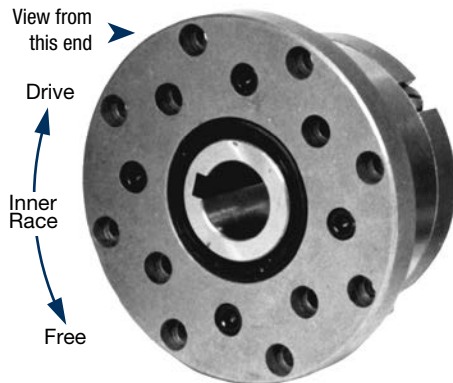


Modular “Building Block” Clutches

GFR..F1F2, GFR..F2F7, GFRN..F5F6

Overrunning, Indexing Ball Bearing Supported, Ramp & Roller Clutches

GFR..F1F2



GFRN..F5F6



Right Hand rotation shown.
(Left Hand opposite.)

Specify direction of rotation when ordering.

Models GFR..F1F2/F2F7 and GFRN..F5F6 are ramp & roller type clutches, self-contained, sealed and bearing supported, using two 160 Series bearings.

They use the GFR and GFRN base modules described on previous pages.

Units must be oil lubricated before use if they are shipped unassembled.

Primarily used as an overrunning or indexing clutches. The cover combination is selected according to the type of drive, attachments required.

F2 and F6 covers are used to enclose the unit. They are equipped with 3 screws for oil filling, drain and level.

This design uses standard lip seals.

Covers may be easily assembled by the user, allowing for easily changing the rotation.

Alternatively, units can be shipped assembled and lubricated.

For Indexing Applications:

Maximum number indexes per minute is 350.

This clutch is designed for oil lubrication. For grease lubrication, reduce the maximum overrunning speed to 50% of listed value.

Specifications

Size	Torque Capacity lb.ft. (Nm)	Overrunning Speed Max. RPM		Shipping Weight lb. (kg)
		Inner Race	Outer Race	
12	41 (55)	3,100	4,700	2.65 (1.2)
15	92 (125)	2,800	4,400	3.53 (1.6)
20	134 (181)	2,400	4,100	4.19 (1.9)
25	213 (288)	1,600	3,800	6.39 (2.9)
30	369 (500)	1,300	2,800	8.60 (3.9)
35	535 (725)	1,200	2,600	10.80 (4.9)
40	756 (1025)	850	2,300	16.54 (7.5)
45	830 (1125)	740	2,200	17.20 (7.8)
50	1,568 (2125)	580	1,950	23.81 (10.8)
55	1,937 (2625)	550	1,800	30.87 (14)
60	2,583 (3500)	530	1,700	37.04 (16.8)
70	4,244 (5750)	500	1,600	45.86 (20.8)
80	6,273 (8500)	480	1,500	59.54 (27)
90	10,701 (14500)	450	1,300	88.20 (40)
100	14,760 (20000)	350	1,100	147.74 (67)
130	23,063 (31250)	250	900	207.27 (94)
150	51,660 (70000)	200	700	412.34 (187)

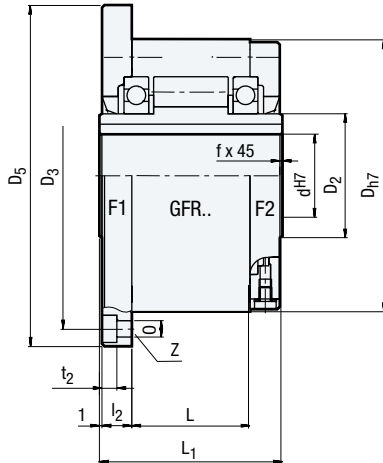
Note: When ordering, please specify direction of rotation.

