

orh mek

MAKİNA LTD. ŞTİ.

 **OMPI** 1976[®]
S.r.l.

SERİ
SERIES

WO



HİDROLİK FREN VE KAVRAMA GRUBU
(İSLAK KAVRAMA)

**OIL ACTUATED CLUTCH-BRAKE UNIT
WET RUNNING**

Yalnızca fren veya sadece kavrama versiyonunda da kullanılabilir

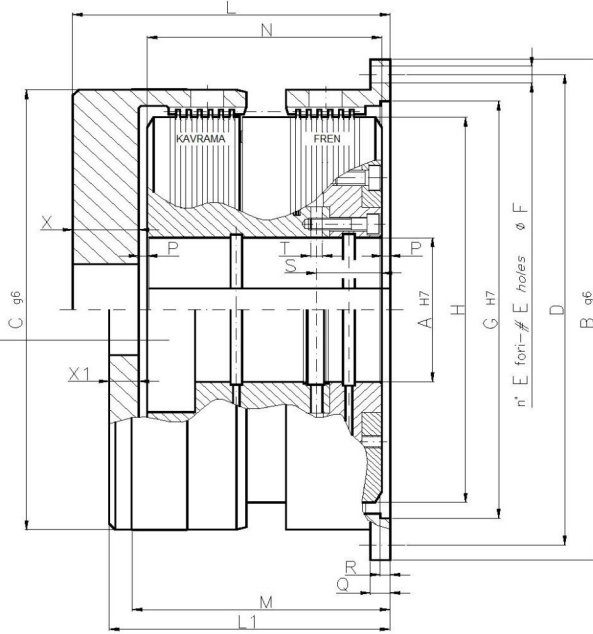
Available also as clutch or brake only

HİDROLİK KUMANDALI FREN - KAVRAMA GRUBU HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERİ
SERIES

WO

STANDART KAVRAMA
VE FREN
STANDARD CLUTCH
AND BRAKE



Kama yada konik sıkma şeklinde montaj edilir
mounting with clamping device or keyway

Boyutlar Size	012-005	025-010	050-024	100-056	200-112	400-224	1100-0840	2300-1500
A max	60 (2.362)	75 (2.953)	95 (3.740)	130 (5.118)	160 (6.299)	200 (7.874)	250 (9.843)	310 (12.204)
Tercih edilen - prebore	32 (1.26)	45 (1.77)	60 (2.36)	70 (2.75)	100 (3.93)	115 (4.53)	150 (5.91)	180 (7.09)
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	990 (38.98)
C	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	880 (34.64)
D	205 (8.07)	245 (9.64)	310 (12.20)	400 (15.75)	470 (18.50)	590 (23.23)	750 (29.53)	930 (36.61)
E	12	12	12	12	12	12	12	12
F	9 (0.35)	9 (0.35)	11 (0.43)	14 (0.55)	18 (0.71)	22 (0.87)	30 (1.18)	33 (1.30)
G	180 (7.09)	215 (8.46)	275 (10.83)	350 (13.78)	415 (16.34)	530 (20.87)	670 (26.38)	830 (32.68)
H	162 (6.37)	196 (7.71)	254 (10.00)	326 (12.83)	385 (15.16)	492 (19.37)	632 (24.88)	778 (30.63)
L	133 (5.24)	155 (6.10)	195 (7.68)	229.6 (9.04)	270 (10.63)	308.5 (12.14)	442 (17.40)	-
L1	117 (4.61)	136 (5.35)	173 (6.81)	204.6 (8.06)	240 (9.45)	273.5 (10.77)	397 (15.63)	-
X	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	55 (2.17)	65 (2.56)	80 (3.15)	-
X1	14 (0.55)	16 (0.63)	18 (0.71)	20 (0.79)	25 (0.98)	30 (1.18)	35 (1.38)	-
M	95 (3.74)	113 (4.45)	139 (5.47)	173.6 (6.83)	196 (7.72)	235 (9.25)	359 (14.13)	-
N	95 (3.74)	112 (4.41)	145 (5.71)	174.6 (6.87)	205 (8.07)	233.5 (9.19)	352 (13.86)	422 (16.61)
P	4 (0.16)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	10 (0.39)
Q	10 (0.39)	11 (0.43)	12 (0.47)	16 (0.63)	20 (0.79)	25 (0.98)	30 (1.18)	40 (1.57)
R	5 (0.19)	6 (0.24)	6 (0.24)	6 (0.24)	7 (0.28)	8 (0.31)	-	10 (0.39)
S	28 (1.10)	31 (1.22)	41 (1.61)	48.8 (1.92)	60 (2.36)	66 (2.60)	112.5 (4.43)	139 (5.47)
T	6 (0.24)	6 (0.24)	7 (0.28)	10 (0.39)	12 (0.47)	15 (0.59)	19 (0.75)	24 (0.94)
Disk Sayıları (Kavrama - Fren) discs number (clutch-brake)	5-5	5-5	6-6	6-6	6-6	7-7	7-7	7-7
Maksimum Hız RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Ağırlık kg (Lbs) Weight (1)	23 (50) 19 (42)	39 (86) 33 (72)	72 (159) 62 (136)	131 (288) 120 (264)	246 (542) 212 (467)	465 (1024) 400 (881)	- -	- -
Hava hacmi Stroke volume dm ³ (in ³)	0.011 (0.671)	0.013 (0.793)	0.039 (2.380)	0.046 (2.807)	0.072 (4.394)	0.144 (8.788)	0.256 (15.624)	0.644 (39.304)
J kam ² (Lbf ²)	İç -Inner 0.05 (1.19) Dış -Outer 0.06 (1.43) Dış -Outer 0.04 (0.95)	0.12 (2.85) 0.11 (2.61) 0.08 (1.90)	0.32 (7.59) 0.37 (8.77) 0.25 (5.93)	1.1 (26.1) 1.2 (28.5) 0.8 (19.0)	2.6 (61.7) 2.6 (61.7) 1.8 (42.7)	6.8 (161) 7.5 (178) 4.9 (116)	31.8 (753) - -	96.4 (2,289) - -
Çalışma Basıncı Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Statik Tork Kavraması Nm Stat. Trq. Clutch (lbin)	1020 (9,016)	2490 (22,011)	6110 (53,985)	11430 (101,164)	23720 (209,993)	52080 (460,387)	113800 (1,005,992)	234022 (2,071,094)
Dinamik Tork Freni Nm Dyn. Trq. Brake (lbin)	560 (4,950)	1000 (8,840)	2400 (21,216)	4800 (42,432)	9600 (84,864)	23100 (204,204)	84000 (742,560)	144444 (1,278,329)
18 Molle yayları bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Statik Tork Kavraması Nm Stat. Trq. Clutch (lbin)	1179 (10,422)	2769 (24,478)	6770 (59,949)	12730 (112,678)	26330 (233,056)	58252 (514,948)	136589 (1,207,447)	260838 (2,308,416)
Dinamik Tork Freni Nm Dyn. Trq. Brake (lbin)	467 (4,128)	834 (7,373)	2000 (17,680)	4000 (35,360)	8000 (70,720)	19250 (170,170)	70000 (618,800)	127777 (1,130,826)
15 Molle yayları bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Statik Tork Kavraması Nm Stat. Trq. Clutch (lbin)	1340 (11,846)	3052 (26,980)	7430 (65,826)	14030 (124,192)	28940 (256,119)	64426 (569,526)	159388 (1,408,990)	287654 (2,545,737)
Dinamik Tork Freni Nm Dyn. Trq. Brake (lbin)	374 (3,306)	667 (5,896)	1600 (14,144)	3200 (28,288)	6400 (56,576)	15400 (136,136)	56000 (495,040)	111110 (983,323)
12 Molle yayları bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Statik Tork Kavraması Nm Stat. Trq. Clutch (lbin)	1500 (13,260)	3335 (29,481)	8100 (71,702)	15330 (135,706)	31540 (279,182)	70600 (624,104)	182188 (1,610,542)	314469 (2,783,050)
Dinamik Tork Freni Nm Dyn. Trq. Brake (lbin)	280 (2,475)	500 (4,420)	1200 (10,608)	2400 (21,216)	4800 (42,432)	11550 (102,102)	42000 (371,280)	94444 (835,829)
9 Molle yayları bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) İnce Kapak muhafazalı versiyon - 1) Version with thin cup housing

