

# Low Inertia High Torque Clutch



WPT Low Inertia (LI) High Torque Clutches provide the highest torque-to-size ratio of any WPT Low Inertia product. WPT's LI High Torque features a "pancake" airtube which provides maximum actuator contact area, increasing the clutch torque capacity. A large air connection is mounted directly to the airtube, allowing for rapid clutch response time. WPT's Low Inertia High Torque Clutches are available in 1, 2, or 3 plate construction with diameters ranging from 11 through 36 inches.

- Hydraulic actuation available
- High cycle life
- Predictable preventative maintenance
- Single-point actuator connection
- End-of-shaft mounting
- Slotted, solid and ventilated center plates available

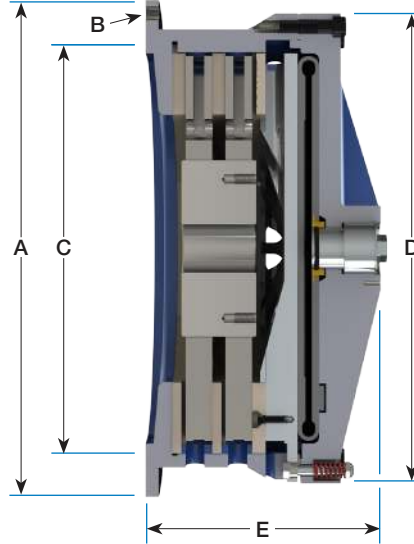
## LI HT Clutch Specifications

Model	Torque Rating @ 100 psi (7 bar)	Maximum Speed			Weight and Inertia				Lining Area	Bore Range*	
	Static Torque**	Complete Clutch	Hub/Cen-ter Plates only	Slip	Total Weight	Total Inertia	Hub & Center Plate Weight	Hub & Center Plate Inertia		Minimum	Maximum
	lbf-in (N-m)	r/min			lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	in <sup>2</sup> (cm <sup>2</sup> )	in (mm)	in (mm)
111	25000 (2820)	2,150	3,130	2,090	130 (58)	24 (1.0)	18 (8.0)	1.2 (0.051)	110 (730)	1.25 (31.8)	2.80 (71.1)
211	50000 (5650)	2,150	3,130	2,090	200 (91)	37 (1.5)	51 (23)	4.5 (0.19)	230 (1500)	1.25 (31.8)	2.80 (71.1)
311	75000 (8470)	2,150	3,130	2,090	330 (150)	36 (1.5)	75 (34)	6.7 (0.28)	340 (2200)	1.25 (31.8)	2.80 (71.1)
114	49800 (5630)	1,830	2,460	1,640	180 (82)	58 (2.4)	41 (19)	5.5 (0.23)	170 (1100)	1.50 (38.1)	3.30 (83.8)
214	99600 (11300)	1,830	2,460	1,640	280 (130)	80 (3.4)	82 (37)	11 (0.50)	330 (2100)	1.88 (47.8)	3.90 (99.0)
314	149000 (16900)	1,830	2,460	1,640	360 (160)	97 (4.1)	120 (52)	16 (0.70)	500 (3200)	1.88 (47.8)	3.90 (99.0)
116	74400 (8400)	1,620	2,150	1,430	240 (110)	90 (3.8)	58 (26)	10 (0.40)	230 (1500)	2.13 (54.1)	4.20 (106.7)
216	149000 (16800)	1,620	2,150	1,430	320 (140)	110 (4.0)	110 (49)	19 (0.80)	460 (2900)	2.13 (54.1)	4.20 (106.7)
316	223000 (25200)	1,620	2,150	1,430	450 (210)	150 (6.0)	140 (65)	24 (1.0)	680 (4400)	2.13 (54.1)	4.20 (106.7)
118	108000 (12200)	1,480	1,950	1,300	410 (190)	200 (8.0)	70 (32)	13 (0.60)	240 (1600)	2.25 (57.2)	4.90 (124.5)
218	216000 (24400)	1,480	1,910	1,270	520 (230)	230 (10)	150 (69)	35 (1.5)	520 (3300)	2.25 (57.2)	4.90 (124.5)
318	324000 (36600)	1,480	1,950	1,300	580 (260)	240 (10)	220 (99)	50 (2.1)	720 (4600)	2.75 (69.9)	4.90 (124.5)
121	174000 (19700)	1,270	1,640	1,090	540 (250)	320 (13)	200 (90)	170 (7.2)	360 (2300)	2.75 (69.9)	6.30 (160.0)
221	348000 (39400)	1,270	1,640	1,090	680 (310)	390 (16)	190 (86)	84 (3.5)	720 (4600)	2.75 (69.9)	6.30 (160.0)
321	523000 (59000)	1,270	1,680	1,120	960 (440)	420 (17)	400 (180)	170 (7.0)	980 (6300)	2.75 (69.9)	6.30 (160.0)
124	241000 (27300)	1,150	1,430	953	700 (320)	560 (23)	240 (110)	240 (10)	580 (3700)	2.75 (69.9)	6.30 (160.0)
224	483000 (54500)	1,150	1,430	953	1100 (520)	900 (38)	240 (110)	100 (4.0)	1,200 (7400)	2.75 (69.9)	6.30 (160.0)
324	724000 (81800)	1,150	1,430	953	1100 (510)	820 (34)	400 (180)	170 (7.0)	1,700 (11000)	2.75 (69.9)	6.30 (160.0)
127	358000 (40430)	1,050	1,270	847	950 (430)	680 (28)	230 (100)	120 (5.0)	750 (4900)	3.25 (82.6)	6.30 (160.0)
227	724000 (81800)	1,050	1,270	847	1100 (500)	940 (39)	370 (170)	190 (8.0)	1,500 (9400)	3.25 (82.6)	6.30 (160.0)
327	1090000 (123000)	1,050	1,270	847	1500 (660)	1200 (51)	510 (230)	310 (13)	2,200 (14000)	3.25 (82.6)	6.30 (160.0)
230	996000 (113000)	929	1,150	767	2000 (890)	2100 (90)	530 (240)	280 (12)	1,700 (11000)	3.50 (88.9)	7.00 (177.9)
330	1490000 (169000)	929	1,150	767	2200 (990)	2200 (94)	690 (320)	390 (17)	2,500 (16000)	3.50 (88.9)	7.00 (177.9)
236	1920000 (216000)	790	960	640	3100 (1400)	3900 (170)	870 (390)	660 (28)	2,200 (15000)	5.50 (139.7)	8.40 (213.4)
336	2870000 (325000)	790	960	640	3600 (1600)	5600 (240)	920 (420)	2100 (88)	3,400 (22000)	5.50 (139.7)	8.40 (213.4)

