

SERIE
SERIES

WO



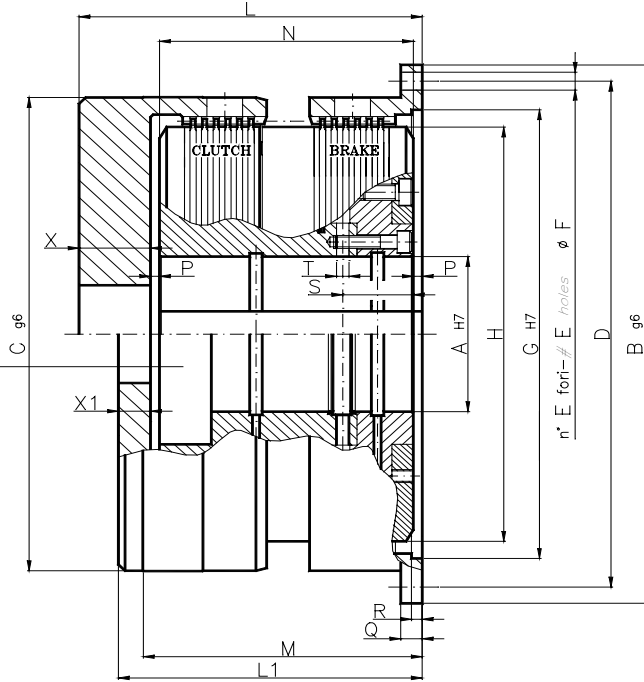
GRUPPO FRENO-FRIZIONE
IN BAGNO D'OLIO A COMANDO IDRAULICO
OIL ACTUATED CLUTCH-BRAKE UNIT
WET RUNNING

Utilizzabile anche nella versione solo freno o solo frizione
Available also as clutch or brake only

GRUPPO FRIZIONE-FRENO A COMANDO IDRAULICO HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERIE
SERIES **WO**

FRIZIONE E FRENO
STANDARD
STANDARD CLUTCH
AND BRAKE



fissaggio con calettatore o linguetta
mounting with clamping device or keyway

Grandezza 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)
preforo - 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)	710 (27.95)
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	8 (0.31)	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	135 (5.31)	155 (6.10)	192 (7.56)	229.6 (9.04)	270 (10.63)	308.5 (12.14)	442 (17.40)	-
L1	121 (4.76)	136 (5.35)	170 (6.69)	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	99 (3.90)	115 (4.53)	136 (5.35)	173.6 (6.83)	196 (7.72)	235 (9.25)	385 (15.16)	-
N	97 (3.81)	110 (4.33)	142 (5.59)	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	29 (1.14)	31 (1.22)	39.5 (1.56)	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)
n° dischi (frizione-freno) discs number (clutch-brake)	5-5	5-5	6-6	6-6	6-6	7-7	7-7	7-7
Velocità massima RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Peso 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)	- -	- -
Vol. per colpo 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 kgm ² (Lbf ²)	Interni-Inner 0.05 (1.19) Esterni-Outer 0.06 (1.43) (1) Esterni-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) -
Pressione operativa bar Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1020 (9,016)	Nm 2490 (22,011)	Nm 6110 (53,985)	Nm 11430 (101,164)	Nm 23720 (209,993)	Nm 52080 (460,387)	Nm 113800 (1,005,992)	Nm 234022 (2,071,094)
Mom.Din.Freno Dyn.Trq.Brake	Nm 560 (4,950)	Nm 1000 (8,840)	Nm 2400 (21,216)	Nm 4800 (42,432)	Nm 9600 (84,864)	Nm 23100 (204,204)	Nm 84000 (742,560)	Nm 144444 (1,278,329)
18 molle-springs bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1179 (10,422)	Nm 2769 (24,478)	Nm 6770 (59,949)	Nm 12730 (112,678)	Nm 26330 (233,056)	Nm 58252 (514,948)	Nm 136589 (1,207,447)	Nm 260838 (2,308,416)
Mom.Din.Freno Dyn.Trq.Brake	Nm 467 (4,128)	Nm 834 (7,373)	Nm 2000 (17,680)	Nm 4000 (35,360)	Nm 8000 (70,720)	Nm 19250 (170,170)	Nm 70000 (618,800)	Nm 127777 (1,130,826)
15 molle-springs bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1340 (11,846)	Nm 3052 (26,980)	Nm 7430 (65,826)	Nm 14030 (124,192)	Nm 28940 (256,119)	Nm 64426 (569,526)	Nm 159388 (1,408,990)	Nm 287654 (2,545,737)
Mom.Din.Freno Dyn.Trq.Brake	Nm 374 (3,306)	Nm 667 (5,896)	Nm 1600 (14,144)	Nm 3200 (28,288)	Nm 6400 (56,576)	Nm 15400 (136,136)	Nm 56000 (495,040)	Nm 111110 (983,323)
12 molle-springs bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1500 (13,260)	Nm 3335 (29,481)	Nm 8100 (71,702)	Nm 15330 (135,706)	Nm 31540 (279,182)	Nm 70600 (624,104)	Nm 182188 (1,610,542)	Nm 314469 (2,783,050)
Mom.Din.Freno Dyn.Trq.Brake	Nm 280 (2,475)	Nm 500 (4,420)	Nm 1200 (10,608)	Nm 2400 (21,216)	Nm 4800 (42,432)	Nm 11550 (102,102)	Nm 42000 (371,280)	Nm 94444 (835,829)
9 molle-springs bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) Versione con campana a fondello stretto. - 1) Version with thin cup housing

