QUIK-JOINT

Steel Compression Pipe Fittings
For 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" Nominal Steel Pipe
Now Available in All Stainless Design

STEEL/STAINLESS STEEL NUT

ELASTOMER GASKET

STEEL/STAINLESS RETAINER RING

BODY OF SCHEDULE 40 STEEL PIPE OR STAINLESS STEEL

USER'S PIPE

GUARDIAN

300 Hwy 212 • PO Box 478 • Michigan City, IN 46360
(219) 874-5248 • Fax (219) 879-6643 • www.guardiancouplings.com

MADE IN U.S.A.
FEATURES AND ADVANTAGES

• Join misaligned pipe. Quik-Joint allows 5° – 7° angular misalignment on each end nut for faster, lower cost installation of piping systems.
• Absorbs vibration. Elastomer gaskets reduce pipe vibration, noise and shock.
• Shortens installation time and lost parts. Replaces threaded unions requiring close tolerance and bolted style compression joints. Install and adjust Quik-Joint by hand, tighten with a pipe wrench.
• Half-Couplings are available for weld joints.
• Compression nuts available in plain steel, stainless steel, bright zinc or nickel-chrome finish. Body available in plain steel pipe, bright zinc finish or stainless steel.

BODY FEATURES

• Body is machined to customer length requirement providing a wider design tolerance for assembly.
• Standard body is schedule 40 carbon or stainless steel pipe, two sizes larger than customer's pipe, providing 10° – 14° of total angular misalignment. When ordering, simply specify your pipe size.
• Body section of steel pipe is ideal for welding to tanks, reservoirs, headers as a half coupling, or for through-the-wall construction with one nut on the inside and one on the outside.
• Custom bodies can be furnished in 304, 316 stainless steel, or schedule 40 aluminum.

SAFE-T NUT OR RING OPTION
Prevents Customer Pipe From Pulling Out

Assembly: Thread pipe ends (standard pipe thread).
Slide Quick-Joint nut, retainer and gasket onto pipe over threads.
Screw on Safe-T Nut or Ring—tighten to cover threads where they contact gasket.
Slide parts into body and tighten Quik-Joint compression nut.

Advantages: Pipe will not pull out under excess pressure, pulsating loads, or pipe deflection.
Pressure Rated to 300 PSI.
Quik-Joint nut, retainer and gasket will stay with pipe during disassembly, won't drop off in handling pipe section
Safety without sacrificing angular misalignment.
Low cost solution to a difficult safety problem. No straps or restraining brackets needed.
Elastomer gaskets absorb shock and vibration in the piping system.

(*) Note: Safety ring is zinc die cast, with (1) internal thread. Safety nut is steel/stainless steel with (4) internal threads.
QUIK-JOINT FULL COUPLING

When ordering specify: Quik-Joint size, assembled length, body length, body finish, gasket material, and end nut finish.

QUIK-JOINT HALF COUPLING (For Weld Joints)

(1) Body length must allow for 1/8” long thread, weld zone and space to tighten nut.
(2) Body is machined from schedule 40 pipe and can be cut to any length required over minimum.
(3) Body end opposite threads furnished square cut with chamfered O.D. for welding.
**BULKHEAD FEATURES**

- Eliminates welding cost and problems of heat distortion for a through-the-wall fitting.
- Compression nuts allow for 10° – 14° of angular misalignment between pipes to be connected.
- Complete fitting made from rugged steel with a plain or bright zinc finish.
- 304 or 316 stainless steel also available with chrome plated or stainless steel end nuts.
- Bulkhead nuts can be positioned anywhere along threaded body. Body can be any length required.
- Eliminates precision fit-up or pipe length when joining pipes or nipples. No threading required.
- Bulkhead hole can be close fit for effective sealing with gasket or liquid sealant.
- Bulkhead nuts can be tightened from either side.
- Bulkhead features can be added to the Quik-Joint Half-Couplings to provide a compression fitting on one side and any length of plain pipe on the other.

### BULKHEAD DESIGN

A table showing various sizes and dimensions for bulkhead design, including assembled length, compressed nut diameter, body diameter, bulkhead nut dimensions, and gasket sizes.