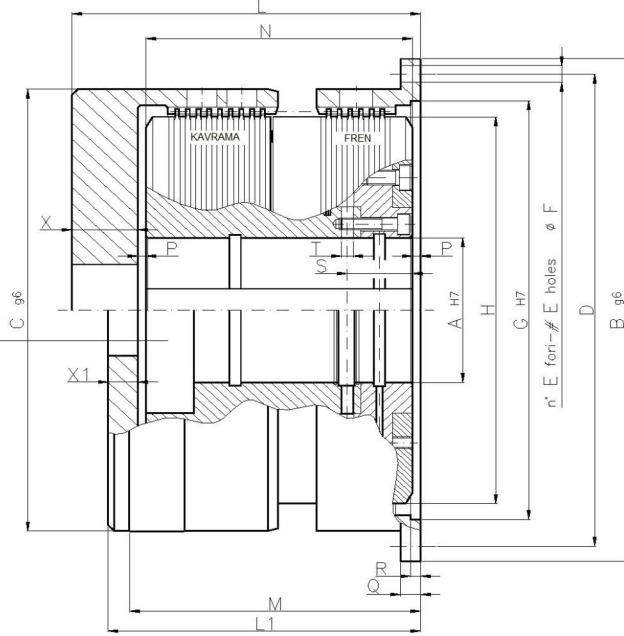
Boyutlar - dimensions in mm (inches)

HİDROLİK KUMANDALI FREN - KAVRAMA GRUBU HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERİ
SERIES

WO

GELİŞMİŞ KAVRAMA
STANDART FREN
INCREASED CLUTCH
STANDARD BRAKE



Kama yada konik sıkma şeklinde montaj edilir
mounting with clamping device or keyway

