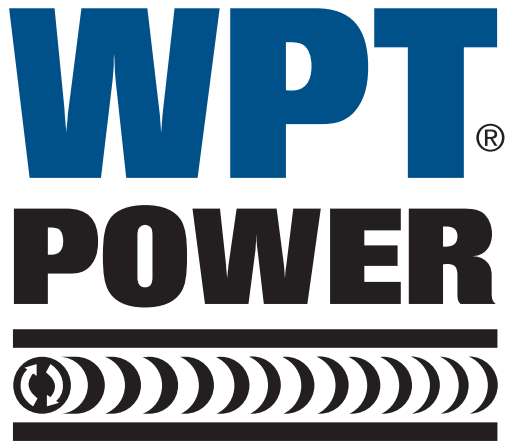
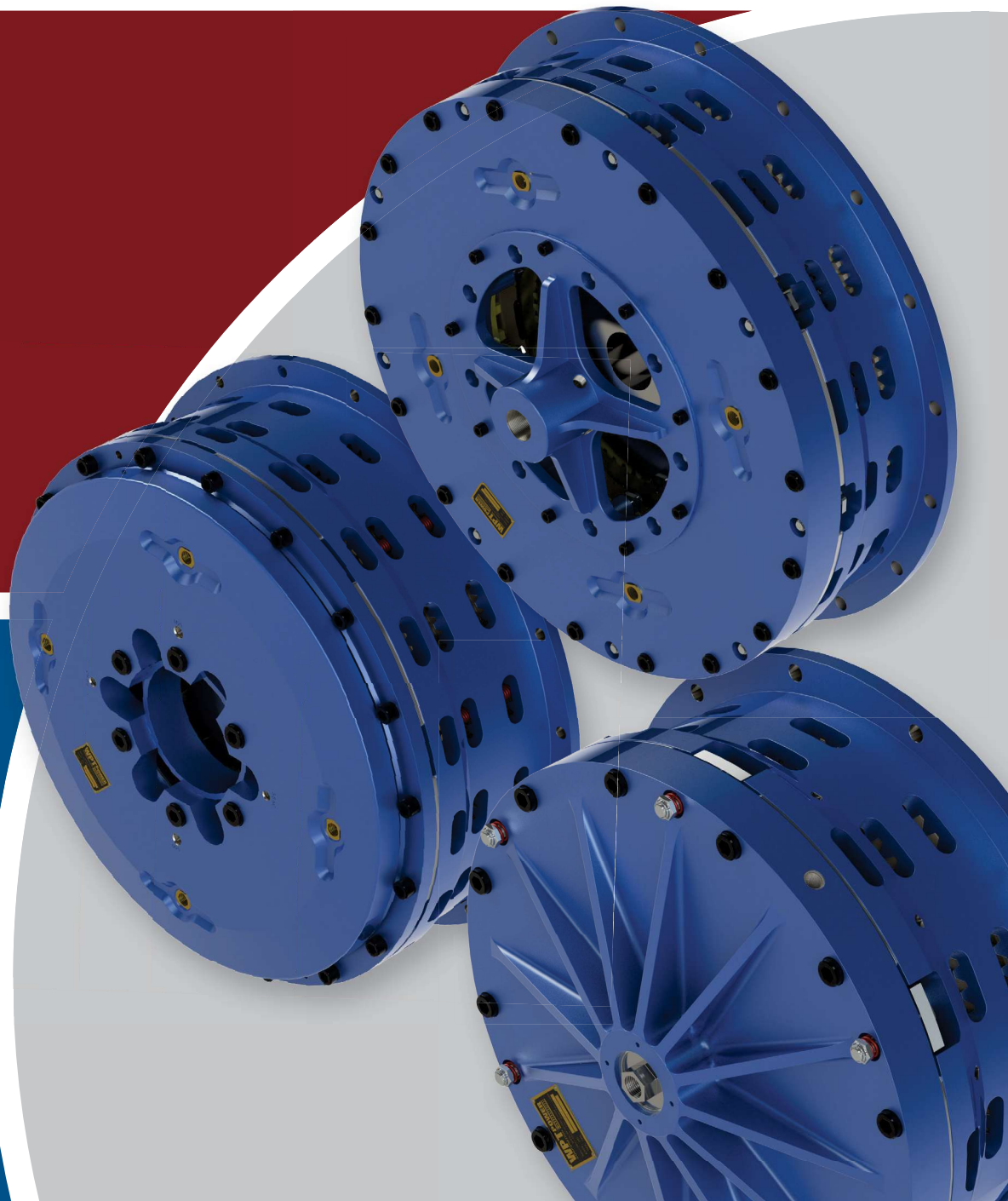




# Low Inertia Clutches and Brakes



## Vision Statement

Our vision is to be the leader in every market we serve, to the benefit of our customers and our shareholders.

## Mission Statement

Profitable growth through superior customer service, innovation, quality and commitment to customer satisfaction.

## Core Values

1. We respect each other, our community and the environment.
2. We are ethical and honest in all of our business dealings.
3. We are diligent in protecting the safety of our people.
4. We are disciplined and personally accountable for our decisions, actions, attitude and results.
5. We have an entrepreneur's mindset, driving innovation and striving for excellence in all we do.
6. We openly communicate among all levels of the company.
7. We believe in working as a team toward common objectives with a can-do attitude.

|           |                                             |
|-----------|---------------------------------------------|
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WPT Power is constantly striving to improve and develop the product range. For this reason, WPT Power reserves the right to make changes in any product information without prior notice. Every effort has been made to ensure that the dimensions, performance, specifications, etc. are correct at the time of printing. For more information, please contact your authorized WPT Power distributor or visit: [WPTpower.com](http://WPTpower.com).

# Low Inertia Clutch

WPT Low Inertia (LI) Clutches are well suited for high cycle applications, such as steel shears and stamping presses. The Low Inertia design reduces the rotational mass during starts and stops, allowing for increased cycles per minute and reduced deceleration times. This advantage also leads to reduced heat generation during dynamic braking conditions. WPT's Low Inertia Clutches are available in 1, 2, or 3 plate construction with diameters ranging 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 Clutch Specifications

