

LARGE AIR CLUTCHES

MODEL PO – SIZES 14, 18, 24, 30, 36 AND 42 INCHES

- AVAILABLE IN 1, 2 OR 3 PLATE CONSTRUCTION
- UNIQUE RELEASE SPRING DESIGN
- INTEGRAL QUICK-RELEASE VALVE
- POSITIVE RELEASE AND POSITIONING OF PRESSURE AND CENTER PLATES
- FOUR OVERSIZE RELEASE SPRINGS, WELL-REMOVED FROM HEAT ZONE, ASSURE QUICK, POSITIVE RELEASE
- NARROWER WIDTH ALLOWS MORE COMPACT INSTALLATION
- HEAVY, RUGGED TEETH FOR LONGER WEAR LIFE
- LARGE DIAPHRAGM AREA PROVIDES UP TO 35 PERCENT HIGHER TORQUE CAPACITY
- TROUBLE-FREE DIAPHRAGM ELIMINATES RELEASE DRAG; FIELD-PROVEN FOR LONG LIFE
- LARGE PASSAGES, WITH CORED BACK PLATE, ASSURE ADEQUATE AIR-COOLING TO ALL PARTS



CAPACITY DATA

| Clutch Model | Application Duty Classification | | | | Maximum Slip Torque @ 130 PSI Nm (lb-ft) | Maximum Safe Operating Speed | | Air Volume to Engage (fully worn) cubic inches |
|--------------|--------------------------------------|--------------------------|-------------|-------------|---|------------------------------|--------------|--|
| | Class I Work Torque Nm (lb-ft) | Maximum rating – kW (hp) | | | | Solid Plates | Split Plates | |
| | | Class II | Class III | Class IV | | | | |
| PO-114 | 3813 (2812) | 140 (188) | 93 (125) | 70 (94) | 5084 (3750) | 2400 | 1950 | 34 |
| PO-214 | 7626 (5625) | 280 (376) | 187 (251) | 140 (188) | 10,169 (7500) | 2500 | 1950 | 66 |
| PO-314 | 11,439 (8437) | 421 (564) | 280 (376) | 210 (282) | 15,253 (11,250) | 2500 | 1920 | 71 |
| PO-118 | 7575 (5587) | 232 (311) | 154 (207) | 116 (156) | 10,101 (7450) | 1800 | 1550 | 56 |
| PO-218 | 15,151 (11,175) | 464 (622) | 309 (415) | 232 (311) | 20,202 (14,900) | 1950 | 1550 | 105 |
| PO-318 | 22,726 (16,762) | 696 (933) | 464 (622) | 348 (467) | 30,303 (22,350) | 2050 | 1550 | 157 |
| PO-124 | 17,592 (12,975) | 412 (553) | 274 (368) | 206 (276) | 23,456 (17,300) | 1400 | 1150 | 115 |
| PO-224 | 35,183 (25,950) | 825 (1106) | 550 (737) | 412 (553) | 46,911 (34,600) | 1450 | 1000 | 220 |
| PO-324 | 52,775 (38,925) | 1237 (1659) | 825 (1106) | 618 (829) | 70,367 (51,900) | 1450 | 975 | 331 |
| PO-230 | 66,096 (48,750) | 1289 (1728) | 859 (1152) | 644 (864) | 88,128 (65,000) | 1100 | 925 | 335 |
| PO-330 | 99,144 (73,125) | 1933 (2592) | 1289 (1728) | 966 (1296) | 132,192 (97,500) | 1100 | 925 | 510 |
| PO-236 | 113,075 (83,400) | 1855 (2488) | 1237 (1659) | 928 (1244) | 15,185 (111,200) | 825 | 600 | 510 |
| PO-336 | 169,613 (125,100) | 2783 (3732) | 1855 (2488) | 1391 (1866) | 226,150 (166,800) | 1100* | 850* | 760 |
| PO-342 | 280,654 (207,000) | 3788 (5080) | 2526 (3387) | 1894 (2540) | 374,206 (276,000) | 1100* | 825* | 1580 |

* Steel driving ring.

For best clutch performance when used as:

Master or Operating Clutch – limit use to 75% of maximum input torque and derate for apply pressures less than 130 psi.

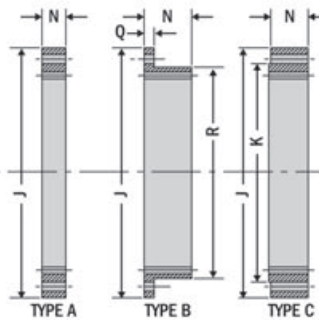
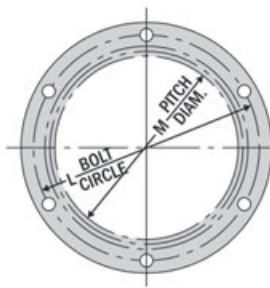
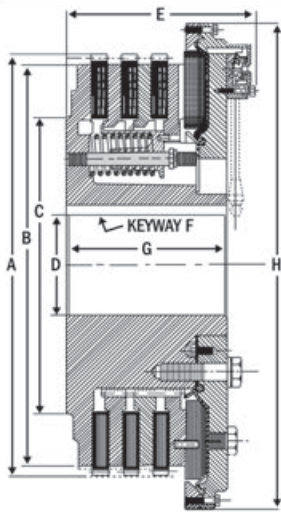
Class I = Disconnect, Class II = Light Duty, Class III = Normal Duty, Class IV = Heavy Duty.

