

# Weld Fittings

M, L and A Series



**FITOK**  
Valves and Fittings

[www.fitokgroup.com](http://www.fitokgroup.com)

# Weld Fittings

## M Series



## L Series



## A Series



# Weld Fittings

## Features

- ⦿ Radius junction design with elbows to provide smooth flow path
- ⦿ Precision machined diameter to match tube diameter
- ⦿ Square, burr-free tube weld ends to enhance alignment
- ⦿ Manual or automatic welding equipment both applicable
- ⦿ Tube wall uniformity to promote weld repeatability
- ⦿ Standard surface roughness finished to an average of Ra 10 µin. (0.25 µm) or Ra 5 µin. (0.13 µm) optional
- ⦿ Each fitting marked with size, material and heat code

## Technical Data

- ⦿ Material:

Material	Bar Stock <sup>①</sup>	Forging <sup>②</sup>	Designator
316 SS	ASTM A479/A276	ASTM A182/A314	SS
316L SS			6L
316L VAR SS	ASTM A479/A276 SEMI F20	—	6LV
316L VIM-VAR SS			6LW

① Only for straight configurations and all M Series weld fittings.

② Includes all elbows, crosses, and tees, excluding M Series weld fittings.

- ⦿ Working Pressure:

- a. Working pressures shown in the Catalog are calculated according to ASME B31.3 and B31.1 at ambient temperature.
- b. To get the allowable working pressure at elevated temperature, use the allowable working pressure at ambient temperature to multiply the elevated temperature factors. Please refer to Table 22 - Elevated Temperature Factors in the FITOK Catalog [Tubing and Pipes](#) for the elevated temperature factors.

- ⦿ Working Temperature:

Material	Minimum Temperature	Max. Temperature
316 SS	-325°F (-198°C)	1000°F (538°C)
316L SS	-325°F (-198°C)	850°F (454°C)
316L VAR SS		
316L VIM-VAR SS		

## Ordering Information

- ⦿ Add the material designator as a prefix, Cleaning and Packaging code as a suffix to the basic ordering number to get the complete ordering number.
- ⦿ Cleaning and Packaging
  - a. FC-01 Standard Cleaning and Packaging is applied to all the fittings for general industry. No suffix is needed.
  - b. FC-02 Special Cleaning and Packaging is following ASTM G93 Level C. Add a suffix of "-F2" when needed.
  - c. FC-03 Ultra-High Purity Process Specification is applied to products with wetted surface roughness finished to an average of Ra 5 µin. (0.13 µm). Add a suffix of "-F3" when needed.

Example: For 1/2" 316L VAR SS Union Tee with FC-03 Ultra-High Purity Process Specification, the ordering number is 6LV-WT1-TB8-F3.

## Cautions

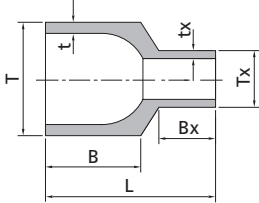
- ⦿ Dimensions are for reference only and are subject to change.
- ⦿ Welding of the same material is more advisable considering the same coefficients of expansion, lower possibility of poor weld, out-of-roundness or dimensional changes.
- ⦿ Tungsten Inert Gas Welding (TIG) is recommended.

# M Series Micro Weld Fittings

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

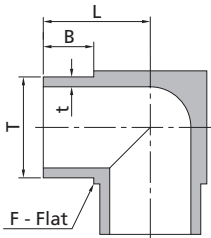


## Reducing Unions



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
					L	B	Bx	
1/4	0.035	1/8	0.028	6LV-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	6LV-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	6LV-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	6LV-WU1-TB8-TB6	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	3300 (227)

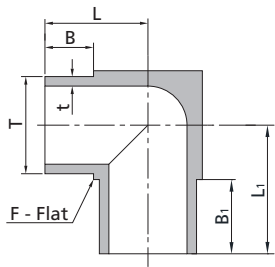
## 90° Union Elbows



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/8	0.028	6LW-WL1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	8500 (585)
1/4	0.035	6LW-WL1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	6LW-WL1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	6LW-WL1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