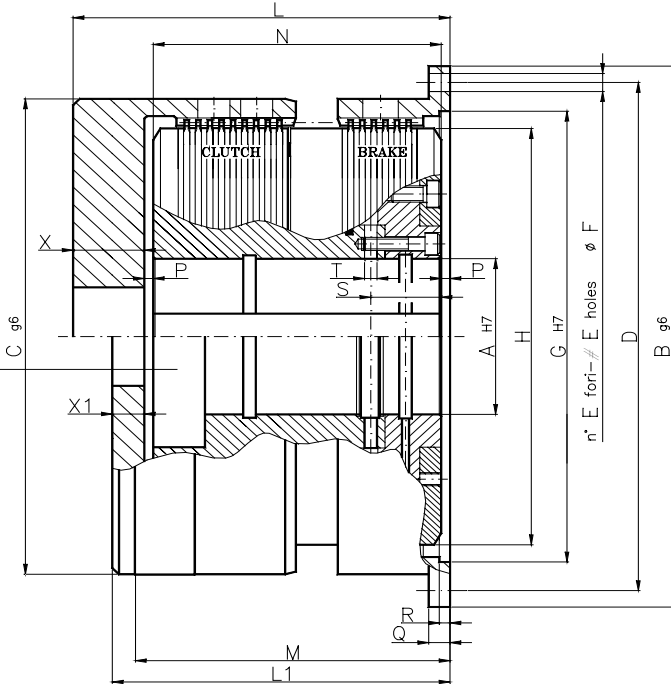
dimensioni - dimensions in mm (inches)