**BULKHEAD nuts can be positioned anywhere along threaded body**

**QUIK-JOINT Half-Coupling with BULKHEAD nuts can be furnished to any length required.**
### Properties of Rubber

<table>
<thead>
<tr>
<th></th>
<th>Nitrile BUNA-N</th>
<th>Silicone</th>
<th>Fluoro-Elastomer (Viton)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASTM/SAE Classification</strong></td>
<td>BF</td>
<td>GE</td>
<td>HK</td>
</tr>
<tr>
<td><strong>Tensile of Compounded Stocks</strong></td>
<td>2500psi</td>
<td>800psi</td>
<td>3500psi</td>
</tr>
<tr>
<td><strong>Durometer</strong></td>
<td>40-95</td>
<td>45-85</td>
<td>70-90</td>
</tr>
<tr>
<td><strong>Elongation</strong></td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Aging</strong></td>
<td>Excel</td>
<td>Excel</td>
<td>Excel</td>
</tr>
<tr>
<td><strong>Heat Aging</strong></td>
<td>Excel</td>
<td>Excel</td>
<td>Excel</td>
</tr>
<tr>
<td><strong>Sunlight Aging</strong></td>
<td>Good</td>
<td>Excel</td>
<td>Excel</td>
</tr>
<tr>
<td><strong>Lubricating Oil Resistance</strong></td>
<td>Excel</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Aromatic Oil Resistance</strong></td>
<td>Good</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Animal-Vegetable Oils Resistance</strong></td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Flame Resistance</strong></td>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Tear Resistance</strong></td>
<td>Fair</td>
<td>Poor</td>
<td>Fair</td>
</tr>
<tr>
<td><strong>Abrasion Resistance</strong></td>
<td>Good</td>
<td>Poor</td>
<td>Fair</td>
</tr>
<tr>
<td><strong>Compression Set Resistance</strong></td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Permeability to Gasses</strong></td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Dielectric Strength</strong></td>
<td>Poor</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Freedom from Odor</strong></td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td><strong>Maximum Temperature, °F</strong></td>
<td>260</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td><strong>Minimum Temperature, °F</strong></td>
<td>-60</td>
<td>-180</td>
<td>-40</td>
</tr>
</tbody>
</table>

**Nitrite (Buna-N):** Gaskets available in all Quik-Joint sizes. Especially resistant to aromatic hydrocarbons, gasoline, petroleum oils, mineral and vegetable oils.

**Silicone:** Gaskets available in all Quik-Joint sizes. Can withstand extreme heat or cold and retain flexibility—normal temperature range of -180°F to 400°F.

**Viton:** Gaskets available in ¾", 1", 1 ¼", 1 ½", 2" Quik-Joint sizes only. In addition to its ability to withstand extreme temperatures, it is also fuel and oil resistant.

### Pressure Tests

(Approved 1/1/06)

<table>
<thead>
<tr>
<th>Quik-Joint Size</th>
<th>Hydrostatic Leakage</th>
<th>Hydrostatic Leakage With Safety Nut or Ring Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>1&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>1¼&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>1½&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>2&quot;</td>
<td>200 psi</td>
<td>300 psi</td>
</tr>
</tbody>
</table>
MOUNTING ARRANGEMENTS

1. Half-Coupling

Connect to round tanks, manifolds, reservoirs, headers by boring a hole, inserting Quik-Joint half-body and welding in place.

2. Half-Coupling

Weld Quik-Joint body directly at flat surface. Body will be supplied with O.D. chamfer weld prep.

3. Full Coupling Standard

5° – 7° of misalignment, each side

Solid support for service pipe

Complete Quik-Joint on welded pipe nipple. For disassembly, allow Quik-Joint to slide toward wall enough to clear opposite service pipe. Provides maximum misalignment.

4. Half Coupling—Standard with Safety Nut or Ring Option

For vertical mount with weight suspended from Quik-Joint, use Safe-T Nut or Ring to prevent pipe from pulling out. See Page 2.

5. Full Coupling Extra Long

...