Boyutlar Size	020-005	040-010	080-024	160-056	320-112	640-224	1600-0840	3200-1500
A max	60 (2.362)	75 (2.953)	95 (3.740)	130 (5.118)	160 (6.299)	200 (7.874)	250 (9.843)	310 (12.204)
Tercih edilen - prebore	32 (1.26)	45 (1.77)	60 (2.36)	70 (2.75)	100 (3.93)	115 (4.53)	150 (5.91)	180 (7.09)
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	990 (38.98)
C	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	880 (34.64)
D	205 (8.07)	245 (9.64)	310 (12.20)	400 (15.75)	470 (18.50)	590 (23.23)	750 (29.53)	930 (36.61)
E	12	12	12	12	12	12	12	12
F	9 (0.35)	9 (0.35)	11 (0.43)	14 (0.55)	18 (0.71)	22 (0.87)	30 (1.18)	33 (1.30)
G	180 (7.09)	215 (8.46)	275 (10.83)	350 (13.78)	415 (16.34)	530 (20.87)	670 (26.38)	830 (32.68)
H	162 (6.37)	196 (7.71)	254 (10.00)	326 (12.83)	385 (15.16)	492 (19.37)	632 (24.88)	778 (30.63)
L	147 (5.79)	171.5 (6.75)	214.5 (8.44)	251.8 (9.91)	302 (11.89)	341 (13.42)	485.5 (19.11)	-
L1	131 (5.16)	152.5 (6.00)	192.5 (7.58)	226.8 (8.93)	272 (10.71)	306 (12.05)	440.5 (17.34)	-
X	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	55 (2.17)	65 (2.56)	80 (3.15)	-
X1	14 (0.55)	16 (0.63)	18 (0.71)	20 (0.79)	25 (0.98)	30 (1.18)	35 (1.38)	-
M	113 (4.45)	138.5 (5.45)	159.5 (6.28)	196.8 (7.75)	228 (8.98)	266 (10.47)	404 (15.91)	-
N	109 (4.29)	128.5 (5.06)	164.5 (6.48)	196.8 (7.74)	237 (9.33)	266 (10.47)	395.5 (15.57)	476 (18.74)
P	4 (0.16)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	10 (0.39)
Q	10 (0.39)	11 (0.43)	12 (0.47)	16 (0.63)	20 (0.79)	25 (0.98)	30 (1.18)	40 (1.57)
R	5 (0.19)	6 (0.24)	6 (0.24)	6 (0.24)	7 (0.28)	8 (0.31)	-	10 (0.39)
S	29 (1.14)	31 (1.22)	41 (1.61)	48.8 (1.92)	60 (2.36)	66 (2.60)	112.5 (4.43)	139 (5.47)
T	6 (0.24)	6 (0.24)	7 (0.28)	10 (0.39)	12 (0.47)	15 (0.59)	19 (0.75)	24 (0.94)
Disk Sayıları (Kavrama - Fren) discs number (clutch-brake)	8-5	8-5	9-6	9-6	10-6	10-7	10-7	10-7
Maksimum Hız RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Ağırlık Weight	25 (55) (1)	43 (95) (1)	80 (176) (1)	158 (248) (1)	272 (599) (1)	515 (1134) (1)	-	-
Hava hacmi Stroke volume	0.011 (0.671)	0.013 (0.793)	0.039 (2.380)	0.046 (2.807)	0.072 (4.394)	0.144 (8.788)	0.256 (15.624)	0.644 (39.304)
J İç -Inner	0.06 (1.43)	0.13 (3.08)	0.34 (8.06)	1.2 (28.5)	2.9 (68.7)	7.6 (180)	35.4 (840)	107.2 (2,546)
Diş -Outer	0.07 (1.66)	0.14 (3.32)	0.43 (10.2)	1.5 (35.6)	3.1 (73.5)	9.0 (213)	-	-
Diş -Outer	0.05 (1.19)	0.11 (2.61)	0.31 (7.35)	1.1 (26.1)	2.3 (54.5)	6.4 (152)	-	-
Çalışma Basıncı Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	1630 (14,409)	3980 (35,183)	9160 (81,110)	17140 (151,751)	39540 (349,999)	74400 (657,696)	162560 (1,437,030)	334310 (2,958,643)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	560 (4,950)	1000 (8,840)	2400 (21,216)	4800 (42,432)	9600 (84,864)	23100 (204,204)	84000 (742,560)	144444 (1,278,329)
18 Molle yayları bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	1887 (16,681)	4430 (39,161)	10160 (89,924)	19090 (169,017)	43890 (388,435)	83218 (735,647)	195127 (1,724,923)	371348 (3,286,429)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	467 (4,128)	834 (7,373)	2000 (17,680)	4000 (35,360)	8000 (70,720)	19250 (170,170)	70000 (618,800)	127777 (1,130,826)
15 Molle yayları bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	2142 (18,935)	4883 (43,166)	11150 (98,739)	21050 (186,292)	48230 (426,870)	92037 (813,607)	227697 (2,012,841)	408386 (3,614,216)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	374 (3,306)	667 (5,896)	1600 (14,144)	3200 (28,288)	6400 (56,576)	15400 (136,136)	56000 (495,040)	111110 (983,323)
12 Molle yayları bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	2398 (21,198)	5336 (47,170)	12150 (107,554)	23000 (203,567)	52570 (465,315)	100856 (891,567)	260268 (2,300,769)	445423 (3,941,993)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	280 (2,475)	500 (4,420)	1200 (10,608)	2400 (21,216)	4800 (42,432)	11550 (102,102)	42000 (371,280)	94444 (835,829)
9 Molle yayları bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) İnce Kapak muhafazası versiyon - 1) Version with thin cup housing

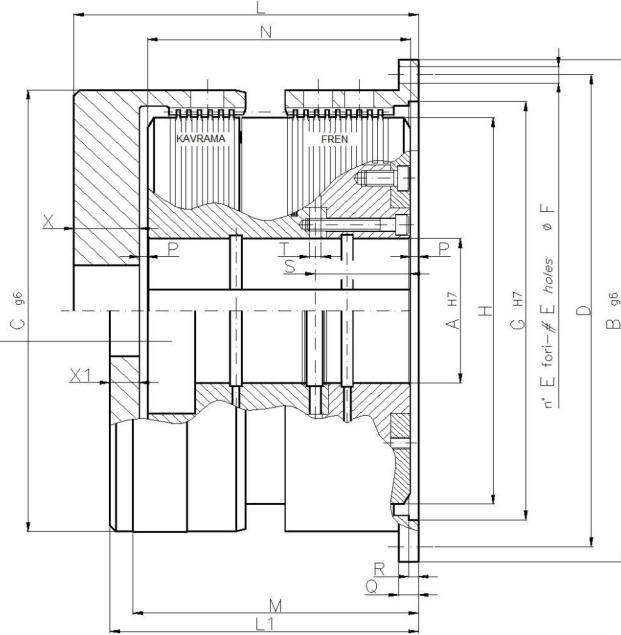
Boyutlar - dimensions in mm (inches)

HİDROLİK KUMANDALI FREN - KAVRAMA GRUBU HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

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GELİŞMİŞ FREN
STANDART KAVRAMA
INCREASED BRAKE
STANDARD CLUTCH



Kama yada konik sıkma şeklinde montaj edilir
mounting with clamping device or keyway