GRUPPO FRIZIONE-FRENO A COMANDO IDRAULICO HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERIE
SERIES **WO**

FRIZIONE MAGGIORATA
FRENO STANDARD
INCREASED CLUTCH
STANDARD BRAKE

fissaggio con calettatore o linguetta
mounting with clamping device or keyway



Grandezza 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)
preforo - 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)	710 (27.95)
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	8 (0.31)	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	149 (5.87)	171.5 (6.75)	211.5 (8.32)	251.8 (9.91)	302 (11.89)	341 (13.42)	488 (19.21)	-
L1	133 (5.24)	152.5 (6.00)	189.5 (7.46)	226.8 (8.93)	272 (10.71)	306 (12.05)	443 (17.44)	-
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	115 (4.53)	128.5 (5.06)	156.5 (6.16)	196.8 (7.75)	228 (8.98)	256 (10.07)	421 (16.57)	-
N	109 (4.29)	126.5 (4.98)	161.5 (6.36)	196.8 (7.74)	237 (9.33)	266 (10.47)	398 (15.66)	476 (18.74)
P	5 (0.19)	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)	39.5 (1.56)	48.8 (1.92)	60 (2.36)	66 (2.60)	112 (4.41)	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)
n° dischi (frizione-freno) discs number (clutch-brake)	8-5	8-5	9-6	9-6	10-6	10-7	10-7	10-7
Velocità massima RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Peso Weight	25 (55) (1) 22 (47)	43 (95) 37 (82)	80 (176) 70 (154)	158 (248) 137 (302)	272 (599) 238 (524)	515 (1134) 450 (991)	-	-
Vol. per colpo 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 kgm ² (Lbft ²)	Interni-Inner 0.06 (1.43) Esterni-Outer 0.07 (1.66) (1) Esterni-Outer 0.05 (1.19)	0.13 (3.08) 0.14 (3.32) 0.11 (2.61)	0.34 (8.06) 0.43 (10.2) 0.31 (7.35)	1.2 (28.5) 1.5 (35.6) 1.1 (26.1)	2.9 (68.7) 3.1 (73.5) 2.3 (54.5)	7.6 (180) 9.0 (213) 6.4 (152)	35.4 (840) -	107.2 (2,546) -
Pressione operativa Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1630 (14,409)	Nm 3980 (35,183)	Nm 9160 (81,110)	Nm 17140 (151,751)	Nm 39540 (349,999)	Nm 74400 (657,696)	Nm 162560 (1,437,030)	Nm 334310(2,958,643)
Mom.Din.Freno Dyn.Trq.Brake	Nm 560 (4,950)	Nm 1000 (8,840)	Nm 2400 (21,216)	Nm 4800 (42,432)	Nm 9600 (84,864)	Nm 23100 (204,204)	Nm 84000 (742,560)	Nm 144444(1,278,329)
18 molle-springs bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1887 (16,681)	Nm 4430 (39,161)	Nm 10160 (89,924)	Nm 19090 (169,017)	Nm 43890 (388,435)	Nm 83218 (735,647)	Nm 195127 (1,724,923)	Nm 371348(3,286,429)
Mom.Din.Freno Dyn.Trq.Brake	Nm 467 (4,128)	Nm 834 (7,373)	Nm 2000 (17,680)	Nm 4000 (35,360)	Nm 8000 (70,720)	Nm 19250 (170,170)	Nm 70000 (618,800)	Nm 127777 (1,130,826)
15 molle-springs bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 2142 (18,935)	Nm 4883 (43,166)	Nm 11150 (98,739)	Nm 21050 (186,292)	Nm 48230 (426,870)	Nm 92037 (813,607)	Nm 227697 (2,012,841)	Nm 408386(3,614,216)
Mom.Din.Freno Dyn.Trq.Brake	Nm 374 (3,306)	Nm 667 (5,896)	Nm 1600 (14,144)	Nm 3200 (28,288)	Nm 6400 (56,576)	Nm 15400 (136,136)	Nm 56000 (495,040)	Nm 111110 (983,323)
12 molle-springs bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 2398 (21,198)	Nm 5336 (47,170)	Nm 12150 (107,554)	Nm 23000 (203,567)	Nm 52570 (465,315)	Nm 100856 (891,567)	Nm 260268 (2,300,769)	Nm 445423(3,941,993)
Mom.Din.Freno Dyn.Trq.Brake	Nm 280 (2,475)	Nm 500 (4,420)	Nm 1200 (10,608)	Nm 2400 (21,216)	Nm 4800 (42,432)	Nm 11550 (102,102)	Nm 42000 (371,280)	Nm 94444 (835,829)
9 molle-springs bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) Versione con campana a fondello stretto. - 1) Version with thin cup housing

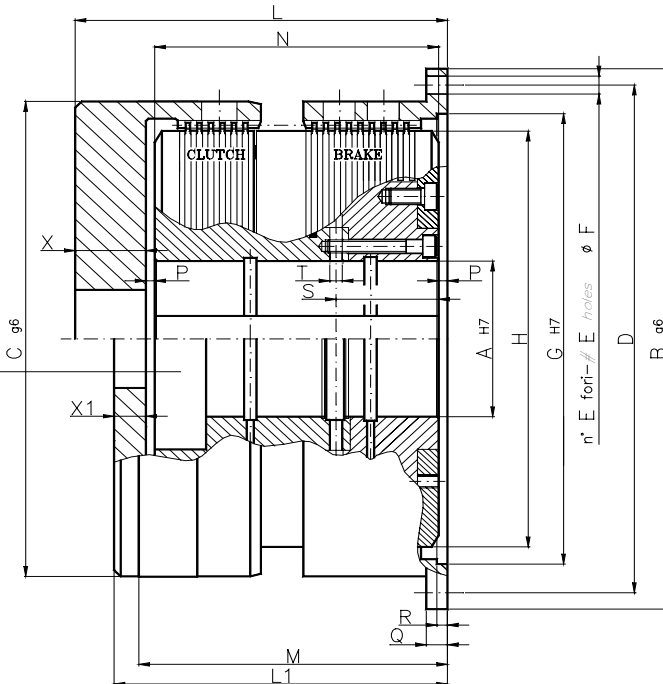
dimensioni - dimensions in mm (inches)

