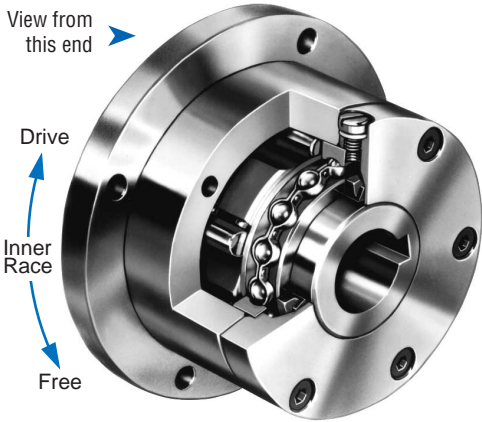


Modular “Building Block” Clutches

AL..F2D2, AL..F4D2; ALM..F2D2, ALM..F4D2

Overrunning, Indexing, Backstopping Ball Bearing Supported, Ramp & Roller Clutches



Right Hand rotation shown.
 (Left Hand opposite.)
 Specify direction of rotation when ordering.

The Model ALM clutch is a modified design for higher torque and lower overrunning speed applications.

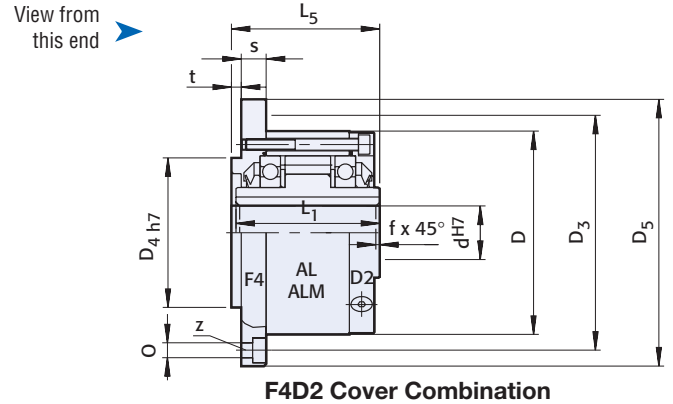
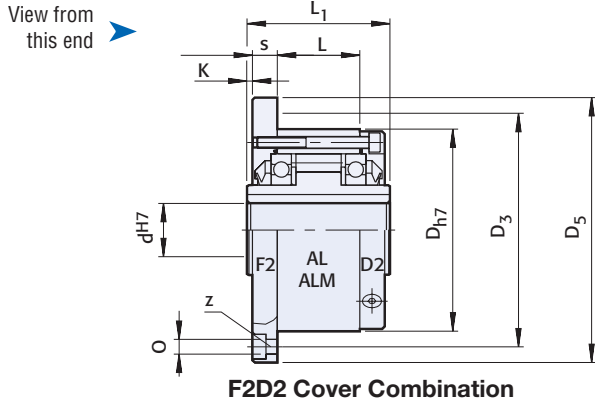
Specifications

