Weld-Miser Tee-Let
Welded Outlet Fittings For Fire Protection & Other Low Pressure Piping Systems

Merit Weld-Miser Tee-Let Outlet Welding Branch Outlet Fittings offer the user a high strength, low cost, welded steel, threaded and grooved line of fittings. Tee-Lets are specifically designed and manufactured to be installed on Schedules 5 thru 40 and proprietary thin wall flow pipe.

Merit Tee-Lets are steel welding outlet fittings. The material used in manufacture meets the chemical and physical requirements of ASTM A 53, Grades A or B, Type E. Tee-Lets employ a low weld volume design to provide for either a partial or full penetration weld employing a single pass with minimum burn-through and pipe distortion. Threads are NPT per ASME B1.20.1 or ISO 7/1 Taper as ordered. Tee-Lets are UL Listed and FM Approved for use conforming to the requirements of NFPA 13. When used in fire sprinkler systems, Tee-Lets are rated for 300 psi or 175 psi on 6" EZ-Flow Pipe.

c UL us LISTED FM APPROVED

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

Tee-Let Welded Outlet Fitting (UL VIZU – EX3788 FM Approval Guide Chapter 1 – Pipe Fittings)

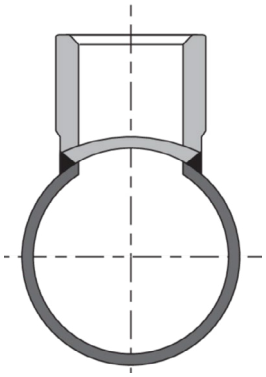
Outlet Model	Outlet Pipe Size	Header Pipe Size**	Rated Pressure
	In.	In.	psig
Tee-Let Type A (F-Threaded End)	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4	1¼ - 8	300
Tee-Let Type C (Grooved End)	1¼ - 8	1¼ - 8	300

**Contact your local ASC Engineered Solutions™ Representative for a complete list of UL Listed proprietary flow pipe and sizes.

MERIT An ASC Engineered Solution

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

Weld-Miser Tee-Let



Unified Design Series

The Merit Unified Design Series from ASC Engineered Solutions 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, burnthrough or excessive distortion.
- On 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 1½" and larger, whether male or female threaded, cut 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 ASME B1.20.1 for NPT tapered pipe threads. ISO 7/1 taper threads are available upon request.
- 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 13.
- 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, permittingthe first size listed to fit the header perfectly, while a small gap along the longitudinal center line of the header will appear for the second size listed.
- Merit Weld-Miser Tee-Lets are identified by a lot number that provides full traceability per ISO 9000 specifications.

For Your Piping System, Specify Weld-Miser Tee-Let

Branch Outlet Fittings shall be Merit Weld-Miser Tee-Let, Lightweight steel, employing low weld volume profile to provide for full penetration welds with minimum burn through and distortion on Schedules 5 thru 40 and proprietary thin wall pipe. Threads may be NPT per ASME B1.20.1 or ISO 7/1 taper, and the bore of the fittings calculated to improve flow. Welding outlets to be UL Listed, FM Approved for use conforming to NFPA 13 and pressure rated for 300 psi maximum.

NOTE: Optional Welding Shield for Weld Miser Tee-Let Type C

If needed, ASC Engineered Solutions offers an optional, reusable weld shield for the 1" and 1 ¼" Weld Miser Tee-Let Type C. The weld shield is used to protect the groove from potential splatter during the welding process.

- 1" Weld Miser Tee-Let Type C Shield PN: WMP-1909
- 1 ¼" Weld Miser Tee-Let Type C Shield PN: WMP-1910

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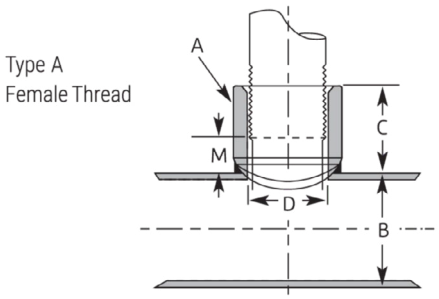
Weld-Miser Tee-Let