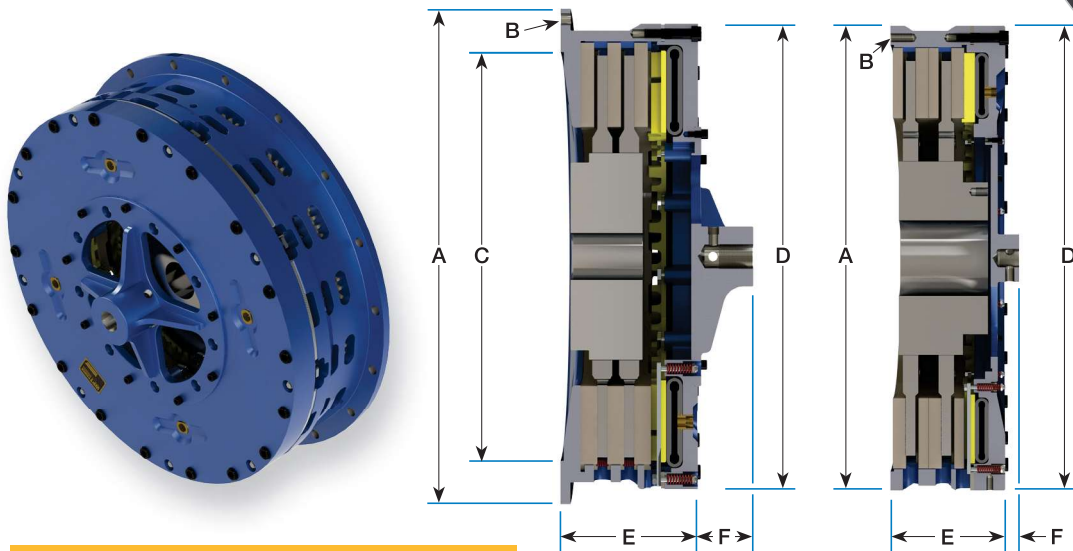
| Model | Torque Rating @ 100<br>psi (7 bar) | Maximum Speed      |                          |      | Weight and Inertia |                                         |                              |                                         | Lining Area                        | Bore Range*   |               |
|-------|------------------------------------|--------------------|--------------------------|------|--------------------|-----------------------------------------|------------------------------|-----------------------------------------|------------------------------------|---------------|---------------|
|       | Static Torque**                    | Complete<br>Clutch | Hub &<br>Center<br>Plate | Slip | Total Weight       | Total Inertia                           | Hub & Center<br>Plate Weight | Hub & Center Plate<br>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)       |
| 106   | 4520 (510)                         | 3930               | 5290                     | 3530 | 23 (10)            | 1.6 (0.066)                             | 6.6 (3.0)                    | 0.17 (0.0072)                           | 39 (250)                           | 0.88 (22.4)   | 1.90 (48.3)   |
| 206   | 9030 (1020)                        | 3930               | 5290                     | 3530 | 36 (16)            | 1.2 (0.052)                             | 12 (5.6)                     | 0.35 (0.015)                            | 78 (500)                           | 0.88 (22.4)   | 1.90 (48.3)   |
| 108   | 7480 (845)                         | 2840               | 4300                     | 2870 | 56 (25)            | 7.2 (0.30)                              | 9.3 (4.2)                    | 0.46 (0.019)                            | 55 (360)                           | 0.94 (23.8)   | 2.50 (63.5)   |
| 208   | 15000 (1690)                       | 2840               | 4300                     | 2870 | 64 (29)            | 8.1 (0.34)                              | 21 (10)                      | 0.90 (0.038)                            | 110 (710)                          | 1.13 (28.7)   | 2.50 (63.5)   |
| 111   | 16800 (1900)                       | 2150               | 3130                     | 2090 | 130 (60)           | 26 (1.1)                                | 27 (12)                      | 2.3 (0.10)                              | 110 (730)                          | 1.25 (31.8)   | 2.80 (71.1)   |
| 211   | 33600 (3790)                       | 2150               | 3130                     | 2090 | 170 (77)           | 31 (1.3)                                | 51 (23)                      | 4.6 (0.19)                              | 230 (1500)                         | 1.25 (31.8)   | 2.80 (71.1)   |
| 311   | 50300 (5690)                       | 2150               | 3130                     | 2090 | 210 (96)           | 32 (1.3)                                | 75 (34)                      | 6.3 (0.27)                              | 340 (2200)                         | 1.25 (31.8)   | 2.80 (71.1)   |
| 114   | 28300 (3190)                       | 1840               | 2460                     | 1640 | 190 (88)           | 52 (2.2)                                | 48 (22)                      | 5.8 (0.24)                              | 170 (1100)                         | 1.50 (38.1)   | 3.30 (83.8)   |
| 214   | 56500 (6390)                       | 1840               | 2460                     | 1640 | 240 (110)          | 72 (3.0)                                | 74 (34)                      | 12 (0.47)                               | 330 (2100)                         | 1.88 (47.8)   | 3.90 (99.1)   |
| 314   | 84800 (9580)                       | 1840               | 2460                     | 1640 | 290 (130)          | 76 (3.2)                                | 120 (56)                     | 17 (0.72)                               | 500 (3200)                         | 1.88 (47.8)   | 3.90 (99.1)   |
| 116   | 38900 (4390)                       | 1620               | 2150                     | 1440 | 290 (130)          | 110 (4.6)                               | 67 (31)                      | 11 (0.45)                               | 230 (1500)                         | 2.13 (54.1)   | 4.20 (106.7)  |
| 216   | 77700 (8780)                       | 1620               | 2150                     | 1440 | 340 (160)          | 94 (4.0)                                | 110 (49)                     | 19 (0.81)                               | 460 (2900)                         | 2.13 (54.1)   | 4.20 (106.7)  |
| 316   | 117000 (13200)                     | 1620               | 2150                     | 1440 | 460 (210)          | 170 (7.0)                               | 160 (71)                     | 29 (1.2)                                | 680 (4400)                         | 2.13 (54.1)   | 4.20 (106.7)  |
| 118   | 64900 (7330)                       | 1480               | 1950                     | 1300 | 350 (160)          | 150 (6.2)                               | 76 (34)                      | 13 (0.56)                               | 240 (1600)                         | 2.25 (57.2)   | 4.90 (124.5)  |
| 218   | 130000 (14700)                     | 1480               | 1910                     | 1280 | 410 (190)          | 180 (7.5)                               | 150 (70)                     | 38 (1.6)                                | 520 (3300)                         | 2.25 (57.2)   | 4.90 (124.5)  |
| 318   | 195000 (22000)                     | 1480               | 1950                     | 1300 | 530 (240)          | 210 (8.9)                               | 220 (100)                    | 52 (2.2)                                | 720 (4600)                         | 2.75 (69.9)   | 4.90 (124.5)  |
| 121   | 93300 (10500)                      | 1280               | 1640                     | 1100 | 470 (210)          | 300 (13)                                | 190 (88)                     | 34 (1.4)                                | 360 (2300)                         | 2.75 (69.9)   | 6.30 (160.0)  |
| 221   | 187000 (21100)                     | 1280               | 1640                     | 1100 | 680 (310)          | 340 (14)                                | 270 (120)                    | 39 (1.6)                                | 720 (4600)                         | 2.75 (69.9)   | 6.30 (160.0)  |
| 321   | 280000 (31600)                     | 1280               | 1680                     | 1120 | 760 (340)          | 420 (18)                                | 270 (120)                    | 71 (3.0)                                | 980 (6300)                         | 2.75 (69.9)   | 6.30 (160.0)  |
| 124H  | 165000 (18600)                     | 1150               | 1430                     | 955  | 640 (290)          | 470 (20)                                | 200 (89)                     | 57 (2.4)                                | 580 (3700)                         | 2.75 (69.9)   | 6.30 (160.0)  |
| 224H  | 330000 (37300)                     | 1150               | 1430                     | 955  | 820 (370)          | 520 (22)                                | 270 (120)                    | 118 (5.0)                               | 1200 (7400)                        | 2.75 (69.9)   | 6.30 (160.0)  |
| 324H  | 495000 (55900)                     | 1150               | 1430                     | 955  | 1100 (480)         | 790 (33)                                | 390 (180)                    | 150 (6.4)                               | 1700 (11000)                       | 2.75 (69.9)   | 6.30 (160.0)  |
| 227   | 371000 (41900)                     | 1050               | 1270                     | 850  | 1100 (480)         | 910 (38)                                | 390 (180)                    | 206 (8.7)                               | 1500 (9400)                        | 3.25 (82.6)   | 6.30 (160.0)  |
| 327   | 556000 (62800)                     | 1050               | 1270                     | 850  | 1200 (530)         | 1100 (44)                               | 430 (190)                    | 298 (13)                                | 2200 (14000)                       | 3.25 (82.6)   | 6.30 (160.0)  |
| 230H  | 692000 (78200)                     | 930                | 1150                     | 770  | 1400 (620)         | 1500 (61)                               | 520 (230)                    | 350 (15)                                | 1700 (11000)                       | 3.50 (88.9)   | 7.00 (177.8)  |
| 330H  | 1040000 (117000)                   | 930                | 1150                     | 770  | 1800 (810)         | 1900 (78)                               | 750 (340)                    | 400 (17)                                | 2500 (16000)                       | 3.50 (88.9)   | 7.00 (177.8)  |
| 236   | 1060000 (119000)                   | 790                | 960                      | 640  | 2000 (900)         | 3200 (140)                              | 780 (360)                    | 470 (20)                                | 2200 (15000)                       | 5.50 (139.7)  | 8.40 (213.4)  |
| 336   | 1590000 (179000)                   | 790                | 960                      | 640  | 2800 (1300)        | 4900 (210)                              | 870 (400)                    | 600 (25)                                | 3400 (22000)                       | 5.50 (139.7)  | 8.40 (213.4)  |
| 242   | 1500000 (170000)                   | 660                | 830                      | 555  | 2800 (1200)        | 5400 (230)                              | 950 (430)                    | 1200 (50)                               | 2700 (18000)                       | 7.50 (190.5)  | 11.20 (284.5) |
| 342   | 2250000 (254000)                   | 660                | 830                      | 555  | 3700 (1700)        | 9200 (390)                              | 1000 (470)                   | 2700 (110)                              | 4100 (26000)                       | 7.50 (190.5)  | 11.20 (284.5) |
| 248   | 2810000 (317000)                   | 605                | 720                      | 480  | 4700 (2100)        | 14000 (580)                             | 3000 (1300)                  | 3300 (140)                              | 4000 (26000)                       | 10.00 (254.0) | 14.50 (368.3) |
| 348   | 4210000 (475000)                   | 605                | 720                      | 480  | 6200 (2800)        | 19000 (810)                             | 3000 (1300)                  | 5200 (220)                              | 6000 (39000)                       | 10.00 (254.0) | 14.50 (368.3) |
| 260   | 5950000 (672000)                   | 490                | 570                      | 480  | 9500 (4300)        | 49000 (2100)                            | 3300 (1500)                  | 8500 (360)                              | 7200 (47000)                       | 10.00 (254.0) | 18.90 (480.1) |
| 360   | 8930000 (1010000)                  | 490                | 570                      | 480  | 12000 (5300)       | 57000 (2400)                            | 5000 (2300)                  | 13000 (540)                             | 11000 (70000)                      | 10.00 (254.0) | 18.90 (480.1) |
| 460   | 11900000 (1340000)                 | 490                | 570                      | 480  | 15000 (6600)       | 69000 (2900)                            | 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 Clutch



