50	1410		12.5
		69	1380		15.75
PYDOKHK50310	50	25	2500	62	6.25
		32	2400		8
		40	2300		10
		50	2250		12.5
		63	2200		15.75
		80	2150		20
PYDOKHK63310	63	32	4200	78	9
		40	4050		10
		50	3900		12.5
		63	3800		15.75
		80	3700		20
		100	3600		25
PYDOKHK80310	80	40	6900	99	10
		50	6600		12.5
		63	6400		15.75
		80	6200		20
		100	6000		25
		125	5800		31.25
PYDOKHK100310	100	50	1300	125	12.5
		63	10800		15.75
		80	10400		20
		100	1000		25
		125	9700		31.25
		160	9500		40
PYDOKHK125310	125	63	17600	156	15.75
		80	16800		20
		100	16000		25
		125	15300		31.25
		160	15000		40

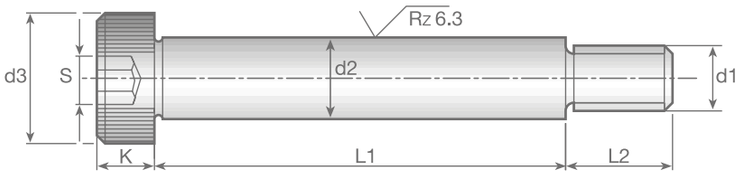
YAY AYAR CİVATASI

YAY AYAR CİVATASI



Malzeme
- Özel alaşımlı çelik

Yüzey
- Sertleştirilmiş, taşlanmış

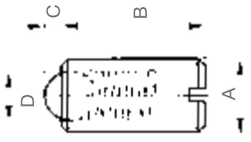


Sip. No.	d1	d2	d3	K	S	L2	L1
YACHK510	M5	6	10	5	3	9.5	10
YACHK512							12
YACHK515							15
YACHK520							20
YACHK525							25
YACHK530							30
YACHK535							35
YACHK540							40
YACHK545							45
YACHK550							50
YACHK610	M6	8	13	6	4	11	10
YACHK612							12
YACHK615							15
YACHK620							20
YACHK625							25
YACHK630							30
YACHK635							35
YACHK640							40
YACHK645							45
YACHK650							50
YACHK655							55
YACHK660							60
YACHK665							65
YACHK670							70
YACHK680							80
YACHK690							90
YACHK6100							100
YACHK815	M8	10	16	7.5	5	13	15
YACHK820							20
YACHK825							25
YACHK830							30
YACHK835							35
YACHK840							40
YACHK845							45
YACHK850							50
YACHK855							55
YACHK860							60
YACHK865							65
YACHK870							70
YACHK880							80
YACHK890							90
YACHK8100							100
YACHK8120							120

Sip. No.	d1	d2	d3	K	S	L2	L1
YACHK1015	M10	12	18	9	6	16	15
YACHK1020							20
YACHK1025							25
YACHK1030							30
YACHK1035							35
YACHK1040							40
YACHK1045							45
YACHK1050							50
YACHK1055							55
YACHK1060							60
YACHK1065							65
YACHK1070							70
YACHK1080							80
YACHK1090							90
YACHK10100							100
YACHK10120							120
YACHK1230	M12	16	24	11	8	18	30
YACHK1235							35
YACHK1240							40
YACHK1245							45
YACHK1250							50
YACHK1255							55
YACHK1260							60
YACHK1265							65
YACHK1270							70
YACHK1280							80
YACHK1290							90
YACHK12100							100
YACHK12120							120
YACHK1640	M16	20	30	14	10	22	40
YACHK1645							45
YACHK1650							50
YACHK1655							55
YACHK1660							60
YACHK1665							65
YACHK1670							70
YACHK1680							80
YACHK1690							90
YACHK16100							100
YACHK16120							120
YACHK2050	M20	24	35	16	12	27	50
YACHK2055							55
YACHK2060							60
YACHK2065							65
YACHK2070							70
YACHK2080							80
YACHK2090							90
YACHK20100							100
YACHK20120							120

BİLYALI SETSKUR



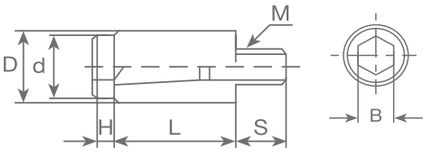


Malzeme
- Özel alaşımlı çelik

A	B	C	D	N İlk Basınç (newton)	N1 Nihai Basınç (newton)
M4	9	0.8	2.5	6	12
M5	12	0.9	3	7	13
M6	14	1.0	3.5	9	15
M8	16	1.5	5	20	35
M10	19	2.0	6	25	45
M12	22	2.5	8	35	60
M16	24	3.5	10	65	110

PLASTİK ÇEKTİRME

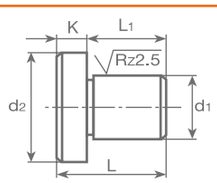




Sip. No.	D	d	M	B	H	L	s
PCHK10	10	11.5	M6	5	4.5	18	8
PCHK12	12						
PCHK13	13					20	
PCHK16	16	14	M8	6		25	10
PCHK20	20	16	M10		5.5	30	

DAYAMA PLAKASI



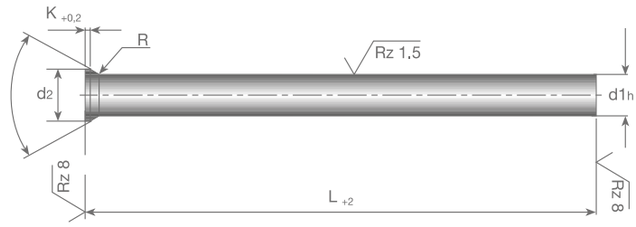


Sip. No.	d1	d2	K	L	L1
DPJ8	8	16	5	17	12
DPJ14	14	24	6	21	15

HSS HAVŞA BAŞLI ZIMBA

HSS / YÜKSEK HIZ ÇELİĞİ ZIMBA





- Malzeme : 1.3343
- Sertlik : Gövde 60/62 HRC Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Sip. No.	d1	d2	K (0,2)	L2
DZHK0.571	0.5	0.9	0.2	71
DZHK0.580				80
DZHK0.5100				100
DZHK0.671	0.6	1.1		71
DZHK0.680				80
DZHK0.6100				100
DZHK0.771	0.7	1.3	0.4	71
DZHK0.780				80
DZHK0.7100				100
DZHK0.871	0.8	1.4		71
DZHK0.880				80
DZHK0.8100				100
DZHK0.971	0.9	1.6		71
DZHK0.980				80
DZHK0.9100				100
DZHK1.071	1	1.8	0.5	71
DZHK1.080				80
DZHK1.0100				100
DZHK1.171	1.1			71
DZHK1.180				80
DZHK1.1100				100
DZHK1.271	1.2	2		71
DZHK1.280				80
DZHK1.2100				100
DZHK1.371	1.3			71
DZHK1.380				80
DZHK1.3100				100
DZHK1.471	1.4	2.2		71
DZHK1.480				80
DZHK1.4100				100
DZHK1.571	1.5			71
DZHK1.580				80
DZHK1.5100				100
DZHK1.671	1.6	2.5		71
DZHK1.680				80
DZHK1.6100				100
DZHK1.771	1.7			71
DZHK1.780				80
DZHK1.7100				100
DZHK1.871	1.8	2.8		71
DZHK1.880				80
DZHK1.8100				100
DZHK1.971	1.9			71
DZHK1.980				80
DZHK1.9100				100
DZHK2.071	2	3		71
DZHK2.080				80
DZHK2.0100				100
DZHK2.0125				125
DZHK2.0160				160
DZHK2.171	2.1	3.2		71
DZHK2.180				80
DZHK2.1100				100
DZHK2.1125				125
DZHK2.1160				160
DZHK2.271	2.2			71
DZHK2.280				80
DZHK2.2100				100
DZHK2.2125				125
DZHK2.2160				160
DZHK2.371	2.3	3.5		71
DZHK2.380				80
DZHK2.3100				100
DZHK2.3125				125
DZHK2.3160				160

Sip. No.	d1	d2	K (0,2)	L2
DZHK2.471	2.4	3.5	0.5	71
DZHK2.480				80
DZHK2.4100				100
DZHK2.4125				125
DZHK2.4160				160
DZHK2.571	2.5			71
DZHK2.580				80
DZHK2.5100				100
DZHK2.5125				125
DZHK2.5160				160
DZHK2.671	2.6	4		71
DZHK2.680				80
DZHK2.6100				100
DZHK2.6125				125
DZHK2.6160				160
DZHK2.771	2.7			71
DZHK2.780				80
DZHK2.7100				100
DZHK2.7125				125
DZHK2.7160				160
DZHK2.871	2.8			71
DZHK2.880				80
DZHK2.8100				100
DZHK2.8125				125
DZHK2.8160				160
DZHK2.971	2.9			71
DZHK2.980				80
DZHK2.9100				100
DZHK2.9125				125
DZHK2.9160				160
DZHK3.071	3	4.5		71
DZHK3.080				80
DZHK3.0100				100
DZHK3.0125				125
DZHK3.0160				160
DZHK3.171	3.1			71
DZHK3.180				80
DZHK3.1100				100
DZHK3.1125				125
DZHK3.1160				160
DZHK3.271	3.2			71
DZHK3.280				80
DZHK3.2100				100
DZHK3.2125				125
DZHK3.2160				160
DZHK3.371	3.3			71
DZHK3.380				80
DZHK3.3100				100
DZHK3.3125				125
DZHK3.3160				160
DZHK3.471	3.4			71
DZHK3.480				80
DZHK3.4100				100
DZHK3.4125				125
DZHK3.4160				160
DZHK3.571	3.5	5		71
DZHK3.580				80
DZHK3.5100				100
DZHK3.5125				125
DZHK3.5160				160
DZHK3.671	3.6			71
DZHK3.680				80
DZHK3.6100				100
DZHK3.6125				125
DZHK3.6160				160

Sip. No.	d1	d2	K (0,2)	L2
DZHK3.771	3.7	5	0.5	71
DZHK3.780				80
DZHK3.7100				100
DZHK3.7125				125
DZHK3.7160				160
DZHK3.871	3.8			71
DZHK3.880				80
DZHK3.8100				100
DZHK3.8125				125
DZHK3.8160				160
DZHK3.971	3.9			71
DZHK3.980				80
DZHK3.9100				100
DZHK3.9125				125
DZHK3.9160				160
DZHK4.071	4	5.5		71
DZHK4.080				80
DZHK4.0100				100
DZHK4.0125				125
DZHK4.0160				160
DZHK4.171	4.1			71
DZHK4.180				80
DZHK4.1100				100
DZHK4.1125				125
DZHK4.1160				160
DZHK4.271	4.2			71
DZHK4.280				80
DZHK4.2100				100
DZHK4.2125				125
DZHK4.2160				160
DZHK4.371	4.3			71
DZHK4.380				80
DZHK4.3100				100
DZHK4.3125				125
DZHK4.3160				160
DZHK4.471	4.4			71
DZHK4.480				80
DZHK4.4100				100
DZHK4.4125				125
DZHK4.4160				160
DZHK4.571	4.5	6		71
DZHK4.580				80
DZHK4.5100				100
DZHK4.5125				125
DZHK4.5160				160
DZHK4.671	4.6			71
DZHK4.680				80
DZHK4.6100				100
DZHK4.6125				125
DZHK4.6160				160
DZHK4.771	4.7			71
DZHK4.780				80
DZHK4.7100				100
DZHK4.7125				125
DZHK4.7160				160
DZHK4.871	4.8			71
DZHK4.880				80
DZHK4.8100				100
DZHK4.8125				125
DZHK4.8160				160
DZHK4.971	4.9			71
DZHK4.980				80
DZHK4.9100				100
DZHK4.9125				125
DZHK4.9160				160

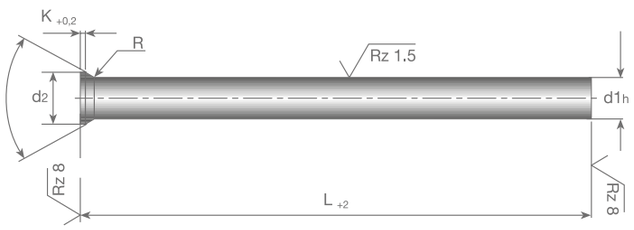
Sip. No.	d1	d2	K (0,2)	L2
DZHK5.071	5	6.5	0.5	71
DZHK5.080				80
DZHK5.0100				100
DZHK5.0125				125
DZHK5.0160				160
DZHK5.171	5.1			71
DZHK5.180				80
DZHK5.1100				100
DZHK5.1125				125
DZHK5.1160				160
DZHK5.271	5.2			71
DZHK5.280				80
DZHK5.2100				100
DZHK5.2125				125
DZHK5.2160				160
DZHK5.371	5.3			71
DZHK5.380				80
DZHK5.3100				100
DZHK5.3125				125
DZHK5.3160				160
DZHK5.471	5.4			71
DZHK5.480				80
DZHK5.4100				100
DZHK5.4125				125
DZHK5.4160				160
DZHK5.571	5.5	7		71
DZHK5.580				80
DZHK5.5100				100
DZHK5.5125				125
DZHK5.5160				160
DZHK5.671	5.6			71
DZHK5.680				80
DZHK5.6100				100
DZHK5.6125				125
DZHK5.6160				160
DZHK5.771	5.7			71
DZHK5.780				80
DZHK5.7100				100
DZHK5.7125				125
DZHK5.7160				160
DZHK5.871	5.8			71
DZHK5.880				80
DZHK5.8100				100
DZHK5.8125				125
DZHK5.8160				160
DZHK5.971	5.9			71
DZHK5.980				80
DZHK5.9100				100
DZHK5.9125				125
DZHK5.9160				160
DZHK6.071	6	8		71
DZHK6.080				80
DZHK6.0100				100
DZHK6.0125				125
DZHK6.0160				160
DZHK6.171	6.1			71
DZHK6.180				80
DZHK6.1100				100
DZHK6.1125				125
DZHK6.1160				160
DZHK6.271	6.2			71
DZHK6.280				80
DZHK6.2100				100
DZHK6.2125				125
DZHK6.2160				160

HSS HAVŞA BAŞLI ZIMBA

HSS / YÜKSEK HIZ ÇELİĞİ ZIMBA



- Malzeme : 1.3343
- Sertlik : Gövde 60/62 HRC Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.



Sip. No.	d1	d2	K (0,2)	L2
DZHK6.371	6.3	8	0.5	71
DZHK6.380				80
DZHK6.3100				100
DZHK6.3125				125
DZHK6.3160				160
DZHK6.471	6.4			71
DZHK6.480				80
DZHK6.4100				100
DZHK6.4125				125
DZHK6.4160				160
DZHK6.571	6.5	9	1	71
DZHK6.580				80
DZHK6.5100				100
DZHK6.5125				125
DZHK6.5160				160
DZHK6.671	6.6			71
DZHK6.680				80
DZHK6.6100				100
DZHK6.6125				125
DZHK6.6160				160
DZHK6.771	6.7			71
DZHK6.780				80
DZHK6.7100				100
DZHK6.7125				125
DZHK6.7160				160
DZHK6.871	6.8			71
DZHK6.880				80
DZHK6.8100				100
DZHK6.8125				125
DZHK6.8160				160
DZHK6.971	6.9			71
DZHK6.980				80
DZHK6.9100				100
DZHK6.9125				125
DZHK6.9160				160
DZHK7.071	7			71
DZHK7.080				80
DZHK7.1100				100
DZHK7.0125				125
DZHK7.0160				160
DZHK7.171	7.1			71
DZHK7.180				80
DZHK7.1100				100
DZHK7.1125				125
DZHK7.1160				160
DZHK7.271	7.2			71
DZHK7.280				80
DZHK7.2100				100
DZHK7.2125				125
DZHK7.2160				160
DZHK7.371	7.3			71
DZHK7.380				80
DZHK7.3100				100
DZHK7.3125				125
DZHK7.3160				160
DZHK7.471	7.4			71
DZHK7.480				80
DZHK7.4100				100
DZHK7.4125				125
DZHK7.4160				160

Sip. No.	d1	d2	K (0,2)	L2
DZHK7.571	7.5	10	1	71
DZHK7.580				80
DZHK7.5100				100
DZHK7.5125				125
DZHK7.5160				160
DZHK7.671	7.6			71
DZHK7.680				80
DZHK7.6100				100
DZHK7.6125				125
DZHK7.6160				160
DZHK7.771	7.7			71
DZHK7.780				80
DZHK7.7100				100
DZHK7.7125				125
DZHK7.7160				160
DZHK7.871	7.8			71
DZHK7.880				80
DZHK7.8100				100
DZHK7.8125				125
DZHK7.8160				160
DZHK7.971	7.9			71
DZHK7.980				80
DZHK7.9100				100
DZHK7.9125				125
DZHK7.9160				160
DZHK8.071	8			71
DZHK8.080				80
DZHK8.0100				100
DZHK8.0125				125
DZHK8.0160				160
DZHK8.171	8.1			71
DZHK8.180				80
DZHK8.1100				100
DZHK8.1125				125
DZHK8.1160				160
DZHK8.271	8.2			71
DZHK8.280				80
DZHK8.2100				100
DZHK8.2125				125
DZHK8.2160				160
DZHK8.371	8.3			71
DZHK8.380				80
DZHK8.3100				100
DZHK8.3125				125
DZHK8.3160				160
DZHK8.471	8.4			71
DZHK8.480				80
DZHK8.4100				100
DZHK8.4125				125
DZHK7.4160				160
DZHK8.571	8.5	11		71
DZHK8.580				80
DZHK8.5100				100
DZHK8.5125				125
DZHK8.5160				160
DZHK8.671	8.6			71
DZHK8.680				80
DZHK8.6100				100
DZHK8.6125				125
DZHK8.6160				160

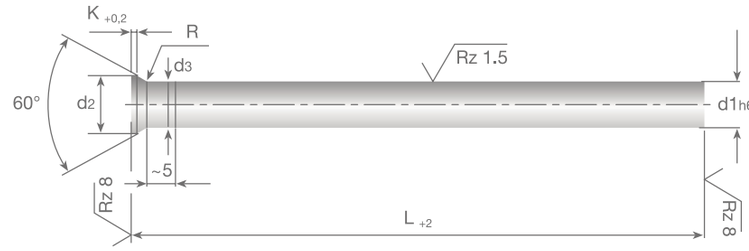
Sip. No.	d1	d2	K (0,2)	L2
DZHK8.771	8.7	11	1	71
DZHK8.780				80
DZHK8.7100				100
DZHK8.7125				125
DZHK8.7160				160
DZHK8.871	8.8			71
DZHK8.880				80
DZHK8.8100				100
DZHK8.8125				125
DZHK8.8160				160
DZHK8.971	8.9			71
DZHK8.980				80
DZHK8.9100				100
DZHK8.9125				125
DZHK8.9160				160
DZHK9.071	9			71
DZHK9.080				80
DZHK9.0100				100
DZHK9.0125				125
DZHK9.0160				160
DZHK9.571	9.5	12		71
DZHK9.580				80
DZHK9.5100				100
DZHK9.5125				125
DZHK9.5160				160
DZHK10.071	10			71
DZHK10.080				80
DZHK10.0100				100
DZHK10.0125				125
DZHK10.0160				160
DZHK10.571	10.5	13		71
DZHK10.580				80
DZHK10.5100				100
DZHK10.5125				125
DZHK10.5160				160
DZHK11.071	11			71
DZHK11.080				80
DZHK11.0100				100
DZHK11.0125				125
DZHK11.0160				160
DZHK11.571	11.5	14		71
DZHK11.580				80
DZHK11.5100				100
DZHK11.5125				125
DZHK11.5160				160
DZHK12.071	12			71
DZHK12.080				80
DZHK12.0100				100
DZHK12.0125				125
DZHK12.0160				160
DZHK12.571	12.5	15		71
DZHK12.580				80
DZHK12.5100				100
DZHK12.5125				125
DZHK12.5160				160
DZHK13.071	13			71
DZHK13.080				80
DZHK13.0100				100
DZHK13.0125				125
DZHK13.0160				160

Sip. No.	d1	d2	K (0,2)	L2
DZHK13.571	13.5	16	1.5	71
DZHK13.580				80
DZHK13.5100				100
DZHK13.5125				125
DZHK13.5160				160
DZHK14.071	14			71
DZHK14.080				80
DZHK14.0100				100
DZHK14.0125				125
DZHK14.0160				160
DZHK14.571	14.5	17		71
DZHK14.580				80
DZHK14.5100				100
DZHK14.5125				125
DZHK14.5160				160
DZHK15.071	15			71
DZHK15.080				80
DZHK15.0100				100
DZHK15.0125				125
DZHK15.0160				160
DZHK16.071	16	18		71
DZHK16.080				80
DZHK16.0100				100
DZHK16.0125				125
DZHK16.0160				160
DZHK17.071	17	19		71
DZHK17.080				80
DZHK17.0100				100
DZHK17.0125				125
DZHK17.0160				160
DZHK18.071	18	20		71
DZHK18.080				80
DZHK18.0100				100
DZHK18.0125				125
DZHK18.0160				160
DZHK19.071	19			71
DZHK19.080				80
DZHK19.0100				100
DZHK19.0125				125
DZHK19.0160				160
DZHK20.071	20	22		71
DZHK20.080				80
DZHK20.0100				100
DZHK20.0125				125
DZHK20.0160				160

İTİCİ PİMLER

HAVŞA BAŞLI İTİCİ PİM





- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60/62 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.

Sip. No.	d1	d2	d3	K	L
HBIHK180	1	1.8	d1+0,03	0.5	80
HBIHK1100					100
HBIHK1125					125
HBIHK1160					160
HBIHK1200					200
HBIHK1.580	1.5	2.2			80
HBIHK1.5100					100
HBIHK1.5125					125
HBIHK1.5160					160
HBIHK1.5200					200
HBIHK1.5250					250
HBIHK280	2	3			80
HBIHK2100					100
HBIHK2125					125
HBIHK2160					160
HBIHK2200					200
HBIHK2250					250
HBIHK2315					315
HBIHK2.580	2.5	3.5			80
HBIHK2.5100					100
HBIHK2.5125					125
HBIHK2.5160					160
HBIHK2.5200					200
HBIHK2.5250					250
HBIHK2.5315					315
HBIHK380	3	4.5			80
HBIHK3100					100
HBIHK3125					125
HBIHK3160					160
HBIHK3200					200
HBIHK3250					250
HBIHK3315					315
HBIHK3.580	3.5	5			80
HBIHK3.5100					100
HBIHK3.5125					125
HBIHK3.5160					160
HBIHK3.5200					200
HBIHK3.5250					250
HBIHK3.5315					315
HBIHK480	4	5.5			80
HBIHK4100					100
HBIHK4125					125
HBIHK4160					160
HBIHK4200					200
HBIHK4250					250
HBIHK4315					315
HBIHK4.580	4.5	6			80
HBIHK4.5100					100
HBIHK4.5125					125
HBIHK4.5160					160
HBIHK4.5200					200
HBIHK4.5250					250
HBIHK4.5315					315
HBIHK580	5	6.5			80
HBIHK5100					100
HBIHK5125					125
HBIHK5160					160
HBIHK5200					200
HBIHK5250					250
HBIHK5315					315

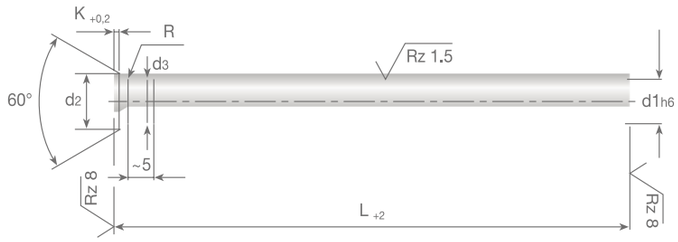
Sip. No.	d1	d2	d3	K	L
HBIHK5.580	5.5	7	d1 +0,03	0.5	80
HBIHK5.5100					100
HBIHK5.5125					125
HBIHK5.5160					160
HBIHK5.5200					200
HBIHK5.5250					250
HBIHK5.5315					315
HBIHK680	6	8			80
HBIHK6100					100
HBIHK6125					125
HBIHK6160					160
HBIHK6200					200
HBIHK6250					250
HBIHK6315					315
HBIHK6.580	6.5	9		1	80
HBIHK6.5100					100
HBIHK6.5125					125
HBIHK6.5160					160
HBIHK6.5200					200
HBIHK6.5250					250
HBIHK6.5315					315
HBIHK780	7				80
HBIHK7100					100
HBIHK7125					125
HBIHK7160					160
HBIHK7200					200
HBIHK7250					250
HBIHK7315					315
HBIHK7.580	7.5	10			80
HBIHK7.5100					100
HBIHK7.5125					125
HBIHK7.5160					160
HBIHK7.5200					200
HBIHK7.5250					250
HBIHK7.5315					315
HBIHK880	8				80
HBIHK8100					100
HBIHK8125					125
HBIHK8160					160
HBIHK8200					200
HBIHK8250					250
HBIHK8315					315
HBIHK8.580	8.5	11			80
HBIHK8.5100					100
HBIHK8.5125					125
HBIHK8.5160					160
HBIHK8.5200					200
HBIHK8.5250					250
HBIHK8.5315					315
HBIHK980	9				80
HBIHK9100					100
HBIHK9125					125
HBIHK9160					160
HBIHK9200					200
HBIHK9250					250
HBIHK9315					315

Sip. No.	d1	d2	d3	K	L
HBIHK9.580	9.5	12	d1 +0,03	1	80
HBIHK9.5100					100
HBIHK9.5125					125
HBIHK9.5160					160
HBIHK9.5200					200
HBIHK9.5250					250
HBIHK9.5315					315
HBIHK1080	10				80
HBIHK10100					100
HBIHK10125					125
HBIHK10160					160
HBIHK10200					200
HBIHK10250					250
HBIHK10315					315
HBIHK10.580	10.5	13			80
HBIHK10.5100					100
HBIHK10.5125					125
HBIHK10.5160					160
HBIHK10.5200					200
HBIHK10.5250					250
HBIHK10.5315					315
HBIHK1180	11				80
HBIHK11100					100
HBIHK11125					125
HBIHK11160					160
HBIHK11200					200
HBIHK11250					250
HBIHK11315					315
HBIHK1280	12	14			80
HBIHK12100					100
HBIHK12125					125
HBIHK12160					160
HBIHK12200					200
HBIHK12250					250
HBIHK12315					315
HBIHK1380	13	15			80
HBIHK13100					100
HBIHK13125					125
HBIHK13160					160
HBIHK13200					200
HBIHK13250					250
HBIHK13315					315
HBIHK1480	14	16			80
HBIHK14100					100
HBIHK14125					125
HBIHK14160					160
HBIHK14200					200
HBIHK14250					250
HBIHK14315					315
HBIHK1680	16	18			80
HBIHK16100					100
HBIHK16125					125
HBIHK16160					160
HBIHK16200					200
HBIHK16250					250
HBIHK16315					315

İTİCİ PİMLER

HAVŞA BAŞLI İTİCİ PİM ONDALIKLI





- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60/62 HRC / Kafa 45±5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.

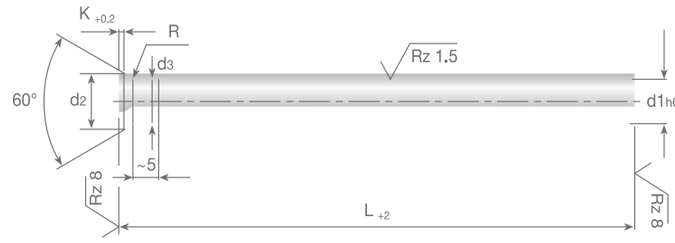
Sip. No.	d (h6)	d2	d3	K (0,2)	L (+2)
HBIONHK1.180	1.1	2	d1 +0,03	0.5	80
HBIONHK1.1100					100
HBIONHK1.1125					125
HBIONHK1.1160					160
HBIONHK1.1200					200
HBIONHK1.1250					250
HBIONHK1.280	1.2				80
HBIONHK1.2100					100
HBIONHK1.2125					125
HBIONHK1.2160					160
HBIONHK1.2200					200
HBIONHK1.2250					250
HBIONHK1.380	1.3				80
HBIONHK1.3100					100
HBIONHK1.3125					125
HBIONHK1.3160					160
HBIONHK1.3200					200
HBIONHK1.3250					250
HBIONHK1.480	1.4				80
HBIONHK1.4100					100
HBIONHK1.4125					125
HBIONHK1.4160					160
HBIONHK1.4200					200
HBIONHK1.4250					250
HBIONHK1.680	1.6	2.5			80
HBIONHK1.6100					100
HBIONHK1.6125					125
HBIONHK1.6160					160
HBIONHK1.6200					200
HBIONHK1.6250					250
HBIONHK1.780	1.7				80
HBIONHK1.7100					100
HBIONHK1.7125					125
HBIONHK1.7160					160
HBIONHK1.7200					200
HBIONHK1.7250					250
HBIONHK1.880	1.8				80
HBIONHK1.8100					100
HBIONHK1.8125					125
HBIONHK1.8160					160
HBIONHK1.8200					200
HBIONHK1.8250					250
HBIONHK1.980	1.9				80
HBIONHK1.9100					100
HBIONHK1.9125					125
HBIONHK1.9160					160
HBIONHK1.9200					200
HBIONHK1.9250					250
HBIONHK2.180	2.1	3.2			80
HBIONHK2.1100					100
HBIONHK2.1125					125
HBIONHK2.1160					160
HBIONHK2.1200					200
HBIONHK2.1250					250
HBIONHK2.280	2.2				80
HBIONHK2.2100					100
HBIONHK2.2125					125
HBIONHK2.2160					160
HBIONHK2.2200					200
HBIONHK2.2250					250

Sip. No.	d (h6)	d2	d3	K (0,2)	L (+2)
HBIONHK2.380	2.3	3.2	d1 +0,03	0.5	80
HBIONHK2.3100					100
HBIONHK2.3125					125
HBIONHK2.3160					160
HBIONHK2.3200					200
HBIONHK2.3250					250
HBIONHK2.480	2.4				80
HBIONHK2.4100					100
HBIONHK2.4125					125
HBIONHK2.4160					160
HBIONHK2.4200					200
HBIONHK2.4250					250
HBIONHK2.680	2.6	4			80
HBIONHK2.6100					100
HBIONHK2.6125					125
HBIONHK2.6160					160
HBIONHK2.6200					200
HBIONHK2.6250					250
HBIONHK2.780	2.7				80
HBIONHK2.7100					100
HBIONHK2.7125					125
HBIONHK2.7160					160
HBIONHK2.7200					200
HBIONHK2.7250					250
HBIONHK2.980	2.9				80
HBIONHK2.9100					100
HBIONHK2.9125					125
HBIONHK2.9160					160
HBIONHK2.9200					200
HBIONHK2.9250					250
HBIONHK3.180	3.1	4.5			80
HBIONHK3.1100					100
HBIONHK3.1125					125
HBIONHK3.1160					160
HBIONHK3.1200					200
HBIONHK3.1250					250
HBIONHK3.280	3.2				80
HBIONHK3.2100					100
HBIONHK3.2125					125
HBIONHK3.2160					160
HBIONHK3.2200					200
HBIONHK3.2250					250
HBIONHK3.380	3.3				80
HBIONHK3.3100					100
HBIONHK3.3125					125
HBIONHK3.3160					160
HBIONHK3.3200					200
HBIONHK3.3250					250
HBIONHK3.480	3.4				80
HBIONHK3.4100					100
HBIONHK3.4125					125
HBIONHK3.4160					160
HBIONHK3.4200					200
HBIONHK3.4250					250
HBIONHK3.680	3.6	5			80
HBIONHK3.6100					100
HBIONHK3.6125					125
HBIONHK3.6160					160
HBIONHK3.6200					200
HBIONHK3.6250					250

İTİCİ PİMLER

HAVŞA BAŞLI İTİCİ PİM ONDALIKLI





- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60/62 HRC / Kafa 45±5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.

Sip. No.	d (h6)	d2	d3	K (0,2)	L (+2)
HBIONHK3.780	3.7	5	d1 +0,03	0.5	80
HBIONHK3.7100					100
HBIONHK3.7125					125
HBIONHK3.7160					160
HBIONHK3.7200					200
HBIONHK3.7250					250
HBIONHK3.880	3.8				80
HBIONHK3.8100					100
HBIONHK3.8125					125
HBIONHK3.8160					160
HBIONHK3.8200					200
HBIONHK3.8250					250
HBIONHK3.980	3.9				80
HBIONHK3.9100					100
HBIONHK3.9125					125
HBIONHK3.9160					160
HBIONHK3.9200					200
HBIONHK3.9250					250
HBIONHK4.180	4.1	5.5			80
HBIONHK4.1100					100
HBIONHK4.1125					125
HBIONHK4.1160					160
HBIONHK4.1200					200
HBIONHK4.1250					250
HBIONHK4.280	4.2				80
HBIONHK4.2100					100
HBIONHK4.2125					125
HBIONHK4.2160					160
HBIONHK4.2200					200
HBIONHK4.2250					250
HBIONHK4.380	4.3				80
HBIONHK4.3100					100
HBIONHK4.3125					125
HBIONHK4.3160					160
HBIONHK4.3200					200
HBIONHK4.3250					250
HBIONHK4.480	4.4				80
HBIONHK4.4100					100
HBIONHK4.4125					125
HBIONHK4.4160					160
HBIONHK4.4200					200
HBIONHK4.4250					250
HBIONHK4.680	4.6	6			80
HBIONHK4.6100					100
HBIONHK4.6125					125
HBIONHK4.6160					160
HBIONHK4.6200					200
HBIONHK4.6250					250
HBIONHK4.780	4.7				80
HBIONHK4.7100					100
HBIONHK4.7125					125
HBIONHK4.7160					160
HBIONHK4.7200					200
HBIONHK4.7250					250
HBIONHK4.880	4.8				80
HBIONHK4.8100					100
HBIONHK4.8125					125
HBIONHK4.8160					160
HBIONHK4.8200					200
HBIONHK4.8250					250

Sip. No.	d (h6)	d2	d3	K (0,2)	L (+2)
HBIONHK4.980	4.9	6	d1 +0,03	0.5	80
HBIONHK4.9100					100
HBIONHK4.9125					125
HBIONHK4.9160					160
HBIONHK4.9200					200
HBIONHK4.9250					250
HBIONHK5.180	5.1	7			80
HBIONHK5.1100					100
HBIONHK5.1125					125
HBIONHK5.1160					160
HBIONHK5.1200					200
HBIONHK5.1250					250
HBIONHK5.280	5.2				80
HBIONHK5.2100					100
HBIONHK5.2125					125
HBIONHK5.2160					160
HBIONHK5.2200					200
HBIONHK5.2250					250
HBIONHK5.380	5.3				80
HBIONHK5.3100					100
HBIONHK5.3125					125
HBIONHK5.3160					160
HBIONHK5.3200					200
HBIONHK5.3250					250
HBIONHK5.480	5.4				80
HBIONHK5.4100					100
HBIONHK5.4125					125
HBIONHK5.4160					160
HBIONHK5.4200					200
HBIONHK5.4250					250
HBIONHK5.680	5.6				80
HBIONHK5.6100					100
HBIONHK5.6125					125
HBIONHK5.6160					160
HBIONHK5.6200					200
HBIONHK5.6250					250
HBIONHK5.780	5.7				80
HBIONHK5.7100					100
HBIONHK5.7125					125
HBIONHK5.7160					160
HBIONHK5.7200					200
HBIONHK5.7250					250
HBIONHK5.880	5.8				80
HBIONHK5.8100					100
HBIONHK5.8125					125
HBIONHK5.8160					160
HBIONHK5.8200					200
HBIONHK5.8250					250
HBIONHK5.980	5.9				80
HBIONHK5.9100					100
HBIONHK5.9125					125
HBIONHK5.9160					160
HBIONHK5.9200					200
HBIONHK5.9250					250

İTİCİ PİMLER

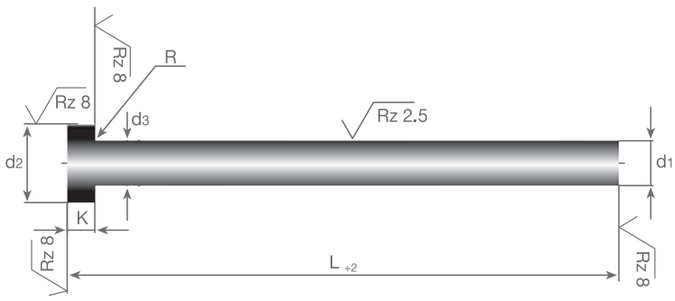
SİLİNDİR BAŞLI İTİCİ PİM

PLASTİK ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60+2 HRC / Kafa 45±5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.



Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L+2
SBIPHK1100	1	2.5	1.2	0.2	d1+0,03	100
SBIPHK1125						125
SBIPHK1160						160
SBIPHK1200						200
SBIPHK1250						250
SBIPHK15100	1.5	3	1.5			100
SBIPHK15125						125
SBIPHK15160						160
SBIPHK15200						200
SBIPHK15250						250
SBIPHK2100	2	4	2			100
SBIPHK2125						125
SBIPHK2160						160
SBIPHK2200						200
SBIPHK2250						250
SBIPHK2315						315
SBIPHK2400						400
SBIPHK2500						500
SBIPHK2.5100	2.5	5		0.3		100
SBIPHK2.5125						125
SBIPHK2.5160						160
SBIPHK2.5200						200
SBIPHK2.5250	2.5	5	2			250
SBIPHK2.5315						315
SBIPHK2.5400						400
SBIPHK2.5500						500
SBIPHK3100	3	6	3			100
SBIPHK3125						125
SBIPHK3160						160
SBIPHK3200						200
SBIPHK3250						250
SBIPHK3315						315
SBIPHK3400						400
SBIPHK3500						500
SBIPHK3630						630
SBIPHK35100	3.5	7				100
SBIPHK35125						125
SBIPHK35160						160
SBIPHK35200						200
SBIPHK35250						250
SBIPHK35315						315
SBIPHK35400						400
SBIPHK35500						500
SBIPHK35630						630
SBIPHK4100	4	8	3			100
SBIPHK4125						125
SBIPHK4160						160
SBIPHK4200						200
SBIPHK4250						250
SBIPHK4315						315
SBIPHK4400						400
SBIPHK4500						500
SBIPHK4630						630
SBIPHK45100	4.5					100
SBIPHK45125						125
SBIPHK45160						160
SBIPHK45200						200
SBIPHK45250						250
SBIPHK45315						315
SBIPHK45400						400
SBIPHK45500						500
SBIPHK45630						630

Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L+2
SBIPHK5100	5	10	8	0.3	d1+0,03	100
SBIPHK5125						125
SBIPHK5160						160
SBIPHK5200						200
SBIPHK5250						250
SBIPHK5315						315
SBIPHK5400						400
SBIPHK5500						500
SBIPHK5630						630
SBIPHK5800						800
SBIPHK51000						1000
SBIPHK55100	5.5					100
SBIPHK55125						125
SBIPHK55160						160
SBIPHK55200						200
SBIPHK55250						250
SBIPHK55315						315
SBIPHK55400						400
SBIPHK55500						500
SBIPHK55630						630
SBIPHK6100	6	12	5	0.5		100
SBIPHK6125						125
SBIPHK6160						160
SBIPHK6200						200
SBIPHK6250						250
SBIPHK6315						315
SBIPHK6400						400
SBIPHK6500						500
SBIPHK6630						630
SBIPHK6800						800
SBIPHK61000						1000
SBIPHK65100	6.5					100
SBIPHK65125						125
SBIPHK65160						160
SBIPHK65200						200
SBIPHK65250						250
SBIPHK65315						315
SBIPHK65400						400
SBIPHK65500						500
SBIPHK65630						630
SBIPHK7100	7	12	5	0.5		100
SBIPHK7125						125
SBIPHK7160						160
SBIPHK7200						200
SBIPHK7250						250
SBIPHK7315						315
SBIPHK7400						400
SBIPHK7500						500
SBIPHK7630						630
SBIPHK75100	7.5					100
SBIPHK75125						125
SBIPHK75160						160
SBIPHK75200						200
SBIPHK75250						250
SBIPHK75315						315
SBIPHK75400						400
SBIPHK75500						500
SBIPHK75630						630
SBIPHK75800						800
SBIPHK751000						1000

İTİCİ PİMLER

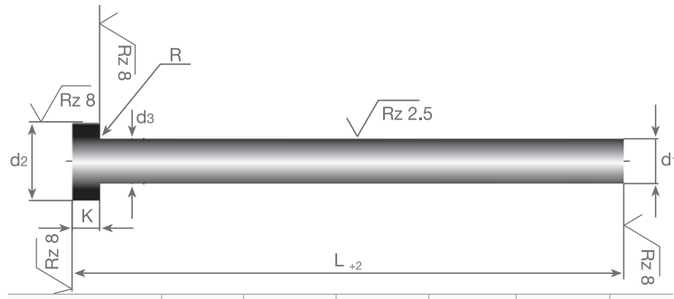
SİLİNDİR BAŞLI İTİCİ PİM

PLASTİK ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60+2 HRC / Kafa 45±5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.



Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L+2
SBIPHK8100	8	14	5	0.5	d1+0,03	100
SBIPHK8125						125
SBIPHK8160						160
SBIPHK8200						200
SBIPHK8250						250
SBIPHK8315						315
SBIPHK8400						400
SBIPHK8500						500
SBIPHK8630						630
SBIPHK8800						800
SBIPHK81000						1000
SBIPHK85100	8.5				d1+0,04	100
SBIPHK85125						125
SBIPHK85160						160
SBIPHK85200						200
SBIPHK85250						250
SBIPHK85315						315
SBIPHK85400						400
SBIPHK85500						500
SBIPHK85630						630
SBIPHK9100	9					100
SBIPHK9125						125
SBIPHK9160						160
SBIPHK9200						200
SBIPHK9250						250
SBIPHK9315						315
SBIPHK9400						400
SBIPHK9500						500
SBIPHK9630						630
SBIPHK10100	10	16				100
SBIPHK10125						125
SBIPHK10160						160
SBIPHK10200						200
SBIPHK10250						250
SBIPHK10315						315
SBIPHK10400						400
SBIPHK10500						500
SBIPHK10630						630
SBIPHK10800						800
SBIPHK101000						1000
SBIPHK11100	11	16			d1+0,04	100
SBIPHK11125						125
SBIPHK11160						160
SBIPHK11200						200
SBIPHK11250						250
SBIPHK11315						315
SBIPHK11400						400
SBIPHK11500						500
SBIPHK11630						630
SBIPHK12100	12	18	7	0.8	d1+0,1	100
SBIPHK12125						125
SBIPHK12160						160
SBIPHK12200						200
SBIPHK12250						250
SBIPHK12315						315
SBIPHK12400						400
SBIPHK12500						500
SBIPHK12630						630
SBIPHK12800						800
SBIPHK121000						1000

Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L+2
SBIPHK14100	14	22	7	0.8	d1+0,1	100
SBIPHK14125						125
SBIPHK14160						160
SBIPHK14200						200
SBIPHK14250						250
SBIPHK14315						315
SBIPHK14400						400
SBIPHK14500						500
SBIPHK14630						630
SBIPHK14800						800
SBIPHK141000						1000
SBIPHK16100						100
SBIPHK16125						125
SBIPHK16160						160
SBIPHK16200						200
SBIPHK16250						250
SBIPHK16315						315
SBIPHK16400						400
SBIPHK16500						500
SBIPHK16630						630
SBIPHK16800						800
SBIPHK161000						1000
SBIPHK18100	18	24	7	0.8		100
SBIPHK18125						125
SBIPHK18160						160
SBIPHK18200						200
SBIPHK18250						250
SBIPHK18315						315
SBIPHK18400						400
SBIPHK18500						500
SBIPHK18630						630
SBIPHK18800						800
SBIPHK181000						1000
SBIPHK20100	20	26	8	1		100
SBIPHK20125						125
SBIPHK20160						160
SBIPHK20200						200
SBIPHK20250						250
SBIPHK20315						315
SBIPHK20400						400
SBIPHK20500						500
SBIPHK20630						630
SBIPHK20800						800
SBIPHK201000						1000
SBIPHK25100	25	32	10			100
SBIPHK25125						125
SBIPHK25160						160
SBIPHK25200						200
SBIPHK25250						250
SBIPHK25315						315
SBIPHK25400						400
SBIPHK25500						500
SBIPHK25630						630
SBIPHK25800						800
SBIPHK251000						1000

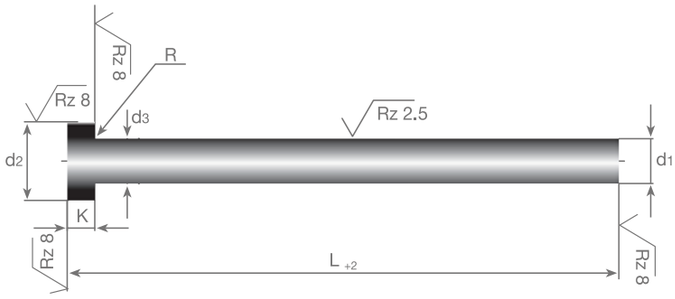
İTİCİ PİMLER

SİLİNDİR BAŞLI İTİCİ PİM ONDALIKLI

PLASTİK ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.



Sip. No.	d1 (h6)	d2	d3	K (+0,2)	L (+2)
SBIPONHK1.180	1.1	2.5	d1(+0,03)	0.05	80
SBIPONHK1.1100					100
SBIPONHK1.1125					125
SBIPONHK1.1160					160
SBIPONHK1.1200					200
SBIPONHK1.1250					250
SBIPONHK1.280	1.2				80
SBIPONHK1.2100					100
SBIPONHK1.2125					125
SBIPONHK1.2160					160
SBIPONHK1.2200					200
SBIPONHK1.2250					250
SBIPONHK1.380	1.3	3			80
SBIPONHK1.3100					100
SBIPONHK1.3125					125
SBIPONHK1.3160					160
SBIPONHK1.3200					200
SBIPONHK1.3250					250
SBIPONHK1.480	1.4				80
SBIPONHK1.4100					100
SBIPONHK1.4125					125
SBIPONHK1.4160					160
SBIPONHK1.4200					200
SBIPONHK1.4250					250
SBIPONHK1.680	1.6				80
SBIPONHK1.6100					100
SBIPONHK1.6125					125
SBIPONHK1.6160					160
SBIPONHK1.6200					200
SBIPONHK1.6250					250
SBIPONHK1.780	1.7				80
SBIPONHK1.7100					100
SBIPONHK1.7125					125
SBIPONHK1.7160					160
SBIPONHK1.7200					200
SBIPONHK1.7250					250
SBIPONHK1.880	1.8				80
SBIPONHK1.8100					100
SBIPONHK1.8125					125
SBIPONHK1.8160					160
SBIPONHK1.8200					200
SBIPONHK1.8250					250
SBIPONHK1.980	1.9				80
SBIPONHK1.9100					100
SBIPONHK1.9125					125
SBIPONHK1.9160					160
SBIPONHK1.9200					200
SBIPONHK1.9250					250
SBIPONHK2.180	2.1	4			80
SBIPONHK2.1100					100
SBIPONHK2.1125					125
SBIPONHK2.1160					160
SBIPONHK2.1200					200
SBIPONHK2.1250					250
SBIPONHK2.280	2.2				80
SBIPONHK2.2100					100
SBIPONHK2.2125					125
SBIPONHK2.2160					160
SBIPONHK2.2200					200
SBIPONHK2.2250					250

Sip. No.	d1 (h6)	d2	d3	K (+0,2)	L (+2)
SBIPONHK2.380	2.3	4	d1(+0,03)	0.05	80
SBIPONHK2.3100					100
SBIPONHK2.3125					125
SBIPONHK2.3160					160
SBIPONHK2.3200					200
SBIPONHK2.3250					250
SBIPONHK2.480	2.4				80
SBIPONHK2.4100					100
SBIPONHK2.4125					125
SBIPONHK2.4160					160
SBIPONHK2.4200					200
SBIPONHK2.4250					250
SBIPONHK2.680	2.6	5			80
SBIPONHK2.6100					100
SBIPONHK2.6125					125
SBIPONHK2.6160					160
SBIPONHK2.6200					200
SBIPONHK2.6250					250
SBIPONHK2.780	2.7				80
SBIPONHK2.7100					100
SBIPONHK2.7125					125
SBIPONHK2.7160					160
SBIPONHK2.7200					200
SBIPONHK2.7250					250
SBIPONHK2.880	2.8				80
SBIPONHK2.8100					100
SBIPONHK2.8125					125
SBIPONHK2.8160					160
SBIPONHK2.8200					200
SBIPONHK2.8250					250
SBIPONHK2.980	2.9				80
SBIPONHK2.9100					100
SBIPONHK2.9125					125
SBIPONHK2.9160					160
SBIPONHK2.9200					200
SBIPONHK2.9250					250
SBIPONHK3.180	3.1	6			80
SBIPONHK3.1100					100
SBIPONHK3.1125					125
SBIPONHK3.1160					160
SBIPONHK3.1200					200
SBIPONHK3.1250					250
SBIPONHK3.280	3.2				80
SBIPONHK3.2100					100
SBIPONHK3.2125					125
SBIPONHK3.2160					160
SBIPONHK3.2200					200
SBIPONHK3.2250					250
SBIPONHK3.380	3.3				80
SBIPONHK3.3100					100
SBIPONHK3.3125					125
SBIPONHK3.3160					160
SBIPONHK3.3200					200
SBIPONHK3.3250					250
SBIPONHK3.480	3.4				80
SBIPONHK3.4100					100
SBIPONHK3.4125					125
SBIPONHK3.4160					160
SBIPONHK3.4200					200
SBIPONHK3.4250					250

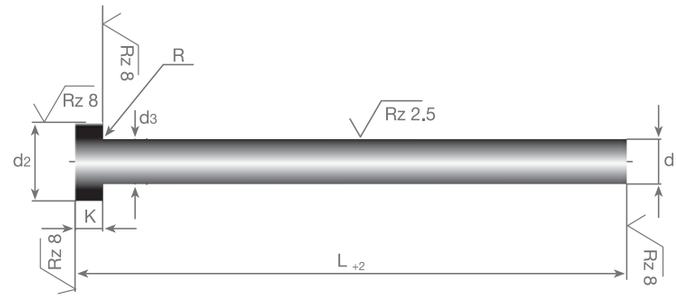
İTİCİ PİMLER

SİLİNDİR BAŞLI İTİCİ PİM ONDALIKLI

PLASTİK ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : Gövde 60+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.



Sip. No.	d1 (h6)	d2	d3	K (+0,2)	L (+2)
SBIPONHK3.680	3.6	7	d1(+0,03)	0.05	80
SBIPONHK3.6100					100
SBIPONHK3.6125					125
SBIPONHK3.6160					160
SBIPONHK3.6200					200
SBIPONHK3.6250					250
SBIPONHK3.780	3.7				80
SBIPONHK3.7100					100
SBIPONHK3.7125					125
SBIPONHK3.7160					160
SBIPONHK3.7200					200
SBIPONHK3.7250					250
SBIPONHK3.880	3.8				80
SBIPONHK3.8100					100
SBIPONHK3.8125					125
SBIPONHK3.8160					160
SBIPONHK3.8200					200
SBIPONHK3.8250					250
SBIPONHK3.980	3.9				80
SBIPONHK3.9100					100
SBIPONHK3.9125					125
SBIPONHK3.9160					160
SBIPONHK3.9200					200
SBIPONHK3.9250					250
SBIPONHK4.180	4.1	8			80
SBIPONHK4.1100					100
SBIPONHK4.1125					125
SBIPONHK4.1160					160
SBIPONHK4.1200					200
SBIPONHK4.1250					250
SBIPONHK4.280	4.2				80
SBIPONHK4.2100					100
SBIPONHK4.2125					125
SBIPONHK4.2160					160
SBIPONHK4.2200					200
SBIPONHK4.2250					250
SBIPONHK4.380	4.3				80
SBIPONHK4.3100					100
SBIPONHK4.3125					125
SBIPONHK4.3160					160
SBIPONHK4.3200					200
SBIPONHK4.3250					250
SBIPONHK4.480	4.4				80
SBIPONHK4.4100					100
SBIPONHK4.4125					125
SBIPONHK4.4160					160
SBIPONHK4.4200					200
SBIPONHK4.4250					250
SBIPONHK4.680	4.6				80
SBIPONHK4.6100					100
SBIPONHK4.6125					125
SBIPONHK4.6160					160
SBIPONHK4.6200					200
SBIPONHK4.6250					250
SBIPONHK4.780	4.7				80
SBIPONHK4.7100					100
SBIPONHK4.7125					125
SBIPONHK4.7160					160
SBIPONHK4.7200					200
SBIPONHK4.7250					250

Sip. No.	d1 (h6)	d2	d3	K (+0,2)	L (+2)
SBIPONHK4.880	4.8	8	d1(+0,03)	0.05	80
SBIPONHK4.8100					100
SBIPONHK4.8125					125
SBIPONHK4.8160					160
SBIPONHK4.8200					200
SBIPONHK4.8250					250
SBIPONHK4.980	4.9				80
SBIPONHK4.9100					100
SBIPONHK4.9125					125
SBIPONHK4.9160					160
SBIPONHK4.9200					200
SBIPONHK4.9250					250
SBIPONHK5.180	5.1	10			80
SBIPONHK5.1100					100
SBIPONHK5.1125					125
SBIPONHK5.1160					160
SBIPONHK5.1200					200
SBIPONHK5.1250					250
SBIPONHK5.280	5.2				80
SBIPONHK5.2100					100
SBIPONHK5.2125					125
SBIPONHK5.2160					160
SBIPONHK5.2200					200
SBIPONHK5.2250					250
SBIPONHK5.380	5.3				80
SBIPONHK5.3100					100
SBIPONHK5.3125					125
SBIPONHK5.3160					160
SBIPONHK5.3200					200
SBIPONHK5.3250					250
SBIPONHK5.480	5.4				80
SBIPONHK5.4100					100
SBIPONHK5.4125					125
SBIPONHK5.4160					160
SBIPONHK5.4200					200
SBIPONHK5.4250					250
SBIPONHK5.680	5.6				80
SBIPONHK5.6100					100
SBIPONHK5.6125					125
SBIPONHK5.6160					160
SBIPONHK5.6200					200
SBIPONHK5.6250					250
SBIPONHK5.780	5.7				80
SBIPONHK5.7100					100
SBIPONHK5.7125					125
SBIPONHK5.7160					160
SBIPONHK5.7200					200
SBIPONHK5.7250					250
SBIPONHK5.880	5.8				80
SBIPONHK5.8100					100
SBIPONHK5.8125					125
SBIPONHK5.8160					160
SBIPONHK5.8200					200
SBIPONHK5.8250					250
SBIPONHK5.980	5.9				80
SBIPONHK5.9100					100
SBIPONHK5.9125					125
SBIPONHK5.9160					160
SBIPONHK5.9200					200
SBIPONHK5.9250					250

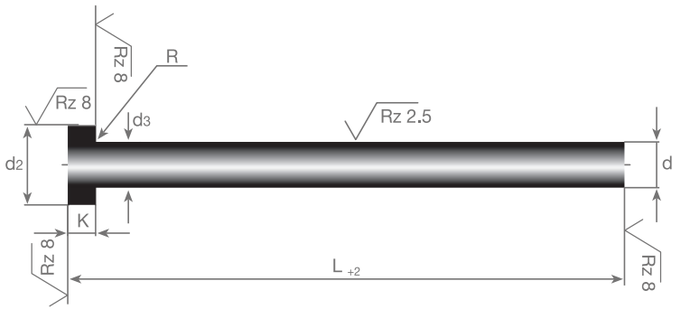
İTİCİ PİMLER

SİLİNDİR BAŞLI İTİCİ PİM (NİTRASYONLU - SİYAH)

METAL ENJEKSİYON



- Malzeme : Sıcak iş çeliği 1.2344
- Sertlik : 65+2 HRC / Kafa 45+5 HRC
- Yüzey : Nitritli ve taşlanmış.



Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L (+2)
SBIMSHK1100	1	2.5	1.2	0.2	d1+0,03	100
SBIMSHK1125						125
SBIMSHK1160						160
SBIMSHK1200						200
SBIMSHK1250						250
SBIMSHK1.5100	1.5	3	1.5			100
SBIMSHK1.5125						125
SBIMSHK1.5160						160
SBIMSHK1.5200						200
SBIMSHK1.5250						250
SBIMSHK2100	2	4	2			100
SBIMSHK2125						125
SBIMSHK2160						160
SBIMSHK2200						200
SBIMSHK2250						250
SBIMSHK2315						315
SBIMSHK2400						400
SBIMSHK2.5100	2.5	5				100
SBIMSHK2.5125						125
SBIMSHK2.5160						160
SBIMSHK2.5200						200
SBIMSHK2.5250						250
SBIMSHK2.5315						315
SBIMSHK2.5400						400
SBIMSHK3100	3	6	4			100
SBIMSHK3125						125
SBIMSHK3160						160
SBIMSHK3200						200
SBIMSHK3250						250
SBIMSHK3315						315
SBIMSHK3400						400
SBIMSHK3500						500
SBIMSHK3.5100	3.5	7				100
SBIMSHK3.5125						125
SBIMSHK3.5160						160
SBIMSHK3.5200						200
SBIMSHK3.5250						250
SBIMSHK3.5315						315
SBIMSHK3.5400						400
SBIMSHK3.5500						500
SBIMSHK4100	4	8				100
SBIMSHK4125						125
SBIMSHK4160						160
SBIMSHK4200						200
SBIMSHK4250						250
SBIMSHK4315						315
SBIMSHK4400						400
SBIMSHK4500						500
SBIMSHK4630						630
SBIMSHK4800						800
SBIMSHK4.5100	4.5					100
SBIMSHK4.5125						125
SBIMSHK4.5160						160
SBIMSHK4.5200						200
SBIMSHK4.5250						250
SBIMSHK4.5315						315
SBIMSHK4.5400						400
SBIMSHK4.5500						500

Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L (+2)
SBIMSHK5100	5	10	4	0.3	d1+0,03	100
SBIMSHK5125						125
SBIMSHK5160						160
SBIMSHK5200						200
SBIMSHK5250						250
SBIMSHK5315						315
SBIMSHK5400						400
SBIMSHK5500						500
SBIMSHK5630						630
SBIMSHK5800						800
SBIMSHK51000						1000
SBIMSHK5.5100	5.5					100
SBIMSHK5.5125						125
SBIMSHK5.5160						160
SBIMSHK5.5200						200
SBIMSHK5.5250						250
SBIMSHK5.5315						315
SBIMSHK5.5400						400
SBIMSHK5.5500						500
SBIMSHK6100	6	12	5	0.5		100
SBIMSHK6125						125
SBIMSHK6160						160
SBIMSHK6200						200
SBIMSHK6250						250
SBIMSHK6315						315
SBIMSHK6400						400
SBIMSHK6500						500
SBIMSHK6630						630
SBIMSHK6800						800
SBIMSHK61000						1000
SBIMSHK6.5100	6.5					100
SBIMSHK6.5125						125
SBIMSHK6.5160						160
SBIMSHK6.5200						200
SBIMSHK6.5250						250
SBIMSHK6.5315						315
SBIMSHK6.5400						400
SBIMSHK6.5500						500
SBIMSHK7100	7					100
SBIMSHK7125						125
SBIMSHK7160						160
SBIMSHK7200						200
SBIMSHK7250						250
SBIMSHK7315						315
SBIMSHK7400						400
SBIMSHK7500						500
SBIMSHK7.5100	7.5					100
SBIMSHK7.5125						125
SBIMSHK7.5160						160
SBIMSHK7.5200						200
SBIMSHK7.5250						250
SBIMSHK7.5315						315
SBIMSHK7.5400						400
SBIMSHK7.5500						500
SBIMSHK8100	8	14				100
SBIMSHK8125						125
SBIMSHK8160						160
SBIMSHK8200						200
SBIMSHK8250						250
SBIMSHK8315						315

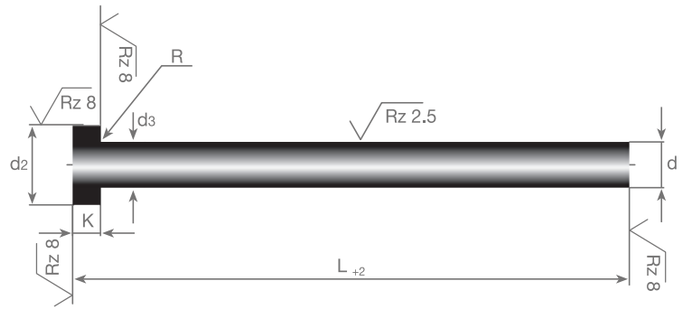
İTİCİ PİMLER

SİLİNDİR BAŞLI İTİCİ PİM (NİTRASYONLU - SİYAH)

METAL ENJEKSİYON



- Malzeme : Sıcak iş çeliği 1.2344
- Sertlik : 65+2 HRC / Kafa 45+5 HRC
- Yüzey : Nitritli ve taşlanmış.



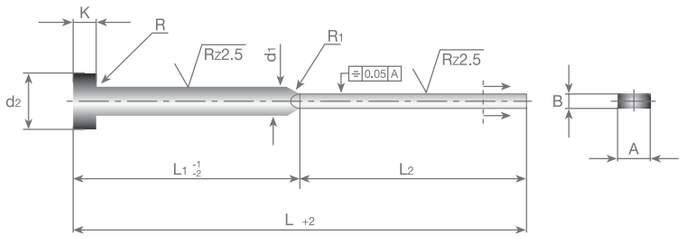
Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L (+2)
SBIMSHK8400	8	14	5	0.5	d1+0,03	400
SBIMSHK8500						500
SBIMSHK8630						630
SBIMSHK8800						800
SBIMSHK81000						1000
SBIMSHK8.5100	8.5				d1+0,04	100
SBIMSHK8.5125						125
SBIMSHK8.5160						160
SBIMSHK8.5200						200
SBIMSHK8.5250						250
SBIMSHK8.5315						315
SBIMSHK8.5400						400
SBIMSHK8.5500						500
SBIMSHK9100	9					100
SBIMSHK9125						125
SBIMSHK9160						160
SBIMSHK9200						200
SBIMSHK9250						250
SBIMSHK9315						315
SBIMSHK9400						400
SBIMSHK9500						500
SBIMSHK10100	10	16				100
SBIMSHK10125						125
SBIMSHK10160						160
SBIMSHK10200						200
SBIMSHK10250						250
SBIMSHK10315						315
SBIMSHK10400						400
SBIMSHK10500						500
SBIMSHK10630						630
SBIMSHK10800						800
SBIMSHK101000						1000
SBIMSHK10.5100	10.5					100
SBIMSHK10.5125						125
SBIMSHK10.5160						160
SBIMSHK10.5200						200
SBIMSHK10.5250						250
SBIMSHK10.5315						315
SBIMSHK10.5400						400
SBIMSHK10.5500						500
SBIMSHK10.5630						630
SBIMSHK10.5800						800
SBIMSHK10.51000						1000
SBIMSHK11100	11					100
SBIMSHK11125						125
SBIMSHK11160						160
SBIMSHK11200						200
SBIMSHK11250						250
SBIMSHK11315						315
SBIMSHK11400						400
SBIMSHK11500						500
SBIMSHK12100	12	18	7	0.8		100
SBIMSHK12125						125
SBIMSHK12160						160
SBIMSHK12200						200
SBIMSHK12250						250
SBIMSHK12315						315
SBIMSHK12400						400
SBIMSHK12500						500
SBIMSHK12630						630
SBIMSHK12800						800
SBIMSHK121000						1000

Sip. No.	d1 (g6)	d2 (-0,2)	K (-0,05)	R (+0,2)	d3	L (+2)
SBIMSHK14100	14	22	7	0.8	d1+0,04	100
SBIMSHK14125						125
SBIMSHK14160						160
SBIMSHK14200						200
SBIMSHK14250						250
SBIMSHK14315						315
SBIMSHK14400						400
SBIMSHK14500						500
SBIMSHK14630						630
SBIMSHK14800						800
SBIMSHK141000						1000
SBIMSHK16100	16					100
SBIMSHK16125						125
SBIMSHK16160						160
SBIMSHK16200						200
SBIMSHK16250						250
SBIMSHK16315						315
SBIMSHK16400						400
SBIMSHK16500						500
SBIMSHK16630						630
SBIMSHK16800						800
SBIMSHK161000						1000
SBIMSHK18100	18	24				100
SBIMSHK18125						125
SBIMSHK18160						160
SBIMSHK18200						200
SBIMSHK18250						250
SBIMSHK18315						315
SBIMSHK18400						400
SBIMSHK18500						500
SBIMSHK18630						630
SBIMSHK18800						800
SBIMSHK181000						1000
SBIMSHK20100	20	26	8	1		100
SBIMSHK20125						125
SBIMSHK20160						160
SBIMSHK20200						200
SBIMSHK20250						250
SBIMSHK20315						315
SBIMSHK20400						400
SBIMSHK20500						500
SBIMSHK20630						630
SBIMSHK20800						800
SBIMSHK201000						1000
SBIMSHK25100	25	32	10		d1+0,1	100
SBIMSHK25125						125
SBIMSHK25160						160
SBIMSHK25200						200
SBIMSHK25250						250
SBIMSHK25315						315
SBIMSHK25400						400
SBIMSHK25500						500
SBIMSHK25630						630
SBIMSHK25800						800
SBIMSHK251000						1000

İTİCİ PİMLER

LAMA İTİCİ PİM





- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : 60+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

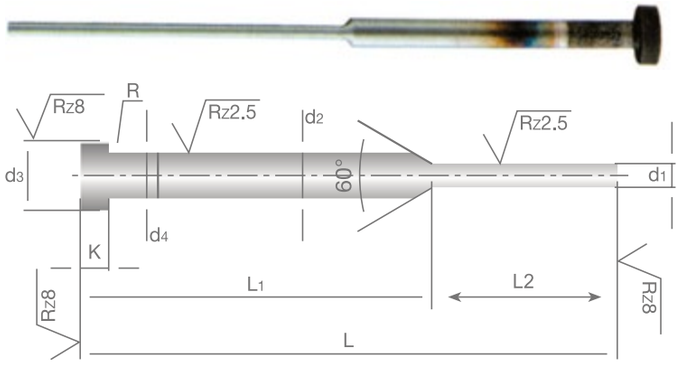
Lama itici pimler özel ürün olup, aşağıdaki tablo temsilen örnek olarak verilmiştir. İstenilen her ebat ve ölçülerde temin edilebilir. Sürekli stoklarımızda bulunamayabilir.

Sip. No.	d1 (g6)	A (-0,015)	B (-0,015	d2 (-0,2)	K (-0,05)	L1	L2	L
LI.13560	4	3.5	1	8	3	30	30	60
LI.13580						40	40	80
LI.135100						50	50	100
LI.135125						65	60	125
LI.135160						80	80	160
LI.135200						100	100	200
LI.135250						125	125	250
LI.135315						160	155	315
LI.135400						200	200	400
LI.13860	4.2	3.8				30	30	60
LI.13880						40	40	80
LI.138100						50	50	100
LI.138125						65	60	125
LI.138160						80	80	160
LI.138200						100	100	200
LI.138250						125	125	250
LI.138315						160	155	315
LI.138400						200	200	400
LI.123860			1.2			30	30	60
LI.123880						40	40	80
LI.1238100						50	50	100
LI.1238125						65	60	125
LI.1238160						80	80	160
LI.1238200						100	100	200
LI.1238250						125	125	250
LI.1238315						160	155	315
LI.1238400						200	200	400
LI.125560	6	5.5		12	5	30	30	60
LI.125580						40	40	80
LI.1255100						50	50	100
LI.1255125						65	60	125
LI.1255160						80	80	160
LI.1255200						100	100	200
LI.1255250						125	125	250
LI.1255315						160	155	315
LI.1255400						200	200	400
LI.155560			1.5			30	30	60
LI.155580						40	40	80
LI.1555100						50	50	100
LI.1555125						65	60	125
LI.1555160						80	80	160
LI.1555200						100	100	200
LI.1555250						125	125	250
LI.1555315						160	155	315
LI.1555400						200	200	400
LI.25560			2			30	30	60
LI.25580						40	40	80
LI.255100						50	50	100
LI.255125						65	60	125
LI.255160						80	80	160
LI.255200						100	100	200
LI.255250						125	125	250
LI.255315						160	155	315
LI.255400						200	200	400
LI.127560	8	7.5	1.2	14		30	30	60
LI.127580						40	40	80
LI.1275100						50	50	100
LI.1275125						65	60	125
LI.1275160						80	80	160
LI.1275200						100	100	200
LI.1275250						125	125	250
LI.1275315						160	155	315
LI.1275400						200	200	400

Sip. No.	d1 (g6)	A (-0,015)	B (-0,015	d2 (-0,2)	K (-0,05)	L1	L2	L
LI.157560	8	7.5	1.5	14	5	30	30	60
LI.157580						40	40	80
LI.1575100						50	50	100
LI.1575125						65	60	125
LI.1575160						80	80	160
LI.1575200						100	100	200
LI.1575250						125	125	250
LI.1575315						160	155	315
LI.1575400						200	200	400
LI.27560			2			30	30	60
LI.27580						40	40	80
LI.275100						50	50	100
LI.275125						65	60	125
LI.275160						80	80	160
LI.275200						100	100	200
LI.275250						125	125	250
LI.275315						160	155	315
LI.275400						200	200	400
LI.159560	10	9.5	1.5	16		30	30	60
LI.159580						40	40	80
LI.1595100						50	50	100
LI.1595125						65	60	125
LI.1595160						80	80	160
LI.1595200						100	100	200
LI.1595250						125	125	250
LI.1595315						160	155	315
LI.1595400						200	200	400
LI.29560			2			30	30	60
LI.29580						40	40	80
LI.295100						50	50	100
LI.295125						65	60	125
LI.295160						80	80	160
LI.295200						100	100	200
LI.295250						125	125	250
LI.295315						160	155	315
LI.295400						200	200	400
LI.251260	12	11.5	2.5	18	7	30	30	60
LI.251280						40	40	80
LI.2512100						50	50	100
LI.2512125						65	60	125
LI.2512160						80	80	160
LI.2512200						100	100	200
LI.2512250						125	125	250
LI.2512315						160	155	315
LI.2512400						200	200	400
LI.21660	16	15.5	2	22		30	30	60
LI.21680						40	40	80
LI.216100						50	50	100
LI.216125						65	60	125
LI.216160						80	80	160
LI.216200						100	100	200
LI.216250						125	125	250
LI.216315						160	155	315
LI.216400						200	200	400
LI.251660			2.5			30	30	60
LI.251680						40	40	80
LI.2516100						50	50	100
LI.2516125						65	60	125
LI.2516160						80	80	160
LI.2516200						100	100	200
LI.2516250						125	125	250
LI.2516315						160	155	315
LI.2516400						200	200	400

İTİCİ PİMLER

KADEMELİ İTİCİ PİM



- Malzeme : Özel alaşımlı çelik 1.2516
- Sertlik : 60+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli itici pimler özel ürün olup, aşağıdaki tablo temsilen örnek olarak verilmiştir. İstenilen her ebat ve ölçülerde temin edilebilir. Sürekli stoklarımızda bulunamayabilir.

Sip. No.	d1 (g6)		d2 (g6)	d3 (-0,2)	d4	K (-0,05)	R (+0,2)	L1 (-1)	L (+2)
	Min.	Max.							
KIPHK0.8100	0.8	1.4	2	4	d1(+0,03)	2	0.2	50	100
KIPHK0.8125									125
KIPHK0.8160								75	160
KIPHK0.8200									200
KIPHK1.5100	1.5	2.4	3	6		3	0.3	50	100
KIPHK1.5125									125
KIPHK1.5160								75	160
KIPHK1.5200									200
KIPHK2.5100	2.5	2.9						50	100
KIPHK2.5125									125
KIPHK2.5160								75	160
KIPHK2.5200									200

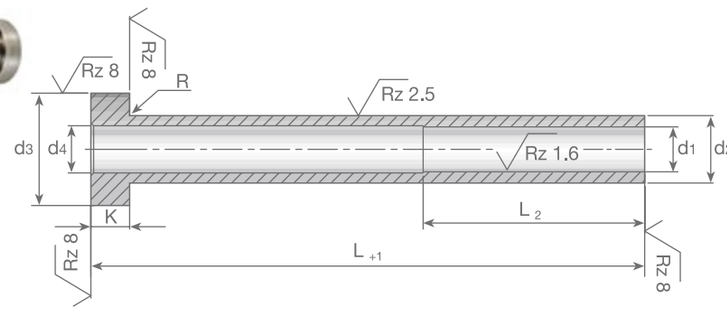
BORU İTİCİ PİM (SERTLEŞTİRİLMİŞ)

PLASTİK ENJEKSİYON METAL ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2344
- Sertlik : 65+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.



Sip.No.	d1 (H5)	d2 (g6)	d4	d3 (-0,2)	K (-0,05)	R (+0,2)	L2 (+2)	L (+1)
BIPHK2475	2	4	2.4	8	3	0.3	35	75
BIPHK24100								100
BIPHK24125								125
BIPHK24150								150
BIPHK24160								160
BIPHK24175								175
BIPHK24200								200
BIPHK24225								225
BIPHK24250								250
BIPHK24275								275
BIPHK24300								300
BIPHK2.5575	2.5	5	2.9	10				75
BIPHK2.55100								100
BIPHK2.55125								125
BIPHK2.55150								150
BIPHK2.55160								160
BIPHK2.55175								175
BIPHK2.55200								200
BIPHK2.55225								225
BIPHK2.55250								250
BIPHK2.55275								275
BIPHK2.55300								300
BIPHK3575	3		3.4				45	75
BIPHK35100								100
BIPHK35125								125
BIPHK35150								150
BIPHK35160								160

Sip.No.	d1 (H5)	d2 (g6)	d4	d3 (-0,2)	K (-0,05)	R (+0,2)	L2 (+2)	L (+1)
BIPHK35175	3	5	3.4	10	3	0.3	45	175
BIPHK35200								200
BIPHK35225								225
BIPHK35250								250
BIPHK35275								275
BIPHK35300								300
BIPHK35500								500
BIPHK3.5675	3.5	6	3.9	12	5	0.5	45	75
BIPHK3.56100								100
BIPHK3.56125								125
BIPHK3.56150								150
BIPHK3.56160								160
BIPHK3.56175								175
BIPHK3.56200								200
BIPHK3.56225								225
BIPHK3.56250								250
BIPHK3.56275								275
BIPHK3.56300								300
BIPHK3.56500								500
BIPHK3.5775		7						75
BIPHK3.57100								100
BIPHK3.57125								125
BIPHK3.57150								150
BIPHK3.57160								160
BIPHK3.57175								175
BIPHK3.57200								200
BIPHK3.57225								225

İTİCİ PİMLER

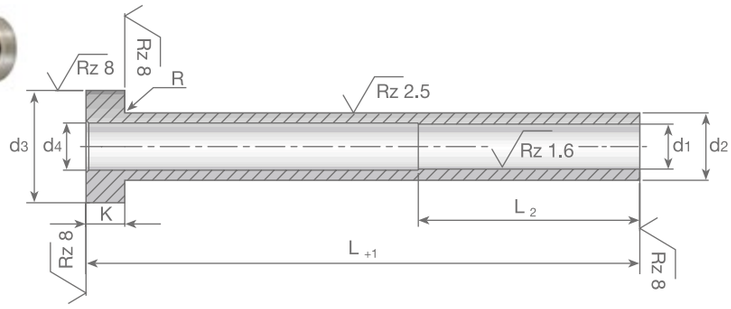
BORU İTİCİ PİM (SERTLEŞTİRİLMİŞ)

PLASTİK ENJEKSİYON
METAL ENJEKSİYON



- Malzeme : Özel alaşımlı çelik 1.2344
- Sertlik : 65+2 HRC / Kafa 45+5 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.

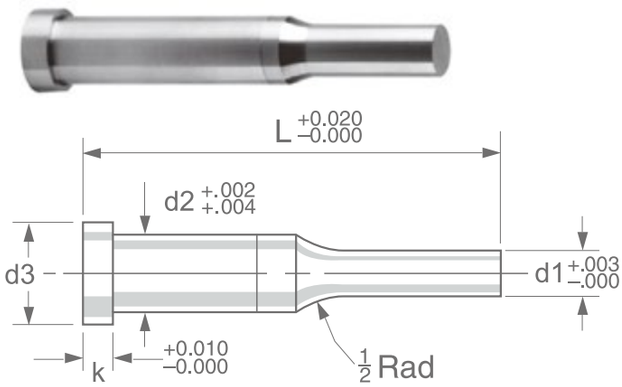


Sip.No.	d1 (H5)	d2 (g6)	d4	d3 (-0,2)	K (-0,05)	R (+0,2)	L2 (+2)	L (+1)
BIPHK3.57250	3.5	7	3.9	12	5	0.5	45	250
BIPHK3.57275								275
BIPHK3.57300								300
BIPHK3.57500								500
BIPHK4675	4	6	4.4					75
BIPHK46100								100
BIPHK46125								125
BIPHK46150								150
BIPHK46160								160
BIPHK46175								175
BIPHK46200								200
BIPHK46225								225
BIPHK46250								250
BIPHK46275								275
BIPHK46300								300
BIPHK46500								500
BIPHK4.2875	4.2	8	4.6	14				75
BIPHK4.28100								100
BIPHK4.28125								125
BIPHK4.28150								150
BIPHK4.28160								160
BIPHK4.28175								175
BIPHK4.28200								200
BIPHK4.28225								225
BIPHK4.28250								250
BIPHK4.28275								275
BIPHK4.28300								300
BIPHK4.28500								500
BIPHK5875	5	8	5.4					75
BIPHK58100								100
BIPHK58125								125
BIPHK58150								150
BIPHK58160								160
BIPHK58175								175
BIPHK58200								200
BIPHK58225								225
BIPHK58250								250
BIPHK58275								275
BIPHK58300								300
BIPHK58500								500
BIPHK61075	6	10	6.4	16				75
BIPHK610100								100
BIPHK610125								125
BIPHK610150								150

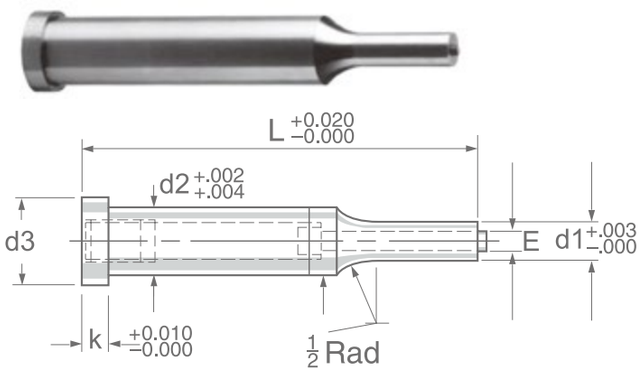
Sip.No.	d1 (H5)	d2 (g6)	d4	d3 (-0,2)	K (-0,05)	R (+0,2)	L2 (+2)	L (+1)
BIPHK610160	6	10	6.4	16	5	0.5	45	160
BIPHK610175								175
BIPHK610200								200
BIPHK610225								225
BIPHK610250								250
BIPHK610275								275
BIPHK610300								300
BIPHK610500								500
BIPHK81275	8	12	8.4	20	7	0.7		75
BIPHK812100								100
BIPHK812125								125
BIPHK812150								150
BIPHK812160								160
BIPHK812175								175
BIPHK812200								200
BIPHK812225								225
BIPHK812250								250
BIPHK812275								275
BIPHK812300								300
BIPHK812500								500
BIPHK101475	10	14	10.4	22				75
BIPHK1014100								100
BIPHK1014125								125
BIPHK1014150								150
BIPHK1014160								160
BIPHK1014175								175
BIPHK1014200								200
BIPHK1014225								225
BIPHK1014250								250
BIPHK1014275								275
BIPHK1014300								300
BIPHK1014500								500
BIPHK121675	12	16	12.4					75
BIPHK1216100								100
BIPHK1216125								125
BIPHK1216150								150
BIPHK1216160								160
BIPHK1216175								175
BIPHK1216200								200
BIPHK1216225								225
BIPHK1216250								250
BIPHK1216275								275
BIPHK1216300								300
BIPHK1216500								500

ÖZEL FORMLU ZIMBALAR VE KOVANLARI / PRES KALIP SÜRÜCÜLERİ

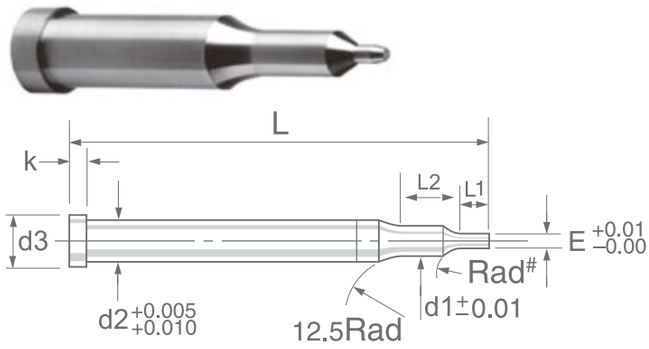
SİLİNDİR BAŞLI KADEMELİ ZIMBA



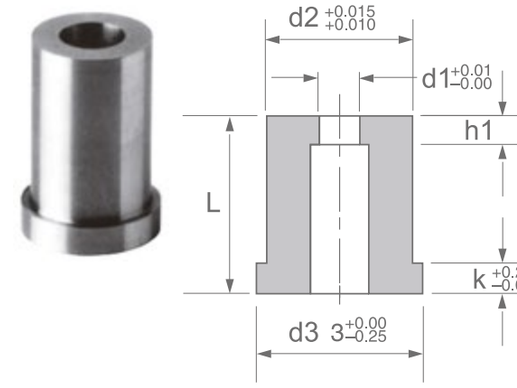
SİLİNDİR BAŞLI KADEMELİ FIRLATICI ZIMBA



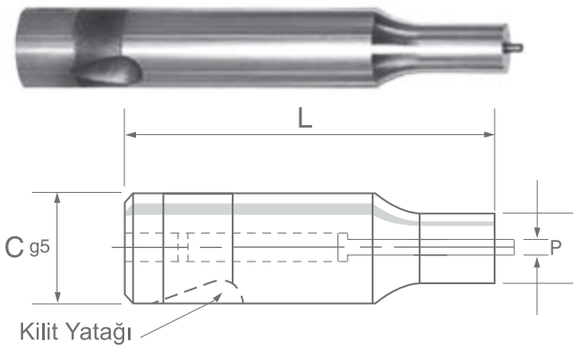
SİLİNDİR BAŞLI ÇİFT KADEMELİ ZIMBA



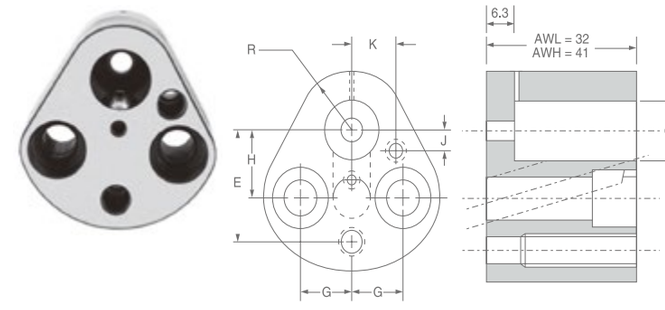
ZIMBA KOVANI



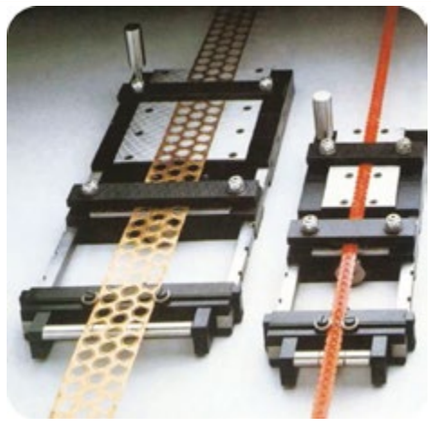
BİLYE KİLİTLEMELİ KADEMELİ ZIMBA



KİLİTLİ ZIMBA KOVANI



PRESS KALIP SÜRÜCÜLERİ



Model	Max Bant Eni (mm)	Hatve (mm)	Max Bant Kalınlığı (mm)
A 50	50	50	1.9
A 100		100	1.8
A 150		150	1.5
B 50	75	50	1.8
B 100		100	1. 7
B 150		150	1.6
C 50	100	50	1.7
C 100		100	1.5
C 150		150	1.4

Sipariş üzerine özel ölçülü sürücüler imal edilmektedir.



Güçlü ön ve arka hava yastıkları 0.02 mm'e varan hassasiyet ile çalışabilme olanağı sağlar. Doğrudan kalıp üzerine monte edilir. Üst kalıbın dikey hareketi sürücüye komut verir. Darbelere ve sürtünmelere maruz bütün yüzeyler sertleştirilmiş ve sert krom kaplanmıştır. Hatve ayarı çok basittir. Sürülecek bandın mutlaka düzlemselliğine dikkat ediniz.

Önemli Uyarı

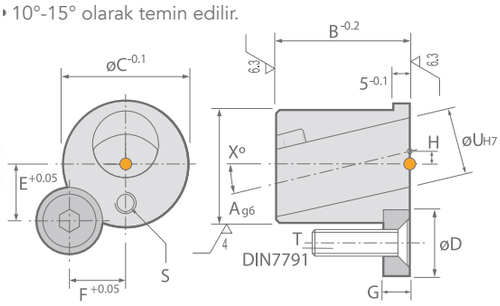
Sürücünün sağlıklı çalışabilmesi için mutlaka şartlandırıcı kullanınız.

PLASTİK KALIBI STANDART ÜRÜNLER

AÇILI PİM TUTUCU 10°-15° (GR)



- Malzeme : 1.7242
- Bu ünite kalıp üzerinde açılı delik delme ihtiyacını ortadan kaldırır.
- Üniteyi oturtmak için kalıbın ön tarafından bir delik delinir.
- 10°-15° olarak temin edilir.



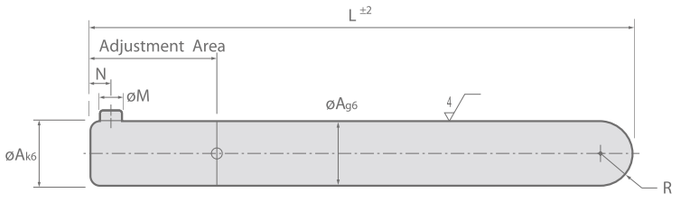
Sip. No.	A	B	C	D	E	F	G	H	s	T	u	x°
GR.182622-10	18	26	22	12	10.8	7.5		3.8	M5x5	M5x16	10	
GR.222826-10	22	28	26	16	11	11	6	4	M6x6	M6x16	12	
GR.283432-10	28	34	32		13	13		5			16	10
GR.344038-10	34	40	38		17	17		5.5			20	
GR.424546-10	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	
GR.465050-10	46	50	50		21	21		7			28	
GR.182622-15	18	26	22	12	10.8	7.5		3.8	MSxS	M5x16	10	
GR.222826-15	22	28	26	16	11	11	6	4	M6x6	M6x16	12	
GR.283432-15	28	34	32		13	13		5			16	15
GR.344038-15	34	40	38		17	17		5.5			20	
GR.424546-15	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	
GR.465050-15	46	so	so		21	21		7			28	

AÇILI PİM (GI)



Sip. No.	A	Adjustament Area	M	N	L			R
GI.010..	10	25			075	090	105	5
GI.012..	12	30	4	4	095	110	130	6
GI.016..	16	35			115	135	160	8
GI.020..	20	40			140	165	190	10
GI.024..	24	45	6	6	170	195	220	12
GI.028..	28	50			200	225	250	14

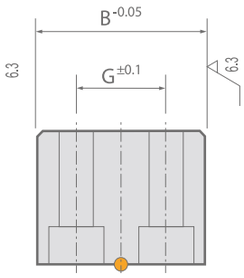
- Malzeme : 1.7242
- 75 - 90 - 105 boylar temin edilir.

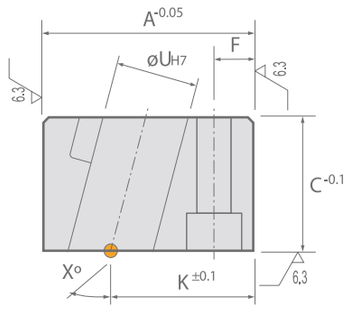


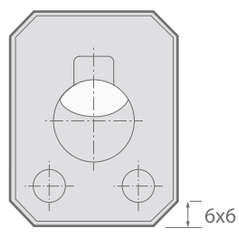
AÇILI PİM TUTUCU (BG)

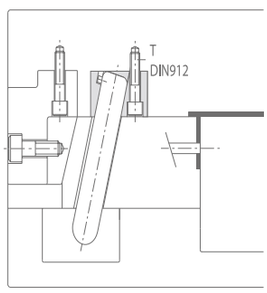


- GR ile aynıdır.
- Malzeme: 1.2312







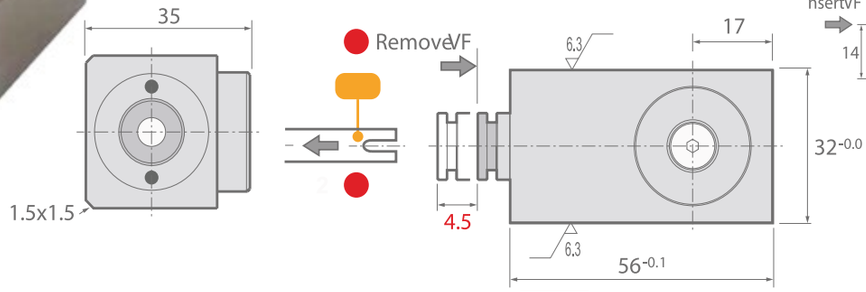


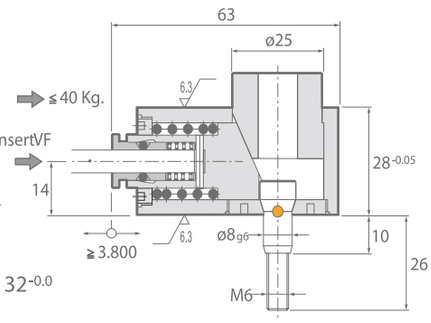
Sip. No.	A	B	C	F	G	K	T	u	X
BG.423016-15	42	30	30	7.5	15	28	M6x35	16	15
BG.504020-15	so	40	36	9	22	34	M8x40	20	15
BG.554024-15	55	40	40	9	22	38	M8x45	24	15
BG.655028-15	65	50	45	12	26	45	M10x50	28	15
BG.423016-20	42	30	30	7.5	15	28	M6x35	16	20
BG.504020-20	50	40	36	9	22	34	M8x40	20	20
BG.554024-20	55	40	40	9	22	38	M8x45	24	20
BG.655028-20	65	so	45	12	26	45	M10x50	28	20

DELİK MAÇASI (UP)



- Malzeme : 1.7264
- Yan delikleri oluşturmak için kullanılır.
- Maça pimi otomatik kilitleme sistemi ile tutulur.
- Montaj için ihtiyaç duyulan alan oldukça küçüktür.



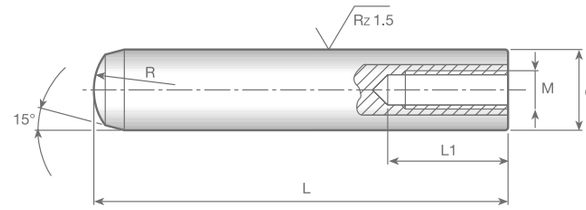


TESPİT PİMLERİ

ÇEKTİRMELİ TESPİT PİMİ



- Sertlik : 60 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.
- Standart : h6 toleranslı
  m6 toleranslı



Sip. No.	d	M	L1	L
CTPHK620	6	M4	10	20
CTPHK625				25
CTPHK630				30
CTPHK635				35
CTPHK640				40
CTPHK645				45
CTPHK650				50
CTPHK655				55
CTPHK660				60
CTPHK670				70
CTPHK680				80
CTPHK690				90
CTPHK6100				100
CTPHK6120				120
CTPHK820	8	M5	12	20
CTPHK825				25
CTPHK830				30
CTPHK835				35
CTPHK840				40
CTPHK845				45
CTPHK850				50
CTPHK855				55
CTPHK860				60
CTPHK870				70
CTPHK880				80
CTPHK890				90
CTPHK8100				100
CTPHK8120				120

Sip. No.	d	M	L1	L
CTPHK1020	10	M6	16	20
CTPHK1025				25
CTPHK1030				30
CTPHK1035				35
CTPHK1040				40
CTPHK1045				45
CTPHK1050				50
CTPHK1055				55
CTPHK1060				60
CTPHK1070				70
CTPHK1080				80
CTPHK1090				90
CTPHK10100				100
CTPHK10120				120
CTPHK10140		M6	16	140
CTPHK1220	12			20
CTPHK1225				25
CTPHK1230				30
CTPHK1235				35
CTPHK1240				40
CTPHK1245				45
CTPHK1250				50
CTPHK1255				55
CTPHK1260				60
CTPHK1270				70
CTPHK1280				80
CTPHK1290				90
CTPHK12100				100

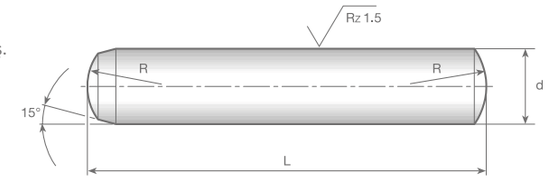
Sip. No.	d	M	L1	L
CTPHK12120	12	M6	16	120
CTPHK12140				140
CTPHK12150				150
CTPHK1430	14	M8	20	30
CTPHK1435				35
CTPHK1440				40
CTPHK1445				45
CTPHK1450				50
CTPHK1455				55
CTPHK1460				60
CTPHK1470				70
CTPHK1480				80
CTPHK1490				90
CTPHK14100				100
CTPHK14120				120
CTPHK14140				140
CTPHK14150				150
CTPHK1630	16			30
CTPHK1635				35
CTPHK1640				40
CTPHK1645				45
CTPHK1650				50
CTPHK1655				55
CTPHK1660				60
CTPHK1670				70
CTPHK1680				80
CTPHK1690				90
CTPHK16100				100

Sip. No.	d	M	L1	L
CTPHK16120	16	M8	20	120
CTPHK16140				140
CTPHK16150				150
CTPHK2030	20	M10	25	30
CTPHK2035				35
CTPHK2040				40
CTPHK2045				45
CTPHK2050				50
CTPHK2055				55
CTPHK2060				60
CTPHK2070				70
CTPHK2080				80
CTPHK2090				90
CTPHK20100				100
CTPHK20120				120
CTPHK20140				140
CTPHK20150				150

DÜZ TESPİT PİMİ



- Sertlik : 60 HRC
- Yüzey : Sertleştirilmiş, taşlanmış.
- Standart : h6 toleranslı
  m6 toleranslı



Sip. No.	d	L
DTPHK410	4	10
DTPHK415		15
DTPHK420		20
DTPHK425		25
DTPHK430		30
DTPHK435		35
DTPHK440		40
DTPHK445		45
DTPHK450		50
DTPHK455		55
DTPHK460		60
DTPHK510	5	10
DTPHK515		15
DTPHK520		20
DTPHK525		25
DTPHK530		30
DTPHK535		35
DTPHK540		40
DTPHK545		45
DTPHK550		50
DTPHK555	5	55
DTPHK560		60
DTPHK570		70
DTPHK580		80

Sip. No.	d	L
DTPHK610	6	10
DTPHK615		15
DTPHK620		20
DTPHK625		25
DTPHK630		30
DTPHK635		35
DTPHK640		40
DTPHK645		45
DTPHK650		50
DTPHK655		55
DTPHK660		60
DTPHK670		70
DTPHK680		80
DTPHK690		90
DTPHK6100		100
DTPHK815	8	15
DTPHK820		20
DTPHK825		25
DTPHK830		30
DTPHK835		35
DTPHK840		40
DTPHK845		45
DTPHK850		50
DTPHK855		55

Sip. No.	d	L
DTPHK860	8	60
DTPHK870		70
DTPHK880		80
DTPHK890		90
DTPHK8100		100
DTPHK8120		120
DTPHK1015	10	15
DTPHK1020		20
DTPHK1025		25
DTPHK1030		30
DTPHK1035		35
DTPHK1040		40
DTPHK1045		45
DTPHK1050		50
DTPHK1055		55
DTPHK1060		60
DTPHK1070		70
DTPHK1080		80
DTPHK1090		90
DTPHK10100		100
DTPHK10120		120
DTPHK1220	12	20
DTPHK1225		25
DTPHK1230		30

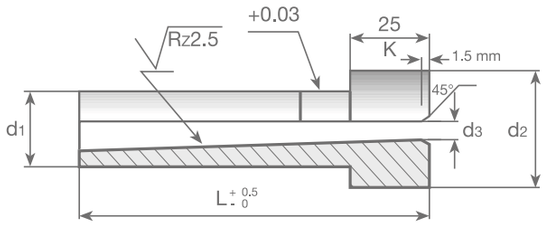
Sip. No.	d	L
DTPHK1235	12	35
DTPHK1240		40
DTPHK1245		45
DTPHK1250		50
DTPHK1255		55
DTPHK1260		60
DTPHK1270		70
DTPHK1280		80
DTPHK1290		90
DTPHK12100		100
DTPHK12120		120
DTPHK1430	14	30
DTPHK1435		35
DTPHK1440		40
DTPHK1445		45
DTPHK1450		50
DTPHK1455		55
DTPHK1460		60
DTPHK1470		70
DTPHK1480		80
DTPHK1490		90
DTPHK14100		100
DTPHK14120		120

Sip. No.	d	L
DTPHK1630	16	30
DTPHK1635		35
DTPHK1640		40
DTPHK1645		45
DTPHK1650		50
DTPHK1655		55
DTPHK1660		60
DTPHK1670		70
DTPHK1680		80
DTPHK1690		90
DTPHK16100		100
DTPHK16120		120
DTPHK2040	20	40
DTPHK2045		45
DTPHK2050		50
DTPHK2055		55
DTPHK2060		60
DTPHK2070		70
DTPHK2080		80
DTPHK2090		90
DTPHK20100		100
DTPHK20120		120

KALIP YOLLUK MEMELERİ - YOLLUK FLANŞLARI

METAL KALIP YOLLUK MEMELERİ





- Malzeme : Sıcak iş çeliği 1.2344
- Yüzey : Sertleştirilmiş, taşlanmış.

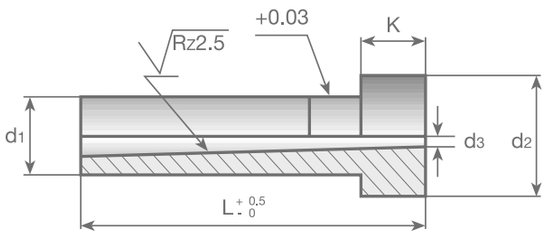
Kademeli ve özel ölçü ürünler de imal edilmektedir.

Sip. No.	d1	d2	K	d3	L
KMMHK1250	12	28	25	5.6	50
KMMHK1265					65
KMMHK1275					75
KMMHK1285					85
KMMHK1295					95
KMMHK12105					105
KMMHK12115					115
KMMHK12125					125
KMMHK1450	14				50
KMMHK1465					65
KMMHK1475					75
KMMHK1485					85
KMMHK1495					95
KMMHK14105					105
KMMHK14115					115
KMMHK14125					125
KMMHK1650	16				50
KMMHK1665					65
KMMHK1675					75
KMMHK1685					85

Sip. No.	d1	d2	K	d3	L
KMMHK1695	16	28	25	5.6	95
KMMHK16105					105
KMMHK16115					115
KMMHK16125					125
KMMHK1850	18				50
KMMHK1865					65
KMMHK1875					75
KMMHK1885					85
KMMHK1895					95
KMMHK18105					105
KMMHK18115					115
KMMHK18125					125
KMMHK2050	20				50
KMMHK2065					65
KMMHK2075					75
KMMHK2085					85
KMMHK2095					95
KMMHK20105					105
KMMHK20115					115
KMMHK20125					125

PLASTİK KALIP YOLLUK MEMELERİ





- Malzeme : Özel alaşımlı çelik
- Yüzey : Sertleştirilmiş, taşlanmış.

Kademeli ve özel ölçü ürünler de imal edilmektedir.

Sip. No.	d1	d2	K	d3	L
KMPHK1250	12	28	20	4.3	50
KMPHK1265					65
KMPHK1275					75
KMPHK1285					85
KMPHK1295					95
KMPHK12105					105
KMPHK12115					115
KMPHK12125					125
KMPHK12135					135
KMPHK12150					150
KMPHK12200					200
KMPHK1450	14				50
KMPHK1465					65
KMPHK1475					75
KMPHK1485					85
KMPHK1495					95
KMPHK14105					105
KMPHK14115					115
KMPHK14125					125

Sip. No.	d1	d2	K	d3	L
KMPHK14135	14	28	20	4.3	135
KMPHK14150					150
KMPHK14200					200
KMPHK1650	16				50
KMPHK1665					65
KMPHK1675					75
KMPHK1685					85
KMPHK1695					95
KMPHK16105					105
KMPHK16115					115
KMPHK16125					125
KMPHK16135					135
KMPHK16150					150
KMPHK16200					200
KMPHK1850	18				50
KMPHK1865					65
KMPHK1875					75
KMPHK1885					85
KMPHK1895					95

Sip. No.	d1	d2	K	d3	L
KMPHK18105	18	28	20	4.3	105
KMPHK18115					115
KMPHK18125					125
KMPHK18135					135
KMPHK18150					150
KMPHK18200					200
KMPHK2050	20				50
KMPHK2065					65
KMPHK2075					75
KMPHK2085					85
KMPHK2095					95
KMPHK20105					105
KMPHK20115					115
KMPHK20125					125
KMPHK20135					135
KMPHK20150					150
KMPHK20200					200

KALIP YOLLUK FLANŞI



- Malzeme : Sıcak iş çeliği 1.2344
- Yüzey : Sertleştirilmiş, taşlanmış.

İsteğe göre temin edilir.

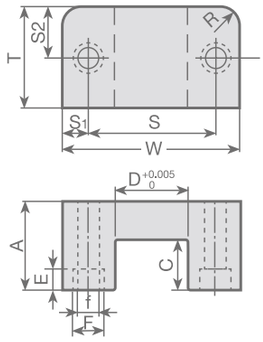
Sip. No.	Çap	Kalınlık	Delik çapı
KYF80	80	25	28
KYF100	100		
KYF125	125		

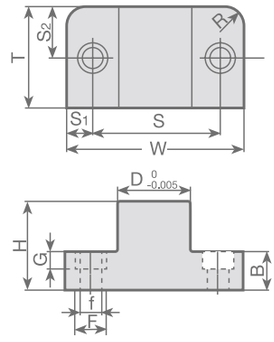
Sip. No.	Çap	Kalınlık	Delik çapı
KYF150	150	25	28
KYF160	160		
KYF200	200		

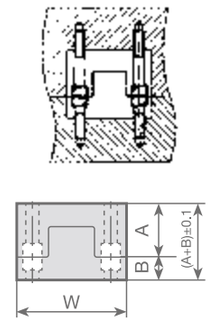
MERKEZLEME BLOKLARI VE KALIP TAKVİMLERİ

KÜP BLOK KİTLEME





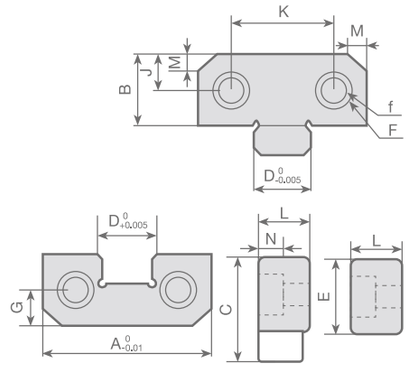




Sip. No.	W -0.01	T ±0.25	A ±0.05	B ±0.05	C	D	E	M	F	f	G	H ±0.05	R ±0.25	S ±0.25	S_1 ±0.25	S_2 ±0.25
LK 15	38.1	25.4	22.17	9.47	13.13	12.70	7	M5	10.5	6	7	22.1	7.0	25.4	6.35	12.7
LK 25	63.5	38.1	34.87	15.82	19.48	25.40	8	M6	12.0	7.2	8	34.8	8.5	44.45	9.53	19.05
LK 35	88.9	50.8	44.4	19.0	25.70	36.58	11	M8	15.5	10.5	11	44.2	9.5	63.5	12.7	25.4

KARE BLOK KİTLEME

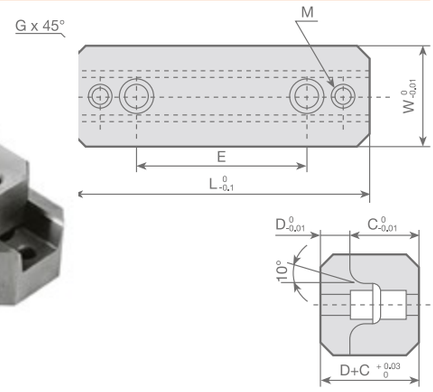




Sip. No.	A	B	C	D	E	F	f	G	J	K	L	M	N
PL 38	38	22	30	12	17	10.5	6.5	7	11	22	13	5	8
PL 50	50	21.5	30	17	21.5	10.5	6.5	11	11	34	16	5	8
PL 75	75	36	50	25	36	16.5	10.5	18	18	50	19	8	12
PL 100	100	45	65	35	45	16.5	10.5	22	22	70	19	10	12
PL 125	125	45	65	45	45	16.5	10.5	22	22	84	25	10	12

UZUN KARE KİTLEME

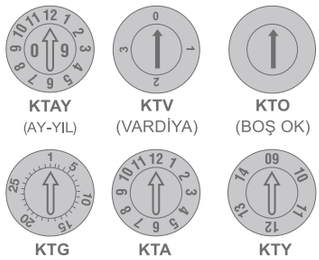


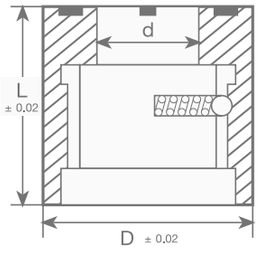


Sip. No.	L	w	C	D	E	G	M
KYSO	50	25	17.5	8	36	5	M5
KY100	100	30	22	10	60	5	M6
KY150	150	40	25	13	100	5	M6

KALIP TAKVİMLERİ







YIL KALIP TAKVİMİ

Sip. No.	D(mm)	L	d
KTY4	4	6	2.2
KTY5	5		2.5
KTY6	6	8	3
KTY8	8		4

Sip. No.	D(mm)	L	d
KTY10	10	10	4.7
KTY12	12		6
KTY16	16	12	7
KTY20	20	14	10

VARDİYA KALIP TAKVİMİ

Sip. No.	D(mm)	L	d
KTV4	4	6	2.2
KTV5	5		2.5
KTV6	6	8	3
KTV8	8		4

Sip. No.	D(mm)	L	d
KTV10	10	10	4.7
KTV12	12		6
KTV16	16	12	7
KTV20	20	14	10

AY YIL KALIP TAKVİMİ

Sip. No.	D(mm)	L	d
KTAY4	4	6	2.2
KTAY5	5		2.5
KTAY6	6	8	3
KTAY8	8		4

Sip. No.	D(mm)	L	d
KTAY10	10	10	4.7
KTAY12	12		6
KTAY16	16	12	7
KTAY20	20	14	10

GÜN KALIP TAKVİMİ

Sip. No.	D (mm)	L	d
KTG4	4	6	2.2
KTG5	5		2.5
KTG6	6	8	3
KTG8	8		4

Sip. No.	D (mm)	L	d
KTG10	10	10	4.7
KTG12	12		6
KTG16	16	12	7
KTG20	20	14	10

AY KALIP TAKVİMİ

Sip. No.	D (mm)	L	d
KTA4	4	6	2.2
KTA5	5		2.5
KTA6	6	8	3
KTA8	8		4

Sip. No.	D (mm)	L	d
KTA10	10	10	4.7
KTA12	12		6
KTA16	16	12	7
KTA20	20	14	10

BOŞ OK KALIP TAKVİMİ

Sip. No.	D (mm)	L	d
KTO4	4	6	2.2
KTO5	5		2.5
KTO6	6	8	3
KTO8	8		4

Sip. No.	D (mm)	L	d
KTO10	10	10	4.7
KTO12	12		6
KTO16	16	12	7
KTO20	20	14	10

KALIP MÜHRELERİ

GERİ DÖNÜŞÜM MÜHRELERİ



Yeniden kullanımı mümkün olan plastik ürünlerin tanımlanmasında kullanır. Mühürler ham maddenin kolayca tanınmasını sağlar.



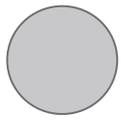
MRS
Sembol,Kod ve Marka



MRN
Naturel Sembol



MRC
Sembol ve Kod



Boş



Sembol ve Kod



Gıda

Sembol	Madde Cinsi
PET	Tereflete polietilen
PE-HD	Yükselen yoğunluklu polietilen
PVC	Vinil poliklorid
PE-HD	Alçak yoğuntuklu polietilen
PP	Poli propilen
PS	Polyester

Sembol	Madde Cinsi
ABS	Termopolimer akrilonitril budatadin stren
	Gıda
PA	Naylon
POM	Poli Asetat
POM	Polifenil Oksit
PC	Polikarbonat

BOŞ KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMBOS6	6	8
KMBOS8	8	8
KMBOS8	10	10

Sip. No.	D(mm)	L
KMBOS12	12	10
KMBOS16	16	12
KMBOS20	20	14

PVC KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPVC6	6	8
KMPVC8	8	8
KMPVC10	10	10

Sip. No.	D(mm)	L
KMPVC12	12	10
KMPVC16	16	12
KMPVC20	20	14

PE-HD KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPEHD6	6	8
KMPEHD8	8	8
KMPEHD10	10	10

Sip. No.	D(mm)	L
KMPEHD12	12	10
KMPEHD16	16	12
KMPEHD20	20	14

GIDA KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMGD6	6	8
KMGD8	8	8
KMGD10	10	10

Sip. No.	D(mm)	L
KMGD12	12	10
KMGD16	16	12
KMGD20	20	14

PP KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPP6	6	8
KMPP8	8	8
KMPP10	10	10

Sip. No.	D(mm)	L
KMPP12	12	10
KMPP16	16	12
KMPP20	20	14

PAM KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPAM6	6	8
KMPAM8	8	8
KMPAM10	10	10

Sip. No.	D(mm)	L
KMPAM12	12	10
KMPAM16	16	12
KMPAM20	20	14

POM KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPOM6	6	8
KMPOM8	8	8
KMPOM10	10	10

Sip. No.	D(mm)	L
KMPOM12	12	10
KMPOM16	16	12
KMPOM20	20	14

PE-LD KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPELD6	6	8
KMPELD8	8	8
KMPELD10	10	10

Sip. No.	D(mm)	L
KMPELD12	12	10
KMPELD16	16	12
KMPELD20	20	14

PA KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPA6	6	8
KMPA8	8	8
KMPA10	10	10

Sip. No.	D(mm)	L
KMPA12	12	10
KMPA16	16	12
KMPA20	20	14

PET KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPET6	6	8
KMPET8	8	8
KMPET10	10	10

Sip. No.	D(mm)	L
KMPET12	12	10
KMPET16	16	12
KMPET20	20	14

PC KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMPC6	6	8
KMPC8	8	8
KMPC10	10	10

Sip. No.	D(mm)	L
KMPC12	12	10
KMPC16	16	12
KMPC20	20	14

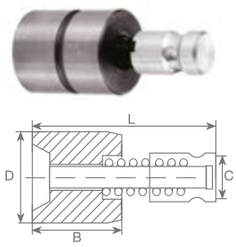
ABS KALIP MÜHRESİ

Sip. No.	D(mm)	L
KMABS6	6	8
KMABS8	8	8
KMABS10	10	10

Sip. No.	D(mm)	L
KMABS12	12	10
KMABS16	16	12
KMABS20	20	14

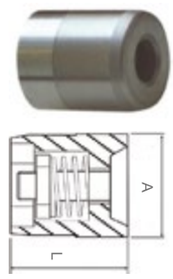
HAVALI VALFLER VE CİVATA ÇEŞİTLERİ

HAVALI VALFLER



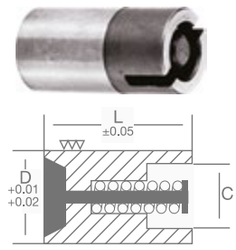
STANDART TİP

Sip. No.	D	B	C	L
HİV 8	8	10	6	27
HİV 10	10	11	6	29
HİV 12	12	11	8	29
HİV 16	16	20	8	42
HİV 18	18	20	12	42
HİV 20	20	20	12	46
HİV 25	25	20	12	62



MİNİ TİP

Sip. No.	A	L
HİVM 6	6	12
HİVM 8	8	12
HİVM 10	10	12
HİVM 12	12	12
HİVM 16	16	20

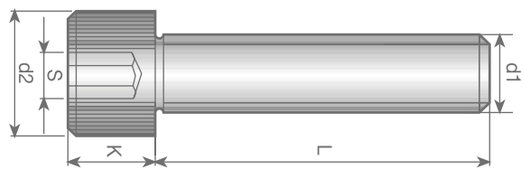


JET TİP

Sip. No.	D	C	L
HİJ 6	6	4	12
HİJ 8	8	4.5	15
HİJ 10	10	6	20
HİJ 12	12	8	25
HİJ 16	16	10	30
HİJ 18	18	12	30
HİJ 20	20	12	30
HİJ 25	25	15	30

İMBUS CİVATA ÇEŞİTLERİ

DIN 912



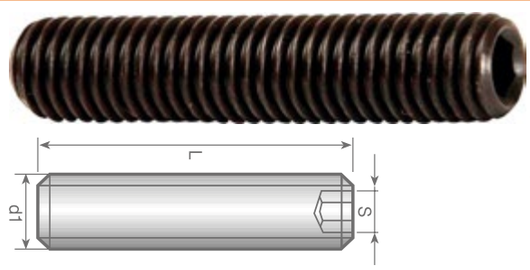


8,8 - 12,9 Kalite

d1	d2	K	S	L (10 12 15 20 25 30 35 40 45 50 55 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 220 240 260 280 300 320 340 360 380 400)
M3	5.5	3	2.5	● ● ● ● ● ● ● ● ●
M4	7	4	3	● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
M5	8.5	5	4	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
M6	10	6	5	● ●
MB	13	8	6	● ●
M10	16	10	8	● ●
M12	18	12	10	● ●
M14	21	14	12	● ●
M16	24	16	14	● ●
M18	27	18	14	● ●
M20	30	20	17	● ●
M24	36	24	19	● ●
M30	45	30	22	● ●

SETSKUR CİVATA

DIN 916



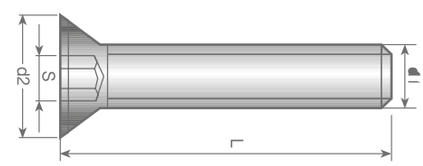
12,9 Kalite

d1	S	L (10 15 20 25 30 35 40 50 60)
M3	1.5	● ● ●
M4	2	● ● ● ● ●
M5	2.5	● ● ● ● ● ● ●
M6	3	● ● ● ● ● ● ●
MB	4	● ● ● ● ● ● ● ●
M10	5	● ● ● ● ● ● ● ● ●
M12	6	● ● ● ● ● ● ● ● ● ●
M14	6	● ● ● ● ● ● ● ● ●
M16	8	● ● ● ● ● ● ● ●

HAVŞA BAŞLI CİVATA



10,9 Kalite



d1	d2	S	L (10 15 20 25 30 35 40 50 60)
M3	6	2	● ● ●
M4	8	2.5	● ● ● ● ●
M5	10	3	● ● ● ● ● ● ●
M6	12	4	● ● ● ● ● ● ●
MB	16	5	● ● ● ● ● ● ● ●
M10	20	6	● ● ● ● ● ● ● ● ●
M12	24	8	● ● ● ● ● ● ● ●
M16	30	10	● ● ● ● ●

KALIP ELEMANLARI

BÖHLER CİVA ÇELİĞİ



SU İLE SERTLEŞTİRİLEN TAKIM ÇELİĞİ

SICAK ŞEKİL VERME- ISIL İŞLEM

- DÖVMETAV = 1050 - 800°C
- YUMUŞATMA TAVI = 700°C
- TAV SERTLİĞİ = 280 HB (azami)
- GERİLİM GERDİRME/ TAVLAMA = 600°C
- SERTLEŞTİRME İÇİN ÖN ISI = 650°C
- SERTLEŞTİRME (SU VERME) = 0 12 ye kadar 800°C yağda
0 12 - 20 Kadar 820°C suda
0 20 - 40 Kadar 820°C suda.
- MENEVİŞ = 180-200C (1saat/25mm)

MALZEMENİN KULLANIM ALANLARI

- Matkaplarda
- Burgulu matkaplarda
- Dişçi matkaplarında
- Raybalarda
- Frezelerde
- Delik zımba ve stampalarında
- İtici Pimlerde
- Metal testerelerinde

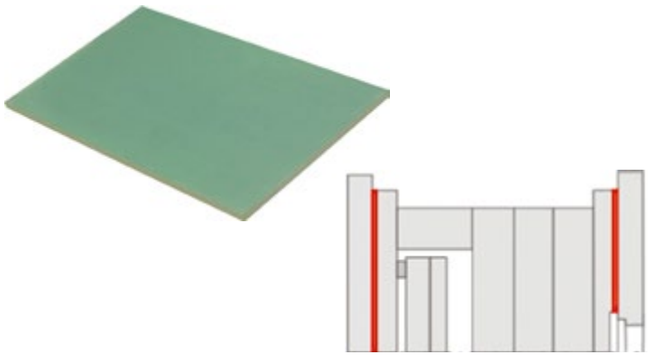
MALZEMENİN TANIMI

- Aşınma dayanımı yüksek olan soğuk iş takım çeliğidir. Cıva çeliği olarak da bilinir.

Sip. No.	Çap mm	Kg/m
CÇ 2	2 mm	0.040 kg
CÇ 2.5	2.5mm	0.050 kg
CÇ 3	3 mm	0.056 kg
CÇ 3.5	3.5mm	0.076 kg
CÇ 4	4 mm	0.100 kg
CÇ 4.5	4.5mm	0.126 kg
CÇ 5	5mm	0.154kg
CÇ 5.5	5.5mm	0.187 kg
CÇ 6	6mm	0.222kg
CÇ 6.5	6.5mm	0.261 kg
CÇ 7	7mm	0.302 kg
CÇ 7.5	7.5mm	0.350 kg
CÇ 8	8mm	0.396 kg
CÇ 8.5	8.5mm	0.445kg
CÇ 9	9mm	0.500 kg
CÇ 9.5	9.5mm	0.556 kg
CÇ 10	10mm	0.617 kg
CÇ 10.5	10.5mm	0.680 kg
CÇ 11	11 mm	0.750 kg
CÇ 11.5	11.5mm	0.815 kg
CÇ 12	12mm	0.888 kg
CÇ 12.5	12.5mm	0.963 kg

Sip. No.	Çap mm	Kg/m
CÇ 13	13mm	1.002 kg
CÇ 13. 5	13.5mm	1.124 kg
CÇ 14	14mm	1.208 kg
CÇ 14.5	14.5mm	1.296 kg
CÇ 15	15mm	1.387 kg
CÇ 16	16mm	1.578 kg
CÇ 17	17mm	1.782kg
CÇ 18	18mm	1.998 kg
CÇ 19	19mm	2.226 kg
CÇ 20	20mm	2.466 kg
CÇ 21	21 mm	2.719 kg
CÇ 22	22mm	2.984 kg
CÇ 23	23mm	3.262 kg
CÇ 24	24mm	3.550 kg
CÇ 25	25mm	3.853 kg
CÇ 26	26mm	4.168 kg
CÇ 27	27mm	4.495 kg
CÇ 28	28mm	4.824 kg
CÇ 30	30mm	5.550 kg
CÇ 32	32mm	6.313 kg
CÇ 35	35mm	7.550 kg
CÇ 40	40mm	9.000 kg

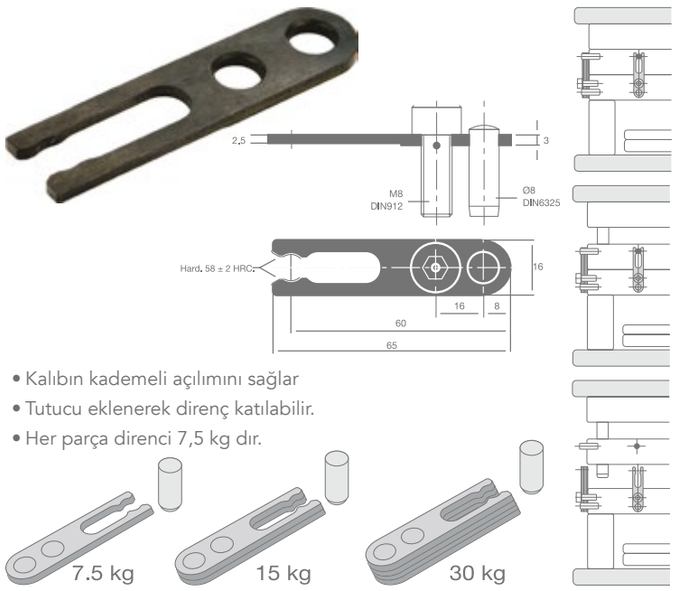
ISI YALITIM PLAKASI



Isı Yalıtım Plakaları Kullanım Şekilleri

- Plakalar astbest içermez, sağlık sertifikası mevcuttur.
- Darbelerden sudan sürtünmelerden etkilenmez, elektriği iletmez
- Maksimum cm^2 1800 ton basınca dayanıklıdır.
- ısı Yalıtım Plakaları kalıpların görünüm standartını yükseltir.
- Tüm ölçüler isteğe bağlı temin edilir .
- 6mm 8mm 10mm kalınlık ölçüleri mevcuttur.

MODÜLER TUTUCU



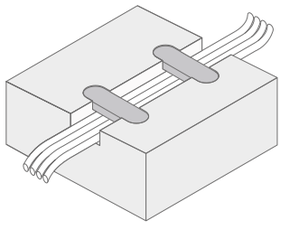
- Kalıbın kademeli açılımını sağlar
- Tutucu eklenerek direnç katılabilir.
- Her parça direnci 7,5 kg dır.

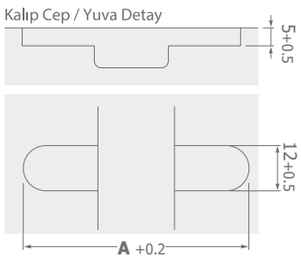
KABLO TUTUCU KAPAĞI

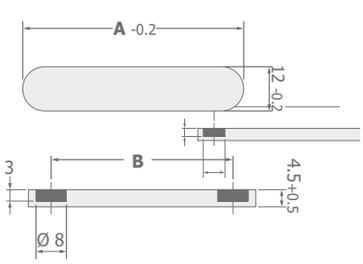


/etik ürün, ekstra delik gerekmez. Kablo tutucu 40 x 12 özellikle sıcak yolluklu kalıplardaki dağınık kabloların kanal içinde
z ve düzgün durmasını sağlar. Ürün manyetik malzemedir, kendiliğinden yapışır ekstra delik delmeye gerek yoktur.
Kalıp sıcaklığını 80°C'nin altında kalmasını tavsiye ediyoruz çünkü plastik hatta mıknatıslar yüksek ısıdan etkilenip bozulabilir.

Sip. No.	A	B	Malzeme	SW
KPK40	40	28	ABS+ NfFeB	80°C
KPK60	60	48	ABS+ NfFeB	80°C



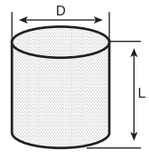




KALIP ELEMANLARI

GAZ ATMA FİLTRESİ

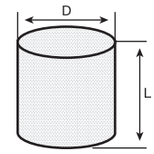




Sip. No.	D	L
PGF 2	2mm	5,0
PGF 3	3mm	10,0
PGF4	4mm	10,0
PGF 5	5mm	10,0
PGF 6	6mm	10,0
PGF 8	8mm	10,0
PGF10	10mm	10,0
PGF12	12mm	12,0
PGF15	15mm	10,0
PGF16	16mm	10,0

GAZ ATMA FİLTRESİ (SİNTERLİ)

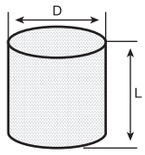




Sip. No.	D	L
SGF 3	3mm	10,0
SGF4	4mm	10,0
SGF 5	5mm	10,0
SGF 6	6mm	10,0
SGF 8	8mm	10,0
SGF10	10mm	10,0
SGF12	12mm	12,0
SGF15	15mm	10,0

GAZ ATMA FİLTRESİ (KANALLI)

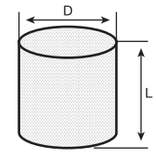




Sip. No.	D	L
KGF 6	6mm	10,0
KGF 8	8mm	10,0
KGF10	10mm	10,0
KGF12	12mm	10,5

GAZ ATMA FİLTRESİ (ÇELİK SİNTERLİ)





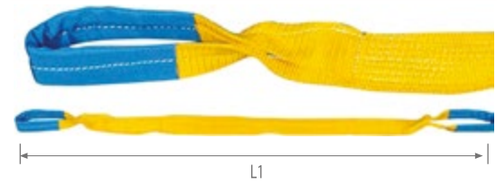
Çsgf 4	4mm	10,0
ÇSGF 6	6mm	10,0
ÇSGF 8	8mm	10,0
ÇSGF10	10mm	12,0
ÇSGF12	12mm	12,0
ÇSGF16	16mm	14,0
ÇSGF 20	20mm	15,0
ÇSGF 28	28mm	15,0

TAŞIYICI SONSUZ SAPAN



Düz kaldırma kapasitesi (WLL)	Sonsuz Halat Uzunlukları (L1) m					
	2m	3m	4m	5m	6m	8m
1.000 kg	•	•	•	•	•	•
2.000 kg	•	•	•	•	•	•
3.000 kg	•	•	•	•	•	•
4.000 kg	•	•	•	•	•	•
5.000 kg	•	•	•	•	•	•
6.000 kg	•	•	•	•	•	•
8.000 kg	•	•	•	•	•	•
10.000 kg	•	•	•	•	•	•

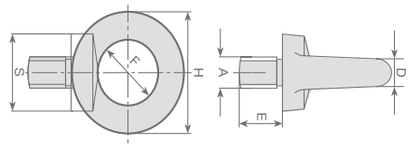
TAŞIYICI SAPAN



Düz kaldırma kapasitesi (WLL)	Sonsuz Halat Uzunlukları (L1) m					
	2m	3m	4m	5m	6m	8m
1.000 kg	•	•	•	•	•	•
2.000 kg	•	•	•	•	•	•
3.000 kg	•	•	•	•	•	•
4.000 kg	•	•	•	•	•	•
5.000 kg	•	•	•	•	•	•
6.000 kg	•	•	•	•	•	•

ERKEK AYBOLD (MAPA)

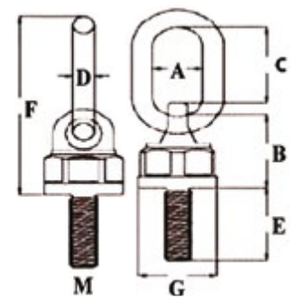




A	D	E	F	H	S	g	Kaldırma Kap.(kg)
M10	10	18	25	45	25	110	230
M12	12	22	30	54	30	195	340
M14	12	22	30	54	30	205	460
M16	14	28	35	63	35	325	700
M18	14	28	35	63	35	335	850
M20	16	30	40	72	40	505	1200
M24	20	38	50	90	50	1020	1800
M30	24	45	60	108	65	1850	3600
M36	28	55	70	126	75	2700	5100
M42	32	65	80	135	85	4030	7000
M56	42	78	100	184	110	8800	11500
M64	48	90	110	206	120	12400	16500

FIRDÖNDÜLÜ MAPA



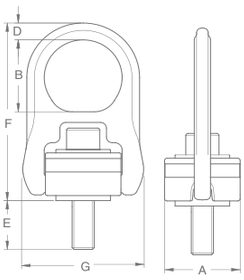


Çap	WLL(kg)	Ana Teknik Parametreler (mm)							Ağırlık
		A	B	C	D	E	F	G	
M10	500	2B.6	39.0	31.8	7.90	19.0	85.8	36.0	0.27
M12	1050	35.0	67.0	58.0	12.7	19.1	149.8	60.0	1.20
M16	1200	35.0	67.0	58.0	12.7	31.8	149.8	60.0	1.20
M20	1900	40.0	78.3	67.0	19.1	38.1	178.7	70.0	2.21
M24	2150	40.0	78.3	67.0	19,1	38.1	178.7	70.0	2.21
M30	5000	51.6	93.1	95.0	22,2	50.0	227,4	80.0	3.86
M36	8000	51.6	93.1	95.0	22,2	54.0	227,4	80.0	3.86
M42	10000	65.0	103.7	118	25.0	63.0	265.8	93.0	6.08

KALIP ELEMANLARI

DÖNER MAPA



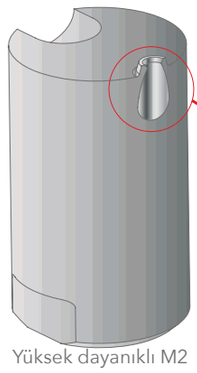


Model	Kaldırma Kapasitesi	Civata Boyutu	Ölçüler(mm)					
			E	A	B	D	F	G
8-203-004	500 Kg	M8x1.25x50	17.0	40	41	9	102	65
8-203-005	550 Kg	M10x1.50x45	11.0	40	41	9	102	65
8-203-005L	550 Kg	M10x1.50x60	26.0	40	41	9	102	65
8-203-010	1300 Kg	M12x1.75x60	15.0	65	64	15	158	105
8-203-010L	1300 Kg	M12x1.75x75	30.0	65	64	15	158	105
8-203-019	2400 Kg	M16x2.00x65	20.0	65	64	15	158	105
8-203-019L	2400 Kg	M16x2.00x80	35.0	65	64	15	158	105
8-203-021	2700 Kg	M20x2.50x70	25.0	65	64	15	158	105
8-203-021L	2700 Kg	M20x2.50x90	45.0	65	64	15	158	105
8-203-030	3750 Kg	M20x2.50x80	25.0	85	79	19	204	134
8-203-030L	3750 Kg	M20x2.50x100	45.0	85	79	19	204	134
8-203-042	5250 Kg	M24x3.00x80	26.0	85	79	19	204	134
8-203-042L	5250 Kg	M24x3.00x110	56.0	85	79	19	204	134
8-203-070	8750 Kg	M30x3.50x140	81.0	100	100	25	241	160
8-203-110	13750 Kg	M36x4.00x160	76.0	120	111	30	286	194
8-203-125	15600 Kg	M42x4.50x180	95.0	120	111	30	286	220
8-203-135	16900 Kg	M48x5.00x190	105.0	120	111	30	286	220
8-203-155	19400 Kg	M56x5.50x180	94.0	138	109	34	308	241
8-203-223	27900 Kg	M64x6.00x190	98.0	138	100	38	312	241
8-203-315	39400 Kg	M72x6.00x240	131.0	166	127	45	377	300

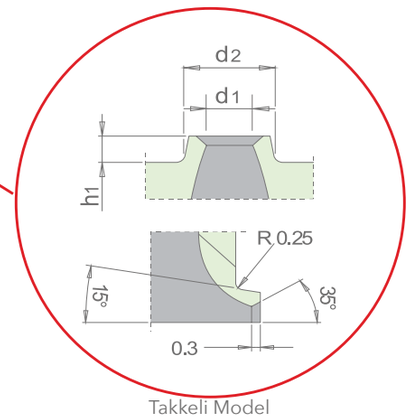
YUVARLAK TİP MUZ YOLLUK SİSTEMİ



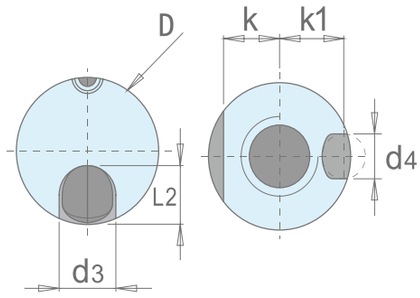
• Malzeme : 1.3343

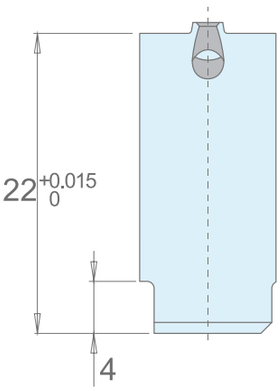


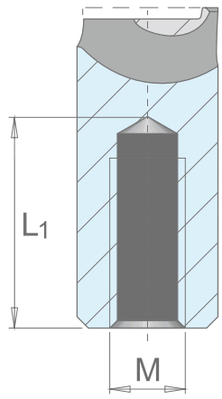
Yüksek dayanıklı M2



Takkeli Model







Takkeli modelleri belirtir.

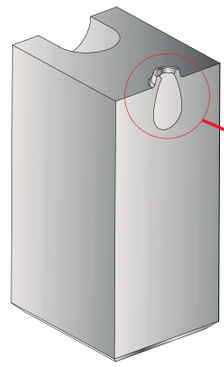
Sip. No.	D	k	d1	d2	d3	d4	k1	h1	L1	L2	M
HGR0806S2	8	6	0.6	1.9	3	-	-	0.6	16	3.25	4
HGR0808S2			0.8	2.1							
HGR1008S2	10	8	0.8	2.2	4	3	4.6	0.8	15	4	5
HGR1010S2			1.0	2.3							
HGR1012S2			1.2	2.6							
HGR1014S2			1.4	2.7							
HGR1016S2			1.6	3.0							
HGR1208S2	12	10	0.8	2.1	5	4	5.4	0.8	14	5	5
HGR1210S2			1.0	2.3							
HGR1212S2			1.2	2.6							
HGR1214S2			1.4	2.7							
HGR1216S2			1.6	3.0							
HGR1218S2			1.8	3.1							
HGR1220S2			2.0	3.4							
HGR1412S2	14	12	1.2	2.5	6	4	6.4	0.8	13	6	6
HGR1414S2			1.4	2.7							
HGR1416S2			1.6	3.0							
HGR1418S2			1.8	3.1							
HGR1420S2			2.0	3.4							
HGR1422S2			2.2	3.5							
HGR1424S2			2.4	3.8							
HGR1428S2			2.8	4.2							

KALIP ELEMANLARI

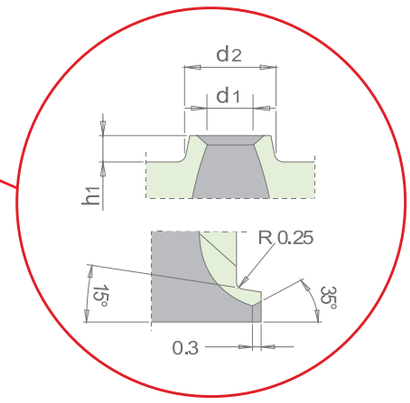
KARE TİP MUZ YOLLUK SİSTEMİ



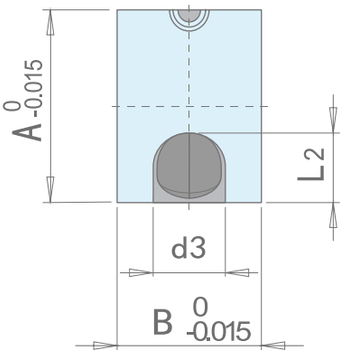
• Malzeme : 1.3343

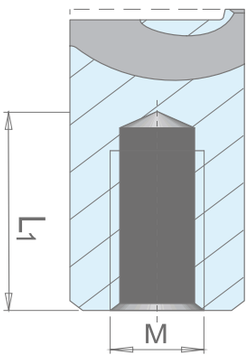


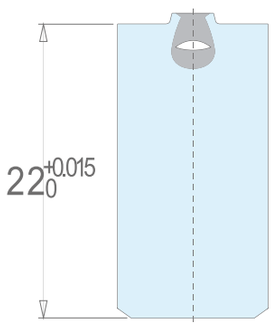
Yüksek dayanıklı M2



Takkeli Model







Takkeli modelleri belirtir.

