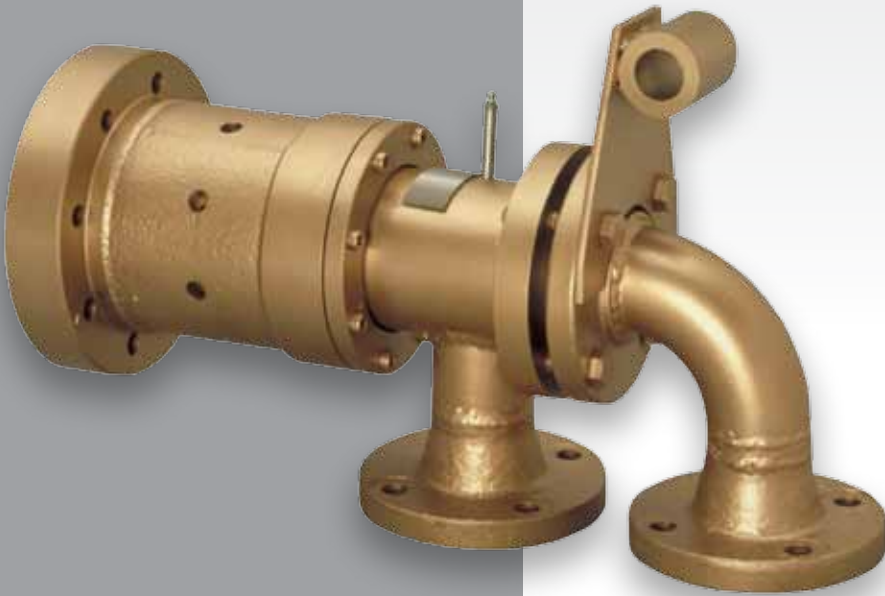


ROTARY UNION

2000 SERIES

SHOCK & VIBRATION RESISTANT



Operating Parameters

| MEDIA |
|--|
| Water, Hot Oil, Air |
| PRESSURE* |
| 150 psi (Water), 100 psi (Air & Hot Oil) |
| TEMPERATURE* |
| 375° F (Water), 550° F (Hot Oil)** |
| SPEED* |
| 500 RPM |
| CONNECTIONS |
| 2 Inch to 4 Inch ASA Flange |
| MATERIAL |
| Cast Iron Housing, Steel Shaft |
| CONFIGURATION OPTIONS |
| Mono Flow and Dual Flow Configurations Available |

* See Performance Charts For Details

**Consult factory for applications exceeding 375° F

FEATURES & BENEFITS

Heavy Duty Design

- Designed with two ball bearings spaced to withstand radial and thrust loads.

No Leakage In Tough Applications

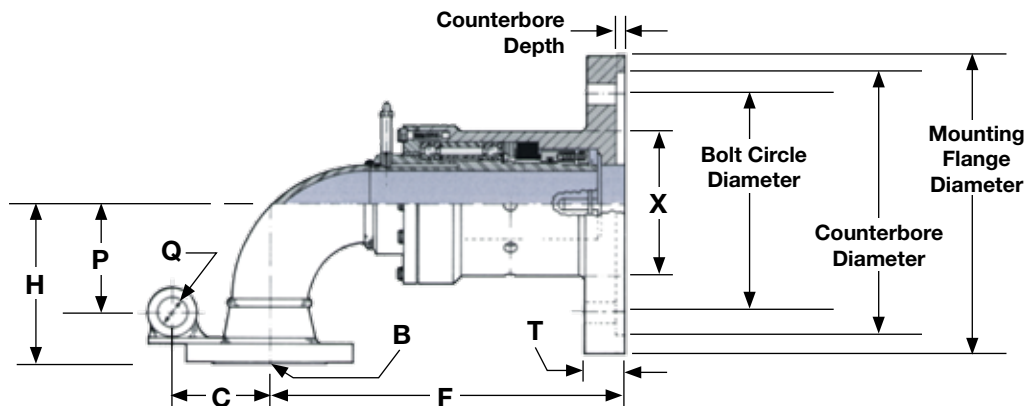
- Compression springs in the 2000 Series provide even loading across the seal surfaces to maintain zero leakage even in low pressure applications.