LI Clutch Dimension

Size 242-460

| Model | Imperial Mounting              |                |          |     |                                | Metric Mounting   |                |           |     |           | D               | E<br>(Ventilated<br>Center Plate) | E<br>(Ductile Slotted<br>Center Plate) | F             |
|-------|--------------------------------|----------------|----------|-----|--------------------------------|-------------------|----------------|-----------|-----|-----------|-----------------|-----------------------------------|----------------------------------------|---------------|
|       | A                              | B              |          |     | C                              | A                 | B              |           | C   |           |                 |                                   |                                        |               |
|       | +0.000/-0.003<br>(+0.00/-0.08) | Hole Circle    | Dia.     | Qty | +0.003/-0.000<br>(+0.08/-0.00) | (+0.00/-<br>0.08) | Hole<br>Circle | Dia.      | Qty | H7        |                 |                                   |                                        |               |
|       | in (mm)                        | in (mm)        | in       |     | in (mm)                        | (mm)              | (mm)           | (mm)      |     | (mm)      | in (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 (95)                        | - -                                    | 1 7/16 (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 (125)                     | - -                                    | 1 7/16 (36.5) |
| 108   | 12.125 (307.98)                | 11.13 (282.7)  | 17/32    | 6   | 8.375 (212.73)                 | (310.00)          | (280.0)        | (14.0)    | 6   | (220.00)  | 11 1/8 (282.6)  | 4 9/16 (116)                      | 5 7/8 (149)                            | 1 3/4 (44.5)  |
| 208   | 12.125 (307.98)                | 11.13 (282.7)  | 17/32    | 6   | 8.375 (212.73)                 | (310.00)          | (280.0)        | (14.0)    | 6   | (220.00)  | 11 1/8 (282.6)  | 5 15/16 (151)                     | 7 1/4 (184)                            | 1 3/4 (44.5)  |
| 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 (138)                      | - -                                    | 1 3/4 (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 (184)                       | 8 1/4 (209)                            | 1 3/4 (44.5)  |
| 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 (229)                           | - -                                    | 1 3/4 (44.5)  |
| 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 (152)                           | - -                                    | 1 3/4 (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 (203)                           | 9 1/2 (241)                            | 1 3/4 (44.5)  |
| 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 (249)                     | - -                                    | 1 3/4 (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 (160)                      | - -                                    | 1 3/4 (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 (210)                       | - -                                    | 1 3/4 (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 (257)                      | 11 7/8 (302)                           | 1 3/4 (44.5)  |
| 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 (171)                       | 10 11/16 (271)                         | 1 5/8 (41.3)  |
| 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 (219)                       | 10 1/2 (267)                           | 1 5/8 (41.3)  |
| 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 (267)                      | 12 3/16 (310)                          | 1 5/8 (41.3)  |
| 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 (187)                       | - -                                    | 2 (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 (241)                       | - -                                    | 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 (295)                      | - -                                    | 2 (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 (194)                       | - -                                    | 2 1/4 (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 (252)                     | 12 1/16 (306)                          | 2 1/4 (57.2)  |
| 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 (310)                     | 14 (356)                               | 2 1/4 (57.2)  |
| 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 (264)                      | 12 1/8 (308)                           | 1 3/4 (44.5)  |
| 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 (324)                      | 12 5/16 (313)                          | 1 3/4 (44.5)  |
| 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 (297)                    | 15 5/8 (397)                           | 4 3/8 (111.1) |
| 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 (316)                     | 16 9/16 (420)                          | 4 3/8 (111.1) |
| 236   | 43.500 (1104.90)               | 42.00 (1066.8) | 25/32    | 18  | 36.375 (923.93)                | (1105.00)         | (1065.0)       | (22.0)    | 18  | (925.00)  | 41 (1041.4)     | 12 7/16 (316)                     | 15 1/4 (383)                           | 1 7/16 (36.5) |
| 336   | 43.500 (1104.90)               | 42.00 (1066.8) | 25/32    | 18  | 36.375 (923.93)                | (1105.00)         | (1065.0)       | (22.0)    | 18  | (925.00)  | 41 (1041.4)     | 17 1/16 (433)                     | 18 9/16 (471)                          | 1 3/4 (44.5)  |
| 242*  | 49.000 (1244.60)               | 49.25 (1251.0) | 1"-8NC   | 24  | 45.000 (1143.00)               | (1320.00)         | (1250.0)       | (33.0)    | 24  | (1134.00) | 49 (1244.6)     | 11 7/8 (302)                      | 13 3/8 (340)                           | 4 1/2 (114.3) |
| 342*  | 49.000 (1244.60)               | 49.25 (1251.0) | 1"-8NC   | 24  | 45.000 (1143.00)               | (1320.00)         | (1250.0)       | (33.0)    | 24  | (1134.00) | 49 (1244.6)     | 14 3/4 (375)                      | - -                                    | 4 1/2 (114.3) |
| 248*  | 56.750 (1441.45)               | 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 (349)                      | - -                                    | 4 (101.6)     |
| 348*  | 56.750 (1441.45)               | 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 (413)                      | - -                                    | 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 (448)                      | - -                                    | 2 3/8 (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 (575)                      | - -                                    | 2 3/8 (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 (689)                      | - -                                    | 2 3/8 (60.3)  |

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

# 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

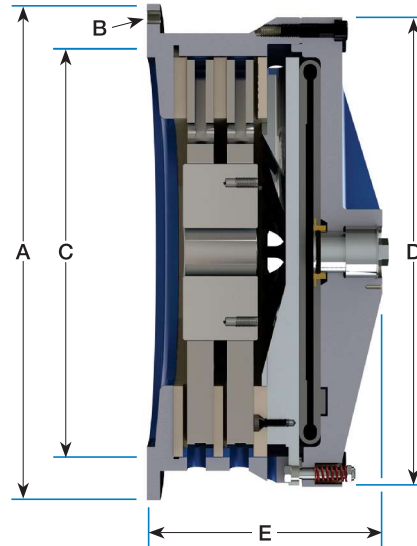
| Model | Torque Rating @ 100 psi (7 bar) | Maximum Speed   |                         |       | Weight and Inertia |                                         |                           |                                         | Lining Area   | Bore Range*  |              |
|-------|---------------------------------|-----------------|-------------------------|-------|--------------------|-----------------------------------------|---------------------------|-----------------------------------------|---------------|--------------|--------------|
|       | 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 (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.

# Low Inertia High Torque Clutch



## LI HT Clutch Dimension

| Model | Imperial Mounting              |                |        |     |                 | Metric Mounting                |               |             |     |          | D               | E<br>(Ventilated<br>Center Plate) | E<br>(Ductile Slotted<br>Center Plate) |
|-------|--------------------------------|----------------|--------|-----|-----------------|--------------------------------|---------------|-------------|-----|----------|-----------------|-----------------------------------|----------------------------------------|
|       | A                              | B              |        | C   | A               | B                              |               | C           |     |          |                 |                                   |                                        |
|       | +0.000/-0.003<br>(+0.00/-0.08) | Hole Circle    | Dia    |     | Qty             | +0.003/-0.000<br>(+0.08/-0.00) | (+0.00/-0.08) | Hole Circle | Dia | Qty      |                 |                                   |                                        |
|       | in (mm)                        | in (mm)        | in     | Qty | in (mm)         | (mm)                           | (mm)          | (mm)        | Qty | (mm)     | in (mm)         | in (mm)                           | in (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)                               |

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

# 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 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

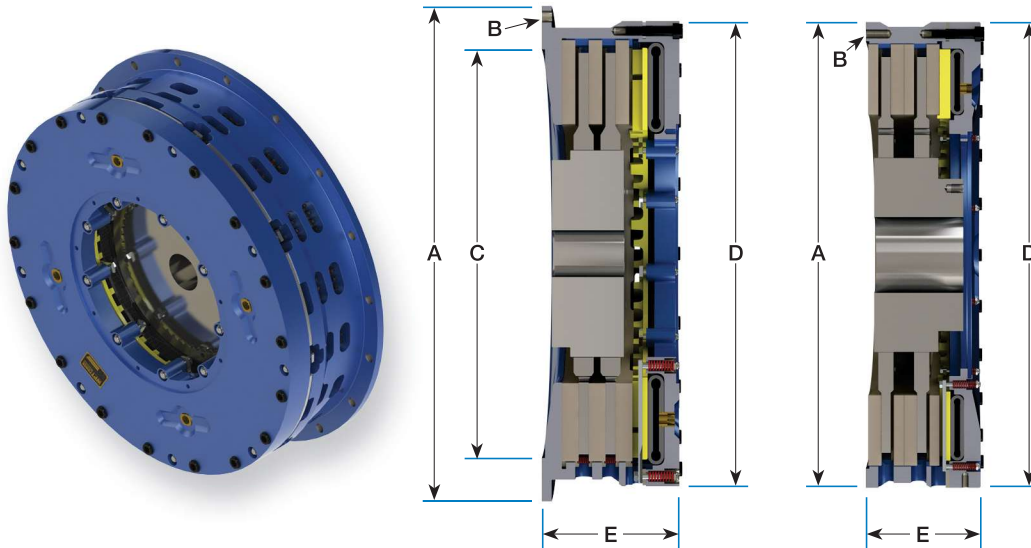
| Model | Torque Rating @ 100 psi<br>(7 bar) | Maximum Speed      |      | Weight and Inertia |                           |                                         | Lining Area   | Bore Range*   |               |
|-------|------------------------------------|--------------------|------|--------------------|---------------------------|-----------------------------------------|---------------|---------------|---------------|
|       | 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-ft <sup>2</sup> (kg-m <sup>2</sup> ) |               | 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



LI Brake Dimension

Size 242-460

| Model | Imperial Mounting              |                |          |     |                                | Metric Mounting |             |           |     |           | D               | E<br>(Ventilated<br>Center Plate) | E<br>(Ductile Slotted<br>Center Plate) |
|-------|--------------------------------|----------------|----------|-----|--------------------------------|-----------------|-------------|-----------|-----|-----------|-----------------|-----------------------------------|----------------------------------------|
|       | A                              | B              |          | Qty | C                              | A               | B           |           | C   |           |                 |                                   |                                        |
|       | +0.000/-0.003<br>(+0.00/-0.08) | Hole Circle    | Dia      |     | +0.003/-0.000<br>(+0.08/-0.00) | (+0.00/-0.08)   | Hole Circle | Dia       | H7  |           |                 |                                   |                                        |
|       | in (mm)                        | in (mm)        | in       |     | in (mm)                        | (mm)            | (mm)        | (mm)      | Qty | (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.



# Low Inertia Spring-Set Brake

WPT Low Inertia (LI) Spring-Set Brakes are a spring-applied / air-release design well suited for fail-safe applications. The LI Spring Set can also be used as a parking brake since no pressure is required to engage the brake. With adjustable spring-release pressures, the LI Spring-Set can provide a range of torques that will suit many applications. WPT's Low Inertia Spring-Set Brakes are available in 1, 2, or 3 plate construction with diameters ranging 6 through 60 inches.

