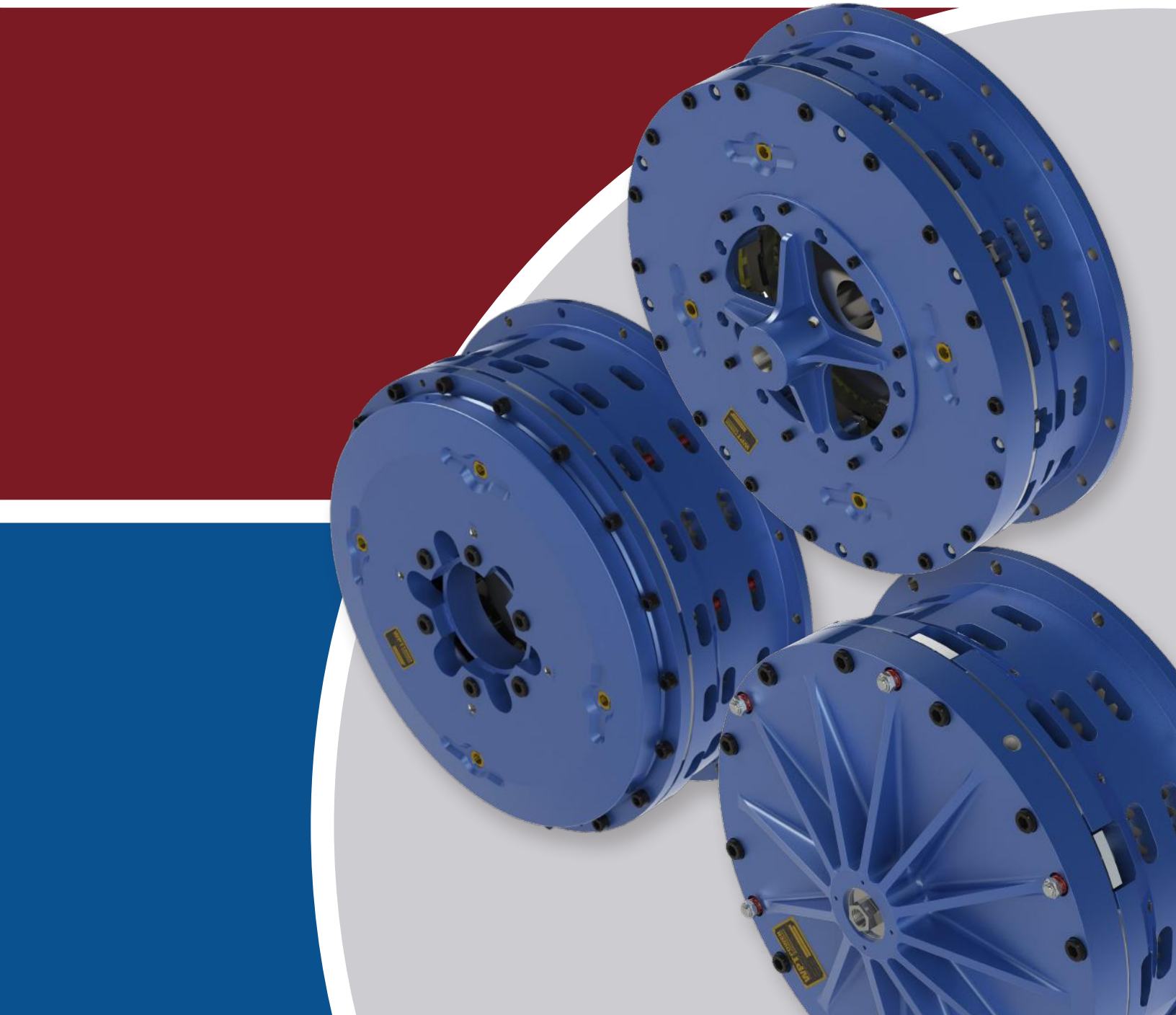
WPT®
POWER

Low Inertia Clutches and Brakes



Low Inertia Brake

WPT Low Inertia (LI) Brakes are well suited for high cycle and tension control applications, such as steel shears and unwind stands. The LI brakes utilize a ventilated design to optimize the airflow in and out of the brake. This increased airflow allows the brake to run cool in high cycle applications. WPT's Low Inertia Brakes are available in 1, 2, or 3 plate construction with diameters ranging from from 6 through 60 inches.

