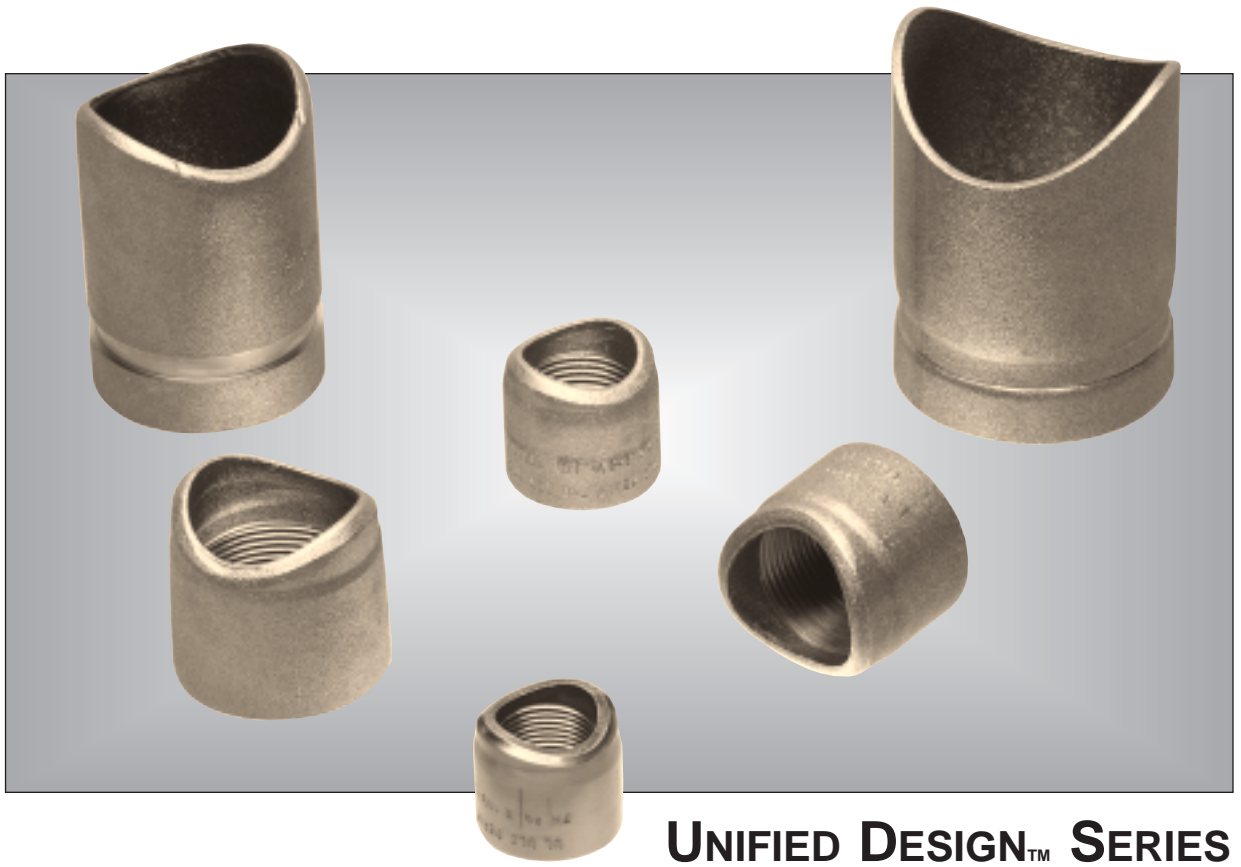




MERIT®

WELD-MISER™ TEE-LET®

WELDING BRANCH OUTLET FITTINGS



UNIFIED DESIGN™ SERIES

meritmfg.com

Factory Mutual System APPROVED  LISTED

MERIT MANUFACTURING CORPORATION
319 Circle of Progress • Pottstown, Pennsylvania 19464-3811

