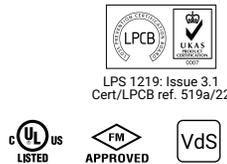
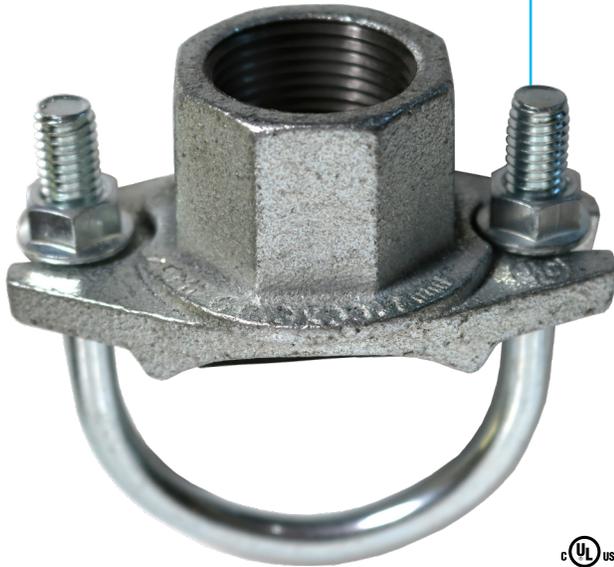


Threaded Mechanical Branch Tee
Fig. MT-90



Material Specifications

Housing

Ductile Iron conforming to ASTM A536, Grade 65-45-12

U-Bolts and Nuts

U-bolt is carbon steel SAE J429 Gr. 2, zinc plated complete with hex flanged lock nuts conforming to ASTM A563 Gr. A or B of SAE J995 Gr. 2.

Threads

BSPT pipe thread

Coatings

Zinc Electroplated

Other available options

(Example: RAL3000 or RAL9000 Series)

Gasket Materials

Properties as designated in accordance with ASTM D2000

Grade "E" EPDM (Green color code)

-40°F to 230°F (Service Temperature Range)
(-40°C to 110°C)

Recommended for water service, diluted acids, alkalis solutions, oil-free air and many chemical services not involving hydrocarbons, oils or gases.

NOT FOR USE WITH HYDROCARBONS.

The MT-90 mechanical tee serves the same function as the MT-1 and MT-8, but uses a steel electro-plated u-bolt to save space for easier installation in tight places. The MT-90 is ideal for direct connections with sprinkler heads and drop nipples.

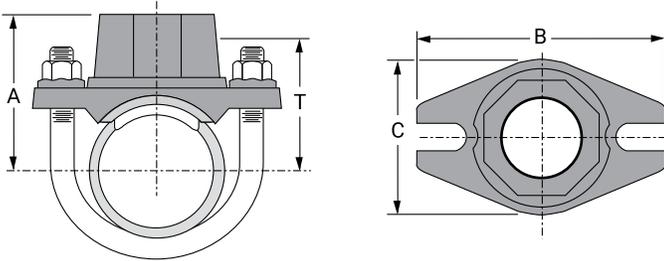
For the latest UL/ULC listed, LPCB, VdS and FM Approved pressure ratings versus pipe schedule, see www.asc-es.com or contact your local ASC Engineered Solutions™ Representative.

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions™ Sales Representative.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Threaded Mechanical Branch Tee Fig. MT-90