Easy Maintenance

- Designed with an integral flange that allows repairs without removing the housing from the machine.

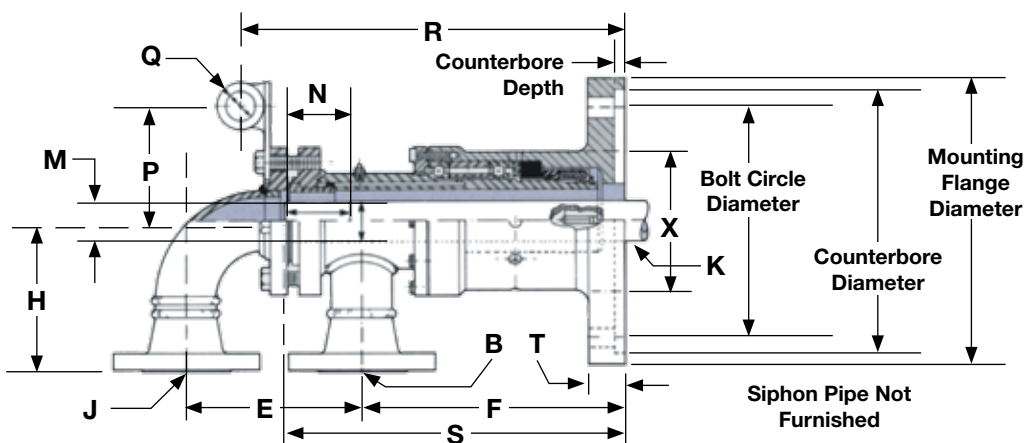
Easy Mounting

- The flange attaches directly to the machine journal, providing inherently concentric mounting, minimizing overhang, and partially relieving bearing load to increase service life.



2000 Series Rotary Unions • Mono Flow (Inch)

| Nominal Pipe Size | Part Number | Repair Cartridge | B (3) | F | T | Mounting Flange Diameter | Bolt Circle Diameter | Flange Type | Counterbore | | Bolt Hole Size | Number of Bolt Holes (4) | H | P | Diameter (X) | Diameter (Q) | C |
|-------------------|-------------|------------------|-------|--------|--------|--------------------------|----------------------|-------------|------------------|-------|----------------|--------------------------|-------|-------|--------------|--------------|---|
| | | | | | | | | | Diameter | Depth | | | | | | | |
| 2 | 730747C | 441781C | 2 | 12-3/4 | 1-7/16 | 10 | 7-1/8 | 2 | 9.002 to 9.004 | 3/16 | 11/16 | 4 | 5-1/2 | N/A | 5-1/4 | — | — |
| 3 | 730841C | 441845C | 3 | 16-1/8 | 1-3/4 | 9-1/2 | 7-9/16 | 2 | 10.824 to 10.820 | | 11/16 | 8 | 7-1/4 | N/A | 6-5/16 | — | — |
| 4 | 730842C | 441846C | 4 | 20-1/4 | 1-3/4 | 11-1/2 | 8-15/16 | 2 | 10.824 to 10.820 | 13/16 | 6 | 9-1/8 | 6-3/4 | 7-3/4 | 1/8 | 5-3/4 | |



