

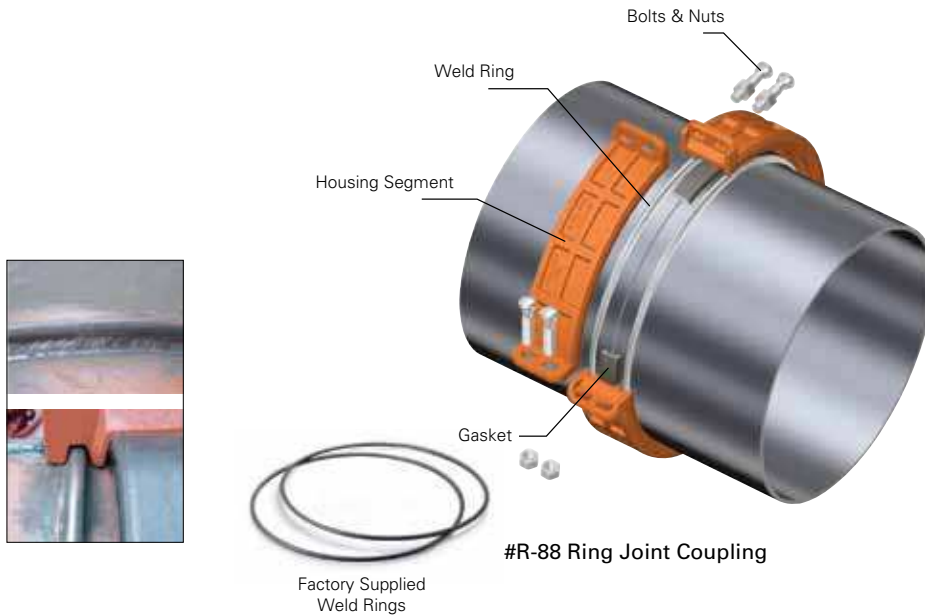


Ring Joint Piping System

**An excellent alternate
to grooving, flanges
and welding**

Shurjoint Ring Joint Piping System

The **Shurjoint** ring joint piping system is a non-grooved mechanical pipe joining method and an excellent alternative where pipe is difficult to groove or when grooving, flanges or welding is not the preferred method. The ring joint coupling can be installed 3 - 4 times faster than a comparable welded or flanged joint.



Hydrostatic testing - 72" R-88 coupling

The processing of a roll groove on pipe becomes more difficult as the pipe O.D. and wall thickness increases. Roll grooving pipe larger than 14" (350mm) requires proper tools and equipment. Pipe having a wall thickness greater than 0.375" (9.5mm) may not be practical to roll groove.

The **Shurjoint** ring joint coupling is supplied complete with a pair of factory supplied weld rings. For installation, weld a ring on each pipe end to be connected, next mount the rubber gasket over the pipe ends, place coupling segments over the gasket and fasten the bolts and nuts.

The **Shurjoint** ring joint coupling is considered a shouldered coupling, with the factory-supplied rings serving as the joint shoulders. The performance stan-

dards meet and or exceed the requirement of ASTM F1476 and AWWA C606. The factory supplied weld rings offer a much more economical and installation friendly alternative to that of traditional shoulder rings, including Type A, B, C, D, E and G rings.

The **Shurjoint** ring joint coupling provides a much more secure joint than that of a comparable standard roll or cut-grooved joint, while maintaining full bore flow and full pipe-wall thickness, which is often required in abrasive media applications. Each joint also serves as a union, making for easy, assembly, disassembly, service and system expansion. Custom high pressure couplings with working pressures to 3770 psi (260 bar) are also available.

Ring joint couplings can also be used on stainless steel pipe and are available with optional compatible grade stainless steel rings. Contact **Shurjoint** for details and availability.

Typical applications include:

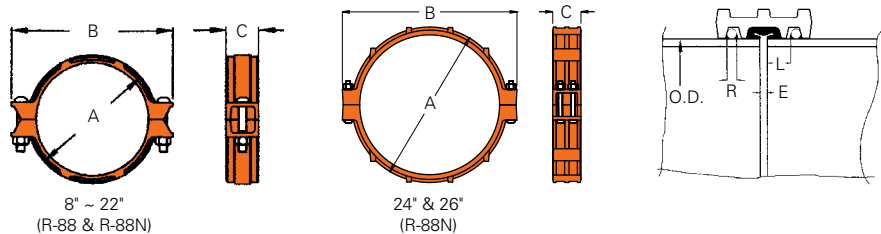
- Water & Waste Water Treatment Plants
- Mining & Tunnel Boring
- Pulp & Paper
- Hydroelectric Plants
- Co-Gen Electric Plants
- Food & Beverage
- Compressed Air
- HVAC

Model R-88 Ring Joint Coupling

The *Shurjoint* Model R-88 Ring Joint Coupling is available in sizes 8"/200mm and above. Sizes 14"/350mm to 26"/650mm are now available either in a two-segment style (R-88N) or multi-segment style (R-88). The two-segment style offers an easier and faster installation.



A 28" R-88 coupling installed in a chilled water system.



| Nominal Size in / mm | Pipe OD in / mm | Rings both sides fully welded** | | | Axial Displacement † E in / mm | Angular Movement / Deflection † | | Dimensions | | | Bolt No. & Size No. in / No. mm | Sealing Surface L in / mm | Ring Size R in / mm | N.W. Lbs / Kgs |
|-------------------------|--------------------|---|---|---------------------------------|--------------------------------------|---------------------------------|------------------------------|--------------|--------------|--------------|------------------------------------|------------------------------|------------------------|-------------------|
| | | Max. Working Pressure (CWP)* psi / Bar | ASME/ANSI Pressure Class Rating^ @ 100°F/ @ 38°C psi / Nom. Class | Max. End Load (CWP) Lbs / kN | | Per Cplg Deg. (°) | Per Pipe in / ft / mm / m | A in / mm | B in / mm | C in / mm | | | | |
| | | | | | | | | | | | | | | |
| 8 | 8.625 | 400 | 400 | 23350 | 0-0.190 | 2.14 | 0.45 | 10.08 | 13.00 | 3.11 | 2 - ¾ x 4¾ | 0.91 | ¼ | 16.8 |
| 200 | 219.1 | 28.0 | 250 | 105.51 | 0-4.8 | | | 37 | 256 | 330 | | | | |
| 10 | 10.750 | 400 | 400 | 36280 | 0-0.190 | 1.95 | 0.41 | 12.29 | 15.20 | 3.25 | 2 - ¾ x 4¾ | 0.91 | ¼ | 22.2 |
| 250 | 273.0 | 28.0 | 250 | 163.81 | 0-4.8 | | | 34 | 312 | 386 | | | | |
| 12 | 12.750 | 400 | 400 | 51040 | 0-0.190 | 0.82 | 0.17 | 14.72 | 17.90 | 3.39 | 2 - 7/8 x 6½ | 1.02 | 5/16 | 30.8 |
| 300 | 323.9 | 28.0 | 250 | 230.59 | 0-4.8 | | | 14 | 374 | 455 | | | | |
| 200 JIS | 8.516 | 400 | 400 | 22770 | 0-0.190 | 1.50 | 0.31 | 9.96 | 12.87 | 3.11 | — | 0.91 | ¼ | 17.6 |
| | 216.3 | 28.0 | 250 | 102.83 | 0-4.8 | | | 26 | 253 | 327 | | | | |
| 250 JIS | 10.528 | 400 | 400 | 34800 | 0-0.190 | 1.50 | 0.31 | 12.05 | 14.96 | 3.25 | — | 0.91 | ¼ | 22.0 |
| | 267.4 | 28.0 | 250 | 157.16 | 0-4.8 | | | 26 | 306 | 380 | | | | |
| 300 JIS | 12.539 | 400 | 400 | 49360 | 0-0.190 | 1.50 | 0.31 | 14.53 | 17.72 | 3.39 | — | 1.02 | 5/16 | 32.6 |
| | 318.5 | 28.0 | 250 | 222.97 | 0-4.8 | | | 26 | 369 | 450 | | | | |
| 14 | 14.000 | 400 | 400 | 61540 | 0-0.250 | 1.20 | 0.25 | 15.93 | 19.40 | 3.65 | 2 - 7/8 x 5½ | 1.02 | 5/16 | 38.3 |
| 350 (R-88N) | 355.6 | 28.0 | 250 | 277.94 | 0-6.4 | | | 21 | 405 | 493 | | | | |
| 16 | 16.000 | 400 | 400 | 80380 | 0-0.250 | 0.90 | 0.19 | 17.92 | 21.52 | 3.65 | 2 - 7/8 x 5½ | 1.02 | 5/16 | 35.0 |
| 400 (R-88N) | 406.4 | 28.0 | 250 | 363.02 | 0-6.4 | | | 16 | 455 | 547 | | | | |
| 18 | 18.000 | 400 | 400 | 101730 | 0-0.375 | 1.20 | 0.25 | 20.37 | 24.17 | 4.23 | 2 - 1 x 5½ | 1.18 | 5/16 | 50.6 |
| 450 (R-88N) | 457.2 | 28.0 | 250 | 459.45 | 0-9.5 | | | 21 | 517 | 614 | | | | |
| 20 | 20.000 | 400 | 400 | 125600 | 0-0.375 | 1.08 | 0.23 | 22.46 | 25.99 | 4.35 | 2 - 1 x 5½ | 1.18 | ¾ | 68.7 |
| 500 (R-88N) | 508.0 | 28.0 | 250 | 567.22 | 0-9.5 | | | 19 | 570 | 660 | | | | |
| 24 | 24.000 | 400 | 400 | 180860 | 0-0.375 | 0.80 | 0.17 | 27.17 | 30.00 | 4.84 | 4 - 7/8 x 6½ | 1.18 | ½ | 104.7 |
| 600 (R-88N) | 609.6 | 28.0 | 250 | 816.80 | 0-9.5 | | | 14 | 690 | 762 | | | | |
| 26 | 26.000 | 300 | 300 | 159190 | 0-0.500 | 1.06 | 0.22 | 29.58 | 32.78 | 6.69 | 4 - 1 x 8¾ | 1.97 | ½ | 173.5 |
| 650 (R-88N) | 660.4 | 20.0 | 150 | 684.72 | 0-12.7 | | | 18 | 751 | 832 | | | | |

R-88N is a two-segment type coupling.

Dimensions are subject to change without notice. Other sizes are available on request.