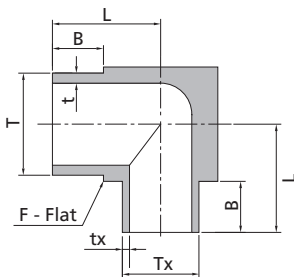
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	6LW-WL1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)
8	1.0	6LW-WL1-MTB8	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	6LW-WL1-MTB10	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240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

## Extended Leg 90° Union Elbows



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			B	B1	F	L	L1	
1/4	0.035	6LW-WL1-TB4-1	0.25 (6.4)	0.45 (11.4)	5/16 (7.9)	0.41 (10.4)	0.61 (15.5)	5100 (351)
1/4	0.035	6LW-WL1-TB4-2	0.25 (6.4)	0.50 (12.7)	5/16 (7.9)	0.41 (10.4)	0.66 (16.8)	5100 (351)
1/4	0.035	6LW-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	6LW-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)

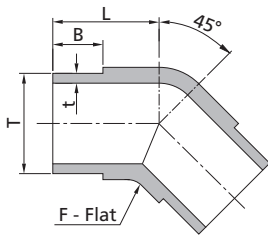
## Reducing 90° Union Elbows



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
					L	B	F	
3/8	0.035	1/4	0.035	6LW-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	6LW-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	6LW-WL1-TB8-TB6	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3300 (227)

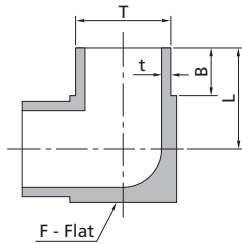
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Tx-Tube O.D. (mm)	tx-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
					L	B	F	
8	1.0	6	1.0	6LW-WL1-MTB8-MTB6	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	6	1.0	6LW-WL1-MTB10-MTB6	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)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

## 45° Union Elbows



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	6LW-WV1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	6LW-WV1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	6LW-WV1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

## Tribows

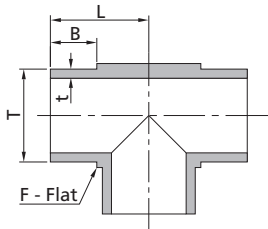


T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	6LW-WB1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	6LW-WB1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	6LW-WB1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)



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

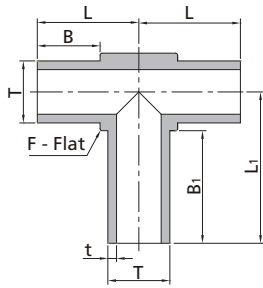
## Union Tees



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working pressure psig (bar)
			L	B	F	
1/8	0.028	6LW-WT1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	8500 (585)
1/4	0.035	6LW-WT1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	6LW-WT1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	6LW-WT1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

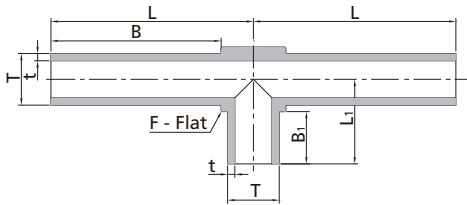
T-Tube O.D. (mm)	t-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working pressure bar (psig)
			L	B	F	
6	1.0	6LW-WT1-MTB6	10.4 (0.41)	6.4 (0.25)	7.9 (5/16)	420 (6095)
8	1.0	6LW-WT1-MTB8	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	310 (4499)
10	1.0	6LW-WT1-MTB10	11.9 (0.47)	6.4 (0.25)	11.1 (7/16)	240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

## Extended Branch Leg Union Tees



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	L <sub>1</sub>	B	B <sub>1</sub>	F	
1/4	0.035	6LW-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)

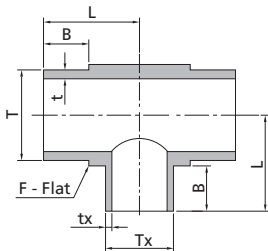
## Extended Run Leg Union Tees



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

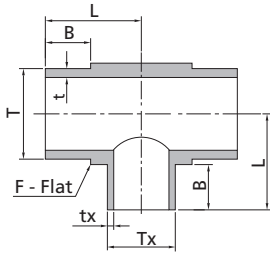
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	L <sub>1</sub>	B	B <sub>1</sub>	F	
1/4	0.035	6LW-WT1-TB4-98	0.98 (24.9)	0.41 (10.4)	0.83 (21.1)	0.25 (6.4)	5/16 (7.9)	5100 (351)

