

DEUBLIN

1109 Series "Pop-Off" Rotor-Mounted Rotating Unions for Coolant Service with Dry Running

- Single passage for coolant or MQL
- Patented "pop-off" technology allows unlimited dry running without media pressure
- Full-flow design has no obstructions to trap swarf or debris
- Bearing-supported with threaded rotor for easy installation
- Dual ABEC 7 (ISO class P4) angular contact ball bearings
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Aluminium housing, endcap anodised resists corrosion

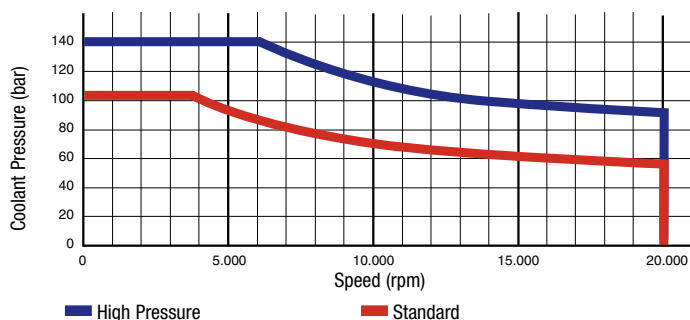


Operating Data

| | | | |
|------------------|--|----------|---------------|
| Media | Water-based Coolant MQL (oil mist) up to 10 bar (145 psi) | | |
| Filtration | ISO 4406 Class 17/15/12, max. 60 micron | | |
| Max. Speed | 20.000 min ⁻¹ 20,000 rpm | | |
| Max. Pressure | see chart | | |
| Max. Flow | 82 l/min | 21.6 gpm | Standard |
| | 24,3 l/min | 6.4 gpm | High Pressure |
| Max. Temperature | 70°C | 160°F | |

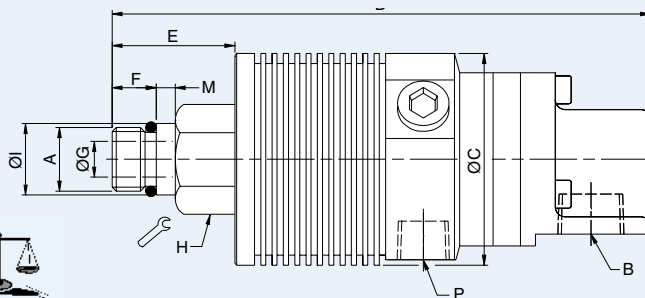
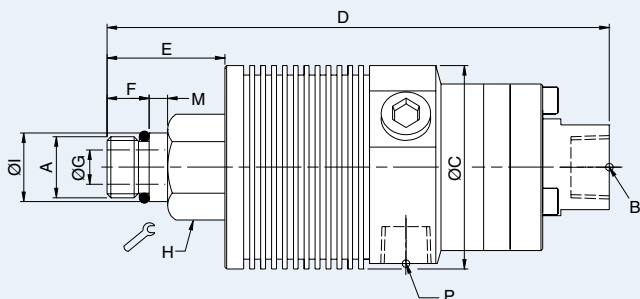


**NO AIR PRESSURE
WITH ROTATION**



Axial Connection

Radial Connection



| | Ordering Number | B Supply Connection | C Overall Diameter | D Overall Length | P Vent Size Ø (3 x 120°) | A Rotor Connection | E Rotor Length | F Thread Length | G Bore Diameter | H Across Flats | I Pilot Diameter | M Pilot Length |
|---------------|-----------------|---------------------|--------------------|------------------|--------------------------|--------------------|----------------|-----------------|-----------------|----------------|-------------------|----------------|
| Standard | 1109-011-165 | 3/8 NPT Axial | 53 | 132 | 1/4 NPT | 5/8-18 UNF LH | 34 | 14 | 9 | 15/16" | 0.6555" / 0.6553" | 5 |
| | 1109-021-188 | G 3/8 Axial | 53 | 129 | G 1/4 | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-041-188 | 3/8 PT Axial | 53 | 129 | 1/4 PT | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-010-165 | 3/8 NPT Radial | 53 | 138 | 1/4 NPT | 5/8-18 UNF LH | 34 | 14 | 9 | 15/16" | 0.6555" / 0.6553" | 5 |
| | 1109-020-188 | G 3/8 Radial | 53 | 135 | G 1/4 | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-040-188 | 3/8 PT Radial | 53 | 135 | 1/4 PT | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| High Pressure | 1109-014-196 | 1/4 NPT Axial | 53 | 132 | 1/4 NPT | 5/8-18 UNF LH | 34 | 14 | 9 | 15/16" | 0.6555" / 0.6553" | 5 |
| | 1109-024-212 | G 3/8 Axial | 53 | 129 | G 1/4 | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-044-212 | 1/4 PT Axial | 53 | 129 | 1/4 PT | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-013-196 | 1/4 NPT Radial | 53 | 138 | 1/4 NPT | 5/8-18 UNF LH | 34 | 14 | 9 | 15/16" | 0.6555" / 0.6553" | 5 |
| | 1109-023-212 | G 1/4 Radial | 53 | 135 | G 1/4 | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |
| | 1109-043-212 | 1/4 PT Radial | 53 | 135 | 1/4 PT | M16 x 1.5 LH | 31 | 11 | 9 | 24 | 17.993 / 17.988 | 5 |