Working Pressure and End Load are the total from all internal and external loads based on the applicable pipe wall thickness.

** Working Pressure is based on rings both sides fully welded standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (Deflection) figures shown are the maximum nominal range of movement at each R-88 coupling joint when rings are welded in the standard position. For design and installation purposes these figures should be reduced by 25%.

^ The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

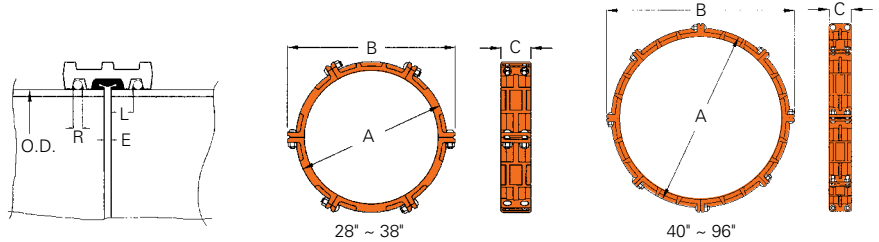
‡ Bolt & nuts are UNC threaded.

Model R-88 Ring Joint Coupling (Large diameter)



R-88
Size: 48"

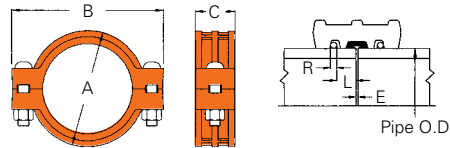
The *Shurjoint* Model R-88 Ring Joint Coupling is available in sizes 28"/700mm to 96"/2400mm. The larger diameter couplings are comprised of 4 to 8 housing segments depending on the size and feature two bolts at each joint segment to ensure a positive connection.



| Nominal Size in / mm | Pipe OD in / mm | Rings both sides fully welded** | | | Axial Displacement † E in / mm | Angular Movement / Deflection † | | Dimensions | | | Bolt No. & Size No. in | Sealing Surface L in / mm | Ring Size R in / mm | N.W. Lbs / Kgs |
|-------------------------|--------------------|---|--|---------------------------------|--------------------------------------|---------------------------------|------------------------------|--------------|--------------|--------------|---------------------------|------------------------------|------------------------|-------------------|
| | | Max. Working Pressure (CWP)* psi / Bar | ASME/ANSI Pressure Class Rating [^] @ 100°F / @ 38°C psi / Nom. Class | Max. End Load (CWP) Lbs / kN | | Per Cplg Deg. (°) | Per Pipe in / ft / mm / m | A in / mm | B in / mm | C in / mm | | | | |
| 28 | 28.0 | 300 | 300 | 184630 | 0-0.500 | 0.90 | 0.19 | 31.75 | 35.50 | 6.73 | 12 - 7/8 x 4 | 2.00 | 1/2 | 222.2 |
| 700 | 711.2 | 20.0 | 150 | 794.11 | 0-12.7 | | 16 | 806 | 902 | 171 | | 50 | 12.7 | 101.0 |
| 30 | 30.0 | 300 | 300 | 211950 | 0-0.500 | | 0.18 | 33.75 | 37.60 | 6.73 | 12 - 1 x 3 1/2 | 2.00 | 1/2 | 218.9 |
| 750 | 762.0 | 20.0 | 150 | 911.61 | 0-12.7 | 0.86 | 15 | 857 | 955 | 171 | | 50 | 12.7 | 99.5 |
| 32 | 32.0 | 300 | 300 | 241150 | 0-0.500 | | 0.18 | 35.75 | 39.50 | 6.73 | 12 - 1 x 3 1/2 | 2.00 | 1/2 | 225.4 |
| 800 | 812.8 | 20.0 | 150 | 1037.21 | 0-12.7 | 0.84 | 15 | 908 | 1003 | 171 | | 50 | 12.7 | 102.2 |
| 34 | 34.0 | 300 | 300 | 272230 | 0-0.500 | | 0.18 | 37.75 | 41.50 | 6.73 | 12 - 1 x 3 1/2 | 2.00 | 1/2 | 253.0 |
| 850 | 863.4 | 20.0 | 150 | 1170.37 | 0-12.7 | 0.84 | 15 | 959 | 1054 | 171 | | 50 | 12.7 | 115.0 |
| 36 | 36.0 | 300 | 300 | 305200 | 0-0.500 | | 0.16 | 39.75 | 43.50 | 6.73 | 12 - 1 x 3 1/2 | 2.00 | 1/2 | 246.0 |
| 900 | 914.4 | 20.0 | 150 | 1312.72 | 0-12.7 | 0.76 | 13 | 1010 | 1103 | 171 | | 50 | 12.7 | 111.6 |
| 38 | 38.0 | 232 | 175 | 262980 | 0-0.500 | | 0.16 | 41.75 | 45.50 | 6.73 | 12 - 1 x 3 1/2 | 2.00 | 1/2 | 275.0 |
| 950 | 965.2 | 16.0 | 125 | 1170.10 | 0-12.7 | 0.76 | 13 | 1060 | 1156 | 171 | | 50 | 12.7 | 125.0 |
| 40 | 40.0 | 232 | 175 | 291390 | 0-0.625 | | 0.17 | 44.69 | 48.39 | 7.80 | 16 - 1 x 3 1/2 | 2.37 | 5/8 | 310.2 |
| 1000 | 1016.0 | 16.0 | 125 | 1296.51 | 0-15.9 | 0.80 | 14 | 1135 | 1229 | 198 | | 60 | 15.9 | 141.0 |
| 42 | 42.0 | 232 | 175 | 321250 | 0-0.625 | | 0.18 | 46.70 | 50.39 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 326.9 |
| 1050 | 1066.8 | 16.0 | 125 | 1429.41 | 0-15.9 | 0.86 | 15 | 1186 | 1280 | 198 | | 60 | 15.9 | 148.6 |
| 44 | 44.0 | 232 | 175 | 352580 | 0-0.625 | | 0.17 | 48.66 | 51.89 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 343.2 |
| 1100 | 1117.6 | 16.0 | 125 | 1568.78 | 0-15.9 | 0.80 | 14 | 1236 | 1318 | 198 | | 60 | 15.9 | 156.0 |
| 48 | 48.0 | 232 | 175 | 419600 | 0-0.625 | | 0.15 | 52.68 | 55.91 | 7.80 | 16 - 1 x 3 1/2 | 2.37 | 5/8 | 466.7 |
| 1200 | 1219.2 | 16.0 | 125 | 1866.98 | 0-15.9 | 0.70 | 12 | 1338 | 1420 | 198 | | 60 | 15.9 | 211.8 |
| 52 | 52.0 | 175 | 175 | 371460 | 0-0.625 | | -- | 61.25 | 60.60 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 453.2 |
| 1300 | 1320.8 | 12.0 | 125 | 1643.33 | 0-15.9 | -- | -- | 63.25 | 62.60 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 472.1 |
| 54 | 54.0 | 175 | 175 | 400580 | 0-0.625 | -- | -- | 66.25 | 65.60 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 491.1 |
| 1350 | 1371.6 | 12.0 | 125 | 1772.17 | 0-15.9 | -- | -- | 1660 | 1590 | 198 | | 60 | 15.9 | 214.6 |
| 56 | 56.0 | 175 | 175 | 430800 | 0-0.625 | -- | -- | 65.38 | 64.60 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 488.2 |
| 1400 | 1422.4 | 12.0 | 125 | 1905.87 | 0-15.9 | -- | -- | 1660 | 1641 | 198 | | 60 | 15.9 | 222.0 |
| 60 | 60.0 | 175 | 175 | 494550 | 0-0.625 | -- | -- | 69.38 | 68.60 | 7.80 | 16 - 1 1/4 x 5 | 2.37 | 5/8 | 537.2 |
| 1500 | 1524.0 | 12.0 | 125 | 2187.87 | 0-15.9 | -- | -- | 1762 | 1742 | 198 | | 60 | 15.9 | 244.2 |
| 66 | 66.0 | 125 | 175 | 427430 | 0-0.750 | -- | -- | 76.00 | 75.79 | 8.00 | 16 - 1 1/2 x 5 | 2.37 | 3/4 | 612.5 |
| 1650 | 1676.4 | 8.6 | 125 | 1897.24 | 0-19.1 | -- | -- | 1932 | 1925 | 216 | | 60 | 19.1 | 278.4 |
| 68 | 68.0 | 125 | 175 | 453730 | 0-0.750 | -- | -- | 78.50 | 77.79 | 8.00 | 16 - 1 1/2 x 5 | 2.37 | 3/4 | 785.4 |
| 1700 | 1727.2 | 8.6 | 125 | 2013.97 | 0-19.1 | -- | -- | 1994 | 1976 | 216 | | 60 | 19.1 | 357.0 |
| 72 | 72.0 | 125 | 175 | 508680 | 0-0.750 | -- | -- | 82.50 | 81.81 | 8.00 | 16 - 1 1/2 x 5 | 2.37 | 3/4 | 737.7 |
| 1800 | 1828.8 | 8.6 | 125 | 2257.88 | 0-19.1 | -- | -- | 2095 | 2078 | 216 | | 60 | 19.1 | 335.3 |
| 84 | 84.0 | 100 | 175 | 553890 | 0-0.750 | -- | -- | 94.75 | 93.81 | 8.00 | 16 - 1 1/2 x 5 | 2.37 | 3/4 | 780.3 |
| 2100 | 2133.6 | 7.0 | 125 | 2501.46 | 0-19.1 | -- | -- | 2406 | 2383 | 216 | | 60 | 19.1 | 354.7 |
| 96 | 96.0 | 100 | 175 | 723450 | 0-0.750 | -- | -- | 106.75 | 105.79 | 8.00 | 16 - 1 1/2 x 5 | 2.37 | 3/4 | 823.2 |
| 2400 | 2438.4 | 7.0 | 125 | 3267.21 | 0-19.1 | -- | -- | 2711 | 2662 | 216 | | 60 | 19.1 | 374.2 |

Dimensions are subject to change without notice. Other sizes are available on request.
 Working Pressure and End Load are the total from all internal and external loads based on the applicable pipe wall thickness.
 **Working Pressure is based on rings both sides fully welded standard wall carbon steel pipe.
 † Allowable Axial Displacement and Angular Movement (Deflection) figures shown are the maximum nominal range of movement at each R-88 coupling joint when rings are welded in the standard position. For design and installation purposes these figures should be reduced by 25%.
[^] The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

Model RH-1000 1000 PSI Ring Joint Coupling



The *Shurjoint* Model RH-1000 coupling is a high pressure ring joint coupling for use with Sch. 40, Sch. 80 and heavier wall carbon steel pipes. The coupling is comprised of two ductile iron heavy-

wall housing segments, rubber gasket (EPDM or Nitrile) and two heat treated track bolts and nuts which provide a fully restrained joint and a maximum working pressure of 1,000 psi (70 Bar) depending

on the pipe used. Two steel weld rings are factory supplied with the coupling. Steel rings must always be fully welded on both sides.