## Reducing Tees



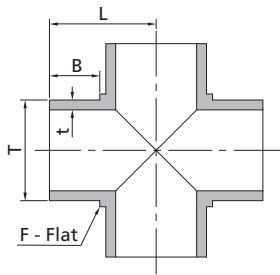
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
					L	B	F	
3/8	0.035	1/4	0.035	6LW-WT1-TB6-TB6-TB4	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	6LW-WT1-TB8-TB8-TB4	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)
1/2	0.049	3/8	0.035	6LW-WT1-TB8-TB8-TB6	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3300 (227)

## 07 Weld Fittings



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

## Union Crosses



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/8	0.028	6LW-WC1-TB2	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	8500 (585)
1/4	0.035	6LW-WC1-TB4	0.41 (10.4)	0.25 (6.4)	5/16 (7.9)	5100 (351)
3/8	0.035	6LW-WC1-TB6	0.47 (11.9)	0.25 (6.4)	7/16 (11.1)	3300 (227)
1/2	0.049	6LW-WC1-TB8	0.53 (13.5)	0.25 (6.4)	9/16 (14.3)	3700 (254)

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

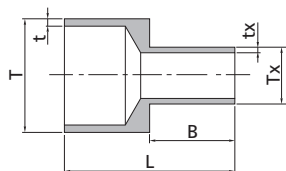


# L Series Tube Butt Weld Fittings

- ⊙ Extended tube design
- ⊙ Machined from forging blanks except for straight configurations
- ⊙ Sizes ranging from 1/4" to 1" and 6 mm to 18 mm



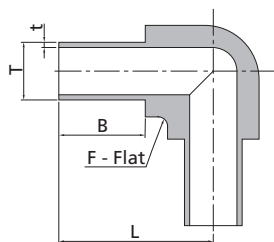
## Reducing Unions



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)		Working Pressure psig (bar)
					L	B	
3/8	0.035	1/4	0.035	6L-WU2-TB6-TB4	1.50 (38.1)	0.75 (19.1)	3300 (227)
1/2	0.049	1/4	0.035	6L-WU2-TB8-TB4	1.50 (38.1)	0.75 (19.1)	3700 (254)
1/2	0.049	3/8	0.035	6L-WU2-TB8-TB6	1.50 (38.1)	0.75 (19.1)	3300 (227)
3/4	0.049	1/2	0.049	6L-WU2-TB12-TB8	1.50 (38.1)	0.75 (19.1)	2400 (165)
1	0.065	1/2	0.049	6L-WU2-TB16-TB8	1.50 (38.1)	0.75 (19.1)	2400 (165)
1	0.065	3/4	0.049	6L-WU2-TB16-TB12	1.50 (38.1)	0.75 (19.1)	2400 (165)

T-Tube O.D. (mm)	t-Wall Thickness (mm)	Tx-Tube O.D. (mm)	tx-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)		Working Pressure bar (psig)
					L	B	
10	1.0	6	1.0	6L-WU2-MTB10-MTB6	38.1 (1.50)	19.1 (0.75)	240 (3483)
10	1.0	8	1.0	6L-WU2-MTB10-MTB8	38.1 (1.50)	19.1 (0.75)	240 (3483)
12	1.0	6	1.0	6L-WU2-MTB12-MTB6	38.1 (1.50)	19.1 (0.75)	200 (2902)
12	1.0	8	1.0	6L-WU2-MTB12-MTB8	38.1 (1.50)	19.1 (0.75)	200 (2902)
12	1.0	10	1.0	6L-WU2-MTB12-MTB10	38.1 (1.50)	19.1 (0.75)	200 (2902)
18	1.5	6	1.5	6L-WU2-MTB18-MTB6	38.1 (1.50)	19.1 (0.75)	200 (2902)
18	1.5	12	1.5	6L-WU2-MTB18-MTB12	38.1 (1.50)	19.1 (0.75)	200 (2902)