Weld-Miser Tee-Let - Type A

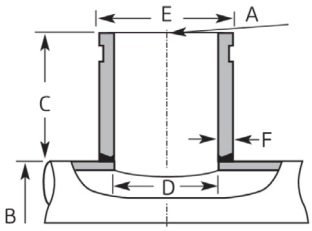
Nominal Outlet A	Nominal Header B	Outlet Length C	Inside Diameter D	Make Up M	Weight Each
In./mm	In./mm	In./mm	In./mm	In./mm	Lbs./kg
¼ x 6 x	1¼ - 8 6 - 200				0.080 0.04
½ x 13 x	1¼ - 2 32 - 50	1.063 27.0	0.700 17.8	0.500 12.7	0.171 0.08
	2 - 2½ 50 - 65	1.063 27.0	0.700 17.8	0.500 12.7	0.171 0.08
	2½ - 8 65 - 200	1.063 27.0	0.700 17.8	0.500 12.7	0.169 0.08
¾ x 19 x	1¼ - 2 32 - 50	1.125 28.6	0.900 22.9	0.500 12.7	0.260 0.12
	2 - 2½ 50 - 65	1.125 28.6	0.900 22.9	0.500 12.7	0.260 0.12
	2½ - 8 65 - 200	1.125 28.6	0.900 22.9	0.500 12.7	0.256 0.12
1 x 25 x	1¼ - 1½ 32 - 40	1.250 31.8	1.145 29.1	0.500 12.7	0.331 0.15
	1½ - 2 40 - 50	1.250 31.8	1.145 29.1	0.500 12.7	0.331 0.15
	2 - 2½ 50 - 65	1.250 31.8	1.145 29.1	0.500 12.7	0.320 0.15
	2½ - 4 65 - 100	1.250 31.8	1.145 29.1	0.500 12.7	0.309 0.14
	5 - 8 125 - 200	1.250 31.8	1.145 29.1	0.500 12.7	0.291 0.13
1¼ x 32 x	1½ - 2 40 - 50	1.375 34.9	1.490 37.8	0.500 12.7	0.421 .019
	2 - 2½ 50 - 65	1.375 34.9	1.490 37.8	0.500 12.7	0.421 .019
	2½ - 3 65 - 80	1.375 34.9	1.490 37.8	0.500 12.7	0.411 .019
	3 - 4 80 - 100	1.375 34.9	1.490 37.8	0.500 12.7	0.389 .018
	5 - 8 125 - 200	1.375 34.9	1.490 37.8	0.500 12.7	0.389 .018
1½ x 40 x	1½ 40	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022
	2 50	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022
	2½ 65	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022
	3 - 4 80 - 100	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022
	4 100	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022
	5 - 8 125 - 200	1.625 41.3	1.610 40.9	0.875 22.2	0.477 .022

Weld-Miser Tee-Let - Type A

Nominal Outlet A	Nominal Header B	Outlet Length C	Inside Diameter D	Make Up M	Weight Each
In./mm	In./mm	In./mm	In./mm	In./mm	Lbs./kg
2 x 50 x	2 50	1.750 44.5	2.067 52.5	0.875 22.2	0.857 0.38
	2½ 65	1.750 44.5	2.067 52.5	0.875 22.2	0.829 0.38
	3 80	1.750 44.5	2.067 52.5	0.875 22.2	0.829 0.39
	4 100	1.750 44.5	2.067 52.5	0.875 22.2	0.800 0.36
	5 125	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
	6 150	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
	8 200	1.750 44.5	2.067 52.5	0.875 22.2	0.743 0.34
2½ x 65 x	2½ 65	2.215 54.0	2.469 62.7	1.125 28.6	1.250 0.55
	3 80	2.215 54.0	2.469 62.7	1.125 28.6	1.200 0.55
	4 100	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
	5 125	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
	6 150	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
	8 200	2.215 54.0	2.469 62.7	1.125 28.6	1.150 0.52
3 x 80 x	3 80	2.500 63.5	3.068 77.9	1.500 38.1	1.750 0.79
	4 100	2.500 63.5	3.068 77.9	1.500 38.1	1.700 0.77
	5 125	2.500 63.5	3.068 77.9	1.500 38.1	1.700 0.77
	6 150	2.500 63.5	3.068 77.9	1.500 38.1	1.650 0.75
	8 200	2.500 63.5	3.068 77.9	1.500 38.1	1.650 0.75
4 x 100 x	4 100	3.000 76.2	4.026 102.3	2.000 50.8	3.000 1.36
	5 125	3.000 76.2	4.026 102.3	2.000 50.8	2.900 1.32
	6 150	3.000 76.2	4.026 102.3	2.000 50.8	2.800 1.27
	8 200	3.000 76.2	4.026 102.3	2.000 50.8	2.800 1.27