Maximum Speeds – The maximum speeds listed in this bulletin are safe permissible speeds possible with cast iron driving rings. The driving ring is normally the most critical member because it has the largest diameter. It should be remembered that the maximum speed listed is usually set considerably above the desired operating speed in the average installation.

DIMENSIONAL DATA

| Model | Weight kg (lbs) | A | B | C | D (max.) | E | F | G | H |
|--------|--------------------|-------|-------|-------|-----------------|--------|------------|-------|-------|
| PO-114 | 66 (145) | 15.15 | 14.00 | 10.00 | 3.500 3.499 | 5.87 | .88 x .44 | 4.39 | 18.50 |
| PO-214 | 84 (185) | | | | | 7.25 | | 5.77 | |
| PO-314 | 100 (220) | | | | | 8.62 | | 7.14 | |
| PO-118 | 118 (260) | 19.15 | 18.00 | 9.38 | 4.500 4.499 | 6.28 | 1 x .50 | 4.80 | 22.50 |
| PO-218 | 159 (350) | | | | | 7.90 | | 6.42 | |
| PO-318 | 191 (420) | | | | | 9.53 | | 8.05 | |
| PO-124 | 259 (570) | 25.15 | 24.00 | 17.75 | 6.000 5.998 | 7.41 | 1.25 x .63 | 5.93 | 28.88 |
| PO-224 | 299 (660) | | | | | 9.11 | | 7.63 | |
| PO-324 | 399 (880) | | | | | 10.86 | | 9.38 | |
| PO-230 | 508 (1120) | 31.15 | 30.00 | 20.75 | 7.000 6.997 | 9.78 | 1.50 x .75 | 8.49 | 34.50 |
| PO-330 | 590 (1300) | | | | | 11.68 | | 10.39 | |
| PO-236 | 839 (1850) | 37.15 | 36.00 | 23.75 | 7.750 7.747 | 11.05* | 2x1 | 10.20 | 40.00 |
| PO-336 | 1089 (2400) | | | | | 13.55 | | 12.70 | |
| PO-342 | 1760 (3880) | 43.15 | 42.00 | 34.00 | 10.000 9.997 | 16.30* | 2x1 | 13.50 | 46.75 |

* Maximum width: PO-236 – 11.08; PO-336 – 13.58;
PO-342 – 16.46



CLUTCH DRIVING RINGS

| Model | Type Ring | J +.000 -.005 | K | L | M | N | Q | R | Holes No. Size | Teeth 20° P.A. |
|--------|-----------|---------------------|-------|-------|-------|------|------|-------|----------------|----------------|
| PO-114 | B | 18.38 | - | 17.25 | 14.75 | 1.13 | .50 | 16.00 | 8 - .53 | 59 - .80 P. |
| PO-214 | | | | | | 2.38 | | | | |
| PO-314 | | | | | | 4.00 | | | | |
| PO-118 | A | 22.50 | - | 21.38 | 18.75 | 1.13 | .63 | 20.00 | 6 - .78 | 75 - .80 P. |
| PO-218 | B | | | | | 3.06 | | | | |
| PO-318 | B | | | | | 4.25 | | | | |
| PO-124 | A | 28.88 | - | 27.25 | 24.75 | 1.50 | .75 | 25.88 | 12 - .78 | 99 - .80 P. |
| PO-224 | B | | | | | 3.50 | | | | |
| PO-324 | B | | | | | 5.50 | | | | |
| PO-230 | C | 34.75 | 32.00 | 33.00 | 30.75 | 4.50 | 4.38 | - | 12 - .78 | 123 - .80 P. |
| PO-330 | | | | | | 7.00 | 6.88 | - | | |
| PO-236 | C | 40.00 | 37.50 | 38.50 | 36.75 | 4.75 | 4.63 | - | 12 - .78 | 147 - .80 P. |
| PO-336 | | | | | | 7.50 | 7.38 | - | 24 - .78 | |
| PO-342 | C | 46.75 | 46.00 | 45.00 | 42.75 | 7.50 | 7.38 | - | 24 - .78 | 171 - .80 |

USE A CERTIFIED PRINT FOR INSTALLATION

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Twin Disc, Incorporated
Racine, Wisconsin 53403 USA
Phone +1-262-638-4000
Fax +1-262-638-4482
www.twindisc.com

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