

723 SADDLE- LET Small Mechanical Tee



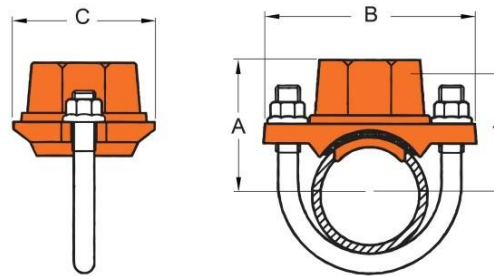
For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website www.shurjoint.com for details or contact your SHURJOINT representatives.

The Model 723 “Saddle-Let” small mechanical tee is the ideal outlet fitting for direct connection to sprinkler heads, drop nipples and gauges. No need for welding just cut or drill a hole at the desired outlet location, position the Saddle-Let so that the locating collar fits within the hole and fasten the U-bolt and nuts. The Model 723 Saddle-Let features a full-bore flow, a uniquely designed grade “E” gasket. The Saddle-Let is supplied with a standard black finish. Optional finishes such as painted or electro-zinc plated coatings are available.

material specification

- **Housing:**
Ductile Iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).
- **Surface Finish:**
Black (bare metal) with thin rust-proof oil.
 - Orange color painted or red RAL3000 color painted.
 - Electro-zinc plated coating.
 - Hot dip galvanized
 - Epoxy coated in red RAL3000 or other colors.

- **Rubber Gasket:**
Grade “E” EPDM (Color code: Green stripe) Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.
Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C)*.
*EPDM gaskets for water services are not recommended for steam services unless couplings or components are accessible for frequent gasket replacement.
 - Other options: Grade “T” Nitrile
Grade “O” Fluoroelastomer.
Grade “L” Silicone.
 For additional details contact Shurjoint.
- **U-Bolt & Nuts:**
Plated U-bolt conforming to ASTM A307 with hex nuts to ASTM A563.



Model 723 "Saddle-Let" Small Mechanical Tee

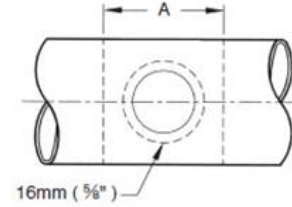
| Nominal Size | Max. Working Pressure (CWP)* | Hole Dia. † +0.13, -0 /+3.2, -0 | Dimensions | | | Take-Out, †T | Bolt Size | Bolt Torque | Weight |
|--------------|------------------------------|---------------------------------------|------------|-------|------|--------------|-----------|-------------|--------|
| | | | A | B | C | | | | |
| in | PSI | in | in | in | in | in | in | lbs-ft | lbs |
| mm | Bar | mm | mm | mm | mm | mm | | Nm | kg |
| 1¼ x ½ | 300 | 1.18 | 1.97 | 3.50 | 2.20 | 1.73 | ¾Ø | 15-22 | 0.9 |
| 32 x 15 | 20 | 30 | 50.0 | 89.0 | 56.0 | 44.0 | U-Bolt | 20-30 | 0.4 |
| 1¼ x ¾ | 300 | 1.18 | 1.97 | 3.50 | 2.20 | 1.73 | ¾Ø | 15-22 | 0.9 |
| 32 x 20 | 20 | 30 | 50.0 | 89.0 | 56.0 | 44.0 | U-Bolt | 20-30 | 0.4 |
| 1¼ x 1 | 300 | 1.18 | 2.13 | 3.50 | 2.20 | 1.85 | ¾Ø | 15-22 | 0.9 |
| 32 x 25 | 20 | 30 | 54.0 | 89.0 | 56.0 | 47.0 | U-Bolt | 20-30 | 0.4 |
| 1½ x ½ | 300 | 1.18 | 2.09 | 3.50 | 2.24 | 1.81 | ¾Ø | 15-22 | 0.9 |
| 40 x 15 | 20 | 30 | 53.0 | 89.0 | 57.0 | 46.0 | U-Bolt | 20-30 | 0.4 |
| 1½ x ¾ | 300 | 1.18 | 2.09 | 3.50 | 2.24 | 1.81 | ¾Ø | 15-22 | 0.9 |
| 40 x 20 | 20 | 30 | 53.0 | 89.0 | 57.0 | 46.0 | U-Bolt | 20-30 | 0.4 |
| 1½ x 1 | 300 | 1.18 | 2.28 | 3.50 | 2.24 | 1.93 | ¾Ø | 15-22 | 0.9 |
| 40 x 25 | 20 | 30 | 58.0 | 89.0 | 57.0 | 49.0 | U-Bolt | 20-30 | 0.4 |
| 2 x ½ | 300 | 1.18 | 2.36 | 3.82 | 2.24 | 2.09 | ¾Ø | 15-22 | 0.9 |
| 50 x 15 | 20 | 30 | 60.0 | 97.0 | 57.0 | 53.0 | U-Bolt | 20-30 | 0.4 |
| 2 x ¾ | 300 | 1.18 | 2.36 | 3.82 | 2.24 | 2.09 | ¾Ø | 15-22 | 0.9 |
| 50 x 20 | 20 | 30 | 60.0 | 97.0 | 57.0 | 53.0 | U-Bolt | 20-30 | 0.4 |
| 2 x 1 | 300 | 1.18 | 2.52 | 3.82 | 2.24 | 2.20 | ¾Ø | 15-22 | 0.9 |
| 50 x 25 | 20 | 30 | 64.0 | 97.0 | 57.0 | 56.0 | U-Bolt | 20-30 | 0.4 |
| 2½ x ½ | 300 | 1.18 | 2.60 | 4.37 | 2.24 | 2.28 | ¾Ø | 15-22 | 0.9 |
| 65 x 15 | 20 | 30 | 66.0 | 111.0 | 57.0 | 58.0 | U-Bolt | 20-30 | 0.4 |
| 2½ x ¾ | 300 | 1.18 | 2.60 | 4.37 | 2.24 | 2.28 | ¾Ø | 15-22 | 0.9 |
| 65 x 20 | 20 | 30 | 66.0 | 111.0 | 57.0 | 58.0 | U-Bolt | 20-30 | 0.4 |
| 2½ x 1 | 300 | 1.18 | 2.76 | 4.37 | 2.24 | 2.40 | ¾Ø | 15-22 | 1.1 |
| 65 x 25 | 20 | 30 | 70.0 | 111.0 | 57.0 | 61.0 | U-Bolt | 20-30 | 0.5 |

