

Micro Weld Fittings M Series

Features

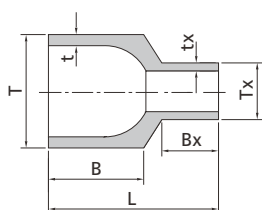
- ◎ Compact design
- ◎ Sizes range from 1/8" to 1/2" and 6 mm to 12 mm
- ◎ Applicable to miniaturized tubing system



Process Specification

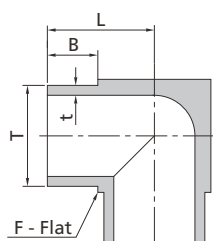
Item	Process Specification	Standard Cleaning and Packaging Process (FC-01) Special Cleaning and Packaging Process (FC-02)	Ultra High Purity Process (FC-03)
Material		316 SS, 316L SS	316L SS, 316L SS VAR, 316L SS VIM-VAR
Wetted Surface Roughness		Ra 10 µin. (0.25 µm)	Ra 5 µin. (0.13 µm)
Polishing Process		Machine finished	Electropolished

Reducing Unions



Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
					L	B	Bx	
1/4	0.035	1/8	0.028	-WU1-TB4-TB2	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	5100 (351)
3/8	0.035	1/4	0.035	-WU1-TB6-TB4	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	3300 (227)
1/2	0.049	1/4	0.035	-WU1-TB8-TB4	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	3700 (254)
1/2	0.049	3/8	0.035	-WU1-TB8-TB6	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	3300 (227)

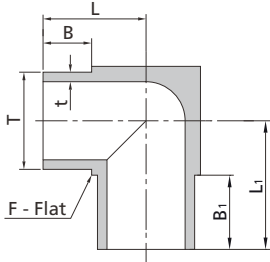
90° Union Elbows



Fractional					
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)		
			L	B	F
1/8	0.028	-WL1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)
1/4	0.035	-WL1-TB4	0.41 (10.3)	0.25 (6.4)	5/16 (7.9)
3/8	0.035	-WL1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)
1/2	0.049	-WL1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)

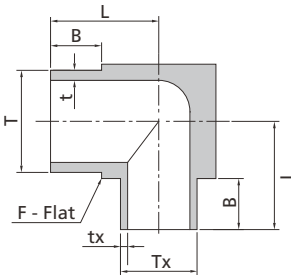
Metric						
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	-WL1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)
8	1.0	-WL1-MTB8	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	-WL1-MTB10	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240 (3483)
12	1.0	-WL1-MTB12	13.5 (0.53)	6.4 (0.25)	14.3 (9/16)	200 (2902)

Extended Leg 90° Union Elbows



Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			B	B1	F	L	L1	
1/4	0.035	-WL1-TB4-1	0.25 (6.4)	0.45 (11.4)	5/16 (7.9)	0.41 (10.3)	0.61 (15.5)	5100 (351)
1/4	0.035	-WL1-TB4-2	0.25 (6.4)	0.50 (12.7)	5/16 (7.9)	0.41 (10.3)	0.66 (16.8)	5100 (351)
1/4	0.035	-WL1-TB4-3	0.45 (11.4)	0.45 (11.4)	5/16 (7.9)	0.61 (15.5)	0.61 (15.5)	5100 (351)
1/4	0.035	-WL1-TB4-4	0.50 (12.7)	0.50 (12.7)	5/16 (7.9)	0.66 (16.8)	0.66 (16.8)	5100 (351)

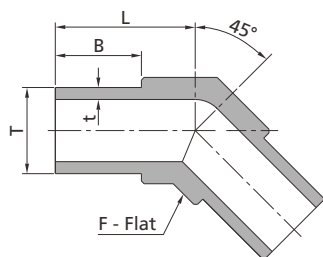
Reducing 90° Union Elbows



Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
					L	B	F	
3/8	0.035	1/4	0.035	-WL1-TB6-TB4	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	-WL1-TB8-TB4	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)
1/2	0.049	3/8	0.035	-WL1-TB8-TB6	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3300 (227)

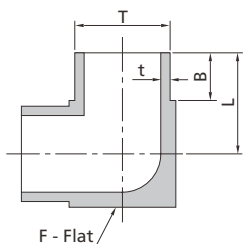
Metric								
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Tx-Tube O.D. (mm)	tx-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
					L	B	F	
8	1.0	6	1.0	-WL1-MTB8-MTB6	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	6	1.0	-WL1-MTB10-MTB6	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240 (3483)
12	1.0	6	1.0	-WL1-MTB12-MTB6	13.5 (0.53)	6.4 (0.25)	14.3 (9/16)	200 (2902)
12	1.0	8	1.0	-WL1-MTB12-MTB8	13.5 (0.53)	6.4 (0.25)	14.3 (9/16)	200 (2902)