- Hydraulic release available
- High cycle life
- Predictable preventative maintenance
- Slotted, solid and ventilated center plates available
- Marine corrosion protection available
- Type approval certification available: DNV, ABS, ATEX
- See Power Performance upgrade on page 12

## LI SS Brake Specifications

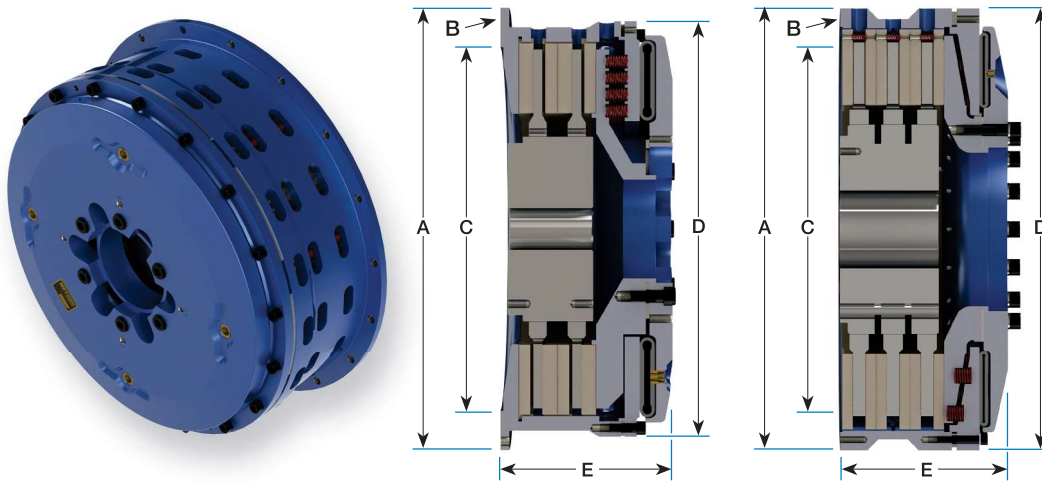
| Model | Static Torque Rating at Minimum Release Pressure** |                                     |                                     | Maximum Speed      |      | Weight and Inertia |                           |                                         | Lining Area   | Bore Range*   |               |
|-------|----------------------------------------------------|-------------------------------------|-------------------------------------|--------------------|------|--------------------|---------------------------|-----------------------------------------|---------------|---------------|---------------|
|       | 60 lbf/in <sup>2</sup><br>(4.1 bar)                | 75 lbf/in <sup>2</sup><br>(5.2 bar) | 90 lbf/in <sup>2</sup><br>(6.2 bar) | Hub & Center Plate | Slip | Total Weight       | Hub & Center Plate Weight | Hub & Center Plate Inertia              |               | Minimum       | Maximum       |
|       | lbf-in (N-m)                                       | lbf-in (N-m)                        | lbf-in (N-m)                        | r/min              |      | lb (kg)            | lb (kg)                   | lb-ft <sup>2</sup> (kg-m <sup>2</sup> ) |               | in (mm)       | in (mm)       |
| 106   | 2510 (284)                                         | 3130 (354)                          | 3760 (425)                          | 5280               | 2620 | 41 (18)            | 6.7 (3.1)                 | 0.19 (0.0080)                           | 39 (250)      | 0.88 (22.4)   | 1.90 (48.3)   |
| 206   | 5020 (567)                                         | 6270 (708)                          | 7520 (850)                          | 5280               | 2620 | 46 (21)            | 13 (5.7)                  | 0.37 (0.016)                            | 78 (500)      | 0.88 (22.4)   | 1.90 (48.3)   |
| 108   | 4130 (467)                                         | 5170 (584)                          | 6200 (701)                          | 4290               | 1890 | 70 (32)            | 9.3 (4.2)                 | 0.46 (0.019)                            | 55 (360)      | 0.94 (23.9)   | 2.50 (63.5)   |
| 208   | 7590 (858)                                         | 9480 (1070)                         | 11400 (1290)                        | 4290               | 1890 | 95 (43)            | 22 (10)                   | 0.95 (0.040)                            | 110 (710)     | 1.13 (28.7)   | 2.50 (63.5)   |
| 111   | 9270 (1050)                                        | 11600 (1310)                        | 13900 (1570)                        | 3120               | 1430 | 160 (70)           | 27 (12)                   | 2.3 (0.10)                              | 110 (730)     | 1.25 (31.8)   | 2.80 (71.1)   |
| 211   | 17100 (1930)                                       | 21400 (2420)                        | 25700 (2900)                        | 3120               | 1430 | 190 (87)           | 51 (23)                   | 4.6 (0.19)                              | 230 (1500)    | 1.25 (31.8)   | 2.80 (71.1)   |
| 311   | 23600 (2670)                                       | 29500 (3330)                        | 35400 (4000)                        | 3120               | 1430 | 240 (110)          | 75 (34)                   | 2.5 (0.11)                              | 340 (2200)    | 1.25 (31.8)   | 2.80 (71.1)   |
| 114   | 15400 (1740)                                       | 19300 (2180)                        | 23100 (2610)                        | 2450               | 1220 | 250 (120)          | 45 (21)                   | 5.7 (0.24)                              | 170 (1100)    | 1.88 (47.8)   | 3.30 (83.8)   |
| 214   | 28300 (3200)                                       | 35400 (4000)                        | 42400 (4790)                        | 2450               | 1220 | 310 (140)          | 83 (38)                   | 11 (0.47)                               | 330 (2100)    | 1.88 (47.8)   | 3.90 (99.1)   |
| 314   | 38700 (4370)                                       | 48400 (5470)                        | 58100 (6560)                        | 2450               | 1220 | 350 (160)          | 120 (56)                  | 17 (0.7)                                | 500 (3200)    | 1.88 (47.8)   | 3.90 (99.1)   |
| 116   | 21500 (2430)                                       | 26800 (3030)                        | 32200 (3640)                        | 2140               | 1080 | 330 (150)          | 65 (30)                   | 9.9 (0.42)                              | 230 (1500)    | 2.13 (54.1)   | 4.20 (106.7)  |
| 216   | 39700 (4490)                                       | 49600 (5600)                        | 59600 (6730)                        | 2140               | 1080 | 400 (180)          | 110 (49)                  | 19 (0.80)                               | 460 (2900)    | 2.13 (54.1)   | 4.20 (106.7)  |
| 316   | 54900 (6200)                                       | 68600 (7750)                        | 82300 (9300)                        | 2140               | 1080 | 490 (220)          | 180 (79)                  | 34 (1.4)                                | 680 (4400)    | 2.13 (54.1)   | 4.20 (106.7)  |
| 118   | 35400 (4000)                                       | 44200 (4990)                        | 53100 (6000)                        | 1900               | 986  | 460 (210)          | 65 (30)                   | 13 (0.55)                               | 240 (1500)    | 2.25 (57.2)   | 4.90 (124.5)  |
| 218   | 66700 (7540)                                       | 83400 (9420)                        | 100000 (11300)                      | 1900               | 986  | 560 (260)          | 150 (67)                  | 33 (1.4)                                | 520 (3300)    | 2.25 (57.2)   | 4.90 (124.5)  |
| 318   | 91200 (10300)                                      | 114000 (12900)                      | 137000 (15500)                      | 1900               | 986  | 660 (300)          | 180 (83)                  | 38 (1.6)                                | 720 (4600)    | 2.25 (57.2)   | 4.90 (124.5)  |
| 121   | 51800 (5850)                                       | 64800 (7320)                        | 77700 (8780)                        | 1630               | 849  | 750 (340)          | 190 (84)                  | 23 (0.97)                               | 360 (2300)    | 2.75 (69.9)   | 6.30 (160.0)  |
| 221   | 96700 (10900)                                      | 121000 (13700)                      | 145000 (16400)                      | 1630               | 849  | 860 (390)          | 270 (120)                 | 39 (1.6)                                | 720 (4600)    | 2.75 (69.9)   | 6.30 (160.0)  |
| 321   | 133000 (15000)                                     | 166000 (18800)                      | 199000 (22500)                      | 1630               | 849  | 930 (420)          | 270 (120)                 | 71 (3.0)                                | 980 (6300)    | 2.75 (69.9)   | 6.30 (160.0)  |
| 124H  | 85100 (9620)                                       | 106000 (12000)                      | 126800 (14300)                      | 1430               | 764  | 990 (450)          | 170 (75)                  | 22 (0.91)                               | 580 (3700)    | 2.75 (69.9)   | 6.30 (160.0)  |
| 224H  | 158000 (17900)                                     | 198000 (22400)                      | 252300 (28500)                      | 1430               | 764  | 1100 (490)         | 280 (130)                 | 110 (5.0)                               | 1200 (7400)   | 2.75 (69.9)   | 6.30 (160.0)  |
| 324H  | 220000 (24900)                                     | 275000 (31100)                      | 374300 (42300)                      | 1430               | 764  | 1400 (630)         | 400 (180)                 | 170 (7.0)                               | 1700 (11000)  | 2.75 (69.9)   | 6.30 (160.0)  |
| 227   | 178000 (20100)                                     | 222000 (25100)                      | 267000 (30200)                      | 1270               | 764  | 1100 (490)         | 390 (180)                 | 190 (8.0)                               | 1500 (9400)   | 3.25 (82.6)   | 6.30 (160.0)  |
| 327   | 247000 (27900)                                     | 309000 (34900)                      | 370000 (41800)                      | 1270               | 764  | 1500 (670)         | 530 (240)                 | 280 (12)                                | 2200 (14000)  | 3.25 (82.6)   | 6.30 (160.0)  |
| 230H  | 356000 (40200)                                     | 445000 (50300)                      | 534000 (60300)                      | 1140               | 700  | 1900 (880)         | 610 (280)                 | 440 (19)                                | 1700 (11000)  | 3.50 (88.9)   | 7.00 (177.8)  |
| 330H  | 480000 (54200)                                     | 600000 (67800)                      | 720000 (81300)                      | 1140               | 700  | 2400 (1100)        | 940 (430)                 | 660 (28)                                | 2500 (16000)  | 3.50 (88.9)   | 7.00 (177.8)  |
| 236   | 746000 (84300)                                     | 687000 (77600)                      | 825000 (93200)                      | 960                | 619  | 2800 (1300)        | 780 (360)                 | 650 (27)                                | 2200 (14000)  | 5.50 (139.7)  | 8.40 (213.4)  |
| 336   | 1210000 (137000)                                   | 1510000 (171000)                    | 1810000 (205000)                    | 960                | 619  | 4000 (1800)        | 1300 (580)                | 1000 (44)                               | 3400 (22000)  | 5.50 (139.7)  | 8.40 (213.4)  |
| 242   | 796000 (89900)                                     | 995000 (112000)                     | - -                                 | 820                | 527  | 4400 (2000)        | 950 (430)                 | 1200 (50)                               | 2700 (17000)  | 7.50 (190.5)  | 11.20 (284.5) |
| 342   | 1140000 (129000)                                   | 1420000 (160000)                    | - -                                 | 820                | 527  | 4000 (1800)        | 1500 (680)                | 1900 (81)                               | 4100 (26000)  | 7.50 (190.5)  | 11.20 (284.5) |
| 248   | 1680000 (190000)                                   | 2100000 (237000)                    | 2530000 (286000)                    | 710                | 512  | 7600 (3400)        | 1500 (670)                | 2000 (82)                               | 4000 (26000)  | 10.00 (254.0) | 14.50 (368.3) |
| 348   | 2510000 (284000)                                   | 3140000 (355000)                    | 3770000 (426000)                    | 710                | 512  | 8300 (3700)        | 2200 (1000)               | 2800 (120)                              | 6000 (39000)  | 10.00 (254.0) | 14.50 (368.3) |
| 260   | 3260000 (368000)                                   | - -                                 | - -                                 | 570                | 325  | 12000 (5500)       | 2600 (1200)               | 7100 (300)                              | 7200 (47000)  | 10.00 (254.0) | 18.90 (480.1) |
| 360   | 4920000 (556000)                                   | - -                                 | - -                                 | 570                | 325  | 16000 (7400)       | 5100 (2300)               | 13000 (540)                             | 11000 (70000) | 10.00 (254.0) | 18.90 (480.1) |
| 460   | 5720000 (646000)                                   | - -                                 | - -                                 | 570                | 325  | 19000 (8800)       | 6800 (3100)               | 19000 (790)                             | 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 Spring-Set Brake



