integrated piping systems

aalberts

# M07 Quick Install Coupling

ensure coupling bolt pads make metal-to-metal contact.

| | |
|---|---|
| job name: | |
| job location: | |
| engineer: | |
| contractor: | |
| tag: | |
| po#: | |
| rep: | |
| wholesale dist.: | |

for pressure rating, listing, and approval information, refer to data or visit SHURJOINT website **shurjoint.com** for details or contact your SHURJOINT representatives.

The Shurjoint Model M07 is a ready to install rigid coupling for general piping applications where rigidity is required, including valve connections, mechanical rooms, risers, and long straight runs. This proprietary design provides a rigid joint that resists flexural and torsional loads. Support and hanging requirements corresponding to ANSI B31.1, B31.9, and NFPA 13.
The Shurjoint Model M07 is available with a proprietary EPDM gasket (NSF/ANSI 61/372 approved), which includes a GapSeal and a center leg feature to support the coupling during installation. The M07 includes two identical housing segments and a fully constrained wedge.
Proper installation requires the tightening of only one bolt/nut. As this bolt/nut is tightened, the wedge applies uniform compression to the gasket, reducing the chance of pinching. The hinge bolt/nut is factory pre-set and requires no adjustment.

Patent Pending

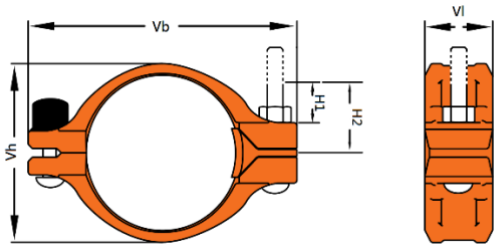
M07 couplings should always be installed so that the coupling bolt pad makes metal to metal contact with the wedge.

## material specification

- Housing and Wedge:
  Ductile Iron to ASTM A536, Gr. 65-45-12
- Rubber Gasket:
  Grade “EHM” EPDM (color code: green and red stripes). Good for cold & hot water up to +250°F (+121°C). Approved under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and wastewater, dilute acids, oil-free air and many chemicals. The Grade “EHM” is only available on Shurjoint Quick Install Couplings. Not recommended for petroleum oils, mineral oils, solvents and aromatic hydrocarbons.
  Max. Temperature Range: -30°F (-34°C) to +250°F (+121°C)
- 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.
- Locking Cap:
  Polyethylene (UV resistant Black or Green)
- Hold Open Clip:
  SUS304 stainless steel



SHURJOINT®

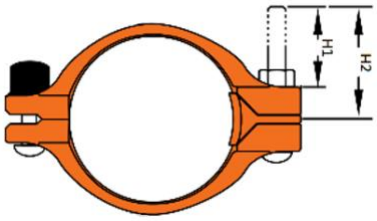



## M07 Quick Install Coupling

| Normal Size | Pipe O.D. | Max. Working Pressure (CWP)* | Max. End Load (CWP) | Axial Displacement† | Dimensions | | | | | Bolt Size | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Vh | Vb | Vl | H1 | H2 | | |
| in | in | psi | lbf | in | in | in | in | in | in | in | lb |
| mm | mm | bar | kN | mm | mm | mm | mm | mm | mm | mm | kg |
| 2" | 2.375 | 750 | 3320 | 0.12 | 3.346 | 5.591 | 1.890 | 1.142 | 2.953 | 1/2x2.9 | 2.86 |
| 50 | 60.3 | 52 | 14.84 | 3.1 | 85.0 | 142.0 | 48.0 | 29.0 | 51.0 | M12x73 | 1.3 |
| 2½" | 2.875 | 750 | 4860 | 0.12 | 3.819 | 6.299 | 1.890 | 1.142 | 2.953 | 1/2x2.9 | 3.30 |
| 65 | 73.0 | 52 | 21.75 | 3.1 | 97.0 | 160.0 | 48.0 | 29.0 | 51.0 | M12x73 | 1.5 |
| 76,1 | 3.000 | 750 | 5310 | 0.12 | 3.880 | 6.421 | 2.008 | 1.130 | 2.880 | 1/2x2.9 | 3.30 |
| | 76.1 | 52 | 23.64 | 3.1 | 98.6 | 163.1 | 51.0 | 28.7 | 49.2 | M12x73 | 1.5 |
| 3" | 3.500 | 750 | 7210 | 0.12 | 4.409 | 7.087 | 1.890 | 1.142 | 2.953 | 1/2x2.9 | 3.74 |
| 80 | 88.9 | 52 | 32.26 | 3.1 | 112.0 | 180.0 | 48.0 | 29.0 | 51.0 | M12x73 | 1.7 |
| 4" | 4.500 | 750 | 11920 | 0.12 | 5.433 | 8.346 | 2.126 | 1.024 | 2.913 | 1/2x2.9 | 5.07 |
| 100 | 114.3 | 52 | 53.33 | 3.1 | 138.0 | 212.0 | 54.0 | 26.0 | 50.0 | M12x73 | 2.3 |
| 139.7 | 5.500 | 750 | 17900 | 0.12 | 6.732 | 9.843 | 2.126 | 1.303 | 3.093 | 5/8x3.2 | 7.71 |
| | 139.7 | 52 | 79.66 | 3.1 | 171.0 | 250.0 | 54.0 | 33.1 | 56.6 | M16x80 | 3.5 |
| 5" | 5.663 | 750 | 17900 | 0.12 | 6.732 | 9.843 | 2.126 | 1.303 | 3.093 | 5/8x3.2 | 7.71 |
| 125 | 141.3 | 52 | 79.66 | 3.1 | 171.0 | 250.0 | 54.0 | 33.1 | 56.6 | M16x80 | 3.5 |
| 6" | 6.625 | 700 | 24110 | 0.12 | 7.756 | 10.906 | 2.126 | 1.299 | 3.110 | 5/8x3.2 | 8.37 |
| 150 | 168.3 | 48 | 106.73 | 3.1 | 197.0 | 277.0 | 54.0 | 33.0 | 57.0 | M16x80 | 3.8 |
| 8" | 8.625 | 600 | 35580 | 0.12 | 10.744 | 13.789 | 2.520 | 1.201 | 3.431 | 3/4x3.5 | 17.40 |
| 200 | 219.1 | 42 | 158.27 | 3.1 | 272.9 | 350.2 | 64.0 | 30.5 | 55.2 | M20x88 | 7.9 |

