Rotary Joints

These rotary joints are engineered for either general applications or special requirements. The products are grouped accordingly to guide selection based upon the characteristic of the machinery systems which they are to be used.

Rotary Joints Group C

These rotary joints are designed to meet the requirements of a wide range of systems as original equipment or replacement parts. Both syphon (circulating service) and single flow requirements can be met. The Type “Super G” rotary joint is designed for the tough corrugated board processing applications. It has proven to be a reliable performer in difficult service conditions where other joints have failed. Joint sizes from ½” to 3” are available for all types, including ferrous and bronze materials.

Type C and CS

Steam, water, oil, gas – threaded ends

Sizes: ½” through 3”
Temperature: 406°F (208°C)
Pressure rating: Steam 250 psi
Hydraulics 500 psi

Type CF and CSF

Steam, water, oil, gas – flange mounted

Sizes: 1”, 1½”, 2”, 2½”, 3”
Temperature: 406°F (208°C)
Pressure rating: Steam 250 psi
Hydraulics 500 psi

Hot Oil Rotary
Types C, CS, CF & CSF
Series 300

Sizes: ½” through 3”
Temperature: 406°F (208°C)
Pressure rating: 100 psi

Type CR and CRF

Rotating syphon for the rubber, plastic and textile industries.

Sizes: ¼” through 3”
Temperature: 406°F (208°C)
Pressure rating: Steam 250 psi
Hydraulics 500 psi

Type Super G

Corrugated board

Sizes: 1¼”, 1½”, 2” and 2½”
Temperature: 406°F (208°C)
Pressure rating: 250 psi

Series 300

Rubber and plastic calenders – steam, hot water, and heat transfer fluids.

Sizes: 1½” x 1½”, 2” x 2” and 2½” x 2½”
Steam temperature: 406°F (208°C)
Pressure rating: 250 psi
Water temperature: 350°F (177°C)
Pressure rating: 300 psi
Heat transfer temperature: 600°F (316°C)
Pressure rating: 150 psi

Rotary Syphon Joints

These joints and the rotating syphon assemblies are designed principally for paper-making machinery and other applications needing condensate evacuation, but can be used in other applications requiring internal siphoning. Joint sizes from ¼” to 4” are available in this product group.

Type GR

Textile and paper machine dryer
For textile applications
Sizes: ¼” and ½”
Temperature: 423°F (217°C)
Pressure rating: 300 psi

For paper machine dryer applications
Sizes: 2”, 2½” and 3”
Temperature: 370°F (188°C)
Pressure rating: Saturated Steam 160 psi

Syphon Elbows

For Type C rotary joints. Bronze and stainless construction for maximum corrosion resistance.

Sizes: ¼” and ½”

Type GR

Barco Joints
Rotary Joints — continued

Water Rotary Joints
This series of joints is designed for water and brine service in cooling roll, calender and super calender applications — commonly used for printing presses, as well as paper, plastics and metal foil processing. Mono and Duo-flow types are available for joint sizes from 3/8" to 4" within this product group. Flanged and threaded end styles are also available.

Type E-75 RS and RSX
Water, brine, high-speed cooling
Sizes: 3/8" through 2"
Temperature: 225°F (107°C)
-01 Part No. suffix
350°F (177°C)
-04 Part No. suffix
Pressure rating: 150 psi
RPM: 3,500 rpm

Type EC
Calenders – paper and plastic
Sizes: 2", 2 1/4", 3" and 4"
Temperature: 300°F (149°C)
Pressure rating: 150 psi
RPM: 750 rpm

Air, Hydraulic, and Coolant Rotary Joints
The Type E-1 and D rotary joints in this category are for specific applications as noted in the product descriptions.

Type E-1
Air, coolants, hydraulic
Sizes: 1/4", 3/8" and 1/2"
Temperature: -20°F to 225°F
(-29°C to 107°C)
Pressure rating: 1150 psi
RPM: 3600 rpm

Type D
Machine tools
Sizes: 1/4"
Temperature: -20°F to 225°F
(-29°C to 107°C)
Pressure rating: 3000 psi
RPM: 6000 rpm
VISI-FLO® Sight Flow Indicators

Four different types of VISI-FLO sight flow indicators are available:

Plain
When the color and/or clarity of the liquid is of prime importance. Bi-directional.

Propeller
The best way to show flow of opaque liquids. Also ideal for observations at a distance. Right to left flow is standard. Specify if left to right flow is required.

Flapper
Points in either direction to show at a glance which way the liquid is flowing. Bi-directional.