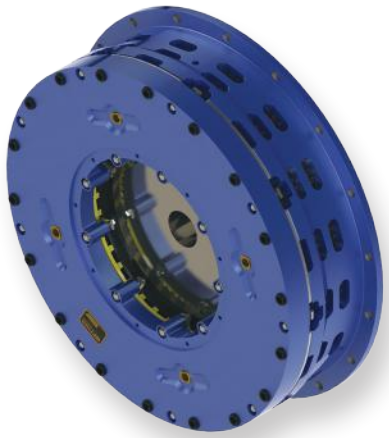
- High cycle life
- Predictable preventative maintenance
- Hydraulic actuation available
- Slotted, solid and ventilated center plates available
- *See Power Performance upgrade on page 12*

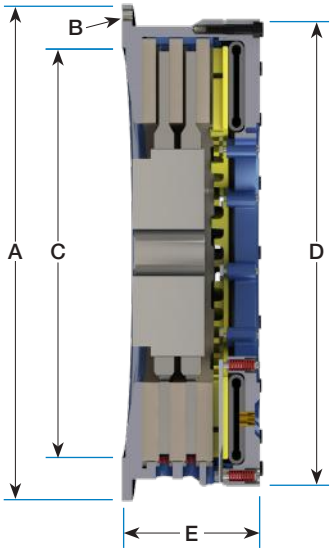
LI Brake Specifications

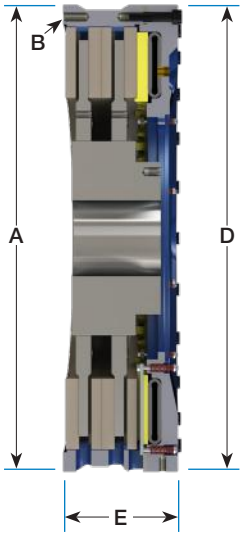
Model	Torque Rating @ 100 psi (7 bar)	Maximum Speed		Weight and Inertia			Lining Area	Bore Range*	
	Static Torque**	Hub & Center Plate	Slip	Total Weight	Hub & Center Plate Weight	Hub & Center Plate Inertia		Minimum	Maximum
	lbf-in (N-m)	r/min		lb (kg)	lb (kg)	lb-ft2 (kg-m2)	in2 (cm2)	in (mm)	in (mm)
106	4520 (510)	5290	3530	23 (10)	6.6 (3.0)	0.17 (0.0072)	39 (250)	0.88 (22.4)	1.90 (48.3)
206	9030 (1020)	5290	3530	36 (16)	12 (5.6)	0.35 (0.015)	78 (500)	0.88 (22.4)	1.90 (48.3)
108	7480 (845)	4300	2870	56 (25)	9.3 (4.2)	0.46 (0.019)	55 (360)	0.94 (23.9)	2.50 (63.5)
208	15000 (1690)	4300	2870	64 (29)	21 (10)	0.90 (0.038)	110 (710)	1.13 (28.7)	2.50 (63.5)
111	16800 (1900)	3130	2090	130 (60)	27 (12)	2.3 (0.10)	110 (730)	1.25 (31.8)	2.80 (71.1)
211	33600 (3790)	3130	2090	170 (77)	51 (23)	4.6 (0.19)	230 (1500)	1.25 (31.8)	2.80 (71.1)
311	50300 (5690)	3130	2090	210 (96)	75 (34)	6.3 (0.27)	340 (2200)	1.25 (31.8)	2.80 (71.1)
114	28300 (3190)	2460	1640	190 (88)	48 (22)	5.8 (0.24)	170 (1100)	1.50 (38.1)	3.30 (83.8)
214	56500 (6390)	2460	1640	240 (110)	74 (34)	12 (0.47)	330 (2100)	1.88 (47.8)	3.90 (99.1)
314	84800 (9580)	2460	1640	290 (130)	120 (56)	17 (0.72)	500 (3200)	1.88 (47.8)	3.90 (99.1)
116	38900 (4390)	2150	1440	290 (130)	67 (31)	11 (0.45)	230 (1500)	2.13 (54.1)	4.20 (106.7)
216	77700 (8780)	2150	1440	340 (160)	110 (49)	19 (0.81)	460 (2900)	2.13 (54.1)	4.20 (106.7)
316	117000 (13200)	2150	1440	460 (210)	160 (71)	29 (1.2)	680 (4400)	2.13 (54.1)	4.20 (106.7)
118	64900 (7330)	1950	1300	350 (160)	76 (34)	13 (0.56)	240 (1600)	2.25 (57.2)	4.90 (124.5)
218	130000 (14700)	1910	1280	410 (190)	150 (70)	38 (1.6)	520 (3300)	2.25 (57.2)	4.90 (124.5)