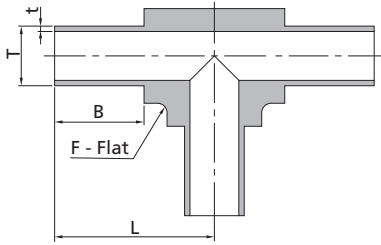
## Union Elbows



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	6L-WL2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	6L-WL2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	6L-WL2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)
3/4	0.049	6L-WL2-TB12	1.46 (37.1)	0.75 (19.1)	15/16 (23.8)	2400 (165)

T-Tube O.D. (mm)	t-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	6L-WL2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	6L-WL2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	6L-WL2-MTB10	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	6L-WL2-MTB12	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)
18	1.5	6L-WL2-MTB18	37.6 (1.48)	19.1 (0.75)	23.8 (15/16)	200 (2902)

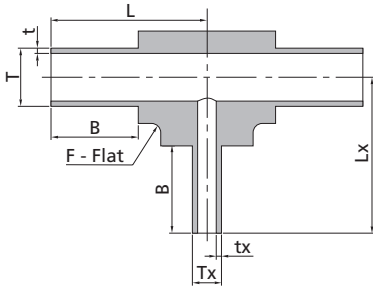
## Union Tees



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	6L-WT2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	6L-WT2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	6L-WT2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)
3/4	0.049	6L-WT2-TB12	1.46 (37.1)	0.75 (19.1)	15/16 (23.8)	2400 (165)

T-Tube O.D. (mm)	t-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	6L-WT2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	6L-WT2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	6L-WT2-MTB10	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	6L-WT2-MTB12	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)
18	1.5	6L-WT2-MTB18	37.6 (1.48)	19.1 (0.75)	23.8 (15/16)	200 (2902)

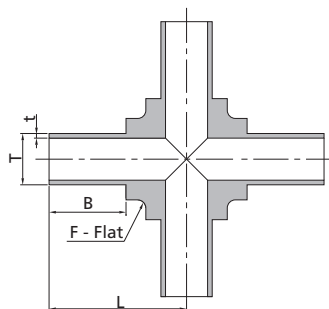
## Reducing Tees



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Tx-Tube O.D. (in.)	tx-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)				Working Pressure psig (bar)
					L	Lx	B	F	
3/8	0.035	1/4	0.035	6L-WT2-TB6-TB6-TB4	1.20 (30.5)	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	6L-WT2-TB8-TB8-TB4	1.34 (34.0)	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)
1/2	0.049	3/8	0.035	6L-WT2-TB8-TB8-TB6	1.34 (34.0)	1.35 (34.3)	0.75 (19.1)	11/16 (17.5)	3700 (254)
3/4	0.049	1/4	0.035	6L-WT2-TB12-TB12-TB4	1.46 (37.1)	1.48 (37.6)	0.75 (19.1)	15/16 (23.8)	2400 (165)
3/4	0.049	3/8	0.035	6L-WT2-TB12-TB12-TB6	1.46 (37.1)	1.35 (34.3)	0.75 (19.1)	15/16 (23.8)	2400 (165)

T-Tube O.D. (mm)	t-Wall Thickness (mm)	Tx-Tube O.D. (mm)	tx-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)				Working Pressure bar (psig)
					L	Lx	B	F	
8	1.0	6	1.0	6L-WT2-MTB8-MTB8-MTB6	31.3 (1.23)	31.3 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	6	1.0	6L-WT2-MTB10-MTB10-MTB6	34.0 (1.34)	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
10	1.0	8	1.0	6L-WT2-MTB10-MTB10-MTB8	34.0 (1.34)	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	6	1.0	6L-WT2-MTB12-MTB12-MTB6	34.0 (1.34)	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)
12	1.0	8	1.0	6L-WT2-MTB12-MTB12-MTB8	34.0 (1.34)	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)

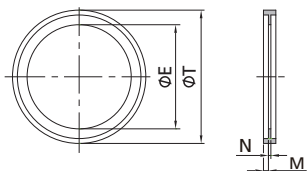
## Union Crosses



T-Tube O.D. (in.)	t-Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	6L-WC2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	6L-WC2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	6L-WC2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)