GRUPPO FRIZIONE-FRENO A COMANDO IDRAULICO HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

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FRENO MAGGIORATO
FRIZIONE STANDARD
INCREASED BRAKE
STANDARD CLUTCH

fissaggio con calettatore o linguetta
mounting with clamping device or keyway



Grandezza 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)
preforo - 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)	710 (27.95)
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	8 (0.31)	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	149 (5.87)	171.5 (6.75)	211.5 (8.32)	251.8 (9.91)	295.5 (11.64)	334 (13.15)	489 (19.25)	-
L1	133 (5.24)	152.5 (6.00)	189.5 (7.46)	226.8 (8.93)	265.5 (10.45)	299 (11.77)	444 (17.48)	-
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)	131.5 (5.17)	155.5 (6.12)	196 (7.72)	228 (8.98)	266 (10.47)	432 (17.01)	-
N	109 (4.29)	126.5 (4.98)	161.5 (6.36)	199.8 (7.87)	230.5 (9.07)	259 (10.20)	399 (15.71)	476 (18.74)
P	5 (0.19)	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)	59 (2.34)	74 (2.91)	85.5 (3.37)	91.5 (3.60)	159.5 (6.28)	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)
n° dischi (frizione-freno) discs number (clutch-brake)	5-8	5-8	6-9	6-9	6-9	7-10	7-10	7-10
Velocità massima RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Peso kg (Lbs) Weight (1)	25 (55) 22 (47)	43 (95) 37 (82)	80 (176) 70 (154)	158 (248) 137 (302)	272 (599) 238 (524)	515 (1134) 450 (991)	- -	- -
Vol. per colpo 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	Interni-Inner 0.06 (1.43) Esterni-Outer 0.07 (1.66) (1) Esterni-Outer 0.05 (1.19)	0.13 (3.08) 0.14 (3.32) 0.11 (2.61)	0.34 (8.06) 0.43 (10.2) 0.31 (7.35)	1.2 (28.5) 1.5 (35.6) 1.1 (26.1)	2.9 (68.7) 3.1 (73.5) 2.3 (54.5)	7.6 (180) 9.0 (213) 6.4 (152)	35.4 (840) -	107.2 (2,546) -
Pressione operativa bar Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1020 (9,016)	Nm 2490 (22,011)	Nm 6110 (53,985)	Nm 11430 (101,164)	Nm 23720 (209,993)	Nm 52080 (460,387)	Nm 113800 (1,005,992)	Nm 234022 (2,071,094)
Mom.Din.Freno Dyn.Trq.Brake	Nm 900 (7,956)	Nm 1600 (14,144)	Nm 3600 (31,824)	Nm 7200 (63,648)	Nm 14400 (127,296)	Nm 33000 (291,720)	Nm 120000 (1,060,800)	Nm 206353(1,826,224)
18 molle-springs bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1179 (10,422)	Nm 2769 (24,478)	Nm 6770 (59,949)	Nm 12730 (112,678)	Nm 26330 (233,056)	Nm 58252 (514,948)	Nm 136589 (1,207,447)	Nm 260838 (2,308,416)
Mom.Din.Freno Dyn.Trq.Brake	Nm 747 (6,603)	Nm 1333 (11,784)	Nm 3000 (26,520)	Nm 6000 (53,040)	Nm 12000 (106,080)	Nm 27500 (243,100)	Nm 100000 (884,000)	Nm 182543(1,615,505)
15 molle-springs bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1340 (11,846)	Nm 3052 (26,980)	Nm 7430 (65,826)	Nm 14030 (124,192)	Nm 28940 (256,119)	Nm 64426 (569,526)	Nm 159388 (1,408,990)	Nm 287654 (2,545,737)
Mom.Din.Freno Dyn.Trq.Brake	Nm 597 (5,277)	Nm 1067 (9,432)	Nm 2400 (21,216)	Nm 4800 (42,432)	Nm 9600 (84,864)	Nm 22000 (194,480)	Nm 80000 (707,200)	Nm 158733(1,404,787)
12 molle-springs bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Mom.Stat.Friz. Stat.Trq.Clutch	Nm 1500 (13,260)	Nm 3335 (29,481)	Nm 8100 (71,702)	Nm 15330 (135,706)	Nm 31540 (279,182)	Nm 70600 (624,104)	Nm 182188 (1,610,542)	Nm 314469 (2,783,050)
Mom.Din.Freno Dyn.Trq.Brake	Nm 448 (3,960)	Nm 800 (7,072)	Nm 1800 (15,912)	Nm 3600 (31,824)	Nm 7200 (63,648)	Nm 16500 (145,860)	Nm 60000 (530,400)	Nm 134923(1,194,068)
9 molle-springs bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) Versione con campana a fondello stretto. - 1) Version with thin cup housing