Boyutlar Size	012-009	025-016	050-036	100-072	200-144	400-330	1100-1200	2300-2100
A max	60 (2.362)	75 (2.953)	95 (3.740)	130 (5.118)	160 (6.299)	200 (7.874)	250 (9.843)	310 (12.204)
Tercih edilen - prebore	32 (1.26)	45 (1.77)	60 (2.36)	70 (2.75)	100 (3.93)	115 (4.53)	150 (5.91)	180 (7.09)
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	990 (38.98)
C	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	880 (34.64)
D	205 (8.07)	245 (9.64)	310 (12.20)	400 (15.75)	470 (18.50)	590 (23.23)	750 (29.53)	930 (36.61)
E	12	12	12	12	12	12	12	12
F	9 (0.35)	9 (0.35)	11 (0.43)	14 (0.55)	18 (0.71)	22 (0.87)	30 (1.18)	33 (1.30)
G	180 (7.09)	215 (8.46)	275 (10.83)	350 (13.78)	415 (16.34)	530 (20.87)	670 (26.38)	830 (32.68)
H	162 (6.37)	196 (7.71)	254 (10.00)	326 (12.83)	385 (15.16)	492 (19.37)	632 (24.88)	778 (30.63)
L	147 (5.79)	171.5 (6.75)	214.5 (8.44)	251.8 (9.91)	295.5 (11.64)	334 (13.15)	485.6 (19.12)	-
L1	131 (5.16)	152.5 (6.00)	192.5 (7.58)	226.8 (8.93)	265.5 (10.45)	299 (11.77)	440.6 (17.35)	-
X	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	55 (2.17)	65 (2.56)	80 (3.15)	-
X1	14 (0.55)	16 (0.63)	18 (0.71)	20 (0.79)	25 (0.98)	30 (1.18)	35 (1.38)	-
M	111 (4.37)	129.5 (5.09)	158.5 (6.12)	195.8 (7.71)	221.5 (8.72)	266 (10.47)	402.6 (15.85)	-
N	109 (4.29)	128.5 (5.06)	164.5 (6.48)	196.8 (7.75)	230.5 (9.07)	259 (10.20)	395.6 (15.57)	476 (18.74)
P	4 (0.16)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	10 (0.39)
Q	10 (0.39)	11 (0.43)	12 (0.47)	16 (0.63)	20 (0.79)	25 (0.98)	30 (1.18)	40 (1.57)
R	5 (0.19)	6 (0.24)	6 (0.24)	6 (0.24)	7 (0.28)	8 (0.31)	-	10 (0.39)
S	42 (1.65)	47.5 (1.87)	60.5 (2.38)	71 (2.80)	85.5 (3.37)	91.5 (3.60)	156.1 (6.15)	159 (6.26)
T	6 (0.24)	6 (0.24)	7 (0.28)	10 (0.39)	12 (0.47)	15 (0.59)	19 (0.75)	24 (0.94)
Disk Sayıları (Kavrama - Fren) discs number (clutch-brake)	5-8	5-8	6-9	6-9	6-9	7-10	7-10	7-10
Maksimum Hız RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Ağırlık Weight	25 (55) (1)	43 (95) (1)	80 (176) (1)	158 (248) (1)	272 (599) (1)	515 (1134) (1)	-	-
Hava hacmi Stroke volume	0.011 (0.671)	0.013 (0.793)	0.039 (2.380)	0.046 (2.807)	0.072 (4.394)	0.144 (8.788)	0.256 (15.624)	0.644 (39.304)
J	0.06 (1.43)	0.13 (3.08)	0.34 (8.06)	1.2 (28.5)	2.9 (68.7)	7.6 (180)	35.4 (840)	107.2 (2,546)
kam² (Lbf ft²)	0.07 (1.66)	0.14 (3.32)	0.43 (10.2)	1.5 (35.6)	3.1 (73.5)	9.0 (213)	-	-
(1)	0.05 (1.19)	0.11 (2.61)	0.31 (7.35)	1.1 (26.1)	2.3 (54.5)	6.4 (152)	-	-
Çalışma Basıncı Operating pressure	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Statik Tork Kavraması Stat. Trq. Clutch	1020 (9,016)	2490 (22,011)	6110 (53,985)	11430 (101,164)	23720 (209,993)	52080 (460,387)	113800 (1,005,992)	234022 (2,071,094)
Dinamik Tork Freni Dyn. Trq. Brake	900 (7,956)	1600 (14,144)	3600 (31,824)	7200 (63,648)	14400 (127,296)	33000 (291,720)	120000 (1,060,800)	206353 (1,826,224)
18 Molle yayları 18 Molle yayları	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Statik Tork Kavraması Stat. Trq. Clutch	1179 (10,422)	2769 (24,478)	6770 (59,949)	12730 (112,678)	26330 (233,056)	58252 (514,948)	136589 (1,207,447)	260838 (2,308,416)
Dinamik Tork Freni Dyn. Trq. Brake	747 (6,603)	1333 (11,784)	3000 (26,520)	6000 (53,040)	12000 (106,080)	27500 (243,100)	100000 (884,000)	182543 (1,615,505)
15 Molle yayları 15 Molle yayları	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Statik Tork Kavraması Stat. Trq. Clutch	1340 (11,846)	3052 (26,980)	7430 (65,826)	14030 (124,192)	28940 (256,119)	64426 (569,526)	159388 (1,408,990)	287654 (2,545,737)
Dinamik Tork Freni Dyn. Trq. Brake	597 (5,277)	1067 (9,432)	2400 (21,216)	4800 (42,432)	9600 (84,864)	22000 (194,480)	80000 (707,200)	158733 (1,404,787)
12 Molle yayları 12 Molle yayları	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Statik Tork Kavraması Stat. Trq. Clutch	1500 (13,260)	3335 (29,481)	8100 (71,702)	15330 (135,706)	31540 (279,182)	70600 (624,104)	182188 (1,610,542)	314469 (2,783,050)
Dinamik Tork Freni Dyn. Trq. Brake	448 (3,960)	800 (7,072)	1800 (15,912)	3600 (31,824)	7200 (63,648)	16500 (145,860)	60000 (530,400)	134923 (1,194,068)
9 Molle yayları 9 Molle yayları	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) İnce Kapak muhafazalı versiyon - 1) Version with thin cup housing