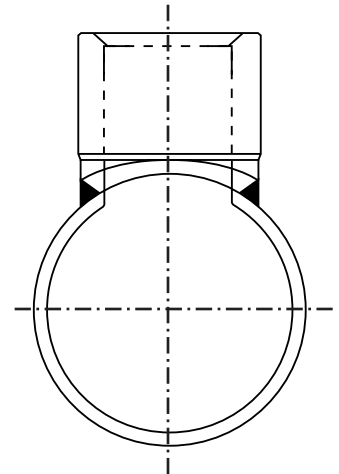
For Fire Protection & Other Low Pressure Piping Systems

Merit Weld-Miser™ Tee-Let® Welding Branch Outlet Fittings offer the user a high strength, low cost forged threaded and grooved line of fittings specifically designed and manufactured to be installed on schedules 5 thru 10, proprietary thin wall flow pipe and standard wall pipe.

Unified Design™ Series

Merit's Unified Design™ Series carries all important design considerations into its entire line of welding branch outlet fittings.

- Merit Weld-Miser Tee-Lets are designed and manufactured to reduce the amount of weld required to install the Tee-Lets on thin wall or proprietary flow pipe. Typically only one weld-pass completes the installation. Merit Tee-Lets install with less weld volume than any other brand of welding outlet fittings for fire sprinkler applications. To accomplish this:
 - The contoured end of the fittings employs a reduced outside diameter. Two major advantages are immediately apparent:
 - The thinner wall on the contoured end permits welding temperatures to be matched to the thickness of the branch line or main thereby insuring complete penetration without cold welds, weld roll-off, burn-through or excessive distortion.
 - On the smaller sizes a heavier section is maintained on the threaded end of the fitting. This protects the threads from damage during shipping and handling prior to installation as well as from weld distortion.
- Each outlet size 1-1/2" and larger, whether male or female threaded, grooved or beveled requires the same hole size in the header pipe. This simplifies the installation process.



General Specifications

- Tee-Let welding outlet fittings are manufactured from highly weldable steel which conforms to the chemical and physical requirements of ASTM A-53, Grades A or B, Type E. Ease of installation is assured when automatic welding equipment is used to install Merit Tee-Lets.
- Threads are cut in accordance with the requirements of ANSI B1.20.1, 300 lb. class, national standard for tapered pipe threads. BS21:1985 BSPT threads are available.
- Tee-Let threaded and grooved welding outlet fittings are UL/ULC Listed, and FM Approved for use in the fire sprinkler systems installed in accordance with the requirements of NFPA Bulletin 13. They are rated for 300 PSI operation in fire sprinkler systems, and higher pressures in other non-critical piping systems. Send for pressure ratings per ASME/ANSI B31.
- Tee-Lets are offered in a wide variety of header sizes. The consolidated header sizes shown in the following charts allow the fittings to be installed on more than one header size, while permitting the first size listed to fit the header perfectly, while a small gap along the longitudinal centerline of the header will appear for the second size listed.

For Your Piping Systems Specify Weld-Miser™ Tee-Let®

Branch Outlet Fittings shall be Merit Weld-Miser™ Tee-Let®, lightweight forged steel, employing low weld volume profile to provide for full penetration welds with minimum burn-through and pipe distortion on schedules 5 thru 10, proprietary thin wall, and standard wall pipe. Threads are to be ANSI B1.20.1, tapered 300 lb. class or BS21:1985, and the bore of the fittings calculated to improve flow. Welding outlets to be UL Listed, FM Approved for use conforming to NFPA, Bulletin 13 and pressure rated for 300 PSI maximum. Tee-Lets® by Merit Manufacturing Corporation, Pottstown, Pennsylvania 19464 U.S.A.

How to order – Use either of the following methods for ordering Merit® Weld-Miser™ Tee-Lets®.

Method No. 1 – Specify quantity desired followed by the part number shown in the “dimensions” chart for the type and size of outlet desired.