Consult WPT Application Engineering for application assistance, service factors, specifications, and detailed drawings/3D models.

\*Contact WPT for larger bore sizes. Listed bore sizes are for square key.

\*\*Dynamic (slipping) Torque is 75% of the Static Torque.



### LI HT Clutch Dimension

Model	Imperial Mounting					Metric Mounting					D	E (Ventilated Center Plate)	E (Ductile Slotted Center Plate)
	A		B		C	A		B		C			
	+0.000/-0.003 (+0.00/-0.08)		Hole Circle	Dia		Qty	+0.003/-0.000 (+0.08/-0.00)		Hole Circle				
	in (mm)				in (mm)		in (mm)			mm			
111	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (289.00)	(406.40)	(374.7)	(18.0)	6	(295.00)	14 3/4 (374.7)	7 15/16 (202)	7 15/16 (202)
211	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (289.00)	(406.40)	(374.7)	(18.0)	6	(295.00)	14 3/4 (374.7)	9 11/16 (246)	9 11/16 (246)
311	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (289.00)	(406.40)	(374.7)	(18.0)	6	(295.00)	14 3/4 (374.7)	11 7/16 (291)	11 7/16 (291)
114	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.20)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	8 3/8 (213)	7 7/8 (200)
214	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.20)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	10 1/4 (260)	9 1/4 (235)
314	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.20)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	12 1/8 (308)	10 5/8 (270)
116	21.248 (539.70)	20.00 (508.0)	21/32	12	16.250 (412.75)	(540.00)	(510.0)	(18.0)	12	(410.00)	20 (508.0)	8 7/8 (225)	8 15/16 (227)
216	21.248 (539.70)	20.00 (508.0)	21/32	12	16.250 (412.75)	(540.00)	(510.0)	(18.0)	12	(410.00)	20 (508.0)	10 3/4 (273)	10 3/4 (273)
316	21.248 (539.70)	20.00 (508.0)	21/32	12	16.250 (412.75)	(540.00)	(510.0)	(18.0)	12	(410.00)	20 (508.0)	12 5/8 (321)	12 5/8 (321)
118	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.63)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	9 1/16 (230)	9 1/4 (235)
218	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.63)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	10 15/16 (278)	10 15/16 (278)
318	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.63)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	12 7/8 (327)	12 9/16 (319)
121	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (543.00)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	9 1/2 (241)	9 3/4 (248)
221	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (543.00)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	11 5/8 (295)	11 5/8 (295)
321	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (543.00)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	14 (356)	13 1/2 (343)
124	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.20)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	9 7/8 (251)	10 1/16 (256)
224	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.20)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	12 (305)	12 1/8 (308)
324	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.20)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	14 1/4 (362)	14 (356)
127	32.750 (831.85)	31.50 (800.1)	21/32	16	27.375 (695.40)	(830.00)	(800.0)	(18.0)	16	(700.00)	31 1/4 (793.8)	10 (254)	10 7/16 (265)
227	32.750 (831.85)	31.50 (800.1)	21/32	16	27.375 (695.40)	(830.00)	(800.0)	(18.0)	16	(700.00)	31 1/4 (793.8)	12 1/2 (318)	12 1/2 (318)
327	32.750 (831.85)	31.50 (800.1)	21/32	16	27.375 (695.40)	(830.00)	(800.0)	(18.0)	16	(700.00)	31 1/4 (793.8)	14 15/16 (379)	14 5/8 (371)
230	37.000 (939.80)	35.50 (901.7)	25/32	18	30.375 (771.53)	(940.00)	(900.0)	(22.0)	18	(775.00)	36 1/8 (917.6)	13 5/8 (346)	13 (330)
330	37.000 (939.80)	35.50 (901.7)	25/32	18	30.375 (771.53)	(940.00)	(900.0)	(22.0)	18	(775.00)	36 1/8 (917.6)	17 (432)	14 1/8 (359)
236	43.500 (1104.90)	42.00 (1066.8)	1 1/32	18	36.375 (924.00)	(1104.90)	(1065.0)	(22.0)	18	(925.00)	41 1/2 (1054.1)	15 1/16 (383)	15 (381)
336	43.500 (1104.90)	42.00 (1066.8)	1 1/32	18	36.375 (924.00)	(1104.90)	(1065.0)	(22.0)	18	(925.00)	41 1/2 (1054.1)	18 7/16 (468)	15 (381)

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