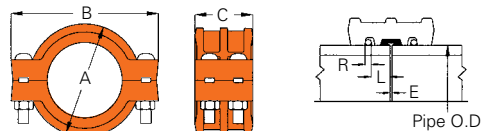


| Nominal Size in / mm | Pipe OD in / mm | Max. Working Pressure (CWP)* psi / Bar | ASME/ANSI Pressure Class Rating [^] @ 100°F / @ 38°C psi / Nom. Class | Max. End Load (CWP) Lbs / kN | Dimensions | | | Bolt / Nut † | | Deflection Deg. | Pipe-end Preparation | | | Weight Lbs / Kgs |
|-------------------------|--------------------|---|--|---------------------------------|--------------|--------------|--------------|--------------|------------|--------------------|----------------------|--------------|--------------------|---------------------|
| | | | | | A in / mm | B in / mm | C in / mm | No. | Size in | | R in / mm | L in / mm | E (max) in / mm | |
| 8 | 8.625 | 1000 | 1000 | 58390 | 11.10 | 14.65 | 3.86 | 2 | 1 x 5½ | 0° - 18' | 0.472 - 0.500 | 1 | 0.13 | 39.8 |
| 200 | 219.1 | 70 | 400 | 263.79 | 282 | 372 | 98 | | | | 12.0 - 12.7 | 25 | 3.2 | 18.1 |
| 10 | 10.750 | 1000 | 1000 | 90710 | 13.32 | 16.93 | 4.25 | 2 | 1 x 6½ | 0° - 38' | 0.472 - 0.500 | 1 | 0.13 | 57.2 |
| 250 | 273 | 70 | 400 | 409.54 | 340 | 430 | 108 | | | | 12.0 - 12.7 | 25 | 3.2 | 26.0 |
| 12 | 12.750 | 1000 | 1000 | 127610 | 16.33 | 20.07 | 4.17 | 2 | 1 x 6½ | 0° - 32' | 0.472 - 0.500 | 1 | 0.13 | 72.6 |
| 300 | 323.9 | 70 | 400 | 576.49 | 415 | 510 | 106 | | | | 12.0 - 12.7 | 25 | 3.2 | 33.0 |

* Working pressure is based on standard wall carbon steel pipe. † Bolt & nuts are UNC threaded.

[^] The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

Model RX-3000 3000 PSI Ring Joint Coupling



The *Shurjoint* RX-3000 coupling is a high pressure ring joint coupling for use with Sch. 80, 120 or heavier wall carbon steel pipelines.

The coupling is comprised of two ductile iron heavy-wall housings, rubber gasket

(EPDM or Nitrile) and two or four heat treated track bolts and nuts which provide a fully restrained joint with maximum working pressure up to 3,000 psi (210 Bar) depending on the pipe used. RX-3000 couplings should always be in-

stalled so that the coupling bolt pads make metal to metal contact.

Two steel weld rings will be factory supplied with the coupling. Steel rings shall always be always fully welded on both sides.

| Nominal Size in / mm | Pipe OD in / mm | Max. Working Pressure (CWP)* psi / Bar | ASME/ANSI Pressure Class Rating [^] @ 100°F / @ 38°C psi / Nom. Class | Max. End Load (CWP) Lbs / kN | Dimensions | | | Bolt / Nut † | | Pipe-end Preparation | | | Weight Lbs / Kgs |
|-------------------------|--------------------|---|--|---------------------------------|--------------|--------------|--------------|--------------|------------|----------------------|--------------|--------------------|---------------------|
| | | | | | A in / mm | B in / mm | C in / mm | No. | Size in | R in / mm | L in / mm | E (max) in / mm | |
| 8 | 8.625 | 3000 | 3000 | 175180 | 11.81 | 15.51 | 5.83 | 2 | 1½ x 5½ | 0.472 ~ 0.500 | 1.22 | ½ | 78.92 |
| 200 | 219.1 | 210 | 1500 | 791.36 | 300 | 394 | 148 | | | 12.0 ~ 12.7 | 31 | 3 | 35.87 |
| 10 | 10.748 | 3000 | 3000 | 272040 | 14.96 | 18.93 | 5.98 | 4 | 1¼ x 6½ | 0.625 ~ 0.629 | 1.22 | ½ | 116.36 |
| 250 | 273.0 | 210 | 1500 | 1228.61 | 380 | 481 | 152 | | | 15.9 ~ 16.0 | 31 | 3 | 52.78 |
| 12 | 12.752 | 3000 | 3000 | 382950 | 18.50 | 22.48 | 6.81 | 4 | 1½ x 6¼ | 0.625 ~ 0.629 | 1.22 | ½ | 212.27 |
| 300 | 323.9 | 210 | 1500 | 1729.46 | 470 | 572 | 173 | | | 15.9 ~ 16.0 | 31 | 3 | 96.24 |

* Working pressure is based on API 5L X65 line pipe.

[^] The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

† Bolt & nuts are UNC threaded.

Model RX-3770 3770 PSI Ring Joint Coupling



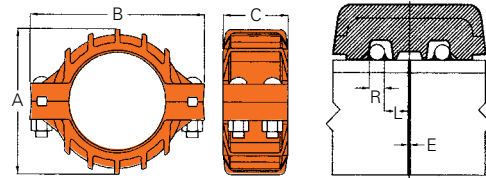
The *Shurjoint* Model RX-3770 Ring Joint Coupling is designed to provide a fully restrained joint for use with extra-strong carbon steel pipe including API 5L Grade X65 line pipe.

The coupling is comprised of two ductile iron heavy-wall housing segments, rubber gasket (EPDM) and four heat-treated track bolts and nuts. Two steel weld rings are

factory supplied with the coupling. Steel rings must always be fully welded on both sides.



Proof and burst pressure testing



| Nominal Size in / mm | Pipe OD in / mm | Max. Working Pressure (CWP)* psi / Bar | ASME/ANSI Pressure Class Rating^ @ 100°F/ @ 38°C psi / Nom. Class | Max. End Load (CWP) Lbs / kN | Dimensions | | | Bolt / Nut † | | Pipe-end Preparation | | | Weight Lbs / Kgs |
|-------------------------|--------------------|---|---|---------------------------------|--------------|--------------|--------------|--------------|------------|----------------------|--------------|--------------------|---------------------|
| | | | | | A in / mm | B in / mm | C in / mm | No. | Size in | R in / mm | L in / mm | E (max) in / mm | |
| 6 | 6.625 | 3770 | 3770 | 129890 | 10.24 | 12.64 | 5.87 | 4 | ¾ x 6½ | 0.472 | 1.22 | 0.20 | 61.2 |
| 150 | 168.3 | 260 | 2000 | 578.11 | 260 | 321 | 149 | | | 12 | 31 | 5 | 27.7 |
| 8 | 8.625 | 3770 | 3770 | 220150 | 12.95 | 16.30 | 6.89 | 4 | 1½ x 6½ | 0.625 | 1.50 | 0.20 | 110.0 |
| 200 | 219.1 | 260 | 2000 | 979.78 | 329 | 414 | 175 | | | 16 | 38 | 5 | 49.9 |
| 10 | 10.750 | 3770 | 3770 | 342000 | 15.90 | 19.88 | 7.40 | 4 | 1½ x 6⅞ | 0.750 | 1.50 | 0.20 | 174.5 |
| 250 | 273.0 | 260 | 2000 | 1521.14 | 404 | 505 | 188 | | | 19 | 38 | 5 | 79.2 |
| 12 | 12.750 | 3770 | 3770 | 481090 | 19.00 | 23.10 | 8.63 | 4 | 1½ x 6⅞ | 0.875 | 1.50 | 0.24 | 247.1 |
| 300 | 323.9 | 260 | 2000 | 2141.24 | 482 | 587 | 219 | | | 22 | 38 | 6 | 112.3 |

* Working pressure is based on API 5L X65 line pipe.

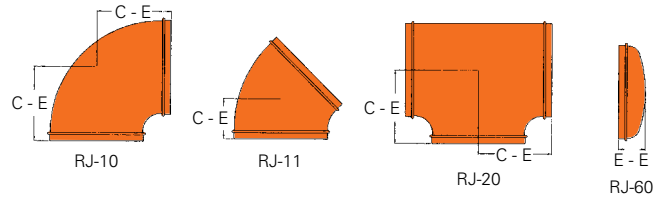
^ The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

† Bolt & nuts are UNC threaded.

Ring Joint Fittings Model

RJ-10 90° Elbow RJ-11 45° Elbow

RJ-20 Tee RJ-60 Cap



Shurjoint offers a full range of ring joint fittings for use with Model R-88 ring joint couplings.

- 8" - 16" (200mm – 400mm) Models RJ-10, RJ-11 & RJ-60 and Model RJ-20

are available in cast ductile iron to ASTM A536 Gr. 65-45-12.

- Larger sizes are made of carbon steel standard weight pipe, ASTM A53 Gr. B or equivalent, or fabricated from wrought

carbon steel of the equivalent properties.