Size 242-460

## LI SS Brake Dimension

| Model | Imperial Mounting              |                |            |         |                                | Metric Mounting   |                |        |      |           | D                | E<br>(Ventilated<br>Center Plate) | E<br>(Ductile Slotted<br>Center Plate) |
|-------|--------------------------------|----------------|------------|---------|--------------------------------|-------------------|----------------|--------|------|-----------|------------------|-----------------------------------|----------------------------------------|
|       | A                              | B              |            | Qty     | C                              | A                 | B              |        | C    |           |                  |                                   |                                        |
|       | +0.000/-0.003<br>(+0.00/-0.08) | Hole<br>Circle | Dia        |         | +0.003/-0.000<br>(+0.08/-0.00) | (+0.00/-<br>0.08) | Hole<br>Circle | Dia    | Qty  | H7        |                  |                                   |                                        |
|       | in (mm)                        | in (mm)        | in         | in (mm) | (mm)                           | (mm)              | (mm)           | Qty    | (mm) | in (mm)   | in (mm)          | in (mm)                           |                                        |
| 106   | 8.753 (222.33)                 | 8.00 (203.2)   | 11/32      | 4       | 7.380 (187.45)                 | (220.00)          | (203.0)        | (9.0)  | 4    | (190.00)  | 8 3/4 (223.8)    | 5.47 (138.94)                     | - -                                    |
| 206   | 8.753 (222.33)                 | 8.00 (203.2)   | 11/32      | 4       | 7.380 (187.43)                 | (220.00)          | (203.0)        | (9.0)  | 4    | (190.00)  | 8 3/4 (223.8)    | 6.59 (167.39)                     | - -                                    |
| 108   | 12.125 (307.98)                | 11.13 (282.6)  | 17/32      | 6       | 8.378 (212.80)                 | (310.00)          | (280.0)        | (14.0) | 6    | (220.00)  | 9 3/8 (238.1)    | 5.94 (150.88)                     | 5.50 (139.70)                          |
| 208   | 12.125 (307.98)                | 11.13 (282.6)  | 17/32      | 6       | 8.378 (212.80)                 | (310.00)          | (280.0)        | (14.0) | 6    | (220.00)  | 9 3/8 (238.1)    | 7.25 (184.15)                     | - -                                    |
| 111   | 16.000 (406.40)                | 14.75 (374.7)  | 21/32      | 6       | 11.378 (289.00)                | (400.00)          | (280.0)        | (18.0) | 6    | (289.00)  | 11 15/16 (303.2) | 6.88 (174.75)                     | - -                                    |
| 211   | 16.000 (406.40)                | 14.75 (374.7)  | 21/32      | 6       | 11.378 (289.00)                | (400.00)          | (375.0)        | (18.0) | 6    | (289.00)  | 11 15/16 (303.2) | 8.69 (220.73)                     | 7.88 (200.15)                          |
| 311   | 16.000 (406.40)                | 14.75 (374.7)  | 21/32      | 6       | 11.378 (289.00)                | (400.00)          | (375.0)        | (18.0) | 6    | (289.00)  | 11 15/16 (303.2) | 10.44 (265.18)                    | 10.44 (265.18)                         |
| 114   | 18.750 (476.25)                | 17.50 (444.5)  | 21/32      | 8       | 14.378 (365.20)                | (470.00)          | (445.0)        | (18.0) | 8    | (295.00)  | 14 3/8 (365.1)   | 7.94 (201.68)                     | 7.88 (200.15)                          |
| 214   | 18.750 (476.25)                | 17.50 (444.5)  | 21/32      | 8       | 14.378 (365.20)                | (470.00)          | (445.0)        | (18.0) | 8    | (295.00)  | 14 3/8 (365.1)   | 9.81 (249.17)                     | - -                                    |
| 314   | 18.750 (476.25)                | 17.50 (444.5)  | 21/32      | 8       | 14.378 (365.20)                | (470.00)          | (445.0)        | (18.0) | 8    | (295.00)  | 14 3/8 (365.1)   | 11.94 (303.28)                    | - -                                    |
| 116   | 21.248 (539.70)                | 20.00 (508.0)  | 21/32      | 12      | 16.253 (412.83)                | (540.00)          | (510.0)        | (18.0) | 12   | (412.75)  | 16 1/4 (414.0)   | 8.19 (208.03)                     | 8.25 (209.55)                          |
| 216   | 21.248 (539.70)                | 20.00 (508.0)  | 21/32      | 12      | 16.253 (412.83)                | (540.00)          | (510.0)        | (18.0) | 12   | (412.75)  | 16 1/4 (414.0)   | 10.13 (257.30)                    | 10.13 (257.30)                         |
| 316   | 21.248 (539.70)                | 20.00 (508.0)  | 21/32      | 12      | 16.253 (412.83)                | (540.00)          | (510.0)        | (18.0) | 12   | (412.75)  | 16 1/4 (414.0)   | 12.00 (304.80)                    | - -                                    |
| 118   | 23.250 (590.55)                | 22.00 (558.8)  | 21/32      | 12      | 18.253 (463.63)                | (590.00)          | (560.0)        | (18.0) | 12   | (463.55)  | 19 3/8 (492.1)   | 8.81 (223.77)                     | 9.00 (228.60)                          |
| 218   | 23.250 (590.55)                | 22.00 (558.8)  | 21/32      | 12      | 18.253 (463.63)                | (590.00)          | (560.0)        | (18.0) | 12   | (463.55)  | 19 3/8 (492.1)   | 10.75 (273.05)                    | 10.34 (262.64)                         |
| 318   | 23.250 (590.55)                | 22.00 (558.8)  | 21/32      | 12      | 18.253 (463.63)                | (590.00)          | (560.0)        | (18.0) | 12   | (463.55)  | 19 3/8 (492.1)   | 12.56 (319.02)                    | 12.50 (317.50)                         |
| 121   | 27.000 (685.80)                | 25.50 (647.7)  | 21/32      | 12      | 21.378 (543.00)                | (685.00)          | (648.0)        | (18.0) | 12   | (540.00)  | 21 5/16 (541.3)  | 9.81 (249.17)                     | - -                                    |
| 221   | 27.000 (685.80)                | 25.50 (647.7)  | 21/32      | 12      | 21.378 (543.00)                | (685.00)          | (648.0)        | (18.0) | 12   | (540.00)  | 21 5/16 (541.3)  | 11.94 (303.28)                    | 11.94 (303.28)                         |
| 321   | 27.000 (685.80)                | 25.50 (647.7)  | 21/32      | 12      | 21.378 (543.00)                | (685.00)          | (648.0)        | (18.0) | 12   | (540.00)  | 21 5/16 (541.3)  | 14.19 (360.43)                    | 13.81 (350.77)                         |
| 124H  | 30.000 (762.00)                | 28.75 (730.3)  | 21/32      | 12      | 24.378 (619.20)                | (760.00)          | (730.0)        | (18.0) | 12   | (620.10)  | 27 (685.8)       | 9.69 (246.13)                     | 9.88 (250.95)                          |
| 224H  | 30.000 (762.00)                | 28.75 (730.3)  | 21/32      | 12      | 24.378 (619.20)                | (760.00)          | (730.0)        | (18.0) | 12   | (620.10)  | 27 (685.8)       | 11.94 (303.28)                    | 12.00 (304.80)                         |
| 324H  | 30.000 (762.00)                | 28.75 (730.3)  | 21/32      | 12      | 24.378 (619.20)                | (760.00)          | (730.0)        | (18.0) | 12   | (620.10)  | 27 (685.8)       | 14.25 (361.95)                    | 14.00 (355.60)                         |
| 227   | 32.750 (831.85)                | 31.50 (800.1)  | 21/32      | 16      | 27.378 (695.40)                | -                 | -              | -      | -    | -         | 27 (685.8)       | 12.63 (320.80)                    | 12.63 (320.80)                         |
| 327   | 32.750 (831.85)                | 31.50 (800.1)  | 21/32      | 16      | 27.378 (695.40)                | -                 | -              | -      | -    | -         | 27 (685.8)       | 15.00 (381.00)                    | - -                                    |
| 230H  | 37.000 (939.80)                | 35.50 (901.7)  | 25/32      | 18      | 30.378 (771.60)                | (940.00)          | (900.0)        | (22.0) | 18   | (775.08)  | 32 (812.8)       | 14.50 (368.30)                    | 14.25 (361.95)                         |
| 330H  | 37.000 (939.80)                | 35.50 (901.7)  | 25/32      | 18      | 30.378 (771.60)                | (940.00)          | (900.0)        | (22.0) | 18   | (775.08)  | 32 (812.8)       | 17.88 (454.15)                    | 17.88 (454.15)                         |
| 236   | 43.500 (1104.90)               | 42.00 (1066.8) | 25/32      | 18      | 36.378 (924.03)                | (1105.00)         | (900.0)        | (22.0) | 18   | (925.00)  | 38 1/4 (971.6)   | 15.30 (388.62)                    | 15.31 (388.87)                         |
| 336   | 43.500 (1104.90)               | 42.00 (1066.8) | 25/32      | 16      | 36.378 (924.00)                | (1105.00)         | (900.0)        | (22.0) | 18   | (925.00)  | 38 1/4 (971.6)   | - -                               | - -                                    |
| 242*  | 49.000 (1244.60)               | 46.50 (1181.1) | 1" - 8 NC  | 24      | 45.000 (1143.08)               | -                 | -              | -      | -    | -         | 44 1/8 (1120.8)  | - -                               | - -                                    |
| 342*  | 49.000 (1244.60)               | 46.50 (1181.1) | 1" - 8 NC  | 24      | 45.000 (1143.08)               | -                 | -              | -      | -    | -         | 44 1/8 (1120.8)  | - -                               | 15.63 (397.00)                         |
| 248*  | 56.750 (1441.45)               | 54.00 (1371.6) | 1" - 8 NC  | 24      | 52.000 (1220.17)               | (1600.00)         | (1540.0)       | (26.0) | 24   | (1220.00) | 52 1/8 (1324.0)  | 18.38 (466.85)                    | 17.69 (449.33)                         |
| 348*  | 56.750 (1441.45)               | 54.00 (1371.6) | 1" - 8 NC  | 24      | 52.000 (1320.93)               | (1600.00)         | (1540.0)       | (26.0) | 24   | (1220.00) | 52 1/8 (1324.0)  | 20.88 (530.35)                    | 22.03 (559.56)                         |
| 260*  | 70.500 (1790.70)               | 66.50 (1689.1) | 2" - 4.5NC | 24      | 62.760 (1594.10)               | -                 | -              | -      | -    | -         | 61 1/2 (1562.1)  | - -                               | - -                                    |
| 360*  | 70.500 (1790.70)               | 66.50 (1689.1) | 2" - 4.5NC | 24      | 62.760 (1594.10)               | -                 | -              | -      | -    | -         | 61 1/2 (1562.1)  | - -                               | 27.00 (685.80)                         |
| 460*  | 70.500 (1790.70)               | 66.50 (1689.1) | 2" - 4.5NC | 24      | 62.760 (1594.10)               | -                 | -              | -      | -    | -         | 61 1/2 (1562.1)  | - -                               | 31.50 (800.10)                         |