2000 Series Rotary Unions • Dual Flow • With Revolving Siphon (Inch)

| Nominal Pipe Size | Part Number | Repair Cartridge | B (3)* | F | T | Mounting Flange Diameter | Bolt Circle Diameter | Flange Type | Counterbore | | Bolt Hole Size | Number of Bolt Holes (4)* | H | P | Diameter (X) | Diameter (Q) | K (1)* |
|-------------------|-------------|------------------|--------|--------|--------|--------------------------|----------------------|-------------|------------------|-------|----------------|---------------------------|-------|-------|--------------|--------------|--------|
| | | | | | | | | | Diameter | Depth | | | | | | | |
| 2 | 730843C | 441781C | 1-1/2 | 10 | 1-7/16 | 10 | 7-1/8 | 2 | 9.002 to 9.004 | 3/16 | 11/16 | 4 | 4-5/8 | — | — | — | 3/4 |
| 3 | 730737C | 441845C | 2-1/2 | 12-1/2 | 1-3/4 | 9-1/2 | 7-9/16 | 2 | 9.002 to 9.004 | | 11/16 | 8 | 7-1/8 | 5-1/2 | 6-5/16 | — | — |
| 4 | 730852C | 441846C | 2-1/2 | 15-3/8 | 1-3/4 | 11-1/2 | 8-15/16 | 2 | 10.820 to 10.824 | | 13/16 | 6 | 7-1/8 | 6-1/8 | 7-3/4 | 1/8 | 5-3/4 |

- (1)* Standard siphon pipe diameter.
- (2)* Machined dimension to allow revolving siphon pipe to run concentrically with journal diameter to within 0.005" T.I.R.
- (3)* 150 lb. ASA Flange.
- (4)* Equally spaced.

NOTES:

- For heat transfer oil applications, consult factory
- Other flange dimensions available. See previous page.
- For dimensions on 5" - 6", consult factory

2000 Series Rotary Unions • Dual Flow • Revolving Siphon (Inch) - Continued

| M (2)* | N | J (3)* | S | E | R |
|----------------|-------|--------|--------|-------|--------|
| 0.991 to 0.997 | 4-1/4 | 1-1/2 | 13-3/8 | 6-5/8 | N/A |
| 1.865 to 1.871 | | 2-1/2 | 16-1/4 | 8-3/8 | 18-1/4 |
| 2.801 to 2.807 | | 2-1/2 | 19-3/8 | 8-7/8 | 21 |

ROTARY UNION

2000 SERIES

SHOCK & VIBRATION RESISTANT

The unique design of this 2000 series flanged type joint permits them to be used to introduce heating and cooling agents into rolls or cylinders in various types of machinery. Models are available to handle water, oil and other fluids in applications requiring sealing pressure to 150 psi, speeds to 500 rpm, and temperature to 550°F when specified.

1 Flexible Hose

Eliminates complex piping, allows adjustment of rolls without repiping. Allows rotary joint to “float” so as to avoid unnecessary strain on sealing surfaces. A flexible hose either rubber or metal - must always be used with rotary joints.

2 Flanged Inlet

Elbow of steel is a 150 lb. ASA flange type.

3 Flanged Rotating Housing

Prevents leakage under pressure and protects the internal parts for a long service life. The flanged housing attaches directly to the machine journal, providing inherently concentric mounting, minimizes overhang. The housing may rotate in either direction without causing back out problems.

4 Stationary shaft

Is constructed of steel. It serves as a conduit for the fluid transfer from the flanged inlet into the revolving flanged housing.

5 Lubrication Fitting

Located on the stationary shaft allows lubrication of the ball bearings while the rotary joint is in operation.

6 Two Single Row, Widely Spaced Ball Bearings

For radial and thrust loads.

7 Grease Ring Assembly

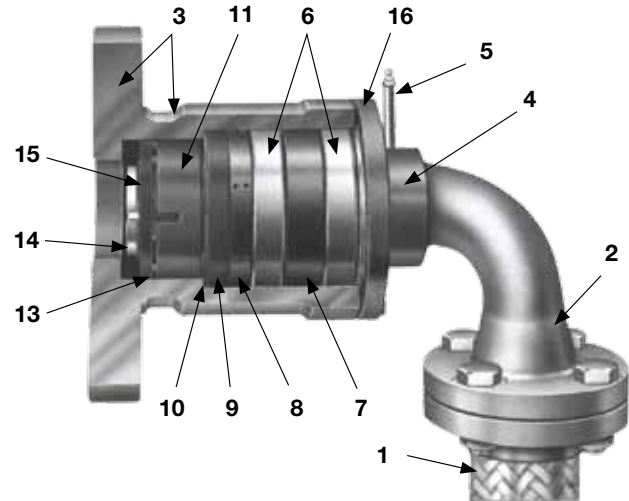
Made of steel, ground and spaced for ball bearing load sharing for increased life.