318	195000 (22000)	1950	1300	530 (240)	220 (100)	52 (2.2)	720 (4600)	2.75 (69.9)	4.90 (124.5)
121	93300 (10500)	1640	1100	470 (210)	190 (88)	34 (1.4)	360 (2300)	2.75 (69.9)	6.30 (160.0)
221	187000 (21100)	1640	1100	680 (310)	270 (120)	39 (1.6)	720 (4600)	2.75 (69.9)	6.30 (160.0)
321	280000 (31600)	1680	1120	760 (340)	270 (120)	71 (3.0)	980 (6300)	2.75 (69.9)	6.30 (160.0)
124H	165000 (18600)	1430	955	640 (290)	200 (89)	57 (2.4)	580 (3700)	2.75 (69.9)	6.30 (160.0)
224H	330000 (37300)	1430	955	820 (370)	270 (120)	118 (5.0)	1200 (7400)	2.75 (69.9)	6.30 (160.0)
324H	495000 (55900)	1430	955	1100 (480)	390 (180)	150 (6.4)	1700 (11000)	2.75 (69.9)	6.30 (160.0)
227	371000 (41900)	1270	850	1100 (480)	390 (180)	206 (8.7)	1500 (9400)	3.25 (82.6)	6.30 (160.0)
327	556000 (62800)	1270	850	1200 (530)	430 (190)	298 (13)	2200 (14000)	3.25 (82.6)	6.30 (160.0)
230H	692000 (78200)	1150	770	1400 (620)	520 (230)	350 (15)	1700 (11000)	3.50 (88.9)	7.00 (177.8)
330H	1040000 (117000)	1150	770	1800 (810)	750 (340)	400 (17)	2500 (16000)	3.50 (88.9)	7.00 (177.8)
236	1060000 (119000)	960	640	2000 (900)	780 (360)	470 (20)	2200 (15000)	5.50 (139.7)	8.40 (213.4)
336	1590000 (179000)	960	640	2800 (1300)	870 (400)	600 (25)	3400 (22000)	5.50 (139.7)	8.40 (213.4)
242	1500000 (170000)	830	555	2800 (1200)	950 (430)	1200 (50)	2700 (18000)	7.50 (190.5)	11.20 (284.5)
342	2250000 (254000)	830	555	3700 (1700)	1000 (470)	2700 (110)	4100 (26000)	7.50 (190.5)	11.20 (284.5)
248	2810000 (317000)	720	480	4700 (2100)	3000 (1300)	3300 (140)	4000 (26000)	10.00 (254.0)	14.50 (368.3)
348	4210000 (475000)	720	480	6200 (2800)	3000 (1300)	5200 (220)	6000 (39000)	10.00 (254.0)	14.50 (368.3)
260	5950000 (672000)	570	480	9500 (4300)	3300 (1500)	8500 (360)	7200 (47000)	10.00 (254.0)	18.90 (480.1)
360	8930000 (1010000)	570	480	12000 (5300)	5000 (2300)	13000 (540)	11000 (70000)	10.00 (254.0)	18.90 (480.1)
460	11900000 (1340000)	570	480	15000 (6600)	7600 (3500)	19000 (800)	15000 (94000)	10.00 (254.0)	18.90 (480.1)