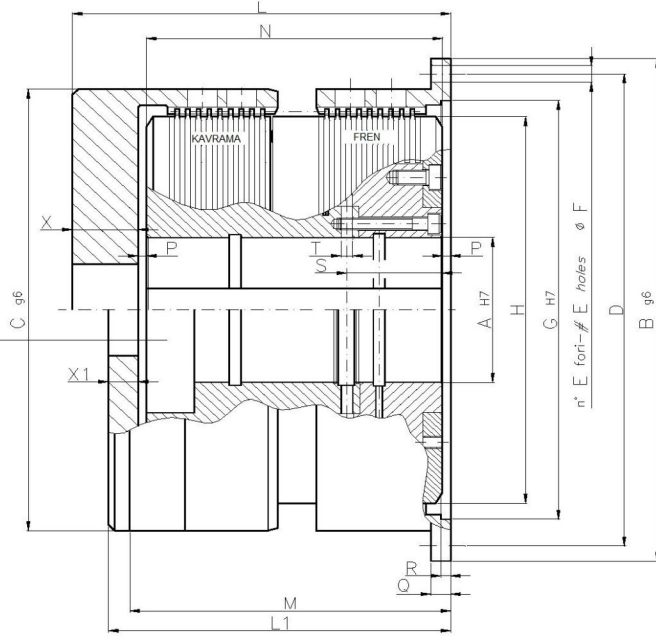
Boyutlar - dimensions in mm (inches)

HİDROLİK KUMANDALI FREN - KAVRAMA GRUBU HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERİ
SERIES

WO

GELİŞMİŞ
KAVRAMA VE FREN
INCREASED
CLUTCH AND BRAKE



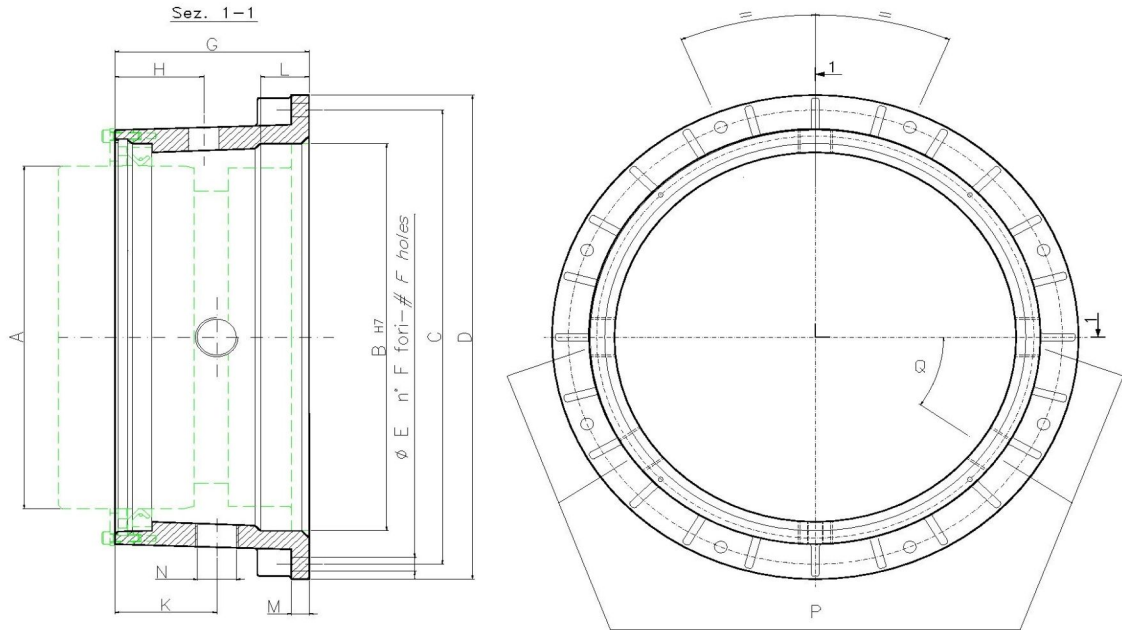
Kama yada konik sıkma şeklinde montaj edilir
mounting with clamping device or keyway

