A rotary union provides a seal for media transfer between a stationary supply pipe or tube and rotating equipment. Custom rotary unions are used when applications demand a specialized solution.

Kadant Johnson’s rapid response product innovation team works with customers to develop reliable, efficient, and technologically advanced solutions for their unique application. We specialize in “impossible deadlines” and provide rapid design and manufacturing services required to meet the fit, form, and function criteria of our customers.

### Features
- Mechanical or DuraSeal™ sealing technology
- Simple construction
- 2 to 12 flow passages
- Air, coolant, oil, steam, and water capable
- Steel, stainless steel, aluminum, or brass construction
- Port for electrical slip ring

### Benefits
- Robust sealing technology for every application
- Reliable, leak free performance
- Accommodates multiple media flows in any direction
- Flexibility in type of media or mixed media
- Electrical and fluid media are transferred simultaneously

### Industries Served
- Aerospace
- Alternative energy
- Chemical
- Converting
- Corrugating
- Food and beverage
- Life sciences
- Machine tool
- Medical
- Metals
- Mining
- Oil and gas
- Packaging
- Paper
- Plastics
- Rubber
- Semiconductor
- Textile/nonwovens
### Sample Custom Rotary Unions

<table>
<thead>
<tr>
<th>Max PSI</th>
<th>Max Temp</th>
<th>Max RPM</th>
<th>Media</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000 psi (207 bar)</td>
<td>150°F (66°C)</td>
<td>25 RPM</td>
<td>Air</td>
<td>Rotary index machine – two-passage, low torque, center port for wires</td>
</tr>
<tr>
<td>145 psi (10 bar)</td>
<td>195°F (90°C)</td>
<td>10 RPM</td>
<td>Water</td>
<td>Water service – two-passage, hardened ground shaft, special bronze bearing</td>
</tr>
<tr>
<td>145 psi (10 bar)</td>
<td>195°F (90°C)</td>
<td>4 RPM</td>
<td>Water</td>
<td>Metal industry – Over-the-shaft, hardened ground shaft, special bronze bearing</td>
</tr>
<tr>
<td>60 psi (4 bar)</td>
<td>150°F (66°C)</td>
<td>200 RPM</td>
<td>Water</td>
<td>Induction roll cleaning – over-the-shaft, light-weight construction</td>
</tr>
<tr>
<td>145 psi (10 bar)</td>
<td>195°F (90°C)</td>
<td>12 RPM</td>
<td>Water</td>
<td>Mixing glass in liquid fusion – two-passage, hardened ground shaft, deep groove radial contact bearings</td>
</tr>
<tr>
<td>90 psi (6 bar)</td>
<td>86°F (30°C)</td>
<td>Swivel</td>
<td>Deionized Water</td>
<td>Semiconductor – two-passage, stainless steel, special key-way drive, 0.3 seconds swivel, 7 to 30 seconds cycle</td>
</tr>
<tr>
<td>2,200 psi (152 bar)</td>
<td>225°F (107°C)</td>
<td>500 RPM</td>
<td>Hydraulic Oil</td>
<td>Expanding mandrel – two-passage, ceramic coated nipple, drain ports</td>
</tr>
<tr>
<td>218 psi (15 bar)</td>
<td>195°F (90°C)</td>
<td>2,000 RPM</td>
<td>Oil/Coolant/Air</td>
<td>CNC turning center – three passage, hardened ground shaft, deep groove radial bearings, drain ports</td>
</tr>
<tr>
<td>1,495 psi (103 bar)</td>
<td>225°F (107°C)</td>
<td>350 RPM</td>
<td>Water</td>
<td>Rotary capping machine – four-passage, ceramic coated rotor</td>
</tr>
<tr>
<td>160 psi (11 bar)</td>
<td>195°F (90°C)</td>
<td>12 RPM</td>
<td>Air</td>
<td>Tire manufacturing – seven-passage, hardened ground shaft, deep groove radial contact bearings</td>
</tr>
<tr>
<td>160 psi (11 bar)</td>
<td>195°F (90°C)</td>
<td>12 RPM</td>
<td>Air</td>
<td>Tire manufacturing – ten-passage, hardened ground shaft</td>
</tr>
<tr>
<td>145 psi (10 bar)</td>
<td>365°F (185°C)</td>
<td>5 RPM</td>
<td>Steam</td>
<td>Door hinge in municipal waste – swivel, hardened ground shaft, bronze bearing</td>
</tr>
</tbody>
</table>

*Max PSI, temperature, and RPM may not be run simultaneously.*

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*Specifications are for reference only and subject to change.*

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