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.

Low Inertia Brake







Size 242-460

LI Brake 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)	(+0.00/-0.08)	Hole Circle	Dia	Qty	H7			
	in (mm)	in (mm)	in		in (mm)	(mm)	(mm)	(mm)		(mm)	in (mm)	in (mm)	in (mm)
106	8.753 (222.33)	8.00 (203.2)	11/32	4	7.377 (187.38)	(220.04)	(203.0)	(9.0)	4	(190.00)	8 13/16 (223.8)	3 3/4 (36.5)	- -
206	8.753 (222.33)	8.00 (203.2)	11/32	4	7.377 (187.38)	(220.04)	(203.0)	(9.0)	4	(190.00)	8 13/16 (223.8)	4 15/16 (36.5)	- -
108	12.125 (307.98)	11.13 (282.7)	17/32	6	8.375 (212.80)	(310.00)	(280.0)	(14.0)	6	(220.00)	11 1/8 (282.6)	4 9/16 (44.5)	5 7/8 (149)
208	12.125 (307.98)	11.13 (282.7)	17/32	6	8.375 (212.80)	(310.00)	(280.0)	(14.0)	6	(220.00)	11 1/8 (282.6)	5 15/16 (44.5)	7 1/4 (184)
111	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (288.93)	(400.00)	(375.0)	(18.0)	6	(295.00)	14 3/4 (374.7)	5 7/16 (44.5)	-
211	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (288.93)	(400.00)	(375.0)	(18.0)	6	(295.00)	14 3/4 (374.7)	7 1/4 (44.5)	9 11/16 (209)
311	16.000 (406.40)	14.75 (374.7)	21/32	6	11.375 (288.93)	(400.00)	(375.0)	(18.0)	6	(295.00)	14 3/4 (374.7)	9 (44.5)	8 7/16 -
114	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.13)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	6 (44.5)	- -
214	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.13)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	8 (44.5)	9 1/2 (241)
314	18.750 (476.25)	17.50 (444.5)	21/32	8	14.375 (365.13)	(470.00)	(445.0)	(18.0)	8	(370.00)	17 1/2 (444.5)	9 13/16 (44.5)	- -
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)	6 5/16 (44.5)	- -
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)	8 1/4 (44.5)	- -
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)	10 1/8 (44.5)	11 7/8 (302)
118	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.55)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	6 3/4 (41.3)	10 11/16 (271)
218	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.55)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	8 5/8 (41.3)	10 1/2 (267)
318	23.250 (590.55)	22.00 (558.8)	21/32	12	18.250 (463.55)	(590.00)	(560.0)	(18.0)	12	(470.00)	22 (558.8)	10 1/2 (41.3)	12 3/16 (310)
121	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (542.93)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	7 3/8 (50.8)	- -
221	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (542.93)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	9 1/2 (50.8)	- -
321	27.000 (685.80)	25.50 (647.7)	21/32	12	21.375 (542.93)	(685.00)	(648.0)	(18.0)	12	(540.00)	24 7/8 (631.8)	11 5/8 (50.8)	- -
124H	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.13)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	7 5/8 (57.2)	- -
224H	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.13)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	9 15/16 (57.2)	12 1/16 (306)
324H	30.000 (762.00)	28.75 (730.3)	21/32	12	24.375 (619.13)	(760.00)	(730.0)	(18.0)	12	(620.00)	29 (736.6)	12 3/16 (57.2)	14 (356)
227	32.750 (831.85)	31.50 (800.1)	21/32	16	27.375 (695.33)	(830.00)	(800.0)	(18.0)	16	(700.00)	31 (787.4)	10 3/8 (44.5)	12 1/8 (308)
327	32.750 (831.85)	31.50 (800.1)	21/32	16	27.375 (695.33)	(830.00)	(800.0)	(18.0)	16	(700.00)	31 (787.4)	12 3/4 (44.5)	12 5/16 (313)
230H	37.000 (939.80)	35.50 (901.7)	25/32	18	30.375 (771.53)	(940.00)	(900.0)	(22.0)	18	(775.00)	34 3/4 (882.7)	11 11/16 (111.1)	15 5/8 (397)
330H	37.000 (939.80)	35.50 (901.7)	25/32	18	30.375 (771.53)	(940.00)	(900.0)	(22.0)	18	(775.00)	34 3/4 (882.7)	12 7/16 (111.1)	16 9/16 (420)
236	43.500 (1104.90)	42.00 (1066.8)	25/32	18	36.375 (924.99)	(1105.00)	(1065.0)	(22.0)	18	(925.00)	41 (1041.4)	12 7/16 (36.5)	15 1/4 (383)
336	43.500 (1104.90)	42.00 (1066.8)	25/32	18	36.375 (924.99)	(1105.00)	(1065.0)	(22.0)	18	(925.00)	41 (1041.4)	17 1/16 (44.5)	18 9/16 (471)
242*	49.000 (1244.60)	49.25 (1251.0)	1"-8NC	24	45.000 (1133.48)	(1320.00)	(1250.0)	(33.0)	24	(1134.00)	49 (1244.6)	11 7/8 (114.3)	13 3/8 (340)
342*	49.000 (1244.60)	49.25 (1251.0)	1"-8NC	24	45.000 (1133.48)	(1320.00)	(1250.0)	(33.0)	24	(1134.00)	49 (1244.6)	14 3/4 (114.3)	- -
248*	56.750 (1441.58)	54.00 (1371.6)	1"-8NC	24	52.000 (1320.80)	(1600.00)	(1540.0)	M24 x 3	24	(1220.00)	56 3/4 (1441.5)	13 3/4 (101.6)	- -
348*	56.750 (1441.58)	54.00 (1371.6)	1"-8NC	24	52.000 (1320.80)	(1600.00)	(1540.0)	M24 x 3	24	(1220.00)	56 3/4 (1441.5)	16 1/4 (101.6)	- -
260*	70.500 (1790.70)	66.50 (1689.1)	2"-4.5NC	24	62.750 (1593.85)	(1790.00)	(1689.0)	2"-4.5 NC	24	(1590.00)	70 1/2 (1790.7)	17 5/8 (60.3)	- -
360*	70.500 (1790.70)	66.50 (1689.1)	2"-4.5NC	24	62.750 (1593.85)	(1790.00)	(1689.0)	2"-4.5 NC	24	(1590.00)	70 1/2 (1790.7)	22 5/8 (60.3)	- -
460*	70.500 (1790.70)	66.50 (1689.1)	2"-4.5NC	24	62.750 (1593.85)	(1790.00)	(1689.0)	2"-4.5 NC	24	(1590.00)	70 1/2 (1790.7)	27 1/8 (60.3)	- -

Consult WPT Application Engineering for application assistance, service factors, specifications, and detailed drawings/3D models.
*Shipped without backplate.

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