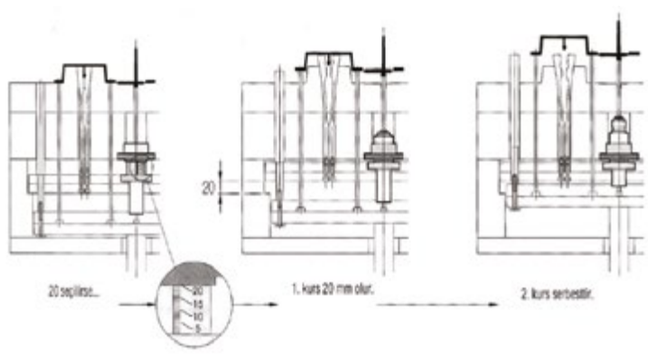
Sip. No.	A	B	d1	d2	d3	h1	L1	L2	M
HGS0806S2/S1	8	6	0.6	1.9	3	0.6	16	3.25	4
HGS0B0BS2/S1			0.8	2.1					
HGS1008S2/S1	10	8	0.8	2.2	4	0.8	15	4	5
HGS1010S2/S1			1.0	2.3					
HGS1012S2/S1			1.2	2.6					
HGS1014S2/S1			1.4	2.7					
HGS1016S2/S1			1.6	3.0					
HGS1208S2/S1	12	10	0.8	2.1	5	0.8	14	5	5
HGS1210S2/S1			1.0	2.3					
HGS1212S2/S1			1.2	2.6					
HGS1214S2/S1			1.4	2.7					
HGS1216S2/S1			1.6	3.0					
HGS1218S2/S1			1.8	3.1					
HGS1220S2/S1			2.0	3.4					
HGS1412S2/S1	14	12	1.2	2.5	6	0.8	13	6	6
HGS1414S2/S1			1.4	2.7					
HGS1416S2/S1			1.6	3.0					
HGS1418S2/S1			1.8	3.1					
HGS1420S2/S1			2.0	3.4					
HGS1422S2/S1			2.2	3.5					
HGS1424S2/S1			2.4	3.8					
HGS1428S2/S1			2.8	4.2					

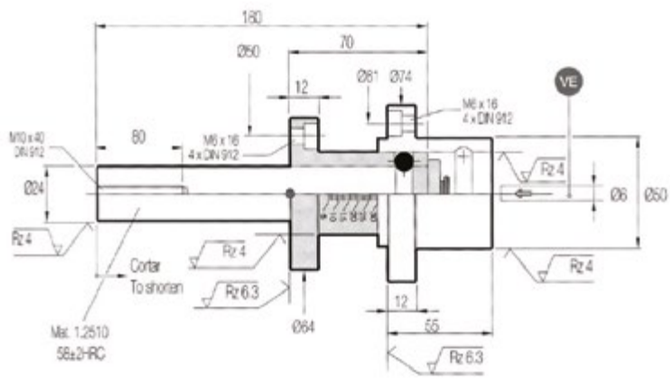
ÇİFT PLAKALI İTİCİ SİSTEM (DE)

DE 243648



• Çift Plakalı İtici Sistem: Bu ünite önceden belirlenen iki adımlı haraketi gerçekleştirir. Esnek iç maçalı kalıpla kademeli itmeyi elde etmek için çok kullanışlıdır.
• Önemli Montaj ölçülerini belirlemek için ilk kursu seçmede 0 - 30 mm cetvelini kullanınız.
• Malzeme: 1.7264 Sertleştirilmiş 52 ± 2HRC



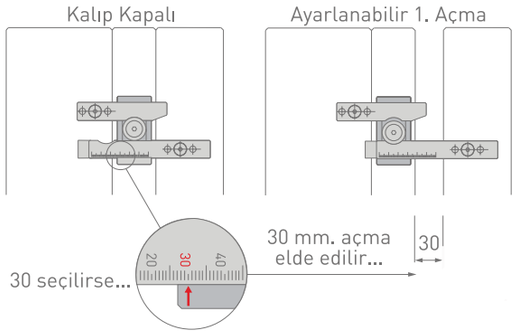


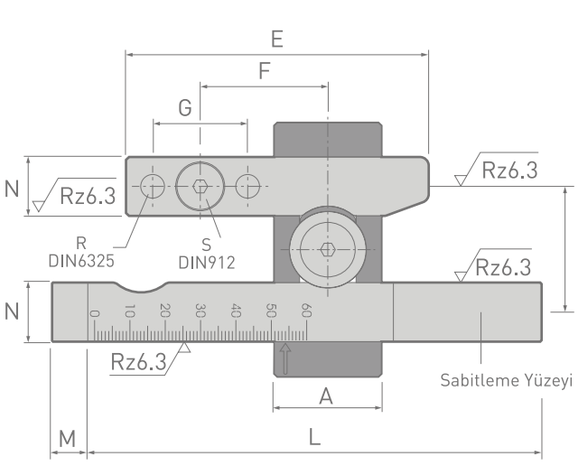
KALIP ELEMANLARI

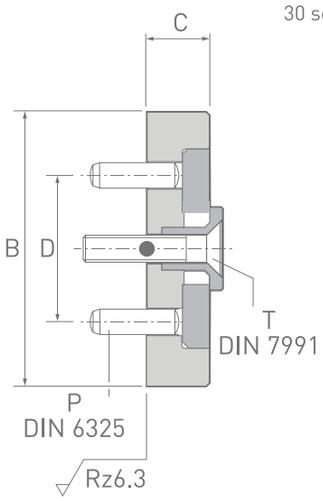
KADEMELİ AÇMA ÜNİTESİ (GS)

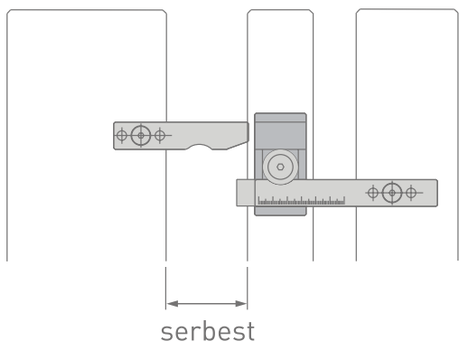


- Malzeme: 0503 Sertleştirilmiş 55±3HRC [Sürtünen Bölge)
- Kademeli Açma Ünitesi: İki adımlı kalıplar için tasarlanmıştır. Cetvel ile ilk açma değeri belirlenebilir.
- Plakaların açılma önceliqi ünitenin montaj yönüne bağlıdır.
- Önemli: İstenen kursu seçtikten sonra cetveli ölçeksiz kısmından sabitleyiniz.







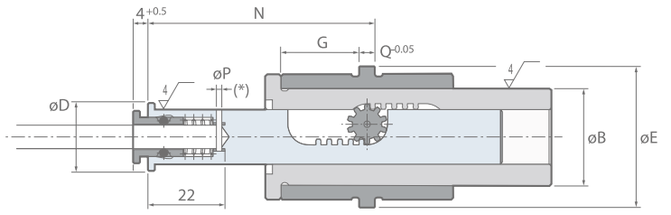


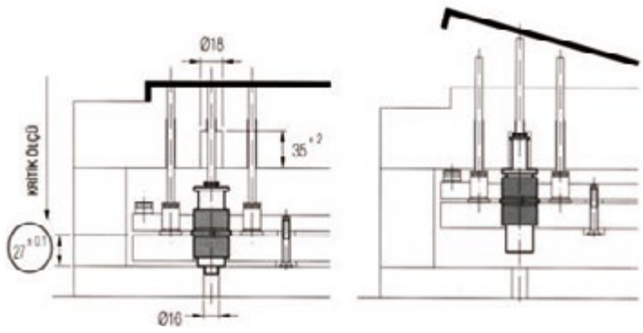
Sip. No.	A	B	C	D	E	F	G	H	L	M	N	P (x2)	R (x4)	S (x2)	T	Esc. Sca
GS.226616	22	66	16	38	75	30	25	32	105	10	15	6x20	6x30	M6x30	M6x35	40
GS.368619	36	86	19	46	102	43	32	42,7	153	12	20	8x24	8x36	M8x35	M8x40	60
GS.421024	42	106	24	56	124	51	40	50,2	190	15	24,5	10x30	10x40	M10x40	M10x45	80

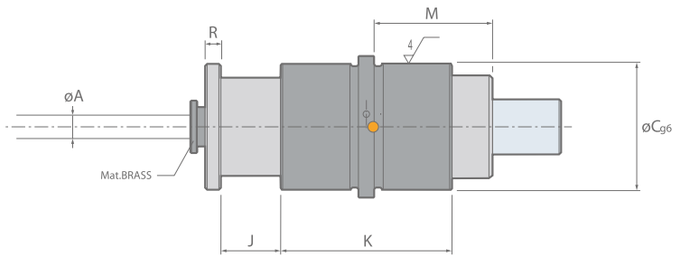
İTİCİ HIZLANDIRICI (AE)



- Malzeme : 7242 Sertleştirilmiş 52 / 54 HRC
- İtici Hızlandırıcı : Kalıp içinde istenen iticinin kursunu arttırır. Silindirik şekli nedeni ile montajı kolaydır. Tüm kalıplara uygulanabilir.





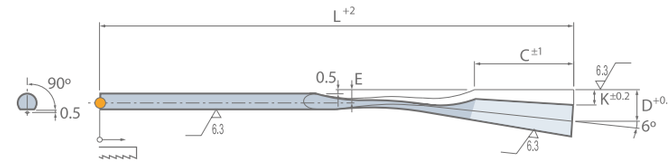


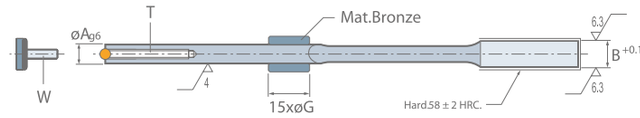
Sip. No.	A	B	C	D	E	F	G	J	K	L	M	N	P	Q	R
AE.031620	3	16	20	12.5	22	13	14	8	32	22	17	37		4	3
AE.041620	4	16	20	12.5	22	13	14	8	32	22	17	37		4	3
AE.052430	5	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.062430	6	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.082430	8	24	30	17	34	17	20	15	44	36	27	57	2	4	3
AE.103036	10	30	36	21.5	40	21	28	20	62	46	34	78	2	6	4
AE.123036	12	30	36	21.5	40	21	28	20	62	46	34	78	2	6	4

PLASTİK KALIBI STANDART ÜRÜNLER

ESNEK İÇ MAÇA (PW)

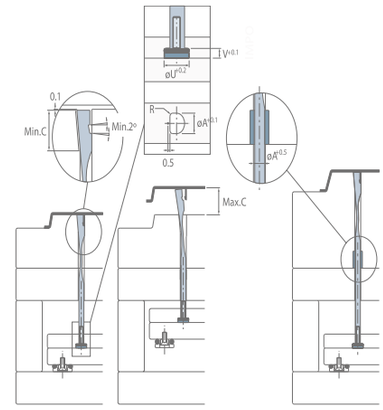






- Esnek İç Maça : Yay çeliğinden imal edilmiştir. küçük tırnakların çıkarılmasında kullanılır. Diğer iticiler gibi itici plakasıyla birlikte çalışır
- Malzeme : 8159 Templado 45 ± 3 HRC

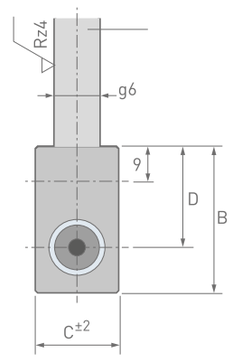
Sip. No.	A	B	C	D	E	G	K	L	M	N	R	T	U	V	W	CS
PW.060622	6	6.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16(DIN7991)	-
PW.060630	6	6.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16(DIN7991)	•
PW.060822	6	8.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16(DIN7991)	-
PW.060830	6	8.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16(DIN7991)	•
PW.080825	8	8.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16(DIN7984)	-
PW.081025	8	10.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16(DIN7984)	-
PW.081030	8	10.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16(DIN7984)	•
PW.081225	8	12.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16iDIN7984)	-
PW.081230	8	12.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16(DIN7984)	•
PW.101430	10	14.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•
PW.101630	10	16.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•
PW.101830	10	18.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•

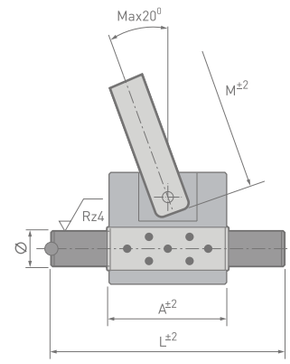


İÇ MAÇA GÖVDESİ (SD)



- Malzeme: 1.3212 = 1080 N/mm²
- İç Maça Gövdesi: Farklı açılarda itme gerektiren iç hareketlerde kullanılır. Grafitli bronz burç çalışmayı kolaylaştırır.





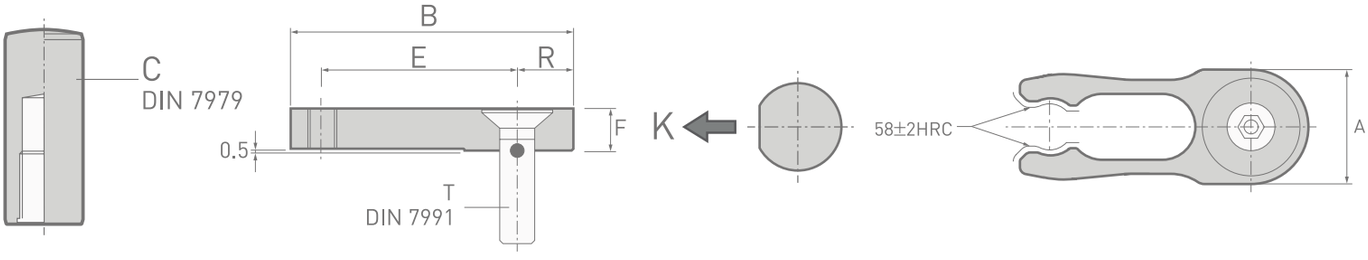
Sip. No.	A	B	C	D	L	M	0
SD. 3220 GR	32	37	20	27	80	180	10
SD. 3824 GR	38	40	24	28	80	210	12
SD. 4528 GR	45	44	28	30	100	250	16

MAÇA TUTUCU (RC)



- Malzeme: 8159 Sertleştirilmiş 45±3HRC
- Maça Tutucu : K Değeri tutucudan kurtulmak için gereken yaklaşık yük değeridir.

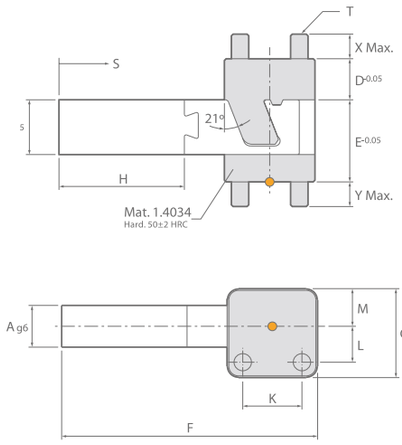
Sip. No.	A	B	C	E	F	G	H	R	T	K Kg.
RC.123006	12	30	6x20	21	5	4	16	6	M5x16	4
RC.164008	16	40	8x20	28	6	5	15	8	M6x25	6
RC.205010	20	50	10x24	34	8	6	17	10	M8x30	12
RC.246012	24	60	12x32	42	10	7	23	12	M10Ox40	18
RC.328012	32	80	16x40	56	12	9	27	16	M12x50	25
RC.328016	32	80	16x40	56	16	9	25	16	M12x50	32

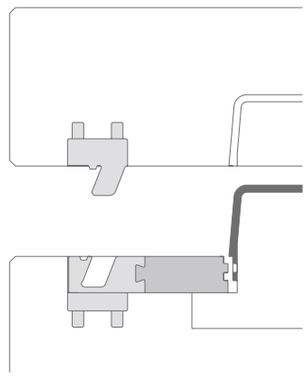


PLASTİK KALIBI STANDART ÜRÜNLER

KIZAKLI MAÇA (SU)







• Malzeme : 1.2344

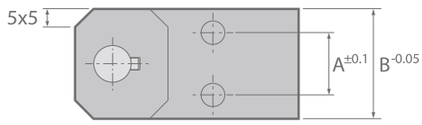
Sip. No.	A	B	C	D	E	F	H	K	L	M	R	s	T	X	y
SU.081220	8.2	12	20	10	18	60	32	12.5	8.25	8	3.75	3	M4	7	8
SU.121626	12.2	16	26	12	24	73.5	36	17	10.5	11	4.5	4	MS	9	7
SU.162032	16.2	20	32	16	30	86.5	40	22	13	14	5	5	M6	10	11

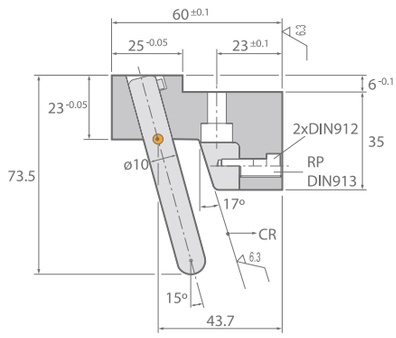
STANDART MAÇA KILAVUZU (CG)



• Malzeme: 1.2312
• İşlemiş açılı pim deliği ve ayarlanabilir maça bloğundan oluşur
• Dıştaki 2 vida dayama bloğunu sabitler, ortadaki vida ise pozisyonu belirler.

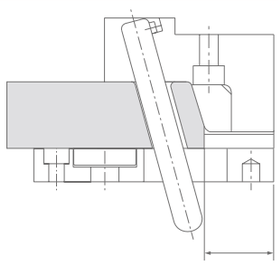
Sip. No.	A	B	CR(N)	RP	Includes
CG.603075	17	30	180.000	081015	GI.010075
CG.604075	22	40	320.000	101015	GI.010075

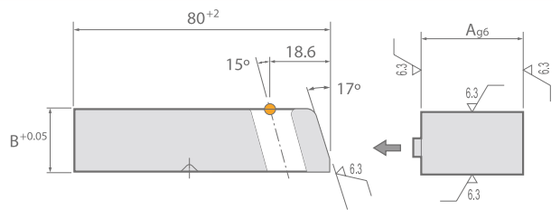




MAÇA KIZAĞI (CA)







• Malzeme: 1.2344
• Değiştirilebilir ve alıştırması yapılmıştır tek gereken parça formunun işlenmesidir
• Dikdörtgen formu nedeni ile işlenmesi basittir.

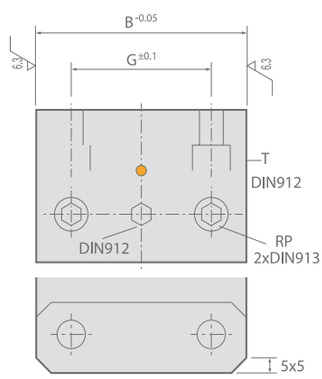
Sip. No.	A	B
CA.322080	32	20
CA.322480	32	24
CA.422080	42	20
CA.422480	42	24

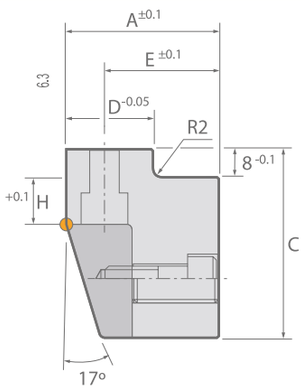
AYARLANABİLİR MAÇA DAYAMASI (CR)



• Malzeme: 1.2312
• Kalıp kapalı iken maça kızağını ayarlama imkanı sağlar.
• Dıştaki 2 vida dayama bloğunu sabitler, ortadaki vida ise pozisyon belirler.

Sip. No.	A	B	C	D	E	G	H	T	RP	CR(N)
CR.403840	40	38	40	25	30	22	12	M8x30	101020	320.000
CR.454849	45	48	49	28	35	28	16	M10x35	121025	480.000
CR.526052	52	60	52	32	40	35	16	M10x35	141030	750.000
CR.526852	52	68	52	32	40	45	16	M10x35	141030	750.000
CR.527556	52	75	56	32	40	so	16	M10x35	141030	750.000



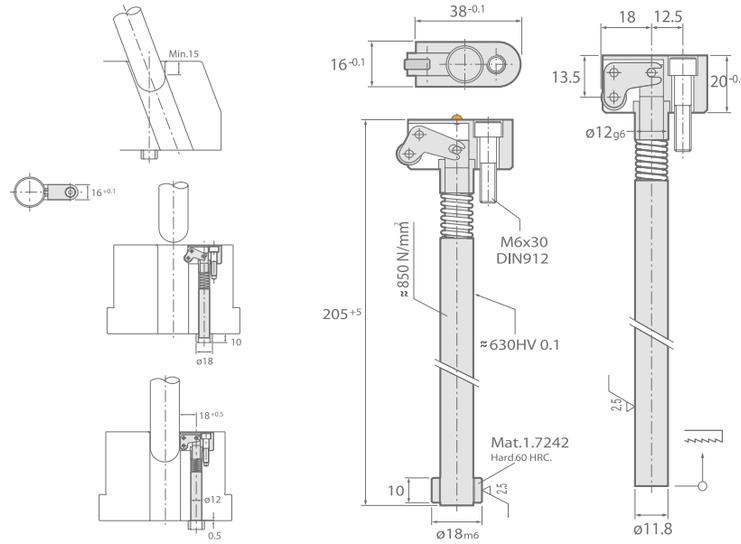


PLASTİK KALIBI STANDART ÜRÜNLER

OTOMATİK MAÇA TUTUCU (RA)

- Malzeme : 1.2510
- Açılı pimle çalışan büyük maça
- Büyük yüklere gerek duymada çalışır.

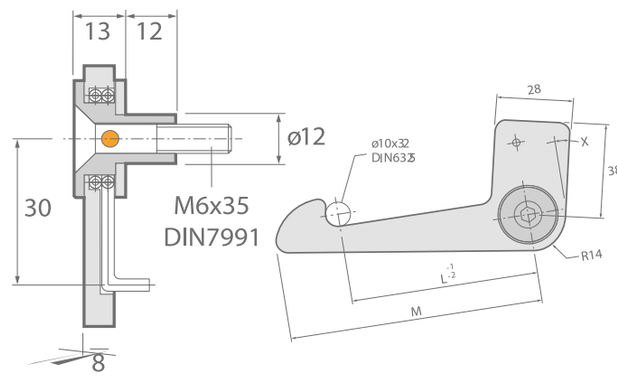




EMNİYET KİLİDİ 75 (BS)



- Malzeme : 1.0503
- Enjeksiyon makinasına bağlı olmayan kalıbı kapalı tutar.
- Kalıp enjeksiyon makinasına bağlanırken kilit otomatik olarak açılır.

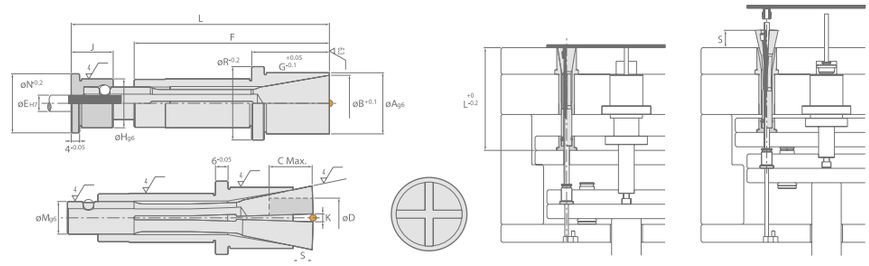


Sip. No.	L	M	N	X
BS.050075	50	75	8.7	15°
BS.075100	75	100	7	12°
BS.100125	100	125	6	10°
BS.125150	125	150	4,8	8°

4'LÜ OTOMATİK MAÇA (PE)



- Malzeme : 1.2101
- Esnek maça üzerinde 4 farklı hareket imkanı sağlar.
- Montaj alanı minimum düzeyde olup gerektirdiği alan bir itici kadardır.
- Özel form işçiliğinin dışında frezeleme, taşlama veya sertleştirme gibi işlemler gerektirmez.
- Kalıp ayrım yüzeyine 90° yuva açılır.

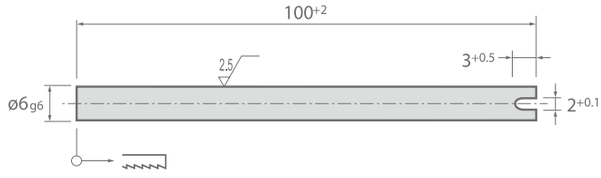


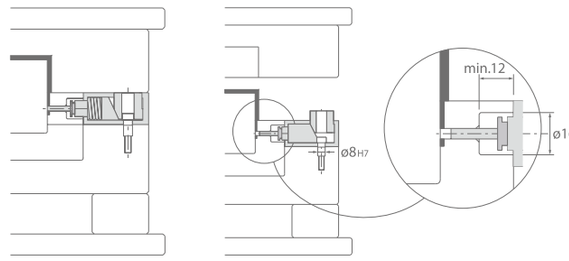
Sip. No.	A	B	C	D	E	F	G	H	J	K	L	M	N	R	s
PE.201208	20	18	12	8	6	63	27	18	17	2	88	12	22	26	8
PE.302214	30	27.5	22	14	8	93	37	24	20	2.5	122.5	16	29	36	9.5
PE.403220	40	37	32	20	12	117	51	34	25	4	158	22	39	46	16

DELİK MAÇASI PİMİ (VF)



- Malzeme: 1.2510
- İstenilen şekli işlemek için hazırdır.



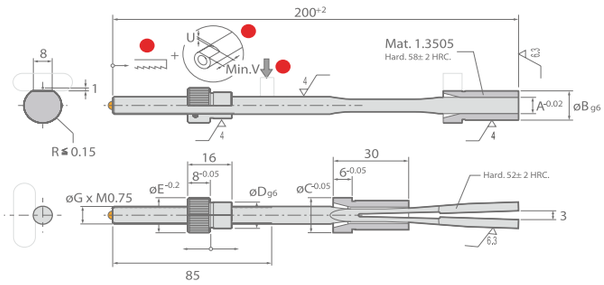


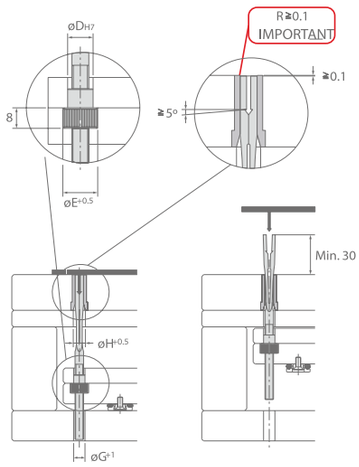
PLASTİK KALIBI STANDART ÜRÜNLER

2'Lİ ESNEK İÇ MAÇA (ED)



- Malzeme : 1.2101
- Küçük tırnaklar için oldukça kullanışlıdır.
- Alıştırması yapılmış ve boy ayarı kolaylıkla yapılır.





Sip. No.	A	B	C	D	E	G	H	u	V
ED.068200	6	12	14	10	14	6	10	0.5	10
ED.088200	8	14	16	12	16	8	12	0.5	10
ED.108200	10	16	18	14	18	8	14	0.5	15
ED.128200	12	16	18	16	20	8	15	0.5	15

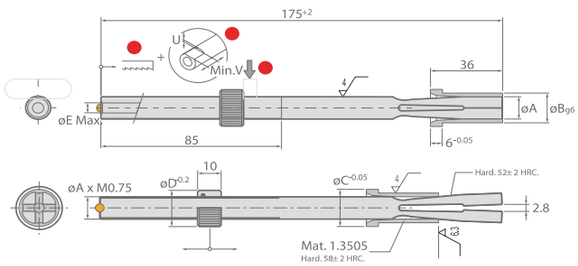
4'LÜ ESNEK İÇ MAÇA (EE)

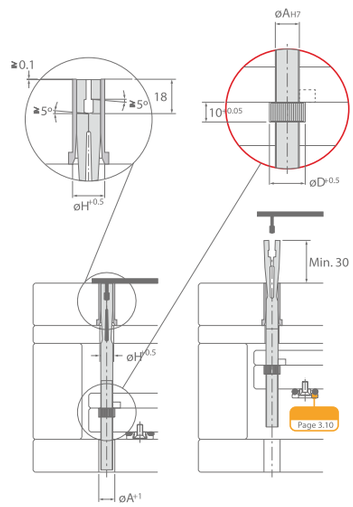


: 1.2101

ıaklar için oldukça
ır.

ı yapılmış ve boy ayarı
yapılır.

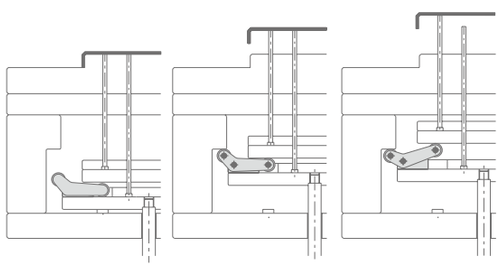


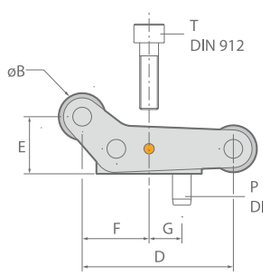


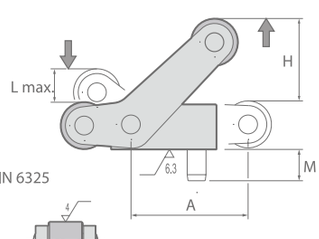
. No.	A	B	C	D	E	H	u	V
060175	6	10	12	12	-	9	0.5	10
082175	8	12	14	14	2	11	0.5	10
103175	10	14	16	16	3	13	0.5	15
124175	12	16	18	18	4	15	0.5	15
168175	16	20	22	22	8	19	1	20

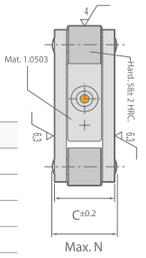
PLAKA HIZLANDIRICI (EP)











- Malzeme : 1.2510
- Bu ürün normal itici kursuna ilave olarak 2. plakaya fazladan bir hareket kazandırır.
- 2'1i veya 4'1ü kullanılır.

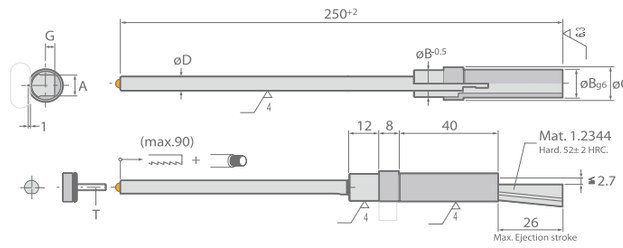
Sip. No.	A	B	C	D	E	F	G	H	L	M	N	p	T	Max İtme
EP.200813	20	8	13.2	25.8	9.4	11.4	6	13.6	5.5	5	15	02.Sx10	M3x12	125Kg
EP.251016	25	10	16	32.3	11.8	14.3	7	17	6.8	6	18.5	03x12	M4x16	250Kg
EP.371522	37.5	15	22	48.5	17.7	21.5	10.5	25.5	10.2	8	25	04x16	M6x25	350Kg
EP.502030	50	20	29.6	64.6	23.6	28.6	14	34	13.6	10	34	05x20	M8x30	800Kg

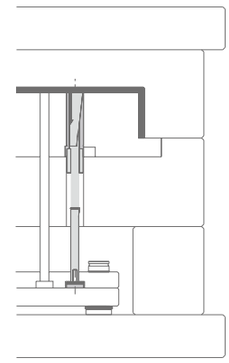
PLASTİK KALIBI STANDART ÜRÜNLER

STANDART MEKANİK MAÇA (PS)



- Malzeme : 1.4034
- Küçük tırnakların çıkarılması için oldukça kullanışlıdır.
- Alıştırması yapılmış ve montaj kolaylıkla yapılır.
- İtici plakaya dik hareket etmesi sebebi ile montaj için gereken alan çok küçüktür.



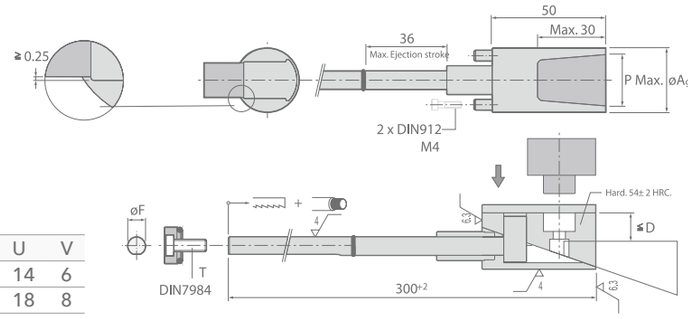


Sip. No.	A	B	C	D	G	R	T	U	V
PS.062250	6.2	10	12	6	3.4	1.25	M4x16 (DIN7991)	12	5
PS.082250	8.2	12	14	6	4	1.25	M4x16 (DIN7991)	12	5
PS.102250	10.2	14	16	8	4.2	2	MSx16 (DIN7984)	14	6
PS.122250	12.2	16	18	8	4.2	2	MSx16 (DIN7984)	14	6

BURÇLU MAÇA (PC)



- Malzeme : 1.4034
- Minimum itici plaka kursundan küçük tırnaklar (16 mm'e kadar) için kullanılır.
- Montaj kolaylığı için gövde ve kızağın alıştırması yapılmıştır, detay işlemleri gerektirir.
- Maçanın yataklaması diktir.

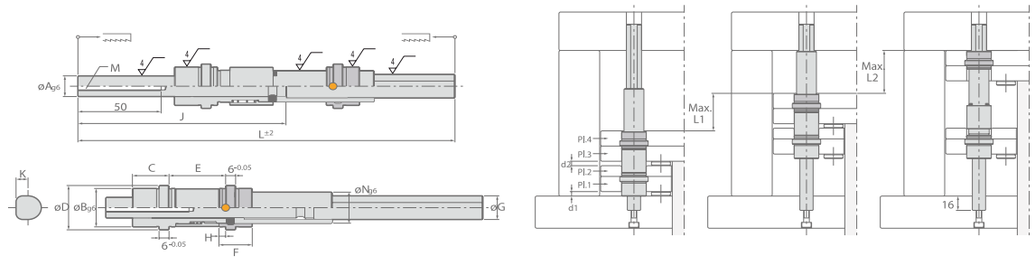


Sip. No.	A	D	F	J	K	P	R	T	U	V
PC.285016	28	12	8	14	20	15.5	2	M5x16	14	6
PC.365022	36	16	10	15	27.5	21.5	2.5	M6x16	18	8

ÇİFT PLAKA İTİCİ SİSTEMİ (DX)



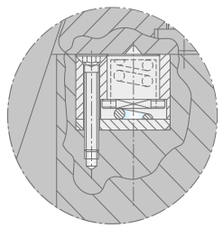
- Malzeme : 1.7264

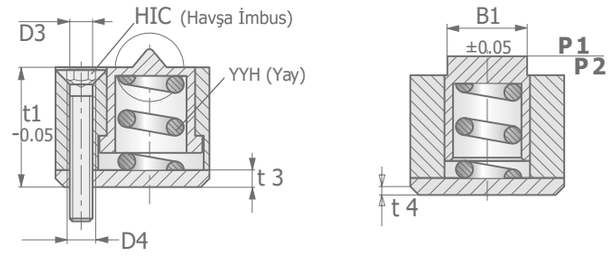


Sip. No.	A	B	C	D	E	F	G	H	J	K	L	M	N	L1	L2
DX.142622	14	26	22	30	34	20	16	4	125	7.2	243	M6	21	42	48
DX.163027	16	30	27	34	44	23	18	6	152	8	314	MB	24	54	80

MAÇA KIZAK TUTUCU YAYLI ÜNİTE



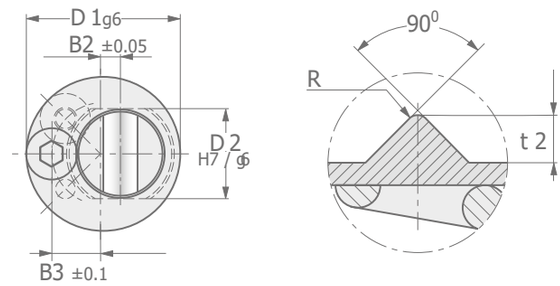




- Enjeksiyon kalıplarında maça sistemlerinde slayt tutucu yuvarlak maça tutucular tespit pimsiz çalışır, maça tutucu olmadan da maçayı kaldırabilir. yuvarlak şekli montajı kolaylaştırır.
- Maksimum sıcaklık :100°C Malzeme: 1.2767

Sip. No.	D1	B1	B2	B3	t1	t2	t3
MTY.13	13	6.6	1.4	4.3	10	1.0	1.6
MTY.18	18	9.6	2.0	6.0	14	1.8	2.0
MTY.27	27	14.4	3.0	9.0	21	2.8	3.0

t4	D2	D3	D4	R	P1	P2	HIC
0.35	7	2.2	M3	0.35	28 Nw	34 Nw	M2-16
0.50	10	3.2	M4	0.50	38 Nw	42 Nw	M3-50
0.50	15	4.3	MS	0.75	38 Nw	92 Nw	M4-25

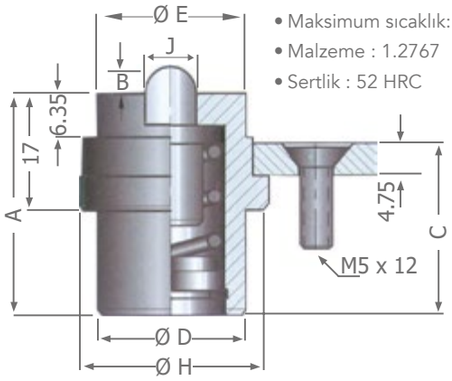


- Kolay kullanım yüklemeye göre dizayn edilmiştir. Maça sistemi bağımsız kendi kendine çalışır.

MAÇA KIZAK TUTUCULAR

MAÇA KIZAK TUTUCU PİMLİ ÜNİTE





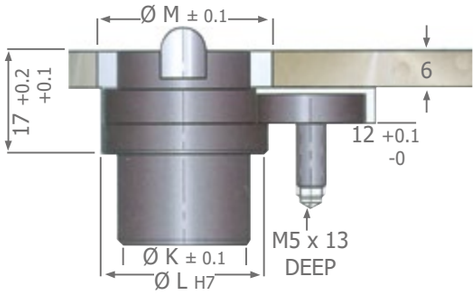
- Maksimum sıcaklık: 120°c
- Malzeme : 1.2767
- Sertlik : 52 HRC

- Küçük, yuvarlak, montajı kolay, bağımsız, temas bağlantılı kolay kullanım, yüklemeye göre dizayn edilmiştir. 3 mm tutma oranı ile tiplere göre 48 / 88 / 176 Nw kuvvet gereksinimleri sunar. Tespit pimi maçanın içine tam olarak kilitlenir. kalıp kapama işlemi yaparken boşa çıkana kadar, tutucu açıldığında hızasızlık olduğunda dahi pim içeri girer.

Sip. No.	A	B	C	D	E	F
MTYP.100	27.43	1.83	20.2	15.75	16	9.52
MTYP.200	33.53	3.07	26.29	18.8	19	10.67
MTYP.400	32	3.78	24.76	22.1	22	11.86

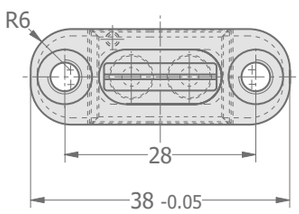
H	J	V	K	L	M	N	Kgf.
22	4.8	2.3	15.87	22	24	17	4.5
25	6.35	3.9	19.05	25	27	18.2	9
28	7.92	4.9	22.23	28	30	19.4	18

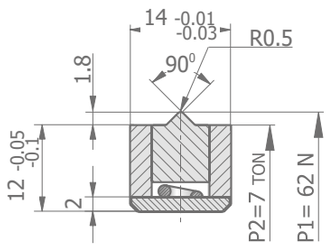
- Sağlam boyut olarak küçük ve yuvarlak oluşu kalıba montaj kolaylığı sağlar.

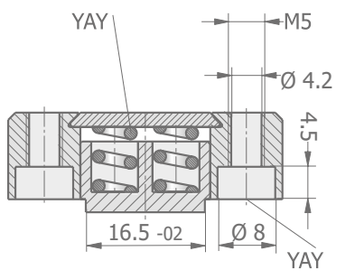


MAÇA TUTUCU TİP - 1

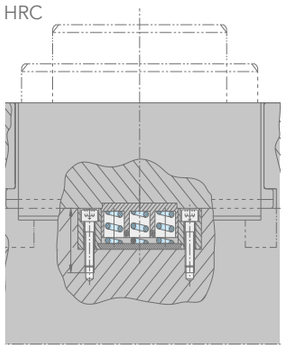


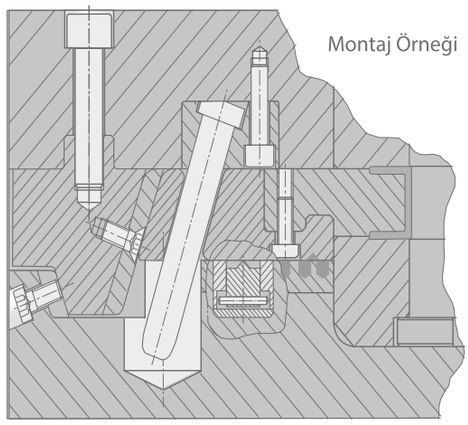






- Maça Sistemlerinde Temas Bağlantılı Hat
- Maksimum sıcaklık : 100°C
- Malzeme : 1.2343
- Sertlik : 54±2 HRC

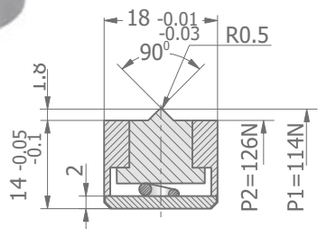


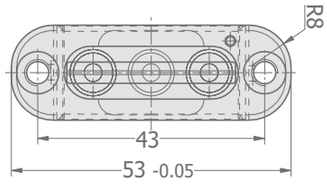


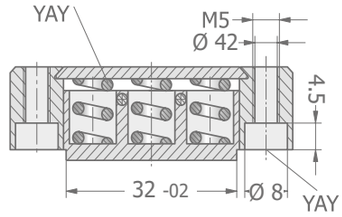
MAÇA TUTUCU TİP - 2



- Maça Sisteminde Tutucu Olmadan Maçayı Kaldırır, Bağımsız Ünite
- Maksimum sıcaklık : 100°C
- Malzeme : 1.2343
- Sertlik : 54±2 HRC



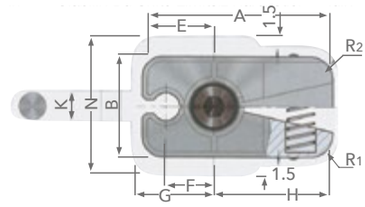


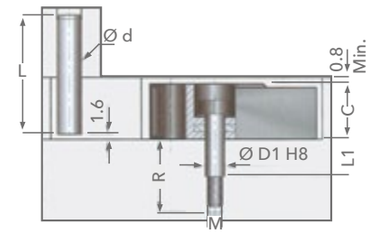


MAÇA KIZAK TUTUCULAR

MAÇA TUTUCU PİMLİ





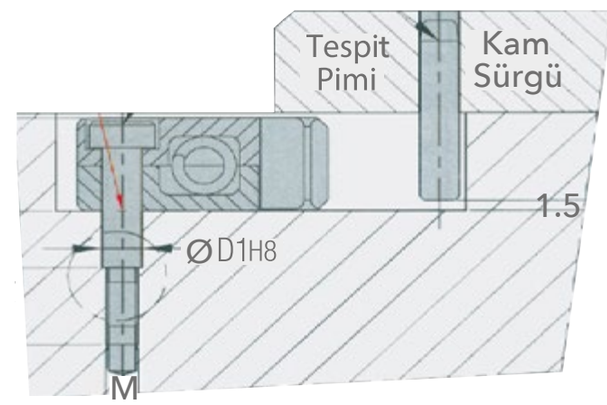


• Hassas - Kilitlemeli ve Hizalamalı, Pimli

Sip. No.	A	B	C	E	F	G
MTP 10M	38	19	16	16	9.1	19
MTP 20M	54	32	20	21	12.7	24
MTP 40M	86	45	30	53	20.3	36

H	N	K	D1	L1	R	R1	R2	M
26	25	8	6	6	15.5	8	5	M5
36	36	10	8	8.5	20.5	10	6	M6
56	56	12	10	10	25	13	10	M8

Maça Blok 10 (Kgf.)
20 (Kgf.)
40 (Kgf.)



• K Değeri : Maça bloğunun, maça tutucudan kurtulması için gereken max. yük değeridir.

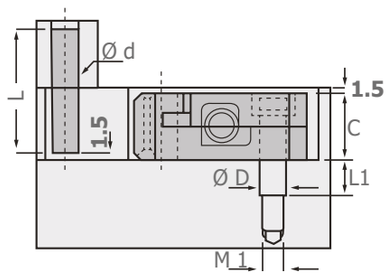
• Maça açılırken, pim tutucunun içine girer. Küçük çaplı yanlış hatalar (hizasızlıklar) olsa bile işlem devam eder.

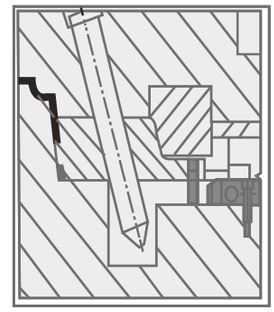
MONTAJ TALİMATI :

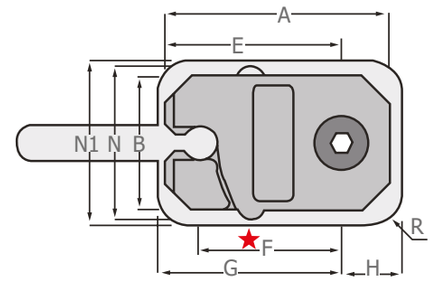
1. Maça tutucunun gövdesini tekrar yuvadan çıkarmak için kalıp üzerinde çıkarıcı pim deliği açmak gereklidir.
2. Maça tutucu üzerindeki pimin merkezi ile montaj esnasında maça tutucu üzerindeki merkezi arasındaki mesafe hassastır (F) iyi hesaplanıp ayarlanmalıdır.
3. Kalıbınıza uygun olan (Maça Tutucu Pimli veya Maça Tutucu Kapalı Yaylı Pimli Tip) gerekli olan taşıma yükünün daha üzerinde bir kuvvette olan modeli tercih ediniz (Emniyet için önemlidir).

PİMLİ, KAPALI YAYLI TİP MAÇA TUTUCU

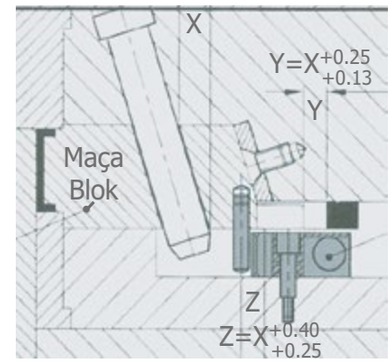








Montaj Örneği



• Hassas - kilitlemeli ve hizalamalı, pimli, yaylı tip maça tutucusu gövde maça civataları ile çıkamaz montaj esnasında bazı yedek delik veya boşluklara ihtiyaç olabilir. Bu ünite limitsiz hareketler içindir.

• Malzeme: 1.4118

• Sertlik · 55 - 62 HRC

Sip. No.	A	B	C	E	★F	N	G	H
MTPY.38	38	19	16	31.5	24.89	24	34.5	10
MTPY.54	54	32	20	43	34.93	36.5	46	14.5
MTPY.86	86	45	30	67	53.98	49.5	70	22.5

N1	R	D	L1	M1	d/L	Maça
25.5	8	6	8.5	M5x1	6x30	10 Kg.
38	10	8	10.5	M6x14	8x40	20 Kg.
51	12	10	17	M8x18	10x60	40 Kg.

• Tespit pimi 90 ile monte edilebilir, pimin yerleşimi ve maça bloğunun açılma yönü ile aynı olmalıdır. Kalıp kapanışında farklı bir değişiklik yoksa; sistemde bu ürün maça kilidi olarak kullanılabilir.

UYGULAMA:

• Maça tutucu açılırken pim tutucunun içine girer, küçük çaplı yanlış hatalamalar (hizasızlıklar) bile olsa işlem devam eder.

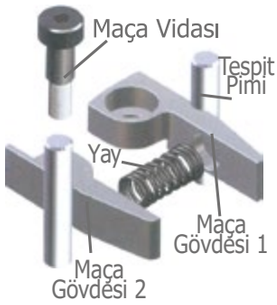
ÖNEMLİ:

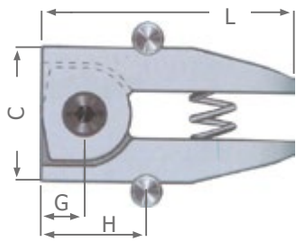
• Yıldızlı (F ölçüsü) önemlidir. Merkezinden olan mesafe ürünün civatasının merkezine kadar olması çok önemlidir. Tespit piminin maçaya tam sıkı olarak tutucunun içine kilitlenmesi gerekir, kalıp kapanma işleminde serbest kalana kadar verimli bir dizayn olarak uygulanmıştır.

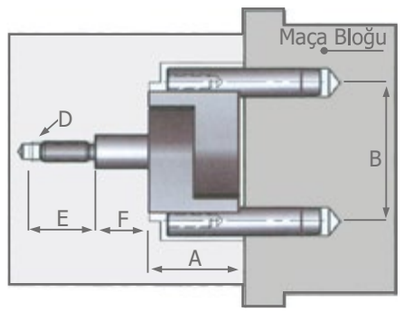
MAÇA KIZAK TUTUCULAR

MAÇA TUTUCU MADALLI









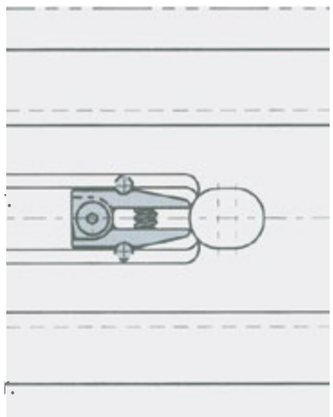
Sip. No.	A	B	C	E	F
MTM 1040	10	21.5	18	9.5	5.1
MTM 1243	12	25.5	22	11	6.1
MTM 1650	16	31.5	28	11	8.1

Sip. No.	G	H	L	D	Max. Tutma	Tespit Pimi
MTM 1040	7	17.5	40	M5		10
MTM 1243	7.5	18	43	M6	0 6-30	15
MTM 1650	9.5	20.5	50	M6		25

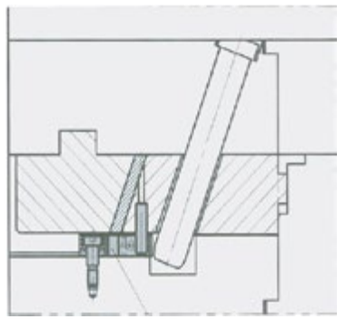
Maça Tutucu Mandalı:

- Deliklere eklenen maça civatası (F) çok derinden olmamalı. Maça gövdesikendini kilitledikten sonra düzgünce ve pürüssüzce çalışması gerekir. Bu yüzden civatayı çok sıkmayın. Tespit pimi maçanın üstündeyken, maça gövdesi kalıbın üstüne tutturulur. Ayrıca maça kaydırma mesajesi tam olarak hesaplanıp montajı yapılmalıdır.
- Malzeme : 1.2767
- Sertlik : 55 - 62 HRC
- Maksimum sıcaklık : 100°
- Özellikle alaşımlı malzemeli kalıplarda tercih edilebilir.

Tespit pim montajlı, dengeli/ hassas maça kilitleme ünitesi

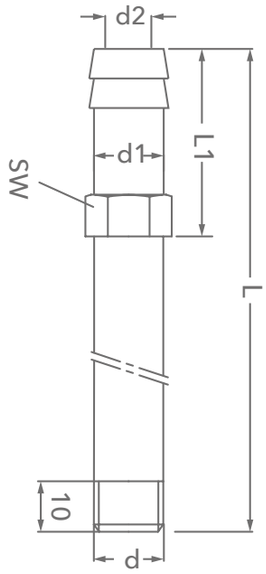


Montaj Örneği



HORTUM GİRİŞLİ REKORLAR





Valfsiz Sip. No.	d	d1	d2	L	L1	SW
SR ER M8	M8x1.25	12	7	40	28	13
SR ER M8-60	M8-60x1.25	12	7	60	28	13
SR ER M8-80	M8-80x1.25	12	7	80	28	13
SR ER M8-100	M8-100x1.25	12	7	100	28	13
SR ER M8-120	M8-120x1.25	12	7	120	28	13
SR ER M8-150	M8-150x1.25	12	7	150	28	13

Valfsiz Sip. No.	d	d1	d2	L	L1	SW
SR ER M10	M10x1.5	12	7	40	28	13
SR ER M10-60	M10-60x1.5	12	7	60	28	13
SR ER M10-80	M10-80x1.5	12	7	80	28	13
SR ER M10-100	M10-100x1.5	12	7	100	28	13
SR ER M10-120	M10-120x1.5	12	7	120	28	13
SR ER M10-150	M10-150x1.5	12	7	150	28	13

Valfsiz Sip. No.	d	d1	d2	L	L1	SW
SR ER M12	M12x1.75	12	7	40	28	13
SR ER M12-60	M12-60x1.75	12	7	60	28	13
SR ER M12-80	M12-80x1.75	12	7	80	28	13
SR ER M12-100	M12-100x1.75	12	7	100	28	13
SR ER M12-120	M12-120x1.75	12	7	120	28	13
SR ER M12-150	M12-150x1.75	12	7	150	28	13

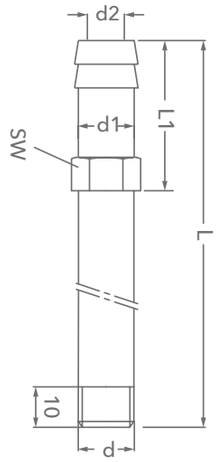
Valfsiz Sip. No.	d	d1	d2	L	L1	SW
SR ER M14	M14	12	7	40	28	14
SR ER M14-60	M14-60	12	7	60	28	14
SR ER M14-80	M14-80	12	7	80	28	14
SR ER M14-100	M14-100	12	7	100	28	14
SR ER M14-120	M14-120	12	7	120	28	14
SR ER M14-150	M14-150	12	7	150	28	14

Valfsiz Sip. No.	d	d1	d2	L	L1	SW
SR ER M16	M16	12	7	40	28	16
SR ER M16-60	M16-60	12	7	60	28	16
SR ER M16-80	M16-80	12	7	80	28	16
SR ER M16-1 00	M16-100	12	7	100	28	16
SR ER M16-120	M16-120	12	7	120	28	16
SR ER M16-150	M16-150	12	7	150	28	16

REKORLAR - SEPARATÖRLER

HORTUM GİRİŞLİ REKORLAR - SEPARATÖR





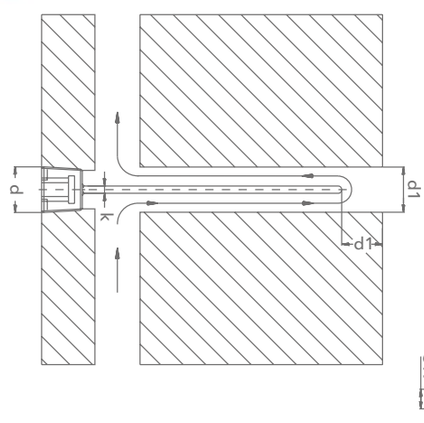
Valfsiz	d	d1	d2	L	L1	SW
Sip. No.						
SR ER 10	G 1/8"	12	7	40	28	13
SR ER 10-60	G 1/8"	12	7	60	28	13
SR ER 10-80	G 1/8"	12	7	80	28	13
SR ER 10-100	G 1/8"	12	7	100	28	13
SR ER 10-120	G 1/8"	12	7	120	28	13
SR ER 10-150	G 1/8"	12	7	150	28	13

Valfsiz	d	d1	d2	L	L1	SW
Sip. No.						
SR ER 13	G 1/4"	12	7	40	28	14
SR ER 13-60	G 1/4"	12	7	60	28	14
SR ER 13-80	G 1/4"	12	7	80	28	14
SR ER 13-100	G 1/4"	12	7	100	28	14
SRER13-120	G 1/4"	12	7	120	28	14
SRER13-150	G 1/4"	12	7	150	28	14

Valfsiz	d	d1	d2	L	L1	SW
Sip. No.						
SR ER 17	G 3/8"	12	7	40	28	17
SR ER 17-60	G 3/8"	12	7	60	28	17
SR ER 17-80	G 3/8"	12	7	80	28	17

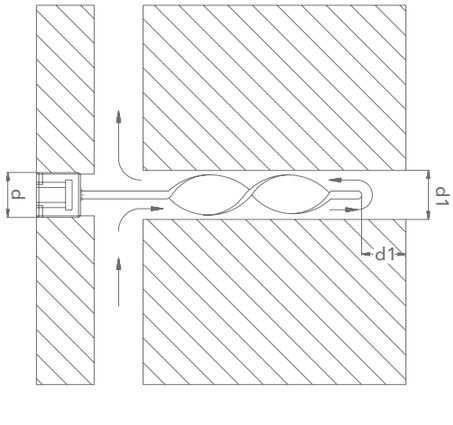
Valfsiz	d	d1	d2	L	L1	SW
Sip. No.						
SR ER 17-100	G 3/8"	12	7	100	28	17
SR ER 17-120	G 3/8"	12	7	120	28	17
SR ER 17-150	G 3/8"	12	7	150	28	17





Metrik	d	SW	d1	d2	L	L1	k
Sip. No.							
SEP M8.100	8x0.75	4	6	5.8	100	8	1.6
SEP M8.200	8x0.75	4	6	5.8	200	8	1.6
SEP M10.100	10x1.0	5	8	7.8	100	8	1.6
SEP M10.125	10x1.5	5	8	7.8	125	8	1.6
SEP M10.200	10x1.0	5	8	7.8	200	8	1.6
SEP M10.300	10x1.0	5	8	7.8	300	8	1.6
SEP M12.125	12x1.5	6	10	9.8	125	8	2.0
SEP M12.250	12x1.5	6	10	9.8	250	8	2.0
SEP M16.150	16x1.5	8	14	13.8	150	10	2.4
SEP M16.300	16x1.5	8	14	13.8	300	10	2.4
SEP M20.150	20x1.5	10	18	17.8	150	10	2.4
SEP M20.200	20x1.5	10	18	17.8	200	10	2.4
SEP M20.300	20x1.5	10	18	17.8	300	10	2.4
SEP M20.400	20x1.5	10	18	17.8	400	10	2.4
SEP M24.150	24x2.0	10	20	19.8	150	12	2.4
SEP M24.300	24x2.0	10	20	19.8	300	12	2.4

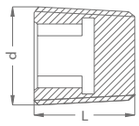


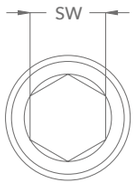


Metrik	d	SW	d1	d2	L	L1	L2	k
Sip. No.								
HSEP M8.100	8x0.75	4	6	5.8	100	50	8	1.6
HSEP M8.200	8x0.75	4	6	5.8	200	100	8	1.6
HSEP M8.300	8x0.75	4	6	5.8	300	150	8	1.6
HSEP M10.100	10x1.0	5	8	7.8	100	50	8	1.6
HSEP M10.100.1.5	10x1.5	5	8	7.8	100	50	8	1.6
HSEP M10.200	10x1.0	5	8	7.8	200	100	8	1.6
HSEP M10.300	10x1.0	5	8	7.8	300	150	8	1.6
HSEP M12.125	12x1.5	6	10	9.8	125	50	8	2.0
HSEP M12.250	12x1.5	6	10	9.8	250	100	8	2.0
HSEP M16.150	16x1.5	8	14	13.8	150	50	10	2.4
HSEP M16.300	16x1.5	8	14	13.8	300	100	10	2.4
HSEP M20.150	20x1.5	10	18	17.8	150	50	10	2.4
HSEP M20.200	20x1.5	10	18	17.8	200	100	10	2.4
HSEP M20.300	20x1.5	10	18	17.8	300	50	10	2.4
HSEP M20.400	20x1.5	10	18	17.8	400	100	10	2.4
HSEP M24.150	24x2.0	10	20	19.8	150	50	12	2.4
HSEP M24.300	24x2.0	10	20	19.8	300	100	12	2.4

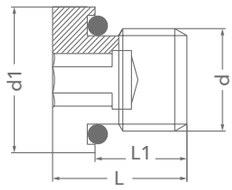
SEPARATÖR - TIKAÇ - REKORLAR

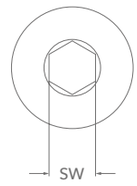
TIKAÇLAR - SEPARATÖR

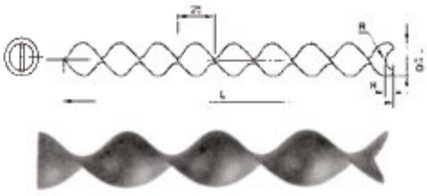


Sip. No.	d	L	SW
KTP 10	BSP 1/8"	8	5
KTP 13	BSP 1/4"	10	7
KTP 17	BSP 3/8"	10	8
KTP 21	BSP 1/2"	10	10
KTP 26	BSP 3/4"	12	12
KTP 33	BSP 1"	19	17
KTP42	BSP 1.1/4"	22	22
KTP48	BSP 1.1/2"	22	24

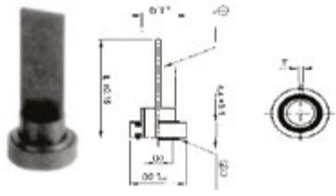





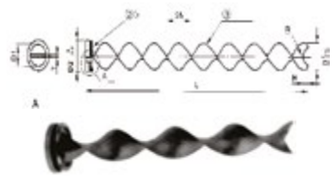
Sip. No.	d	d1	L	L1	SW
OSKTR M10	M10x1	14	10	7	5
OSKTR M12	M12x1.5	17	11	8	6
OSKTR M14	M14x1.5	19	12	9	8
OSKTR M16	M16x1.5	21	12	9.5	10
OSKTR M22	M22x1.5	27	13	11.5	14
OSKTR M24	M24x1.5	30	15	11.5	14



D1	D2	T	Ürün Sip. No.	Ürün D	L
6	15	1.2	GCT	8	25-30-35-40
8	18	1.5		10	
10	22	1.6		12	
13	25	2		16	
17	30	2		20	
22	35	2.4		25	



R	H	Sip. No.	D	L
2	2	GCB	8	96-196-296
2.5	2.5		10	
3	3		12	
4	4		16	
5	5		20	96-196-296-396
6	6		25	



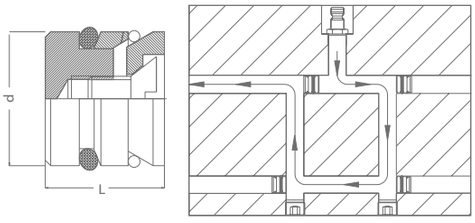
Montajda ürün montaj yuvasına rahat (0.2-0.5) boşlukla geçmelidir.

D1	D2	T	R	H	Ürün Sip. No.	Ürün D	L
8	15	1.5	2	2	GCA	8	100-200-300
10	18	1.8	2.5	2.5		10	
11	22	2	3	3		12	
15	25	3	4	4		16	
18	30	3	5	5		20	100-200-300-400
22	35	3.5	6	6		25	

VİTON ORİNGLİ TIKAÇ

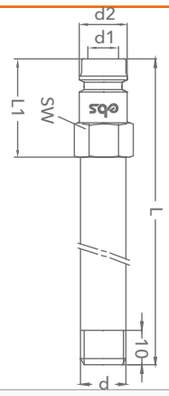


• Çalışma Sıcaklığı Maks. 200°C



Viton Oring Sip. No.	Nbr Oring Sip. No.	d	L
TKV-06	TK-06	6	10
TKV-08	TK-08	8	10
TKV-10	TK-10	10	10
TKV-12	TK-12	12	10
TKV-14	TK-14	14	12
TKV-16	TK-16	16	12
TKV-20	TK-20	20	12

OTOMATİK GİRİŞLİ REKORLAR (QUİCK)

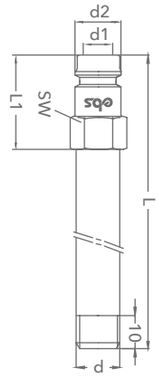
Valfsiz Sip. No.	d	d1	d2	SW	L	L1
590 ER 10	BSP 1/8"	9	13	14	29	10
590 ER 13	BSP 1/4"	9	13	14	29	10
590 ER 17	BSP 3/8"	9	13	17	29	10
590 ER 21	BSP 1/2"	9	13	21	29	10
590 ER M8	M8x1.25	9	13	14	29	10

Valfsiz Sip. No.	d	d1	d2	SW	L	L1
590 ER M10-1	M10x1.5	9	13	14	29	10
590 ER M10	M10x1.0	9	13	14	29	10
590 ER M12	M12x1.75	9	13	14	29	10
590 ER M14	M14x1.5	9	13	21	29	10
590 ER M16	M16x1.5	9	13	21	29	10
590 ER 10-60	BSP 1/8"	9	13	14	60	20
590 ER 10-80	BSP 1/8"	9	13	14	80	20
590 ER 10-100	BSP 1/8"	9	13	14	100	20
590 ER 10-120	BSP 1/8"	9	13	14	120	20
590 ER 10-150	BSP 1/8"	9	13	14	150	20
590 ER 13-60	BSP 1/4"	9	13	14	60	20
590 ER 13-80	BSP 1/4"	9	13	14	80	20
590 ER 13-100	BSP 1/4"	9	13	14	100	20
590 ER 13-120	BSP 1/4"	9	13	14	120	20
590 ER 13-150	BSP 1/4"	9	13	14	150	20
590 ER 17-60	BSP 3/8"	9	13	17	60	20
590 ER 17-80	BSP 3/8"	9	13	17	80	20
590 ER 17-100	BSP 3/8"	9	13	17	100	20
590 ER 17-120	BSP 3/8"	9	13	17	120	20
590 ER 17-150	BSP 3/8"	9	13	17	150	20

REKOR VE KAPLİNLER

OTOMATİK GİRİŞLİ REKORLAR (QUİCK)





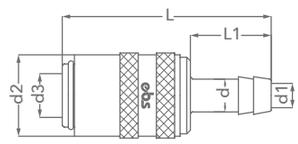
Valfsiz Sip. No.	d	d1	d2	SW	L	L1
590 ER M8-60	M8x1.25	9	13	14	60	20
590 ER M8-80	M8x1.25	9	13	14	80	20
590 ER M8-100	M8x1.25	9	13	14	100	20
590 ER M8-120	M8x1.25	9	13	14	120	20
590 ER M8-150	M8x1.25	9	13	14	150	20

Valfsiz Sip. No.	d	d1	d2	SW	L	L1
590 ER M10-60	M10x1.5	9	13	14	60	20
590 ER M10-80	M10x1.5	9	13	14	80	20
590 ER M10-100	M10x1.5	9	13	14	100	20
590 ER M10-120	M10x1.5	9	13	14	120	20
590 ER M10-150	M10x1.5	9	13	14	150	20
590 ER M12-60	M12x1.75	9	13	14	60	20
590 ER M12-80	M12x1.75	9	13	14	80	20
590 ER M12-100	M12x1.75	9	13	14	100	20
590 ER M12-120	M12x1.75	9	13	14	120	20
590 ER M12-150	M12x1.75	9	13	14	150	20
590 ER M 14-60	M14x2	9	13	14	60	20
590 ER M14-80	M14x2	9	13	14	80	20
590 ER M14-100	M14x2	9	13	14	100	20
590 ER M14-120	M14x2	9	13	14	120	20
590 ER M14-150	M14x2	9	13	14	150	20
590 ER M16-60	M16x2	9	13	14	60	20
590 ER M16-80	M16x2	9	13	14	80	20
590 ER M16-100	M16x2	9	13	14	100	20
590 ER M16-120	M16x2	9	13	14	120	20
590 ER M16-150	M16x2	9	13	14	150	20

590 SERİSİ GÖVDE (SU)

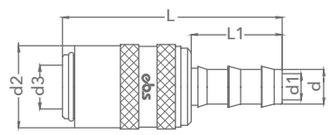


HORTUM GÖVDE



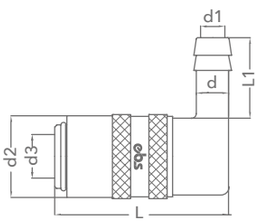
Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 HGB 10	590 HG 10	10	7.5	23	13	59	23
590 HGB 13	590 HG 13	13	10	23	13	59	23

KELEPÇESİZ HORTUM GÖVDE



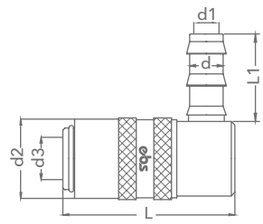
Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 FGB 10	590 FG 10	10	7.5	23	13	64	28
590 FGB 13	590 FG 13	13	10	23	13	64	28

90° HORTUM GÖVDE



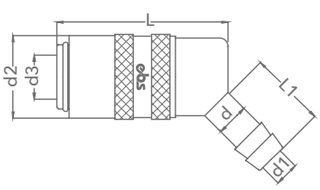
Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 HGB 10-90	590 HG 10-90	10	7.5	23	13	52	29
590 HGB 13-90	590 HG 13-90	13	10	23	13	52	29

90° KELEPÇESİZ HORTUM GÖVDE



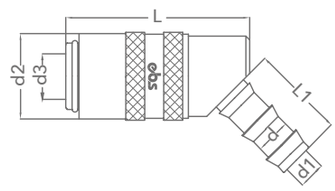
Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 FGB 10-90	590 FG 10-90	10	7.5	23	13	52	29
590 FGB 13-90	590 FG 13-90	13	10	23	13	52	29

45° KELEPÇESİZ HORTUM GÖVDE



Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 HGB 10-45	590 HG 10-45	10	7.5	23	13	52	26
590 HGB 13-45	590 HG 13-45	13	10	23	13	52	26

45° HORTUM GÖVDE



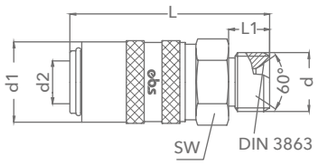
Valfli Sip. No.	Valflsiz Sip. No.	d	d1	d2	d3	L	L1
590 FGB 10-45	590 FG 10-45	10	7.5	23	13	52	29
590 FGB 13-45	590 FG 13-45	13	10	23	13	52	29

REKOR VE KAPLİNLER

590 SERİSİ GÖVDE (SU)

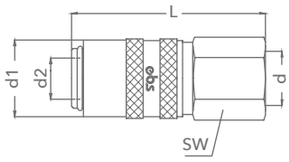


ERKEK GÖVDE



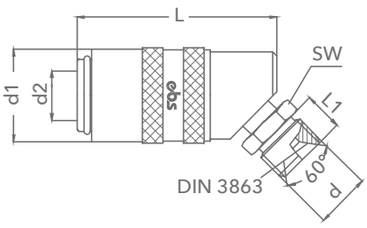
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
590 EGB 13	590 EG 13	BSP 1/4"	23	13	52	9	21
590 EGB 17	590 EG 17	BSP 3/8"	23	13	52	9	21
590 EGB 21	590 EG 21	BSP 1/2"	23	13	52	9	21
590 EGB M16	590 EG M16	M16x1.5	23	13	52	10	21

DİŞİ GÖVDE



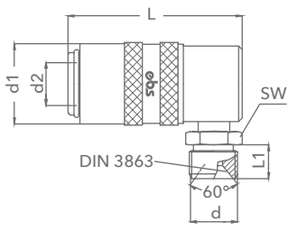
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	SW
590 DGB 13	590 DG 13	BSP 1/4"	23	13	52	21
590 DGB 17	590 DG 17	BSP 3/8"	23	13	52	21
590 DGB 21	590 DG 21	BSP 1/2"	23	13	52	24
590 DGB M16	590 DG M16	M16x1.5	23	13	52	21

45° ERKEK GÖVDE



Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
590 EGB 13-45	590 EG 13-45	BSP 1/4"	23	13	52	9	15
590 EGB 17-45	590 EG 17-45	BSP 3/8"	23	13	52	9	19
590 EGB 21-45	590 EG 21-45	BSP 1/2"	23	13	52	9	21
590 EGB M16-45	590 EG M16-45	M16x1.5	23	13	52	10	19

90° ERKEK GÖVDE

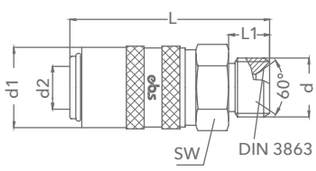


Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
590 EGB 13-90	590 EG 13-90	BSP 1/4"	23	13	52	9	15
590 EGB 17-90	590 EG 17-90	BSP 3/8"	23	13	52	9	19
590 EGB 21-90	590 EG 21-90	BSP 1/2"	23	13	52	9	21
590 EGB M16-90	590 EG M16-90	M16x1.5	23	13	52	10	19

560 SERİSİ GÖVDE (SU)

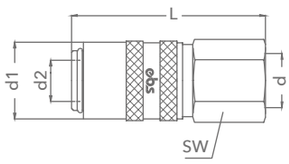


ERKEK GÖVDE



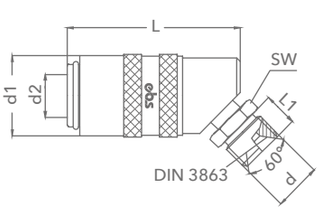
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
560 HGB 06-45	560 HG 06-45	6	4.5	18	9	42	26
560 HGB 08-45	560 HG 08-45	8	6	18	9	42	26
560 HGB 10-45	560 HG 10-45	10	7	18	9	42	26

DİŞİ GÖVDE



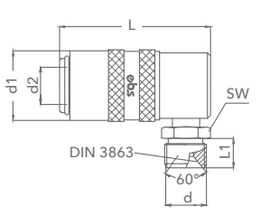
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
560 DGB 13	560 DG 13	BSP 1/4"	18	9	47.5	9	17
560 DGB 17	560 DG 17	BSP 3/8"	18	9	47.5	9	21
560 DGB M10	560 DG M10	M10x1.0	18	9	47.5	9	17
560 DGB M14	560 DG M14	M14x1.5	18	9	47.5	9	17

45° ERKEK GÖVDE



Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
560 EGB 13-45	560 EG 13-45	BSP 1/4"	18	9	42	9	14
560 EGB 17-45	560 EG 17-45	BSP 3/8"	18	9	42	9	17
560 EGB M14-45	560 EG M 14-45	M14x1.5	18	9	42	9	17

90° ERKEK GÖVDE



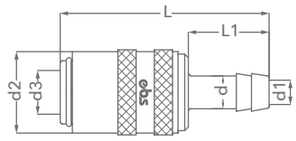
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	L	L1	SW
560 EGB 13-90	560 EG 13-90	BSP 1/4"	18	9	42	9	14
560 EGB 17-90	560 EG 17-90	BSP 3/8"	18	9	42	9	17
560 EGB M14-90	560 EG M 14-90	M14x1.5	18	9	42	9	17

REKOR VE KAPLİNLER

560 SERİSİ GÖVDE (SU)

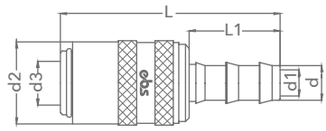


HORTUM GÖVDE



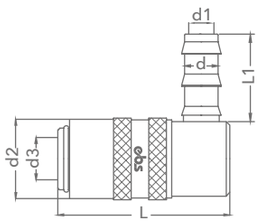
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 HGB 06	560 HG 06	6	4.5	18	9	47.5	17.5
560 HGB 08	560 HG 08	8	6	18	9	47.5	17.5
560 HGB 10	560 HG 10	10	7	18	9	47.5	17.5

KELEPÇESİZ HORTUM GÖVDE



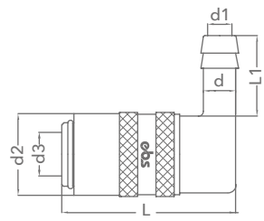
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 FGB 06	560 FG 06	6	4.5	18	9	48	18
560 FGB 08	560 FG 08	8	6	18	9	48	18
560 FGB 10	560 FG 10	10	7	18	9	48	18

45° HORTUM GÖVDE



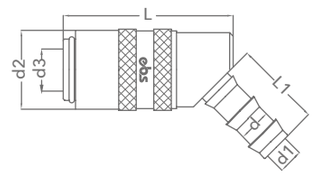
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 HGB 06-45	560 HG 06-45	6	4.5	18	9	42	26
560 HGB 08-45	560 HG 08-45	8	6	18	9	42	26
560 HGB 10-45	560 HG 10-45	10	7	18	9	42	26

90° HORTUM GÖVDE



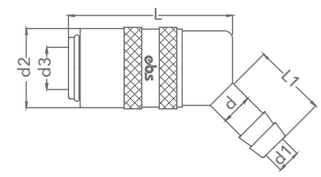
Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 HGB 06-90	560 HG 06-90	6	4.5	18	9	42	26
560 HGB 08-90	560 HG 08-90	8	6	18	9	42	26
560 HGB 10-90	560 HG 10-90	10	7	18	9	42	26

45° KELEPÇESİZ HORTUM GÖVDE



Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 FGB 06-45	560 FG 06-45	6	4.5	18	9	42	26
560 FGB 08-45	560 FG 08-45	8	6	18	9	42	26
560 FGB 10-45	560 FG 10-45	10	7	18	9	42	26

90° KELEPÇESİZ HORTUM GÖVDE

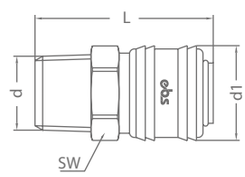


Valfli → Sip. No.	Valflsiz → Sip. No.	d	d1	d2	d3	L	L1
560 FGB 06-90	560 FG 06-90	6	4.5	18	9	42	26
560 FGB 08-90	560 FG 08-90	8	6	18	9	42	26
560 FGB 10-90	560 FG 10-90	10	7	18	9	42	26

A26 SERİSİ GÖVDE (HAVA)

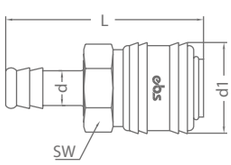


ERKEK GÖVDE



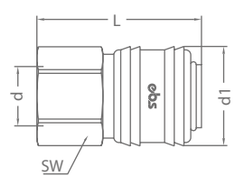
Valfli → Sip. No.	d	d1	L	SW
A26 EGB 13	BSP 1/4"	25	58	21
A26 EGB 17	BSP 3/8"	25	58	21
A26 EGB 21	BSP 1/2"	25	59	21
A26 EGB M14	M14x1,5	25	58	21
A26 EGB M16	M16x1,5	25	58	21
A26 EGB M18	M18x1,5	25	59	21

HORTUM GÖVDE



Valfli → Sip. No.	d	d1	L	SW
A26 HGB 06	6 mm-1/4"	25	55	21
A26 HGB 08	8 mm-5/16"	25	55	21
A26 HGB 09	9 mm-5/14"	25	55	21
A26 HGB 10	10 mm-3/8"	25	55	21
A26 HGB 13	13 mm-1/2"	25	55	21

DİŞİ GÖVDE



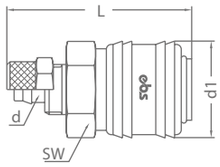
Valfli → Sip. No.	d	d1	L	SW
A26 DGB 10	BSP 1/8"	25	41	21
A26 DGB 13	BSP 1/4"	25	41	21
A26 DGB 17	BSP 3/8"	25	41	21
A26 DGB 21	BSP 1/2"	25	41	24
A26 DGB M14	M14x1,5	25	41	21
A26 DGB M16	M16x1,5	25	41	21
A26 DGB M18	M18x1,5	25	41	22

REKOR VE KAPLİNLER

A26 SERİSİ GÖVDE (HAVA)

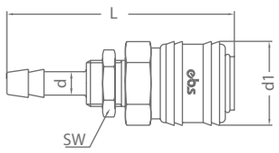


PLASTİK HORTUM GÖVDE



Valfli → Sip. No.	d	d1	L	SW
A26 PGB 06	6x8 mm M12x1	25	50	21
A26 PGB 08	8x10 mm M16x1	25	54	21
A26 PGB 09	9x12 mm M16x1	25	63	21

PANEL PLASTİK HORTUM GÖVDE

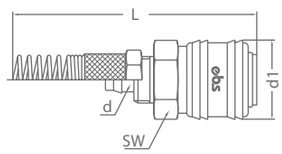


Valfli → Sip. No.	d	d1	L	SW
A26 MGB 06	6 mm M12x1	25	60	21
A26 MGB 08	8 mm M16x1	25	63	21
A26 MGB 09	10 mm M16x1	25	72	21

A26 SERİSİ GÖVDE (HAVA)

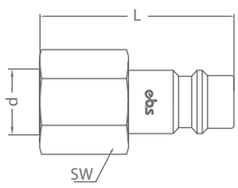


YAYLI PLASTİK HORTUM GÖVDE



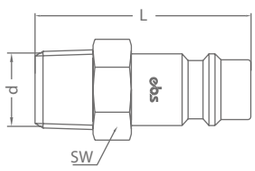
Valfli → Sip. No.	d	d1	L	SW
A26 YGB 06	6x8 mm M12x1	25	133	21
A26 YGB 08	8x10 mm M16x1	25	148	21
A26 YGB 09	9x12 mm M16x1	25	148	21

DİŞİ UÇLAR



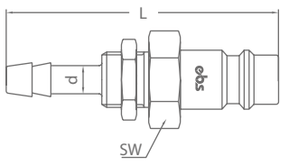
Valflsiz → Sip. No.	d	L	SW
A26 DR 10	BSP 1/8"	30	14
A26 DR 13	BSP 1/4"	33	17
A26 DR 17	BSP 3/8"	33	19
A26 DR21	BSP 1/2"	36	24
A26 DRM14-1	M14x1,25	33	17
A26 DRM14	M14x1,5	33	17
A26 DRM16	M16x1,5	33	19
A26 DRM18	M18x1,5	36	21

ERKEK UÇLAR



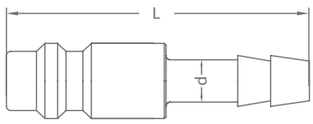
Valflsiz → Sip. No.	d	L	SW
A26 ER 10	BSP 1/8"	31	13
A26 ER 13	BSP 1/4"	33	14
A26 ER 17	BSP 3/8"	33	17
A26 ER 21	BSP 1/2"	38	22
A26 ER M14	M14x1,5	35	17
A26 ER M16	M16x1,5	36	17
A26 ER M18	M18x1,5	37	19

PANEL HORTUM UÇ



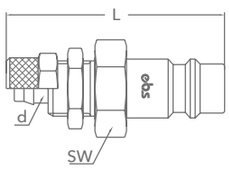
Valflsiz → Sip. No.	d	L	SW
A26 MR 06	6mm M12x1	56	14
A26 MR 08	8 mm M12x1	56	14
A26 MR 10	10mm M14x1	56	16

HORTUM UÇ



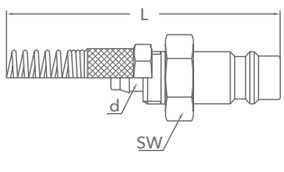
Valfli → Sip. No.	d	L
A26 HR 06	6 mm-1/4"	46
A26 HR 08	8 mm-5/16"	46
A26 HR 09	9 mm-5/14"	46
A26 HR 10	10 mm-3/8"	46
A26 HR 13	13 mm-1/2"	48

PLASTİK HORTUM UÇ



Valflsiz → Sip. No.	d	L	SW
A26 PR 04	4x6 mm M10x1	34	12
A26 PR 06	6x8 mm M12x1	34	12
A26 PR 08	8x10 mm M16x1	42	17
A26 PR 09	9x12 mm M16x1	42	17

YAYLI PLASTİK HORTUM UÇ



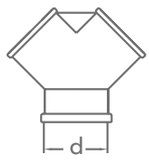
Valflsiz → Sip. No.	d	L	SW
A26 YR 04	4x6 mm M10x1	120	12
A26 YR 06	6x8 mm M12x1	120	12
A26 YR 08	8x10 mm M16x1	140	17
A26 YR 09	9x12 mm M16x1	140	17

REKOR VE KAPLİNLER

A26 SERİSİ GÖVDE (HAVA)

İKİLİ GÖVDE

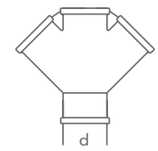




Sip. No.	Bağlantı	
	Erkek	Dişi
A26 2G 13B	R 1/4"	G 1/4"
A26 2G 17B	R 3/8"	G 3/8"
A262G21B	R 1/2"	G 1/2"

ÜÇLÜ GÖVDE

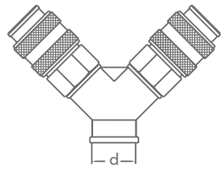




Sip. No.	Bağlantı	
	Erkek	Dişi
A26 3G 13B	R 1/4"	G 1/4"
A26 3G 17B	R 3/8"	G 3/8"
A26 3G 21B	R 1/2"	G 1/2"

DOLU İKİLİ GÖVDE

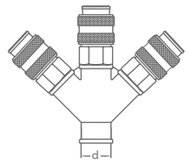




Valfli	d
Sip. No.	
A26 2GD 17	BSP 3/8"
A26 2GD 21	BSP 1/2"
A26 2GD 13	BSP 1/4"

DOLU ÜÇLÜ GÖVDE

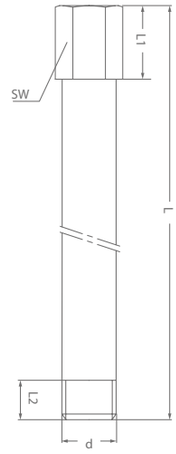




Valfli	d
Sip. No.	
A26 3GD 17	BSP 3/8"
A26 3GD 21	BSP 1/2"
A26 3GD 13	BSP 1/4"

UZATMA REKORLAR





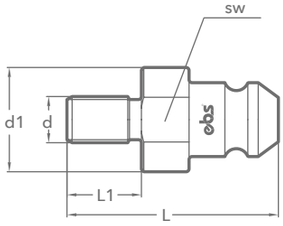
Valflsiz	Bağlantı Ölç. (Erkek)	Bağlantı Ölç. (Dişi)	L	L1	L2	SW
Sip. No.						
UZR 10-60	G 1/8"	G 1/8"	60	12	10	14
UZR 10-80	G 1/8"	G 1/8"	80	12	10	14
UZR 10-100	G 1/8"	G 1/8"	100	12	10	14
UZR 10-120	G 1/8"	G 1/8"	120	12	10	14
UZR 10-150	G 1/8"	G 1/8"	150	12	10	14
UZR 13-60	G 1/4"	G 1/4"	60	12	10	14
UZR 13-80	G 1/4"	G 1/4"	80	12	10	14
UZR 13-100	G 1/4"	G 1/4"	100	12	10	14
UZR 13-120	G 1/4"	G 1/4"	120	12	10	14
UZR 13-150	G 1/4"	G 1/4"	150	12	10	14
UZR 17-60	G 3/8"	G 3/8"	60	12	10	19
UZR 17-80	G 3/8"	G 3/8"	80	12	10	19
UZR 17-100	G 3/8"	G 3/8"	100	12	10	19
UZR 17-120	G 3/8"	G 3/8"	120	12	10	19
UZR 17-150	G 3/8"	G 3/8"	150	12	10	19
UZR 10-13-60	G 1/8"	G 1/4"	60	12	10	14

Valflsiz	Bağlantı Ölç. (Erkek)	Bağlantı Ölç. (Dişi)	L	L1	L2	SW
Sip. No.						
UZR 10-13-80	G 1/8"	G 1/4"	80	12	10	14
UZR 10-13-100	G 1/8"	G 1/4"	100	12	10	14
UZR 10-13-120	G 1/8"	G 1/4"	120	12	10	14
UZR 10-13-150	G 1/8"	G 1/4"	150	12	10	14
UZR 13-10-60	G 1/4"	G 1/8"	60	12	10	14
UZR 13-10-80	G 1/4"	G 1/8"	80	12	10	14
UZR 13-10-100	G 1/4"	G 1/8"	100	12	10	14
UZR 13-10-120	G 1/4"	G 1/8"	120	12	10	14
UZR 13-10-150	G 1/4"	G 1/8"	150	12	10	14
UZR 10-17-60	G 1/8"	G 3/8"	60	12	10	19
UZR 10-17-80	G 1/8"	G 3/8"	80	12	10	19
UZR 10-17-100	G 1/8"	G 3/8"	100	12	10	19
UZR 10-17-120	G 1/8"	G 3/8"	120	12	10	19
UZR 10-17-150	G 1/8"	G 3/8"	150	12	10	19
UZR 17-10-60	G 3/8"	G 1/8"	60	12	10	19
UZR 17-10-80	G 3/8"	G 1/8"	80	12	10	19
UZR 17-10-100	G 3/8"	G 1/8"	100	12	10	19
UZR 17-10-120	G 3/8"	G 1/8"	120	12	10	19
UZR 17-10-150	G 3/8"	G 1/8"	150	12	10	19
UZR 13-17-60	G 1/4"	G 3/8"	60	12	10	19
UZR 13-17-80	G 1/4"	G 3/8"	80	12	10	19
UZR 13-17-100	G 1/4"	G 3/8"	100	12	10	19
UZR 13-17-120	G 1/4"	G 3/8"	120	12	10	19
UZR 13-17-150	G 1/4"	G 3/8"	150	12	10	19
UZR 17-10-60	G 3/8"	G 1/4"	60	12	10	19
UZR 17-10-80	G 3/8"	G 1/4"	80	12	10	19
UZR 17-10-100	G 3/8"	G 1/4"	100	12	10	19
UZR 17-10-120	G 3/8"	G 1/4"	120	12	10	19
UZR 17-10-150	G 3/8"	G 1/4"	150	12	10	19

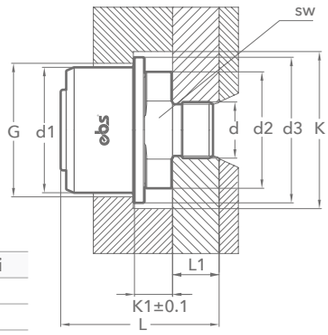
REKOR VE KAPLİNLER

OTOMATİK İTİCİ PLAKA BAĞLANTI SİSTEMİ

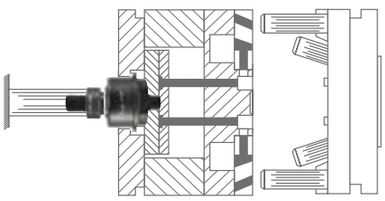






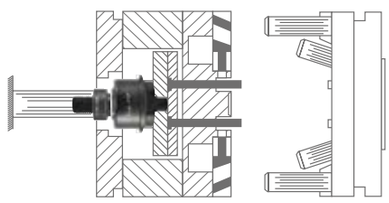


Sip. No.	d	G	d1	d2	d3	K	K1	L1	L	SW	Çekme Kuvveti
OPC-01 EG 12	M12x1.75	34	32	32	39	44	10	15	42.5	30	1500
OPC-01 EG 16	M16x1.5	34	32	32	39	44	10	15	42.5	30	1500
OPC-02 EG 16-1	M16x1.5	40	38	38	48	53	13	15	52	32	2400
OPC-02 EG 16-2	M16x2.0	40	38	38	48	53	13	15	52	32	2400
OPC-03 EG 16	M16x1.5	58	56	52	65	70	17	18	68	46	3200
OPC-03 EG 18	M18x1.5	58	56	52	65	70	17	18	68	46	3200
OPC-03 EG 20	M20x1.5	58	56	52	65	70	17	18	68	46	3200
OPC-03 EG 24	M24x1.5	58	56	52	65	70	17	18	68	46	3200
OPC-03 EG 27	M27x1.5	58	56	52	65	70	17	18	68	46	3200
OPC-03 EG 30	M30x1.5	58	56	52	65	70	17	18	68	46	3200

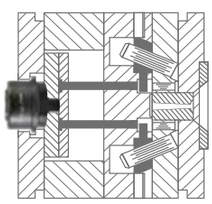


Sip. No.	d	SW	d1	L1	L	Çekme Kuvveti
OPC-01 EU 10	M10x1.5	19	22.8	20	45.5	1500
OPC-01 EU 12	M12x1.75	19	22.8	20	45.5	1500
OPC-01 EU 14	M14x2.0	19	22.8	20	45.5	1500
OPC-01 EU 16	M16x2.0	19	22.8	20	45.5	1500

Sip. No.	d	SW	d1	L1	L	Çekme Kuvveti
OPC-02 EU 10	M10x1.5	22	25.8	20	55	2400
OPC-02 EU 12	M12x1.75	22	25.8	20	55	2400
OPC-02 EU 14	M14x2.0	22	25.8	20	55	2400
OPC-02 EU 16	M16x2.0	22	25.8	20	55	2400







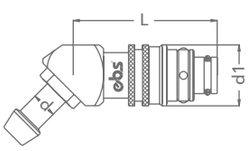
Sip. No.	d	SW	d1	L1	L	Çekme Kuvveti
OPC-03 EU 16	M16x2.0	32	35	25	68	3200
OPC-03 EU 18	M18x2.5	32	35	25	68	3200
OPC-03 EU 20	M20x2.5	32	35	25	68	3200
OPC-03 EU 24	M24x3.0	32	35	25	68	3200
OPC-03 EU 27	M27x3.0	32	35	25	68	3200
OPC-03 EU 30	M30x3.5	32	35	25	68	3200

600 SERİSİ REKORLAR



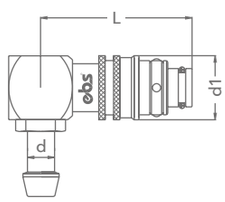


45° HORTUM GÖVDE



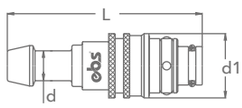
Valflsiz → ← Sip. No.	d	d1	L
600.08 HG 06-45°	1/4" 06mm	20	47.5
600.08 HG 08-45°	5/16" 08mm	20	47.5
600.08 HG 10-45°	3/8" 10mm	20	47.5
600.08 HG 12-45°	15/32" 12mm	20	47.5
600.08 HG 13-45°	1/2" 13mm	20	47.5

90° HORTUM GÖVDE



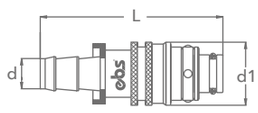
Valflsiz → ← Sip. No.	d	d1	L
600.08 HG 06-90°	1/4" 06mm	20	45.5
600.08 HG 08-90°	5/16" 08mm	20	45.5
600.08 HG 10-90°	3/8" 10mm	20	45.5
600.08 HG 12-90°	15/32" 12mm	20	45.5
600.08 HG 13-90°	1/2" 13mm	20	45.5

HORTUM GÖVDE



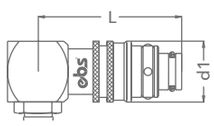
Valflsiz → ← Sip. No.	d	d1	L
600.08 HG 06	1/4" 06mm	20	62
600.08 HG 08	5/16" 08mm	20	62
600.08 HG 10	3/8" 10mm	20	62
600.08 HG 12	15/32" 12mm	20	62
600.08 HG 13	1/2" 13mm	20	62

KELEPÇESİZ HORTUM GÖVDE



Valflsiz → ← Sip. No.	d	d1	L
600.08 FG 10	3/8" 10mm	20	37
600.08 FG 13	1/2" 13mm	20	40

90° KELEPÇESİZ HORTUM GÖVDE

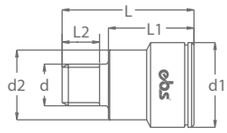


Valflsiz → ← Sip. No.	d	d1	L
600.08 FG 1 0-90°	3/8" 10mm	20	45.5
600.08 FG 13-90°	1/2" 13mm	20	45.5

REKOR VE KAPLİNLER

600 SERİSİ REKORLAR

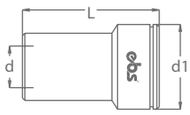




ERKEK UÇLAR

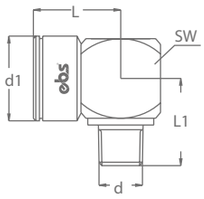
Valfisiz → Sip. No.	d	d1	L1	L2	d2	L	SW
600.08 ER 10	BSPT 1/8"	21	21	8	17.5	31	6
600.08 ER 13	BSPT 1/4"	21	21	10	17.5	33	8
600.08 ER 17	BSPT 3/8"	21	11	11	17.5	24	8
600.08 NR 10	NPT 1/8"	21	21	7	17.5	31	1/4"
600.08 NR 13	NPT 1/4"	21	21	10	17.5	33	5/16"
600.08 NR 17	NPT 3/8"	21	11	11	17.5	24	5/16"
600.08 ER M10-1	M10x1.0	21	21	10	17.5	31	6
600.08 ER M10	M10x1.5	21	21	10	17.5	31	6
600.08 ER M12	M14x1.5	21	21	11	17.5	31	8
600.08 ER M14	M12x1.75	21	21	11	17.5	31	8

DİŞİ UÇLAR



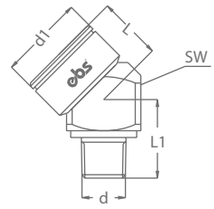
Valfisiz → Sip. No.	d	d1	L	SW
600.08 DR 10	BSPT 1/8"	21	39	8
600.08 DR 13	BSPT 1/4"	21	39	8

90° ERKEK UÇLAR



Valfisiz → Sip. No.	d	L	d1	L1	SW
600.08 ER 10-90°	BSPT 1/8"	21	33	23	20
600.08 ER 13-90°	BSPT 1/4"	21	33	25	20
600.08 ER 17-90°	BSPT 3/8"	21	33	26	20
600.08 NR 13-90°	NPT 1/4"	21	21	27	20

45° ERKEK UÇLAR

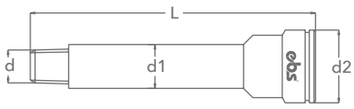


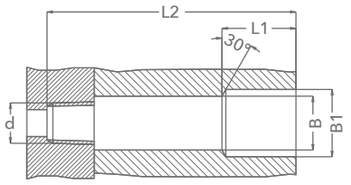
Valfisiz → Sip. No.	d	L	d1	L1	SW
600.08 ER 10-45°	Bspt 1/8"	21	33	16.5	20
600.08 ER 13-45°	BSPT 1/4"	21	33	16.5	20
600.08 ER 17-45°	BSPT 3/8"	21	33	16.5	20
600.08 NR 13-45°	NPT 1/4"	21	33	16.5	20

600 SERİSİ REKORLAR

ERKEK UZATMA UÇLAR

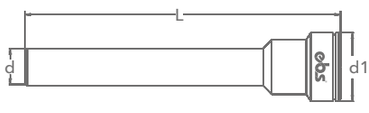


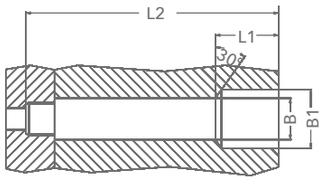




Valflsiz → Sip. No.	d	L min/max	L1	L2	d2	B1	B	d1	SW
600.08 ER10-100	BSPT 1/8"	33/100	23	L-5.5	21	22	11	10.2	6
600.08 ER10-150	BSPT 1/8"	100/150	23	L-5.5	21	22	11	10.2	6
600.08 ER10-200	BSPT 1/8"	150/200	23	L-5.5	21	22	11	10.2	6
600.08 ER10-250	BSPT 1/8"	200/250	23	L-5.5	21	22	11	10.2	6
600.08 NR10-100	NPT 1/8"	33/100	23	L-5.5	21	22	11	10.2	1/4"
600.08 NR10-150	NPT 1/8"	100/150	23	L-5.5	21	22	11	10.2	1/4"
600.08 NR10-200	NPT 1/8"	150/200	23	L-5.5	21	22	11	10.2	1/4"
600.08 NR10-250	NPT 1/8"	200/250	23	L-5.5	21	22	11	10.2	1/4"
600.08 ER13-100	BSPT 1/4"	33/100	23	L-7.5	21	22	14	13.5	8
600.08 ER13-150	BSPT 1/4"	100/150	23	L-7.5	21	22	14	13.5	8
600.08 ER13-200	BSPT 1/4"	150/200	23	L-7.5	21	22	14	13.5	8
600.08 ER13-250	BSPT 1/4"	200/250	23	L-7.5	21	22	14	13.5	8
600.08 NR13-100	NPT 1/4"	33/100	23	L-5.5	21	22	14	13.5	1/4"
600.08 NR13-150	NPT 1/4"	100/150	23	L-5.5	21	22	14	13.5	1/4"
600.08 NR13-200	NPT 1/4"	150/200	23	L-5.5	21	22	14	13.5	1/4"
600.08 NR13-250	NPT 1/4"	200/250	23	L-5.5	21	22	14	13.5	1/4"

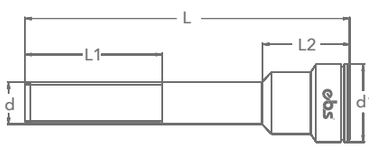
ERKEK UZATMA UÇLAR





Valflsiz → Sip. No.	d	L	L1	L2	d1	B1	B	SW
600.08 BU 10-50	10.2	50	23	L-5.5	21	22	11	6
600.08 BU 10-100	10.2	100	23	L-5.5	21	22	11	6
600.08 BU 10-150	10.2	150	23	L-5.5	21	22	11	6
600.08 BU 10-200	10.2	200	23	L-5.5	21	22	11	6
600.08 BU 13-50	13.5	50	23	L-7.5	21	22	14	8
600.08 BU 13-100	13.5	100	23	L-7.5	21	22	14	8
600.08 BU 13-150	13.5	150	23	L-7.5	21	22	14	8
600.08 BU 13-200	13.5	200	23	L-7.5	21	22	14	8
600.08 BU 13-250	13.5	250	23	L-7.5	21	22	14	8

ERKEK UZATMA UÇLAR



Valflsiz → Sip. No.	d	L	L1	L2	d1	SW
600.08 UR 10-50	BSP 1/8"	50	26	21	21	6
600.08 UR 10-100	BSP 1/8"	100	60	21	21	6
600.08 UR 10-150	BSP 1/8"	150	60	21	21	6
600.08 UR 13-50	BSP 1/4"	50	27	21	21	8
600.08 UR 13-100	BSP 1/4"	100	60	21	21	8
600.08 UR 13-150	BSP 1/4"	150	60	21	21	8
600.08 UR 13-200	BSP 1/4"	200	60	21	21	8

REKOR VE KAPLİNLER

PNÖMATİK REKORLAR

Plastik Bağlantılar	Sip. No.	Bağlantı Ölçüleri
	P001	PLASTİK REKOR 1/8-4
	P001	PLASTİK REKOR 1/8-6
	P001	PLASTİK REKOR 1/4-6
	P001	PLASTİK REKOR 3/8-6
	P001	PLASTİK REKOR 1/2-6
	P001	PLASTİK REKOR 1/8-8
	P001	PLASTİK REKOR 1/4-8
	P001	PLASTİK REKOR 3/8-8
	P001	PLASTİK REKOR 1/2-8
	P001	PLASTİK REKOR 1/4-10
	P001	PLASTİK REKOR 3/8-10
	P001	PLASTİK REKOR 1/2-10
	P001	PLASTİK REKOR 1/4-12
	P001	PLASTİK REKOR 3/8-12
	P001	PLASTİK REKOR 1/2-12
	P002	PLASTİK NİPEL 4
	P002	PLASTİK NİPEL 5
	P002	PLASTİK NİPEL 6
	P002	PLASTİK NİPEL 8
	P002	PLASTİK NİPEL 9
	P002	PLASTİK NİPEL 9,5
	P002	PLASTİK NİPEL 10
	P002	PLASTİK NİPEL 11
	P002	PLASTİK NİPEL 12
	P002	PLASTİK NİPEL 14
	P002	PLASTİK NİPEL 15
	P002	PLASTİK NİPEL 16
	P003	PLASTİK TE 4
	P003	PLASTİK TE 6
	P003	PLASTİK TE 8
	P003	PLASTİK TE 10
	P003	PLASTİK TE 12
	P003	PLASTİK TE 16
	P106	REDİKSİYON TE 6-6-8
	P108	REDİKSİYON TE 8-8-6
	P108	REDİKSİYON TE 8-8-10
	P101	REDİKSİYON TE 10-10-8
	P101	REDİKSİYON TE 10-10-12
	P101	REDİKSİYON TE 12 12-10
	P009	REDİKSİYON 6-4
	P009	REDİKSİYON 8-6
	P009	REDİKSİYON 10-8
	P009	REDİKSİYON 12-10
	P004	DÖNER DİRSEK 1/8-4
	P004	DÖNER DİRSEK 1/8-6
	P004	DÖNER DİRSEK 1/4-6
	P004	DÖNER DİRSEK 3/8-6
	P004	DÖNER DİRSEK 1/8-8
	P004	DÖNER DİRSEK 1/4-8
	P004	DÖNER DİRSEK 3/8-8
	P004	DÖNER DİRSEK 1/4-10
	P004	DÖNER DİRSEK 3/8-10
	P004	DÖNER DİRSEK 1/2-10
	P004	DÖNER DİRSEK 1/4-12
	P004	DÖNER DİRSEK 3/8-12
	P004	DÖNER DİRSEK 1/2-12

Plastik Bağlantılar	Sip. No.	Bağlantı Ölçüleri
	P005	PLASTİK DİRSEK 4
	P005	PLASTİK DİRSEK 6
	P005	PLASTİK DİRSEK 8
	P005	PLASTİK DİRSEK 10
	P005	PLASTİK DİRSEK 12
	P005	PLASTİK DİRSEK 16
	P006	ORTA BACAK DİŞLİ 1/8-6
	P006	ORTA BACAK DİŞLİ 1/4-6
	P006	ORTA BACAK DİŞLİ 3/8-6
	P006	ORTA BACAK DİŞLİ 1/8-8
	P006	ORTA BACAK DİŞLİ 1/4-8
	P006	ORTA BACAK DİŞLİ 3/8-8
	P006	ORTA BACAK DİŞLİ 1/4-10
	P006	ORTA BACAK DİŞLİ 3/8 10
	P006	ORTA BACAK DİŞLİ 1/4-12
	P006	ORTA BACAK DİŞLİ 3/8-12
	P007	YAN BACAK DİŞLİ TE 1/8-6
	P007	YAN BACAK DİŞLİ TE 1/4-6
	P007	YAN BACAK DİŞLİ TE 3/8-6
	P007	YAN BACAK DİŞLİ TE 1/8-8
	P007	YAN BACAK DİŞLİ TE 1/4-8
	P007	YAN BACAK DİŞLİ TE 3/8-8
	P007	YAN BACAK DİŞLİ TE 1/4-10
	P007	YAN BACAK DİŞLİ TE 3/8-10
	P007	YAN BACAK DİŞLİ TE 1/4-12
	P007	YAN BACAK DİŞLİ TE 3/8-12
	P010	PLASTİK YE 4-4-4
	P010	PLASTİK YE 6-6-6
	P010	PLASTİK YE 8-8-8
	P011	PLASTİK YE 10-10-10
	P011	PLASTİK YE 12-12-12
	2x4	POLİETİLEN HORTUM
	3x5	POLİETİLEN HORTUM
	4x6	POLİETİLEN HORTUM
	4x8	POLİETİLEN HORTUM
	5x8	POLİETİLEN HORTUM
	6x8	POLİETİLEN HORTUM
	6x10	POLİETİLEN HORTUM
	8x10	POLİETİLEN HORTUM
	8x12	POLİETİLEN HORTUM
	9x11	POLİETİLEN HORTUM
	10x12	POLİETİLEN HORTUM
	10x14	POLİETİLEN HORTUM
	12x16	POLİETİLEN HORTUM
	10x16	POLİETİLEN HORTUM
	6,5x10	POLİETİLEN HORTUM
	9x12	POLİETİLEN HORTUM
	5x3.3	POLYAMİD 12 HORTUM
	6x3	POLYAMİD 12 HORTUM
	6x4	POLYAMİD 12 HORTUM
	7x5	POLYAMİD 12 HORTUM
	7.5x3.5	POLYAMİD 12 HORTUM
	8x4.4	POLYAMİD 12 HORTUM
	8x5.5	POLYAMİD 12 HORTUM
	8x6	POLYAMİD 12 HORTUM
	9x6	POLYAMİD 12 HORTUM
	9.5x6	POLYAMİD 12 HORTUM
	9.5x7	POLYAMİD 12 HORTUM
	10x8	POLYAMİD 12 HORTUM
	12x9	POLYAMİD 12 HORTUM

REDÜKSİYON VE REGÜLATÖR

REDÜKSİYON



Sip. No.	Bağlantı	
	Erkek	Dişi
TD 05/05	M5	M5
TD 05/10	M5	G 1/8"
TD 10/05	G 1/8"	M5
TD 10/10	G 1/8"	G 1/8"
TD 10/13	G 1/8"	G 1/4"
TD 13/10	G 1/4"	G 1/8"
TD13/13	G 1/4"	G 1/4"
TD 13/17	G 1/4"	G 3/8"
TD 17/13	G 3/8"	G 1/4"
TD 17/17	G 3/8"	G 3/8"
TD 17/21	G 3/8"	G 1/2"
TD 21/17	G 1/2"	G 3/8"
TD 21/21	G 1/2"	G 1/2"
TD 21/26	G 1/2"	G 3/4"



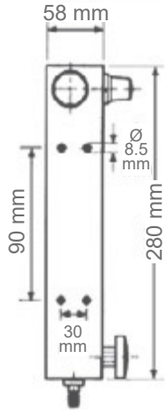
Sip. No.	Bağlantı	
	Erkek	Dişi
RD 05/10	M5	G 1/8"
RD 05/13	M5	G 1/4"
RD 10/13	G 1/8"	G 1/4"
RD 17/13	G 3/8"	G 1/4"
RD 10/17	G 1/8"	G 3/8"
RD 10/21	G 1/8"	G 1/2"
RD 13/17	G 1/4"	G 3/8"
RD 13/21	G 1/4"	G 1/2"
RD 17/21	G 3/8"	G 1/2"
RD 17/26	G 3/8"	G 3/4"
RD 21/26	G 1/2"	G 3/4"
RD 21/33	G 1/2"	G 1"
RD 26/33	G 3/4"	G 1"

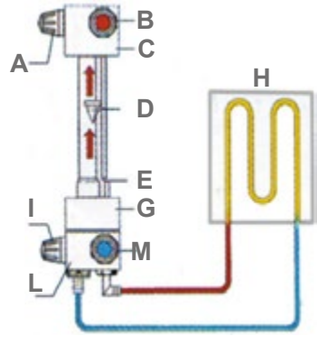


Sip. No.	Bağlantı Ölçüleri
MN M5	M5
MN 10	G 1/8"
MN 13	G 1/4"
MN 17	G 3/8"
MN 21	G 1/2"
MN 26	G 3/4"
MN 30	G 1"

SİRKÜLASYON REGÜLATÖRÜ

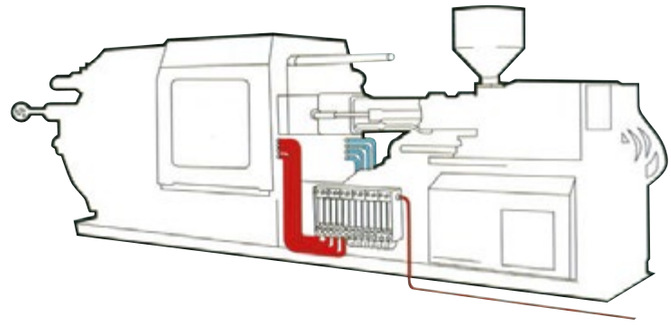






A : Kontrol Vanası
B : Su Çıkışı
C : Akış Manifoldu
D : Şamandıra
E : Kalibrasyonlu Şeffaf Tip
G : Alıcı Bölüm
H : Kalıp Dağıtım
I : Kapatma Vanası
L : Besleme Manifoldu
M : Su Girişi

Sip. No.	Tüp Sayısı	Çıkış Devre	Boyut A
REG-04	4'lü	Rakor/Uç R:1/4" 10 mm Hortum	240
REG-06	6'lı		360
REG-08	8'li		480
REG-10	10'lu		600
REG-12	12'li		720



PLASTİK KALIBI ÜRÜNLERİ

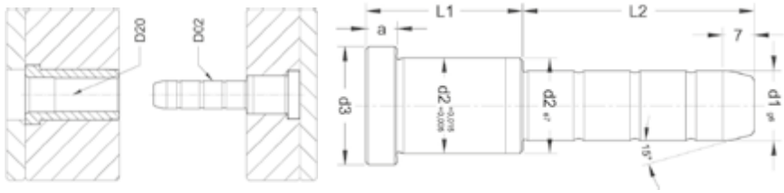
DELTA®

ŞAPKALI KADEMELİ KOLON

D02



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon



Sip. No.	d1	L1	L2	d2	d3	a
D02_12026026	12	26	26	16	19	4
036			36			
046			46			
056			56			
D02_12036026	12	36	26	16	19	4
036			36			
046			46			
056			56			
D02_12046026	12	46	26	16	19	4
036			36			
046			46			
056			56			
066			66			
D02_14026026	14	26	26	20	25	6
036			36			
046			46			
056			56			
066			66			
076			76			
D02_14036026	14	36	26	20	25	6
036			36			
046			46			
056			56			
066			66			
086			86			
D02_14046026	14	46	26	20	25	6
036			36			
046			46			
056			56			
076			76			
096			96			
D02_14056026	14	56	26	20	25	6
036			36			
046			46			
066			66			
086			86			
106			106			
D02_16026026	16	26	26	24	28	6
036			36			
046			46			
056			56			
076			76			
096			96			
D02_16036026	16	36	26	24	28	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
D02_16046026	16	46	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			

Sip. No.	d1	L1	L2	d2	d3	a
D02_16056026	16	56	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_16066026	16	66	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
116			116			
D02_16076026	16	76	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_16086026	16	86	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_18026026	18	26	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
D02_18036026	18	36	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
D02_18046026	18	46	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
126			126			

PLASTİK KALIBI ÜRÜNLERİ

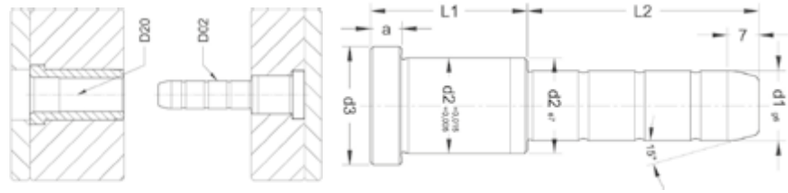
DELTA®

ŞAPKALI KADEMELİ KOLON

D02



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon



Sip. No.	d1	L1	L2	d2	d3	a
D02_18056026	18	56	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
126			126			
D02_18066026	18	66	26	26	31	6
036			36			
056			56			
076			76			
096			96			
116			116			
D02_18076026	18	76	26	26	31	6
046			46			
066			66			
086			86			
106			106			
126			126			
D02_18086026	18	86	26	26	31	6
046			46			
066			66			
086			86			
106			106			
126			126			
D02_20026026	20	26	26	28	32	6
036			36			
046			46			
056			56			
066			66			
086			86			
D02_20036026	20	36	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
D02_20046026	20	46	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
D02_20056026	20	56	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			

Sip. No.	d1	L1	L2	d2	d3	a
D02_20066026	20	66	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_20076026	20	76	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_20086026	20	86	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_20096026	20	96	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_25026026	25	26	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
D02_25036026	25	36	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
D02_25036036	25	36	36	34	38	8
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			

PLASTİK KALIBI ÜRÜNLERİ

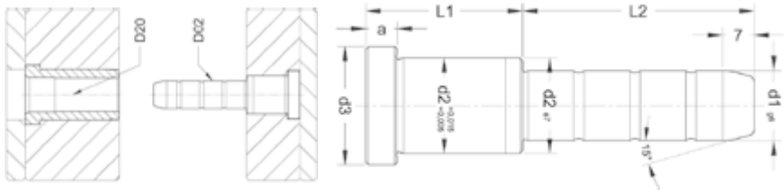
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ŞAPKALI KADEMELİ KOLON

D02



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon



Sip. No.	d1	L1	L2	d2	d3	a
D02_25046026	25	46	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_25056026	25	56	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_25066026	25	66	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_25076026	25	76	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_25086036	25	86	36	34	38	8
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_25096036	25	96	36	34	38	8
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_25106046	25	106	46	34	38	8
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			

Sip. No.	d1	L1	L2	d2	d3	a
D02_30036036	30	36	36	39	43	10
046			46			
056			56			
066			66			
086			86			
106			106			
D02_30046036	30	46	36	39	43	10
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_30056036	30	56	36	39	43	10
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_30066036	30	66	36	39	43	10
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_30076036	30	76	36	39	43	10
046			46			
056			56			
076			76			
096			96			
116			116			
136			136			
D02_30086036	30	86	36	39	43	10
046			46			
066			66			
086			86			
106			106			
126			126			
146			146			
D02_30096046	30	96	46	39	43	10
066			66			
086			86			
106			106			
126			126			
146			146			
D02_30106056	30	106	56	39	43	10
076			76			
096			96			
116			116			
136			136			
D02_30116056	30	116	56	39	43	10
076			76			
096			96			
116			116			
136			136			

PLASTİK KALIBI ÜRÜNLERİ

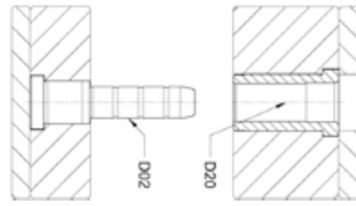
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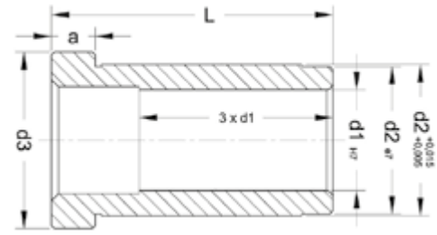
ŞAPKALI KADEMELİ KOLON

D02



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon





Sip. No.	d1	L1	L2	d2	d3	a
D02_40056056	40	56	56	54	58	10
086			86			
106			106			
126			126			
156			156			
186			186			
D02_40066066	40	66	66	54	58	10
096			96			
116			116			
136			136			
166			166			
196			196			
D02_40076076	40	76	76	54	58	10
106			106			
126			126			
146			146			
166			166			
196			196			
216			216			
D02_40086086	40	86	86	54	58	10
126			126			
146			146			
176			176			
206			206			
226			226			

Sip. No.	d1	L1	L2	d2	d3	a
D02_40096096	40	96	96	54	58	10
136			136			
156			156			
186			186			
216			216			
236			236			
D02_40106106	40	106	106	54	58	10
126			126			
156			156			
186			186			
226			226			
246			246			
D02_40116116	40	116	116	54	58	10
136			136			
166			166			
196			196			
236			236			
256			256			
D02_40126126	40	126	126	54	58	10
166			166			
196			196			
236			236			
266			266			
D02_40136136	40	136	136	54	58	10
196			196			
226			226			
266			266			

PLASTİK KALIBI ÜRÜNLERİ

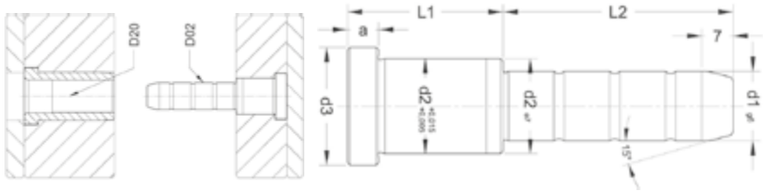
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ŞAPKALI BURÇ

D20



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon



Sip. No.	d1	L	d2	d3	a
D20_12026	12	26	16	19	4
036		36			
046		46			
056		56			
066		66			
D20_14026	14	26	20	25	6
036		36			
046		46			
056		56			
066		66			
076		76			
D20_16026	16	26	24	28	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
D20_18026	18	26	26	31	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
D20_20026	20	26	28	32	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			

Sip. No.	d1	L	d2	d3	a
D20_25026	25	26	34	38	8
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
D20_30036	30	36	39	43	10
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
116		116			
D20_40046	40	46	54	58	10
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
116		116			
126		126			
136		136			
146		146			

PLASTİK KALIBI ÜRÜNLERİ

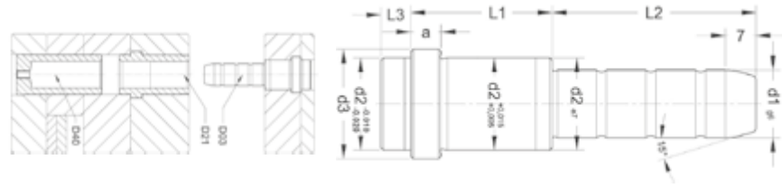
DELTA®

KUYRUKLU ŞAPKALI KADEMELİ KOLON

D03



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon
- ≈DIN 16761-A



Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_14017035	14	D03_15017035	15	17	35	9	20	25	6
055		055			55				
075		075			75				
095		095			95				
D03_14022030	14	D03_15022030	15	22	30	9	20	25	6
050		050			50				
070		070			70				
090		090			90				
110		110			110				
125		125			125				
150		150			150				
D03_14027030	14	D03_15027030	15	27	30	9	20	25	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
145		145			145				
165		165			165				
D03_14036035	14	D03_15036035	15	36	35	9	20	25	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
125		125			125				
145		145			145				
155		155			155				
D03_14046035	14	D03_15046035	15	46	35	9	20	25	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
145		145			145				
D03_14056035	14	D03_15056035	15	56	35	9	20	25	6
055		055			55				
075		075			75				
095		095			95				
135		135			135				
D03_14066055	14	D03_15066055	15	66	55	9	20	25	6
065		065			65				
085		085			85				
095		095			95	9	20	25	6
105		105			105				
125		125			125				
D03_14076035	14	D03_15076035	15	76	35	9	20	25	6
055		055			55				
075		075			75				
095		095			95				
125		125			125				
D03_14086055	14	D03_15086055	15	86	55	9	20	25	6
075		075			75				
095		095			95				
D03_14096055	14	D03_15096055	15	96	55	9	20	25	6
075		075			75				
095		095			95				
D03_14116075	14	D03_15116075	15	116	75	9	20	25	6
D03_18017035	18	D03_20017035	20	17	35	9	26	31	6
055		055			55				
075		075			75				
120		120			120				

Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_18022035	18	D03_20022035	20	22	35	9	26	31	6
045		045			45				
065		065			65				
085		085			85				
095		095			95				
115		115			115				
D03_18027035	18	D03_20027035	20	27	35	9	26	31	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
165		165			165				
225		225			225				
245		245			245				
D03_18036035	18	D03_20036035	20	36	35	9	26	31	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
165		165			165				
225		225			225				
255		255			255				
D03_18046035	18	D03_20046035	20	46	35	9	26	31	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
135		135			135				
165		165			165				
245		245			245				
D03_18056035	18	D03_20056035	20	56	35	9	26	31	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
D03_18066035	18	D03_20066035	20	66	35	9	26	31	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
145		145			145				
D03_18076035	18	D03_20076035	20	76	35	9	26	31	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
D03_18086055	18	D03_20086055	20	86	55	9	26	31	6
075		075			75				
095		095			95				
125		125			125				
135		135			135				
D03_18096055	18	D03_20096055	20	96	55	9	26	31	6
075		075			75				
095		095			95				

PLASTİK KALIBI ÜRÜNLERİ

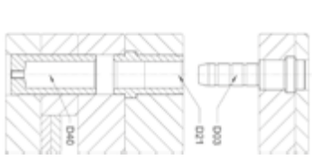
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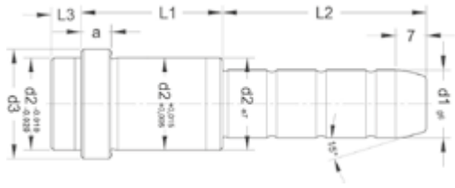
KUYRUKLU ŞAPKALI KADEMELİ KOLON

D03



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon
- ≈DIN 16761-A





Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_18116075	18	D03_20116075	20	116	75	9	26	31	6
115		115			115				
D03_18136135	18	D03_20136135	20	136	135	9	26	31	6
D03_22017035	22	D03_24017035	24	17	35	9	30	35	6
055		055			55				
D03_22017075	22	D03_24017075	24	17	75	9	30	35	6
D03_22022035	22	D03_24022035	24	22	35	9	30	35	6
055		055			55				
075		075			75				
095		095			95				
105		105			105				
130		130			130				
D03_22027035	22	D03_24027035	24	27	35	9	30	35	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
165		165			165				
205		205			205				
245		245			245				
D03_22036035	22	D03_24036035	24	36	35	9	30	35	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
165		165			165				
205		205			205				
245		245			245				
285		285			285				
D03_22046035	22	D03_24046035	24	46	35	9	30	35	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
165		165			165				
205		205			205				
D03_22056035	22	D03_24056035	24	56	35	9	30	35	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
165		165			165				
205		205			205				
D03_22066035	22	D03_24066035	24	66	35	9	30	35	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
D03_22076035	22	D03_24076035	24	76	35	9	30	35	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
145		145			145				

Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_22086055	22	D03_24086055	24	86	55	9	30	35	6
075		075			75				
095		095			95				
125		125			125				
135		135			135				
D03_22096055	22	D03_24096055	24	96	55	9	30	35	6
075		075			75				
095		095			95				
125		125			125				
D03_22106055	22	D03_24106055	24	106	55	9	30	35	6
075		075			75				
095		095			95				
115		115			115				
D03_22116075	22	D03_24116075	24	116	75	9	30	35	6
115		115			115				
155		155			155				
D03_22136095	22	D03_24136095	24	136	95	9	30	35	6
135		135			135				
D03_30027035	30	D03_32027035	32	27	35	9	42	47	6
045		045			45				
065		065			65				
085		085			85				
105		105			105				
125		125			125				
145		145			145				
165		165			165				
185		185			185				
245		245			245				
285		285			285				
D03_30036035	30	D03_32036035	32	36	35	9	42	47	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
245		245			245				
285		285			285				
D03_30046045	30	D03_32046045	32	46	45	9	42	47	6
065		065			65				
085		085			85				
105		105			105				
125		125			125				
145		145			145				
165		165			165				
245		245			245				
285		285			285				
D03_30056045	30	D03_32056045	32	56	45	9	42	47	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
175		175			175				
245		245			245				
295		295			295				

PLASTİK KALIBI ÜRÜNLERİ

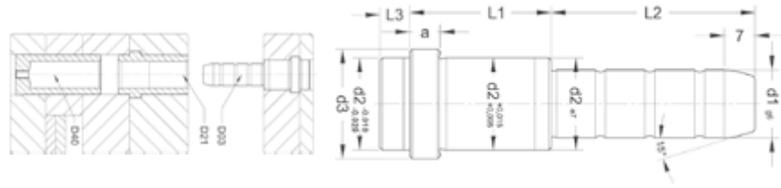
DELTA®

KUYRUKLU ŞAPKALI KADEMELİ KOLON

D03



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon
- ≈DIN 16761-A



Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_30066045	30	D03_32066045	32	66	45	9	42	47	6
055		055			55				
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
175		175			175				
245		245			245				
295		295			295				
D03_30076055	30	D03_32076055	32	76	55	9	42	47	6
075		075			75				
095		095			95				
115		115			115				
D03_30076135	30	D03_32076135	32	76	135	9	42	47	6
155		155			155				
225		225			225				
D03_30086055	30	D03_32086055	32	86	55	9	42	47	6
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
225		225			225				
D03_30096055	30	D03_32096055	32	96	55	9	42	47	6
075		075			75				
095		095			95				
115		115			115				
135		135			135				
155		155			155				
205		205			205				
D03_30106075	30	D03_32106075	32	106	75	9	42	47	6
095		095			95				
115		115			115				
125		125			125				
145		145			145				
165		165			165				
D03_30116075	30	D03_32116075	32	116	75	9	42	47	6
095		095			95				
115		115			115				
135		135			135				
155		155			155				

Sip. No.	d1	Sip. No.	d1	L1	L2	L3	d2	d3	a
D03_30136095	30	D03_32136095	32	136	95	9	42	47	6
115		115			115				
135		135			135				
155		155			155				
D03_30156115	30	D03_32156115	32	156	115	9	42	47	6
155		155			155				
D03_30196155	30	D03_32196155	32	196	155	9	42	47	6
195		195			195				
D03_40046095	40	D03_42046095	42	46	95	12	54	60	10
165		165			165				
D03_40056075	40	D03_42056075	42	56	75	12	54	60	10
115		115			115				
155		155			155				
195		195			195				
D03_40066075	40	D03_42066075	42	66	75	12	54	60	10
135		135			135				
D03_40076075	40	D03_42076075	42	76	75	12	54	60	10
115		115			115				
175		175			175				
D03_40086075	40	D03_42086075	42	86	75	12	54	60	10
135		135			135				
D03_40096075	40	D03_42096075	42	96	75	12	54	60	10
115		115			115				
155		155			155				
D03_40116095	40	D03_42116095	42	116	95	12	54	60	10
135		135			135				
195		195			195				
D03_40136095	40	D03_42136095	42	136	95	12	54	60	10
135		135			135				
215		215			215				
D03_40156115	40	D03_42156115	42	156	115	12	54	60	10
155		155			155				
215		215			215				
D03_40196155	40	D03_42196155	42	196	155	12	54	60	10
195		195			195				
235		235			235				
D03_40246165	40	D03_42246165	42	246	165	12	54	60	10
245		245			245				

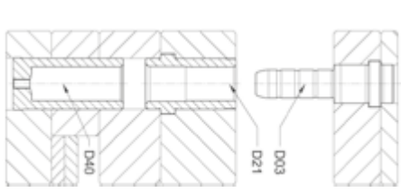
PLASTİK KALIBI ÜRÜNLERİ

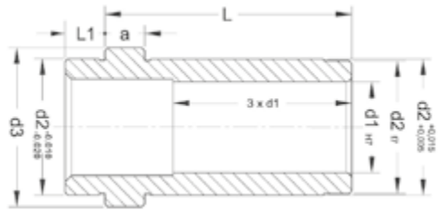
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KUYRUKLU ŞAPKALI BURÇ — D21



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN 16716 - C





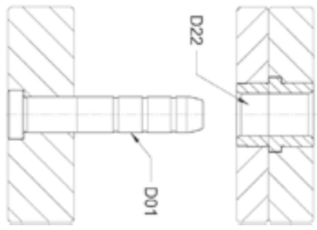
Sip. No.	d1	Sip. No.	d1	L	d2	d3	a	L1
D21_14017		D21_15017		17				
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056	14	056	15	56	20	25	6	9
066		066		66				
076		076		76				
086		086		86				
096		096		96				
116		116		116				
D21_18017		D21_20017		17				
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056		056		56				
066	18	066	20	66	26	31	6	9
076		076		76				
086		086		86				
096		096		96				
106		106		106				
116		116		116				
136		136		136				
D21_22017		D21_24017		17				
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056		056		56				
066	22	066	24	66	30	35	6	9
076		076		76				
086		086		86				
096		096		96				
106		106		106				
116		116		116				
136		136		136				
156		156		156				

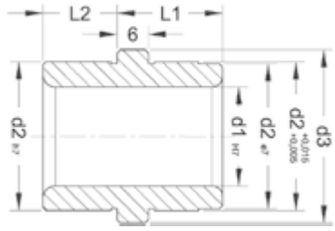
Sip. No.	d1	Sip. No.	d1	L	d2	d3	a	L1
D21_30027		D21_32027		27				
036		036		36				
046		046		46				
056		056		56				
066		066		66				
076		076		76				
086	30	086	32	86	42	47	6	9
096		096		96				
106		106		106				
116		116		116				
126		126		126				
136		136		136				
156		156		156				
196		196		196				
D21_40046		D21_42046		46				
056		056		56				
066		066		66				
076		076		76				
086		086		86				
096	40	096	42	96	54	60	10	12
116		116		116				
136		136		136				
156		156		156				
196		196		196				
246		246		246				

FLANŞLI BURÇ — D22



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon





Sip. No.	d1	L1	d2	d3	L2
D22_1216	12	16	16	19	12
D22_1416	14	16	20	25	12
D22_1616	16	16	24	28	12
D22_1816	18	16	26	31	12

Sip. No.	d1	L1	d2	d3	L2
D22_2016	20	16	28	32	12
D22_2421	24	21	34	38	16
D22_2521	25	21	34	38	16
D22_3021	30	21	39	43	16

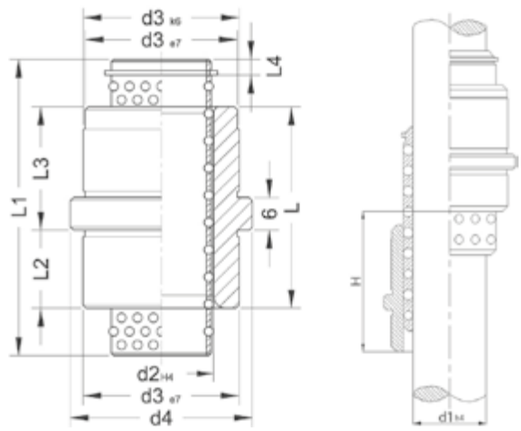
PLASTİK KALIBI ÜRÜNLERİ

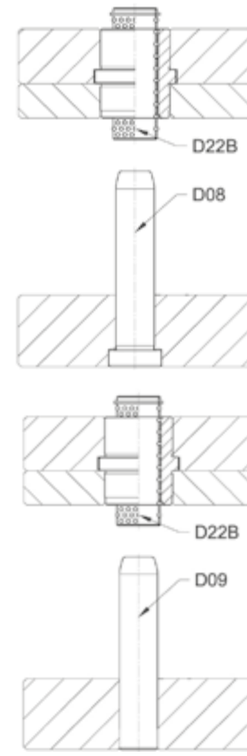
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BİLYALI BURÇ

D22B





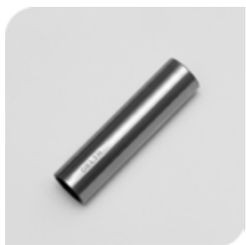


- Malzeme : Asil Çelik 1.3505 (100Cr6)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme
- Bilya Malzemesi : 1.3505. (100Cr6)

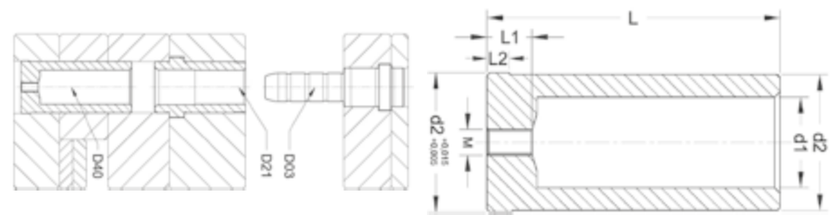
Sip. No.	d1	L1	Hmax	L4	L	L2	d2	d3	d4	L3
D22B_1240	12	40	50	2.1	24	6	16	22	26	18
56		56	82							
D22B_1845	18	45	44	3	34	11	24	30	35	23
56		56	66							
71		71	96							
D22B_3056	30	56	32	4.8	54	21	38	46	52	33
75		75	70							
95		95	110							

TESPİT BURCU

D40



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN 16759



Sip. No.	d2	L	d1	M	L1	L2	d2 Tol.
D40_20030	20	30	16	12	10	2	g6
040		40					
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
D40_26030	26	30	21	12	13	2.5	g6
040		40					
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
D40_30040	30	40	25	12	13	2.5	g6
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
200		200					
240		240					

Sip. No.	d2	L	d1	M	L1	L2	d2 Tol.
D40_42040	42	40	33	12	16	4.5	g6
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
200		200					
220		220					
260		260					
300		300					
D40_54060	54	60	43	12	16	4.5	f6
080		80					
120		120					
160		160					
200		200					
240		240					
280		280					

PLASTİK KALIBI ÜRÜNLERİ

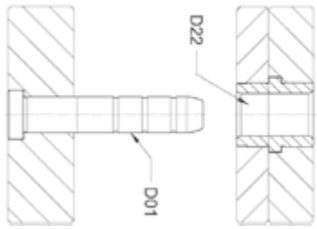
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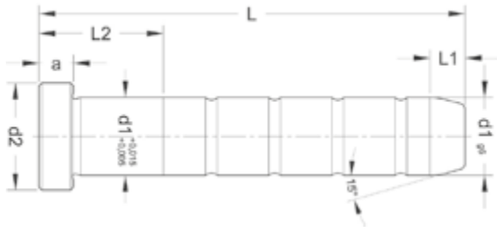
ŞAPKALI KOLON

D01



- Malzeme : : Asil Çelik 1.1213 (Cf 53))
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon





Sip. No.	d1	L	L1	L2	d2	a
D01_10040	10	40	4	17	12	3
060		60				
080		80		22		
100		100		27		
120		120				
D01_12040	12	40	4	17	16	6
060		60		22		
080		80		27		
100		100				
120		120		36		
140		140				
160		160				
D01_14060	14	60	7	17	18	8
080		80		22		
100		100		27		
120		120		36		
140		140				
160		160				
180		180		46		
D01_16040	16	40	7	22	20	8
060		60		27		
080		80				
100		100		36		
120		120				
140		140				
160		160		46		
180		180				
200		200		56		
D01_18060	18	60	7	27	22	8
080		80				
100		100		36		
120		120				
140		140				
160		160		46		
180		180				
200		200		56		
240		240				
D01_20060	20	60	7	27	24	8
080		80				
100		100		36		
120		120				
140		140				
D01_20160	20	160	7	46	24	8
180		180				
200		200		56		
240		240		76		

Sip. No.	d1	L	L1	L2	d2	a
D01_22080	22	80	7	36	26	15
100		100				
120		120				
140		140				
160		160		46		
180		180		56		
200		200				
220		220				
240		240		66		
300		300				
D01_24080	24	80	7	36	28	15
100		100				
120		120				
140		140				
160		160		46		
180		180		56		
200		200				
220		220				
240		240		66		
300		300				
D01_25100	25	100	7	35	29	10
120		120				
140		140				
160		160				
180		180				
200		200				
220		220				
250		250				
D01_30100	30	100	7	36	36	15
120		120				
140		140				
160		160		46		
180		180		56		
200		200		66		
220		220				
240		240				
300		300		76		
360		360				
D01_40160	40	160	10	46	48	15
180		180		56		
200		200		66		
220		220				
240		240				
280		280				
300		300		76		
320		320				
360		360				
D01_50160	50	160	10	56	58	15
200		200				
240		240				
300		300		66		
360		360		76		

PLASTİK KALIBI ÜRÜNLERİ

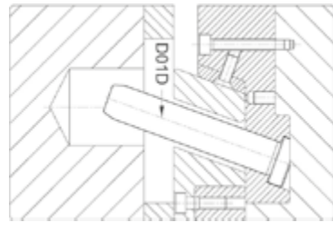
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ŞAPKALI KOLON

D01D



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon DIN ISO 8404 - A





Sip. No.	d1	L	L1	d2	a
D01D_10040	10	40	4	12	3
060		60			
080		80			
100		100			
120		120			
D01D_12040	12	40	4	16	6
060		60			
080		80			
100		100			
120		120			
140		140			
160		160			
D01D_14060	14	60	7	18	8
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
D01D_16040	16	40	7	20	8
060		60			
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
D01D_18060	18	60	7	22	8
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
240		240			
D01D_20060	20	60	7	24	8
080		80			
100		100			
120		120			
140		140			
D01D_20160	20	160	7	24	8
180		180			
200		200			
240		240			

D01D_22080	22	80	7	26	15
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
D01D_24080	24	80	7	28	15
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
D01D_30100	30	100	7	36	15
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
360		360			
D01D_40160	40	160	10	48	15
180		180			
200		200			
220		220			
240		240			
280		280			
300		300			
320		320			
360		360			
D01D_50160	50	160	10	58	15
200		200			
240		240			
300		300			
360		360			

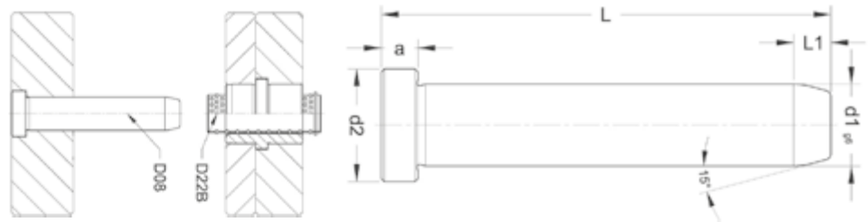
PLASTİK KALIBI ÜRÜNLERİ

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KOLON D08



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon



Sip. No.	d1	L	L1	d2	a
D08_12080	12	80	4	16	4
100		100			
120		120			

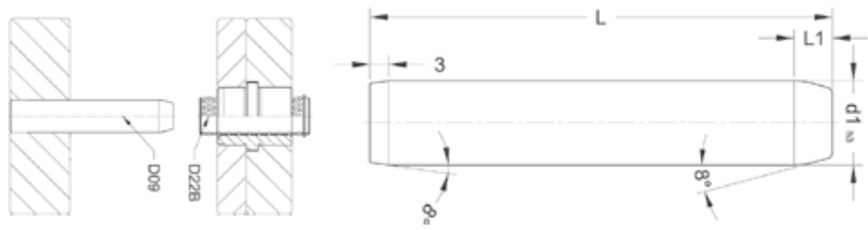
Sip. No.	d1	L	L1	d2	a
D08_18120	18	120	7	22	6
140		140			
160		160			