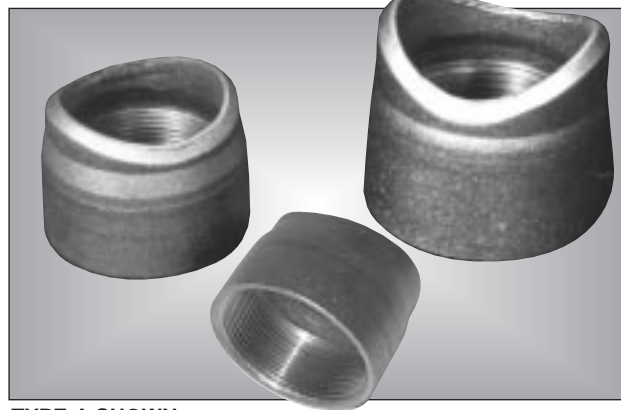
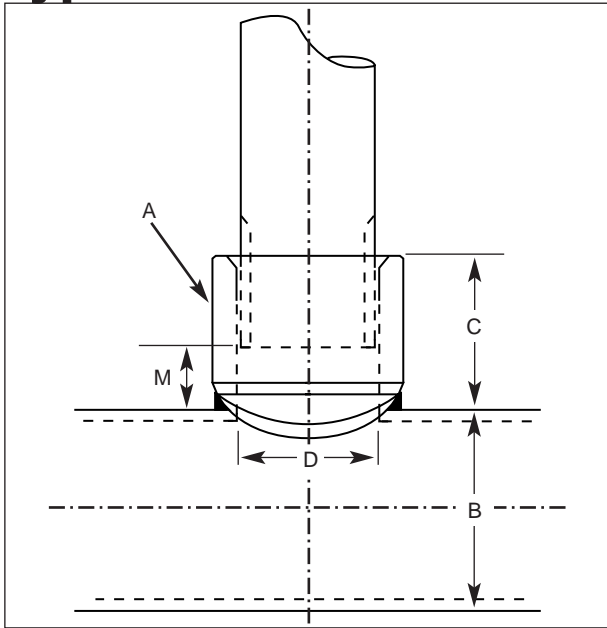
QUANTITY

PART NUMBER

Method No. 2 – Use the following system:

Quantity	Outlet Size	Header Size	Weight	Type End	Merit Tee-Let	Steel Material
Always order a few more than actually required for the job.	Column “A” of chart	Insert size consolidation from Column “B” of chart	Sch. 10 Standard	A – Female Thread B – Male Thread C – Cut Groove C/R – Roll Groove		

Type A - Female Threads



TYPE-A SHOWN

Dimensions & Corresponding Part Numbers

Part Number BSPT	In. / mm					Weight Each Lb. / kgs
	Nominal Outlet Size A	Nominal Header Size B	Outlet Length Size C	Inside Diameter Size D	Make up Size M	
1002002 -	1/4 x 6 x	1-1/4 - 8 6 - 200				0.080 0.04
1005012 -	1/2 x 13 x	1-1/4 - 1-1/2 32 - 40	1.063 27.0	0.700 17.8	0.500 12.7	0.171 0.08
1005015 -		1-1/2 - 2 40 - 50	1.063 27.0	0.700 17.8	0.500 12.7	0.171 0.08
1005020 -		2 - 2-1/2 50 - 65	1.063 27.0	0.700 17.8	0.500 12.7	0.171 0.08
1005025 -		2-1/2 - 8 65 - 200	1.063 27.0	0.700 17.8	0.500 12.7	0.169 0.08
1007012 -	3/4 x 19 x	1-1/4 - 1-1/2 32 - 40	1.125 28.6	0.900 22.9	0.500 12.7	0.260 0.12
1007015 -		1-1/2 - 2 40 - 50	1.125 28.6	0.900 22.9	0.500 12.7	0.260 0.12
1007020 -		2 - 2-1/2 50 - 65	1.125 28.6	0.900 22.9	0.500 12.7	0.260 0.12
1007025 -		2-1/2 - 8 65 - 200	1.125 28.6	0.900 22.9	0.500 12.7	0.256 0.12
1010012 1110012	1 x 25 x	1-1/4 - 1-1/2 32 - 40	1.250 31.8	1.145 29.1	0.500 12.7	0.331 0.15
1010015 1110015		1-1/2 - 2 40 - 50	1.250 31.8	1.145 29.1	0.500 12.7	0.331 0.15
1010020 1110020		2 - 2-1/2 50 - 65	1.250 31.8	1.145 29.1	0.500 12.7	0.320 0.15
1010025 1110025		2-1/2 - 3 65 - 80	1.250 31.8	1.145 29.1	0.500 12.7	0.314 0.14
1010030 1110030		3 - 4 80 - 100	1.250 31.8	1.145 29.1	0.500 12.7	0.309 0.14
1010050 1110050		5 - 8 125 - 200	1.250 31.8	1.145 29.1	0.500 12.7	0.291 0.13
1012012 1112012	1- 1/4 x 32 x	1-1/4 - 1-1/2 32 - 40	1.375 34.9	1.490 37.8	0.500 12.7	0.432 0.19
1012015 1112015		1-1/2 - 2 40 - 50	1.375 34.9	1.490 37.8	0.500 12.7	0.421 0.19
1012020 1112020		2 - 2-1/2 50 - 65	1.375 34.9	1.490 37.8	0.500 12.7	0.421 0.19
1012025 1112025		2-1/2 - 3 65 - 80	1.375 34.9	1.490 37.8	0.500 12.7	0.411 0.19
1012030 1112030		3 - 4 80 - 100	1.375 34.9	1.490 37.8	0.500 12.7	0.389 0.18
1012050 1112050		5 - 8 125 - 200	1.375 34.9	1.490 37.8	0.500 12.7	0.389 0.18