Modular "Building Block" Clutches

GFR..F1F2, GFR..F2F7, GFRN..F5F6

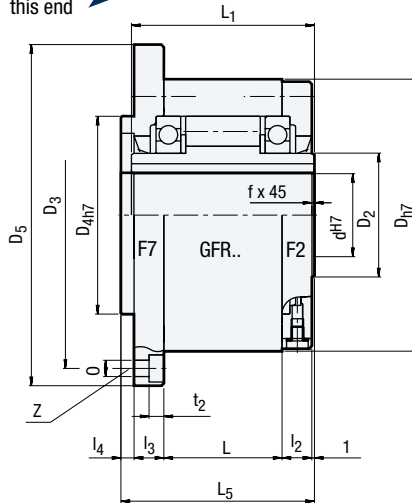
GFR..F1F2

View from this end



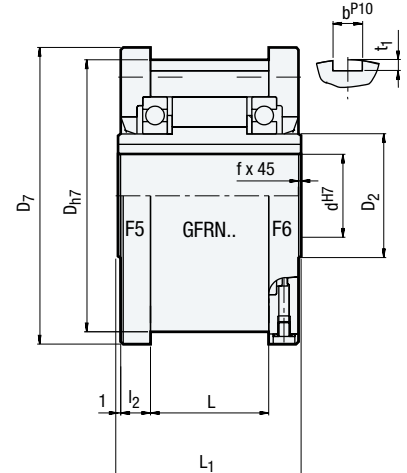
GFR..F2F7

View from this end



GFRN..F5F6

View from this end



Dimensions inches (mm)

