SURE SEAL O-RING UNIONS

HART INDUSTRIAL UNIONS, LLC
PO BOX 310429
NEWINGTON, CT 06131
USA

PHONE: 1-800-769-0503
FAX: 1-800-769-0504
www.HartIndustries.com
info@HartIndustries.com

MAD IN USA
O-RING UNIONS
Hart O-ring Unions are used when piping requirements dictate the necessity of having a flat face seat to make and break the pipe line. Hart Unions meet requirements where a O-ring, zero leakage, seal is needed.

FEATURES
• Turbulence-free fit across seats. Full bore I.D.
• O-ring located in the threadpiece face, well out of the waterway bore providing added protection against abrasives and erosion.
• Combination End Connections. Threaded, socketweld and butt weld ends are all interchangeable, as well as one-step line size changes.
• 3,000 psi W.O.G. Cold Non-Shock Pressure rating is standard. 6,000 and 10,000 psi are also available.
• Precision Machined Parts. Ends taper reamed before threading.
• Resistant to Vibration. Seals will not loosen, even under extreme vibration or pressure surges.
• No maintenance needed because once the seal is made it never requires retightening.
• Saves money and weight by eliminating unnecessary nipples, bushings, couplings and inserts when initially designed into the system.

DESIGN STANDARDS
Unions are designed to comply with current industry standards for pressure piping. These standards include ANSI B 31.1.0 "Power Piping", ANSI B16.11 "Forged Steel Fittings Socket Welded and Threaded", and ASME "Boiler and Pressure Vessel Code".

For a More Perfect Union Get Together with HART

For a More Perfect Union Get Together with HART

Female Threaded O-ring Union (Figure 3131)

Socketweld O-ring Union (Figure 3333)

*Nominal Pipe Size
**ORIFICE UNION**

For precise regulation of flow and predetermined pressure drop.
- Double O-Ring design for zero leakage.
- If specific bore size is needed, specify orifice hole diameter desired.
- Minimum hole size is 1/32 (0.03125”). Also can be furnished with blank orifice plate.
- Orifice plate thickness is .0830” (+/- .005”).
- Standard O-Rings include: Viton, Teflon, Buna, Nitrile and EPDM.
- Specify prefix letter “O” to designate Orifice Union.

**HAMMER BLOW-LUG NUT**

For fast make and break applications.
- Ideal for applications in rough environments.
- No special tools required to assemble pipe union.
- Union Lug Nut and Threadpiece contain “ACME PipeThreads” for rapid assembly and disassembly.
- Specify prefix letter “H” to designate Hammer Style Union.

**DIELECTRIC-INSULATING UNIONS**

(approved for gases and liquids)

*The most effective method of preventing electrolytic deterioration*
- Engineered to insulate against galvanic corrosion.
- Breaks the flow of current-preventing stray current corrosion (RF Shielding).
- Union tailpiece is uniformly coated with a tough polymer composite coating.
- Coating Thickness: 3-6 mils.
- Dielectric Strength: >600 volts/mil (ASTM D149-97)
- Breakdown Voltage: >20000 volts at 650μm (ASTM D149)
- Volume Resistivity: 1.26 x 1016 ohm-cm (ASTM D257)
- Pencil Hardness: H (ASTM B3363)
- Salt Spray Resistance: 500 hours-No Blistering (ASTM B117)
- Specify prefix letter “D” to designate Dielectric Union.

**HIGH TEMPERATURE / HIGH PRESSURE UNION**

Flat-face design allows easy removal without having to spring piping. Union contains a spiral-wound 304 stainless steel gasket with graphite filler.

Suitable for hot oil, saturated steam, cryogenic fluids, and other process fluids; in high-pressure/high-temp. steam trap, valve, pump, and compressor manifold applications.