- Other configurations are also available upon request. Contact *Shurjoint* for details.

| Nominal Size in / mm | Pipe OD in / mm | RJ-10 90° Elbow | | RJ-11 45° Elbow | | RJ-20 Tee | | RJ-60 Cap | |
|-------------------------|--------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|
| | | C - E in / mm | Weight Lbs / Kgs | C - E in / mm | Weight Lbs / Kgs | C - E in / mm | Weight Lbs / Kgs | E - E in / mm | Weight Lbs / Kgs |
| 8 | 8.625 | 7.75 | 28.6 | 4.25 | 20.9 | 7.75 | 46.2 | 3.00 | 12.1 |
| 200 | 219.1 | 197 | 13.0 | 108 | 9.5 | 197 | 21.0 | 76 | 5.5 |
| 10 | 10.750 | 9.00 | 55.0 | 4.75 | 39.6 | 9.00 | 72.6 | 3.00 | 13.2 |
| 250 | 273.0 | 229 | 25.0 | 121 | 18.0 | 229 | 33.0 | 76 | 6.0 |
| 12 | 12.750 | 10.00 | 77.0 | 5.25 | 50.6 | 10.00 | 103.4 | 3.00 | 17.6 |
| 300 | 323.9 | 254 | 35.0 | 133 | 23.0 | 254 | 47.0 | 76 | 8.0 |
| 200 JIS | 8.516 | 7.75 | 28.6 | 4.25 | 20.9 | 7.75 | 46.2 | 3.00 | 12.1 |
| | 216.3 | 197 | 13.0 | 108 | 9.5 | 197 | 21.0 | 76 | 5.5 |
| 250 JIS | 10.528 | 9.00 | 55.0 | 4.75 | 39.6 | 9.00 | 72.6 | 3.00 | 13.2 |
| | 267.4 | 229 | 25.0 | 121 | 18.0 | 229 | 33.0 | 76 | 6.0 |
| 300 JIS | 12.539 | 10.00 | 77.0 | 5.25 | 50.6 | 10.00 | 103.4 | 3.00 | 17.6 |
| | 318.5 | 254 | 35.0 | 133 | 23.0 | 254 | 47.0 | 76 | 8.0 |
| 14 | 14.000 | 11.00 | 81.4 | 6.00 | 52.8 | 11.00 | 118.8 | 4.00 | 26.4 |
| 350 | 355.6 | 280 | 37.0 | 152 | 24.0 | 280 | 54.0 | 102 | 12.0 |
| 16 | 16.000 | 12.00 | 99.0 | 7.25 | 101.2 | 12.00 | 154.0 | 4.00 | 33.0 |
| 400 | 406.4 | 305 | 45.0 | 184 | 46.0 | 305 | 70.0 | 102 | 15.0 |
| 18 | 18.000 | 27.00 | 209.0 | 11.25 | 105.6 | 15.50 | 268.0 | 5.00 | 46.2 |
| 450 | 457.2 | 686 | 95.0 | 286 | 48.0 | 394 | 122.0 | 127 | 21.0 |
| 20 | 20.000 | 30.00 | 203.6 | 12.50 | 110.0 | 17.25 | 337.0 | 6.00 | 57.2 |
| 500 | 508.0 | 762 | 138.0 | 318 | 50.0 | 438 | 153.0 | 152 | 26.0 |
| 24 | 24.000 | 36.00 | 485.0 | 15.00 | 176.0 | 20.00 | 466.0 | 6.00 | 77.0 |
| 600 | 609.6 | 914 | 220.0 | 381 | 80.0 | 508 | 212.0 | 152 | 35.0 |
| 26 | 26.000 | 39.00 | 521.0 | 16.00 | 262.0 | 22.50 | 766.0 | 10.50 | 110.0 |
| 650 | 660.4 | 991 | 237.0 | 406 | 119.0 | 572 | 348.0 | 267 | 50.0 |
| 28 | 28.000 | 42.00 | 605.0 | 17.25 | 304.0 | 23.50 | 862.0 | 10.50 | 123.0 |
| 700 | 711.2 | 1067 | 275.0 | 438 | 138.0 | 597 | 392.0 | 267 | 56.0 |
| 30 | 30.000 | 45.00 | 695.0 | 18.50 | 348.0 | 25.00 | 992.0 | 10.50 | 136.0 |
| 750 | 76.20 | 1143 | 316.0 | 480 | 158.0 | 635 | 451.0 | 267 | 62.0 |
| 32 | 32.000 | 48.00 | 792.0 | 19.75 | 396.0 | 26.50 | 1135.0 | 10.50 | 248.6 |
| 800 | 812.8 | 1219 | 360.0 | 502 | 180.0 | 673 | 516.0 | 267 | 113.0 |
| 34 | 34.000 | 51.00 | 895.0 | 21.00 | 449.0 | 28.00 | 1285.0 | 10.50 | 165.0 |
| 850 | 863.4 | 1295 | 407.0 | 533 | 204.0 | 711 | 584.0 | 267 | 75.0 |
| 36 | 36.000 | 54.00 | 1005.0 | 22.25 | 504.0 | 30.00 | 1445.0 | 10.50 | 334.4 |
| 900 | 914.4 | 1372 | 457.0 | 565 | 229.0 | 762 | 657.0 | 267 | 152.0 |
| 40 | 40.000 | 60.00 | 1241.0 | 24.88 | 620.0 | 33.00 | 1790.0 | 12.00 | 224.0 |
| 1000 | 1016.0 | 1524 | 564.0 | 632 | 282.0 | 838 | 814.0 | 305 | 102.0 |
| 42 | 42.000 | 63.00 | 1368.0 | 26.00 | 684.0 | 35.00 | 1841.0 | 12.00 | 242.0 |
| 1050 | 1066.8 | 1600 | 622.0 | 660 | 311.0 | 889 | 837.0 | 305 | 110.0 |
| 44 | 44.000 | 66.00 | 1503.0 | 27.39 | 752.0 | 36.00 | 2075.0 | 13.50 | 277.0 |
| 1100 | 1117.6 | 1676 | 683.0 | 696 | 342.0 | 914 | 943.0 | 343 | 126.0 |
| 48 | 48.000 | 72.00 | 1790.0 | 29.88 | 895.0 | 40.00 | 2488.0 | 13.50 | 315.0 |
| 1200 | 1219.2 | 1829 | 814.0 | 759 | 407.0 | 1016 | 1131.0 | 343 | 143.0 |

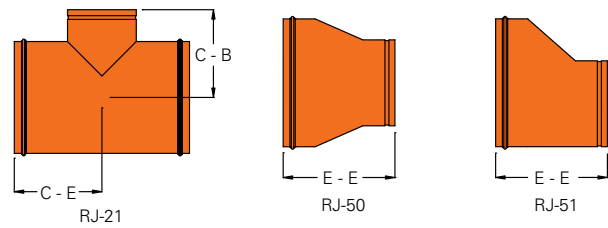
• C-E of RJ-10 and RJ-11 18" and larger sizes and E-E of RJ-60 26" and larger sizes conform to ANSI B16.9. All other sizes are to manufacturer's standard.

Ring Joint Fittings Model

RJ-21 Reducing Tee

RJ-50 Concentric Reducer

RJ-51 Eccentric Reducer



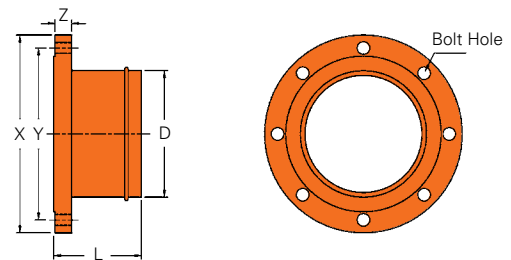
| Nominal Size in / mm | Pipe OD in / mm | RJ-21 Reducing Tee | | | RJ-50 Conc. Reducer | | RJ-51 Ecc. Reducer | |
|-------------------------|--------------------|--------------------|------------------|---------------------|---------------------|---------------------|--------------------|---------------------|
| | | C - E in / mm | C - B in / mm | Weight Lbs / Kgs | E - E in / mm | Weight Lbs / Kgs | E - E in / mm | Weight Lbs / Kgs |
| 14 x 12 | 14.000 x 12.750 | 11.00 | 10.62 | 145.0 | 8.00 | 51.0 | 13.00 | 51.0 |
| 350 x 300 | 355.6 x 323.9 | 279 | 270 | 66.0 | 203* | 23.0 | 330 | 23.0 |
| 16 x 12 | 16.000 x 12.750 | 12.00 | 11.62 | 172.0 | 9.00* | 64.0 | 9.00* | 64.0 |
| 400 x 300 | 406.4 x 323.9 | 305 | 295 | 78.0 | 229 | 29.0 | 229 | 29.0 |
| 16 x 14 | 16.000 x 14.000 | 12.00 | 12.00 | 176.0 | 9.00* | 64.0 | 9.00* | 64.0 |
| 400 x 350 | 406.4 x 355.6 | 305 | 305 | 80.0 | 229 | 29.0 | 229 | 29.0 |
| 18 x 12 | 18.000 x 12.750 | 13.50 | 12.62 | 246.0 | 9.50* | 72.6 | 15.00 | 78.0 |
| 450 x 300 | 457.2 x 323.9 | 343 | 321 | 112.0 | 241 | 33.0 | 381 | 35.0 |
| 18 x 14 | 18.000 x 14.000 | 13.50 | 13.00 | 253.0 | 15.00 | 79.0 | 15.00 | 79.0 |
| 450 x 350 | 457.2 x 355.6 | 343 | 330 | 115.0 | 381 | 36.0 | 381 | 36.0 |
| 18 x 16 | 18.000 x 16.000 | 13.50 | 13.00 | 264.0 | 15.00 | 79.0 | 15.00 | 79.0 |
| 450 x 400 | 457.2 x 406.4 | 343 | 330 | 120.0 | 381 | 36.0 | 381 | 36.0 |
| 20 x 12 | 20.000 x 12.750 | 15.00 | 13.62 | 297.0 | 10.00* | 95.0 | 20.00 | 95.0 |
| 500 x 300 | 508.0 x 323.9 | 381 | 346 | 135.0 | 254 | 43.0 | 508 | 43.0 |
| 20 x 14 | 20.000 x 14.000 | 15.00 | 14.00 | 304.0 | 20.00 | 99.0 | 20.00 | 99.0 |
| 500 x 350 | 508.0 x 355.6 | 381 | 356 | 138.0 | 508 | 45.0 | 508 | 45.0 |
| 20 x 16 | 20.000 x 16.000 | 15.00 | 14.00 | 317.0 | 20.00 | 101.0 | 20.00 | 101.0 |
| 500 x 400 | 508.0 x 406.4 | 381 | 356 | 144.0 | 508 | 46.0 | 508 | 46.0 |
| 20 x 18 | 20.000 x 18.000 | 15.00 | 14.50 | 328.0 | 20.00 | 128.0 | 20.00 | 128.0 |
| 500 x 450 | 508.0 x 457.2 | 381 | 368 | 149.0 | 508 | 58.0 | 508 | 58.0 |
| 24 x 12 | 24.000 x 12.750 | 17.00 | 15.62 | 396.0 | 12.00* | 154.0 | 20.00 | 154.0 |
| 600 x 300 | 609.6 x 323.9 | 432 | 397 | 180.0 | 305 | 70.0 | 508 | 70.0 |
| 24 x 14 | 24.000 x 14.000 | 17.00 | 16.00 | 407.0 | 20.00 | 154.0 | 20.00 | 154.0 |
| 600 x 350 | 609.6 x 355.6 | 432 | 406 | 185.0 | 508 | 70.0 | 508 | 70.0 |
| 24 x 16 | 24.000 x 16.000 | 17.00 | 16.00 | 418.0 | 12.00* | 154.0 | 20.00 | 154.0 |
| 600 x 400 | 609.6 x 406.4 | 432 | 406 | 190.0 | 305 | 70.0 | 508 | 70.0 |
| 24 x 18 | 24.000 x 18.000 | 17.00 | 16.50 | 433.0 | 20.00 | 154.0 | 20.00 | 154.0 |
| 600 x 450 | 609.6 x 457.2 | 432 | 419 | 197.0 | 508 | 70.0 | 508 | 70.0 |
| 24 x 20 | 24.000 x 20.000 | 17.00 | 17.00 | 444.0 | 12.00* | 156.0 | 20.00 | 156.0 |
| 600 x 500 | 609.6 x 508.0 | 432 | 432 | 202.0 | 305 | 71.0 | 508 | 71.0 |

C-E: Mfr's standard. E-E marked (*): Mfr's standard (made of ductile iron). All other E-E: ANSI B16.9.

