

F09 QUICK INSTALL RIGID COUPLING



The *Shurjoint* Model FO9 is a ready to install rigid coupling for moderate pressure piping services including fire mains, long straight runs, and valve connections. The *angle-pad* design allows for easy installation over grooved pipe ends and provides a rigid joint which resists so called snaking on long straight pipe runs. The Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

The *Shurjoint* Model FO9 is available with an EPDM prelubricated gasket, which includes a **GapSeal** and a center leg feature to support the coupling during installation.

The F09 has a *support barrier ring* seated between the gasket and the housing segments. This barrier ring acts as a stabilizing force, ensuring rigidity to assist in easier key-to-groove alignment during vertical installations. This barrier ring also helps prevent accidental gasket pinching during the installation process.

The F09 bolts are supplied with a torque resistant adhesive strategically placed to assist and provide the installer with touch feedback, while *equally and alternately* tightening the nuts.

F09 couplings should always be installed so that the coupling bolt pads make metal to metal contact. Refer to the F09 Installation Instructions regarding situations in which additional lubrication is required.

For additional information or questions, please refer to the Shurjoint Installation Manual or contact a Shurjoint representative.



For pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit *SHURJOINT* website, <u>www.shurjoint.com</u> for details or contact your *SHURJOINT* Representative.

material specifications

• Housing:

Ductile iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).

• Rubber Gasket:

Grade "Lube-E2" (E2-A) (color code: Violet stripe) UL/FM approved pre-lubricated gasket designed specifically for the fire protection industry. Listed/Approved for use in dry pipe systems for temperatures to -40°F/-40°C.

Maximum Temperature: Ambient

- Support Barrier Ring: ASTM A240 S30400 SUS304
- Surface Finish:

Standard painted finishes in orange or RAL3000 red.Hot dip zinc galvanized (optional).

Bolts & Nuts:

Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr.2), minimum tensile strength 110,000 psi (758 MPa). Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.







| Model F09 Quick Install Rigid Coupling | | | | | | | | | | |
|--|--------------|---------------------------------------|---------------------------|-------------------------|------------|-------|------|------|--|--------|
| Normal | Pipe O.D. | Max. Working Pressure (CWP)* | Max. End Load (CWP) | Axial Displacement † | Dimensions | | | Bolt | | Weight |
| Size | | | | | А | В | С | No. | Size | |
| in | in | psi | lbf | in | in | in | in | | in | lbs |
| mm | mm | bar | kN | mm | mm | mm | mm | | mm | kg |
| 11⁄4 | 1.66 | 365 | 790 | 0.16 | 2.76 | 4.4 | 1.93 | 2 | ³∕8 x 21∕8 | 1.58 |
| 32 | 42.2 | 25 | 3.51 | 4.0 | 70 | 112.5 | 49 | 2 | M10 x 55 | 0.72 |
| 11/2 | 1.9 | 365 | 1035 | 0.17 | 2.95 | 4.7 | 1.93 | 2 | ¾ x 21⁄8 | 1.59 |
| 40 | 48.3 | 25 | 4.60 | 4.3 | 72 | 119.3 | 49 | 2 | M10 x 55 | 0.72 |
| 2 | 2.375 | 365 | 1617 | 0.19 | 3.43 | 5.06 | 1.93 | 0 | ³ ∕8 x 2 ⁹ ∕ ₁₆ | 1.85 |
| 50 | 60.3 | 25 | 7.19 | 4.8 | 87 | 128.5 | 49 | 2 | M10 x 65 | 0.84 |
| 21/2 | 2.875 | 365 | 2370 | 0.20 | 3.94 | 5.5 | 1.93 | 0 | ³ ∕8 × 2 ⁹ ∕ ₁₆ | 2.13 |
| 65 | 73 | 25 | 10.54 | 5.0 | 100 | 139.8 | 49 | 2 | M10 x 65 | 0.97 |
| 76.1 | 3 | 365 | 2474 | 0.20 | 4.06 | 5.6 | 1.93 | 0 | ³ ∕8 × 2 ⁹ ∕ ₁₆ | 2.19 |
| | 76.1 | 25 | 11.00 | 5.0 | 103 | 142.2 | 49 | 2 | M10 x 65 | 0.99 |
| 3 | 3.5 | 365 | 3512 | 0.20 | 4.53 | 6.25 | 1.93 | 0 | ³ ∕8 x 2 ⁹ ∕ ₁₆ | 2.47 |
| 80 | 88.9 | 25 | 15.62 | 5.0 | 115 | 158.8 | 49 | 2 | M10 x 65 | 1.2 |
| 4 | 4.5 | 365 | 5805 | 0.22 | 5.6 | 7.33 | 2.01 | 2 | ³ ∕8 × 2 ⁹ ∕ ₁₆ | 3.22 |
| 100 | 114.3 | 25 | 25.82 | 5.7 | 142 | 186.2 | 51 | 2 | M10 x 65 | 1.46 |

* Working Pressure is based on roll grooved standard wall carbon steel pipe.





| Model F09 Quick Install Rigid Coupling Pressure Ratings | | | | | | | | | | |
|---|-------|-----------------|----------------|-----------------|-----------|--|--|--|--|--|
| Normal | Pipe | Pipe Standard | Wall Thickness | Pressure rating | Psi / bar | | | | | |
| Size | O.D. | | | UL | FM. | | | | | |
| | | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 1¼ 32 | 42.2 | ANSI B30.10 | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 2.6 mm | | 300 / 20 | | | | | |
| | | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 1½ 40 | 48.3 | ANSI 630.10 | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 2.6 mm | | 300 / 20 | | | | | |
| | | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 2 50 | 60.3 | ANSI 630.10 | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 2.6 mm | | 300 / 20 | | | | | |
| 21/2 | 77 | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 65 | /3 | ANSI 630.10 | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 2.6 mm | | 300 / 20 | | | | | |
| 76.1 | 76.1 | ISO 4200 E | 2.9 mm | 365 / 25 | | | | | | |
| | | DIN: EN 10255M | 3.6 mm | 365 / 25 | 365 / 25 | | | | | |
| | | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 3 80 | 88.9 | ANSI 630.10 | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 2.9 mm | | 300 / 20 | | | | | |
| | | | Sch 10 | 365 / 25 | 365 / 25 | | | | | |
| 4 100 | 114.3 | ANJI DJU.IU | Sch 40 | 365 / 25 | 365 / 25 | | | | | |
| | | DIN: EN 10217-1 | 3.2 mm | | 365 / 25 | | | | | |

General Note

- Maximum Working Pressure (CWP) listed is the maximum cold-water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods.
 Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- Field Joint Test: For one time, only the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

Aalberts integrated piping systems APAC Inc. 11F-2 No. 175 Zhongzheng 2nd Rd. / Lingya, Kaohsiung Taiwan

5 SHURJOINT®