DEUBLIN

1109 Series "Pop-Off" Bore-Mounted Rotating Unions for Coolant Service with Dry Running

- Single passage for coolant or MQL
- Patented "pop-off" technology allows unlimited dry running without media pressure
- Accepts up to 19 mm of axial drawbar movement
- Full-flow design has no obstructions to trap swarf or debris
- Bore-mounted design for easy installation
- Matched, ISO class P4 hybrid ball bearings for smooth operation at high speeds
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodised aluminium and stainless steel parts resist corrosion

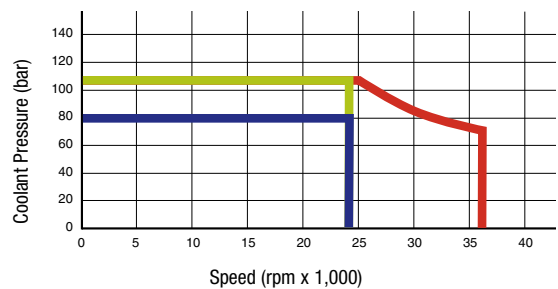


Operating Data

| | | |
|------------------|--|------------|
| Media | Water-based Coolant MQL (oil mist) up to 10 bar (145 psi) | |
| Filtration | ISO 4406 Class 17/15/12, max. 60 micron | |
| Max. Speed | 36.000 min ⁻¹ | 36,000 rpm |
| Max. Pressure | 105 bar | 1,520 psi |
| Max. Flow | | |
| 1109-710-717 | 82 l/min | 21.6 gpm |
| 1109-92x-930 | 24,3 l/min | 6.4 gpm |
| Max. Temperature | 70°C | 160°F |

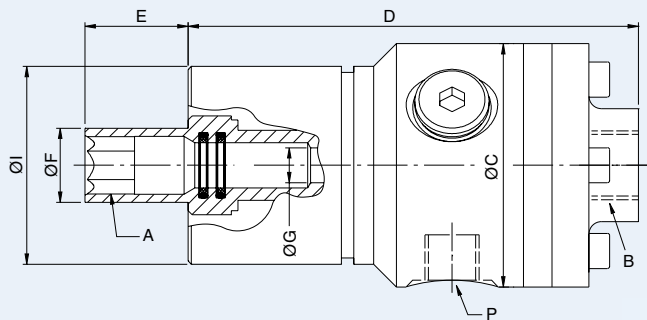


**NO AIR PRESSURE
WITH ROTATION**

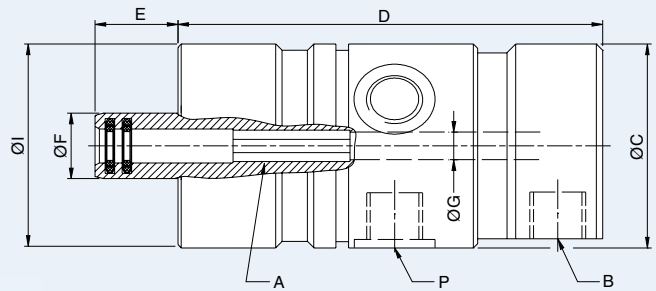


■ 1109-928-930, 1109-929-930 ■ 1109-710-717 ■ 1109-926-930, 1109-927-930

Axial Connection (1109-710-717 shown)



Radial Connection



| | Ordering Number | B Supply Connection | C Overall Diameter | D Housing Length | P Vent Size Ø (3 x 120°) | A Rotor Connection | E Rotor Length | F Rotor Overall Diameter | G Bore Diameter | I Pilot Diameter | Maximum Speed (rpm) | Max. Pressure (bar) |
|--------|-----------------|---------------------|--------------------|------------------|--------------------------|--------------------|----------------|--------------------------|-----------------|------------------|---------------------|---------------------|
| Axial | 1109-710-717 | G 3/8 | 59 | 109 | G 1/4 | Hexagon 12 D10 | 25 | 18 | 11 h7 | 48 g6 | 24,000 | 80 |
| | 1109-927-930 | G 1/4 | 48 | 93 | G 1/4 | Octagon 7.4 D10 | 19.5 | 15.4 | 8.1 f9 | 48 h7 | 36,000 | 105 |
| | 1109-929-930 | G 1/4 | 48 | 93 | G 1/4 | Octagon 7.4 D10 | 19.5 | 15.4 | 8.1 f9 | 48 h7 | 24,000 | 105 |
| Radial | 1109-926-930 | G 1/4 | 48 | 93 | G 1/4 | Octagon 7.4 D10 | 19.5 | 15.4 | 8.1 f9 | 48 h7 | 36,000 | 105 |
| | 1109-928-930 | G 1/4 | 48 | 93 | G 1/4 | Octagon 7.4 D10 | 19.5 | 15.4 | 8.1 f9 | 48 h7 | 24,000 | 105 |