



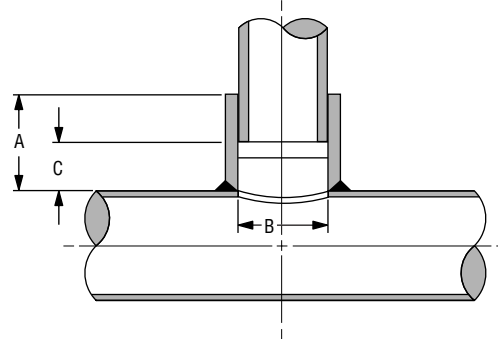
The SPF™ Model MT-40 Weld Outlet Fitting provides an economical threaded outlet branch connection. Fittings are forged steel per ASTM A-105 and are available in outlet sizes of 1/2" through 2" for 1 1/4" through 8" run pipe sizes. A precise fit at the opening in the run pipe is achieved through the MT-40's contoured shape and conforms to standard practice MSS SP-97. The weld bevel is a standard 37 1/2°. The MT-40 may be installed on all schedules of steel pipe. Each outlet size requires only one hole size across the run pipe range, minimizing hole saw/drills needed for component installation. MT-40 threads comply with ANSI/ASME B1.20.1 for NPT.

All fittings are UL/ULC Listed and all fittings except 1 1/4 x 1 1/4, 1 1/2 x 1 1/2, and 2 x 2 are FM Approved for use in fire protection systems at 175 PSI for schedule 5 pipe and 300 PSI for schedule 7 pipe and above. For the latest UL/ULC Listed and FM Approved pressure ratings versus pipe schedule see [www.anvilstar.com](http://www.anvilstar.com) or contact your local AnvilStar Sales Representative.



**APPROVED**  
For Listing / Approval  
details contact your  
AnvilStar™ Representative.

PROJECT INFORMATION:		APPROVAL STAMP:
<b>Project:</b>		
<b>Date:</b>	<b>Phone:</b>	
<b>Architect / Engineer:</b>		
<b>Contractor:</b>		
<b>Address:</b>		
<b>Notes 1:</b>		
<b>Notes 2:</b>		



**FIGURE MT-40 WELD OUTLETS**

Outlet Size	Nominal Size	Outlet Height A	Inside Diameter B	Recommended Hole Size	Take Out C	Approx. Wt. Ea.
In./mm	In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lb./kg
1/2 x 13 x	1 1/4 - 1 1/2 32 - 40	1 1/16 27.0	1 1/16 17.5	5/8 15.9	9/16 14.3	0.171 0.08
	1 1/2 - 2 40 - 50	1 1/16 27.0	1 1/16 17.5	5/8 15.9	9/16 14.3	0.171 0.08
	2 - 2 1/2 50 - 65	1 1/16 27.0	1 1/16 17.5	5/8 15.9	9/16 14.3	0.171 0.08
	2 1/2 - 8 65 - 200	1 1/16 27.0	1 1/16 17.5	5/8 15.9	9/16 14.3	0.169 0.08
	3/4 x 19 x	1 1/4 - 1 1/2 32 - 40	1 1/8 28.6	7/8 22.2	7/8 22.2	9/16 14.3
1 x 25 x	1 1/2 - 2 40 - 50	1 1/8 28.6	7/8 22.2	7/8 22.2	9/16 14.3	0.260 0.12
	2 - 2 1/2 50 - 65	1 1/8 28.6	7/8 22.2	7/8 22.2	9/16 14.3	0.260 0.12
	2 1/2 - 8 65 - 200	1 1/8 28.6	7/8 22.2	7/8 22.2	9/16 14.3	0.256 0.12
	1 1/4 - 1 1/2 32 - 40	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.331 0.15
	1 1/2 - 2 40 - 50	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.331 0.15
1 1/4 x 32 x	2 - 2 1/2 50 - 65	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.320 0.15
	2 1/2 - 3 65 - 80	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.314 0.14
	3 - 4 80 - 100	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.309 0.14
	5 - 8 125 - 200	1 1/4 31.8	1 3/16 30.2	1 1/8 28.6	5/8 15.9	0.291 0.13
	1 1/4 - 1 1/2 32 - 40	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.432 .019
	1 1/2 - 2 40 - 50	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.421 .019
	2 - 2 1/2 50 - 65	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.421 .019
	2 1/2 - 3 65 - 80	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.411 .019
	3 - 4 80 - 100	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.389 .018
	5 - 8 125 - 200	1 3/8 34.9	1 1/2 38.1	1 1/2 38.1	1 1/16 17.5	0.389 .018