Model

RJ-70 Flange Adapter

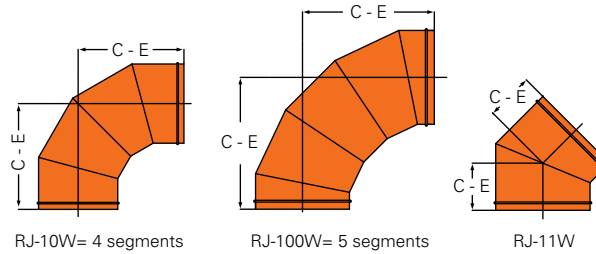
ANSI Class 125/150



| Nominal Size in / mm | Pipe O.D. D in / mm | RJ-70 Flange Adapter | | | | | | | |
|-------------------------|---------------------------|----------------------|--------------|--------------|-----------------|------------|-----|--------------|---------------------|
| | | X in / mm | Y in / mm | Z in / mm | Bolt Size in | Bolt Hole | | L in / mm | Weight Lbs / Kgs |
| | | | | | | Dia. in | No. | | |
| 8 | 8.625 | 13.500 | 11.750 | 1.125 | 3/4 | 7/8 | 8 | 6 | 44.9 |
| 200 | 219.1 | 343.0 | 298.0 | 29.0 | | | | 152 | 20.4 |
| 10 | 10.750 | 16.000 | 14.250 | 1.180 | 7/8 | 1 | 12 | 8 | 67.1 |
| 250 | 273.0 | 406.4 | 362.0 | 30.0 | | | | 203 | 30.5 |
| 12 | 12.750 | 19.000 | 17.000 | 1.250 | 7/8 | 1 | 12 | 8 | 98.1 |
| 300 | 323.9 | 483.0 | 432.0 | 32.0 | | | | 203 | 44.6 |
| 14 | 14.000 | 21.000 | 18.750 | 1.377 | 1 | 1 1/8 | 12 | 8 | 118.8 |
| 350 | 355.6 | 533.0 | 476.25 | 35.0 | | | | 203 | 54.0 |
| 16 | 16.000 | 23.500 | 21.250 | 1.456 | 1 | 1 1/8 | 16 | 8 | 147.0 |
| 400 | 406.4 | 597.0 | 539.75 | 37.0 | | | | 203 | 66.8 |
| 18 | 18.000 | 25.000 | 22.751 | 1.059 | 1 1/8 | 1 1/4 | 16 | 8 | 143.0 |
| 450 | 457.2 | 635.0 | 577.9 | 26.9 | | | | 203 | 65.0 |
| 20 | 20.000 | 27.519 | 25.000 | 1.692 | 1 1/8 | 1 1/4 | 20 | 8 | 169.4 |
| 500 | 508.0 | 699.0 | 635.0 | 43.0 | | | | 203 | 77.0 |
| 24 | 24.000 | 32.031 | 29.500 | 1.889 | 1 1/4 | 1 3/8 | 20 | 8 | 286.9 |
| 600 | 609.6 | 813.6 | 749.3 | 48.0 | | | | 203 | 130.4 |

L: Mfr's standard.

Large Diameter Ring Joint Fittings



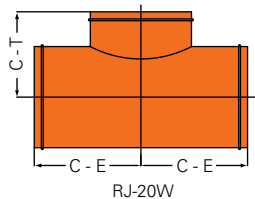
Shurjoint fabricated ring joint fittings are made of carbon steel, 0.375" (9.5mm) and 0.5" (12.7mm) wall, conforming to ASTM A53, Grade B, or equivalent. Additional ring joint fitting configurations

are available to accommodate almost any connection; ring to groove, ring to flange or ring to weld. Contact *Shurjoint* for further details.

Coatings:
 Standard: Rust inhibiting paint, orange color.
 Optional: Other color paint or hot-dip galvanized conforming to ASTM A153.

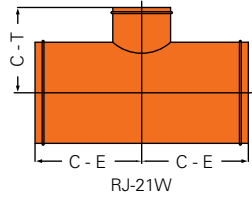
| Nominal Size | Pipe OD | RJ-10W 90° Elbow, Standard Radius | | | RJ-100W 90° Elbow, Long Radius | | | RJ-11W 45° Elbow | | |
|--------------|---------|-----------------------------------|------------------------------|-----------------------------|--------------------------------|------------------------------|-----------------------------|------------------|------------------------------|-----------------------------|
| | | C - E | Weight (t = 0.375" / 9.5 mm) | Weight (t = 0.5" / 12.7 mm) | C - E | Weight (t = 0.375" / 9.5 mm) | Weight (t = 0.5" / 12.7 mm) | C - E | Weight (t = 0.375" / 9.5 mm) | Weight (t = 0.5" / 12.7 mm) |
| in / mm | in / mm | in / mm | Lbs / Kgs | Lbs / Kgs | in / mm | Lbs / Kgs | Lbs / Kgs | in / mm | Lbs / Kgs | Lbs / Kgs |
| 26 | 26.000 | 33.5 | 494 | 653 | 36.5 | 537 | 709 | 13 | 222 | 292 |
| 650 | 660.4 | 851 | 225 | 297 | 927 | 244 | 322 | 330 | 101 | 133 |
| 28 | 28.000 | 37.5 | 589 | 778 | 39.0 | 609 | 805 | 14 | 257 | 338 |
| 700 | 711.2 | 953 | 268 | 354 | 991 | 277 | 366 | 356 | 117 | 154 |
| 30 | 30.000 | 37.5 | 632 | 835 | 41.5 | 699 | 924 | 15 | 295 | 388 |
| 750 | 762.0 | 953 | 287 | 379 | 1054 | 318 | 420 | 381 | 134 | 176 |
| 32 | 32.000 | 37.5 | 674 | 891 | 44.0 | 791 | 1047 | 16 | 335 | 441 |
| 800 | 812.8 | 953 | 306 | 4055 | 1118 | 360 | 476 | 406 | 152 | 201 |
| 34 | 34.000 | 40.0 | 803 | 1064 | 46.5 | 886 | 1176 | 17 | 377 | 498 |
| 850 | 863.4 | 1016 | 365 | 484 | 1181 | 403 | 534 | 432 | 171 | 226 |
| 36 | 36.000 | 40.0 | 805 | 1065 | 49.0 | 990 | 1310 | 18 | 423 | 558 |
| 900 | 914.4 | 1016 | 366 | 484 | 1245 | 450 | 596 | 457 | 192 | 253 |
| 38 | 38.000 | 40.0 | 847 | 1047 | 51.5 | 1003 | 1331 | 19 | 480 | 636 |
| 950 | 965.2 | 1016 | 385 | 476 | 1308 | 456 | 605 | 483 | 218 | 289 |
| 40 | 40.000 | 43.5 | 937 | 1303 | 54.0 | 1160 | 1615 | 20 | 503 | 696 |
| 1000 | 1016.0 | 1105 | 426 | 592 | 1372 | 527 | 734 | 508 | 228 | 316 |
| 42 | 42.000 | 43.5 | 989 | 1369 | 56.5 | 1278 | 1774 | 21 | 555 | 767 |
| 1050 | 1066.8 | 1105 | 449 | 622 | 1435 | 581 | 807 | 533 | 252 | 349 |
| 44 | 44.000 | 43.5 | 1086 | 1435 | 59.5 | 1479 | 1958 | 22 | 638 | 841 |
| 1100 | 1117.6 | 1105 | 494 | 652 | 1511 | 672 | 890 | 559 | 290 | 382 |
| 46 | 46.000 | 45.0 | 1162 | 1577 | 51.5 | 1003 | 1331 | 23 | 790 | 904 |
| 1150 | 1168.4 | 1143 | 528 | 717 | 1308 | 456 | 605 | 584 | 319 | 411 |
| 48 | 48.000 | 45.0 | 1209 | 1610 | 64.0 | 1722 | 2296 | 24 | 752 | 999 |
| 1200 | 1219.2 | 1143 | 550 | 732 | 1626 | 783 | 1044 | 610 | 342 | 454 |

t: wall thickness



| Nominal Size | Pipe OD | RJ-20W Tee | | | |
|--------------|---------|------------|---------|------------------------------|-----------------------------|
| | | C - E | C - T | Weight (t = 0.375" / 9.5 mm) | Weight (t = 0.5" / 12.7 mm) |
| in / mm | in / mm | in / mm | in / mm | Lbs / Kgs | Lbs / Kgs |
| 26 | 26.000 | 19.5 | 19.5 | 779 | 1025 |
| 650 | 660.4 | 495 | 495 | 354 | 466 |
| 28 | 28.000 | 20.5 | 20.5 | 877 | 1154 |
| 700 | 711.2 | 521 | 521 | 398 | 525 |
| 30 | 30.000 | 22.0 | 22.0 | 1008 | 1329 |
| 750 | 762.0 | 559 | 559 | 458 | 604 |
| 32 | 32.000 | 23.5 | 23.5 | 1151 | 1517 |
| 800 | 812.8 | 597 | 597 | 524 | 690 |
| 34 | 34.000 | 25.0 | 25.0 | 1302 | 1718 |
| 850 | 863.4 | 635 | 635 | 592 | 781 |
| 36 | 36.000 | 26.5 | 26.5 | 1464 | 1931 |
| 900 | 914.4 | 673 | 673 | 666 | 878 |
| 40 | 40.000 | 29.5 | 29.5 | 1823 | 2406 |
| 1000 | 1016.0 | 749 | 749 | 829 | 1094 |
| 42 | 42.000 | 30.0 | 27.0 | 1876 | 2476 |
| 1050 | 1066.8 | 762 | 711 | 853 | 1126 |
| 44 | 44.000 | 32.0 | 30.0 | 2111 | 2786 |
| 1100 | 1117.6 | 813 | 762 | 959 | 1266 |
| 48 | 48.000 | 35.0 | 33.0 | 2527 | 3339 |
| 1200 | 1219.2 | 889 | 838 | 1149 | 1518 |