† Hole diameters listed are suggested hole saw diameters.
 †T: Take-out (Center of run to end of pipe to be engaged)
 * Working Pressure is based on standard wall carbon steel pipe.



Hole Cutting

The method of pipe preparation requires the cutting or drilling of a specified hole size on the centerline of the pipe. Always use the correct hole saw size as shown in the table. After the hole has been cut all rough edges must be removed and the area within 5/8" (16 mm) of the hole should be inspected to ensure a clean smooth surface, free of any indentations or projections that could affect proper gasket sealing



Hole Sizes for 723 S-let

| Saddle-Let Branch Size | Hole Dimensions | | Surface Preparation "A" |
|------------------------|-----------------|------------------|-------------------------|
| | Hole Saw Size | Max dia. Allowed | |
| in | in | in | in |
| mm | mm | mm | mm |
| 1/2, 3/4, 1 | 1 3/16 | 1 1/4 | 3 1/2 |
| 15, 20, 25 | 30 | 32 | 89 |

unit: in/mm

Flow Data - Cv Values

Values for flow of water at +60°F (+16°C).

$$Cv = \frac{Q}{\sqrt{\Delta P}}$$

Where: Cv = Flow coefficient
 Q = Flow (GPM)
 ΔP = Pressure drop (psi)

| Model 723 "Saddle-Let" Cv Value | |
|---------------------------------|----------|
| Nominal Size | Cv Value |
| in | |
| mm | |
| 1/2 | 10 |
| 15 | |
| 3/4 | 15 |
| 20 | |
| 1 | 22 |
| 25 | |

Flow Characteristics

| Model 723 "Saddle-Let" Flow Characteristics | |
|--|---------------------------|
| Nominal Size | Equivalent Length of pipe |
| in | feet |
| mm | meter |
| ½ | 3 |
| 15 | 0.9 |
| ¾ | 5 |
| 20 | 1.5 |
| 1 | 8.0 |
| 25 | 2.4 |

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.
- 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.