T-Tube O.D. (mm)	t-Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
			L	B	F	
6	1.0	6L-WC2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	6L-WC2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	6L-WC2-MTB10	34.0 (1.34)	19.1 (0.75)	15.9 (5/8)	240 (3483)
12	1.0	6L-WC2-MTB12	34.0 (1.34)	19.1 (0.75)	15.9 (5/8)	200 (2902)

## Weld Rings

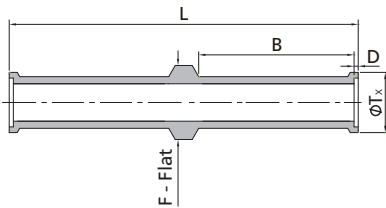


T-Tube O.D. (in.)	Ordering Number	Dimension, in. (mm)			
		E	M	N	T
1/4	6L-WR-4	0.20 (5.1)	0.02 (0.51)	0.01 (0.25)	0.28 (7.1)
3/8	6L-WR-6	0.32 (8.1)	0.02 (0.51)	0.01 (0.25)	0.41 (10.4)
1/2	6L-WR-8	0.42 (10.7)	0.02 (0.51)	0.01 (0.25)	0.54 (13.7)

# A Series Automatic Tube Butt Weld Fittings

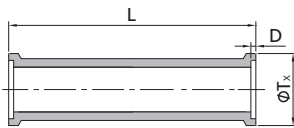
- Extended tube design with locating ring
- Machined from forging blanks except for straight configurations
- Sizes ranging from 1/4" to 1" and 6 mm to 18 mm

## Locator Unions



Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	B	D	F	T <sub>x</sub>	
1/4	0.035	6L-WU2-L-TB4A	1.69 (42.9)	0.75 (19.1)	0.02 (0.51)	0.36 (9.1)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WU2-L-TB6A	1.71 (43.4)	0.75 (19.1)	0.03 (0.76)	0.42 (10.7)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WU2-L-TB8A	1.73 (43.9)	0.75 (19.1)	0.04 (1.0)	0.60 (15.2)	0.55 (14.0)	3700 (254)

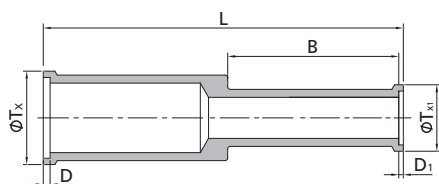
## Unions



Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			Working Pressure psig (bar)
			L	D	T <sub>x</sub>	
1/4	0.035	6L-WU2-TB4A	1.00 (25.4)	0.02 (0.5)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WU2-TB6A	1.00 (25.4)	0.03 (0.8)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WU2-TB8A	1.00 (25.4)	0.04 (1.0)	0.55 (14.0)	3700 (254)
3/4	0.049	6L-WU2-TB12A	1.00 (25.4)	0.04 (1.0)	0.80 (20.3)	2400 (165)
1	0.065	6L-WU2-TB16A	1.25 (31.8)	0.04 (1.0)	1.06 (26.9)	2400 (165)

Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, mm (in.)			Working Pressure bar (psig)
			L	D	T <sub>x</sub>	
6	1	6L-WU2-MTB6A	31.8 (1.25)	0.5 (0.02)	6.9 (0.27)	420 (6095)
8	1	6L-WU2-MTB8A	31.8 (1.25)	0.8 (0.03)	8.9 (0.35)	310 (4499)
10	1	6L-WU2-MTB10A	31.8 (1.25)	0.8 (0.03)	10.9 (0.43)	240 (3483)
12	1	6L-WU2-MTB12A	31.8 (1.25)	1.0 (0.04)	13.2 (0.52)	200 (2902)
18	1.5	6L-WU2-MTB18A	31.8 (1.25)	1.0 (0.04)	19.3 (0.76)	200 (2902)

