

Modular “Building Block” Clutches

ALP..F7D7, ALPM..F7D7

Overrunning, Indexing Ball Bearing Supported, Ramp & Roller Clutches



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

Model ALP..F7D7 is a ramp & roller type clutch, self-contained, sealed and bearing supported using two 160 Series bearings. Unit is shipped oil lubricated.

This cover combination is mostly used as an overrunning or indexing clutch.

A keyway is machined on the outer race for the connection to the drive or driven member centered on its outside.

D7 cover is used to close the unit. It is equipped with two screws for oil filling, drain and level.

The shaft seal is a V-ring type. Cover and seal have been designed to provide sealing with minimum drag torque.

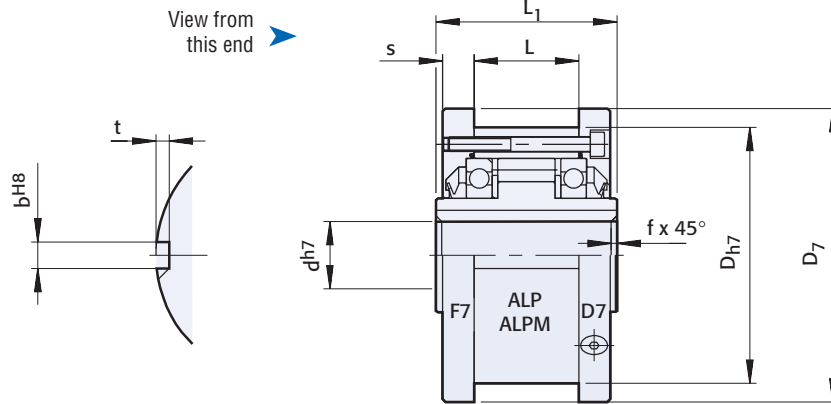
We recommend that the unit be supplied assembled.

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		
ALP.. F7D7	12	41 (55)	2,500	7,200	9.73 (11)	2.21 (1)
	15	92 (125)	1,900	6,500	13.28 (15)	3.09 (1.4)
	20	134 (181)	1,600	5,600	15.93 (18)	4.19 (1.9)
	25	213 (288)	1,400	4,500	31.86 (36)	6.17 (2.8)
	28	369 (500)	1,300	4,100	39.83 (45)	8.16 (3.7)
	30	369 (500)	1,300	4,100	39.83 (45)	8.16 (3.7)
	35	535 (725)	1,100	3,800	53.10 (60)	10.36 (4.7)
	40	756 (1025)	950	3,400	74.34 (84)	15.66 (7.1)
	45	830 (1125)	900	3,200	83.19 (94)	16.32 (7.4)
	50	1,568 (2125)	850	2,800	113.28 (128)	22.93 (10.4)
	55	1,937 (2625)	720	2,650	132.75 (150)	29.55 (13.4)
	60	2,583 (3500)	680	2,450	141.60 (160)	35.06 (15.9)
	70	4,244 (5750)	580	2,150	318.60 (360)	45.86 (20.8)
	80	6,273 (8500)	480	1,900	318.60 (360)	59.76 (27.1)
	90	10,701 (14500)	380	1,700	601.80 (680)	86.88 (39.4)
100	14,760 (20000)	350	1,450	778.80 (880)	146.41 (66.4)	
120	23,063 (31250)	250	1,250	1,062.00 (1200)	201.76 (91.5)	
150	51,660 (70000)	180	980	1,194.75 (1350)	412.34 (187)	
200	129,150 (175000)	120	750	3,717.00 (4200)	948.15 (430)	
250	212,175 (287500)	100	620	5,752.50 (6500)	1,517.04 (688)	
ALPM F7D7	25	286 (388)	1,100	2,800	36.29 (41)	6.39 (2.9)
	30	434 (588)	1,000	2,500	56.64 (64)	8.49 (3.85)
	35	618 (838)	900	2,400	67.26 (76)	10.80 (4.9)

Note: When ordering, please specify direction of rotation.