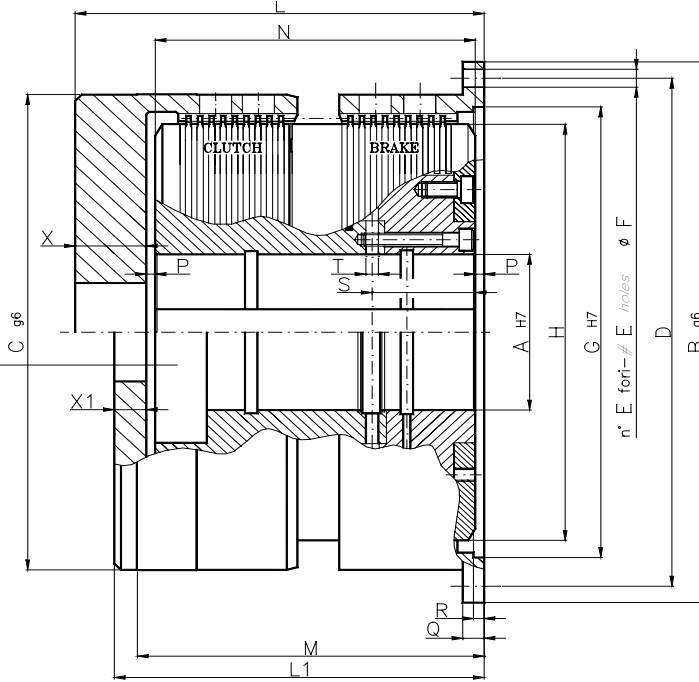
dimensioni - dimensions in mm (inches)

GRUPPO FRIZIONE-FRENO A COMANDO IDRAULICO HYDRAULICALLY ACTUATED CLUTCH-BRAKE UNIT

SERIE
SERIES **WO**

FRIZIONE E FRENO
MAGGIORATI
INCREASED
CLUTCH AND BRAKE

fissaggio con calettatore o linguetta
mounting with clamping device or keyway

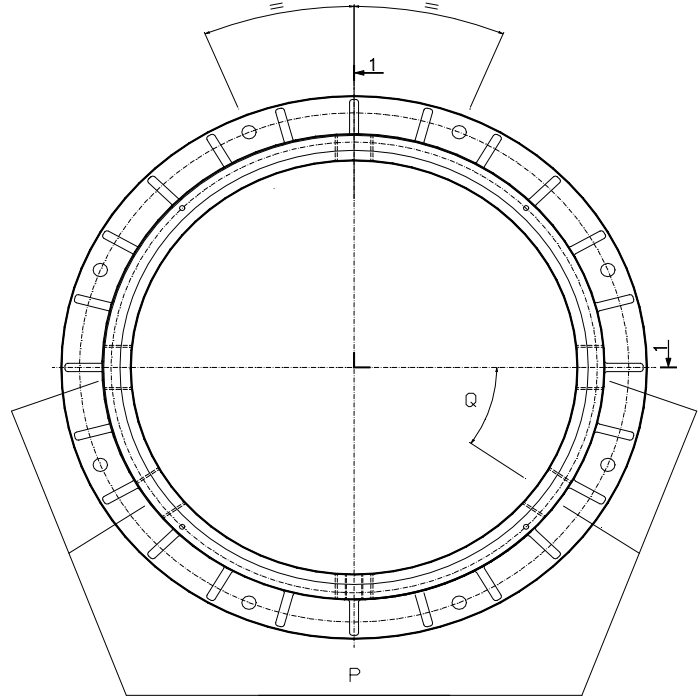
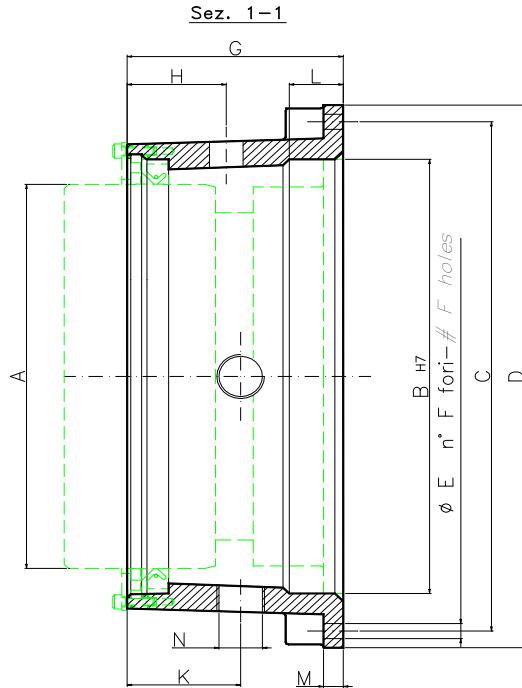