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

† Allowable Axial Displacement figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These Axial Displacement figures shown are for layout estimation only. The M07 coupling forms a rigid connection and will not accommodate axial expansion/contraction.




**Pre-snap Dimensions**

| Nominal Size | Dimensions | |
|---|---|---|
| | Pre-snap H1 | Pre-snap H2 |
| in | in | in |
| mm | mm | mm |
| 2 | 2.087 | 2.953 |
| 50 | 53.0 | 75.0 |
| 2.5 | 2.087 | 2.953 |
| 65 | 53.0 | 75.0 |
| 76.1 | 2.075 | 2.882 |
| | 52.7 | 73.2 |
| 3 | 2.087 | 2.953 |
| 80 | 53.0 | 75.0 |
| 4 | 1.969 | 2.913 |
| 100 | 50.0 | 74.0 |
| 139.7 | 2.169 | 3.094 |
| | 55.1 | 78.6 |
| 5 | 2.169 | 3.094 |
| 125 | 55.1 | 78.6 |
| 6 | 2.165 | 3.110 |
| 150 | 55.0 | 79.0 |
| 8 | 2.461 | 3.433 |
| 200 | 62.5 | 87.2 |

## Pressure Performance Data

The following tables show maximum working pressures (CWP) of Shurjoint M07 Quick Install Couplings used on both carbon steel and stainless steel pipes. Shurjoint M07 Quick Install Couplings can be used in conjunction with stainless steel pipe in non-corrosive environments as the flow media does not come in direct contact with coupling housings but rather only the gaskets. Stated pressure ratings have been developed with a safety factor. Proper installation is important to proper performance.

## Carbon steel pipe

| Nominal Size | Cut-Grooved | | Roll-Grooved | |
|---|---|---|---|---|
| | XS | STD | STD | Sch 10 |
| in | psi | psi | psi | psi |
| mm | bar | bar | bar | bar |
| 2 | 750 | 750 | 750 | 750 |
| 50 | 52 | 52 | 52 | 52 |
| 2½ | 750 | 750 | 750 | 600 |
| 65 | 52 | 52 | 52 | 42 |
| 3 | 750 | 750 | 750 | 600 |
| 80 | 52 | 52 | 52 | 42 |
| 4 | 750 | 750 | 750 | 600 |
| 100 | 52 | 52 | 52 | 42 |
| 5 | 750 | 750 | 750 | 500 |
| 125 | 52 | 52 | 52 | 35 |
| 6 | 700 | 700 | 700 | 500 |
| 150 | 48 | 48 | 48 | 35 |
| 8 | 600 | 600 | 600 | 300 |
| 200 | 42 | 42 | 42 | 21 |

## Stainless steel pipe

| Nominal Size | Cut-Grooved | | Roll-Grooved | |
|---|---|---|---|---|
| | XS | STD | STD | Sch 10S |
| in | psi | psi | psi | psi |
| mm | bar | bar | bar | bar |
| 2 | 600 | 600 | 600 | 300 |
| 50 | 42 | 42 | 42 | 20 |
| 2½ | 600 | 600 | 600 | 300 |
| 65 | 42 | 42 | 42 | 20 |
| 3 | 600 | 600 | 600 | 300 |
| 80 | 42 | 42 | 42 | 20 |
| 4 | 600 | 600 | 600 | 300 |
| 100 | 42 | 42 | 42 | 20 |
| 5 | 600 | 600 | 600 | 300 |
| 125 | 42 | 42 | 42 | 20 |
| 6 | 600 | 600 | 600 | 300 |
| 150 | 42 | 42 | 42 | 20 |
| 8 | 400 | 400 | 400 | 150 |
| 200 | 28 | 28 | 28 | 10 |

## 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.



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