Weld-Miser Tee-Let

Type C
Cut Groove
Standard Weight



Weld-Miser Tee-Let – Type C (Nominal Sizes 1" thru 2")

Nominal Outlet A	Nominal Header B	Outlet Length C	Inside Diameter D	Outside Diameter E	Wall Thickness F
In./mm	In./mm	In./mm	In./mm	In./mm	In./mm
1 x 25 x	1¼ - 1½ 32 - 40	1½ 40	1.049 26.6	1.315 33.4	0.133 3.4
	1½ -2 40 - 50	1½ 40	1.049 26.6	1.315 33.4	0.133 3.4
	2 - 2½ 50 - 65	1½ 40	1.049 26.6	1.315 33.4	0.133 3.4
	2½ - 4 65 - 100	1½ 40	1.049 26.6	1.315 33.4	0.133 3.4
	5 - 8 125 - 200	1½ 40	1.049 26.6	1.315 33.4	0.133 3.4
1 x 25 x	1¼ - 1½ 32 - 40	3 80	1.049 26.6	1.315 33.4	0.133 3.4
	1½ -2 40 - 50	3 80	1.049 26.6	1.315 33.4	0.133 3.4
	2 - 2½ 50 - 65	3 80	1.049 26.6	1.315 33.4	0.133 3.4
	2½ - 4 65 - 100	3 80	1.049 26.6	1.315 33.4	0.133 3.4
	5 - 8 125 - 200	3 80	1.049 26.6	1.315 33.4	0.133 3.4
1¼ x 32 x	1¼ 32	1½ 40	1.368 34.7	1.660 42.2	0.140 3.6
	1½ 40	1½ 40	1.368 34.7	1.660 42.2	0.140 3.6
	2 - 2½ 50 - 65	1½ 40	1.368 34.7	1.660 42.2	0.140 3.6
	3 - 4 80 - 100	1½ 40	1.368 34.7	1.660 42.2	0.140 3.6
	5 - 8 125 - 200	1½ 40	1.368 34.7	1.660 42.2	0.140 3.6

continued

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 - 2½" 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 2½" size. If a perfect fit is required for a 2½" header pipe, then a 1" x 2½ - 3" Tee-Let would be ordered. Size consolidations are employed to reduce inventory and provide for greater flexibility. Tee-Let welding shield for 1" and 1¼" Type C outlets are available as needed. See Page 2 for details.

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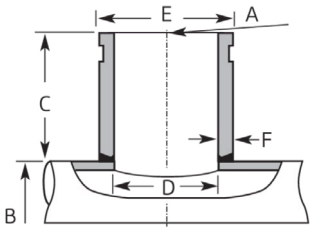
Weld-Miser Tee-Let

Type C
Cut Groove
Standard Weight



Weld-Miser Tee-Let – Type C (Nominal Sizes 1" thru 2")