Grandezza Size	020-010	040-016	080-036	160-072	320-144	640-330	1600-1200	3200-2100
A max	60 (2.362)	75 (2.953)	95 (3.740)	130 (5.118)	160 (6.299)	200 (7.874)	250 (9.843)	310 (12.204)
preforo - prebore	32 (1.26)	45 (1.77)	60 (2.36)	70 (2.75)	100 (3.93)	115 (4.53)	150 (5.91)	180 (7.09)
B	220 (8.66)	260 (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)	710 (27.95)
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	8 (0.31)	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	162 (6.37)	188 (7.40)	231 (9.09)	277 (10.91)	327.5 (12.89)	366.5 (14.43)	535 (21.06)	-
L1	146 (5.75)	169 (6.65)	209 (8.23)	252 (9.92)	297.5 (11.71)	331.5 (13.05)	490 (19.29)	-
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	128 (5.04)	145 (5.71)	176 (6.93)	222 (8.74)	260 (10.24)	291.5 (11.48)	468 (18.42)	-
N	122 (4.80)	143 (5.63)	181 (7.13)	222 (8.74)	262.5 (10.33)	291.5 (11.48)	445 (17.52)	530 (25.19)
P	5 (0.19)	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)	59 (2.34)	74 (2.91)	85.5 (3.37)	91.5 (3.60)	159 (6.26)	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)
n° dischi (frizione-freno) discs number (clutch-brake)	8-8	8-8	9-9	9-9	10-9	10-10	10-10	10-10
Velocità massima RPM Max speed RPM	2000	1700	1300	1000	850	700	500	415
Peso Weight	-	-	-	-	-	-	-	-
Vol. per colpo 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 kgm 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)
Pressione operativa Operating pressure (Psi)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	60 (870)	87 (1262)	86 (1247)
Mom.Stat.Friz. Stat.Trq.Clutch	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)
Mom.Din.Freno 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-springs bar (Psi)	26 (383)	22 (323)	22 (323)	23 (338)	23 (330)	24 (351)	45 (658)	41 (597)
Mom.Stat.Friz. Stat.Trq.Clutch	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)
Mom.Din.Freno 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-springs bar (Psi)	22 (319)	19 (270)	18 (268)	19 (281)	19 (275)	20 (292)	38 (548)	36 (524)
Mom.Stat.Friz. Stat.Trq.Clutch	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)
Mom.Din.Freno 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-springs bar (Psi)	18 (255)	15 (216)	15 (215)	16 (225)	15 (220)	16 (234)	30 (439)	32 (466)
Mom.Stat.Friz. Stat.Trq.Clutch	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)
Mom.Din.Freno 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-springs bar (Psi)	13 (192)	11 (162)	11 (161)	12 (169)	11 (165)	12 (175)	23 (329)	27 (393)

1) Versione con campana a fondello stretto. - 1) Version with thin cup housing

dimensioni - dimensions in mm (inches)

CAMPANA CONTENIMENTO OLIO - OIL COVER



Grandezza 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°	-

Grandezza 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°	-

Grandezza 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°	-

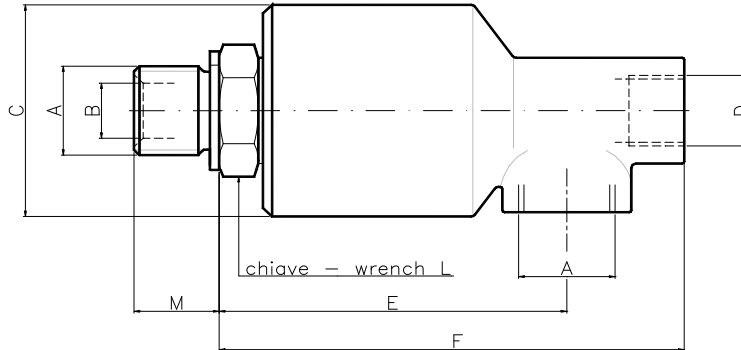
dimensioni - dimensions in mm (inches)

