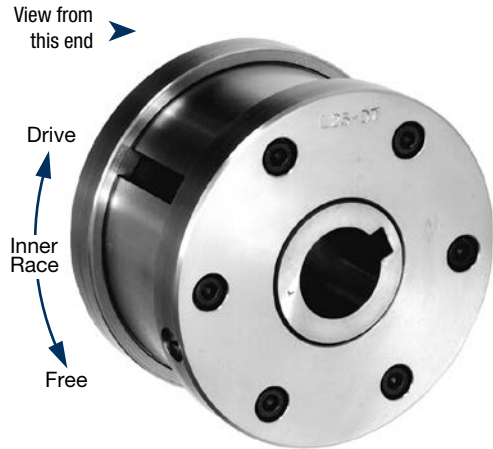


# Modular “Building Block” Clutches

## 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.

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

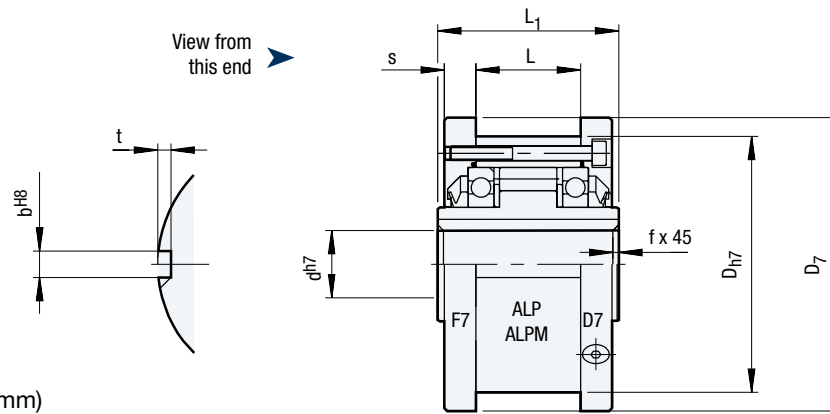
#### Specifications

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	1.0 (11)	2.21 (1)
	15	92 (125)	1,900	6,500	1.3 (15)	3.09 (1.4)
	20	134 (181)	1,600	5,600	1.6 (18)	4.19 (1.9)
	25	213 (288)	1,400	4,500	3.2 (36)	6.17 (2.8)
	28	369 (500)	1,300	4,100	4.0 (45)	8.16 (3.7)
	30	369 (500)	1,300	4,100	4.1 (45)	8.16 (3.7)
	35	535 (725)	1,100	3,800	5.4 (60)	10.36 (4.7)
	40	756 (1025)	950	3,400	7.4 (84)	15.66 (7.1)
	45	830 (1125)	900	3,200	8.3 (94)	16.32 (7.4)
	50	1,568 (2125)	850	2,800	11.3 (128)	22.93 (10.4)
	55	1,937 (2625)	720	2,650	13.3 (150)	29.55 (13.4)
	60	2,583 (3500)	680	2,450	14.2 (160)	35.06 (15.9)
	70	4,244 (5750)	580	2,150	31.9 (360)	45.86 (20.8)
	80	6,273 (8500)	480	1,900	31.9 (360)	59.76 (27.1)
	90	10,701 (14500)	380	1,700	60.2 (680)	86.88 (39.4)
100	14,760 (20000)	350	1,450	77.9 (880)	146.41 (66.4)	
120	23,063 (31250)	250	1,250	106.2 (1200)	201.76 (91.5)	
150	51,660 (70000)	180	980	119.5 (1350)	412.34 (187)	
200	129,150 (175000)	120	750	371.7 (4200)	948.15 (430)	
250	212,175 (287500)	100	620	575.3 (6500)	1,517.04 (688)	
ALPM.. F7D7	25	286 (388)	1,100	2,800	3.6 (41)	6.39 (2.9)
	30	434 (588)	1,000	2,500	5.7 (64)	8.49 (3.85)
	35	618 (838)	900	2,400	6.7 (76)	10.80 (4.9)

**Note:** When ordering, please specify direction of rotation.

# Modular “Building Block” Clutches

## ALP..F7D7, ALPM..F7D7



Dimensions inches (mm)

Model	Size	d <sup>H7</sup>	D <sup>H7</sup>	L <sub>1</sub>	D <sub>7</sub>	s	L	b <sup>H8</sup>	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 91.