Size	d ^{H7}	D _{h7}	D ₅	D ₇	D ₃	D _{4h7}	0	t ₂	L ₁	L ₅	L	I ₂	I ₃	I ₄	t ₁	b ^{P10}	f	z
12	0.47 (12)	2.44 (62)	3.35 (85)	2.76 (70)	2.83 (72)	1.65 (42)	0.22 (5.5)	0.22 (5.7)	1.65 (42)	1.73 (44)	0.79 (20)	0.39 (10)	0.39 (10)	0.12 (3)	0.10 (2.5)	0.16 (4)	0.02 (0.5)	2
15	0.59 (15)	2.68 (68)	3.62 (92)	2.99 (76)	3.07 (78)	1.85 (47)	0.22 (5.5)	0.22 (5.7)	2.05 (52)	2.13 (54)	1.10 (28)	0.43 (11)	0.43 (11)	0.12 (3)	0.12 (3)	0.20 (5)	0.03 (0.8)	3
20	0.79 (20)	2.95 (75)	3.86 (98)	3.31 (84)	3.35 (85)	2.17 (55)	0.22 (5.5)	0.22 (5.7)	2.24 (57)	2.32 (59)	1.34 (34)	0.41 (10.5)	0.41 (10.5)	0.12 (3)	0.14 (3.5)	0.24 (6)	0.03 (0.8)	3
25	0.98 (25)	3.54 (90)	4.65 (118)	3.90 (99)	4.09 (104)	2.68 (68)	0.26 (6.6)	0.27 (6.8)	2.36 (60)	2.44 (62)	1.38 (35)	0.45 (11.5)	0.45 (11.5)	0.12 (3)	0.16 (4)	0.31 (8)	0.04 (1)	4
30	1.18 (30)	3.94 (100)	5.04 (128)	4.29 (109)	4.49 (114)	2.95 (75)	0.26 (6.6)	0.27 (6.8)	2.68 (68)	2.76 (70)	1.69 (43)	0.45 (11.5)	0.45 (11.5)	0.12 (3)	0.16 (4)	0.31 (8)	0.04 (1)	4
35	1.38 (35)	4.33 (110)	5.51 (140)	4.69 (119)	4.88 (124)	3.15 (80)	0.26 (6.6)	0.27 (6.8)	2.91 (74)	2.99 (76)	1.77 (45)	0.53 (13.5)	0.51 (13)	0.14 (3.5)	0.20 (5)	0.39 (10)	0.04 (1)	6
40	1.57 (40)	4.92 (125)	6.30 (160)	5.31 (135)	5.59 (142)	3.54 (90)	0.35 (9)	0.35 (9)	3.39 (86)	3.46 (88)	2.09 (53)	0.61 (15.5)	0.59 (15)	0.14 (3.5)	0.20 (5)	0.47 (12)	0.06 (1.5)	6
45	1.77 (45)	5.12 (130)	6.50 (165)	5.51 (140)	5.75 (146)	3.74 (95)	0.35 (9)	0.35 (9)	3.39 (86)	3.46 (88)	2.09 (53)	0.61 (15.5)	0.59 (15)	0.14 (3.5)	0.22 (5.5)	0.55 (14)	0.06 (1.5)	6
50	1.97 (50)	5.91 (150)	7.28 (185)	6.30 (160)	6.54 (166)	4.33 (110)	0.35 (9)	0.35 (9)	3.70 (94)	3.78 (96)	2.52 (64)	0.55 (14)	0.51 (13)	0.16 (4)	0.22 (5.5)	0.55 (14)	0.06 (1.5)	8
55	2.17 (55)	6.30 (160)	8.03 (204)	6.69 (170)	7.17 (182)	4.53 (115)	0.43 (11)	0.43 (11)	4.09 (104)	4.17 (106)	2.60 (66)	0.71 (18)	0.67 (17)	0.16 (4)	0.24 (6)	0.63 (16)	0.08 (2)	8
60	2.36 (60)	6.69 (170)	8.43 (214)	7.17 (182)	7.56 (192)	4.92 (125)	0.43 (11)	0.43 (11)	4.49 (114)	4.57 (116)	3.07 (78)	0.67 (17)	0.63 (16)	0.16 (4)	0.28 (7)	0.71 (18)	0.08 (2)	10
70	2.76 (70)	7.48 (190)	9.21 (234)	7.95 (202)	8.35 (212)	5.51 (140)	0.43 (11)	0.43 (11)	5.28 (134)	5.35 (136)	3.74 (95)	0.73 (18.5)	0.69 (17.5)	0.16 (4)	0.30 (7.5)	0.79 (20)	0.10 (2.5)	10
80	3.15 (80)	8.27 (210)	10.00 (254)	8.74 (222)	9.13 (232)	6.30 (160)	0.43 (11)	0.43 (11)	5.67 (144)	5.75 (146)	3.94 (100)	0.83 (21)	0.79 (20)	0.16 (4)	0.35 (9)	0.87 (22)	0.10 (2.5)	10
90	3.54 (90)	9.06 (230)	10.94 (278)	9.53 (242)	10.00 (254)	7.09 (180)	0.55 (14)	0.51 (13)	6.22 (158)	6.30 (160)	4.53 (115)	0.81 (20.5)	0.75 (19)	0.18 (4.5)	0.35 (9)	0.98 (25)	0.12 (3)	10
100	3.94 (100)	10.63 (270)	13.19 (335)	11.10 (282)	12.01 (305)	8.27 (210)	0.71 (18)	0.69 (17.5)	7.17 (182)	7.24 (184)	4.72 (120)	1.18 (30)	1.10 (28)	0.20 (5)	0.39 (10)	1.10 (28)	0.12 (3)	10
130	5.12 (130)	12.20 (310)	14.96 (380)	12.68 (322)	13.58 (345)	9.45 (240)	0.71 (18)	0.69 (17.5)	8.35 (212)	8.43 (214)	5.98 (152)	1.14 (29)	1.06 (27)	0.20 (5)	0.43 (11)	1.26 (32)	0.12 (3)	12
150	5.91 (150)	15.75 (400)	19.09 (485)	16.22 (412)	17.52 (445)	12.20 (310)	0.87 (22)	0.85 (21.5)	9.69 (246)	9.76 (248)	7.09 (180)	1.26 (32)	1.18 (30)	0.20 (5)	0.47 (12)	1.42 (36)	0.16 (4)	12

Note: For bore and keyseat information see page 99.

Dimension D₂ listed on page 101.