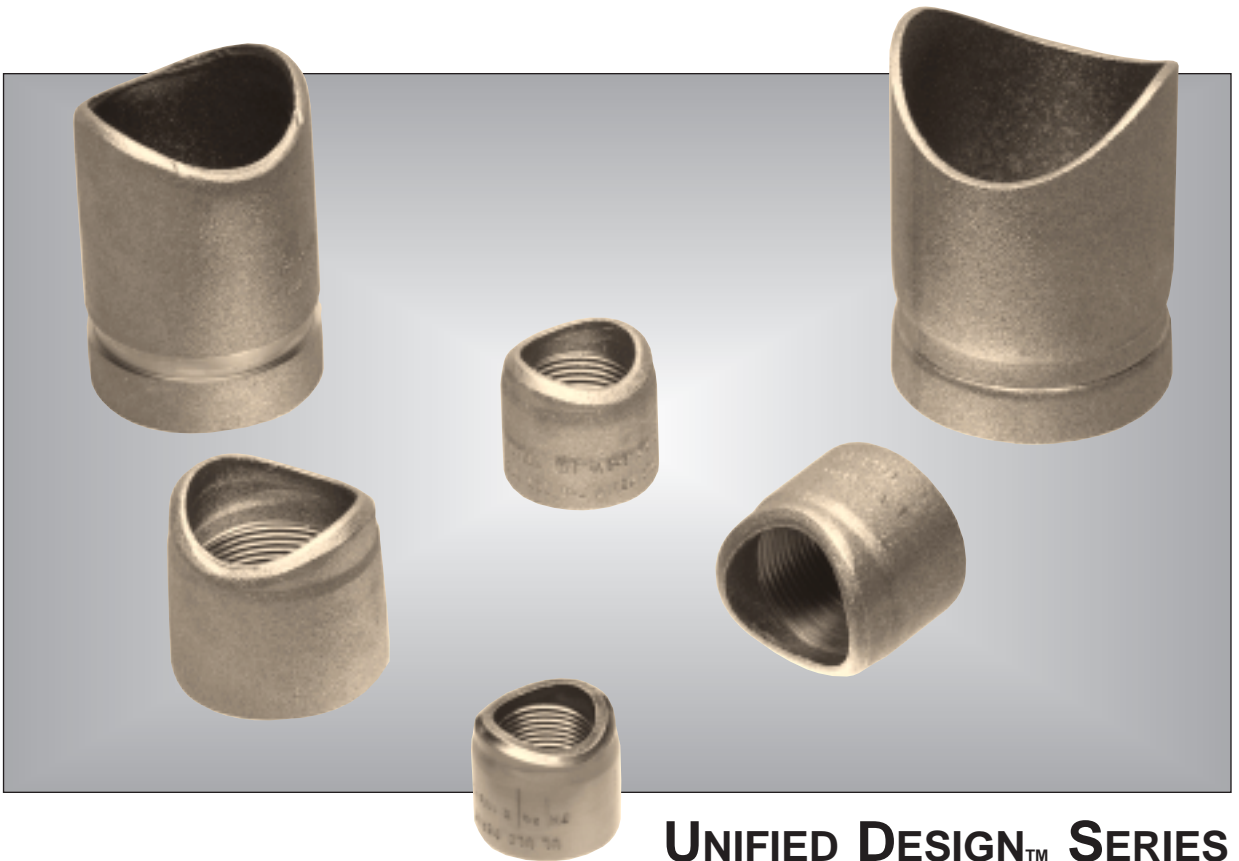




MERIT®

WELD-MISER™ TEE-LET®

WELDING BRANCH OUTLET FITTINGS



UNIFIED DESIGN™ SERIES

meritmfg.com

Factory
Mutual
System
APPROVED



MERIT MANUFACTURING CORPORATION
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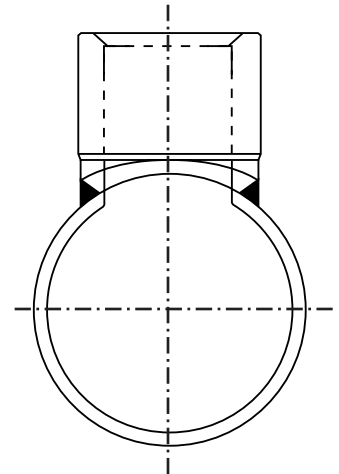
For Fire Protection & Other Low Pressure Piping Systems

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.