Boyutlar Size	020-010	040-016	080-036	160-072	320-144	640-330	1600-1200	3200-2100
A max	60 (2.362)	75 (2.953)	95 (3.740)	130 (5.118)	160 (6.299)	200 (7.874)	250 (9.843)	310 (12.204)
Tercih edilen - prebore	32 (1.26)	45 (1.77)	60 (2.36)	70 (2.75)	100 (3.93)	115 (4.53)	150 (5.91)	180 (7.09)
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	990 (38.98)
C	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	880 (34.64)
D	205 (8.07)	245 (9.64)	310 (12.20)	400 (15.75)	470 (18.50)	590 (23.23)	750 (29.53)	930 (36.61)
E	12	12	12	12	12	12	12	12
F	9 (0.35)	9 (0.35)	11 (0.43)	14 (0.55)	18 (0.71)	22 (0.87)	30 (1.18)	33 (1.30)
G	180 (7.09)	215 (8.46)	275 (10.83)	350 (13.78)	415 (16.34)	530 (20.87)	670 (26.38)	830 (32.68)
H	162 (6.38)	196 (7.71)	254 (10.00)	326 (12.83)	385 (15.16)	492 (19.37)	632 (24.88)	778 (30.63)
L	160 (6.29)	188 (7.40)	234 (9.21)	274 (10.78)	327.5 (12.89)	366.5 (14.43)	529.1 (20.83)	-
L1	144 (5.67)	169 (6.65)	212 (8.34)	249 (9.80)	297.5 (11.71)	331.5 (13.05)	484.1 (19.06)	-
X	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	55 (2.17)	65 (2.56)	80 (3.15)	-
X1	14 (0.55)	16 (0.63)	18 (0.71)	20 (0.79)	25 (0.98)	30 (1.18)	35 (1.38)	-
M	126 (4.96)	155 (6.10)	179 (7.05)	219 (8.62)	253.5 (9.98)	291.5 (11.48)	447.6 (18.42)	-
N	122 (4.80)	145 (5.71)	184 (7.24)	219 (8.62)	262.5 (10.33)	291.5 (11.48)	439.1 (17.29)	530 (25.19)
P	4 (0.16)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	5 (0.19)	10 (0.39)
Q	10 (0.39)	11 (0.43)	12 (0.47)	16 (0.63)	20 (0.79)	25 (0.98)	30 (1.18)	40 (1.57)
R	5 (0.19)	6 (0.24)	6 (0.24)	6 (0.24)	7 (0.28)	8 (0.31)	-	10 (0.39)
S	42 (1.65)	47.5 (1.87)	60.5 (2.38)	71 (2.80)	85.5 (3.37)	91.5 (3.60)	156.1 (6.15)	193 (7.59)
T	6 (0.24)	6 (0.24)	7 (0.28)	10 (0.39)	12 (0.47)	15 (0.59)	19 (0.75)	24 (0.94)
Disk Sayıları (Kavrama - Fren) discs number (clutch-brake)	8-8	8-8	9-9	9-9	10-9	10-10	10-10	10-10
Maksimum Hiz RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Ağırlık Weight	-	-	-	-	-	-	-	-
Hava hacmi Stroke volume	0.011 (0.671)	0.013 (0.793)	0.039 (2.380)	0.046 (2.807)	0.072 (4.394)	0.144 (8.788)	0.256 (15.624)	0.644 (39.304)
J İç -Inner Dış -Outer kcm ² (Lbf ²)	0.06 (1.43) - -	0.14 (3.32) - -	0.37 (8.79) - -	1.2 (28.5) - -	3.1 (73.6) - -	8.3 (198) - -	39 (926) - -	118 (2,802) - -
Çalışma Basıncı Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	1630 (14,409)	3980 (35,183)	9160 (81,110)	17140 (151,751)	39540 (349,999)	74400 (657,696)	162560(1,437,030)	334310(2,958,643)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	900 (7,956)	1600 (14,144)	3600 (31,824)	7200 (63,648)	14400 (127,296)	33000 (291,720)	120000(1,060,800)	206353(1,826,224)
18 Molle yayları bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	1887 (16,681)	4430 (39,161)	10160 (89,924)	19090 (169,017)	43890 (388,435)	83218 (735,647)	195127 (1,724,923)	371348(3,286,429)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	747 (6,603)	1333 (11,784)	3000 (26,520)	6000 (53,040)	12000 (106,080)	27500 (243,100)	100000 (884,000)	182543(1,615,505)
15 Molle yayları bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	2142 (18,935)	4883 (43,166)	11150 (98,739)	21050 (186,292)	48230 (426,870)	92037 (813,607)	227697 (2,012,841)	408386(3,614,216)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	597 (5,277)	1067 (9,432)	2400 (21,216)	4800 (42,432)	9600 (84,864)	22000 (194,480)	80000 (707,200)	158733(1,404,787)
12 Molle yayları bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Statik Tork Kavraması Stat. Trq. Clutch (lbin)	2398 (21,198)	5336 (47,170)	12150 (107,554)	23000 (203,567)	52570 (465,315)	100856 (891,567)	260268 (2,300,769)	445423(3,941,993)
Dinamik Tork Freni Dyn. Trq. Brake (lbin)	448 (3,960)	800 (7,072)	1800 (15,912)	3600 (31,824)	7200 (63,648)	16500 (145,860)	60000 (530,400)	134923(1,194,068)
9 Molle yayları bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) İnce Kapak muhafazalı versiyon - 1) Version with thin cup housing

Boyutlar - dimensions in mm (inches)

YAĞ TOPLAYICI GÖVDE - OIL COVER



Boyutlar Size	012-005	025-010	050-024	100-056	200-112	400-224	1100-0840	2300-1500
A	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	-
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	-
C	260 (10.24)	305 (12.01)	385 (15.16)	480 (18.89)	555 (21.85)	685 (26.97)	865 (34.05)	-
D	275 (10.83)	325 (12.79)	410 (16.14)	505 (19.88)	580 (22.83)	710 (27.95)	895 (35.23)	-
E	9 (0.35)	9 (0.35)	11 (0.43)	11 (0.43)	11 (0.43)	11 (0.43)	13 (0.51)	-
F	8	8	8	8	12	12	12	-
G	106 (4.17)	120 (4.72)	145 (5.71)	180 (7.09)	205 (8.07)	235 (9.25)	305 (12.01)	-
H	46 (1.81)	55 (2.16)	66 (2.60)	83 (3.26)	95 (3.74)	109 (4.29)	195 (7.68)	-
K	60 (2.36)	63 (2.48)	80 (3.15)	110 (4.33)	125 (4.92)	145 (5.71)	195 (7.68)	-
L	26.5 (1.04)	30 (1.18)	30 (1.18)	30 (1.18)	38 (1.49)	45 (1.77)	68 (2.68)	-
M	11 (0.43)	11 (0.43)	12 (0.47)	14 (0.55)	15 (0.59)	16 (0.63)	18 (0.71)	-
N	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	-
P	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	2"	-
Q	35°	35°	35°	35°	30°	30°	30°	-