Sip. No.	d1	L	L1	d2	a
D08_30160	30	160	7	36	6
200		200			
240		240			

KOLON D09



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon DIN 9825 - 2



Sip. No.	d1	L	L1
D09_12100	12	100	6
125		125	

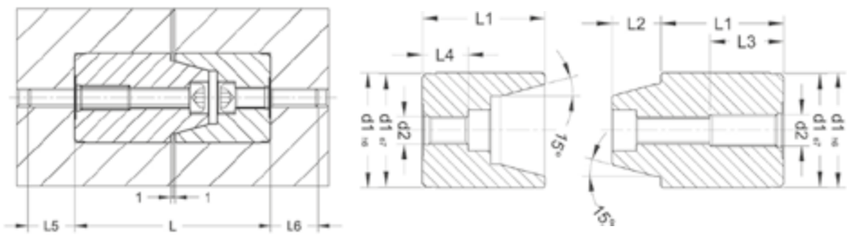
Sip. No.	d1	L	L1
D09_18125	18	125	6
160		160	

Sip. No.	d1	L	L1
D09_30160	30	160	7
240		240	

KONİK KİLİTLEME D50



- Malzeme : : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN ISO 8406



Sip. No.	d1	L	L1	L2	L3	L4	L5	L6	d2
D50_12	12	34	16	4.5	9.6	8.6	8	7.5	M4
D50_14	14	34	16	6	12.4	6	7.5	8	M5
D50_16	16	34	16	6	12.4	5.8	7.5	8	M5
D50_20	20	54	26	9	19.7	10.6	12	9.5	M8

Sip. No.	d1	L	L1	L2	L3	L4	L5	L6	d2
D50_25	25	54	26	10	19.7	9.2	11	11	M8
D50_30	30	72	35	14	25	12.2	15	13	M10
D50_32	32	72	35	14	25	12.2	15	13	M10
D50_42	42	92	45	18	27	16.8	16	13	M10

PLASTİK KALIBI ÜRÜNLERİ

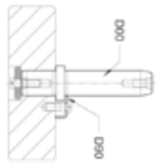
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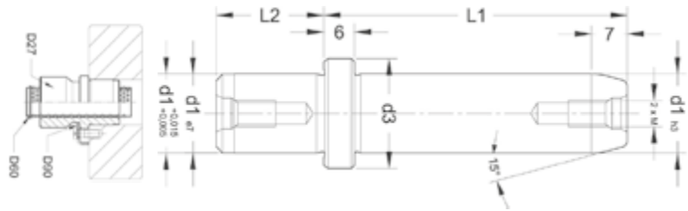
ORTADAN ŞAPKALI KOLON

D00



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon





Sip. No.	d1	Sip. No.	d1	L1	L2	d3	M
D00_1510020	15	D00_1610020	16	100	20	22	1x8
11220		11220		112			
12520		12520		125			
14020		14020		140			
16020		16020		160			
18020		18020		180			
20020		20020		200			
D00_1910023	19	D00_2010023	20	100	23	25	8
11223		11223		112			
12523		12523		125			
14023		14023		140			
16023		16023		160			
18023		18023		180			
20023		20023		200			
D00_2410030	24	D00_2510030	25	100	30	32	8
11230		112 30		112			
12530		12530		125			
14030		14030		140			
16030		16030		160			
18030		18030		180			
20030		20030		200			
22430		22430		224			
25030		25030		250			
D00_3011237	30	D00_3211237	32	112	37	40	8
12537		12537		125			
14037		14037		140			
16037		16037		160			
18037		18037		180			
20037		20037		200			
22437		22437		224			
25037		25037		250			
28037		28037		280			
31537		31537		315			

Sip. No.	d1	Sip. No.	d1	L1	L2	d3	M
D00_3812537	38	D00_4012537	40	125	37	50	8
14037		14037		140			
16037		16037		160			
18037		18037		180			
20037		20037		200			
22437		22437		224			
25037		25037		250			
28037		28037		280			
31537		31537		315			
35537		35537		355			
D00_4814047	48	D00_5014047	50	140	47	63	8
16047		16047		160			
18047		18047		180			
20047		20047		200			
22447		22447		224			
25047		25047		250			
28047		28047		280			
31547		31547		315			
35547		35547		355			
40047		40047		400			
D00_6016047	60	D00_6316047	63	160	47	80	8
18047		18047		180			
20047		20047		200			
22447		22447		224			
25047		25047		250			
28047		28047		280			
31547		31547		315			
35547		35547		355			
40047		40047		400			
		D00_8020060	80	200	60	95	12
		22460		224			
		25060		250			
		28060		280			
		31560		315			
		35560		355			
		40060		400			

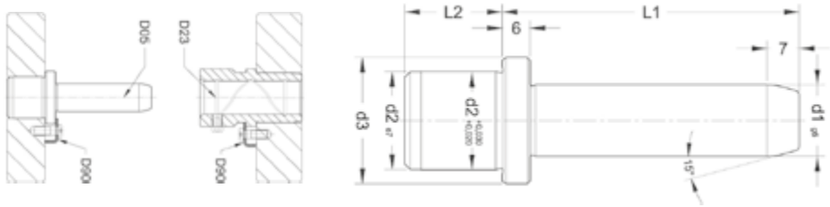
PLASTİK KALIBI ÜRÜNLERİ

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ARKASI KALIN KOLON — D05



- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon



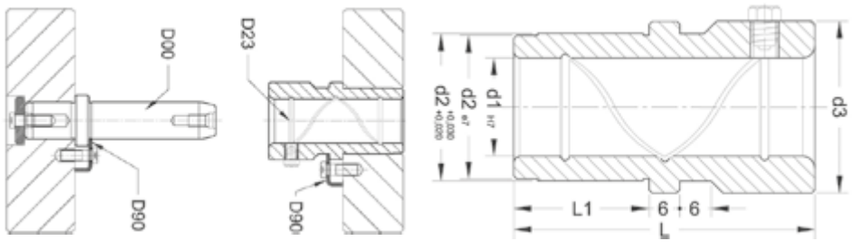
Sip. No.	d1	L1	L2	d2	d3
D05_2010025	20	100	25	28	34
35			35		
D05_2012525		125	25		
35			35		
D05_2014025		140	25		
35			35		
D05_2016025		160	25		
35			35		
D05_2018025		180	25		
35			35		
D05_2510025	25	100	25	34	39
35			35		
D05_2512525		125	25		
35			35		
D05_2514025		140	25		
35			35		
D05_2516025		160	25		
35			35		
D05_2518025		180	25		
35			35		
D05_2520025		200	25		
35			35		
D05_2522025		220	25		
35			35		
D05_2524025		240	25		
35			35		

Sip. No.	d1	L1	L2	d2	d3
D05_3012535	30	125	35	39	44
45			45		
D05_3014035		140	35		
45			45		
D05_3016035		160	35		
45			45		
D05_3018035		180	35		
45			45		
D05_3020035		200	35		
45			45		
D05_3022035		220	35		
45			45		
D05_3024035		240	35		
45			45		
D05_3026035		260	35		
45			45		
D05_3028035	30	280	35	39	44
45			45		
D05_3031535		315	35		
45			45		

BURÇ — D23



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon



Sip. No.	d1	L	L1	d2	d3
D23_1605923	16	59	23	30	32
D23_2007026	20	70	26	28	34
36			36		
D23_2508026	25	80	26	34	39
36			36		
D23_3009036	30	90	36	39	44
46			46		

Sip. No.	d1	L	L1	d2	d3
D23_4010036	40	100	36	50	54
10836		108	36	58	65
10046		100	46	50	54
D23_5012046	50	120	46	60	64
56		127	56	70	75
12756			56		
D23_6313056	63	130	56	80	87
15056		150	56	85	95
D23_8015060	80	150	60	105	115

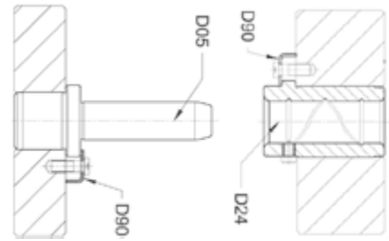
PLASTİK KALIBI ÜRÜNLERİ

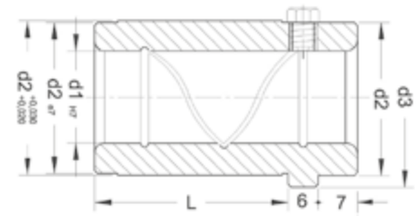
DELTA

BURÇ — D24



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon





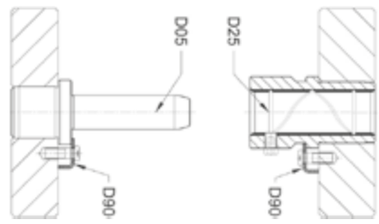
Sip. No.	d1	d2	L	d3
D24_1603023	16	30	23	34
D24_2002826	20	28	26	
D24_2503426	25	34	26	39
D24_3003926	30	39	26	44
36			36	
D24_4005036	40	50	36	54
46		58	46	65
05846				

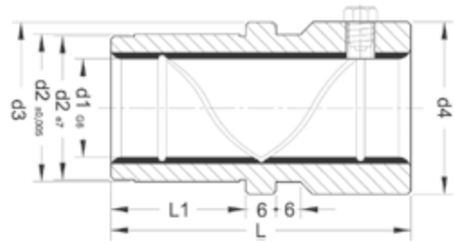
Sip. No.	d1	d2	L	d3
D24_5006046	50	60	46	64
07046		70		75
D24_6308546	63	85	46	95
56			56	
D24_8010560	80	105	60	115

BRONZLU BURÇ — D25



- Malzeme : Çelik + Bronz ISO - 9448





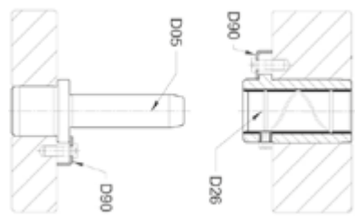
Sip. No.	d1	L	L1	d2	d3	d4
D25_1605923	16	59	23	30	34	32
D25_1904323	19	43		32	40	39
05923		59				
05933			33			
D25_2004323	20	43	23	32	40	39
05923		59				
05933			33			
D25_2405923	24	59	23	40	48	46
07923		79				
07933			33			
D25_2505923	25	59	23	40	48	46
07923		79				
07933			33			
D25_3007530	30	75	30	48	55	53
09330		93				
09340			40			
D25_3207530	32	75	30	48	55	53
09330		93				
09340			40			

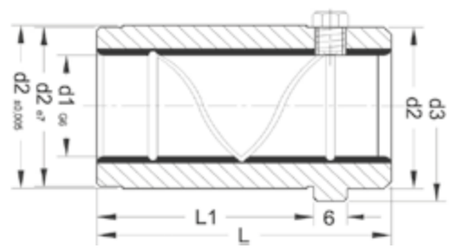
Sip. No.	d1	L	L1	d2	d3	d4
D25_3808237	38	82	37	58	65	63
10837		108				
10847			47			
D25_4008237	40	82	37	58	65	63
10837		108				
10847			47			
D25_4809747	48	97	47	70	80	77
12747		127				
12757			57			
D25_5009747	50	97	47	70	80	77
12747		127				
12757			57			
D25_6011660	60	116	60	85	95	92
15060		150				
D25_6311660	63	116	60	85	95	92
15060		150				
D25_8012060	80	120	60	105	118	115
15060		150				

BRONZLU BURÇ — D26



- Malzeme : Çelik + Bronz ISO - 9448





Sip. No.	d1	L	L1	d2	d3
D26_163523	16	35	23	30	34
D26_193523	19			32	40
4533		45	33		
D26_203523	20	35	23	32	40
4533		45	33		
D26_243523	24	35	23	40	48
4533		45	33		
D26_253523	25	35	23	40	48
4533		45	33		

Sip. No.	d1	L	L1	d2	d3
D26_304230	30	42	30	48	55
5240		52	40		
D26_324230	32	42	30	48	55
5240		52	40		
D26_385237	38	52	37	58	65
6247		62	47		
D26_405237	40	52	37	58	65
6247		62	47		

Sip. No.	d1	L	L1	d2	d3
D26_486547	48	65	47	70	80
7557		75	57		
D26_506547	50	65	47	70	80
7557		75	57		
D26_608060	60	80	60	85	95
D26_638060	63	80	60	85	95
D26_808060	80	80	60	105	118

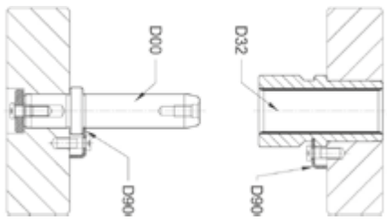
PLASTİK KALIBI ÜRÜNLERİ

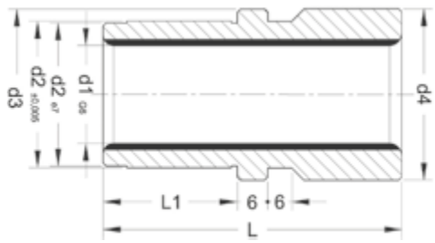
DELTA®

SİNTERLİ BURÇ — D32



- Malzeme : 1.1191 (Ck45) + Sinter
- Sertlik : 52± 2 HRC
- Isıl İşlem : İndüksiyon



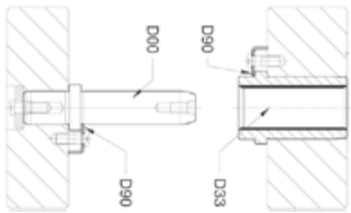


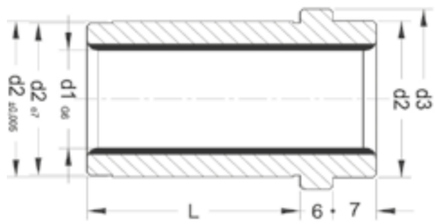
Sip. No.	d1	L	L1	d2	d3	d4
D32_2007026	20	70	26	32	40	38
36			36			
D32_2508026	25	80	26	40	47	45
36			36			
D32_3009036	30	90	36	48	54	52
46			46			
D32_4010036	40	100	36	58	64	62
46			46			
D32_5012046	50	120	46	70	78	76
56			56			
D32_6315056	63	150	56	85	93	91
D32_8015060	80	150	60	105	118	115

SİNTERLİ BURÇ — D33



- Malzeme : 1.1191 (Ck45) + Sinter
- Sertlik : 52± 2 HRC
- Isıl İşlem : Indüksiyon





Sip. No.	d1	d2	L	d3
D33_2003226	20	32	26	40
36			36	
D33_2504026	25	40	26	47
36			36	
D33_3004826	30	48	26	54
36			36	
D33_4005836	40	58	36	64
46			46	
D33_5007046	50	70	46	78
D33_6308556	63	85	56	93
D33_8010560	80	105	60	118

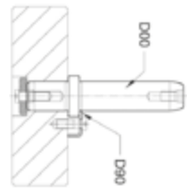
PLASTİK KALIBI ÜRÜNLERİ

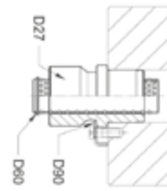
DELTA®

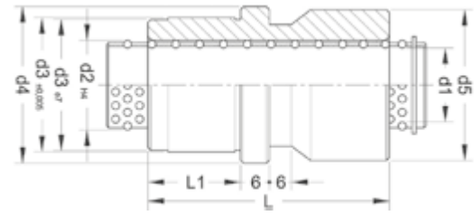
BURÇ D27



- Malzeme : : Asil Çelik 1.3505 (100Cr6)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme DIN 9831 ISO 9448 - 7







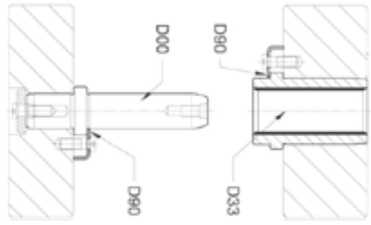
Sip. No.	d1	L	L1	d2	d3	d4	d5
D27_1504323	15	43	23	21	30	34	32
05923		59					
05933			33				
D27_1604323	16	43	23	22	30	34	32
05923		59					
05933			33				
D27_1904323	19	43	23	25	32	40	39
05923		59					
05933			33				
D27_2004323	20	43	23	26	32	40	39
05923		59					
05933			33				
D27_2405923	24	59	23	30	40	48	46
07923		79					
07933			33				
D27_2505923	25	59	23	31	40	48	46
07923		79					
07933			33				
D27_3007530	30	75	30	38	48	55	53
09330		93					
09340			40				

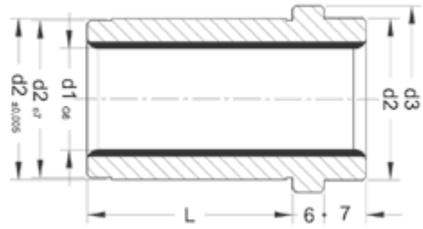
Sip. No.	d1	L	L1	d2	d3	d4	d5
D27_3207530	32	75	30	40	48	55	53
09330		93					
09340			40				
D27_3808237	38	82	37	46	58	65	63
10837		108					
10847			47				
D27_4008237	40	82	37	48	58	65	63
10837		108					
10847			47				
D27_4809747	48	97	47	56	70	80	77
12747		127					
12757			57				
D27_5009747	50	97	47	58	70	80	77
12747		127					
12757			57				
D27_6011660	60	116	60	68	85	95	92
15060		150					
D27_6311660	63	116	60	71	85	95	92
15060		150					
D27_8012060	80	120	60	92	105	118	115
15060		150					

BURÇ D28



- Malzeme : Asil Çelik 1.3505 (100Cr6)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme DIN 9831 ISO 9448 - 7





Sip. No.	d1	L	L1	d2	d3	d4
D28_153523	15	35	23	21	30	34
4533		45	33			
D28_163523	16	35	23	22	30	34
4533		45	33			
D28_193523	19	35	23	25	32	40
4533		45	33			
D28_203523	20	35	23	26	32	40
4533		45	33			
D28_243523	24	35	23	30	40	48
4533		45	33			
D28_253523	25	35	23	31	40	48
4533		45	33			
D28_304230	30	42	30	38	48	55
5240		52	40			

Sip. No.	d1	L	L1	d2	d3	d4
D28_324230	32	42	30	40	48	55
5240		52	40			
D28_385237	38	52	37	46	58	65
6247		62	47			
D28_405237	40	52	37	48	58	65
6247		62	47			
D28_486547	48	65	47	56	70	80
7557		75	57			
D28_506547	50	65	47	58	70	80
7557		75	57			
D28_608060	60	80	60	68	85	95
D28_638060	63	80	60	71	85	95
D28_808060	80	80	60	92	105	118

PLASTİK KALIBI ÜRÜNLERİ

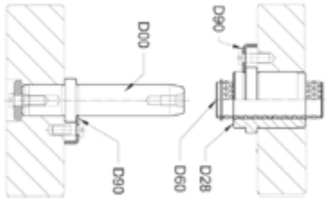
DELTA®

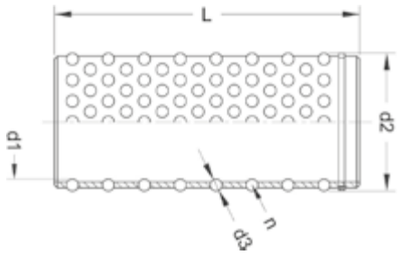
BİLYALI KAFES

D60



- Malzeme : : Ms58
- Bilya Malzemesi : 100Cr6 (1.3505)
- DIN 471
- DIN 5401



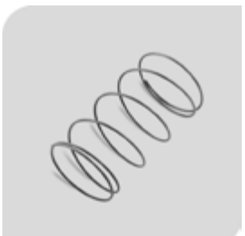


Sip. No.	d1	L	d2	d3	n
D60_12040	12	40	16	2	176
056		56			272
D60_15045	15	45	21	3	140
056		56			196
071		71			238
D60_16045	16	45	22	3	140
056		56			196
071		71			238
D60_18045	18	45	24	3	176
056		56			240
071		71			272
D60_19045	19	45	25	3	180
056		56			234
071		71			306
080		80			342
095		95			414
D60_20045	20	45	26	3	180
056		56			234
071		71			306
080		80			342
095		95			414
D60_24045	24	45	30	3	180
056		56			240
071		71			280
080		80			320
095		95			440
105		105			480
120		120			560
D60_25045	25	45	31	3	180
056		56			240
071		71			280
080		80			320
095		95			440
105		105			480
120		120			560
D60_30045	30	45	38	4	140
056		56			180
075		75			240
080		80			280
095		95			340
105		105			380
120		120			420
140		140			500
D60_32045	32	45	40	4	140
056		56			180
075		75			240
080		80			280
095		95			340
105		105			380
120		120			420
140		140			500

Sip. No.	d1	L	d2	d3	n
D60_38056	38	56	46	4	216
071		71			288
080		80			336
095		95			408
105		105			456
120		120			528
140		140			624
160		160			720
D60_40056	40	56	48	4	216
071		71			288
080		80			336
095		95			408
105		105			456
120		120			528
140		140			624
160		160			720
D60_48071	48	71	56	4	360
080		80			390
095		95			480
105		105			540
120		120			600
140		140			720
160		160			840
D60_50071	50	71	58	4	360
080		80			390
095		95			480
105		105			540
120		120			600
140		140			720
160		160			840
D60_60085	60	85	68	4	504
095		95			558
105		105			612
120		120			720
140		140			828
160		160			972
D60_63085	63	85	71	4	504
95		95			558
105		105			612
120		120			720
140		140			828
160		160			972
D60_80120	80	120	92	6	286
140		140			330
160		160			374
180		180			462
200		200			506

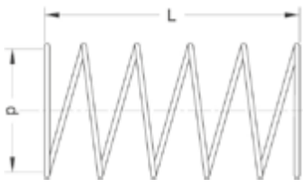
BİLYALI KAFES TUTUCUSU

D60.01

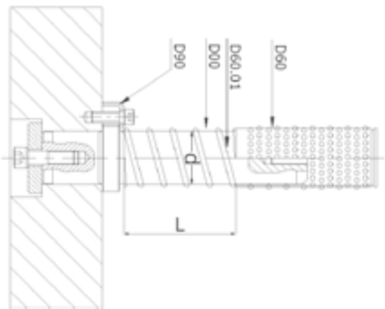


- Malzeme : : Yay Çeliği

d	L	Not / Note
19	040-140	L 10 mm. aralıklarla
20	040-140	
24	040-180	
25	040-180	
30	050-230	
32	050-230	
38	060-230	
40	060-230	
48	070-280	
50	070-280	
60	080-250	
63	080-250	



Sipariş Kodu Örneği
Spiral Yay = D60.01_
Ø Kolon = 19
Yay Boy = 040
Sipariş Kodu = D60.01_19040



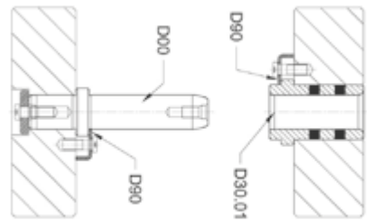
PLASTİK KALIBI ÜRÜNLERİ

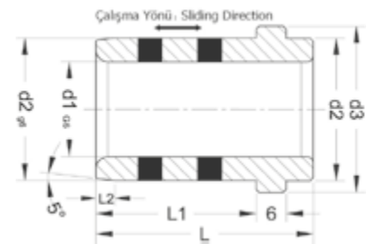
DELTA

GRAFİTLİ BURÇ D30.01



- Malzeme : Ms58
- Sertlik : HB≥180 DIN 9832
- Bilya Malzemesi : DIN 471
- DIN 5401





Sip. No.	FORD WDX1360	NAAMS G61	OPEL U2802-99(A)	d1	L	d2	d3	L1	L2
D30.01_020040				20	40	28	34	30	4
025040	08025	2540	F33020019	25	40	32	40	30	4
030050				30	50	40	50	40	4
032050	08032	3250	F33020020	32	50	40	50	40	4
040063	08040	4063	F33020021	40	63	50	63	50	5
050071	08050	5071	F33020022	50	71	63	71	56	6
063080	08063	6300	F33020023	63	80	80	90	63	8
080100	08080	8010	F33020024	80	100	100	112	80	10
100125	08100	1012	F33020025	100	125	125	140	106	12
125160	08125	1216	F33020026	125	160	160	180	132	12

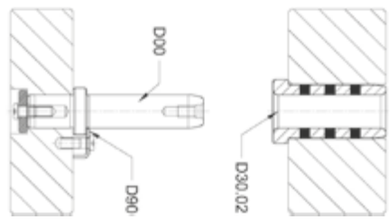
GRAFİTLİ BURÇ D30.02

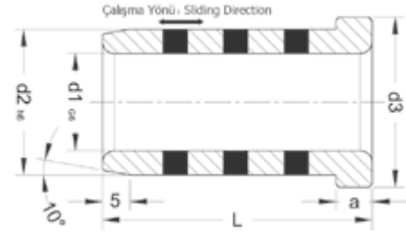


- Malzeme : SAE 430B
- Sertlik : HB≥180

Not:

- Toleranssız ölçüler EN-22768 -1 standardına göre üretilir.
- Belirtilmeyen köseler R=0,5





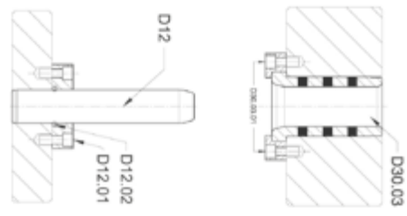
Sip. No.	FORD WDX1370	FORD WSA 003	d1	L	d2	d3	a
D30.02_020035	05020	11020	20	35	28	36	8
025040			25	40	32	40	8
030055			30	55	40	50	8
032055	05032		32	55	40	50	8
040070	05040		40	70	50	60	8
042070	05042	11042	42	70	50	60	8

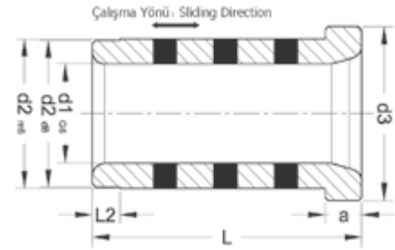
Sip. No.	FORD WDX1370	FORD WSA 003	d1	L	d2	d3	a
050075	05050		50	75	63	75	12
052075	05052	11052	52	75	63	75	12
063080	05063		63	80	80	90	12
080100	05080		80	100	100	110	12
100125	05100		100	125	125	135	12

GRAFİTLİ BURÇ D30.03



- Malzeme : SAE 430B
- Sertlik : HB≥180





Sip. No.	PSA MABEC CODE	RENAULT MABEC CODE	d1	L	d2	d3	a	L2
D30.03_025040			25	40	35	40	5	5
032050			32	50	44	50	6	5
040063	X345 274 670	M764 539 401	40	63	52	60	8	8
050080	X345 281 970	M764 544 501	50	80	63	71	10	8
063100	X345 287 270	M764 549 501	63	100	80	90	12	10
080125	X345 292 370	M764 554 601	80	125	100	112	16	10
100160		X345 298 500	100	160	125	140	20	10

PLASTİK KALIBI ÜRÜNLERİ

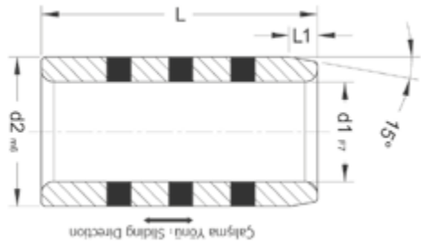
DELTA®

GRAFİTLİ BURÇ

D30.04



- Malzeme : SAE 430B
- Sertlik : HB≥180



Sip. No.	d1	L	d2	L1
D30.04_20015028	20	15	28	4
016028		16	28	
016030		16	30	
020028		20	28	
020030		20	30	
025028		25	28	
025030		25	30	
030028		30	28	
030030		30	30	
035028		35	28	
035030		35	30	
037028		37	28	
040026		40	26	
040028		40	28	
040030		40	30	
050028		50	28	
D30.04_25016033	25	16	33	4
016035		16	35	
020033		20	33	
020035		20	35	
025033		25	33	
025035		25	35	
030033		30	33	
030035		30	35	
035033		35	33	
035035		35	35	
040033		40	33	
040035		40	35	
047033		47	33	
050032		50	32	
050033		50	33	
050035		50	35	
060033		60	33	
D30.04_30020038	30	20	38	4
020040		20	40	
025038		25	38	
025040		25	40	
030038		30	38	
030040		30	40	
035038		35	38	
035040		35	40	
040038		40	38	
D30.04_30040040	30	40	40	4
050038		50	38	
050040		50	40	
060038		60	38	
060040		60	40	
060042		60	42	
D30.04_35020045	35	20	45	4
025044		25	44	
025045		25	45	
030044		30	44	
030045		30	45	
035044		35	44	
035045		35	45	
040044		40	44	
040045		40	45	
050044		50	44	
050045		50	45	
060044		60	44	
060045		60	45	

Sip. No.	d1	L	d2	L1
D30.04_40020050	40	20	50	4
025050		25	50	
025055		25	55	
030050		30	50	
030055		30	55	
035050		35	50	
035055		35	55	
040050		40	50	
040055		40	55	
050050		50	50	
050055		50	55	
060050		60	50	
060055		60	55	
070050		70	50	
077050		77	50	
080050		80	50	
D30.04_50030060	50	30	60	4
030062		30	62	
030065		30	65	
035060		35	60	
035062		35	62	
040060		40	60	
040062		40	62	
040065		40	65	
050060		50	60	
050062		50	62	
050065		50	65	
060060		60	60	
060062		60	62	
060065		60	65	
070060		70	60	
070062		70	62	
070065		70	65	
080060		80	60	
080065		80	65	
095060		95	60	
100065		100	65	
D30.04_63030074	63	30	74	4
030075		30	75	
035074		35	74	
035075		35	75	
040074		40	74	
040075		40	75	
050074		50	74	
050075		50	75	
060074		60	74	
060075		60	75	
070074		70	74	
070075		70	75	
080074		80	74	
080075		80	75	
100075		100	75	

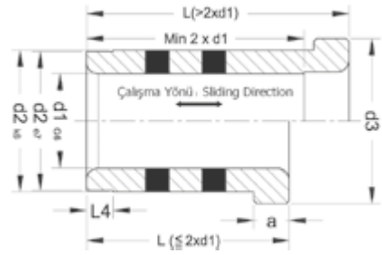
PLASTİK KALIBI ÜRÜNLERİ

DELTA®

GRAFİTLİ BURÇ — D30.05



- Malzeme : SAE 430B
- Sertlik : HB≥180



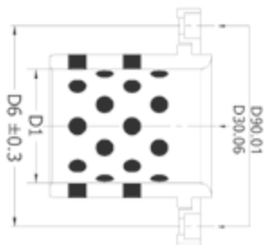
Sip. No.	d1	L	d2	d3	a	L4
D30.05_20017	20	17	26	31	6	2
022		22				
027		27				
036		36				
046		46				
056		56				
066		66				
076		76				
D30.05_25046	25	46	32	38	6	3
056		56				
066		66				
076		76				
086		86				
D30.05_30027	30	27	42	47	6	4
036		36				
046		46				
056		56				
066		66				
076		76				
086		86				
096		96				
116		116				

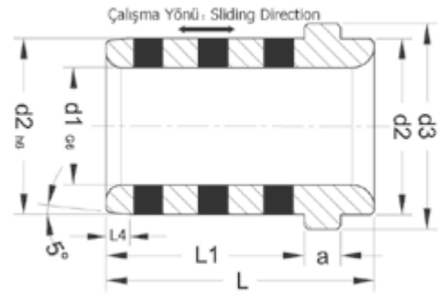
Sip. No.	d1	L	d2	d3	a	L4
D30.05_40046	40	46	54	60	10	5
056		56				
066		66				
076		76				
086		86				
096		96				
116		116				
136		136				
156		156				
D30.05_50076	50	76	66	72	10	5
086		86				
096		96				
116		116				
136		136				
156		156				
196		196				
D30.05_60096	60	96	80	86	20	5
116		116				
136		136				
156		156				
196		196				
D30.05_63096	63	96	80	86	20	5
116		116				
136		136				
156		156				
196		196				

GRAFİTLİ BURÇ — D30.06



- Malzeme : SAE 430B
- Sertlik : HB≥180





Sip. No.	BMW CODE B2 2933 1	PSA MABEC CODE	d1	L	d2	d3	D6	L1	a	L4
D30.06_025040	2168699		25	40	32	40	58	30	6.3	3
032050	2168700		32	50	40	50	66	40	6.3	4
040063	2168701		40	63	50	63	79	50	6.3	5
050071	2168702		50	71	63	71	89	56	6.3	6.3
063080	2168703		63	80	80	90	123	63	10	8
080100	2168704		80	100	100	112	143	80	10	10
100125	2168705	Z000499644	100	125	125	140	168	106	10	12.5
125160	2168706	Z000499646	125	160	160	180	203	132	10	16
160200	2168707		160	200	200	220	243	170	10	16

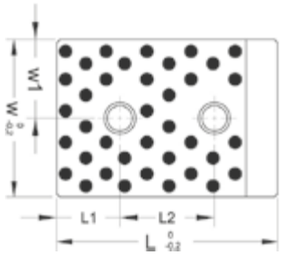
PLASTİK KALIBI ÜRÜNLERİ

DELTA

GRAFİTLİ SÜRTÜNME PLAKASI — D80.01



- Malzeme : SAE 430B
- Sertlik : HB≥180 ISO 9183-1



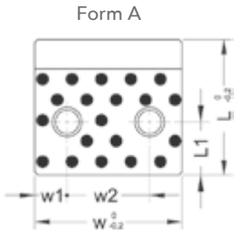


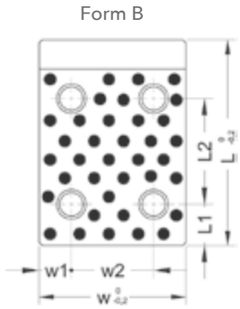
Sip. No.	VW/AUDI 39D863	FORD WDX 1365	OPEL 3425	W	L	w1	L1	L2	d1	d	t
D80.01_050080	12				80			30	15	9	9
100	13	01050100-Y	F33 04 0000		100			50			
125	14		F33 04 0001	50	125	25	25	75	20	13.5	13
160	15	01050160-Y	F33 04 0002		160			110			
200	16	01050200-Y	F33 04 0003		200			150			
D80.01_080080	22				80			30			
100	23	01080100-Y	F33 04 0004		100			50			
125	24		F33 04 0005		125		25	75			
160	25	01080160-Y	F33 04 0006	80	160	40		110	20	13.5	13
200	26	01080200-Y	F33 04 0007		200			150			
250		01080250-Y			250		40	170			
315		01080315-Y			315			235			
D80.01_100100	33	01100100-Y	F33 04 0010		100			50			
125	34	01100125-Y	F33 04 0011		125		25	75			
160	35	01100160-Y	F33 04 0012	100	160	50		110	20	13.5	13
200	36	01100200-Y	F33 04 0013		200			150			
250		01100250-Y			250		40	170			
315		01100315-Y			315			235			

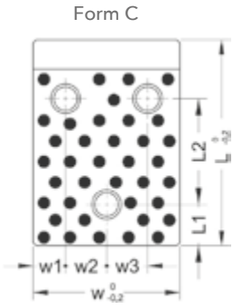
GRAFİTLİ SÜRTÜNME PLAKASI — D80.02

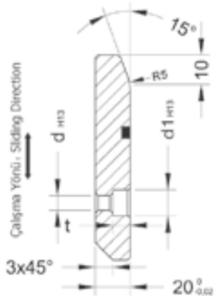


- Malzeme : SAE 430B
- Sertlik : HB≥180









Sip. No.	VW/AUDI 39D863	FORD WDX 1365	OPEL 3425	W	L	w1	w2	w3	L1	L2	d1	d	t	Form
D80.02_080050	21			80	50	25	30		25		15	9	9	A
D80.02_100050	31	01100050-Y	F33 04 0008	100	50	25	50		25		20	13.5	13	A
080	32		F33 04 0009	100	80				40					
D80.02_125050	41			125	50		75		25					A
080	42		F33 04 0014	125	80				40					
100	43	01125100-Y	F33 04 0015	125	100					50				
125	44		F33 04 0016	125	125	25			25	75	20	13.5	13	
160	45	01125160-Y	F33 04 0017	125	160		37.5	37.5		110				C
200	46	01125200-Y		125	200					150				
250		01125250-Y		125	250				40	170				
315		01125315-Y		125	315									
D80.02_160050	51			160	50		110		25	235				A
080	52			160	80				40					
100	53	01160100-Y	F33 04 0018	160	100					50				
125	54		F33 04 0019	160	125		55		25	75				C
160	55	01160160-Y	F33 04 0020	160	160	25		55		110	20	13.5	13	
200	56	01160200-Y		160	200					150				
250		01160250-Y		160	250		110		40	170				B
315		01160315-Y		160	315					235				
250.01		01160250-Y		160	250		55	55		170				C
315.01		01160315-Y		160	315					235				

PLASTİK KALIBI ÜRÜNLERİ

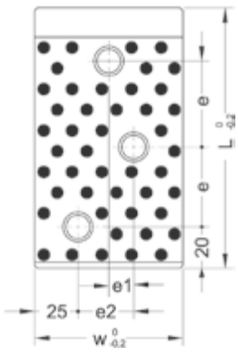
DELTA

GRAFİTLİ SÜRTÜNME PLAKASI — D80.03

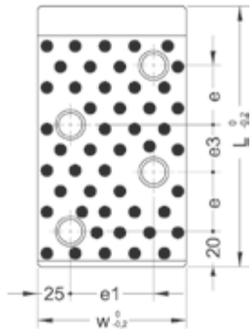


- Malzeme : SAE 430B
- Sertlik : HB≥180 ISO 9183-2

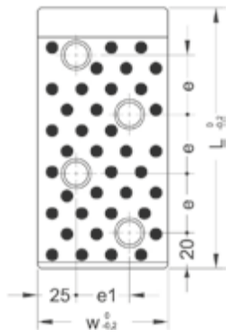
Form B



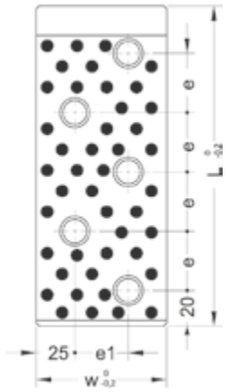
Form C



Form D

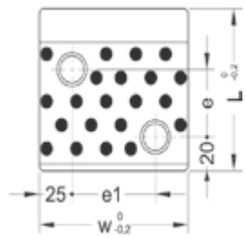


Form E



Sip. No.	PSA Mabec Code	RENAULT Mabec Code	W	L	e	e1	e2	e3	Form
D80.03_070100	Z000 166 214	R100 092 843	70	100	50	20			A
150	Z000 166 216	R100 092 844		150		10	20		B
200	Z000 166 221	R100 092 845		200		20			D
D80.03_100150	Z000 166 217	R100 092 883	100	150	25	50		50	C
200	Z000 166 222	R100 092 884		200	50	50			D
250	Z000 166 225	R100 092 885		250		50			E
D80.03_150200	Z000 166 223	R100 092 890	150	200	50	100			D
250	Z000 166 226	R100 092 893		250		100			E

Form A



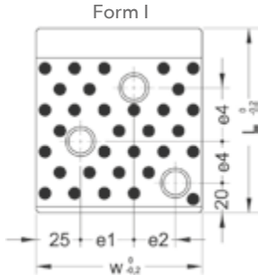


GRAFİTLİ SÜRTÜNME PLAKASI — D80.03

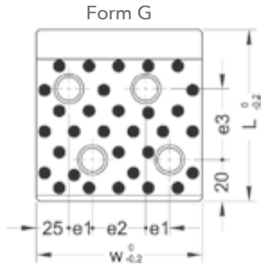


- Malzeme : SAE 430B
- Sertlik : HB≥180 ISO 9183-2

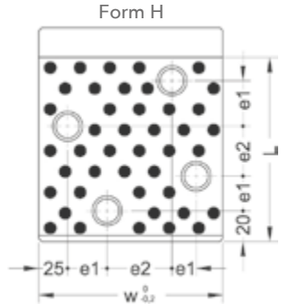
Form I



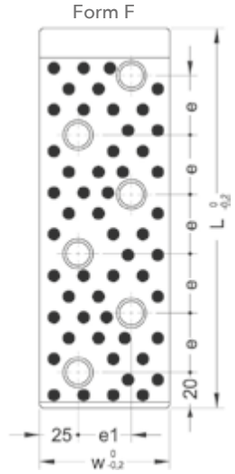
Form G



Form H



Form F



Sip. No.	PSA Mabec Code	RENAULT Mabec Code	W	L	e	e1	e2	e3	e4	Form
D80.03_100100	Z000 166 215	R100 092 846	100	100		30	20		25	I
300	Z000 166 227	R100 092 886		300	50	50				F
D80.03_150100	Z000 166 218	R100 092 887	150	100		25	50	50		G
150	Z000 166 219	R100 092 888		150		25	50			H
300	Z000 166 228	R100 092 894		300	50	100				F
D80.03_200100	Z000 166 224	R100 092 895	200	100		50	50	50		G

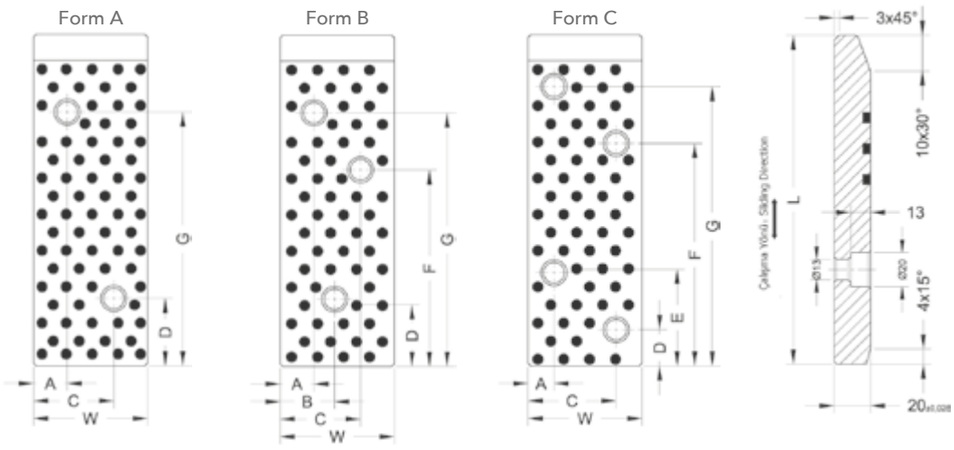
PLASTİK KALIBI ÜRÜNLERİ

DELTA®

GRAFİTLİ SÜRTÜNME PLAKASI — D80.04

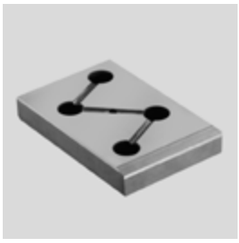


- Malzeme : SAE 430B
- Sertlik : HB≥180

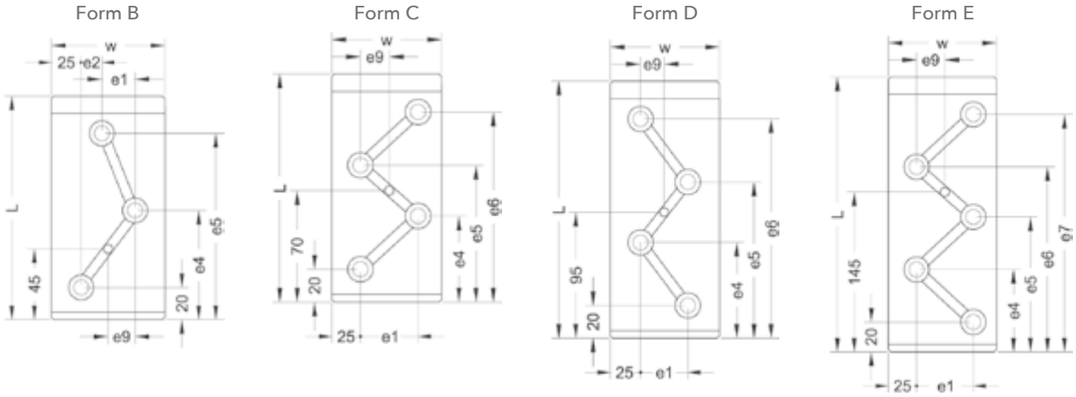


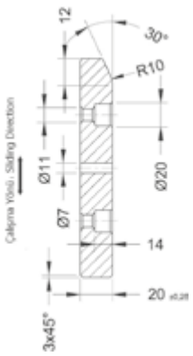
Sip. No.	FORD CODE WDX1362	W	L	A	B	C	D	E	F	G	Form
D80.04_050100	02050100-Y	50	100	25		25	30			60	A
150	02050150-Y		150				30			110	A
200	02050200-Y		200				40			160	A
D80.04_080100	02080100-Y	80	100	20		60	30			60	A
150	02080150-Y		150				30			110	A
200	02080200-Y		200				40			160	A
250	02080250-Y		250				40			210	A
315	02080315-Y		315		40		40		250	275	B
D80.04_100100	02100100-Y	100	100	22		78	30			60	A
150	02100150-Y		150				30			110	A
200	02100200-Y		200		50		40		135	160	B
250	02100250-Y		250		50		40		185	210	B
315	02100315-Y		315		50		40		250	275	B
D80.04_125100	02125100-Y	125	100	25		100	30			60	A
150	02125150-Y		150				30			110	A
200	02125200-Y		200		62		40		135	160	B
250	02125250-Y		250		62		40		185	210	B
315	02125315-Y		315				40		250	275	C
D80.04_160100	02160100-Y	160	100	30		130	30	65		60	A
150	02160150-Y		150				30			110	A
200	02160200-Y		200		80		40		135	160	B
250	02160250-Y		250				40	65	185	210	C
315	02160315-Y		315				40	65	250	275	C

ÇELİK SÜRTÜNME PLAKASI — D80.15



- Malzeme : Çelik
- Sertlik : 62± 2 HRC



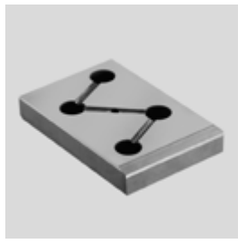


Sip. No.	PSA Mabec Code	RENAULT Mabec Code	W	L	e1	e2	e3	e4	e5	e6	e7	e8	e9	Form
D80.15_070100	Z000166213	P446625854	70	100	20			70	120				10	A
150	P446626558	P446626558		150	10	10							10	B
200	P446627059	P446627059		200	20					170			10	D
D80.15_100150	P446626559	P446626559	100	150	50			45	95	120			25	C
200	P446627060	P446627060		200				70	120	170			25	D
250	P446627454	P446627454		250							220		25	E
D80.15_150200	P446627061	P446627061	150	200	100			70	120	170			50	D
250	P446627455	P446627455		250	100						220		50	E

PLASTİK KALIBI ÜRÜNLERİ

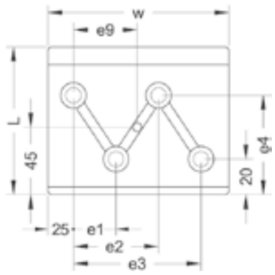
DELTA

ÇELİK SÜRTÜNME PLAKASI — D80.15

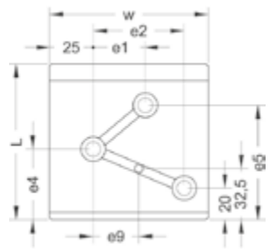


- Malzeme : Çelik
- Sertlik : 62± 2 HRC

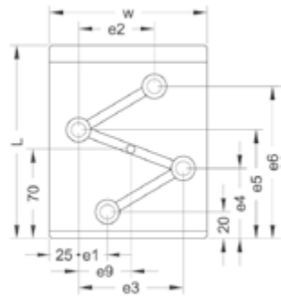
Form G



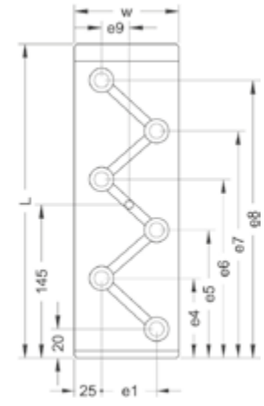
Form I



Form H



Form F

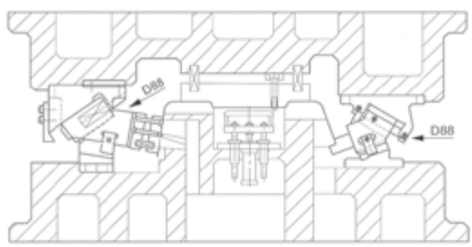


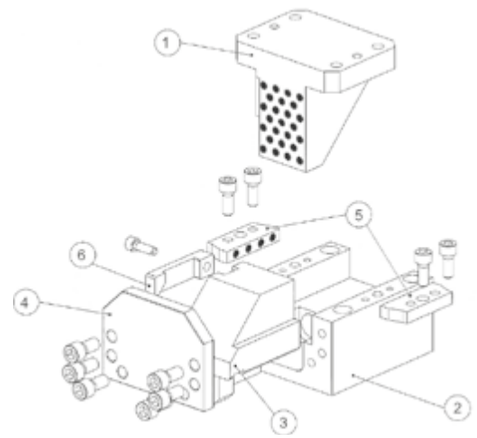


Sip. No.	PSA Mabec Code	RENAULT Mabec Code	W	L	e1	e2	e3	e4	e5	e6	e7	e8	e9	Form
D80.15_100100	P446625855	P446625855	100	100	30	50		45	70				25	I
300	P446627754	P446627754		300	50			70	120	170	220	270	25	F
D80.15_150100	P446626560	P446626560	150	100	25	75	100	70					50	G
150	P446626561	P446626561		150				45	95	120			50	H
300	P446627755	P446627755		300	100			70	120	170	220	270	50	F
D80.15_200100	Z000166220	P446627062	200	100	50	100	150	70					75	G

DÜZ KAM — D88







No	Parça Adı	Ad.	Malzeme	Not
1	Üst Gövde	1	SO#50F	Grafitli Yüzey
2	Alt Gövde	1	SO#50F	
3	Sürücü	1	SO#50F	
4	Arka Kapak	1	Çelik 55-60 HRC	
5	Üst Yan Kapak	2	Çelik	Grafitli Yüzey
6	Yan Kılavuz Kol	1	Çelik 55-60 HRC	

Sip. No.	Yay Ölçüleri		İlk Durum Initial		Final		Zımba Alanı B x H (mm)	Maksimum Çalışma Gücü (kN)	Kurs (mm)	Ağırlık (Kg)
	Ø Yay O.D. (mm)	Serbest Boy (mm)	Uzunluk (mm)	Yükleme (N)	Uzunluk (mm)	Yükleme (N)				
D88_05225	20	70	62	150	37	600	52x65	10	25	8
D88_05240	20	100	92	100	52	610	52x65	10	40	8
D88_05260	20	150	137	110	77	620	52x65	10	60	11
D88_06540	22	100	92	130	52	770	65x70	18	40	15
D88_06560	22	150	137	130	77	770	65x70	18	60	19
D88_10040	27	100	92	190	52	1150	100x100	30	40	32
D88_10060	27	150	137	210	77	1170	100x100	30	60	33
D88_10080	30	200	188	173	108	1325	100x100	30	80	38
D88_15040	35	100	92	320	52	1880	150x100	60	40	53
D88_15060	35	150	137	340	77	1900	150x100	60	60	57
D88_20040	35	100	92	470	52	2820	200x110	80	40	71
D88_20060	35	150	137	510	77	2850	200x110	80	60	76
D88_25040	40	100	92	620	52	3690	250x130	100	40	97
D88_25060	40	150	137	660	77	3720	250x130	100	60	105
D88_30040	40	100	92	620	52	3690	300x130	130	40	113
D88_30060	40	150	137	660	77	3720	300x130	130	60	120
D88_40060	60	150	148	156	88	4760	400x150	140	60	202
D88_50060	60	150	148	310	88	9520	500x150	140	60	236
D88_60060	60	150	148	310	88	9520	600x150	140	60	269

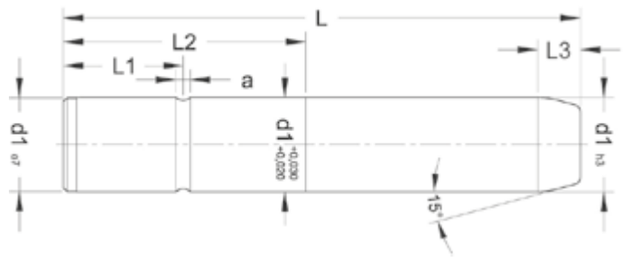
PLASTİK KALIBI ÜRÜNLERİ

DELTA®

KOLON — D10

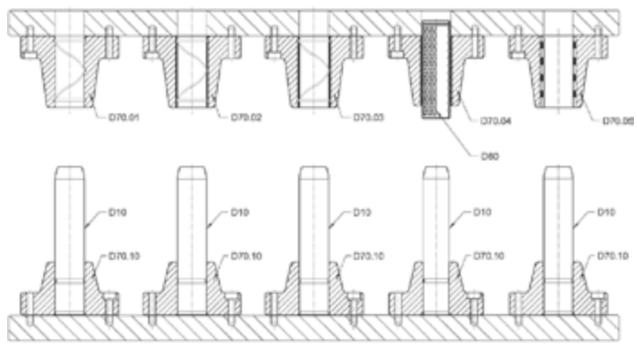


- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : İndüksiyon



Sip. No.	d1	L	L1	L2	a	L3
D10_40180	40	180	37	77	8	10
220		220				
260		260				
300		300				
355		355				
400		400				
D10_50200	50	200	47	95	8	10
240		240				
280		280				
315		315				
355		355				
400		400				
450		450				

Sip. No.	d1	L	L1	L2	a	L3
D10_63240	63	240	60	120	8	10
280		280				
315		315				
355		355				
400		400				
450		450				
D10_80240	80	240	60	120	8	16
280		280				
315		315				
355		355				
400		400				
450		450				
500		500				

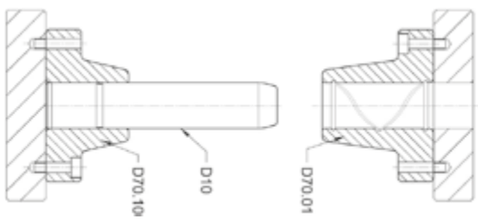


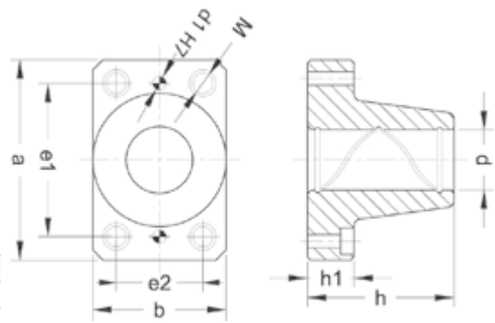
DÖKÜM BLOK — D70.01



- Malzeme : GG25

Ød	M
40	12
50	14
63	16
80	20





Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.01_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

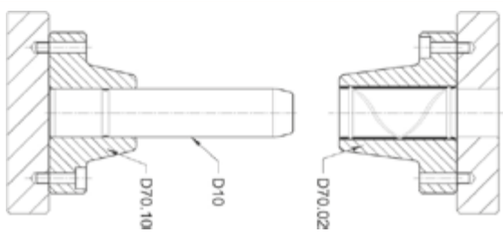
Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

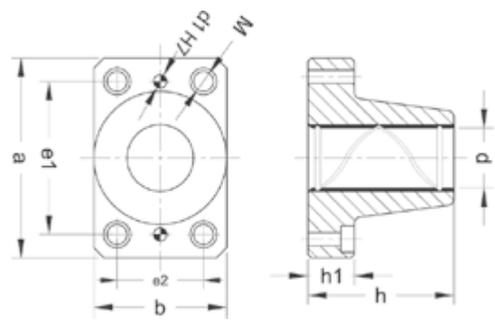
BRONZLU DÖKÜM BLOK — D70.02



- Malzeme : GG25

Ød	M
40	12
50	14
63	16
80	20





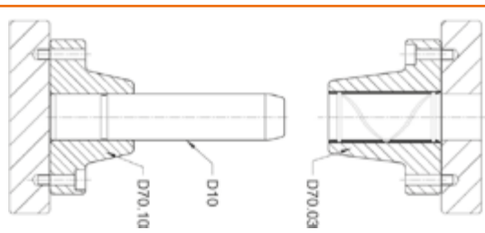
Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.02_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

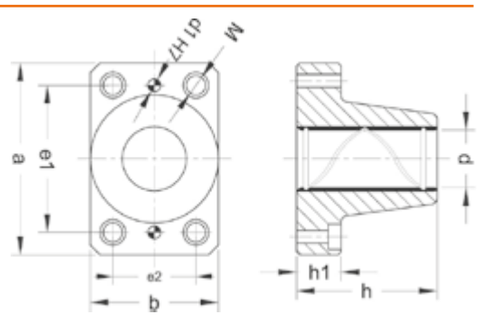
ÇELİK KAYMALI DÖKÜM BLOK — D70.03



Ød	M
40	12
50	14
63	16
80	20



- Malzeme : GG25 / Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon



Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.03_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

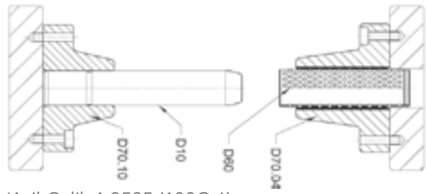
PLASTİK KALIBI ÜRÜNLERİ

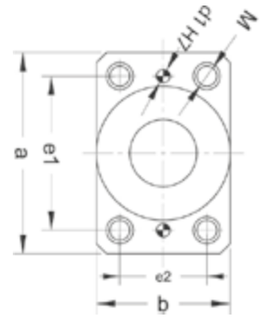
DELTA

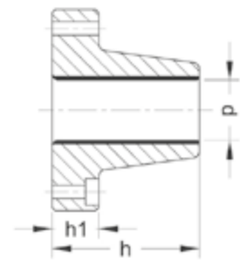
BİLYALI DÖKÜM BLOK — D70.04



Ød	M
40	12
50	14
63	16
80	20







- Malzeme : GG25 /Asil Çelik 1.3505 (100Cr6)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon

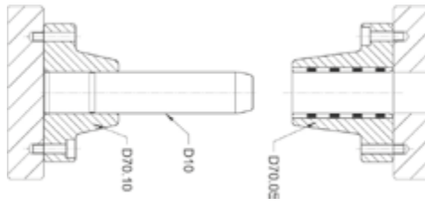
Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.04_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

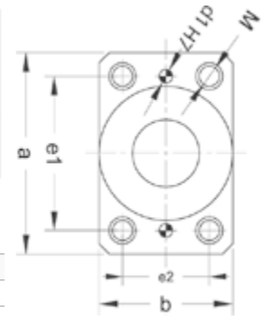
Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

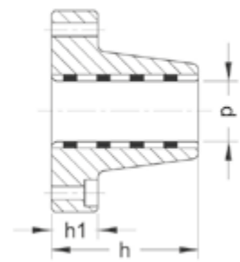
GRAFİTLİ DÖKÜM BLOK — D70.05



Ød	M
40	12
50	14
63	16
80	20







- Malzeme : GG25/ SAE 430B
- Sertlik : HB≥180

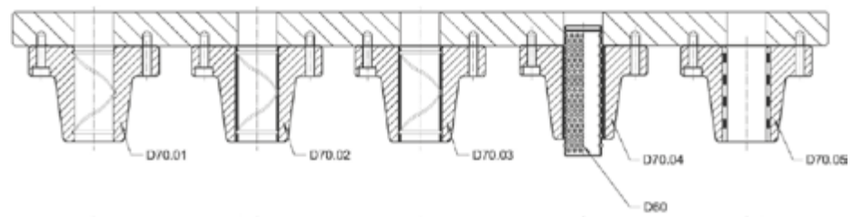
Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.05_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

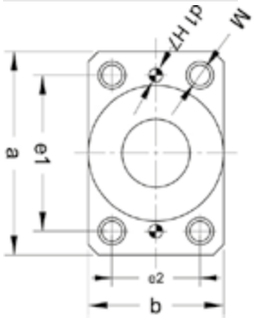
KOLON SABİTLEME BLOĞU — D70.10

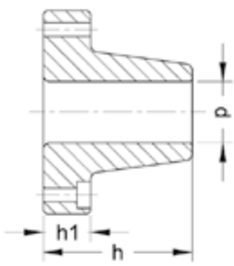


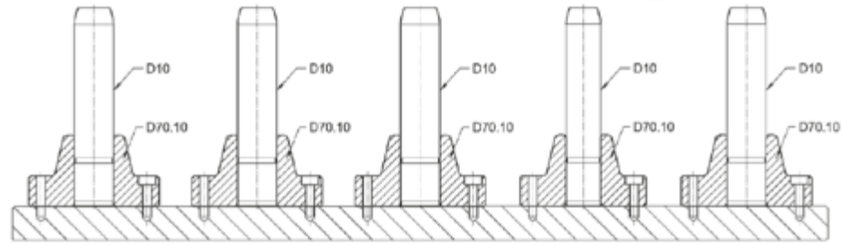
Ød	M
40	12
50	14
63	16
80	20



- Malzeme : GG25







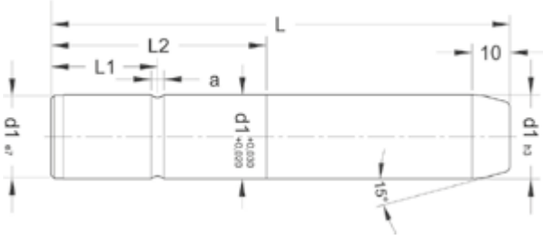
Sip. No.	d	d1	h	h1	a	b	e1	e2
D70.10_40	40	10	77	30	130	80	95	45
50	50	10	95	35	160	96	118	55

Sip. No.	d	d1	h	h1	a	b	e1	e2
63	63	12	120	35	180	110	132	62
80	80	14	120	40	215	130	160	75

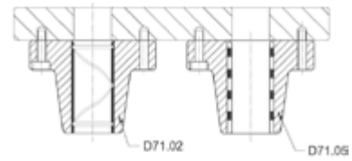
KOLON — D11

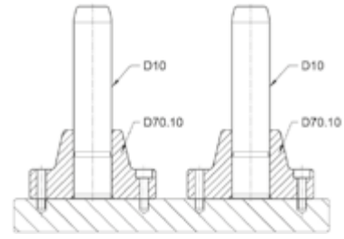


- Malzeme : Asil Çelik 1.1213 (Cf 53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon



Sip. No.	d1	L	L1	L2	a
D11_40160	40	160	25	50	8
180		180			
200		200			
225		225			
250		250			
280		280			
D11_50160	50	160	35	70	8
180		180			
200		200			
225		225			
250		250			
280		280			
315		315			





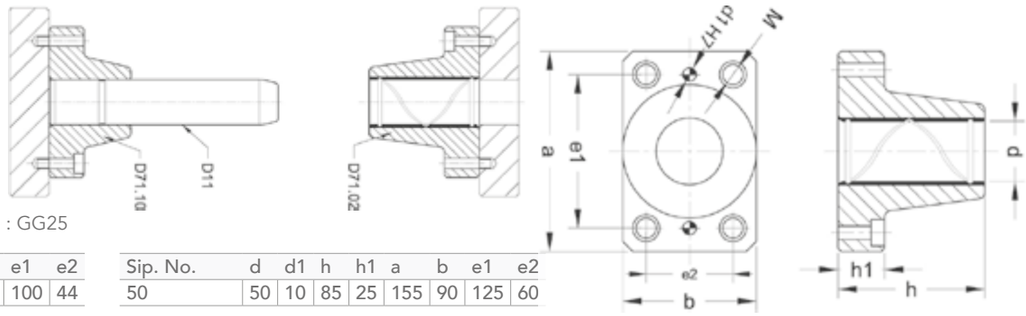
PLASTİK KALIBI ÜRÜNLERİ

DELTA®

BRONZLU DÖKÜM BLOK — D71.02



Ød	M
40	12
50	12



• Malzeme : GG25

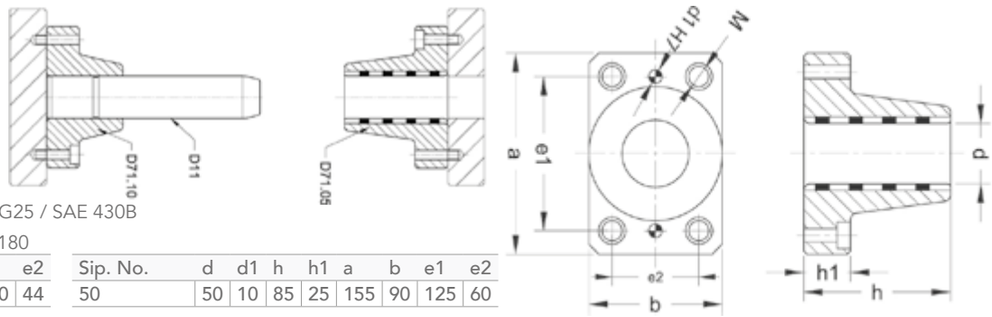
Sip. No.	d	d1	h	h1	a	b	e1	e2
D71.02_40	40	10	70	25	130	75	100	44

Sip. No.	d	d1	h	h1	a	b	e1	e2
50	50	10	85	25	155	90	125	60

GRAFİTLİ DÖKÜM BLOK — D71.05



Ød	M
40	12
50	12



• Malzeme : GG25 / SAE 430B

• Sertlik : HB≥180

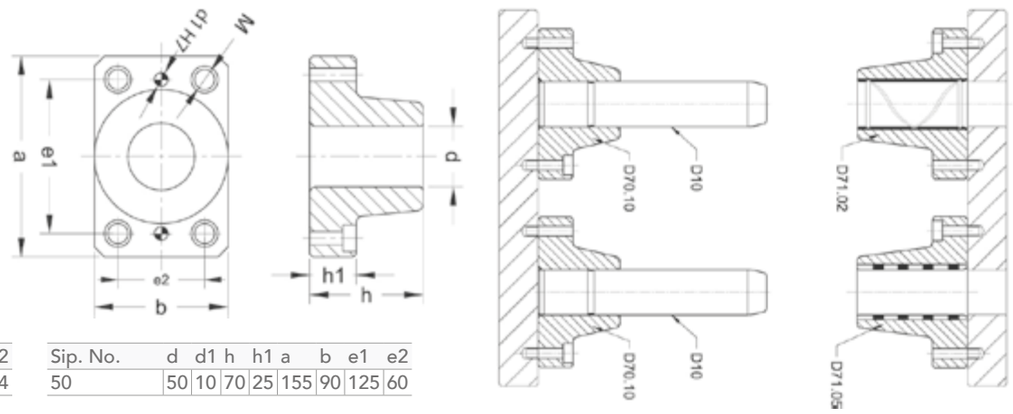
Sip. No.	d	d1	h	h1	a	b	e1	e2
D71.05_40	40	10	70	25	130	75	100	44

Sip. No.	d	d1	h	h1	a	b	e1	e2
50	50	10	85	25	155	90	125	60

KOLON SABİTLEME BLOĞU — D71.10



Ød	M
40	12
50	12



• Malzeme : GG25

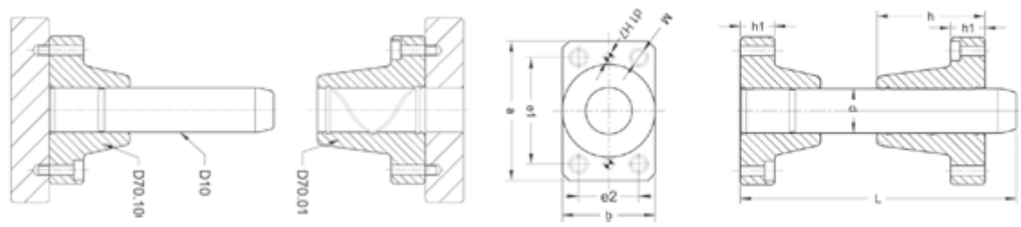
Sip. No.	d	d1	h	h1	a	b	e1	e2
D71.10_40	40	10	50	25	130	75	100	44

Sip. No.	d	d1	h	h1	a	b	e1	e2
50	50	10	70	25	155	90	125	60

DÖKÜM SET — D70.011



Ød	M
40	12
50	14
63	16
80	20



• Malzeme : GG25 / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC • Isıl İşlem : Indüksiyon

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.011_40180	40	180	10	77	30	130	80	95	45
220		220							
260		260							
300		300							
355		355							
400		400							
D70.011_50200	50	200	10	95	35	160	96	118	55
240		240							
280		280							
315		315							
355		355							
400		400							
450		450							

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.011_63240	63	240	12	120	35	180	110	132	62
280		280							
315		315							
355		355							
400		400							
450		450							
D70.011_80240	80	240	14	120	40	215	130	160	75
280		280							
315		315							
355		355							
400		400							
450		450							
500		500							

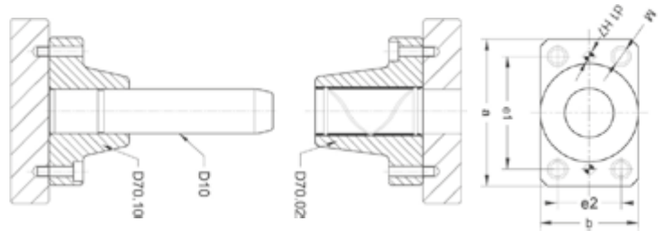
PLASTİK KALIBI ÜRÜNLERİ

DELTA

BRONZLU DÖKÜM SET — D70.021



Ød	M
40	12
50	14
63	16
80	20



• Malzeme : GG25 / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC • Isıl İşlem : İndüksiyon

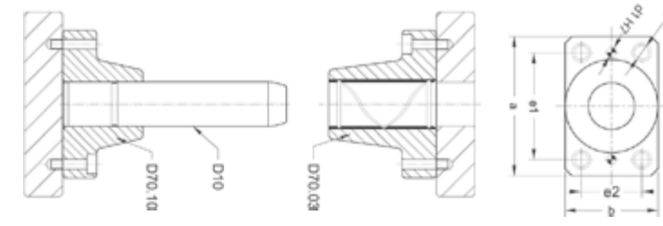
Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.021_40180	40	180	10	77	30	130	80	95	45
220		220							
260		260							
300		300							
355		355							
400		400							
D70.021_50200	50	200	10	95	35	160	96	118	55
240		240							
280		280							
315		315							
355		355							
400		400							
450		450							

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.021_63240	63	240	12	120	35	180	110	132	62
280		280							
315		315							
355		355							
400		400							
450		450							
D70.021_80240	80	240	14	120	40	215	130	160	75
280		280							
315		315							
355		355							
400		400							
450		450							
500		500							

ÇELİK KAYMALI DÖKÜM SET — D70.031



Ød	M
40	12
50	14
63	16
80	20



• Malzeme : GG25 / Asil Çelik 1.7131 (16MnCr5) / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC • Isıl İşlem : Indüksiyon / Sementasyon

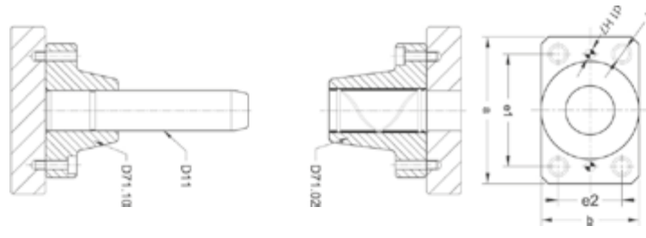
Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.031_40180	40	180	10	77	30	130	80	95	45
220		220							
260		260							
300		300							
355		355							
400		400							
D70.031_50200	50	200	10	95	35	160	96	118	55
240		240							
280		280							
315		315							
355		355							
400		400							
450		450							

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.031_63240	63	240	12	120	35	180	110	132	62
280		280							
315		315							
355		355							
400		400							
450		450							
D70.031_80240	80	240	14	120	40	215	130	160	75
280		280							
315		315							
355		355							
400		400							
450		450							
500		500							

BRONZLU DÖKÜM SET — D71.021



Ød	M
40	12
50	12



• Malzeme : GG25 / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC • Isıl İşlem : Indüksiyon

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D71.021_40160	40	160	10	70	25	130	75	100	44
180		180							
200		200							
225		225							
250		250							
280		280							
D71.10_40	40		10	50	25	130	75	100	44
D71.021_50160	50	160	10	85	25	155	90	125	60

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
180		180							
200		200							
225		225							
250		250							
280		280							
315		315							
D71.10_50	50		10	70	25	155	90	125	60

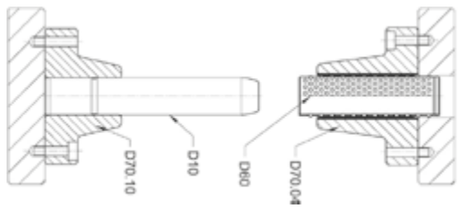
PLASTİK KALIBI ÜRÜNLERİ

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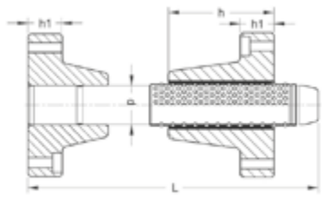
BİLYALI DÖKÜM SET — D70.041



Ød	M
40	12
50	14
63	16
80	20







• Malzeme : GG25 Asil Çelik 1.3505 (100Cr6) / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC • Isıl İşlem : İndüksiyon / Sementasyon

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.041_40180	40	180	10	77	30	130	80	95	45
220		220							
260		260							
300		300							
355		355							
400		400							

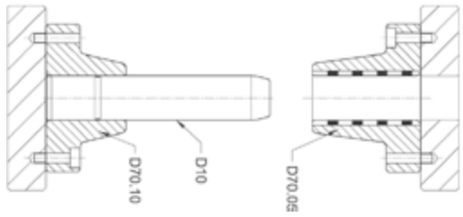
Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.041_50200	50	200	10	95	35	160	96	118	55
240		240							
280		280							
315		315							
355		355							
400		400							
450		450							

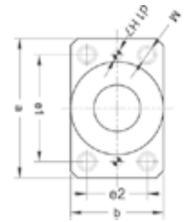
Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.041_63240	63	240	12	120	35	180	110	132	62
280		280							
315		315							
355		355							
400		400							
450		450							

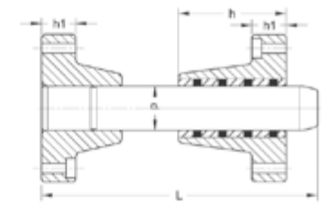
GRAFİTLİ DÖKÜM SET — D70.051



Ød	M
40	12
50	14
63	16
80	20







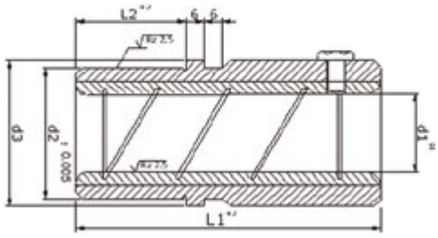
• Malzeme : GG25 / SAE 430B / Asil Çelik 1.1213 (Cf 53) • Sertlik : 62± 2 HRC / HB≥180 • Isıl İşlem : İndüksiyon

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.051_40180	40	180	10	77	30	130	80	95	45
220		220							
260		260							
300		300							
355		355							
400		400							
D70.051_50200	50	200	10	95	35	160	96	118	55
240		240							
280		280							
315		315							
355		355							
400		400							
450		450							

Sip. No.	d	L	d1	h	h1	a	b	e1	e2
D70.051_63240	63	240	12	120	35	180	110	132	62
280		280							
315		315							
355		355							
400		400							
450		450							
D70.051_80240	80	240	14	120	40	215	130	160	75
280		280							
315		315							
355		355							
400		400							
450		450							
500		500							

BRONZLU BURÇ — U25





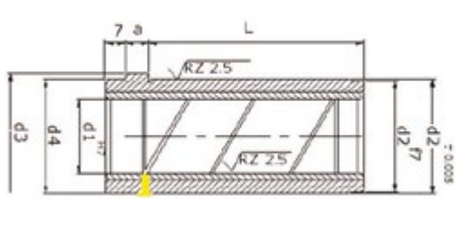
• Malzeme : 1.1186 (Ck40)+Bronz • Isıl İşlem : İndiksiyon • Sertlik : 52±2 HRC

Sipariş Şekli : d1 x L

d1	d2	d3	L	L 26	L 36	L 46	L 56
20	30	39	70	•	•		
25	36	44	80	•	•		
30	42	49	90		•	•	
40	54	59	100		•	•	
50	64	69	120			•	•

KISA BRONZLU BURÇ — U26





• Malzeme : 1.1186 (Ck40)+Bronz • Isıl İşlem : İndiksiyon • Sertlik : 52±2 HRC

Sipariş Şekli : d1 x L

d1	d2	d3	L 26	L 36	L 46	L 56
20	30	39	•	•		
25	36	44	•	•		
30	42	49		•	•	
40	54	59		•	•	
50	64	69			•	•

PLASTİK KALIBI ÜRÜNLERİ

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TAŞIMA MİLİ — D19.01



• Malzeme : Çelik

Dikkat : Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.

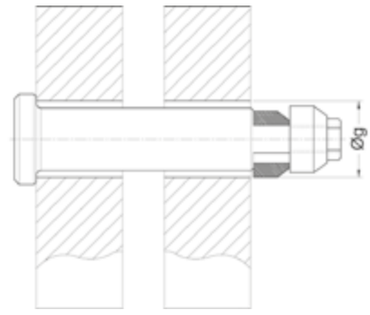


Sip. No.	d1	PSA Mabec Code	Taşıma Kapasitesi (Kg)	d	L	L1	a	S	s1
D19.01_32	32	P953254770	6400	40	154	132	6	10	5
40	40	P953255870	10000	50	197.75	170	8	12.5	6
50	50	P953256670	16000	63	247.6	212	10	16	8
63	63	P953257470	25000	80	309	265	12	20	10

TAŞIMA MİLİ — D19.02







• Malzeme : Çelik

Dikkat : Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.

Sip. No.	g	Taşıma Kapasitesi (Kg)	d	L	L1	d1	a	s
D19.02_16	16	1200	25	102.5	77	15.6	6	11.5
21	21	2000	30	113.5	86	20.6	6	13.5
26	26	4000	35	128.5	100	25.6	6	13.5

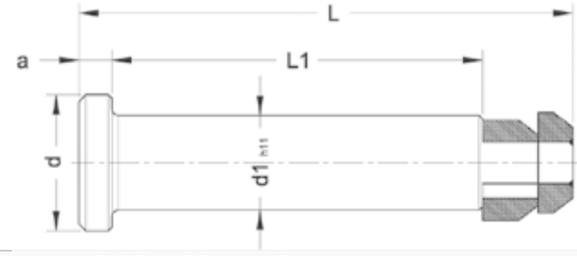
Sip. No.	g	Taşıma Kapasitesi (Kg)	d	L	L1	d1	a	s
34	34	8000	43	166.5	135	33	6	15.5
44	44	14000	53	215.5	175	43	8	20.5

TAŞIMA MİLİ — D19.03



• Malzeme : Çelik

Dikkat : Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.



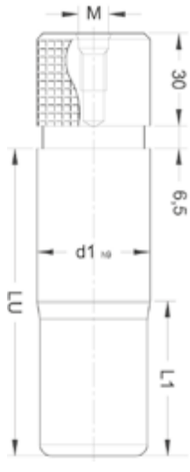
Sip. No.	FORD CODE WDX2260	d1	Taşıma Kapasitesi (Kg)	d	a	L	L1
D19.03_35	0135	35	3200	45	12	162.5	125
50	0150	50	8000	63	12	227.5	190

Sip. No.	FORD CODE WDX2260	d1	Taşıma Kapasitesi (Kg)	d	a	L	L1
63	0163	63	12500	75	12	317.5	280
80	0180	80	31500	95	12	357.5	320

EMNİYET MİLİ — D19.50



• Malzeme : CK45

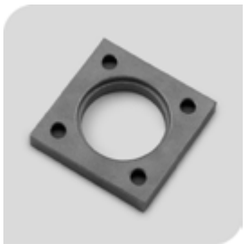


Sip. No.	d1	LU	PSA MABEC CODE	RENAULT MABEC CODE	L1	M
D19.50_20081	20	81	Z000 400 337	R100 306 188	19	M8
25081	25	81	Z000 400 338	R100 306 190	19	M8
25098	25	98	Z000 400 339	R100 306 191	19	M8
32103	32	103	Z000 400 487	R100 306 194	26	M8
32148	32	148	Z000 400 342	R100 306 198	26	M8
40132	40	132	Z000 400 345	R100 306 201	33	M10
40192	40	192	Z000 400 346	R100 306 204	33	M10
50165	50	165	Z000 400 349	R100 306 207	41	M10
50220	50	220	Z000 400 350	R100 306 209	41	M10
63210	63	210	Z000 400 353	R100 306 210	51	M12
63250	63	250	Z000 400 354	R100 306 213	51	M12
80210	80	210	Z000 400 846	R100 357 232	51	M12

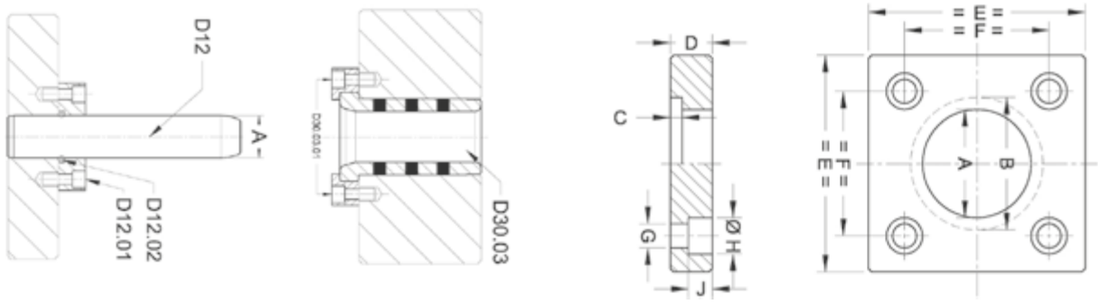
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KOLON TUTUCU FLANŞ — D12.01



• Malzeme : CK45

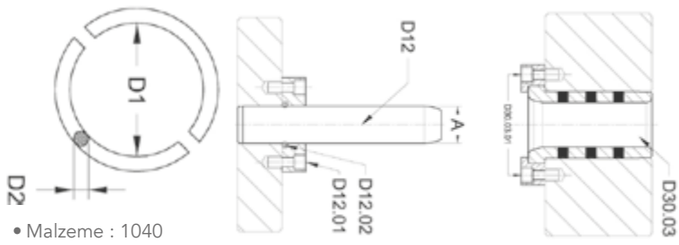


Sip. No.	PSA Mabec Code	RENAULT Mabec Code	A	B	G	H	J	D	C	E	F
D12.01_025	Z000 248 844	P483 784 100	25	28	6.6	11	7	10	2.7	45	31
032	P446 932 711	P483 784 600	32	37	6.6	11	7	10	4.2	56	36
040	P446 932 701	P483 795 100	40	45	6.6	11	7	12	4.2	70	50
050	P446 932 702	P483 795 401	50	55	9	16	9	14	4.2	80	55
063	P446 932 703	P483 795 801	63	70	11	18	11	18	6.2	100	70
080	P446 932 704	P483 796 001	80	87	13	22	14	20	6.2	110	80
100		P483 796 401	100	107	13	22	14	20	6.2	140	100

TUTUCU HALKA — D12.02

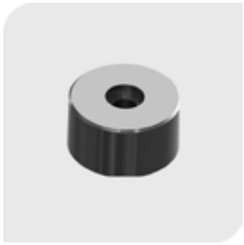


Sip. No.	RENAULT Mabec Code	A	D1	D2
D12.02_025	P446 180 200	25	22.5	2.5
032	P446 180 300	32	28	4
040	P446 180 400	40	36	4
050	P446 180 500	50	46	4
063	P446 180 600	63	57	6
080	P446 180 700	80	74	6
100	P446 180 800	100	94	6



• Malzeme : 1040

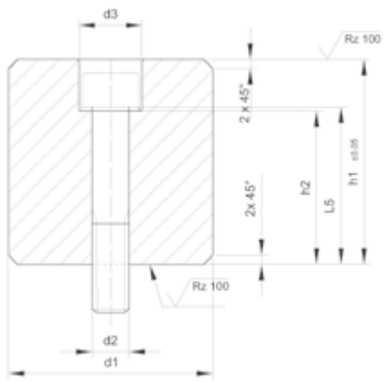
STOPLAMA BLOĞU — D17.01



• Malzeme : Çelik

Sip. No.	VW/AUDI CODE	d1	d2	d3	h1	Taşıma Yükü	Adet
D17.01_060xxx	39V1162/14	60	14	20	1)	< 1800 kN	4
080xxx	39V1162/15	80				≥1800 - 3400 kN	
100xxx	39V1162/25	100	18	26		>3400 - 5300 kN	
120xxx	39V1162/17	120	22	33		>5300 - 10000 kN	
150xxx	39V1162/18	150				>10000 - 25000 kN	8

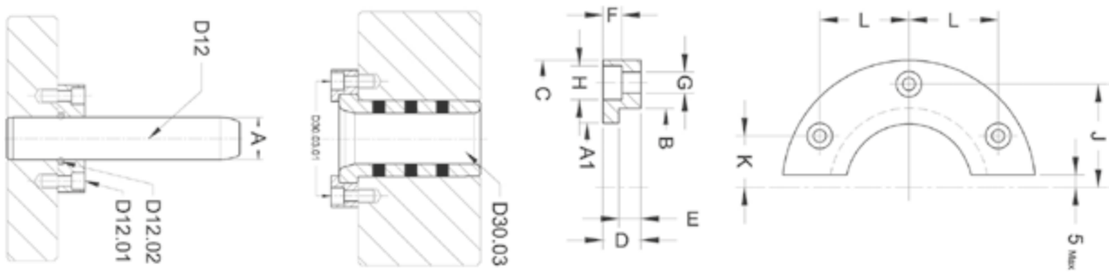
DIN EN ISO 4762	M12		M16		M20	
h1 1)	h2	L5	h2	L5	h2	L5
≥ 040 - 060	22	40	20	40	15	50
> 060 - 080	42	60	36	60	30	60
> 080 - 100	62	80	56	80	50	80
> 100 - 120	82	100	76	100	70	100
> 120 - 140	102	120	96	120	90	120
> 140 - 160	122	140	116	140	110	140



BURÇ TUTUŞ FLANŞ — D30.03.01



• Malzeme : CK45



Sip. No.	PSA Mabec Code	RENAULT Mabec Code	A	A1	B	C	D	E	F	G	H	K	J	L
D30.03.01_025		M321 534 500	25	32	41	72	10	5	7	6.6	12	20		20
032	P446 932 717	M321 544 501	32	40	51	80	12	6	7	6.6	12	21		25
040	P446 932 712	M321 548 501	40	50	61	100	12	8	7	6.6	12	14	41	38.5
050	P446 932 713	M321 552 601	50	63	72	125	16	10	9	9	16	17	49	46
063	P446 932 714	M321 556 601	63	80	91	140	20	12	11	11	18	17	57.5	55
080	P446 932 715	M321 560 601	80	100	113	180	25	16	13	14	22	20	72	70
100		M321 562 700	100	125	141	200	32	20	13	14	22	25	85	81

PLASTİK KALIBI ÜRÜNLERİ

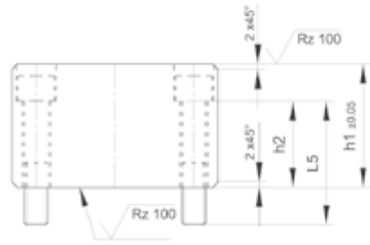
DELTA

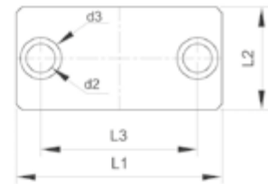
KOLON TUTUCU FLANŞ — D17.02



• Malzeme : Çelik

Code	Taşıma Yükü	Adet
D17.02_04100xxx	< 3500 kN	4
05120xxx	≥3500 - 4900 kN	
20150xxx	≥4900 - 9800 kN	8
20150xxx	≥9800 - 19600 kN	
21160xxx	≥19600 - 25000 kN	





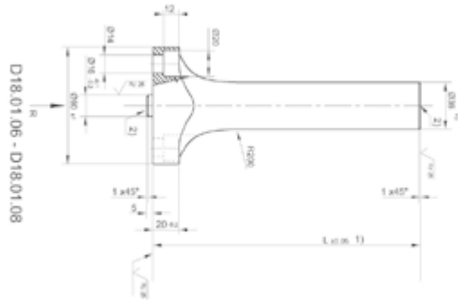
Sip. No.	VW/AUDI CODE	L1	L2	L3	d2	d3	h1
D17.02_01060xxx	39V1162/1	60	40	40	9	15	1)
02080xxx	39V1162/2	80		56	11	18	
03100xxx	39V1162/3	100		71	14	20	
04100xxx	39V1162/4		50	76			
05120xxx	39V1162/5	120	60	93			
20150xxx	39V1162/20	150	80	120	18	26	
21160xxx	39V1162/21	160	100	130			

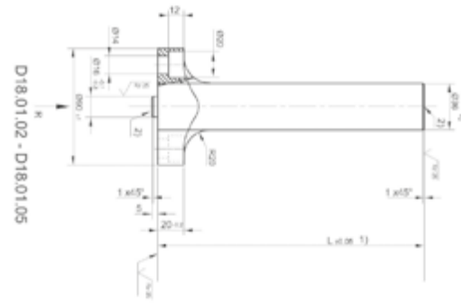
DIN EN ISO 4762	M8		M10		M12		M16	
h1 1)	h2	L5	h2	L5	h2	L5	h2	L5
≥ 020 - 040	10	25	8	25	-	-	-	-
> 040 - 060	28	40	25	40	22	40	18	40
> 060 - 080	48	60	45	60	42	60	38	60
> 080 - 100	68	80	65	80	62	80	58	80
> 100 - 120			85	100	82	100	78	100
> 120 - 140			105	120	102	120	98	120
> 140 - 160					122	140	118	140

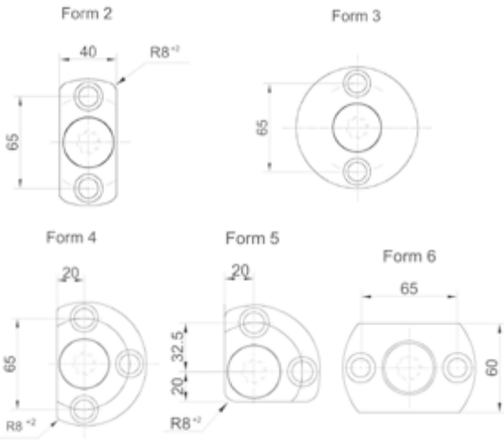
HAVALANDIRMA PİMİ — D18.01



• Malzeme : Çelik







Sip. No.	VW/AUDI CODE	L	Form
D18.01.02_36150	39D638/2	150	2
175	39D638/2	175	2
200	39D638/2	200	2
225	39D638/2	225	2
250	39D638/2	250	2
D18.01.03_36150	39D638/3	150	3
175	39D638/3	175	3
200	39D638/3	200	3
225	39D638/3	225	3
250	39D638/3	250	3
D18.01.04_36150	39D638/4	150	4
175	39D638/4	175	4
200	39D638/4	200	4
225	39D638/4	225	4
250	39D638/4	250	4
D18.01.05_36150	39D638/5	150	5
175	39D638/5	175	5
200	39D638/5	200	5

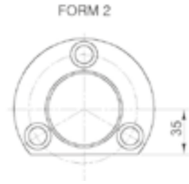
Sip. No.	VW/AUDI CODE	L	Form
225	39D638/5	225	5
250	39D638/5	250	5
D18.01.06_36150	39D638/10	150	6
175	39D638/10	175	6
200	39D638/10	200	6
225	39D638/10	225	6
250	39D638/10	250	6
D18.01.07_36150	39D638/11	150	2
175	39D638/11	175	2
200	39D638/11	200	2
225	39D638/11	225	2
250	39D638/11	250	2
D18.01.08_36150	39D638/12	150	5
175	39D638/12	175	5
200	39D638/12	200	5
225	39D638/12	225	5
250	39D638/12	250	5

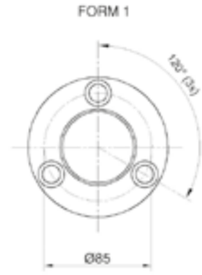
HAVALANDIRMA PİMİ — D18.02

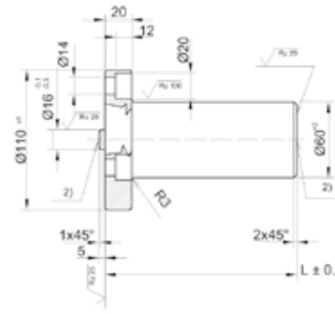


• Malzeme : Çelik

* L Ölçüsü liste dışında özel üretim yapılır.







Sip. No.	VW/AUDI CODE	d	L	Form
D18.02.01_60150	39D951/1	60	150	1
175	39D951/1	60	175	1
200	39D951/1	60	200	1
225	39D951/1	60	225	1
250	39D951/1	60	250	1
D18.02.02_60150	39D951/2	60	150	2

Sip. No.	VW/AUDI CODE	d	L	Form
175	39D951/2	60	175	2
200	39D951/2	60	200	2
225	39D951/2	60	225	2
250	39D951/2	60	250	2

PLASTİK KALIBI ÜRÜNLERİ

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HAVALANDIRMA PİMİ

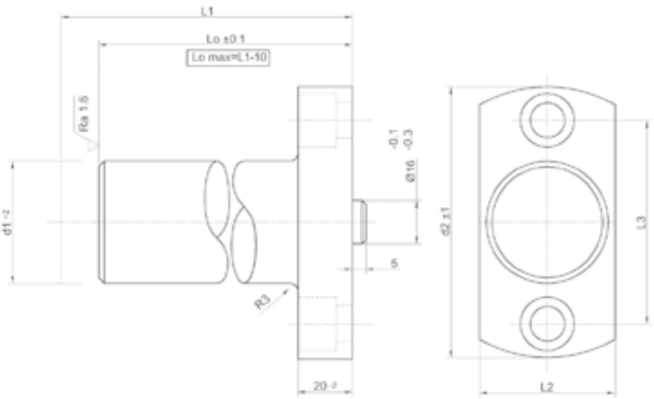
D18.03



• Malzeme : Çelik

* L Ölçüsü liste dışında özel üretim yapılır.

Sip. No.	FORD CODE WDX1760	d1	d2	L1	L2	L3
D18.03_36110	0236110	36	90	110	40	65
150	0236150			150		
160	0236150			160		
175	0236175			175		
200	0236200			200		
225	0236225			225		
250	0236250			250		
275	0236275			275		
300	0236300			300		
325	0236325			325		
340	0236340			340		
360	0236360			360		
D18.03_45175	0245175	45	100	175	50	75
250	0245250			250		
360	0245360			360		



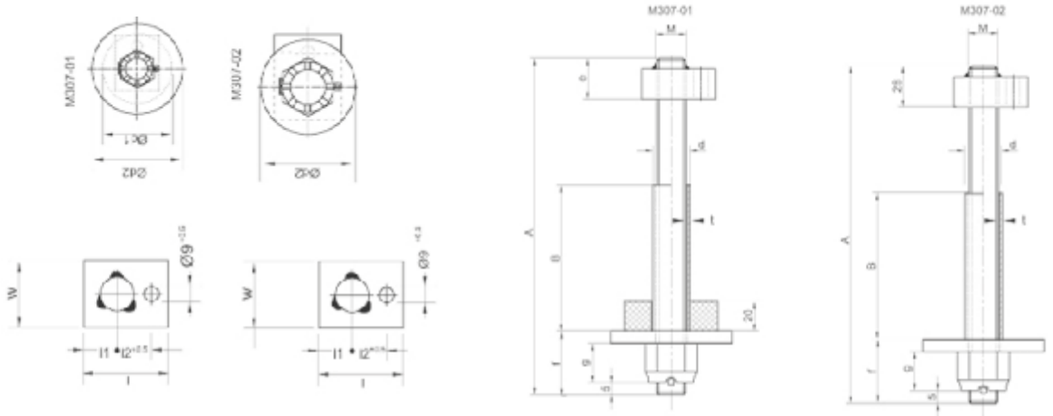
FRENLEYİCİ

D18.04



• Malzeme : Çelik

* L Ölçüsü liste dışında özel üretim yapılır.



Sip. No.	FORD CODE	KG	M	A	B	f	g	d	t	e	w	l	l1	l2	d1	d2
D18.04.01_16AAABBB	WDX14-60-0516	250	M16	?	?	30	19	22	2	28	35	50	20	20	50	65
20AAABBB	WDX14-60-0520	450	M20	?	?	35	22	25	2	28	40	50	20	20	63	82
24AAABBB	WDX14-60-0524	750	M24	?	?	42	27	30	2.5	28	45	50	20	20	80	105
30AAABBB	WDX14-60-0530	1250	M30	?	?	50	33	38	3.5	33	50	63	28	26	100	130

Sip. No.	FORD CODE	KG	M	A	B	f	g	d	t	w	l	l1	l2	d2
D18.04.02_16AAABBB	WDX14-60-0616	1000	M16	?	?	30	19	22	2	35	50	20	20	40
20AAABBB	WDX14-60-0620	1400	M20	?	?	35	22	25	2	40	50	20	20	44

TAŞIMA MİLİ

D19.04



• Malzeme : Çelik Cf53

Dikkat: Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.



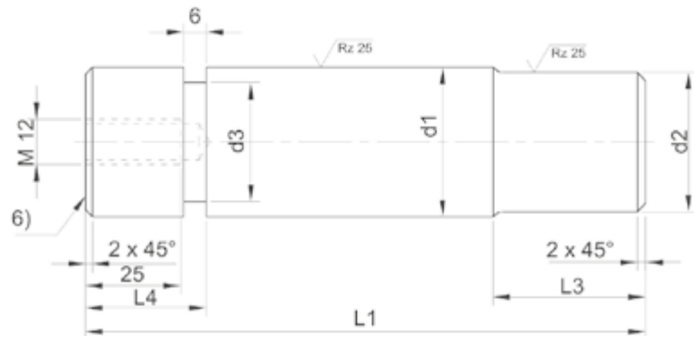
Sip. No.	FIAT CODE	Max. Taş›ma Kapasitesi	Max. Kal›p A€›rl›€›	d	d1	L	a	L1	L3	L4	h
D19.04_29150	SOL_KG2000	2000 kg	4000 kg	38	29	178.5	6	150	9	6	4
D19.04_33170	SOL_KG3200	3200 kg	6400 kg	43	33	200.5	6	170	10	6	4
D19.04_43195	SOL_KG5000	5000 kg	10000 kg	53	43	233	8	195	12	8	6
D19.04_53180	SOL_KG8000_T	8000 kg	16000 kg	65	53	227	10	180	16	10	6
235	SOL_KG8000	8000 kg	16000 kg	65	53	282	10	235	16	10	7.5
D19.04_63215	SOL_KG13000_T	13000 kg	26000 kg	78	63	272.5	12	215	20	12	7.5
295	SOL_KG12000	12000 kg	24000 kg	78	63	352.5	12	295	20	12	8.5
D19.04_78355	SOL_KG13000	30000 kg	60000 kg	95	78	421.5	14	355	25	14	11

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EMNİYET PİMİ — D19.50.01



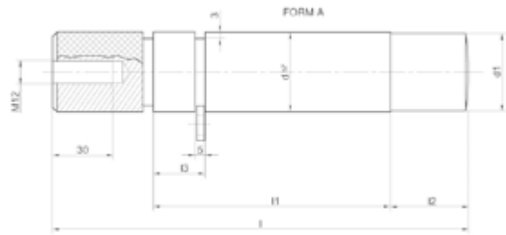


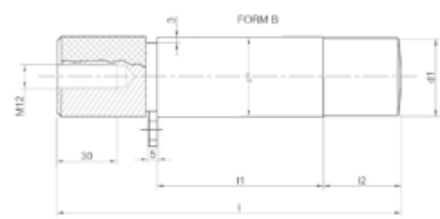
• Malzeme : Çelik Cf53

Sip. No.	BMW CODE	VW/AUDI CODE	d1 (e8)	d2 +0,05	d3 -1,0	L1	L3	L4	r 1) -0.5	Taşıma Kapasitesi
D19.50.01_32105	B2 5702 11 2169033	39D854/1	32	29	24	105	25	22	4	500 kg
122	B2 5702 11 2169034	39D854/2				122				
D19.50.01_40139	B2 5702 11 2169035	39D854/3	40	37	32	139	32	32	5	750 kg
159	B2 5702 11 2169036	39D854/4				159				
D19.50.01_50167	B2 5702 11 2169037	39D854/5	50	47	42	167	40		6	1250 kg
192	B2 5702 11 2169038	39D854/6				192				
D19.50.01_63202	B2 5702 11 2169039	39D854/7	63	60	55	202	50			2500 kg
237	B2 5702 11 2169040	39D854/8				237				

EMNİYET PİMİ — D19.50.02



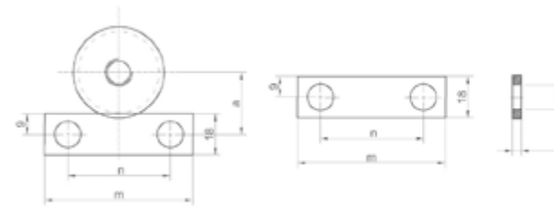




• Malzeme : Çelik Cf53

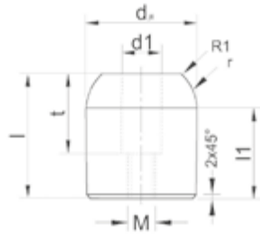
Sip. No.	Form	d	l	d1	l1	l2	l3	a
D19.50.02_30155	A	30	155	29	87	33	19	22
40193	A	40	193	39	109	39	21	27
40229	A	50	229	49	131	43	23	32
40172	B	40	172	39	88	39	-	27
50206	B	50	206	49	108	43	-	32

Emniyet Pimi Tutucusu			
Sip. No.	d	m	n
D19.50.02.01	30	50	35
02	40	65	45
03	50	70	50



MERKEZLEME PİMİ — D51.01



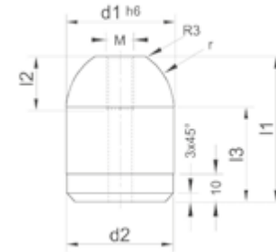


• Malzeme : Çelik 16MnCr5
• Sertlik : 58 - 62 Hrc

Sip. No.	d	l	l1	d1	t	M	r
D51.01_2245	22	45	37.5	14	25	M10	20
3250	32	50	40	18	35	M12	20
4055	40	55	40	18	35	M12	20
5055	50	55	40	18	35	M12	20

MERKEZLEME PİMİ — D51.02





• Malzeme : Çelik 16MnCr5
• Sertlik : 58 - 62 Hrc

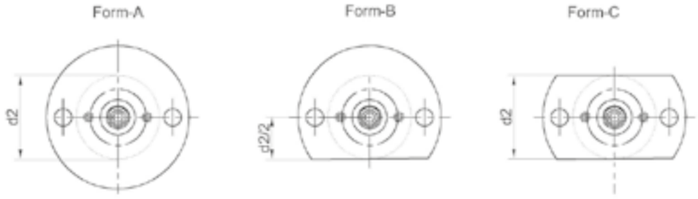
Sip. No.	VW/AUDI CODE	d1	l1	l2	l3	d2	M	r
D51.02_2245	39V1205/1	22	45	16	35	21.95	M8	15
2255	39V1205/2	22	55	16	45	21.95	M8	15
3250		32	50	20	35	31.95	M10	20
4055	39V1205/3	40	55	20	35	39.95	M10	25
4065	39V1205/4	40	65	20	45	39.95	M10	25
4085	39V1205/5	40	85	20	65	39.95	M10	25
5055		50	55	20	35	49.95	M10	25

PLASTİK KALIBI ÜRÜNLERİ

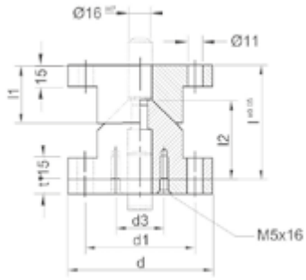
DELTA

KONİK MERKEZLENDİRME D55.01





Malzeme : Çelik 16MnCr5 Sertlik : 58 - 62 Hrc Ayar Plakası : Ck 45

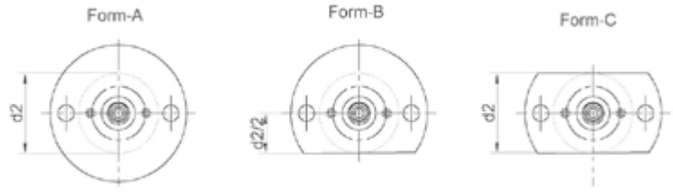


Sip. No.	VW/AUDI CODE	d	l	d1	d2	d3	l1	l2	t	Form
D55.01_100005		100	80	76	58	40.5	40	55	5.5	A
120005		120	90	96	78	50.5	50	65	5.5	A
100105		100	80	76	58	40.5	40	55	5.5	B
120105		120	90	96	78	50.5	50	65	5.5	B
100205		100	80	76	58	40.5	40	55	5.5	C
120205		120	90	96	78	50.5	50	65	5.5	C

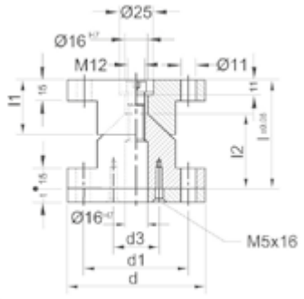
Sip. No.	VW/AUDI CODE	d	l	d1	d2	d3	l1	l2	t	Form
100010	39V1168/10	100	80	76	58	40.5	40	55	10	A
120010	39V1168/12	120	90	96	78	50.5	50	65	10	A
100110	39V1168/14	100	80	76	58	40.5	40	55	10	B
120110	39V1168/16	120	90	96	78	50.5	50	65	10	B
100210	39V1168/18	100	80	76	58	40.5	40	55	10	C
120210	39V1168/20	120	90	96	78	50.5	50	65	10	C

KONİK MERKEZLENDİRME D55.02





- Malzeme : Çelik 16MnCr5
- Sertlik : 58 - 62 Hrc
- Ayar Plakası : Ck 45

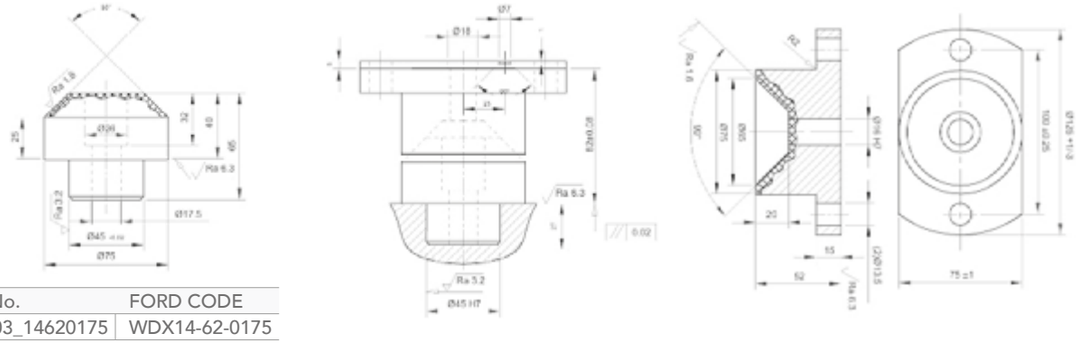


Sip. No.	d	l	d1	d2	d3	l1	l2	t	Form
D55.02_100005	100	80	76	58	40.5	40	55	5.5	A
120005	120	90	96	78	50.5	50	65	5.5	A
100105	100	80	76	58	40.5	40	55	5.5	B
120105	120	90	96	78	50.5	50	65	5.5	B
100205	100	80	76	58	40.5	40	55	5.5	C
120205	120	90	96	78	50.5	50	65	5.5	C
100010	100	80	76	58	40.5	40	55	10	A

Sip. No.	d	l	d1	d2	d3	l1	l2	t	Form
120010	120	90	96	78	50.5	50	65	10	A
100110	100	80	76	58	40.5	40	55	10	B
120110	120	90	96	78	50.5	50	65	10	B
100210	100	80	76	58	40.5	40	55	10	C
120210	120	90	96	78	50.5	50	65	10	C
100215	100	80	76	58	40.5	40	55	10.5	C
120215	120	90	96	78	50.5	50	65	10.5	C

KONİK MERKEZLENDİRME D55.03





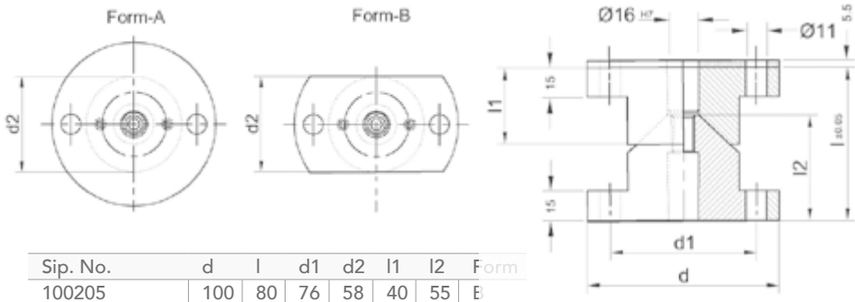
- Malzeme : Çelik
- Sertlik : 54 - 58 Hrc

Sip. No.	FORD CODE
D55.03_14620175	WDX14-62-0175

KONİK MERKEZLENDİRME D55.04



- Malzeme : Çelik 16 MnCr5
- Sertlik : 60 - 64 Hrc
- Ayar Plakası : Ck 45



Sip. No.	d	l	d1	d2	l1	l2	Form
D55.04_100005	100	80	76	58	40	55	A
120005	120	90	96	78	50	65	A

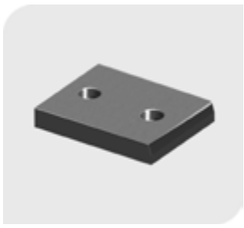
Sip. No.	d	l	d1	d2	l1	l2	Form
100205	100	80	76	58	40	55	B
120205	120	90	96	78	50	65	B

PLASTİK KALIBI ÜRÜNLERİ

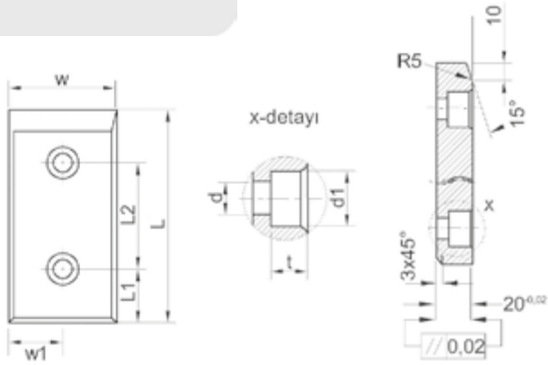
DELTA

ÇELİK SÜRTÜNME PLAKASI

D80.16



- Malzeme : Çelik
- Sertlik : 60 - 64 Hrc



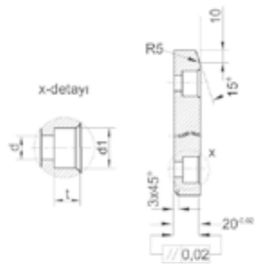
Sip. No.	VW/AUDI 39D863	FORD WDX 13-65	W	L	w1	L1	L2	d1	d	t	Civata
D80.16_ 50080	62	WDX136501050100-X	50	80	25	25	30	15	9	9	M8x25
100	63	WDX136501050125-X		100			50	20	13.5	13	M12x25
125	64	WDX136501050160-X		125			75				
160	65	WDX136501050200-X		160			110				
200	66			200			150				
D80.16_ 80080	72	WDX136501080100-X	80	80	40	25	30	20	13.5	13	
100	73	WDX136501080125-X		100			50				
125	74	WDX136501080160-X		125			75				
160	75	WDX136501080200-X		160			110				
200	76	WDX136501080250-X		200			150				
250		WDX136501080315-X		250		40	170				
315		WDX136501100100-X		315			235				
D80.16_100100	83	WDX136501100125-X	100	100	50	25	50	20	13.5	13	
125	84	WDX136501100160-X		125			75				
160	85	WDX136501100200-X		160			110				
200	86	WDX136501100250-X		200			150				
250		WDX136501100315-X		250		40	170				
315				315			235				

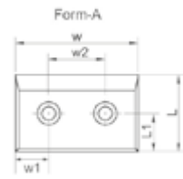
ÇELİK SÜRTÜNME PLAKASI

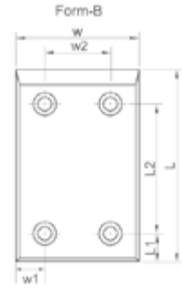
D80.16

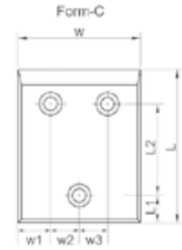


- Malzeme : Çelik
- Sertlik : 60 - 64 Hrc









Sip. No.	VW/AUDI 39D863	FORD WDX	W	L	w1	w2	w3	L1	L2	d1	d	t	Form	Civata
D80.16_080050	71		80	50	25	30		25		15	9	9	A	M8x25
D80.16_100050	81	WDX136501100050-X	100	50	25	50		25		20	13.5	13	A	M12x25
080	82		100	80				40						
D80.16_125050	91		125	50	25	75		25		20	13.5	13	A	
080	92		125	80				40						
100	93	WDX136501125100-X	125	100		37.5	37.5	25	50				C	
125	94	WDX136501125125-X	125	125					75					
160	95	WDX136501125160-X	125	160					110					
200	96	WDX136501125200-X	125	200					150					
250		WDX136501125250-X	125	250				40	170					
315		WDX136501125315-X	125	315					235					
D80.16_160050	101		160	50	25	110		25		20	13.5	13	A	
080	102		160	80				40						
100	103	WDX136501160100-X	160	100		55	55	25	50				C	
125	104	WDX136501160125-X	160	125					75					
160	105	WDX136501160160-X	160	160					110					
200	106	WDX136501160200-X	160	200					150					
250			160	250		110		40	170				B	
315			160	315					235					
250.01		WDX136501160250-X	160	250		55	55		170				C	
315.01		WDX136501160315-X	160	315					235					

PLASTİK KALIBI ÜRÜNLERİ

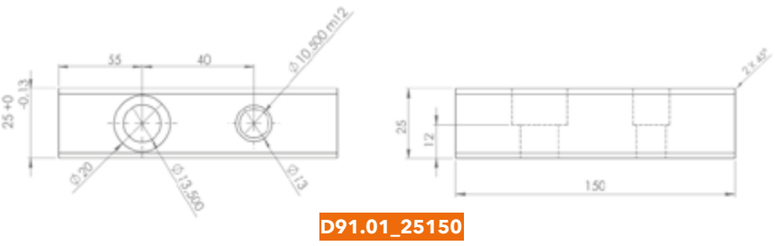
DELTA

KAMA D91.01

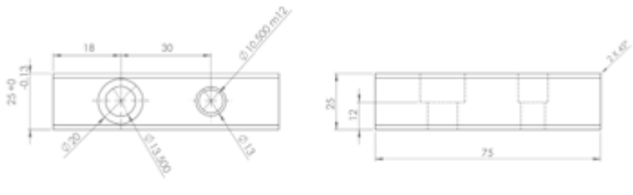


• Malzeme : Çelik

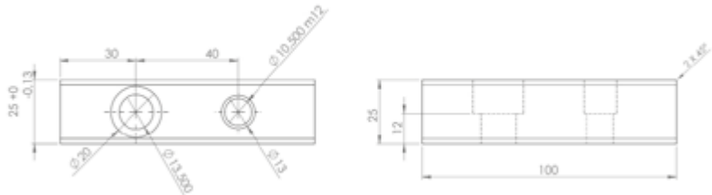
Sip. No.	FORD CODE
D91.01_25075	WDX30-80-06075
100	WDX30-80-06100
150	WDX30-80-060150



D91.01_25150



D91.01_25075



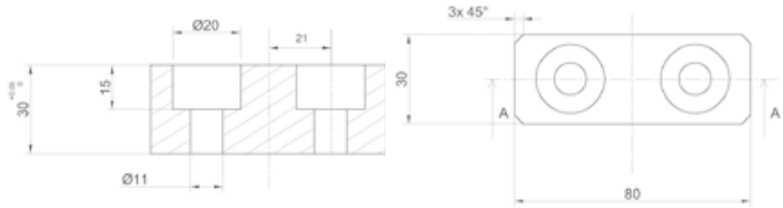
D91.01_25100

KAMA D91.02



• Malzeme : CK45

Sip. No.	TOFAŞ CODE
D91.02_3080	TKS SMS 080 030 01

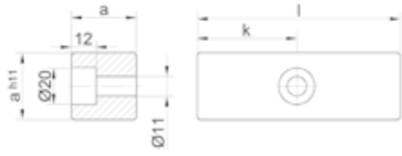


KAMA D91.03



• Malzeme : CK45

Sip. No.	FIAT CODE	a	l	k
D91.03_25080	CH_R_025080	25	80	40
125	CH_R_025125	25	125	62.5
D91.03_30080	CH_R_030080	30	80	40
125	CH_R_030125	30	125	62.5



KAMA D91.04



• Malzeme : CK45



Sip. No.	VW/AUDI CODE	l1	l2	h	p
D91.04_14050	39V1304/1	50	32	14	-
080	39V1304/2	80	50	14	-
100	39V1304/3	100	80	14	-
125	39V1304/4	125	100	14	-
D91.04_22050	39V1304/7	50	32	22	4
080	39V1304/8	80	50	22	4

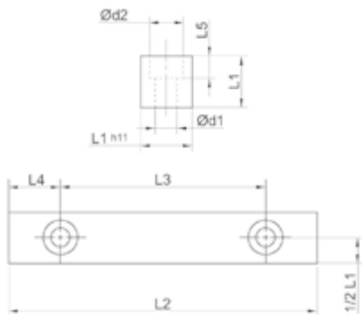
Sip. No.	VW/AUDI CODE	l1	l2	h	p
100	39V1304/9	100	80	22	4
125	39V1304/10	125	100	22	4
D91.04_40050	39V1304/11	50	32	40	4
080	39V1304/12	80	50	40	4
100	39V1304/13	100	80	40	4
125	39V1304/14	125	100	40	4

KAMA D91.05



• Malzeme : CK45

Sip. No.	FORD CODE	Size L1	L2	L3	L4	L5	d1	d2	Number of Holes
D91.05_25125	WDX30-60-0125125	25	125	-	62.5	11	11	18	1
180	WDX30-60-0125180		180	130	25				2
D91.05_30125	WDX30-60-0130125	30	125	-	62.5	13	13	20	1
180	WDX30-60-0130180		180	120	30				2



PLASTİK KALIBI ÜRÜNLERİ

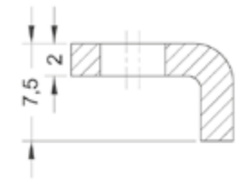
DELTA®

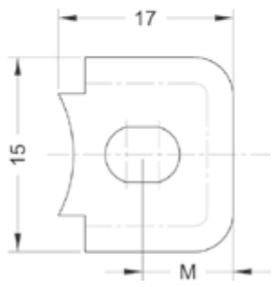
BAĞLAMA PABUCU — D90

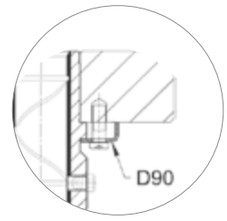


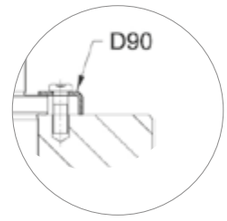
• Sertlik : 40-2 HRC

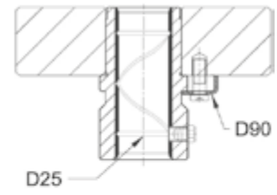


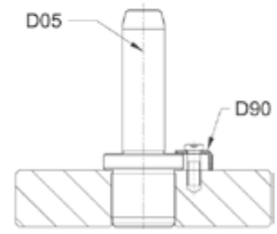








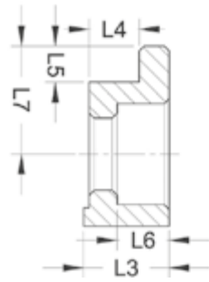


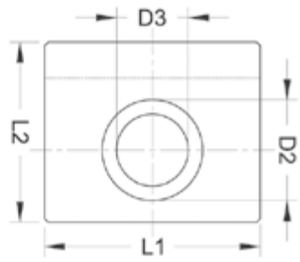


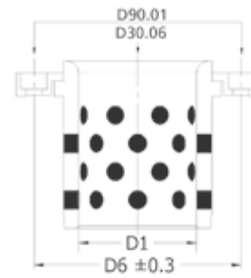
BAĞLAMA PABUCU — D90.01



• Sertlik : 40± 2 HRC







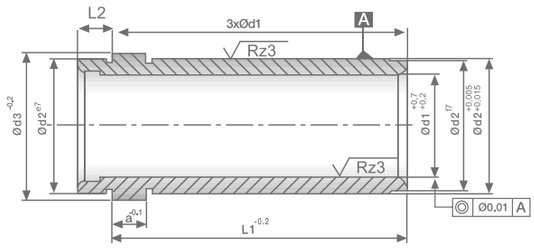
Sip. No.	FORD CODE	BMW CODE	PSA Mabec Code	D1	L1	L2	L3	L4	L5	L6	L7	D2	D3
D90.01_01	WDX1360 0901	B2 2978 11 2168834		25 32 40 50	20	20	10	6.3	5	7	12.5	11	7
D90.01_02	WDX1360 0902	B2 2978 11 2168842	Z000263005	63 80 100 125 160	32	32	16	10	10	11.5	21	17	11
D90.01_03	WDX1360 1001			25 32 40 50 63 80 100 125	32	32	16	6	10	11.5	21	17	11

PLASTİK KALIBI ÜRÜNLERİ

KUYRUKLU ŞAPKALI BURÇ - YERLİ TİP



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN 16716-C



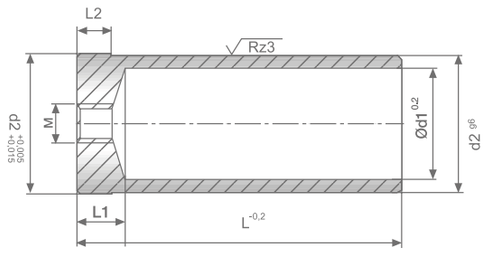
Sip. No.	d1	d2	d3	a	L2	L1
EFFE.KSB1626	16	24	28	6	10	26
EFFE.KSB1636						36
EFFE.KSB1646						46
EFFE.KSB1656						56
EFFE.KSB1666						66
EFFE.KSB1676						76
EFFE.KSB1686						86
EFFE.KSB2026	20	28	32			26
EFFE.KSB2036						36
EFFE.KSB2046						46
EFFE.KSB2056						56
EFFE.KSB2066						66
EFFE.KSB2076						76
EFFE.KSB2086						86
EFFE.KSB2096						96

Sip. No.	d1	d2	d3	a	L2	L1
EFFE.KSB2526	25	34	38	8	10	26
EFFE.KSB2536						36
EFFE.KSB2546						46
EFFE.KSB2556						56
EFFE.KSB2566						66
EFFE.KSB2576						76
EFFE.KSB2586						86
EFFE.KSB2596						96
EFFE.KSB25106						106
EFFE.KSB3036	30	39	43	10		36
EFFE.KSB3046						46
EFFE.KSB3056						56
EFFE.KSB3066						66
EFFE.KSB3076						76
EFFE.KSB3086						86
EFFE.KSB3096						96
EFFE.KSB30106						106
EFFE.KSB30116						116

TESPİT BURCU / TB - D 40 - YERLİ TİP



- Malzeme : Asil Çelik 1.7131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN 16759



Sip. No.	d2	d1	M	L1	L2	L
EFFE.TB1660	24	16	8	15	5	60
EFFE.TB1680						80
EFFE.TB16100						100
EFFE.TB16120						120
EFFE.TB16140						140
EFFE.TB2060	28	20				60
EFFE.TB2080						80
EFFE.TB20100						100
EFFE.TB20120						120
EFFE.TB20140						140

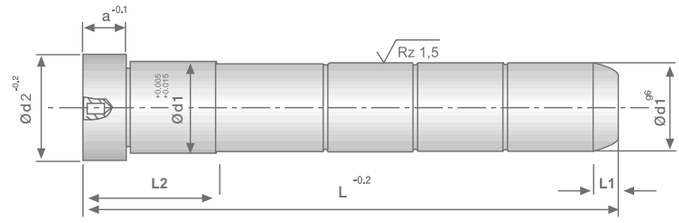
Sip. No.	d2	d1	M	L1	L2	L
EFFE.TB2580	34	25	10	15	5	80
EFFE.TB25100						100
EFFE.TB25120						120
EFFE.TB25140						140
EFFE.TB25160						160
EFFE.TB3080	39	30				80
EFFE.TB30100						100
EFFE.TB30120						120
EFFE.TB30140						140
EFFE.TB30160						160

PLASTİK KALIBI ÜRÜNLERİ

ŞAPKALI KOLON - YERLİ TİP



- Malzeme : Asil Çelik 1.1213 (Cf53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Islah + İndüksiyon



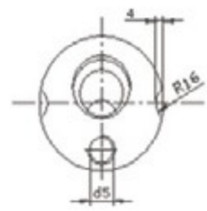
Sip. No.	d1	L	L1	d2	a
EFFE.SK1240	12	40	7	16	10
EFFE.SK1260		60			
EFFE.SK1280		80			
EFFE.SK12100		100			
EFFE.SK12120		120			
EFFE.SK12140		140			
EFFE.SK12160		160			
EFFE.SK1460	14	60		18	
EFFE.SK1480		80			
EFFE.SK14100		100			
EFFE.SK14120		120			
EFFE.SK14140		140			
EFFE.SK14160		160			
EFFE.SK14180		180			
EFFE.SK1640	16	40		20	
EFFE.SK1660		60			
EFFE.SK1680		80			
EFFE.SK16100		100			
EFFE.SK16120		120			
EFFE.SK16140		140			
EFFE.SK16160		160			
EFFE.SK16180		180			
EFFE.SK16200		200			
EFFE.SK1860	18	60		22	
EFFE.SK1880		80			
EFFE.SK18100		100			
EFFE.SK18120		120			
EFFE.SK18140		140			
EFFE.SK18160		160			
EFFE.SK18180		180			
EFFE.SK18200		200			
EFFE.SK18240		240			

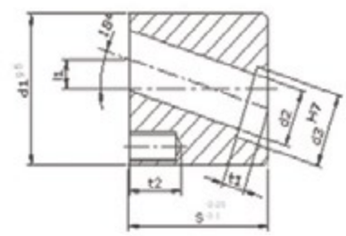
Sip. No.	d1	L	L1	d2	a
EFFE.SK2060	20	60	7	24	10
EFFE.SK2080		80			
EFFE.SK20100		100			
EFFE.SK20120		120			
EFFE.SK20140		140			
EFFE.SK20160		160			
EFFE.SK20180		180			
EFFE.SK20200		200			
EFFE.SK20250		250			
EFFE.SK2580	25	80		29	
EFFE.SK25100		100			
EFFE.SK25120		120			
EFFE.SK25140		140			
EFFE.SK25160		160			
EFFE.SK25180		180			
EFFE.SK25200		200			
EFFE.SK25220		220			
EFFE.SK25250		250			
EFFE.SK25300		300			
EFFE.SK30100	30	100		34	12
EFFE.SK30120		120			
EFFE.SK30140		140			
EFFE.SK30160		160			
EFFE.SK30180		180			
EFFE.SK30200		200			
EFFE.SK30220		220			
EFFE.SK30250		250			
EFFE.SK30300		300			
EFFE.SK30360		360			

BOYNUZ PİMİ YATAĞI



- Malzeme : Asil Çelik 1.17131 (16MnCr5)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sementasyon DIN 16716-C





Sip. No.	d1	S	d2	d3	d5	L1	L3	T1	T2
EFFE.MACA12	32	36	12	16	M6	7	10	10	12
EFFE.MACA14	36	36	14	18	M8	7	12	10	16
EFFE.MACA16	40	46	16	20	M8	8.5	13.5	10	16
EFFE.MACA18	40	46	18	22	M8	8.5	13.5	10	16

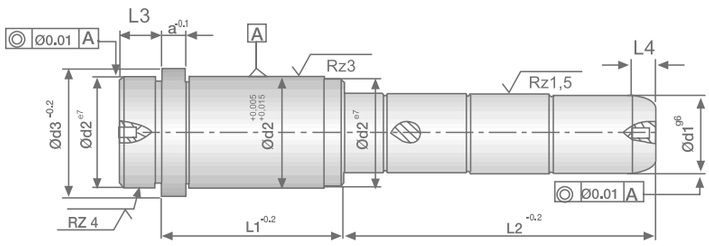
Sip. No.	d1	S	d2	d3	d5	L1	L3	T1	T2
EFFE.MACA20	45	46	20	25	M8	8.5	15	10	16
EFFE.MACA25	50	56	25	29	M8	10	16	12	16
EFFE.MACA30	63	66	30	34	M10	12	21	15	20

PLASTİK KALIBI ÜRÜNLERİ

KUYRUKLU ŞAPKALI KADEMELİ KOLON - YERLİ TİP



- Malzeme : Asil Çelik 1.1213 (Cf53)
- Sertlik : 62± 2 HRC
- Isıl İşlem : Indüksiyon



Sip. No.	d1	L1	L2	L3	d2	d3	a
KSKK162626	16	26	26	10	24	28	6
KSKK162636			36				
KSKK162646			46				
KSKK162656			56				
KSKK162666			66				
KSKK162676			76				
KSKK162696			96				
KSKK163626		36	26				
KSKK163636			36				
KSKK163646			46				
KSKK163656			56				
KSKK163666			66				
KSKK163686			86				
KSKK164626		46	26				
KSKK164636			36				
KSKK164646			46				
KSKK164656			56				
KSKK164676			76				
KSKK164696			96				
KSKK1646116			116				
KSKK165636		56	36				
KSKK165646			46				
KSKK165666			66				
KSKK165686			86				
KSKK1656106			106				
KSKK1656126			126				
KSKK1656146			146				
KSKK166636		66	36				
KSKK166656			56				
KSKK166676			76				
KSKK166696			96				
KSKK1666116			116				
KSKK1666136			136				
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KSKK1676106			106				
KSKK1676126			126				
KSKK168646		86	46				
KSKK168666			66				
KSKK168686			86				
KSKK1686106			106				
KSKK1686126			126				
KSKK202626	20	26	26		28	32	
KSKK202636			36				
KSKK202646			46				
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KSKK2036106			106				
KSKK2036126			126				
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KSKK204636			36				
KSKK204646			46				
KSKK204656			56				
KSKK204676			76				
KSKK204696			96				
KSKK2046116			116				

Sip. No.	d1	L1	L2	L3	d2	d3	a
KSKK205626	20	56	26	10	28	32	6
KSKK205636			36				
KSKK205646			46				
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KSKK208696			96				
KSKK2086116			116				
KSKK209646		96	46				
KSKK209666			66				
KSKK209686			86				
KSKK2096106			106				
KSKK2096126			16				
KSKK252656	25	26	56	10	34	38	8
KSKK252666			66				
KSKK252676			76				
KSKK253636		36	36				
KSKK253646			46				
KSKK253656			56				
KSKK253666			66				
KSKK253686			86				
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KSKK2536126			126				
KSKK2536146			146				
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KSKK254656			56				
KSKK254676			76				
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KSKK2546136			136				
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KSKK255646			46				
KSKK255666			66				
KSKK255686			86				
KSKK2556106			106				
KSKK2556126			126				
KSKK2556146			146				
KSKK256636		66	36				
KSKK256656			56				
KSKK256676			76				
KSKK256696			96				
KSKK2566116			116				
KSKK2566136			136				
KSKK257646		76	46				
KSKK257666			66				
KSKK257686			86				
KSKK2576106			106				
KSKK2576126			126				

Sip. No.	d1	L1	L2	L3	d2	d3	a
KSKK258656	25	86	56	10	34	38	8
KSKK258676			76				
KSKK258696			96				
KSKK2586116			116				
KSKK2586136			136				
KSKK259656		96	56				
KSKK259676			76				
KSKK259696			96				
KSKK2596116			116				
KSKK2596136			136				
KSKK2510666		106	66				
KSKK2510686			86				
KSKK25106106			106				
KSKK25106126			126				
KSKK303636	30	36	36	10	39	43	10
KSKK303646			46				
KSKK303656			56				
KSKK303666			66				
KSKK303686			86				
KSKK3036106			106				
KSKK304636		46	36				
KSKK304646			46				
KSKK304656			56				
KSKK304676			76				
KSKK304696			96				
KSKK3046116			116				
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KSKK307666			66				
KSKK307686			86				
KSKK3076106			106				
KSKK3076126			126				
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KSKK308676			76				
KSKK308696			96				
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KSKK309666			66				
KSKK309686			86				
KSKK3096106			106				
KSKK3096126			126				
KSKK3010656		106	56				
KSKK3010666			66				
KSKK3010686			86				
KSKK30106106			106				
KSKK30106126			126				
KSKK3011666		116	66				
KSKK3011686			86				
KSKK30116106			106				
KSKK30116126			126				

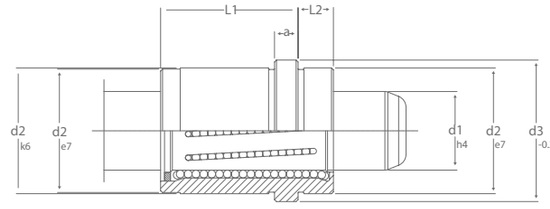
PLASTİK KALIBI ÜRÜNLERİ

İTİCİ PLAKA MERKEZLEME BURÇLARI



- Malzeme : Asil Çelik 1.13505 (100 Cr 6), Bronze Misket 1.3505 (100 Cr 6
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme

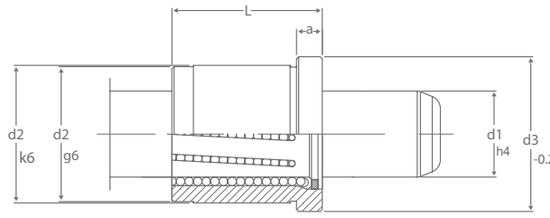
Sip. No.	d1	d2	d3	L1	a	L2
OZ1001220	12	22	26	20	6	8
OZ1001824	18	30	35	24		9
OZ1002026	20	32	36	26		
OZ1002035				35		
OZ1003034	30	46	52	34		12





- Malzeme : Asil Çelik 1.13505 (100 Cr 6), Bronze Misket 1.3505 (100 Cr 6
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme

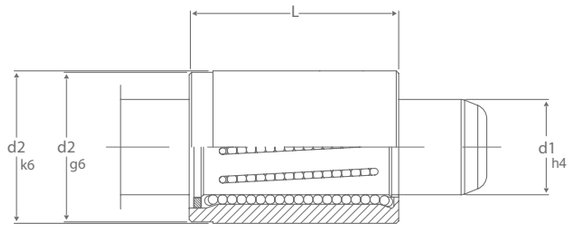
Sip. No.	d1	d2	d3	L	a
OZ1012035	20	32	36	35	6
OZ1012535	25	40	45		
OZ1014045	40	60	64	45	8
OZ1014063				63	





- Malzeme : Asil Çelik 1.13505 (100 Cr 6), Bronze Misket 1.3505 (100 Cr 6
- Sertlik : 62± 2 HRC
- Isıl İşlem : Sertleştirme

Sip. No.	d1	d2	L
OZ2035	20	32	35
OZ2045			45
OZ2545	25	40	
OZ2555			55



5. İŞ PARÇASI BAĞLAMA

Sy. 366/465

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
Başakşehir / İstanbul

Gsm: +90 533 554 72 40 – +90 555 988 00 53
Tel: +90 (212) 549 46 62 – 671 50 76
Faks: +90 (212) 549 54 27


VERTEX

MANDRENLER

TEMAK

ELLE SIKMALI MANDRENLER

TIP500



ÖZELLİKLER

- MATKAP UÇLARININ SERİ OLARAK BAĞLANMASI VE YİNE AYNI ŞEKİLDE SÖKÜLMESİ İÇİN UYGUNDUR.
- ÇALIŞMA ESNASINDA AYAKLARDA OLUŞAN MOMENT OTOMATİK OLARAK SIKMA KUVVETİNİ ARTIRIR.
- AYAKLAR YÜKSEK MUKAVEMETLİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞ OLUP SERTLİK DEĞERİ 61 ± 2 HRc DİR.
- PARÇA DEĞİŞİMİ GEREKİRSE, PARÇALARI YEDEK OLARAK FİRMAMIZDAN TEMİN EDEBİLİRSİNİZ.

Ür. Kd.	Sıkma Kapasitesi (mm)	Bağlantı Tipi	Dış Çap (mm)	Kapalı Boy (mm)	Açık Boy (mm)	Sıkma Momenti Nm	Max. Salgı (mm)	Sip. No.
510	0-10	B12	35	78	71	9	0,07	00001
503	0-10	3/8-24	35	78	71	9	0,07	00002
501	0-10	1/2-20	35	78	71	9	0,07	00003
513	1-13	B16	42	96	87	12	0,07	00004
533	1-13	3/8-24	42	96	87	12	0,07	00005
531	1-13	1/2-20	42	96	87	12	0,07	00006
515	1-16	B16	49	112	103	14	0,07	00007
516	1-16	B18	49	112	103	14	0,07	00008
561	1-16	1/2-20	49	112	103	14	0,07	00009
565	1-16	5/8-16	49	112	103	14	0,07	00010
520	4-20	B22	55	131	122	15	0,07	00011

ANAHTARLI MANDRENLER

TIP600



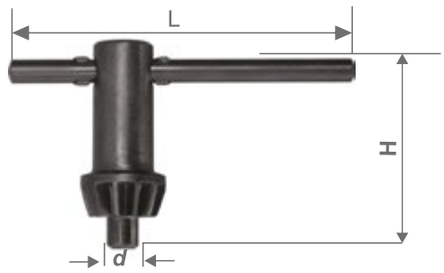
ÖZELLİKLER

- ENDÜSTRİYEL HİZMET İÇİN BELİRLENEN STANDART ÖLÇÜLERDEDİR.
- DARBELERE VE AĞIR İŞ ORTAMINA DAYANIKLIDIR.
- SAĞ VE SOL YÖNLÜ OLARAK EMNİYETLE KULLANILABİLİR.
- ANAHTARI İLE BİRLİKTE TESLİM EDİLİR.