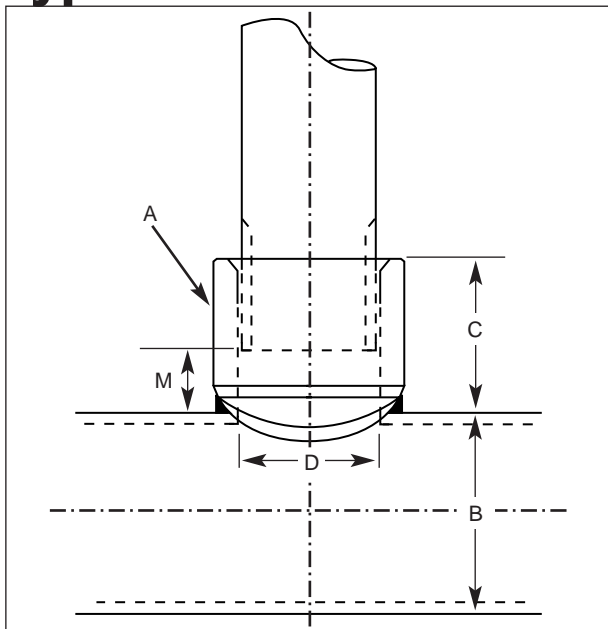
QUANTITY

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

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	1- 1/2 x	1-1/2	1.625	1.610	0.875	0.477
1115015	40 x	40	41.3	40.9	22.2	.022
1015020		2	1.625	1.610	0.875	0.477
1115020		50	41.3	40.9	22.2	.022
1015025		2-1/2	1.625	1.610	0.875	0.477
1115025		65	41.3	40.9	22.2	.022
1015030		3 - 4	1.625	1.610	0.875	0.477
1115030		80 - 100	41.3	40.9	22.2	.022
1015040		4	1.625	1.610	0.875	0.477
1115040		100	41.3	40.9	22.2	.022
1015050		5 - 8	1.625	1.610	0.875	0.477
1115050		125 - 200	41.3	40.9	22.2	.022
1020020	2 x	2	1.750	2.067	0.875	0.857
1120020	50 x	50	44.5	52.5	22.2	0.38
1020025		2-1/2	1.750	2.067	0.875	0.829
1120025		65	44.5	52.5	22.2	0.38
1020030		3	1.750	2.067	0.875	0.829
1120030		80	44.5	52.5	22.2	0.39
1020040		4	1.750	2.067	0.875	0.800
1120040		100	44.5	52.5	22.2	0.36
1020050		5	1.750	2.067	0.875	0.743
1120050		125	44.5	52.5	22.2	0.34
1020060		6	1.750	2.067	0.875	0.743
1120060		150	44.5	52.5	22.2	0.34
1020080		8	1.750	2.067	0.875	0.743
1120080		200	44.5	52.5	22.2	0.34
1025025	2-1/2 x	2-1/2	2.215	2.469	1.125	1.250
1125025	65 x	65	54.0	62.7	28.6	0.55
1025030		3	2.215	2.469	1.125	1.200
1125030		80	54.0	62.7	28.6	0.55
1025040		4	2.215	2.469	1.125	1.150
1125040		100	54.0	62.7	28.6	0.52
1025050		5	2.215	2.469	1.125	1.150
1125050		125	54.0	62.7	28.6	0.52
1025060		6	2.215	2.469	1.125	1.150
1125060		150	54.0	62.7	28.6	0.52
1025080		8	2.215	2.469	1.125	1.150
1125080		200	54.0	62.7	28.6	0.52
1025030	3 x	3	2.500	3.068	1.500	3.100
1125030	80 x	80	63.5	77.9	38.1	1.41
1025040		4	2.500	3.068	1.500	3.100
1125040		100	63.5	77.9	38.1	1.41
1025050		5	2.500	3.068	1.500	3.100
1125050		125	63.5	77.9	38.1	1.412
1025060		6	2.500	3.068	1.500	3.100
1125060		150	63.5	77.9	38.1	1.412
1025080		8	2.500	3.068	1.500	3.100
1125080		200	63.5	77.9	38.1	1.41
1040040	4 x	4	3.000	4.026	2.000	5.000
1120040	4 x	100	76.2	102.3	50.8	2.27
1040050		5	3.000	4.026	2.000	5.000
1120050		125	76.2	102.3	50.8	2.27
1040060		6	3.000	4.026	2.000	5.000
1120060		150	76.2	102.3	50.8	2.27
1040080		8	3.000	4.026	2.000	5.000
1120080		200	76.2	102.3	50.8	2.27