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

# Steel Water Cooled Brake

WPT Steel Water Cooled Brakes (Steel WCBs) are designed for high-heat applications, such as coil processors and high-cycle press / shear lines. The unique design of the steel water jackets allows for the rapid transfer of heat to an external cooler or recirculation system. This increased heat transfer capabilities allow the Steel WCB to operate in continuous slip applications. WPT's Steel WCBs are available in 1, 2, or 3 plate construction with diameters ranging from 6 through 30 inches.

- High duty cycle
- Maximum heat transfer
- Predictable preventative maintenance
- Durable steel water jacket design
- Low-inertia drive plate design

## Steel WCB Specifications

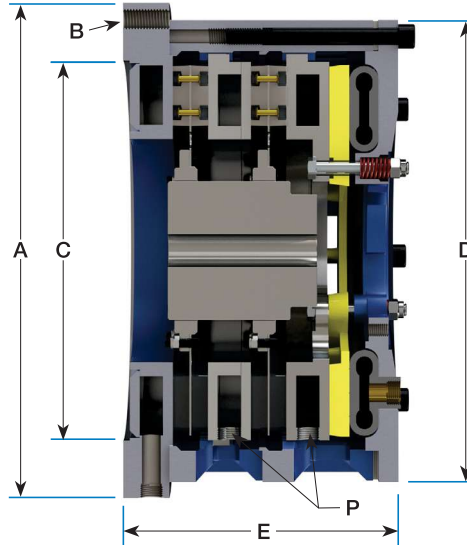
| Model | Torque Rating @ 100<br>psi (7 bar) | Maximum Speed           |      | Heat Dissipation<br>Capacity | Water flow<br>(minimum) | Weight and Inertia |                                |                                         | Lining Area                        | Bore Range* |              |
|-------|------------------------------------|-------------------------|------|------------------------------|-------------------------|--------------------|--------------------------------|-----------------------------------------|------------------------------------|-------------|--------------|
|       | Static Torque**                    | Hub &<br>Drive<br>Plate | Slip |                              |                         | Total Weight       | Hub &<br>Drive Plate<br>Weight | Hub &<br>Drive Plate<br>Inertia         |                                    | Minimum     | Maximum      |
|       |                                    |                         |      |                              |                         |                    |                                |                                         |                                    |             |              |
|       | lbf-in (N-m)                       | r/min                   |      | hp (kW)                      | gal/min<br>(litre/min)  | lb (kg)            | lb (kg)                        | lb-ft <sup>2</sup> (kg-m <sup>2</sup> ) | in <sup>2</sup> (cm <sup>2</sup> ) | in (mm)     | in (mm)      |
| 106   | 3380 (382)                         | 5290                    | 3530 | 6 (4.5)                      | 1 (3.5)                 | 50 (22)            | 8.7 (3.9)                      | 0.27 (0.011)                            | 40 (260)                           | 0.88 (22.4) | 1.90 (48.3)  |
| 108   | 5840 (660)                         | 4300                    | 2870 | 9 (6.7)                      | 2 (5.5)                 | 100 (45)           | 11 (4.9)                       | 0.40 (0.017)                            | 22 (140)                           | 0.94 (23.9) | 2.50 (63.5)  |
| 208   | 11700 (1320)                       | 4300                    | 2870 | 18 (13.4)                    | 3 (11)                  | 140 (64)           | 22 (9.8)                       | 0.85 (0.036)                            | 43 (280)                           | 1.13 (28.7) | 2.50 (63.5)  |
| 111   | 13100 (1480)                       | 3130                    | 2090 | 19 (14.2)                    | 3 (11)                  | 200 (91)           | 29 (13)                        | 1.8 (0.078)                             | 22 (140)                           | 1.25 (31.8) | 2.80 (71.1)  |
| 211   | 26200 (2960)                       | 3130                    | 2090 | 38 (28.3)                    | 6 (22)                  | 250 (110)          | 45 (20)                        | 12 (0.48)                               | 91 (580)                           | 1.25 (31.8) | 2.80 (71.1)  |
| 311   | 39300 (4440)                       | 3130                    | 2090 | 57 (42.6)                    | 9 (33)                  | 300 (130)          | 61 (27)                        | 16 (0.68)                               | 160 (1000)                         | 1.25 (31.8) | 2.80 (71.1)  |
| 114   | 22000 (2490)                       | 2460                    | 1640 | 28 (20.9)                    | 4 (16)                  | 310 (140)          | 54 (24)                        | 7.0 (0.29)                              | 74 (480)                           | 1.50 (38.1) | 3.30 (83.8)  |
| 214   | 44100 (5000)                       | 2460                    | 1640 | 56 (41.8)                    | 9 (32)                  | 350 (160)          | 50 (23)                        | 4.3 (0.18)                              | 140 (890)                          | 2.00 (50.8) | 3.50 (88.9)  |
| 314   | 66100 (7470)                       | 2460                    | 1640 | 84 (62.7)                    | 13 (48)                 | 390 (170)          | 65 (29)                        | 7.8 (0.33)                              | 210 (1400)                         | 2.00 (50.8) | 3.50 (88.9)  |
| 116   | 30300 (3420)                       | 2150                    | 1440 | 38 (28.3)                    | 6 (22)                  | 410 (190)          | 73 (33)                        | 12 (0.52)                               | 100 (670)                          | 2.13 (54.1) | 4.20 (106.7) |
| 216   | 60600 (6850)                       | 2150                    | 1440 | 76 (56.7)                    | 12 (44)                 | 590 (270)          | 140 (65)                       | 25 (1.1)                                | 210 (1300)                         | 2.13 (54.1) | 4.20 (106.7) |
| 118   | 50600 (5720)                       | 1950                    | 1300 | 44 (32.8)                    | 7 (25)                  | 450 (200)          | 90 (42)                        | 19 (0.80)                               | 120 (760)                          | 2.25 (57.2) | 4.90 (124.5) |
| 218   | 101000 (11400)                     | 1910                    | 1280 | 88 (65.6)                    | 13 (50)                 | 590 (270)          | 120 (56)                       | 22 (0.94)                               | 230 (1500)                         | 2.13 (54.1) | 4.10 (104.1) |
| 318   | 152000 (17200)                     | 1950                    | 1300 | 130 (98.4)                   | 20 (75)                 | 880 (400)          | 180 (84)                       | 34 (1.4)                                | 340 (2200)                         | 2.13 (54.1) | 4.10 (104.1) |
| 121   | 72800 (8230)                       | 1640                    | 1100 | 60 (44.7)                    | 9 (34)                  | 630 (290)          | 140 (65)                       | 41 (1.7)                                | 170 (1100)                         | 2.75 (69.9) | 6.30 (160.0) |
| 221   | 146000 (16500)                     | 1640                    | 1100 | 120 (89.5)                   | 18 (68)                 | 810 (370)          | 160 (73)                       | 38 (1.6)                                | 330 (2100)                         | 2.13 (54.1) | 4.10 (104.1) |
| 124   | 79600 (9000)                       | 1430                    | 955  | 96 (71.6)                    | 15 (54)                 | 970 (430)          | 230 (100)                      | 71 (3.0)                                | 260 (1700)                         | 2.13 (54.1) | 6.30 (160.0) |
| 224   | 159000 (18000)                     | 1430                    | 955  | 190 (143.2)                  | 29 (108)                | 1200 (520)         | 260 (120)                      | 76 (3.2)                                | 510 (3300)                         | 2.75 (69.9) | 5.50 (139.7) |
| 124H  | 129000 (14600)                     | 1430                    | 955  | 96 (71.6)                    | 15 (54)                 | 860 (390)          | 230 (100)                      | 71 (3.0)                                | 260 (1700)                         | 2.75 (69.9) | 6.30 (160.0) |
| 224H  | 258000 (29200)                     | 1430                    | 955  | 190 (143.2)                  | 29 (108)                | 1100 (500)         | 260 (120)                      | 76 (3.2)                                | 520 (3300)                         | 2.75 (69.9) | 5.50 (139.7) |
| 127   | 145000 (16400)                     | 1270                    | 850  | 110 (80.5)                   | 16 (61)                 | 990 (450)          | 240 (110)                      | 120 (5.2)                               | 350 (2300)                         | 3.25 (82.6) | 6.30 (160.0) |
| 130   | 211000 (23800)                     | 1270                    | 850  | 140 (102.2)                  | 21 (78)                 | 130 (600)          | 330 (150)                      | 210 (8.9)                               | 390 (2500)                         | 3.50 (88.9) | 7.00 (177.8) |
| 230   | 422000 (47700)                     | 1270                    | 850  | 270 (204.3)                  | 41 (156)                | 2000 (910)         | 680 (310)                      | 420 (18)                                | 780 (5000)                         | 3.50 (88.9) | 7.00 (177.8) |
| 230H  | 541000 (61100)                     | 1150                    | 770  | 140 (204.3)                  | 41 (156)                | 2000 (910)         | 680 (310)                      | 420 (18)                                | 780 (5000)                         | 3.50 (88.9) | 7.00 (177.8) |
| 330H  | 811000 (91600)                     | 1150                    | 770  | 210 (306.5)                  | 62 (234)                | 2700 (1200)        | 1000 (470)                     | 630 (26)                                | 1200 (7500)                        | 3.50 (88.9) | 7.00 (177.8) |