**FIGURE MT-40 WELD OUTLETS**

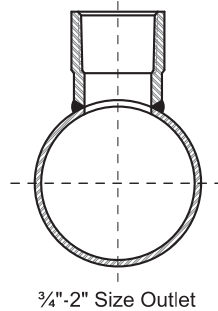
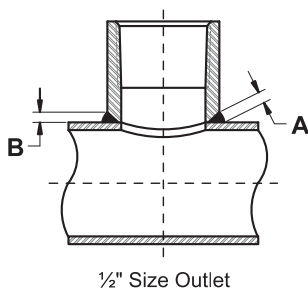
Outlet Size	Nominal Size	Outlet Height A	Inside Diameter B	Recommended Hole Size	Take Out C	Approx. Wt. Ea.	
In./mm	In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lb./kg	
1 1/2 x 40 x	1 1/2 40	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	2 50	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	2 1/2 65	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	3 - 4 80 - 100	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	4 100	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	5 - 8 125 - 200	1 3/8 41.3	1 3/8 41.3	1 5/8 41.3	1 5/16 23.8	0.477 .022	
	2 x 50 x	2 50	1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.857 0.38
		2 1/2 65	1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.829 0.38
		3 80	1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.829 0.39
		4 100	1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.800 0.36
5 125		1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.743 0.34	
6 150		1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.743 0.34	
8 200		1 3/4 44.5	2 1/16 52.4	2 50.8	1 1/16 27.0	0.743 0.34	





## Installation - Model MT-40 Weld Outlet

- SPF™ Outlet Fittings are designed to be installed using only one weld pass.
- 1/2" size outlets have a heavy cross section which helps to prevent weld/heat induced distortion during installation.
- 3/4"-2" size outlets maintain a relative uniform wall thickness in the contoured section. Heat settings can easily be set to allow for full penetration welds while reducing the probability of burn through. The weld area is designed adequately distanced from the threads such that the welding process should not distort the threads.
- It is recommended that the weld temperature be only as hot as needed to fully penetrate the materials being welded. Excessive heat may cause the outlet fitting to expand excessively resulting in threads not gauging properly after cooling. The following chart lists the recommended amount of weld for each size outlet.



Outlet Size	A (Inches)	B (Inches)
1/2	1/4	3/16
3/4	1/4	3/16
1	1/4	3/16
1 1/4	1/4	3/16
1 1/2	5/16	1/4
2	5/16	1/4

## Thread Assembly Instructions

### THREAD INSPECTION

- A. Prior to installing a threaded branch pipe or nipple into a MT-40 outlet fitting, inspect the thread of the outlet and the nipple to insure that:
- 1) No dirt or weld spatter is in the threads.
  - 2) No burn-through has damaged the threads.
  - 3) Thread length is correct.

B. Clean as needed.

### APPLICATION OF PIPE SEALANT

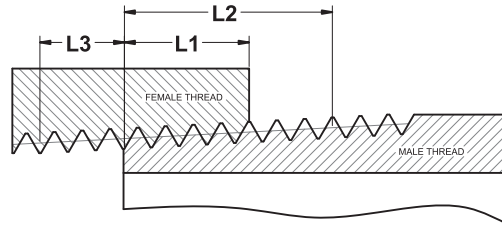
- A. Use a pipe sealant that is fast drying, sets-up semi-hard and is vibration resistant. For outlets 1/2" through 1", an anaerobic pipe sealant is recommended.

B. Thread tape containing Teflon\* may also be used.

### TIGHTENING OF BRANCH PIPE

- A. For outlet sizes through 2", wrench tighten up to three (3) full turns past handtight.

\*Teflon is a registered trademark of DuPont.



### NPT TAPERED PIPE THREADS ANSI/ASME B1.20.1 Length of Effective Threads

Drop Nipple or Outlet Size	L1 Dim. Hand Tight in./thrds.	L3 Dim. Wrench Tight in./thrds.	Total L1 + L3 Length in./thrds.	L2 Dim. Effective Threads in./thrds.
1/2"	0.320/4.48	0.214/3.00	0.534/7.48	0.534/7.47
3/4"	0.339/4.75	0.214/3.00	0.553/7.75	0.546/7.64
1"	0.400/4.60	0.261/3.00	0.661/7.60	0.683/7.85
1-1/4"	0.420/4.83	0.261/3.00	0.681/7.83	0.707/8.13
1-1/2"	0.420/4.83	0.261/3.00	0.681/7.83	0.724/8.32
2"	0.436/5.01	0.261/3.00	0.697/8.01	0.757/8.70