Nominal Size	Pipe O.D.	Hole Dimensions		Max. Working Pressure ▲	Dimensions				Approx. Wt. Ea.
		Min. Diam.	Max. Diam.		A	B	C	T Take-out	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	Lbs./kg
1¼ x ½ 32 x 12	1.660 x 0.840 42.4 x 21.3	1⅜ 30	1⅝ 33	300 20.7	2⅞ 54	3½ 89	2¼ 57.2	1⅝ 42	0.8 0.4
1¼ x ¾ 32 x 19	1.660 x 1.050 42.4 x 26.7	1⅜ 30	1⅝ 33	300 20.7	2⅞ 54	3½ 89	2¼ 57.2	1⅝ 42	0.8 0.4
1¼ x 1 32 x 25	1.660 x 1.315 42.4 x 33.7	1⅜ 30	1⅝ 33	300 20.7	2¼ 58	3½ 89	2¼ 57.2	1⅝ 41	1.1 0.5
1½ x ½ 40 x 12	1.900 x 0.840 48.3 x 21.3	1⅜ 30	1⅝ 33	300 20.7	2¼ 57	3½ 89	2¼ 57.2	1¾ 48	0.8 0.4
1½ x ¾ 40 x 19	1.900 x 1.050 48.3 x 26.7	1⅜ 30	1⅝ 33	300 20.7	2¼ 57	3½ 89	2¼ 57.2	1¾ 48	0.9 0.4
1½ x 1 40 x 25	1.900 x 1.315 48.3 x 33.7	1⅜ 30	1⅝ 33	300 20.7	2⅞ 61	3½ 89	2¼ 57.2	1¾ 48	1.1 0.5
2 x ½ 50 x 12	2.375 x 0.840 60.3 x 21.3	1⅜ 30	1⅝ 33	300 20.7	2½ 64	3¾ 95	2¼ 57.2	2 51	0.9 0.4
2 x ¾ 50 x 19	2.375 x 1.050 60.3 x 26.7	1⅜ 30	1⅝ 33	300 20.7	2½ 64	3¾ 95	2¼ 57.2	2 51	0.9 0.4
2 x 1 50 x 25	2.375 x 1.315 60.3 x 33.7	1⅜ 30	1⅝ 33	300 20.7	2⅞ 67	3¾ 95	2¼ 57.2	2 50	1.1 0.5
3 O.D. x ½ 76.1 x 12	2.996 x 0.840 76.1 x 21.3	1⅜ 30	1⅝ 33	300 20.7	2⅞ 73	4¼ 108	2¼ 57.2	2⅜ 59	0.9 0.4
3 O.D. x ¾ 76.1 x 19	2.996 x 1.050 76.1 x 26.7	1⅜ 30	1⅝ 33	300 20.7	2⅞ 73	4¼ 108	2¼ 57.2	2⅜ 59	0.9 0.4
3 O.D. x 1 76.1 x 25	2.996 x 1.315 76.1 x 33.7	1⅜ 30	1⅝ 33	300 20.7	3 76	4¼ 108	2¼ 57.2	2¼ 58	1.1 0.5

Note:

▲ – Working Pressure Ratings are for reference only and based on Sch. 10 and Sch. 40 pipe. For the latest UL/ULC, FM, VdS and LPCB pressure ratings versus pipe schedule, please visit asc-es.com or contact your local ASC Engineered Solutions™ Representative.

Note: Tighten nuts alternately to a recommended torque of 18–22 ft.-lbs. (25–30 Nm) on pipe wall less than schedule 10 (Din 2440) or 23–27 ft.-lbs. (31–37 Nm) on pipe walls schedule 10 (DIN 2440) and above.

WARNING: For dry pipe systems and freezer applications lubrication of the gasket is required, Golvlok Xtreme Lubricant is required.



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Fig. MT-90 Threaded Mechanical Branch Tee

1 Alignment

Align the gasket and fitting above the 1.19" (30mm) pipe hole.

Branch Size	Hole Saw Size	Equivalent Pipe Length
Inches (mm)	Inches $+\frac{1}{8}, -0$ (mm $+3, -0$)	(See Note)
$\frac{1}{2}$ -1	1.19	5
12 x 25	30.23	1.52

Note: Flow Data is expressed as Feet/Meters of Schedule 40 steel outlet pipe with a "Hazen-Williams coefficient of friction value of 120".

2 Housing Assembly

Attach the U-bolt from the other side and fasten the nuts finger tight.

3 Tighten Nuts

Making sure the fitting is properly located over the pipe hole, use a $\frac{9}{16}$ " (14 mm) wrench to tighten the nuts alternately to a recommended torque of 18-22 ft.-lbs. (25-30 Nm) on pipe wall less than schedule 10 (DIN 2440) or 23-27 ft.-lbs. (31-37 Nm) on pipe walls schedule 10 (DIN 2440) and above.



Specified Bolt Torque

Specified bolt torque is for the u-bolt used on SPF threaded mechanical branches. The nuts must be tightened alternately and evenly until fully tightened.

Caution: Proper torquing of mechanical branch u-bolt is required to obtain specified performance. **Over torquing the u-bolt may result in damage to the pipe and/or casting which could result in pipe joint separation.** Under torquing the u-bolt may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.



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