Part Number BSPT	In. / mm					Weight Each Lb. / kgs
	Nominal Outlet Size A	Nominal Header Size B	Outlet Length Size C	Inside Diameter Size D	Make up Size M	
1015015 1115015	1- 1/2 x 40 x	1-1/2 40	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1015020 1115020		2 50	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1015025 1115025		2-1/2 65	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1015030 1115030		3 - 4 80 - 100	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1015040 1115040		4 100	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1015050 1115050		5 - 8 125 - 200	1.625 41.3	1.610 40.9	0.875 22.2	0.477 0.22
1020020 1120020	2 x 50 x	2 50	1.750 44.5	2.067 52.5	0.875 22.2	0.857 0.38
1120025		2-1/2 65	1.750 44.5	2.067 52.5	0.875 22.2	0.829 0.38
1020030 1120030		3 80	1.750 44.5	2.067 52.5	0.875 22.2	0.829 0.39
1020040 1120040		4 100	1.750 44.5	2.067 52.5	0.875 22.2	0.800 0.36
1020050 1120050		5 125	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
1020060 1120060		6 150	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
1020080 1120080		8 200	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
1025025 1125025	2-1/2 x 65 x	2-1/2 65	2.215 54.0	2.469 62.7	1.125 28.6	1.250 0.55
1025030 1125030		3 80	2.215 54.0	2.469 62.7	1.125 28.6	1.200 0.55
1025040 1125040		4 100	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
1025050 1125050		5 125	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
1025060 1125060		6 150	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
1025080 1125080		8 200	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
1025030 -	3 x 80 x	3 80	2.500 63.5	3.068 77.9	1.500 38.1	3.100 1.41
1025040 -		4 100	2.500 63.5	3.068 77.9	1.500 38.1	3.100 1.41
1025050 -		5 125	2.500 63.5	3.068 77.9	1.500 38.1	3.100 1.412
1025060 -		6 150	2.500 63.5	3.068 77.9	1.500 38.1	3.100 1.412
1025080 -		8 200	2.500 63.5	3.068 77.9	1.500 38.1	3.100 1.41
1040040 -	4 x 4 x	4 100	3.000 76.2	4.026 102.3	2.000 50.8	5.000 2.27
1040050 -		5 125	3.000 76.2	4.026 102.3	2.000 50.8	5.000 2.27
1040060 -		6 150	3.000 76.2	4.026 102.3	2.000 50.8	5.000 2.27
1040080 -		8 200	3.000 76.2	4.026 102.3	2.000 50.8	5.000 2.27