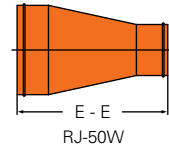
Note: C-E / C-T to ANSI B16.9



| Nominal Size in / mm | Pipe OD in / mm | RJ-21W Reducing Tee | | | |
|-------------------------|--------------------|---------------------|------------------|--|---|
| | | C - E in / mm | C - T in / mm | Weight (t = 0.375" / 9.5 mm) Lbs / Kgs | Weight (t = 0.5" / 12.7 mm) Lbs / Kgs |
| 14 x 12 | 14.0 x 12.0 | 11.0 | 10.6 | 178 | 236 |
| 350 x 300 | 355.6 x 323.9 | 279 | 270 | 81 | 107 |
| 16 x 12 | 16.0 x 12.0 | 12.0 | 11.6 | 192 | 255 |
| 400 x 300 | 406.4 x 323.9 | 305 | 295 | 87 | 116 |
| 16 x 14 | 16.0 x 14.0 | 12.0 | 12.0 | 200 | 266 |
| 400 x 350 | 406.4 x 355.6 | 305 | 305 | 91 | 121 |
| 18 x 12 | 18.0 x 12.0 | 13.5 | 12.6 | 255 | 339 |
| 450 x 300 | 457.2 x 323.9 | 343 | 321 | 116 | 154 |
| 18 x 14 | 18.0 x 14.0 | 13.5 | 13.0 | 263 | 350 |
| 450 x 350 | 457.2 x 355.6 | 343 | 330 | 120 | 159 |
| 18 x 16 | 18.0 x 16.0 | 13.5 | 13.0 | 270 | 359 |
| 450 x 400 | 457.2 x 406.4 | 343 | 330 | 123 | 163 |
| 20 x 14 | 20.0 x 14.0 | 15.0 | 14.0 | 360 | 479 |
| 500 x 350 | 508.0 x 355.6 | 381 | 356 | 164 | 218 |
| 20 x 16 | 20.0 x 16.0 | 15.0 | 14.0 | 362 | 482 |
| 500 x 400 | 508.0 x 406.4 | 381 | 356 | 165 | 219 |
| 20 x 18 | 20.0 x 18.0 | 15.0 | 15.5 | 373 | 496 |
| 500 x 450 | 508.0 x 457.2 | 381 | 394 | 170 | 226 |
| 24 x 18 | 24.0 x 18.0 | 17.0 | 16.5 | 551 | 733 |
| 600 x 450 | 609.6 x 406.4 | 432 | 419 | 251 | 333 |
| 24 x 20 | 24.0 x 20.0 | 17.0 | 17.0 | 591 | 786 |
| 600 x 500 | 609.6 x 508.0 | 432 | 432 | 269 | 357 |
| 26 x 16 | 26.0 x 16.0 | 19.5 | 17.0 | 705 | 933 |
| 650 x 400 | 660.4 x 406.4 | 495 | 432 | 320 | 424 |
| 26 x 18 | 26.0 x 18.0 | 19.5 | 17.5 | 711 | 942 |
| 650 x 450 | 660.4x406.4 | 495 | 445 | 323 | 428 |
| 28 x 18 | 28.0 x 18.0 | 20.5 | 18.5 | 800 | 1060 |
| 700 x 450 | 711.2 x 457.2 | 521 | 470 | 364 | 482 |
| 28 x 20 | 28.0 x 20.0 | 20.5 | 19.0 | 807 | 1069 |
| 700 x 500 | 711.2 x 508.0 | 521 | 483 | 367 | 486 |
| 28 x 24 | 28.0 x 24.0 | 20.5 | 20.0 | 822 | 1089 |
| 700 x 600 | 711.2 x 609.6 | 521 | 508 | 374 | 495 |
| 30 x 20 | 30.0 x 20.0 | 22.0 | 20.0 | 924 | 1224 |
| 750 x 500 | 762.0 x 508.0 | 559 | 508 | 420 | 556 |
| 30 x 26 | 30.0 x 26.0 | 22.0 | 21.5 | 949 | 1256 |
| 750 x 65 | 762.0 x 660.4 | 559 | 546 | 431 | 571 |
| 32 x 24 | 32.0 x 24.0 | 23.5 | 22.0 | 1063 | 1408 |
| 800 x 600 | 812.8 x 609.6 | 597 | 559 | 483 | 641 |
| 32 x 28 | 32.0 x 28.0 | 23.5 | 22.5 | 1077 | 1426 |
| 800 x 700 | 812.8 x 711.2 | 597 | 572 | 489 | 648 |
| 34 x 26 | 34.0 x 26.0 | 25.0 | 23.5 | 1204 | 1595 |
| 850 x 650 | 863.4 x 660.4 | 635 | 597 | 547 | 725 |
| 34 x 30 | 34.0 x 30.0 | 25.0 | 24.0 | 1217 | 1612 |
| 850 x 750 | 863.4 x 762.0 | 635 | 610 | 553 | 733 |
| 36 x 24 | 36.0 x 24.0 | 26.5 | 24.0 | 1333 | 1767 |
| 900 x 600 | 914.4 x 609.6 | 673 | 610 | 606 | 803 |
| 36 x 28 | 36.0 x 28.0 | 26.5 | 24.5 | 1346 | 1785 |
| 900 x 700 | 914.4 x 711.2 | 673 | 622 | 612 | 811 |
| 36 x 32 | 36.0 x 32.0 | 26.5 | 25.5 | 1366 | 1811 |
| 900 x 800 | 914.4 x 812.8 | 673 | 648 | 621 | 823 |
| 40 x 28 | 40.0 x 28.0 | 29.5 | 26.5 | 1673 | 2215 |
| 1000 x 700 | 1016.0 x 711.2 | 749 | 673 | 761 | 1007 |
| 40 x 32 | 40.0 x 32.0 | 29.5 | 28.0 | 1698 | 2247 |
| 1000 x 800 | 1016.0 x 812.8 | 749 | 711 | 772 | 1021 |
| 40 x 36 | 40.0 x 36.0 | 29.5 | 29.0 | 1722 | 2279 |
| 1000 x 900 | 1016.0 x 914.4 | 749 | 737 | 783 | 1036 |
| 42 x 30 | 42.0 x 30.0 | 30.0 | 28.0 | 1791 | 2371 |
| 1050 x 750 | 1066.8 x 762.0 | 762 | 711 | 814 | 1078 |
| 42 x 34 | 42.0 x 34.0 | 30.0 | 28.0 | 1804 | 2388 |
| 1050 x 850 | 1066.8 x 863.4 | 762 | 711 | 820 | 1086 |
| 44 x 32 | 44.0 x 32.0 | 32.0 | 28.0 | 1984 | 26267 |
| 1100 x 800 | 1117.6 x 812.8 | 813 | 711 | 902 | 1194 |
| 44 x 36 | 44.0 x 36.0 | 32.0 | 28.5 | 1999 | 2647 |
| 1100 x 900 | 1117.6 x 914.4 | 813 | 724 | 909 | 1203 |

| Nominal Size in / mm | Pipe OD in / mm | RJ-21W Reducing Tee | | | |
|-------------------------|--------------------|---------------------|------------------|--|---|
| | | C - E in / mm | C - T in / mm | Weight (t = 0.375" / 9.5 mm) Lbs / Kgs | Weight (t = 0.5" / 12.7 mm) Lbs / Kgs |
| 44 x 40 | 44.0 x 40.0 | 32.0 | 29.5 | 2023 | 2679 |
| 1100 x 1000 | 1117.6 x 1016.0 | 813 | 749 | 920 | 1218 |
| 48 x 36 | 48.0 x 36.0 | 35.0 | 31.0 | 2371 | 3140 |
| 1200 x 900 | 1219.2 x 914.4 | 889 | 787 | 1078 | 1427 |
| 48 x 40 | 48.0 x 40.0 | 35.0 | 32.0 | 2395 | 3172 |
| 1200 x 1000 | 1219.2 x 1066.8 | 889 | 813 | 1089 | 1442 |
| 48 x 44 | 48.0 x 44.0 | 35.0 | 33.0 | 2421 | 3207 |
| 1200 x 1100 | 1219.2 x 1117.6 | 889 | 838 | 1101 | 1458 |