8 Drain Ring

Made of steel. It allows minute start-up leakage from entering the ball bearings.

9 Seal Ring

Forms the primary rotating seal with the face ring.



The seal ring is constructed of carbon graphite to provide a low friction, wear resistant surface.

10 Gasket

Provides an effective seal between the housing and the fluid chamber.

11 The Face Ring

Constructed of hardened and tempered stainless steel mates with the seal ring to form the primary seal.

12 O-Ring Elastomer (not shown)

Made of ethylene propylene for hot water applications. For higher temperature applications, a perfluoroelastomer is used.

13 Compression Springs

Apply an initial pressure between the face ring and seal ring to provide sealing for low pressure applications.

14 Drive Collar

Keys the face ring and the shaft together to prevent rotation.

15 Retainer Rings

Secure the internal components to the shaft.

16 Flange Secures

Secures the internal components within the flanged housing. This allows quick rotary joint repair and less machine downtime.

Order Checklist

Supply the following information when ordering

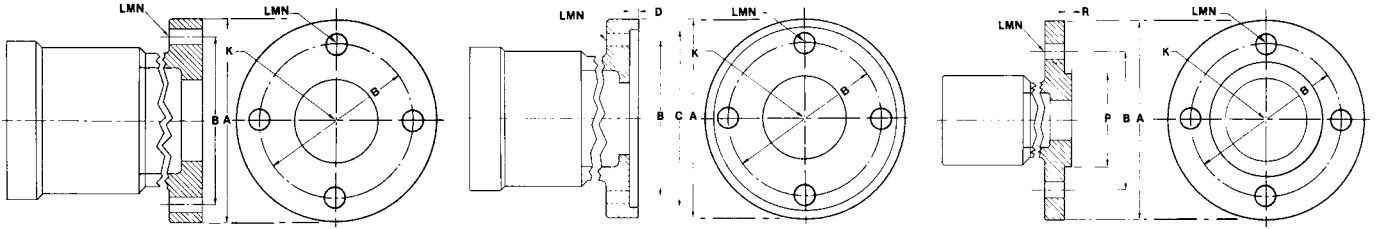
- | | |
|--|--|
| <input type="checkbox"/> 1. Desired bolt circle | <input type="checkbox"/> 4. Desired flange thickness |
| <input type="checkbox"/> 2. Bolt hole size | <input type="checkbox"/> 5. Flange O.D. |
| <input type="checkbox"/> 3. Number of bolt holes and spacing | <input type="checkbox"/> 6. Pilot diameter and type |
| | <input type="checkbox"/> 7. Pilot (length or depth) |

Dimensions - 2000 & 9000 • Bolt & Flange

| Shaft I.D. | Minimum Bolt Circle | | Max. Flange Diameter (A) | Max. Flange Thickness |
|------------|---------------------|--------------------|--------------------------|-----------------------|
| | Bolt Circle (B) | Cap Screw Diameter | | |
| 2 | 7-1/8 | 5/8 | 10-7/8 | 1-7/16 |
| 3 | 7-9/16 | 5/8 | 13-1/2 | 1-3/4 |
| 4 | 8-15/16 | 3/4 | 14-7/8 | 2-1/16 |
| 5 | 11-9/16 | 1 | 16-1/4 | 2-3/4 |

*All dimensions in inches. See page 35 for diagram.