Note: Tee-lets are manufactured to fit size-on-size, that is the contoured shape on a given Tee-Let is made to fit perfectly on the first listed header size. If installed on the second header size marked on the fitting, a slight gap of approximately 1/32" will appear along the longitudinal centerline of the header. For example, a 1" x 2 - 2-1/2" Tee-Let, is a 1" outlet fitting manufactured to fit perfectly on the 2" header size listed, while leaving a 1/32" gap along the longitudinal centerline of the 2-1/2" size. If a perfect fit is required for a 2-1/2" header pipe, then a 1" x 2-1/2 - 3" Tee-let would be ordered. Size consolidations are employed to reduce inventory and provide for greater flexibility.

TYPE C

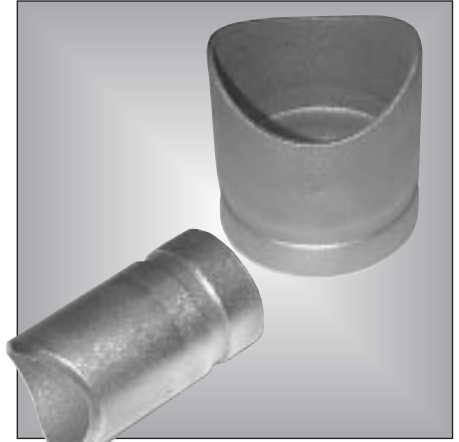
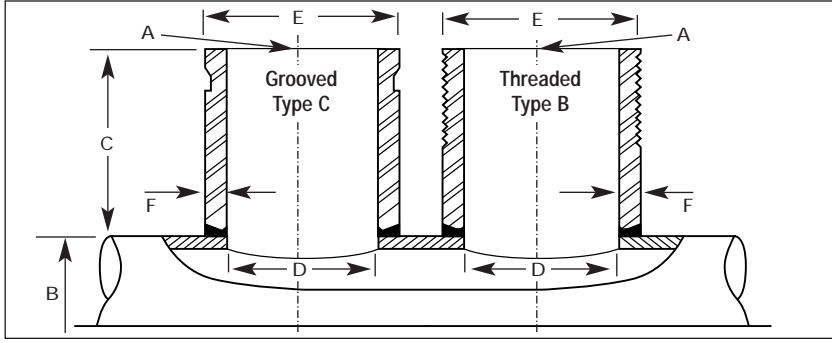
Cut Groove Std. Wt.

TYPE B

Male Thread Std. Wt.

TYPE C/R

Roll Groove Sch. 10



TYPE-C SHOWN

Male Thread Std. Wt.	Cut Groove Std. Wt.	Roll Groove Sch. 10	In. / mm					F Wall Thickness Std. Wt.	Weight Each Lb. / kgs
			Nominal Outlet Size A	Nominal Header Size B	Outlet Length Size C	Inside Diameter Size D	Outside Diameter Size E		
1310012	2010012	2210012	1 x 25 x	1-1/4 - 1-1/2	3	1.049	1.315	0.133	1.500
1310015	2010015	2210015		32 - 40	80	26.6	33.4	3.4	30
1210020	2010020	2210020		1-1/2 - 2	3	1.049	1.315	0.133	1.500
1310025	2010025	2210025		2 - 2-1/2	3	1.049	1.315	0.133	1.500
1310050	2010050	2210050		40 - 50	80	26.6	33.4	3.4	30
1312012	2012012	2212012	1-1/4 x 32 x	2-1/2 - 4	3	1.049	1.315	0.133	1.500
1312015	2012015	2212015		5 - 8	3	1.049	1.315	0.133	1.500
1212020	2012020	2212020		65 - 100	80	26.6	33.4	3.4	30
1312025	2012025	2212025		1-1/4	3	1.368	1.660	0.140	1.500
1312050	2012050	2212050		32	80	34.7	42.2	3.6	30
1315015	2015015	2215015		1-1/2	3	1.368	1.660	0.140	1.500
1215020	2015020	2215020		40	80	34.7	42.2	3.6	30
1315025	2015025	2215025		2 - 2-1/2	3	1.368	1.660	0.140	1.500
1315030	2015030	2215030		50 - 65	80	34.7	42.2	3.6	30
1315050	2015050	2215050		3 - 4	3	1.368	1.660	0.140	1.500
1320020	2020020	-	2 x 50 x	80 - 100	80	34.7	42.2	3.6	30
1320025	2020025	-		5 - 8	3	1.368	1.660	0.140	1.500
1320030	2020030	-		125 - 200	80	34.7	42.2	3.6	30
1320035	2020040	-		1-1/2	3	1.610	1.900	0.145	1.500
1320050	2020050	-		40	80	40.9	48.3	3.7	30
1320060	2020060	-		2	3	1.610	1.900	0.145	1.500
1320080	2020080	-		50	80	40.9	48.3	3.7	30
-	-	-		2-1/2	3	1.610	1.900	0.145	1.500
-	-	-		65	80	40.9	48.3	3.7	30
-	-	-		3	3	2.067	2.375	0.154	1.500