Note: C-E / C-T to ANSI B16.9



| Nominal Size in / mm | Pipe OD in / mm | E - E in / mm | RJ-50W Concentric Reducer | |
|-------------------------|--------------------|------------------|--|---|
| | | | Weight (t = 0.375" / 9.5 mm) Lbs / Kgs | Weight (t = 0.5" / 12.7 mm) Lbs / Kgs |
| 26 x 16 | 26.0 x 16.0 | 24 | 178 | 236 |
| 650 x 400 | 660.4 x 406.4 | 610 | 81 | 107 |
| 26 x 18 | 26.0 x 18.0 | 24 | 184 | 245 |
| 650 x 450 | 660.4x406.4 | 610 | 84 | 112 |
| 28 x 18 | 28.0 x 18.0 | 24 | 194 | 259 |
| 700 x 450 | 711.2 x 457.2 | 610 | 88 | 118 |
| 28 x 20 | 28.0 x 20.0 | 24 | 201 | 268 |
| 700 x 500 | 711.2 x 508.0 | 610 | 92 | 122 |
| 28 x 24 | 28.0 x 24.0 | 24 | 215 | 286 |
| 700 x 600 | 711.2 x 609.6 | 610 | 98 | 130 |
| 30 x 20 | 30.0 x 20.0 | 24 | 211 | 281 |
| 750 x 500 | 762.0 x 508.0 | 610 | 96 | 128 |
| 30 x 26 | 30.0 x 26.0 | 24 | 233 | 309 |
| 750 x 65 | 762.0 x 660.4 | 610 | 106 | 141 |
| 32 x 24 | 32.0 x 24.0 | 24 | 235 | 313 |
| 800 x 600 | 812.8 x 609.6 | 610 | 107 | 142 |
| 32 x 28 | 32.0 x 28.0 | 24 | 249 | 331 |
| 800 x 700 | 812.8 x 711.2 | 610 | 113 | 150 |
| 34 x 26 | 34.0 x 26.0 | 24 | 252 | 335 |
| 850 x 650 | 863.4 x 660.4 | 610 | 114 | 152 |
| 34 x 30 | 34.0 x 30.0 | 24 | 265 | 352 |
| 850 x 750 | 863.4 x 762.0 | 610 | 120 | 160 |
| 36 x 24 | 36.0 x 24.0 | 24 | 257 | 341 |
| 900 x 600 | 914.4 x 609.6 | 610 | 117 | 155 |
| 36 x 28 | 36.0 x 28.0 | 24 | 268 | 356 |
| 900 x 700 | 914.4 x 711.2 | 610 | 122 | 162 |
| 36 x 32 | 36.0 x 32.0 | 24 | 283 | 376 |
| 900 x 800 | 914.4 x 812.8 | 610 | 129 | 171 |
| 40 x 28 | 40.0 x 28.0 | 24 | 299 | 398 |
| 1000 x 700 | 1016.0 x 711.2 | 610 | 136 | 181 |
| 40 x 32 | 40.0 x 32.0 | 24 | 310 | 412 |
| 1000 x 800 | 1016.0 x 812.8 | 610 | 141 | 187 |
| 40 x 36 | 40.0 x 36.0 | 24 | 323 | 430 |
| 1000 x 900 | 1016.0 x 914.4 | 610 | 147 | 195 |
| 42 x 30 | 42.0 x 30.0 | 24 | 318 | 422 |
| 1050 x 750 | 1066.8 x 762.0 | 610 | 144 | 192 |
| 42 x 34 | 42.0 x 34.0 | 24 | 329 | 437 |
| 1050 x 850 | 1066.8 x 863.4 | 610 | 149 | 199 |
| 44 x 32 | 44.0 x 32.0 | 24 | 334 | 444 |
| 1100 x 800 | 1117.6 x 812.8 | 610 | 152 | 202 |
| 44 x 36 | 44.0 x 36.0 | 24 | 345 | 459 |
| 1100 x 900 | 1117.6 x 914.4 | 610 | 157 | 209 |
| 44 x 40 | 44.0 x 40.0 | 24 | 358 | 477 |
| 1100 x 1000 | 1117.6 x 1016.0 | 610 | 163 | 217 |
| 48 x 36 | 48.0 x 36.0 | 28 | 422 | 561 |
| 1200 x 900 | 1219.2 x 914.4 | 711 | 192 | 255 |
| 48 x 40 | 48.0 x 40.0 | 28 | 438 | 582 |
| 1200 x 1000 | 1219.2 x 1066.8 | 711 | 199 | 265 |
| 48 x 44 | 48.0 x 44.0 | 28 | 453 | 602 |
| 1200 x 1100 | 1219.2 x 1117.6 | 711 | 206 | 274 |

Note: E-E to ANSI B16.9



Max. Internal Service Pressure of Carbon Steel Pipe, ASTM A53 Gr. B

When designing a piping system you must select pipe with the appropriate wall thickness to correspond with the intended working pressure of the system. The table lists design working pressure by the pipe wall schedule, XS, STD and LW, of representative ASTM A53 Gr. B carbon steel pipe calculated in accordance with the formula stipulated in ASME B31.1 Power Piping para. 104.1.

$$P = \frac{2SE (tm-A)}{Do - 2y (tm - A)}$$

Where:

- P = Maximum internal service pressure (psi)
- SE = Allowable stress (psi)
(ASTM A53 Gr. B = 15,000 psi)
- tm = Minimum pipe wall thickness (inch)
(87.5% of nominal wall thickness)
- Do = Outside diameter of pipe (inch)
- y = A coefficient (For ferritic steels 600°F or below = 0.4)
- A = Additional thickness (inch) (A = 0)

Max. Internal Service Pressure of Carbon Steel Pipe, ASTM A53 Gr. B

Unit: psi

| Nominal Size in / mm | XS 0.5" | STD 0.375"* | LW 0.25" / 0.312"^ |
|-------------------------|------------|----------------|-----------------------|
| 8 / 200 | 1586 | 1006 | 777 |
| 10 / 250 | 1262 | 913 | 621 |
| 12 / 300 | 1058 | 788 | 522 |
| 14 / 350 | 962 | 717 | 475 |
| 16 / 400 | 839 | 625 | 415 |
| 18 / 450 | 744 | 555 | 368 |
| 20 / 500 | 668 | 499 | 331 |
| 24 / 600 | 555 | 415 | 275 |
| 26 / 650 | 512 | 382 | 318 |
| 28 / 700 | 475 | 355 | 295 |
| 30 / 750 | 443 | 331 | 275 |
| 32 / 800 | 415 | 310 | 258 |
| 36 / 900 | 368 | 275 | 229 |
| 38 / 950 | 349 | 261 | 217 |
| 40 / 1000 | 331 | 248 | 206 |
| 42 / 1050 | 315 | 236 | 187 |
| 44 / 1100 | 301 | 225 | |
| 48 / 1200 | 275 | 206 | |
| 52 / 1300 | 254 | 190 | |
| 54 / 1350 | 245 | 183 | |
| 56 / 1400 | 236 | 177 | |
| 60 / 1500 | 220 | 165 | |
| 66 / 1650 | 200 | 150 | |
| 68 / 1700 | 194 | 145 | |
| 72 / 1800 | 183 | 137 | |
| 84 / 2100 | 157 | 118 | |
| 96 / 2400 | 137 | 103 | |

Except *8": 0.322"

^ 8" ~ 24": 0.25", 26" ~ 42": 0.312"

Material Specifications

Housing

Ductile Iron: Per ASTM A536 Gr. 65-45-12, and/or ASTM A395 Gr. 65-45-15 minimum tensile strength 65,000 psi or 448 MPa. **Paint:** Orange or RAL3000 red. **Optional:** Hot-dip galvanized, epoxy coating or polyamid 11 (Nylon) coating is also available upon request.

Hardware

Bolts: Carbon steel heat-treated track bolts to ASTM A183 Gr. 2.

Nuts: Carbon steel heavy duty nuts to ASTM A563. Both bolts and nuts are UNC threaded and electro zinc plated.

Weld Rings

Factory supplied end rings are made of carbon steel per SAE J403 (ANSI) 1020. **Optional:** Stainless steel rings: Type 304, 316 or 316L available upon request.

Gasket

Always specify the desired compound (Grade) at time of order

| Compound | EPDM (Grade E) | Nitrile (Grade T) |
|-------------------|--|--|
| Color Code | Green stripe | Orange stripe |
| Temperature Range | -29°F to +230°F (-34°C to +110°C) | -20°F to +180°F (-29°C to +82°C) |
| Applications | Recommended for cold and hot water services, water with chlorine, deionized water, seawater, waste water, dilute acids, oil-free air and many other chemicals Caution: Not recommended for petroleum oils, mineral oils, solvents and aromatic hydrocarbons | Recommended for petroleum oils, mineral oils, vegetable oils, aromatic hydrocarbons, many acids and water up to +150°F (+65°C) |

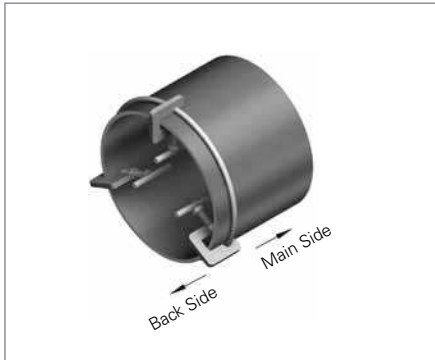
Note: Other gasket options are also available.

Angular deflection: The R-88 coupling is designed to provide a restrained joint with a controlled range of angular deflection (flexibility). The degree of deflection is influenced by several factors including; pipe, fitting and component dimensions, pipe end squareness, ring location, weld size and system pressure. When designing a piping system these considerations should be factored into the system. When designing a system requiring increased deflection (flexibility) please contact **Shurjoint** for customized solutions.

As with all piping systems proper support, anchoring and bracing are essential. Industry standard requirements such as B31.1 (Power Piping), B31.9 (Building Services) and B31.11 (Slurry Transportation), etc. should be followed for your specific type of pipeline system application.

Installation Instructions

1. Mounting factory supplied weld rings: Mount the factory supplied weld ring on the pipe end using the *Shurjoint* ring clamp, C-clamp or other device to secure and position the ring in place. **Prior to welding make sure that the "L" dimension (the distance between the pipe end and the ring) is as specified for the coupling / pipe size.**



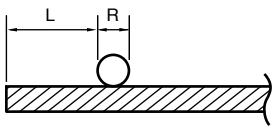
2. Step one welding: First weld the butt ends of the ring together. Next tack weld the ring to the pipe at several locations. Remove the ring clamps or other positioning devices.



3-1. Step two welding: Determine the type of weld required, full or partial, depending on the intended system working pressure. Refer to page 11 for working pressures and full and partial welding information. Weld the ring to the pipe using the proper weld(s) for the intended service.

Full & Partial Ring Welding: The *Shurjoint* Model R-88 Ring Joint Coupling is supplied with factory weld rings and is designed for a variety of service and pressure applications. For lower pressure applications weld rings need not be fully welded around the entire circumference of the pipe. The table shows the minimum required weld length in inches or millimeters and corresponding working pressures. Working pressures are based on the use of applicable pipe wall thickness for the service pressure intended.

Full welding means both sides of the weld ring are fully welded around the circumference of the pipe. One side shall be referred to as the "Main Weld" and the other side as "Back Weld". Either side of the weld ring can receive the Main Weld.