GIUNTO ENTRATA OLIO - OIL INLET UNION

UNA VIA SINGLE FLOW

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SERIES

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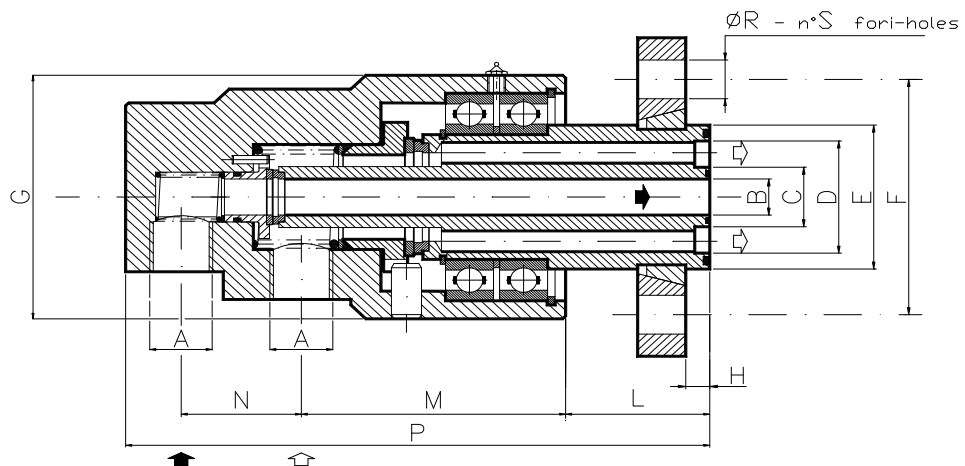


Grandezza Size	A	B	C	D	E	F	L	M	Peso (kg) Weight (lb)	Velocità max. (g/min) Max speed (rpm)
U.025	1/4"	6 (0.24)	36 (1.42)	-	60 (2.36)	74 (2.91)	17 (0.67)	14,5 (0.57)	0,4 (0.88)	5000 5000
U.037	3/8"	10 (0.39)	44 (1.73)	1/4"	68 (2.68)	90 (3.54)	22 (0.87)	16 (0.63)	0,6 (1.32)	3500 3500
U.050	1/2"	13 (0.51)	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