Dimensions & Corresponding Part Numbers

Male Thread Std. Wt.	Cut Groove Std. Wt. Metric	Roll Groove Sch. 10	In. / mm					Wall Thickness		Weight Each Lb. / kgs		
			Nominal Outlet Size A	Nominal Header Size B	Outlet Length Size C	Inside Diameter Std. Wt. Size D	Sch. 10 Size D	Outside Diameter Size E	Std. F		Sch. 10 F	
1325025	2025025	2225025	2-1/2 x 65 x	2-1/2	3	2.469	2.635	2.875	0.203	0.120	1.500	
1325030	2025030	2225030		65	80	62.7	67.0	76.2	5.0	3.0	30	
1325035	2025040	2225035		3	3	2.469	2.635	2.875	0.203	0.120	1.500	
1325050	2025050	2225050		80	80	62.7	67.0	76.2	5.0	3.0	30	
1325060	2025060	2225060		4	3	2.469	2.635	2.875	0.203	0.120	1.500	
1325080	2025080	2225080		100	80	62.7	67.0	76.2	5.0	3.0	30	
1330025	2030025	2230025		3 x	3	3	3.068	3.260	3.500	0.216	0.120	1.500
1330030	2030030	2230030		80 x	3-1/2	3	3.068	3.260	3.500	0.216	0.120	1.500
1330035	2030035	2230035		85	80	78.0	83.0	88.0	5.0	3.0	30	
1330050	2030050	2230050		4	3	3.068	3.260	3.500	0.216	0.120	1.500	
1340040	2040040	2240040	4 x 100 x	5	3	3.068	3.260	3.500	0.216	0.120	1.500	
1340050	2040050	2240050		125	80	78.0	83.0	88.0	5.0	3.0	30	
1340060	2040060	2240060		6	3	3.068	3.260	3.500	0.216	0.120	1.500	
1340080	2040080	2240080		150	80	78.0	83.0	88.0	5.0	3.0	30	
-	2060060	2260060		6 x	6	4	4.026	4.260	4.500	0.237	0.120	1.500
-	2060080	2260080		150 x	5	4	4.026	4.260	4.500	0.237	0.120	1.500
-	2080080	2280080		8 x	8	4	4.026	4.260	4.500	0.237	0.120	1.500
-	-	-		200 x	125	100	102.0	108.0	114.0	6.0	3.0	30
-	-	-		6	4	4.026	4.260	4.500	0.237	0.120	1.500	
-	-	-		150	100	102.0	108.0	114.0	6.0	3.0	30	
-	2060060	2260060	6	4	6.065	6.357	6.625	0.280	0.134	1.500		
-	2060080	2260080	8	4	6.065	6.357	6.625	0.280	0.134	1.500		
-	2080080	2280080	8 x	8	4	7.981	8.329	8.625	0.322	0.148	1.500	
-	-	-	200 x	200	100	203.0	212.0	213.0	8.0	3.0	30	

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