Welding conditions:

Method: SMAW (Shielded metal arc welding)*

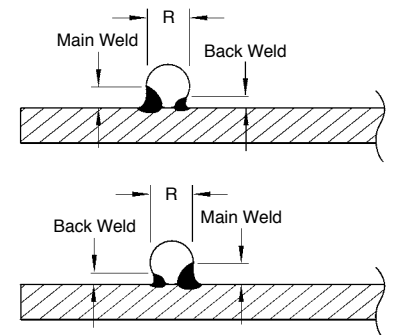
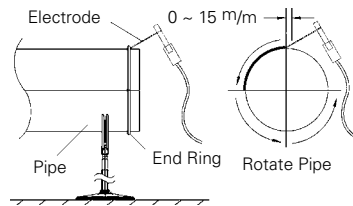
Electrode: Flux-cored electrode $\frac{3}{32}$ " (2.4mm) to $\frac{1}{8}$ " (3.2mm)

Welding speed: 12" (300mm) to 16" (400mm) per minute

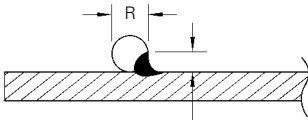
Current: 110A – 160A

Rotate pipe so that you can keep your electrode holder at the same position.

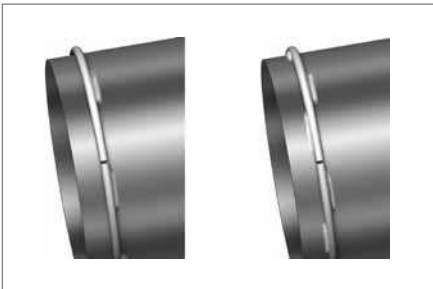
*GTAW or FCAW is also acceptable.



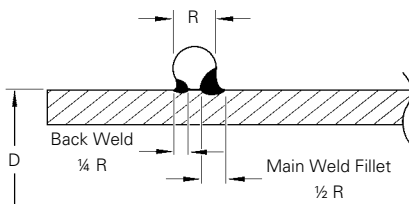
3-2. Partial weld: Partial ring welding will provide sufficient strength for lower pressure services. In case of partial ring welding, the weld shall be processed on the backside (away from the pipe end) of the ring.



An equal alternating or zigzag weld is acceptable. Welds should be equal length and evenly spaced. Back welding provides additional strength to a partial weld.



The fillet size of the Main Weld should measure a minimum of one half of the end ring size. The Back Weld should measure a minimum of one half of the Main Weld size.



Standard End Ring & Fillet Size

Unit: Inch (mm)

| End Ring Size | Main Weld Size | Back Weld Size |
|---------------|----------------|----------------|
| 1/4 (6.0) | 1/8 (3.0) | 1/16 (1.5) |
| 9/32 (7.0) | 9/64 (3.5) | 9/128 (1.75) |
| 5/16 (8.0) | 5/32 (4.0) | 5/64 (2) |
| 3/8 (9.5) | 3/16 (4.8) | 3/32 (2.4) |
| 1/2 (12.0) | 1/4 (6.0) | 1/8 (3) |
| 5/8 (16.0) | 5/16 (8.0) | 5/32 (4) |
| 3/4 (19.0) | 3/8 (9.5) | 3/16 (4.75) |

Working Pressure / Full & Partial Ring Welding

Minimum required weld length in inches (mm) and corresponding working pressures in psi (bar) for applicable steel pipe*.

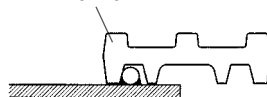
| Nominal Size in / mm | Weld Length - in / mm | | | |
|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | < 125 psi < 9 bar | < 175 psi < 12 bar | < 300 psi < 20 bar | 350 psi < 24 bar < |
| 8 / 200 | 10 / 254 | 14 / 356 | 20 / 508 | Full |
| 10 / 250 | 12 / 305 | 20 / 508 | 30 / 762 | Full |
| 12 / 300 | 16 / 406 | 24 / 610 | 36 / 914 | Full |
| 14 / 350 | 18 / 457 | 28 / 711 | 40 / 1016 | Full |
| 16 / 400 | 22 / 559 | 32 / 813 | Full | Full |
| 18 / 450 | 28 / 711 | 40 / 1016 | Full | Full |
| 20 / 500 | 30 / 762 | 44 / 1118 | Full | Full |
| 24 / 600 | 40 / 1016 | 56 / 1422 | Full | Full |
| 26 / 650 | 42 / 1067 | 60 / 1524 | Full | Full |
| 28 / 700 | 44 / 1118 | 62 / 1575 | Full | Full |
| 30 / 750 | 48 / 1219 | 70 / 1778 | Full | Full |
| 32 / 800 | 50 / 1270 | 76 / 1930 | Full | Full |
| 34 / 850 | 54 / 1372 | 80 / 2032 | Full | Full |
| 36 / 900 | 68 / 1727 | 88 / 2235 | Full | Full |
| 38 / 950 | 76 / 1930 | 94 / 2388 | Full | Full |
| 40 / 1000 | 78 / 1981 | 102 / 2591 | Full | Full |
| 42 / 1050 | 81 / 2057 | 106 / 2692 | Full | Full |
| 44 / 1100 | 90 / 2286 | 114 / 2896 | Full | Full |
| 48 / 1200 | 110 / 2794 | 130 / 3302 | Full | Full |
| 52 / 1300 | 136 / 3454 | Full | Full | Full |
| 54 / 1350 | 140 / 3556 | Full | Full | Full |
| 56 / 1400 | 150 / 3810 | Full | Full | Full |
| 60 / 1500 | 164 / 4166 | Full | Full | Full |
| 66 / 1650 | Full | Full | Full | Full |
| 68 / 1700 | Full | Full | Full | Full |
| 72 / 1800 | Full | Full | Full | Full |
| 84 / 2100 | Full | Full | Full | Full |
| 96 / 2400 | Full | Full | Full | Full |

1. Applicable to Model R-88 couplings only.
2. "Full" welding means both sides of the weld ring are fully welded, all others are welded one side only.
3. * Refer to Max. Internal Service Pressure of Carbon Steel Pipe, ASTM A53 Gr. B table on page 9.

4. Quick check guide: After welding use an R-88 housing segment as a gauge to check the weld size by ensuring full and smooth engagement. The housing ring pocket must fully engage the ring without interference from the weld or fillet material.

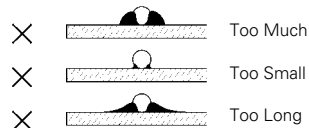


Housing Segment



Quick Check

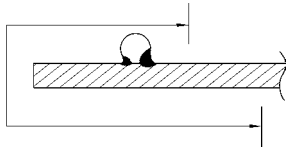
Fillets unacceptable:



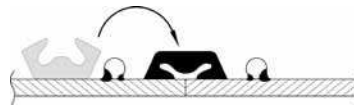
5. Weld the second ring: Repeat step 3 and weld the second ring to the other pipe end to be connected.



6. Apply a rust prevention coating: After welding apply a thin smooth coat of a rust prevention resin paint coating to the rings, weld areas and pipe ends. A fast drying paint is preferred.



8. Align the pipe ends to be connected: Bring the mating pipes together and align the pipe ends. Turn the gasket back over the ring and center the gasket over the pipe ends and between the rings.



10. Tighten bolts and nuts: Install all bolts and nuts hand tight making sure the oval neck of the bolt fully engages into the housing bolt hole. Tighten nuts alternately and equally until all bolt pads come metal to metal.



Recommended Torque

| Bolt size x number | Lbs - Ft (Nm) |
|--------------------|-----------------------|
| 5/8" x 6 | 100 - 130 (136 - 176) |
| 3/4" x 6 | 150 - 200 (203 - 271) |
| 7/8" x 8 | 180 - 220 (244 - 298) |
| 1" x 16 | 200 - 250 (271 - 339) |
| 1 1/4" x 16 | 250 - 350 (339 - 475) |
| 1 1/2" x 16 | 350 - 500 (475 - 678) |

Note: For systems subject to vibration or movement the use of Belleville washers or periodic checks to ensure tightness of bolts and nuts are recommended.

7. Lubricate and install gasket: Apply a thin coat of *Shurjoint* lubricant to the gasket exterior and sealing lips. Install the gasket over one pipe end. Turn the gasket inside out over the ring.



9. Install the coupling segments: Place the coupling segments over gasket so that the housing engages both rings. For larger size couplings, multiple segments can be loosely pre-assembled to aid in installation.



Warning – Always depressurize and drain the piping system before attempting to install, remove, adjust, or repair any *Shurjoint* piping component. Failure to comply with these instructions could lead to joint failure or resulting in serious personal injury, product and or property damage.

Project Pictures



72" (1800mm) Model R-88 couplings used in a domestic water treatment plant, Ontario, Canada

12" (300mm) & 14" (350mm) R-88 couplings used in tunnel boring / mining application. The pipe line delivered a bentonite water mixture while the outflow was an aggressive rock and mud slurry, Portland, Oregon, USA



36" (900mm) Model R-88 couplings used in an HVAC chilled water line for a major university, Saudi Arabia



24" (600mm), 36" (900mm) and 48" (1200mm) Model R-88 Couplings with stainless steel rings used on stainless steel hydro electric pipe line, Vernon, British Columbia, Canada



48" (1200mm) Model R-88 couplings used in a water treatment plant, Quary, Utah, USA



Shurjoint Piping Products

4775 East Cheyenne Ave., Suite 100
Las Vegas, Nevada 89115
USA
Tel: 702-644-4492
Fax: 702-644-1091
Toll Free: 1-877-GROOVED
1-877-476-6833
E-mail: world@shurjoint.com

Shurjoint Piping Products

1380 Beverage Drive, Suite P
Stone Mountain, Georgia 30083
USA
Tel: 770-817-0444
Fax: 770-817-0443
Toll Free: 1-877-880-6600

Shurjoint Piping Products

3F 130 Xinhua 3rd Road, (Neihu)
Taipei, Taiwan
Tel: 886-2-2792-7929
Fax: 886-2-2792-5159

Your local distributor is: _____

Job Name: _____ Contractor: _____

Job Location: _____ Approval: _____

Job Number: _____ Engineer: _____

Representative: _____ Approval Date: _____

Shurjoint specifications and or designs are subject to change without notice and or obligation

No. F001RS-13 © Copyright 2013 Shurjoint

Shurjoint product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Shurjoint Technical Service. Shurjoint reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on Shurjoint products previously produced or sold.