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Dimensions inches (mm)

Model	Size	d ^{H7}	D _{h7}	L ₁	D ₇	s	L	b ^{H8}	t	f
ALP.. F7D7	12	0.47 (12)	2.44 (62)	1.65 (42)	2.76 (70)	0.41 (10.4)	0.79 (20)	0.16 (4)	0.09 (2.4)	0.02 (0.5)
	15	0.59 (15)	2.68 (68)	2.05 (52)	2.99 (76)	0.45 (11.4)	1.10 (28)	0.20 (5)	0.11 (2.9)	0.03 (0.8)
	20	0.79 (20)	2.95 (75)	2.24 (57)	3.31 (84)	0.43 (10.9)	1.34 (34)	0.24 (6)	0.14 (3.5)	0.03 (0.8)
	25	0.98 (25)	3.54 (90)	2.36 (60)	3.90 (99)	0.47 (11.9)	1.38 (35)	0.31 (8)	0.16 (4.1)	0.04 (1)
	28	1.18 (30)	3.94 (100)	2.68 (68)	4.29 (109)	0.47 (11.9)	1.69 (43)	0.31 (8)	0.16 (4.1)	0.04 (1)
	30	1.18 (30)	3.94 (100)	2.68 (68)	4.29 (109)	0.47 (11.9)	1.69 (43)	0.31 (8)	0.16 (4.1)	0.04 (1)
	35	1.38 (35)	4.33 (110)	2.91 (74)	4.69 (119)	0.53 (13.4)	1.77 (45)	0.39 (10)	0.19 (4.7)	0.04 (1)
	40	1.57 (40)	4.92 (125)	3.39 (86)	5.31 (135)	0.61 (15.4)	2.09 (53)	0.47 (12)	0.19 (4.9)	0.06 (1.5)
	45	1.77 (45)	5.12 (130)	3.39 (86)	5.51 (140)	0.61 (15.4)	2.09 (53)	0.55 (14)	0.22 (5.5)	0.06 (1.5)
	50	1.97 (50)	5.91 (150)	3.62 (92)	6.30 (160)	0.51 (12.9)	2.52 (64)	0.55 (14)	0.22 (5.5)	0.06 (1.5)
	55	2.17 (55)	6.30 (160)	4.09 (104)	6.69 (170)	0.69 (17.5)	2.60 (66)	0.63 (16)	0.24 (6.2)	0.08 (2)
	60	2.36 (60)	6.69 (170)	4.49 (114)	7.17 (182)	0.65 (16.5)	3.07 (78)	0.71 (18)	0.27 (6.8)	0.08 (2)
	70	2.76 (70)	7.48 (190)	5.28 (134)	7.95 (202)	0.71 (18)	3.74 (95)	0.79 (20)	0.29 (7.4)	0.10 (2.5)
	80	3.15 (80)	8.27 (210)	5.67 (144)	8.74 (222)	0.81 (20.5)	3.94 (100)	0.87 (22)	0.33 (8.5)	0.10 (2.5)
	90	3.54 (90)	9.06 (230)	6.22 (158)	9.53 (242)	0.79 (20)	4.53 (115)	0.98 (25)	0.34 (8.7)	0.12 (3)
	100	3.94 (100)	10.63 (270)	7.17 (182)	11.10 (282)	1.12 (28.5)	4.72 (120)	1.10 (28)	0.39 (9.9)	0.12 (3)
	120	4.72 (120)	12.20 (310)	7.95 (202)	12.68 (322)	0.89 (22.5)	5.98 (152)	1.26 (32)	0.44 (11.1)	0.12 (3)
	150	5.91 (150)	15.75 (400)	9.69 (246)	16.22 (412)	1.22 (31)	7.09 (180)	1.42 (36)	0.48 (12.3)	0.16 (4)
	200	7.87 (200)	20.47 (520)	12.83 (326)	21.26 (540)	1.57 (40)	9.45 (240)	1.77 (45)	0.59 (15)	0.20 (5)
	250	9.84 (250)	24.02 (610)	15.59 (396)	24.80 (630)	1.77 (45)	11.8 (300)	1.77 (45)	0.59 (15)	0.20 (5)
ALPM.. F7D7	25	0.98 (25)	3.54 (90)	2.36 (60)	3.90 (99)	0.47 (11.9)	1.38 (35)	0.31 (8)	0.16 (4.1)	0.04 (1)
	30	1.18 (30)	3.94 (100)	2.68 (68)	4.29 (109)	0.47 (11.9)	1.69 (43)	0.31 (8)	0.16 (4.1)	0.04 (1)
	35	1.38 (35)	4.33 (110)	2.91 (74)	4.69 (119)	0.53 (13.4)	1.77 (45)	0.39 (10)	0.19 (4.7)	0.04 (1)

Note: For bore and keyseat information see page 83.