Ür. Kd.	Sıkma Kapasitesi (mm)	Bağlantı Tipi	Dış Çap (mm)	Açık Boy (mm)	Kapalı Boy (mm)	Anahtar Kodu	Sip. No.
615	1-16	B16	56	80	80	S3	00012
616	1-16	B18	56	56	100	S3	00013
620	1-20	B22	65	92	114	S4	00014
626	1-26	B24	80	120	150	S4	00015

ANAHTARLAR

TIP650



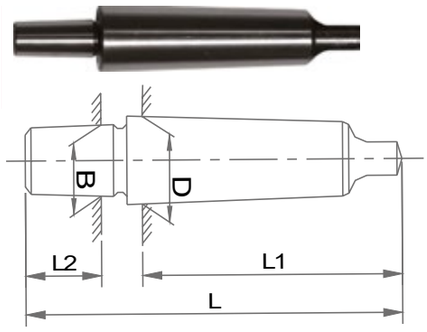
Ür. Kd.	Kodu	H (mm)	L (mm)	d (mm)	Sip. No.
653	S3	50	90	8	00016
654	S4	54	110	9	00017

İŞ PARÇASI BAĞLAMA VE SÖKME AKSESUARLARI

TEMAK

MANDREN SAPLARI

TIP6600



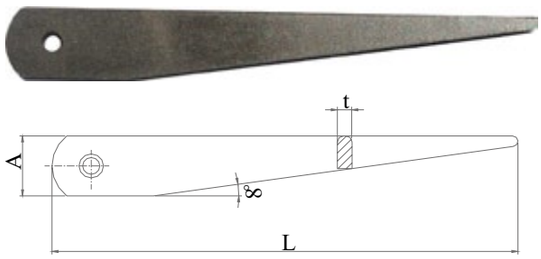
ÖZELLİKLER

- MANDRENLERİN EN AZ SALGI İLE TEZGAHA BAĞLANABİLMELERİNİ SAĞLAR.
- KOMPLE SERTLEŞTİRİLİP TAŞLANMIŞTIR.
- KONİKLER ARASI MAX. SALGI : 0,01 mm

Ür. Kd.	Mk DIN 228-B	B		D (mm)	L1 (mm)	L2 (mm)	L (mm)	Sip. No.
		Konik	Ölçü (mm)					
6000	MK0	B10	10,095	9,045	56,5	14,5	79	00018
6001	MK1	B10	10,095	12,065	62	14,5	86	00019
6011	MK1	B12	12,065	12,065	62	18,5	89	00020
6002	MK2	B10	10,095	17,780	75	14,5	103	00021
6012	MK2	B12	12,065	17,780	75	18,5	106	00022
6022	MK2	B16	15,733	17,780	75	24	110	00023
6032	MK2	B18	17,780	17,780	75	32	117	00024
6013	MK3	B12	12,065	23,825	94	18,5	125	00025
6023	MK3	B16	15,733	23,825	94	24	133	00026
6033	MK3	B18	17,780	23,825	94	32	140	00027
6043	MK3	B22	21,793	23,825	94	40,5	147	00028
6053	MK3	B24	23,825	23,825	94	50,5	158	00029
6024	MK4	B16	15,733	31,267	117,5	24	158	00030
6034	MK4	B18	17,780	31,267	117,5	32	168	00031
6044	MK4	B22	21,793	31,267	117,5	40,5	175	00032
6054	MK4	B24	23,825	31,267	117,5	50,5	185	00033

MORS KAMALARI

TIP7200



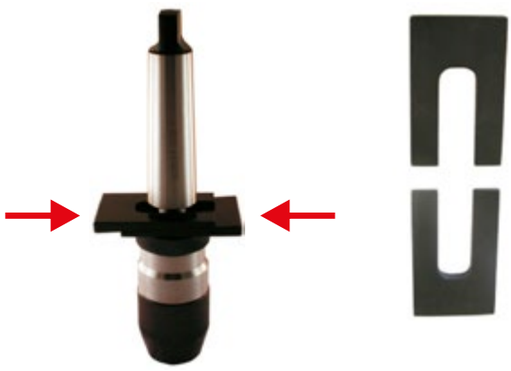
ÖZELLİKLER

- MORS KOVANLARININ VE MANDREN SAPLARININ BİRBİRLERİNDEN VEYA TEZGAHTAN KOLAYCA SÖKÜLMELERİNİ SAĞLAR
  SERTLİK: 35 ± 2HRc

Ür. Kd.	İlgili Konik	A (mm)	L (mm)	t (mm)	Sip. No.
7202	MK1/MK2	20	140	5	00034
7203	MK3	25	190	7	00035
7204	MK4	30	225	10	00036

MANDREN SÖKME KAMALARI

TIP7500



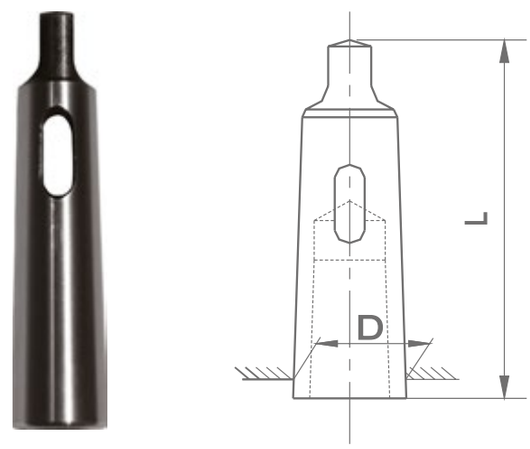
ÖZELLİKLER

- MANDREN İLE MANDREN SAPINI BİRBİRİNDEN AYIRMAK İÇİN KULLANILIRLAR.
  SERTLİK: 35 ± 2 HRC
- TAKIM OLARAK TESLİM EDİLİR. 1 TAKIM 2 ADETTİR.

Ür. Kd.	İlgili Konik	En (mm)	Boy (mm)	Kalınlık (mm)	Sip. No.
7512	B12	30	58	8	00037
7516	B16	36	68	8	00038
7518	B18	42	75	8	00039
7522	B22	48	86	8	00040

MORS KOVANLARI DIN2185

TIP7100



ÖZELLİKLER

- MORS KONİK ŞAFTLI TAKIMLARIN TEZGAHLARA VEYA BİRBİRLERİNE EN AZ SALGI İLE BAĞLANMALARINI SAĞLAYAN ADAPTÖRDÜR.
- KOMPLE SERTLEŞTİRİLİP TAŞLANMIŞTIR.
- DIŞ VE İÇ KONİK ARASINDAKİ MAX. SALGI : 0,01 mm

Ür. Kd.	Dış Konik	İç Konik	D (mm)	D1 (mm)	L (mm)	Fiyat Kodu
7121	MK2	MK1	17,780	12,065	92	00041
7131	MK3	MK1	23,825	12,065	99	00042
7132	MK3	MK2	23,825	17,780	112	00043
7141	MK4	MK1	31,267	12,065	124	00044
7142	MK4	MK2	31,267	17,780	124	00045
7143	MK4	MK3	31,267	23,825	140	00046
7151	MK5	MK1	44,399	12,065	156	00047
7152	MK5	MK2	44,399	17,780	156	00048
7153	MK5	MK3	44,399	23,825	156	00049
7154	MK5	MK4	44,399	31,267	171	00050
7165	MK6	MK5	63,348	44,399	218	00051

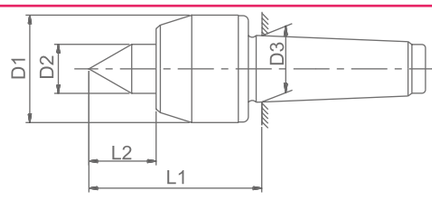
DÖNER PUNTALAR

TEMAK

NORMAL UÇLU

TİP 100





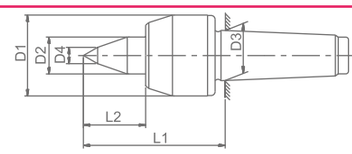
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,008 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	Devir d/d (max)	Parça Ağırlığı KG (max)	Sip. No.
102	MK2	45	20	17.780	65	24	6000	150	00941
103	MK3	60	25	23.825	83	31	4300	300	00942
104	MK4	70	32	31.267	102	40	3500	600	00943
105	MK5	90	40	44.399	129	50	2500	1100	00944
106	MK6	105	50	63.348	151	57	1900	2000	00945

KOPYE UÇLU

TİP 110





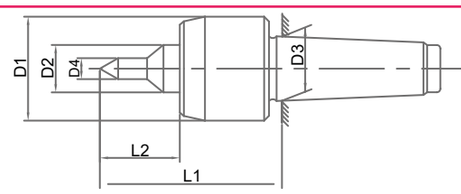
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,008 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	L1 (mm)	L2 (mm)	Devir d/d (max)	Parça Ağırlığı KG (max)	Sip. No.
114	MK4	70	32	31.267	12	108	46	3500	450	00946
115	MK5	90	40	44.399	15	135	56	2500	850	00947

İNCE UÇLU

TİP 120





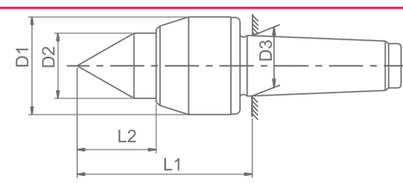
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,008 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	L1 (mm)	L2 (mm)	Devir d/d (max)	Parça Ağırlığı KG (max)	Sip. No.
124	MK4	70	32	31.267	12	102	40	3500	450	00948
125	MK5	90	40	44.399	15	129	50	2500	800	00949

BÜYÜK MİL ÇAPLI

TİP 150





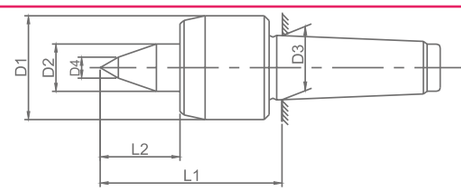
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,008 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	Devir d/d (max)	Parça Ağırlığı KG (max)	Sip. No.
154	MK4	70	48	31.267	108	46	3500	600	00950
155	MK5	90	56	44.399	135	56	2500	1000	00951

CNC TORNALAR İÇİN

TİP 140





ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,008 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	L1 (mm)	L2 (mm)	Devir d/d (max)	Parça Ağırlığı KG (max)	Sip. No.
144	MK4	70	32	31.267	12	102	40	5000	500	00952
145	MK5	90	40	44.399	15	129	50	4000	850	00953

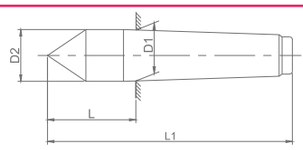
SABİT / DÖNER / TIRNAKLI VE BORU BUNTALARI

TEMAK

SABİT PUNTALAR - NORMAL UÇLU

TİP 400





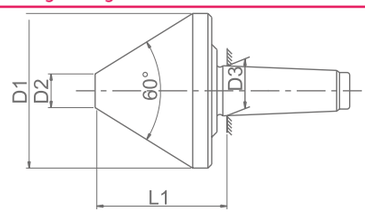
ÖZELLİKLER
- KOMPLE SERTLEŞTİRİLİP TAŞLANMIŞTIR.
- PUNTA UCU SERTLİĞİ: 60-62 HRc
- SALGI: MAX. 0,005 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Sip. No.
402	MK2	17.780	18	36	100	00954
403	MK3	23.825	24.1	44	125	00955
404	MK4	31.267	31.6	57.5	160	00956
405	MK5	44.399	44.7	70.5	200	00957
406	MK6	63.348	63.8	88	270	00958

BORU PUNTALARI-60 DERECE UÇ AÇILI

TİP 200





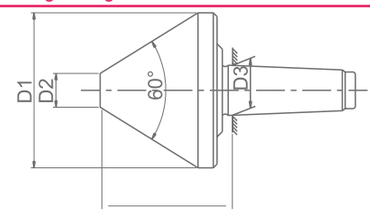
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ 60-62 HRc
- SALGI: MAX. 0,01 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	Devir d/d (max)	İŞ Parçası Ağırlığı KG (Max.)	Sip. No.
203	MK3	80	25	23.825	70	3000	300	00959
213	MK3	100	32	23.825	85	2400	500	00960
204	MK4	120	38	31.267	90	2400	500	00961
205	MK5	120	38	44.399	90	2400	500	00962
224	MK4	140	40	31,267	105	1800	600	00963
225	MK5	140	40	44,399	105	1800	600	00964
215	MK5	170	50	44.399	100	1500	1000	00965

BORU PUNTALARI-70 DERECE UÇ AÇILI

TİP 210/230





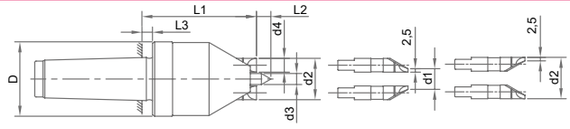
ÖZELLİKLER
- RULMAN ÖMRÜ 2000 İŞ SAATİDİR.
- PUNTA UCU SERTLİĞİ 60-62 HRc
- SALGI: MAX. 0,01 Mm

Ür. Kd.	Konik	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	Devir d/d (max)	İŞ Parçası Ağırlığı KG (Max.)	Sip. No.
235	MK5	200	70	44.399	125	800	1000	00966
216	MK6	250	75	63.348	147	800	1500	00967

TIRNAKLI PUNTALAR - BASMA ÇAPI 15 MM - 30 MM

TİP 320





3 ADET YEDEK TIRNAK İLE BİRLİKTE TESLİM EDİLİR.

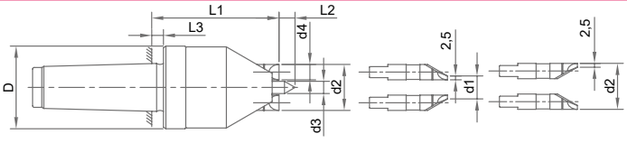
ÖZELLİKLER
- MEKANİK KİLİTLEMELİ
- SALGISI 0,02 Mm' YE KADAR AYARLANABİLİR.
- MİL VE TIRNAKLARDA SERTLİK:60-63 Hrc

Ür. Kd.	Konik	d1 (mm)	d2 (mm)	d3 (mm)	d4 (mm)	Tornalama Çapı (mm) Min.	Tornalama Çapı (mm) Max.	D (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Tırnak Sayısı	Sip. No.
323	MK3	15	30	8	10	16	60	54	80	7,5	5	3+3	00968
324	MK4	15	30	8	10	16	60	54	80	7,5	5	3+3	00969
325	MK5	15	30	8	10	16	60	54	80	7,5	5	3+3	00970

TIRNAKLI PUNTALAR - BASMA ÇAPI 24 MM - 45 MM

TİP 340





6 ADET YEDEK TIRNAK İLE BİRLİKTE TESLİM EDİLİR.

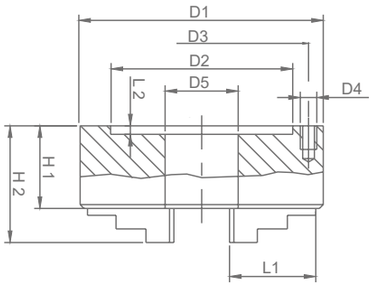
ÖZELLİKLER
- MEKANİK KİLİTLEMELİ
- SALGISI 0,02 Mm' YE KADAR AYARLANABİLİR.
- MİL VE TIRNAKLARDA SERTLİK:60-63 Hrc

Ür. Kd.	Konik	d1 (mm)	d2 (mm)	d3 (mm)	d4 (mm)	Tornalama Çapı (mm) Min.	Tornalama Çapı (mm) Max.	D (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Tırnak Sayısı	Sip. No.
344	MK4	24	45	17	13	25	90	69	94	15	5	6+6	00971
345	MK5	24	45	17	13	25	90	69	94	15	5	6+6	00972

TORNA AYNALARI

TEKNİK BİLGİLER

DIN 6350/A



ÖZELLİKLER

- KONSTRÜKSİYONU VE ÖLÇÜLERİ DIN 6350' YE UYGUNDUR.
- İŞ BAĞLAMA KAPASİTESİ, SALGI, YALPA, SERTLİK VE TORK GÜCÜ GİBİ TEKNİK DEĞERLER
- DIN 6386 SINIRLARI İÇİNDEDİR.
- KUVVET İLETMEYİ SAĞLAYAN, SPİRAL, PİNYON VE AYAKLAR SERTLEŞTİRİLİP TAŞLANMIŞTIR.
- ÜNİVERSAL TORNA TEZGAHLARINDA FENER MİLİNE FLANŞ İLE BAĞLANIR.
- AYRICA FREZE VE MATKAP TEZGAHLARI İLE TABLALARDA DA KULLANILIR.

Ayna Çapı D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	D5 (mm)	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)
80	56	67	M6	16	50	66	32	3
100	70	83	M8	22	55	74	43	3,5
125	95	108	M8	30	55	78	55	4
160	125	140	M8	42	65	93	70	4,5
200	160	176	M10	60	75	110	85	5
250	200	224	M12	80	80	122	106	5,5
315	260	286	M16	100	90	142	126	6
400	330	362	M16	130	100	171	139	7

Ayna Çapı (mm)	Dönme Hızı Devir/Dakika (max.)		Sıkma Kuvveti** (min.) 1 daN=1 kgf	Uygulanacak Tork Gücü (max.) (kg-m)	Salgı (max.) (mm)	Yalpa (max.) (mm)
	Çelik Gövde	Döküm Gövde				
80	7000	4000	1000	5,5	0,04	0,02
100	6000	3100	1700	7	0,04	0,02
125	4800	2750	2400	8	0,04	0,03
160	3800	2150	3100	10	0,04	0,03
200	3000	1700	3700	11	0,06	0,03
250	2400	1350	4600	12	0,06	0,03
315	1900	1050	5500	14	0,08	0,04
400	1500	850	6500	16	0,08	0,04

SALGI VE YALPA: BU DEĞERLER, DIN 6386 DA BELİRTİLEN TEKNİK ÖZELLİKLERDE ÜRETİLMİŞ OLAN MALAFA VE DİSKLERLE ÖLÇÜM YAPILARAK ELDE EDİLİR.

DÖNME HIZLARI : AYNAYA BAĞLANABİLECEK EN BÜYÜK ÖLÇÜDEKİ İŞ PARÇASINA GÖRE TESPİT EDİLMİŞTİR. DENGESİZ VE EKSANTRİK PARÇA BAĞLANMASI VE AYNANIN BAKIMSIZ OLMASI DURUMUNDA LİSTEDEKİ DEĞERLER GEÇERSİZ KALIR.

UYGULANACAK TORK VE SIKMA KUVVETİ : AYNANIN ANAHTARINA İLAVE PARÇA, BORU, V.S BAĞLANMADAN SADECE EL İLE SIKMA YAPILARAK LİSTEDEKİ DEĞERLERE ULAŞILMALIDIR.

İŞ BAĞLAMA KAPASİTELERİ

	DÜZ AYAK İLE					TERS AYAK İLE		
d1 Ayna Çapı (mm)	d5 min	d6 max	d7 min	d8 max	d9 max	d11 min	d12 max	d13 max
80	2	22	25	70	86	23	63	86
100	3	32	30	88	115	32	80	115
125	3	40	37	122	148	38	110	148
160	4	56	50	158	196	55	145	195
200	5	86	64	198	255	65	200	255
250	6	110	79	248	312	90	250	312
315	10	140	94	312	386	100	315	386
400	16	206	118	390	480	120	400	480

NOT: YUKARIDAKİ DEĞERLERİ AŞARAK ÇALIŞMAK CİDDİ TEHLİKELER YARATABİLİR..

TORNA AYNALARI

TORNA AYNASI YEDEKLERİ

Ür. Kd.	DÜZ AYAK 3-AYAKLI AYNALAR	Sip. No.
803TA	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00066
103TA		00067
123TA		00068
163TA		00069
203TA		00070
253TA		00071
313TA		00072
403TA		00073

Ür. Kd.	DÜZ AYAK-4 AYAKLI AYNALAR	Sip. No.
124TA	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00074
164TA		00075
204TA		00076
254TA		00077
314TA		00078
404TA		00079

Ür. Kd.	TERS AYAK-3 AYAKLI AYNALAR	Sip. No.
803TB	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00080
103TB		00081
123TB		00082
163TB		00083
203TB		00084
253TB		00084
313TB		00085
403TB		00086

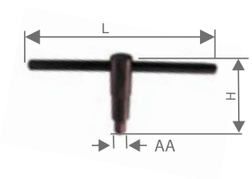
Ür. Kd.	TERS AYAK-4 AYAKLI AYNALAR	Sip. No.
124TB	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00088
164TB		00089
204TB		00090
254TB		00091
314TB		00092
404TB		00093

Ür. Kd.	YUMUŞAK AYAK-3 AYAKLI AYNALAR	Sip. No.
123TY		00094
163TY		00095
203TY		00096
253TY		00097
313TY		00098
403TY		00099

Ür. Kd.	YUMUŞAK AYAK-4 AYAKLI AYNALAR	Sip. No.
124TY		00100
164TY		00101
204TY		00102
254TY		00103
314TY		00104
404TY		00105

Ür. Kd.	SPİRAL	Sip. No.
80TS	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00106
100TS		00107
125TS		00108
160TS		00109
200TS		00110
250TS		00111
315TS		00112
400TS		00113

Ür. Kd.	PİNYON	Sip. No.
80TP	 SERTLEŞTİRİLMİŞTİR TAŞLANMIŞTIR.	00114
100TP		00115
125TP		00116
160TP		00117
200TP		00118
250TP		00119
315TP		00120
400TP		00121

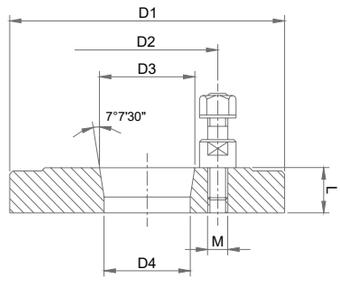
Ür. Kd.	ANAHTAR	İlgili Ayna	AA (mm)	H (mm)	L (mm)	Sip. No.
80K	 GÖVDESİ SERTLEŞTİRİLMİŞTİR	80	8	74	110	00122
100K		100	8	74	110	00123
125K		125	10	84	170	00124
160K		160	12	104	180	00125
200K		200	12	104	250	00126
250K		250	12	104	250	00127
315K		315	14	114	310	00128
400K		400	15	134	375	00129

AYNA FLANŞLARI

SAPLAMA VE SOMUNLU

DIN 55027





ÖZELLİKLER

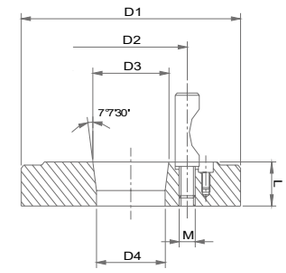
- DÖKÜM GÖVDELİDİR.
- SAPLAMA VE SOMUNLARI İLE BİRLİKTE TESLİM EDİLİR.
- AYNALARIN TORNA TEZGAHLARINA BAĞLANABİLMESİ İÇİN ADAPTÖR GÖREVİ YAPARLAR.
- BU BAĞLANTIDAN İYİ SONUÇ ALABİLMEK İÇİN TORNA AYNASI VE FLANŞLARIN KULLANIM TALİMATLARINA EKSİKSİZ OLARAK UYMANIZI ÖNERİRİZ.
- AYNA FLANŞLARININ HASSAS OLARAK İŞLENMİŞ OLAN TEZGAH TARAFI, MONTAJA HAZIR HALDEDİR. AYNANIN BAĞLANACAĞI TARAF İSE KABA OLARAK BIRAKILMIŞ OLUP MONTAJ ESNASINDA KULLANICI TARAFINDAN İŞLENECEKTİR.

Ür. Kd.	D1 mm	No	D2 mm	D3 mm	D4 mm	L mm	M mm	Saplama Adedi	Sip. No.
160.4.F		4	85	63,525	60,6	25	M10	3	00130
160.5.F	160	5	104,8	82,563	79,4	25	M10	4	00131
160.6.F		6	133,4	106,375	103	25	M12	4	00132
200.5.F		5	104,8	82,563	79,4	25	M10	4	00133
200.6.F	200	6	133,4	106,375	103	25	M12	4	00134
200.8.F		8	171,4	139,719	136	25	M16	4	00135
250.5.F		5	104,8	82,563	79,4	30	M10	4	00136
250.6.F	250	6	133,4	106,375	103	30	M12	4	00137
250.8.F		8	171,4	139,719	136	30	M16	4	00138
315.6.F		6	133,4	106,375	103	35	M12	4	00139
315.8.F	315	8	171,4	139,719	136	35	M16	4	00140
315.11.F		11	235	196,869	192,5	35	M20	6	00141
400.6.F		6	133,4	106,375	103	36	M12	4	00142
400.8.F	400	8	171,4	139,719	136	36	M16	4	00143
400.11.F		11	235	196,869	192,5	36	M20	6	00144
500.8.F	500	8	171,4	139,719	136	40	M16	4	00145
500.11.F		11	235	196,869	192,5	40	M20	6	00146

CAMLOCK SAPLAMALI

DIN 55029





ÖZELLİKLER

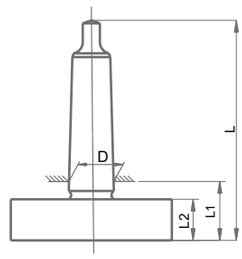
- DÖKÜM GÖVDELİDİR.
- SAPLAMALARI İLE BİRLİKTE TESLİM EDİLİR.
- AYNALARIN TORNA TEZGAHLARINA BAĞLANABİLMESİ İÇİN ADAPTÖR GÖREVİ YAPARLAR.
- BU BAĞLANTIDAN İYİ SONUÇ ALABİLMEK İÇİN TORNA AYNASI VE FLANŞLARIN
- KULLANIM TALİMATLARINA EKSİKSİZ OLARAK UYMANIZI ÖNERİRİZ.
- AYNA FLANŞLARININ HASSAS OLARAK İŞLENMİŞ OLAN TEZGAH TARAFI, MONTAJA HAZIR HALDEDİR. AYNANIN BAĞLANACAĞI TARAF İSE KABA OLARAK BIRAKILMIŞ OLUP MONTAJ ESNASINDA KULLANICI TARAFINDAN İŞLENECEKTİR.

Ür. Kd.	D1 mm	No	D2 mm	D3 mm	D4 mm	L mm	M mm	Saplama Adedi	Sip. No.
160.4.C		4	82,55	63,525	60,6	25	M12x1	3	00147
160.5.C	160	5	104,8	82,563	79,4	28	M12x1	6	00148
160.6.C		6	133,4	106,375	103	33	M16x1,5	6	00149
200.5.C		5	104,8	82,563	79,4	28	M12x1	6	00150
200.6.C	200	6	133,4	106,375	103	33	M16x1,5	6	00151
200.8.C		8	171,4	139,719	136	38	M20x1,5	6	00152
250.5.C		5	104,8	82,563	79,4	33	M12x1	6	00153
250.6.C	250	6	133,4	106,375	103	33	M16x1,5	6	00154
250.8.C		8	171,4	139,719	136	38	M20x1,5	6	00155
315.6.C		6	133,4	106,375	103	35	M16x1,5	6	00156
315.8.C	315	8	171,4	139,719	136	38	M20x1,5	6	00157
315.11.C		11	235	196,869	192,5	44	M22x1,5	6	00158
400.6.C		6	133,4	106,375	103	40	M16x1,5	6	00159
400.8.C	400	8	171,4	139,719	136	40	M20x1,5	6	00160
400.11.C		11	235	196,869	192,5	45	M22x1,5	6	00161
500.8.C	500	8	171,4	139,719	136	45	M20x1,5	6	00162
500.11.C		11	235	196,869	192,5	45	M22x1,5	6	00163

MORSLU FLANŞLAR

TIP 6100





ÖZELLİKLER

- MORSLU FLANŞLAR, AYNALARIN TEZGAHLARA MİNİMUM SALGI İLE BAĞLANMASINI SAĞLARLAR.
- KABA İŞLENMİŞ OLAN TARAF AYNA ÖLÇÜLERİNE UYGUN OLARAK DELİNİP TORNALANDIKTAN SONRA AYNANIN BAĞLANMASI GERÇEKLEİTİRİLİR.
- MORSLU TARAF SERTLEŞTİRİLMİŞ VE TAŞLANMIŞ OLUP, AYNA TARAFI SERTLEŞTİRİLMEMİŞTİR.

** : DIN 228/A FORMUNDADIR

Ür. Kd.	Dış Çap(mm)	MK	D (mm)	L (mm)	L1 (mm)	L2 (mm)	Sip. No.
6102		2	17.780	104	27	18	00164
6103	80	3	23.825	123	29	18	00165
6104		4	31.267	147	30	18	00166
6113	100	3	23.825	123	29	18	00167
6114		4	31.267	147	30	18	00168
6123	125	3	23.825	125	31	20	00169
6124		4	31.267	149	32	20	00170
6133		3	23.825	125	31	20	00171
6134	160	4	31.267	149	32	20	00172
6135**		5	44.399	183	33	20	00173

HİDROLİK AYNALAR

AUTOGRIP® Great Rigidity, Infallible Precision

2 AYAKLI AÇIK MERKEZLİ HİDROLİK AYNA



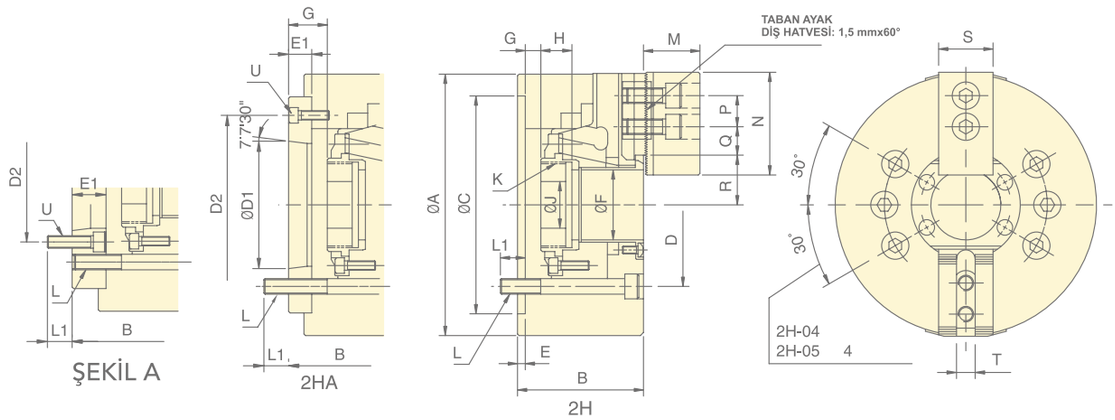
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İÇİN ŞEKİL A ' YA BAKINIZ

ÖZELLİKLER

- AÇIK MERKEZLİ 2 AYAKLI TİPTEDİR.
- TÜM HAREKETLİ PARÇALAR SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR.
- YÜKSEK HASSASİYETLİ VE YÜKSEK MUKAVEMETLİ TASARIMA SAHİPTİR.
- ÇEKTİRME DİŞ ÖLÇÜLERİ (K) TABLODA BELİRTİLMİŞTİR. FARKLI DİŞ ÖLÇÜSÜ İSTENDİĞİNDE TEMİN EDİLEBİLİR.
- STANDART BAĞLAMA ISO-A ADAPTÖR İLE BİRLİKTE TESLİM EDİLİR. STANDART DIŞI ADAPTÖR İSTENDİĞİNDE AYNA ÜZERİNDEKİ ADAPTÖR DEĞİŞTİRİLEBİLİR.
- AYNA ÜZERİNDE YUMUŞAK AYAK MONTAJLI OLARAK SEVK EDİLİR. SERT AYAKLAR AYRICA SİPARİŞ EDİLMESİ GEREKİP FİYATA DAHİL DEĞİLDİR.

STANDART AKSESUARLAR

- ISO-A ADAPTÖR
- YUMUŞAK AYAK (AYNAYA MONTAJLI SEVKEDİLİR)
- BAĞLANTI CİVATA VE SOMUNLARI
- ÇEKTİRME SOMUNU
- KULLANIM KILAVUZU



TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
2H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

BİRİM mm

Özellik Model/Adaptör		Sip. No.	Piston Stroku (mm)	Ayak Stroku (mm)	Sıkma Çapı (mm) Max.	Sıkma Çapı (mm) Min	Max. Çekme Kuvveti KN (kgf)	Max. Sıkma Kuvveti KN (kgf)	Max. Devir d/d	Atalet Momenti GD Kg.m	Ağırlık Kg		Uygun Silindir Modeli	Max. Hidrolik BasıncıMpa (ggf/Cm)
2H-04		14141	10	5,4	110	7	9.21940)	18.911930)	8000	0.01	3,8	3,8	TH-536	1.6116)
2H-05	A4	14142	10	5,4	135	12	11.711190)	23.912440)	7000	0.02	6.5	7,3	TH-536	2.0120)
2H-06	A5	14143	12	5.5	168	15	14.411470)	37.913870)	6000	0.06	11.5	13,3	TH-646	1.9119)
2H-08	A5	14144	16	7,4	210	13	23.112360)	57.215840)	5000	0,17	21,3	24,2	TH-852	1.9119)
2H-08	A6	14145	16	7,4	210	13	23.112360)	57.215840)	5000	0,17	21,3	22,4	TH-852	1.9119)
2H-10	A6	14146	19	8,8	254	31	28.412900)	73.917540)	4200	0,31	33,5	40,5	TH-1075	1.8118)
2H-10	A8	14147	19	8,8	254	31	28.412900)	73.917540)	4200	0,31	33,5	39	TH-1075	1.8118)
2H-12	A8	14148	23	10,6	304	34	36.713740)	95.819780)	3300	0.70	59.7	62,7	TH-1291	1.8118)
2H-15	A8	14149	23	10,6	381	50	46.914790)	119.6112200)	2500	2.42	115	129	TH-1512	1.7117)
2H-15	A11	14150	23	10,6	381	50	46.914790)	119.6112200)	2500	2.34	115	122	TH-1512	1.7117)

Özellik Model/Adaptör		A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
2H-04		110	59	59	85	70.6	-	-	4	-	26	3,5	3,5	-6,5	-6,5	17.5	12
2H-05	A4	135	60	71	110	82.6	63.51	96	4	15	33	1	16	-9	6	20	12
2H-06	A5	168	68	91	140	104.8	82,56	116	5	15	45	11	26	-1	14	15	20
2H-08	A5	210	91	109	170	133,4	82,56	104.8	5	23	52	14,5	37.5	-1,5	21.5	20,5	30
2H-08	A6	210	91	103	170	133,4	106,38	150	5	17	52	14,5	31.5	-1,5	15.5	20,5	30
2H-10	A6	254	100	120	220	171,4	106,38	133.4	5	25	75	8,5	33.5	-10,5	14.5	25	45
2H-10	A8	254	100	113	220	171,4	139,72	190	5	18	75	8,5	26.5	-10,5	7.5	25	45
2H-12	A8	304	110	122	220	171,4	139,72	190	6	18	91	8	26	-15	3	28	50
2H-15	A8	381	133	160	300	235	139,72	171.4	6	33	120	11	44	-12	21	39	60
2H-15	A11	381	133	149	300	235	196.87	260	6	22	120	11	33	-12	10	39	60

Özellik Model/Adaptör		K (max)	L	L1		M	N	P	Q (max)	Q (min)	R (max)	R (min)	S	T	U
2H-04		M 32X1.5	4~M10	16	16	24	52	14	11.3	6.8	23	20.3	25	10	-
2H-05	A4	M 40x1.5	4~M10	15	15	31	62	14	19.8	7.8	26,5	23.8	25	10	3~M6
2H-06	A5	M 55x2	6~M10	16	16	37	73	20	22.8	9.3	32	29.3	31	12	3~M6
2H-08	A5	M 60x2	6~M12	20	17	38	95	25	29,8	14,8	38,7	35	35	14	6~M10
2H-08	A6	M 60x2	6~M12	20	18	38	95	25	29,8	14,8	38,7	35	35	14	3~M6
2H-10	A6	M 85x2	6~M16	22	18	43	110	30	33,8	14,3	51	46.6	40	16	6~M12
2H-10	A8	M 85x2	6~M16	22	24	43	110	30	33,8	14,3	51		40	16	3~M8
2H-12	A8	M 100x2		23	25	51	130	30	45.8	15.8	61.3	56	50	21	3~M8
2H-15	A8	M 130x2	6~M20	30	24	63	165	43	47,3	18,2	80	74,7	62	25.5 ya da 22	6~M16
2H-15	A11	M 130x2	6~M20	30	28	63	165	43	47,3	18,2	80	74,7	62	25.5 ya da 22	3~M10

HİDROLİK AYNALAR

AUTOGRIP® Great Rigidity, Infallible Precision

3 AYAKLI AÇIK MERKEZLİ HİDROLİK AYNA



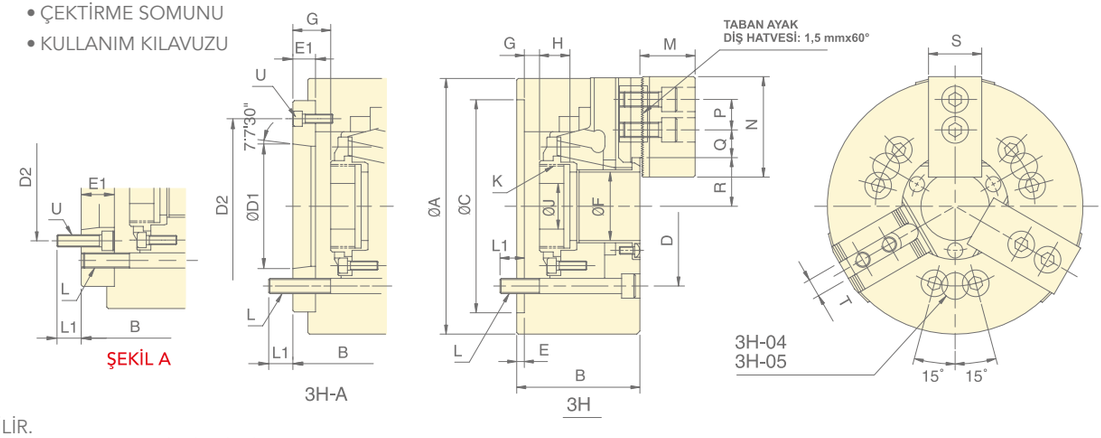
3H-08A5
2H-10A6
2H-15A8
İÇİN ŞEKİL A ' YA BAKINIZ

ÖZELLİKLER

- AÇIK MERKEZLİ 3 AYAKLI TİPTEDİR.
- TÜM HAREKETLİ PARÇALAR SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR.
- YÜKSEK HASSASİYETLİ VE YÜKSEK MUKAVEMETLİ TASARIMA SAHİPTİR.
- ÇEKTİRME DİŞ ÖLÇÜLERİ (K) TABLODA BELİRTİLMİŞTİR. FARKLI DİŞ ÖLÇÜSÜ İSTENDİĞİNDE TEMİN EDİLEBİLİR.
- STANDART BAĞLAMA ISO-A ADAPTÖR İLE BİRLİKTE TESLİM EDİLİR. STANDART DIŞI ADAPTÖR İSTENDİĞİNDE AYNA ÜZERİNDEKİ ADAPTÖR DEĞİŞTİRİLEBİLİR.
- AYNA ÜZERİNDE YUMUŞAK AYAK MONTAJLI OLARAK SEVK EDİLİR. SERT AYAKLAR AYRICA SİPARİŞ EDİLMESİ GEREKİP FİYATA DAHİL DEĞİLDİR.

STANDART AKSESUARLAR

- ISO-A ADAPTÖR
- YUMUŞAK AYAK (AYNAYA MONTAJLI SEVKEDİLİR)
- BAĞLANTI CİVATA VE SOMUNLARI
- ÇEKTİRME SOMUNU
- KULLANIM KILAVUZU



TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
2H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

BİRİM mm

Özellik Model/Adaptör		Sip. No.	Piston Stroku (mm)	Ayak Stroku (mm)	Sıkma Çapı (mm) Max.	Sıkma Çapı (mm) Min.	Max. Çekme Kuvveti KN (kgf)	Max. Sıkma Kuvveti KN (kgf)	Max. Devir D/D	Atalet Momenti GD Kg.m	Ağırlık Kg		Uygun Silindir Modeli	Max. Hidrolik Basıncı Mpa (kgf/Cm)
3H-04		14151	10	5,4	110	7	13.711400)	28.412900)	8000	0,01	1 4	1 4	TH-536	2,3123)
3H-05	A4	14152	10	5,4	135	12	17.111750)	35.813650)	7000	0,02	6,7	7,5	TH-536	2,9129)
3H-06	A5	14153	12	5,5	168	15	21.512200)	56.815800)	6000	0,06	11,9	13,7	TH-646	2,8128)
3H-08	A5	14154	16	7,4	210	13	34.313500)	85.818750)	5000	0,18	22,5	25,4	TH-852	2,8119)
3H-08	A6	14155	16	7,4	210	13	34.313500)	85.818750)	5000	0,18	22,5	23,6	TH-852	2,8119)
3H-10	A6	14156	19	8,8	254	31	42.614380)	110.7111300)	4200	0,33	34,5	41,5	TH-1075	2,7127)
3H-10	A8	14157	19	8,8	254	31	42.614380)	110.7111300)	4200	0,33	34,5	40	TH-1075	2,7127)
3H-12	A8	14158	23	10,6	304	34	54.915600)	143.6114650)	3300	0,77	56,6	59,5	TH-1291	2,7127)
3H-15	A8	14159	23	10,6	381	50	7117250)	179.8118350)	2500	2,47	120	134	TH-1512	2,4124)
3H-15	A11	14160	23	10,6	381	50	7117250)	179.8118350)	2500	2,39	120	127	TH-1512	2,4124)
3H-18	A11	14161	23	10,6	450	50	7117250)	179.8118350)	2000	4,78	164	178	TH-1512	2,4124)

Özellik Model/Adaptör		A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
3H-04		110	59	59	85	70.6	-	-	4	-	26	3,5	3,5	-6,5	-6,5	17.5	12
3H-05	A4	135	60	71	110	82.6	63.51	96	4	15	33	1	16	-9	6	20	12
3H-06	A5	168	81	91	140	104.8	82,56	116	5	15	45	11	26	-1	14	19	20
3H-08	A5	210	91	109	170	133,4	82,56	104.8	5	23	52	14,5	37.5	-1,5	21.5	20,5	30
3H-08	A6	210	91	103	170	133,4	106,38	150	5	17	52	14,5	31.5	-1,5	15.5	20,5	30
3H-10	A6	254	100	120	220	171,4	106,38	133.4	5	25	75	8,5	33.5	-10,5	14.5	25	45
3H-10	A8	254	100	113	220	171,4	139,72	190	5	18	75	8,5	26.5	-10,5	7.5	25	45
3H-12	A8	304	110	122	220	171,4	139,72	190	6	18	91	8	26	-15	3	28	50
3H-15	A8	381	133	160	300	235	139,72	171.4	6	33	120	11	44	-12	21	39	60
3H-15	A11	381	133	149	300	235	196,87	260	6	22	120	11	33	-12	10	39	60
3H-18	A11	450	133	149	300	235	196,87	260	6	22	120	11	33	-12	10	39	60

Özellik Model/Adaptör		K (max)	L	L1		M	N	P	Q (max)	Q (min)	R (max)	R (min)	S	T	U
3H-06B	A5	M60x2	6~M10	16	16	37	73	20	22,75	9,25	35,5	32,8	31	12	3~M6
3H-08B	A6	M75x2	6~M12	20	18	38	95	25	23,75	11,25	45,7	42	35	14	3~M6
3H-10B	A8	M95x2	6~M16	22	24	43	110	30	32,25	14,25	56	51,6	40	16	3~M8
3H-12B	A11	M115x2	6~M20	30	28	51	130	30	45,75	15,75	68,8	63,5	50	21	3~M10
3H-15B	A15	M155x3	6~M24	35	38	63	165	46	43,75	18,25	91	85,7	62	25,5	3~M12
3H-18B	A15	M175x3	6~M24	35	38	63	165	46	65,25	18,75	102	96,7	62	25,5	3~M12
3H-21B	A15	M190x3	6~M24	35	38	73	180	60	69,5	21,5	113,5	108,2	65	25	3~M12
3H-24B	A15	M215x3	6~M24	35	35	73	180	60	93,5	21,5	126	120	65	25	6~M24
3H-24B	A20	M215x3	6~M24	35	38	73	180	60	93,5	21,5	126	120	65	25	3~M12

HİDROLİK AYNALAR

AUTOGRIP® Great Rigidity, Infallible Precision

4 AYAKLI BÜYÜK AÇIK MERKEZLİ HİDROLİK AYNA



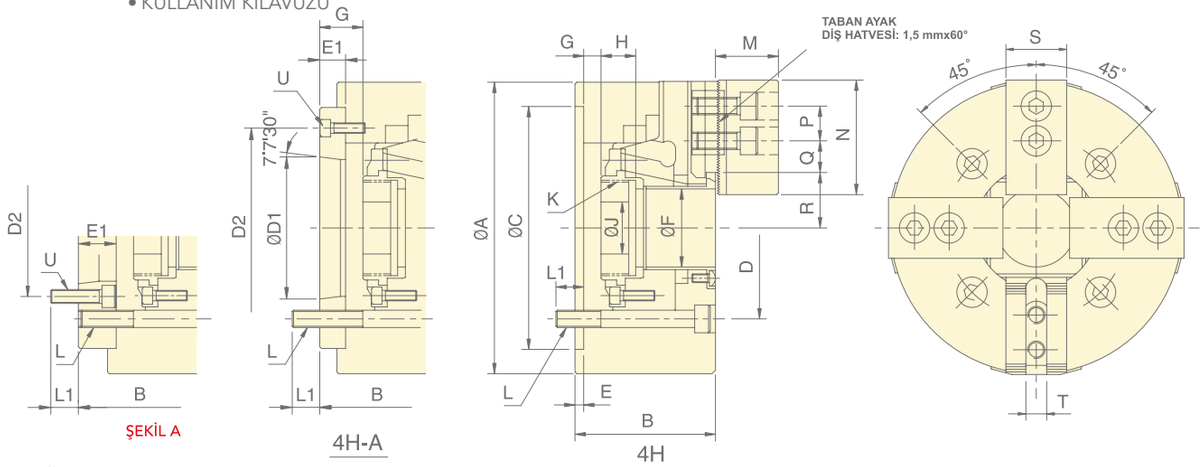
4H-08A5
4H-10A6
4H-15A8
İÇİN ŞEKİL A ' YA BAKINIZ

ÖZELLİKLER

- AÇIK MERKEZLİ 4 AYAKLI TİPTEDİR.
- TÜM HAREKETLİ PARÇALAR SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR.
- YÜKSEK HASSASİYETLİ VE YÜKSEK MUKAVEMETLİ TASARIMA SAHİPTİR.
- ÇEKTİRME DİŞ ÖLÇÜLERİ (K) TABLODA BELİRTİLMİŞTİR. FARKLI DİŞ ÖLÇÜSÜ İSTENDİĞİNDE TEMİN EDİLEBİLİR.
- STANDART BAĞLAMA ISO-A ADAPTÖR İLE BİRLİKTE TESLİM EDİLİR. STANDART DIŞI ADAPTÖR İSTENDİĞİNDE AYNA ÜZERİNDEKİ ADAPTÖR DEĞİŞTİRİLEBİLİR.
- AYNA ÜZERİNDE YUMUŞAK AYAK MONTAJLI OLARAK SEVK EDİLİR. SERT AYAKLAR AYRICA SİPARİŞ EDİLMESİ GEREKİP FİYATA DAHİL DEĞİLDİR.

STANDART AKSESUARLAR

- ISO-A ADAPTÖR
- YUMUŞAK AYAK (AYNAYA MONTAJLI SEVKEDİLİR)
- BAĞLANTI CİVATA VE SOMUNLARI
- ÇEKTİRME SOMUNU
- KULLANIM KILAVUZU



TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
2H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

BİRİM mm

Özellik Model/Adaptör		Sip. No.	Piston Stroku (mm)	Ayak Stroku (mm)	Sıkma Çapı (mm) Max.	Sıkma Çapı (mm) Min.	Max. Çekme Kuvveti KN (kgf)	Max. Sıkma Kuvveti KN (kgf)	Max. Devir D/D	Atalet Momenti GD Kg.m	Ağırlık Kg		Uygun Silindir Modeli	Max. Hidrolik Basıncı Mpa (kgf/Cm)
4H-06	A5	14171	12	5.5	168	15	21.6(2000)	56.8(5800)	6000	0.07	12.5	14.3	TH-646	2.8(28)
4H-08	A5	14172	16	7,4	210	13	34.3(3500)	85.8(8750)	5000	0,19	23,5	25.4	TH-852	2.8(28)
4H-08	A6	14173	16	7,4	210	13	34.3(3500)	85.8(8750)	5000	0,19	23,5	24.3	TH-852	2.8(28)
4H-10	A6	14174	19	8,8	254	31	42.6(4380)	110.7(11300)	4200	0,34	36,3	41	TH-1075	2.7(27)
4H-10	A8	14175	19	8,8	254	31	42.6(4380)	110.7(11300)	4200	0,34	36,3	39.3	TH-1075	2.7(27)
4H-12	A8	14176	23	10,6	304	34	54.9(5600)	143.6(14650)	3300	0.79	62	65.7	TH-1291	2.7(27)
4H-15	A8	14177	23	10,6	381	50	71(7250)	179.8(18350)	2500	2.50	123,7	137.7	TH-1512	2.4(24)
4H-15	A11	14178	23	10,6	381	50	71(7250)	179.8(18350)	2500	2.42	123,7	130.7	TH-1512	2.4(24)
4H-18	A11	14179	23	10,6	450	50	71(7250)	179.8(18350)	2000	4.85	170	184	TH-1512	2.4(24)

Özellik Model/Adaptör		A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
4H-06	A5	168	81	91	140	104.8	82,56	116	5	15	45	11	26	-1	14	19	20
4H-08	A5	210	91	109	170	133,4	82,56	104.8	5	23	52	14,5	37.5	-1,5	21.5	20,5	30
4H-08	A6	210	91	103	170	133,4	106,38	150	5	17	75	14,5	31.5	-1,5	15.5	20,5	30
4H-10	A6	254	100	120	220	171,4	106,38	133.4	5	25	75	8,5	33.5	-10,5	14.5	25	45
4H-10	A8	254	100	113	220	171,4	139,72	190	5	18	91	8,5	26.5	-10,5	7.5	25	45
4H-12	A8	304	110	122	220	171,4	139,72	190	6	18	91	8	26	-15	3	28	50
4H-15	A8	381	133	160	300	235	139,72	171.4	6	33	120	11	44	-12	21	39	60
4H-15	A11	381	133	149	300	235	196,87	260	6	22	120	11	33	-12	10	39	60
4H-18	A11	450	133	149	300	235	196,87	260	6	22	120	11	33	-12	10	39	60

Özellik Model/Adaptör		K (max)	L	L1		M	N	P	Q (max)	Q (min)	R (max)	R (min)	S	T	U
4H-06	A5	M55X2	4~M10	16	16	37	73	20	22.8	9.3	32	29.3	31	12	3~M6
4H-08	A5	M60X2	4~M12	20	17	38	95	25	29,8	14,8	38,7	35	35	14	6~M10
4H-08	A6	M60X2	4~M12	20	18	38	95	25	29,8	14,8	38,7	35	35	14	3~M6
4H-10	A6	M85X2	4~M16	22	18	43	110	30	33,8	14,3	51	46,6	40	16	6~M12
4H-10	A8	M85X2	4~M16	22	24	43	110	30	33,8	14,3	51	46,6	40	16	3~M8
4H-12	A8	M100X2	4~M16	23	25	51	130	30	45.8	15.8	61.3	56	50	21	3~M8
4H-15	A8	M130X2	4~M20	30	24	63	165	43	47,3	18,2	80	74,7	62	25,5	6~M16
4H-15	A11	M130X2	4~M20	30	28	63	165	43	47,3	18,2	80	74,7	62	25,5	6~M16
4H-18	A11	M130X2	4~M20	30	28	63	165	43	79.2	18,2	80	74,7	62	25,5	3~M10

HİDROLİK AYNA SİLİNDİR

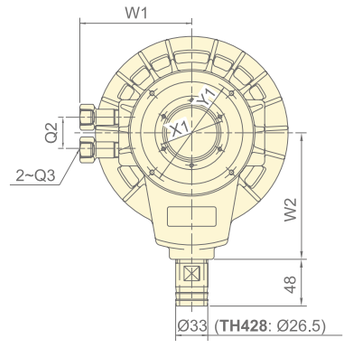
AUTOGRIP® Great Rigidity, Infallible Precision

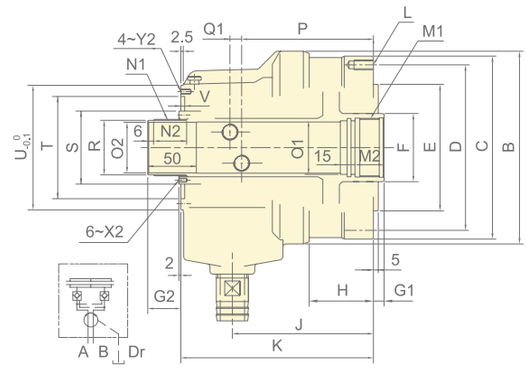
AÇIK MERKEZLİ HİDROLİK SİLİNDİR



ÖZELLİKLER

- EMNİYET MEKANİZMASI MEVCUTTUR
- YÜKSEK HIZLI, HAFİF TASARIM GENİŞ AÇIK MERKEZ
- İÇERDE OLUŞAN ANİ BASINÇ DÜŞMELERİNİ ENGELLEYEN ÇEK VALF
- SAYESİNDE İŞ PARÇASINI FIRLATMAZ VE CİDDİ KAZALARIN ÖNÜNE GEÇER





Model	Sip. No.	Efektif Piston Alanı cm²		Piston Kuvveti mm	Max.Devir r.p.m	Max. Basınç Mpa (kgf/cm²)	Atalet Momenti GD² kg.m²	Ağırlık kg
		Uzatma	Geri Çekme					
TH-428	14180	53.2	50.5	10	8000	4.0(40)	0.02	5.8
TH-536	14181	69.8	67.5	15	8000	4.0(40)	0.05	8.5
TH-646	14182	97.3	87.9	15	7000	4.0(40)	0.09	13.5
TH-846	14183	146,8	142	20	6200	4.0(40)	0,2	17.2
TH-852	14184	146,8	136.6	20	6200	4.0(40)	0,2	16.4
TH-1068	14185	196,2	196.2	25	4700	4.0(40)	0,4	27
TH-1075	14186	196,2	182	25	4700	4.0(40)	0,4	25.8
TH-1291	14187	250	233.5	30	3800	4.0(40)	0.61	33
TH-1512	14188	345.4	334,6	30	2800	4.0(40)	1.50	50

Model	A	B	C	D	E h7	F	G1		G2		H	J	K	L	M1	M2	N1	N2
							max.	min.	max.	min.								
TH-428	90	130	120	100	80	40	10	0	35	25	45	127.5	155	6~M8x15	M33x1.5	25	M34x1.5	26
TH-536	105	150	135	115	100	48	15	0	40	25	47.5	125.5	170.5	6~M10x20	M42x1.5	25	M44x1.5	28
TH-646	125	169	156	130	100	65	15	0	40	25	60	135.5	193.5	12~M10x20	M55x2	30	M52x1.5	32
TH-846	150	198	188	170	130	65	20	0	45	25	66	145	198	12~M10x20	M55x2	30	M58x1.5	34
TH-852	150	198	188	170	130	70	20	0	45	25	66	145	198	12~M10x20	M60x2	30	M58x1.5	34
TH-1068	175	225	215	190	160	85	25	0	50	25	62	166,5	231	12~M10x22	M75x2	35	M48x2	40
TH-1075	175	225	215	190	160	95	25	0	50	25	62	166,5	231	12~M10x22	M85x2	35	M48x2	40
TH-1291	205	255	240	215	180	110	30	0	55	25	64.5	180.5	250	12~M12x24	M100x2	35	M94x2	46
TH-1512	250	315	305	275	230	140	30	0	55	25	68	193	273	12~M16x32	M130x2	45	M134x2	46

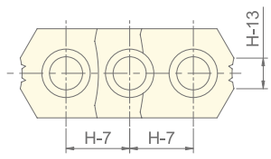
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TH-428	30	28	101.5	11	24	RC1/4	32	45	65	86	4	72	105	-	-	76	M4x7
TH-536	38	36	119	10	24	RC1/4	42	55	73	98	4	80	110	-	-	83	M5x10
TH-646	50	46	127.5	12	30	RC3/8	50	70	90	116	4	98	125	62	M4x8	98	M5x10
TH-846	50	46	135,5	12	32	RC3/8	56	75	100	128	4	100	130	67	M4x8	110	M6x10
TH-852	55	52	135,5	12	32	RC3/8	56	75	100	128	4	100	130	67	M4x8	110	M6x10
TH-1068	70	68	153,5	17	36	RC3/8	81	100	125	158	5	115	160	92	M4x8	145	M6x10
TH-1075	80	75	153,5	17	36	RC3/8	81	100	125	158	5	115	160	92	M4x8	145	M6x10
TH-1291	95	91	165	21	34	RC1/2	96	120	142	180	5	136	185	110	M4x8	165	M6x10
TH-1512	125	120	176.5	23	40	RC1/2	130	160	195	227	6	160	210	171	M6x10	215	M6x10

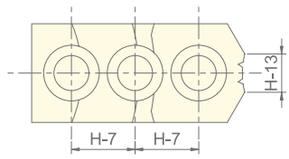
HİDROLİK AYNA YEDEKLERİ

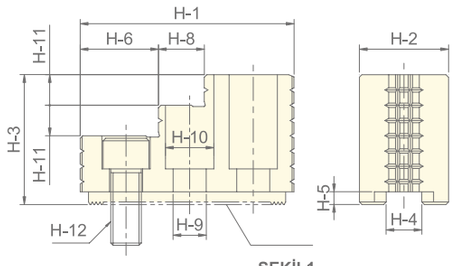
STANDART SERT AYAK



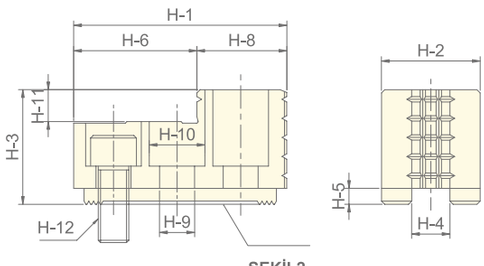
TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.







ŞEKİL1

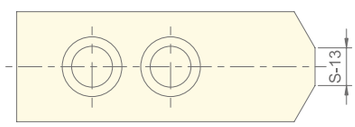


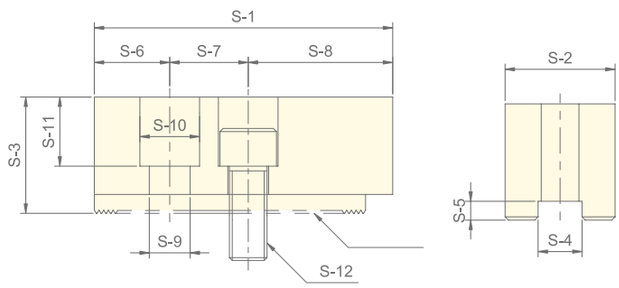
ŞEKİL2

Ölçü Model	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13	Diş Hatvesi	Uygun Ayna	Referans Şekil	2 Ayaklı Set Fiyat Kodu	3 Ayaklı Set Fiyat Kodu	4 Ayaklı Set Fiyat Kodu
HJ05	56	23	27.5	10	4	30.5	14	22.5	8.5	13.5	10	M8	6	1.5x60°	3H-04,3H-05	ŞEKİL-2	14189	14198	14207
HJ06	67	31	35	12	5	39	20	28	11	17	12	M10	10	1.5x60°	3H-06,3P-06	ŞEKİL-2	14190	14199	14208
HJ08	86	35	51	14	5	31	25	18	13	19	12	M12	12	1.5x60°	3H-08,3P-08	ŞEKİL-1	14191	14200	14209
HJ10	99.5	40	54	16	5	43	30	17	13	19	13	M12	15	1.5x60°	3H-10,3P-10	ŞEKİL-1	14192	14201	14210
HJ12H	103	50	52	21	5	62,5	30	40,5	17	25	17	M16	30	1.5x60°	3H-12,3P-12	ŞEKİL-2	14193	14202	14211
HJ12P	103	50	52	18	5	62,5	30	40,5	15	22	17	M14	30	1.5x60°	3P-12	ŞEKİL-2	14194	14203	14212
HJ15H	149	62	86	22	8	63	43	34	21	32	20	M20	43	1.5x60°	3H-15,3H-18	ŞEKİL-1	14195	14204	14213
HJ15P	149	62	86	25.5	6	63	43	34	21	32	20	M20	43	1.5x60°	3H-15,3H-15 3P-15,3P-18-15	ŞEKİL-1	14196	14205	14214
HJ21	159.5	80	90	25	9	104.5	50	55	21	32	40	M20	55	3.0x60°	3H-21,3H-24 3P-21,3P-24	ŞEKİL-2	14197	14206	14215

STANDART YUMUŞAK AYAK





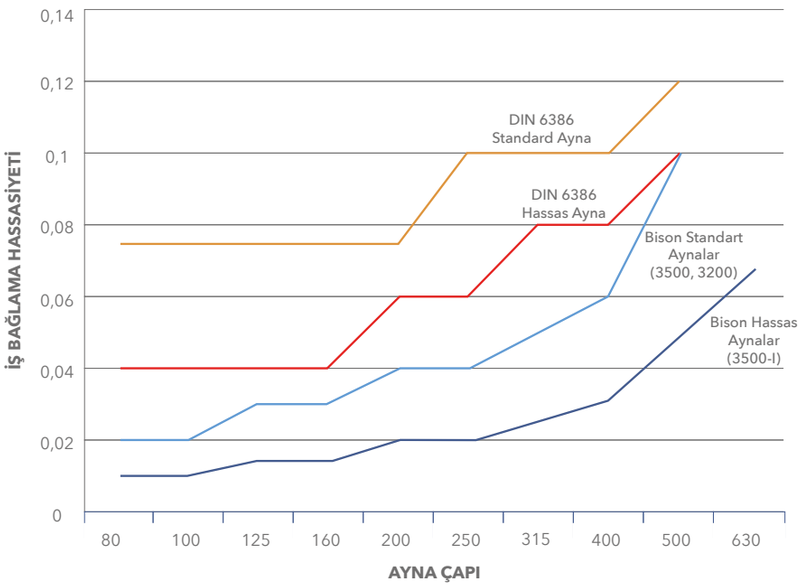


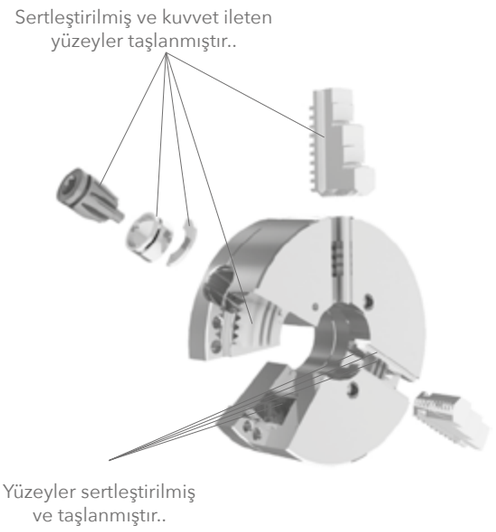
TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.

Ölçü Model	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	S-11	S-12	S-13	Diş Hatvesi	Uygun Ayna	2 Ayaklı Set Fiyat Kodu	3 Ayaklı Set Fiyat Kodu	4 Ayaklı Set Fiyat Kodu
SJ04	52	23	23	10	4	10	14	28	9	14	13	M8	5	1.5x60°	3H-04,3P-04	14216	14226	14236
SJ05	62	25	30	10	4	10	14	38	9	14	16	M8	5	1.5x60°	3H-05,3L-05 3P-05,3M-05	14217	14227	14237
SJ06	73	31	36	12	5	15	20	38	11	17	20	M10	14	1.5x60°	3H-06,3L-06 3P-06,3M-06	14218	14228	14238
SJ08	95	35	37	14	5	24	25	46	13	19	22	M12	16	1.5x60°	3H-08,3L-08 3P-08,3M-08	14219	14229	14239
SJ10	110	40	42	16	5	30	30	50	13	19	27	M12	18	1.5x60°	3H-10,3L-10 3P-10,3M-10	14220	14230	14240
SJ12H	130	50	50	21	5	39	30	60	18	26	30	M16	18	1.5x60°	3H-12,3L-12 3P-12,3M-12	14221	14231	14241
SJ12P	130	50	50	18	5	39	30	60	16	23	30	M14	18	1.5x60°	3P-12	14222	14232	14242
SJ15H	165	62	62	22	8	37	43	85	21	32	38	M20	-	1.5x60°	3H-15,3H-18	14223	14233	14243
SJ15P	165	62	62	25.5	6	37	43	85	21	32	38	M20	-	1.5x60°	3H-15,3H-18,3L-15 3P-15,3P-18	14224	14234	14244
SJ21	180	65	70	25	9	40	60	80	21	32	45	M20	-	3.0x60°	3H-21,3H-24 3P-21,3P-24	14225	14235	14245

AYNALAR HAKKINDA TEKNİK BİLGİLER

BISON TORNA AYNALARININ İŞ BAĞLAMA HASSASİYETİNİN DIN STANDARTLARI İLE KARŞILAŞTIRMA TABLOSU





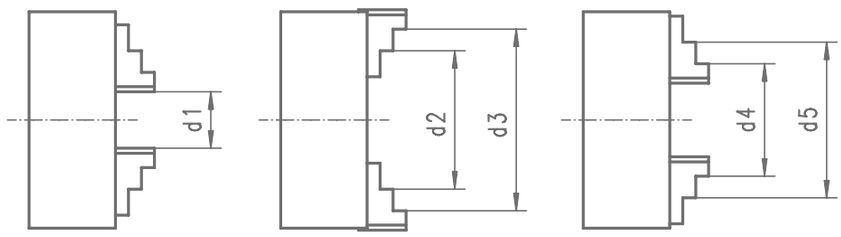
GÖVDE
- Tip 3200 ve 3600 serisi: Yüksek kaliteli dökümden imal edilmiştir.
- Tüm aynaların gövdelerinin üzerinde yağlamak için gresörlü bulunmaktadır.

AYAKLAR
- Alaşımlı çelikten imal edilmiştir.
- Dişler ve diğer çalışan yüzeyler karbonlanmış, sertleştirilmiş ve taşlanmıştır.

PİNYONLAR
- Alaşımlı çelikten imal edilmiş olup karbonlanmış, sertleştirilmiş ve
- taşlanmıştır.

SPİRAL
- Alaşımlı çelikten imal edilmiş olup karbonlanmış ve sertleştirilmiştir
- Dişlerin her iki yanıda taşlanmıştır.

3 AYAKLI VE 4 AYAKLI UNIVERSAL AYNALAR İÇİN TEKNİK BİLGİLER



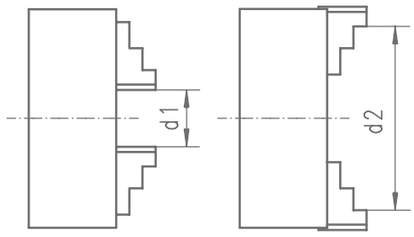
BİRİM mm

3 AYAKLI VE 4 AYAKLI UNIVERSAL AYNALARIN İŞ BAĞLAMA KAPASİTELERİ VE MAKSİMUM DEVİRLERİ						
AYNA ÇAPI		80	100	125	160	200
SERT AYAK	d1	2-27	3-33	3-50	3-64	4-90
	d2	25-50	32-62	39-83	50-107	60-145
	d3	48-71	62-93	80-125	98-160	130-200
	d4	22-46	25-56	34-74	42-100	52-135
	d5	45-69	56-87	72-115	94-154	120-202
DÖNDÜRÜLEBİLİR AYAK (2 PARÇA)	d1			3-50	3-64	4-90
	d2			52-96	62-121	72-156
	d3			95-125	115-160	133-200
	d4			34-76	42-97	50-130
	d5			75-118	88-146	105-190
MAKSİMUM ÇEVİRME ÇAPI		90	117	151	204	246
3200 Max. d/d		5000	4500	4000	3600	3000

AYNA ÇAPI		250	315	400	500	630	800	915	1000
SERT AYAK	d1	5-118	10-131	10-180	20-235	30-335	150-482	-	-
	d2	77-188	90-215	103-272	140-357	180-487	302-634	-	-
	d3	160-250	190-315	230-400	276-500	345-630	468-800	-	-
	d4	62-174	78-200	85-252	120-335	160-465	282-614	-	-
	d5	145-256	172-299	210-380	245-476	325-630	448-780	-	-
DÖNDÜRÜLEBİLİR AYAK (2 PARÇA)	d1	5-118	10-131	10-180	20-235	30-335	150-482	200 - 550	250 - 600
	d2	86-197	103-226	127-294	110-400	120-570	240-724	300 - 950	350 - 1080
	d3	160-250	190-315	230-400	190-500	200-630	316-800	380 - 1025	430 - 1150
	d4	58-165	65-182	72-228	120-410	140-590	252-736	350 - 1000	425 - 1070
	d5	125-235	145-265	165-329	200-485	210-665	328-812	450 - 1025	500 - 1150
MAKSİMUM ÇEVİRME ÇAPI		306	384	472	600	770	940	-	-
3200 Max. d/d		2500	2000	1600	1000	800	600	400	400

TEKNİK BİLGİLER

KEPENKLİ AYNALAR İÇİN İŞ BAĞLAMA KAPASİTELERİ



BİRİM mm

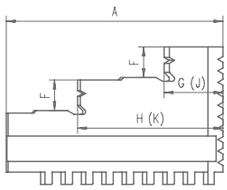
KEPENKLİ AYNALAR İÇİN İŞ BAĞLAMA KAPASİTELERİ								
AYNA ÇAPI	85	100	125	160	200	250	315	350
d1 Min.	3	3	8	8	10	10	15	15
d2 Max.	85	100	125	160	200	250	315	350
Max. Çevirme Çapı	101	116	150	185	235	296	369	404

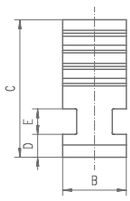
AYNA ÇAPI	85	100	125	160	200	250	315	350
Dökme Demir Gövde Veya Çelik Gövde	4000	3800	3500	3200	2500	2000	1500	1500
Dökme Demir Gövde	-	-	-	-	1800	1500	1200	1200

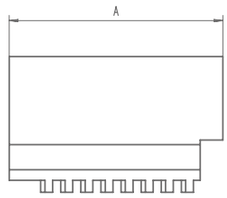
KEPENKLİ AYNALAR İÇİN İŞ BAĞLAMA KAPASİTELERİ							
AYNA ÇAPI	400	500	630	800	915	1000	1250
d1 Min.	20	45	50	50	120	170	170
d2 Max.	400	500	630	800	915	1000	1250
Max. Çevirme Çapı	465	570	720	888	1003	1088	1338

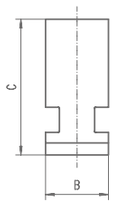
AYNA ÇAPI	400	500	630	800	915	1000	1250
Dökme Demir Gövde Veya Çelik Gövde	1100	700	550	450	200	200	150
Dökme Demir Gövde	800	500	400	300	150	150	100

UNIVERSAL TORNA AYNASI İÇİN TERS-DÜZ AYAK ÖLÇÜLERİ









BİRİM mm

Ayna Çapı		8	0	100	125	160	200
A		32	32	42	51	70	85
B		11	11	15	20	20	25
C		28	28	32	40	53	54
D		6	6	6	8	8	9
E		6	6	6	8	8	10
F		6	6	7	8	10	12
G		9,5	9,5	11	13	19	23
H		21	21	27	33,5	45	57
J		9,5	9,5	12	13	22	23
K		21	21	27,5	33,5	47,5	57
kg	Sert Ayak	0,03	0,03	0,09	0,18	0,36	0,50
	Yumuşak Ayak	0,07	0,07	0,13	0,26	0,50	0,80

Ayna Çapı		250	315	400	500	630	800
A		105	125	145	180	225	225
B		28	32	36	40	50	50
C		63	73	92	100	110	110
D		11	12,7	15	16	16	16
E		12	12	14	14	14	14
F		14	18	22	26	28	28
G		28	34,5	36	50	66	66
H		69,5	83	99	119,5	149	149
J		28	34,5	36	50	66	66
K		69,5	83	99	119,5	149	149
kg	Sert Ayak	0,80	1,32	2,35	3,36	5,80	5,80
	Yumuşak Ayak	1,36	1,90	2,46	5,00	8,36	8,36

TORNA AYNALARI 3 AYAKLI

DIN 6350/A



1ÖZELLİKLER
- 3 AYAKLI
- TORNA AYNALARI
- DÖKÜM GÖVDELİ
- 3ZG

1STANDART AKSESUARLAR
1. DÜZ AYAK - 1 TAKIM / 3 ADET
2. TERS AYAK - 1 TAKIM / 3 ADET
3. ANAHTAR - 1 ADET
4. FLANŞ BAĞLAMA CİVATASI 3 ADET

Sip. Nr.	Ayna Çapı(mm)	Sip. No.
TM.080.3	80	00052
TM.100.3	100	00053
TM.125.3	125	00054
TM.160.3	160	00055
TM.200.3	200	00056
TM.250.3	250	00057
TM.315.3	315	00058
TM.400.3	400	00059

TORNA AYNALARI 4 AYAKLI

DIN 6350/A



1ÖZELLİKLER
- 4 AYAKLI
- TORNA AYNALARI
- DÖKÜM GÖVDELİ
- 4ZG

1STANDART AKSESUARLAR
1. DÜZ AYAK - 1 TAKIM / 4 ADET
2. TERS AYAK - 1 TAKIM / 4 ADET
3. ANAHTAR - 1 ADET
4. FLANŞ BAĞLAMA CİVATASI 3 ADET

Sip. Nr.	Ayna Çapı (mm)	Sip. No.
TM.125.4	125	00060
TM.160.4	160	00061
TM.200.4	200	00062
TM.250.4	250	00063
TM.315.4	315	00064
TM.400.4	400	00065

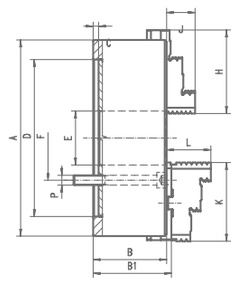
* 3 VE 4 AYAKLI, MERKEZİ SIKMALI TORNA AYNALARIMIZIN YEDEK PARÇALARINI FİRMAMIZDAN TEMİN EDEBİLİRSİNİZ

TEKNİK BİLGİLER

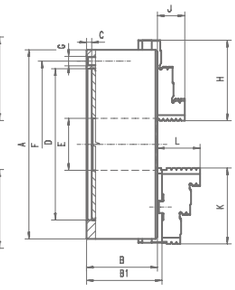
3 AYAKLI DÖKÜM GÖVDELİ (DIN 6350)

TİP 3204





Ø80-630 mm AYNALAR



Ø800-915-1000 mm AYNALAR
*ÖNDEN CİVATA BAĞLANTILI

ÖZELLİKLER

- 3 AYAKLI MERKEZİ SIKMALI UNİVERSAL TORNA AYNASI
- YÜKSEK KALİTELİ DÖKÜM GÖVDE
- UNİVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR.

BİRİM mm

Ür. Kd.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	* ÖNDEN CİVATA BAĞLANTILI Bis.Ayn.	Bis.Ayn.	Bis.Ayn.
Ø	80	100	125	160	200	250	315	400	500	630	800	915	1000
B	44	50	56	64,5	75	85	94	105	120	135	159	171	171
B1	-	-	60,8	69,3	79,8	88,8	99,1	113,8	130,8	146,3	170,3	180	180
C	3	3	4	4	4	5	5	5	5	7	20	20	20
D H7	56	70	95	125	160	200	260	330	420	545	450	520	520
E	16	20	32	42	55	76	103	136	190	252	320	408	408
F	67	83	108	140	176	224	286	362	458	586	368,3	463,6	463,6
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16	-	-	-
H	32	42	51	70	85	105	125	145	180	225	225	-	-
J	13	-	56	67	29	95	43	55	60	70	70	-	-
K	-	17	20	32	80	34	110	127	127	127	127	175	175
L	-	-	40	43	45	53	57	67	70	87	87	100	100
KG	1,5	2,8	5	10	17,5	29	50	85	145	250	402	560	720
Sip. No.	14246	14247	14248	14249	14250	14251	14252	14253	14254	14255	14256	14257	14258

STANDART AKSESUARLARR

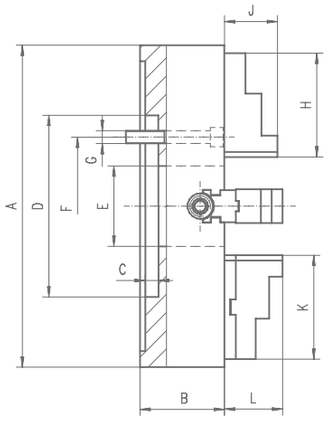
1 Takım Düz Ayak	1 Takım Ters Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

İSTEĞE BAĞLI AKSESUARLAR

1 Takım Yumuşak Ayak	Ayna Bağlama Flanşı
	

NOT: DONDURULEBİLİR AYAK TAKILARAK KULLANILABİLİR.

KEPENKLİ AYNA





ÖZELLİKLER

- 4 AYAKLI HER BİR AYAK BAĞIMSIZ OLARAK AYARLANABİLİR
- KARE, ÇOKGEN, DAİRESEL OLAN VEYA OLMAYAN PARÇALARIN İŞLENMESİNDE KULLANILIR
- UNİVERSAL TORNA TEZGAHLARINDA FENER MİLİNE FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILABİLİR.

STANDART AKSESUARLARR

1 Takım Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
		

İSTEĞE BAĞLI AKSESUARLAR

Ayna Bağlama Flanşı

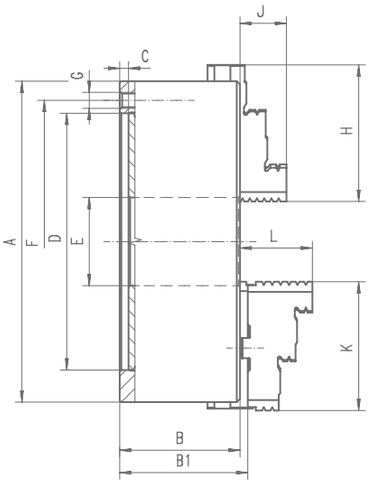

BİRİM mm

Ür. Kd.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.	Bis.Kep.
Ø	200	250	315	350	400	500	630	800	915	1000	1250
A	200	250	315	350	400	500	630	800	915	1000	1250
B	80	85	95	95	105	120	140	160	170	170	190
C	5	7	7	7	10	12	12	12	18	18	18
D H7	110	150	175	175	200	270	270	380	370	370	550
E	50	65	80	80	100	125	160	200	190	190	190
F	82,6	104,8	133,4	133,4	171,4	235	235	330	330	330	500
G	4xM10	4xM12	4xM16	4xM16	4xM16	4xM20	4xM20	4xM24	8xM24	8xM24	8xM24
H	81	96,5	111	111	129	152,5	177	202	-	-	-
J	40,3	40,3	49,8	49,8	49,8	59,8	59,8	70,8	-	-	-
K	82	96,5	112,5	-	129	136	136	136	160	160	160
L	46,4	25	39	47,5	61	90,3	163	93,8	102,8	410	102,8
KG	14	60,4	60,9	-	72,3	105	97,8	319	350	410	950
Sip. No.	14267	14268	14269	14270	14271	14272	14273	14274	14275	14276	14277

TEKNİK BİLGİLER - YEDEK AYAKLAR

4 AYAKLI DÖKÜM GÖVDELİ (DIN 6350)

TİP 3604





ÖZELLİKLER

- 4 AYAKLI MERKEZİ SIKMALI UNİVERSAL TORNA AYNASI
- YÜKSEK KALİTELİ DÖKÜM GÖVDE
- UNİVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR.

STANDART AKSESUARLARR	1 Takım Düz Ayak	1 Takım Ters Ayak	1 Adet Anahtar	Flanş Bağlama Civatası	İSTEĞE BAĞLI AKSESUARLAR	1 Takım Yumuşak Ayak	Ayna Bağlama Flanşı
							

NOT: DONDURULEBİLİR AYAK TAKILARAK KULLANILABİLİR.

BİRİM mm

Ür. Kd.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.	Bis.Ayn.
Ø	125	160	200	250	315	400	500	630
B1	60,8	69,3	79,8	88,8	99,1	113,8	130,8	146,3
C	4	4	4	5	5	5	5	7
D H7	95	125	160	200	260	330	420	545
E	32	42	55	76	103	136	190	252
F	108	140	176	224	286	362	458	586
G	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	51	70	85	105	125	145	180	225
J	56	67	80	95	110	127	60	70
K	20	32	29	34	43	55	127	127
L	40	43	45	53	57	67	70	87
KG	5	10	17,5	29	50	85	145	250
Sip. No.	14259	14260	14261	14262	14263	14264	14265	14266

BISON TERS AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.T	80	14278
BIS.AYAK.T	100	14279
BIS.AYAK.T	125	14280
BIS.AYAK.T	160	14281
BIS.AYAK.T	200	14282
BIS.AYAK.T	250	14283
BIS.AYAK.T	315	14284
BIS.AYAK.T	400	14285
BIS.AYAK.T	500	14286
BIS.AYAK.T	630	14287
BIS.AYAK.T	800	14288

BISON DÜZ AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.D	80	14289
BIS.AYAK.D	100	14290
BIS.AYAK.D	125	14291
BIS.AYAK.D	160	14292
BIS.AYAK.D	200	14293
BIS.AYAK.D	250	14294
BIS.AYAK.D	315	14295
BIS.AYAK.D	400	14296
BIS.AYAK.D	500	14297
BIS.AYAK.D	630	14298
BIS.AYAK.D	800	14299

BISON YUMUŞAK AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.Y	80	14305
BIS.AYAK.Y	100	14306
BIS.AYAK.Y	125	14307
BIS.AYAK.Y	160	14308
BIS.AYAK.Y	200	14309
BIS.AYAK.Y	250	14310
BIS.AYAK.Y	315	14311
BIS.AYAK.Y	400	14312
BIS.AYAK.Y	500	14313
BIS.AYAK.Y	630	14314
BIS.AYAK.Y	800	14315

BISON DÖNDÜRÜLEBİLİR AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.DN	160	14300
BIS.AYAK.DN	200	14301
BIS.AYAK.DN	250	14302
BIS.AYAK.DN	315	14303
BIS.AYAK.DN	400	14304

YEDEK AYAKLAR

BISON TERS AYAK TAKIMI



4 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.D	80	14327
BIS.AYAK.D	100	14328
BIS.AYAK.D	125	14329
BIS.AYAK.D	160	14330
BIS.AYAK.D	200	14331
BIS.AYAK.D	250	14332
BIS.AYAK.D	315	14333
BIS.AYAK.D	400	14334
BIS.AYAK.D	500	14335
BIS.AYAK.D	630	14336
BIS.AYAK.D	800	14337

BISON DÜZ AYAK TAKIMI



4 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.T	80	14316
BIS.AYAK.T	100	14317
BIS.AYAK.T	125	14318
BIS.AYAK.T	160	14319
BIS.AYAK.T	200	14320
BIS.AYAK.T	250	14321
BIS.AYAK.T	315	14322
BIS.AYAK.T	400	14323
BIS.AYAK.T	500	14324
BIS.AYAK.T	630	14325
BIS.AYAK.T	800	14326

BISON TERS AYAK TAKIMI



4 ADET

Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.DN	160	14338
BIS.AYAK.DN	200	14339
BIS.AYAK.DN	250	14340
BIS.AYAK.DN	315	14341
BIS.AYAK.DN	400	14342

BISON DÜZ AYAK TAKIMI



4 ADET

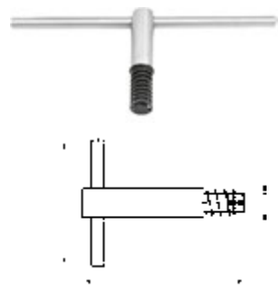
Ür. Kd.	Ebat	Sip. No.
BIS.AYAK.Y	80	14343
BIS.AYAK.Y	100	14344
BIS.AYAK.Y	125	14345
BIS.AYAK.Y	160	14346
BIS.AYAK.Y	200	14347
BIS.AYAK.Y	250	14348
BIS.AYAK.Y	315	14349
BIS.AYAK.Y	400	14350
BIS.AYAK.Y	500	14351
BIS.AYAK.Y	630	14352
BIS.AYAK.Y	800	14353

SPİRAL



Ür. Kd.	Ebat	Sip. No.
BİS.SPR.	80	14354
BİS.SPR.	100	14355
BİS.SPR.	125	14356
BİS.SPR.	160	14357
BİS.SPR.	200	14358
BİS.SPR.	250	14359
BİS.SPR.	315	14360
BİS.SPR.	400	14361
BİS.SPR.	500	14362
BİS.SPR.	630	14363
BİS.SPR.	800	14364

ANAHTAR



Ür. Kd.	Ebat	S	Sip. No.
BİS.ANH.	80	6	14365
BİS.ANH.	100	9	14366
BİS.ANH.	125	8	14367
BİS.ANH.	160	11	14368
BİS.ANH.	200	11	14369
BİS.ANH.	250	14	14370
BİS.ANH.	315	14	14371
BİS.ANH.	400	17	14372
BİS.ANH.	500	17	14373
BİS.ANH.	630	-	14374
BİS.ANH.	800	-	14375

PİNYON / ADET



Ür. Kd.	Ebat	Sip. No.
BİS.PNY.	80	14376
BİS.PNY.	100	14377
BİS.PNY.	125	14378
BİS.PNY.	160	14379
BİS.PNY.	200	14380
BİS.PNY.	250	14381
BİS.PNY.	315	14382
BİS.PNY.	400	14383
BİS.PNY.	500	14384
BİS.PNY.	630	14385
BİS.PNY.	800	14386

PİNYON PİMİ / ADET



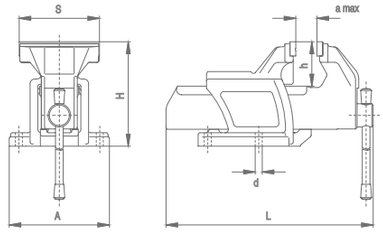
Ür. Kd.	Ebat	Sip. No.
BİS.PİM	80	14387
BİS.PİM	100	14388
BİS.PİM	125	14389
BİS.PİM	160	14390
BİS.PİM	200	14391
BİS.PİM	250	14392
BİS.PİM	315	14393
BİS.PİM	400	14394
BİS.PİM	500	14395
BİS.PİM	630	14396
BİS.PİM	800	14397

MENGENELER - TORNA AYNALARI

SABİT TEZGAH MENGENESİ

TİP 1250





ÖZELLİKLER

- Gövde ve çeneler yüksek kaliteli çelik dökümden diğer parçalar alaşımlı çelikten imal edilmiştir.
- Çeneler indüksiyon ile sertleştirilmiş ve taşlanmıştır.
- Yuvarlak iş parçaları için çenelerde yatay ve dikey kanallar bulunmaktadır.
- Vidalar talaştan korunmak için gövde içine muhafa edilmiştir.
- Freze tezgahlarında ve sütunlu matkaplarda kullanılabilir.

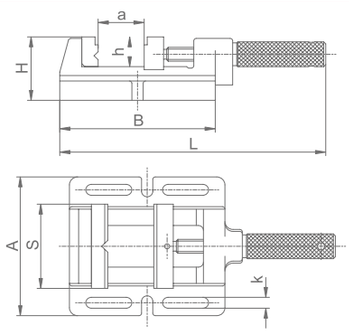
BİRİM mm

Ür. Kd.	Ölçü S	A	H	L	a (max)	d	h	Max. sıkma kuvveti (daN)	Ağırlık [kg]	Sip. No.
BIS.MNG.L063	63L	120	112	229	63	9	45	1200	4,0	14398
BIS.MNG.L080	80L	137	137	280	80	11	58	1800	6,6	14399
BIS.MNG.L100	100L	137	137	282	80	11	58	2200	7,5	14400
BIS.MNG.L125	125L	156	156	323	100	11	65	2600	10,5	14401
BIS.MNG.L150	150L	170	182	380	125	13	75	3400	16,2	14402
BIS.MNG.L175	175L	190	202	434	150	13	90	3800	23,0	14403

MATKAP MENGENESİ

TİP 6543





ÖZELLİKLER

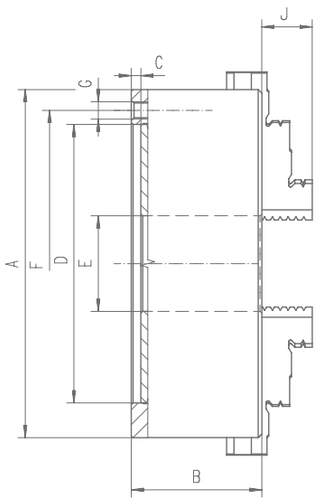
- Matkap tezgahları ve frezeleme operasyonları için özeldir.
- Herbir çenesinde yatay ve dikey V kanallar bulunmaktadır
- V Kanallar sayesinde farklı şekillerde iş parçaları bağlanabilir
- Her iki çenenin birbirine temas eden yüzeyleri sayesinde düz parçalar bağlanabilir.

BİRİM mm

Ür. Kd.	Ölçü S	A	B	H	L	a (max)	h	k	Max. sıkma kuvveti (daN)	Ağırlık [kg]	Sip. No.
BIS.MNG.M085	85M	140	152	64	265	70	30	11	400	3,5	14404
BIS.MNG.M100	100M	152	170	64	285	85	30	13,5	500	4,0	14405
BIS.MNG.M120	120M	176	212	64	360	120	30	13,5	650	6,0	14406
BIS.MNG.M150	150M	208	262	66	442	150	38	13,5	800	8,4	14407

3 AYAKLI UNIVERSAL TORNA AYNASI

TİP K11





ÖZELLİKLER

- 3 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- DÖKÜM GÖVDE
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR.

STANDART AKSESUARLARR	1 Takım Düz Ayak	1 Takım Ters Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
				

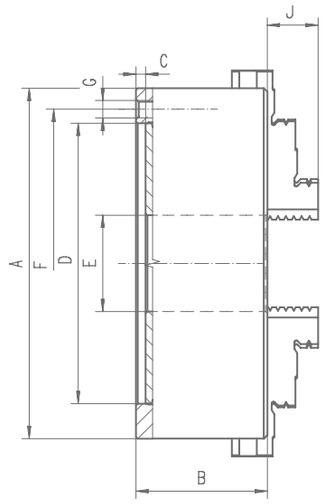
BİRİM mm

Ür. Kd.	CHAR.80/3	CHAR.100/3	CHAR.125/3	CHAR.160/3	CHAR.200/3	CHAR.250/3	CHAR.315/3	CHAR.400/3	CHAR.500/3	CHAR.630/3
ØA	80	100	125	160	200	250	315	400	500	630
B	50	55	58	65	75	80	90	100	115	133,5
C	3,5	3,5	4	5	5	5	6	6	6	7
D H7	55	72	95	130	165	206	260	340	440	560
E	16	22	30	40	65	80	100	130	210	270
F	66	84	108	142	180	226	285	368	465	595
G	3XM6	3XM8	3XM8	6XM8	3XM10	3XM12	3XM16	3XM16	6XM16	6XM16
J	16	19,5	26	30	34	40	57	72	87	84,5
KG	1,9	3,2	5	8,8	15,5	25,7	47	71	119	215
Sip. No.	14534	14535	14536	14537	14538	14539	14540	14541	14542	14543

TORNA AYNALARI

4 AYAKLI UNIVERSAL TORNA AYNASI

TİP K12





ÖZELLİKLER

- 4 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- DÖKÜM GÖVDE
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR.

STANDART AKSESUARLARR

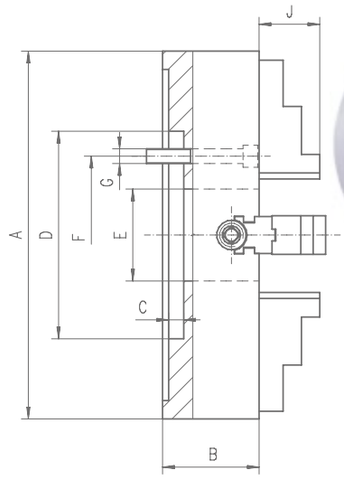
1 Takım Düz Ayak	1 Takım Ters Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

BİRİM mm

Ür. Kd.	CHAR.80/4	CHAR.100/4	CHAR.125/4	CHAR.160/4	CHAR.200/4	CHAR.250/4	CHAR.315/4	CHAR.400/4	CHAR.500/4	CHAR.630/4
ØA	80	100	125	160	200	250	315	400	500	630
B	50	55	58	65	75	80	90	100	115	133,5
C	3,5	3,5	4	5	5	5	6	6	6	7
D H7	55	72	95	130	165	206	260	340	440	560
E	16	22	30	40	65	80	100	130	210	270
F	66	84	108	142	180	226	285	368	465	595
G	4XM6	3XM8	3XM8	6XM8	3XM10	3XM12	3XM16	3XM16	6XM16	6XM16
J	16	19,5	26	30	34	40	57	72	87	84,5
Sip. No.	14544	14545	14546	14547	14548	14549	14550	14551	14552	14553

KEPENKLİ AYNA

TİP K72





ÖZELLİKLER

- 4 AYAKLI HER BİR AYAK BAĞIMSIZ OLARAK AYARLANABİLİR
- KARE, ÇOKGEN, DAİRESEL OLAN VEYA OLMAYAN PARÇALARIN İŞLENMESİNDE KULLANILIR.
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİNE FLANŞ İLE BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILABİLİR

STANDART AKSESUARLARR

1 Takım Düz Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
		

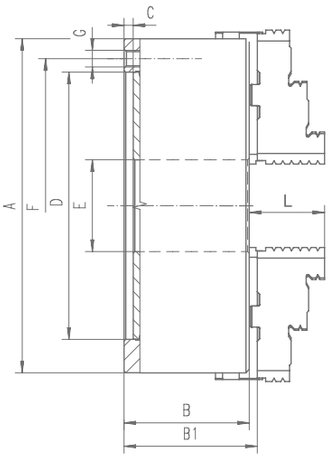
BİRİM mm

Ür. Kd.	CHARK.160	CHARK.200	CHARK.250	CHARK.320	CHARK.400	CHARK.500	CHARK.630	CHARK.800	CHARK.1000
ØA	160	200	250	320	400	500	630	800	1000
B	65	80	90	90	95	106	118	132	150
C	5	6	6	6	8	8	10	12	15
D H7	75	80	110	140	160	200	220	250	320
E	45	56	75	95	125	160	180	210	260
F	95	112	130	165	185	236	258	300	370
G	4XM10	4XM10	4XM12	4XM16	4XM16	4XM20	4XM20	8XM20	8XM120
J	24	27	30	44	48	55	62	70	80
Sip. No.	14554	14555	14556	14557	14558	14559	14560	14561	14562

TORNA AYNALARI

3 AYAKLI DÖNDÜRÜLEBİLİR TORNA AYNASI

TİP K11





ÖZELLİKLER

- 3 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- 2 PARÇALI AYAKLARIN ÜST KISMI DÖNDÜRÜLEBİLİR
- AYAKLAR TERS VE DÜZ OLARAK KULLANILABİLİR, AYRICA AYAR GEREKTİRMEZ
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE ÖNDEN BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR
- DÖKÜM GÖVDELİDİR.

STANDART AKSESUARLARR

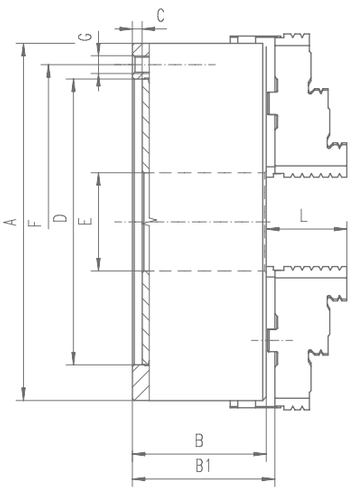
1 Takım Üst Ayak	1 Takım Alt Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

BİRİM mm

Ür. Kd.	CHARD.160	CHARD.200	CHARD.250	CHARD.315	CHARD.400	CHARD.500	CHARD.630
ØA	160	200	250	315	400	500	630
B	65	75	80	90	100	115	133,5
B1	71	80	86	95	108	126	142
C	5	5	5	6	6	6	7
D H	130	165	206	260	340	440	560
E	40	65	80	100	130	210	270
F	142	180	226	285	368	465	595
G	3XM8	3XM10	3XM12	3xM16	3xM16	6xM16	6xM16
L	44	47	50	63	72	87	84,5
Kg	8,3	14,1	23	41	71	119	215
Sip. No.	14563	14564	14565	14566	14567	14568	14569

4 AYAKLI DÖNDÜRÜLEBİLİR TORNA AYNASI

TİP K12





ÖZELLİKLER

- 4 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- 2 PARÇALI AYAKLARIN ÜST KISMI DÖNDÜRÜLEBİLİR
- AYAKLAR TERS VE DÜZ OLARAK KULLANILABİLİR, AYRICA AYAR GEREKTİRMEZ
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE ÖNDEN BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR
- DÖKÜM GÖVDELİDİR.

STANDART AKSESUARLARR

1 Takım Üst Ayak	1 Takım Alt Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

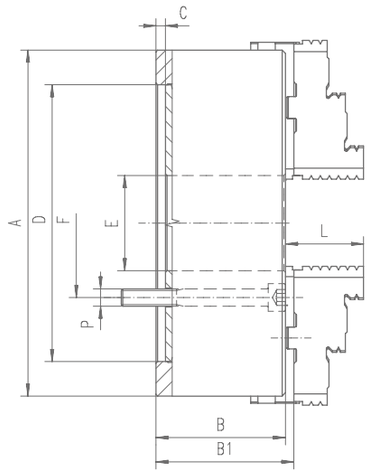
BİRİM mm

Ür. Kd.	CHARD.160	CHARD.200	CHARD.250	CHARD.315	CHARD.400	CHARD.500	CHARD.630
ØA	160	200	250	315	400	500	630
B	65	75	80	90	100	115	133,5
B1	71	80	86	95	108	126	142
C	5	5	5	6	6	6	7
D H7	130	165	206	260	340	440	560
E	40	65	80	100	130	210	270
F	142	180	226	285	368	465	595
G	3XM8	3XM10	3XM12	3xM16	3xM16	6xM16	6xM16
L	44	47	50	63	72	87	84,5
Sip. No.	14570	14571	14572	14573	14574	14575	14576

TORNA AYNALARI

3 AYAKLI DÖNDÜRÜLEBİLİR ÖNDEN BAĞLANTILI TORNA AYNASI

TİP K11





ÖZELLİKLER

- 3 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- 2 PARÇALI AYAKLARIN ÜST KISMI DÖNDÜRÜLEBİLİR
- AYAKLAR TERS VE DÜZ OLARAK KULLANILABİLİR, AYRICA AYAR GEREKTİRMEZ
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE ÖNDEN BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANILIR
- DÖKÜM GÖVDELİ
- DİVİZÖR AYNASI OLARAKDA ADLANDIRILIR

STANDART AKSESUARLARR

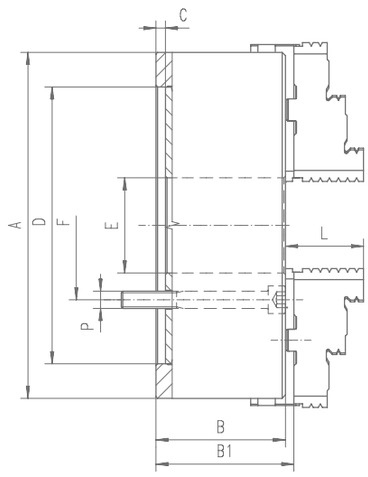
1 Takım Üst Ayak	1 Takım Alt Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

BİRİM mm

Ür. Kd.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.
ØA	160	200	250	315	400	500	630
B	65	75	80	90	100	115	133,5
B1	71	80	86	95	108	126	142
C	5	5	5	6	6	6	7
D H7	130	165	206	260	340	440	560
E	40	65	80	100	130	210	270
F	56	83,5	100	123,5	166,5	245	315
G	3XM8	3XM10	3XM12	3xM16	3xM16	6xM16	6xM16
L	44	47	50	63	72	87	84,5
Kg	8,3	14,1	23	41	71	119	215
Sip. No.	14577	14578	14579	14580	14581	14582	14583

4 AYAKLI DÖNDÜRÜLEBİLİR ÖNDEN BAĞLANTILI TORNA AYNASI

TİP K12





ÖZELLİKLER

- 4 AYAKLI MERKEZİ SIKMALI UNIVERSAL TORNA AYNASI
- K2 PARÇALI AYAKLARIN ÜST KISMI DÖNDÜRÜLEBİLİR
- AYAKLAR TERS VE DÜZ OLARAK KULLANILABİLİR, AYRICA AYAR GEREKTİRMEZ
- UNIVERSAL TORNA TEZGAHLARINDA FENER MİLİ FLANŞ İLE ÖNDEN BAĞLANIR
- FREZELER, DİVİZÖRLER VE TABLALARDA KULLANİLİR
- DÖKÜM GÖVDELİ
- DİVİZÖR AYNASI OLARAKDA ADLANDIRILIR

STANDART AKSESUARLARR

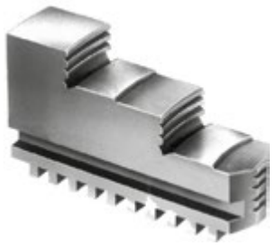
1 Takım Üst Ayak	1 Takım Alt Ayak	1 Adet Anahtar	Flanş Bağlama Civatası
			

BİRİM mm

Ür. Kd.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.	CHARDFRN.
ØA	160	200	250	315	400	500	630
B	65	75	80	90	100	115	133,5
B1	71	80	86	95	108	126	142
C	5	5	5	6	6	6	7
D H7	130	165	206	260	340	440	560
E	40	65	80	100	130	210	270
F	56	83,5	100	123,5	166,5	245	315
G	MXM8	3XM10	3XM12	3xM16	3xM16	6xM16	6xM16
L	44	47	50	63	72	87	84,5
Sip. No.	14584	14585	14586	14587	14588	14589	14590

YEDEK AYAKLAR

HARVEST TERS AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
CHAR.AYAKD	80	14602
CHAR.AYAKD	100	14603
CHAR.AYAKD	125	14604
CHAR.AYAKD	160	14605
CHAR.AYAKD	200	14606
CHAR.AYAKD	250	14607
CHAR.AYAKD	315	14608
CHAR.AYAKD	400	14609
CHAR.AYAKD	500	14610
CHAR.AYAKD	630	14611
CHAR.AYAKD	800	14612

HARVEST DÜZ AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
CHAR.AYAKT	80	14591
CHAR.AYAKT	100	14592
CHAR.AYAKT	125	14593
CHAR.AYAKT	160	14594
CHAR.AYAKT	200	14595
CHAR.AYAKT	250	14596
CHAR.AYAKT	315	14597
CHAR.AYAKT	400	14598
CHAR.AYAKT	500	14599
CHAR.AYAKT	630	14600
CHAR.AYAKT	800	14601

HARVEST TERS AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
CHAR.AYAKT	80	14613
CHAR.AYAKT	100	14614
CHAR.AYAKT	125	14615
CHAR.AYAKT	160	14616
CHAR.AYAKT	200	14617
CHAR.AYAKT	250	14618
CHAR.AYAKT	315	14619
CHAR.AYAKT	400	14620
CHAR.AYAKT	500	14621
CHAR.AYAKT	630	14622
CHAR.AYAKT	800	14623

HARVEST DÜZ AYAK TAKIMI



3 ADET

Ür. Kd.	Ebat	Sip. No.
CHAR.AYAKD	80	14624
CHAR.AYAKD	100	14625
CHAR.AYAKD	125	14626
CHAR.AYAKD	160	14627
CHAR.AYAKD	200	14628
CHAR.AYAKD	250	14629
CHAR.AYAKD	315	14630
CHAR.AYAKD	400	14631
CHAR.AYAKD	500	14632
CHAR.AYAKD	630	14633
CHAR.AYAKD	800	14634

HARVEST DÖNDÜRÜLEBİLİR AYAK TAKIMI



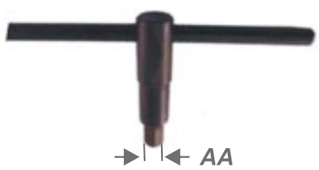
Ür. Kd.	Ebat	3'LÜ Set Fiyat Kodu	4'LÜ Set Fiyat Kodu
CHAR.AYAKDN	160	14635	14642
CHAR.AYAKDN	200	14636	14643
CHAR.AYAKDN	250	14637	14644
CHAR.AYAKDN	315	14638	14645
CHAR.AYAKDN	400	14639	14646
CHAR.AYAKDN	500	14640	14647
CHAR.AYAKDN	630	14641	14648

DÜZ AYAK TAKIMI



Ür. Kd.	Ebat	Sip. No.
CHAR.PNY	80	14649
CHAR.PNY	100	14650
CHAR.PNY	125	14651
CHAR.PNY	160	14652
CHAR.PNY	200	14653
CHAR.PNY	250	14654
CHAR.PNY	315	14655
CHAR.PNY	400	14656
CHAR.PNY	500	14657
CHAR.PNY	630	14658
CHAR.PNY	800	14659

ANAHTAR



Ür. Kd.	Ebat	AA	Sip. No.
CHAR.ANH	80	8	14660
CHAR.ANH	100	8	14661
CHAR.ANH	125	10	14662
CHAR.ANH	160	10	14663
CHAR.ANH	200	12	14664
CHAR.ANH	250	12	14665
CHAR.ANH	315	13	14666
CHAR.ANH	400	-	14667
CHAR.ANH	500	-	14668
CHAR.ANH	630	-	14669
CHAR.ANH	800	-	14670

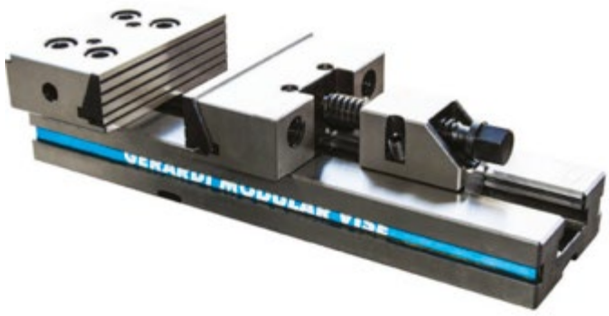
SPİRAL

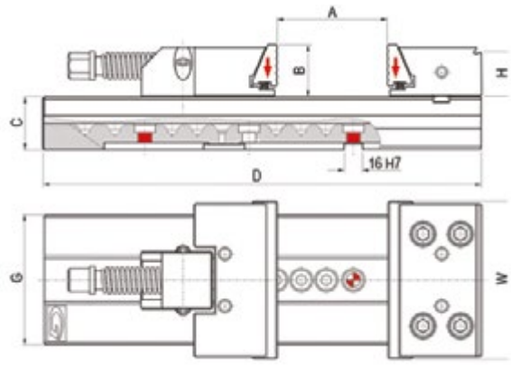


Ür. Kd.	Ebat	Sip. No.
CHAR.SPR	80	14671
CHAR.SPR	100	14672
CHAR.SPR	125	14673
CHAR.SPR	160	14674
CHAR.SPR	200	14675
CHAR.SPR	250	14676
CHAR.SPR	315	14677
CHAR.SPR	400	14678
CHAR.SPR	500	14679
CHAR.SPR	630	14680
CHAR.SPR	800	14681

MENGENELER

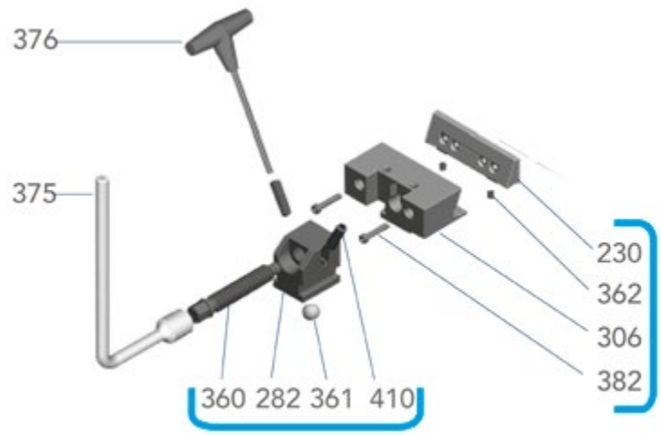
SÜPER HASSAS MENGENE

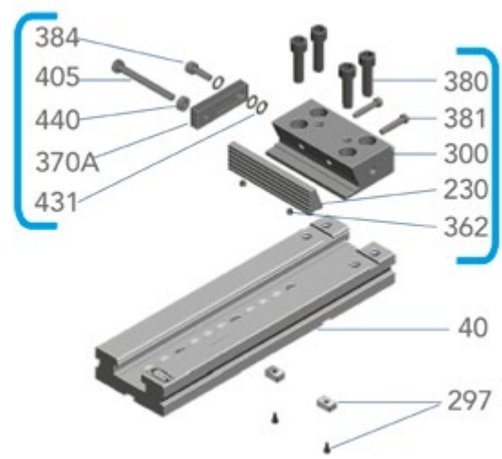




Ür. Kd.	W (mm)	A (mm)	B (mm)	C (mm)	D (mm)	G (mm)	Ağırlık (Kg)	Sip. No.
GR.02.10000	125	150	40	40	345	95	12,9	14745
GR.03.20000	150	200	50	50	420	125	25,5	14746
GR.03.30000	150	300	50	50	520	125	29	14747
GR.04.20000	175	200	60	58	455	145	37	14748
GR.04.30000	175	300	60	58	555	145	42	14749
GR.05.30000	200	300	65	70	595	170	69	14750
GR.05.40000	200	400	65	70	695	170	74	14751
GR.05.50000	200	500	65	70	795	170	79	14752
GR.05.60000	200	600	65	70	895	170	84	14753
GR.06.40000	300	400	80	78	735	195	115	14754
GR.06.50000	300	500	80	78	835	195	125	14755

SÜPER HASSAS MENGENE YEDEKLERİ

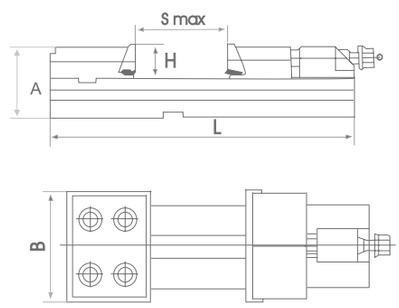




İLGİLİ YEDEK PARÇA RESİMDEKİ NUMARA İLE SİPARİŞ EDİLEBİLİR.

MVN SÜPER HASSAS TEZGAH MENGENESİ





TEKNİK ÖZELLİKLERİ

- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,0015 mm / 100 mm, KARESELLİK TOLERANSI 0,03mm
- ÇALIŞMA YÜZEYLERİ HRC56-60 ŞERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- HAREKETLİ ÇENE HIZLI AYARLANABİLİR VE KOLAY KULLANILIR.
- CNC İŞLEME MERKEZLERİNDE VE DİĞER HASSAS TEZGAHLARDA KULLANILIR.

Ür. Kd.	B (mm)	H (mm)	A (mm)	S max. (mm)	L (mm)	Ağırlık (kg)	Sip. No.
C970-MVN125	125	40	82	140	323	14,5	14756
C970-MVN150	150	52	103	210	423	28	14757
C970-MVN175	175	58	116	240	470	38	14758
C970-MVN200	200	66	132	270	520	51	14759
C970-MVN250	250	74	148	340	600	78	14760

MENGENELER

MVN SÜPER HASSAS MENGENE YEDEKLERİ

VİDA BLOĞU



Ölçü (mm)	Sip. No.
125	14761
150	14762
175	14763
200	14764
250	14765

HAREKETLİ ÇENE



Ölçü (mm)	Sip. No.
125	14766
150	14767
175	14768
200	14769
250	14770

HAREKETLİ ÇENE PLEYTİ



Ölçü (mm)	Sip. No.
125	14776
150	14777
175	14778
200	14779
250	14780

SABİT ÇENE



Ölçü (mm)	Sip. No.
125	14771
150	14772
175	14773
200	14774
250	14775

SABİT ÇENE PLEYTİ



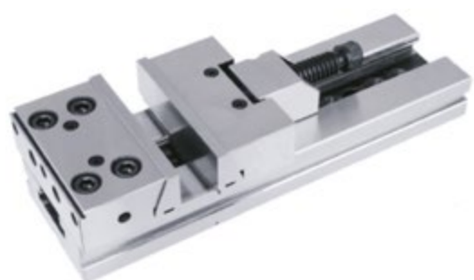
Ölçü (mm)	Sip. No.
125	14781
150	14782
175	14783
200	14784
250	14785

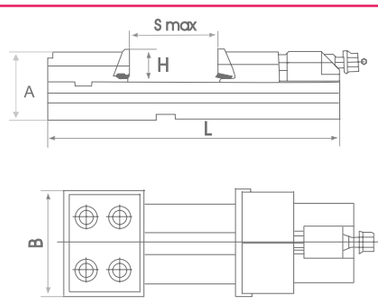
MENGENE VİDASI



Ölçü (mm)	Sip. No.
125	14786
150	14787
175	14788
200	14789
250	14790

SÜPER HASSAS TEZGAH MENGENESİ





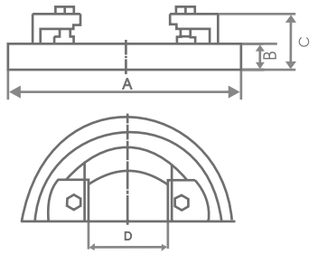
TEKNİK ÖZELLİKLERİ

- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,005 mm / 100 mm
- ÇALIŞMA YÜZEYLERİ HRC58-62 ŞERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- .HAREKETLİ ÇENE HIZLI AYARLANABİLİR VE KOLAY KULLANILIR.
- CNC İŞLEME MERKEZLERİNDE VE DİĞER HASSAS TEZGAHLARDA KULLANILIR.

Ür. Kd.	B (mm)	H (mm)	A (mm)	S max. (mm)	L (mm)	Basma Kuvvveti (Kg)	Ağırlık (Kg)	Sip. No.
C970-125X150	125	40	85	150	345	3000	12,7	14791
C970-150X200	150	50	105	200	420	5000	25,6	14792
C970-150X300	150	50	105	300	520	5000	29,5	14793
C970-175X200	175	60	120	200	455	6000	33,8	14794
C970-175X300	175	60	120	300	555	6000	42,5	14795
C970-200X300	175	65	135	300	595	10000	64,0	14796
C970-200X400	200	65	135	400	695	10000	71,0	14797
C970-200X500	200	65	135	500	795	10000	78,0	14798
C970-200X600	200	65	135	600	895	10000	85,0	14799
C970-300X400	300	80	160	400	735	120000	100,0	14800
C970-300X500	300	80	160	500	835	120000	120,0	14801

SÜPER HASSAS TEZGAH MENGENESİ İÇİN DÖNER TABLA

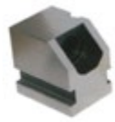




Ür. Kd.	A (mm)	B (mm)	C (mm)	D (mm)	Sip. No.
C971-125	226	23	47	95	14802
C971-150	290	28	58	125	14803
C971-175	320	28	58	145	14804
C971-200	370	34	74	170	14805
C971-300	400	38	78	195	14806

MENGENELER

SÜPER HASSAS TEZGAH MENGENESİ YEDEKLERİ


VİDA BLOĞU


HAREKETLİ ÇENE


SABİT ÇENE


HAREKETLİ ÇENE PLEYTİ


SABİT ÇENE PLEYTİ


MENGENE VİDASI

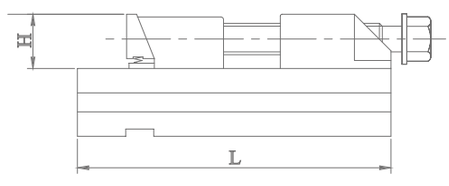

KİLİTLEME CİVATASI

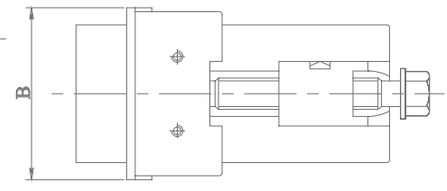

MENGENE KOLU

Ür. Kd.	Açıklama	Sip. No.
C972-125 B	125mm MENGENE VİDA BLOĞU	14807
C972-150 B	150mm MENGENE VİDA BLOĞU	14808
C972-175 B	175mm MENGENE VİDA BLOĞU	14809
C972-200 B	200mm MENGENE VİDA BLOĞU	14810
C972-300 B	300mm MENGENE VİDA BLOĞU	14811
C972-125 HÇ	125mm MENGENE HAREKETLİ ÇENE	14812
C972-150 HÇ	150mm MENGENE HAREKETLİ ÇENE	14813
C972-175 HÇ	175mm MENGENE HAREKETLİ ÇENE	14814
C972-200 HÇ	200mm MENGENE HAREKETLİ ÇENE	14815
C972-300 HÇ	300mm MENGENE HAREKETLİ ÇENE	14816
C972-125 HÇP	125mm MENGENE HAREKETLİ ÇENE PLEYT	14817
C972-150 HÇP	150mm MENGENE HAREKETLİ ÇENE PLEYT	14818
C972-175 HÇP	175mm MENGENE HAREKETLİ ÇENE PLEYT	14819
C972-200 HÇP	200mm MENGENE HAREKETLİ ÇENE PLEYT	14820
C972-300 HÇP	300mm MENGENE HAREKETLİ ÇENE PLEYT	14821
C972-125 KC	125mm MENGENE KİLİTLEME CIVATASI	14822
C972-150 KC	150mm MENGENE KİLİTLEME CIVATASI	14823
C972-175 KC	175mm MENGENE KİLİTLEME CIVATASI	14824
C972-200 KC	200mm MENGENE KİLİTLEME CIVATASI	14825
C972-300 KC	300mm MENGENE KİLİTLEME CIVATASI	14826
C972-125 SÇ	125mm MENGENE SABİT ÇENE	14827
C972-150 SÇ	150mm MENGENE SABİT ÇENE	14828
C972-175 SÇ	175mm MENGENE SABİT ÇENE	14829
C972-200 SÇ	200mm MENGENE SABİT ÇENE	14830
C972-300 SÇ	300mm MENGENE SABİT ÇENE	14831
C972-125 SÇP	125mm MENGENE SABİT ÇENE PLEYTİ	14832
C972-150 SÇP	150mm MENGENE SABİT ÇENE PLEYTİ	14833
C972-175 SÇP	175mm MENGENE SABİT ÇENE PLEYTİ	14834
C972-200 SÇP	200mm MENGENE SABİT ÇENE PLEYTİ	14835
C972-300 SÇP	300mm MENGENE SABİT ÇENE PLEYTİ	14836
C972-125 V	125mm MENGENE VİDASI	14837
C972-150 V	150mm MENGENE VİDASI	14838
C972-175 V	175mm MENGENE VİDASI	14839
C972-200 V	200mm MENGENE VİDASI	14840
C972-300 V	300mm MENGENE VİDASI	14841
C972-125 K	125mm MENGENE KOLU	14842
C972-150 K	150mm MENGENE KOLU	14843
C972-175 K	175mm MENGENE KOLU	14844
C972-200 K	200mm MENGENE KOLU	14845
C972-300 K	300mm MENGENE KOLU	14846

MODÜLER SÜPER HASSAS TEZGAH MENGENESİ HAREKETLİ ÇENE KISMI NO:1





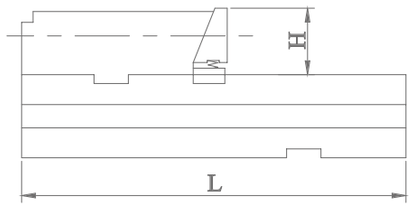


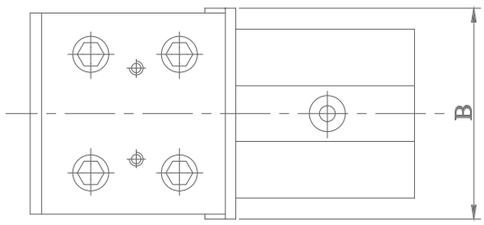
Ür. Kd.	B (mm)	H (mm)	L (mm)	Sip. No.
C970M-125I	125	40	160	14847
C970M-150I	150	50	230	14848
C970M-175I	175	60	240	14849
C970M-200I	200	65	300	14850

MENGENELER

MODÜLER SÜPER HASSAS TEZGAH MENGENESİ SABİT ÇENE KISMI NO:2



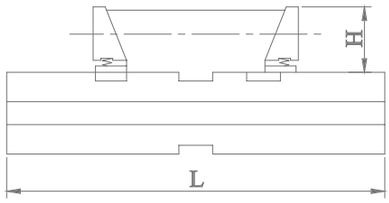


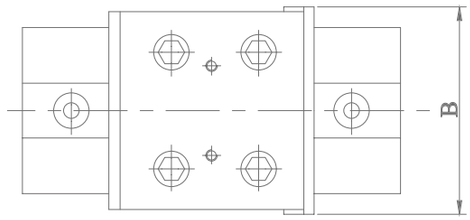


Ür. Kd.	B (mm)	H (mm)	L (mm)	Sip. No.
C970M-125II	125	40	160	14851
C970M-150II	150	50	230	14852
C970M-175II	175	60	240	14853
C970M-200II	200	65	300	14854

MODÜLER SÜPER HASSAS TEZGAH MENGENESİ ÇİFT TARAFLI SABİT ÇENE KISMI NO:3







Ür. Kd.	B (mm)	H (mm)	L (mm)	Sip. No.
C970M-125III	125	40	160	14855
C970M-150III	150	50	230	14856
C970M-175III	175	60	240	14857
C970M-200III	200	65	300	14858

DÖNER TABLALAR VE AKSESUARLARI

VERTEX® TAYVAN

YATAY DİKEY DÖNER TABLA



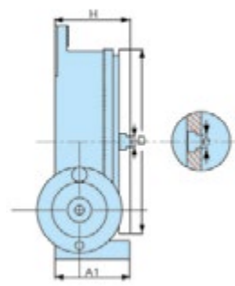
HV-6, 8, 10, 12, 14, 16

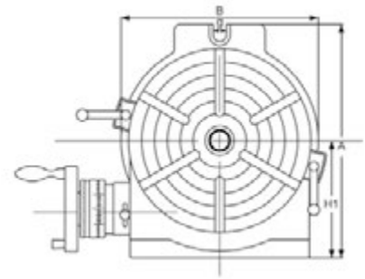




ÖZEL AKSESUARLAR







BİRİM mm

Ür. Kd.	Tabla			Taban Ölçüsü			T-Kanal Uzunluğu		Bağlantı Yuvası	Döner Tabla İçin Yük Kapasitesi		Merkez Koniği	Brüt Ağırlık Tahta Kutu(T) Karton (K)		Sip. No.
	Dış Çap		Yükseklik												
	A1	D	H	H1	A	B	e	Tip	g	Yatay	Dikey				
HV-4	58	110	72	80	138	118	11	✇	17	35 kg	18 kg	MK2	(K)	7.5 kg	14945
HV-6	78	150	80	102	205	163	11	✇	17	40 kg	20 kg	MK2	(K)	12.7 kg	14946
HV-8	100	205	102	135	265	219	14	✇	17	80 kg	40 kg	MK3	(K)	26.2 kg	14947
HV-10	106	254	109	163	321	276	14	✇	17	90 kg	50 kg	MK3	(K)	37.3 kg	14948
HV-12	123	305	125	194	388	330	16	✇	18	120 kg	60 kg	MK4	(T)	69.8 kg	14949
HV-14	123	353	125	225	445	389	16	✇	18	130 kg	70 kg	MK4	(T)	90.3 kg	14950
HV-16	128	406	130	258	435	435	16	✇	18	140 kg	70 kg	MK4	(T)	123.1 kg	14951

Madde	Test Konusu	Sapma (inch) (mm)
1	KAPANMA YÜZEYİ DÜZLEMSELLİĞİ (KONKAV)	.0006" (0.015mm)
2	KAPANMA YÜZEYİNİN TABANA GÖRE PARELELLİĞİ	.0008" (0.02mm)
3	KAPANMA YÜZEYİNİN AÇI YÜZÜNE GÖRE KARESELLİĞİ	.0008" (0.02mm)
4	KAPANMA YÜZEYİNİN GERÇEK SALGISI	.0006" (0.015mm)
5	"MERKEZ DELİĞİNİN DELİK SINIRINDAKİ GERÇEK SALGISI"	.0008" (0.02mm)
6	DOĞRUDAN İNDEKS MEKANİZMASININ İNDEKS HASSASİYETİ TOPLAM MAKSİMUM SAPMASI	45

- YÜKSEK YOĞUNLUKLU MEEHANIT' TEN ÜRETİLMİŞTİR VE MÜKEMMEL KALİTE VE DEVAMLILIK İÇİN "HEIDENHAIN" ELEKTRONİK CİHAZLARLA TEST EDİLMİŞTİR.
- MİL HASSAS BİÇİMDE YATAKLANMIŞTIR. BU DA AĞIR YÜKLERDE SAĞLAMLIK SAĞLAR.
- SALYANGOZ SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR. DİŞLİ ORANI 90:1'DİR.
- ÇALIŞMA TABLASI TAM 360° DERECELENDİRİLMİŞTİR. KOLUN HER BİR TURU TABLAYI 4° HAREKET ETTİRİR. MİKRO AYAR 1'ER DAKİKA OLARAK DERECELENDİRİLMİŞTİR. VERNİERLİ SKALA 10 SANİYEYE KADAR AYAR İMKANI SAĞLAR.
- BU DÖNER TABLALAR MÜKEMMEL PERFORMANSLARI, PRATİK DİZAYNLARI VE UYGUN FİYATLARINDAN DOLAYI ÇOK TERCİH EDİLİR. KULLANIM ALANLARI DAİRESEL İŞLEME, AÇISAL İŞLEME, BARALAMA VS GİBİ OLDUKÇA GENİŞTİR.

DÖNER TABLA ÖZEL AKSESUARLAR

DİVİZÖR PLAKLAR

DP-2, 3, 4, 5



1 SET İÇEREN 1 KARTON } DP SET, İNDEKS PLAKA, KRANK KOLU, 3 ADET VİDA, SEKTÖR VE U-PUL İÇERİR
BRÜT AĞIRLIK:3,5 kg

Ür. Kd.	Uygun Olduğu Model	Ağırlık (kg)	Sip. No.
*DP-1	HV-4, HV-6, VUT-6, VU-100,150	1.4	14952

A-Plaka	15, 16, 17, 18, 19, 20
B-Plaka	21, 23, 27, 29, 31, 33
C-Plaka	37, 39, 41, 43,47, 49

DİVİZÖR PLAKALARIN DELİK SAYILARI

Ür. Kd.	Uygun Olduğu Model		Ağırlık (kg)	Sip. No.
*DP-2	HV RT	-8, VU-200	4.5	14953
DP-3	HV RT	-10,12,14,16, VUT-10 -12	4.6	14954
DP-4	CS	-6,8	4.6	14955
DP-5	VU	-300	4.6	14956

A-Plaka	26, 30, 34, 38, 41, 44, 47, 51, 57, 28, 32, 37, 39, 43, 46, 49, 53, 59
B-Plaka	61, 67, 71, 77, 81, 87, 91, 9763, 69, 73, 79, 83, 89, 93, 99

DÖNER TABLALAR VE AKSESUARLARI

VERTEX TAYVAN

KARŞI PUNTA



TS2-TS3-TS4



TS-1

BİRİM mm

Ür. Kd.	Ayar Aralığı En Yüksek	Ayar Aralığı En Düşük	Uygun Olduğu Model	Brüt Ağırlık (kg)	Sip. No.
TS-1	108	80	HV-4, HV-6, VSI-4, VSI-5, BS-0, VUT-6, VU-100, VU-150	3.9	14957
TS-2	145	115	BS-1, CC-6 CS-6, HV-8	5.5	14958
TS-3	200	130	CS-8, HV-10, HV-12, CC-8, VUT-10, VUT-12, VU-200	8.1	14959
TS-4	260	190	HV-14 HV-16	11.9	14960

FLANŞ



VSC-5F için FLT-0
VSC-6F için FLT-1
VSC-7F için FLT-2
VSC-8F için FLT-3

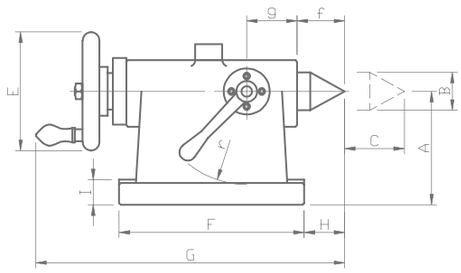
DEAYLAR — BİRİM mm

Ür. Kd.	D	d	H	Uygun Olduğu Model	Ağırlık (kg)	Sip. No.
FLT-0	138	100	20	RT- HV- 6,8	1.9	14961
FLT-1	170	130	21	RT- HV- 8,10	3.3	14962
FLT-2	195	155	24	RT- HV- 10,12,14	5.2	14963
FLT-3	210	160	24	RT- HV- 12,14,16	4.9	14964

NC DÖNER TABLA KARŞI PUNTASI







BİRİM mm

Ür. Kd.	Ana Ölçüler İçin	Merkez Yüksekliği A	Merkez Çapı B	Kurs Boyu C	Punta Uç Çapı D	Çark Çapı E	Taban Ölçüleri FxM	G	H	I	J	K	L	Sip. No.
TS-135	VNCM-150	135	ø45 MK#3	55	ø14	125	215x120	215x120	332	25	109	-	164	14965
TS-135-MK3	VNCM-150	135	ø45 MK#3	55	ø14	125	215x120	215x120	332	25	109	-	164	14966
TS-160	VNCM-220 VNCX-10 VNCM-250	160	ø45 MK#3	55	ø18	140	230x130	230x130	356	30	129	53	193	14967
TS-160-MK3	VNCM-220 VNCX-10 VNCM-250	160	ø45 MK#3	55	ø18	140	230x130	230x130	356	30	129	53	193	14968
TS-210	VNCM-320	210	ø45 MK#3	55	ø18	140	230x146	230x146	356	30	129	53	243	14969
TS-210-MK3	VNCM-320	210	ø45 MK#3	55	ø18	140	230x146	230x146	356	30	129	53	243	14970

Ana Ölçüler Ür. Kd.	İçin	M	c	u	f	g	h	j	r	Ağırlık (kg)
TS-135	VNCM-150	18	42	19	40	69	44	70	80	20,6
TS-135	VNCM-150	18	46	19	40	69	44	70	80	20,6
TS-135-MK3	VNCM-150	18	46	19	40	69	44	70	80	20,6
TS-160	VNCM-220 VNCX-10 VNCM-250	18	49	19	45	70	52	80	95	23,1
TS-160-MK3	VNCM-220 VNCX-10 VNCM-250	18	51	19	45	70	52	80	95	23,1
TS-210	VNCM-320	18	51	19	45	70	52	80	95	29,4
TS-210-MK3	VNCM-320	18	57	23	45	70	52	80	95	29,4

YUKARIDAKİ TABLODA LİSTELENEN MODELLER UYGULANABİLİR METALLERİN ÖRNEKLERİDİR.
DÖNDÜRÜLEBİLİR TABLANIN MERKEZ YÜKSEKLİĞİ VE BÖLME BAŞLIKLARI GEZER PUNTANIN YÜKSEKLİKLERİYLE AYNI OLMALIDIR.

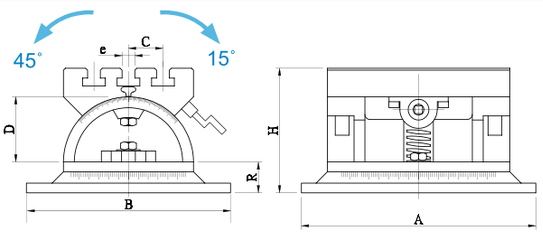
360° 2 AÇILI TABLA



VP-250S
VP-380S



VP-600



- ÇEŞİTLİ TEZGAHLARDA AÇI SABİTLEMEK İÇİN KULLANILIR.
- MALZEMESİ FC30'DUR.
- DAHA ALÇAK AÇILI TABLA İLE DAHA BÜYÜK ÇALIŞMA ALANI SAĞLAR.

DETAYLAR — BİRİM mm

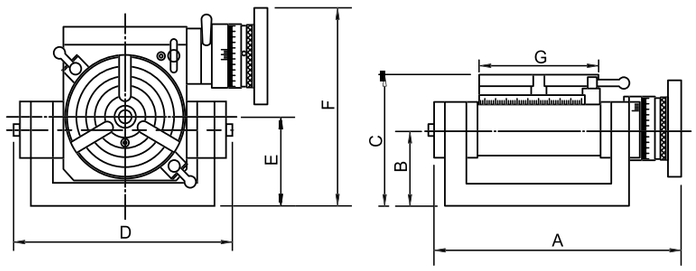
Ür. Kd.	Tabla A	Tabla B	Tabla H	T-Yuva e	T-Yuva C	T-Yuva D	R	Ağırlık (kg)	Sip. No.
VP-250S	290	180	206	16	50	105	52	36	14979
VP-380S	390	360	255	16	68	127	60	86	14980
VP-600	600	300	202	16	80	202	-	85	14981

DÖNER TABLALAR VE AKSESUARLARI

VERTEX® TAYVAN

UNIVERSAL AÇILI DÖNER TABLA





OPSİYONEL



1. KARŞI PUNTA

Ür. Kd.	Sip. No
TS-1	14971
TS-3	14972

2. DİVİZÖR PLEYT

Ür. Kd.	Sip. No
* VU-100, 150 İÇİN DP-1	14973
* VU-200 İÇİN DP-2	14974

- HAREKET ARALIĞI 0-90 ° DİR. RİJİTLİĞİ YÜKSEKTİR.
- MİNİMUM KURULUM SÜRESİ: SABİTLEMEK İÇİN İKİ VİDA VARDIR. YÜKSEK KAPASİTE İÇİN GÖVDE PROFİLİ DÜŞÜK TUTULMUŞTUR.
- SALYANGOZ SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR. DİŞLİ ORANI 1:90'DIR.
- ÇALIŞMA TABLASI TAM 360° DERECELENDİRİLMİŞTİR. KOLUN HER BİR TURU TABLAYI 4° HAREKET ETTİRİR. MİKRO AYAR 1'ER DAKİKA OLARAK DERECELENDİRİLMİŞTİR. VERNİERLİ SKALA 10 SANİYEYE KADAR AYAR İMKANI SAĞLAR.
- KARŞI PUNTA VE DİVİZÖR PLEYTLERİ OPSİYONELDİR. ÖLÇÜLER DÖNER TABLA İLE AYNIDIR.
- TAŞLAMA, MATKAP VE ARK YA DA İNDEKS KESİCİ FREZE MAKİNALARINA UYGUNDUR.

Detaylar — BİRİM mm

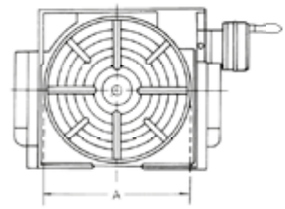
Ür. Kd.	A	B	C	D	E	F	G	Uygun Karşı Punta	Uygun Divizör Pleyt	Ağırlık Kg	Sip. No.
VU-100	228	68	117	202	80	177	100	TS-1	DP-1	13,5	14975
VU-150	266	75	140	246	90	216	150	TS-1	DP-1	21,5	14976
VU-200	429	111	177	432	141	283	205	TS-3	DP-2	46,0	14977

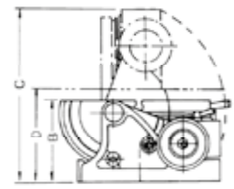




ÖZEL AKSESUARLAR
- DİVİZÖR PLEYTİ
- KARŞI PUNTA

- BU TABLA FREZELEME, BARALAMA VE DİĞER MAKİNALAR İÇİN ÖZEL OLARAK DİZAYN EDİLMİŞTİR.
- BU TABLA İNDEKSLEME, ALIN TORNALAMA VE DİĞER İŞLEMLERİN HIZLI VE YÜKSEK HASSASİYET İLE YAPILMASINI SAĞLAR.
- HAREKET ARALIĞI 0-90°'DİR. KOLUN BİR DÖNÜŞÜ 3 DERECE VE 5 DAKİKAYA EŞİTTİR.
- TABLA ÖLÇEĞİ 1 DAKİKA OLARAK ÖLÇEKLENDİRİLMİŞTİR.
- KURULUM SÜRESİ MİNİMUMDUR.
- SAĞLAM BİR GÖVDEYE SAHİPTİR.