Drip Tube
Ideal for gravity, extremely low, or intermittent flow. Keeps liquid from dripping on glass. For vertical lines only.

Threaded Ends
Sizes: ¼", ⅜", ½", ⅝", 1", 1⅛, 1⅛, 1⅝, 2"
Available in: Bronze, 316 Stainless, Carbon Steel, Ductile Iron

Flanged Ends
Available in: 316 Stainless, Carbon Steel, Ductile Iron (available in sizes 3" and 4" only)

Model Selection
Series: [14] 71-2"
1400 Series, 1500 Series
Metal: [14]71-2"
2 – Carbon Steel
3 – Bronze
7 – 316 Stainless Steel
8 – Ductile Iron
Indicator: [14]71-2"
0 – Plain
1 – Propeller
2 – Flapper
3 – Drip Tube
5 – Low Flow (¼" and ½" only)
Size: 1471-2"
F: Add "F" for flanged ends.
Example: 1471F-2"
FJP: Add "FJP" for matched length unit with flanged ends.
Example: 1471FJP-2"

Stainless Steel

<table>
<thead>
<tr>
<th>Type</th>
<th>1400 Series</th>
<th>1500 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>1420FJP</td>
<td>1520FJP</td>
</tr>
<tr>
<td>Propeller</td>
<td>1421FJP</td>
<td>1521FJP</td>
</tr>
<tr>
<td>Flapper</td>
<td>1422FJP</td>
<td>1522FJP</td>
</tr>
<tr>
<td>Drip Tube</td>
<td>1423FJP</td>
<td>1523FJP</td>
</tr>
</tbody>
</table>

Flanged VISI-FLO®
Flanged models conform to standard ANSI mounting dimensions. All models have 150 lbs. raised-face flanges. Sizes range from 1" to 12".

General Dimensions:
Size of VISI-FLO: ¾", 1", 1½", 2", 3", 4"
Size of VISI-FLO Flanged Ends: 6", 8", 10", 12"

Seals available from stock:
• Viton® (standard)
• Teflon®
• EPT
• Neoprene
• Buna N

Viton and Teflon are registered trademarks of the DuPont Co. and VISI-FLO is a registered trademark of OPW Engineered Systems.
Brass Ball Valves
For control of air, water, oil and gas in hose or pipe lines.
Female NPT x Female NPT, Standard Port
BBV Series

<table>
<thead>
<tr>
<th>Size (In.)</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated to 600 psi WOG and 150 psi steam</td>
<td></td>
</tr>
<tr>
<td>¾</td>
<td>4BBV</td>
</tr>
<tr>
<td>1¼</td>
<td>6BBV</td>
</tr>
<tr>
<td>1½</td>
<td>8BBV</td>
</tr>
<tr>
<td>1¾</td>
<td>12BBV</td>
</tr>
<tr>
<td>1</td>
<td>16BBV</td>
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</table>

<table>
<thead>
<tr>
<th>Size (In.)</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated to 400 psi WOG and 125 psi steam</td>
<td></td>
</tr>
<tr>
<td>1½</td>
<td>20BBV</td>
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<tr>
<td>1½</td>
<td>24BBV</td>
</tr>
<tr>
<td>2</td>
<td>32BBV</td>
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</tbody>
</table>

Stainless Steel Low Pressure Ball Valves — Reduced Bore
Female

<table>
<thead>
<tr>
<th>Size (In.)</th>
<th>Description</th>
<th>Part No.</th>
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</thead>
<tbody>
<tr>
<td>1½</td>
<td>Small SS 4-bolt</td>
<td>PV100</td>
</tr>
<tr>
<td>1½</td>
<td>Standard SS 4-bolt</td>
<td>PV200</td>
</tr>
</tbody>
</table>

Maximum working pressure: 125 psi at 70°F.

<table>
<thead>
<tr>
<th>Size (In.)</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½</td>
<td>Small SS 4-bolt</td>
<td>PVFP50</td>
</tr>
<tr>
<td>1½</td>
<td>Small SS 4-bolt</td>
<td>PVFP75</td>
</tr>
<tr>
<td>1</td>
<td>SS 4-bolt</td>
<td>PVFP100</td>
</tr>
<tr>
<td>1½</td>
<td>SS 4-bolt</td>
<td>PVFP150</td>
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<tr>
<td>2</td>
<td>SS 6-bolt</td>
<td>PVFP200</td>
</tr>
<tr>
<td>3</td>
<td>SS 6-bolt</td>
<td>PVFP300</td>
</tr>
</tbody>
</table>

Maximum working pressure: 125 psi at 70°F.