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.

# Steel Water Cooled Brake



## Steel WCB Dimensions

| Model | Imperial Mounting              |               |       |     |                                |               | Metric Mounting |             |        |     |          |               | D               | E                |
|-------|--------------------------------|---------------|-------|-----|--------------------------------|---------------|-----------------|-------------|--------|-----|----------|---------------|-----------------|------------------|
|       | A                              | B             |       |     | C                              | P             | A               | B           |        |     | C        | P             |                 |                  |
|       | +0.000/-0.003<br>(+0.00/-0.08) | Hole Circle   | Dia   | Qty | +0.003/-0.000<br>(+0.08/-0.00) | Coolant Ports | (+0.08/-0.00)   | Hole Circle | Dia    | Qty | H7       | Coolant Ports |                 |                  |
|       | in (mm)                        | in (mm)       | in    |     | in (mm)                        | NPT           | (mm)            | (mm)        | (mm)   |     | (mm)     | BSPT          |                 |                  |
| 106   | 8.749 (222.22)                 | 8.00 (203.2)  | 11/32 | 4   | 7.377 (187.38)                 | 1/4           | (220.00)        | (203.0)     | (9.0)  | 4   | (190.00) | 1/4           | 8 13/16 (223.8) | 5 13/16 (147.6)  |
| 108   | 12.125 (307.98)                | 11.13 (282.7) | 17/32 | 4   | 8.375 (212.73)                 | 3/8           | (310.00)        | (280.0)     | (14.0) | 4   | (220.00) | 1/2           | 11 1/8 (282.6)  | 6 11/16 (169.9)  |
| 208   | 12.125 (307.98)                | 11.13 (282.7) | 17/32 | 4   | 8.375 (212.73)                 | 3/8           | (310.00)        | (280.0)     | (14.0) | 4   | (220.00) | 1/2           | 11 1/8 (282.6)  | 8 7/8 (225.4)    |
| 111   | 16.000 (406.40)                | 14.75 (374.7) | 21/32 | 4   | 11.375 (288.93)                | 1/2           | (400.00)        | (375.0)     | (18.0) | 4   | (295.00) | 1/2           | 14 3/4 (374.7)  | 7 7/16 (188.9)   |
| 211   | 16.000 (406.40)                | 14.75 (374.7) | 21/32 | 4   | 11.375 (288.93)                | 1/2           | (400.00)        | (375.0)     | (18.0) | 4   | (295.00) | 1/2           | 14 3/4 (374.7)  | 9 9/16 (242.9)   |
| 311   | 16.000 (406.40)                | 14.75 (374.7) | 21/32 | 4   | 11.375 (288.93)                | 1/2           | (400.00)        | (375.0)     | (18.0) | 4   | (295.00) | 1/2           | 14 3/4 (374.7)  | 11 11/16 (296.9) |
| 114   | 18.750 (476.25)                | 17.50 (444.5) | 21/32 | 6   | 14.375 (365.13)                | 1/2           | (470.00)        | (445.0)     | (18.0) | 6   | (370.00) | 1/2           | 17 1/2 (444.5)  | 8 9/16 (217.5)   |
| 214   | 18.750 (476.25)                | 17.50 (444.5) | 21/32 | 6   | 14.375 (365.13)                | 1/2           | (470.00)        | (445.0)     | (18.0) | 6   | (370.00) | 1/2           | 17 1/2 (444.5)  | 10 7/16 (265.1)  |
| 314   | 18.750 (476.25)                | 17.50 (444.5) | 21/32 | 6   | 14.375 (365.13)                | 1/2           | (470.00)        | (445.0)     | (18.0) | 6   | (370.00) | 1/2           | 17 1/2 (444.5)  | 13 1/2 (342.9)   |
| 116   | 21.248 (539.70)                | 20.00 (508.0) | 21/32 | 10  | 16.250 (412.75)                | 1/2           | (540.00)        | (510.0)     | (18.0) | 10  | (410.00) | 1/2           | 20 (508.0)      | 8 11/16 (220.7)  |
| 216   | 21.248 (539.70)                | 20.00 (508.0) | 21/32 | 10  | 16.250 (412.75)                | 1/2           | (540.00)        | (510.0)     | (18.0) | 10  | (410.00) | 1/2           | 20 (508.0)      | 10 7/8 (276.2)   |
| 118   | 23.250 (590.55)                | 22.00 (558.8) | 21/32 | 10  | 18.250 (463.55)                | 1/2           | (590.00)        | (560.0)     | (18.0) | 10  | (470.00) | 1/2           | 22 (558.8)      | 9 (228.6)        |
| 218   | 23.250 (590.55)                | 22.00 (558.8) | 21/32 | 10  | 18.250 (463.55)                | 1/2           | (590.00)        | (560.0)     | (18.0) | 10  | (470.00) | 1/2           | 22 (558.8)      | 11 3/4 (298.5)   |
| 318   | 23.250 (590.55)                | 22.00 (558.8) | 21/32 | 10  | 18.250 (463.55)                | 1/2           | (590.00)        | (560.0)     | (18.0) | 10  | (470.00) | 1/2           | 22 (558.8)      | 14 5/16 (363.5)  |
| 121   | 27.000 (685.80)                | 25.50 (647.7) | 21/32 | 10  | 21.375 (542.93)                | 1/2           | (685.00)        | (648.0)     | (18.0) | 10  | (540.00) | 1/2           | 24 7/8 (631.8)  | 9 1/2 (241.3)    |
| 221   | 27.000 (685.80)                | 25.50 (647.7) | 21/32 | 10  | 21.375 (542.93)                | 1/2           | (685.00)        | (648.0)     | (18.0) | 10  | (540.00) | 1/2           | 24 7/8 (631.8)  | 11 13/16 (300.0) |
| 124   | 30.000 (762.00)                | 28.75 (730.3) | 21/32 | 10  | 24.375 (619.13)                | 1/2           | (760.00)        | (730.0)     | (18.0) | 10  | (620.00) | 1/2           | 29 (736.6)      | 9 3/4 (247.7)    |
| 224   | 30.000 (762.00)                | 28.75 (730.3) | 21/32 | 10  | 24.375 (619.13)                | 1/2           | (760.00)        | (730.0)     | (18.0) | 10  | (620.00) | 1/2           | 29 (736.6)      | 12 1/4 (311.2)   |
| 124H  | 30.000 (762.00)                | 28.75 (730.3) | 21/32 | 10  | 24.375 (619.13)                | 1/2           | (760.00)        | (730.0)     | (18.0) | 10  | (620.00) | 1/2           | 29 (736.6)      | 9 3/4 (247.7)    |
| 224H  | 30.000 (762.00)                | 28.75 (730.3) | 21/32 | 10  | 24.375 (619.13)                | 1/2           | (760.00)        | (730.0)     | (18.0) | 10  | (620.00) | 1/2           | 29 (736.6)      | 12 1/4 (311.2)   |
| 127   | 32.750 (831.85)                | 31.50 (800.1) | 21/32 | 14  | 27.375 (695.33)                | 1/2           | -               | -           | -      | -   | -        | -             | 31 (787.4)      | 10 (254.0)       |
| 130   | 37.000 (939.80)                | 35.50 (901.7) | 25/32 | 16  | 30.375 (771.53)                | 3/4           | -               | -           | -      | -   | -        | -             | 34 3/4 (882.7)  | 11 (279.4)       |
| 230   | 37.000 (939.80)                | 35.50 (901.7) | 25/32 | 16  | 30.375 (771.53)                | 3/4           | -               | -           | -      | -   | -        | -             | 34 3/4 (882.7)  | 16 11/16 (423.9) |
| 230H  | 37.000 (939.80)                | 35.50 (901.7) | 25/32 | 16  | 30.375 (771.53)                | 3/4           | -               | -           | -      | -   | -        | -             | 34 3/4 (882.7)  | 16 11/16 (423.9) |
| 330H  | 37.000 (939.80)                | 35.50 (901.7) | 25/32 | 16  | 30.375 (771.53)                | 3/4           | -               | -           | -      | -   | -        | -             | 34 3/4 (882.7)  | 22 (558.8)       |

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

# Power Performance Upgrade



WPT's Power Performance Low Inertia (PPLI) upgrade for clutch and brake products is specifically designed to exceed the demands of high-cycle, high-energy, and high-speed applications. The PPLI upgrade replaces the standard molded friction material with a high-grade semi-metallic friction material that has excellent thermal conductivity and increased temperature threshold. The standard center plates are replaced with a high flow, reduced inertia design. The WPT PPLI upgrade is well suited for operations running presses, shears, and applications where high-energy dynamic stopping produces extreme heat. The WPT PPLI upgrade is available as an upgrade kit or in complete units in 1, 2, or 3 plate construction with diameters ranging from 18 to 36 inches.