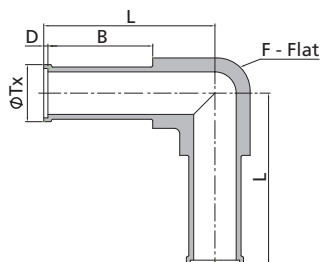
## Reducing Unions



Tube O.D. (in.)	Wall Thickness (in.)	Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)						Working Pressure psig (bar)
					L	B	D	D <sub>1</sub>	T <sub>x</sub>	T <sub>x1</sub>	
3/8	0.035	1/4	0.035	6L-WU2-TB6A-TB4A	1.58 (40.1)	0.75 (19.1)	0.03 (0.8)	0.02 (0.5)	0.41 (10.4)	0.29 (7.4)	3300 (227)
1/2	0.049	1/4	0.035	6L-WU2-TB8A-TB4A	1.58 (40.1)	0.75 (19.1)	0.04 (1.0)	0.02 (0.5)	0.55 (14.0)	0.29 (7.4)	3700 (254)
1/2	0.049	3/8	0.035	6L-WU2-TB8A-TB6A	1.58 (40.1)	0.75 (19.1)	0.04 (1.0)	0.03 (0.8)	0.55 (14.0)	0.41 (10.4)	3300 (227)
3/4	0.049	1/2	0.049	6L-WU2-TB12A-TB8A	1.62 (41.1)	0.75 (19.1)	0.04 (1.0)	0.04 (1.0)	0.80 (20.3)	0.55 (14.0)	2400 (165)

Tube O.D. (mm)	Wall Thickness (mm)	Tube O.D. (mm)	Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)						Working Pressure bar (psig)
					L	B	D	D <sub>1</sub>	T <sub>x</sub>	T <sub>x1</sub>	
8	1	6	1	6L-WU2-MTB8A-MTB6A	39.9 (1.57)	19.1 (0.75)	0.8 (0.03)	0.5 (0.02)	8.90 (0.35)	6.8 (0.27)	310 (4499)
12	1	6	1	6L-WU2-MTB12A-MTB6A	40.1 (1.58)	19.1 (0.75)	1.0 (0.04)	0.5 (0.02)	13.2 (0.52)	6.8 (0.27)	200 (2902)
12	1	8	1	6L-WU2-MTB12A-MTB8A	40.4 (1.59)	19.1 (0.75)	1.0 (0.04)	0.8 (0.03)	13.2 (0.52)	8.9 (0.35)	200 (2902)

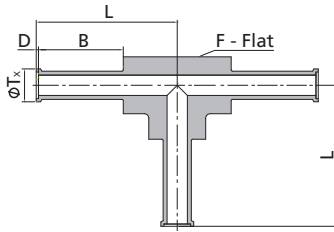
## 90° Union Elbows



Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	B	D	F	T <sub>x</sub>	
1/4	0.035	6L-WL2-TB4A	1.25 (31.8)	0.75 (19.1)	0.02 (0.5)	7/16 (11.1)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WL2-TB6A	1.23 (31.2)	0.75 (19.1)	0.03 (0.8)	7/16 (11.1)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WL2-TB8A	1.38 (35.1)	0.75 (19.1)	0.04 (1.0)	11/16 (17.5)	0.55 (14.0)	3700 (254)
3/4	0.049	6L-WL2-TB12A	1.50 (38.1)	0.75 (19.1)	0.04 (1.0)	15/16 (23.8)	0.80 (20.3)	2400 (165)

Tube O.D. (mm)	Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)					Working Pressure bar (psig)
			L	B	D	F	T <sub>x</sub>	
6	1	6L-WL2-MTB6A	31.8 (1.25)	19.1 (0.75)	0.5 (0.02)	11.1 (7/16)	6.90 (0.27)	351 (5100)
8	1	6L-WL2-MTB8A	32.0 (1.26)	19.1 (0.75)	0.8 (0.03)	11.1 (7/16)	8.90 (0.35)	227 (3300)
10	1	6L-WL2-MTB10A	34.8 (1.37)	19.1 (0.75)	0.8 (0.03)	17.5 (11/16)	10.9 (0.43)	254 (3700)
12	1	6L-WL2-MTB12A	35.1 (1.38)	19.1 (0.75)	1.0 (0.04)	17.5 (11/16)	13.2 (0.52)	199 (2888)
18	1.5	6L-WL2-MTB18A	38.6 (1.52)	19.1 (0.75)	1.0 (0.04)	23.8 (15/16)	19.3 (0.76)	206 (2989)