Boyutlar Size	020-005 012-010	040-010 025-016	080-024 050-036	160-056 100-072	320-112 200-144	640-224 400-330	1600-0840 1100-1200	3200-1500 2300-2100
A	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	-
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	-
C	260 (10.24)	305 (12.01)	385 (15.16)	480 (18.89)	555 (21.85)	685 (26.97)	865 (34.05)	-
D	275 (10.83)	325 (12.79)	410 (16.14)	505 (19.88)	580 (22.83)	710 (27.95)	895 (35.23)	-
E	9 (0.35)	9 (0.35)	11 (0.43)	11 (0.43)	11 (0.43)	11 (0.43)	13 (0.51)	-
F	8	8	8	8	12	12	12	-
G	121 (4.76)	136.5 (5.37)	165 (6.50)	206 (8.11)	237 (9.33)	266 (10.47)	380 (14.96)	-
H	35 (1.37)	71.5 (2.81)	76 (2.99)	96 (3.78)	111 (4.37)	125 (4.92)	270 (10.63)	-
K	71 (2.80)	63 (2.48)	101 (3.98)	141 (5.55)	157 (6.18)	181 (7.13)	270 (10.63)	-
L	26.5 (1.04)	30 (1.18)	30 (1.18)	30 (1.18)	38 (1.49)	45 (1.77)	68 (2.68)	-
M	11 (0.43)	11 (0.43)	12 (0.47)	14 (0.55)	15 (0.59)	16 (0.63)	18 (0.71)	-
N	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	-
P	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	2"	-
Q	35°	35°	35°	35°	30°	30°	30°	-

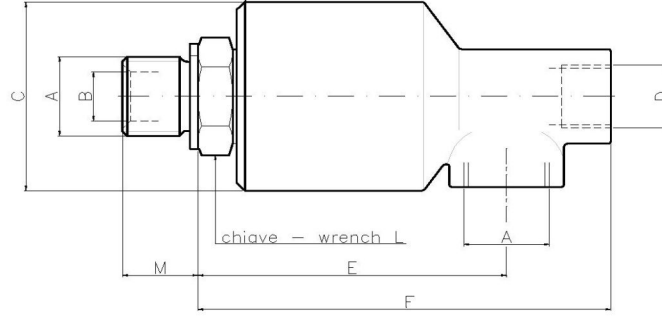
Boyutlar Size	020-010	040-016	080-036	160-072	320-144	640-330	1600-1200	3200-2100
A	190 (7.48)	230 (9.05)	300 (11.81)	380 (14.96)	440 (17.32)	560 (22.05)	710 (27.95)	-
B	220 (8.66)	260 (10.24)	330 (12.99)	425 (16.73)	500 (19.68)	630 (24.80)	800 (31.50)	-
C	260 (10.24)	305 (12.01)	385 (15.16)	480 (18.89)	555 (21.85)	685 (26.97)	865 (34.05)	-
D	275 (10.83)	325 (12.79)	410 (16.14)	505 (19.88)	580 (22.83)	710 (27.95)	895 (35.23)	-
E	9 (0.35)	9 (0.35)	11 (0.43)	11 (0.43)	11 (0.43)	11 (0.43)	13 (0.51)	-
F	8	8	8	8	12	12	12	-
G	136 (5.35)	153 (6.02)	185 (7.28)	230 (9.05)	268 (10.55)	302 (11.89)	-	-
H	46 (1.81)	55 (2.16)	66 (2.60)	83 (3.26)	95 (3.74)	109 (4.29)	-	-
K	60 (2.36)	63 (2.48)	80 (3.15)	110 (4.33)	125 (4.92)	145 (5.71)	-	-
L	26.5 (1.04)	30 (1.18)	30 (1.18)	30 (1.18)	38 (1.49)	45 (1.77)	68 (2.68)	-
M	11 (0.43)	11 (0.43)	12 (0.47)	14 (0.55)	15 (0.59)	16 (0.63)	18 (0.71)	-
N	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	-
P	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	2"	-
Q	35°	35°	35°	35°	30°	30°	30°	-

Boyutlar - dimensions in mm (inches)

YAĞ GİRİŞ BAĞLANTI ŞEKLİ - OIL INLET UNION

TEK YÖNLÜ AKIŞ SINGLE FLOW

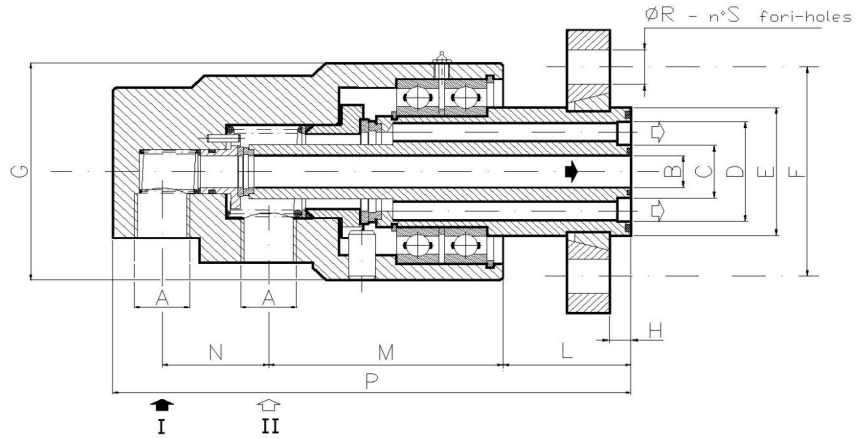
SERİ
SERIES **U**



Boyutlar Size	A	B	C	D	E	F	L	M	Ağırlık (kg) Weight (lb)	Maksimum Hız (g/min) Max speed (rpm)
U.025	1/4"	6 (0.24)	36 (1.42)	-	60 (2.36)	74 (2.91)	17 (0.67)	14,5 (0.57)	0,4 (0.88)	5000 5000
U.037	3/8"	10 (0.39)	44 (1.73)	1/4"	68 (2.68)	90 (3.54)	22 (0.87)	16 (0.63)	0,6 (1.32)	3500 3500
U.050	1/2"	13 (0.51)	52 (2.05)	3/8"	76 (2.99)	101 (3.98)	27 (1.06)	18 (0.71)	0,8 (1.76)	3000 3000
U.075	3/4"	18 (0.71)	57 (2.24)	1/2"	80 (3.15)	111 (4.37)	32 (1.26)	20 (0.79)	1,1 (2.42)	2500 2500
U.100	1"	24 (0.94)	73 (2.87)	3/4"	97 (3.82)	134 (5.28)	41 (1.61)	23 (0.91)	1,9 (4.19)	2000 2000