Model	Size	Torque Capacity lb.ft. (Nm)	Overrunning Speed Max. RPM		Resistance after run-in lb.in. (Ncm)	Shipping Weight lb. (kg)
			Inner Race	Outer Race		
AL..F2D2 AL..F4D2	12	41 (55)	2,500	7,200	9.74 (11)	1.98 (0.9)
	15	92 (125)	1,900	6,500	13.28 (15)	2.87 (1.3)
	20	134 (181)	1,600	5,600	15.93 (18)	3.75 (1.7)
	25	213 (288)	1,400	4,500	31.86 (36)	5.73 (2.6)
	28	369 (500)	1,300	4,100	3.54 (4)	7.72 (3.5)
	30	369 (500)	1,300	4,100	3.54 (4)	7.72 (3.5)
	35	535 (725)	1,100	3,800	53.10 (60)	9.92 (4.5)
	40	756 (1025)	950	3,400	74.34 (84)	15.21 (6.9)
	45	830 (1125)	900	3,200	83.19 (94)	15.66 (7.1)
	50	1,568 (2125)	850	2,800	113.28 (128)	22.27 (10.1)
	55	1,937 (2625)	720	2,650	132.75 (150)	28.89 (13.1)
	60	2,583 (3500)	680	2,450	141.60 (160)	34.40 (15.6)
	70	4,244 (5750)	580	2,150	318.60 (360)	44.98 (20.4)
	80	6,273 (8500)	480	1,900	318.60 (360)	58.87 (26.7)
	90	10,701 (14500)	380	1,700	601.80 (680)	86.00 (39)
	100	14,760 (20000)	350	1,450	778.80 (880)	145.53 (66)
	120	23,063 (31250)	250	1,250	1,062.00 (1200)	200.66 (91)
150	51,660 (70000)	180	980	1,194.75 (1350)	410.13 (186)	
200	129,150 (175000)	120	750	3,717.00 (4200)	937.12 (425)	
250	212,175 (287500)	100	620	5,752.50 (6500)	1,499.4 (680)	
ALM..F2D2 ALM..F4D2	25	286 (388)	1,100	2,800	36.29 (41)	5.95 (2.7)
	30	434 (588)	1,000	2,500	56.64 (64)	8.05 (3.65)
	35	618 (838)	900	2,400	67.26 (76)	10.36 (4.7)

Note: When ordering, please specify direction of rotation.

Modular "Building Block" Clutches

AL..F2D2, AL..F4D2; ALM..F2D2, ALM..F4D2



Dimensions inches (mm)