## PPLI Clutch/Brake Specifications

| Model | Weight and Inertia        |                                         | Lining Area                        |
|-------|---------------------------|-----------------------------------------|------------------------------------|
|       | Hub & Center Plate Weight | Hub & Center Plate Inertia              |                                    |
|       | lb (kg)                   | lb-ft <sup>2</sup> (kg-m <sup>2</sup> ) | in <sup>2</sup> (cm <sup>2</sup> ) |
| 118   | 52 (24)                   | 8.4 (0.36)                              | 168 (1090)                         |
| 218   | 100 (47)                  | 17 (0.71)                               | 336 (2170)                         |
| 318   | 160 (71)                  | 25 (1.1)                                | 505 (3260)                         |
| 124H  | 110 (50)                  | 28 (1.2)                                | 235 (1520)                         |
| 224H  | 190 (86)                  | 55 (2.3)                                | 471 (3040)                         |
| 324H  | 270 (120)                 | 82 (3.5)                                | 706 (4560)                         |
| 230H  | 400 (180)                 | 190 (7.9)                               | 1120 (7230)                        |
| 330H  | 600 (270)                 | 280 (12)                                | 1680 (10900)                       |
| 236   | 730 (330)                 | 520 (22)                                | 1390 (8970)                        |
| 336   | 900 (410)                 | 560 (24)                                | 2090 (13500)                       |

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

## LIFE versus WEAR



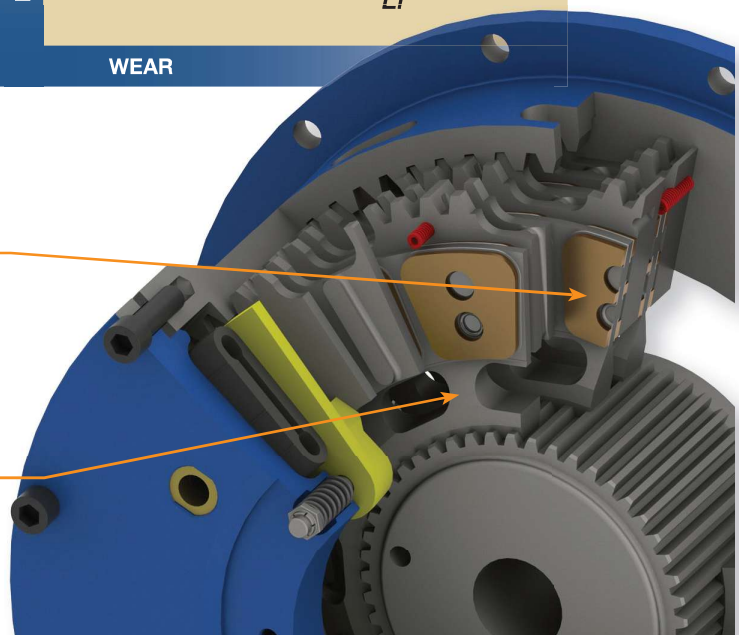
## Power Performance Low Inertia (PPLI)

### Sintered Bronze Friction Material

- ✓ Grooves for increased airflow
- ✓ Very high temperature threshold
- ✓ Excellent heat rejection
- ✓ Wear rate is consistent & predictable

### Center Plates

- ✓ Outstanding ventilation
- ✓ Wear surface receives most cooling
- ✓ Reduced mass and inertia

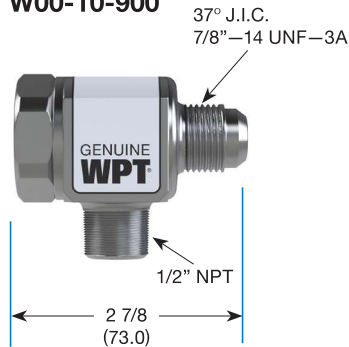


# Low Inertia Accessories

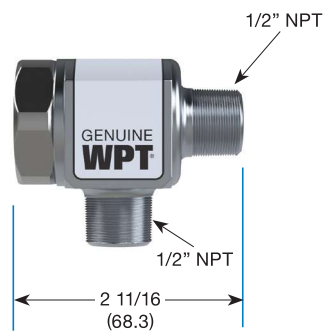
## Quick Release Valves

WPT quick release valves are utilized to provide fast exhaust of air pressure from the clutch. Mounted directly to the airtube spuds, these QRVs provide a large exhaust port directly at clutch or brake. Mufflers are optional for quieter operation.

**W00-10-900**



**W00-10-901**



**W00-10-900 with W00-10-906**



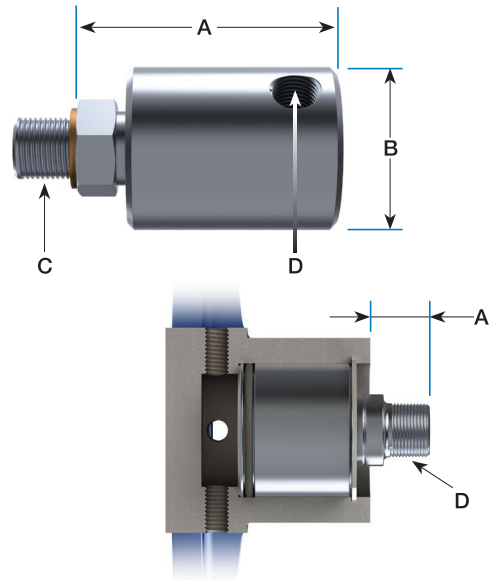
## Rotating Unions

The WPT rotating union is engineered to allow air or fluid passage under pressure to the end of a rotating shaft. This is a maintenance-free design that protects against leakage.

### Rotating Air Union Dimensions for Low Inertia Clutches

| Clutch Size | Air Union Part Number | A               | B              | C Rotor Thread | D Inlet Thread |
|-------------|-----------------------|-----------------|----------------|----------------|----------------|
|             |                       | in (mm)         | in (mm)        |                |                |
| 104 - 206   | W00-21-006            | 2 9/16 (66.5)   | 1 5/8 (41.3)   | 5/8"-18        | 1/4" NPT       |
| 108 - 321   | W00-21-002            | 3 11/16 (95.2)  | 2 3/16 (56.7)  | 1"-14          | 1/2" NPT       |
| 124 - 327   | W00-21-008            | 4 1/4 (109.5)   | 2 13/16 (72.9) | 1"-14          | 3/4" NPT       |
| 230 - 348   | W00-21-010            | 1 15/32 (37.31) | 3 3/16 (82.4)  | -              | 1" NPT         |
| 124 - 348   | W00-21-011            | 5 1/16 (128.7)  | 3 1/4 (82.6)   | 1 1/2"-12      | 1" NPT         |
| 230 - 348   | W00-21-033            | 6 15/16 (176.2) | 4 1/4 (108.0)  | 2"-12          | 1 1/2" NPT     |
| 260 - 460   | W00-21-020            | 10 (254.0)      | 7 (178.2)      | 2 1/2" NPT     | 2 1/2" NPT     |

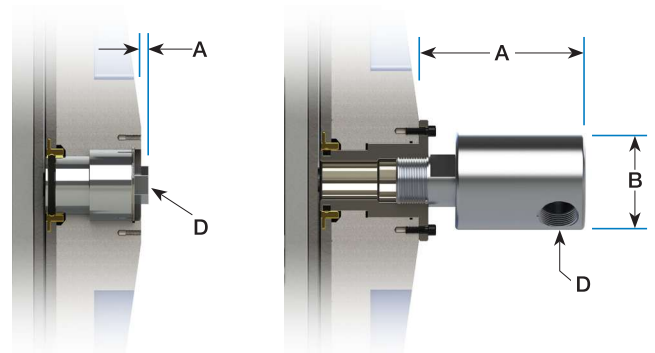
Consult WPT Application Engineering for application assistance, service factors, specifications, and detailed drawings/3D models.



### Rotating Air Union Dimensions for High Torque Clutches

| Clutch Size | Air Union Part Number | Adapter Part Number | A              | B             | C Rotor Thread | D Inlet Thread |
|-------------|-----------------------|---------------------|----------------|---------------|----------------|----------------|
|             |                       |                     | in (mm)        | in (mm)       |                |                |
| 111 - 336   | W00-21-000            | -                   | 19/64 (7.54)   | -             | -              | 1/2" NPT       |
| 116 - 330   | W00-21-011            | W00-21-018          | 5 7/16 (138.1) | 3 1/4 (82.6)  | 1 1/2"-12      | 1" NPT         |
| 236 - 336   | W00-21-049            | W00-21-058          | 8 7/8 (225.4)  | 4 1/4 (108.0) | 1 3/4"-12      | 1 1/2" NPT     |

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