BAĞIMSIZ ÇİFT YÖNLÜ AKIŞ DUAL INDEPENDENT FLOW

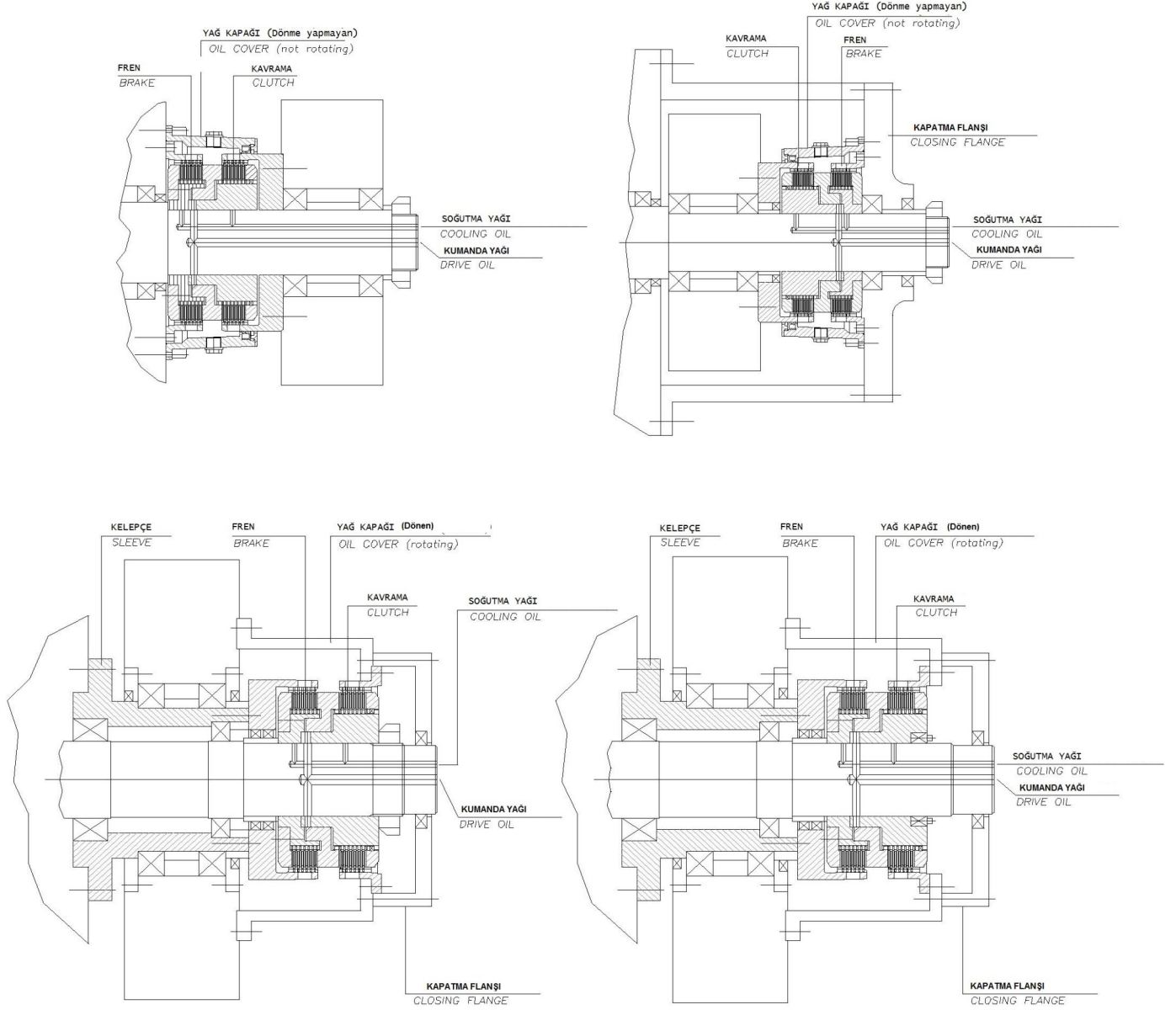
SERİ
SERIES **D**



Boyutlar Size	A	B	C	D	E	F	G	H	L	M	N	P	R	S
D.025	1/4"	6 (0.24)	13,3 (0.52)	23 (0.91)	36 (1.42)	65 (2.56)	60 (2.36)	6 (0.24)	43 (1.69)	62 (2.44)	30 (1.18)	148 (5.83)	14 (0.55)	4
D.037	3/8"	10 (0.39)	18 (0.71)	31 (1.22)	45 (1.77)	75 (2.95)	75 (2.95)	8 (0.31)	48 (1.89)	78 (3.07)	38 (1.50)	178,5 (7.03)	14 (0.55)	4
D.050	1/2"	13 (0.51)	21,5 (0.85)	40,5 (1.59)	52 (2.05)	85 (3.35)	88 (3.46)	8 (0.31)	48 (1.89)	88 (3.46)	40 (1.57)	194,5 (7.66)	14 (0.55)	4
D.075	3/4"	18 (0.71)	27 (1.06)	45 (1.77)	58 (2.28)	100 (3.94)	94 (3.70)	10 (0.39)	57 (2.24)	93 (3.66)	48 (1.89)	224 (8.82)	18 (0.71)	4
D.100	1"	24 (0.94)	33 (1.30)	54 (2.13)	65 (2.56)	100 (3.94)	110 (4.33)	10 (0.39)	57 (2.24)	100 (3.94)	58 (2.28)	246 (9.69)	18 (0.71)	4

Boyutlar - dimensions in mm (inches)

MONTAJ ÖRNEKLERİ MOUNTING EXAMPLES



Herhangi bir değişiklik ve güncelleme web sitesinde bulunmaktadır. (www.ormek.com)
Possible changes and updates available on internet (www.ormek.com)