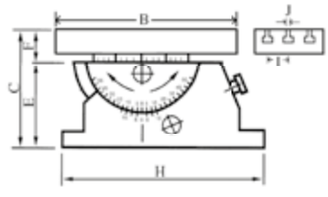


Ür. Kd.	VU-300
Tabla Çapı A	300 mm
Tabla Yüksekliği (Yatay) B	185 mm
Tabla Yüksekliği (Dikey) C	170 mm
Merkez Delik	MK3
Delik Yüksekliği (Dikey) D	208 mm
Direkt İndeksleme	24-div
Dişli Oranı	90:1
Brüt Ağırlık	102 kgs
Net Ağırlık	99,5 kgs
Sip. No.	14978

UNIVERSAL AÇILI TABLA









- AÇILI TABLA HASSAS TAŞLANMIŞ RİJİT TASARIM
- YATAY 360°, DİKEY 45° HAREKET KABİLİYETİ
- VMV VE VDV TİP MENGENE İLE 3 AYAKLI AYNA TAKILABİLİR.
- HASSAS OKUMA İÇİN ÖLÇÜLENDİRİLMİŞTİR.
- PARALELLİK ±0,02mm
- KARESELLİK ±0,02mm
- MALZEME SK-2
- SERTLİK HRC 52°±2°

Detaylar — BİRİM mm

Ür. Kd.	A	B	C	D	E	F	G	H	I	J	Brüt (kg)	Sip. No.
VUA-408	100	200	133	110	83	50	16	182	30	12	15	14982
VUA-510	126	250	133	110	83	50	16	182	40	12	18.1	14983

DİVİZÖRLER VE AKSESUARLARI

VERTEX TAYVAN

YARI UNİVERSAL DİVİZÖR



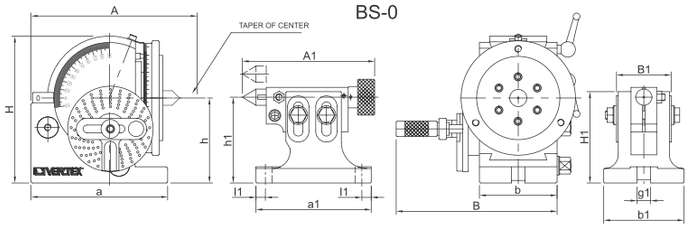
DİŞ MİLLERİ
BS-0. 1 1/8 - 12TPI
BS-0. 1 1/2 - 8TPI

Ür. Kd.	Ağırlık (kg)	Sip. No.
BS-0	19	14984
BS-1	33.5	14985

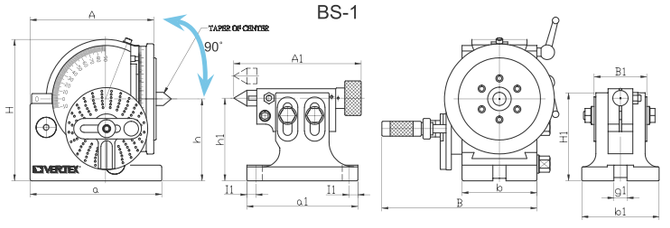
STANDART AKSESUARLAR



BS-0



BS-1



DİVİZÖR PLAKLARI

PLAKA A	15	16	17	18	19	20
PLAKA B	21	23	27	29	31	33
PLAKA C	37	39	41	43	47	49

- DİVİZÖR HERHANGİ BİR AÇIYI DİREKT, ENDİREKT YA DA FARKLI BİR METOD İLE BÖLEBİLİR. DİŞLİ ORANI 1:40'DIR.
- SERTLEŞTİRİLMİŞ VE TAŞLANMIŞ MİL KONİK DÖNER YATAK İÇERİSİNDE RİJİT BİR ŞEKİLDE HAREKET ETMEKTEDİR. AYRICA SALYANGOZ TAŞLANMIŞ VE SERTLEŞTİRİLMİŞTİR.
- DÖNER KAFA YATAY 10° ALTI İLE DİKEY 90° ARASI HER AÇIDA SABİTLENEBİLİR.
- TÜM MODELLER 2,3,4,6,8,12 VE 24'E DOĞRUDAN HIZLI BÖLÜNEBİLMESİNİ SAĞLAYAN 24 DELİKLİ AÇI PLAKALARINA SAHİPTİR.
- 2-50 ARASI TÜM VE 52-380 ARASI BİRÇOK SAYIYA KOLAYCA İNDEKSLENEBİLİR.

BS - 0.1 DİVİZÖR

BİRİM mm

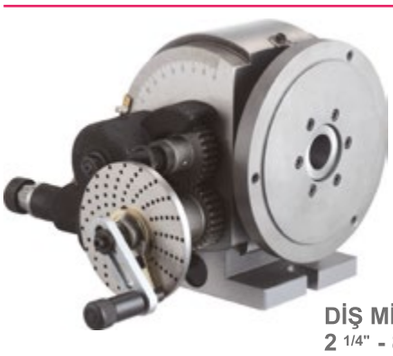
Ür. Kd.	A	B	H	I	a	b	g	h	Merkez Koniği	Mil Deliği Çapı
BS-0	177	188	173	13	160	91	16	100	MK-2	18
BS-1	245	230	220	19	205	114	16	128	MK-3	20

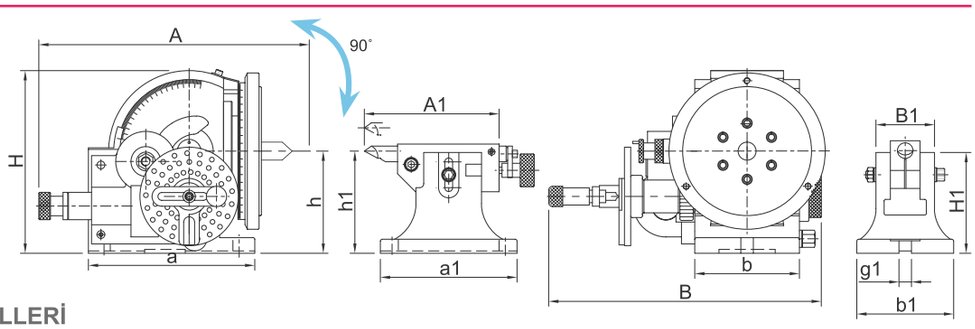
BS - 0.1 KARŞI PUNTA

BİRİM mm

Ür. Kd.	A1	B1	H1	I1	a1	h1	b1	g1
BS-0	155-180	64	107	11	134	80-108	94	16
BS-1	170-195	64	150	11	155	150-115	110	16

UNİVERSAL DİVİZÖR





DİŞ MİLLERİ
2 1/4" - 8 TPI

Ür. Kd.	Ağırlık (kg)	Sip. No.
BS-2	65	14986

Ür. Kd.	Brüt Ağırlık (kg)	Bağlanabilir Ayna Ölçüsü
BS-0	(K)20	5
BS-1	(K)33	6
BS-2	(K)65	6" YA DA 8

STANDART AKSESUARLAR



BS-2 DİVİZÖR

BİRİM mm

Ür. Kd.	A	B	H	I	a	b	g	h	Merkez Koniği	Mil Deliği Çapı
BS-2	365	272	236	132.7	213	134	16	134	MK-4	25.4

BS-2 KARŞI PUNTA

BİRİM mm

Ür. Kd.	A1	B1	H1	h1	a1	b1	g1
BS-2	205~255	86	139	132.7	175	124	16

DİVİZÖRLER VE AKSESUARLARI

VERTEX® TAYVAN

YATAY DİKEY SÜPER İNDEKS DİVİZÖR



STANDART AKSESUARLAR







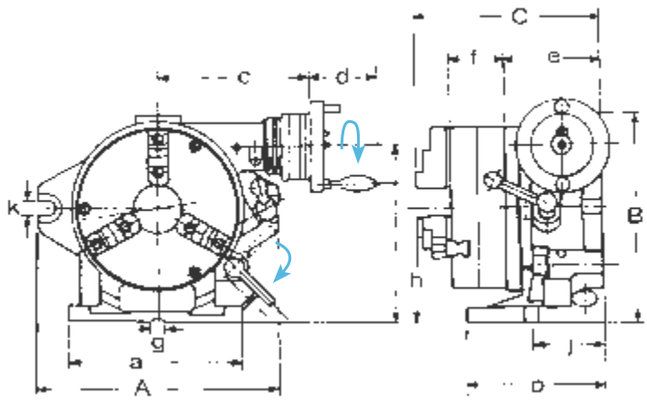
ÖZEL AKSESUARLAR





CS8, 3 AYAKLI AYNA İLE BİRLİKTE MASKELEME PLAKASI & YÜZEY PLAKASI

- BU ÜRÜN SÜPER İNDEKS İLE SALYANGOZ DİŞLİ İNDEKSİN AVANTAJLARINI BİRLEŞTİRİR. FREZE, BARA YA DA BAŞKA BİR MAKİNAYA TAKILDIĞINDA SALYANGOZ TAHRİK MEKANİZMASI SAYESİNDE TEKİL İNDEKS VE ENDİREKT İNDEKS İŞLEMLERİNİ GERÇEKLEŞTİREBİLİR. SALYANGOZ TAHRİĞİ DEVRE DIŞI BIRAKILARAK 24 DELİKLİ ANA PLAKANIN 2,3,4,6,8,12 VE 24'E BÖLME İŞLEMİ YAPMASI SAĞLANABİLİR. AYNA ÇIKARILDIĞINDA YATAY-DİKEY TİP DÖNER TABLA OLARAK KULLANILABİLİR. DİŞLİ ORANI 1:90'DIR. OPERASYON KOLU 1 DAKİKA OLARAK DERECELENDİRİLMİŞTİR. 10 SANİYE HASSASİYETİNE KADAR OKUMA YAPILABİLİR.
- SÜPER İNDEKS DİVİZÖRLER, 3 AYAKLI AYNA, 10"/250 mm YÜZEY PLAKASI, MASKELEME PLAKALARI 2,3,4,6,8,12 İLE BİRLİKTE GELİR.





DÖNER TABLA İLE AYNIDIR.

CS-8'İN GÖVDESİ,YÜZEY PLAKASI VE DİVİZÖR PLAKASI İLE UYUMLUDUR.

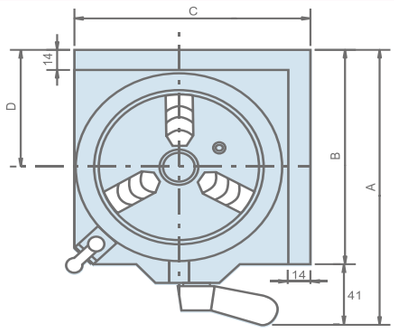
DETAYLAR — BİRİM mm

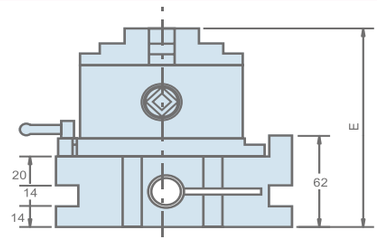
Ür. Kd.	Divizör Sayısı	Ayna				Yüzey Plakası		A	B	C	a	Sip. No.
		Dış Çap	İç Ayak	Dış Ayak	İç Çap	Dış Çap	Kalınlık					
CS-6	2,3,4,6 8,12,24	167 VSK-6	4~42	10~156	44	203	50	250	235	221	220	14987
CS-8	2,3,4,6 8,12,24	210 VSK-8	4~62	10~180	63	254	58	310	285	243	225	14988

Ür. Kd.	b	c	d	e	f	Kılavuz Deliği g	h	i	j	k	Brüt Ağırlık (kg)
CS-6	150	184	82	112	66	16	123	186	80	18	(K) 44,5
CS-8	160	201	82	125	75	16	155	232	80	18	(T) 71,5

EKONOMİK TİP YATAY DİKEY İNDEKS DİVİZÖR







- BÜYÜK KAPASİTESİ (Ø3-Ø100) İLE PENS SİSTEMİNDEN DAHA İYİDİR.
- BASİT VE HIZLI OPERASYON 15°LİK 24 DELİKLİ PLAKA
- AÇISAL İNDEKSLEME İÇİN TABLA ÖLÇEĞİ 1°DİR.
- TABLA DELİĞİ 30 mm'DİR.
- YATAY-DİKEY KULLANIM
- FREZELEME VE MATKAP MAKİNALARINA UYGUNDUR.

DETAYLAR — BİRİM mm

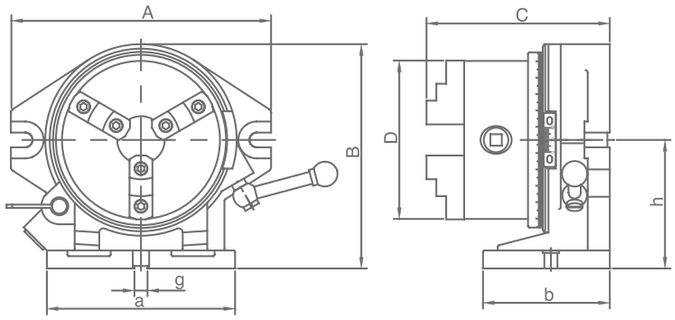
Ür. Kd.	A	B	C	D	E	Delik Çapı	Ağırlık (kg)	Sip. No.
VSI-4	187	146	146	80	135	Ø 30	10.5	14991
VSI-5	202	161	161	87	142	Ø 30	14,5	14992

DİVİZÖRLER VE AKSESUARLARI

VERTEX TAYVAN

YATAY DİKEY İNDEKS DİVİZÖR





BÜYÜK MERKEZ DİZAYNI

- MERKEZ DELİK BÜYÜK VE UZUN PARÇALARA UYGUN ŞEKİLDE BÜYÜK TUTULMUŞTUR.
- SERTLEŞTİRİLMİŞ VE TAŞLANMIŞ 24 POZİSYONLU PLAKA ÖZEL BİR AÇI OLAN 15°'Yİ MÜKEMMEL BİR HASSASİYETLE SAĞLAR.
- CS TİP DÖNDÜRÜLEBİLİR 3 AYAKLI AYNA İLE KULLANILABİLİR. AYRICA, YÜZEY PLAKASI İLE EŞLENDİĞİNDE DÖNER TABLA İŞLEVİ GÖREBİLİR.
- HIZLI İNDEKSLENİR VE KOLAY KULLANILIR. SERİ ÜRETİM İÇİN VAZGEÇİLMEZ BİR ÜRÜNDÜR.
- YATAY - DİKEY İNDEX DİVİZÖR PAKET İÇERİĞİNDE 3 AYAKLI AYNA, MASKELEME PLAKALARI 2,3,4,6,8,12 MEVCUTTUR.

STANDART AKSESUARLAR



ÖZEL AKSESUARLAR

DÖNER TABLA İLE AYNIDIR.



İNDEKS DİVİZÖRLER İÇİN HASSASİYET STANDARTLARI

NO.	TEST KONUSU	TOLERANSLAR (inch)
1	12" E GÖRE TABLA YÜZEYİ İLE TABANIN PARALELLİĞİ	0,015
2	TABLA YÜZEYİNİN AKSİYAL HAREKETTEKİ GERÇEK SALGISI	
3	MERKEZ ÜNİTENİN GERÇEK SALGISI	0,010
4	12" E GÖRE AÇI YÜZEYİ İLE TABANIN KARESELLİĞİ	0,020
5	AYNA MERKEZİNİN GERÇEK SALGISI	0,030
6	HER BİR PLAKANIN KONUMLANDIRMA TOLERANSI	45

DETAYLAR — BİRİM mm

Ür. Kd.	Divizör No.	A	B	C	D	a	b	h	Ters Ayak	Kılavuz Deliği g	Düz Ayak	Delik Çapı (Taret)	Delik Çapı (Ayna)	Brüt Ağırlık kg	Sip. No.
CC-6	2,3,4,6 8,12,24	253	225	179	160	187	115	130	55~145	16	3~160	44	44	(K)29.5	14989
CC-8	2,3,4,6 8,12,24	318	274	209	200	230	155	157	65~200	16	4~200	63	58	(K)51.5	14990

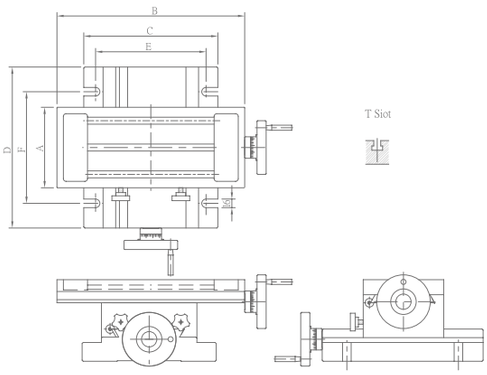
HASSAS ÇAPRAZ SUPORT



VCT-407



VCT-514



- MALZEME: FC-30 ÜSTÜ
- HASSASİYET: 0,02/100 mm
- HAREKETLİ YÜZEYLER ISIL İŞLEME TABİ TUTULMUŞ VE HASSAS TAŞLANMIŞTIR.
- ÖLÇÜM TABLASI OLARAK KULLANILABİLİR.

DETAYLAR — BİRİM mm

Ür. Kd.	A	B	C	D	E	F	Hareket	T Yuva	Toplam Yükseklik	Ölçek Oranı	Max. Yük (kg)	Ağırlık (kg)	Sip. No.
VCT-407	100	180	130	100	115	50	50x80	3/8"	100	2.5 mm/0.02	35	12	14993
VCT-514	150	350	250	300	206	208	156x170	3/8"	134	4 mm/0.02	105	33.5	14994
VCT-820	200	500	300	400	250	290	200x250	3/8"	155	4 mm/0.02	140	72	14995
VCT-1024	250	600	400	500	340	430	250x300	1/2"	210	4 mm/0.02	175	141	14996

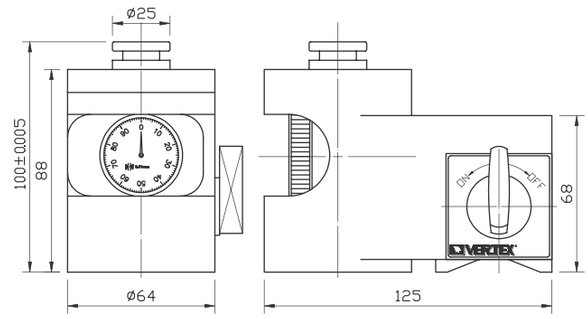
YÜKSEKLİK HİZALAMA ÜRÜNLERİ

VERTEX® TAYVAN

MANYETİK TABANLI YÜKSEKLİK HİZALAMA (SAATLİ)







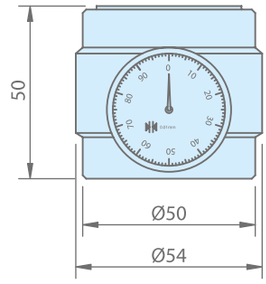
Sip. No.	Referans Yüzeyden Yükseklik	Ağırlık (Kg)	Sip. No.
HP-100	100 mm	2.6	15010

- YÜKSEKLİK HİZALAMAYI İŞ PARÇASININ UYGUN BİR REFERANS YÜZEYİNE YERLEŞTİRİN
- Z EKSENİNDE KESİCİ TAKIMI YAVAŞCA AŞAĞI İNDİRİN. DAHA SONRA KESİCİ ÖLÇÜM POZİSYONUNA GELECEKTİR.
- BÖYLECE PARÇA REFERANS YÜZEYİ İLE KESİCİ TAKIMIN ARASINDAKİ MESAFE HASSAS VE KOLAYLIKLA ÖLÇÜLECEKTİR.
- YÜKSEKLİK HİZALAMA BIR ÇOK MAKİNADA UYGULANABİLİR OLUP, NC TORNA VE FREZELERDE DE KULLANILABİLİR.
- YÜKSEKLİK HİZALAMA YATAY VE DİKEY OLARAK KULLANILABİLİR.

YÜKSEKLİK HİZALAMA (SAATLİ)

HP-50A

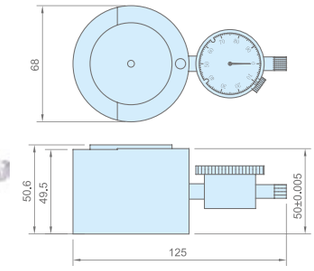




Ür. Kd.	Yükseklik	Stil	Ağırlık (Kg)	Sip. No.
HP-50A	50 mm	STANDART TİP	1,1	15011
HP-50B	50 mm	STANDART TİP	1,7	15012
HP-50AM	50 mm	MANYETİK TABAN	1,2	15013
HP-50BM	50 mm	MANYETİK TABAN	1,7	15014

HP-50B



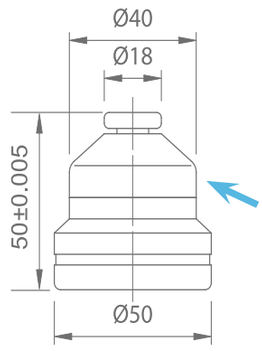


- YÜKSEKLİK HİZALAMAYI TABLA ÜZERİNE YERLEŞTİRDİKTEN SONRA ÜZERİNE DÜZ BİR PARÇA KOYUN VE SAATİ ELLE ÇEVİREREK "0" KONUMUNA GETİRİN.
- DAHA SONRA KESİCİ TAKIMI YÜKSEKLİK HİZALAMAYA DEYDİRİN. SAAT "0" KONUMUNA GELDİĞİNDE TABLA İLE KESİCİ TAKIM ARASINDAKİ MESAFE 50mm' DİR.
- TOLERANS ±0,005 mm

YÜKSEKLİK SIFIRLAMA (Z EKSEN) OPTİK TİP

HP-50Z





LR44 PİL 1 SET 2 ADET

- YÜKSEKLİK 50mm.
- MANYETİK TABANLI
- DOKUNDUĞUNDA KIRMIZI IŞIK YANAR
- HASSASİYET 0.005mm.
- YATAY VE DİKEY HİZALAMA TEK ALETTE
- AĞIRLIK: 0,7 kg

DETAYLAR

Ür. Kd.	Standart Tip	Manyetik Tabanlı
	HP-50Z	HP-50ZM
Sip. No.	15015	15016

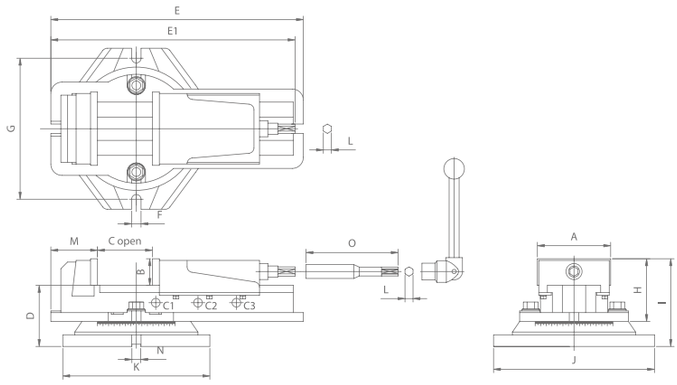
MENGENELER

VERTEX® TAYVAN

UZUN TİP SÜPER OPEN MENEGENE

VJ-600





- HİDROLİK SİSTEM HARİÇ VH-TİP İLE AYNI ÖZELLİKLERE SAHİPTİR.
- HASSİYET 0,02 mm'DİR.
- VJ-400 ÇENE AÇILIMI 185 mm
- VJ-500 ÇENE AÇILIMI 245 mm
- VJ-600 ÇENE AÇILIMI 305 mm

DETAYLAR — BİRİM mm

Ür. Kd.	A	B	C Açılım	Açılma Kapasitesi C1	C2	C3	D	E	E1	F	G	H	I	J	K	L	M	N	O	Max Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VJ-400	110	38	185	0-65	52-129	116-185	97	386	516	15	240	96	135	270	238	14,5	90	16	156	1500	25	15017
VJ-500	132	48	245	0-78	70-158	150-245	110	455	580	17	255	113	158	290	265	14,5	85	16	166	1500	34	15018
VJ-600	154	56	305	0-111	97-211	197-305	118	546	722	17	255	131	175	290	265	19	111	16	200	1500	46	15019

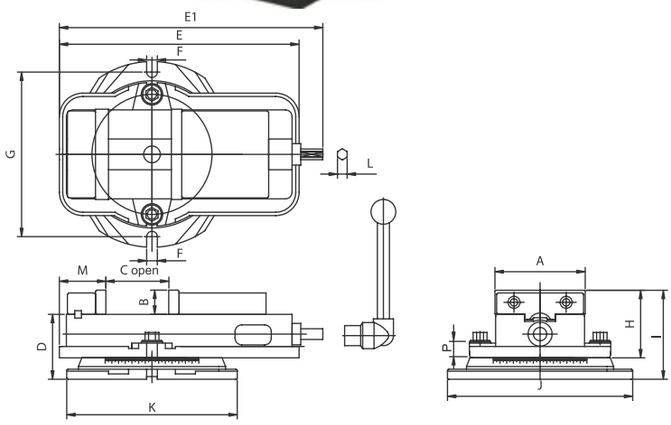
FREZE MENGENESİ



- ÇENELER VE HAREKETLİ YÜZEYLER SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR.
- MAKSİMUM KAPAMA GÜCÜ SAĞLAR.
- HASSAS VE SAĞLAMDIR.
- BU MENGENE SIKILAN KOLUN HAREKETLİ ÇENE İÇERSİNDEKİ YARIM- DAİREYİ SIKIŞTIRMASI İLE YATAY GÜCÜN HAREKETLİ ÇENEYİ AŞAĞI BASTIRMASINI SAĞLAYACAK ŞEKİLDE DİZAYN EDİLMİŞTİR.
- BU SAYEDE İŞLENEN PARÇA ÇENELERİN ÜST KISMINDA OLSA BİLE YUKARI KALKMAZ.
- 4 ADET YERLEŞİM POSİZYONU DAHA GENİŞ ÇENE AÇILIMI SAĞLAR.
- YENİ MODELLER VD675 İLE VA-8L NİN İKİ ÖNEMLİ FARKI VARDIR. BİRİNCİSİ DAHA GENİŞ AÇILMA KAPASİTELERİ İKİNCİSİ İSE YENİ SABİT ÇENEDEKİ ESNEMENİN BÜYÜK BAĞLANTI ELEMANLARI İLE %50 AZALTILMIŞ OLMASIDIR.
- HASSASİYETİ 0,02 mm'DİR.

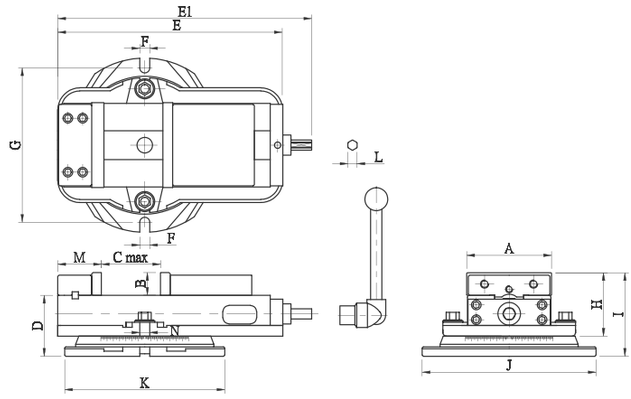
VA-8L





VD-690
VD-810





DETAYLAR — BİRİM mm

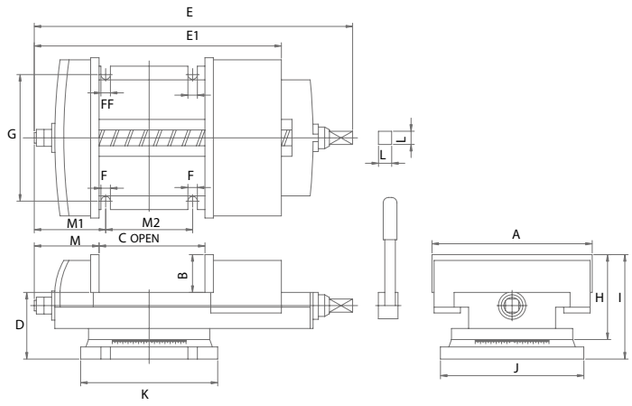
Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	L	M	N	P	Max.Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VA-4	106	36	103	90	324	351	13	211	96	126	242	228	14,5	75	16	15	1500	20	15020
VA-5	135	36	110	97	359	394	17	246	101	133	277	255	14,5	85	16	15	2000	30	15021
VA-6	155	46	150	110	422	452	20	288	118	158	326	302	19	95	16	17	2500	42	15022
VA-8	210	60	197	129	553	583	19	355	145	190	395	366	19	105	16	19	3000	80	15023
VA-8L	208	64	260	138	510	561	17	310	157	202	375	282	19	71	16	19	3000	73	15024
VD-675	160	49	190	110	445	478	19	296	121	160	333	305	19	80	16	17	2500	42	15025
VD-690	155	46	230	110	450	480	20	288	118	158	326	302	19	67	16	17	2300	43	15026
VD-810	205	62	275	129	555	615	19	378	147	191	420	377	19	79	16	17	3000	76	15027

MENGENELER

VERTEX® TAYVAN

ŞEKİLLENDİRME VE FREZE MENGENESİ





- YÜKSEK GERİLİMLİ DÖKME DEMİRDEN İMAL EDİLMİŞTİR.
- GENİŞ AÇILABİLİR ÇENELERİ VE YÜKSEK KAVRAMA GÜCÜ İLE AĞIR İŞ KESME VE AĞIR İŞ FREZELEME OPERASYONLARINDA BÜYÜK PARÇALARI TUTMAK İÇİN UYGUNDUR.

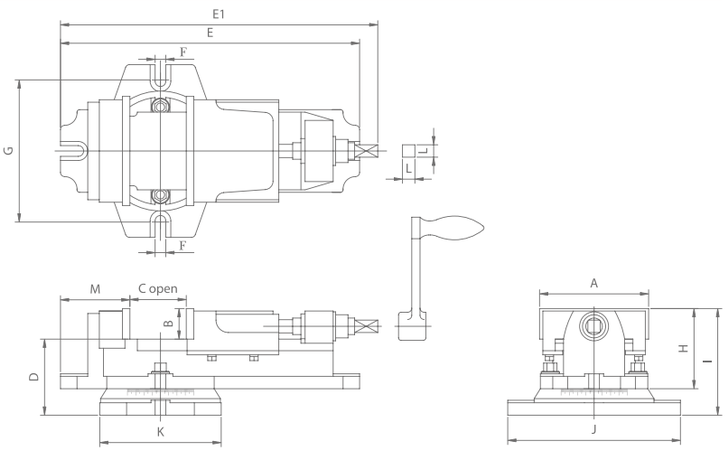
DETAYLAR — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	L	M	M1	M2	Max.Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VSM-12	304	72	290	126	604	560	18	240	161	198	272	260	25	123	135	165	800	84	15028
VSM-16	405	96	415	145	763	738	20	292	200	241	336	336	25	135	143	248	1000	142	15029
VSM-20	508	95	505	150	902	871	21	288	204	245	336	336	25	169	211	246	1200	200	15030

K TİPİ FREZE MENGENESİ







- YÜKSEK HASSASİYET VE KALİTELİ İŞÇİLİĞİ İLE EKİPMANLARIN PRATİK BİR PARÇASIDIR.
- GÖVDE, HAREKETLİ ÇENE VE TABLA SIK TANELİ YÜKSEK MUKAVEMETLİ DÖKME DEMİRDEN İMAL EDİLMİŞTİR.AĞIR İŞLER VE SÜREKLİ HASSASİYET İÇİN ÜRETİLMİŞTİR.
- ÇENE PLEYTLERİ SERTLEŞTİRİLMİŞ VE TAŞLANMIŞ TAKIM ÇELİĞİNDEN İMAL EDİLMİŞTİR.
- EN UYGUN KULLANIM YERLERİ FREZELEME, DELME VE TAŞLAMADIR.
- HASSASİYETİ 0,02 mm'DİR.

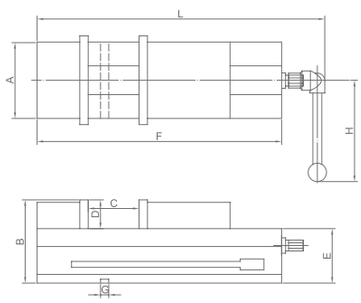
DETAYLAR — BİRİM mm

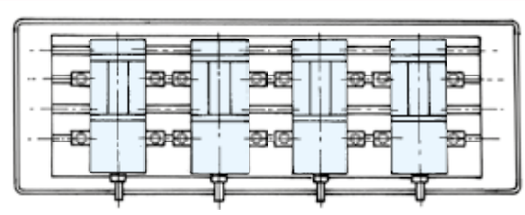
Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	L	M	Max.Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VK-4	104	36	62	76	293	310	13	145	83	113	176	122	15	65	900	10	15031
VK-5	132	37	80	92	362	384	13	172	97	129	209	147	15	84	900	16	15032
VK-6	154	43	112	105	442	473	15	209	108	148	260	181	16,5	90	1000	27	15033
VK-8	204	63	146	127	579	609	18	312	148	190	350	234	21	122	1400	59	15034

LOCK FIXED II HASSAS MAKİNA MENGENESİ









DETAYLAR — BİRİM mm

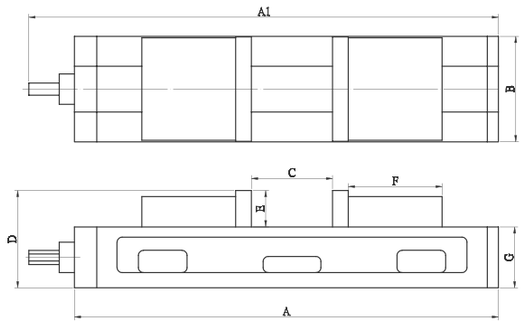
Ür. Kd.	A	B	C Açılım	D	E	F	G	L	H	Max.Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VMC-4	108	100	110	36	63	283	16	374	202	1500	14.2	15035
VMC-6	156	120	142	46	74	368	16	472	221	2500	29.8	15036

MENGENELER

VERTEX TAYVAN

BİLEŞİK HASSAS MENGENE





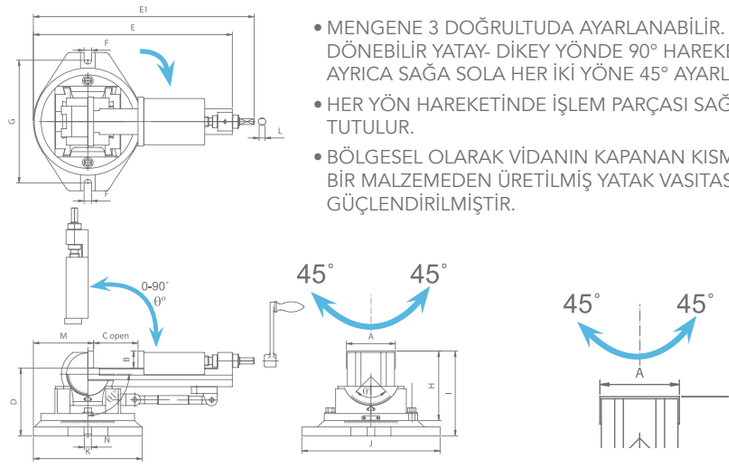
- OTOMATİK MERKEZLEME.
- KOMPAKT DİZAYN
- YÜKSEK HASSASİYET
- YÜKSEK AÇILIM KAPASİTESİ
- KABA VE ŞEKİLSİZ PARÇALARA UYGUNDUR
- HIZLI VE GÜVENLİ MERKEZLEME

Detaylar — BİRİM mm

Ür. Kd.	A	A1	B	C Açılım	D	E	F	G	Max.Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
VCV-44	420	469	108	185	98	36	102	62	450	17.7	15037

3 AÇILI FREZE MENGENESİ





- MENGENE 3 DOĞRULTUDA AYARLANABİLİR. TABLA 360° DÖNEBİLİR YATAY- DİKEY YÖNDE 90° HAREKET EDEBİLİR. AYRICA SAĞA SOLA HER İKİ YÖNE 45° AYARLANABİLİR.
- HER YÖN HAREKETİNDE İŞLEM PARÇASI SAĞLAM BİÇİMDE TUTULUR.
- BÖLGESEL OLARAK VİDANIN KAPANAN KISMI ÖZEL BİR MALZEMEDEN ÜRETİLMİŞ YATAK VASITASIYLA GÜÇLENDİRİLMİŞTİR.

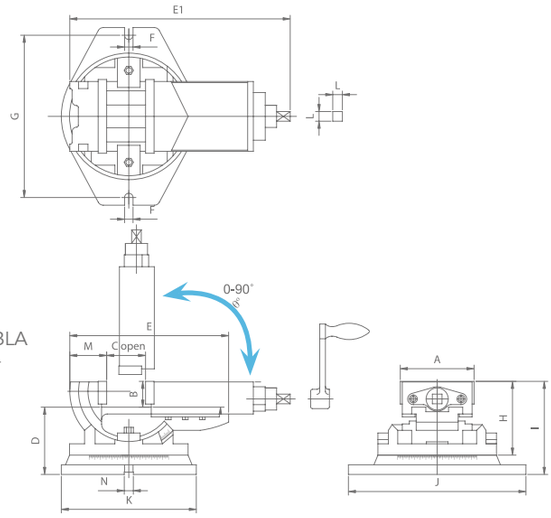
Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	L	M	N	θ	θ_1	Maksimum Kapama Gücü (kg)	Ağırlık (kg)	Sip. No.
VW-3	80	31	85	126	335	370	15	210	127	157	240	185	10	95	16	-45°~45°	-0°~90°	800	(K)16.7	15038
VW-4	110	38	116	152	448	497	17	276	157	190	311	245	13	135	16	-45°~45°	-0°~90°	1000	(K)32.7	15039
VW-5	135	40	145	170	530	580	17	310	173	210	358	271	13	140	16	-45°~45°	-0°~90°	1600	(K)49.4	15040

2 AÇILI MAKİNA MENGENESİ



- AĞIR DÖKME DEMİR GÖVDE
- HER İKİ DOĞRULTUDA ÖLÇEK
- Z DOĞRULTUSUNDA 360°'LİK TABLA
- DİKEY VE YATAY 90°'LİK HAREKET



Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	L	M	N	θ	Max. Kap. Gücü (kg)	Ağırlık (kg)	Sip. No.
VWT-5	130	46	100	118	280	415	15	286	130	164	313	238	17	65	16	0°~90°	900	(K)31.7	15041
VWT-6A	160	51	120	140	360	510	17	293	150	191	328	252	17	83	16	0°~90°	1600	(K)47	15042

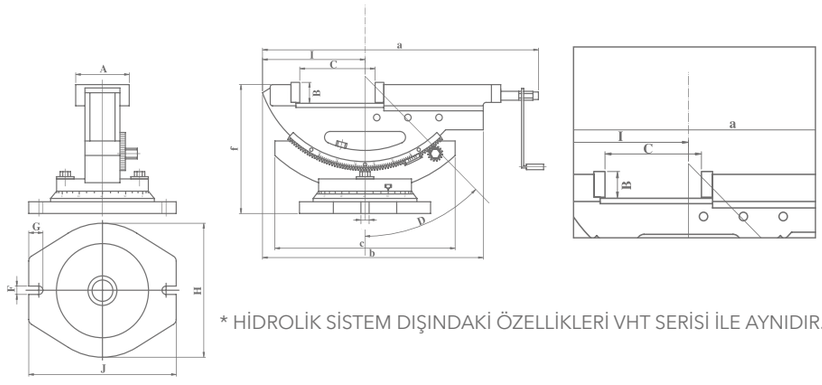
MENGENELER

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2 AÇILI MAKİNA MENGENESİ

VWT-4B





* HİDROLİK SİSTEM DIŞINDAKİ ÖZELLİKLERİ VHT SERİSİ İLE AYNIDIR.

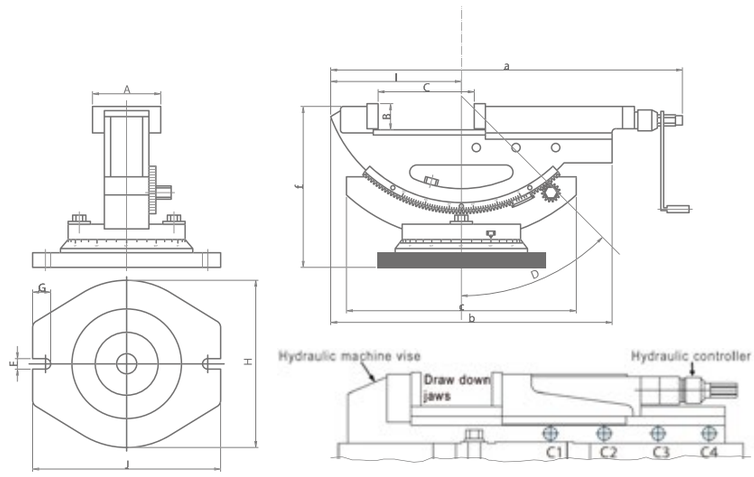
Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	F	G	H	I	J	a	b	c	f	Maksimum Kapama Gücü (kg)	Ağırlık (kg)	Sip. No.
VWT-4B	110	36	220	50°	15	15	26	240	185	270	500	404	335	230	1200	(K)33.3	15043
VWT-6B	154	54	350	50°	20	19	28	300	246	330	800	585	415	290	1600	(T)80	15044

2 AÇILI HİDROLİK MAKİNA MENGENESİ

VHT-4







- GENEL OLARAK VH TİP İLE AYNIDIR.
- HAREKETLİ YATAK SAĞLAMLIK İÇİN İKİ ADET KİLİTLEME VİDASINA SAHİPTİR.
- HAREKET ARALIĞI 0-50°DİR. KOLAY OKUNACAK ŞEKİLDE ÖLÇEKLENDİRİLMİŞTİR. TABLA 0-360° ARASI HERHANGİ BİR YERDE SABİTLENECEK ŞEKİLDE DERECELENDİRİLMİŞTİR.
- 3 KADEMELİ AÇILMA VH TİPTEKİ GİBİDİR.
- HASSASİYETİ 0,02 mm DİR.

Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	F	G	H	I	J	a	b	c	f	Maksimum Kapama Gücü (kg)	Ağırlık (kg)	Sip. No.
VHT-4	110	36	170	50°	15	15	26	240	185	270	500	404	335	230	2500	(K)33.3	15045
VHT-6	154	54	300	50°	20	19	28	300	246	330	800	585	415	290	4500	(T)88	15046

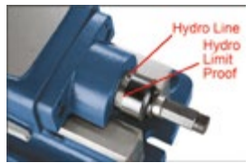
MENGENELER

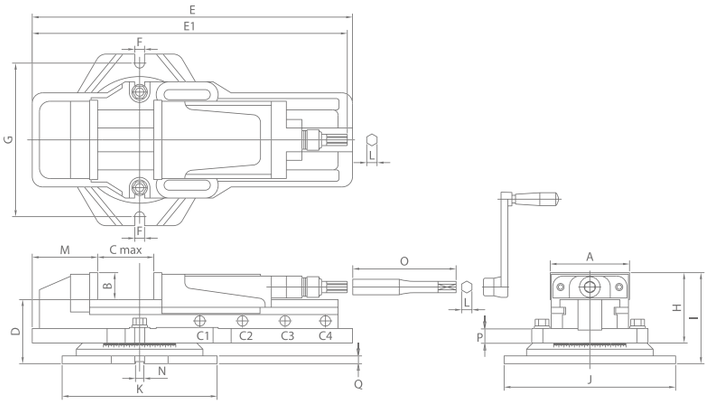
VERTEX® TAYVAN

HİDROLİK MENGENE









- KİTLENME ÖNLEYİCİ YENİ SİSTEM YANLIŞ GÜÇ AYARI NEDENİ İLE OLUŞAN KİTLENMELERİ ÖNLER.
- SAĞLAM YAPISI SAYESİNDE DELME, FREZELEME, TAŞLAMA GİBİ BİR ÇOK İŞLEMDE KULLANILABİLMESİNİ SAĞLAR.
- YALITILMIŞ MİLİ KİR VE ÇAPAĞA KARŞI KORUNAKLIDIR.
- KAYMA YATAKLARI SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR.
- HİDROLİK SİSTEMİ MİNİMUM GÜÇ İLE MAKSİMUM KAPANMA BASINCI SAĞLAR.
- HIZLI KAPANMA VE KİTLENME KOLAY KULLANIM SAĞLAR.
- HASSASİYETİ 0,02 mm'DİR
- TABLA YA DA TABLASIZ OLABİLİR.
- HİDROLİK İTİCİ SİSTEMİ 1 YIL KULLANIM GARANTİLİDİR.
- 68 NOLU HİDROLİK YAĞ KULLANILIR. HİDROLİK İTİCİ SİSTEM ARIZALARINA KARŞI KULLANIM KILAVUZUNA BAKINIZ.
- YENİ DİZAYN: AYARLANABİLİR BASINÇ
- ALUMİNYUM, PLASTİK, PRİNÇ VE ÇELİK İŞLEMLERİNE UYGUNDUR.

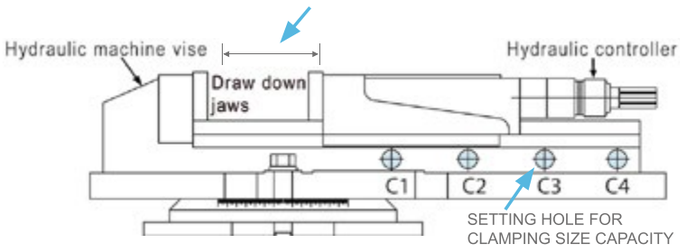
Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	Açılma Kapasitesi				D	E	E1	F	G	H	I	J	K	L	M	N	O	P	Max Kapanma Gücü (kg)	Ağırlık (kg)	Sip. No.
				C1	C2	C3	C4																	
VH-4	108	36	175	0-63	61-120	118-175	----	98	443	583	14	235	95	135	270	240	14	110	16	156	22	2500	28	15047
VH-5	132	48	220	0-75	73-150	148-210	----	113	550	703	17	253	118	161	290	263	19	124	16	165	22	4500	47	15048
VH-6	151	52	300	0-100	98-200	198-300	----	124	620	800	19	298	136	176	332	300	19	126	16	200	30	4500	63	15049
VH-8	204	62	300	0-100	98-200	198-300	----	144	680	857	17	342	162	206	375	350	19	155	16	200	30	7500	110	15050
VH-8L	204	62	400	0-100	98-200	198-300	298-400	144	795	950	17	342	262	206	375	350	19	155	16	200	30	7500	108	15051

MAX. AÇILMA KAPASİTELERİ

BİRİM mm

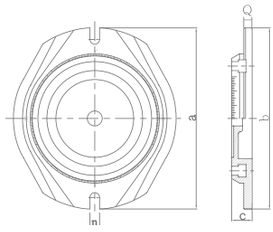
Ür. Kd.	C1	C2	C3	C4
VH-4, VHT-4	0-63	61-120	118-175	----
VH-5	0-75	73-150	148-210	----
VH-6, VHT-6	0-100	98-200	198-300	----
VH-8	0-100	98-200	198-300	----
VH-8L	0-100	98-200	198-300	298-400



DÖNER TABLA

BİRİM mm

Ür. Kd.	a	b	c	n	Ø	Ağırlık (kg)	Sip. No.
HS-4	280	210	30	16	15	4	15052
HS-5	297	267	43	16	20	7	15053
HS-6	335	310	40	16	20	10	15054
HS-8	373	355	45	16	22	16	15055



MENGENELER

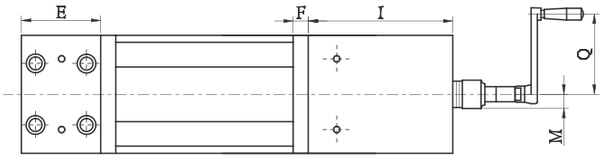
NC HİDRO MAKİNA MENGENESİ

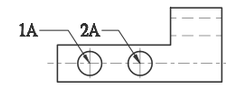




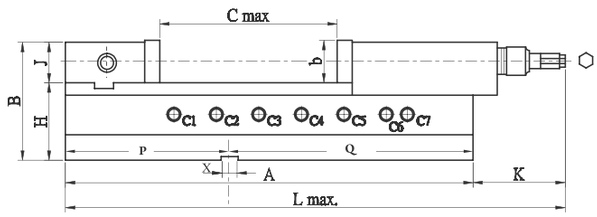


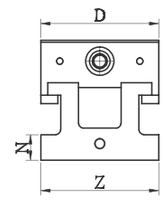
- HİDRO İTİCİ SİSTEM MİNİMUM GÜÇ İLE MAKSİMUM KAPANMA BASINCI SAĞLAR
- KAYMA YATAKLARI TAŞLANMIŞ VE SERTLEŞTİRİLMİŞTİR.
- KOMPAKT YAPIDADIR. KAPAMA KAPASİTESİ HARİKADIR.
- GÖVDE FCD60 SÜNEK DÖKME DEMİRDEN ÜRETİLMİŞTİR.
- AKMA VE DARBE DAYANIMI YÜKSEKTİR.
- FREZEDEN DELMEYE, TAŞLAMAYA BİRÇOK OPERASYONA UYGUN OLARAK YAPILANDIRILMIŞTIR.





2 HOLES POSITION MORE CAPACITY





Detaylar — BİRİM mm

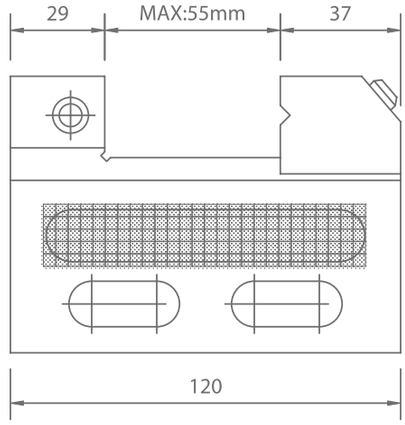
Ür. Kd.	C Max. Açılım	Kapama Gücü KN	L max	Açılma Kapasiteleri								Sip. No.
				-	C1	C2	C3	C4	C5	C6	C7	
VNC-100H	205	25	25	464	1A	2-30	57-90	115-146	173-205	-	-	-	15056
VNC-100H	205	25	25	464	2A	0-3	28-60	86-116	145-175	-	-	-	15056
VNC-125H	225	40	40	556	1A	10-46	70-106	130-166	190-226	-	-	-	15057
VNC-125H	225	40	40	556	2A	0-12	38-72	98-132	158-192	-	-	-	15057
VNC-160H	309	50	50	684	1A	13-70	93-150	173-230	253-310	-	-	-	15058
VNC-160H	309	50	50	684	2A	0-30	53-110	133-190	213-270	-	-	-	15058
VNC-160LH	509	50	50	884	1A	13-70	93-150	173-230	253-310	333-390	410-470	450-510	15059
VNC-160LH	509	50	50	884	2A	0-30	53-110	133-190	213-270	293-350	370-430	410-470	15059

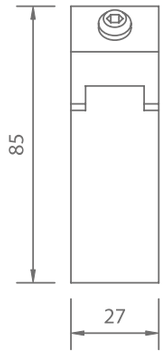
Detaylar — BİRİM mm

Ür. Kd.	A	B	D	E	F	b	H	J	N	I	Z	X	P	Q	Ağırlık kg
VNC-100H	380	107	100	67	13	38	70	37	24	133	100	14	152	228	23
VNC-125H	432	126	124	85	15	45	82	44	27	147	125	18	174	258	37
VNC-160H	550	148	159	102	18	54	95	53	27	189	160	18	219	331	63
VNC-160LH	750	148	159	102	18	54	95	53	27	189	160	18	219	531	77

TEL EROZYON MENGENESİ (PASLANMAZ)







- EROZYON KESME TEZGAHLARINDA KULLANILIR.
- TÜM PARÇALAR PASLANMAZ ÇELİK VE YÜKSEK EROZYONA DİRENÇLİ OLARAK İMAL EDİLMİŞTİR.
- MALZEME SUS440

Detaylar — BİRİM mm

Ür. Kd.	Paralellik	Karesellik	Açılım	Kalınlık	Çene Derinliği	Ağırlık (Kg)	Sertlik	Sip. No.
VSTV-50W	±0,002/100	±0,002/100	55	27	25	1.4	HRC54°±2°	15068

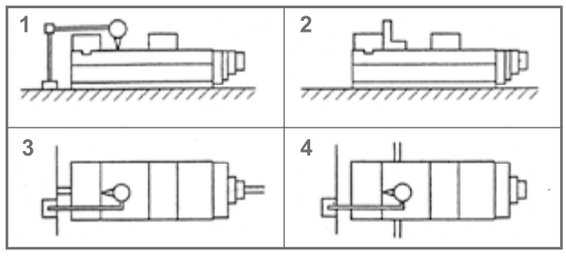
MENGENELER

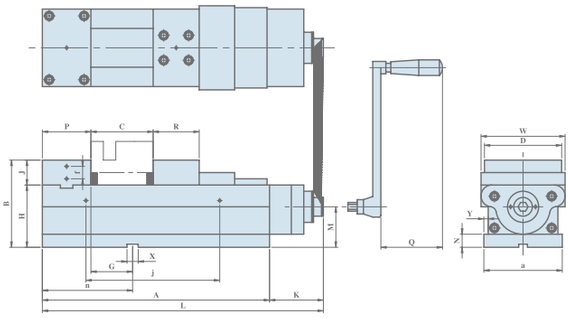
VERTEX® TAYVAN

MEKANİK MC MENGENE









* MAFSAL DESTEKLİ MEKANİZMASI AĞIR İŞLER İÇİN TASARLANMIŞTIR.

- KOMPAKT DİZAYN. RİJİT VE YÜKSEK KAPAMA GÜCÜ
- MAFSAL DESTEKLİ MEKANİZMA İŞLEME PARÇASINI,
- İÇ YAPISINDAKİ DİSK YAYI İLE ESNEK BİÇİMDE TUTTUĞU SÜRECE TİTREŞİM VE ŞOKLARA KARŞI SÜREKLİ BİR KAPAMA GÜCÜ SAĞLAR
- YÜKSEK KAPAMA GÜCÜ
- GENİŞ ÇENE DARBE ARALIĞI
- GÖVDE FCD60 YÜKSEK KALİTELİ SÜNEK DÖKME İMAL EDİLMİŞTİR. DARBE VE AKMAYA DİRENÇLİDİR
- HAREKETLİ KAYMA YATAKLARI SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR,
- İÇ MEKANİZMASI TALAŞ VE KİRE KARŞI KORUNMUŞTUR
- HIZLI KAPANMA VE KİLİTLENME SİSTEMİ İLE KOLAY KULLANIMLIDIR.

KAPAMA KAPASİTELERİ

Ür. Kd.	Çene H	Çene Açılım C	B	Max.Kapama Gücü (KN)	Ağırlık (kg)
VQC-125	40	205	140	40	40.4
VQC-160	45	275	165	60	72.3
VQC-160L	45	355	165	60	78.6
VQC-200L	70	405	190	60	108

TEST DETAYLARI

NO	Test Cinsi (Her 100 mm İçin)	Garanti Edilen Değerler
1	PARALELLİK: HAREKETLİ YÜZEY İLE TABAN YATAĞI	0,01/100 mm
2	KARESELLİK: HAREKETLİ YÜZEY İLE ÇENE PLEYTİ	0,02/100 mm
3	KARESELLİK: ÇENE PLEYTİ YATAĞINDAKİ ANAHTAR YOLLARI	0,02/100 mm
4	PARALELLİK: HAREKETLİ YÜZEYDEKİ TEST BLOĞU İLE YATAK YÜZEYİ	0,02/100 mm

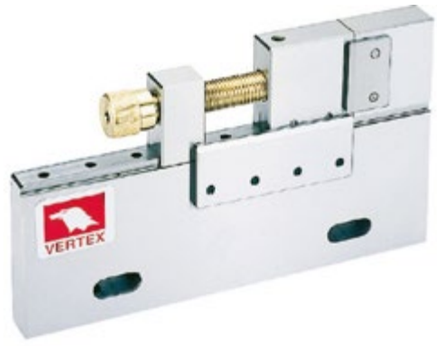
Detaylar — BİRİM mm

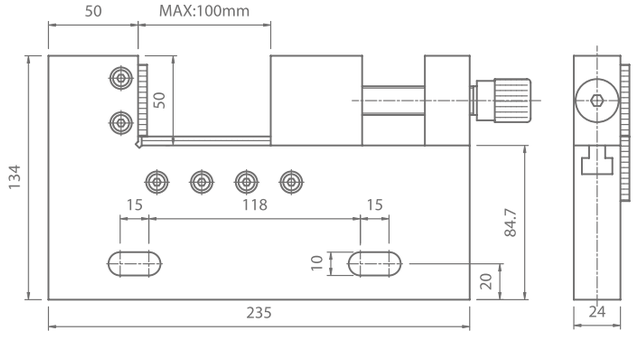
Ür. Kd.	A	B	a	D	P	R	G	H	J	K	L
VQC-125	366	140	126	124.5	78	74	66	100	40	86	452
VQC-160	456	165	161	159.5	86	86	58	120	45	98	554
VQC-160L	536	165	162	160	86	86	58	120	45	98	634
VQC-200L	616	180	202	200	102	98	74	120	70	95	711

Detaylar — BİRİM mm

Ür. Kd.	M	N	Q	W	X	Y	Çene Açılım C	f	J	n	Sip. No.
VQC-125	65	21	74	135	18	7	205	20	216	145	15060
VQC-160	78	21	94	170	18	7	275	20	286	145	15061
VQC-160L	78	21	94	174	18	7	355	20	286	145	15062
VQC-200L	75	21	96	217	18	7	405	20	386	177	15063

TEL EROZYON MENGENESİ (PASLANMAZ)





Detaylar — BİRİM mm

Ür. Kd.	Paralellik	Karesellik	Açılım	Kalınlık	Çene Derinliği	Ağırlık (Kg)	Sertlik	Sip. No.
VSTV-100W	±0,002/100	±0,002/100	100	24	50	4.88	HRC54°±2°	15069

MENGENELER

VERTEX® TAYVAN

HİDROLİK MC MENGENE



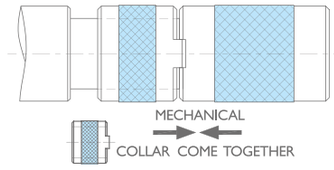
HİDROLİK TAKVİYE

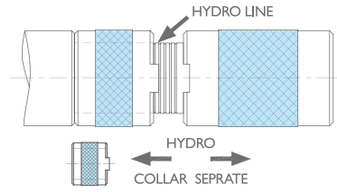


İNCE PARÇALAR İÇİN



- SINIRSIZ HİDROLİK SIKMA GÜCÜ
- HİDROLİK VE MEKANİK SIKMA OPSİYONU
- AĞIR İŞLEMLER İÇİN
- YÜKSEK DAYANIKLILIK VE YÜKSEK HASSASİYET
- TALAŞ GEÇİRMEZ GİZLİ MİL
- HIZLI VE KOLAY OPERASYON
- ESNEME DİRENCİ SABİT VE KUVVETLİ
- SERTLİK HRC45
- TOLERANS 0,01/100mm
- TİTREŞİME ABZORBE EDEN FCD-60 YÜKSEK KALİTE YUMUŞAK DÖKÜM GÖVDE
- SABİT AÇILI DİZAYN'I SAYESİNDE YATAY-DİKEY KESİMLERDE VE İŞLEME MERKEZLERİNDE UYGUN KULLANIM



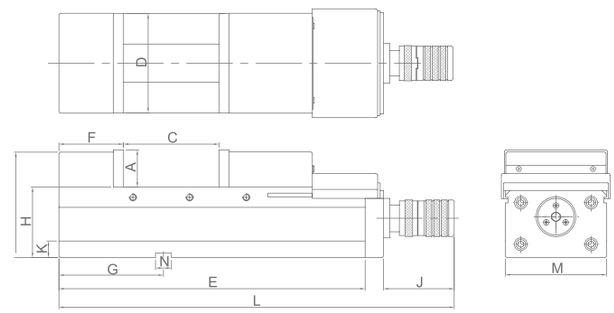


Detaylar — BİRİM mm

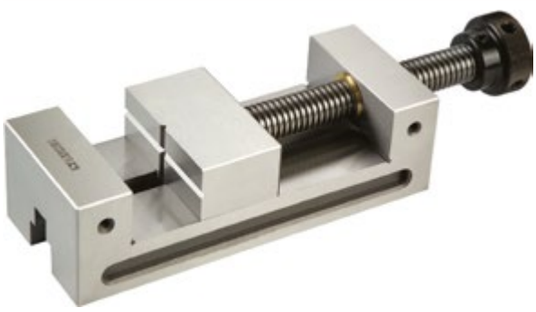
Ür. Kd.	A	B	C Açılım	D	E	F	G	H	J	K	L	M	N	Kapama Gücü (Kg)	Ağırlık (Kg)	Sip. No.
VMC-100HV	48	130	125	100	340	80	125	85	110	15	470	101	16	3000	27	15064
VMC-130HV	55	147	180	130	405	85	150	95	110	21	535	131	18	4000	40	15065
VMC-160HV	58	168	240	160	495	100	165	105	110	21	625	161	18	5000	58	15066
VMC-200HV	61	170	280	200	570	118	190	110	110	21	700	201	18	6000	87	15067

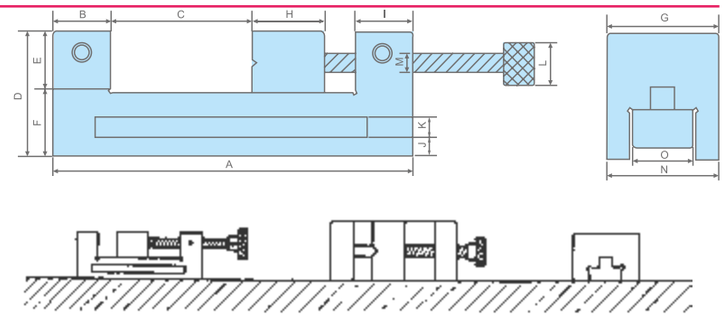
HASSASİYET TESTİ STANDARTLARI

NO	Konu	Garanti Edilen Değerler
1	YAN KANALLAR İLE YATAK HASSASİYETİ	0,010/100 mm
2	TABAN KAMA KANALLARI İLE ÇENELERİN HASSASİYETİ	0,015/100 mm
3	ÇENELERİN BİRBİRİNE GÖRE PARALELLİĞİ,	0,020/100 mm
4	TAM AÇILIM ANINDA TEST BLOĞUNUN MENGENE TABANINA GÖRE PARALELLİĞİ	0,030/100 mm
5	MENGENE YATAĞININ YÜZEYİNİN TABANA GÖRE PARALELLİĞİ	0,015/100 mm



VİDALI HASSAS TEZGAH MENGENESİ





BİRİM mm

Tolerans		±0.004mm, ±0.005mm														Yükseklik	Sertlik	Ağırlık (kg)	Sip. No.
Ür. Kd.	Malzeme	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O				
VDV-20	SK2	155	25	55	54	25	29	48	45	25	10	10	35	16	48	19	54	HRC54°±2°	2.5	15081
VDV-25	SK2	176	25	75	60	30	30	63	45	25	10	11	40	16	63	26	60	HRC54°±2°	3.9	15082
VDV-30	SK2	181	30	71	70	30	40	73	52	25	14	13	50	19	73	26	70	HRC54°±2°	5.7	15083
VDV-35	SK2	250	35	121	73	38	35	88	55	35	11	12	55	25	88	30	73	HRC54°±2°	9.2	15084
VDV-40	SK2	250	35	121	73	38	35	98	55	35	12	12	55	25	98	30	73	HRC54°±2°	10.1	15085

MENGENELER

VERTEX TAYVAN

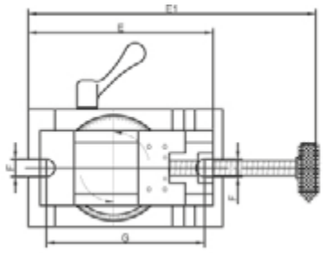
HASSAS UNIVERSAL AÇILI MENGENE

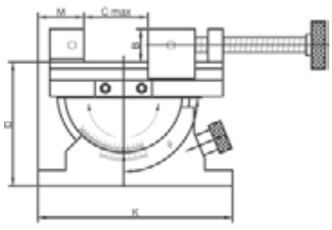
VUA-3

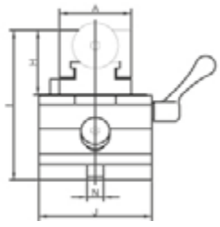


VUA-4









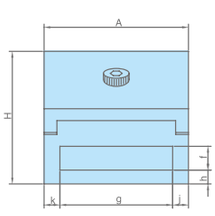
- DOĞRU BİR OKUMA İÇİN HASSAS ÖLÇEKLENDİRİLMİŞTİR.
- YATAY VE DİKEY HAREKET KABİLİYETİ MENGENEYİ EĞİMLİ VE ZOR PARÇALAR İÇİN İDEAL KILAR.
- HASSAS TAŞLAMA FREZELEME, BARALAMA MAKİNALARINDA KULLANILABİLİR.
- TOLERANS : ±0,01 mm/100 mm
- MENGENE TABAN PARALELLİĞİ : ±0,02 mm
- KARESELLİK : ±0,02 mm
- 360° YATAY HAREKET
- 45° DİKEY HAREKET
- HASSAS TAŞLAMA
- SK-2 MALZEME
- SERTLİK: HRC 52°±2°

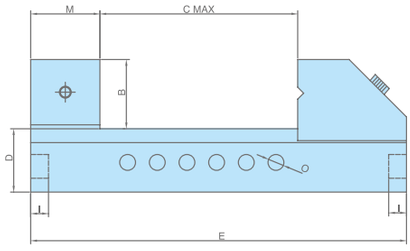
Detaylar — BİRİM mm

Ür. Kd.	A	B	C Açılım	D	E	E1	F	G	H	I	J	K	M	N	θ	Ağırlık kg	Sip. No.
VUA-3	70	31	80	115	173	291	16	156	63	146	110	182	43	16	-20°~50°	12	15070
VUA-4	88	35	100	132	193	346	16	156	83	167	110	182	29	16	-20°~50°	15	15071

PİMLİ HASSAS TEZGAH MENGENESİ







- SERTLEŞTİRİLMİŞ HASSAS ZEMİN
- KARESELLİK VE PARALELLİK ±0,005
- PARÇA MENGENE ÜZERİNE, YANINA VEYA KENARINA HASSAS ŞEKİLDE BAĞLANABİLİR.
- MENGENE İŞLEMLERİNDE İSTER TABANI, İSTER KENARLARI, İSTER KÖŞELERİ ÜSTÜNDE DURSUN, ZEMİNİ KORUR

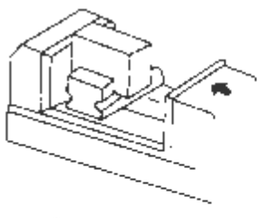
BİRİM mm

Ür. Kd.	Malzeme	A	B	C	D	E	I	f	g	h	j	k	H	M	O	Sertlik	Ağırlık (kg)	Sip. No.
VMV-15	SK2	36	20	40	20	100	5	8	24	5	6	6	40	20	6	HRC54°±2°	0.9	15073
VMV-20	SK2	47	29	70	28	150	5	10	37	6	5	5	57	30	8	HRC54°±2°	2	15074
VMV-25	SK2	62	34	84	28	170	7	10	52	6	5	5	62	30	8	HRC54°±2°	3.3	15075
VMV-30	SK2	72	34	98	32	190	9	12	56	7	8	8	66	35	8	HRC54°±2°	4.5	15076
VMV-35	SK2	88	45	125	40	230	12	12	64	11	12	12	85	40	10	HRC54°±2°	7	15077
VMV-40	SK2	98	45	130	40	235	12	12	64	11	17	17	85	40	10	HRC54°±2°	8.9	15078
VMV-50	SK2	125	50	150	50	287	12	13	73	14	26	26	100	50	14	HRC54°±2°	15.5	15079
VMV-60	S50C	150	50	200	50	330	12	14	76	14	37	37	100	50	14	HRC54°±2°	21.4	15080

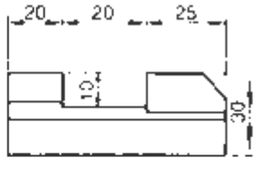
MİNİ PİMLİ HASSAS TEZGAH MENGENESİ

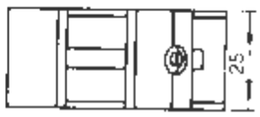


- MİNİ TİP PİMLİ HASSAS TEZGAH MENGENESİ DAHA BÜYÜK MENGENELERİN İÇİNE BAĞLANARAK,
- HASSAS PARÇALARIN İŞLENMESİNE OLANAK SAĞLAR.
- KARESELLİK VE PARALELLİK 0,005MM



AĞIRLIK : 0.3 KG





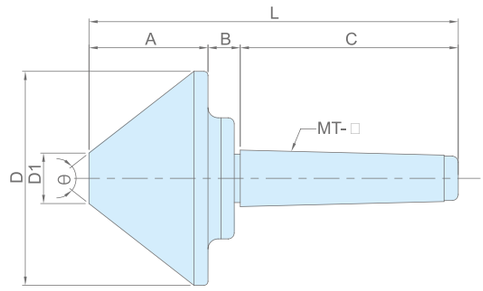
Ür. Kd.	Sip. No.
VMV-10	15072

PUNTALAR VE PARALEL SET

VERTEX TAYVAN

BORU PUNTASI





- SERTLİK : HRC50°
- EŞ MERKEZLİLİK : 0.005mm
- DAİRESELLİK : 0.005mm
- MALZEME : ÇELİK

Detaylar — BİRİM mm

Ür. Kd.	Ölçü	A	B	C	D	D1	L	Max.Hız R.P.M.	θ	100 Rpmde Yük Kapasitesi (kg)	Ağırlık (kg) Bürüt	Sip. No.
VLC-433	MK3x3"	52	18	86	78	15	156	3300	60°	400	1.6	15145
VLC-434	MK3x4"	59	16	86	106	25	161	3000	70°	400	2.8	15146
VLC-443	MK4x3"	52	18	108	78	15	178	3300	60°	400	1.8	15147
VLC-444	MK4x4"	59	16	108	106	25	183	3000	70°	500	3.1	15148
VLC-445	MK4x5"	73	12	108	128	40	193	2000	70°	650	4.9	15149

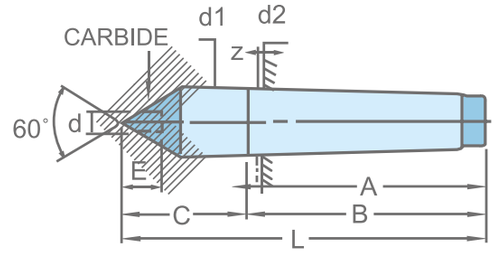
Detaylar — BİRİM mm

Ür. Kd.	Ölçü	A	B	C	D	D1	L	Max.Hız R.P.M.	θ	100 Rpmde Yük Kapasitesi (kg)	Ağırlık (kg) Bürüt	Sip. No.
VLC-446	MK4x6"	88	12	108	156	45	208	1900	70°	800	7.7	15150
VLC-448	MK4x8"	98	12	108	206	81	218	1500	75°	1300	15.4	15151
VLC-455	MK5x5"	73	12	136	128	40	221	2000	70°	650	5.8	15152
VLC-456	MK5x6"	88	12	136	156	45	236	1900	70°	800	8.6	15153
VLC-458	MK5x8"	98	12	136	206	81	246	1500	75°	1600	15.7	15154

ELMAS UÇLU SABİT PUNTA



- ELMAS UÇ SERTLİĞİ HRC 70° SERTLEŞTİRİLMİŞ VE HASSAS TAŞLANMIŞTIR
- EŞMERKEZLİLİK= 0,002" (0,005mm) İÇİNDEDİR.
- DIN 806



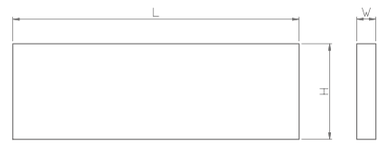
Detaylar — BİRİM mm

Ür. Kd.	Ölçü	L	A	B	C	E	d2	d1	d	Ağırlık (kg)	Sip. No.
VLC-112	MK-2	100	69	67	31	8	17,780	18.0	6	0.2	15155
VLC-113	MK-3	125	89	81	39	10	23,825	24.1	8	0.4	15156
VLC-114	MK-4	155	109	102.5	46	14	31,267	31.6	10	0.8	15157
VLC-115	MK-5	200	136	129.5	64	18	44,399	44.7	14	2.1	15158
VLC-116	MK-6	270	190	182	80	30	63,648	63.8	18	5.7	15159

PARALEL SET (9 ÇİFT)

VP-100



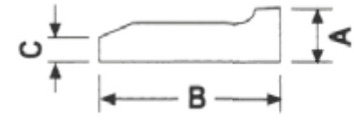


HASSASİYET 0,1 mm

- DAHA EMİN FREZE MENGENESİ İŞLEMLERİ İÇİN
- SERTLİK HRC 48°-53°
- HASSASİYET 0,01 mm
- 4 TARAFI TAŞLANMIŞ
- 1 SET 18 PARÇA İÇERİR
- PLASTİK KUTUDADIR.
- BRÜT AĞIRLIK 11,5 kg

BİRİM mm

Gövde Ölçüsü	Kapama Ölçüsü
WxHxLxAdet	AxBxCxLxAdet
5x16x100x2	
6x18x100x2	15x31x2.5x200x2
8x24x100x2	
10x30x100x2	
12x36x150x2	
14x48x150x2	
18x60x150x2	
22x62x150x2	
Sip. No.	15160



PARALEL SET VE MANYETİK TABANLI ÜRÜNLER

VERTEX TAYVAN

PARALEL SET (14 ÇİFT)

VP-128A





HASSASİYET 0,1 mm

- SERTLİK: HRC 48°-53°
- SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR
- YÜKSEK ALAŞIMLI ÇELİKTEN İMAL EDİLMİŞTİR.
- 28 ADET / SET 10.7 kg

BİRİM mm

WxHxLx Adet	
10x14x150x2	10x28x150x2
10x16x150x2	10x30x150x2
10x18x150x2	10x32x150x2
10x20x150x2	10x35x150x2
10x22x150x2	10x40x150x2
10x24x150x2	10x45x150x2
10x26x150x2	10x50x150x2
Sip. No.	15161

PARALEL SET (9 ÇİFT)

VP-200





HASSASİYET 0,1 mm

- SERTLİK: HRC 48°-53°
- SERTLEŞTİRİLMİŞ VE TAŞLANMIŞTIR
- YÜKSEK ALAŞIMLI ÇELİKTEN İMAL EDİLMİŞTİR.
- 28 ADET / SET 10.7 kg

BİRİM mm

Gövde Ölçüsü	Kapama Ölçüsü
AxBxLxAdet	AxBxCxLxAdet
5x16x150x2	
6x18x150x2	15x31x2,5x200x2
8x24x150x2	
10x30x150x2	
12x36x200x2	
14x48x200x2	
18x60x200x2	
22x62x200x2	
Sip. No.	15162



MANYETİK TABANLI ÜRÜNLER

VMB-06



MANYETİK TABANLI ESNEK KOL

VML-M



MANYETİK AYAKLI BÜYÜTEÇ
M8X1.25p,80kg



VMB-00

KÜÇÜK BOY MANYETİK TABAN
M8X1.25p,80kg



VMB-11

BÜYÜK BOY MANYETİK TABAN
M8X1.25p,140kg



VMB-12

12 mm DELİKLİ TAŞ DÜZELTME MANYETİK TABAN
(TAŞ DÜZELTME DAHİL DEĞİLDİR.)

Detaylar — BİRİM mm

Ür. Kd.	Taban Ölçüleri BxExY	Tutma Gücü	Ana Kol O.Dxl	Ağırlık (kg)	Sip. No.
VMB-06	60x50x55	80 kg	ø16x208	1.6	15163
VMB-00	60x50x55	80 kg	----	1.1	15164
VMB-11	117x50x55	140 kg	----	2.1	15165
VMB-12	60x50x55	80 kg	----	1.1	15166
VML-M	60x50x55	80 kg	ø15x325	1.7	15167

MANYETİK AYAKLAR

VERTEX® TAYVAN

MANYETİK AYAKLAR

VMB-B



MANYETİK AYAK /80kg

VMB-01



MANYETİK AYAK
AYARLANABİLİR TİP /80kg

VMB-02



MANYETİK AYAK
AYARLANABİLİR TİP 80kg

VMB-03





BÜYÜK ÇAP &
UZUN ÇUBUK

MANYETİK AYAK
UZUN ÇUBUK TİPİ / 130kg

- SABİT KOL TİPİ VMB-B,01,02
- SAAT SABİTLEME DELİK ÇAPLARI Ø6.5 & Ø8

Detaylar — BİRİM mm

Ür. Kd.	Ayak Ölçüleri B x E x Y	Tutma Gücü	Sabit Kol Çap x Boy	Hareketli Kol Çap x Boy	Ağırlık (kg)	Sip. No.
VMB-B	60x50x55	80 kg	ø12x173	ø10x162	1.6	15168
VMB-01	60x50x55	80 kg	ø12x176	ø10x150	1.6	15169
VMB-02	60x50x55	80 kg	ø12x171	ø10x153	1.6	15170
VMB-03	115x50x55	130 kg	ø20x310	ø14x200	3.9	15171

UNIVERSAL MANYETİK AYAKLAR

VMB-70



DELUKS UNIVERSAL
MANYETIK AYAK /100kg

VMB-106

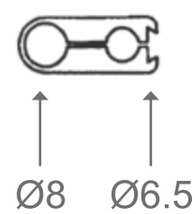


MEKANİK KOLLU
MANYETIK AYAK /100kg

VMB-106H



HİDROLİK KOLLU
MANYETİK AYAK /100kg



- SAAT SABİTLEME DELİK ÇAPLARI Ø6.5, Ø8 & GEÇME

Detaylar — BİRİM mm

Ür. Kd.	Ayak Ölçüleri B x E x Y	Tutma Gücü	Sabit Kol Çap x Boy	Hareketli Kol Çap x Boy	Ağırlık (kg)	Sip. No.
VMB-70	73x50x55	100 kg	ø25x128	ø25x116	1.7	15172
VMB-106	73x50x55	100 kg	ø25x125	ø25x125	1.9	15173
VMB-106H	75x50x55	100 kg	ø25x125	ø25x125	2.2	15174

MANYETİK TABANLI ÜRÜNLER

VERTEX® TAYVAN

MANYETİK TABANLI ÜRÜNLER

VME-112



MİNİ MANYETİK AYAK

VH-70



MİNİ MANYETİK AYAK

VMF-102B



MİNİ DELÜKS UNIVERSAL MANYETİK AYAK

VMS-1/4
VMS-3/8



SULAMA HORTUMU

Detaylar — BİRİM mm

Ür. Kd.	Ayak Ölçüleri L x W x H	Tutma Gücü	Sabit Kol Çap x Boy	Hareketli Kol Çap x Boy	Ağırlık (kg)	Sip. No.
VMF-112	34,5x30x35	30 kg	ø20 X 70	ø20 X 65	0.6	15175
VH-70	31x31x32	15 kg	ø10 X 70	ø6 X 90	0.4	15176
VMF-102B	ø31 x 31H	30 kg	ø20 X 70	ø15 X 65	0.5	15177
VMS-1/4	----	----	ø11 X 320	HORTUM DİŞİ 1/4	0.2	15178
VMS-3/8	----	----	ø15 X 320	HORTUM DİŞİ 3/8	0.4	15179
VMH-54	60x50x55	80 kg	ø16 X 330	2 ADET HORTUM	1.4	15180
VMH-62	60x50x55	80 kg	ø16 X 330	3ADET HORTUM	1.5	15181
VMH-63	60x50x55	80 kg	ø11 X 330	1ADET HORTUM	1.6	15182
VMH-64	60x50x55	80 kg	ø11 X 330	2ADET HORTUM	2	15183
VMH-65	60x50x55	80 kg	ø11 X 330	3ADET HORTUM	2.2	15184

VMH-42



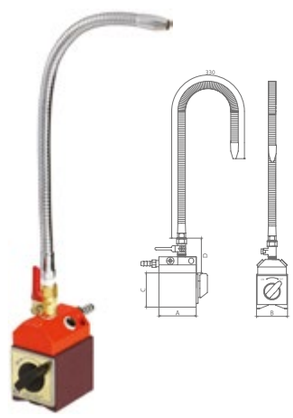
MANYETİK AYAKLI PLASTİK SULAMA HORTUMU (2 HORTUM)

VMH-62



MANYETİK AYAKLI PLASTİK SULAMA HORTUMU (3 HORTUM)

VMH-63



MANYETİK AYAKLI METAL SULAMA HORTUMU (1 HORTUM)

VMH-64



AYAKLI METAL
ORTUMU (2 HORTUM)

VMH-65



YETİK AYAKLI METAL
MA HORTUMU (3 HORTUM)

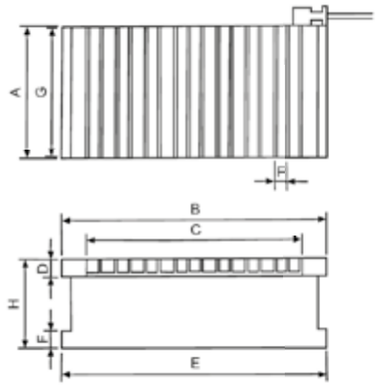
MANYETİK TABLALAR

VERTEX® TAYVAN

STANDART KUTUPLU ELEKTROMANYETİK TABLA 450 GAUSS

450 GAUSS





KULLANIM
- TAŞLAMA İŞLEMLERİ İÇİN UYGUNDUR
- KONTROL ÜNİTESİZ KULLANILMAZ

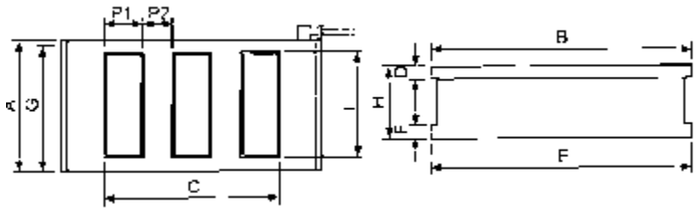
Detaylar — BİRİM mm

Ür. Kd.	Ölçüler	Tabla Ölçüleri				Kutup Hatvesi	Tabla Sabitleme Yüzeyi				Voltaj (V)	Akım (A)	Ağırlık (kg)	Sip. No.
		A	B	C	D	P1	G	E	F	H			NET	
VEM-1530A	150x300	150	300	228	20	15(3+12)	144	316	20	70	DC-90V	0.15A	21	15185
VEM-1535A	150x350	150	350	288	20	15(3+12)	144	366	20	70	DC-90V	0.18A	25	15186
VEM-1545A	150x450	150	450	378	20	15(3+12)	144	466	20	70	DC-90V	0.24A	32	15187
VEM-2040A	200x400	200	400	348	20	15(3+12)	194	416	20	70	DC-90V	0.47A	38	15188
VEM-2045A	200x450	200	450	378	20	15(3+12)	194	466	20	70	DC-90V	0.35A	43	15189
VEM-2550A	250x500	250	500	438	20	15(3+12)	240	500	20	70	DC-90V	0.73A	67	15190
VEM-3060A	300x600	300	600	529	20	15(3+12)	290	600	20	70	DC-90V	0.97A	97	15191
VEM-4080A	400x800	400	800	725	25	19(3+16)	390	800	20	80	DC-90V	1.56A	182	15192
VEM-40100A	400x1000	400	1000	936	25	19(3+16)	390	1000	20	80	DC-90V	1.60A	228	15193
VEM-50100A	500x1000	500	1000	936	25	19(3+16)	490	1000	20	80	DC-90V	1.72A	285	15194

ÇOK KUVVETLİ ELEKTROMANYETİK TABLA 1200 GAUSS

1200 GAUSS





KULLANIM
- FREZELEME GİBİ AĞIR KESME İŞLEMLERİNE UYGUNDUR.
- YÜKSEK TALAŞ KALDIRMAYA VE YÜKSEK HIZLI KESMEYE UYGUNDUR
- KONTROL ÜNİTESİZ KULLANILMAZ.

Detaylar — BİRİM mm

Ür. Kd.	Ölçüler	Tabla Ölçüleri					Kutup Hatvesi		Tabla Sabitleme Yüzeyi				Voltaj (V)	Akım (A)	Ağırlık (kg)	Sip. No.
		A	B	C	D	I	P1	P2	G	E	F	H			NET	
VEM-2040Z	200x400	200	400	332	20	160	40	35	194	400	20	110	DC-90V	0.71	54	15195
VEM-2050Z	200x500	200	500	422	20	160	48	34	194	500	20	110	DC-90V	0.91	75	15196
VEM-2060Z	200x600	200	600	520	20	160	48	30	194	600	20	110	DC-90V	1.00	80	15197
VEM-2550Z	250x500	250	500	422	20	200	42	34	240	500	20	120	DC-90V	1.16	90	15198
VEM-3060Z	300x600	300	600	520	20	240	48	30	290	600	20	120	DC-90V	1.63	130	15199
VEM-4080Z	400x800	400	800	718	25	340	48	30	390	800	20	120	DC-90V	2.53	230	15200
VEM-40100Z	400x1000	400	1000	917	25	340	45	35	390	1000	20	120	DC-90V	2.96	288	15201
VEM-50100Z	500x1000	500	1000	917	25	430	45	35	490	1000	20	120	DC-90V	3.96	360	15202
VEM-60100Z	600x1000	600	1000	917	25	530	45	35	590	1000	20	120	DC-90V	5.30	432	15203

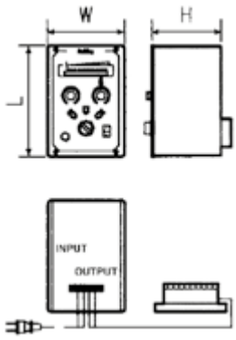
KONTROL ÜNİTELERİ

VERTEX® TAYVAN

ELEKTROMANYETİK TABLALAR İÇİN KONTROL ÜNİTESİ

VCC-705 (5A)





GÜÇ KAYNAĞ TABLA

VGI-618~2048 / VLZ-510~612 / VIW-612~1224 / VEM-1530A~50100A KODLU TABLALAR İÇİN UYGUNDUR

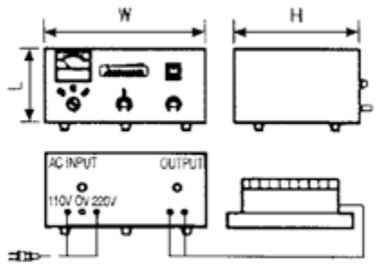
ÖZELLİKLER
- STANDART TİP ELEKTROMANYETİK TABLALAR İÇİNDİR.
- 5A KAPASİTESİ İLE MANYETİK ALMA KAPASİTESİ 6-15 SANİYEDİR.
- LED VOLTAJ GÖSTERGESİ İLE ELEKTROMANYETİK TABLANIN GÜCÜNÜ HASSAS BİÇİMDE AYARLAR.

BİRİM mm

Ür. Kd.	Giriş Voltajı Tek Faz	Çıkış	Ölçüler				Net Ağırlık (KG)	Sip. No.
		Voltaj	Akım	En	Boy	Yükseklik		
VCC-705	AC 110V/220V	DC 0-100V	5A	200	137	122	3.5	15204

VCC-805A (10A)





GÜÇ KAYNAĞI TABLA

VCC-805A (10A) BAĞLANABİLECEĞİ TABLALAR
VGI-2060 / VEA-816~1640 / VEM-2040Z~40100Z
VCC-815 (15A) BAĞLANABİLECEĞİ TABLALAR
VEA-2040~VEA2460 / VLZ-2060 / VEM-50100A / VEM-50100Z
KODLU TABLALAR İÇİN UYGUNDUR

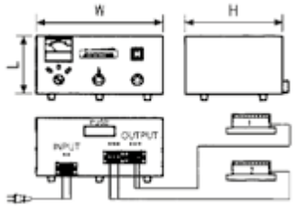
ÖZELLİKLER
- STANDART TİP ELEKTROMANYETİK TABLALAR İÇİNDİR.
- 10A VE 15A KAPASİTESİ İLE MANYETİK ALMA KAPASİTESİ 6-15 SANİYEDİR.
- LED VOLTAJ GÖSTERGESİ İLE ELEKTROMANYETİK TABLANIN
- GÜCÜNÜ HASSAS BİÇİMDE AYARLAR.

BİRİM mm

Ür. Kd.	Giriş Voltajı Tek Faz	Çıkış	Ölçüler				Net Ağırlık (KG)	Sip. No.
		Voltaj	Akım	En	Boy	Yükseklik		
VCC-805A	AC 110/220/380/415/440V	DC 0-100V	10A	150	330	260	18	15205
VCC-815	AC 220/380/415/440V	DC 0-120V	15A	150	330	260	20	15206

VCC-820 (20A)





GÜÇ KAYNAĞI TABLA

VEA-2460~/ VEM-60100Z
KODLU TABLALAR İÇİN UYGUNDUR

ÖZELLİKLER
- ÇOK KUVVETLİ BÜYÜK ELEKTROMANYETİK TABLALARDA KULLANILIR VE AYNI ANDA İKİ TABLAYI KONTROL EDEBİLİR.
- 20 A KAPASİTESİ İLE MANYETİK ALMA KAPASİTESİ
- 8-15 SANİYEDİR.
- LED VOLTAJ GÖSTERGESİ İLE ELEKTROMANYETİK TABLANIN GÜCÜNÜ HASSAS BİÇİMDE AYARLAR.
- DAHİLİ FANI SOĞUTMA SAĞLAR

BİRİM mm

Ür. Kd.	Giriş Voltajı Tek Faz	Çıkış	Ölçüler				Net Ağırlık (KG)	Sip. No.
		Voltaj	Akım	En	Boy	Yükseklik		
VCC-820	AC 220/380/415/440V	DC 0-120V	20A	180	385	295	32	15207

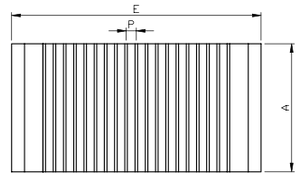
KOLLU MANYETİK TABLALAR

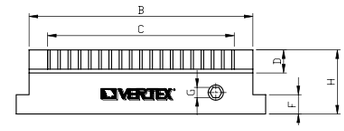
VERTEX® TAYVAN

MANYETİK TABLA

18 KGF







ÖZEL OLARAK İŞLENMİŞ HASSAS YÜZEY.

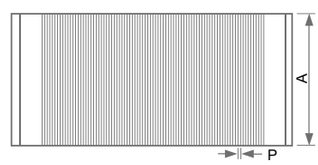
Detaylar — BİRİM mm

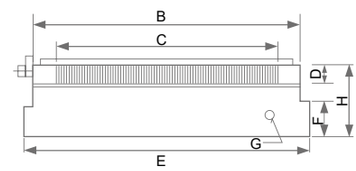
Ür. Kd.	Ölçüler	Tabla Ölçüleri				Kutup Hatvesi	Tabla Sabitleme Yüzeyi			Yükseklik	Ağırlık (kg)	Sip. No.
		A	B	C	D	P	G	E	F	H	NET	
VG-407	100x175	100	175	146	20	8(2+6)	8	187	15	50	7.2	15208
VG-510	125x250	125	250	206	20	8(2+6)	8	262	15	50	15	15209
VG-612	150x300	150	300	256	20	8(2+6)	8	318	15	50	18.5	15210
VG-614	150x350	150	350	306	20	8(2+6)	8	368	15	50	20.9	15211
VG-618	150x450	150	450	406	20	8(2+6)	8	468	15	50	27.5	15212
VG-816	200x400	200	400	365	20	8(2+6)	8	418	15	50	32	15213
VG-818	200x450	200	450	406	20	8(2+6)	8	468	15	50	36.3	15214
VG-820	200x500	200	500	456	20	8(2+6)	8	518	15	50	40.4	15215
VG-1020	250x500	250	500	456	20	8(2+6)	8	518	15	50	50.3	15216
VG-606	150x150	150	150	116	20	8(2+6)	8	162	15	50	9	15217
VG-1224	300x600	300	600	550	18	8(2+6)	8	620	15	48	73.5	15218

İNCE ÇİZGİLİ MANYETİK TABLA

19 KGF







ÖZEL OLARAK İŞLENMİŞ HASSAS YÜZEY.

UYGULAMA

- BU YENİ İNCE TİP TABLA, 50mm YÜKSEKLİK , TAŞLAMA İŞLEMLERİNE, İNCE SAÇLARA VE KÜÇÜK İŞ PARÇALARINA UYGUNDUR. GENİŞ BİR UYGULAMA ALANI VARDIR VE TABLA ÜZERİNDE GENİŞ BİR MANYETİK ALAN OLUŞTURUR.

ÖZELLİKLER

- İNCE VE HAFİF OLMASI ÇOK YÖNLÜ KULLANIM SAĞLAR
- SIK KUTUPLU OLMASI, BU MODELDE, TABLAYI İNCE VE KÜÇÜK PARÇALAR İÇİN UYGUN KILAR
- TABLA YÜZEYİ BENZER TİPLERE GÖRE DAHA GENİŞ MANYETİKLEŞMİŞ ALAN SAĞLAR

Detaylar — BİRİM mm

Ür. Kd.	Ölçüler	Tabla Ölçüleri				Kutup Hatvesi	Tabla Sabitleme Yüzeyi			Yükseklik	G	Ağırlık (kg)	Sip. No.
		A	B	C	D	P	A	E	F	H		NET	
VGF-1018B	100X175	100	175	146	18	5(1+4)	100	195	15	50	8	7.7	15219
VGF-1515B	150X150	150	150	116	18	5(1+4)	150	175	15	50	8	10	15220
VGF-1530B	150X300	150	300	256	18	5(1+4)	150	320	15	50	8	18.8	15221
VGF-1535B	150X350	150	350	306	18	5(1+4)	150	370	15	50	8	21.6	15222
VGF-1545B	150X450	150	450	406	18	5(1+4)	150	470	15	50	8	27.4	15223
VGF-2040B	200X400	200	400	356	18	5(1+4)	200	420	15	50	8	32.3	15224
VGF-2045B	200X450	200	450	406	18	5(1+4)	200	470	15	50	8	36.3	15225

DÖNER MANYETİK TABLA

18 KGF





(0°-90°) AÇILI PARÇALARIN TAŞLANMASINI SAĞLAR.
ÖLÇÜ GÖSTERGESİ SAYESİNDE KOLAYCA AYARLANIR.

Detaylar — BİRİM mm

Ür. Kd.	Ölçüler	Tabla Ölçüleri				Kutup Hatvesi	Ayak Ölçüleri						Yükseklik	Ağırlık (kg)	Sip. No.
		B	L	L2	H2	P	a	b	t	F	L1	d	H		
VLU-510B	125x250	125	250	191		8.5 (2.5+6)	50	35	17	96	380	16	150	33.2	15226
VLU-612B	150x300	150	300	245		8.5 (2.5+6)	50	35	17	96	430	16	150	44.5	15227
VLU-618B	150x450	150	450	414		8(2+6)	50	27	15	90	565	-	145	43	15228

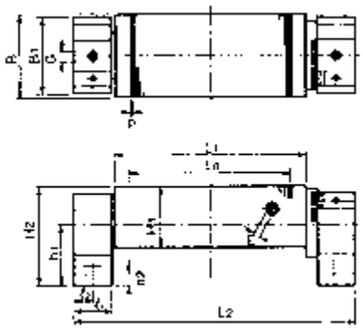
AÇILI MANYETİK TABLALAR

VERTEX TAYVAN

İNCE ÇİZGİLİ DÖNER MANYETİK TABLA

17 KGF





UYGULAMA

- (0°-90°) ARALIĞINDAKİ TAŞLAMALARA UYGUNDUR.

ÖZELLİKLER

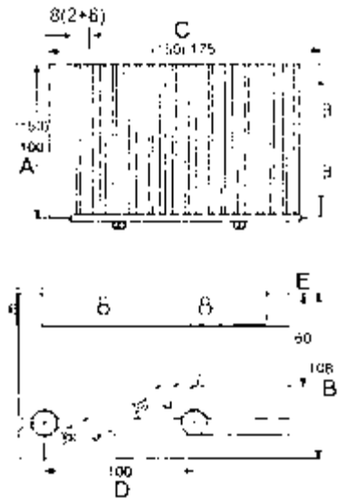
- ÖLÇEKLENDİRİLMİŞ DÖNER SAFTI HERHANGİ BİR AÇIDA ÇALIŞMASINI SAĞLAR
- AÇMA KAPAMA SIRASINDA YÜZEY HASSASİYETİ DEĞİŞMEZ.
- SIK KUTUPLU YAPISI İNCE VE KÜÇÜK PARÇALARIN TAŞLANMASINA İMKAN SAĞLAR.

Detaylar — BİRİM mm

Ür. Kd.	Ölçüler	Tabla Ölçüleri				Kutup Hatvesi	Uzunluk	Ayak Ölçüleri						Yükseklik	Ağırlık (kg)	Sip. No.
		B	L1	L2	H1	P	L2	B	1	2	G	h1	h2	H2		
VLU-407BF	100X175	100	175	125	78	2 (1+1.5)	293	100	50	25	16	103	50	145	19	15229
VLU-510BF	125X250	125	250	200	78	2 (1+1.5)	368	100	50	25	16	103	50	145	27	15230
VLU-612BF	150X300	150	300	246	78	2 (1+1.5)	418	100	50	25	16	103	50	145	31	15231
VLU-614BF	150X350	150	350	296	78	2 (1+1.5)	468	100	50	25	16	103	50	145	37	15232
VLU-618BF	150X450	150	450	396	78	2 (1+1.5)	568	100	50	25	16	103	50	145	43	15233

MANYETİK SİNÜS TABLA İKİ YÖNLÜ



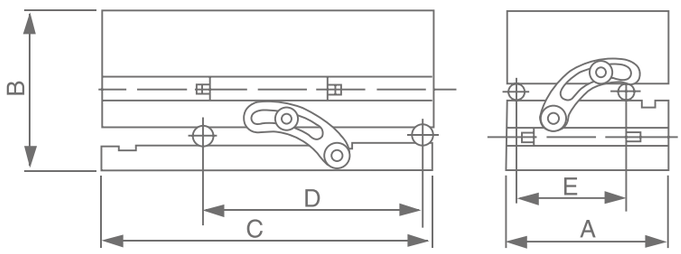


Detaylar — BİRİM mm

Ür. Kd.	A	B	C	D	E	P	Açı	Ağırlık (Kg)	Özellik	Sip. No.
V-612M	150	108	300	100	60	8(2+6)	0°~45°	27	İKİ YÖNLÜ	15234

AÇILI MANYETİK SİNÜS TABLA





ÖZELLİKLER

- ÇİFT YÖNLÜ SİNÜS TABLA, AYNI ANDA İKİ FARKLI AÇIDA TAŞLAMA YAPILABİLİR.
- SERTLEŞTİRİLMİŞ ÇELİK ALAŞIMDAN OLUŞUR
- KESİN AÇI ÖLÇÜ BLOĞUNDAN ELDE EDİLİR.
- HİÇ BİR SAPMA OLMADAN HERHANGİ BİR AÇIDA POZİTİF KİLİTLEME YAPILABİLİR.
- POZİTİF KİLİTLEME SİSTEMİ YÜZEYE MONTELİDİR.

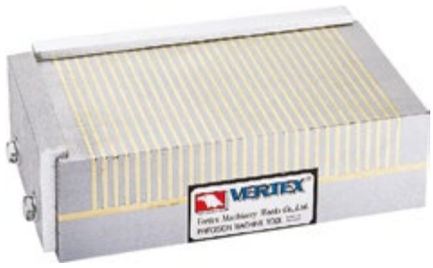
Detaylar — BİRİM mm

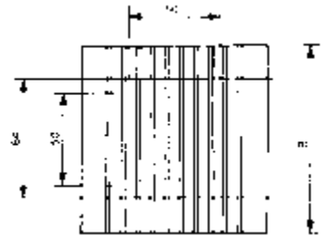
Ür. Kd.	A	B	C	D	E	P	Açı	Ağırlık (Kg)	Özellik	Sip. No.
V-612MS	150	142	300	200	100	1+3	0°~60°	34,7	AÇILI	15235

MANYETİK ÜRÜNLER

VERTEX TAYVAN

MİNİ TİP MANYETİK TABLA (SADECE KARBÜR MALZEMELER İÇİN)







ON/OF DÜĞMESİ

- BU MANYETİK TABLA ZAYIF MANYETİK MALZEMELER İÇİN DİZAYN EDİLMİŞTİR.
- GENİŞ MANYETİK BİR TABLA ÜZERİNE MONTE EDİLEBİLİR.
- SADECE KARBÜR MALZEMELERDE İŞLEM YAPMAK İÇİN KULLANILIR.

Ür. Kd.	Boyut	Tabla Ölçüsü			Kutup Hatvesi	Yükseklik	Test Bloğu	Ağırlık (kg)	Sip. No.
		B	L	Le	P	H			
VG-407H	100x180	100	180	152	5(2+3)	50	Ø 50x25t TEST BLOĞU(TUNGSTEN) 210N(21kgf)	7	15236
VG-410H	100x250	100	250	222	5(2+3)	50	Ø 50x25t TEST BLOĞU(TUNGSTEN) 210N(21kgf)	10	15237

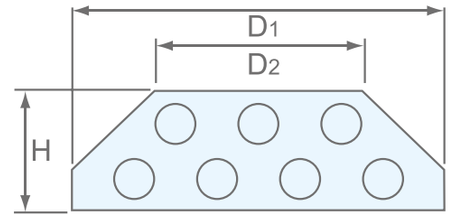
MANYETİK AYIRICI

VMS-9B



VMS-7B





- MANYETİK AYIRICI BAR ÜNİTESİ KUVVETLİ MIKNATISTAN İMAL EDİLMİŞTİR.
- TEMEL KULLANIM AMACI; KİMYA, PLASTİK VE ÇEŞİTLİ ALANLARDA TOZ VE KÜÇÜK TANELİ HAMMADDE İÇERİR.
- İÇİNDEKİ METAL ARTIKLARI AYIRMAK ÜRETİM VERİMLİLİĞİ SAĞLAMAKTADIR
- KOLAY MONTAJ SAYESİNDE BİRÇOK ALANDA KULLANILIR.
- SICAKLIK LİMİTİ 60°C

Detaylar — BİRİM mm

Ür. Kd.	D1	D2	H	Tüp Ölçüleri	Ağırlık kg	Sip. No.
VMS-7B	175	112	75	ø22,2x180	2.4	15238
VMS-9B	218	156	75	ø22,2x230	3.8	15239

MANYETİK AYIRICI

VCC-16



- TUTTUĞU PARÇALARIN DÜŞMESİ İÇİN TETİĞİ ÇEKİNİZ
- KALICI MIKNATIS
- DARBEYE DAYANIKLI PLASTİK MALZEME
- HAFİF VE KULLANIŞLI TASARIM
- EV, OFİS VE FABRİKA İÇİN KÜÇÜK DEMİR VEYA ÇELİK PARÇALARI TOPLAR

Detaylar — BİRİM mm

Ür. Kd.	Boy	En	Yükseklik	Ağırlık kg	Sip. No.
VCC-16	110	110	190	0,7	15240

MANYETİK TALAŞ TOPLAYICI

VCC-16



- DAR ALANDA MÜKEMMEL ÇALIŞMA
- ÇİVİ, CIVATA, KAĞIT KELEPÇESİ GİBİ DEMİR İÇEREN METAL ÜRÜNLER TOPLAR
- RAHAT KAVRAMA
- KULLANIMI KOLAY, GÜVENİLİR, PRATİK VE HIZLI
- KALICI MIKNATIS

*AYARLANABİLİR KOLLU

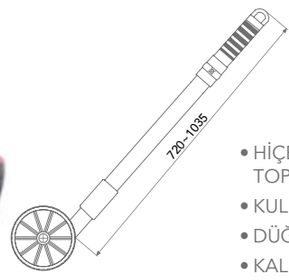
Detaylar — BİRİM mm

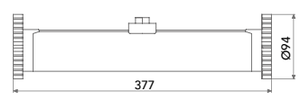
Ür. Kd.	Manyetik Ayak	Toplam Boy	Ağırlık (kg)	Sip. No.
VCC-17A	120 x 70 mm	700 mm	2	15241

TEKERLEKLİ MANYETİK TALAŞ TOPLAYICI









- HİÇBİR PROBLEM ÇIKARMADAN MANYETİK ATIKLARI TEKER TEKER TOPLAR
- KULLANIMI KOLAY, GÜVENİLİR, PRATİK VE HIZLI
- DÜĞMESİNE BASARAK MANYETİK KUVVETİ ÇALIŞTIRABİLİRSİNİZ
- KALICI MIKNATIS

Detaylar — BİRİM mm

Ür. Kd.	Toplam Boy	Toplam Genişlik	Ağırlık (kg)	Sip. No.
VCC-19	720 ~ 1035 mm	377 mm	1,5	15242

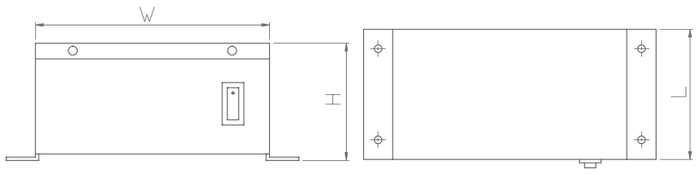
MANYETİK ALMA CİHAZLARI VE PROP

VERTEX TAYVAN

MANYETİK ALMA CİHAZI

VDM-8, 11





- GİRİŞ VOLTAJI 110-220 VAC'DİR
- AÇMA KAPAMA DÜĞMESİ MEVCUTTUR
- TAKIMLARIN,MATKAPLARIN KOLAYCA MANYETİĞİNİ ALIR

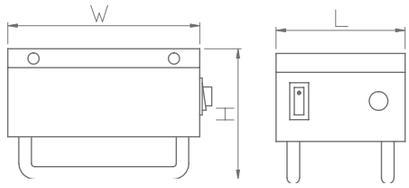
Detaylar — BİRİM mm

Ür. Kd.	Giriş Voltajı	Kapasite	Çalışma Yüzeyi	Yükseklik	Ağırlık (KG)	Çevrim Oranı	Sip. No.
VDM-8	AC-110V	210VA	160x110	100	4.5	50%	15243
VDM-11	AC-220V	550VA	200x280	130	16	100%	15244

MİNİ TİP MANYETİK ALMA CİHAZI

VDM-9









- PORTATİF KULLANIM

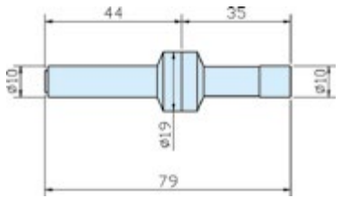
Detaylar — BİRİM mm

Ür. Kd.	Giriş Voltajı	Kapasite	Çalışma Yüzeyi	Yükseklik	Ağırlık (KG)	Çevrim Oranı	Sip. No.
VDM-9	AC- 110V / 220V	110VA	123X83	83	1.8	90%	15245

MEKANİK PROP

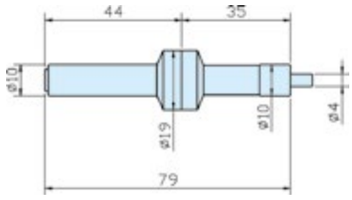


VPS-301 ÇELİK
VPS-301S PASLANMAZ



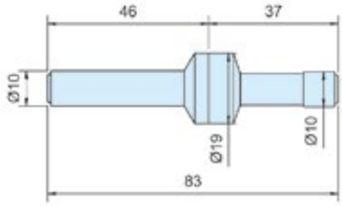


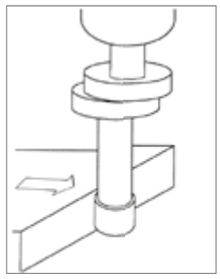
VPS-302 ÇELİK
VPS-302S PASLANMAZ



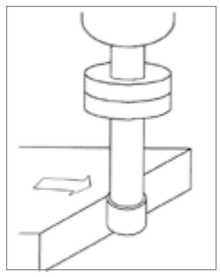


VPS-301C SERAMİK

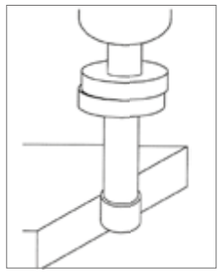




PROBU YAKLAŞIK 500 RPM'DE ÇALIŞTIRDIKTAN SONRA, İŞ PARÇASINI YAKLAŞTIRIN. PROP EŞ EKSENLİ OLANA KADAR İŞ PARÇASINI YAKLAŞTIRMAYA DEVAM EDİN.



PROP İŞ PARÇASINA DOKUNDUĞUNDA TEK BİR BÖLÜM İÇİNDE GÖRÜLÜR.



MALAFA VE PROP EŞEKSENLİ OLDUĞUNDA FENER MİLİ ÖLÇÜM YÜZEYİNDEN 5 mm MESAFEDEDİR.

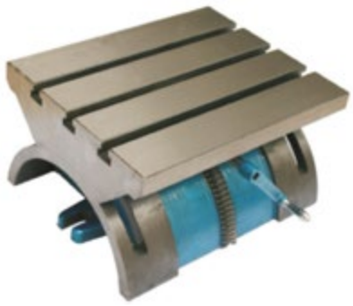
- TEKRARLAMA HASSASİYETİ 0,003 mm İÇERSİNDEDİR.
- R.P.M 450-600 ARASINDADIR.
- NET GÖRÜŞ İÇİN DİZAYN EDİLMİŞTİR.

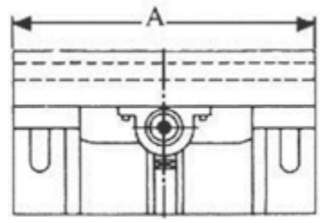
Detaylar — BİRİM mm

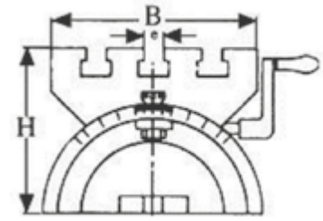
Ür. Kd.	Malzeme	Sertlik	Ağırlık (kg)	Sip. No.
VPS-301	ALAŞIMLI ÇELİK	HRC 56°	0.06	15246
VPS-302		HRC 56°	0.05	15247
VPS-301S	PASLANMAZ	HRC 60°	0.06	15248
VPS-302S		HRC 60°	0.06	15249
VPS-301C	SERAMİK	HRC 60°	0.06	15250

İŞ PARÇASI BAĞLAMA

AÇILI TABLA

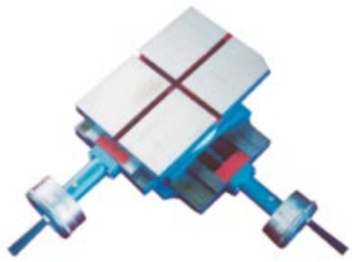






Ür. Kd.	Tabla			T Kanal	Çalışma Açısı	Ağırlık (Kg)	Sip. No.
	A (mm)	B (mm)	H (mm)	e (mm)			
C004-250	254	178	127	12,70	45°	29	15355

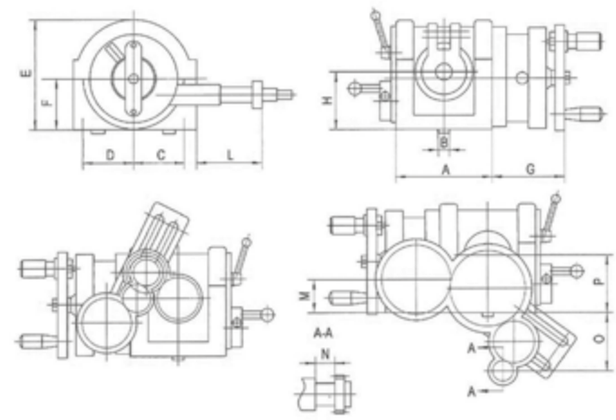
ÇAPRAZ SUPORT



Ür. Kd.	Tabla Ölçüsü (mm)	Yükseklik (mm)	Uzunluk (mm)	Kanal Ölçüsü (mm)	Çalışma Mesafesi (mm)	Hassasiyet (mm)	Ağırlık (Kg)	Sip. No.
C975-200X200	200x200	175	350	9,66	125	0,01	20	15356
C975-200X305	200x305	140	510	11,18	200	0,01	38	15357

ÜNİVERSAL KUYRUKLU DİVİZÖR



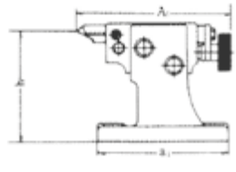


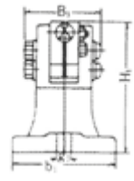
- AYNA FİYATA DAHİL DEĞİLDİR.
- SAĞ (R) KUYRUK, SOL (L) KUYRUK OLARAK TESLİM EDİLİR.
- FOTOĞRAF SAĞ (R) DİR.

Ür. Kd.	Ayna Çapı	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)	O (mm)	P (mm)	Ağırlık (Kg)	Sip. No.
C966-125L	Ø160	209	18	116	98	98	117	120	120	103	68,5	64,5	100	125	110	15358
C966-125R	Ø160	209	18	116	98	98	117	120	120	103	68,5	64,5	100	125	110	15359
C966-160L	Ø200	209	18	116	98	259	152	120	160	103	68,5	64,5	100	160	130	15360
C966-160R	Ø200	209	18	116	98	259	152	120	160	103	68,5	64,5	100	160	130	15361

KARŞI PUNTA







Ür. Kd.	A1 (mm)	B1 (mm)	H1 (mm)	h (mm)	a1 (mm)	b1 (mm)	g1 (mm)	Sip. No.
C963-BSOKP	167	80	107,5	100	130	92	13	15362
C963-BS1KP	191	88	137	128	150	108	16	15363
C963-BS2KP	250~255	86	139	132,7	175	124	16	15364

YATAY DİKEY SÜPER İNDEKS DİVİZÖR YEDEKLERİ

KARŞI PUNTA



DP TANBUR

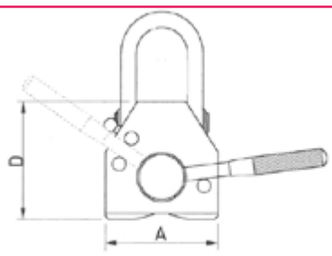


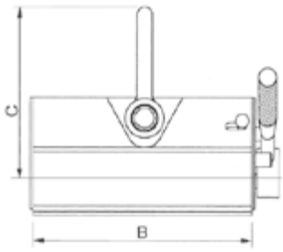
Ür. Kd.	Divizör Çapı	Açıklama	Sip. No.
CS-6-EDP-1	160	TANBUR	15365
CS-8-EDP-2	200	TANBUR	15366
CS-6-ETS-1	160	KARŞI PUNTA	15367
CS-8-ETS-2	200	KARŞI PUNTA	15368

KALDIRAÇLAR VE MANYETİK TABLALAR

MANYETİK KALDIRAÇ







Ür. Kd.	Kapasite (Kg)	A (mm)	B (mm)	C (mm)	D (mm)	Max. Çalışma Sıcaklığı (°C)	Emniyet Katsayısı	Ağırlık (Kg)	Sip. No.
C990-0300 OZ	300	92	163	180	93	<80	3:1	10	15374
C990-0600 OZ	600	120	216	220	116	<80	3:1	21	15375
C990-1000 OZ	1000	152	264	260	136	<80	3:1	35	15376
C990-2000 OZ	2000	172	395	375	168	<80	3:1	65	15377
C990-3000 OZ	3000	155	530	310	170	<80	3:1	100	15378

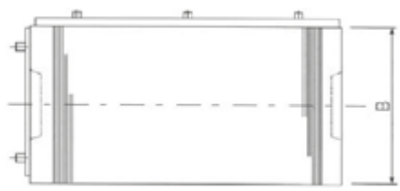
YUVARLAK MANYETİK TABLA

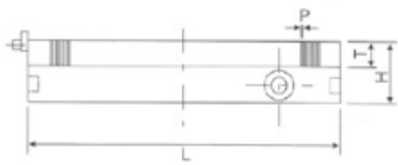


Ür. Kd.	Ölçü (mm)	Yükseklik (mm)	Tutma Kuvveti	Sip. No.
C009-160	160	70	12 Kg/cm²	15379
C009-200	200	75	12 Kg/cm²	15380
C009-250	250	80	12 Kg/cm²	15381

KUVVETLİ MANYETİK TABLA







Ür. Kd.	B (mm)	L (mm)	H (mm)	T (mm)	P (mm)	Tutma Kuvveti (N/cm²)	Net Ağırlık (Kg)	Sip. No.
C001-1530X41	150	300	48	20	0.5+1.5	>120	16,8	15382
C001-2040X41	200	400	53	22	0.5+1.5	>120	31,8	15383
C001-2050X41	200	500	53	22	0.5+1.5	>120	41,6	15384
C001-2060X41	200	600	53	22	0.5+1.5	>120	50	15385
C001-2550X41	250	500	58	23	0.5+1.5	>120	53,5	15386
C001-3050X41	300	500	58	23	0.5+1.5	>120	68,5	15387
C001-3060X41	300	600	58	23	0.5+1.5	>120	77	15388
C001-3080X41	300	800	58	23	0.5+1.5	>120	109	15389

ELEKTROMANYETİK TABLA



ÖZELLİKLER

- KONTROL ÜNİTESİ FİYATA DAHİLDİR
- MANYETİK TABLALAR KONTROL ÜNİTESİZ KESİNLİKLE ÇALIŞTIRILMAZ
- ÇOK KUVVETLİ TUTUCU MANYETİK TABLA, FREZELEME VE TAŞLAMA İŞLEMLERİNDE İŞ PARÇASI İŞLEMEK İÇİN KULLANILIR AÇIK POZİSYONDA GÜÇ KESİLSE BİLE UZUN SÜRE MANYETİK ÖZELLİĞİNİ KORUYARAK ÇALIŞMAYA DEVAM EDER
- EN GÜÇLÜ MAKİNA TAKIMLARI İÇİN BİLE UYGUNDUR
- İŞ PARÇASINI TUTARKEN DIŞ GÜÇ KAYNAKLARINDAN TAMAMEN BAĞIMSIZDIR. ELEKTRİK KESİNTİLERİNDE TAMAMEN GÜVENLİDİR HASSASİYETİ SICAKLIKTAN ASLA ETKİLENMEZ
- İŞ PARÇASININ BAĞLANMASI ÇOK KOLAY VE UYGUNDUR, KISA SÜREDE BAĞLANIR ORTA BÜYÜK VE SERT PARÇALARDA BİLE AĞIR İŞLEMEYE UYGUNDUR

ABLA İÇİN ÜZERİNDE YAPILAN İŞLEME GÖRE UYGUN BLOKLAR İSTEĞE GÖRE TEMİN EDİLİR

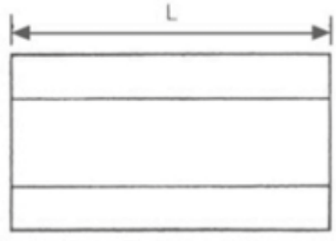
Ür. Kd.	Uzunluk (mm)	Genişlik (mm)	Yükseklik (mm)	Kutup Sayısı	Ağırlık (Kg)	Sip. No.
C001-329392	329	392	68	16	65	15390
C001-491392	491	392	68	24	95	15391
C001-609392	609	392	68	32	125	15392
C001-771392	771	392	68	40	155	15393
C001-771480	771	480	68	50	190	15394
C001-933304	933	304	68	36	140	15395

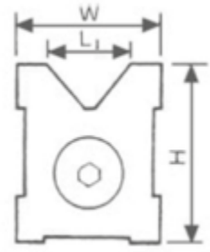
V-YATAKLAR, GÖNYE PLEYTİ VE MANYETİK ALMA CİHAZI

PLD ÇİN

MANYETİK V-YATAK TEK ÖLÇÜM İÇİN

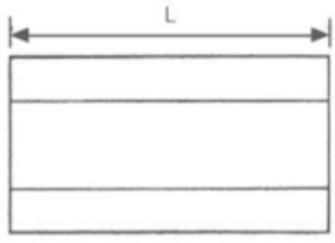


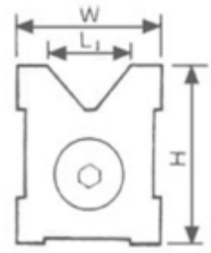




MANYETİK V-YATAK ÇİFT ÖLÇÜM İÇİN







Ür. Kd.	H (mm)	W (mm)	L (mm)	L1 (mm)	Ağırlık (Kg)	Sip. No.
C899-50	50	40	70	30	1x2	15398
C899-80	80	50	100	60	3x2	15399

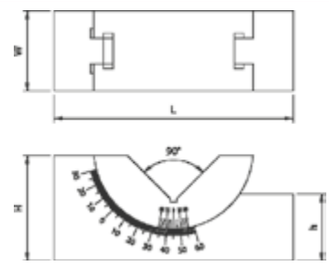
PARALEL V-YATAK İŞLEME İÇİN (ÇİFT)



Ür. Kd.	Genişlik (mm)	Yükseklik (mm)	Uzunluk (mm)	Ağırlık (Kg)	Sip. No.
C902-44	44	41	35	1,2	15400
C902-70	70	44	41	1,9	15401

AYARLANABİLİR V YATAK

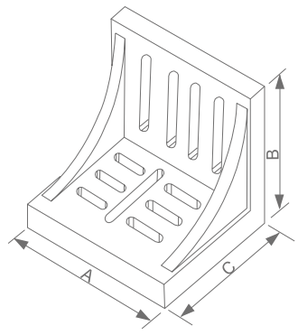




Ür. Kd.	H (mm)	W (mm)	L (mm)	h (mm)	Ağırlık (Kg)	Sip. No.
C005-30	48	30	102	28	0,9	15402

GÖNYE PLEYTİ





Ür. Kd.	A (mm)	B (mm)	C (mm)	Ağırlık (Kg)	Sip. No.
C012-250	250	200	150	12	15403
C012-300	300	230	200	23	15404

MANYETİK ALMA CİHAZI



Ür. Kd.	EN (mm)	Boy (mm)	Yükseklik (mm)	Giriş Voltajı	Sip. No.
C010-000	120	165	90	220V	15405

MENGENELER

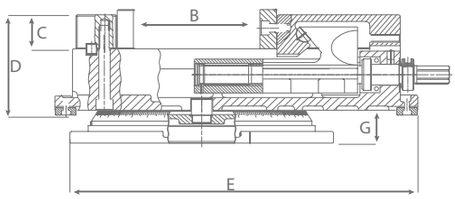
FREZE MENGENESİ

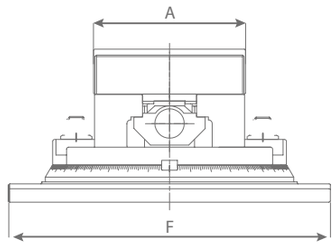


Ür. Kd.	Çene Genişliği (mm)	Çene Yüksekliği (mm)	Max.Açılma (mm)	Ağırlık (Kg)	Sip. No.
C906-136	136	36	170	15	15406
C906-160	160	51	180	22	15407
C906-200	200	64	220	36	15408
C906-250	250	64	280	53	15409
C906-320	320	81	360	77	15410

HASSAS FREZE MENGENESİ (SÜPER OPEN)







NOT : 160 mm ALT TABLASIZ OLARAK TESLİM EDİLİR.
200 mm ALT TABLALI OLARAK TESLİM EDİLİR.

Ür. Kd.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Ağırlık (Kg)	Sip. No.
C965-160A	161	160	48	112,5	425	300	41,5	45	15411
C965-160	161	190	48	112,5	425	300	41,5	40	15412
C965-200	200	218	62	140	550	336	44,5	85	15413
C965-160T				160 mm MENGENE TABLASI					15414

3 AÇILI MENGENE



TEKNİK ÖZELLİKLER

- MENGENE 3 DOĞRULTUDA AYARLANABİLİR. TABLA 360° DÖNEBİLİR YATAY-DİKEY YÖNDE 90° HAREKET EDEBİLİR.
- AYRICA SAĞA SOLA HER İKİ YÖNE 45° AYARLANABİLİR
- HER YÖN HAREKETİNDE İŞ PARÇASI SAĞLAM BİÇİMDE TUTULUR.
- BÖLGESEL OLARAK VİDANIN KAPANAN KISMI ÖZEL BİR MALZEMEDEN ÜRETİLMİŞ YATAK VASITASIYLA GÜÇLENDİRİLMİŞTİR.

Ür. Kd.	Çene Genişliği (mm)	Çene Yüksekliği (mm)	Max.Açılma (mm)	Ağırlık (Kg)	Sip. No.
C007-105	105	40	110	31	15415
C007-125	125	40	125	35	15416
C007-135	135	45	145	40	15417

2 AÇILI MENGENE



TEKNİK ÖZELLİKLER

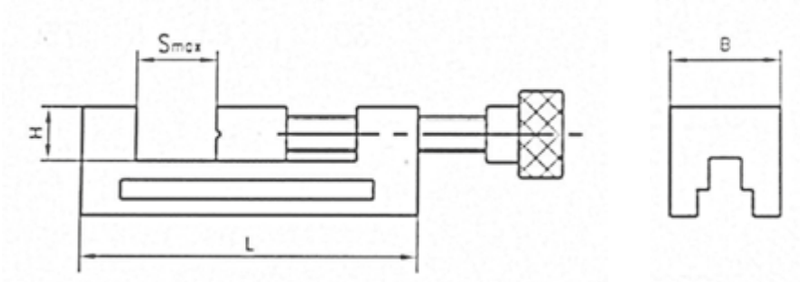
- AĞIR DÖKME DEMİR GÖVDE
- HER İKİ DOĞRULTUDA ÖLÇEK
- Z DOĞRULTUSUNDA 360°'LİK TABLA
- DİKEY VE YATAY 90°'LİK HAREKET

Ür. Kd.	Çene Genişliği (mm)	Çene Yüksekliği (mm)	Max.Açılma (mm)	Ağırlık (Kg)	Sip. No.
C904-125	125	46	140	31	15418
C904-160	160	50	125	35	15419

MENGENELER

VİDALI HASSAS MENGENE



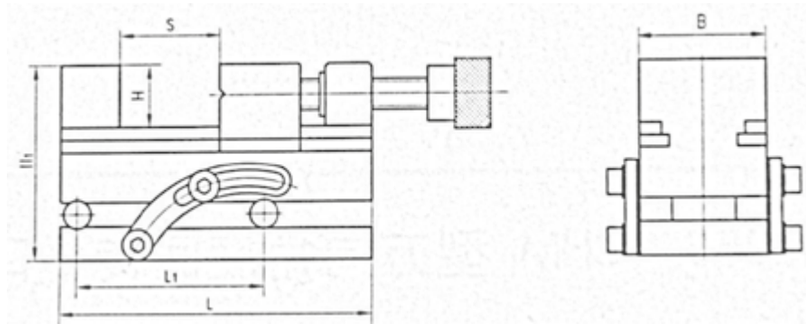


TEKNİK ÖZELLİKLER
- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,005 mm / 100 mm
- ÇALIŞMA YÜZEYLERİ HRC58-62 SERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- HASSAS ÖLÇÜMLERDE, KALİTE KONTROLDE, TAŞLAMA VE ELEKTRO EREZYON TEZGAHLARINDA KULLANILIR.

Ür. Kd.	B (mm)	H (mm)	Smax. (mm)	L (mm)	Ağırlık (Kg)	Sip. No.
C905-QGG050	50	25	65	155	3	15420
C905-QGG073	73	35	100	210	5	15421
C905-QGG100	100	45	125	260	13	15422
C905-QGG125	125	50	160	300	19,5	15423

AÇILI-VİDALI HASSAS MENGENE



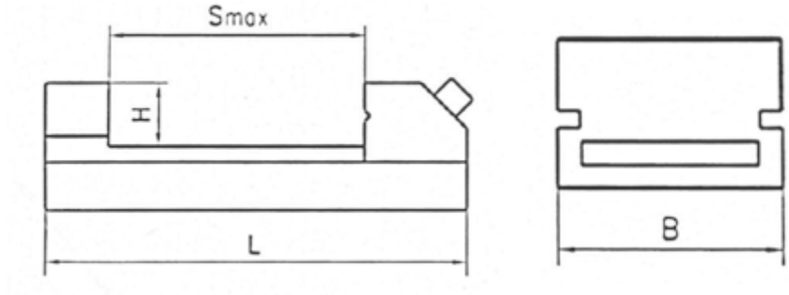


TEKNİK ÖZELLİKLER
- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,005 mm / 100 mm
- ÇALIŞMA YÜZEYLERİ HRC58-62 SERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- AÇI KONTROLÜ VE AÇILI İŞLEMLERDE KULLANILIR.

Ür. Kd.	B (mm)	H (mm)	H1 (mm)	Smax. (mm)	L (mm)	L1 (mm)	Çalışma Açısı	Sip. No.
C905-QGJ050	50	25	87	60	140	100	0~45°	15424
C905-QGJ073	73	35	111	90	190	100	0~45°	15425
C905-QGJ100	100	45	139	125	245	100	0~45°	15426
C905-QGJ125	125	50	154	160	285	200	0~45°	15427

PİMLİ HASSAS MENGENE





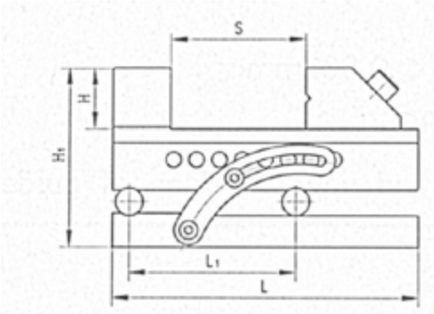
TEKNİK ÖZELLİKLER
- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,005 mm / 100 mm
- ÇALIŞMA YÜZEYLERİ HRC58-62 SERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- HASSAS ÖLÇÜMLERDE, KALİTE KONTROLDE, TAŞLAMA VE ELEKTRO EREZYON TEZGAHLARINDA KULLANILIR.

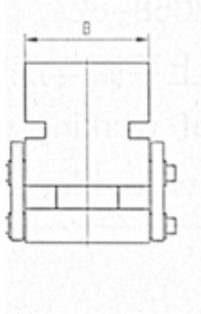
Ür. Kd.	B (mm)	H (mm)	Smax. (mm)	L (mm)	Ağırlık (Kg)	Sip. No.
C905-QKG050	50	25	65	140	3	15428
C905-QKG073	73	35	100	190	4,1	15429
C905-QKG100	100	45	125	245	10	15430
C905-QKG125	125	50	160	285	18	15431

MENGENELER

AÇILI-PİMLİ HASSAS MENGENE







TEKNİK ÖZELLİKLER

- YÜKSEK KALİTELİ ALAŞIMLI ÇELİKTEN ÜRETİLMİŞTİR.
- PARALELLİK TOLERANSI 0,005 mm / 100 mm
- ÇALIŞMA YÜZEYLERİ HRC58-62 SERTLEŞTİRİLİP HASSAS TAŞLANMIŞTIR.
- AÇI KONTROLÜ VE AÇILI İŞLEMLERDE KULLANILIR.

Ür. Kd.	B (mm)	H (mm)	H1 (mm)	Smax. (mm)	L (mm)	L1 (mm)	Çalışma Açısı	Sip. No.
C905-QKJ050	50	25	80	65	140	100	0~45°	15432
C905-QKJ073	73	35	104	100	190	100	0~45°	15433
C905-QKJ100	100	45	134	125	245	100	0~45°	15434
C905-QKJ125	125	50	144	160	285	200	0~45°	15435

CNC FREZE MENGENESİ

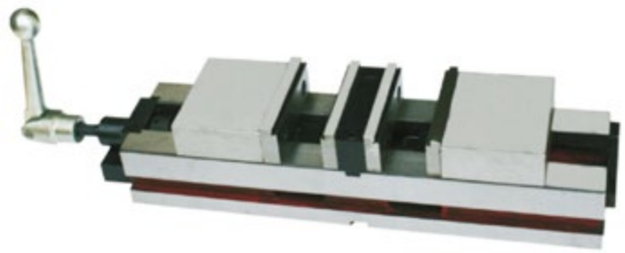


TEKNİK ÖZELLİKLER

- CNC TEZGAHLARLA TAŞLAMA VE FREZELEME İŞLEMLERİNDE KULLANILIR.
- PARALELLİK TOLERANSI 0,025 mm/100 mm
- AÇILI KİLİTLEME SAYESİNDE İŞ PARÇASI SIKMA ESNASINDA YUKARI KAYMAZ

Ür. Kd.	Çene Genişliği (mm)	Çene Yüksekliği (mm)	Max.Açılma (mm)	Ağırlık (Kg)	Sip. No.
C964-100	100	34	100	10	15436
C964-150	150	45	150	26	15437

ÇİFT ÇENELİ MENGENE



TEKNİK ÖZELLİKLER

- SFERO DÖKÜM DEMİRİNDEN ÜRETİLMİŞTİR.
- ÇALIŞMA YÜZEYLERİ HRC 50-60 SERTLEŞTİRİLMİŞTİR.
- AÇILI KİLİTLEME SAYESİNDE İŞ PARÇASI SIKMA ESNASINDA YUKARI KAYMAZ.
- PARALELLİK TOLERANSI 0,025 mm / 100 mm
- İKİ İŞ PARÇASI AYNI ANDA SIKILABİLİR.
- TEK TEK YA DA YANYANA BİRKAÇ MENGENE OLARAK KULLANILABİLİR

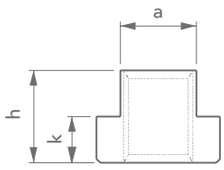
Ür. Kd.	Çene Genişliği (mm)	Çene Yüksekliği (mm)	Max.Açılma (mm)	Tam Boy (mm)	Ağırlık (Kg)	Sip. No.
C980-100	100	35	76	390	22	15438
C980-160	160	50	100	510	43	15439

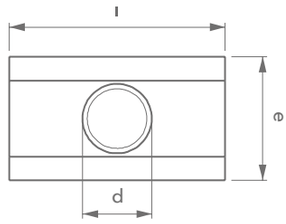
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

UZUN "T" PABUÇ



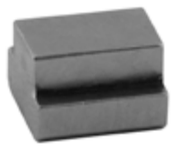


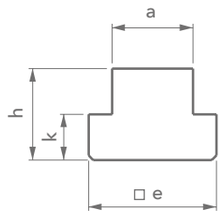


- T-Pabucun mukavemeti için dişli kısmının tümüne vidalama yapılması gerekir
- Sertleştirilmiş
- Siyah kaplama
- Kalite 10

Sip. No.	dx (a)	a	e	l	h	k	Ağırlık g
1710-0608	M6x8	7.7	13	26	10	6	14
1710-0810	M8x10	9.7	15	30	12	6	25
1710-1012	M10x12	11.7	18	36	14	7	49
1710-1214	M12x14	13.7	22	44	16	8	82
1710-1416	M14x16	15.7	25	50	18	9	120
1710-1618	M16x18	17.7	28	56	20	10	165
1710-1820	M18x20	19.7	32	64	24	12	260
1710-2022	M20x22	21.7	35	70	28	14	365
1710-2224	M22x24	23.7	40	80	32	16	535
1710-2428	M24x28	27.7	44	88	36	18	745
1710-3036	M30x36	35.6	54	108	44	22	1390

DELİKSİZ "T" PABUÇ



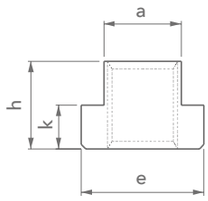


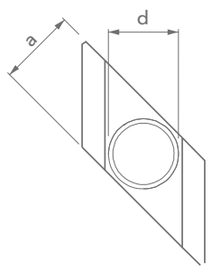
- Istege göre delik delme dis çekme uygulanabilir

Sip. No.	dx (a)	a	e	h	k	Ağırlık g
1730-06	6	5.7	10	8	4	4
1730-08	8	7.7	13	10	6	10
1730-10	10	9.7	15	12	6	16
1730-12	12	11.7	18	14	7	27
1730-14	14	13.7	22	16	8	50
1730-16	16	15.7	25	18	9	70
1730-18	18	17.7	28	20	10	95
1730-20	20	19.7	32	24	12	150
1730-22	22	21.7	35	28	14	210
1730-24	24	23.7	40	32	16	310
1730-28	28	27.7	44	36	18	430
1730-36	36	35.6	54	44	22	800
1730-42	42	41.6	65	52	26	1400

DERECELİ "T" PABUÇ





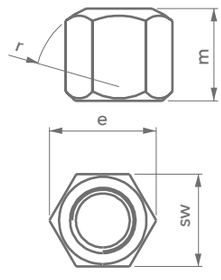


- T-Kanal pleytlerde üstten T-Kanala girip bağlama özelliği vardır
- Sertleştirilmiş
- Siyah kaplama
- Kalite 10

Sip. No.	dx (a)	a	e	h	k	Ağırlık g
1770-0810	M8x10	9.7	15	12	6	10
1770-1012	M10x12	11.7	18	14	7	15
1770-1014 1770-1214	M10x14* M12x14	13.7	22	16	8	30 25
1770-1416	M14x16	15.7	25	18	9	40
1770-1018 1770-1618	M10x18* M16x18	17.7	28	20	10	70 60
1770-1620 1770-1820	M16x20* M18x20	19.7	32	24	12	95 90
1770-1622 1770-2022	M16x22* M20x22	21.7	35	28	14	135 125
1770-1628 1770-2028 1770-2428	M16x28* M20x28* M24x28	27.7	44	36	18	330 295 265

TAKVİYELİ SOMUN





- Düz yüzey DIN 6340 pul ile kullanılır
- Radüslü yüzey DIN 6319D ve DIN 6319G pullar ile kullanılır
- Sertleştirilmiş
- Kalite 10
- Siyah kaplama

Sip. No.		sw	e	m	r	Ağırlık g
1790-06	M6	10	11.5	9	9	5
1790-08	M8	13	15	12	12	9
1790-10	M10	17	19.6	15	15	20
1790-12	M12	19	21.9	18	17	25
1790-14	M14	22	25.4	21	20	40
1790-16	M16	24	27.7	24	22	55
1790-18	M18	27	31.2	27	24	80
1790-20	M20	30	34.6	30	27	110
1790-22	M22	32	36.9	33	30	130
1790-24	M24	36	41.5	36	32	190
1790-30	M30	46	53.1	45	41	400
1790-36	M36	55	63.5	54	50	680
1790-42	M42	65	75	63	58	1150

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

"T" PABUÇ

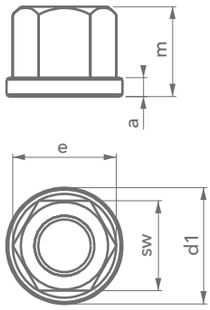


- T-Kanal pleytlerde üstten T-Kanala girip bağlama özelliği vardır
- Sertleştirilmiş
- Siyah kaplama
- Kalite 10

Sip. No.	dx	a	e	h	k	Ağırlık g
1750-0608	M6x8	7.7	13	10	6	9
1750-0810	M8x10	9.7	15	12	6	12
1750-0812	M8x12*	11.7	18	14	7	22
1750-1012	M10x12					20
1750-0814	M8x14*	13.7	22	16	8	40
1750-1014	M10x14*					37
1750-1214	M12x14					35
1750-0816	M8x16*	15.7	25	18	9	60
1750-1016	M10x16*					50
1750-1216	M12x16*					50
1750-1416	M14x16					45
1750-0818	M8x18*	17.7	28	20	10	90
1750-1018	M10x18*					87
1750-1218	M12x18*					80
1750-1418	M14x18*					75
1750-1618	M16x18					65
1750-1620	M16x20*	19.7	32	24	12	110
1750-1820	M18x20					105
1750-1622	M16x22*	21.7	35	28	14	175
1750-1822	M18x22*					160
1750-2022	M20x22					155
1750-1624	M16x24*	23.7	40	32	16	260
1750-2024	M20x24*					230
1750-2224	M22x24					220
1750-1628	M16x28*	27.7	44	36	18	380
1750-2028	M20x28*					350
1750-2228	M22x28*					340
1750-2428	M24x28					320
1750-2436	M24x36*	35.6	54	44	22	700
1750-3036	M30x36					600

PULLU SOMUN



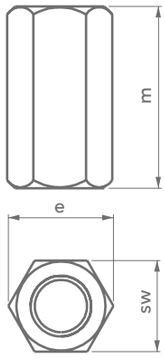


- Sertleştirilmiş
- Siyah kaplama
- Kalite 10

Sip. No.		sw	e	m	r	d1	Ağırlık g
1810-08	M8	13	14.7	12	3.5	18	12
1810-10	M10	17	19.2	15	4	22	25
1810-12	M12	19	21.5	18	4	25	30
1810-14	M14	22	24.9	21	4.5	28	50
1810-16	M16	24	27.2	24	5	31	65
1810-18	M18	27	30.6	27	5	34	90
1810-20	M20	30	34	30	6	37	130
1810-22	M22	32	36.3	33	6	40	155
1810-24	M24	36	40.8	36	6	45	220
1810-30	M30	46	52.3	45	8	58	465
1810-36	M36	55	62	54	10	68	500
1810-42	M42	65	75	63	12	80	1340

UZATMA SOMUN





- Sertleştirilmiş
- Siyah kaplama
- Kalite 10

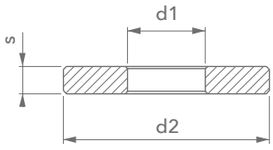
Sip. No.		sw	e	m	Ağırlık g
1830-06	M6	10	11.7	18	8
1830-08	M8	13	15	24	19
1830-10	M10	17	19.6	30	40
1830-12	M12	19	21.6	36	55
1830-14	M14	22	25.4	42	90
1830-16	M16	24	27.7	48	115
1830-18	M18	27	31.2	54	165
1830-20	M20	30	34.6	60	230
1830-22	M22	32	36.9	66	245
1830-24	M24	36	41.5	72	400
1830-30	M30	46	53.1	90	840
1830-36	M36	55	63.5	108	1430
1830-42	M42	65	75	126	2330

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

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PUL





- Sertleştirilmiş
- Siyah kaplama

Sip. No.	metrik	whitworth	d1	d2	S	Ağırlık g
1870-06	M6	1/4	6.4	17	3	6
1870-08	M8	5/16	8.4	23	4	10
1870-10	M10	3/8	10.5	28	4	16
1870-12	M12	1/2	13	35	5	30
1870-14	M14	-	15	40	5	40
1870-16	M16	5/8	17	45	6	60
1870-18	M18	-	19	45	6	60
1870-20	M20	3/4	21	50	6	70
1870-22	M22	7/8	23	50	8	90
1870-24	M24	7/8	25	60	8	140
1870-30	M30	11/8	31	68	10	215
1870-36	M36	11/4	38	80	12	360
1870-42	M42	11/2	44	98	15	640

"T" KANAL TEMİZLEYİCİSİ





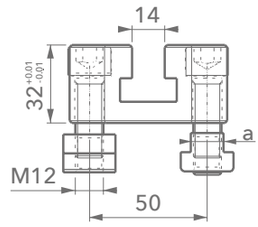
- T-Kanalları temizlemek için kullanılır

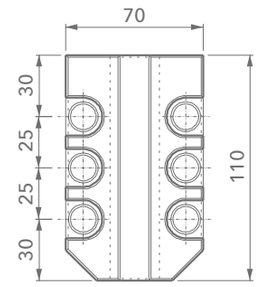
Sip. No.	a	Ağırlık g
1950-1214	12-14	25
1950-1618	16-18	45
1950-2022	20-22	45
1950-2428	24-28	70

MODÜLER "T" BLOK



Sip. No.	a	Ağırlık g
1960-110	14-16-18-20	1200





KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

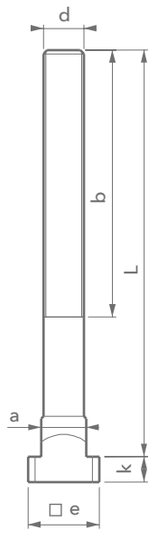
SOMUNLU PULLU T-AYAKLI SAPLAMA

Sip. No.	dx	a	xL	b	a	e	k	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1610-0606025	M6x6		x25	15	5.7	10	4	17	17	19
1610-0606040			x40	28						25
1610-0606063			x63	40						36
1610-0808032	M8x8		x32	22	7.7	12	6	43	32	39
1610-0808050			x50	35						45
1610-0808080			x80	50						56
1610-1010040	M10x10		x40	23	9.7	15	6	79	51	65
1610-1010063			x63	45						80
1610-1010080			x80	50						90
1610-1010100			x100	60						110
1610-1012050	M10x12		x50	35	11.7	18	7	79	51	85
1610-1012063			x63	40						95
1610-1012080			x80	55						100
1610-1012100			x100	60						110
1610-1012125			x125	75						125
1610-1012160			x160	90						140
1610-1012200			x200	120						160
1610-1212050	M12x12		x50	35	11.7	18	7	141	74	120
1610-1212063			x63	40						128
1610-1212080			x80	55						140
1610-1212100			x100	65						160
1610-1212125			x125	75						170
1610-1212160			x160	100						195
1610-1212200			x200	120						220
1610-1214050	M12x14		x50	35	13.7	22	8	141	74	140
1610-1214063			x63	45						150
1610-1214080			x80	55						155
1610-1214100			x100	65						175
1610-1214125			x125	75						195
1610-1214160			x160	100						220
1610-1214200			x200	120						240
1610-1416063	M14x16		x63	45	15.7	25	9	223	101	200
1610-1416080			x80	55						230
1610-1416100			x100	65						245
1610-1416125			x125	75						270
1610-1416160			x160	100						310
1610-1416200			x200	120						340
1610-1416250			x250	150						390
1610-1616063	M16x16		x63	45	15.7	25	9	354	138	260
1610-1616080			x80	55						285
1610-1616100			x100	65						310
1610-1616125			x125	85						345
1610-1616160			x160	100						385
1610-1616200			x200	120						435
1610-1616250			x250	150						505
1610-1618063	M16x18		x63	45	17.7	28	10	354	138	290
1610-1618080			x80	55						305
1610-1618100			x100	65						340
1610-1618125			x125	85						370
1610-1618160			x160	100						415
1610-1618200			x200	120						460
1610-1618250			x250	150						525
1610-1820080	M18x20		x80	55	19.7	32	12	474	169	405
1610-1820100			x100	65						435
1610-1820125			x125	85						480
1610-1820160			x160	110						535
1610-1820200			x200	125						610
1610-1820250			x250	150						680
1610-1820315			x315	190						790
1610-2020080	M20x20		x80	55	19.7	32	12	679	215	480
1610-2020100			x100	65						515
1610-2020125			x125	85						570
1610-2020160			x160	110						635
1610-2020200			x200	125						725
1610-2020250			x250	160						820
1610-2020315			x315	190						950
1610-2022080	M20x22		x80	55	21.7	35	14	679	215	530
1610-2022100			x100	65						565
1610-2022125			x125	85						620
1610-2022160			x160	110						690
1610-2022200			x200	125						775
1610-2022250			x250	150						880
1610-2022315			x315	190						1050

Sip. No.	dx	a	xL	b	a	e	k	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1610-2224080	M22x24		x80	55	23.7	40	16	903	266	700
1610-2224100			x100	65						740
1610-2224125			x125	85						805
1610-2224160			x160	110						890
1610-2224200			x200	125						1000
1610-2224250			x250	150						1115
1610-2224315			x315	190						1280
1610-2424100	M24x24		x100	70	23.7	40	16	1163	310	885
1610-2424125			x125	85						970
1610-2424160			x160	110						1060
1610-2424200			x200	125						1180
1610-2424250			x250	150						1320
1610-2424315			x315	190						1515
1610-2424400			x400	240						1750
1610-2428100	M24x28		x100	70	27.7	44	18	1163	310	1000
1610-2428125			x125	85						1065
1610-2428160			x160	110						1150
1610-2428200			x200	125						1280
1610-2428250			x250	150						1425
1610-2428315			x315	190						1640
1610-2428400			x400	240						1870
1610-2428500			x500	290						2170
1610-3036125	M30x36		x125	80	35.6	54	22	2258	493	1900
1610-3036160			x160	110						2065
1610-3036200			x200	135						2250
1610-3036250			x250	150						2500
1610-3036315			x315	200						2770
1610-3036500			x500	300						3630
1610-3642160	M36x42		x160	100	41.6	65	26	3953	719	3310
1610-3642250			x250	175						3930
1610-3642400			x400	250						5010
1610-3642600			x600	340						6900
1610-4248160	M42x48		x160	100	47.6	75	30	6337	986	4600
1610-4248250			x250	175						5600
1610-4248400			x400	250						7200

- Kalite 12.9
- Siyah kaplama

Not: 150 °C üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.





KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

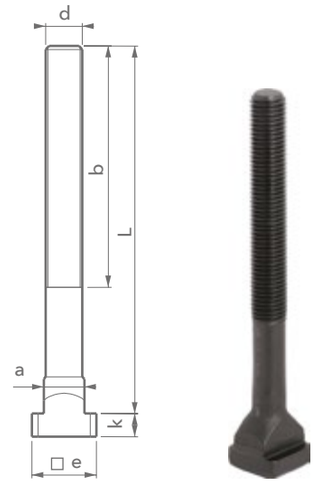
"T" AYAKLI SAPLAMA

Sip. No.	dx	a	xL	b	a	e	k	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1590-0606025	M6x6		x25	15	5.7	10	4	17	17	8
1590-0606040			x40	28						11
1590-0606063			x63	40						15
1590-0808032	M8x8		x32	22	7.7	12	6	43	32	13
1590-0808050			x50	35						16
1590-0808080			x80	50						20
1590-1010040	M10x10		x40	23	9.7	15	6	79	51	35
1590-1010063			x63	45						45
1590-1010080			x80	50						60
1590-1010100			x100	60						70
1590-1012050	M10x12		x50	35	11.7	18	7	79	51	50
1590-1012063			x63	40						60
1590-1012080			x80	55						65
1590-1012100			x100	60						75
1590-1012125			x125	75						90
1590-1012160			x160	90						105
1590-1012200			x200	120						120
1590-1212050	M12x12		x50	35	11.7	18	7	141	74	65
1590-1212063			x63	40						70
1590-1212080			x80	55						80
1590-1212100			x100	65						100
1590-1212125			x125	75						110
1590-1212160			x160	100						140
1590-1212200			x200	120						160
1590-1214050	M12x14		x50	35	13.7	22	8	141	74	80
1590-1214063			x63	45						90
1590-1214080			x80	55						100
1590-1214100			x100	65						110
1590-1214125			x125	75						135
1590-1214160			x160	100						160
1590-1214200			x200	120						180
1590-1416063	M14x16		x63	45	15.7	25	9	223	101	115
1590-1416080			x80	55						140
1590-1416100			x100	65						160
1590-1416125			x125	75						180
1590-1416160			x160	100						220
1590-1416200			x200	120						255
1590-1416250			x250	150						300
1590-1616063	M16x16		x63	45	15.7	25	9	354	138	140
1590-1616080			x80	55						160
1590-1616100			x100	65						190
1590-1616125			x125	85						225
1590-1616160			x160	100						270
1590-1616200			x200	120						315
1590-1616250			x250	150						380
1590-1618063	M16x18		x63	45	17.7	28	10	354	138	170
1590-1618080			x80	55						185
1590-1618100			x100	65						220
1590-1618125			x125	85						245
1590-1618160			x160	100						295
1590-1618200			x200	120						340
1590-1618250			x250	150						405
1590-1820080	M18x20		x80	55	19.7	32	12	474	169	260
1590-1820100			x100	65						290
1590-1820125			x125	85						340
1590-1820160			x160	110						390
1590-1820200			x200	125						455
1590-1820250			x250	150						535
1590-1820315			x315	190						650
1590-2020080	M20x20		x80	55	19.7	32	12	679	215	300
1590-2020100			x100	65						330
1590-2020125			x125	85						380
1590-2020160			x160	110						450
1590-2020200			x200	125						535
1590-2020250			x250	160						635
1590-2020315			x315	190						760
1590-2022080	M20x22		x80	55	21.7	35	14	679	215	345
1590-2022100			x100	65						380
1590-2022125			x125	85						435
1590-2022160			x160	110						500
1590-2022200			x200	125						590
1590-2022250			x250	150						695
1590-2022315			x315	190						820

Sip. No.	dx	a	xL	b	a	e	k	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1590-2224080	M22x24		x80	55	23.7	40	16	903	266	465
1590-2224100			x100	65						515
1590-2224125			x125	85						580
1590-2224160			x160	110						660
1590-2224200			x200	125						775
1590-2224250			x250	150						805
1590-2224315			x315	190						1050
1590-2424100	M24x24		x100	70	23.7	40	16	1163	310	550
1590-2424125			x125	85						630
1590-2424160			x160	110						725
1590-2424200			x200	125						850
1590-2424250			x250	150						990
1590-2424315			x315	190						1180
1590-2424400			x400	240						1410
1590-2428100	M24x28		x100	70	27.7	44	18	1163	310	660
1590-2428125			x125	85						730
1590-2428160			x160	110						820
1590-2428200			x200	125						950
1590-2428250			x250	150						1090
1590-2428315			x315	190						1300
1590-2428400			x400	240						1530
1590-2428500			x500	290						1800
1590-3036125	M30x36		x125	80	35.6	54	22	2258	493	1280
1590-3036160			x160	110						1440
1590-3036200			x200	135						1620
1590-3036250			x250	150						1880
1590-3036315			x315	200						2150
1590-3036500			x500	300						3010
1590-3642160	M36x42		x160	100	41.6	65	26	3953	719	2260
1590-3642250			x250	175						2890
1590-3642400			x400	250						4010
1590-3642600			x600	340						5900
1590-4248160	M42x48		x160	100	47.6	75	30	6337	986	3550
1590-4248250			x250	175						4530
1590-4248400			x400	250						6160

- Kalite 12.9
- Siyah kaplama

Not: 150 °c üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.



KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

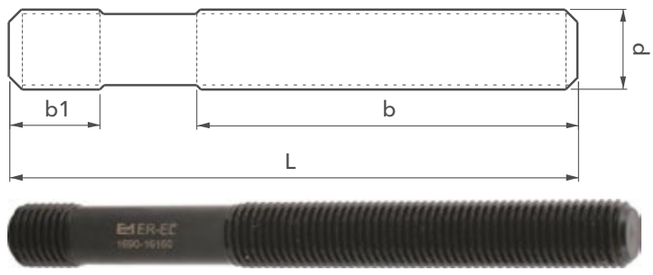
DÜZ SAPLAMA

Sip. No.	d	x L	b1	b	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1690-08040	M8	x40	11	20	36	27	10
1690-08063		x63		40			15
1690-08080		x80		50			20
1690-08100		x100		63			30
1690-08125		x125		75			35
1690-08160		x160		100			45
1690-10050	M10	x50	13	25	67	43	20
1690-10063		x63		32			25
1690-10080		x80		50			35
1690-10100		x100		63			45
1690-10125		x125		75			55
1690-10160		x160		100			70
1690-10200		x200		125			95
1690-12050	M12	x50	15	25	120	63	35
1690-12063		x63		32			40
1690-12080		x80		50			55
1690-12100		x100		63			70
1690-12125		x125		75			90
1690-12160		x160		100			115
1690-12200		x200		125			140
1690-14063	M14	x63	17	32	191	86	60
1690-14080		x80		50			75
1690-14100		x100		63			95
1690-14125		x125		75			120
1690-14160		x160		100			150
1690-14200		x200		125			195
1690-14250		x250		160			240
1690-16063	M16	x63	19	32	302	118	85
1690-16080		x80		50			105
1690-16100		x100		63			130
1690-16125		x125		75			160
1690-16160		x160		100			205
1690-16200		x200		125			260
1690-16250		x250		160			325
1690-16315		x315		180			405
1690-16500		x500		315			650
1690-18080	M18	x80	23	50	405	144	130
1690-18100		x100		60			160
1690-18125		x125		75			200
1690-18160		x160		100			260
1690-18200		x200		125			320
1690-18250		x250		150			400
1690-18315		x315		180			510
1690-20080	M20	x80	27	32	580	184	155
1690-20100		x100		60			200
1690-20125		x125		70			250
1690-20160		x160		100			330
1690-20200		x200		125			400
1690-20250		x250		160			510
1690-20315		x315		200			640
1690-20400		x400		250			815
1690-20500		x500		315			1020

Sip. No.	d	x L	b1	b	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1690-22100	M22	x100	31	45	772	228	250
1690-22125		x125		70			305
1690-22160		x160		100			400
1690-22200		x200		125			500
1690-22250		x250		160			620
1690-22315		x315		180			780
1690-22400		x400		250			1010
1690-24100	M24	x100	35	45	994	265	290
1690-24125		x125		70			365
1690-24160		x160		100			470
1690-24200		x200		125			580
1690-24250		x250		160			730
1690-24315		x315		200			920
1690-24400		x400		250			1170
1690-24500		x500		315			1470
1690-24630		x630		315			1860
1690-30125	M30	x125	43	56	1930	421	570
1690-30200		x200		125			910
1690-30250		x250		160			1150
1690-30315		x315		200			1435
1690-30500		x500		315			2315
1690-30700		x700		400			3215
1690-301000		x1000		400			4700
1690-36160	M36	x160	51	80	3378	614	1100
1690-36200		x200		125			1340
1690-36250		x250		160			1710
1690-36315		x315		200			2150
1690-36400		x400		250			2700
1690-36500		x500		315			3450
1690-36700		x700		400			4750
1690-42315	M42	x315	59	200	5415	843	2950
1690-42400		x400		250			3750
1690-42500		x500		315			4690

- Kalite 10.9
- Siyah kaplama

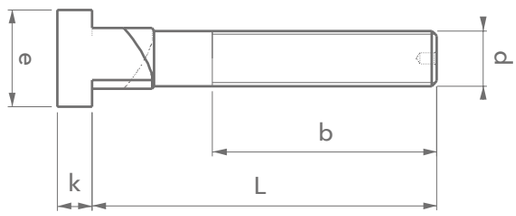
Not: 150 °C üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.

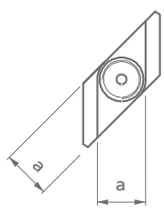


DERECELİ "T" AYAKLI SAPLAMA

Sip. No.	dx (a)	xL	b	a	e	k	Sıkma Verileri Nm	Sıkma Verileri kN	Ağırlık g
1650-1214050	M12x14	x50	35	13.7	22	8	141	74	70
1650-1214080		x80	55						100
1650-1214125		x125	75						120
1650-1618063	M16x18	x63	45	17.7	28	10	354	138	160
1650-1618100		x100	65						220
1650-1618160		x160	100						280
1650-2022080	M20x22	x80	55	21.7	35	14	679	215	330
1650-2022125		x125	85						430
1650-2022200		x200	120						570
1650-2428100	M24x28	x100	70	27.7	44	18	1163	310	650
1650-2428125		x125	85						770
1650-2428250		x250	150						1150







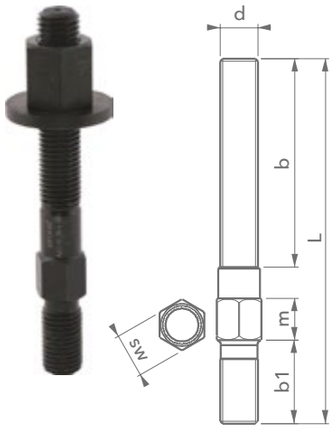


- T-Kanal pleytlerde üstten T-Kanala girip bağlama özelliği vardır
- Kalite 12.9
- Siyah kaplama
- Not: 150 °C üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

ANAHTAR AĞIZLI SAPLAMA



- Kullanım alanı; Enjeksiyon makinalarında ve M12-14-16-18-20-22-24-30 diş açılmış pleytlerde kullanlır.
- Kalite 10.9
- Siyah kaplama

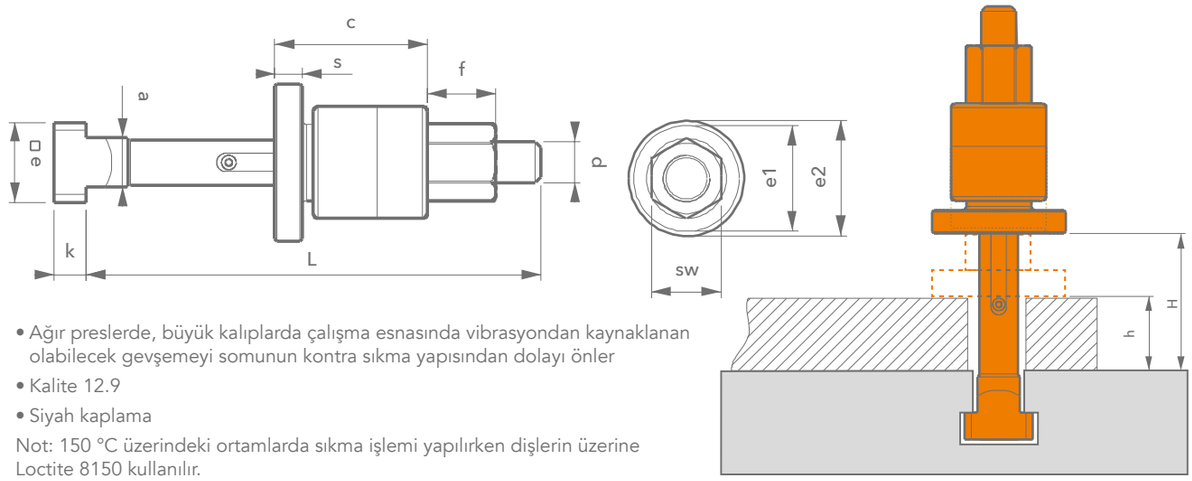
Not: 150 °C üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.



Sip. No.	d	L	b	b1	m	sw	Sıkma Verileri		Ağırlık g
							Nm	kN	
1670-12130	M12	130	65	24	14	14	120	63	160
1670-12160		160	90						185
1670-14130	M14	130	65	28	15	15	191	86	216
1670-14160		160	90						246
1670-16140	M16	140	70	32	16	17	302	118	310
1670-16160		160	95						340
1670-18150	M18	150	70	35	19	19	405	144	395
1670-18180		180	95						450
1670-20150	M20	150	70	40	22	22	580	184	520
1670-20180		180	95						575
1670-22150	M22	150	70	40	22	24	772	228	610
1670-22180		180	95						705
1670-24170	M24	170	75	47	22	27	994	265	875
1670-24205		205	105						990
1670-24250		250	140						1125
1670-30250	M30	250	135	55	32	36	1930	421	1950
1670-30315		315	195						2260

KOMBİNE "T" AYAKLI SAPLAMA





- Ağır preslerde, büyük kalıplarda çalışma esnasında vibrasyondan kaynaklanan olabilecek gevşemeyi somunun kontra sıkma yapısından dolayı önler
- Kalite 12.9
- Siyah kaplama

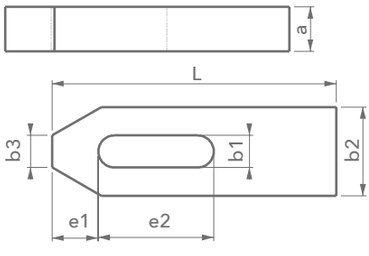
Not: 150 °C üzerindeki ortamlarda sıkma işlemi yapılırken dişlerin üzerine Loctite 8150 kullanılır.

Sip. No.	dx a xL	a	e	k	h-H	e1	e2	c	s	f	sw	Sıkma Verileri		Ağırlık g
												Nm	kN	
1630-2022200	M20x22x200	21.7	35	14	25-75	49	69	92	12	30	30	679	215	1635
1630-2022250	M20x22x250	21.7	35	14	70-120	49	69	92	12	30	30	679	215	1720
1630-2424200	M24x24x200	23.7	40	16	25-75	53	74	92	12	30	36	1163	310	2075
1630-2424250	M24x24x250	23.7	40	16	70-120	53	74	92	12	30	36	1163	310	2250
1630-2428200	M24x28x200	27.7	44	18	25-75	53	74	92	12	30	36	1163	310	2180
1630-2428250	M24x28x250	27.7	44	18	70-120	53	74	92	12	30	36	1163	310	2340
1630-3036200	M30x36x200	35.6	54	22	25-75	68	88	94	14	30	46	2258	493	3660
1630-3036250	M30x36x250	35.6	54	22	70-120	68	88	94	14	30	46	2258	493	3910

DÜZ PABUÇ



- Sertleştirilmiş
- Siyah Kaplama



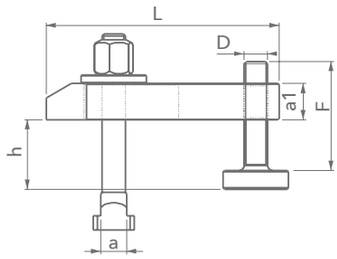
Sip. No.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	Ağırlık g
1350-06050	50	6,6	M6	1/4	10	20	8	10	20	60
1350-08060	60	9	M8	5/16	12	25	10	13	22	110
1350-10080	80	11	M10	3/8	15	30	12	15	30	185
1350-12100	100	14,5	M12-M14	1/2	20	40	14	21	40	480
1350-12125	125							21	50	610
1350-16125	125	18,5	M16-M18	518	25	50	18	26	45	980
1350-16160	160								65	1240
1350-20160	160	22,5	M20-M22	3/4	30	60	22	30	60	1795
1350-20200	200								80	2255
1350-24200	200	26	M24	1	30	70	26	35	80	2570
1350-24250	250				35				100	3875
1350-30250	250	33	M30	11/4	40	80	34	45	100	4990
1350-30315	315				50				130	7885
1350-36400	400	43	M36-M42	11/2	60	100	43	100	150	14450

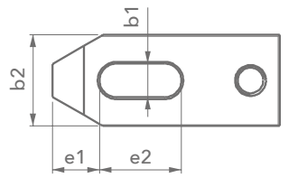
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

AYARLANABİLİR DESTEK CİVATALI KOMBİNE BAĞLAMA PABUCU





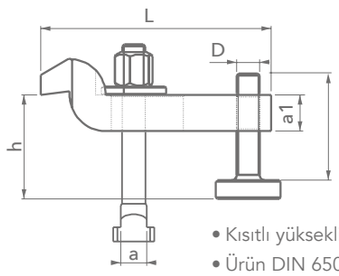


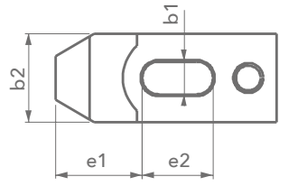
• Ürün DIN 650 T-Kanala uyumludur.

Sip. No.	a	L	Nr. 1330 a1	Nr. 1330 b1	e1	e2	b1	Nr.1610	h	Nr.1490 D x F	Ağırlık g
1170-1010080	10	80	15	30	15	30	11	M10x10x80	10-35	M10x42	370
1170-1212100	12	100	20	40	21	40	14.5	M12x12x100	12-40	M12x50	740
1170-1212125	12	125	20	40	21	50	14.5	M12x12x160	12-85	M12x95	940
1170-1214100	14	100	20	40	21	40	14.5	M12x14x100	12-40	M12x50	705
1170-1214125	14	125	20	40	21	50	14.5	M12x14x160	12-85	M12x95	965
1170-1616125	16	125	25	50	26	45	18.5	M16x16x125	15-50	M16x62	1115
1170-1616160	16	160	25	50	26	65	18.5	M16x16x160	15-85	M16x97	1870
1170-1618125	18	125	25	50	26	45	18.5	M16x18x125	15-50	M16x62	1540
1170-1618160	18	160	25	50	26	65	18.5	M16x18x160	15-85	M16x97	1900
1170-2020160	20	160	30	60	30	60	22.5	M20x20x160	15-45	M20x62	1675
1170-2020200	20	200	30	60	30	80	22.5	M20x20x200	15-80	M20x97	3295
1170-2022160	22	160	30	60	30	60	22.5	M20x22x160	15-45	M20x62	2730
1170-2022200	22	200	30	60	30	80	22.5	M20x22x200	15-80	M20x97	3340
1170-2424160	24	160	30	70	35	60	26.5	M24x24x160	16-60	M24x81	3465
1170-2424200	24	200	30	70	35	80	26.5	M24x24x200	16-95	M24x116	4660
1170-2428160	28	160	30	70	35	60	26.5	M24x28x160	16-60	M24x81	5560
1170-2428200	28	200	30	70	35	80	26.5	M24x28x200	16-95	M24x116	4755

AYARLANABİLİR DESTEK CİVATALI KOMBİNE BAĞLAMA Z-PABUÇ







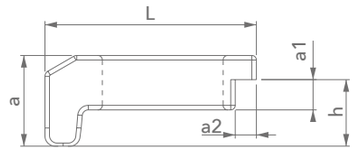
• Kısıtlı yükseklik mesafelerinden kazanma amaçlı kullanılır.
• Ürün DIN 650 T-Kanala uyumludur.

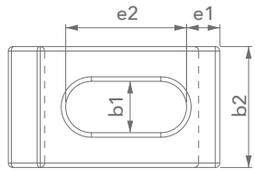
Sip. No.	a	L	Nr. 1450 a1	Nr. 1450 b1	e1	e2	b1	Nr.1610	h	Nr.1490 D x F	Ağırlık g
1190-1010100	10	100	15	30	32	32	11	M10x10x80	26-50	M10x42	405
1190-1212125	12	125	20	40	40	40	14.5	M12x12x100	33-60	M12x50	870
1190-1214125	14	125	20	40	40	40	14.5	M12x14x100	37-60	M12x50	890
1190-1616160	16	160	25	50	49	50	18.5	M16x16x125	41-75	M16x62	1785
1190-1618160	18	160	25	50	49	50	18.5	M16x18x125	41-75	M16x62	1810
1190-2020200	20	200	30	60	55	70	22.5	M20x20x160	46-75	M20x62	3105
1190-2022200	22	200	30	60	55	70	22.5	M20x22x160	46-75	M20x62	3155
1190-2424200	24	200	35	70	72	60	26	M24x24x200	52-95	M24x81	4695
1190-2428200	28	200	35	70	72	60	26	M24x28x200	52-95	M24x81	4790

PLAKA BAĞLAMA PABUCU



• Sertleştirilmiş
• Siyah Kaplama
• Yükselticisiz çalışma özelliği avantajı sağlar.







Sip. No.	L	b1	metrik	whitworth	a	b2	a1xa2	e1	e2	h	Ağırlık g
1387-12070	70	13	M12	1/2	21.5	40	8x6	11	40	14	255
1387-16070	70	17	M16	5/8	29.5	40	10x7	11	40	22	290

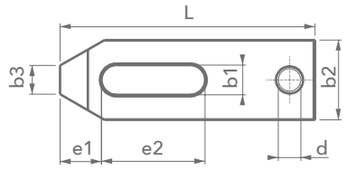
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

DESTEK DELİKLİ DÜZ PABUÇ







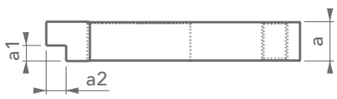


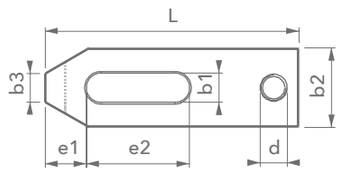
• Sertleştirilmiş • Siyah Kaplama

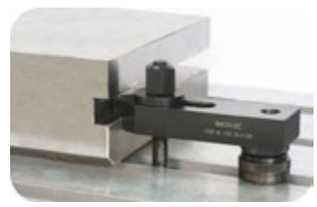
Sip. No.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	d	Ağırlık g
1330-06050	50	6,6	M6	1/4	10	20	8	10	20	M8	50
1330-08060	60	9	M8	5/16	12	25	10	13	22	M8	105
1330-10080	80	11	M10	3/8	15	30	12	15	30	M10	210
1330-12100	100	14.5	M12-M14	1/2	20	40	14	21	40	M12	465
1330-12125	125							21	50		590
1330-16125	125	18.5	M16-M18	5/8	25	50	18	26	45	M16	930
1330-16160	160								65		1200
1330-20160	160	22.5	M20-M22	3/4	30	60	22	30	60	M20	1710
1330-20200	200				30	60	22		80		2170
1330-20250	250				35	70	30		100		3885
1330-24160	160	26	M24	1	30	70	26	35	60	M24	1965
1330-24200	200				35	70	26		80		2920
1330-24250	250				35	70	26		100		3720
1330-24315	315				40	80	35		100		6435
1330-30250	250	33	M30	11/4	40	80	34	45	100	M24	4825
1330-30315	315				50				130		7665
1330-36400	400	43	M36-M42	11/2	58	100	43	100	150	M30	14490

KADEMELİ DESTEK DELİKLİ DÜZ PABUÇ







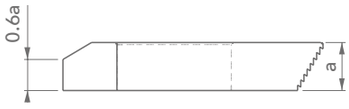


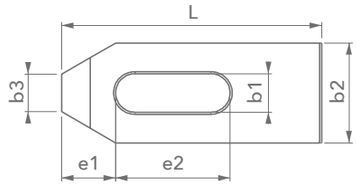
• Sertleştirilmiş
• Siyah Kaplama
• Kısıtlı alanlarda yükseklikten kazanma amaçlı kullanılır.

Sip. No.	L	b1	metrik	whitworth	a	b2	a1xa2	b3	e1	e2	d	Ağırlık g
1370-10080	80	11	M10	3/8	15	30	5x8	12	15	30	M10	180
1370-12100	100	14.5	M12-14	1/2	20	40	8x10	14	21	40	M12	410
1370-12125	125									50		590
1370-16125	125	18.5	M16-18	5/8	25	50	10x12.5	18	26	45	M16	910
1370-16160	160									65		1180
1370-20160	160	22.5	M20-22	3/4	30	60	12x15	22	30	60	M20	1575
1370-20200	200									80		2150
1370-24160	160	26	M24	1	30	70	12x15	26	35	60	M24	1800
1370-24200	200				35		14x17			80		2875
1370-24250	250				35		14x17			100		3500

MERDİVEN DİŞ BAĞLAMA PABUCU









• Nr. 131 O Merdiven destek ile kullanılır Sertleştirilmiş
• Siyah Kaplama

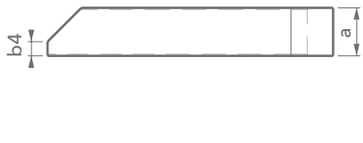
Sip. No.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	Ağırlık g
1290-06050	50	6.6	M6	1/4	10	20	8	10	20	50
1290-06080	80								30	95
1290-08060	60	9	M5	5/16	12	25	10	13	22	100
1290-08100	100								45	170
1290-10080	80	11	M10	3/8	15	30	12	15	30	190
1290-10100	100								45	225
1290-12100	100	14.5	M12-M14	1/2	20	40	14	21	45	435
1290-12125	125								55	580
1290-16125	125	18.5	M16-M18	5/8	25	50	18	26	55	855
1290-16160	160								65	1175

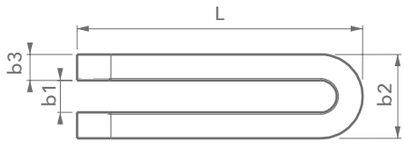
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

ÇATAL PABUÇ









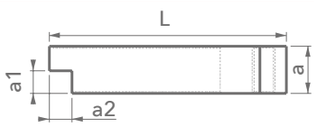
- Sertleştirilmiş
- Siyah Kaplama
- Kademeli yüzeylerde şekilli iş parçalarının bağlanmasında pabucun yapısı itibarı ile kolaylık sağlar

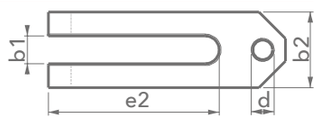
Sip. No.	L	b1	metrik	whitworth	a	b2	b3	b4	Ağırlık g
1390-06060	60	6.6	M6	1/4	12	19	6.2	3	65
1390-08080	80	9	MS	5/16	15	25	8	4	140
1390-10100	100	11	M10	3/8	20	30	9.5	5	240
1390-12125	125								700
1390-12160	160	14.5	M12-M14	1/2	25	38	12	6	915
1390-12200	200								1235
1390-16160	160				27			8	945
1390-16200	200	18.5	M16-M18	5/8	27	48	15	8	1215
1390-16250	250				37			10	2000
1390-20200	200				37	52	15		1650
1390-20250	250	22.5	M20-M22	3/4	37	62	20	10	2765
1390-20315	315				37	62	20		3510
1390-20500	500				47	62	20		7200
1390-24200	200				37				2260
1390-24250	250	26	M24	1	37	66	20	10	2740
1390-24315	315				37				3515
1390-24500	500				47				7100
1390-30250	250				47	73	20		3500
1390-30315	315				47	73	20		4190
1390-30400	400	33	M30	11/4	47	73	20	12	5735
1390-30600	600				46	73	20		8455
1390-301000	1000				57	93	30		28000
1390-36400	400	40	M36	11/2	57	100	30	12	10800
1390-36600	600								16500
1390-42600	600	43	M42	11/2	77	123	40	12	28800

KADEMELİ DESTEK DELİKLİ ÇATAL PABUÇ



- Sertleştirilmiş
- Siyah Kaplama
- Kademeli ve kısıtlı alanlarda kullanım avantajı sağlar.





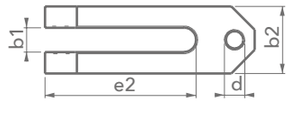
Sip. No.	L	b1	metrik	whitworth	a	e2	a1xa2	b2	d	Ağırlık g
1400-10100	100	11	M10	3/8	18.5	70	10x10	28	M10	260
1400-12125	125	14.5	M12-14	1/2	25	90	12x12	40	M12	565
1400-16160	160	18.5	M16-18	5/8	30	11 O	15x15	50	M16	1235
1400-20200	200	22.5	M20-22	3/4	40	135	20x20	60	M20	2460

DESTEK DELİKLİ ÇATAL PABUÇ



- Sertleştirilmiş
- Siyah Kaplama
- Kademeli ve kısıtlı alanlarda kullanım avantajı sağlar.





Sip. No.	L	b1	metrik	whitworth	a	e1	e2	b2	d	Ağırlık g
1410-10100	100	11	M10	3/8	18.5	5	70	28	M10	260
1410-12125	125	14.5	M12-14	1/2	25	6	90	40	M12	560
1410-16160	160	18.5	M16-18	5/8	30	8	110	50	M16	1230
1410-20200	200	22.5	M20-22	3/4	40	10	135	60	M20	1490

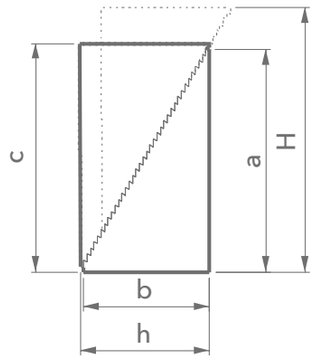
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

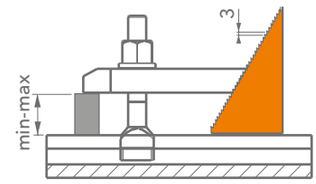
MERDİVEN DİŞ DESTEK







- Nr. 1290 Merdiven diş pabuç ile kullanılır
- Siyah Kaplama



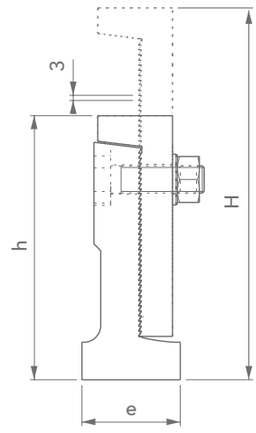
Sip. No.	h-H	a	b	c	Min. - Max.	Ağırlık g
1310-01	37-85	57	35	60	0-40	505
1310-02	48-112	73	45	76	0-60	825
1310-03	58-139	90	55	93	0-75	1250
1310-04	66-165	108	64	111	0-90	685

MERDİVEN DİŞ KOMBİNE DESTEK



- Yükseltme aralığı (hatve) 3mm'dir
- Siyah Kaplama

Sip. No.	h-H	e	kgf	Ağırlık g
1585-050	110-150	48x48	4000	1120
1585-060	155-220	60x58	5000	2710
1585-080	220-340	80x78	6000	6560

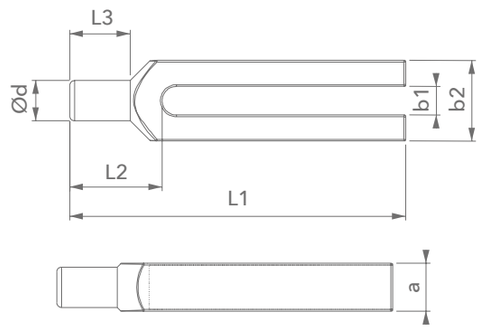




SİLİNDİR BAŞLI ÇATAL PABUÇ



- Muhtelif iş parçalarının delikli yüzeylerine girerek iş parçasını sabitler
- Sertleştirilmiş
- Siyah Kaplama





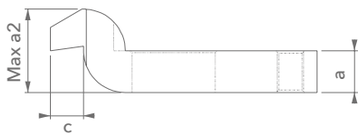
Sip. No.	L	b1	metrik	whitworth	a	b2	Ød	L2	L3	Ağırlık g
1470-08100	100	9	MB	5/6	15	30	12	30	18	180
1470-10125	125	11	M10	3/8	20	30	16	36	24	290
1470-12160 1470-12200	160 200	14.5	M12-M14	1/2	25	40	20	45	30	715 815
1470-16200 1470-16250	200 250	18.5	M16-M18	5/8	30	50	24	55	36	1210 1550
1470-20250 1470-20315	250 315	22.5	M20-M22	3/4	40	60	30	65	45	2680 3435
1470-24250 1470-24315	250 315	26	M24	1	40	70	38	80	56	3060 4120
1470-30315 1470-30400	315 400	34	M30	11/4	50	80	45	85	56	5600 7135

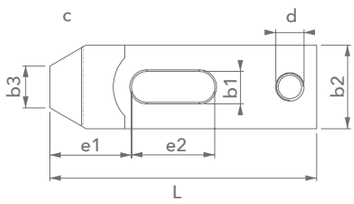
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

DESTEK DELİKLİ Z-BAĞLAMA PABUCU







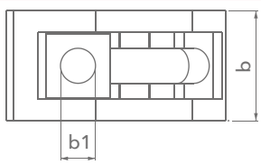


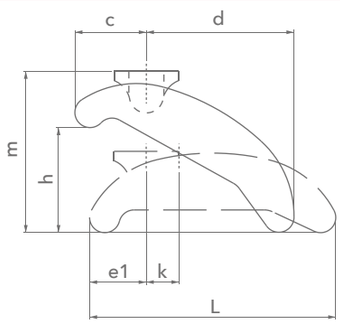
- Yükseklikten kazanma ve somun geçişlerinde avantaj sağlar
- Sertleştirilmiş
- Siyah Kaplama

Sip. No.	L	b1	metrik	whitworth	a	a2	b2	b3	c	e1	e2	d	Ağırlık g
1450-06060	60	6.6	M6	1/4	10	20	20	10	8	20	20	M8	80
1450-08080	80	9	M8	5/16	12	24	25	12	9	25	25	M8	170
1450-10100	100	11	M10	3/8	15	30	30	15	12	32	32	M10	245
1450-12125	125	14.5	M12-M14	1/2	19	40	38	20	16	40	40	M12	600
1450-16125 1450-16160	125 160	18.5	M16-M18	5/8	24	50	48	25	20	49	40 50	M16	925 1205
1450-20160 1450-20200	160 200	22.5	M20-M22	3/4	29	58	58	30	24	55	55 70	M20	1705 2145
1450-24160 1450-24200 1450-24250	160 200 250	26	M24	1	33	70	70	35	28	53 72 72	55 60 80	M24	2110 3070 3710
1450-30250 1450-30315	250 315	33	M30	11/4	38 48	80 100	77	40	40	91	80 100	M24	4635 7050

KADEMELİ BAĞLAMA PABUCU







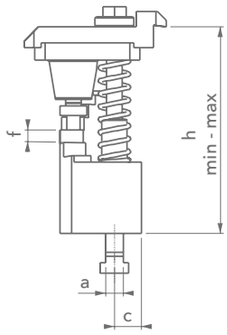


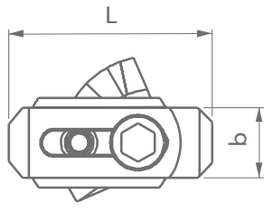
- Destek kullanmadan 0-75mm arası
- kullanım imkanı sağlar
- Malzeme: Dövme Çelik
- Sertleştirilmiş
- Çinko Kaplama

Sip. No.	b1	a	DIN 787	m	h	b x L	c	d	e1	k x 4	Ağırlık g
1210-013	13	12-14	-	52	0-40	40x90	28	48	23	14	340
1210-017	18	16-18	-	80	0-60	58x130	38	74	29	18	990
1210-021	22	20-22	-	98	0-75	68x140	46	80	32	20	1450
1210-025	26	24-28	-	110	0-90	78x175	52	100	39	24	2360
1210-012	13	12	M12x12x100	52	0-40	40x90	28	48	23	14	400
1210-014	13	14	M12x14x100	52	0-40	40x90	28	48	23	14	420
1210-016	18	16	M16x16x160	80	0-60	58x130	38	74	29	18	1140
1210-018	18	18	M16x18x160	80	0-60	58x130	38	74	29	18	1145
1210-020	22	20	M20x20x200	98	0-75	68x140	46	80	32	20	1560

BASAMAKLI KOMBİNE PABUÇ









- Pabucun çift taraflı kullanım özelliği; basamaklı yükselticisi ile kısıtlı alanlarda kullanım avantajı sağlar.
- DIN 650 T-Kanala uyumludur.
- Pabuç malzeme: Sertleştirilmiş
- Civata 10.9 kalite
- Gövde statik boyalı diğer parçalar siyah kaplama

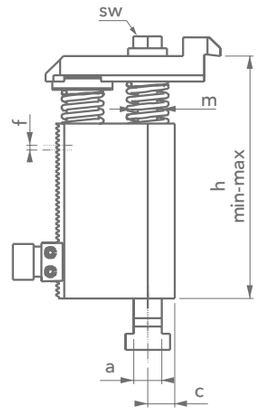
Sip. No.	a	h Min. - Max.	f	c	L	b	Ağırlık g
1230-01	14-16-18-20-22	40 - 80	5	16	110	38	1200
1230-02		70 - 125	10	16	110	38	1490
1230-03		120 - 175	10	18	110	38	2700
1230-04		170 - 225	10	23	110	38	4260

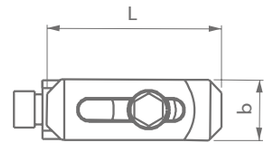
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

KOMBİNE BAĞLAMA PABUCU







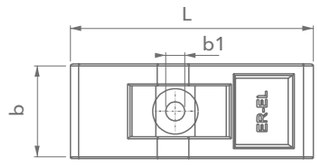


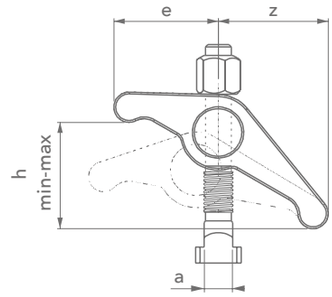
- Pabucun çift taraflı kullanım özelliği; kendi içinde bulunan kademeli yükseltici desteği ile kısıtlı alanlarda kullanım kolaylığı sağlar.
- DIN 650 T-Kanala uyumludur.
- Pabuç Malzeme: Sertleştirilmiş
- Civata 10.9 kalite
- Siyah kaplama

Sip. No.	a	h Min. - Max.	f	c	L	b	m	sw	Sıkma Kuvveti	Nm	Ağırlık g
1250 - 02	14-16-18-20-22	80-137	3	17	110	38	M12	19	2250	85	2015
1250 - 03		125-224	3	17	110	38	M12	19	2250	85	2910
1250 - 04		160-300	3	17	110	38	M12	19	2250	85	3665

DESTEKSİZ ASKI PABUÇ







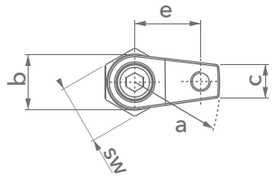


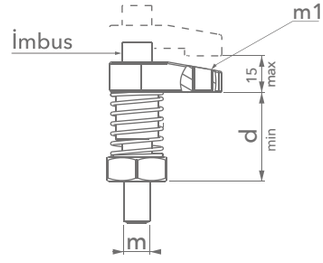
- Destek kullanmadan 0-55 mm arası kullanım imkanı sağlar.
- Malzeme: Dövme çelik
- Pabuç Malzeme: Sertleştirilmiş
- Civata 12.9 kalite
- Çinko Kaplama

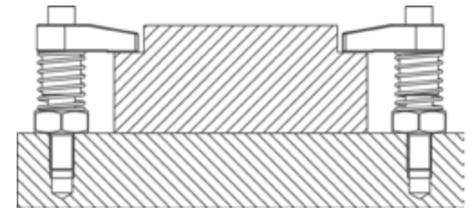
Sip. No.	a	h Min. - Max.	DIN 787	b1	e	z	L	b	Ağırlık g
1270-1012	12	0-45	M10x12x125	11	48	61	109	40	660
1270-1214	14	0-45	M12x14x125	13	48	61	109	40	705
1270-1416	16	0-55	M14x16x125	15	57	72	129	50	1190
1270-1618	18	0-55	M16x18x125	17	57	72	129	50	1265

KOMBİNE BURÇLU PABUÇ









- Kısıtlı alanlarda çalışma özelliği
- Sertleştirilmiş
- Siyah kaplama

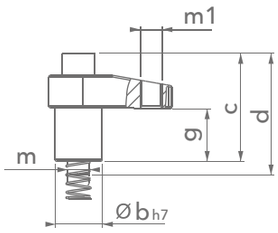
Sip. No.	a	b	c	d	e	m	sw	m1	İmbus	Sıkma Kuvveti	Ağırlık g
1275-3012	30	28	16	40	23	M12	30	MS	M10	750	300
1275-5012	50	32	20	45	40	M12	36	M12	M12	1000	500
1275-5016	50	32	20	45	40	M16	36	M12	M12	1000	510
1275-6016	60	40	25	45	45	M16	41	M16	M16	1250	750

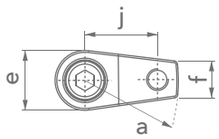
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

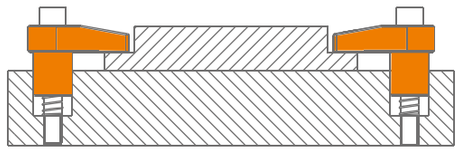
ER-EL

KOMBİNE BURÇLU PABUÇ





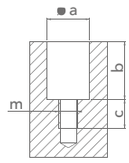




- Kısıtlı alanlarda çalışma özelliği plaka üstüne uygulama seçeneği
- Sertleştirilmiş
- Siyah kaplama

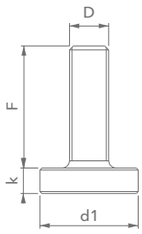
Sip. No.	a	Ø b h7	c	d	e	f	g	m	m1	j	Sıkma Kuvveti	Ağırlık g
1280-3010	30	22	58	80	28	16	30	M10	MS	23	750	220
1280-5012	50	26	70	90	32	20	40	M12	M12	40	1100	400
1280-6016	60	32	74	95	40	25	40	M16	M16	45	1250	610

Sip. No.	a (F7)	b	c	m
1280-3010	22	30	20	M10
1280-5012	26	40	25	M12
1280-6016	32	40	25	M16

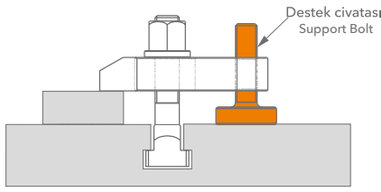


PABUÇ DESTEK CİVATASI





- Siyah Kaplama

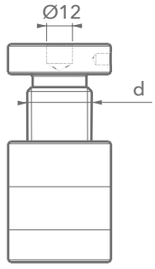


Sip. No.	D x F	d1	k	Ağırlık g
1490-08032	M8x32	25	8	40
1490-10042	M10x42	30	8	60
1490-12050	M12x50	36	10	110
1490-12095	M12x95	36	10	150
1490-16062	M16x62	45	13	240
1490-16097	M16x97	45	13	285
1490-16117	M16x117	45	13	310

Sip. No.	D x F	d1	k	Ağırlık g
1490-20062	M20x62	50	13	320
1490-20097	M20x97	50	13	390
1490-20117	M20x117	50	13	430
1490-24081	M24x81	50	14	445
1490-24116	M24x116	50	14	555
1490-30180	M30x180	70	24	1650

TRAPEZ DİŞ YÜKSELTİCİ DESTEK





- Nr. 151 O yükselticiler DIN 6314-6315-6316 pabuçlarda yükseltici destek amaçlı kullanılır.
- Hareketli parça üstünde bulunan 012mm delik Referens Nr. 1555-1560-1565-1570-1575 yükselticiler üst üste ve farklı amaçlı kullanılır
- Siyah Kaplama
- Destek Civatası : Sertleştirilmiş



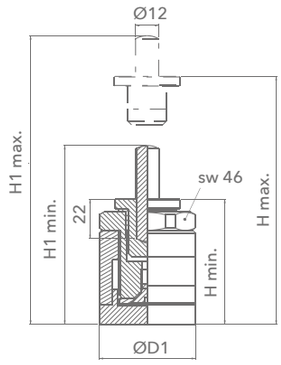
Sip. No.	H	d			kgf	Ağırlık g
1510-023030	23-30	M16	34	32	1000	140
1510-040060	40-60	M16	34	32	1800	250
1510-042052	42-52	Tr30x4	50	50	6000	570
1510-050070	50-70	Tr30x4	50	50	6000	680
1510-070100	70-100	Tr30x4	50	50	6000	960
1510-100140	100-140	Tr30x4	50	50	6000	1395
1510-140220	140-220	Tr30x4	54	54	6000	2285
1510-210330	210-330	Tr 30x6	58	58	8000	3950
1510-260430	260-430	Tr30x6	68	68	8000	7250

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

MANYETİK VİDALI YÜKSELTİCİ





- Ürün manyetik oluğundan dolayı kendi ağırlığını taşıdığı için yatay bağlamalarda özellikle enjeksiyon makinalarında kullanım avantajı sağlar.
- Sertleştirilmiş
- Siyah kaplama

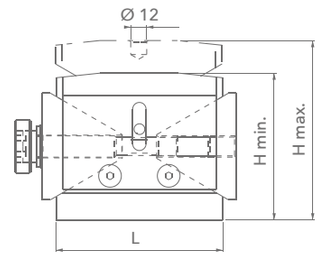


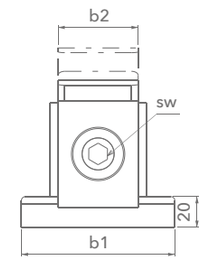
Sip. No.	H Min.	H Max.	D1	12x50 H1 Min. - H1 Max.	12x50 H1 Min. - H1 Max.	kgf	Ağırlık g
1515-065085	65	85	50	93-113	123-143	3000	810
1515-085125	85	125	50	113-153	143-183	3000	1050

BLOK DESTEK



- Ürün Özellikle ağır parçaların desteklenmesi ve kaldırılması için tasarlanmıştır.
- Sertleştirilmiş
- Siyah kaplama

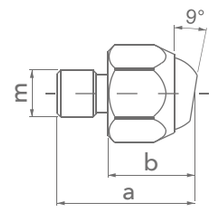


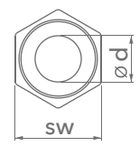


Sip. No.	H Min.	H Max.	D1	b1	b2	sw	Sıkma Kuvveti	Ağırlık g
1520-050063	50	63	-	40	63	8	4000	1890
1520-100125	100	125	115	60	125	14	10000	9910
1520-170190	170	190	145	80	175	22	25000	28480

OYNAR BAŞLI BASKI PABUCU





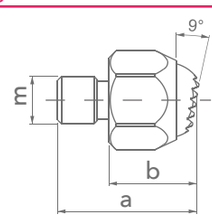


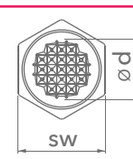
- Dereceli temiz yüzeyler için Nr.1275 ve 1280 ürünlerle uyumludur
- Sertleştirilmiş
- Siyah kaplama

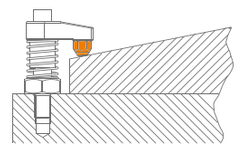
Sip. No.	a	b	m	d	SW	Ağırlık g
1282-0825	25	12	MS	8	14	10
1282-1030	30	17	M10	10	17	30
1282-1235	35	22	M12	12	22	65
1282-1642	42	26	M16	14	27	125

OYNAR BAŞLI BASKI PABUCU









- Dereceli ve bozuk yüzeyler için baskı yüzeyi tırtıllı olarak tasarlanmıştır.
- Sertleştirilmiş
- Siyah kaplama

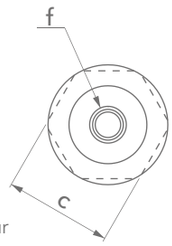
Sip. No.	a	b	m	d	SW	Ağırlık g
1283-0825	25	12	MS	8	14	10
1283-1030	30	17	M10	10	17	30
1283-1235	35	22	M12	12	22	60
1283-1642	42	26	M16	14	27	120

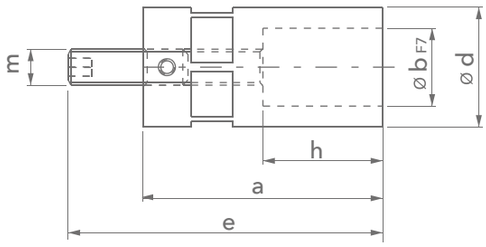
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

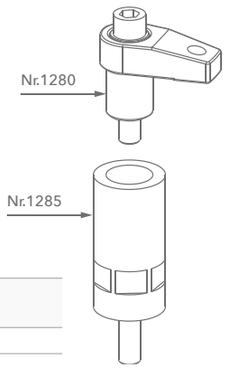
ER-EL

YÜKSELTME KOVANI









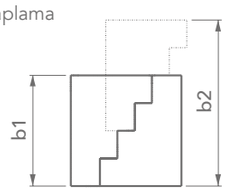
- Nr.1280 ürün ile yüksek parça bağlamalarda kullanılır
- Sertleştirilmiş
- Siyah kaplama

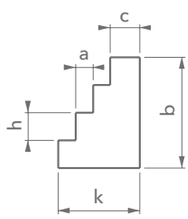
Sip. No.	a	b F7	c	d	e	f	m	h	Ağırlık g
1285-12080	80	26	36	40	110	M12	M12	40	600
1285-12100	100	26	36	40	130	M12	M12	40	795
1285-16080	80	32	46	50	110	M16	M16	40	945
1285-16100	100	32	46	50	130	M16	M16	40	1230

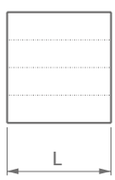
BASAMAKLI DESTEK

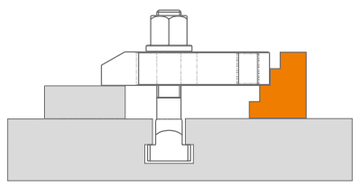


Siyah kaplama





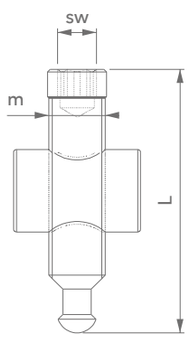




Sip. No.	h	a	c	k	b	L	b1	b2	Ağırlık g
1580-050	13	8	13	37	52	50	52	78	460
1580-060	16	10	17	47	64	60	64	96	860
1580-070	19	13	18	57	76	70	76	114	1420

PABUÇ KALDIRMA CİVATA VE SOMUNU



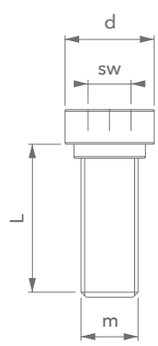


- Kalite 10.9
- Siyah Kaplama

Sip. No.	m	L	SW		Ağırlık g
1120-0714	M14	72	8	-	138
1130-0818	M18	83	10	-	235
1150-0920	M20	96	12	-	360
1160-1024	M24	134	12	24	795

SABİTLEME İMBUS CİVATASI





- M12-M16-M18-M20 diş delikler için
- Kalite 10.9
- Siyah kaplama

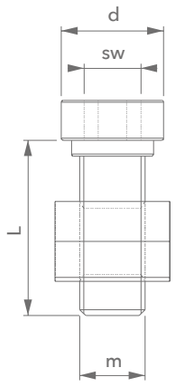
Sip. No.	m	L	d	SW	Ağırlık g
1120-310	M10	29	16.5	8	28
1120-312	M12	29	16.5	8	34
1130-412	M12	30	20.5	10	45
1130-416	M16	34	20.5	10	75
1150-516	M16	34	24.5	12	75
1150-518	M18	38	24.5	12	90
1150-520	M20	38	24.5	12	105
1160-620	M20	45	34	12	170
1160-622	M22	49	34	12	95
1160-624	M24	45	34	12	390
1160-724	M24	55	34	12	405
1160-730	M30*	66	38.5	12	400

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

SABİTLEME İMBUS CİVATA VE T-PABUÇ





- (a) 14-28 T-Kanal sabitleme imbus civata ve T-Pabuç DIN 508
- Kalite 10.9
- Siyah Kaplama
- Yıldızlı olan kodlar alt destek civatalarıdır.

Sip. No.	a	m	L	d	SW	Ağırlık g
1120-512	12	M10	29	16.5	8	48
1120-514*	14	M12	29	16.5	8	54
1130-614*	14	M12	30	20.5	10	80
1130-616	16	M12	30	20.5	10	100
1130-618	18	M12	30	20.5	10	130
1130-620	20	M12	36	20.5	10	180
1130-622	22	M12	36	20.5	10	220
1150-718*	18	M16	34	24.5	12	145
1150-720	20	M16	34	24.5	12	190
1150-722	22	M16	42	24.5	12	260
1150-724	24	M16	42	24.5	12	350
1150-728	28	M16	42	24.5	12	470
1160-822	22	M20	45	34	12	320
1160-824	24	M20	45	34	12	410
1160-826*	28	M24	45	34	12	550
1160-828	28	M24	55	34	12	580
1160-832	32	M24	61	34	12	603
1160-836	36	M24	66	38.5	12	865

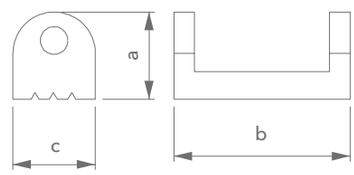
ÖN BASKI PABUCU







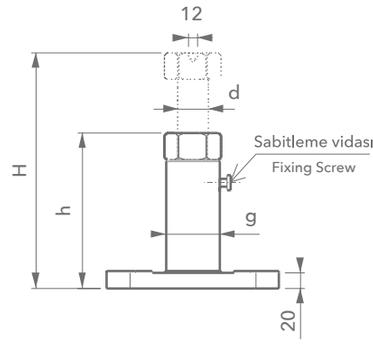
- Ürün DP : Düz parça sıkma
- Ürün BSP: Boyuna silindir sıkma
- Ürün ESP: Enine silindir sıkma
- Siyah Kaplama



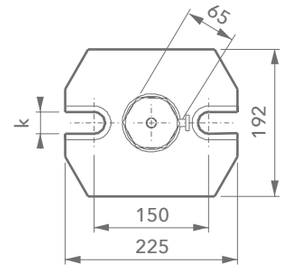
Sip. No.	a	b	c	Ağırlık g
1120-DP	13.5	26.5	12	15
1120-BSP	15.5	26.5	12	18
1120-ESP	18	26.5	12	21
1130-DP	17	32	15	20
1130-BSP	19	32	15	30
1130-ESP	22	32	15	30
1150-DP	19	38	18	40
1150-BSP	21	38	18	40
1150-ESP	25	38	18	50
1160-DP	22	44	22	55
1160-BSP	25	44	22	70
1160-ESP	28	44	22	80

TRAPEZ DİŞ YÜKSELTİCİ DESTEK





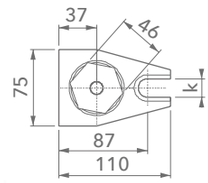
- Yüksek parçalarda kullanım amaçlı trapez diş yükseltici destek
- Gövde statik boyalı. Altı köşede bulunan 012mm delik
- Referans Nr. 1555-1560-1565-1570-1575 ürünlerle kullanıldığında farklı kullanım avantajı sağlar.

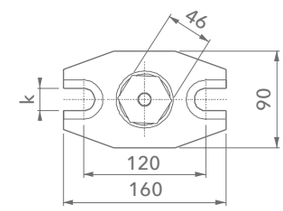


Sip. No.	H / h	d	g	k	kgf	Ağırlık g
1530-200	200-300	Tr40x7	69	28	8000	10.0
1530-280	280-460	Tr40x7	69	28	6000	11.8
1530-430	430-750	Tr40x7	69	28	5000	14.2
1530-710	710-1250	Tr40x7	69	28	4000	20.9

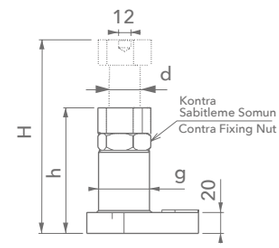
TRAPEZ DİŞ YÜKSELTİCİ DESTEK







- Yüksek parçalarda kullanım amaçlı trapez diş yükseltici destek
- Gövde statik boyalı. Altı köşede bulunan 012mm delik
- Referans Nr. 1555-1560-1565-1570-1575 ürünlerle kullanıldığında farklı kullanım avantajı sağlar.



Sip. No.	H / h	d	g	k	kgf	Ağırlık g
1550-100	100-140	Tr30x6	49	18	6000	2.05
1550-140	140-200	Tr30x6	49	18	6000	2.45
1550-200	200-320	Tr30x6	49	22	4000	3.90
1550-320	320-550	Tr30x6	49	22	2500	5.15



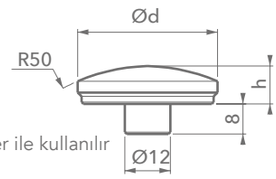
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

TRAPEZ DİŞ YÜKSELTİCİ YEDEK PARÇALARI

RADÜSLÜ DESTEK



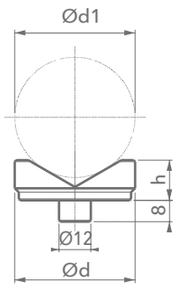


- Bu ürünler Nr. 1510-1517-1530-1550 ürünler ile kullanılır

Sip. No.	h	Ø d	(g)
1555	10	37	75

V-YATAK



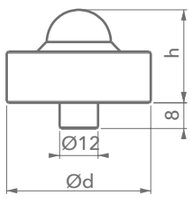


- Silindirik parçalarda V yatak desteği
- Siyah Kaplama

Sip. No.	h	Ø d	Ø d1 Min.	Ø d1 Max.	(g)
1565	15	45	10 I	50	130

BİLYALI DESTEK



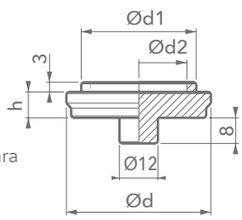


- Açılı yüzeylerde kullanım kolaylığı sağlar
- Siyah Kaplama

Sip. No.	h	Ø d	kgf	Ağırlık (g)
1560	25	45	3000	220

ARA MERKEZLEME VASATI



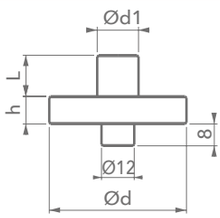


- Trapez diş yükselticiler üst üste kullanıldığında ara merkezleme vasatı olarak kullanılır
- Siyah Kaplama

Sip. No.	h	Ø d	Ø d1	Ø d2	Ağırlık g
1575	8	45	35.8	30	105

PİMLİ DESTEK





- Şekilli parçalarda araya giderek destek sağlar
- Siyah Kaplama

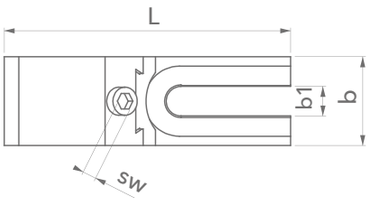
Sip. No.	h	Ø d	Ø d1	L	Ağırlık g
1570	12	50	15	20	220

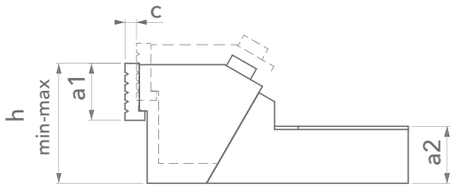
BLOK YANDAN BAĞLAMA

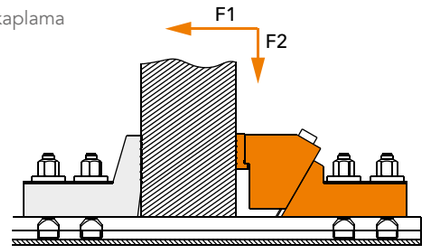


Sip. No.	a	a1	a2	b	b1	c	h Min. - Max.	L	sw	F1 Sıkma Kuveti Kgf	F2 Sıkma Kuveti Kgf	Ağırlık g
2095-571	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.68
2095-761	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	7.66

- İş parçasını dayama ve pleyt yönüne sıkar özellikle yüksek iş parçaları için tasarlanmıştır
- Çene Sertlik: Sertleştirilmiş
- Siyah kaplama







KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

MERDİVEN YÜKSELTİCİLİ BAĞLAMA SET

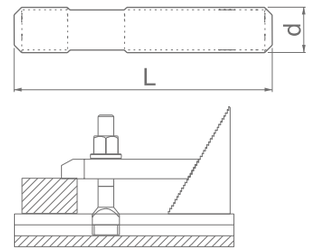


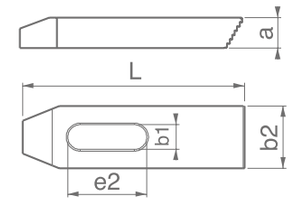
Sip. No.	dx a		Ağırlık g	DIN 6379 d x L
2010-1012	M10x12	330x255	7.27	M10x80-100-160-200
2010-1214	M12x14	380x255	9.26	M12x80-100-160-200
2010-1416	M14x16	435x255	12.29	M14x80-100-160-200
2010-1618	M16x18	435x255	15.62	M16x80-100-160-200
2010-1820	M18x20	495x255	18.00	M18x80-100-160-200

- Tabla üzerine iş parçası ve aparatların hızlı ve güvenli bir şekilde bağlanması için çelik mamülden üretilmiş parçalardan oluşan bağlama seti.

- 6 adet DIN 508 T-Pabuç
- 16 adet DIN 6379 saplama
- 6 adet DIN 6330B takviyeli somun
- 4 adet DIN 6331 pullu somun
- 2 adet 1830 uzatma somun
- 4 adet DIN 6340 kalın pul
- 4 adet Nr.1290 merdiven pabuç
- 8 adet Nr. 131 O merdiven diş destek
- 1 adet Nr. 1950 T-Kanal temizleyici
- 1 adet statik boyalı çelik set

Sip. No.	L	b1		a	e2	b2
1290	80 100	11	M10	15	30 45	30
1290	100 125	14.5	M12-M14	20	45 55	40
1290	125 160	185	M16-M18	25	65 65	50



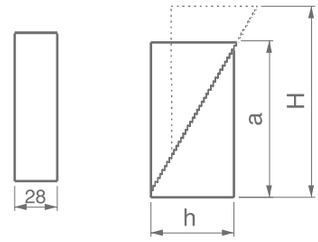


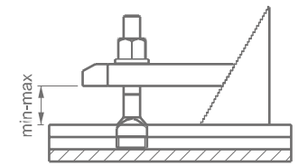
a	DIN 508	DIN 6330 B	Nr 1830	DIN 6331	DIN 6340
12	M10	M10	M10	M10	M10
14	M12	M12	M12	M12	M12
16	M14	M14	M14	M14	M14
18	M16	M16	M16	M16	M16
20	M18	M18	M18	M18	M18



Nr. 1950	a	12-14 16-18 20-22

Sip. No.	h-H	a	Min. - Max
1310	37-85	57	0-40
1310	48-112	73	0-60
1310	58-139	90	0-75
1310	66-165	108	0-90

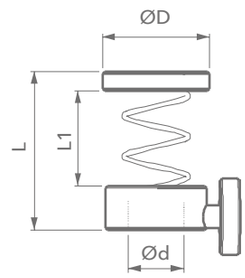


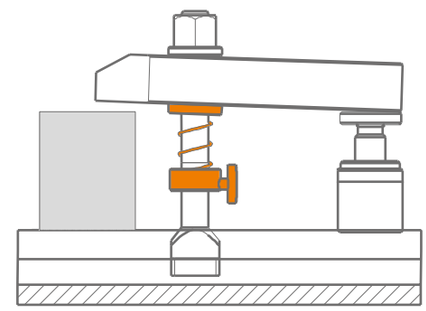


PABUÇ KALDIRMA YAYLI PUL



- Sertleştirilmiş
- Siyah kaplama
- Tezgah pleytine bağlanacak iş parçasının orantısız duruşunda pleytin uygun bir yerine sabitlenerek iş parçasını bağlamada kolaylık sağlar.





Sip. No.		Ø D	Ø d	L	L1	Ağırlık g
1970-10	M10	27	10.5	35	20	65
1970-12	M12	27	12.5	40	33	70
1970-14	M14	28	14.5	40	30	60
1970-16	M16	37	16.5	45	30	110

Sip. No.		Ø D	Ø d	L	L1	Ağırlık g
1970-18	M18	37	18.5	45	40	115
1970-20	M20	37	21	45	42	105
1970-22	M22	37	23	45	45	120
1970-24	M24	45	25	50	45	170

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

VİDALI YÜKSELTİCİLİ BAĞLAMA SET

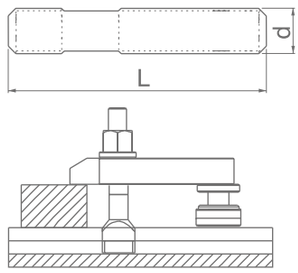


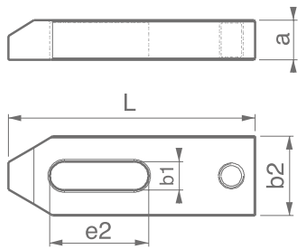
Sip. No.	dx		Ağırlık g	d x L DIN 6379
1990-1012	M10x12	265x255	6.44	M1Ox80-100-160-200
1990-1214	M12x14	305x255	8.72	M12x80-100-160-200
1990-1416	M14x16	435-255	12.98	M14x80-100-160-200
1990-1618	M16x18	435-255	16.30	M16x80-100-160-200
1990-1820	M18x20	495x255	17.82	M 18x80-100-160-200
1990-2022	M20x22	540x255	23.10	M20x100-125-160-200

- Tabla üzerine iş parçası ve aparatların hızlı ve güvenli bir şekilde bağlanması için çelik mamülden üretilmiş parçalardan oluşan bağlama seti

- 6 adet DIN 508 T-Pabuç (M20x20'de 4 adet)
- 16 adet DIN 6379 saplama
- 6 adet DIN 6330B takviyeli somun
- 4 adet DIN 6331 pullu somun
- 2 adet Nr. 1830 uzatma somun
- 4 adet DIN 6340 kalın pul
- 4 adet Nr. 1330 destek delikli pabuç
- 8 adet Nr. 151 O vida diş yükseltici destek
- 1 adet Nr. 1950 T-Kanal temizleyici
- 1 adet statik boyalı çelik set
- Not: M20 vss·de somun ve pul 4'er adet
- M10-12 VBS'de 151 O yükseltici 6 adet konulmaktadır.

Sip. No.	L	b1		a	e2	b2
1330	80	11	M10	15	30	30
1330	100	14.5	M12-M14	20	40	40
1330	125					
1330	125	18.5	M16-M18	25	45	50
1330	160				65	
1330	160	22.5	M20-M22	30	60	60
1330	200				80	



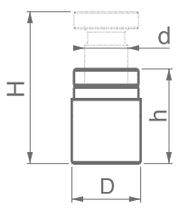


a	DIN 508	DIN 6330 B	Nr 1830	DIN 6331	DIN 6340
12	M10	M10	M10	M10	M10
14	M12	M12	M12	M12	M12
16	M14	M14	M14	M14	M14
18	M16	M16	M16	M16	M16
20	M18	M18	M18	M18	M18
22	M20	M20	M20	M20	M20



Nr. 1950	a	12-14 16-18 20-22

Sip. No.	h	H	d	D
1510	23	30	M16	34
1510	40	60	M16	34
1510	70	100	Tr 30x4	50
1510	100	140	Tr 30x4	50

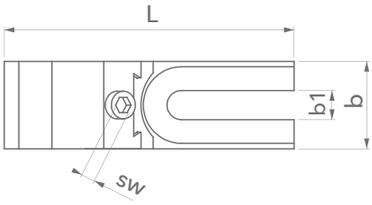


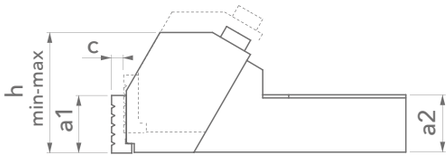
BLOK YANDAN BAĞLAMA

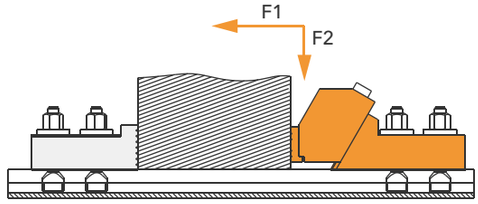


Sip. No.	a	a1	a2	b	b1	c	h Min. - Max.	L	sw	F1 Sıkma Kuveti Kgf	F2 Sıkma Kuveti Kgf	Ağırlık g
2095-572	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.6
2095-762	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	6.7

- İş parçasını dayama ve pleyt yönüne sıkar özellikle yüksek iş parçaları için tasarlanmıştır
- Çene Sertlik: Sertleştirilmiş
- Siyah kaplama







KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

DERECELİ YANDAN BAĞLAMA SET

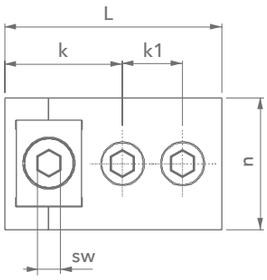


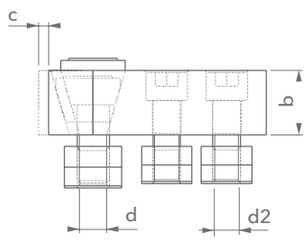
Sip. No.	a	c	L	b	n	k	k1	k2	L1	d	d1	d2	sw	Sıkma Kuvveti Kgf	Tork Değeri Nm	Ağırlık g
2030-14	14	5	90	23	47	47	26	26	65	M12	M12	M12	10	2000	35	3490
2030-16	16															3670
2030-18	18	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	5000
2030-20	20															5355
2030-22	22															5720
2030-24	24															6190
2030-28	28															6650

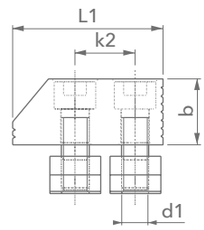
- Sertleştirilmiş
- Siyah kaplama
- Plastik kutuda set
- İş parçasını dayama yönünde sıktığında parçanın özgün yapısını değişikliğe sebep vermez

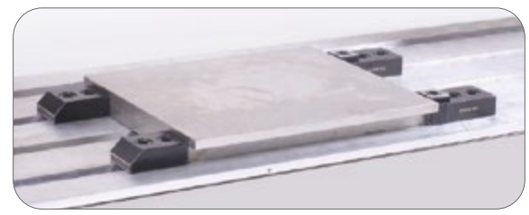
Parça						
Adet	2	2	10	10	1	1











DERECELİ YANDAN BAGLAMA (PARALELLİ) SET

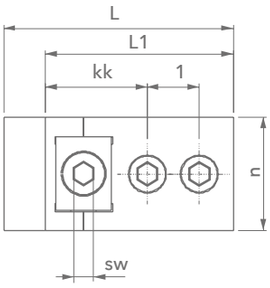


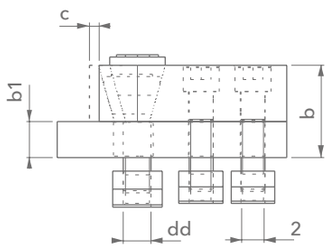
Sip. No.	a	c	L	L1	L2	L3	b	b1 ±0.01	n	k	k1	k2	d	d1	d2	sw	Sıkma Kuvveti Kgf	Tork Değeri Nm	Ağırlık g
2050-14	14	5	110	90	85	65	41	18	47	47	26	26	M12	M12	M12	6	1000	15	5920
2050-16	16																		6210
2050-18	18	5	115	95	85	65	46	18	57	52	26	26	M12	M12	M12	8	1250	20	8090
2050-20	20																		8440
2050-22	22																		8825
2050-24	24																		10080
2050-28	28																		10750

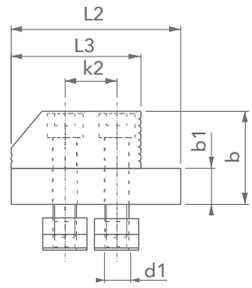
- Sertleştirilmiş
- Siyah kaplama
- Plastik kutuda set
- İş parçasını dayama yönünde sıktığında parçanın özgün yapısını değişikliğe sebep vermez.
- Paralelli oluşundan dolayı işlenen parçaya delik işlemi uygulanabilir.

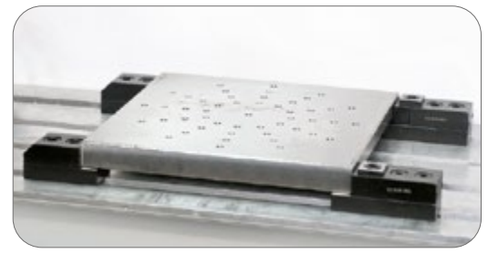
Parça						
Adet	2	2	10	10	1	1











KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

KIZAKLI YANDAN BAĞLAMA SET

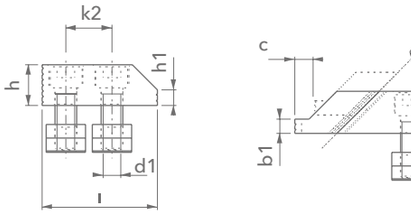


- Hareketli çenenin kızaklı yapısından dolayı iş parçasını dayama ve pleyt yönüne sıkar. Çenenin geniş hareketi iş parçasını bağlama ve sökmede kolaylık sağlar.
- DIN 650 T-Kanala uyumludur
- Çene Sertlik : Sertleştirilmiş
- Siyah kaplama
- Plastik kutuda set

Sip. No.	a	c	L	b	b1	n	n1	n2	k	k1	k2	sw	ı	h	h1	d	d1	Sıkma Kuvveti Kgf	Tork Değeri Nm	Ağırlık g
2070-14	14	10	142	24	8	37	12.5	18.5	65	54	26	6	65	23	10	M12	M12	850	15	3575
2070-16	16																			3710
2070-18	18																			5215
2070-20	20	14	145	28	10	48	12.5	18.5	74	56	26	8	65	28	11	M12	M12	1000	35	5400
2070-22	22																			5610

Parça						
Adet	2	2	8	8	2	1







Not: Sabit dayamanın dereceli tarafı ince parçalar, düz tarafı ise kalın parçalarda kullanılmak üzere iki farklı şekilde kullanılabilmektedir.



KOLLU YANDAN BAĞLAMA SET

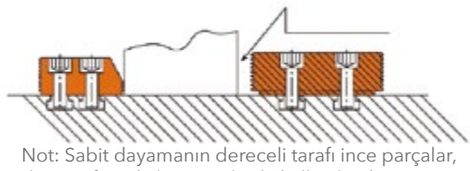


Sip. No.	a	c	b	k1	k2	k3	k4	L	h	h1	d	d1	Sıkma Kuvveti Kgf	Ağırlık g
2090-14	14													7925
2090-16	16													8490
2090-18	18													4610
2090-20	20	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	8850
2090-22	22													9030
2090-24	24													9490
2090-28	28													9800

- Ürünün eksantrik çalışma sistemi saat yönünde sıkıldığında iş parçasını dayama ve pleyt yönüne özel dizayn anahtarı ile yüksek kuvvette sıkar.

1. Kollu yandan sıkma pabucun eksantrik hareketi 3.5 mm'dir.
2. Ürün iş parçasına 1.5 - 2 mm yakınlaştırılır.
3. 10 mm alyan ile imbus civataları sabitlenir.
4. Ürünü anahtarı ile saat yönünde çevirerek iş parçasını sabitleme işlemi gerçekleştirilir.

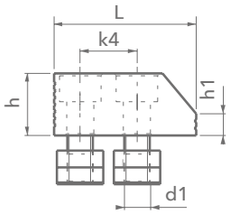
- DIN 650 T-Kanala uyumludur
- Somun Sertlik : Sertleştirilmiş
- Siyah kaplama
- Plastik kutuda set

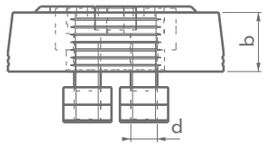


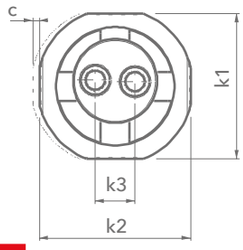
Not: Sabit dayamanın dereceli tarafı ince parçalar, düz tarafı ise kalın parçalarda kullanılmak üzere iki farklı şekilde kullanılabilmektedir.



Parça							
Adet	2	2	1	8	8	1	1









KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

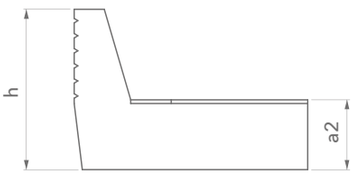
ER-EL

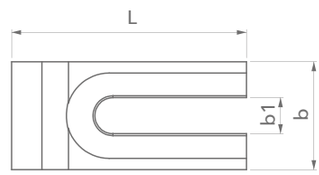
BLOK YANDAN BAĞLAMA DAYAMASI

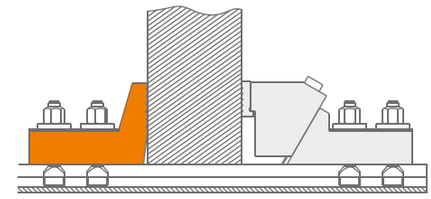


- 2095-571 ve 761 pabuçlar için dayama olarak tasarlanmıştır.
- Siyah kaplama

Sip. No.	a	a2	b	b1	h	L	Ağırlık g
2098-571	14-16-18	37	57	19	85	124	2.025
2098-761	20-22-24-28	45	76	26	105	154	4.185





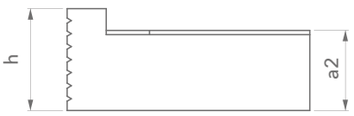


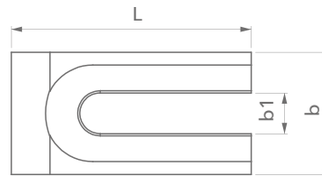
BLOK YANDAN BAĞLAMA DAYAMASI

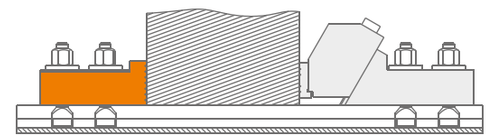


- 2095-572 ve 762 pabuçlar için dayama olarak tasarlanmıştır.
- Siyah kaplama

Sip. No.	a	a2	b	b1	h	L	Ağırlık g
2098-572	14-16-18	37	57	19	47	112	2.800
2098-762	20-22-24-28	45	76	26	49	140	4.185

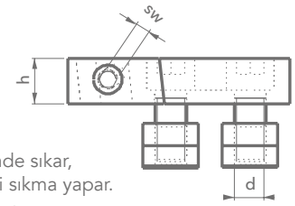


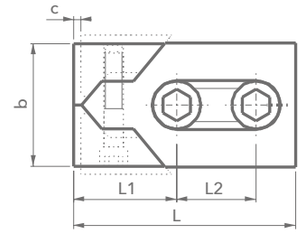


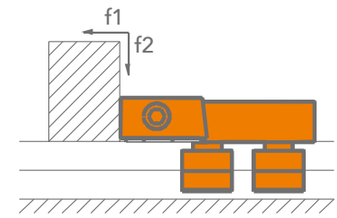


ÇİFT ÇENELİ YANDAN BAĞLAMA PABUCU







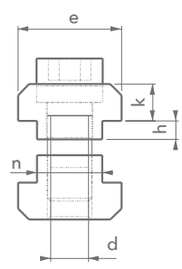


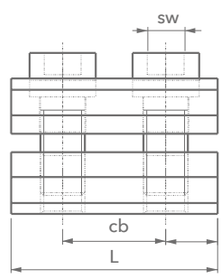
- İş parçasını dayama ve pleyt yönünde sıkar, pabucun yapısından dolayı kuvvetli sıkma yapar.
- Sertleştirilmiş
- Siyah kaplama

Sip. No.	a	c	h	b	L	L1	L2	sw	d	Sıkma Kuvveti f1 Kgf	Sıkma Kuvveti f2 Kgf	Ağırlık g
2110-12	12	3	20	40	80	39	26	6	M10	1600	60	415
2110-14	14									2200	90	425
2110-16	16	4	25	50	100	46	34	8	M14	3200	120	785
2110-18	18									3600	140	810
2110-20	20									3600	140	850
2110-22	22	5	28.5	78	140	65	50	10	M20	3600	140	2275
2110-24	24									3600	140	2360
2110-28	28									4000	160	2500

DAYAMA







- Dayama referans alma, uzunlamasına ve enlemesine kullanılır.
- Sertleştirilmiş
- Siyah kaplama

Sip. No.	a	n	e	c	d	b	h	k	L	sw	Ağırlık g
2130-12	12	11.7	18	18	M8	9	3	7	36	6	100
2130-14	14	13.7	22	22	M8	11	4	8	44	6	180
2130-16	16	15.7	25	25	M12	12.5	5	9	50	10	270
2130-18	18	17.7	28	28	M12	14	5	10	56	10	355
2130-20	20	19.7	32	32	M16	16	5	12	64	14	570
2130-22	22	21.7	35	35	M16	17.5	6	14	70	14	770
2130-24	24	23.7	40	40	M20	20	6	16	80	17	1180
2130-28	28	27.7	44	44	M20	22	6	18	88	17	1560

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

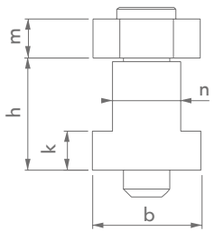
ER-EL

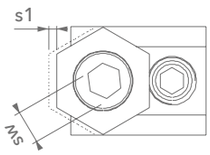
KANAL İÇİ YANDAN BAĞLAMA

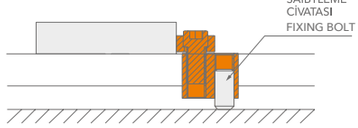


- Ürünün T-Gövdesi tamamıyla tezgah kanalına girer.
- Sadece ürünün eksantrik başlığı tabla yüzeyinde kaldığı için ince parçalarda sıkma kolaylığı sağlar.
- DIN 650 T-Kanala uyumludur
- Sertleştirilmiş
- Siyah kaplama

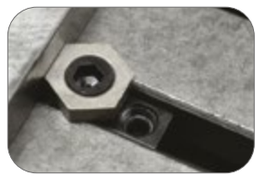
Sip. No.	a	s1	m	sw	L	h	k	n	b	Sıkma Kuvveti kgf	Ağırlık g
2150-08	8	1.4	5	4	23	9.5	6	7.7	13	310	25
2150-10	10	1.4	5	4	23	14	6	9.7	15	310	35
2150-12	12	1.2	7	5	28	15	7	11.7	18	340	60
2150-14	14	1.7	7	7	30	22	8	13.7	22	800	95
2150-16	16	1.7	10	8	30	22	9	15.7	25	1500	130
2150-18	18	2	10	8	35	28	10	17.7	28	1500	190
2150-20	20	2.5	13	10	40	32	12	19.7	32	2000	290
2150-22	22	2.5	13	12	45	38	14	21.7	35	2000	390







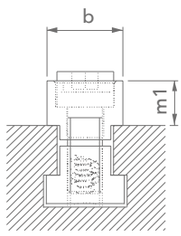


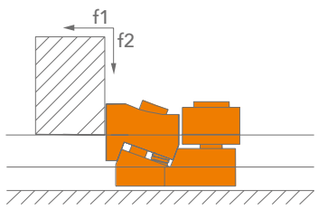


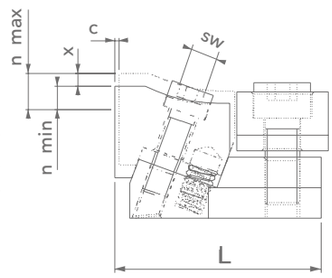
YANDAN BAĞLAMA PENÇE PABUÇ



- İş parçasını dayama ve pleyt yönüne sıkar
- T-Kanal içinde çalışması yükseklik avantajı sağlar
- DIN 650 T-Kanala uyumludur
- Sertleştirilmiş
- Siyah kaplama







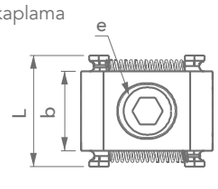
Sip. No.	a	c	n Min.	n Max.	x	L	b	m1	sw	Sıkma Kuvveti f1 kgf	Sıkma Kuvveti f2 kgf	Ağırlık g
2170-12	12	2	2	6	4	46	21	10	5	500	60	120
2170-14	14	2.5	2.5	7.5	5	51	26	10	6	550	70	200
2170-16	16	3	2.5	8.5	6	61	27.5	12	6	800	90	290

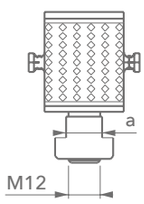
Sip. No.	a	c	n Min.	n Max.	x	L	b	m1	sw	Sıkma Kuvveti f1 kgf	Sıkma Kuvveti f2 kgf	Ağırlık g
2170-18	18	3	2	8	6	67	35	13	8	900	100	420
2170-20	20	4	2.5	11	8.5	78	38	13	10	1200	140	640
2170-22	22	4.5	2.5	12	9.5	87	39	16.5	10	1600	190	830

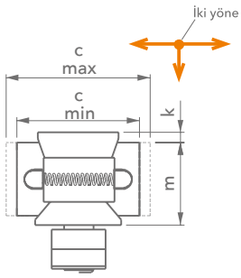
ÇİFT AÇILIR YANDAN BAĞLAMA

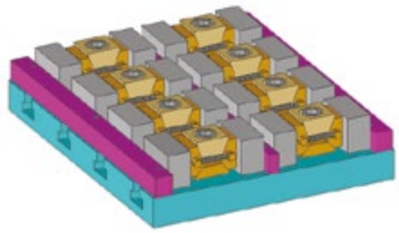


- Bir noktadan iki yöne ve pleyt yönüne doğru sıkma işlemi yapar.
- M12 diş pleytlerde ve (a) 14-16-18-20-22 T-Kanal ölçülerinde kullanılır.
- Sertleştirilmiş
- Siyah kaplama





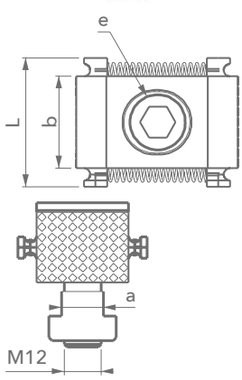


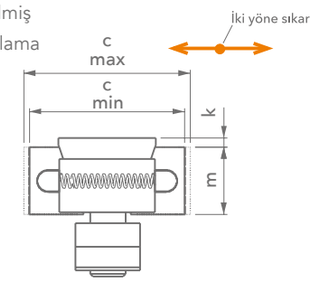


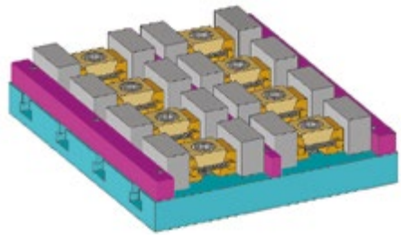
Sip. No.	c Min.	c Max.	a	m	k	b	L	e DIN 912	Sıkma Kuvveti kgf	Ağırlık g
2190-5055	50	55	14-16-18-20-22	35	4	30	42	M12	1750	390



- Bir noktadan iki yöne sıkma işlemi yapar.
- M12 diş pleytlerde ve (a) 14-16-18-20-22 T-Kanal ölçülerinde kullanılır.
- Sertleştirilmiş
- Siyah kaplama







Sip. No.	c Min.	c Max.	a	m	k	b	L	e DIN 912	Sıkma Kuvveti kgf	Ağırlık g
2210-4954	49	54	14-16-18-20-22	23	4	30	42	M12	1500	280

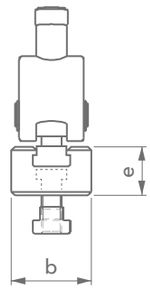
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

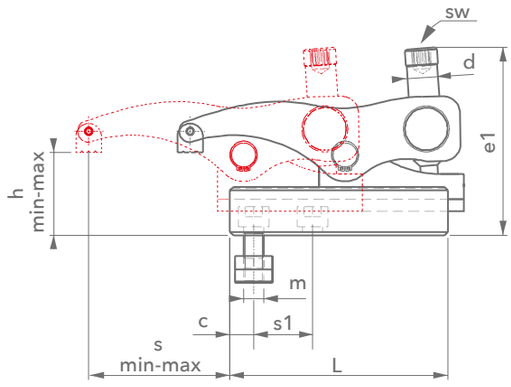
ER-EL

KIZAKLI KOMBİNE BAĞLAMA PABUCU

Sip. No.	a	m	h Min.	h Max.	s	s1	e1	d	sw	L	e	b	c	Sıkma Kuvveti kgf	Ağırlık g
1120-014 T	14	M12	0	50	12-66	25	100	M14	8	104	35.5	38	13	1600	1700
1120-016 T	16	M12	0	50	12-66	25	100	M14	8	104	35.5	38	13	1600	1700
1120-018 T	18	M12	0	50	12-66	25	100	M14	8	104	35.5	38	13	1600	1700
1130-014 T	14	M12	0	60	15-83	30	113	M18	10	130	39	48	17.5	2000	3040
1130-016 T	16	M12	0	60	15-83	30	113	M18	10	130	39	48	17.5	2000	3055
1130-018 T	18	M12	0	60	15-83	30	113	M18	10	130	39	48	17.5	2000	3085
1130-020 T	20	M12	0	60	15-83	30	113	M18	10	130	39	48	17.5	2000	3135
1130-022 T	22	M12	0	60	15-83	30	113	M18	10	130	39	48	17.5	2000	3150
1150-118 T	18	M16	0	65	18-96	35	125	M20	12	140	43	55	19.5	2500	4410
1150-120 T	20	M16	0	65	18-96	35	125	M20	12	140	43	55	19.5	2500	4460
1150-122 T	22	M16	0	65	18-96	35	125	M20	12	140	43	55	19.5	2500	4515
1150-124 T	24	M16	0	65	18-96	35	125	M20	12	140	43	55	19.5	2500	4620
1150-128 T	28	M16	0	65	18-96	35	125	M20	12	140	43	55	19.5	2500	4725
1160-222 T	22	M20	20	80	17-92	41.5	175	M24	12 / 24	178	55	74	24	5500	9030
1160-224 T	24	M20	20	80	17-92	41.5	175	M24	12 / 24	178	55	74	24	5500	9120
1160-228 T	28	M24	20	80	17-92	41.5	175	M24	12 / 24	178	55	74	24	5500	9180
1160-236 T	36	M24	20	80	17-92	41.5	175	M24	12 / 24	178	55	74	24	5500	9600







Ürün Nr.1120-1130 Kızaklı Kombine Bağlama Pabucu

- Nr. 1120 (a) 14-18 T-Kanalda M12 imbus civata DIN 508 T-Pabuçla kullanılır. Parça yükseklik sıkma aralığı 0-50 mm ileri-geri hareket mesafesi 54mm'dir. Sıkma Kuvveti 1600 kgf.
- Nr.1130 (a) 14-22 T-Kanalda M12 imbus civata DIN 508 T-Pabuçla kullanılır. Parça yükseklik sıkma aralığı 0-60 mm ileri-geri hareket mesafesi 68mm'dir. Sıkma Kuvveti 2000 kgf.

Ürün Nr. 1150-1160 Kızaklı Kombine Bağlama Pabucu

- Nr. 1150 (a) 18-28 T-Kanalda M16 imbus civata DIN 508 T-Pabuçla kullanılır. Parça yükseklik sıkma aralığı 0-65mm ileri-geri hareket mesafesi 78mm'dir. Sıkma Kuvveti 2500 kgf.
- Nr. 1160 (a) 22-36 T-Kanalda M20-M24 imbus civata DIN 508 T-Pabuçla kullanılır. Parça yükseklik sıkma aralığı 20-80mm ileri-geri hareket mesafesi 73mm'dir. Sıkma Kuvveti 5500 kgf.

UYGULAMA;

1. Alt kızağı iş parçasına uygun şekle getir sabitle



2. Üst gövdeyi kızağa sür, istenilen pozizyona getir



3. Pabuç imbus civatasıyla iş parçasını sabitle



4. Parça işlenmek için hazır



KULLANIM ALANI

- Enjeksiyon maki nal arı presler, freze tezgahları, matkap tezgahları ve çeşitli sanayi makinaları

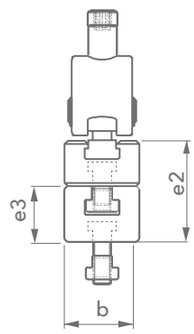
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

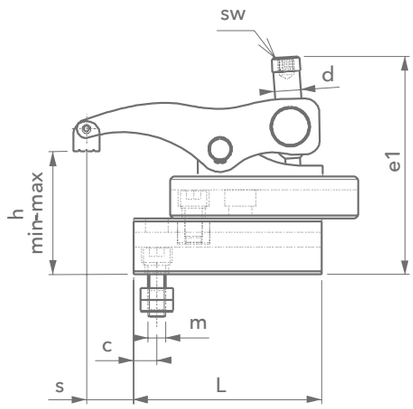
ER-EL

KIZAKLI KOMBİNE BAĞLAMA PABUCU

Sip. No.	a	m	h Min.	h Max.	s	e1	e2	d	sw	L	b	e3	c	Ağırlık g
1120-014 DT	14	M12	36	86	12-66	136	71.5	M14	8	104	38	38	13	2540
1120-016 OT	16	M12	36	86	12-66	136	71.5	M14	8	104	38	38	13	2540
1120-018 DT	18	M12	36	86	12-66	136	71.5	M14	8	104	38	38	13	2540
1130-014 DT	14	M12	45	105	15-83	158	83	M18	10	130	48	45	17.5	4750
1130-016 DT	16	M12	45	105	15-83	158	83	M18	10	130	48	45	17.5	4775
1130-018 DT	18	M12	45	105	15-83	158	83	M18	10	130	48	45	17.5	4805
1130-020 DT	20	M12	45	105	15-83	158	83	M18	10	130	48	45	17.5	4855
1130-022 DT	22	M12	45	105	15-83	158	83	M18	10	130	48	45	17.5	4905
1150-118 DT	18	M16	48	113	18-96	173	90	M20	12	140	55	48	19.5	6625
1150-120 DT	20	M16	48	113	18-96	173	90	M20	12	140	55	48	19.5	6690
1150-122 DT	22	M16	48	113	18-96	173	90	M20	12	140	55	48	19.5	6750
1150-124 DT	24	M16	48	113	18-96	173	90	M20	12	140	55	48	19.5	6840
1150-128 DT	28	M16	48	113	18-96	173	90	M20	12	140	55	48	19.5	6960
1160-222 DT	22	M20	79	139	17-92	235	114	M24	12 24	178	74	59	24	13330
1160-224 DT	24	M20	79	139	17-92	235	114	M24	12 24	178	74	59	24	13465
1160-228 DT	28	M24	79	139	17-92	235	114	M24	12 24	178	74	59	24	13580
1160-236 DT	36	M24	79	139	17-92	235	114	M24	12 24	178	74	59	24	13890







Ürün Nr. 1120:Alt Destekli
- M12 imbus civata DIN 508 T-Pabuçla kullanılır.
- Parça yükseklik sıkma aralığı 36-86mm
- Sıkma kuvveti 1600kgf

Ürün Nr. 1130:Alt Destekli
- M12 imbus civata DIN 508 T-Pabuçla kullanılır.
- Parça yükseklik sıkma aralığı 45-105mm
- Sıkma kuvveti 2000kgf

Ürün Nr. 1150:Alt Destekli
- M16 İmbus civata DIN 508 T-Pabuçla kullanılır.
- Parça yükseklik sıkma aralığı 48-113mm
- Sıkma kuvveti 2500kgf

Ürün Nr. 1160:Alt Destekli
- M20-M24 İmbus civata DIN 508 T-Pabuçla kullanılır. Parça yükseklik sıkma aralığı 79-139mm
- Sıkma kuvveti 5500kgf

UYGULAMA;

1. Alt desteği iş parçasına uygun şekle getir sabitle



2. K.K.S.P. destekler artırılarak istenilen mesafeye ulaşılır



3. K.K.S.P. imbus civata ile T-Pabuca karşılık T-Kanala tak istenilen pozisyona getir.



4. Pabuç imbus civatasıyla iş parçasını sabitle

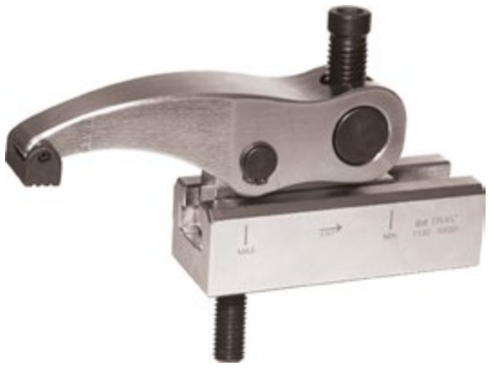


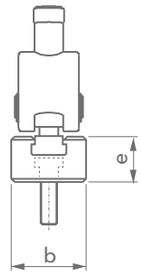
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

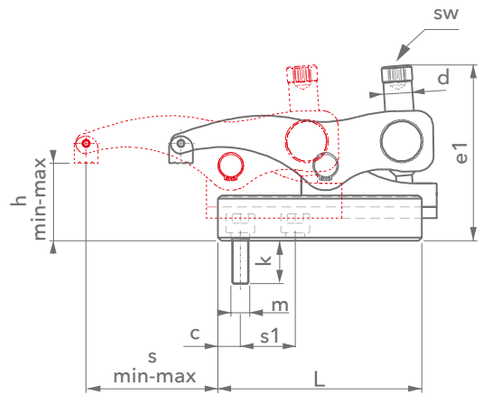
ER-EL

KIZAKLI KOMBİNE BAĞLAMA PABUCU

Sip. No.	m	h Min.	h Max.	s	s1	e1	d	sw		L	e	b	c	k	Sıkma Kuvveti kgf	Ağırlık g
1120-010 M	M10	0	50	12-66	25	100	M14		8	104	35.5	38	13	20	1600	1700
1120-012 M	M12	0	50	12-66	25	100	M14		8	104	35.5	38	13	20	1600	1700
1130-012 M	M12	0	60	15-83	30	113	M18	10		130	39	48	17.5	22	2000	3000
1130-016 M	M16	0	60	15-83	30	113	M18		10	130	39	48	17.5	26	2000	3030
1150-116 M	M16	0	65	18-96	35	125	M20		12	140	43	55	19.5	26	2500	4340
1150-118 M	M18	0	65	18-96	35	125	M20		12	140	43	55	19.5	30	2500	4360
1150-120 M	M20	0	65	18-96	35	125	M20		12	140	43	55	19.5	30	2500	4370
1160-220 M	M20	20	80	17-92	41.5	175	M24	12	24	178	55	74	24	34	5500	8880
1160-222 M	M22	20	80	17-92	41.5	175	M24	12	24	178	55	74	24	38	5500	8900
1160-224 M	M24	20	80	17-92	41.5	175	M24	12	24	178	55	74	24	44	5500	8920
1160-230 M	M30*	20	80	17-92	41.5	175	M24	12	24	178	55	74	24	51	5500	9110







Ürün Nr. 1120 Kızaklı Kombine Bağlama Pabucu
- M10-M12 diş deliklerde (1120-310)-(1120-312) Referans Nr.
- imbus civatayla kullanılır.
- Parça yükseklik sıkma aralığı 0-50mm, sıkma kuvveti 1600 kgf.

Ürün Nr. 1130 Kızaklı Kombine Bağlama Pabucu
- M12-M16 diş deliklerde (1130-412)-(1130-416) Referans Nr. imbus civatayla kullanılır.
- Parça yükseklik sıkma aralığı 0-60mm, sıkma kuvveti 2000 kgf.

AVANTAJLARI;
- 1600 kgf - 2000 kgf sıkma kuvveti
- Delik ve T-Kanalda kullanım
- Kızak üzerinde kaydırarak değişik pozizyonlarda sabitleme
- imbus civatasıyla desteksiz yüksek ve düşük mesafeleri sıkar
- Pratik yapısından dolayı hızlı ve kolay şekilde bağlama sağlar

Ürün Nr. 1150 Kızaklı Kombine Bağlama Pabucu
- M16-M18-M20 diş deliklerde (1150-516)-(1150-518)-(1160-520)
- Referans Nr. imbus civatayla kullanılır.
- Parça yükseklik sıkma aralığı 0-65mm. sıkma kuvveti 2500 kgf

Ürün Nr. 1160 Kızaklı Kombine Bağlama Pabucu
- M20-M22-M24-M30 diş deliklerde(1160-620)-(1160-622) (1160-624)-(1160-724)-(1160-730) Referans Nr. imbus civatayla kullanılır.
- Parça yükseklik sıkma aralığı 20-80mm, sıkma kuvveti 5500 kgf
- Not: 1160-230M kodlu ürünün alt T-Kızaklı gövdesindeki civata yeri standart değildir. Civata yeri bu ürüne özel işlenmektedir.

AVANTAJLARI;
- 2500 kgf - 5500 kgf sıkma kuvveti
- Delik ve T-Kanalda kullanım
- Kızak üzerinde kaydırarak değişik pozizyonlarda sabitleme
- imbus civatasıyla desteksiz yüksek ve düşük mesafeleri sıkar
- Pratik yapısından dolayı hızlı ve kolay şekilde bağlama sağlar

1.



2.



3.



4.



KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

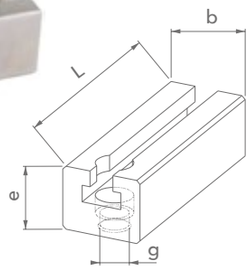
ER-EL

KIZAKLI KOMBİNE BAĞLAMA PABUCU YEDEK PARÇALARI

ALT DESTEK



• Sertleştirilmiş



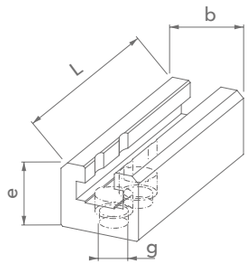


Sip. No.	g	a	L	b	e	Ağırlık g
1120-040	M10 M12	14	104	38	38	820
1130-045	M12 M16	14	130	48	45	1630
1150-048	M16 M18 M20	18	140	55	48	2070
1160-059	M20 M22 M24	28	178	74	55	3980

T-KIZAKLI GÖVDE



• Sertleştirilmiş



Sip. No.	g	a	L	b	e	Ağırlık g
1120-045	M10 M12	14-18	104	38	35.5	750
1130-047	M12 M16	18-28	130	48	39	1275
1150-053	M16 M18 M20	18-28	140	55	42	1700
1160-074	M20 M22 M24	22-28	178	74	55	3650
1160-075	M30*	36	178	74	55	3650

ÜST KIZAK GRUBU



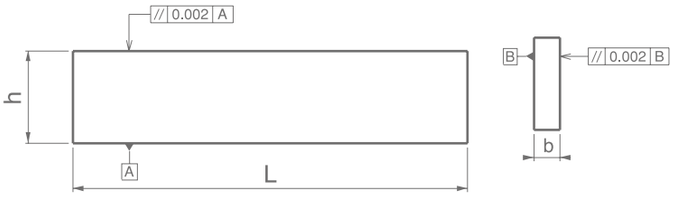
• Üst Kızak Grubu: Dövme Çelik
• Sertleştirilmiş

Sip. No.	a	h		sw		Ağırlık g
		Min.	Max.			
1120-0050	14-18	o	50	8	-	860
1130-0060	14-22	o	60	10	-	1680
1150-0062	18-28	o	65	12	-	2565
1160-2080	22-36	20	80	12	24	5050

PARALEL SET



• Ürün iş parçalarının paralel bağlanmasında ve hassas işlenmesinde altlık olarak kullanılır.
• 28 parça
• Sertleştirilmiş
• Ahşap kutuda set



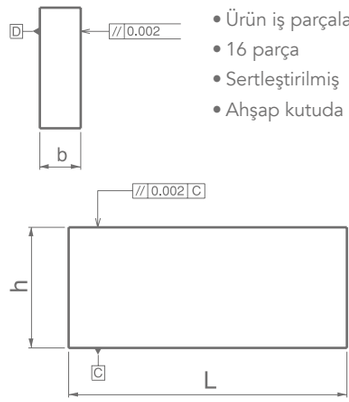
Sip. No.	h x b x L	tolerans h	tolerans b	Ağırlık Kg	Adet
2230-028	14x10x150	±0.01	±0.01	±10.8	2
	16x10x150				2
	18x10x150				2
	20x10x150				2
	22x10x150				2
	24x10x150				2
	26x10x150				2
	28x10x150				2
	30x10x150				2
	32x10x150				2
	35x10x150				2
	40x10x150				2
	45x10x150				2
	50x10x150				2

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

PARALEL SET

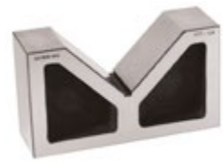




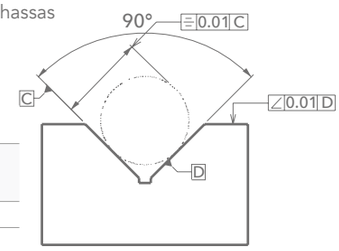
- Ürün iş parçalarının paralel bağlanmasında ve hassas işlenmesinde altlık olarak kullanılır.
- 16 parça
- Sertleştirilmiş
- Ahşap kutuda set

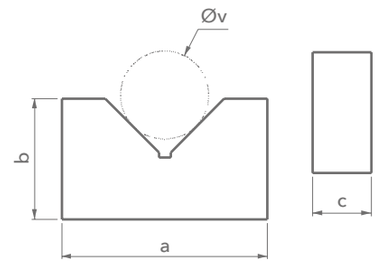
Sip. No.	h x b x L	tolerans h	tolerans b	Ağırlık Kg	Adet
2250-016	20x6x100	±0.01	±0.01	±10.6	2
	23x8x100				2
	28x10x100				2
	36x12x150				2
	42x14x150				2
	48x16x150				2
	58x18x150				2
	65x22x150				2

V-YATAK



- Malzeme : Döküm
- Silindir parçaların paralel bağlanmasında ve hassas işlenmesinde altlık olarak kullanılır.
- İkili takım

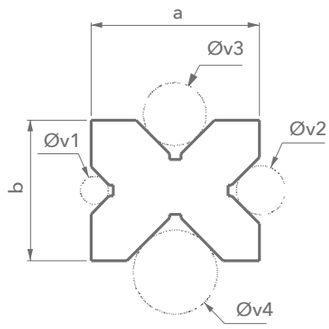


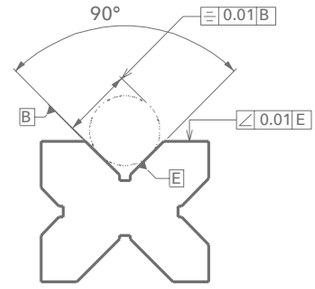


Sip. No.	a	b	c	Øv		Ağırlık g
				Min.	Max.	
2270-140	140	82	40	20	11 O	1980
2270-204	204	115	66	15	150	6150

XV-YATAK









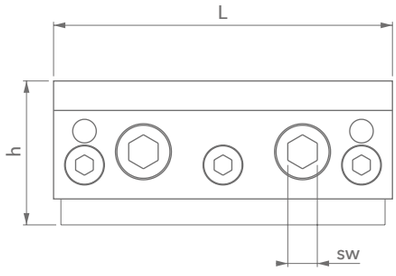


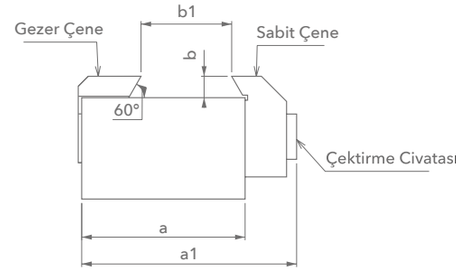
- Malzeme : Döküm
- Silindir parçaların paralel bağlanmasında hassas işlenmesinde altlık olarak kullanılır, X formunda olmasından dolayı 4 ayrı yüzeyi kullanma avantajı sağlar.
- İkili takım

Sip. No.	a	b	c	Øv1		Øv2		Øv3		Øv4		Ağırlık g
				Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
2290-120	120	100	60	12	40	12	60	12	75	12	90	2840
2290-150	152	132	74	15	80	15	95	15	110	15	120	4975

CNC 5 EKSEN PARÇA BAĞLAMA APARATI







- İş parçasına kırlangıç yuva açılarak aparata bağlanır.
- Sertleştirilmiş
- Siyah kaplama

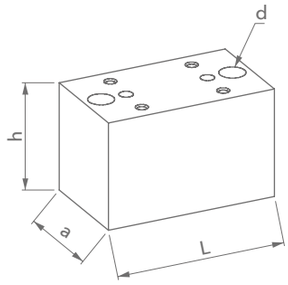
Sip. No.	L	h	a	a1	b	b1	sw	Ağırlık g
2295-090	90	39	55	73	7	21-35	8	1480
2295-115	115	49	65	82.5	8.5	31-42	10	2690
2295-130	130	56	75	98	10	37-48	12	4160

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

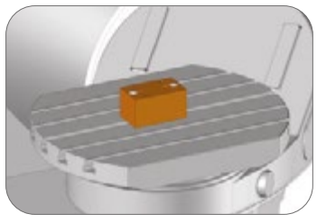
ER-EL

CNC 5 EKSEN PARÇA BAĞLAMA TAKOZU





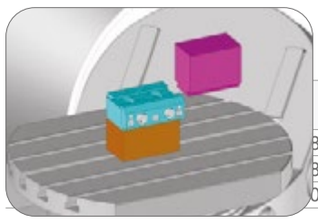
1.



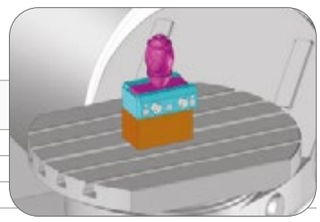
2.



3.



4.

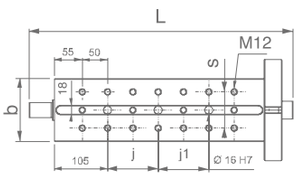


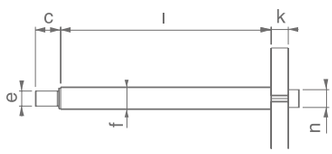
- Sertleştirilmiş
- Siyah kaplama

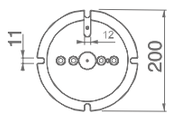
DİVİZÖR KULESİ

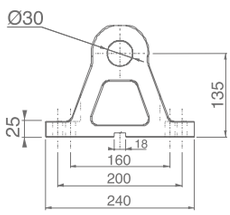


Yatak = Nr.2460



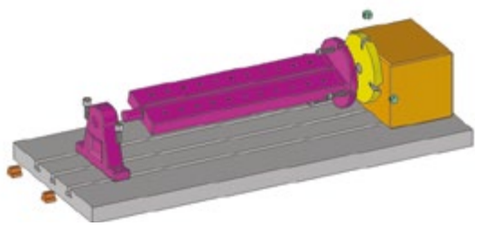












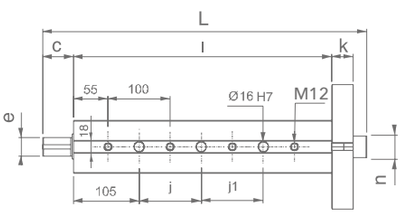
- Divizör kulesi dik işleme tezgahlarında divizöre bağlanarak. dördüncü ekseni 360 derece kullanma imkanı sağlar.
- Divizör kulesi üzerine iş parçası direk bağlanabildiği gibi, mengene grupları veya farklı aparatlarda kullanılır.
- Siparişte divizör marka model numurasını bildiriniz.
- Yatak merkezi yükseklik için alt plakalar mevcuttur.
- Malzeme : Döküm

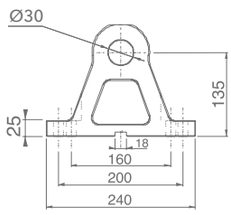
Sip. No.	L	l	f	n	b	k	c	e	a	Ø16H7 j	Ø16H7 j1	Ağırlık Kg
2450-415L	503.5	415	45	-	125	35	31	30	72	100	100	29.25
2450-615L	703.5	615	50	-	160	35	31	30	90	100	300	46.75

DİVİZÖR KULESİ

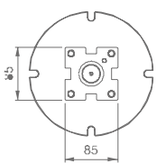


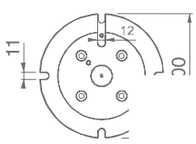
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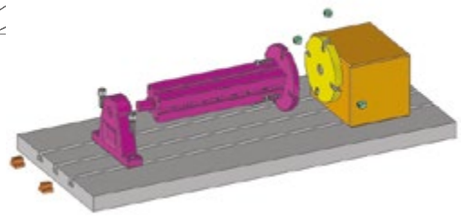












- Divizör kulesi dik işleme tezgahlarında divizöre bağlanarak, dördüncü ekseni 360 derece kullanma imkanı sağlar.
- Divizör kulesi üzerine iş parçası direk bağlanabildiği gibi, mengene grupları veya farklı aparatlarda kullanılır
- Siparişte divizör marka model numurasını bildiriniz.
- Yatak merkezi yükseklik için alt plakalar mevcuttur.
- Malzeme : Döküm

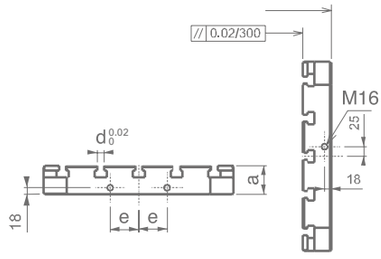
Sip. No.	L	l	n	k	e	c	Ø16H7 j	Ø16H7 j1	Ağırlık Kg
2470-415K	502	415	-	35	30	31	100	100	33
2470-615K	702	615	-	35	30	31	100	300	42

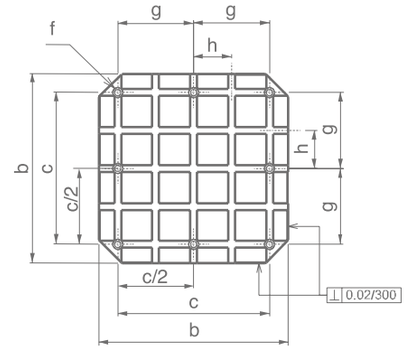
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

CNC YATAY İŞLEME TABLASI





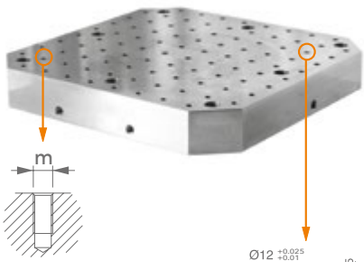


- Malzeme : Döküm
- Standart bağlama ekipmanlarına uyumludur.
- T-Kanal ölçüsü 14mm - 18mm DIN 650 standartındadır.

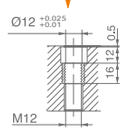
Sip. No.	a ±0.02	b	c	d	e	f	g	h ±0.02	Ağırlık Kg
2490-7540014	75	400	320	14	55	18	160	80	71
2490-7550014	75	500	400	14	75	18	200	100	115
2490-7563014	75	630	500	14	100	18	250	125	188

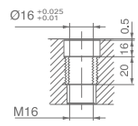
Sip. No.	a ±0.02	b	c	d	e	f	g	h ±0.02	Ağırlık Kg
2490-7540018	75	400	320	18	55	18	160	80	65
2490-7550018	75	500	400	18	75	18	200	100	107
2490-7563018	75	630	500	18	100	18	250	125	178

CNC YATAY İŞLEME TABLASI



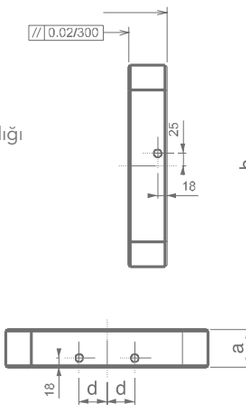
Gövdeye dişli
Referans Nr. 2510

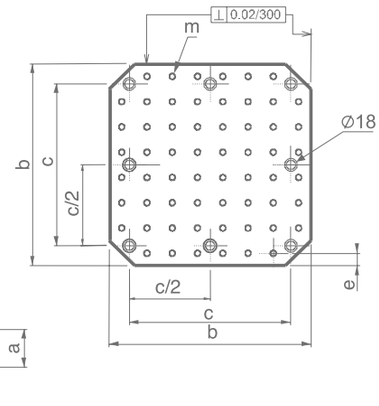




Çelik burçlu
Referans Nr. 2520

- Malzeme : Döküm
- Standart bağlama ekipmanlarına uyumludur.
- Yüzeyinde M12 - M16 diş merkez aralığı 50±0.02
- Çelik burçlu dişleri sertleştirilmiştir.

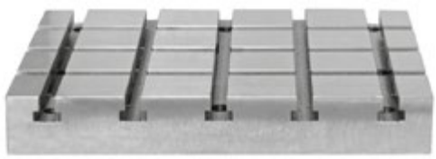


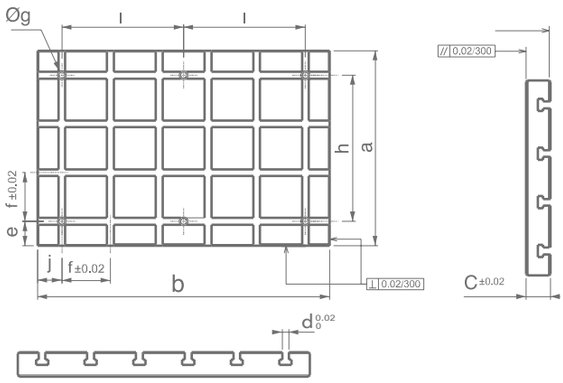


Sip. No.	a ±0.02	b	c	d	e		Ağırlık Kg
2520-7540012	75	400	320	55	25	M12	80
2520-7550012	75	500	400	75	25	M12	127
2520-7563012	75	630	500	100	40	M12	204
2520-7540016	75	400	320	55	25	M16	79
2520-7550016	75	500	400	75	25	M16	125
2520-7563016	75	630	500	100	40	M16	200

Sip. No.	a ±0.02	b	c	d	e		Ağırlık Kg
2510-7540012	75	400	320	55	25	M12	80
2510-7550012	75	500	400	75	25	M12	127
2510-7563012	75	630	500	100	40	M12	204
2510-7540016	75	400	320	55	25	M16	79
2510-7550016	75	500	400	75	25	M16	125
2510-7563016	75	630	500	100	40	M16	200

CNC DİK İŞLEME PLEYTİ





- Malzeme : Döküm
- Standart bağlama ekipmanlarına uyumludur.
- T-Kanal ölçüsü 14mm - 18mm DIN 650 standartındadır.

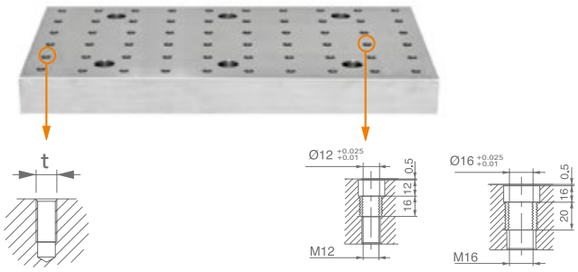
Sip. No.	a	b	c	d	e	f	Øg	h	ı	j	Ağırlık Kg
2550-040018	400	600	75	18	50	100	18	-	-	50	108
2550-050018	500	600	75	18	50	100	18	-		50	135
2550-060018	600	800	75	18	50	100	18	-	-	50	216
2550-140018	400	800	75	18	50	100	18	-	-	50	143
2550-145018	450	900	75	18	75	100	18	-		50	183
2550-150018	500	1000	75	18	50	100	18	-	-	50	225

Sip. No.	a	b	c	d	e	f	Øg	h	ı	j	Ağırlık Kg
2550-040014	400	600	60	14	50	100	18	-	-	50	90
2550-050014	500	600	60	14	50	100	18	-	-	50	115
2550-060014	600	800	60	14	50	100	18	-	-	50	198
2550-140014	400	800	60	14	50	100	18	-	-	50	120
2550-145014	450	900	60	14	75	100	18	-	-	50	162
2550-150014	500	1000	60	14	50	100	18	-	-	50	199

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

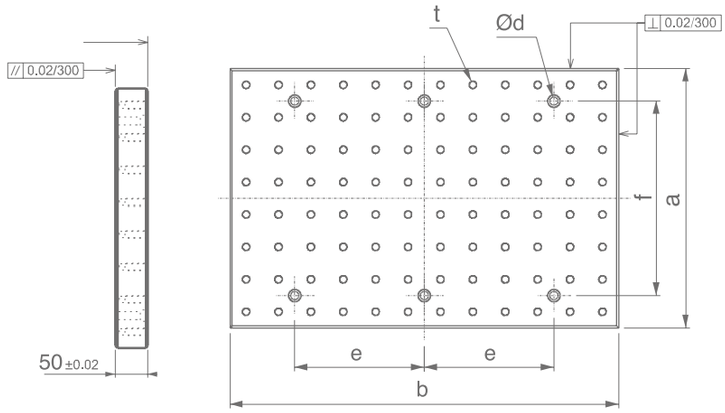
ER-EL

CNC DİK İŞLEME PLEYTİ



Gövdeye dişli
Referans Nr. 2530

Çelik burçlu
Referans Nr. 2540

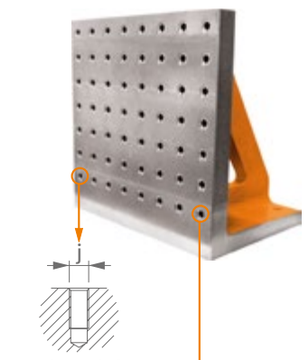


- Malzeme : Döküm
- Standart bağlama ekipmanlarına uyumludur.
- Yüzeyinde M12-M16 diş Merkez aralığı 50±0.02
- Çelik burçlu dişleri sertleştirilmiştir.

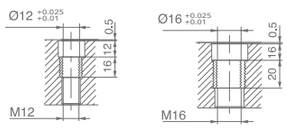
Sip. No.	a	b	Ød	e	f	t	Ağırlık Kg
2530-040012	400	600	18	-	-	M12	73
2530-050012	500	600	18	-	-	M12	112
2530-060012	600	800	18	-	-	M12	162
2530-140012	400	800	18	-	-	M12	119
2530-145012	450	900	18	-	-	M12	151
2530-150012	500	1000	18	-	-	M12	173

Sip. No.	a	b	Ød	e	f	t	Ağırlık Kg
2530-040016	400	600	18	-	-	M16	87
2530-050016	500	600	18	-	-	M16	108
2530-060016	600	800	18	-	-	M16	155
2530-140016	400	800	18	-	-	M16	115
2530-145016	450	900	18	-	-	M16	146
2530-150016	500	1000	18	-	-	M16	171

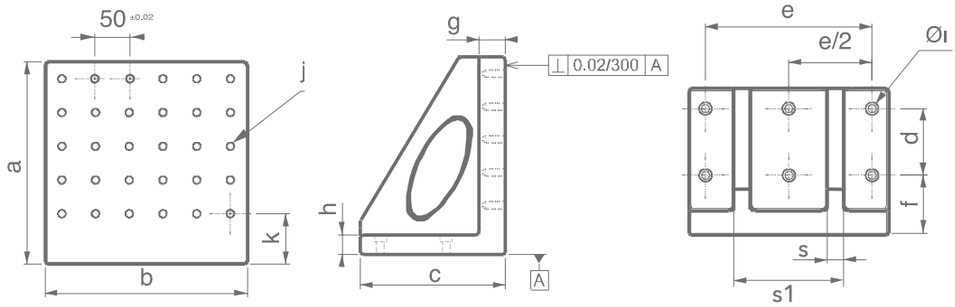
L GÖNYE "DELİKLİ"



Gövdeye dişli
Referans Nr. 2570



Çelik burçlu
Referans Nr. 2575

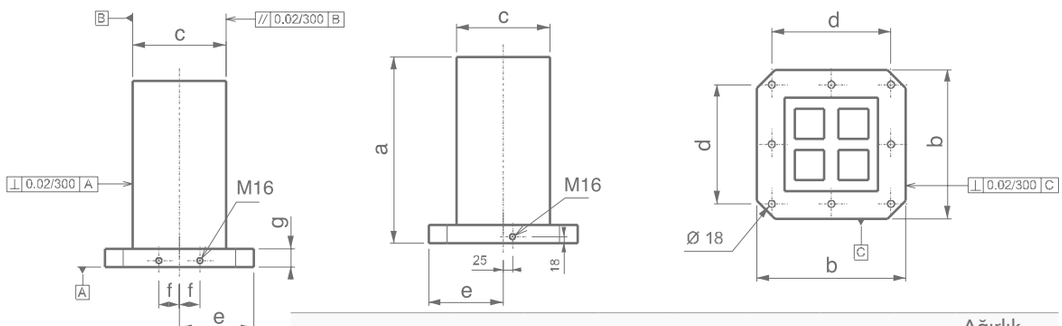


- Malzeme : Döküm
- CNC yatay ve dik işleme tezgahlarında kullanılır.
- Standart bağlama ekipmanlarına uyumludur.
- Yüzeyinde M12 - M16 diş merkez aralığı 50±0.02
- Çelik burçlu dişleri sertleştirilmiştir.

Sip. No.	a	b	c	d	e	f	g	h	Øı	j	k	s	s1	Ağırlık Kg
2570-30012	300	300	220	100	250	90	40	30	18	M12	75	25	170	50
2570-40012	400	400	280	160	320	90	40	30	18	M12	75	30	240	88
2570-50012	500	500	345	200	400	90	50	35	18	M12	75	35	300	175
2570-63012	630	630	435	250	500	100	50	40	18	M12	105	40	360	298
2570-30016	300	300	220	100	250	90	40	30	18	M16	75	25	170	45
2570-40016	400	400	280	160	320	90	40	30	18	M16	75	30	240	84
2570-50016	500	500	345	200	400	90	50	35	18	M16	75	35	300	170
2570-63016	630	630	435	250	500	100	50	40	18	M16	105	40	360	293

CNC YATAY İŞLEME KULESİ





- İsteğe göre uygulama yapılabilmesi için yüzeyler deliksizdir.
- Malzeme : Döküm

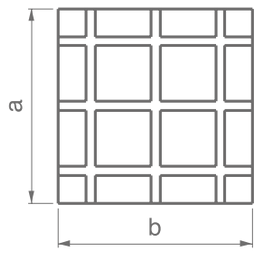
Sip. No.	a	b	c	d	e	f	g	Ağırlık Kg
2610-400250	500	400	250	320	200	55	50	180
2610-500300	600	500	300	400	250	75	50	240
2610-630350	700	630	350	500	315	100	50	390

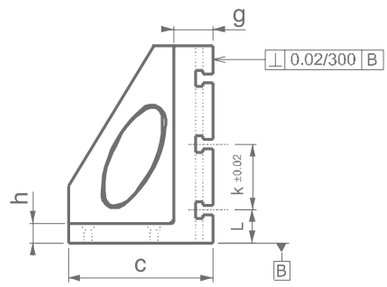
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

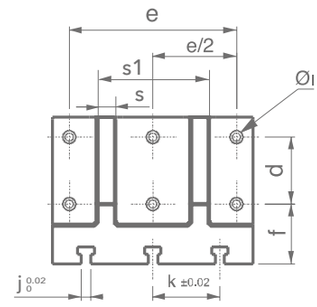
ER-EL

L GÖNYE "T KANALLI"







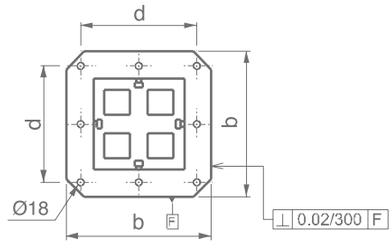


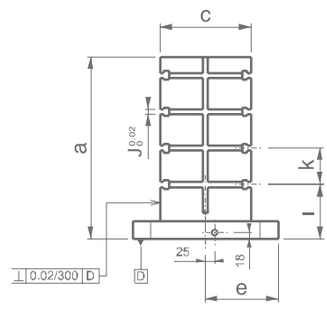
- Malzeme : Döküm
- CNC yatay ve dik işleme tezgahlarında kullanılır.
- Standart bağlama ekipmanlarına uyumludur.
- T-Kanal ölçüleri 14mm - 18mm DIN 650 standartındadır.