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	1-1/4 - 8				0.080
-	6 x	6 - 200				0.04
1005012	1/2 x	1-1/4 - 1-1/2	1.063	0.700	0.500	0.171
-	13 x	32 - 40	27.0	17.8	12.7	0.08
1005015		1-1/2 - 2	1.063	0.700	0.500	0.171
-		40 - 50	27.0	17.8	12.7	0.08
1005020		2 - 2-1/2	1.063	0.700	0.500	0.171
-		50 - 65	27.0	17.8	12.7	0.08
1005025		2-1/2 - 8	1.063	0.700	0.500	0.169
-		65 - 200	27.0	17.8	12.7	0.08
1007012	3/4 x	1-1/4 - 1-1/2	1.125	0.900	0.500	0.260
-	19 x	32 - 40	28.6	22.9	12.7	0.12
1007015		1-1/2 - 2	1.125	0.900	0.500	0.260
-		40 - 50	28.6	22.9	12.7	0.12
1007020		2 - 2-1/2	1.125	0.900	0.500	0.260
-		50 - 65	28.6	22.9	12.7	0.12
1007025		2-1/2 - 8	1.125	0.900	0.500	0.256
-		65 - 200	28.6	22.9	12.7	0.12
1010012	1 x	1-1/4 - 1-1/2	1.250	1.145	0.500	0.331
1110012	25 x	32 - 40	31.8	29.1	12.7	0.15
1010015		1-1/2 - 2	1.250	1.145	0.500	0.331
1110015		40 - 50	31.8	29.1	12.7	0.15
1010020		2 - 2-1/2	1.250	1.145	0.500	0.320
1110020		50 - 65	31.8	29.1	12.7	0.15
1010025		2-1/2 - 3	1.250	1.145	0.500	0.314
1110025		65 - 80	31.8	29.1	12.7	0.14
1010030		3 - 4	1.250	1.145	0.500	0.309
1110030		80 - 100	31.8	29.1	12.7	0.14
1010050		5 - 8	1.250	1.145	0.500	0.291
1110050		125 - 200	31.8	29.1	12.7	0.13
1012012	1- 1/4 x	1-1/4 - 1-1/2	1.375	1.490	0.500	0.432
1112012	32 x	32 - 40	34.9	37.8	12.7	.019
1012015		1-1/2 - 2	1.375	1.490	0.500	0.421
1112015		40 - 50	34.9	37.8	12.7	.019
1012020		2 - 2-1/2	1.375	1.490	0.500	0.421
1112020		50 - 65	34.9	37.8	12.7	.019
1012025		2-1/2 - 3	1.375	1.490	0.500	0.411
1112025		65 - 80	34.9	37.8	12.7	.019
1012030		3 - 4	1.375	1.490	0.500	0.389
1112030		80 - 100	34.9	37.8	12.7	.018
1012050		5 - 8	1.375	1.490	0.500	0.389
1112050		125 - 200	34.9	37.8	12.7	.018