2000 & 9000 Series Flange Mountings



Flange Housing Type 1

- A. Overall diameter
- B. Bolt circle diameter
- K. Rotary Union joint shaft thread size and direction
- L. Size of bolt holes
- M. Type and size of bolts
- N. Number of bolt holes required

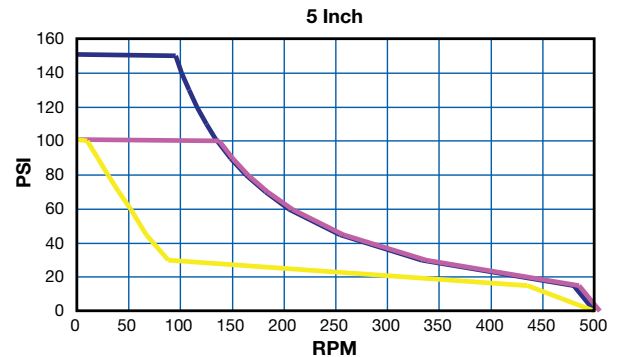
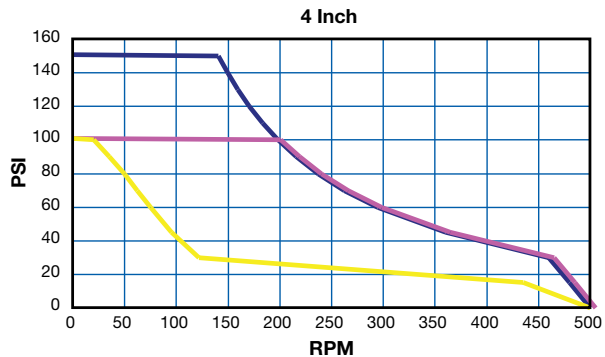
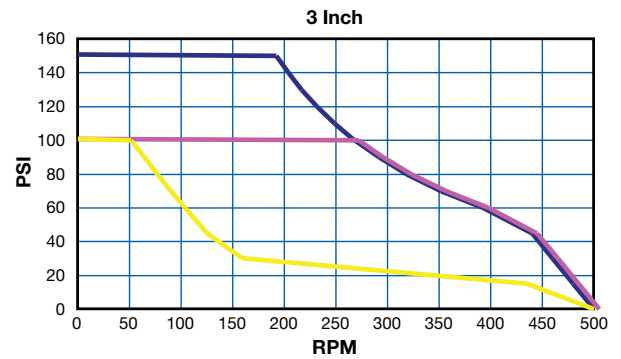
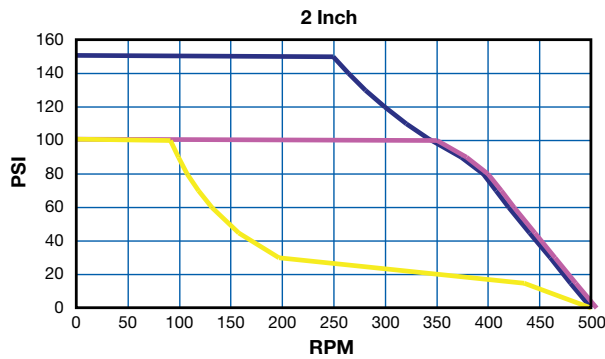
Flange Housing with Counterbore - Type 2

- A. Overall diameter
- B. Bolt circle diameter
- C. O.D. of journal for sizing counterbore diameter
- D. Counterbore depth
- K. Rotary Union joint shaft thread size and direction
- L. Size of bolt holes
- M. Type and size of bolts
- N. Number of bolt holes required

Flange Housing with Pilot Type 3

- A. Overall diameter
- B. Bolt circle diameter
- K. Rotary Union joint shaft thread size and direction
- L. Size of bolt holes
- M. Type and size of bolts
- N. Number of bolt holes required
- P. I.D. of journal for sizing pilot diameter
- R. Pilot length

Performance Charts



Water Hot Oil Air