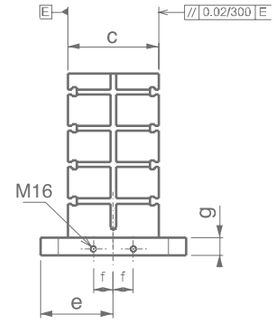
Sip. No.	a	b	c	d	e	f	g	h	Øı	j	k	L	s	s1	Ağırlık Kg
2590-30014	300	300	220	100	250	90	60	30	18	14	100	50	25	170	50
2590-40014	400	400	300	160	320	90	60	30	18	14	100	50	30	240	100
2590-50014	500	500	350	200	400	90	60	35	18	14	100	50	35	300	185
2590-63014	630	630	450	250	500	100	65	40	18	14	125	65	40	360	315
2590-30018	300	300	220	100	250	90	60	30	18	18	100	50	25	170	50
2590-40018	400	400	300	160	320	90	60	30	18	18	100	50	30	240	98
2590-50018	500	500	350	200	400	90	60	35	18	18	100	50	35	300	174
2590-63018	630	630	450	250	500	100	65	40	18	18	125	65	40	360	286

CNC YATAY İŞLEME KULESİ "T KANALLI"





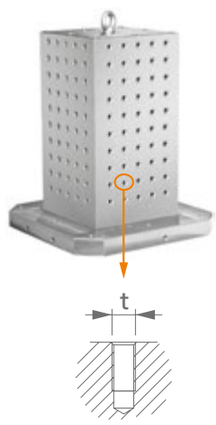


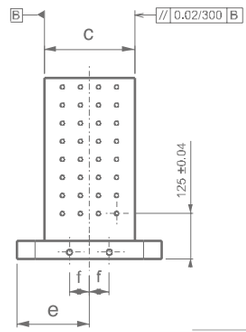


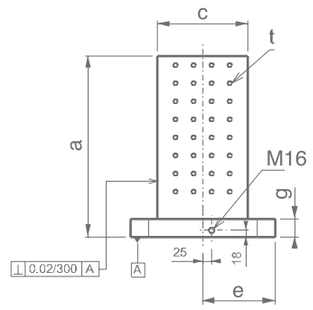
- Dört yüzeyine iş parçası bağlanabilir.
- Standart bağlama ekipmanlarına uyumludur.
- T-Kanal ölçüsü 14mm - 18mm DIN 650 standartındadır.
- Malzeme : Döküm

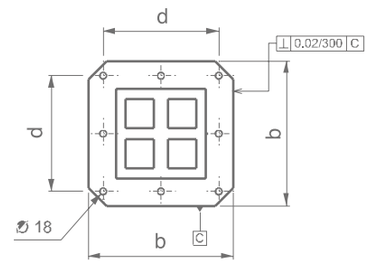
Sip. No.	a	b	c	d	e	f	g	ı	k	J (0.02 0)	Ağırlık Kg
2630-40025014	500	400	250	320	200	55	50	150	100	14	165
2630-50030014	600	500	300	400	250	75	50	150	100	14	227
2630-63035014	700	630	350	500	315	100	50	150	125	14	375
2630-40025018	500	400	250	320	200	55	50	150	100	18	155
2630-50030018	600	500	300	400	250	75	50	150	100	18	223
2630-63035018	700	630	350	500	315	100	50	150	125	18	370

CNC YATAY İŞLEME KULESİ "KARE DELİKLİ"









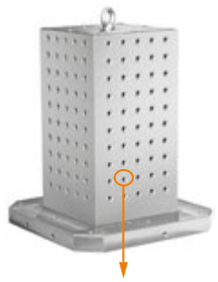
- Malzeme : Döküm
- Dört yüzeyine iş parçası bağlanabilir.
- Standart bağlama ekipmanlarına uyumludur
- Her yüzeye M12 - M16 diş merkez aralığı 50mm 0.02

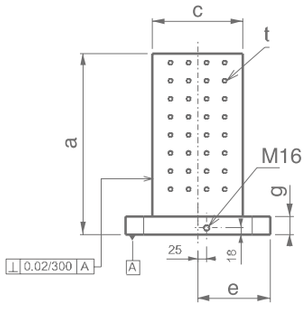
Sip. No.	a	b	c	d	e	f	g	t	Ağırlık Kg
2650-40025012	500	400	250	320	200	55	50	M12	170
2650-50030012	600	500	300	400	250	75	50	M12	230
2650-63035012	700	630	350	500	315	100	50	M12	380
2650-40025016	500	400	250	320	200	55	50	M16	168
2650-50030016	600	500	300	400	250	75	50	M16	228
2650-63035016	700	630	350	500	315	100	50	M16	376

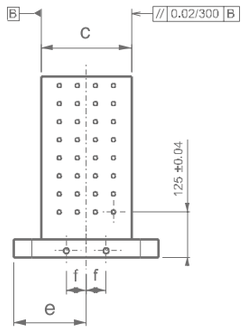
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

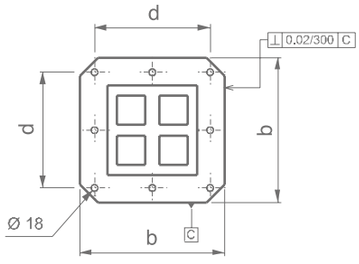
ER-EL

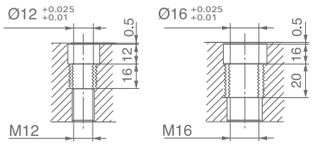
CNC YATAY İŞLEME KULESİ "KARE DELİKLİ"









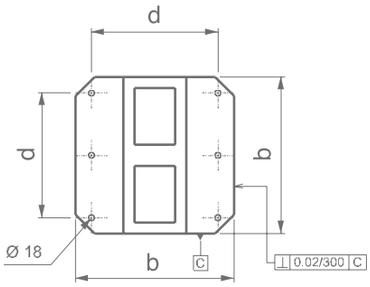


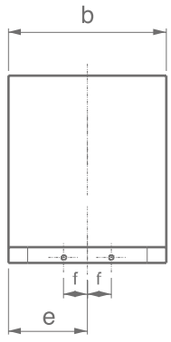
- Malzeme : Döküm
- Dört yüzeyine iş parçası bağlanabilir.
- Standart bağlama ekipmanlarına uyumludur.
- Her yüzeye M12 - M16 diş merkez aralığı 50mm 0.02
- Çelik burçlu dişler sertleştirilmiştir.

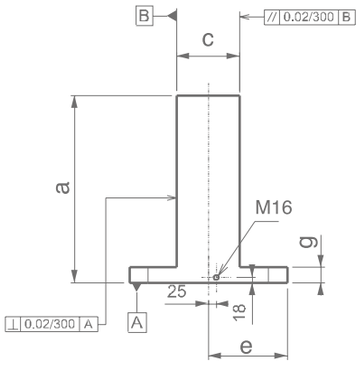
Sip. No.	a	b	c	d	e	f	g	t	Ağırlık Kg
2660-40025012	500	400	250	320	200	55	50	M12	170
2660-50030012	600	500	300	400	250	75	50	M12	230
2660-63035012	700	630	350	500	315	100	50	M12	380
2660-40025016	500	400	250	320	200	55	50	M16	168
2660-50030016	600	500	300	400	250	75	50	M16	228
2660-63035016	700	630	350	500	315	100	50	M16	376

CNC YATAY İŞLEME KULESİ "DİKDÖRTGEN"









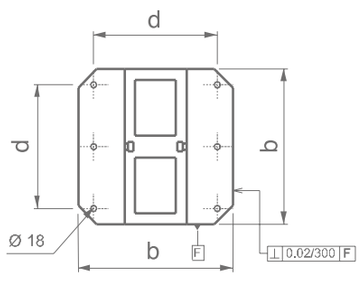
- Malzeme : Döküm
- İsteğe göre uygulama yapılabilmesi için yüzeyler deliksizdir.

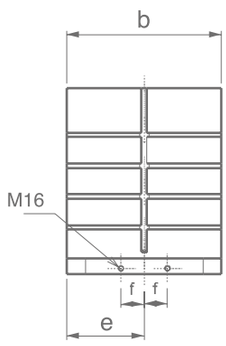
Sip. No.	a	b	c	d	e	f	g	Ağırlık Kg
2670-400150	500	400	150	320	200	55	50	175
2670-500200	600	500	200	400	250	75	50	265

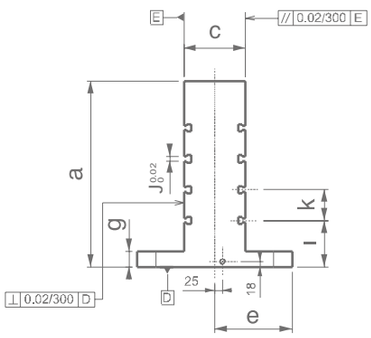
Sip. No.	a	b	c	d	e	f	g	Ağırlık Kg
2670-630250	700	630	250	500	315	100	50	484

CNC YATAY İŞLEME KULESİ "DİKDÖRTGEN T KANALLI"









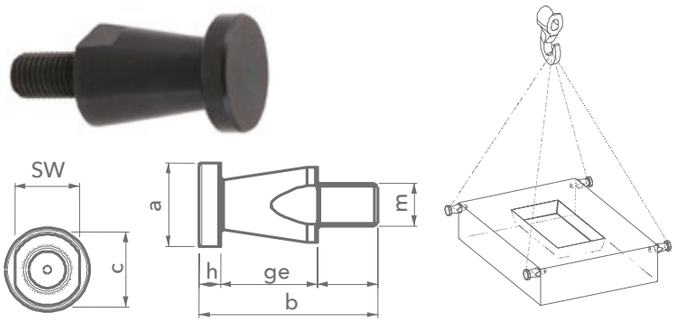
- İki yüzeyine iş parçası bağlanabilir.
- Standart bağlama ekipmanlarına uyumludur.
- T-Kanal ölçüsü 14mm - 18mm DIN 650 standartındadır.
- Malzeme : Döküm

Sip. No.	a	b	c	d	e	f	g	ı	k (±0.02)	J	Ağırlık Kg
2690-40015014	500	400	150	320	200	55	50	150	100	14	165
2690-50020014	600	500	200	400	250	75	50	150	100	14	240
2690-63025014	700	630	250	500	315	100	50	150	125	14	455
2690-40015018	500	400	150	320	200	55	50	150	100	18	152
2690-50020018	600	500	200	400	250	75	50	150	100	18	238
2690-63025018	700	630	250	500	315	100	50	150	125	18	450

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

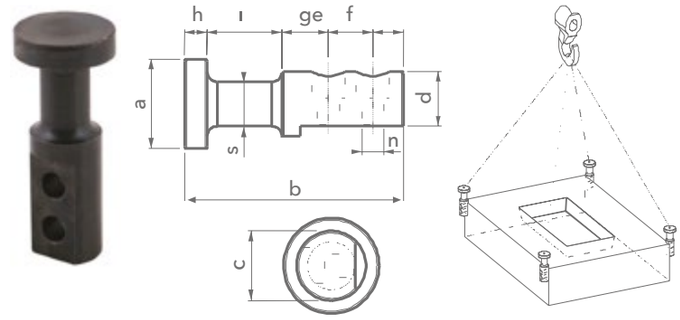
KALIP TAŞIMA MAPASI



- Bağlama ölçüsü M16 - M20
- Siyah Kaplama

Sip. No.	m	a	b	c	sw	e	g	h	Taşıma kuvveti Kgf	Ağırlık g
2730-016	M16	39	85	35	30	30	45	10	660	370
2730-020	M20	39	85	35	30	30	45	10	1000	390

KALIP TAŞIMA MAPASI



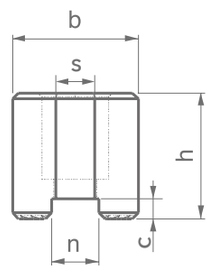
- Siyah Kaplama
- Bağlama civata ölçüsü DIN 912 M10x35 in bus

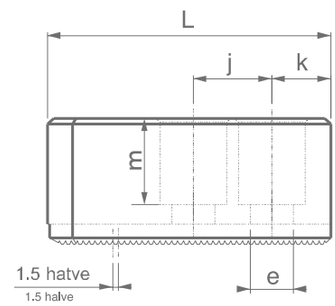
Sip. No.	a	b	c	d	e	f	g	h	ı	n	s	Taşıma kuvveti Kgf	Ağırlık g
2750-044	44	108	32	27	15	22	23	11	37	11	22	400	525

CNC YUMUŞAK AYAK



- 6"-8"-10"-12" inch aynalar için



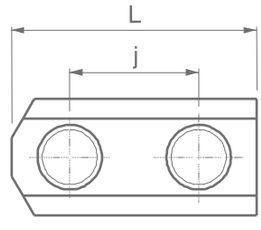


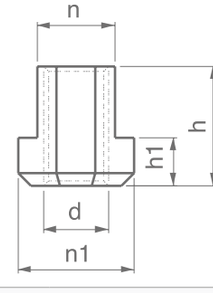
Sip. No.	inch	hatve	L	b	h	n t7	c	k	j	e	m	s	Ø Min	Ağırlık g
2770-0612	6" inch	1.5x60	72	32	32	12	5	15	20	11	22	10	6.5	1460
2770-0814	8" inch	1.5x60	98	37	37	14	5	24	25	13	22	14	8.5	2785
2770-1016	10" inch	1.5x60	110	42	42	16	5	30	30	13	29	14	10	4060
2770-1218	12" inch	1.5x60	130	50	52	18	5	39	30	15	32	17	12	6510
2770-1221	12" inch	1.5x60	130	50	52	21	5	39	30	17	32	19	12	6575
2775-0612	6" inch	1.5x60	72	28	37	12	5	15	20	11	17	10	6.5	1415
2775-0814	8" inch	1.5x60	95	35	67	14	5	24	25	13	19	14	8.5	4465
2775-1016	10" inch	1.5x60	110	38	77	16	5	30	30	13	19	14	10	6850
2775-1218	12" inch	1.5x60	130	48	77	18	5	39	30	15	23	17	12	10075
2775-1221	12" inch	1.5x60	130	48	77	21	5	39	30	17	23	19	12	9600

YUMUŞAK AYAK T-PABUCU



- 6"-8"-10"-12" inch aynalar için
- Sertleştirilmiş
- Siyah Kaplama





Sip. No.	inch	L	h	n T6	n1	h1	d	j	Ağırlık g
2790-0610	6" inch	38	18.5	12	18	7.5	M10	20	55
2790-0812	8" inch	45	21.5	14	21	8.5	M12	25	85
2790-1012	10" inch	52	21.5	16	22	8.5	M12	30	115
2790-1214	12" inch	55	33.5	18	26.5	13.5	M14	30	225
2790-1216	12" inch	55	27	21	29	13.5	M16	30	210

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

ER-EL

DELİK İŞLEME APARATI

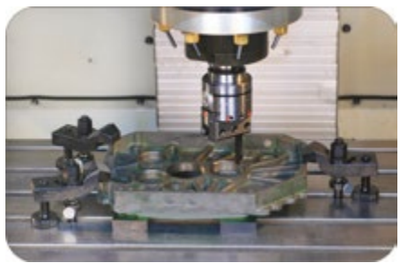


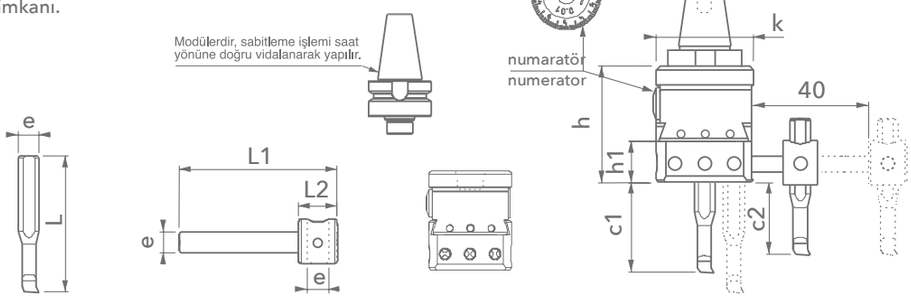




Sip. No.	J x M	k	h	h1	e	L	L1	L2	Ağırlık g
2390-010	ISO30-M12								6030
2390-015	ISO40-M16								6555
2390-020	ISO50-M24								9110
2390-025	BT40 -M16								6900
2390-030	BT50 - M24					85			9840
2390-035	SK40- M16	83	99	35	18	95	128	26	6750
2390-040	SK50- M24					132			8970
2390-045	MK4- M16								6180
2390-050	MK4 Kamalı								6880
2390-055	MKS - M20								7785
2390-060	MKS Kamalı								7450

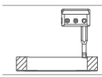
Ürün 0.02 işleme hassasiyetli olup 18mm'den 210mm'ye kadar işlem yapabilir.
Modüler sistem oluşu kullanım için kolaylık sağlar.
Tutucu değiştirilerek CNC ve Mekanik tezgahlarda kullanım avantajı sağlar.
Ürün, 4 ad. delik barası, 1 ad. T-Kanal temizleyici ile ahşap kutudadır.
Değiştirilebilir Tutucular:
ISO-30-40-50 BT40-50 SK40-50 MK4-5 ile kullanım imkanı.





Sip. No.	L	L1	e	Kesici uç tipi	Ağırlık g
2395-1	85	-	18	DCMT	112
2395-2	95	-	18	DCMT	130
2395-3	132	-	18	DCMT	200
2395-4	-	128	18	-	360

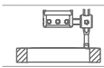
Ø min	Ø max	c1	devir dk.
18	95	50	400-450
18	95	63	400-450
20	100	100	170-220





- Ürünün kızağındaki alt deliklerine baraları takarak 18mm'den 100mm çapa kadar büyütme 0-100mm kadar derinliğe inebilir.

Ø min	Ø max	c2	devir dk.
95	210	55	90-170
95	210	65	90-170





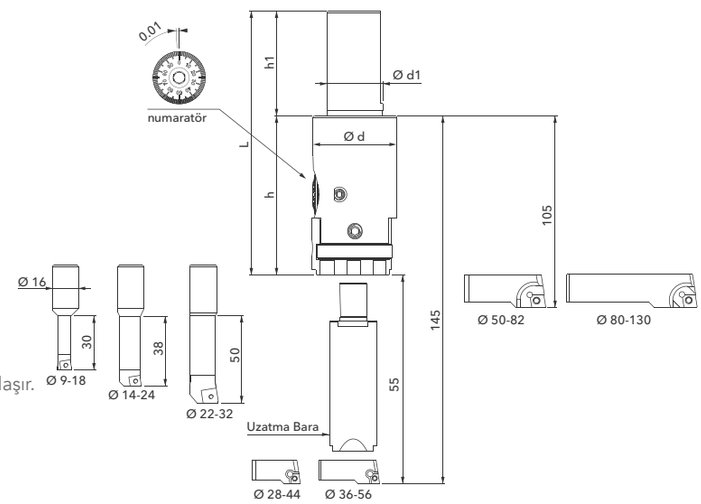
- Ürünün kızağındaki yan deliğe ara vasatı takarak, şekilde görüldüğü gibi 95mm'den - 210mm çapa kadar büyütme, 0-65mm kadar derinliğe inebilir.

HASSAS DELİK İŞLEME APARATI





- Ürün 0.01 işleme hassasiyetli olup 9mm'den 130mm çapa 145 mm derinliğe işlem yapabilir değiştirilebilir bara ve kartuş özelliği ile mükemmel kullanıma sahiptir.
- Not: Ø 52 den sonra gövdeyle 105 mm uzatma barayla 145 mm derinliğe ulaşır.



Sip. No.	d	d1	h	h1	L	Ağırlık g
2385-130	48	32	91	60	151	3.05

Sip. No.	Cinsi	Uç Tipi	Devir	İlerleme	ap
2386-00918	09-18 Bara	CCMT 06	2700 d/dk.	F 75	0.1-0.5 mm
2386-01424	14-24 Bara	CCMT 06	2500 d/dk.	F 75	0.1-0.5 mm
2386-02232	22-32 Bara	CCMT 09	2000 d/dk.	F 50	0.1-1 mm
2386-02844	28-44 Kartuş	CCMT 06	1800 d/dk.	F 60	0.1-1 mm

Sip. No.	Cinsi	Uç Tipi	Devir	İlerleme	ap
2386-03656	36-56 Kartuş	CCMT 06	1500 d/dk.	F 65	0.1-1.5 mm
2386-05082	50-82 Kartuş	CCMT 09	1500 d/dk.	F 70	0.1-2 mm
2386-80130	80-130 Kartuş	CCMT 09	360 d/dk.	F 75	2 mm
2386-00055	Uzatma Bara	-	400 d/dk.	F 75	1.5mm

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

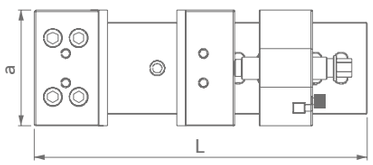
ER-EL

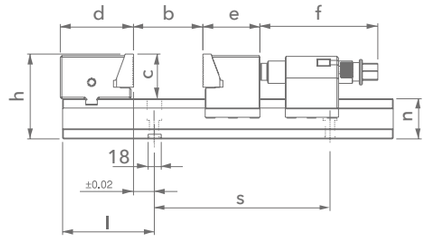
MEKANİK ÇELİK MENGENE

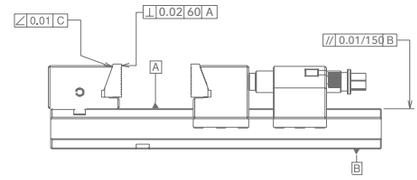


Refereans Nr.	a	b	c	L	d	e	f	h	ı	n	s	Sıkma kuvveti Kgf	Ağırlık Kg
2330-127160	127	0-160	60	422	99	78	160	115	125	55	200	3500	28
2330-157200	157	0-200	60	462	99	78	160	115	150	55	200	4500	46
2330-157300	157	0-300	60	562	99	78	160	115	150	55	250	4500	51
2330-197300	197	0-300	60	562	99	78	160	115	150	55	250	4500	66
2330-197400	197	0-400	60	662	99	78	160	115	150	55	350	4500	73
2330-197500	197	0-500	60	762	99	78	160	115	150	55	250/250	4500	80

- Mekanik çelik mengene sertleştirilmiş ve hassas taşlanmış olarak mükemmel kullanıma sahiptir.
- Kullanım özelliği işlenecek malzemeyi sabitlerken sabit ve hareketli çenelerde bulunan modüler çeneler yaylı sisteminden dolayı malzemeyi mengene tabanına doğru çeker ve güvenli çalışma sağlar. Kamalı sabitleme özelliğiyle hareketli çene mesafesi hızlı ayarlanabilir, kolay kullanılır.
- Kullanım alanı: CNC ve mekanik frezeler, taşlama ve matkap tezgahları, çeşitli sanayi makinaları Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.





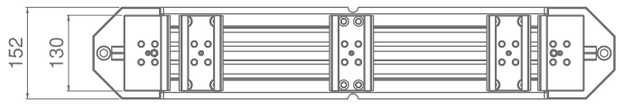


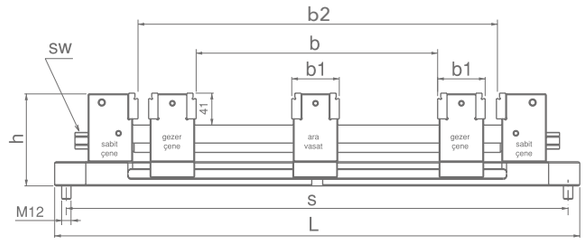
GRUP ÇİFT AÇILIR ÇELİK MENGENE



Refereans Nr.	b	b1	b2	L	h	s	w	Standart bağlama adedi	Sıkma kuvveti Kgf	Ağırlık Kg
2375-092	92	61	224	430	119	400	19	2	2000	44
2375-192	192	61	324	530	119	500	19	2	2000	48.7
2375-342	342	61	474	680	124	650	19	2	2000	52.5
2375-442	442	61	575	780	124	750	19	2	2000	57

- Ürün hassas taşlanmış olup şekillerdeki gibi çok amaçlı kullanım özelliğine sahip tek hareketle bir ve birden fazla iş parçasını sıkmak için tasarlanmıştır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

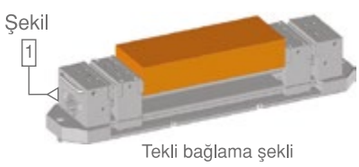




Sip. No.	İş Bağlama Adetleri				
	1 İş parçası	2 İş parçası	3 İş parçası	4 İş parçası	5 İş parçası
2375-092	92	15	-	-	-
2375-192	192	66	23	-	-
2375-342	342	140	73	39.5	-
2375-442	442	190	106.5	64.5	39

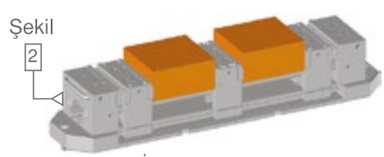
BÜTÜN UYGULAMALARIN TEK HAREKETLE SIKMA ÖZELLİĞİ

Şekil 1



Tekli bağlama şekli

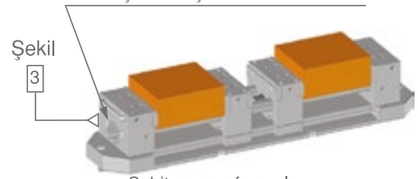
Şekil 2



İkili bağlama şekli

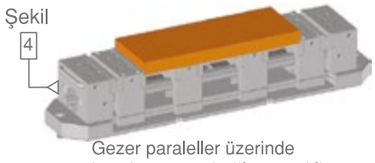
İş parçalarının kendi arasında 2mm kadar ölçü farkını içine sindiren mekanizma

Şekil 3



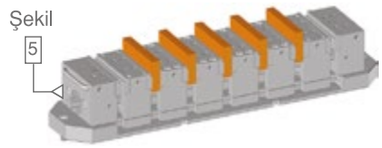
Sabit çene referanslı merkezden dışa bağlama şekli

Şekil 4



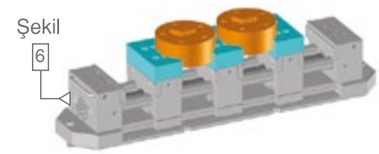
Gezer paraleller üzerinde ince iş parçası bağlama şekli

Şekil 5



Çoklu bağlama şekli

Şekil 6



Yumuşak ayak ile bağlama şekli

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

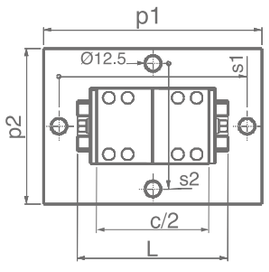
ER-EL

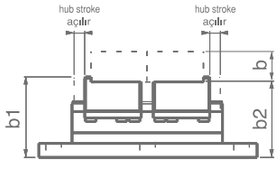
ÇİFT AÇILIR ÇELİK MENGENE

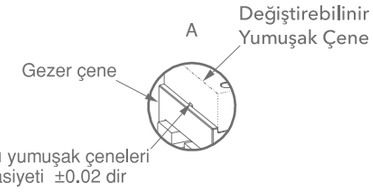


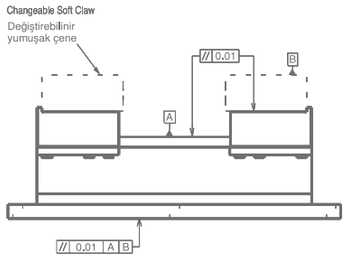
- Ürün işlem yapılacak malzemeyi sabitlerken aynı zamanda da merkezleme yapmaktadır.
- Bu sistemin avantajı özellikle dış çap ölçüleri değişken malzemelerde merkez değişmeden işlem yapılabilir.
- Diğer özelliği ise yumuşak çenelere işlenecek parçanın formu uygulanabilinir (1-2-3-4-5-6 şekillerde görüldüğü gibi.)
- Kullanım alanı: CNC ve mekanik frezeler, taşlama, matkap gibi çeşitli sanayi makinalarında kullanılır.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.
- Çeneleri ayrı olarak satın almanız gerekir.
- Siyah Kaplama

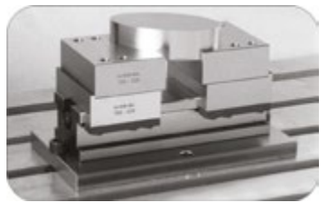
Refereans Nr.	a	L	c/2	açılır 2xmm	İş bağlama kapasitesi (mm)	b	b1	b2 ±0,02	b3	p1	p2	s1	s2	Sıkma kuvveti Kgf	sw	Ağırlık Kg
2310-060	60	120	90	20	120	23.5	70.5	67.5	91	174	124	150	100	1000	9	7
2310-078	78	180	130	30	180	33	97	93	126	224	124	200	100	1600	12	14
2310-100	100	220	154	38	220	35	99	95	130	274	174	250	150	1600	12	22
2310-125	125	260	174	47	260	38	108	103	141	324	174	300	150	2200	14	35
2310-157	157	350	208	75	350	46	123	118	164	424	224	400	200	2200	17	65

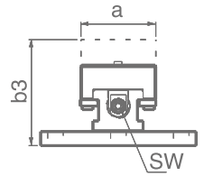


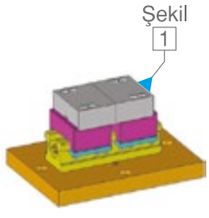


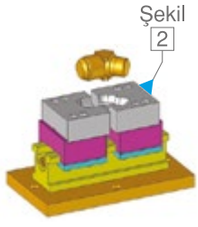


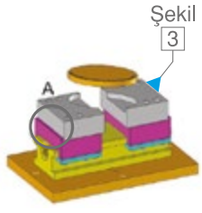


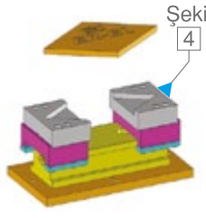


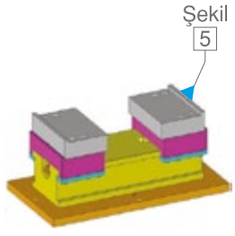


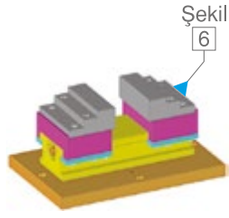










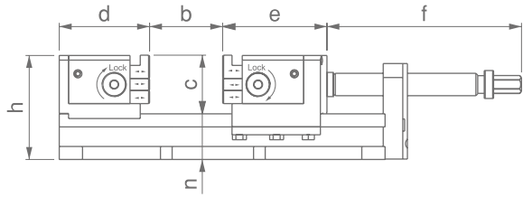


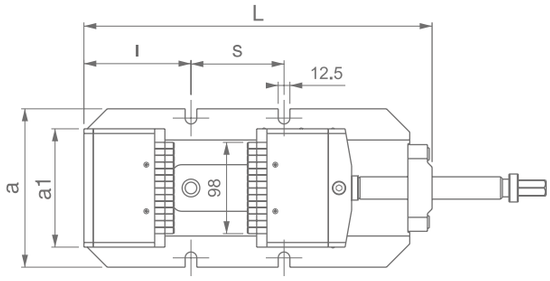
KAVRAMALI MENGENE

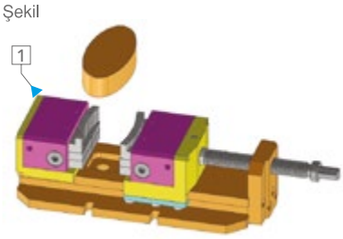


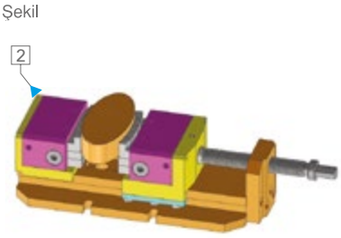
Refereans Nr.	a	a1	b	c	e	f	h	L	ı	s	n	Sıkma kuvveti Kgf	Ağırlık Kg
2300-127130	170	127	0-130	63	112	209	112	374	115	100	49	2750	31

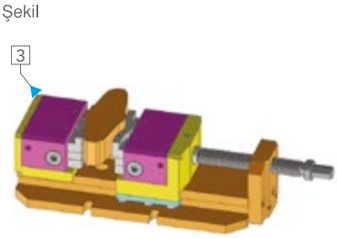
- Mengene çenelerinin bağlanacak iş parçasına göre form alması ve gerektiğinde bu formun sabitlenebilir olması kavramalı mengenenin en önemli özelliğidir. (Şekil 1-2-3-4'teki gibi)
- Çene : Sertleştirilmiş

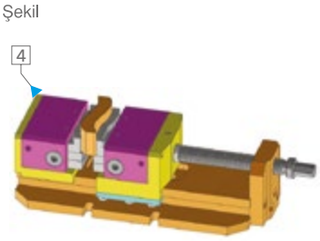












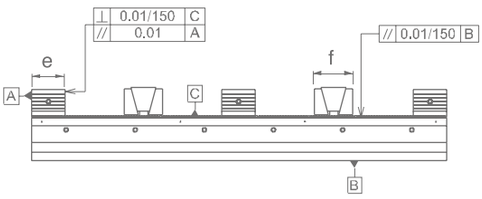
KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

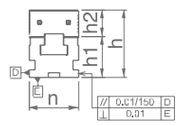
ER-EL

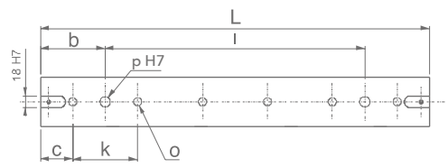
ÇOK ÇENELİ SERİ MENGENE



- Çift açılır.
- Çeneleri ayrı olarak satın almanız gerekir.







Refereans Nr.	L	n	h1	h2	h	o	e	f	b	c	k	ı	p	Sıkma kuvveti Kgf
2435-055300	300	55	50	32	82	12.5	32	37	100	50	100	100	18	1750
2435-055500	500	55	50	32	82	12.5	32	37	100	50	100	300	18	
2435-075400	400	75	65	37	102	12.5	37	57	100	50	100	200	18	2000
2435-075600	600	75	65	37	102	12.5	37	57	100	50	100	400	18	
2435-100400	400	100	65	37	102	12.5	37	57	100	50	100	200	18	2500
2435-100600	600	100	65	37	102	12.5	37	57	100	50	100	400	18	

ÇİFT AÇILIR ÇENE İLE İŞ PARÇASI BAĞLAMA ADETLERİ

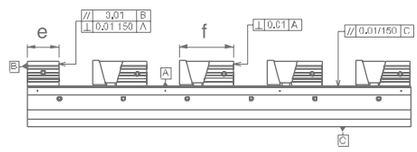
Sip. No.	2 İş parçası	3 İş parçası	4 İş parçası
2435-055300	75mm	37mm	16mm
2435-055500	173mm	103mm	66mm
2435-075400	107mm	55mm	28mm
2435-075600	209mm	123mm	79mm
2435-100400	104mm	53mm	26mm
2435-100600	206mm	121mm	77mm

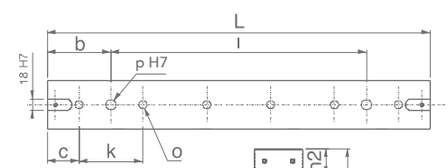
Sip. No.	5 İş parçası	6 İş parçası	7 İş parçası	8 İş parçası
2435-055300	-	-	-	-
2435-055500	45mm	30mm	20mm	-
2435-075400	13mm	-	-	-
2435-075600	54mm	45mm	24mm	14mm
2435-100400	12mm	-	-	-
2435-100600	52mm	34mm	22mm	12mm

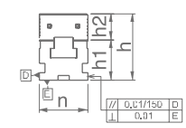
Not: iş bağlama adetleri ölçülerinde yumuşak ayak dahil değildir.

ÇOK ÇENELİ SERİ MENGENE









- Ürüne birden fazla iş bağlama imkanı sağlar. Çeneler modülerdir, istenen ölçüye ayarlanır.
- Gruplara bağlanan yumuşak ayaklara iş parçası formu uygulanabilir.
- Hassas taşlama
- Çeneleri ayrı olarak satın almanız gerekir.

Refereans Nr.	L	n	h1	h2	h	o	e	f	b	c	k	ı	p H7	Standart bağlama ededi	Sıkma kuvveti Kgf	Ağırlık
2430-055300	300	55	50	32	72	12.5	36	65	100	50	100	100	18	2	1750	9
2430-055500	500	55	50	32	72	12.5	36	65	100	50	100	300	18	4		15
2430-075400	400	75	65	37	102	12.5	48	77	100	50	100	200	18	2	2000	20
2430-075600	600	75	65	37	102	12.5	48	77	100	50	100	400	18	4		33
2430-100400	400	100	65	37	102	12.5	48	80	100	50	100	200	18	2	2500	27
2430-100600	600	100	65	37	102	12.5	48	80	100	50	100	400	18	3		41

GEZER ÇENE İLE İŞ PARÇASI BAĞLAMA ADETLERİ

Sip. No.	1 İş parçası	2 İş parçası	3 İş parçası	4 İş parçası	5 İş parçası
2430-055300	196mm	65mm	22mm	-	-
2430-055500	394mm	165mm	88mm	50mm	26mm
2430-075400	268mm	95mm	38mm	9mm	-
2430-075600	472mm	197mm	106mm	60mm	32mm
2430-100400	265mm	93mm	35mm	-	-
2430-100600	469mm	195mm	103mm	57mm	30mm

Not: iş bağlama adetleri ölçülerinde yumuşak ayak dahil değildir.

KALIP VE İŞ PARÇASI BAĞLAMA EKİPMANLARI

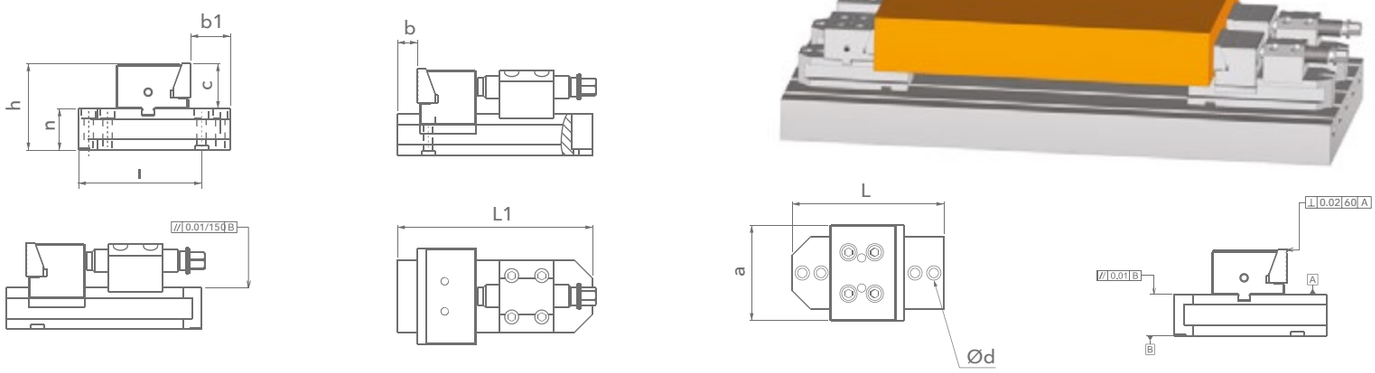
ER-EL

MODÜLER MEKANİK ÇELİK MENGENE



- Ürün çenelarinin hareketli oluşu iş parçasını karşıya ve aşağıya çekerek sıkar. Mengenenin iki parçalı ve paralel oluşu büyük iş parçalarını bağlamada delik diş vs. gibi işlemlerde kolaylık sağlar.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

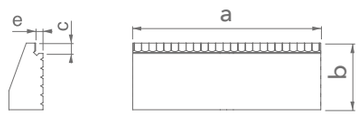
Refereans Nr.	a	L	L1	b1	b	c	h	ı	n	Ød	Sıkma kuvveti Kgf	Ağırlık Kg
2345-127	127	202	260	53	0-58	60	115	163.5	55	12.5	3500	28



MEKANİK ÇENELER (MODÜLER MEKANİK ÇELİK MENGENE İÇİN)



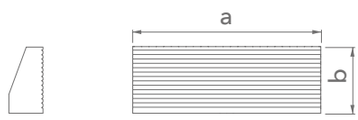
• Sertleştirilmiş



Referans	a	b	c	d	e	f	Ağırlık (g)
2333-127	127	45	7	-	5	-	760
2333-157	157	45	7	-	5	-	935
2333-197	197	45	7	-	5	-	1180



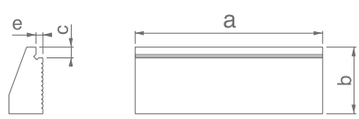
• Sertleştirilmiş



Referans	a	b	c	d	e	f	Ağırlık (g)
2334-127	127	45		-	-	-	765
2334-157	157	45	-	-	-	-	960
2334-197	197	45		-	-	-	1185



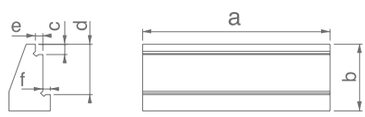
• Sertleştirilmiş



Referans	a	b	c	d	e	f	Ağırlık (g)
2335-127	127	45	7	-	5	-	760
2335-157	157	45	7	-	5	-	935
2335-197	197	45	7	-	5	-	1180



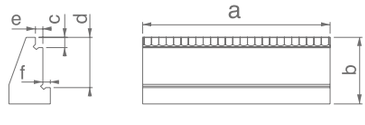
• Sertleştirilmiş



Referans	a	b	c	d	e	f	Ağırlık (g)
2340-127	127	45	7	34	5	5	950
2340-157	157	45	7	34	5	5	1010
2340-197	197	45	7	34	5	5	1290



• Sertleştirilmiş



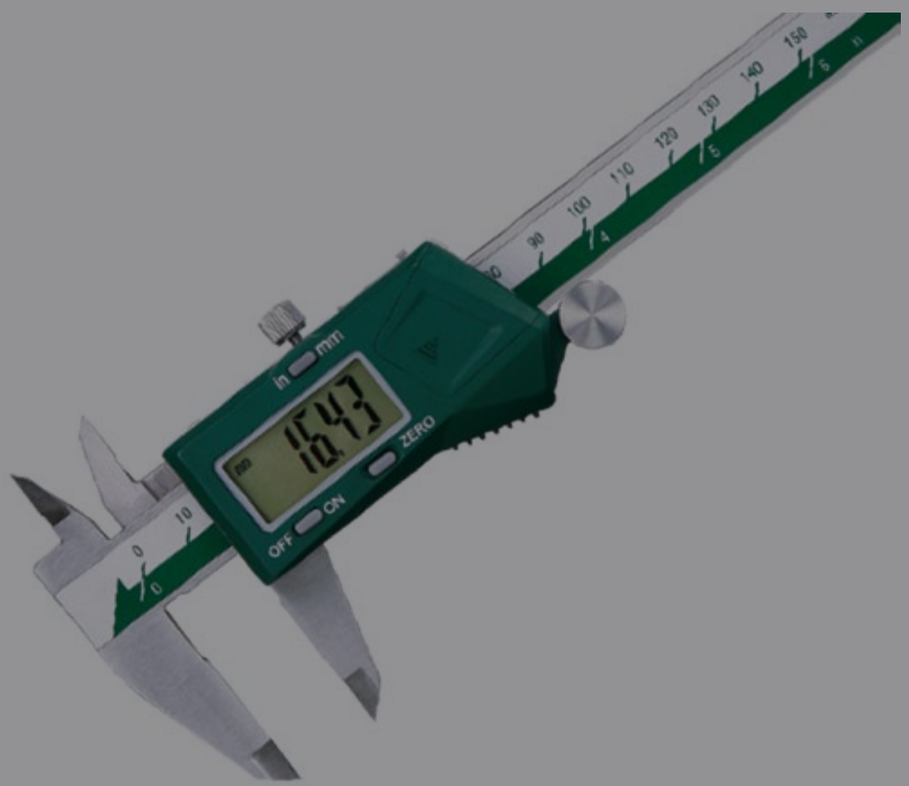
Referans	a	b	c	d	e	f	Ağırlık (g)
2336-127	127	45	7	34	5	5	950
2336-157	157	45	7	34	5	5	1010
2336-197	197	45	7	34	5	5	1290

6. ÖLÇÜ ALETLERİ

Sy. 466/505

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
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Gsm: +90 533 554 72 40 – +90 555 988 00 53
Tel: +90 (212) 549 46 62 – 671 50 76
Faks: +90 (212) 549 54 27

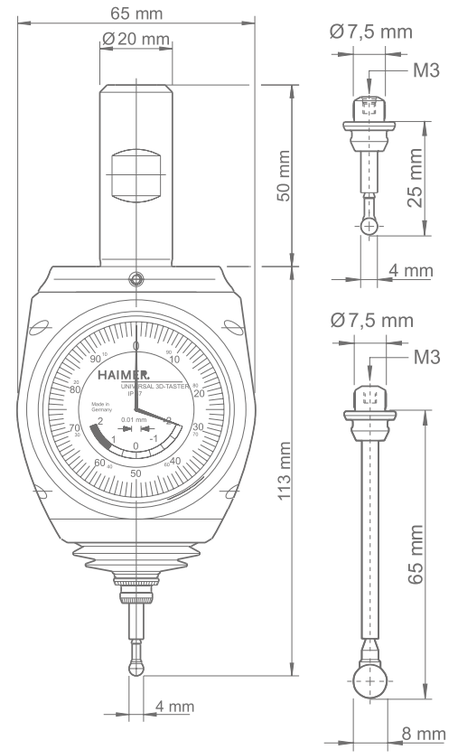

in
mm
ZERO
OFF
ON


INSIZE
INSIZE
INSIZE
HAIMER

3D TESTER

3D TESTER (3 BOYUTLU ÖLÇÜM İÇİN)





Universal 3D-Sensor, frezeleme ve EDM makineleri (yalıtılmış prop) için kullanılan çok duyarlı ve hassas bir ölçü aletidir. Firmaların olmazsa olmazıdır. 3D-Sensor bir alet tutucuya kenetli ve bir frezeleme miline eklidir.

Bir kere makinenin miline kenetlendiğinde taşma tamamen sıfıra ayarlanabilir. Bu sayede işlenecek parçanın köşelerinin üzerindeki mil ekseninin kesin konumu bulunabilir. Bu, sıfırların ayarlanmasının ve uzunlukların ölçülmesinin hızlı ve kolayca yapılmasını sağlar. 3D-Sensor ile X, Y ve Z olmak üzere tüm eksenlere ulaşılabilir.

Kadranlı mikrometre sıfırı gösterdiğinde, mil ekseni tam olarak işlenecek parçanın köşesinde durur. Sadece Haimer 3D-Sensor köşelerin ilk denemede bulunabilmesini sağlar. prop çapının hesaplanmasına gerek yoktur, yalnızca sıfırlayın yeter! Matematiksel hesaplamalara dair tüm sorunlar ortadan kalktı, operatör hataları azaldı. 3D-Sensor hızlı ve kolaydır, üretken zamanı ve operatör duyarlılığını arttırır.

Kısa ve uzun proplar mevcuttur. Sensör proplar hiçbir alete gerek kalmadan değiştirilebilir. propun değişiminden sonra üniteyi tekrar ayarlamaya gerek yoktur. Kısaca, ibreyi sıfıra getirin ve o size köşeyi göstersin.

Aletin duyarlılığı sayesinde makinenin üzerindeki parçaları denetleyebilirsiniz. Ibrişim mengenesiyle, deliğin merkezini, köşeleri bulun ve parçaları belirleyin bunların tümü Haimer 3D-Sensor ile mümkün. Ünitenin tümüyle test edilmiş ön ayar kırıcı noktaları ile bağlantılı çok uzun bir aşırı çalışma mesafesi vardır, bu da sensörün ömrünü uzatır.Tüm Universal 3D-Sensor'ler tek tek test edilmiştir ve maksimum ölçüm duyarlılığına ulaşmak için ayarlanmıştır.

Sip. No.	Hassasiyet	Komple Boy (Sapsız)	Açıklama	Sip. No.
HAIM-8036000	0,01 mm	113 mm	3D TESTER MEKANİK	12971
HAIM-8036440	0,01 mm	113 mm	SK40 SAPLI 3 D TESTER MEKANİK	12972
HAIM-8036540	0,01 mm	113 mm	BT40 SAPLI 3 D TESTER MEKANİK	12973
HAIM-8036200	-	-	Ø4 KISA UÇ	12974
HAIM-8036300	-	-	Ø8 UZUN UÇ	12975

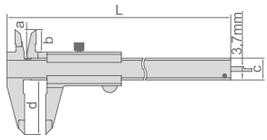
*SK50, BT50, HSK-A50, HSK-E 50, HSK-A 63, HSK-A80, HSK-A100 MODELLERİ İÇİN FİYAT ALINIZ.

INSIZE ÖLÇÜ ALETLERİ

MEKANİK KUMPASLAR

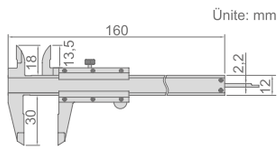


1205-150S





1201-1003



- DIN862 Standardına uygundur
- Paslanmaz çelikten yapılmıştır
- Parlak krom kaplamalı okuma yüzeyi

(mm)

Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk
1201-1003	0-100mm	0,05mm	±0,05mm

Hassasiyet: 0,05mm-1/128" (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c	d
1205-150S	0-150mm/0-6"	±0,05mm	235	20,5	15,5	16	40
1205-200S	0-200mm/0-8"	±0,05mm	290	23,5	19	17	50
1205-250S	0-250mm/0-10"	±0,05mm	364	27,5	22	20	64
1205-300S	0-300mm/0-12"	±0,05mm	414	27,5	22	20	64

Hassasiyet: 0,02mm-0,001" (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c	d
1205-1502S	0-150mm/0-6"	±0,03mm	235	20,5	15,5	16	40
1205-2002S	0-200mm/0-8"	±0,03mm	290	23,5	19	17	50
1205-2502S	0-250mm/0-10"	±0,03mm	364	27,5	22	20	64
1205-3002S	0-300mm/0-12"	±0,03mm	414	27,5	22	20	64

Hassasiyet: 0,05mm (mm)

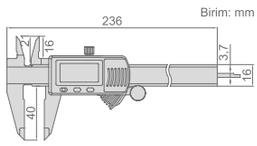
Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c	d
1205-1503S	0-150mm	±0,05mm	235	20,5	15,5	16	40
1205-2003S	0-200mm	±0,05mm	290	23,5	19	17	50
1205-3003S	0-300mm	±0,05mm	414	27,5	22	20	64

Hassasiyet: 0,02mm (mm)

Sip. No.	Ölçüm	Doğruluk	L	a	b	c	d
1205-1501S	0-150mm	±0,03mm	235	20,5	15,5	16	40
1205-2001S	0-200mm	±0,03mm	290	23,5	19	17	50
1205-3001S	0-300mm	±0,03mm	414	27,5	22	20	64

DİJİTAL KUMPAS





BİLGİ ÇIKIŞI YOKTUR

EKONOMİK MODEL

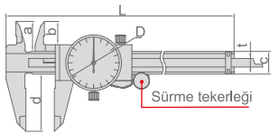
(mm)

Sip. No.	Ölçüm aralığı	Doğruluk
1112-150	0-150mm/0-6"	±0,03mm

- Hassasiyet: 0,01 mm/0,0005"
- Tuşlar: sıfırlama, açma/kapama, mm/inch
- Otomatik kapanma ve dijital üniteyi hareket ettirerek açma,
- CR2032 Lityum Pil
- DIN862 Standardma uygundur
- Paslanmaz çelikten imal edilmiştir.

SAATLİ KUMPAS





KALİBRASYON SERTİFİKASI DKD ONAYLI

DARBEYE DAYANIKLI

- Darbeye dayanıklı saatli kumpas
- Paslanmaz çelikten yapılmıştır

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

Saat hassasiyeti: 0,02mm (mm)

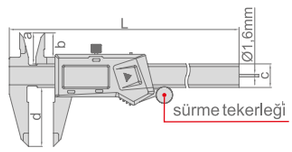
Sip. No.	Ölçüm Aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d	D	t
1312-150A*	0-150mm	±0,03mm	dahil	235	21	16,5	16	40	Ø39	6,5
1312-200A*	0-200mm	±0,03mm	dahil	288	24	19	16	48	Ø39	6,5
1312-300A*	0-300mm	±0,03mm	dahil	410	28	22	20	62	Ø44,5	7,5
1312-150AW*	0-150mm	±0,03mm	hariç	235	21	16,5	16	40	Ø39	6,5
1312-200AW*	0-200mm	±0,03mm	hariç	288	24	19	16	48	Ø39	6,5
1312-300AW*	0-300mm	±0,03mm	hariç	410	28	22	20	62	Ø44,5	7,5

Saat hassasiyeti: 0,01mm (mm)

Sip. No.	Ölçüm Aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d	D	t
1311-150A*	0-150mm	±0,03mm	dahil	235	21	16,5	16	40	Ø39	6,5
1311-200A*	0-200mm	±0,03mm	dahil	288	24	19	16	48	Ø39	6,5
1311300A*	0-300mm	±0,03mm	dahil	410	28	22	20	62	Ø44,5	7,5
1311-150AW*	0-150mm	±0,03mm	hariç	235	21	16,5	16	40	Ø39	6,5
1311-200AW*	0-200mm	±0,03mm	hariç	288	24	19	16	48	Ø39	6,5
1311-300AW*	0-300mm	±0,03mm	hariç	410	28	22	20	62	Ø44,5	7,5

YUVARLAK DERİNLİK ÇUBUKLU DİJİTAL KUMPASLAR







yuvarlak derinlik çubuğu Ø1,6mm

KALİBRASYON SERTİFİKASI DKD ONAYLI

- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: açma/kapama, sıfırlama, mm/inch
- Otomatik kapatma, dijital üniteyi hareket ettirerek açma
- CR2032 Lityum Pil
- Bilgi çıkışı
- DIN862 Standardına uygundur
- Paslanmaz çelikten imal edilmiştir
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)

BİLGİ ÇIKIŞLI (mm)

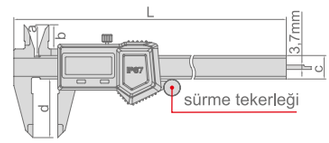
Sip. No.	Ölçüm aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d
1119-150*	0-150mm/0-6"	±0,03mm	dahil	236	21	16	16	40
1119-150W*	0-150mm/0-6"	±0,03mm	hariç	236	21	16	16	40

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

INSIZE ÖLÇÜ ALETLERİ

SU GEÇİRMEZ DİJİTAL KUMPAS





KALİBRASYON SERTİFİKASI DKD ONAYLI

IP67 SU GEÇİRMEZ

- IP67 toza/suya dayanıklı Hassasiyet: 0,01mm/0,0005"
- Tuş fonksiyonu: sıfırlama, açma/kapama, mm/inch, ABS/REL, okunan değeri yakalayabilme
- CR2032 Lityum Pil
- DIN862 Standardına uygundur
- Paslanmaz çelikten imal edilmiştir

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

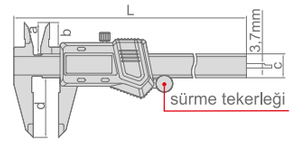
GÜÇ VERİLDİKTEN SONRA HER SEFERİNDE SIFIRLAMA YAPILMALIDIR
DATA ÇIKIŞI YOKTUR

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d
1118-150B*	0-150mm/0-6"	±0,03mm	dahil	236	21	16	16	40
1118-200B*	0-200mm/0-8"	±0,03mm	dahil	286	24	19	16	50
1118-300B*	0-300mm/0-12"	±0,03mm	dahil	400	25	20,5	17	60
1118-150BW*	0-150mm/0-6"	±0,03mm	hariç	236	21	16	16	40
1118-200BW*	0-200mm/0-8"	±0,03mm	hariç	286	24	19	16	50
1118-300BW*	0-300mm/0-12"	±0,03mm	hariç	400	25	20,5	17	60

DİJİTAL KUMPAS





KALİBRASYON SERTİFİKASI DKD ONAYLI

- Çinko alaşımlı dijital birim muhafazası
- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: sıfırlama, açma/kapama, mm/inch
- Otomatik kapanma ve dijital üniteyi hareket ettirerek açma CR2032 Lityum Pil
- DIN862 Standardına uygundur
- Paslanmaz çelikten imal edilmiştir (mm)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

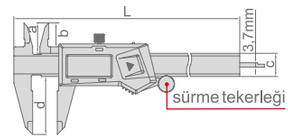
DATA ÇIKIŞI YOKTUR

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d
1114-150A*	0-150mm/0-6"	±0,03mm	dahil	236	21	16	16	40
1114-200A*	0-200mm/0-8"	±0,03mm	dahil	286	24	19	16	50
1114-300A*	0-300mm/0-12"	±0,03mm	dahil	400	25	20,5	17	60
1114-150AW*	0-150mm/0-6"	±0,03mm	hariç	236	21	16	16	40
1114-200AW*	0-200mm/0-8"	±0,03mm	hariç	286	24	19	16	50
1114-300AW*	0-300mm/0-12"	±0,03mm	hariç	400	25	20,5	17	60

DİJİTAL KUMPAS (STANDART MODEL)





KALİBRASYON SERTİFİKASI DKD ONAYLI

- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: açma/kapama, sıfırlama, mm/inch
- Otomatik kapatma, dijital üniteyi hareket ettirerek açma
- CR2032 Lityum Pil, bilgi çıkışı
- DIN862 Standardına uygundur
- Paslanmaz çelikten imal edilmiştir
- Seçmeli aksesuar: veri çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

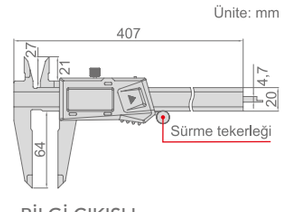
BİLGİ ÇIKIŞLI

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	Sürme Tekerleği	L	a	b	c	d
1108-150*	0-150mm/0-6"	±0,02mm	dahil	236	21	16	16	40
1108-200*	0-200mm/0-8"	±0,03mm	dahil	286	24	19	16	50
1108-250*	0-250mm/0-10"	±0,03mm	dahil	350	25	20,5	16	60
1108-300*	0-300mm/0-12"	±0,03mm	dahil	400	25	20,5	16	60
1108-150W*	0-150mm/0-6"	±0,02mm	hariç	236	21	16	16	40
1108-200W*	0-200mm/0-8"	±0,03mm	hariç	286	24	19	16	50
1108-250W*	0-250mm/0-10"	±0,03mm	hariç	350	25	20,5	16	60
1108-300W*	0-300mm/0-12"	±0,03mm	hariç	400	25	20,5	16	60

300MM AĞIR İŞ DİJİTAL KUMPASI





KALİBRASYON SERTİFİKASI DKD ONAYLI

- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: açma/kapama, sıfırlama, mm/inch Otomatik kapanma ve dijital üniteyi hareket ettirerek açma
- CR2032 Lityum Pil, bilgi çıkışı
- DIN862 Standardına uygundur
- Paslanmaz çelikten imal edilmiştir
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)

BİLGİ ÇIKIŞLI

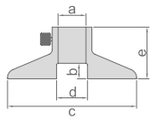
(mm)

Sip. No.	Ölçüm aralığı	Sürme tekerleği	Doğruluk
1196-300W*	0-300mm/0-12"	dahil	±0,03mm
1196-300W*	0-300mm/0-12"	hariç	±0,03mm

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

INSIZE ÖLÇÜ ALETLERİ

DERİNLİK TABAN EKİ



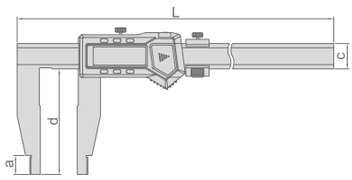
(mm)

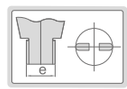
Sip. No.	a	b	c	d	e	Uygulama
6140	16,5	9	75	18	30	Gövde genişliği (w) 16mm olan dijital kumpaslar için uygundur
6140-300A	20	15	125	22	34	Gövde genişliği (w) 20mm olan dijital kumpaslar için uygundur

UZUN ÇENE DİJİTAL KUMPAS



- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: aç/kapa, sıfırla, mm/inç, ABS, bilgi sıfırlama
- CR2032 Lityum Pil Bilgi Çıkışı
- Paslanmaz çelikten yapılmıştır
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)



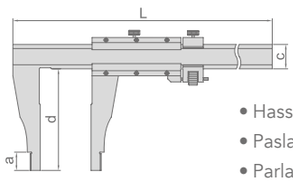


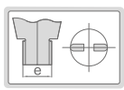
(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	a	c	d	L
1135-451	0-450mm/0-18"	±0,05mm	45	24	100	625
1135-601	0-600mm/0-24"	±0,05mm	45	24	100	770
1135-1002	0-1000mm/0-40"	±0,08mm	60	31	150	1220

UZUN ÇENE MEKANİK KUMPAS







- Hassas ayarlı
- Paslanmaz çelikten yapılmıştır
- Parlak krom kaplamalı okuma yüzeyi

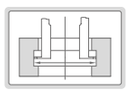
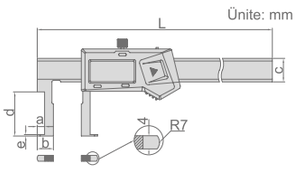
(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	a	c	d	e	L
1214-300	0-300mm/0-12"	±0,05mm	10	20	75	10	410
1214-450	0-450mm/0-18"	±0,05mm	18	24	100	20	620
1214-500	0-500mm/0-20"	±0,05mm	18	24	100	20	670
1214-600	0-600mm/0-24"	±0,05mm	18	24	100	20	770
1214-1000	0-1000mm/0-40"	±0,08mm	24	32	140	20	1216
1214-1500	0-1500mm/0-60"	±0,12mm	24	42	200	20	1830
1214-2000	0-2000mm/0-80"	±0,14mm	24	42	200	20	2320

Hassasiyet: 0,05mm-1/128" (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	a	c	d	e	L
1214-6004	0-600mm/0-24"	±0,08mm	18	24	100	20	770
1214-1004	0-1000mm/0-40"	±0,12mm	24	32	140	20	1216

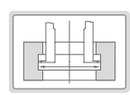
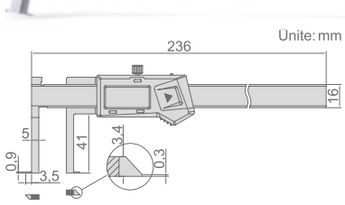
DİJİTAL İÇ KANAL KUMPASI





- Kanal çapı ölçülür
- Çözünürlük: 0,01mm/0,0005"
- Tuşlar: aç/kapa, ayar, mm/inç, ön ayar (+,-)
- Otomatik kapanma, dijital göstergenin haraket ettirilmesi ile açılır
- Pil CR2032, bilgi Çıkış
- Paslanmaz çelikten yapılmıştır
- Opsiyonel aksesuar: derinlik sabitleme (kod 6143), bilgi çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)





BİLGİ ÇIKIŞLI (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c	d	e
1120-150A	22-150mm	±0,04mm	250	5	11	16	30	1
1120-200A	25-200mm	±0,04mm	310	5	12,5	16	40	1
1120-300A	30-300mm	±0,05mm	410	5	15	17	50	1,5

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk
1520-150	11-150mm/0,43-6"	±0,04mm

DİJİTAL DERİNLİK KUMPASI (STANDART MODEL)



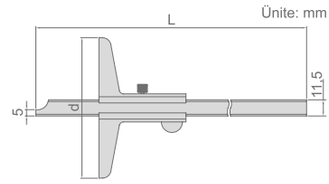
- Hassasiyet: 0,01mm/0,0005"
- Tuşlar: aç/kapa, sıfırla, mm/inç
- CR2032 Lityum Pil, bilgi çıkışı
- Paslanmaz çelikten yapılmıştır
- Otomatik kapatma, dijital göstergenin hareket ettirilmesi ile açılır
- DIN862 Standardına uygundur (1141-500A hariç)
- Opsiyonel aksesuar: bilgi çıkış kablosu(kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02)

Sip. No.	Ölçüm Aralığı	Doğruluk	L	a	b	d
1141-150A	0-150mm/0-6"	±0,03mm	230	6	14,5	100
1141-200A	0-200mm/0-8"	±0,03mm	280	6	14,5	100
1141-300A	0-300mm/0-12"	±0,03mm	380	6	14,5	150
1141-500A	0-500mm/0-20"	±0,05mm	585	7	15	150

INSIZE ÖLÇÜ ALETLERİ

MEKANİK DERİNLİK KUMPASI (STANDART MODEL)





- Paslanmaz çelikten yapılmıştır
- Parlak krom kaplama okuma yüzeyi

Hassasiyet: 0,05mm (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	d
1240-150	0-150mm	±0,05mm	245	100
1240-200	0-200mm	±0,05mm	282	100
1240-300	0-300mm	±0,08mm	382	100
1240-500	0-500mm	±0,09mm	585	150

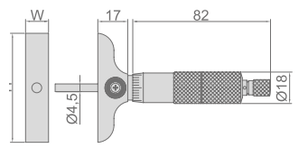
Hassasiyet: 0,02mm (mm)

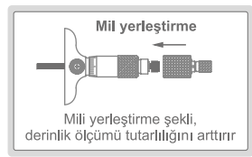
Sip. No.	Ölçüm aralığı	Doğruluk	L	d
1240-1501	0-150mm	±0,03mm	245	100
1240-2001	0-200mm	±0,03mm	282	100
1240-3001	0-300mm	±0,04mm	382	100
1240-5001	0-500mm	±0,05mm	585	150

DERİNLİK MİKROMETRESİ



Ünite: mm





- DIN863-2 Standardına uygundur
- Hassasiyet: 0,01mm
- Mikrometre kafası doğruluk: +/-3µm
- Mil doğruluk: +/-(2+L/75)µm,
- L mm olarak ölçüm aralığıdır
- Düz uçlu mil
- Cırcırlı

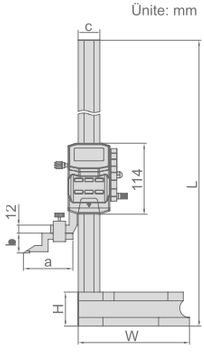
Taban: HxW=63x17mm

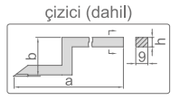
Sip. No.	Ölçüm aralığı	Miller
3241-B25	0-25mm	1 parça

Taban: HxW=101,5x17mm

Sip. No.	Ölçüm aralığı	Miller
3240-25	0-25mm	1 parça
3240-50	0-50mm	2 parça
3240-75	0-75mm	3 parça
3240-100	0-100mm	4 parça
3240-150	0-150mm	6 parça
3240-200	0-200mm	8 parça
3240-300	0-300mm	12 parça

MAKARALI DİJİTAL MİHENGİR















- Çözünürlük: 0,01mm/0,0005"
- Tuşlar: aç/kapa, sıfırla, mm/inç,
- ön ayar (+,-), beklet
- Otomatik kapatma, dijital göstergenin hareket ettirilmesi ile açılır
- Karbür uçlu çizici
- Paslanmaz çelikten yapılmıştır
- CR2032 Lityum Pil, bilgi çıkışı
- Kılıf ile tedarik edilir
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A, 7305-A01/A02), salgı saat tutucu (kod 6293-6), açiölçer için kelepçe (kod 2372-CLAMP)

BİLGİ ÇIKIŞLI

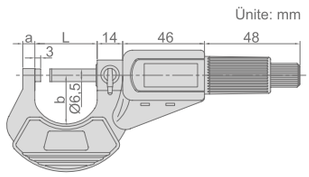
Sip. No.	Ölçüm aralığı	Doğruluk	L	W	H	a	b	c	h
1156-300	0-300mm/0-12"	±0,03mm	515mm	180mm	55mm	80mm	30mm	35mm	9mm
1156-600	0-600mm/0-24"	±0,05mm	815mm	180mm	55mm	80mm	30mm	35mm	9mm
1156-1000	0-1000mm/0-40"	±0,07mm	1220mm	265mm	70mm	92mm	48mm	40mm	12mm

INSIZE ÖLÇÜ ALETLERİ

DİJİTAL DIŞ ÇAP MİKROMETRE









KALİBRASYON SERTİFİKASI DKD ONAYLI

DATA ÇIKIŞI YOKTUR

- Çözünürlük: 0,01mm/0,0005"
- Tuşlar: on/off, set, mm/inç,
- ABS/INC, bilgi çıkışı
- Bilgi çıkışı yok
- LR44 Pil, otomatik kapanma
- Karbür ölçüm uçları
- Tambur
- Küresel uç ile tedarik edilir
- Sıfırlama mastarları dahildir (0-25 mm/0-1" hariç)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b
3109-25A*	0-25mm/0-1"	±2µm	32	6	27,5
3109-50A*	25-50mm/1-2"	±2µm	57	8	37
3109-75A*	50-75mm/2-3"	±3µm	82	8	50
3109-100A*	75-100mm/3-4"	±3µm	107	10	61

DİJİTAL DIŞ ÇAP MİKROMETRE (BİLGİ ÇIKIŞLI)



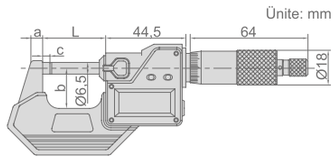






KALİBRASYON SERTİFİKASI DKD ONAYLI

IP65 SUGEÇİRMEZ



- IP65 Suya ve Toza Karşı Korumalı
- Tuşlar: on/off, set, mm/inç, ABS/INC, bilgi çıkışı
- Bilgi Çıkışı
- LR44 Pil, otomatik kapanma
- Karbür ölçüm uçları
- Küresel uç ile tedarik edilir
- Sıfırlama mastarları dahildir
- (0-25 mm/0-1" hariç)
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-30A, 7302-SPC6, 7305-SPC3A, 7305-B01)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

BİLGİ ÇIKIŞLI

Metrik/inç model (cırcırlı) (mm)

Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk	L	a	b	c
3101-25AJ*	0-25mm	0,001mm	±2µm	34,5	6	25	3
3101-50AJ*	25-50mm	0,001mm	±2µm	59,5	8	32	3
3101-75AJ*	50-75mm	0,001mm	±3µm	84,5	8	44,5	3
3101-100AJ*	75-100mm	0,001mm	±3µm	109,5	8	57	3

Metrik/inç model (tambur) (mm)

Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk	L	a	b	c
3101-25FA*	0-25mm/0-1"	0,001mm/0,00005"	±2µm	34,5	6	25	3

Metrik/inç model (cırcırlı) (mm)

Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk	L	a	b	c
3101-25A*	0-25mm/0-1"	0,001mm/0,00005"	±2µm	34,5	6	25	3
3101-50A*	25-50mm/1-2"	0,001mm/0,00005"	±2µm	59,5	8	32	3
3101-75A*	50-75mm/2-3"	0,001mm/0,00005"	±3µm	84,5	8	44,5	3
3101-100A*	75-100mm/3-4"	0,001mm/0,00005"	±3µm	109,5	8	57	3
3101-125A	100-125mm/4-5"	0,001mm/0,00005"	±3µm	135	10	70	3
3101-150A	125-150mm/5-6"	0,001mm/0,00005"	±3µm	160,5	10	82	3
3101-175A	150-175mm/6-7"	0,001mm/0,00005"	±4µm	186	12	94,5	5,5
3101-200A	175-200mm/7-8"	0,001mm/0,00005"	±4µm	211,5	12	107	5,5
3101-225A	200-225mm/8-9"	0,001mm/0,00005"	±4µm	236	23	129,5	5,5
3101-250A	225-250mm/9-10"	0,001mm/0,00005"	±4µm	261,5	23	142,5	5,5
3101-275A	250-275mm/10-11"	0,001mm/0,0001"	±5µm	287	23	155	5,5
3101-300A	275-300mm/11-12"	0,001mm/0,0001"	±5µm	312,5	23	167,5	5,5

DİJİTAL DIŞ ÇAP MİKROMETRE (BİLGİ ÇIKIŞI OLMADAN)



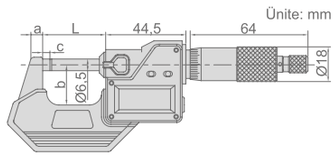






KALİBRASYON SERTİFİKASI DKD ONAYLI

IP65 SUGEÇİRMEZ



- IP65 Suya ve Toza Karşı Korumalı
- Tuşlar: on/off, set, mm/inç, ABS/INC, bilgi çıkışı
- Bilgi Çıkışı
- LR44 Pil, otomatik kapanma
- Karbür ölçüm uçları
- Küresel uç ile tedarik edilir
- Sıfırlama mastarları dahildir
- (0-25 mm/0-1" hariç)
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-30A, 7302-SPC6, 7305-SPC3A, 7305-B01)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

DİKKAT: DATA ÇIKIŞI YOKTUR

Tamburdan cırcırlı model

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c
3108-25FA*	0-25mm/0-1"	±2µm	34,5	6	25	3

Cırcırlı model (mm)

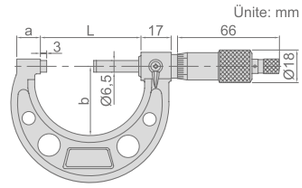
Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b	c
3108-25A*	0-25mm/0-1"	±2µm	34,5	6	25	3
3108-50A*	25-50mm/1-2"	±2µm	59,5	8	32	3
3108-75A*	50-75mm/2-3"	±3µm	84,5	8	44,5	3
3108-100A*	75-100mm/3-4"	±3µm	109,5	8	57	3
3108-125A	100-125mm/4-5"	±3µm	135	10	70	3
3108-150A	125-150mm/5-6"	±3µm	160,5	10	82	3
3108-175A	150-175mm/6-7"	±4µm	186	12	94,5	5,5
3108-200A	175-200mm/7-8"	±4µm	211,5	12	107	5,5

INSIZE ÖLÇÜ ALETLERİ

DIŞ ÇAP MİKROMETRE



3203-25A



KALİBRASYON SERTİFİKASI
DKD ONAYLI



3203-50A





3203-3006A



3203-1004A

- Hassasiyet: metrik 0,01mm
  imperial 0001"
- Karbür ölçüm ağızları
- DIN863-1 standardına uygundur
- Sıfırlama mastarları ile tedarik edilir (0-25mm ve 0-1" hariç)

*DKD (Alman kalibrasyon hizmet birimi) tarafından izlenebilir muayene denetleyici sertifikası ile birlikte verilir

Metrik/inç model (cırcırlı) (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b
3203-25A*	0-25mm	±2µm	32	9	28
3203-50A*	25-50mm	±2µm	57	14	38
3203-75A*	50-75mm	±2µm	82	15	49
3203-100A*	75-100mm	±3µm	107	15	60
3203-125A	100-125mm	±3µm	133	16,5	73
3203-150A	125-150mm	±3µm	158	16,5	85
3203-175A	150-175mm	±4µm	183	19,4	104
3203-200A	175-200mm	±4µm	209	19,4	117
3203-225A	200-225mm	±4µm	234	19,4	130
3203-250A	225-250mm	±5µm	260	19,4	142
3203-275A	250-275mm	±5µm	285	19,4	155
3203-300A	275-300mm	±5µm	310	19,4	168

Imperial (cırcırlı model) (mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b
3203-1A*	0-1"	,00016"	1,260"	,354"	1,102"
3203-2A*	1-2"	,00016"	2,244"	,551"	1,496"
3203-3A*	2-3"	,00020"	3,228"	,591"	1,929"
3203-4A*	3-4"	,00020"	4,213"	,591"	2,362"
3203-5A*	4-5"	,00024"	5,236"	,650"	2,874"
3203-6A*	5-6"	,00024"	6,220"	,650"	3,346"
3203-7A	6-7"	,00028"	7,205"	,764"	4,094"
3203-8A	7-8"	,00028"	8,228"	,764"	4,606"
3203-9A	8-9"	,00031"	9,213"	,764"	5,118"
3203-10A	9-10"	,00031"	10,236"	,764"	5,591"
3203-11A	10-11"	,00035"	11,220"	,764"	6,102"
3203-12A	11-12"	,00035"	12,205"	,764"	6,614"

Metrik mikrometre ayarı (cırcırlı model)

Sip. No.	Ölçüm aralığı	Mikrometre dahil	Paketleme
3203-753A*	0-75mm	3203-25A; 3203-50A; 3203-75A	şişme kalıp paket
3203-1004A*	0-100mm	3203-25A; 3203-50A; 3203-75A; 3203-100A	şişme kalıp paket
3203-1506A	0-150mm	3203-25A; 3203-50A; 3203-75A; 3203-100A; 3203-125A; 3203-150A	şişme kalıp paket
3203-3006A	150-300mm	3203-175A; 3203-200A; 3203-225A; 3203-250A; 3203-275A; 3203-300A" 3203-25A; 3203-50A;	aluminyum kutu
3203-3012A	0-300mm	3203-75A; 3203-100A; 3203-125A; 3203-150A; 3203-175A; 3203-200A; 3203-225A; 3203-250A; 3203-275A; 3203-300A	aluminyum kutu

Imperial mikrometrik ayarı (cırcırlı model)

Sip. No.	Ölçüm aralığı	Mikrometre dahil	Paketleme
3203-33A*	0-3"	3203-1A; 3203-2A; 3203-3A	şişme kalıp paket
3203-44A*	0-4"	"3203-1A; 3203-2A; 3203-3A; 203-4A"	şişme kalıp paket
3203-66A*	0-6"	"3203-1A; 3203-2A; 3203-3A; 3203-4A; 3203-5A; 3203-6A"	şişme kalıp paket
3203-126A	6-12"	"3203-7A; 3203-8A; 3203-9A; 3203-10A; 3203-11A; 3203-12A"	aluminyum kutu
3203-1212A	0-12"	"3203-1A; 3203-2A; 3203-3A; 3203-4A; 3203-5A; 3203-6A; 3203-7A; 3203-8A; 3203-9A; 3203-10A; 3203-11A; 3203-12A"	aluminyum kutu

Imperial (tamburdan cırcırlı model)

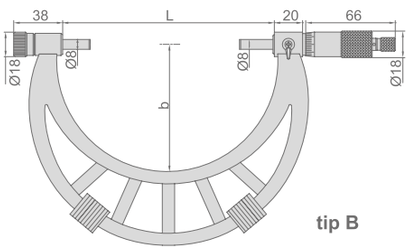
Sip. No.	Ölçüm aralığı	Doğruluk	L	a	b
3203-1FA*	0-1"	,00016"	1,260"	,354"	1,102"
3203-2FA*	1-2"	,00016"	2,244"	,551"	1,496"
3203-3FA*	2-3"	,00020"	2,244"	,591"	1,929"

INSIZE ÖLÇÜ ALETLERİ

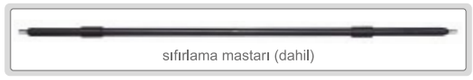
DIŞ ÇAP MİKROMETRE



3206-400



tip B



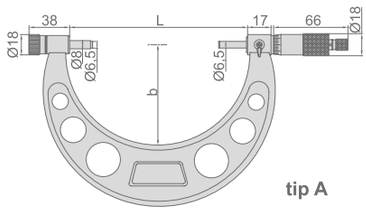


- Hassasiyet: 0,01mm
- Cırcırlı
- DIN863-3 standardına uygundur
- Karbür ölçüm uçları
- Sıfırlama mastarı ile tedarik edilir



3206-50A

Ünite: mm



tip A

Sip. No.	Ölçüm aralığı	Tip	Doğruluk	L	b	Sıfırlama mastarı (dahil)
3206-50A	0-50mm	A	4µm	58	35	25
3206-100A	0-100mm	A	5µm	108	57	25, 50, 75
3206-150A	0-150mm	A	6µm	158	82	25, 50, 75, 100, 125
3206-151A	50-150mm	A	6µm	158	82	50, 75, 100, 125
3206-200A	100-200mm	A	7µm	208	114	100, 125, 150, 175
3206-300A	150-300mm	A	9µm	308	165	150, 175, 200, 225, 250, 275
3206-301A	200-300mm	A	9µm	308	165	200, 225, 250, 275
3206-400	300-400mm	B	11µm	409	224	325, 375
3206-500	400-500mm	B	13µm	509	275	425, 475
3206-600	500-600mm	B	14µm	609	321	525, 575
3206-700	600-700mm	B	16µm	709	371	625, 675
3206-800	700-800mm	B	18µm	809	426	725, 775
3206-900	800-900mm	B	20µm	909	476	825, 875
3206-1000	900-1000mm	B	22µm	1009	576	925, 975

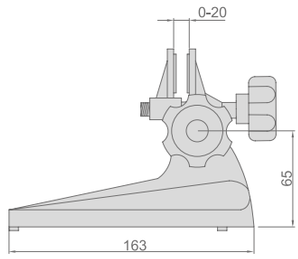
INSIZE ÖLÇÜ ALETLERİ

MİKROMETRE STANDI



6301

Ünite: mm





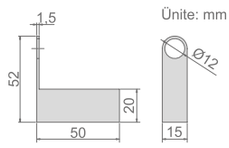
• 100 mm kadar olan mikrometreler için uygundur

Kod
6301



6301-1

Ünite: mm





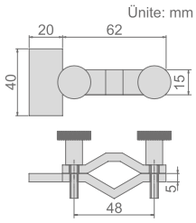
• İç mikrometreler için uygundur

Kod	Açıklama	Uygun bir üründür
6301-1	iç mikrometreler için kelepçelidir	3220 serileri için



6301-2

Ünite: mm



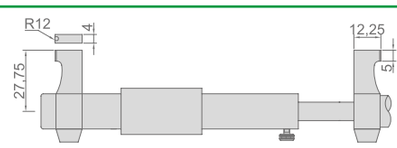


• Üç ayaklı iç mikrometreleri için uygundur

Kod	Açıklama	Uygun bir üründür
6301-2	üç ayaklı iç mikrometreleri için kelepçelidir	3127 ve 3227 serilerindeki 100 mm kadar olan ürünler için uygundur

İÇ ÇAP MİKROMETRE (EKONOMİK MODEL)





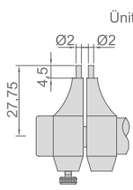
tip C

• Hassasiyet 0,01 mm
• Cırcırlı
• Karbür ölçüm ağızları
• Opsiyonel aksesuar: sıfırlama mastarı (kod 6312), mikrometre standı ve kelepçe (kod 6301 ve 6301-2)

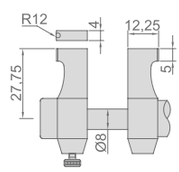
kıskaçlı mikrometre standı (**opsiyonel**)



Ünite: mm



tip A

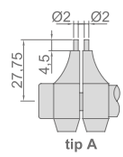


tip B

Sip. No.	Ölçüm aralığı	Tip	Sıfırlama mastarı	Doğruluk
3220-30	5-30mm	A	5mm (dahil)	7µm
3220-50	25-50mm	B	25mm (dahil)	8µm
3220-75	50-75mm	B	50mm (opsiyonel)	9µm
3220-100	75-100mm	C	75mm (opsiyonel)	10µm

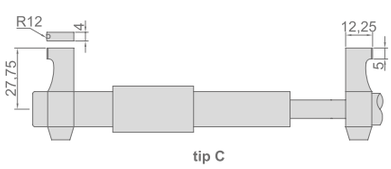
DİJİTAL İÇ ÇAP MİKROMETRESİ (EKONOMİK MODEL)





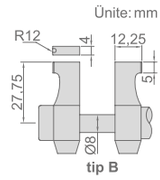
tip A

• Çözünürlük 0,001mm/0,00005"
• Tuşlar: aç/kapa, ayar, mm/inç, ABS/INC
• Bilgi çıkış
• LR44 pil, otomatk kapanma
• Cırcırlı
• Karbür ölçüm ağızları
• Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-30A, 7302-SPC6, 7305-SPC3A, 7305-B01), sıfırlama mastarı (kod 6312)



tip C

Ünite: mm



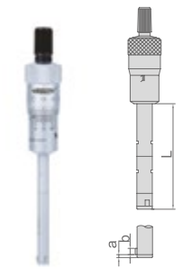
tip B

BİLGİ ÇIKIŞI

Sip. No.	Ölçüm aralığı	Tip	Sıfırlama mastarı	Doğruluk
3520-30	5-30mm/0,2-1,2"	A	5mm (dahil)	±5µm
3520-50	25-50mm/1-2"	B	25mm (dahil)	±6µm
3520-75	50-75mm/2-3"	B	50mm (opsiyonel)	±7µm
3520-100	75-100mm/3-4"	C	75mm (opsiyonel)	±8µm

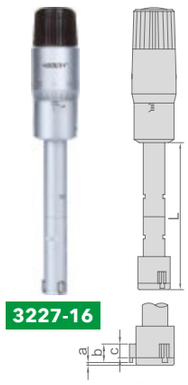
INSIZE ÖLÇÜ ALETLERİ

ÜÇ AYAKLI MİKROMETRELER



3227-8

Tip A
6-12mm,
çelik ölçme ucu



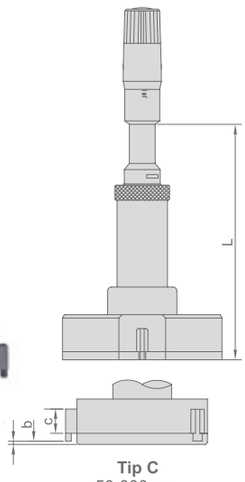
3227-16

Tip B
12-50mm,
karbür ölçme ucu

KALİBRASYON SERTİFİKASI



3227-125



Tip C
50-300mm,
karbür ölçme ucu

sıfırlama mastarı



6-100mm: dahil,
100-300mm: **opsiyonel**

uzatma çubuğu



dahil

kıskaçlı mikrometre standı (**opsiyonel**)





3227-504

- DIN863-4 Standardına uygundur
- 6-12mm: hassasiyet 0,001mm
- 12-300mm: hassasiyet 0,005mm
- Cırcırlı
- Opsiyonel aksesuar: sıfırlama mastarı (kod 6312), mikrometre standı ve kelepçe (kod 6301 ve 6301-2)

*Üretici kalibrasyon sertfikası ile tedarik edilir

(mm)

Sip. No.	Ölçüm aralığı	Tip	Doğruluk	Sıfırlama mastarı	Uzatma çubuğu (dahil)	L	a	b	c
3227-8*	6-8mm	A	4µm	Ø6mm (dahil)	100mm	54,5	1,5	2,5	-
3227-10*	8-10mm	A	4µm	Ø8mm (dahil)	100mm	54,5	1,5	2,5	-
3227-12*	10-12mm	A	4µm	Ø10mm (dahil)	100mm	54,5	1,5	2,5	-
3227-16*	12-16mm	B	4µm	Ø16mm (dahil)	150mm	80	0,5	6	4,5
3227-20*	16-20mm	B	4µm	Ø16mm (dahil)	150mm	80	0,5	6	4,5
3227-25*	20-25mm	B	4µm	Ø25mm (dahil)	150mm	90	0,5	8	6
3227-30*	25-30mm	B	4µm	Ø25mm (dahil)	150mm	90	0,5	8	6
3227-40*	30-40mm	B	4µm	Ø40mm (dahil)	150mm	97	0,5	14	12
3227-50*	40-50mm	B	5µm	Ø40mm (dahil)	150mm	97	0,5	14	12
3227-63*	50-63mm	C	5µm	Ø62mm (dahil)	150mm	114	0,5	17,5	14,5
3227-75*	62-75mm	C	5µm	Ø62mm (dahil)	150mm	114	0,5	17,5	14,5
3227-88*	75-88mm	C	5µm	Ø87mm (dahil)	150mm	114	0,5	17,5	14,5
3227-100*	87-100mm	C	5µm	Ø87mm (dahil)	150mm	114	0,5	17,5	14,5
3227-125*	100-125mm	C	5µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-150*	125-150mm	C	5µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-175*	150-175mm	C	5µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-200*	175-200mm	C	5µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-225	200-225mm	C	7µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-250	225-250mm	C	7µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-275	250-275mm	C	7µm	opsiyonel	150mm	145	0,5	19,5	14,5
3227-300	275-300mm	C	7µm	opsiyonel	150mm	145	0,5	19,5	14,5

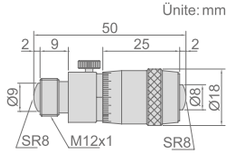
Sip. No.	Ölçüm aralığı	Mikrometreler dahildir	Sıfırlama mastarı (dahil)	Uzatma çubuğu (dahil)
3227-123*	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3227-202*	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm
3227-504*	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3227-1004*	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

İÇ ÇAP MİKROMETRE (BORU TİP)





Ünite: mm



- Hassasiyet 0,01mm
- Doğruluk: (3+n+L/50)µm
- n=ölçüm çubuğu sayısı
- L: maksimum ölçüm uzunluğu (mm)
- Sıfırlama mastarları ile tedarik edilir
- Karbür ölçüm ağızları

Sip. No.	Ölçüm aralığı	Mikrometre kafasını ilerletir	Uzatma çubukları
3222-63	50-63mm	13mm	-
3222-150	50-150mm	13mm	13mm, 25mm, 50mm
3222-300	50-300mm	13mm	13mm, 25mm, 50mm (2 parça), 100mm
3222-500	50-500mm	13mm	13mm, 25mm, 50mm (2 parça), 100mm, 200mm
3222-600	50-600mm	13mm	13mm, 25mm, 50mm, 100mm, 150mm, 200mm
3222-1000	50-1000mm	13mm	13mm, 25mm, 50mm (2 parça), 100mm, 200mm (2 parça), 300mm
3222-1500	50-1500mm	13mm	13mm, 25mm, 50mm (2 parça), 100mm, 200mm (3 parça), 300mm (2 parça)

INSIZE ÖLÇÜ ALETLERİ

SİLİNDİR KOMPARATÖRÜ



2322-160A



2122-35A

(mm)

Ölçüm aralığı	A	B	C	ØD	ØE	F	L
35-60mm	22	9	27	13	12,8	SR2	141
50-100mm	26	9	35	13	12,8	SR2	141
50-160mm	26	9	35	13	12,8	SR2	141
100-160mm	26	9	35	13	12,8	SR2	141
160-250mm	56,5	13	74,5	15	12,8	SR2	241
250-450mm	86,5	15	101,5	15	14,5	SR2,5	241

Komparatör saati ile

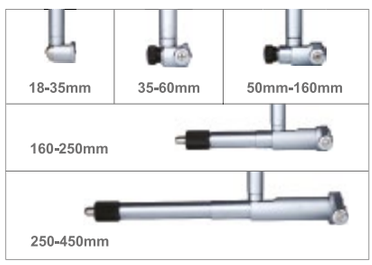
Kod	Ölçüm aralığı	Komparatör	Doğruluk	Tekrarlanabilirlik
2322-35A	18-35mm	saatli komparatör; aralık 10mm; hassasiyet 0,01mm (kod 2308-10FA)	±0,015mm	0,003mm
2322-60A	35-60mm		±0,018mm	0,003mm
2322-100A	50-100mm		±0,018mm	0,003mm
2322-160A	50-160mm		±0,018mm	0,003mm
2322-161A	100-160mm		±0,018mm	0,003mm
2322-250A	160-250mm		±0,018mm	0,003mm
2322-450A	250-450mm		±0,018mm	0,003mm

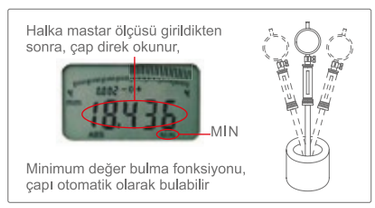
Dijital komparatör saati ile

Kod	Ölçüm aralığı	Komparatör	Doğruluk	Tekrarlanabilirlik
2122-35A	18-35mm	dijital komparatör, aralık 12,7mm/0,5"; hassasiyet 0,002mm/0,0001" (kod 2108-10F)	±0,015mm	0,003mm
2122-60A	35-60mm		±0,018mm	0,003mm
2122-100A	50-100mm		±0,018mm	0,003mm
2122-160A	50-160mm		±0,018mm	0,003mm
2122-161A	100-160mm		±0,018mm	0,003mm
2122-250A	160-250mm		±0,018mm	0,003mm
2122-450A	250-450mm		±0,018mm	0,003mm

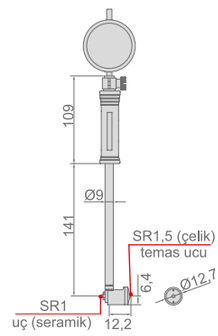
- Opsiyonel aksesuar:
- sıfırlama mastarı (kod 6312), uzun kol (kod 7351)

0,001MM KOMPARATÖR SAATLERİNE UYGUN DEĞİLDİR
BİLGİ ÇIKIŞI

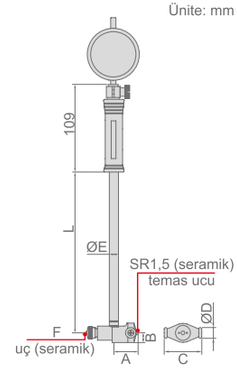




Ünite: mm



18-35mm

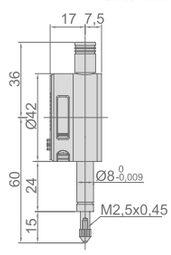


35-450mm

KOMPAKT DİJİTAL KOMPARATÖR



Ünite: mm



- Tuşlar
- in/mm: inc/metrik dönüştürme için kısa basın, ölçme yönünü değiştirmek için uzun basın
- ABS: Mutlak ve sayarak artan ölçüm için kıa basın ve bilgi ayarı yapmak için uzun basın
- 0/AÇ: Açmak için kısa basın ve açıkken sıfırlamak için kısa basın
- Tekrar başlatma sonrası önayar ve tolerans verileri hafızada kalır
- CR1632 pil, otomatik kapanma
- Bilgi çıkış
- Opsiyonel aksesuar: bilgi çıkış kablosu
- (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01), temas uçları

KALİBRASYON SERTİFİKASI
NIST ONAYLI

BİLGİ ÇIKIŞI *Üretici kalibrasyon sertifikası ile tedarik edilir

Kod	Ölçüm aralığı	Çözünürlük	Doğruluk	Gecikme	Açıklama
2114-5F*	5mm/0,2"	0,01mm/0,0005"	20µm	10µm	düz kapak
2114-51F*	5mm/0,2"	0,001mm/0,00005"	5µm	2µm	düz kapak

INSIZE ÖLÇÜ ALETLERİ

SİLİNDİR KOMPARATÖR SETİ



2824-S3 2824-S160

Sip. No.	Ölçüm aralığı	Komparatör	Silindir dahildir	Doğruluk
2824-S160	35-160mm	saatli komparator, kod 2308-10FA, aralik 10mm, hassasiyet 0,01 mm	• 35mm-50mm (saatli komparator ve kol dahil degildir) • 50-160mm	35-50mm ±0,018mm 50-160mm ±0,018mm
2824-S3	18-160mm	saatli komparator, kod 2308-10FA, aralik 10mm, hassasiyet 0,01 mm	• 18-35mm • 35-60mm (komparator saati dahil degildir) • 50-160mm (komparator saati dahil degildir)	18-35mm ±0,015mm 35-60mm ±0,018mm 50-160mm ±0,018mm

0,001MM KOMPARATÖR SAATLERİNE UYGUN DEĞİLDİR
BİLGİ ÇIKIŞI

- Tekrarlanabilirlik: 0,003mm
- Opsiyonel aksesuar:
- sıfırlama mastarı (kod 6312), uzun kol (kod 7351)

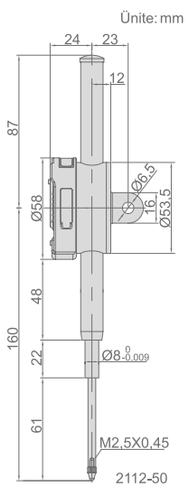
paketleme (kod **2824-S3**)



DİJİTAL KOMPARATÖR (STANDART MODEL)

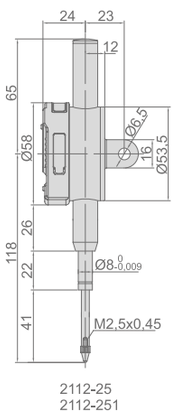


2112-501



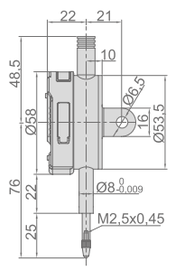


2112-251





2112-10



mil kaldırma kolu dahildir



KALİBRASYON SERTİFİKASI
NIST ONAYLI

- Tuşlar: aç/kapa, ayar, mm/inç, sıfırla
- CR2032 pil, otomatik kapanma
- Bilgi çıkış
- Opsiyonel aksesuar: bilgi çıkış kablosu
- (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01),
- arkalar (sayfa 94-95), bağlantı ucu (sayfa 92-93)

BİLGİ ÇIKIŞI

*Üretici kalibrasyon sertifikası ile tedarik edilir

Çözünürlük 0,001mm/0,00005"

Sip. No.	Ölçüm aralığı	Doğruluk	Gecikme	Açıklama
2112-101F*	12,7mm/0,5"	5µm	2µm	düz kapak
2112-251F*	25,4mm/1"	5µm	3µm	düz kapak
2112-501 F*	50,8mm/2"	6µm	3µm	düz kapak
2112-101*	12,7mm/0,5"	5µm	2µm	kulaklı kapak
2112-251*	25,4mm/1"	5µm	3µm	kulaklı kapak
2112-501*	50,8mm/2"	6µm	3µm	kulaklı kapak

Çözünürlük 0,001mm/0,00005"

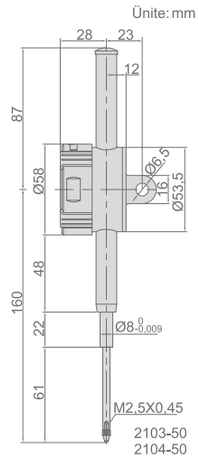
Sip. No.	Ölçüm aralığı	Doğruluk	Gecikme	Açıklama
2112-10F*	12,7mm/0,5"	20µm	10µm	düz kapak
2112-25F*	25,4mm/1"	20µm	10µm	düz kapak
2112-50F*	50,8mm/2"	30µm	10µm	düz kapak
2112-10*	12,7mm/0,5"	20µm	10µm	kulaklı kapak
2112-25*	25,4mm/1"	20µm	10µm	kulaklı kapak
2112-50*	50,8mm/2"	30µm	10µm	kulaklı kapak

INSIZE ÖLÇÜ ALETLERİ

DİJİTAL KOMPARATÖR SAATİ (GELİŞMİŞ MODEL)

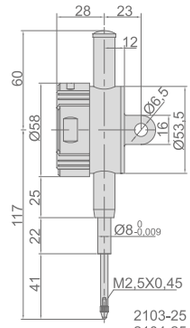


2103-50





2104-25



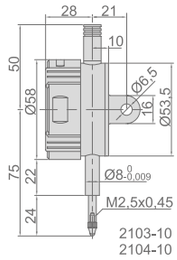
KALİBRASYON SERTİFİKASI NIST ONAYLI

BİLGİ ÇIKIŞI

*Üretici kalibrasyon sertifikası ile tedarik edilir



2103-10





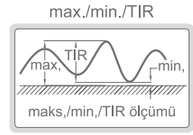
analog uç



tolerans dışına çıkınca uyarı gelir



max./min./TIR



mil kaldırma kolu dahildir



- Dijital ve analog okuma
- Gösterge 320° dönebilir
- Tekrar başlatma sonrası önayar ve tolerans verileri hafızada kalır
- Tuşlar: Geçer ve Geçmez tolerans göstergesi,veri ön ayar, ölçüm yönü değişimi, maks./min./TIR ölçümü, inç/metrik dönüştürme, mutlak/sayarak artarak ölçüm
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01) +++
- CR2032 pil, otomatik kapanma
- Bilgi çıkış

Çözünürlük 0,001mm/0,00005"

Sip. No.	Ölçüm aralığı	Doğruluk	Gecikme	Açıklama
2103-10F*	12,7mm/0,5"	5µm	2µm	düz kapak
2103-25F*	25,4mm/1"	5µm	3µm	düz kapak
2103-50F*	50,8mm/2"	6µm	3µm	düz kapak
2103-10*	12,7mm/0,5"	5µm	2µm	kulaklı kapak
2103-25*	25,4mm/1"	5µm	3µm	kulaklı kapak
2103-50*	50,8mm/2"	6µm	3µm	kulaklı kapak

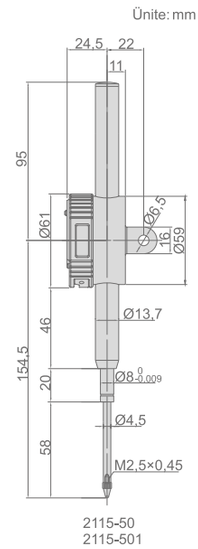
Çözünürlük 0,01mm/0,0005"

Sip. No.	Ölçüm aralığı	Doğruluk	Gecikme	Açıklama
2104-10F*	12,7mm/0,5"	20µm	10µm	düz kapak
2104-25F*	25,4mm/1"	20µm	10µm	düz kapak
2104-50F*	50,8mm/2"	30µm	10µm	düz kapak
2104-10*	12,7mm/0,5"	20µm	10µm	kulaklı kapak
2104-25*	25,4mm/1"	20µm	10µm	kulaklı kapak
2104-50*	50,8mm/2"	30µm	10µm	kulaklı kapak

SU GEÇİRMEZ DİJİTAL KOMPARATÖR SAATİ

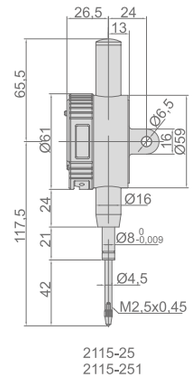


2115-50



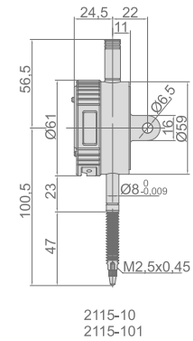


2115-25





2115-10



mil kaldırma kolu dahildir (**2115-101/101F, 2115-10/10F** hariç)



KALİBRASYON SERTİFİKASI NIST ONAYLI

BİLGİ ÇIKIŞI

TOZA/SUYA KARŞI KORUMALI

*Üretici kalibrasyon sertifikası ile tedarik edilir

- Toza/suya karşı korumalı
- Tuşlar: aç/kapa, sıfırla, mm/inç
- CR2032 pil, otomatik kapanma
- Bilgi çıkış
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01)

Çözünürlük 0,001mm/0,00005"

Sip. No.	Ölçüm aralığı	Toza/ suya karşı korumalı	Doğruluk	Gecikme	Açıklama
2115-101*	12,7mm/0,5"	IP65	5µm	2µm	kulaklı kapak
2115-251*	25,4mm/1"	IP54	5µm	3µm	kulaklı kapak
2115-501*	50,8mm/2"	IP54	6µm	3µm	kulaklı kapak
2115-101F*	12,7mm/0,5"	IP65	5µm	2µm	düz kapak
2115-251F*	25,4mm/1"	IP54	5µm	3µm	düz kapak
2115-501F*	50,8mm/2"	IP54	6µm	3µm	düz kapak

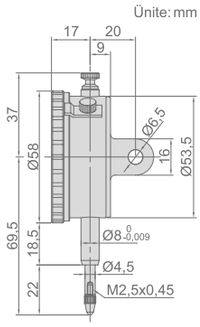
Çözünürlük 0,01mm/0,0005"

Sip. No.	Ölçüm aralığı	Toza/ suya karşı korumalı	Doğruluk	Gecikme	Açıklama
2115-10*	12,7mm/0,5"	IP65	20µm	10µm	kulaklı kapak
2115-25*	25,4mm/1"	IP54	20µm	10µm	kulaklı kapak
2115-50	50,8mm/2"	IP54	30µm	10µm	kulaklı kapak
2115-10F	12,7mm/0,5"	IP65	20µm	10µm	düz kapak
2115-25F*	25,4mm/1"	IP54	20µm	10µm	düz kapak
2115-50F*	50,8mm/2"	IP54	30µm	10µm	düz kapak

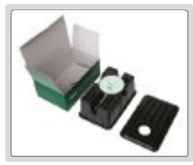
INSIZE ÖLÇÜ ALETLERİ

KOMPARATÖR SAATİ (PROMOSYON MODEL)





karton kutu



KALİBRASYON SERTİFİKASI NIST ONAYLI

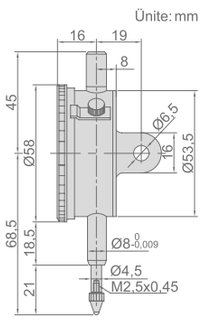
- DIN878 Standardına uygundur
- Kıymetli taş yataklı
- Limit uçları ve çerçeve kelepçesi
- ile tedarik edilir
- Karton kutudadır
- Opsiyonel aksesuar:
- arka kapaklar (sayfa 94-95),
- temas uçları (sayfa 92-93)

*Üretici kalibrasyon sertifikası ile tedarik edilir

Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	Gecikme	Aralık	Saat okuma	Açıklama
2301-10F*	10mm	0,01mm	17µm	3µm	1mm	0-100	düz kapak
2301-10*	10mm	0,01mm	17µm	3µm	1mm	0-100	yedek düz arkalı kulaklı kapak

KOMPARATÖR SAATİ (STANDART MODEL)





KALİBRASYON SERTİFİKASI NIST ONAYLI

- DIN878 Standardına uygundur
- Kıymetli taş yataklı
- Limit uçları ve çerçeve kelepçesi ile tedarik edilir
- Opsiyonel aksesuar: arka kapaklar (sayfa 94-95),
- temas uçları (sayfa 92-93)

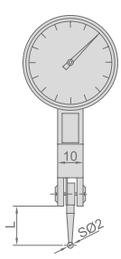
KIYMETLİ TAŞ YATAKLI

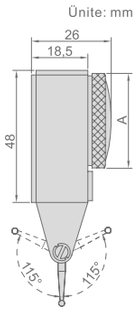
*Üretici kalibrasyon sertifikası ile tedarik edilir

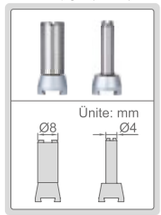
Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	Gecikme	Aralık	Saat okuma	Açıklama
2308-3FA*	3mm	0,01mm	12µm	3µm	1mm	0-100	düz kapak
2308-5FA*	5mm	0,01mm	14µm	3µm	1mm	0-100	düz kapak
2308-10FA*	10mm	0,01mm	17µm	3µm	1mm	0-100	düz kapak
2308-3A*	3mm	0,01mm	12µm	3µm	1mm	0-100	kulaklı kapak
2308-5A*	5mm	0,01mm	14µm	3µm	1mm	0-100	kulaklı kapak
2308-10A*	10mm	0,01mm	17µm	3µm	1mm	0-100	kulaklı kapak

SALGI SAATİ



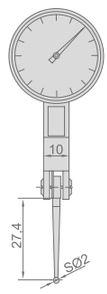


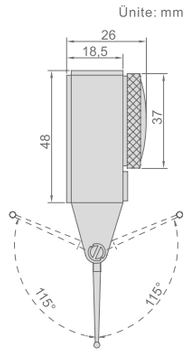


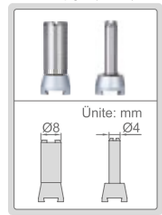


2380-08









2383-08A

KALİBRASYON SERTİFİKASI NIST ONAYLI

- DIN2270 Standardına uygundur
- Seramik çerçeveli
- Kıymetli taş yatak
- Karbür temas ucu
- Çift yönlü ölçüm
- Manyetik olmayan gövde
- İki kelepçe ile tedarik edilir: çap Ø8mm ve Ø4 mm
- Opsiyonel aksesuar: prob (sayfa 99)

KIYMETLİ TAŞ YATAKLI

*Üretici kalibrasyon sertifikası ile tedarik edilir

mm

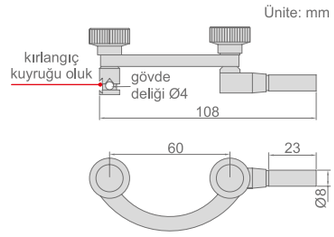
Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	Gecikme	Saat okuma	A	L
2380-08*	0,8mm	0,01mm	13µm	3µm	0-40-0	Ø30	13,5
2381-08*	0,8mm	0,01mm	13µm	3µm	0-40-0	Ø37	13,5
2380-02*	0,2mm	0,002mm	6µm	2µm	0-100-0	Ø30	12,5
2381-02*	0,2mm	0,002mm	6µm	2µm	0-100-0	Ø37	12,5
2383-08A*	0,8mm	0,01mm	13µm	3µm	0-40-0	Ø37	27,4

INSIZE ÖLÇÜ ALETLERİ

SALGI SAATİ MERKEZLEME TUTUCUSU







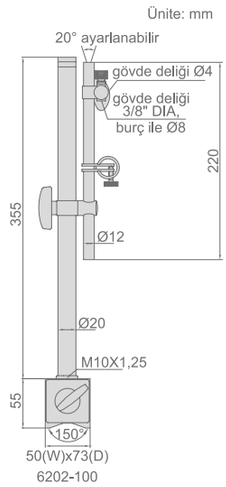
Kod
6291-1

- Tezgah üzerindeki silindir veya delikler merkezlenir

MANYETİK AYAK

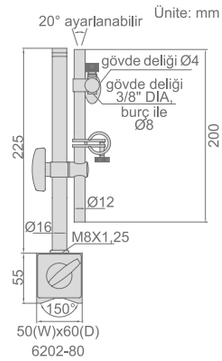


6202-100



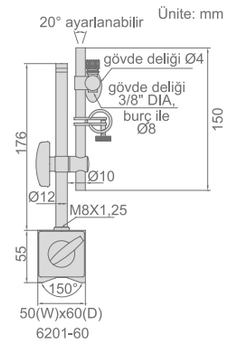


6202-80



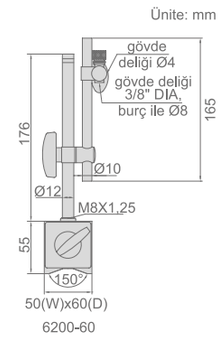


6201-60





6200-60



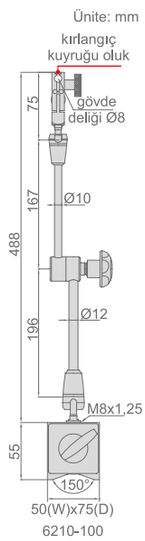
- Dijital ve analog komparatör ve salgı saatleri için

Sip. No.	Manyetik kuvvet	Uygulanabilir tutma sapı	Açıklama
6200-60	60kgf	Ø8mm, Ø4mm, 3/8" ÇAP	hassas ayarlı değil
6201-60	60kgf	Ø8mm, Ø4mm, 3/8" ÇAP	hassas ayarlı
6202-80	80kgf	Ø8mm, Ø4mm, 3/8" ÇAP	hassas ayarlı
6202-100	100kgf	Ø8mm, Ø4mm, 3/8" ÇAP	hassas ayarlı

UNIVERSAL MANYETİK AYAK

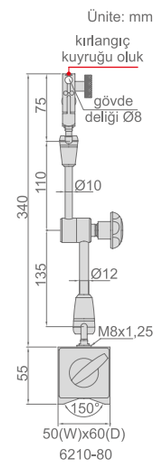


6210-100



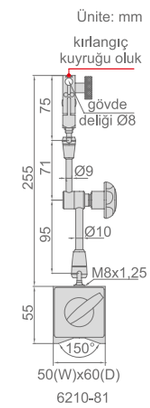


6210-80





6210-81



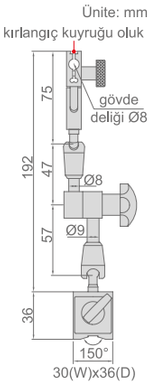
- Dijital ve analog komparatör ve salgı saatleri için

Sip. No.	Manyetik kuvvet	Uygulanabilir tutma sapı	Açıklama
6210-81	80kgf	Ø8mm	Hassas ayar ve kırlangıç kuyruğu oluk ile
6210-80	80kgf	Ø8mm	Hassas ayar ve kırlangıç kuyruğu oluk ile
6210-100	100kgf	Ø8mm	Hassas ayar ve kırlangıç kuyruğu oluk ile

INSIZE ÖLÇÜ ALETLERİ

MİNİ MANYETİK AYAK





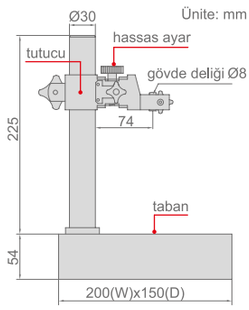
- Salgı saatleri için
- Hassas ayar ve kırlangıç kuyruğu oluk ile

YALNIZCA SALGI SAATLERİ İÇİNDİR

Sip. No.	Manyetik kuvvet	Uygulanabilir tutma sapı
6224-40	40kgf	Ø8mm

GRANİT SALGI SAATİ AYAĞI

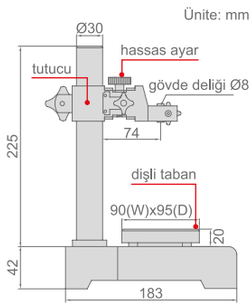






6866-150







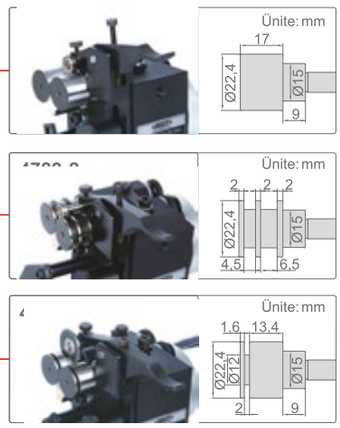
6863-150

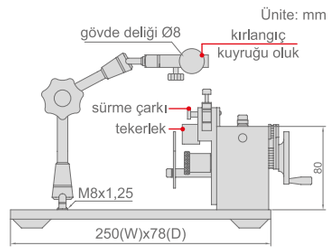
- Tutucunun dikey ilerlemesi: 150mm
- Hassas ayar aralığı: 2mm
- Kılıf ile tedark edilir

Sip. No.	Uygulanabilir tutma sapı	Taban
6866-150	Ø8mm	düzlük 2,5µm
6863-150	Ø8mm	dişli; düzlük 1,5µm; sertlik HRC60±2

SALGI ÖLÇME CİHAZI



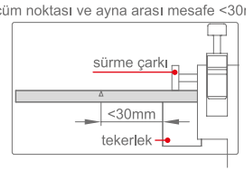






- Doğruluk 2µm
- Opsiyonel aksesuar: salgı saati,
- mini manyetik ayak (kod 6224-40)

ölçüm noktası ve ayna arası mesafe <30mm

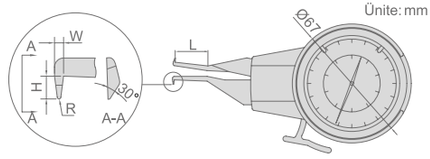


Sip. No.	Uygulanabilir çap
4789-1	Ø3,5mm-25mm
4789-2	Ø1mm-25mm
4789-3	Ø1mm-25mm

INSIZE ÖLÇÜ ALETLERİ

İÇ ÇAP KOMPARATÖRÜ



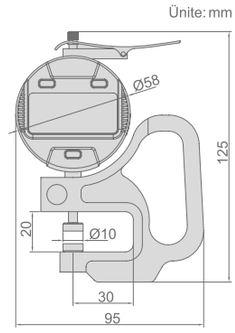


mm

Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	L	H	W	R
2222-15	5-15mm	0,01mm	±0,03mm	20	2	1,5	R0,3
2222-25	5-25mm	0,01mm	±0,03mm	35	1,5	1,0	R0,3
2222-301	10-30mm	0,01mm	±0,03mm	55	5,5	2,5	R0,5
2222-401	20-40mm	0,01mm	±0,03mm	80	6,0	3,0	R0,5
2222-501	30-50mm	0,01mm	±0,03mm	80	8,0	3,0	R0,5
2222-60	40-60mm	0,01mm	±0,03mm	80	8,0	3,0	R0,5

DİJİTAL KALINLIK KOMPARATÖRÜ





- Seramik mil ucu ve yatağı
- Tuşlar: aç/kapa, sıfırla, mm/inç
- CR2032 pil, otomatik kapanma
- Bilgi çıkış
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01)

BİLGİ ÇIKIŞLI

Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk
2871-10	0-10mm/0-0,4"	0,01mm/0,0005"	±0,02mm
2871-101	0-10mm/0-0,4"	0,001mm/0,00005"	±0,005mm

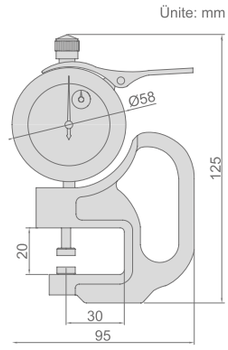
KALINLIK KOMPARATÖRÜ

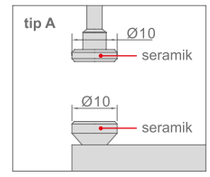


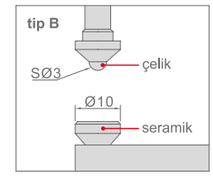
2364-10



2364-1







Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	Tip	ØD
2364-10	0-10mm	0,01mm	±0,02mm	A	58mm
2364-10B	0-10mm	0,01mm	±0,02mm	B	58mm
2364-1	0-1mm	0,001mm	±0,005mm	A	56mm

INSIZE ÖLÇÜ ALETLERİ

ÇELİK BLOK MASTARI

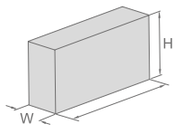


aşımlı çelikten yapılmıştır
Ↄ3650 Standardına uygundur

Boyut (L)	W	H
0,5≤L≤10mm	9mm	30mm
L>10mm	9mm	35mm

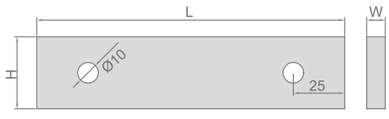
- Delikli (L≥125mm)
- Üretici kalibrasyon sertfikası ile tedarik edilir

KALİBRASYON SERTİFİKASI



deliksiz

Ünite:mm



delikli

Set başına blok	Set içinde blok mastarı vardır			Sip. No.		
	Boyut (mm)	Adım (mm)	Adet	Sınıf 0	Sınıf 1	Sınıf 2
122	1,0005		1	4100-122	4100-1122	4100-2122
	1,001-1,009	0,001	9			
	1,01-1,49	0,01	49			
	11,6-1,9	0,1	4			
	0,5-24,5	0,5	49			
	30-100	10	8			
	25-75	50	2			
112	1,0005		1	4100-112	4100-1112	4100-2112
	1,001-1,009	0,001	9			
	I 1,01-1,49	0,01	49			
	0,5-24,5	0,5	49			
	25-100	25	4			
103	1,005		1	4100-103	4100-1103	4100-2103
	11,01-1,49	0,01	49			
	0,5-24,5	0,5	49			
	25-100	25	4			
88	1,0005		1	4100-88	4100-188	4100-288
	1,001-1,009	0,001	9			
	I 1,01-1,49	0,01	49			
	0,5-9,5	0,5	19			
	10-100	10	10			
87	1,001-1,009	0,001	9	4100-87	4100-187	4100-287
	11,01-1,49	0,01	49			
	0,5-9,5	0,5	19			
	10-100	10	10			
83	0,5		1	4100-83	4100-183	4100-283
	1		1			
	1,005		1			
	11,01-1,49	0,01	49			
	1,5-1,9	0,1	5			
	2-9,5	0,5	16			
	10-100	10	10			
76	1,005		1	4100-76	4100-176	4100-276
	1,01-1,49	0,01	49			
	I 0,5-9,5	0,5	19			
	10-40	10	4			
	50-100	25	3			

Set başına blok	Set içinde blok mastarı vardır			Sip. No.		
	Boyut (mm)	Adım (mm)	Adet	Sınıf 0	Sınıf 1	Sınıf 2
56	0,5		1	4100-56	4100-156	4100-256
	1,001-1,009	0,001	9			
	1,01-1,09	0,01	9			
	1, 1-1,9	0, 1	9			
	1-24	1	24			
	25-100	25	4			
47	1,005			4100-47A	4100-147A	4100-247A
	1,01-1,09	0,01	9			
	1, 1-1,9	0, 1	9			
	1-24	1	24			
	25-100	25	4			
47	1,005		1	4100-47	4100-147	4100-247
	1,01-1, 19	0,01	19			
	1,2-1,9	0,1	8			
	1-9	1	9			
	10-100	10	10			
46	1,001-1,009	0,001	9	4100-46	4100-146	4100-246
	1,01-1,09	0,01	9			
	1, 1-1,9	0,1	9			
	1-9	1	9			
	10-100	10	10			
34	1,0005		1	4100-34	4100-134	4100-234
	1,001-1,009	0,001	9			
	1,01-1,09	0,01	9			
	1, 1-1,9	0,1	9			
	1-5	1	5			
	10					
32	1,005			4100-32	4100-132	4100-232
	1,01-1,09	0,01	9			
	1,1-1,9	0,1	9			
	1-9	1	9			
	10-30	10	3			
	50		1			
9	1,001-1,009	0,001	9	4100-9	4100-19	4100-29
9	0,991-0,999	0,001	9	4100-9A	4100-19A	4100-29A
8	125-175	25	3	4100-8	4100-18	4100-28
	200-250	50	2			
	300-500	100	3			

METRİK DİŞ VİDA TAMPON MASTARI



- Geçer ve geçmez mastarlar ile tedarik edilir
- H6 Kalite
- ISO1502 standardına uygundur

EKONOMİK MODEL*Üretici kalibrasyon sertfikası ile tedarik edilir

KALİBRASYON SERTİFİKASI

Birelsel (mm)

Sip. No.	Boyut
4130-2*	M2x0,4
4130-2D2*	M2,2x0,45
4130-2D5*	M2,5x0,45
4130-3*	M3x0,5
4130-3D5*	M3,5x0,6
4130-4*	M4x0,7
4130-5*	M5x0,8
4130-6*	M6x1

(mm)

Sip. No.	Boyut
4130-7*	M7x1
4130-8*	M8x1,25
4130-9*	M9x1,25
4130-10*	M10x1,5
4130-11*	M11x1,5
4130-12*	M12x1,75
4130-14*	M14x2
4130-16*	M16x2

(mm)

Sip. No.	Boyut
4130-18*	M18x2,5
4130-20*	M20x2,5
4130-22*	M22x2,5
4130-24*	M24x3
4130-27*	M27x3
4130-30*	M30x3,5
4130-33*	M33x3,5
4130-36*	M36x4

(mm)

Sip. No.	Boyut
4130-39*	M39x4
4130-42*	M42x4,5
4130-45*	M45x4,5
4130-48*	M48x5
4130-52*	M52x5
4130-56*	M56x5,5
4130-60*	M60x5,5

Ayar

Sip. No.	Diş vida tampon mastarı dahildir
4130-S7*	M3x0,5(4130-3);
	M4x0,7(4130-4);
	M5x0,8(4130-5);
	M6x1(4130-6);
	M8x1,25(4130-8);
	M10x1,5(4130-10);
	M12x1,75(4130-12)

INSIZE ÖLÇÜ ALETLERİ

METRİK HALKA DİŞ MASTARI



4120-16



4120-16N

- Geçer ve geçmez mastarlar ayrı tedarik edilir
- 6g Kalite
- ISO1502 standardına uygundur

EKONOMİK MODEL

*Üretici kalibrasyon sertfikası ile tedarik edilir

KALİBRASYON SERTİFİKASI

Bireysel

Kod (GO)	Kod (NOGO)	Boyut (mm)
4120-2*	4120-2N*	M2x0,4
4120-202*	4120-2O2N*	M2,2x0,45
4120-205*	4120-2O5N*	M2,5x0,45
4120-3*	4120-3N*	M3x0,5
4120-305*	4120-3O5N*	M3,5x0,6
4120-4*	4120-4N*	M4x0,7
4120-5*	4120-5N*	M5x0,8
4120-6*	4120-6N*	M6x1
4120-7*	4120-7N*	M7x1
4120-8*	4120-8N*	M8x1,25
4120-9*	4120-9N*	M9x1,25

Kod (GO)	Kod (NOGO)	Boyut (mm)
4120-10*	4120-10N*	M10x1,5
4120-11*	4120-11 N*	M11x1 ,5
4120-12*	4120-12N*	M12x1,75
4120-14*	4120-14N*	M14x2
4120-16*	4120-16N*	M16x2
4120-18*	4120-18N*	M18x2,5
4120-20*	4120-20N*	M20x2,5
4120-22*	4120-22N*	M22x2,5
4120-24*	4120-24N*	M24x3
4120-27*	4120-27N*	M27x3
4120-30*	4120-30N*	M30x3,5

Kod (GO)	Kod (NOGO)	Boyut (mm)
4120-33*	4120-33N*	M33x3,5
4120-36*	4120-36N*	M36x4
4120-39*	4120-39N*	M39x4
4120-42*	4120-42N*	M42x4,5
4120-45*	4120-45N*	M45x4,5
4120-48*	4120-48N*	M48x5
4120-52*	4120-52N*	M52x5
4120-56*	4120-56N*	M56x5,5
4120-60*	4120-60N*	M60x5,5

Set başına geçer mastar

Sip. No.	Halka diş mastarı dahildir
4120-S7*	M3x0,5(4120-3); M4x0,7(4120-4); M5x0,8(4120-5); 4120-57*1 M6x1(4120-6); M8x1,25(4120-8); M10x1 ,5(4120-10); M12x1 ,75(4120-12)

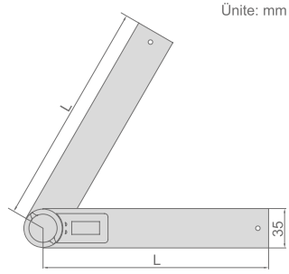
Set başına geçmez mastar

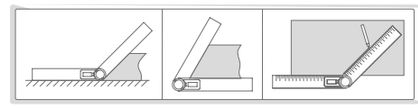
Sip. No.	Halka diş mastarı dahildir
4120-S7N*	-M3x0,5(4120-3N); M4x0,7(4120-4N); M5x0,8(4120-5N); 4120-S7N*I M6x1(4120-6N); M8x1,25(4120-8N); M10x1,5(4120-10N); M12x1 ,75(4120-12N)

DİJİTAL AÇI ÖLÇER



Ünite: mm





- Tuşlar: aç/kapa, sabitle, sıfırla
- Yassı çubuk sıkma vidası ile kilitlenir
- Yassı çubuk hassasiyeti: 1mm ve 1/32"
- Paslanmaz çelikten yapılmıştır
- Pil CR2032
- Otomatik kapanma

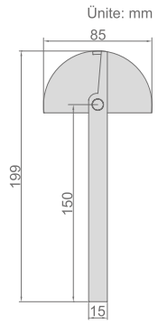
Sip. No.	Boyut (L)	Ölçüm aralığı	Çözünürlük	Doğruluk
2176-200	200mm	0 - 360°	0,1°	±0,3°
2176-300	300mm	0 - 360°	0,1°	±0,3°

AÇI ÖLÇER



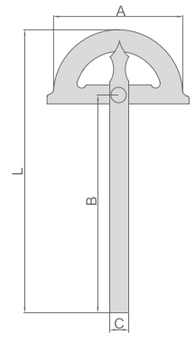
4780-85

Ünite: mm





4799-180



- Paslanmaz çelikten yapılmıştır
- Parlak krom kaplama skala
- Sıkma vidası ile tedarik edilir

Sip. No.	Boyut	Ölçüm aralığı	Hassasiyet	Doğruluk
4780-85	85x150mm	0-180°	1°	±0,3°

- Hassasiyet: 1°
- Paslanmaz çelikten yapılmıştır
- (4799-1300 karbon çeliğinden yapılmıştır)
- Parlak krom kaplama skala
- Sıkma vidası ile tedarik edilir

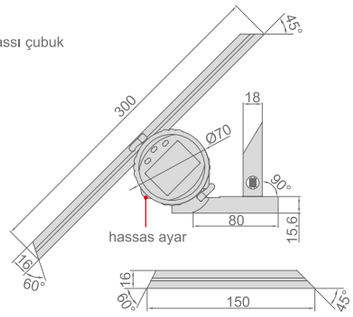
Sip. No.	Boyut (AxB)	Ölçüm aralığı	Doğruluk	L	C
4799-180	80x120mm	0-180°	±0,3°	168mm	11mm
4799-1120	120x150mm	0-180°	±0,3°	220mm	14mm
4799-1150	150x200mm	0-180°	±0,3°	285mm	16mm
4799-1200	200x300mm	0-180°	±0,3°	413mm	20mm
4799-1300	300x500mm	0-180°	±0,3°	675mm	30mm

INSIZE ÖLÇÜ ALETLERİ

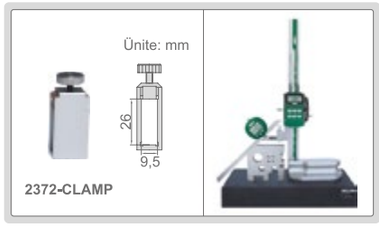
DİJİTAL AÇI ÖLÇER

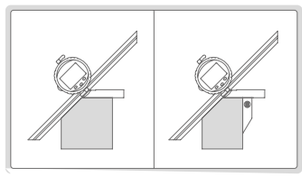


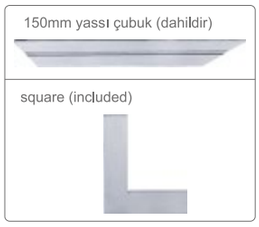
Ünite: mm



mihengirler için kelepçe (**opsiyonel**)







- Dereceli (örnek olarak 32,655°) ve derece/dakika/saniye (örnek olarak 32°39'30") gösterge
- SET tuşu: değer önden ayarlama, ölçüm yönü değiştirme
- MODE tuşu: 0~90°, 0~180° veya 0~360° ekran seçilir
- ZERO/ON/OFF tuşu: sıfırlama ve aç/kapa
- Pil CR2032, otomatik kapanma
- Bilgi çıkış
- 90° ayarlaması için gönye
- Paslanmaz çelikten yapılmıştır
- Opsiyonel aksesuar: bilgi çıkış kablosu (kod 7306-40, 7302-SPC3A, 7305-SPC1A, 7305-C01), kelepçe (kod 2372-CLAMP), 1156, 1351 ve 1250 mihengirlere uygundur

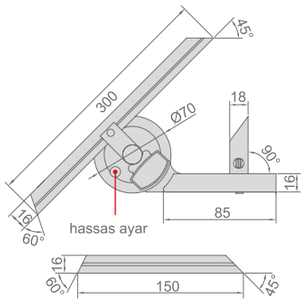
BİLGİ ÇIKIŞLI

Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk
2172-360A	0 - 360°	10"/0,005°	±5'

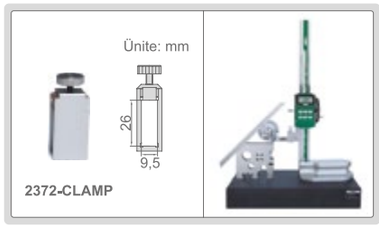
UNİVERSAL AÇI ÖLÇER



Ünite: mm



mihengirler için kelepçe (**opsiyonel**)





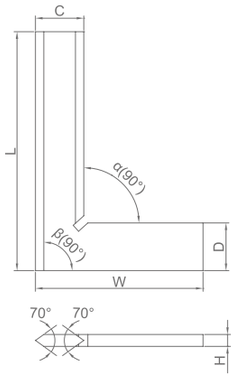
- Paralaksız okuma
- Paslanmaz çelikten yapılmıştır
- Opsiyonel aksesuar: kelepçe (kod 2372-CLAMP),
- 1156, 1351 ve 1250 mihengirlere uygundur

BİLGİ ÇIKIŞLI

Kod	Ölçüm aralığı	Çözünürlük	Doğruluk
2372-360	0-360°	5'	±5'

90° KIL GÖNYE





- Mat krom kaplama
- İç ve dış ölçümler için
- pahlanmış kenarlar
- Sertleştirilmiş paslanmaz çelik

DIN875 kalite 00 (mm)

Sip. No.	Boyut (LxW)	Karesellik İç (α)	Karesellik Dış (β)	C	D	H
4790-050	50x40mm	2,4µm	2,5µm	13	13	4
4790-075	75x50mm	2,6µm	2,8µm	15	15	4
4790-0100	100x70mm	2,8µm	3,0µm	20	20	5
4790-0150	150x100mm	3,2µm	3,5µm	30	30	6
4790-0200	200x130mm	3,7µm	4,0µm	34	34	7
4790-0250	250x165mm	4,2µm	4,5µm	35	35	7
4790-0300	300x200mm	4,6µm	5,0µm	40	40	8

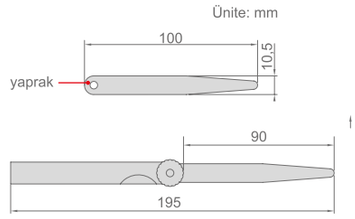
DIN875 kalite 00 (mm)

Sip. No.	Boyut (LxW)	Karesellik İç (α)	Karesellik Dış (β)	C	D	H
4790-500	50x40mm	6µm	6µm	13	13	4
4790-750	75x50mm	6µm	7µm	15	15	4
4790-1000	100x70mm	7µm	7µm	20	20	5
4790-1500	150x100mm	7µm	8µm	30	30	6
4790-2000	200x130mm	8µm	9µm	34	34	7
4790-2500	250x165mm	9µm	10µm	35	35	7
4790-3000	300x200mm	10µm	11µm	40	40	8

INSIZE ÖLÇÜ ALETLERİ

FİLLER ÇAKISI



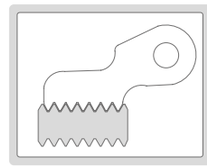


- Sertleştirilmiş alaşımlı çelikten yapılmıştır
- DIN2275 standardına uygundur
- Doğruluk: ±(3+T/80) µm;
- 'T' µm cinsinden yaprak kalınlığıdır

Sip. No.	Ölçüm aralığı	Yaprak kalınlığı dahildir (mm)	Yaprak adedi
4602-13A	0,03-0,50mm	0,03; 0,04; 0,05; 0,06; 0,07; 0,08; 0,09; 0,10; 0,15; 0,20; 0,30; 0,40; 0,50	13
4602-13	0,05-1,00mm	0,05; 0,10; 0,15; 0,20; 0,25; 0,30; 0,40; 0,50; 0,60; 0,70; 0,80; 0,90; 1,00	13
4602-17	0,02-1,00mm	0,02; 0,03; 0,04; 0,05; 0,06; 0,07; 0,08; 0,09; 0,10; 0,15; 0,20; 0,25; 0,30; 0,40; 0,50; 0,75; 1,00	17
4602-20	0,05-1,00mm	0,05; 0,10; 0,15; 0,20; 0,25; 0,30; 0,35; 0,40; 0,45; 0,50; 0,55; 0,60; 0,65; 0,70; 0,75; 0,80; 0,85; 0,90; 0,95; 1,00	20
4602-28	0,05-1,00mm	0,05; 0,06; 0,07; 0,08; 0,09; 0,10; 0,11; 0,12; 0,13; 0,14; 0,15; 0,20; 0,25; 0,30; 0,35; 0,40; 0,45; 0,50; 0,55; 0,60; 0,65; 0,70; 0,75; 0,80; 0,85; 0,90; 0,95; 1,00"	28
4602-32	0,03-1,00mm	"0,03; 0,04; 0,05; 0,06; 0,07; 0,08; 0,09; 0,10; 0,13; 0,15; 0,18; 0,20; 0,23; 0,25; 0,28; 0,30; 0,33; 0,35; 0,38; 0,40; 0,45; 0,50; 0,55; 0,60; 0,63; 0,65; 0,70; 0,75; 0,80; 0,85; 0,90; 1,00"	32

DİŞ MASTARI





- Vida diş kontrolü yapılır
- Doğruluk: ±0,07mm
- Orta karbonlu çelikten yapılmıştır

DÜŞÜK HASSASİYET

METRİK 60° VİDA

Sip. No.	Ölçüm aralığı	Yaprak dişleri dahildir (mm)	Yaprak adedi
4820-122	0,4 - 7,0mm	0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7	22
4820-124	0,25 - 7,0mm	0,25; 0,3; 0,35; 0,4; 0,5; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7	24
4820-1241	0,25 - 6,0mm	0,25; 0,3; 0,35; 0,4; 0,45; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6	24

BİRLEŞİK 60° VİDA

Sip. No.	Ölçüm aralığı	Yaprak dişleri dahildir (mm)	Yaprak adedi
4820-230	4 - 42TPI	4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 11-1/2; 12; 13; 14; 15; 16; 18; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI	30

WHİTWORTH 55° VİDA

Sip. No.	Ölçüm aralığı	Yaprak dişleri dahildir (mm)	Yaprak adedi
4820-330	4 - 42TPI	4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 18; 19; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI	30
4820-328	4 - 62TPI	4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI	28

METRİK 60° VE WHİTWORTH 55° VİDA

Sip. No.	Ölçüm aralığı	Yaprak dişleri dahildir (mm)	Yaprak adedi
4820-452	0,25 - 6,0mm	0,25; 0,3; 0,35; 0,4; 0,45; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6mm	52
	4 - 62TPI	4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI	
4820-450	0,4 - 7,0mm	0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7mm	50
	4 - 62TPI	4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI	

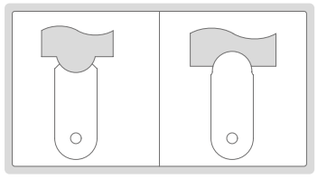
METRİK 60° VE BİRLEŞİK 60° VİDA

Sip. No.	Ölçüm aralığı	Yaprak dişleri dahildir (mm)	Yaprak adedi
4820-552	0,4 - 7,0mm	0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7mm	52
	4 - 42TPI	4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 11-1/2; 12; 13; 14; 15; 16; 18; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI	

INSIZE ÖLÇÜ ALETLERİ

RADÜS MASTAR





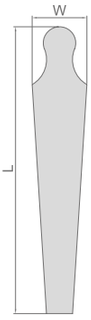
- Orta karbon çelikten yapılmıştır

DÜŞÜK HASSASİYET

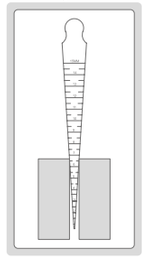
Sip. No.	Ölçüm aralığı	Yaprak radüsü dahildir (mm)	Yaprak adedi (iç+dış)	Doğruluk
4801-17	1-7mm	1; 1,25; 1,5; 1,75; 2; 2,25; 2,5; 2,75; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7	17+17	±0,03mm
4801-16	7,5-15mm	7,5; 8; 8,5; 9; 9,5; 10; 10,5; 11; 11,5; 12; 12,5; 13; 13,5; 14; 14,5; 15	16+16	±0,035mm
4801-15	15,5-25mm	15,5; 16; 16,5; 17; 17,5; 18; 18,5; 19; 19,5; 20; 21; 22; 23; 24; 25	15+15	±0,042mm

KONİK CETVEL







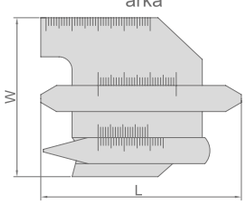


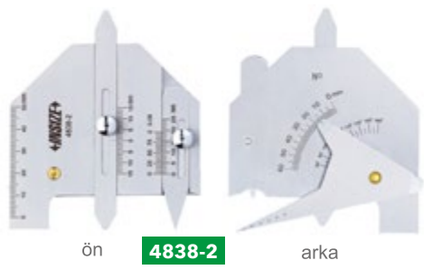
- Açıklık, aralık genişliği, delik boyu gibi ölçümler için
- Çap düzeltme tablosu arkadadır (sadece 4833-1, 4833-2 için)
- Paslanmaz çelikten yapılmıştır

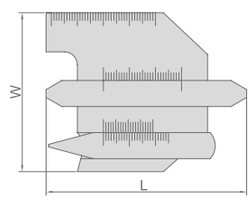
Sip. No.	Ölçüm aralığı	Hassasiyet	Doğruluk	L	W
4833-1	0,8-15mm	0,1mm	±0,1mm	146mm	17mm
4833-2	15-30mm	0,1mm	±0,1mm	159mm	30,4mm
4833-3	30-45mm	0,1mm	±0,1mm	166mm	45,4mm
4833-4	45-60mm	0,1mm	±0,1mm	170mm	60,5mm

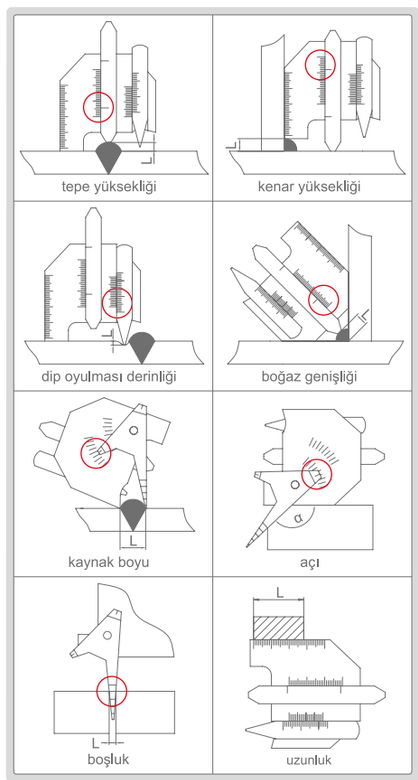
KAYNAKÇI KUMPASI











Sip. No.	4838-1			4838-2		
Ölçü	Ölçüm aralığı	Hassasiyet	Doğruluk	Ölçüm aralığı	Hassasiyet	Doğruluk
tepe yüksekliği	0-10mm	1mm	±0,5mm	0-15mm	1mm	±0,5mm
kenar yüksekliği	0-14mm	1mm	±0,5mm	0-15mm	1mm	±0,5mm
dip oyulması derinliği	0-5mm	0,05mm	±0,05mm	0-5mm	0,05mm	±0,05mm
boğaz genişliği	0-13mm	1mm	±0,5mm	0-13mm	1mm	±0,5mm
kaynak boyu	0-40mm	1mm	±1mm	0-60mm	1mm	±1mm
açı	90°-150°	5°	±1°	80°-160°	5°	±1°
boşluk	0,5-5mm	1mm	±0,5mm	1-6mm	1mm	±0,5mm
uzunluk	0-40mm	1mm	±0,5mm	0-50mm	1mm	±0,5mm
LxW		62x77mm			99x84mm	