**Buttweld O-ring Union (Figure 3535)**

<table>
<thead>
<tr>
<th>FIGURE NO.</th>
<th>**</th>
<th>A</th>
<th>B</th>
<th>C HEX</th>
<th>D</th>
<th>E TAIL PIECE</th>
<th>F THREAD PIECE</th>
<th>WGT. (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3535-0</td>
<td>⅛”</td>
<td>*</td>
<td>1¼</td>
<td>1½</td>
<td>.405</td>
<td>¾</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>3535-1</td>
<td>⅜”</td>
<td>*</td>
<td>1¼</td>
<td>1½</td>
<td>.540</td>
<td>¾</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>3535-2</td>
<td>½”</td>
<td>*</td>
<td>1¼</td>
<td>1½</td>
<td>.675</td>
<td>¾</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>3535-3</td>
<td>3/8”</td>
<td>*</td>
<td>1⅛</td>
<td>1⅛</td>
<td>.840</td>
<td>⅝</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>3535-4</td>
<td>⅝”</td>
<td>*</td>
<td>2⅛</td>
<td>2⅛</td>
<td>1.050</td>
<td>1</td>
<td>1⅛</td>
<td>⅝</td>
</tr>
<tr>
<td>3535-5</td>
<td>1”</td>
<td>*</td>
<td>2⅝</td>
<td>2⅝</td>
<td>1.315</td>
<td>1⅛</td>
<td>1⅛</td>
<td>1</td>
</tr>
<tr>
<td>3535-6</td>
<td>1¼”</td>
<td>*</td>
<td>2⅝</td>
<td>3</td>
<td>1.660</td>
<td>1⅛</td>
<td>1⅛</td>
<td>1⅛</td>
</tr>
<tr>
<td>3535-7</td>
<td>1½”</td>
<td>*</td>
<td>3⅛</td>
<td>3⅛</td>
<td>1.900</td>
<td>1⅛</td>
<td>1⅛</td>
<td>1⅛</td>
</tr>
<tr>
<td>3535-8</td>
<td>2”</td>
<td>*</td>
<td>3⅜</td>
<td>3⅜</td>
<td>2.375</td>
<td>1⅛</td>
<td>1⅛</td>
<td>1⅛</td>
</tr>
<tr>
<td>3535-9</td>
<td>2½”</td>
<td>*</td>
<td>4⅝</td>
<td>4⅝</td>
<td>2.875</td>
<td>1⅝</td>
<td>1⅛</td>
<td>1⅛</td>
</tr>
<tr>
<td>3535-10</td>
<td>3”</td>
<td>*</td>
<td>5⅞</td>
<td>5⅞</td>
<td>3.500</td>
<td>1⅜</td>
<td>1⅛</td>
<td>4</td>
</tr>
<tr>
<td>3535-12</td>
<td>4”</td>
<td>*</td>
<td>7⅞</td>
<td>7⅞</td>
<td>4.500</td>
<td>1⅝</td>
<td>1⅛</td>
<td>4½</td>
</tr>
</tbody>
</table>

*Corresponds to Pipe Schedule (Specify with Suffix)
**Nominal Pipe Size
# How to Order

The above chart contains all the information necessary to place an order. Use the appropriate codes in the manner shown below.

A 3,000 lb. Female Threaded 1" Union with Viton O-ring and 316 Stainless Steel Ends is coded as follows:

**Option Tailpiece/Threadpiece Size O-ring Material**

<table>
<thead>
<tr>
<th>Tailpiece</th>
<th>Threadpiece</th>
<th>Size</th>
<th>O-ring</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>3131</td>
<td>5</td>
<td>V</td>
<td>316</td>
<td>Teflon, Viton® Kalrez® are Registered Trademarks from DuPont</td>
</tr>
</tbody>
</table>

When a size reduction or change in material is needed, simply enter the Tailpiece code and then the Threadpiece code separated by a slash as shown below.

A dielectric 3,000 lb. FNPT Female x MNPT Male Pipe Thread Union, ¾" FNPT Tailpiece, ½" MNPT Threadpiece, Teflon O-Ring, A105 Carbon Steel Tailpiece with Dielectric Coating, A182F304 Stainless Steel Threadpiece is coded as follows:

**Option Tailpiece/Threadpiece Size O-ring Material**

<table>
<thead>
<tr>
<th>Option</th>
<th>Tailpiece</th>
<th>Threadpiece</th>
<th>Size</th>
<th>O-ring</th>
<th>Material</th>
</tr>
</thead>
</table>