

Style 422 Stainless Steel Mechanical-T® Bolted Branch Outlets



⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

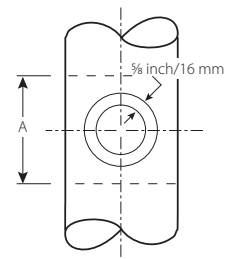
PREPARATION REQUIREMENTS FOR STAINLESS STEEL PIPE USED WITH STYLE 422 STAINLESS STEEL MECHANICAL-T OUTLETS

⚠ CAUTION

- The Victaulic [HCT908](#) Hole-Cutting Tool is recommended for proper hole preparation.
- To prevent contamination, use only hole saws that are designed for use with stainless steel material. **DO NOT** use a hole saw that was used previously to cut carbon steel pipe.
- Always verify that coupons have been removed from the pipe after the hole-cutting process is complete.

Failure to follow these instructions could cause improper product assembly, resulting in joint failure and property damage.

- The pipe around the entire circumference, within the “A” dimension shown, must be free from any dirt, scale, or projections that might prevent the housing from seating fully on the pipe. Refer to the “Pipe Preparation Requirements” table on this page for the “A” dimension.

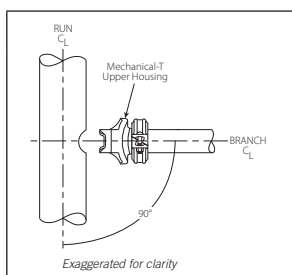


Exaggerated for clarity

Stainless Steel Pipe Preparation Requirements

Size	Hole Dimensions inches/mm		Surface Preparation “A” Dimension
	Minimum Hole Diameter/ Hole Saw Size	Maximum Allowable Diameter	inches mm
8 x 2-inch/ 219.1 x 60.3-mm Outlets	2 3/4 70	2 7/8 73	4 1/2 114
All Other 2-inch/ 60.3 Outlets	2 1/2 64	2 5/8 67	4 1/2 114
All 3-inch/ 88.9 Outlets	3 1/2 89	3 5/8 92	5 1/2 140
All 4-inch/ 114.3 Outlets	4 1/2 114	4 5/8 118	6 1/2 165

- The Style 422 Stainless Steel Mechanical-T Outlet is designed only for use with stainless steel pipe.
- Proper preparation of the hole is essential for sealing and performance. Make sure the correct hole saw size is being used. Refer to the “Pipe Preparation Requirements” table on this page for the proper hole saw size.
- Holes **MUST** be drilled on the pipe centerline.
- Ensure that a 5/16-inch/16-mm area around the hole is clean, smooth, and free from indentations and/or projections that could affect gasket sealing. Remove any burrs and sharp or rough edges from the hole. Burrs and sharp edges could affect product assembly, proper seating of the locating collar, flow from the outlet, or gasket sealing.



NOTICE

BRANCH CONNECTIONS

- If a branch connection is made to the upper (outlet) housing before the Mechanical-T is installed on the pipe, make sure the branch connection is 90° to the pipe run before tightening the nuts in step 5 on the following page.
- When the Mechanical-T is used as a transition piece between two runs, it must be assembled onto the runs before the branch connection is made.

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CAUTION

- Pipe must be prepared in accordance with requirements listed in these installation instructions.

Failure to follow pipe preparation requirements could cause improper gasket sealing and joint leakage, resulting in property damage.



1. ASSEMBLE HOUSINGS: Insert a bolt into the two housings. Thread a nut loosely onto the end of the bolt, as shown to the left. **NOTE:** The nut should be backed off no further than flush with the end of the bolt.



2. CHECK GASKET AND LUBRICATE: Inspect the sealing surface of the gasket to ensure no debris or physical damage is present. **It is not necessary to remove the gasket from the housing.** Lubricate the exposed sealing surface of the gasket that will contact the pipe. Refer to the "Lubricant Compatibility" table below.

Lubricant Compatibility

Lubricant	Compatibility with Grade "T" Nitrile Gaskets	Compatibility with Grade "E" EPDM Gaskets
Victaulic Lubricant, Soap-Based Solutions, Glycerin, Silicone Oil, or Silicone Release Agent	Good	Good
Corn Oil, Soybean Oil, Hydrocarbon-Based Oils, or Petroleum-Based Greases	Good	Not Recommended



3. INSTALL HOUSINGS: Rotate the lower housing so that it is positioned approximately 90° to the upper (outlet) housing, as shown to the left. Place the upper (outlet) housing onto the pipe in line with the hole. Rotate the lower housing around the pipe.



3a. Make sure the locating collar engages the hole completely. Check this engagement by rocking the upper (outlet) housing in the hole. **NOTE:** The upper (outlet) housing should be flush to the pipe OD and should not be able to rotate.



4. INSTALL REMAINING BOLT/NUT: Install the remaining bolt, and thread a nut finger-tight onto the bolt. **NOTE:** Make sure the oval neck of each bolt seats properly in the bolt hole.



5. TIGHTEN NUTS: Make sure the locating collar remains positioned properly in the hole. Tighten the nuts evenly by alternating sides until the required torque value is achieved at each nut. Refer to the "Required Torque Values" table on this page.

WARNING

- Nuts must be tightened evenly by alternating sides until upper (outlet) housing/pipe contact AND the specified torque value are achieved.

Failure to follow this instruction could cause joint failure, resulting serious personal injury and property damage.

6. COMPLETE THE OUTLET CONNECTION: Complete the assembly by installing a Victaulic coupling to the grooved outlet connection. Refer to the installation instructions provided with the applicable coupling.

Required Torque Values

Nominal Pipe Size inches	Torque Requirement ft-lbs/N•m
3 & 4	50 68
6	75 102
8	100 136

Helpful Information

Nominal Pipe Size inches	Nut Size inches/Metric	Socket Size inches/mm
3 & 4	1/2 M12	7/8 22
6	3/8 M16	1 1/16 27
8	3/4 M20	1 1/4 32

For complete contact information, visit victaulic.com

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