A DOPPIO PASSAGGIO INDIPENDENTE DUAL INDEPENDENT FLOW

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SERIES

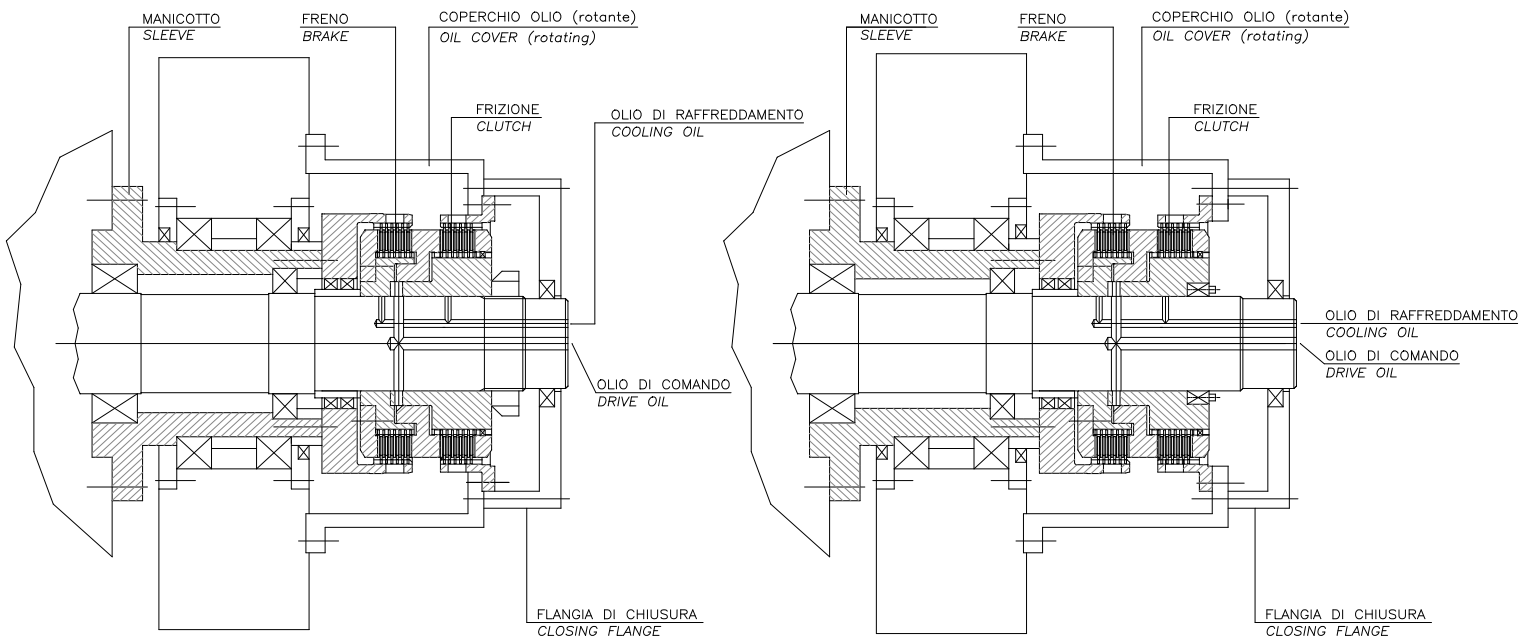
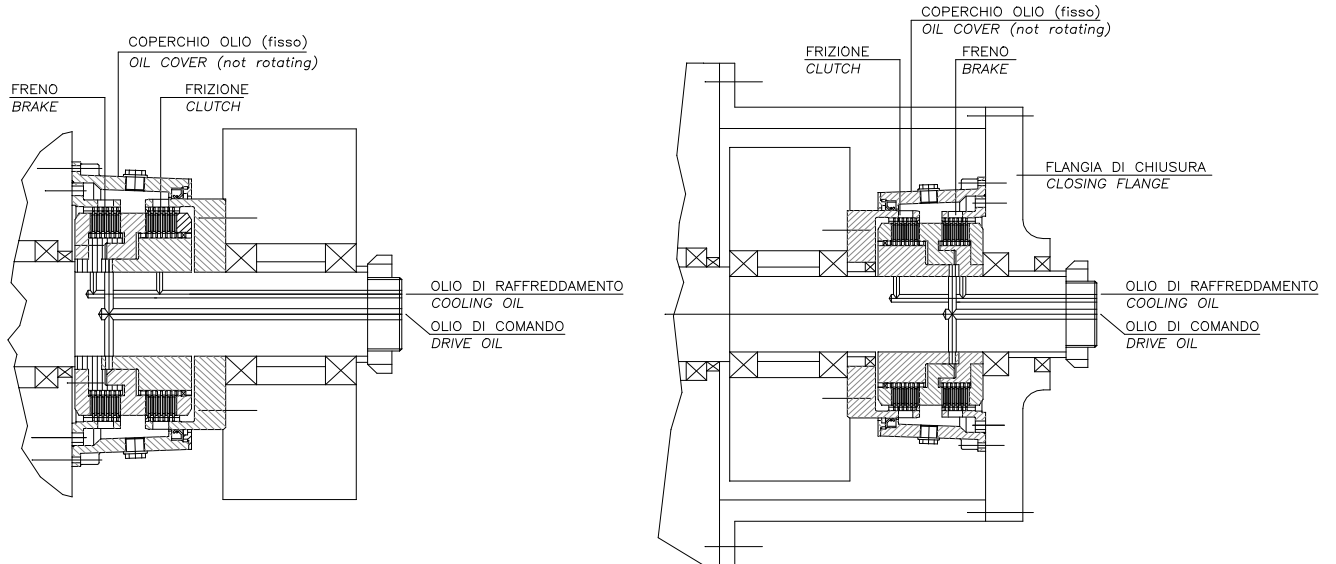
D



Grandezza 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

dimensioni - dimensions in mm (inches)

ESEMPI DI INSTALLAZIONE MOUNTING EXAMPLES



Eventuali modifiche e aggiornamenti saranno disponibili sul sito internet (www.ompisrl.com)

Possible changes and updatings available on internet (www.ompisrl.com)



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