Model	Size	d ^{H7}	D _{h7}	L ₁	D ₅	D ₃	z	O	D _{4h7}	t	L ₅	K	s	f
AL..F2D2 AL..F4D2	12	0.47 (12)	2.44 (62)	1.65 (42)	3.35 (85)	2.83 (72)	3	0.22 (5.5)	1.65 (42)	0.12 (3)	1.73 (44)	0.02 (0.5)	0.41 (10.3)	0.02 (0.5)
	15	0.59 (15)	2.68 (68)	2.05 (52)	3.62 (92)	3.07 (78)	3	0.22 (5.5)	1.85 (47)	0.12 (3)	2.13 (54)	0.02 (0.5)	0.41 (10.3)	0.03 (0.8)
	20	0.79 (20)	2.95 (75)	2.24 (57)	3.86 (98)	3.35 (85)	4	0.22 (5.5)	2.17 (55)	0.12 (3)	2.32 (59)	0.02 (0.5)	0.43 (10.8)	0.03 (0.8)
	25	0.98 (25)	3.54 (90)	2.36 (60)	4.65 (118)	4.09 (104)	4	0.26 (6.6)	2.68 (68)	0.12 (3)	2.44 (62)	0.02 (0.5)	0.41 (10.5)	0.04 (1)
	28	1.18 (30)	3.94 (100)	2.68 (68)	5.04 (128)	4.49 (114)	6	0.26 (6.6)	2.95 (75)	0.12 (3)	2.76 (70)	0.02 (0.5)	0.44 (11.3)	0.04 (1)
	30	1.18 (30)	3.94 (100)	2.68 (68)	5.04 (128)	4.49 (114)	6	0.26 (6.6)	2.95 (75)	0.12 (3)	2.76 (70)	0.02 (0.5)	0.44 (11.3)	0.04 (1)
	35	1.38 (35)	4.33 (110)	2.91 (74)	5.43 (138)	4.88 (124)	6	0.26 (6.6)	3.15 (80)	0.14 (3.5)	2.99 (76)	0.04 (1)	0.46 (11.8)	0.04 (1)
	40	1.57 (40)	4.92 (125)	3.39 (86)	6.30 (160)	5.59 (142)	6	0.35 (9)	3.54 (90)	0.14 (3.5)	3.46 (88)	0.04 (1)	0.54 (13.8)	0.06 (1.5)
	45	1.77 (45)	5.12 (130)	3.39 (86)	6.50 (165)	5.75 (146)	8	0.35 (9)	3.74 (95)	0.14 (3.5)	3.46 (88)	0.04 (1)	0.54 (13.8)	0.06 (1.5)
	50	1.97 (50)	5.91 (150)	3.62 (92)	7.28 (185)	6.54 (166)	8	0.35 (9)	4.33 (110)	0.16 (4)	3.70 (94)	0.04 (1)	0.50 (12.8)	0.06 (1.5)
	55	2.17 (55)	6.30 (160)	4.09 (104)	8.03 (204)	7.17 (182)	8	0.43 (11)	4.53 (115)	0.16 (4)	4.17 (106)	0.06 (1.5)	0.66 (16.8)	0.08 (2)
	60	2.36 (60)	6.69 (170)	4.49 (114)	8.43 (214)	7.56 (192)	10	0.43 (11)	4.92 (125)	0.16 (4)	4.57 (116)	0.06 (1.5)	0.64 (16.3)	0.08 (2)
	70	2.76 (70)	7.48 (190)	5.28 (134)	9.21 (234)	8.35 (212)	10	0.43 (11)	5.51 (140)	0.16 (4)	5.35 (136)	0.06 (1.5)	0.70 (17.8)	0.10 (2.5)
	80	3.15 (80)	8.27 (210)	5.67 (144)	10.00 (254)	9.13 (232)	10	0.43 (11)	6.30 (160)	0.16 (4)	5.76 (146.3)	0.06 (1.5)	0.80 (20.3)	0.10 (2.5)
	90	3.54 (90)	9.06 (230)	6.22 (158)	10.94 (278)	10.00 (254)	10	0.55 (14)	7.09 (180)	0.18 (4.5)	6.34 (161)	0.06 (1.5)	0.79 (20)	0.12 (3)
100	3.94 (100)	10.63 (270)	7.17 (182)	13.19 (335)	12.01 (305)	10	0.71 (18)	8.27 (210)	0.20 (5)	7.24 (184)	0.10 (2.5)	1.10 (28)	0.12 (3)	
120	4.72 (120)	12.20 (310)	7.95 (202)	14.76 (375)	13.58 (345)	12	0.71 (18)	9.45 (240)	0.20 (5)	8.03 (204)	0.10 (2.5)	1.12 (28.5)	0.12 (3)	
150	5.91 (150)	15.75 (400)	9.69 (246)	19.09 (485)	17.52 (445)	12	0.87 (22)	12.20 (310)	0.20 (5)	9.80 (249)	0.10 (2.5)	1.22 (31)	0.16 (4)	
200	7.87 (200)	20.47 (520)	12.83 (326)	24.61 (625)	22.24 (565)	18	1.02 (26)	15.75 (400)	0.20 (5)	12.91 (328)	0.12 (3)	1.57 (40)	0.20 (5)	
250	9.84 (250)	24.02 (610)	15.59 (396)	29.13 (740)	26.77 (680)	20	1.30 (33)	18.90 (480)	0.20 (5)	15.67 (398)	0.12 (3)	1.77 (45)	0.20 (5)	
ALM..F2D2 ALM..F4D2	25	.098 (25)	3.54 (90)	2.36 (60)	4.65 (118)	4.09 (104)	4	0.26 (6.6)	2.68 (68)	0.12 (3)	2.44 (62)	0.02 (0.5)	0.41 (10.5)	0.04 (1)
	30	1.18 (30)	3.94 (100)	2.68 (68)	5.04 (128)	4.49 (114)	6	0.26 (6.6)	2.95 (75)	0.12 (3)	2.76 (70)	0.02 (0.5)	0.44 (11.3)	0.04 (1)
	35	1.38 (35)	4.33 (110)	2.91 (74)	5.43 (138)	4.88 (124)	6	0.26 (6.6)	3.15 (80)	0.14 (3.5)	2.99 (76)	0.04 (1)	0.46 (11.8)	0.04 (1)

Note: For bore and keyseat information see page 83.