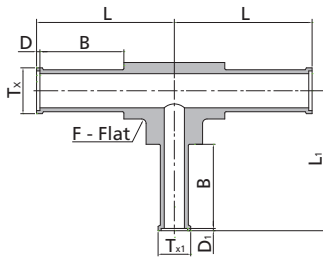
## Union Tees



Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	B	D	F	T <sub>x</sub>	
1/4	0.035	6L-WT2-TB4A	1.25 (31.8)	0.75 (19.1)	0.02 (0.5)	7/16 (11.1)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WT2-TB6A	1.23 (31.2)	0.75 (19.1)	0.03 (0.8)	7/16 (11.1)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WT2-TB8A	1.38 (35.1)	0.75 (19.1)	0.04 (1.0)	11/16 (17.5)	0.55 (14.0)	3500 (241)
3/4	0.049	6L-WT2-TB12A	1.50 (38.1)	0.75 (19.1)	0.04 (1.0)	15/16 (23.8)	0.80 (20.3)	2400 (165)

Tube O.D. (mm)	Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)					Working Pressure bar (psig)
			L	B	D	F	T <sub>x</sub>	
6	1	6L-WT2-MTB6A	31.8 (1.25)	19.1 (0.75)	0.5 (0.02)	11.1 (7/16)	6.90 (0.27)	454 (6589)
8	1	6L-WT2-MTB8A	32.0 (1.26)	19.1 (0.75)	0.8 (0.03)	11.1 (7/16)	8.90 (0.35)	323 (4687)
10	1	6L-WT2-MTB10A	34.8 (1.37)	19.1 (0.75)	0.8 (0.03)	17.5 (11/16)	10.9 (0.43)	254 (3686)
12	1	6L-WT2-MTB12A	35.1 (1.38)	19.1 (0.75)	1.0 (0.04)	17.5 (11/16)	13.2 (0.52)	206 (2989)
18	1.5	6L-WT2-MTB18A	38.6 (1.52)	19.1 (0.75)	1.0 (0.04)	23.8 (15/16)	19.3 (0.76)	206 (2989)

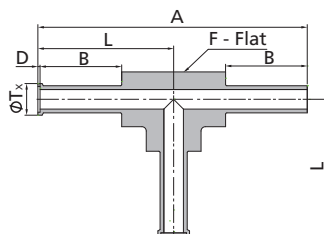
## Reducing Tees



Tube O.D. (in.)	Wall Thickness (in.)	Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)							Working Pressure psig (bar)	
					L	L1	B	D	D1	T <sub>x</sub>	T <sub>x1</sub>		F
3/8	0.035	1/4	0.035	6L-WT2-TB6A-TB6A-TB4A	1.23 (31.2)	1.25 (31.8)	0.75 (19.1)	0.03 (0.8)	0.02 (0.5)	0.41 (10.4)	0.29 (7.4)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	6L-WT2-TB8A-TB8A-TB4A	1.38 (35.1)	1.38 (35.1)	0.75 (19.1)	0.04 (1.0)	0.02 (0.5)	0.55 (14.0)	0.29 (7.4)	11/16 (17.5)	3700 (254)
1/2	0.049	3/8	0.035	6L-WT2-TB8A-TB8A-TB6A	1.38 (35.1)	1.37 (34.8)	0.75 (19.1)	0.04 (1.0)	0.03 (0.8)	0.55 (14.0)	0.41 (10.4)	11/16 (17.5)	3300 (227)
3/4	0.049	3/8	0.035	6L-WT2-TB12A-TB12A-TB6A	1.50 (38.1)	1.50 (38.1)	0.75 (19.1)	0.04 (1.0)	0.03 (0.8)	0.80 (20.3)	0.41 (10.4)	15/16 (23.8)	2400 (165)
3/4	0.049	1/2	0.049	6L-WT2-TB12A-TB12A-TB8A	1.50 (38.1)	1.50 (38.1)	0.75 (19.1)	0.04 (1.0)	0.04 (1.0)	0.80 (20.3)	0.55 (14.0)	15/16 (23.8)	2400 (165)