- Paslanmaz çelikten yapılmıştır

INSIZE ÖLÇÜ ALETLERİ

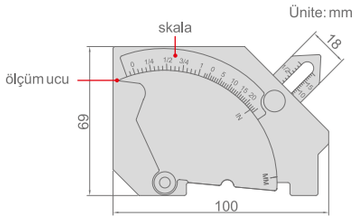
KAYNAKÇI KUMPASI



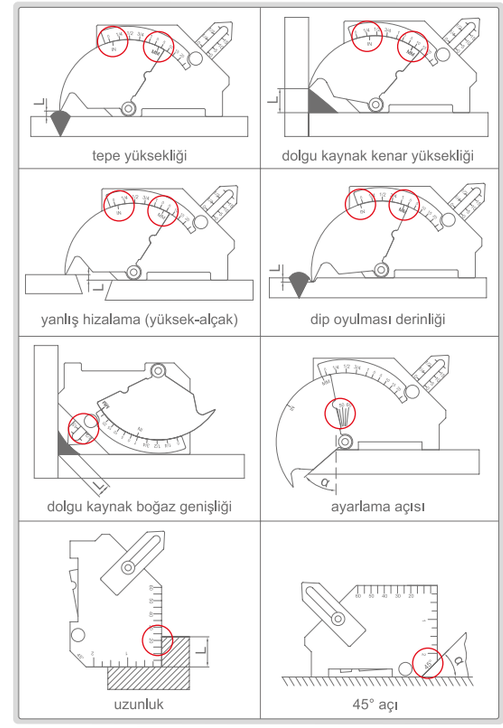
ön



arka



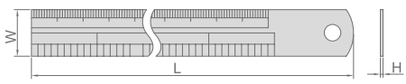
- Ölçüm ucu aşınmasını kompanse
- etmek için ayarlanabilir skala
- Paslanmaz çelikten yapılmıştır



Sip. No.	Ölçü	Ölçüm aralığı	Hassasiyet	Doğruluk
4835-1	tepe yüksekliği	0-25mm (0-1")	1mm (1/16")	±0,5mm
	dolgu kaynak kenar yüksekliği	0-25mm (0-1")	1mm (1/16")	±0,5mm
	yanlış hizalama (yüksek-alçak)	0-25mm (0-1")	1mm (1/16")	±0,5mm
	dip oyulması derinliği	0-2mm (0-1/8")	1mm (1/16")	±0,5mm
	dolgu kaynak boğaz genişliği	0-20mm (0-3/4")	1mm (1/16")	±0,5mm
	ayarlama açısı	0-60°	5°	±1°
	uzunluk	0-60mm (0-2")	1mm (1/16")	±0,5mm
	45° açı	—	—	±1°

ÇELİK CETVEL





- Hassasiyet: 0,5mm; 1mm; 1/64"; 1/32"; 1/16"
- Bükülmez cetvel
- Paslanmaz çelikten yapılmıştır
- Parlamayan yüzey

EKONOMİK MODEL

(mm)

Sip. No.	Ölçüm aralığı	Doğruluk	L	W	H	Açıklama
7110-150	150mm/6"	±0,15mm	170	18	1,0	ön ve arka hassasiyeti
7110-200	200mm/8"	±0,15mm	220	18	1,0	ön ve arka hassasiyeti
7110-300	300mm/12"	±0,15mm	330	25	1,0	ön ve arka hassasiyeti
7110-3001	300mm/12"	±0,15mm	325	30	1,0	ön ve arka hassasiyeti
7110-500	500mm/20"	±0,15mm	530	30	1,2	ön ve arka hassasiyeti
7110-600	600mm/24"	±0,20mm	630	30	1,2	ön ve arka hassasiyeti
7110-1000	1000mm/40"	±0,20mm	1040	32	1,5	ön ve arka hassasiyeti
7110-1200	1200mm/48"	±0,22mm	1240	35	1,8	ön hassasiyet
7110-1500	1500mm/60"	±0,25mm	1550	38	1,8	ön hassasiyet
7110-2000	2000mm/80"	±0,30mm	2065	40	2,0	ön hassasiyet

INSIZE ÖLÇÜ ALETLERİ

KOMBİNASYONLU AÇI ÖLÇER



2278-180

- Merkezleme başlığı (dökme demirden yapılmıştır): Çap (Ød) 30-100mm olan silindirlerin merkezinin belirlenmesi için
  Doğruluk: ±0,15mm
- Açı ölçer başlık (dökme demirden yapılmıştır): İş parçasının kenarına, yassı çubuğun istenİlen açı ile oturtulması içindir ve açı ölçmek için kullanılır
  Ölçüm aralığı: 0-180°
  Doğruluk: ±7min,
- Gönye başlık (dökme demirden yapılmıştır): Yassı çubuğun 90° veya 45° ile iş parçasına oturtulması için
  Doğruluk: 90° gönye için ±8dk,
  45° gönye için ±10dk
- Yassı çubuk (paslanmaz çelikten yapılmıştır): Ölçüm aralığı: 300mm/12",
  Hassasiyet: 0,5mm ve 1/32" ön yüzde,
  1mm ve 1/64" arka yüzde
- Opsiyonel aksesuar: bükülmez cetvel (kod 7113)

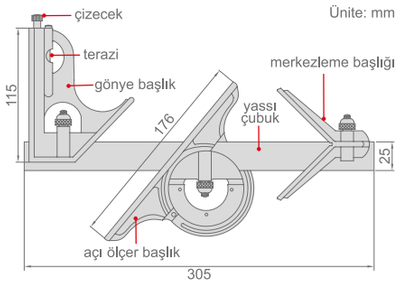


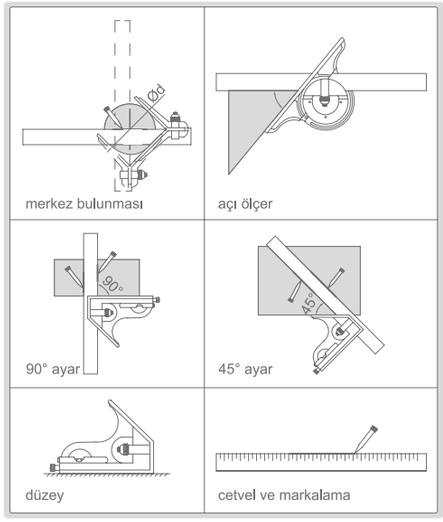
2278-3



2278-2

Sip. No.	Açıklama
2278-2	2-parçalı set
2278-3	3-parçalı set
2278-180	4-parçalı set





ÇİZECEK

7230



7231

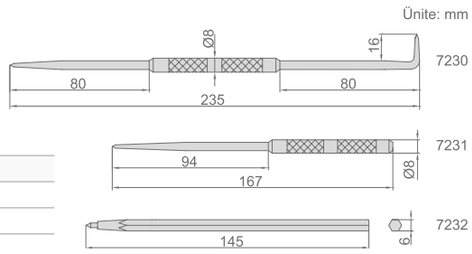


7232



- Nikel kaplama

Sip. No.	Uç
7230	sertleştirilmiş uçlar
7231	sertleştirilmiş uçlar
7232	karbür uç



ÖLÇÜM SETLERİ



5024

Sip. No.	Parça Adedi
5024	2

İçindekiler:

1. Komparatör saati; aralık 10mm, hassasiyet 0,01mm (kod 2308-10A)
2. Manyetik ayak (kod 6201-60)



5041

Sip. No.	Açıklama	Parça Adedi
5041	Mekanik Kumpas; hassasiyet 0,05mm/1/128" (kod 1205-150S)	4
5041-2	Mekanik Kumpas; hassasiyet 0,02mm/0,001" (kod 1205-1502S)	

İçindekiler:

1. Mekanik kumpas; araık 0-150mm/0-6"
2. Dış çap mikrometre; aralık 0-25mm, hassasiyet 0,01mm; (kod 3202-25A)
3. 90° kıl gönye; 100x70mm 0 kalite (kod 4790-1000)
4. Kıl mastar; 150mm/6" (kod 7110-150)



5042

Sip. No.	Parça Adedi
5042	4

İçindekiler:

1. Dijital kumpas; aralık 0-150mm/0-6", çözünürlük 0,01mm/0,0005" (kod 1108-150)
2. Dış çap mikrometre; aralık 0-25mm; hassasiyet 0,01mm; (kod 3202-25A)
3. 90° kıl gönye; 100x70mm; 1 kalite (kod 4790-1000)
4. Çelik cetvel; 150mm/6" (kod 7110-150)

INSIZE ÖLÇÜ ALETLERİ

GRANİT PLEYT





DENETLEME SERTİFİKASI

- Granitten yapılmıştır, zamanla bozulma ya da boyut değişimi olmaz, sıcaklık
- değişimine bağlı minimal boyutsal değişim olur
- DIN876 standardı, kalite kontrol ve labaratuar için 00 kalite, atölye için 0 kalite
- Opsiyonel aksesuar: pleyt için sehpa (kod 6902), pleyt için ayak (kod 6903)

ÖZEL YAPIM MÜŞTERİ TALEBİNE GÖRE ÖZEL ÖLÇÜLER ÜRETİLİR

*Üretici kalibrasyon sertifikası ile tedarik edilir

Sınıf 00

Sip. No.	Boyut (LxWxH)	Düzlük	Ağırlık	Max. yük
6900-132*	300x200x60mm	2,7µm	11kg	30kg
6900-142*	400x250x60mm	2,9µm	18kg	50kg
6900-144*	400x400x60mm	3,1µm	29kg	60kg
6900-153*	500x315x70mm	3,2µm	33kg	60kg
6900-164*	630x400x80mm	3,5µm	60kg	65kg
6900-166*	630x630x100mm	3,8µm	119kg	75kg
6900-185*	800x500x100mm	3,9µm	120kg	100kg
6900-1106*	1000x630x140mm	4,4µm	265kg	200kg
6900-1101*	1000x1000x150mm	4,8µm	450kg	400kg
6900-1128*	1200x800x160mm	4,9µm	461kg	500kg
6900-1161*	1600x1000x180mm	5,8µm	864kg	600kg
6900-1201*	2000x1000x220mm	6,5µm	1320kg	650kg
6900-1202*	2000x1500x250mm	7,0µm	2250kg	750kg

Sınıf 0

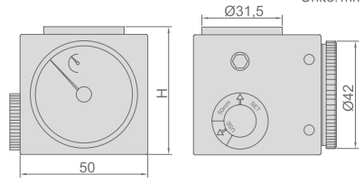
Sip. No.	Boyut (LxWxH)	Düzlük	Ağırlık	Max. yük
6900-032*	300x200x60mm	5,4µm	11kg	60kg
6900-042*	400x250x60mm	5,9µm	18kg	100kg
6900-044*	400x400x60mm	6,3µm	29kg	120kg
6900-053*	500x315x70mm	6,4µm	33kg	120kg
6900-064*	630x400x80mm	7,0µm	60kg	130kg
6900-066*	630x630x100mm	7,6µm	119kg	150kg
6900-085*	800x500x100mm	7,8µm	120kg	200kg
6900-0106*	1000x630x140mm	8,7µm	265kg	400kg
6900-0101*	1000x1000x150mm	9,7µm	450kg	800kg
6900-0128*	1200x800x160mm	9,8µm	461kg	1000kg
6900-0161*	1600x1000x180mm	11,5µm	864kg	1200kg
6900-0201*	2000x1000x220mm	12,9µm	1320kg	1300kg
6900-0202*	2000x1500x250mm	14,0µm	2250kg	1500kg

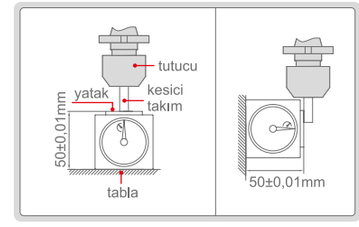
SAATLİ SIFIRLAMA APARATI



- Manyetik taban

Ünite: mm





Sip. No.	Yükseklik (H)	Doğruluk	Test yükü
2397-502A	50mm	±10µm	9N (50mm)

PORTATİF KIRILIM ÖLÇER (REFRAKTOMETRE) KOD ISQ-RM30



ÖZELLİK	
Ölçüm aralığı	0~32%
Hassasiyet	0,2%
Boyut	27×40×160mm
Ağırlık	175g

- Soğutucu konsantrasyonu hızlıca ölçülür
- Soğutma sıvısının kırılma faktörüne bakın, örneğin:
- öğütme emülsiyonunun kırılma faktörü 2,1;
- okuma değeri %6, dolayısıyla gerçek konsantrasyon (2,1×%6) =%12,6'dır

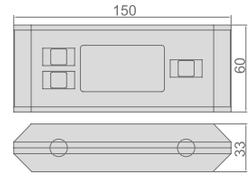
DİJİTAL TERAZİ VE AÇI ÖLÇER

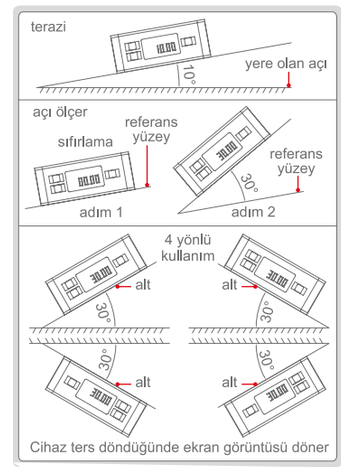


Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk
2179-360	0-360° (90°x4)	"0,05° (=0,873mm/m)"	"0° ve 90°'de: ±0,1°; diğerleri: ±0,2°"

IP54 SU GEÇİRMEZ
MUTLAK TERAZİ
ARKA IŞIK
0° VE 90°'DE SESLİ ALARM

Ünite: mm





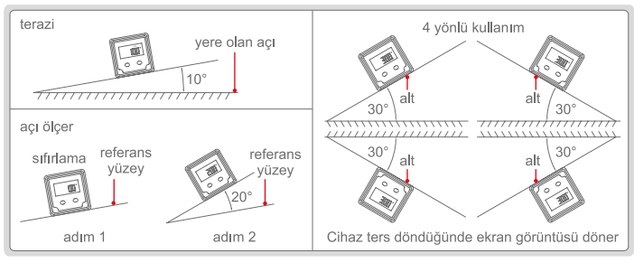
- IP54 suya/toza karşı koruma
- Aluminyum çerçeve;
- Mil üstü kullanım için V-kanallı manyetik taban
- Yere olan açı kalıcı olarak ayarlanmıştır; pil değişiminde sıfırlama gerekmemektedir
- Tuşlar: AÇ/KAPA; mutlak ve sayarak artarak ölçme; BEKLET; ünite (mm/m; %; °)
- İki AAA pil
- Otomatik kapanma

INSIZE ÖLÇÜ ALETLERİ

DİJİTAL TERAZİ VE AÇI ÖLÇER



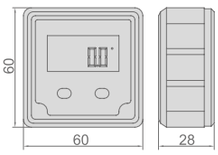
Sip. No.	Ölçüm aralığı	Çözünürlük	Doğruluk
2170-1	4x90°	"0,1° (=1,745mm/m)"	"0° ve 90°'de: ±0,1°; diğerleri: ±0,2°"



- Aluminyum çerçeve
- Manyatik taban
- Cihaz ters döndüğünde ekran görüntüsü döner
- Kullanırken arka ışık otomatik yanar; kullanım durduktan15 dakika sonra otomatik kapanır
- Yere olan açı kalıcı olarak ayarlanmıştır; pil değişiminde sıfırlama gerekmemektedir
- Tuşlar: AÇ/KAPA; mutlak ve sayarak artarak ölçme; BEKLET; ünite (mm/m; %; °)
- Bir AAA pil
- 5 dakika sonra otomatik kapanma

MUTLAK TERAZİ
ARKA IŞIK
MANYATIK TABAN
CİHAZ TERS DÖNDÜĞÜNDE EKRAN GÖRÜNTÜSÜ DÖNER

Ünite: mm



MANUEL ROCKWELL SERTLİK ÖLÇME CİHAZI KOD ISH-R150




Ø60mm düz yatak (dahil)


Ø150mm düz yatak (dahil)


V-tipi uç (dahil); Ø4~60mm çapa sahip silindirler içindir


küçük V-tipi uç (**opsiyonel**); Ø2~4mm çapa sahip silindirler içindir

KALİBRASYON SERTİFİKASI

Sertlik test bloğu HRB88~95	ISH-BHRB
Sertlik test bloğu HRC60~65	ISH-BHRC3
Sertlik test bloğu HRC20~30	ISH-BHRC1
Küçük V-tipi uç	ISH-SMALL ANVIL

Sertlik skalası	HRA; HRB; HRC; HRD; HRF; HRG
Ilk test kuvveti	98N
Test kuvveti	588N; 980N; 1471N
Gösterge	analog
Aşama yükseltme	manuel
Yük kontrol	manuel
Min. okuma	0,5HR
Maks. iş parçası yüksekliği	170mm
Maks. iş parçası derinliği	165mm (işaretleyici uç merkezinden)
Boyut	520×160×700mm
Ağırlık	60kg

Ana ünite	1 parça
Ø60mm düz uç	1 parça
Ø150mm düz uç	1 parça
V-tipi uç	1 parça
Elmas işaretleyici uç	1 parça
Ø1,5875mm karbürlü işaretleyici uç	1 parça
Sertlik test bloğu HRB88~95	1 parça
Sertlik test bloğu HRC60~65	1 parça
Sertlik test bloğu HRC20~30	1 parça
Kılıf	1 parça

DİJİTAL TORK ANAHTARI



OPSİYONEL AKSESUAR	
Kalibrasyon kablosu	IST-W-CABLE

KALİBRASYON SERTİFİKASI

- Saat yönü ve tersi yönünde operasyon
- Birim: N.m, in.lb, ft.lb, kg.cm
- Tepe ve izleme çalışma modları
- Hedef tork değeri ayarlanabilir, sesli ve görünür alarm ile:
  – Tork değeri, hedef tork değerinin %90~%100 civarına geldiğinde yeşil LED ışık yanar ve uyarı sesi gelir
  – Hedef tork değerine ulaşıldığında hem yeşil hem kırmızı LED ışık yanar ve sesli uyarı gelir
- 5 dakika kullanılmazsa otomatik kapanır
- Kaymayan tutma kolu
- Nem kaydı ile
- Fazla yük kaydetme ile (tork maksimum aralığın %110'a ulaştığında)

OPSİYONEL AKSESUAR: SAAT YÖNÜ: ±1%
SAAT YÖNÜ TERSINDE: ±2%
SADECE 6~850N.m ARALIĞI İÇİN

ÖZELLİK

Sip. No.	Ölçüm aralığı	Doğruluk	Çözünürlük	Kare sürgü parçası(L)	Güç kaynağı	Uzunluk	Ağırlık
IST-W30A	6~30N.m	saat yönünde: ±2% saat yönünün tersinde: ±3%	0,01N.m	2×AA pil	1/4"	390mm	830g
IST-W135A	27~135N.m		0,1N.m		3/8"	415mm	950g
IST-W200A	40~200N.m		0,1N.m		1/2"	530mm	1,4kg
IST-W340A	68~340N.m		0,1N.m		1/2"	650mm	1,6kg
IST-W500A	100~500N.m	saat yönünde: ±2,5% saat yönünün tersinde: ±3,5%	0,1N.m		3/4"	950mm	2,1kg
IST-W850A	170~850N.m		0,1N.m		3/4"	1220mm	2,55kg
IST-W1200A	240~1200N.m		1N.m		1"	1800mm	13kg
IST-W1500A	300~1500N.m		1N.m		1"	1800mm	13kg
IST-W2000A	400~2000N.m		1N.m		1"	1800mm	14kg

INSIZE ÖLÇÜ ALETLERİ

TORK ANAHTARLARI



KALİBRASYON SERTİFİKASI

- DIN ISO 6789, ASME B107.300-2011
- standardına uygundur
- Metal gövde, dayanıklı

SADECE SAAT YÖNÜNDE ÇALIŞMA

ÖZELLİK

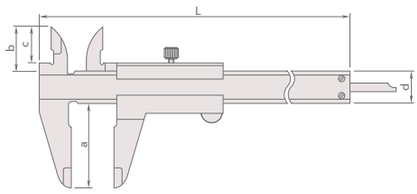
Sip. No.	IST-9WM12	IST-9WM20	IST-9WM30	IST-9WM60	IST-9WM100	IST-9WM125	IST-9WM200
Aralık (saat yönünde)	2,5~12N.m	4~20N.m	6~30N.m	10~60N.m	20~100N.m	25~125N.m	40~200N.m
Doğruluk	±6% (<10N.m) ±4% (≥10N.m)	±6% (<10N.m) ±4% (≥10N.m)	±6% (<10N.m) ±4% (≥10N.m)	±4%	±4%	±4%	±4%
Hassasiyet	0,1N.m	0,1N.m	0,2N.m	0,5N.m	0,5N.m	0,5N.m	1N.m
Kare sürgü parçası (D)	1/4"	1/4"	3/8"	3/8"	1/2"	1/2"	1/2"
Uzunluk	290mm	290mm	318mm	388mm	443mm	443mm	468mm
	680g	680g	820g	960g	1040g	1040g	1160g

Sip. No.	IST-9WM335	IST-9WM500	IST-9WM800	IST-9WM1000	IST-9WM1500	IST-9WM2000	IST-9WM3000
Aralık (saat yönünde)	65~335N.m	100~500N.m	160~800N.m	200~1000N.m	300~1500N.m	400~2000N.m	600~3000N.m
Doğruluk	±4%	±4%	±4%	±4%	±4%	±4%	±4%
Hassasiyet	1N.m	2,5N.m	4N.m	5N.m	5N.m	10N.m	15N.m
Kare sürgü parçası (D)	1/2"	3/4"	3/4"	3/4"	1"	1"	1"
Uzunluk	528mm	855mm	1055mm	1055mm	1260mm	1260mm	1260mm
Ağırlık	1300g	5000g	5900g	5900g	9200g	9200g	10500g

MITUTOYO ÖLÇÜ ALETLERİ

VERNİYER KUMPAS





Seri 530

Standart tip sürmeli kumpas aşağıdaki faydaları sunar:

- Yüksek rijitlik için,ana gövde ve skala satin krom kaplamadır
- Hassas kayma yüzeyleri.

Cetvel Çözünürlüğü 0,02 mm — Metrik

No.	Ölçüm aralığı [mm]	Derinlik çubuğu [mm]	Hata sınırı [mm]	L [mm]	a [mm]	b [mm]	c [mm]	d [g]	Ağırlık
530-122	0-150	düz	±0,03	229	40	21	17	16	143
530-123	0-200	düz	±0,03	288	50	24,5	20,5	16	180
530-124	0-300	düz	±0,04	404	64	27,5	22	20	355

Cetvel Çözünürlüğü 0,05 mm — Metrik

No.	Ölçüm aralığı [mm]	Derinlik çubuğu	Hata sınırı [mm]	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
530-100	0-100	Ø 1,9 mm	±0,05	182	40	21,5	17	16	128
530-102	0-150	Ø 1,9 mm	±0,05	229	40	21	17	16	144
530-101	0-150	düz	±0,05	229	40	21	17	16	143
530-108	0-200	düz	±0,05	288	50	24,5	20,5	16	180
530-109	0-300	düz	±0,08	404	64	27,5	22	20	355
530-501	0-600	olmadan	±0,1	780	90	47	38	25	1300
530-502	0-1000	olmadan	±0,15	1240	130	60	50	32	3300

Cetvel Çözünürlüğü 0,02 mm-1/1000" — Metrik/İnç

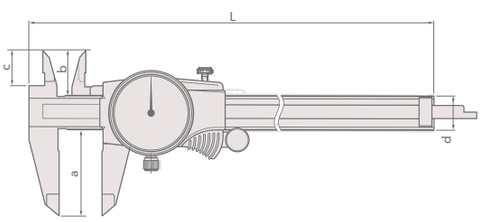
No.	Ölçüm aralığı [inch]	Ölçüm aralığı [mm]	Hassasiyet (20°C)	Derinlik çubuğu	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
530-312	0-6	0-150	±0,03 mm/0,0015"	düz	229	40	21	17	16	143
530-118	0-8	0-200	±0,03 mm/0,0015"	düz	288	50	24,5	20,5	16	180
530-119	0-12	0-300	±0,04 mm/0,002"	düz	404	64	27,5	22	20	355

Cetvel Çözünürlüğü 0,05 mm-1/128" — Metrik/İnç

No.	Ölçüm aralığı [inch]	Ölçüm aralığı [mm]	Hassasiyet (20°C)	Derinlik çubuğu	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
530-104	0-6	0-150	±0,05 mm/ 0,002"	duz	229	40	21	17	16	143
530-316	0-6	0-150	±0,05 mm/ 0,002"	duz	229	40	21	17	16	145
530-114	0-8	0-200	±0,05 mm/ 0,002"	duz	288	50	24,5	20,5	16	180
530-115	0-12	0-300	±0,08 mm/ nnnr	duz	404	64	27,5	22	20	355

SAATLİ KUMPAS



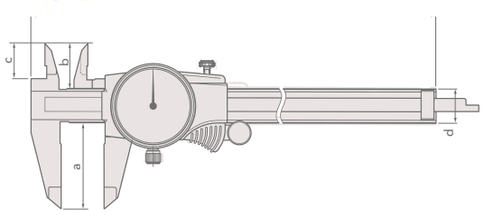


Seri 505

Bu kumpaslar size güvenilir ölçümler ve aşağıdaki yararları sunar.

- Yeni font karakterleri ile okuma kolaylığı





Seri 505

Bu kumpaslar size güvenilir ölçümler ve aşağıdaki yararları sunar.

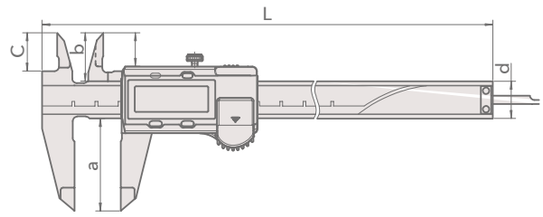
- Yeni font karakterleri ile okuma kolaylığı

No.	Ölçüm aralığı [mm]	Çözünürlük	Açıklamalar	Hassasiyet (20°C)	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
505-730	0-150	0,02 mm. 2 mm/rev		±0,03 mm	231	40	21	16,5	16	175
505-732	0-150	0,01 mm. 1 mm/rev		±0,02 mm	231	40	21	16,5	16	176
505-734	0-150	0,02 mm. 2 mm/rev	Karbür yüzeyli dış çeneler	±0,03 mm	231	40	21	16,5	16	175
505-735	0-150	0,02 mm. 2mm/rev	Karbür yüzeyli dış ve iç çenele	±0,03 mm	231	40	21	16,5	16	175
505-731	0-200	0,02 mm. 2 mm/rev		±0,03 mm	288	50	24,5	20	16	185
505-733	0-200	0,01 mm. 1 mm/rev		±0,03 mm	288	50	24,5	20	16	186
505-745	0-300	0,02 mm. 2 mm/rev		±0,04 mm	403	64	27,5	22	20	370

MITUTOYO ÖLÇÜ ALETLERİ

MUTLAK SİSTEMLİ DİJİTAL KUMPAS





- Seri 500

Bu dijital kumpaslar güvenilir ölçümler almanızı sağlar ve aşağıdaki yararları sunar:

- Elektromanyetik indüksiyon tipi ABS (mutlak değerli) sensörünün kabulü sayesinde; bu kumpas, ölçüm esnasında yüzeydeki kirlenmelere karşı endişe duyulmaksızın kullanılabilir. Algılama sinyali ölçüm yüzeyindeki su, yağ gibi kirlerden etkilenmez.
- Sürme tekerleği düzgün , dengeli ve konforlu çalışma sağlar.
- 9 mm karakter yüksekliği (yüksek konsantrasyonlu LCD ile yorulumun giderilmesi)
- Mutlak değerli (ABS) ölçüm ; cihaz açıldığında herhangi bir başlangıç noktası ayarı ve herhangi bir yanıt hızı sınırı gerektirmez.
- Uzun pil ömrü

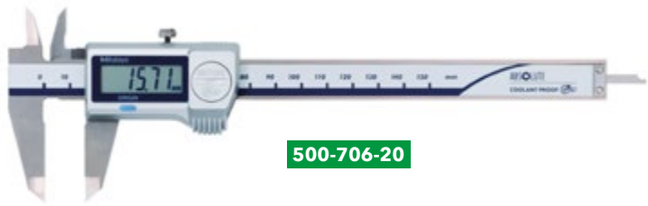
Sürme Tekerleksiz — Metrik

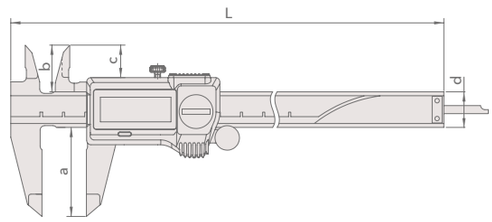
No.	Ölçüm aralığı [mm]	Derinlik çubuğu	Bilgi çıkışı	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
500-180-30	0-100	Ø 1,9 mm		182	40	21	16,5	16	142
500-201-30	0-100	Ø 1,9 mm	●	182	40	21	16,5	16	143
500-184-30	0-150	Ø 1,9 mm		233	40	21	16,5	16	164
500-203-30	0-150	Ø 1,9 mm	●	233	40	21	16,5	16	168
500-181-30	0-150	düz		233	40	21	16,5	16	164
500-161-30	0-150	düz	●	233	40	21	16,5	16	164
500-182-30	0-200	düz		290	50	24,5	20	16	194
500-162-30	0-200	düz	●	290	50	24,5	20	16	194
500-205	0-300	düz	●	404	64	27,5	22	20	350

Sürme Tekerleksiz — Metrik

No.	Ölçüm aralığı [mm]	Derinlik çubuğu	Bilgi çıkışı	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
500-150-30	0-100	Ø 1,9 mm	●	182	40	21	16,5	16	143
500-151-30	0-150	düz	●	233	40	21	16,5	16	164
500-158-30	0-150	Ø 1,9 mm	●	233	40	21	16,5	16	164
500-152-30	0-200	düz	●	290	50	24,5	20	16	194
500-153	0-300	düz	●	404	64	27,5	22	20	350

MUTLAK SİSTEMLİ KORUMALI DIGIMATIC KUMPAS IP67





Seri 500

Bu sağlam kumpas geniş bir yelpazede güvenilir ölçümler almasına izin verir.

MUTLAK Digimatic Kumpas IP67 aşağıdaki yararları sağlar:

- MUTLAK sistemi güvenilir ölçümler sunuyor.
- Su, soğutma sıvısı ve toz dahil olmak üzere (IP67 koruma seviyesi) ağır işletme ortamlara karşı mükemmel direnç gösterir.
- Zorlu çalışma ortamlarında kullanım için tasarlanmıştır.
- Soğutucular ve yağlara son derece dayanıklı.

Sürme Tekerleksiz — Metrik

No.	Ölçüm aralığı [mm]	Derinlik çubuğu	Bilgi çıkışı	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
500-706-20	0-150	düz		233	40	21	16,5	16	164
500-709-20	0-150	Ø 1,9 mm		233	40	21	16,5	16	164
500-716-20	0-150	düz	●	233	40	21	16,5	16	164
500-707-20	0-200	düz		290	50	24,5	20	16	194
500-717-20	0-200	düz	●	290	50	24,5	20	16	194
500-708-11	0-300	düz		404	64	27,5	21,8	20	345
500-718-11	0-300	düz	●	404	64	27,5	21,8	20	345

Sürme Tekerleksiz — Metrik

No.	Ölçüm aralığı [mm]	Derinlik çubuğu	Bilgi çıkışı	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
500-702-20	0-150	düz		233	40	21	16,5	16	164
500-712-20	0-150	düz	●	233	40	21	16,5	16	164
500-719-20	0-150	Ø 1,9 mm	●	233	40	21	16,5	16	164
500-703-20	0-200	düz		290	50	24,5	20	16	194
500-713-20	0-200	düz	●	290	50	24,5	20	16	194
500-704-10	0-300	düz		404	64	27,5	21,8	20	345
500-714-10	0-300	düz	●	404	64	27,5	21,8	20	345

MITUTOYO ÖLÇÜ ALETLERİ

METRİK KOMPARATÖR SAATİ SERİ 2



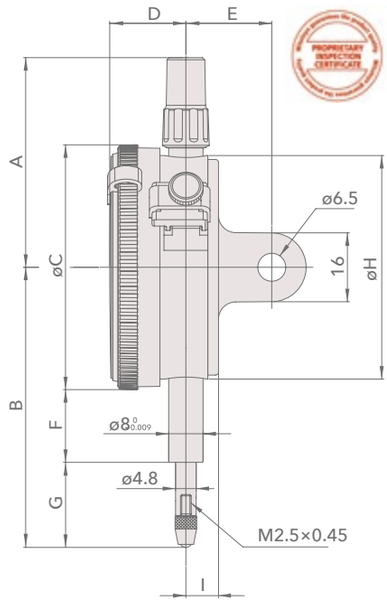
2046S



2902S



2047S



Seri 500

- 0,001mm okuma hassasiyetli, Ekran çapı Ø 57 mm , 1 mm ölçüm aralıklı
- Standart ve metrik model Analog Komparatör Saati

Metrik

No.	No: kulaklı kapaklı	Ölçüm aralığı [mm]	Adım başına ölçüm aralığı	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]
2046SB	2046S	10	1 mm	0,01 mm	0-100 (100-0)	0,4 - 1,4
2046SB-09	2046S-09	10	1 mm	0,01 mm	0-100 (100-0)	0,4 - 1,4
2046SB-60	2046S-60	10	1 mm	0,01 mm	0-100 (100-0)	0,4 - 2,5
2310SB-10	2310S-10	10	1 mm	0,01 mm	0-100 (100-0)	0,4 - 1,4
2902SB	2902S	10	1 mm	0,01 mm	100-0	0,4 - 1,4
2047SB	2047S	10	1 mm	0,01 mm	0-50-0	0,4 - 1,4

No.	Ağırlık kulaklı/düz [g]	a [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	G [mm]	I [mm]
2046SB	144/135	48,8	65,2	57	17,7	20	16,9	52	19,8	7,6
2046SB-09	146/137	48,8	65,2	57	17,7	20	16,9	52	19,8	7,6
2046SB-60	146/137	48,8	70	57	17,7	20	12,3	52	29,2	7,6
2310SB-10	146/137	48,8	65,2	57	17,7	20	16,9	52	19,8	7,6
2902SB	144/135	48,8	65,2	57	17,7	20	16,9	52	19,8	7,6
2047SB	144/135	48,8	65,2	57	17,7	20	16,9	52	19,5	7,6

No.	DIN 878 (1983)			EN ISO 463					
				Modele g\u00f6re g \u00f6sterim hatas\u0131				Tekrarlanabilirlik µm	Histerezis hatası µm
	fe µm	fges µm	fu µm	Her 1/10 turda µm	Her 1/2 turda µm	Her 1 turda µm	Ölçüm aralığı µm		
2046SB	12	15	3	5	9	10	13	3	3
2046SB-09	15	17	3	5	9	10	15	3	3
2046SB-60	12	15	3	5	9	10	13	3	3
2310SB-10	12	15	3	5	9	10	15	3	3
2902SB	12	15	3	5	9	10	13	3	3
2047SB	12	15	3	5	9	10	13	3	3

MITUTOYO ÖLÇÜ ALETLERİ

METRİK SALGI KOMPARATÖRÜ YATAY TİP - 0,01 MM


513-466-10E


513-424-10E


513-414-10E


513-464-10E


513-404-10E


513-415-10E


513-426-10E


513-466-10E


513-424-10E


513-414-10E

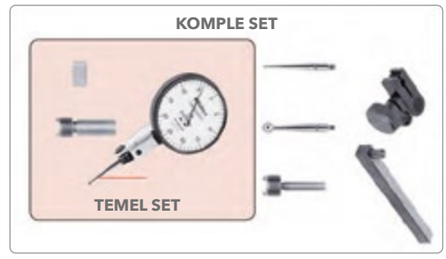

513-464-10E


513-404-10E


513-415-10E


513-426-10E

- Seri 513
- Salgı komparatörleri ulaşılması zor yüzeylere kolay ulaşma imkanı sağlar.
- Geleneksel salgı saatlerinin ulaşamadığı yüzeylere ulaşma imkanı.
- No clutch yapısı sayesinde, otomatik ölçüm yönünü değiştirebilme,
- Tek parça çerçevesi ve sağlam bağlantıları sayesinde suya ve toza karşı yüksek direnç gösterir.
- Çizilmelere dayanıklı yüzey
- Kolay sıfırlama için döner skala
- Düzgün, doğru hareket ve hızlı ölçüm , rulmanlarda , hassas dişlilerde kullanılabilme.



Temel Set — Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Karbür uç tip Ø2 mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-466-10E	0,5	0,01 mm	0-25-0	0,01-0,3	137557	29,2	22,2	18,7	41
513-424-10E	0,5	0,01 mm	0-25-0	0,01-0,3	137557	40	22,2	18,7	45
513-414-10E	0,5	0,01 mm	0-25-0	0,01-0,2	131324	40	37,4	33,9	45
513-464-10E	0,8	0,01 mm	0-40-0	0,01-0,3	103006	29,2	20,9	17,4	41
513-404-10E	0,8	0,01 mm	0-40-0	0,01-0,3	103006	40	20,9	17,4	45
513-415-10E	1	0,01 mm	0-50-0	0,01-0,2	136013	40	44,5	41	45
513-426-10E	1,5	0,01 mm	0-25-0	0,01-0,4	137557	40	22,2	18,7	45

Temel Set - Yakut kontak noktalı — Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Yakut uç Ø2 mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-478-10E	0,5	0,01 mm	0-25-0	0,01-0,3	21CZA210	40	22,2	18,7	45
513-474-10E	0,8	0,01 mm	0-40-0	0,01-0,3	21CZA201	40	20,9	17,4	45
513-477-10E	1	0,01 mm	0-50-0	0,01-0,3	21CZA211	40	44,5	41	45

Tam Set — Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Karbür uç tip mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-424-10T	0,5	0,01 mm	0-25-0	0,01-0,3	137557	40	22,2	18,7	45
513-414-10T	0,5	0,01 mm	0-25-0	0,01-0,2	131324	40	37,4	33,9	45
513-404-10T	0,8	0,01 mm	0-40-0	0,01-0,3	103006	40	20,9	17,4	45
513-415-10T	1	0,01 mm	0-50-0	0,01-0,2	136013	40	44,5	41	45

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Aralık dışı gösterge hatası		Hysteresis	Tekrarlanabilirlik	10 skala bölüntülü	Aralık dışı gösterge hatası			Hysteresis	Tekrarlanabilirlik
	10 skala bölüntülü	ölçüm aralığı				yarım devir	tam devir	ölçüm aralığı		
513-466-10E	5	5	3	3	5			5	3	3
513-424-10E	5	5	3	3	5			5	3	3
513-414-10E	5	10	4	3	5			10	4	3
513-464-10E	5	8	3	3	5	6		8	3	3
513-404-10E	5	8	3	3	5	6		8	3	3
513-415-10E					5	8		10	4	3
513-426-10E					5		10	16	4	3
513-478-10E	5	5	3	3	5			5	3	3
513-474-10E	5	8	3	3	5	6		8	3	3
513-477-10E					5	8		10	4	3
513-424-10T	5	5	3	3	5			5	3	3
513-414-10T	5	10	4	3	5			10	4	3
513-404-10T	5	8	3	3	5	6		8	3	3
513-415-10T					5	8		10	4	3

MITUTOYO ÖLÇÜ ALETLERİ

METRİK SALGI KOMPARATÖRÜ - YATAY TİP - 0.001/0,002 MM


513-401-10E


513-465-10E


513-405-10E


513-425-10E


513-401-10E

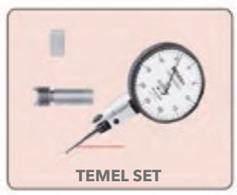

513-465-10E


513-405-10E


513-425-10E

KOMPLE SET




TEMEL SET

Seri 513

- Metrik Salgı Komparatörü girilmesi zor yerlere ulaşmanızı sağlar.
- Her iki ölçüm yönüne temas edebilir.
- Kolay sıfırlama icin doner skala mevcuttur.
- Düzgün, doğru hareket ve hızlı tepki için Jewelled kıymetli taş yatakları ve hassas Dişlileri
- Tek parçalı ekran yapısı sayesinde suya ve toza karşı yüksek direnç.
- Çizilmelere dayanıklı kaplama

Temel Set — Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Karbür uç tip ø2 mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-401-10E	0,14	0,001 mm	0-70-0	0,01-0,3	103010	40	14,7	11,2	45
513-465-10E	0,2	0,002 mm	0-100-0	0,01-0,3	103011	29,2	18,7	15,2	41
513-405-10E	0,2	0,002 mm	0-100-0	0,01-0,3	103011	40	18,7	15,2	45
513-425-10E	0,6	0,002 mm	0-100-0	0,01-0,4	103011	40	18,7	15,2	45

Temel Set - Yakut kontak noktalı — Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Yakut uç ø2 mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-475-10E	0,2	0,002 mm	0-100-0	0,01-0,3	21CZB068	40	18,7	15,2	45

Tam Set — Metrik

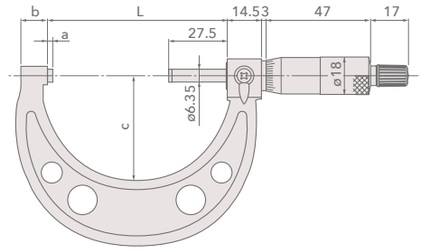
No.	Ölçüm aralığı [mm]	Çözünürlük	Ölçek	Ölçüm kuvveti (N) [N]	Karbür uç tip mm No.	Ø D [mm]	L1 [mm]	L2 [mm]	Ağırlık [g]
513-405-10T	0,2	0,002 mm	0-100-0	0,01-0,3	103011	40	18,7	15,2	45

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Aralık dışı gösterge hatası		Hysteresis	Tekrarlanabilirlik	10 skala bölüntülü	Aralık dışı gösterge hatası			Hysteresis	Tekrarlanabilirlik
	10 skala bölüntülü	ölçüm aralığı				yarım devir	tam devir	ölçüm aralığı		
513-401-10E					2	3		3	2	1
513-465-10E	2	3	2	1	2	3		3	2	1
513-405-10E	2	3	2	1	2	3		3	2	1
513-425-10E					2	3	5	7	4	1
513-475-10E	2	3	2	1	2	3		3	2	1
513-405-10T	2	3	2	1	2	3		3	2	1

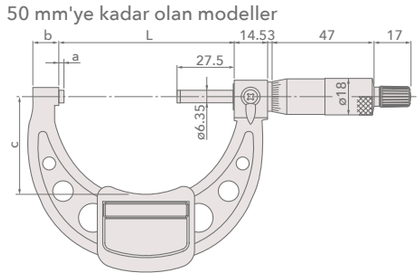
MITUTOYO ÖLÇÜ ALETLERİ

DIŞ ÇAP MİKROMETRESİ

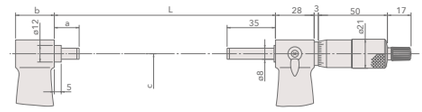




50 mm'ye kadar olan modeller



50-300mm modeller; plaka yalıtımlıdır



300 mm üzeri modeller

Seri 103

Bu dış çap mikrometresi yeni nesil olup doğru ve güvenilir ölçüm yapar ve aşağıdaki avantajı sunar:

- Hafif ağırlıklı atölye tasarımı.

Okuma Hassasiyeti 0,001 mm

metrik

No.	Ölçüm aralığı [mm]	Hata Sınırı [µm]	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık [g]
103-129	0-25	±2	30,3	2,8	9	28	6,35	175
103-130	25-50	±2	55,3	2,8	10	38	6,35	215

No.	Ölçüm aralığı [mm]	Hata Sınırı [µm]	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık[g]
103-137	0-25	±2	30,3	2,8	9	28	6,35	175
103-138	25-50	±2	55,3	2,8	10	38	6,35	215
103-139-10	50-75	±2	80,3	2,8	12	46	6,35	315
103-140-10	75-100	±3	105,3	2,8	14	57	6,35	375
103-141-10	100-125	±3	132,8	5,3	17	76	6,35	515
103-142-10	125-150	±3	158,2	5,7	19	90	6,35	665
103-143-10	150-175	±4	183,6	6,1	20	102	6,35	720
103-144-10	175-200	±4	208,8	6,3	19	115	6,35	920
103-145-10	200-225	±4	234,2	6,7	18	127	6,35	1080
103-146-10	225-250	±5	258	5,5	18	139	6,35	1255
103-147-10	250-275	±5	284	6,5	18	152	6,35	1405
103-148-10	275-300	±5	309	6,5	18	166	6,35	1565
103-149	300-325	±6	353	18	28	187	8	1985
103-150	325-350	±6	378	18	28	199	8	2155
103-151	350-375	±6	403	18	28	212	8	2305
103-152	375-400	±7	428	18	28	224	8	2455
103-153	400-425	±7	453	18	28	236	8	2715
103-154	425-450	±7	478	18	28	248	8	2965
103-155	450-475	±8	503	18	28	261	8	3215
103-156	475-500	±8	528	18	28	273	8	3450

No.	Ölçüm aralığı [mm]	Hata Sınırı [µm]	L [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Ağırlık[g]
103-157	500-525	±9	575	40	28	307	8	4060
103-158	525-550	±9	575	15	28	307	8	4080
103-159	550-575	±9	625	40	28	332	8	4500
103-160	575-600	±9	625	15	28	332	8	4525
103-161	600-625	±9	675	40	28	355	8	4915
103-162	625-650	±9	675	15	28	355	8	4930
103-163	650-675	±9	725	40	28	382	8	5200
103-164	675-700	±9	725	15	28	382	8	5215
103-165	700-725	±9	775	40	28	405	8	5835
103-166	725-750	±9	775	15	28	405	8	5860
103-167	750-775	±9	825	40	28	430	8	6385
103-168	775-800	±9	825	15	28	430	8	6410
103-169	800-825	±9	875	40	28	455	8	6925
103-170	825-850	±9	875	15	28	455	8	6940
103-171	850-875	±9	925	40	28	480	8	7565
103-172	875-900	±9	925	15	28	480	8	7590
103-173	900-925	±9	975	40	28	505	8	8215
103-174	925-950	±9	975	15	28	505	8	8240
103-175	950-975	±9	1025	40	28	530	8	8860
103-176	975-1000	±9	1025	15	28	530	8	8880

DIŞ ÇAP MİKROMETRE SETİ



Seri 103

Bu yeni jenerasyon hassas ve güvenilir dış çap mikrometresi size aşağıdaki avantajları sağlar:

- Atölyeler için hafif dizayn.
- Kutu içinde gelir.

Çözünürlük : 0,01 mm

Metrik

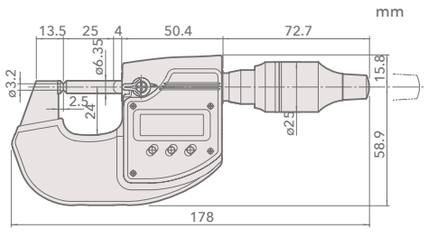
No.	Ölçüm aralığı [mm]	Setin İçindekiler	Ağırlık [g]
103-927-10	0-75	103-137, 103-138, 103-139-10,2 ölçü ayarı	750
103-913-50	0-150	103-137, 103-138, 103-139-10, 103-140-10, 103-141-10, 103-142-10, 5 ölçü ayarı	2260
103-915-10	150-300	103-143-10, 103-144-10, 103-145-10, 103-146-10, 103-147-10,103-148-10, 6 ölçü ayarı	7695
103-914-50	0-300	103-913-50 ve 103-915-10'un tum mikrometreleri bir sette, 11 ölçü ayarı	9300

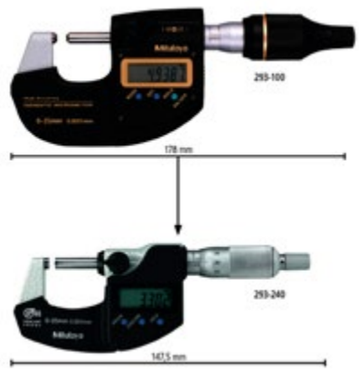
MITUTOYO ÖLÇÜ ALETLERİ

ABSOLUTE YÜKSEK HASSASİYETLİ DIGIMATIC MİKROMETRE



293-100





Yüksek Hassasiyetli Mikrometre
Isı yalıtım örtüsü ile birlikte (standart aksesuar)

ABSOLUTE®

Seri 293

- 0,1 µm çözünürlükte ölçüm mümkünlüğü.
- Yüksek Hassasiyetli Digimatic Mikrometre,yeni 0,1µm çözünürlükte ABS (mutlak) sistem ve yüksek hassasiyet vidalama makine teknolojisi ile alet hatasını 0,5 µm ye düşürür.
- Sağlam yapılı ve yüksek performanslı sabit kuvvet mekanizması (7-9N), daha stabil ölçüm sağlar.

No.	Ölçüm aralığı [mm]	Cetvel Çözünürlüğü	Hata Sınırı	Ağırlık [g]
293-100	0-25	0,0001 mm/ 0,0005 mm (değiştirilebilir)	±0,5 µm	400

Boyut karşılaştırması:
Çok sağlam yapılı Yüksek Hassasiyetli Mikrometre ve standart yapılı standart Mikrometre

İÇ ÇAP MİKROMETRESİ



133-143



133-144



133-145



133-146



133-147



133-148



133-149

Seri 133

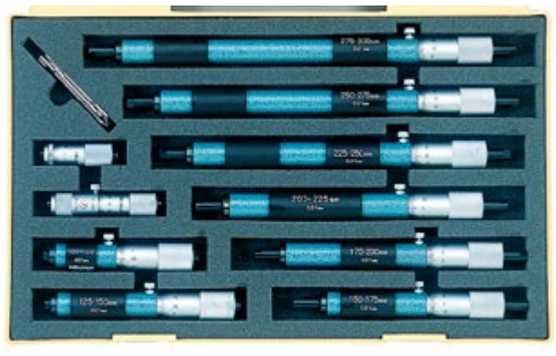
- İç çap boru mikrometresi
- Standart tek çubuklu
- Ölçüm yüzeyler, karbürdür.

Metrik

No.	Ölçüm aralığı [mm]	Hata Sınırı [µm]	L [mm]	a [mm]	b [mm]	Ağırlık [g]
133-143	50-75	±3				50
133-144	75-100	±4				75
133-145	100-125	±5	100	5	3	130
133-146	125-150	±5	125	5	3	160
133-147	150-175	±5	150	18	15	170
133-148	175-200	±5	175	18	15	180
133-149	200-225	±5	200	18	15	200
133-150	225-250	±6	225	18	15	210
133-151	250-275	±6	250	18	15	235
133-152	275-300	±6	275	18	15	245
133-153	300-325	±7	300	18	15	265
133-154	325-350	±7	325	18	15	285
133-155	350-375	±7	350	18	15	300
133-156	375-400	±8	375	18	15	315
133-157	400-425	±8	400	18	15	330
133-158	425-450	±8	425	18	15	340
133-159	450-475	±9	450	18	15	360
133-160	475-500	±9	475	18	15	370
133-161	500-525	±9	500	18	15	390

Metrik

No.	Ölçüm aralığı [mm]	Hata Sınırı [µm]	L [mm]	a [mm]	b [mm]	Ağırlık [g]
133-162	525-550	±10	525	18	15	400
133-163	550-575	±10	550	18	15	410
133-164	575-600	±10	575	18	15	415
133-165	600-625	±11	600	18	15	430
133-166	625-650	±11	625	18	15	450
133-167	650-675	±11	650	18	15	470
133-168	675-700	±12	675	18	15	480
133-169	700-725	±12	700	18	15	500
133-170	725-750	±12	725	18	15	510
133-171	750-775	±13	750	18	15	520
133-172	775-800	±13	775	18	15	540
133-173	800-825	±13	800	18	15	555
133-174	825-850	±14	825	18	15	570
133-175	850-875	±14	850	18	15	590
133-176	875-900	±14	875	18	15	600
133-177	900-925	±15	900	18	15	620
133-178	925-950	±15	925	18	15	630
133-179	950-975	±15	950	18	15	650
133-180	975-1000	±16	975	18	15	670



133-902

Seri 133

- İç çap boru mikrometresi
- Boru konstruksiyonları için hafif modeller

Metrik

No.	Ölçüm aralığı [mm]	İçeriği, ürün kodları	Ağırlık [g]
133-901	50-150	133-143, 133-144, 133-145, 133-146	415
133-902	50-300	133-143, 133-144, 133-145,133-146 133-147, 133-148, 133-149,133-150, 133-151, 133-152	1655

MITUTOYO ÖLÇÜ ALETLERİ

SİLİNDİR KOMPARATÖRLERİ "BORE GAUGE"



511-814

Seri 511

- Bu mikrometre kafası değiştirilebilir uçlara gerek olmaksızın ölçüm yapmanızı sağlar. Bu size aşağıdaki avantajları sağlar:
- Uzun pistonu sayesinde mükemmel hassasiyet
- Karbür kontak noktaları (> 18mm aralık) size yüksek dayanım ve aşınma direnci sağlar.
- Geniş kavraması sayesinde operatörden gelen ısıyı %50 oranında azaltır.
- Yardımcı uçlar ile geniş ölçüm aralığı



Derin delik ölçümü için uzatma(opsiyonle aksesuar)



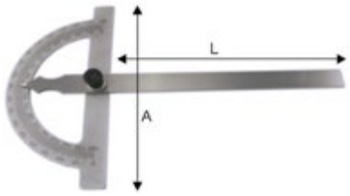
Metrik

No.	Ölçüm aralığı [mm]	Çözünürlük	No: Komparatör saati	Takılabilen mikrometre ölçüm aralığı	Uzatmalar	Delik Derinliği	Ağırlık [g]
511-823	60-100	0,001 mm	2109SB-10	10 mm	10, 20 mm	150 mm	430
511-824	100-160	0,001 mm	2109SB-10	13 mm	10, 20, 20 mm	150 mm	480
511-825	150-250	0,001 mm	2109SB-10	13 mm	10, 20, 20, 50 mm	150 mm	850
511-826	250-400	0,001 mm	2109SB-10	25 mm	25, 50, 50 mm	150 mm	950
511-827	400-600	0,001 mm	2109SB-10	50 mm	50, 100 mm	250 mm	1270
511-828	600-800	0,001 mm	2109SB-10	50 mm	50, 100 mm	250 mm	1670
511-813	60-100	0,01 mm	2046SB	10 mm	10, 20 mm	150 mm	430
511-814	100-160	0,01 mm	2046SB	13 mm	10, 20, 20 mm	150 mm	480
511-815	150-250	0,01 mm	2046SB	13 mm	10, 20, 20, 50 mm	150 mm	850
511-816	250-400	0,01 mm	2046SB	25 mm	25, 50, 50 mm	150 mm	950
511-817	400-600	0,01 mm	2046SB	50 mm	50, 100 mm	250 mm	1270
511-818	600-800	0,01 mm	2046SB	50 mm	50, 100 mm	250 mm	1670

GÖNYELER

AÇILI GÖNYE

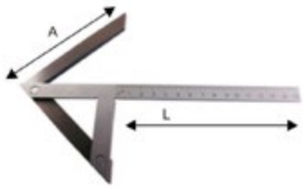
PLD



Ür. Kd.	A (mm)	L (mm)	Sip. No.
C120-080	80	120	13592
C120-120	120	150	13593
C120-150	150	200	13594
C120-200	200	300	13595
C120-300	300	500	13596

MERKEZLEME GÖNYESİ

PLD



Ür. Kd.	A (mm)	L (mm)	Sip. No.
C119-070	70	100	13597
C119-130	130	150	13598
C119-150	150	200	13599
C119-160	160	250	13600
C119-180	180	300	13601

GÖNYELER

PLD



Ür. Kd.	Ölçü	Ölçme Çubuğu	Ölçme Çubuğu Boyları	Sip. No.
C610-360M	DERECELİ MERCEKLİ GÖNYE	3 ADET	150-200-300mm	13602
C610-360S	360°x5 SAATLİ GÖNYE	3 ADET	150-200-300mm	13603

DİJİTAL GÖNYE

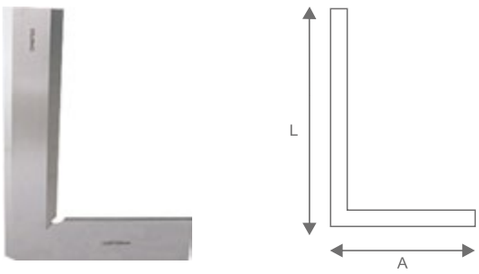
PLD



Ür. Kd.	Ölçü	Sip. No.
C610-360D	0-360°x5 DİJİTAL GÖNYE	13604

KIL GÖNYE DIN 875/0

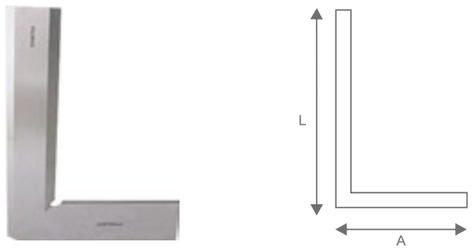
PLD



Ür. Kd.	L (mm)	A (mm)	Sip. No.
C125-050040	50	40	13605
C125-075050	75	50	13606
C125-100070	100	70	13607
C125-150100	150	100	13608
C125-200130	200	130	13609
C125-300200	300	200	13610

EKONOMİK TİP KIL GÖNYE

PLD



Ür. Kd.	L (mm)	A (mm)	Sip. No.
C125-100070E	100	70	13611

ŞAPKALI GÖNYE DIN 875/0

PLD



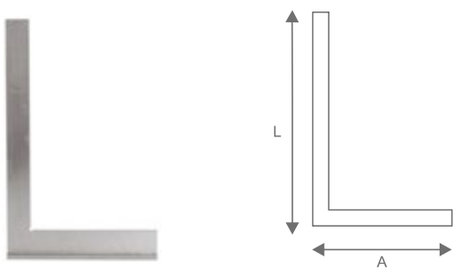
GENİŞ TABANLI

Ür. Kd.	L (mm)	A (mm)	Sip. No.
C127-050040	50	40	13615
C127-075050	75	50	13616
C127-100070	100	70	13617
C127-150100	150	100	13618
C127-200130	200	130	13619
C127-250165	250	165	13620
C127-300175	300	175	13621
C127-400230	400	230	13622
C127-500280	500	280	13623
*C127-600400	600	400	13624
*C127-750500	750	500	13625
*C127-1000660	1000	660	13626

GENİŞ TABANLI

ŞAPKALI GÖNYE DIN 875/0

KINEX



Ür. Kd.	L (mm)	A (mm)	Sip. No.
NB-127-630400	630	400	13612
NB-127-750375	750	375	13613
NB-127-1000500	1000	500	13614

CETVELLER - MASTAR SETLERİ - SENTİLLER

DERECELİ ÇELİK MASTAR

PLD



Ür. Kd.	Boy (mm)	Genişlik (mm)	Kalınlık (mm)	Sip. No.
C111-0500	500	25	5	13627
C111-0750	750	30	6	13628
C111-1000	1000	30	6	13629
C111-1500	1500	30	6	13630
C111-2000	2000	40	8	13631
C111-2500	2500	40	8	13632
C111-3000	3000	40	8	13633
C111-4000	4000	40	8	13634

DİJİTAL DOĞRUSAL CETVEL

PLD



İşleme tezgahlarında işlemlerin yüksek hassasiyetle yapılmasını sağlar. Matkap, freze makinalarına kolayca monte edilebilir. Geniş LCD ekranı vardır. Alüminyum alaşımlı çubuğu kesilerek her türlü pozisyona ve özel makinaya monte edilebilir. Değişik sabitleme seçenekleri olarak, mıknatıs, asma deliği ve sabitleme plakası vardır.

Ür. Kd.	Boy (mm)	Hassasiyet (mm)	Sip. No.
C110D-0600	600	0,01 mm	13643
C110D-1000	1000	0,01 mm	13644

AÇI MASTAR SETİ (10 PARÇA)

PLD



Ür. Kd.	Ölçü	Sip. No.
C326-130	1°/2°/3°/4°/5°/10°/15°/20°/25°/30°	13667

PİM MASTAR SETİ

PLD



Ür. Kd.	Ölçü (mm)	Set Adeti	Pürüzlük	Adım (mm)	Sertlik	Boy (mm)	Sip. No.
C995-091	1-10	91 PARÇA	≤ 0,1µm Ra	0.1	60-62 HRC	50	13671
C995-273	0,99-10,01	273 PARÇA	≤ 0,1µm Ra	0.1	60-62 HRC	50	13672

PASLANMAZ ÇELİK CETVEL MM/INCH

PLD



Ür. Kd.	Boy (mm)	Genişlik (mm)	Kalınlık (mm)	Sip. No.
C110-01515	150	15	0.50	13635
C110-02020	200	20	0.75	13636
C110-03025	300	25	0.70	13637
C110-05030	500	30	0.85	13638
C110-10020	1000	20	0.70	13639
C110-10030	1000	30	0.95	13640
C110-15038	1500	38	1.40	13641
C110-20038	2000	38	1.70	13642

JOHNSON MASTAR SETİ (103 PARÇA)

PLD



Ür. Kd.	Ölçü	Sip. No.
C327-103-2	1,005-100 mm Gr2	13666

PARALEL SET

PLD



Ür. Kd.	Ölçü	Sip. No.
C328-7	150 mm 7 ÇİFT 6X10-6X12-8X14-12X18-12X24-16X36-16X38	13668
C328-14X5	150X5 mm 14 ÇİFT 14-16-18-20-22-24-26-28-30-32-35-40-45-50	13669
C328-14X10	150X10 mm 14 ÇİFT 14-16-18-20-22-24-26-28-30-32-35-40-45-50	13670

FİLLER ÇAKISI

PLD



Ür. Kd.	Ölçü (mm)	Sip. No.
C320-20	0,05-1,0X100 mm 20 ADET / TK	13673
C320-20X300	0,05-1,0X300 mm 20 ADET/TK	13674
C320-20X500	0,05-1,0X500 mm 20 ADET/TK	13675
C319-26 INCH	0,0015"-0,025"X90 mm 26 ADET/TK	13676

ŞERİT SENTİL

PLD



Ür. Kd.	Hassasiyet (mm)	Boy (mm)	Sip. No.
C318-002	0.02	5000	13677
C318-003	0.03	5000	13678
C318-004	0.04	5000	13679
C318-005	0.05	5000	13680
C318-006	0.06	5000	13681
C318-007	0.07	5000	13682
C318-008	0.08	5000	13683

Ür. Kd.	Hassasiyet (mm)	Boy (mm)	Sip. No.
C318-009	0.09	5000	13684
C318-010	0.10	5000	13685
C318-015	0.15	5000	13686
C318-020	0.20	5000	13687
C318-025	0.25	5000	13688
C318-030	0.30	5000	13689
C318-040	0.40	5000	13690

Ür. Kd.	Hassasiyet (mm)	Boy (mm)	Sip. No.
C318-050	0.50	5000	13691
C318-060	0.60	5000	13692
C318-070	0.70	5000	13693
C318-080	0.80	5000	13694
C318-090	0.90	5000	13695
C318-100	1.00	5000	13696

TORNA KALEM MASTARI, DİŞ TARAĞI,KALIP ALMA ŞABLONU, RADIUS MASTARI

TORNA KALEM MASTARI

PLD



Ür. Kd.	Ölçü (mm)	Sip. No.
C321-001	90x40	13697

DİŞ TARAĞI (METRIK / INCH)

PLD



Ür. Kd.	Parça Adedi	Sip. No.
C329-52	52 PARÇA	13698

KALIP ALMA ŞABLONU

PLD



Ür. Kd.	Ölçü (mm)	Sip. No.
C322-044	130	13699

RADIUS MASTARI

PLD



Ür. Kd.	Ölçü	Sip. No.
C330-1065	R1-6,5x0,5	13700
C330-7014	R7-14,5x0,5	13701
C330-1525	R15-25x0,5	13702

GRANİT PLEYT DIN 876/1

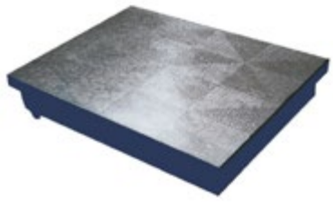
PLD



Ür. Kd.	Boy (mm)	En (mm)	Yükseklik (mm)	Ağırlık (kg)	Sip. No.
C002-4025	400	250	80	30	13703
C002-6340	630	400	100	80	13704
C002-8050	800	500	130	150	13705
C002-1063	1000	630	150	280	13706
C002-1280	1200	800	160	360	13707
C002-1610	1600	1000	200	1080	13708
C002-2020	2000	1000	200	1360	13709

DÖKÜM PLEYT GB4986-85 GR.1

PLD

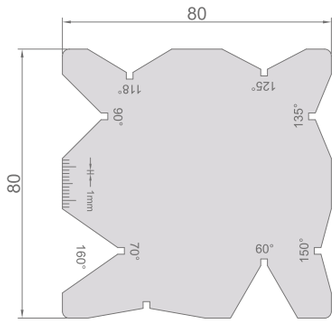


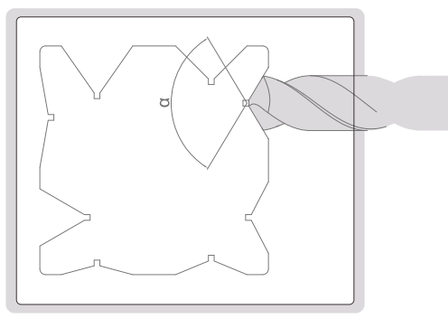
Ür. Kd.	Boy (mm)	En (mm)	Yükseklik (mm)	Ağırlık (kg)	Sip. No.
C002-4030D	400	300	85	15	13710
C002-6040D	600	400	95	35	13711
C002-8050D	800	500	100	65	13712
C002-1075D	1000	750	170	120	13713

MATKAP AÇI MASTARI

PLD







Ür. Kd.	Ölçü Dereceleri	Hassasiyet	Sip. No.
C107-024	60° - 82° - 90° - 118° - 120° - 135° - 150° - 160°	±0,5°	13714

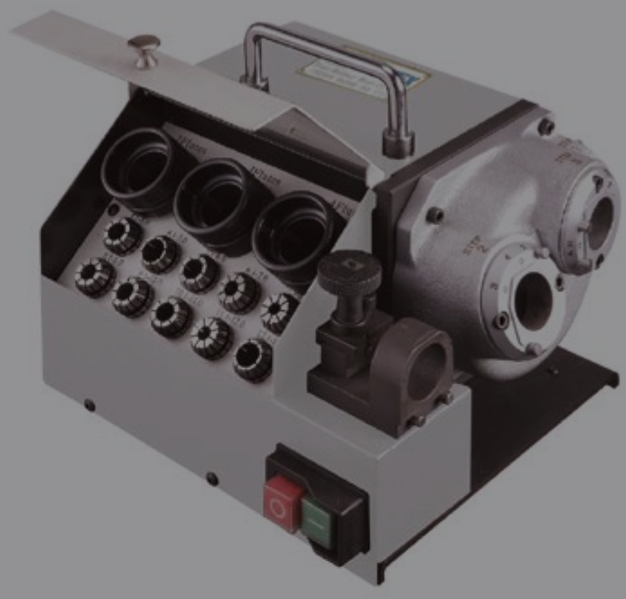
7.
MAKİNE VE AKSESUARLARI

Sy. 506/521

ATA TEKNİK HIRDAVAT SAN. TİC. LTD. ŞTİ.
İkitelli O.S.B. Eskoop San. Sit. C1 Blok No:5
Başakşehir / İstanbul

Gsm: +90 533 554 72 40 – +90 555 988 00 53
Tel: +90 (212) 549 46 62 – 671 50 76
Faks: +90 (212) 549 54 27





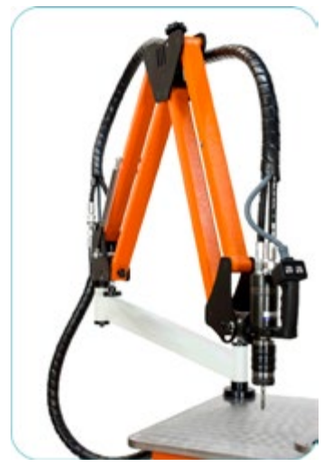

VERITEX

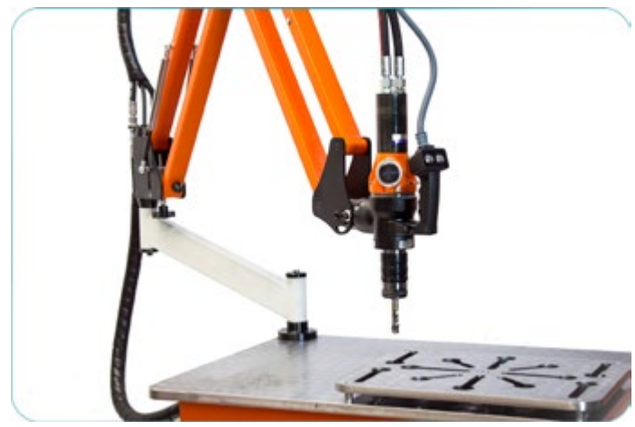
KILAVUZ ÇEKME MAKİNALARI

HİDROLİK KILAVUZ ÇEKME MAKİNASI









M5-M16

MAKİNA BİLGİLERİ

M5 ile M16 arası kılavuz çekme kapasitesine sahiptir. Çalışma alanı yarıçapta 2050 mm'ye kadar açılabilen kol yapısı sayesinde geniş çalışma alanı sağlamaktadır.

Standart özellik olarak yatay ve dikey ve kılavuz çekme özelliğine ve 0 - 600 rpm arası ayarlanabilir devire sahiptir. Opsiyonel olarak masasız çanta Tip (ÇT) versiyonu da bulunmaktadır.

MASA ÖLÇÜLERİ

Sip. No.	En	Boy	Yükseklik
HMS3	800	1000	900
HMS2	700	900	900

TEKNİK ÖZELLİKLER

- M5 - M16 Kılavuz çekme kapasitesi
- 0 - 600 rpm arası hızda kılavuz çekebilme kapasitesi
- Kolay kullanım ve ergonomik yapı
- Güçlü konstrüksiyon
- Piston sertlik ayarı
- Devir ayarı
- 2050 mm yarıçapında çalışma alanı
- Hızlı kılavuz değiştirme özelliği
- Dikey, yatay kılavuz çekebilme özelliği
- Taşınması zor, büyük makina gövdelerine kılavuz çekebilme
- Farklı uygulama alanları (Raybalama,perçinleme, kalıpçı taşlama, havşalama, pafta çekme, çoklu kılavuz çekme vs...)

TEKNİK BİLGİLER

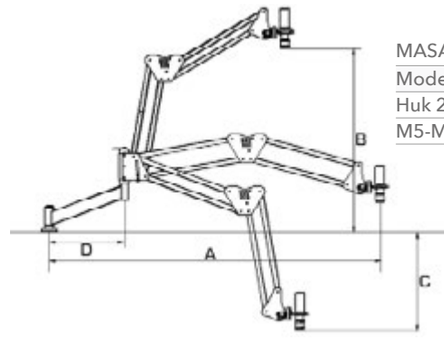
Kılavuz Kapasitesi	Güç (kw)	Hız(rpm)	Çalışma Basıncı (bar)	Ağırlık (kg)
M5-M16	3	0-600	60-100	200

KILAVUZ TUTUCU TABLOSU



Makina ile birlikte kullanacağınız kılavuz tutucular emniyetli ve emniyetsiz olarak iki gruba ayrılır. M16 ve M24 Model makinalarda KTE-02 grubu, M36 Model makinalarda ise KTE-03 grubu kılavuz tutucular kullanılmaktadır. Emniyetli kılavuz tutuculardaki tork kontrol bulunmaktadır. Bu sayede kılavuz kırılma riskiniz minimize edilmektedir.

KOL ÇALIŞMA ÖLÇÜLERİ



MASA ÖLÇÜLERİ

Model	A	B	C	D
Huk 2000 M5-M16	2050	1000	600	500

KILAVUZ ÇEKME MAKİNALARI

HİDROLİK KILAVUZ ÇEKME MAKİNASI











M5-M24

MAKİNA BİLGİLERİ

M5 - M24 hidrolik kılavuz çekme makinası geniş çalışma hacmi ve çift kademeli şanzıman sisteminin avantajlarını bir arada sunmaktadır. Kılavuz çekme işlemlerinizi seri ve minimum maliyetli bir operasyon haline getirmektedir.

Çift kademeli şanzıman sistemi sayesinde, M5 ile M14 arası kılavuz çekme işlemleriniz 1.Kademe de 0 - 600 Rpm arası hızda, M16 ile M24 arası kılavuz çekme işlemlerini ise 2.Kademede 0 - 150 rpm arası hızda ve yüksek tork da gerçekleşmektedir. Böylece küçük çaplı kılavuz çekme işlemleri yüksek hız , büyük çaplı kılavuz çekme işlemlerinde ise yüksek tork değerlerini birarada sunmaktadır.

Standart özellik olarak yatay ve dikey kılavuz çekme imkanı sağlamaktadır. İsteğe bağlı olarak masalı veya çanta tip olarak üretilmektedir.

- Hms kodlu masalar hidrolik kullanılır.
- Ölçüler mm cinsindendir.

MASA ÖLÇÜLERİ

Sip. No.	En	Boy	Yükseklik
HMS3	800	1000	900
HMS2	700	900	900

TEKNİK ÖZELLİKLER

- M5 - M24 Kılavuz çekme kapasitesi
- Yüksek tork ve hızı birarada sağlayan çift kademeli şanzıman sistemi
- Kolay kullanım ve ergonomik yapı
- Güçlü konstrüksiyon
- Piston sertlik ayarı
- Devir ayarı
- 2050 mm yarıçapında çalışma alanı
- Hızlı kılavuz değiştirme özelliği
- Dikey, yatay kılavuz çekebilme özelliği
- Taşınması zor, büyük makina gövdelerine kılavuz çekebilme
- Farklı uygulama alanları (Raybalama,perçinleme, kalıpçı taşlama, havşalama, pafta çekme, çoklu kılavuz çekme vs...)

TEKNİK BİLGİLER

Kılavuz Kapasitesi	Güç (kw)	Hız(rpm)	Çalışma Basıncı (bar)	Ağırlık (kg)
M5-M24	3	1.Kademe:0-150 2.Kademe:0-600	60-100	225

M5-M36

MAKİNA BİLGİLERİ

M5 - M36 Hidrolik Kılavuz Çekme Makinası standart kol yapısı sayesinde yarıçapta 2050 mm'ye kadar uzanabilmekte ve taşınması zor olan büyük makina gövdelerine rahatça kılavuz çekebilmektedir. Hidrolik olarak çalışan sistemi M5 ile M36 arasındaki kılavuz çekme işlemlerinizi hızlı ve minimum maliyetle gerçekleştirir.

Standart olarak 0 ile 100 rpm arasında kılavuzun büyüklüğüne göre istenilen hızda , yatay ve dikey kılavuz çekme özelliğine sahiptir.

- Hms kodlu masalar hidrolik kullanılır.
- Ölçüler mm cinsindendir.

MASA ÖLÇÜLERİ

Sip. No.	En	Boy	Yükseklik
HMS3	800	1000	900
HMS2	700	900	900

TEKNİK ÖZELLİKLER

- M5 - M36 Kılavuz çekme kapasitesi
- 5.5 Kw elektrik motoru
- 380 V çalışma gerilimi
- İsteğe göre ayarlanabilir devir ayarı
- Güçlü konstrüksiyon
- Dikey, yatay kılavuz çekebilme
- Hızlı tutucu değiştirme
- Faz koruma rölesi sayesinde elektrik motorunun ters yöne çalışmasını engelleyerek hidrolik pompa'nın zarar görmesini engelleme gibi özelliklere sahiptir.

TEKNİK BİLGİLER

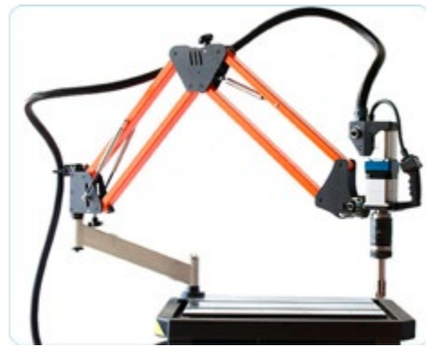
Kılavuz Kapasitesi	Güç (kw)	Hız(rpm)	Çalışma Basıncı (bar)	Ağırlık(kg)
M5-M36	5.5	0-100	60-120	250

KILAVUZ ÇEKME MAKİNALARI

M5-M30 ELEKTRİKLİ KILAVUZ ÇEKME MAKİNASI (MASALI MODEL)







MAKİNA BİLGİLERİ

Uzun ömürlü servo sistemi, rahat kullanımı ve 220V çalışma desteği ile M5-M20, M5-M24, M5-30 ve M5,M36 gibi farklı diş büyüklükleri için tasarlanmış,servo modellerle, çok düşük devirlerde dahi yüksek tork verebilen servo sistem, hassas kılavuzlarınız için maksimum oranda güvenilirlik sağlamaktadır.

TEKNİK ÖZELLİKLER

- M5-M20/M5-M24/M5-M36 Kılavuz çekme kapasitesi
- Yüksek tork ve hızı bir arada sağlayan Panasonic Servo Sistem
- 220V Elektrik ile çalışabilme
- Piston sertlik ayarı
- Potansiyometreli hassas devir ayarı
- 2050 mm yarıçapında çalışma alanı
- Hızlı kılavuz değiştirme özelliği
- Dikey, yatay kılavuz çekebilme özelliği
- Taşınması zor, büyük makina gövdelerine kılavuz çekebilme
- Güçlü konstrüksiyon
- Korumalı Servo Sistem

M5-M30 ELEKTRİKLİ KILAVUZ ÇEKME MAKİNASI (MASALI PLC MODEL)







MAKİNA BİLGİLERİ

Uzun ömürlü servo sistemi, rahat kullanımı ve 220V çalışma desteği ile M5-M20, M5-M24, M5-30 ve M5,M36 gibi farklı diş büyüklükleri için tasarlanmış,servo modellerle, çok düşük devirlerde dahi yüksek tork verebilen servo sistem, hassas kılavuzlarınız için maksimum oranda güvenilirlik sağlamaktadır.

TEKNİK ÖZELLİKLER

- M5-M16/M5-M24/M5-M36 Kılavuz çekme kapasitesi
- Yüksek tork ve hızı bir arada sağlayan Panasonic Servo Sistem
- 220V Elektrik ile çalışabilme
- Piston sertlik ayarı
- Potansiyometreli hassas devir ayarı
- 2050 mm yarıçapında çalışma alanı
- Hızlı kılavuz değiştirme özelliği
- Dikey, yatay kılavuz çekebilme özelliği
- Taşınması zor, büyük makina gövdelerine kılavuz çekebilme
- Güçlü konstrüksiyon
- Korumalı Servo Sistem
- Dijital derinlik kontrol sistemi (Her kılavuz için farklı farklı hız ve derinlik tanımlayabilme)
- Reçete özelliğiyle değişik iş parçalarını isimlendirerek kaydedebilme ve tekrar çağırabilme özelliği
- Talaş kırma fonksiyonu ile emniyetli kılavuz çekme özelliği (Kritik kılavuz çekme operasyonları ve kalıpçılar için tavsiye edilir) - Dokunmatik Panel

MAKİNE VE HIRDAVAT AKSESUARLARI

SAATLİ Z-SIFIRLAMA APARATI PLD



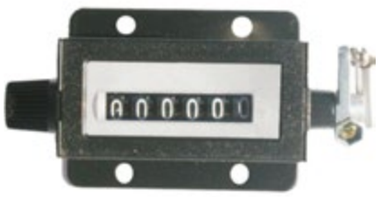
Ür. Kd.	Ölçü (mm)	Hassasiyet (mm)	Sip. No.
C323-229	50	0,01	13715
C323-230	100	0,01	13716

IŞIKLI Z-SIFIRLAMA APARATI PLD



Ür. Kd.	Ölçü (mm)	Hassasiyet (mm)	Sip. No.
C323-050	50	0,01	13717

TURMETRE PLD



Ür. Kd.	Ölçü	Sip. No.
C008-001	6 HANELİ VURMALI	13718

MANYETİK KOMPARATÖR AYAKLARI PLD



NORMAL
C900-0040



FLEX
C900-MT060A



UNIVERSAL
C900-111

Ür. Kd.	Uzunluk (mm)	Genişlik (mm)	Yükseklik (mm)	Tutma Kuvveti	Sip. No.
C900-0040	62	50	55	80 Kg	13719
C900-111	62	50	55	63 Kg	13720
C900-MT060A	62	50	55	75 Kg	13721

MEKANİK PROPLAR PLD



C325-109T



C325-109

Ür. Kd.	Ölçü (mm)	Sip. No.
C325-109	MEKANİK PROP	13722
C325-109T	ANTİ MANYETİK MEKANİK PROP	13723

IŞIKLI VE SESLİ PROPLAR PLD



Ür. Kd.	Ölçü (mm)	Sip. No.
C324-232	IŞIKLI PROP	13724
C324-233	20X160 IŞIKLI SESLİ	13725
C324-234	6X120 IŞIKLI SESLİ KÜÇÜK ÇAP	13726

10 PARÇA SAATÇİ EĞE TAKIMI PLD



Ür. Kd.	Boy (mm)	Şaft (mm)	Sip. No.
C271-03140	140	3	13727
C271-04160	160	3	13728

3 PARÇA EĞE TAKIMI PLD



Ür. Kd.	Inch	mm	Sip. No.
C272-3-8	8"	200	13729
C272-3-10	10"	250	13730

5 PARÇA EĞE TAKIMI PLD



Ür. Kd.	Inch	mm	Sip. No.
C272-5-8	8"	200	13731
C272-5-10	10"	250	13732

ELMAS EĞE TAKIMI PLD



Ür. Kd.	Boy (mm)	Kesici Boy (mm)	Şaft (mm)	İçindeki Adet	Sip. No.
C270-14703	140	70	3	5	13733
C270-16504	160	50	4	5	13734
C270-16504-10	160	50	4	10	13735
C270-20704	200	70	4	5	13736

MAKİNE VE HIRDAVAT AKSESUARLARI

ELMAS EĞE

PLD



Ür. Kd.	Boy (mm)	Kesici Boy (mm)	Şaft (mm)	Tip	Sip. No.
C270-14703DZ	140	70	4	LAMA	13737
C270-14703UC	140	70	3	ÜÇGEN	13738
C270-14703YV	140	70	3	YUVARLAK	13739
C270-14703BS	140	70	3	BALIK SIRTI	13740
C270-14703KR	140	70	3	KARE	13741
C270-16504DZ	160	50	4	LAMA	13742
C270-16504UC	160	50	4	ÜÇGEN	13743
C270-16504YV	160	50	4	YUVARLAK	13744
C270-16504BS	160	50	4	BALIK SIRTI	13745
C270-20704DZ	200	70	4	LAMA	13746
C270-20704UC	200	70	4	ÜÇGEN	13747
C270-20704YV	200	70	4	YUVARLAK	13748
C270-20704BS	200	70	4	BALIK SIRTI	13749
C270-20704KR	200	70	4	KARE	13750

TAŞ DÜZELTME ELMASI

PLD

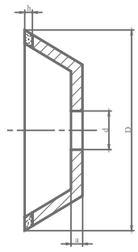


Ür. Kd.	Karat	MK	Sip. No.
C290-030	0,3	1	13753
C290-050	0,5	1	13754
C290-075	0,75	1	13755
C290-100	1,0	1	13756
C290-150	1,5	1	13757
C290-200	2,0	1	13758
C290-250	2,5	1	13759
C290-300	3,0	1	13760
C290-400	4,0	1	13761

ELMAS ÇANAK TAŞ KONİK C75

PLD





D (mm)	d (mm)	a (mm)	h (mm)	C180-WFW Sip. No.
75	20	5	3	13767
100	20	5	3	13768
125	32	5	3	13769
150	32	5	3	13770

ELMAS ÇİZGİ KALEMİ

PLD



Ür. Kd.	Ölçü (mm)	Sip. No.
C008-000U	160	13766

EĞİK ELMAS EĞE TAKIMI

PLD





Ür. Kd.	Açıklama	Sip. No.
C270-WS1	TEK TARAFI EĞİK ELMAS EĞE TAKIMI	13751
C270-WST2	ÇİFT TARAFI EĞİK ELMAS EĞE TAKIMI	13752

SAPLI ELMAS TAŞ

PLD

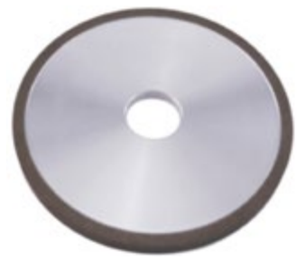


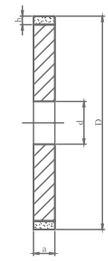


Ür. Kd.	Set İçeriği	Sip. No.
C280-100	2,35 mm 20 ADET / TK	13762
C280-000	3,0 mm 20 ADET / TK	13763
C280-300	3,0 mm 50 ADET / TK	13764
C280-200	6,0 mm 10 ADET / TK	13765

ELMAS ÇANAK TAŞ DİSK C75

PLD

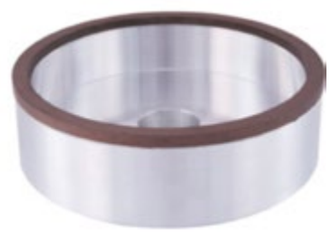


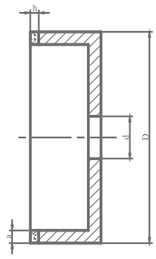


D (mm)	d (mm)	a (mm)	h (mm)	C182 Sip. No.
75	20	6	3	13771
100	20	8	4	13772
125	32	8	4	13773
150	32	8	4	13774
175	32	10	4	13775
200	32	10	4	13776

ELMAS ÇANAK TAŞ DİK C75

PLD





D (mm)	d (mm)	a (mm)	h (mm)	C180-WCW Sip. No.
75	20	5	3	13777
100	20	5	3	13778
125	20	5	3	13779

MAKİNE VE HIRDAVAT AKSESUARLARI

ANAHTARLI MANDREN (AĞIR İŞ İÇİN)

Harvest



Ür. Kd.	Ölçü (mm)	Sip. No.
C8631A	1-13 mm 1/2"-20 UNF	13814
C8536A	1-13 mm B16	13815
C8548A	1-16 mm B18	13816
C8552A	5-20 mm B22	13817
C8554A	5-25 mm B24	13818
C8902A	S1 MANDREN ANAHTARI (13 mm İÇİN)	13819
C8903A	S2 MANDREN ANAHTARI (16 mm İÇİN)	13820
C8904A	S3 MANDREN ANAHTARI (20 mm İÇİN)	13821
C8905A	S4 MANDREN ANAHTARI (25 mm İÇİN)	13822

ELLE SIKMALI MANDREN

Harvest



PLASTİK GÖVDE

Ür. Kd.	Ölçü (mm)	Sip. No.
C8613P	6 mm 3/8"-24 UNF	13823
C8623P	10 mm 3/8"-24 UNF	13824
C8131P	13 mm 1/2"-20 UNF	13825

CP TAŞ DÜZELTME ELMASI

GRAT·EX



Ür. Kd.	Taşlanacak Taşın Ölçüleri (mm)	Krat (mm)	MK	Sip. No.
CP291-035	100x20 - 200x10	0,35	1	13880
CP291-050	200x30 - 350x18	0,5	1	13881
CP291-075	250x50 - 400x35	0,75	1	13882
CP291-100	300x70 - 500x40	1,0	1	13883
CP291-150	400x100 - 800x50	1,5	1	13884
CP291-200	500x100 - 900x60	2,0	1	13885
CP291-300	500x200 - 900x110	3,0	1	13886
CP291-400	600x250 - 900x130	4,0	1	13887

KİLİTLİ ELLE SIKMALI MANDREN

Harvest



METAL GÖVDE

Ür. Kd.	Ölçü (mm)	Sip. No.
C8131M	13 mm 1/2"-20 UNF	13826

ANAHTARLI MANDREN

Harvest



Ür. Kd.	Ölçü (mm)	Sip. No.
C8613	6 mm 3/8''-24 UNF	13798
C8510	6 mm B10	13799
C8621	1-10 mm 1/2''-20 UNF	13800
C8623	1-10 mm 3/8''-24 UNF	13801
C8522	1-10 mm B12	13802
C8631	1-13 mm 1/2''-20 UNF	13803
C8633	1-13 mm 3/8''-24 UNF	13804
C8536	1-13 mm B16	13805
C8641	3-16 mm 1/2''-20 UNF	13806
C8546	3-16 mm B16	13807
C8548	3-16 mm B18	13808
C8552	5-20 mm B22	13809
C8902	S1 MANDREN ANAHTARI (10-13 mm İÇİN)	13810
C8903	S2 MANDREN ANAHTARI (16 mm İÇİN)	13811
C8904	S3 MANDREN ANAHTARI (20 mm İÇİN)	13812
C8905	MANDREN ANAHTARI (10 mm 3/8'' İÇİN)	13813

SAATÇİ EĞE TAKIMLARI

TOME

Ölçü	6 Parça Set Fiyat Kodu	12 Parça Set Fiyat Kodu
140 mm	14133	14137
160 mm	14134	14138
180 mm	14135	14139
200 mm	14136	14140



SAATÇİ EĞELER

TOME

		160 mm Fiyat Kodu	200 mm Fiyat Kodu
LAMA		14119	14126
BIÇAK EĞESİ		14120	14127
YARIM YUVARLAK		14121	14128
ÜÇGEN		14122	14129
KARE		14123	14130
YUVARLAK		14124	14131
OVAL EĞE		14125	14132

MAKİNE VE HIRDAVAT AKSESUARLARI

MASUS ALMANYA

ÇELİK HARF TAKIMI



SİYAH



NİKEL

NİKEL KAPLAMALI HAFRLER,
PASLANMAZ ÇELİKLERDE KULLANILABİLİR.

Ür. Kd.	Ölçü (mm)	⌀ (mm)	L (mm)	Siyah	Nikel Kaplı
				Sip. No.	Sip. No.
M245010	1 mm	6	65	14900	14908
M245015	1,5 mm	6	65	14901	14909
M245020	2 mm	6	65	14902	14910
M245025	2,5 mm	6	65	14903	14911
M245030	3 mm	6	65	14904	14912
M245040	4 mm	7	65	14905	14913
M245050	5 mm	8	65	14906	14914
M245060	6 mm	9	75	14907	14915
M245080	8 mm	11	76	14916	14923
M245100	10 mm	12	80	14917	14924
M245120	12 mm	14	80	14918	14925
M245150	15 mm	16	85	14919	14926
M245160	16 mm	16	85	14920	14927
M245180	18 mm	15x25	101	14921	14928
M245200	20 mm	15x25	101	14922	14929

ÇELİK RAKAM TAKIMI



SİYAH



NİKEL

NİKEL KAPLAMALI RAKAMLAR,
PASLANMAZ ÇELİKLERDE KULLANILABİLİR.

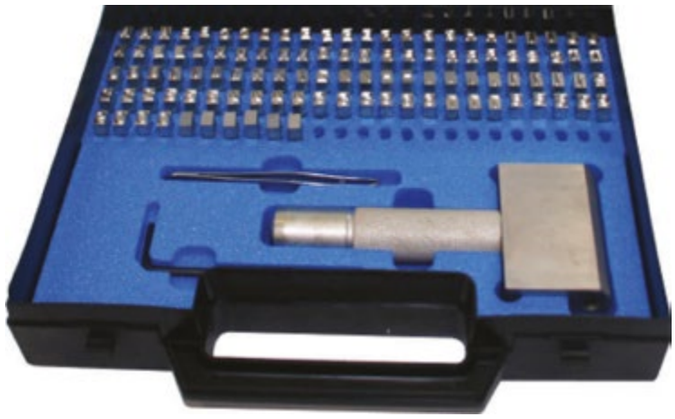
Ür. Kd.	Ölçü (mm)	⌀ (mm)	L (mm)	Siyah	Nikel Kaplı
				Sip. No.	Sip. No.
M240010	1	6	65	14859	14867
M240015	1,5	6	65	14860	14868
M240020	2	6	65	14861	14869
M240025	2,5	6	65	14862	14870
M240030	3	6	65	14863	14871
M240040	4	7	65	14864	14872
M240050	5	8	65	14865	14873
M240060	6	9	75	14866	14874
M240080	8	11	76	14875	14882
M240100	10	12	80	14876	14883
M240120	12	14	80	14877	14884
M240150	15	16	85	14878	14885
M240160	16	16	85	14879	14886
M240180	18	15x25	101	14880	14887
M240200	20	15x25	101	14881	14888

PRES MONTAJ MALAFASI



Ür. Kd.	Ölçü (mm)	Sip. No.
M10000	10x40	14944

ÇELİK HARF VE RAKAM SETİ 106 PARÇA



- PRES MONTAJ MALAFASI SAYESİNDE PRESE BAĞLANARAK İSTEDİĞİNİZ CÜMLEYİ YADA TARİHİ YAZABİLİRSİNİZ.
- SET İÇİNDE BULUNAN HAFLER VE RAKAMLARDAN MİNİMUM 2 ADET MAKSİMUM 3 ADET KARAKTER BULUNMAKTADIR.

Ür. Kd.	Ölçü (mm)	Karakter Adedi	Boy (mm)	Sip. No.
M16503	3 mm	13	19	14941
M16504	4 mm	10	19	14942
M16505	5 mm	8	19	14943

ÇELİK TERS HARF TAKIMI



TERS HARFLER,
KALIPÇILIKTA
KULLANILIR.
KALIPTA TERS ÇIKAN
HARF, MAMÜLDE
DÜZ OLARAK ÇIKAR.

Ür. Kd.	Ölçü (mm)	⌀ (mm)	L (mm)	Siyah
				Sip. No.
M265010	1 mm	6	65	14930
M265015	1,5 mm	6	65	14931
M265020	2 mm	6	65	14932
M265025	2,5 mm	6	65	14933
M265030	3 mm	6	65	14934
M265040	4 mm	7	65	14935
M265050	5 mm	8	65	14936
M265060	6 mm	9	75	14937
M265080	8 mm	11	76	14938
M265100	10 mm	12	80	14939
M265120	12 mm	14	80	14940

ÇELİK TERS RAKAM TAKIMI



TERS RAKAMLAR,
KALIPÇILIKTA
KULLANILIR.

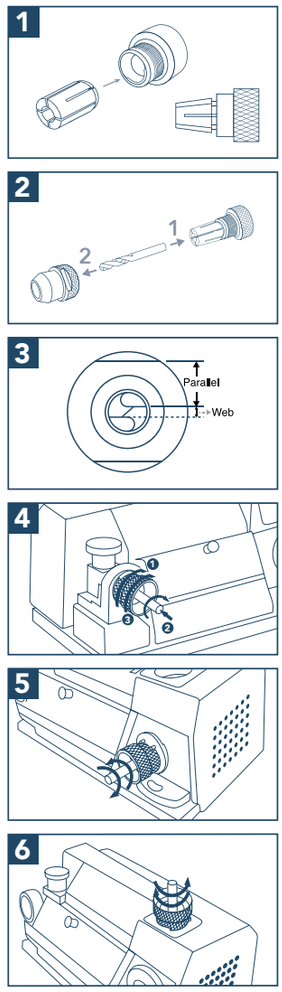
KALIPTA TERS ÇIKAN
RAKAM, MAMÜLDE
DÜZ OLARAK ÇIKAR.

Ür. Kd.	Ölçü (mm)	⌀ (mm)	L (mm)	Siyah
				Sip. No.
M260010	1mm	6	65	14889
M260015	1,5mm	6	65	14890
M260020	2 mm	6	65	14891
M260025	2,5 mm	6	65	14892
M260030	3 mm	6	65	14893
M260040	4 mm	7	65	14894
M260050	5 mm	8	65	14895
M260060	6 mm	9	75	14896
M260080	8 mm	11	76	14897
M260100	10 mm	12	80	14898
M260120	12 mm	14	80	14899

MAKİNELER

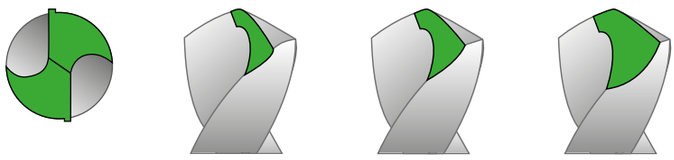
HEI.MMB24B TAŞINABİLİR MATKAP BİLEME MAKİNESİ Ø3-13MM 11 ADET PENS 4800 RPM





STANDARD ACCESSORIES / STANDART İÇERİK	
Model Kod	HEI.MMB24B
Machine Size Makine Boyutları	35x20x20 cm
Collet Numbers Pens Sayısı	11 pcs Collets 11 Adet Pens Ø3,4,5,6,7,8,9,10,11,12,13
Power Supply Güç Kaynağı	220V / 120W
RPM of Motor Motor Devri	4800 RPM
Drill Diameter Bileme Çap Aralığı	Ø3-13mm
Weight Ağırlık	10 KG
Grinding Wheel Bileme Taşı	1 pc. Grinding Wheel for Solid Carbide Tool 1 adet Karbür bilemek için bileme taşı
Product Açıklama	Portable Twist Drill Re-sharpening Machine Taşınabilir Matkap Bileme Makinesi

OPTIONAL ACCE. / OPSİYONEL AKSE.	
Other Collets Diğer Pensler	Ø3.5-12.5
Grinding Wheel	Grinding Wheel for HSS
Bileme Taşı	HSS için Bileme Taşı





MAKİNELER

HEI.MMB30G TAŞINABİLİR MATKAP BİLEME MAKİNESİ Ø3-20MM 18 ADET PENS 4800 RPM



18 Adet Pens
ER20 Φ3-4-5-6-7-8-9-10-11-12-13
ER25 Φ14-15-16-17-18-19-20
Matkaba uygun pens seçimi yapılır ve matkap pense bağlanır.

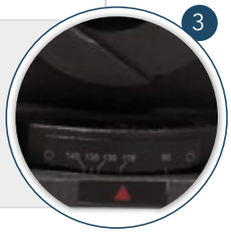


Radyal Nokta (Tahliye) İnceltme
Matkap ucu dik konumda yuvaya yerleştirildikten sonra önce bir yüzü sağ ve sol yönlü hareketlerle bilendikten sonra tutucu 180° sağ yönde çevrilerek bu defa diğer yüzü bilenir ve operasyon tamamlanır.



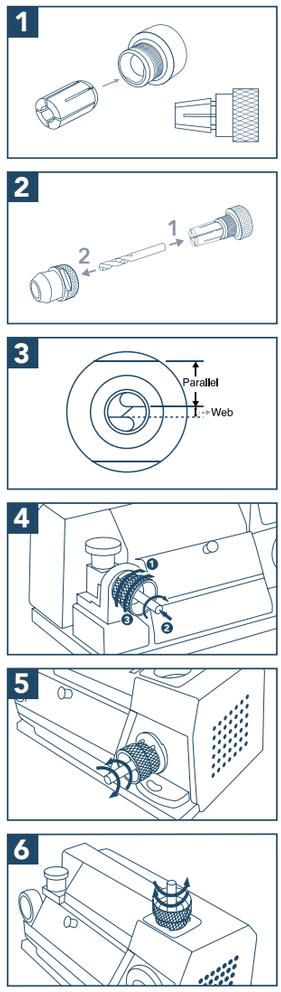


Çap Ayar Skalası
Matkap pense bağlandıktan sonra matkap çapı ile skala aynı hizaya getirilir.



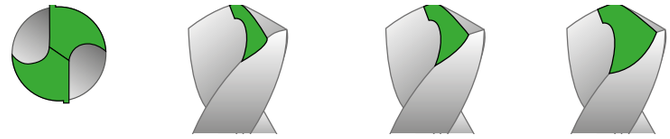
Uç Açısı Skalası
Matkap ucunun uç açısını 90-118-130-135-140° olarak bu alandan ayarlayabilirsiniz.
Standart Açı: 130°
Sert malzemeler için daha sivri (135-140°), yumuşak malzemeler için (90-118°)

Ağız Bileme Alanı
Matkap yuvaya yerleştirildikten sonra sağ ve sola çevirme hareketleriyle ağız bilenir.



STANDARD ACCESSORIES / STANDART İÇERİK	
Model Kod	HEI.MMB30G
Machine Size Makine Boyutları	35x20x20 cm
Collet Numbers Pens Sayısı	18 pcs Collets 18 Adet Pens Ø3,4,5,6,7,8,9,10,11,12,13 Ø14,15,16,17,18,19,20
Power Supply Güç Kaynağı	220V / 120W
RPM of Motor Motor Devri	4800 RPM
Drill Diameter Bileme Çap Aralığı	Ø3-20mm
Weight Ağırlık	11 KG
Grinding Wheel Bileme Taşı	1 pc. Grinding Wheel for Solid Carbide Tool 1 adet Karbür bilemek için bileme taşı
Product Açıklama	Portable Twist Drill Re-sharpening Machine Taşınabilir Matkap Bileme Makinesi

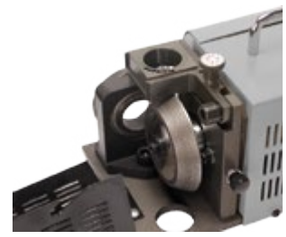
OPTIONAL ACCE. / OPSİYONEL AKSE.	
Other Collets Diğer Pensler	Ø3.5-12.5
Grinding Wheel	Grinding Wheel for HSS
Bileme Taşı	HSS için Bileme Taşı











MAKİNELER

HEI.MFBH4 TAŞINABİLİR 2-3-4 AĞIZLI FREZE BİLEME MAKİNESİ 4-14MM 6 ADET PENS 4800 RPM





2 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



3 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



4 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma

STANDARD ACCESSORIES / STANDART İÇERİK	
Model Kod	HEI.MFBH4
Machine Size Makine Boyutları	40x25x25 cm
Collet Numbers Pens Sayısı	6 pcs Collets 6 Adet Pens Ø4,6,8,10,12,14
Power Supply Güç Kaynağı	220V / 160W
RPM of Motor Motor Devri	4800 RPM
Drill Diameter Bileme Çap Aralığı	Ø4-14mm
Weight Ağırlık	15 KG
Grinding Wheel Bileme Taşı	1 pc. Grinding Wheel for Solid Carbide Tool 1 adet Karbür bilemek için bileme taşı
Product Açıklama	Portable End Mill Re-sharpening Machine Taşınabilir Freze Bileme Makinesi

OPTIONAL ACCE. / OPSİYONEL AKSE.	
Other Collets Diğer Pensler	Ø4.5-13.5
Grinding Wheel	Grinding Wheel for HSS
Bileme Taşı	HSS için Bileme Taşı



MAKİNELER

HEI.MFBH4A TAŞINABİLİR 2-3-4 AĞIZLI FREZE BİLEME MAKİNESİ 4-20MM 9 ADET PENS 4800 RPM





2 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



3 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



4 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma

STANDARD ACCESSORIES / STANDART İÇERİK	
Model Kod	HEI.MFBH4A
Machine Size Makine Boyutları	40x25x25 cm
Collet Numbers Pens Sayısı	9 pcs Collets 9 Adet Pens Ø4,6,8,10,12,14,16,18,20
Power Supply Güç Kaynağı	220V / 160W
RPM of Motor Motor Devri	4800 RPM
Drill Diameter Bileme Çap Aralığı	Ø4-20mm
Weight Ağırlık	17 KG
Grinding Wheel Bileme Taşı	1 pc. Grinding Wheel for Solid Carbide Tool 1 adet Karbür bilemek için bileme taşı
Product Açıklama	Portable End Mill Re-sharpening Machine Taşınabilir Freze Bileme Makinesi
OPTIONAL ACCE. / OPSİYONEL AKSE.	
Other Collets Diğer Pensler	Ø4.5-13.5
Grinding Wheel	Grinding Wheel for HSS
Bileme Taşı	HSS için Bileme Taşı







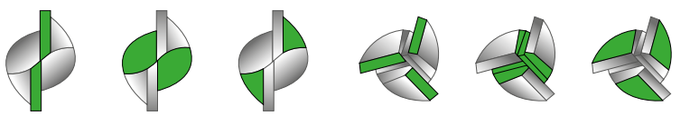
MAKİNELER

HEI.MFBH7 TAŞINABİLİR 2-3-4 AĞIZ VE YANAK FREZE BİLEME MAKİNESİ 4-14MM 11 ADET PENS 4800 RPM



STANDARD ACCESSORIES / STANDART İÇERİK	
Model Kod	HEI.MFBH7
Machine Size Makine Boyutları	40x22x29 cm
Collet Numbers Pens Sayısı	6 pcs (ER-20) Collets - 5 pcs (16C) Collects 6 Adet (ER20) Pens - 5 Adet (16C) Pens Ø4,6,8,10,12,14 - 6,8,10,12,14
Power Supply Güç Kaynağı	220V / 160W
RPM of Motor Motor Devri	4800 RPM
Drill Diameter Bileme Çap Aralığı	Ø4-14mm
Weight Ağırlık	23 KG
Grinding Wheel Bileme Taşı	2 pc. Grinding Wheel for Solid Carbide Tool 2 adet Karbür bilemek için bileme taşı
Product Açıklama	Portable Twist Drill Re-sharpening Machine Taşınabilir Ağız ve Yanak Freze Bileme Makinesi

OPTIONAL ACCE. / OPSİYONEL AKSE.	
Grinding Wheel	Grinding Wheel for HSS
Bileme Taşı	HSS için Bileme Taşı



2 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma

3 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



4 Ağızlı Freze Bileme Operasyonları
1. Ağız Bileme
2. Merkez İnceltme
3. Arka Boşaltma



Freeze Yanak Bileme Operasyonları



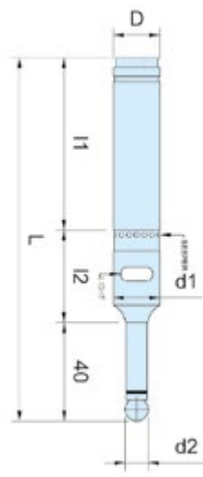


MAKİNE VE HIRDAVAT AKSESUARLARI

VERTEX® TAYVAN

IŞIKLI PROPLAR VE IŞIKLI SESLİ PROPLAR





- ÖLÇÜM SIRASINDA DÖNDÜRMEYE GEREK YOKTUR.
- SUDAN ETKİLENMEZKEN IŞIĞINIDA KORUR.
- KIRMIZI IŞIK YANARKEN AYNI ANDA SES ÇIKARTIR.
- IŞIK GÖRÜŞ ALANI DIŞINDA İSE SESLİ UYARI KULLANICIYI UYARIR.
- HASSASİYET 0,005 mm İÇERSİNDEDİR.

IŞIKLI SESLİ PROP

BİRİM mm

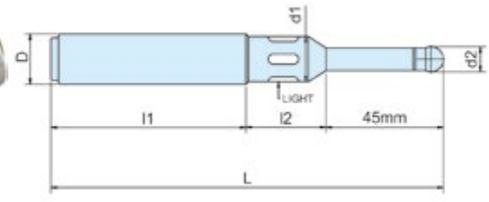
Ür. Kd.	D	d1	d2	L	l1	l2	Pil Tipi	Ağırlık (kg)	Sip. No.
VPS-20B	Ø20	18	10	160	79	41	UM-5#(SP)	0.4	15251
VPS-32B	Ø32	18	10	160	79	41	x1ADET/12V	0.7	15252

VPS-20

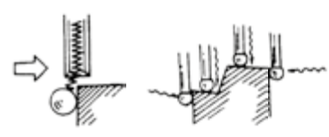


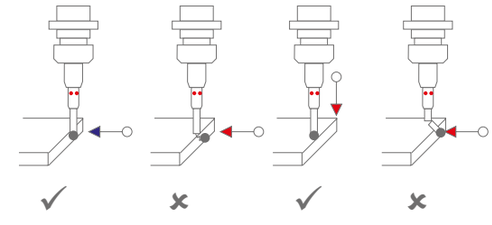
VPS-32





- YÜKSEK HASSASİYETLİ SENSÖRLERİ VARDIR.
- KIRMIZI IŞIK RAHATÇA GÖRÜLEBİLİR.
- BİTİŞ YÜZEYİNİN YERİ, DIŞ ÇAP, İÇ ÇAP GİBİ BİRÇOK ÖLÇÜ BÜYÜK ETKİNLİKLE SAPTANABİLİR.
- PROP UCUNDAKİ TOP CİHAZA BİR YAY VASITASIYLA BAĞLANMIŞTIR. BU SAYEDE FAZLA HAREKET AVANTAJI SAĞLANIR.
- TOP MERKEZ NOKTAYA DÖNDÜĞÜNDE YÜKSEK HASSASİYETLİ ÖLÇÜM ELDE EDİLİR.





IŞIKLI PROP

BİRİM mm

Ür. Kd.	D	d1	d2	L	l1	l2	Pil Tipi	Ağırlık (kg)	Sip. No.
VPS-20	20	16	10	157	77	35	UM-5#(SP) x2P/ R1./12V	0.4	15253
VPS-32	32	16	10	157	71	41		0.7	15254

PAH KIRMA MAKİNASI

VCF-500S



PRATİK

- FLAP DİSK KULLANILIR
- ÇELİK VE SERTLEŞTİRİLMİŞ DÖKME DEMİR İÇİN UYGUNDUR
- YUMUŞAK DEMİR VE ALUMİNYUM İÇİN UYGUN DEĞİLDİR.
- DÜZENSİZ PARÇALARDA KULLANILIRSA OLUŞAN YÜZEY GÜÇSÜZ OLABİLİR.

AKSESUAR : FLAP DİSK 165Øx22Ø

VCF-600



VCF

- 500S : FLAP DİSK KULLANILIR.
- SERT VE RİJİT MALZEMELERDE UYGUNDUR.
- 600 : KOLAYCA TAŞINIR VE AĞIR PARÇALARIN İŞLENMESİNİ KOLAYLAŞTIRIR.
- KARE ŞEKİLLİ TUNGSTEN KARBÜR UÇ OLAN ISO1203SPUN KULLANILIR. BASİTLEŞTİRİLMİŞ KULLANIMI VASIFSIZ ELEMANLAR İÇİN UYGUNDUR.

AKSESUAR : UÇ SPMW 321 ZSPMW 090308

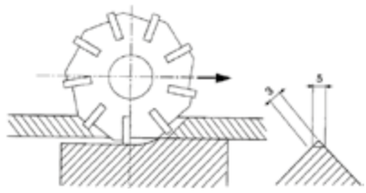
Ür. Kd.	Sip. No.
VCF-500S	15258

MAKİNELER

VERTEX® TAYVAN

VCF-700





VCF ÖZELLİKLERİ

- 700 : TAŞINABİLİRDİR. DEMİR VE DEMİR ALAŞIMLARI ÖZELLİKLE ÇELİK VE DÖKME DEMİR İÇİN UYGUNDUR.
- KARE ŞEKİLLİ TUNGSTEN KARBÜR UÇ OLAN ISO1203SPUN KULLANILIR. BASİTLEŞTİRİLMİŞ KULLANIMI VASIFSIZ ELEMANLAR İÇİN UYGUNDUR.

AKSESUAR : FREZE

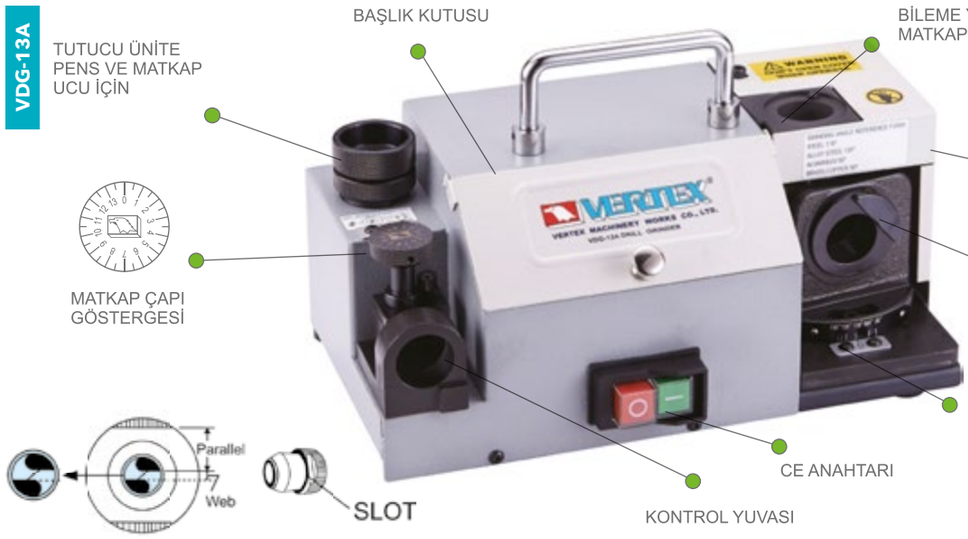
Ür. Kd.	Sip. No.
VCF-700	15260

TEKNIK BILGILER

Gerekli Alan	VCF-500S	VCF-600	VCF-700
	330 x 410 mm	500 x 440 mm	500 x 220 mm
Ağırlık (kg)	26	3.7	14
Voltaj	3Ø220V ve 1Ø110V/220V 3Ø380V/415V 50HZ/60HZ		
Motor Çıkışı	0.7KW		0.37KW
Hız	3500 r.p.m	12000 r.p.m	3500 r.p.m
Ray Yuvası Uzunluğu	320 mm	100 mm	200 mm
Pah Yüksekliği	0-3 mm	0-3 mm	0-7 mm
Pah Açısı	45°	45°	15° ~ 45° AYARLANABİLİR

MATKAP BİLEME MAKİNASI

VDG-13A





- MATKAP UÇLARININ BİLENMESİ İÇİN KULLANILIR.
- HASAS VE KULLANIMI BASİTTİR. MATKAP UÇLARI HIZLI BİR BİÇİMDE BİLENEBİLİR.
- ±0,05 MM HASSASİYET GARANTİLİDİR.
- GÜÇLÜ MOTURU 2 SAAT ÇALIŞMAYI DESTEKLER.
- KARBÜR VE HSS DAHİL HER TÜRLÜ MATKAP İÇİN UYGUNDUR.
- KARBÜR BİLEME TAŞI İLE BİRLİKTE TESLİM EDİLİR
- KARBÜR TAŞ İLE HSS ÜRÜN BİLENMEZ
- HSS ÜRÜNLER İÇİN TAŞ TEMİN EDİLEBİLİR

Ür. Kd.	Matkap Çapı	Uç Açısı	Güç Kaynağı	Motor Gücü	Bileyici	Net Ağırlık	Ölçüler	Sip. No.
VDG-13A	Ø2.0-Ø13.0	90°- 140°	AC-110 veya 220 1PH	5100R.P.M.	SDC #200	9.7 kgs	W282xD185xH110 mm	15271
VDG-25	Ø12-Ø25	100° -136°	AC-110 veya 220 1PH	5300 R.P.M.	SDC #200	29 kgs	W380xD240xH200 mm	15272

ÇANAK TAŞ

Ür. Kd.	Bilenecek Malzeme	Tane Büyüklüğü	Sip. No.
VDG-13B	HSS	CBN200	15273
VDG-13D	KARBÜR	SDC200	15274
VDG-25B	HSS	CBN200	15275
VDG-25D	KARBÜR	SDC200	15276

Opsiyonel Özel Pens Ölçüleri	ER-20	ER-40 Özel Ölçüleri
	"Ø 3.5, 4.5, 5.5, 6.5, 7.5, 8.5, 9.5, 10.5, 11.5, 12.5"	"Ø,8, 9, 10, 11, 26, 27, 28, 29,30"

VDG-25 Ø30 mm'ye KADAR KULLANILABİLİR.
BUNUN İÇİN LÜTFEN OPSİYONEL PENSLERİ TERCİH EDİN.

VDG-25



UNIVERSAL BİLEME MAKİNASI

VERTEX® TAYVAN

UNIVERSAL BİLEME MAKİNASI

U2



HSS VE KARBÜR'DEN ÜRETİLMİŞ NEGATİF AÇILI , RADYUSLU DAHİL ÇOK ÇEŞİTLİ KESİCİ UÇLARIN TAŞLANMASINDA KULLANILIR.

POZİSYONLU UNIVERSAL İNDEKS KAFASI İLE HERHANGİ BİR AÇI VE ŞEKLİN TAŞLANMASINI SAĞLAR.

FREZE, MATKAP, KALEM VS TAŞLANABİLMESİ İÇİN 100-3600 DEVİR ARASI ÇALIŞTIRILABİLİR.

ÖZEL APARATLARIN KURULUMU VE KULLANIMI OLDUKÇA BASİTTİR.

- MAX. TAŞLAMA ÇAPI Ø25
- TEPE AÇISI 0°-180°
- KANAL AÇISI 0°- 45°
- NEGATİF AÇI 0°-26°
- TAŞLAMA MİLİ: 3600 RPM
- ÇANAK TAŞ: 100X50X20 mm
- MOTOR 1/3 HP 220V50/90HZ
- NET AĞIRLIK 45 Kg
- BRÜT AĞIRLIK 58 Kg
- MAKİNA ÖLÇÜLERİ BxExY 45x40x35 cm
- KUTU ÖLÇÜLERİ BxExY 55X45X47 cm

Ür. Kd.	Sip. No.
U2	15261
U2-E	15262
U2-T	15263
U2-L	15264
U2-D #100	15265
U2-B KAYIŞ	15266
U2-G ÇANAK TAŞ	15267
U2-R #200	15268

STANDART AKSESUARLAR

TAŞ DÜZELTME ELMASI	1 PARÇA
TAŞ FLANŞI (BAĞLI)	1 PARÇA
ÇANAK TAŞ	1 PARÇA (U2-G)
PENS Ø4,6,8,10,12 mm	5 PARÇA
MERKEZLEME ÇUBUĞU	1 PARÇA
TAHRİK KAYIŞI	1 PARÇA
KİLİTLEME PİMİ	1 PARÇA
ALETLER	1 SET

OPSİYONEL AKSESUARLAR

MATKAP BİLEME APARATI U2-T
FREZE BİLEME APARATI U2-E
TAKIM TAŞLAMA APARATI U2-L
ÇANAK TAŞ BALANS STANDI
LBS-100
ELMAS ÇANAK TAŞ U2-D
SUNİ REÇİNELİ VE CBN ÇANAK TAŞ U2-R
EXTRA PENSLER 1, 2, 2.5, 3, 5, 7, 9, 16, 18, 20, 25mm
VE 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8").
■ L:120 ■ D:28 ■ d:20 ■ G:2.0P ■ HASSASİYET: ±0.02MM
■ α:17°30' ■ AĞIRLIK:0.18KGS ■ SERTLİK: HRC47°





Ür. Kd.	Ölçü	Sip. No.
NO : 1	3~16 mm	15269



Ür. Kd.	Ölçü	Sip. No.
NO : 2	18~25 mm	15270

U2-E FREZE BİLEME APARATI



AĞIRLIK : 2kg

U2-T MATKAP BİLEME APARATI



AĞIRLIK : 2kg

U2-L TORNA TAKIM TAŞLAMA APARATI



AĞIRLIK : 0.9kg

ELMAS ÇANAK TAŞ SUNİ REÇİNELİ & CBN ÇANAK TAŞ

U2-D



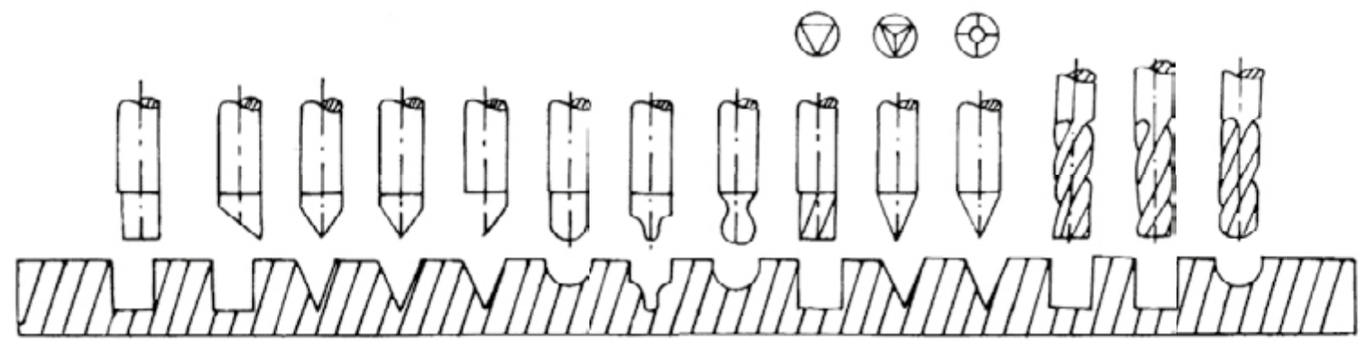
AĞIRLIK: 0.7kg

U2-R



AĞIRLIK: 0.5kg

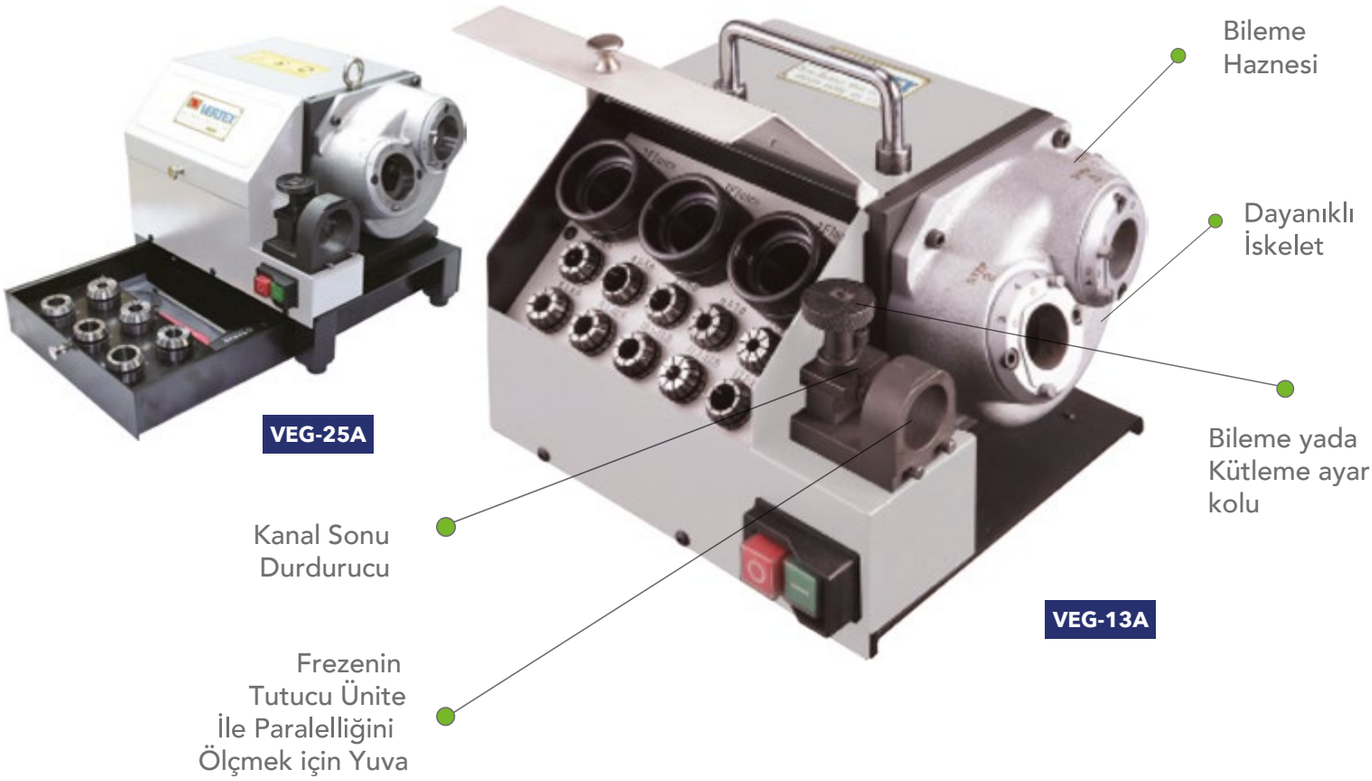
ZIMBA VE FREZE UÇ PROFİLLERİ



FREZE BİLEME MAKİNASI

VERTEX® TAYVAN

FREZE BİLEME MAKİNASI



- 2,3,4 AĞIZLI FREZELERİ BİLEMEK İÇİN KULLANILIR.
- HASSAS VE KOLAY KULLANIM SAĞLAR. FREZELERİ HIZLI BİR ŞEKİLDE BİLENEBİLİR.
- ±0,02 mm HASSASİYET GARANTİLİDİR.
- KARBÜR BİLEME TAŞI İLE BİRLİKTE TESLİM EDİLİR
- KARBÜR TAŞ İLE HSS ÜRÜN BİLENMEZ
- HSS ÜRÜNLER İÇİN TAŞ TEMİN EDİLEBİLİR

Ür. Kd.	Veg-13A	Veg-25A
FREZE ÇAP ARALIĞI	Ø4~ Ø13mm	Ø12~Ø25mm
MOTOR	450W	1000W
HIZ	4800rpm	4300rpm
GÜÇ	AC-110 veya 220 1PH 50/60HZ	AC-110 veya 220 1PH 50/60HZ
AKSİYAL AÇI	NO.1 30° Derecelik düz yiv açısı NO.2 20° Derecelik ikinci radyal açı NO.3 6° Derecelik kesme açısı	NO.1 30° Derecelik düz yiv açısı NO.2 20° Derecelik ikinci radyal açı NO.3 6° Derecelik kesme açısı
STANDART AKSESUARLAR	Alaşımlı Çelik Pens ER-20 Pens: Ø4, 5, 6, 7, 8, 9, 10, 11, 12, 13mm 10 adet/set, Anahtar:1 adet SDC 270 x1,Ø4 ~ Ø6mm için SDC 270 x1 Ø8~ Ø13mm için Kare Tip 4 Ağızlı freze için x 1 Set Hex. Tip 3 Ağızlı freze için x 1 Set Paralel Tip 2 Ağızlı freze için x 1 Set	Alaşımlı Çelik Pens ER-40 Pens: Ø12, 16, 18, 20, 22, 25mm 6 adet/set, Anahtar:1 adet SDC 150 x1 Ø12 ~ Ø25mm için Kare Tip 4 Ağızlı freze için x 1 Set Hex. Tip 3 Ağızlı freze için x 1 Set Paralel Tip 2 Ağızlı freze için x 1 Set
PAKET ÖLÇÜLERİ	320x260x300mm	365x293x345mm
AĞIRLIK (KG)	17	31
FİYAT KODU	15277	15278

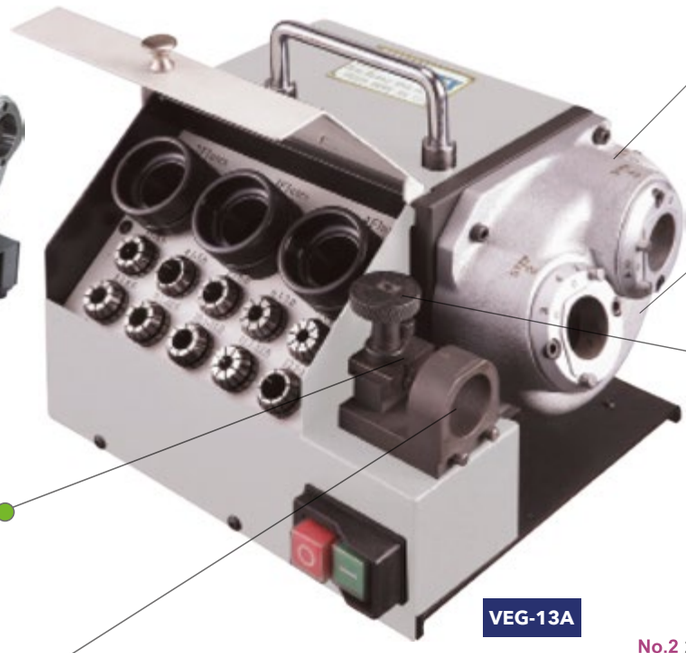
HASSAS FREZE BİLEME MAKİNESİ VE YEDEKLERİ

VERTEX® TAYVAN

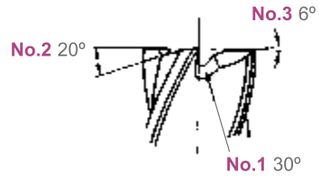
HASSAS FREZE BİLEME MAKİNASI YEDEK TAŞLARI



VEG-25A

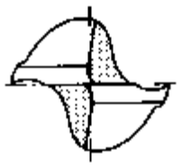


VEG-13A



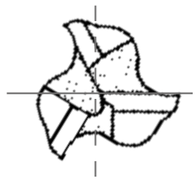


2 Ağızlı Freze İçin



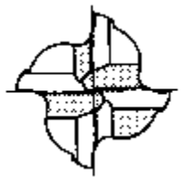


3 Ağızlı Freze İçin

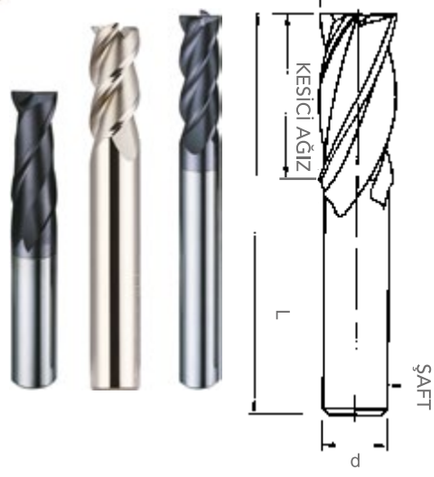




4 Ağızlı Freze İçin







* HER TUTUCU ÜZERİNE 2,3 VE 4 KONUMLARI İŞARETLENMİŞTİR

OPSİYONEL AKSESUAR

Ür. Kd.	Bileme Taşı	Kullanılacağı Mazeme	Ağırlık (kg)	Sip. No.
VEG-13BS	CBN 300x1 (4 ~ 6mm için)	H.S.S	0.35	15279
VEG-13BL	CBN 270x1 (7 ~ 13mm için)	H.S.S	0.35	15280
VEG-13DS	SDC 270x1 (4 ~ 6mm için)	KARBÜR	0.35	15281
VEG-13DL	SDC 270x1 (7 ~ 13mm için)	KARBÜR	0.35	15282
VEG-25BS	CBN 150x1 (12 ~ 25mm için)	H.S.S	-	15283
VEG-25DS	SDC 150x1 (12 ~ 25mm için)	KARBÜR	-	15284

UNIVERSAL BİLEME MAKİNESİ VE YEDEKLERİ

ÜNİVERSAL BİLEME MAKİNASI

U2



ÜNİVERSAL BİLEME MAKİNASI

HSS VE KARBÜR'DEN ÜRETİLMİŞ NEGATİF AÇILI , RADYUSLU DAHİL ÇOK ÇEŞİTLİ KESİCİ UÇLARIN TAŞLANMASINDA KULLANILIR.

POZİSYONLU UNIVERSAL İNDEKS KAFASI İLE HERHANGİ BİR AÇI VE ŞEKLİN TAŞLANMASINI SAĞLAR.

FREZE, MATKAP, KALEM VS TAŞLANABİLMESİ İÇİN 100-3600 DEVİR ARASI ÇALİŞTIRILABİLİR.

ÖZEL APARATLARIN KURULUMU VE KULLANIMI OLDUKÇA BASİTTİR.

- MAX. TAŞLAMA ÇAPI Ø25
- TEPE AÇISI 0°-180°
- KANAL AÇISI 0°- 45°
- NEGATİF AÇI 0°-26° TAŞLAMA MİLİ: 3600 RPM ÇANAK TAŞ: 100X50X20 mm MOTOR 1/3 HP 220V50/90HZ NET AĞIRLIK 45 Kg
- BRÜT AĞIRLIK 58 Kg
- MAKİNA ÖLÇÜLERİ BxExY 45x40x35 cm
- KUTU ÖLÇÜLERİ BxExY 55X45X47 cm
- STANDART AKSESUARLAR

U2-E FREZE BİLEME APARATI



U2-E MATKAP BİLEME APARATI



U2-L TORNA TAKIM TAŞLAMA APARATI



R8 PENS



STANDART AKSESUARLAR

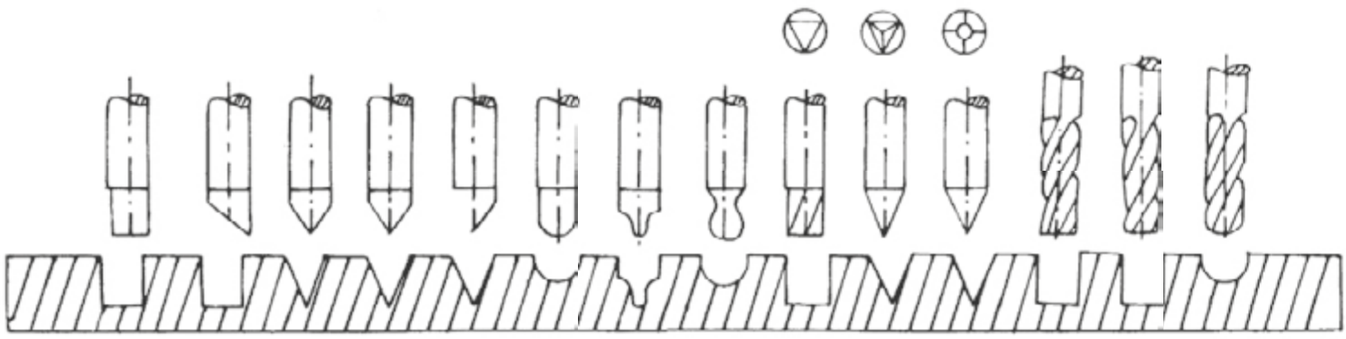
- MATKAP BİLEME APARATI U2-T
- FREZE BİLEME APARATI U2-E
- TAKIM TAŞLAMA APARATI U2-L
- TAŞ DÜZELTME ELMASI 1 PARÇA
- TAŞ FLANŞI(BAĞLI) 1 PARÇA
- ÇANAK TAŞ 1 PARÇA (U2-G)
- PENS Ø4,6,8,10,12 mm 5 PARÇA
- MERKEZLEME ÇUBUĞU 1 PARÇA
- TAHRİK KAYİŞI 1 PARÇA
- KİLİTLEME PİMİ 1 PARÇA
- ALETLER 1 SET

Ür. Kd.	Sip. No.
U2	15440
U2-E	15441
U2-T	15442
U2-L	15443
U2-D #100	15444
U2-B KAYIŞ	15445
U2-G ÇANAK TAŞ	15446
U2-R #200	15447
U2-R-1 #400	15448

ELMAS ÇANAK TAŞLAR

Ür. Kd.	Ölçü	Tane Büyüklüğü	Sip. No.
U2-D	100Çx10Ex5Ux20Yx22T	#100	15449
U2-R	100Çx8Ex2Xx20Y	#200	15450
U2-R-1	100Çx8Ex2Xx20Y	#400	15451

ZIMBA VE FREZE UÇ PROFİLLERİ



MATKAP VE FREZE BİLEME MAKİNELERİ

MATKAP BİLEME MAKİNASI

C.KR-13A



C.KR-26A







- PORTATİF MATKAP BİLEYİCİ.
- KOLAY KULLANIM, HIZLI VE HASSAS BİLEME
- ÖZEL DONANIMI SAYESİNDE UZUN KULLANIM ÖMRÜ
- MATKAP UÇLARININ ÖZ KISMINDA AÇTIĞI İKİNCİL KESME KENARI SAYESİNDE DELME İŞLEMİNİ KOLAYLAŞTIRIR.
- KARBÜR BİLEME TAŞI İLE BİRLİKTE TESLİM EDİLİR
- KARBÜR TAŞ İLE HSS ÜRÜN BİLENMEZ
- HSS ÜRÜNLER İÇİN TAŞ TEMİN EDİLEBİLİR

Ür. Kd.	C.KR-13A	C.KR-26A
MATKAP BİLEME ARALIĞI	Ø2~ Ø13	Ø8~ Ø30
BİLEME AÇISI	90° ~135°	85° ~140°
MOTOR	180W	450W
HIZ	5300rpm	4000rpm
GÜÇ	220 VAC	220 VAC
ÇANAK TAŞ	SD/CBN	SD/CBN
PAKET ÖLÇÜLERİ	370x180x190mm	460x240x220mm
AĞIRLIK (KG)	10	27
FİYAT KODU	15452	15453

FREZE BİLEME MAKİNASI

C.KR-X3



C.KR-X5





- PORTATİF FREZE BİLEME MAKİNASI 2, 3, 4 VE 6 AĞIZLI PARMAK FREZELERİN BİLENMESİNE OLANAK SAĞLAR.
- DOĞRU VE HIZLI BİLEME
- KOLAY OPERASYON
- TEK BİR BİLEME TAŞI İLE TÜM OPERASYONLARDA UYGULAMA KOLAYLIĞI.
- UZUN KULLANIM ÖMRÜ
- KARBÜR BİLEME TAŞI İLE BİRLİKTE TESLİM EDİLİR
- KARBÜR TAŞ İLE HSS ÜRÜN BİLENMEZ
- HSS ÜRÜNLER İÇİN TAŞ TEMİN EDİLEBİLİR

Ür. Kd.	C.KR-X3	C.KR-X5
FREZE BİLEME ARALIĞI	Ø4~ Ø14	Ø13~ Ø30
BİLEME AÇISI	0°~5°	0°~5°
MOTOR	180W	450W
HIZ	5300rpm	4000rpm
GÜÇ	220 VAC	220 VAC
ÇANAK TAŞ	SD/CBN	SD/CBN
PAKET ÖLÇÜLERİ	320x210x200mm	500x290x300mm
AĞIRLIK (KG)	20	50
FİYAT KODU	15454	15455

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