Nominal Outlet A	Nominal Header B	Outlet Length C	Inside Diameter D	Outside Diameter E	Wall Thickness F
In./mm	In./mm	In./mm	In./mm	In./mm	In./mm
1¼ x 32 x	1¼ 32	3 80	1.368 34.7	1.660 42.2	0.140 3.6
	1½ 40	3 80	1.368 34.7	1.660 42.2	0.140 3.6
	2 - 2½ 50 - 65	3 80	1.368 34.7	1.660 42.2	0.140 3.6
	3 - 4 80 - 100	3 80	1.368 34.7	1.660 42.2	0.140 3.6
	5 - 8 125 - 200	3 80	1.368 34.7	1.660 42.2	0.140 3.6
1½ x 40 x	1½ 40	3 80	1.610 40.9	1.900 48.3	0.145 3.6
	2 50	3 80	1.610 40.9	1.900 48.3	0.145 3.6
	2½ 65	3 80	1.610 40.9	1.900 48.3	0.145 3.6
	3 - 4 80 - 100	3 80	1.610 40.9	1.900 48.3	0.145 3.6
	5 - 8 125 - 200	3 80	1.610 40.9	1.900 48.3	0.145 3.6
2 x 50 x	2 50	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	2½ 65	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	3 80	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	4 100	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	5 125	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	6 150	3 80	2.067 52.5	2.375 60.3	0.154 3.9
	8 200	3 80	2.067 52.5	2.375 60.3	0.154 3.9

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 - 2½" 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 2½" size. If a perfect fit is required for a 2½" header pipe, then a 1" x 2½ - 3" Tee-Let would be ordered. Size consolidations are employed to reduce inventory and provide for greater flexibility. Tee-Let welding shield for 1" and 1¼" Type C outlets are available as needed. See Page 2 for details.

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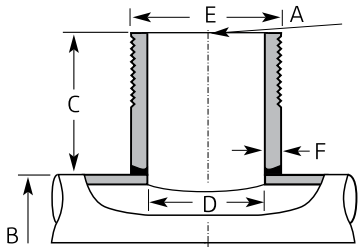
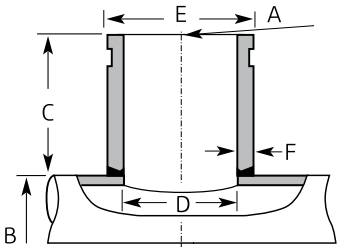
Weld-Miser Tee-Let

Type B
Male Thread
Standard Weight



Type C
Cut Groove
Standard Weight



Weld-Miser Tee-Let - Type C and C/R (Nominal Sizes 2½" thru 8")

Nominal Outlet A	Nominal Header B	Outlet Length C	Inside Diameter - D		Outside Diameter E	Wall Thickness - F	
			Standard Weight	Schedule 10		Standard Weight	Schedule 10
In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm
2½ x 65 x	2½ 65	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
	3 80	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
	4 100	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
	5 125	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
	6 175	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
	8 200	3 80	2.469 62.7	2.635 67.0	2.875 76.2	0.203 5.0	0.120 3.0
3 x 80 x	3 80	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
	3½ 85	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
	4 100	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
	5 125	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
	6 150	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
	8 200	3 80	3.068 78.0	3.260 83.0	3.500 88.0	0.216 5.0	0.120 3.0
4 x 100 x	4 100	4 100	4.026 102.0	4.260 108.0	4.500 114.0	0.237 6.0	0.120 3.0
	5 125	4 100	4.026 102.0	4.260 108.0	4.500 114.0	0.237 6.0	0.120 3.0
	6 150	4 100	4.026 102.0	4.260 108.0	4.500 114.0	0.237 6.0	0.120 3.0
	8 200	4 100	4.026 102.0	4.260 108.0	4.500 114.0	0.237 6.0	0.120 3.0
6 x 150 x	6 150	4 100	6.065 155.0	6.357 161.5	6.625 168.3	0.280 7.1	0.134 3.0
	8 200	4 100	6.065 155.0	6.357 161.5	6.625 168.3	0.280 7.1	0.134 3.0
8 x 200 x	8 200	4 100	7.981 203.0	8.329 212.0	8.625 213.0	0.322 8.0	0.148 3.0

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 - 2½" 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 2½" size. If a perfect fit is required for a 2½" header pipe, then a 1" x 2½ - 3" Tee-Let would be ordered. Size consolidations are employed to reduce inventory and provide for greater flexibility.