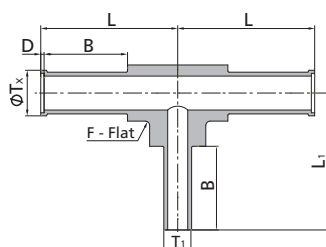
Tube O.D. (mm)	Wall Thickness (mm)	Tube O.D. (mm)	Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)							Working Pressure bar (psig)	
					L	L1	B	D	D1	T <sub>x</sub>	T <sub>x1</sub>		F
12	1	6	1	6L-WT2-MTB12A-MTB12A-MTB6A	35.1 (1.38)	34.5 (1.36)	19.1 (0.75)	0.5 (0.02)	0.5 (0.02)	13.2 (0.52)	6.9 (0.27)	17.5 (11/16)	200 (2902)

## Manifold Tees



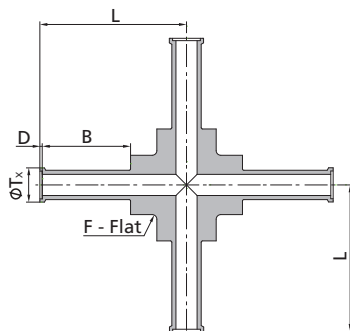
Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)						Working Pressure psig (bar)
			A	L	B	D	F	T <sub>x</sub>	
1/4	0.035	6L-WT2-TB4A-TB4-TB4A	2.48 (63.0)	1.25 (31.8)	0.75 (19.1)	0.02 (0.5)	7/16 (11.1)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WT2-TB6A-TB6-TB6A	2.43 (61.7)	1.23 (31.2)	0.75 (19.1)	0.03 (0.8)	11/16 (17.5)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WT2-TB8A-TB8-TB8A	2.72 (69.1)	1.38 (35.1)	0.75 (19.1)	0.04 (1.0)	11/16 (17.5)	0.55 (14.0)	3700 (254)

## Reducing Tees



Tube O.D. (in.)	Wall Thickness (in.)	Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)						Working Pressure psig (bar)
					L	L <sub>1</sub>	B	D	T <sub>x</sub>	F	
3/8	0.035	1/4	0.035	6L-WT2-TB6A-TB6A-TB4	1.23 (31.2)	1.23 (31.2)	0.75 (19.1)	0.03 (0.8)	0.41 (10.4)	7/16 (11.1)	3300 (227)
1/2	0.049	1/4	0.035	6L-WT2-TB8A-TB8A-TB4	1.38 (35.1)	1.36 (34.5)	0.75 (19.1)	0.04 (1.0)	0.55 (14.0)	11/16 (17.5)	3700 (254)
1/2	0.049	3/8	0.035	6L-WT2-TB8A-TB8A-TB6	1.38 (35.1)	1.35 (34.3)	0.75 (19.1)	0.04 (1.0)	0.55 (14.0)	11/16 (17.5)	3300 (227)

## Union Crosses



Tube O.D. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	B	D	F	T <sub>x</sub>	
1/4	0.035	6L-WC2-TB4A	1.25 (31.8)	0.75 (19.1)	0.02 (0.5)	7/16 (11.1)	0.29 (7.4)	5100 (351)
3/8	0.035	6L-WC2-TB6A	1.23 (31.2)	0.75 (19.1)	0.03 (0.8)	7/16 (11.1)	0.41 (10.4)	3300 (227)
1/2	0.049	6L-WC2-TB8A	1.35 (34.3)	0.75 (19.1)	0.04 (1.0)	5/8 (17.5)	0.55 (14.0)	3700 (254)

Tube O.D. (mm)	Wall Thickness (mm)	Ordering Number	Dimension, mm (in.)					Working Pressure bar (psig)
			L	B	D	F	T <sub>x</sub>	
6	1	6L-WC2-MTB6A	31.8 (1.25)	19.1 (0.75)	0.5 (0.02)	11.1 (7/16)	6.9 (0.27)	420 (6095)
8	1	6L-WC2-MTB8A	31.8 (1.25)	19.1 (0.75)	0.8 (0.03)	11.1 (7/16)	8.9 (0.35)	310 (4499)

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