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

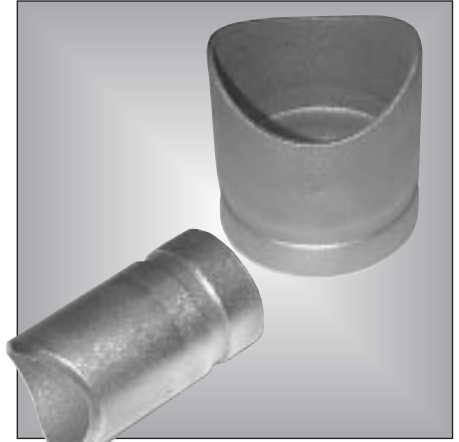
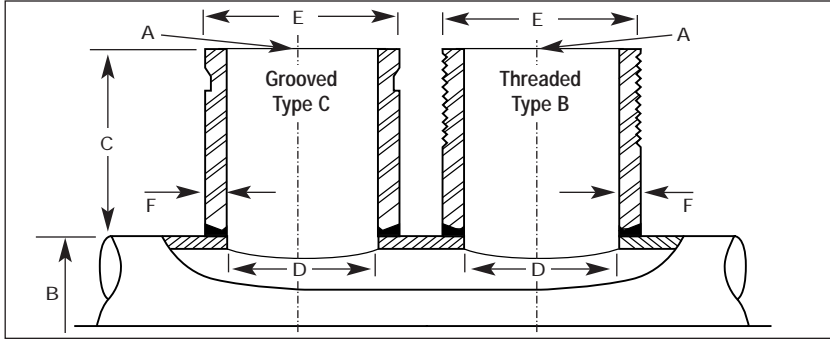
Cut Groove Std. Wt.

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	-		2	3	1.610	1.900	0.145	1.500
1320060	2020060	-		50	80	40.9	48.3	3.7	30
1320080	2020080	-		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
				80	80	52.5	60.3	3.9	30
			4	3	2.067	2.375	0.154	1.500	
			100	80	52.5	60.3	3.9	30	
			5	3	2.067	2.375	0.154	1.500	
			125	80	52.5	60.3	3.9	30	
			6	3	2.067	2.375	0.154	1.500	
			150	80	52.5	60.3	3.9	30	
			8	3	2.067	2.375	0.154	1.500	
			200	80	52.5	60.3	3.9	30	

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	
1330060	2030060	2230060	100	80	78.0	83.0	88.0	5.0	3.0	30		
1330080	2030080	2230080	5	3	3.068	3.260	3.500	0.216	0.120	1.500		
1340040	2040040	2240040	4 x 100 x	6	3	3.068	3.260	3.500	0.216	0.120	1.500	
1340050	2040050	2240050		8	3	3.068	3.260	3.500	0.216	0.120	1.500	
1340060	2040060	2240060		150	80	78.0	83.0	88.0	5.0	3.0	30	
1340080	2040080	2240080		200	80	78.0	83.0	88.0	5.0	3.0	30	
-	2060060	2260060	6 x 150 x	4	4	4.026	4.260	4.500	0.237	0.120	1.500	
-	2060080	2260080		5	4	4.026	4.260	4.500	0.237	0.120	1.500	
-	2080080	2280080		125	100	102.0	108.0	114.0	6.0	3.0	30	
-	2060060	2260060	6	4	4.026	4.260	4.500	0.237	0.120	1.500		
-	2060080	2260080	150	100	102.0	108.0	114.0	6.0	3.0	30		
-	2060080	2260080	8	4	4.026	4.260	4.500	0.237	0.120	1.500		
-	2080080	2280080	200	100	102.0	108.0	114.0	6.0	3.0	30		
-	2060060	2260060	8 x 200 x	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		150	100	155.0	161.5	168.3	7.1	3.0	30	
-	2080080	2280080	200	100	155.0	161.5	168.3	7.1	3.0	30		
-	2080080	2280080	8	4	7.981	8.329	8.625	0.322	0.148	1.500		
-	2080080	2280080	200 x	200	100	203.0	212.0	213.0	8.0	3.0	30	

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319 Circle of Progress
Pottstown, Pennsylvania 19464-3811
(610) 327-4000 • Fax (610) 970-9282
Fax Toll Free 800-543-7013
www.meritmfg.com