45° Union Elbows



Fractional						
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	-WV1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	-WV1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	-WV1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

Tribows

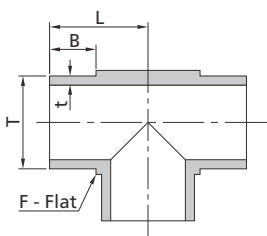


Fractional						
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	-WB1-TB4	0.41 (10.3)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	-WB1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	-WB1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)



Metric						
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	-WB1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)

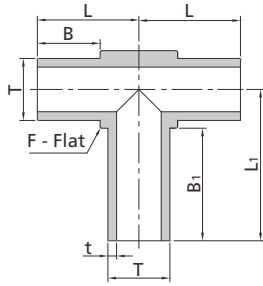
Union Tees



Fractional						
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/8	0.028	-WT1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	8500 (585)
1/4	0.035	-WT1-TB4	0.41 (10.3)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	-WT1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	-WT1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

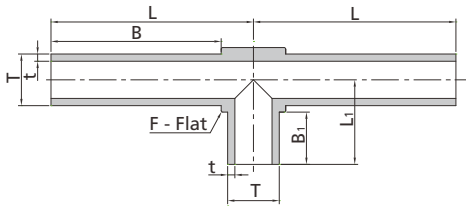
Metric						
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	-WT1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)
8	1.0	-WT1-MTB8	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	-WT1-MTB10	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240 (3483)
12	1.0	-WT1-MTB12	13.5 (0.53)	6.4 (0.25)	14.3 (9/16)	200 (2902)

Extended Branch Leg Union Tees



Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	L ₁	B	B ₁	F	
1/4	0.035	-WT1-TB4-45	0.41 (10.4)	0.61 (15.5)	0.25 (6.4)	0.45 (11.4)	5/16 (7.9)	5100 (351)

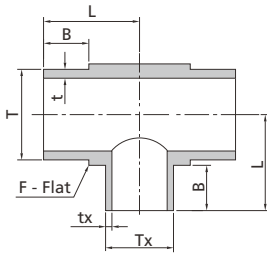
Extended Run Leg Union Tees



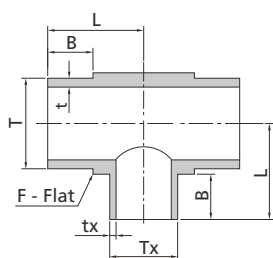
There may be a minor step between run ends at drill intersection.

Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	L ₁	B	B ₁	F	
1/4	0.035	-WT1-TB4-98	0.98 (24.9)	0.41 (10.4)	0.83 (21.1)	0.25 (6.4)	5/16 (7.9)	5100 (351)

Reducing Tees

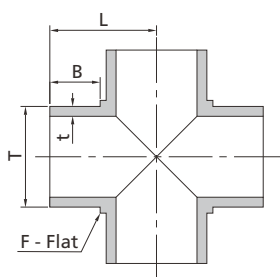


Fractional								
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
					L	B	F	
3/8	0.035	1/4	0.035	-WT1-TB6-TB6-TB4	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	-WT1-TB8-TB8-TB4	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)
1/2	0.049	3/8	0.035	-WT1-TB8-TB8-TB6	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3300 (227)



Metric								
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Tx-Tube O.D. (mm)	tx-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
					L	B	F	
10	1.0	6	1.0	-WT1-MTB10-MTB10-MTB6	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240 (3483)
12	1.0	6	1.0	-WT1-MTB12-MTB12-MTB6	0.53 (13.5)	6.4 (0.25)	14.3 (9/16)	200 (2902)
12	1.0	8	1.0	-WT1-MTB12-MTB12-MTB8	0.53 (13.5)	6.4 (0.25)	14.3 (9/16)	200 (2902)

Union Crosses



Fractional						
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/8	0.028	-WC1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	8500 (585)
1/4	0.035	-WC1-TB4	0.41 (10.3)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	-WC1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	-WC1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

Metric						
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Basic Ordering Number	Dimensions, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	-WC1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)
8	1.0	-WC1-MTB8	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	-WC1-MTB10	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240 (3483)
12	1.0	-WC1-MTB12	13.5 (0.53)	6.4 (0.25)	14.3 (9/16)	200 (2902)