

# Tube Butt Weld Fittings L Series



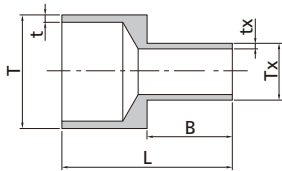
## Features

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

## 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
Wetted Surface Roughness		Ra 10 μin. (0.25 μm)	Ra 5 μin. (0.13 μm)
Polishing Process		Machine finished	Electropolished

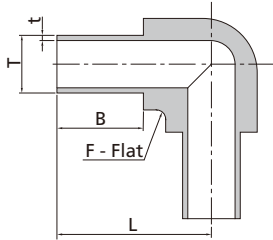
## Reducing Unions



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	
3/8	0.035	1/4	0.035	-WU2-TB6-TB4	1.50 (38.1)	0.75 (19.1)	3300 (227)
1/2	0.049	1/4	0.035	-WU2-TB8-TB4	1.50 (38.1)	0.75 (19.1)	3700 (254)
1/2	0.049	3/8	0.035	-WU2-TB8-TB6	1.50 (38.1)	0.75 (19.1)	3300 (227)
3/4	0.049	1/2	0.049	-WU2-TB12-TB8	1.50 (38.1)	0.75 (19.1)	2400 (165)
1	0.065	1/2	0.049	-WU2-TB16-TB8	1.50 (38.1)	0.75 (19.1)	2400 (165)
1	0.065	3/4	0.049	-WU2-TB16-TB12	1.50 (38.1)	0.75 (19.1)	2400 (165)

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	
10	1.0	6	1.0	-WU2-MTB10-MTB6	38.1 (1.50)	19.1 (0.75)	240 (3483)
10	1.0	8	1.0	-WU2-MTB10-MTB8	38.1 (1.50)	19.1 (0.75)	240 (3483)
12	1.0	6	1.0	-WU2-MTB12-MTB6	38.1 (1.50)	19.1 (0.75)	200 (2902)
12	1.0	8	1.0	-WU2-MTB12-MTB8	38.1 (1.50)	19.1 (0.75)	200 (2902)
12	1.0	10	1.0	-WU2-MTB12-MTB10	38.1 (1.50)	19.1 (0.75)	200 (2902)
18	1.5	6	1.0	-WU2-MTB18-MTB6	38.1 (1.50)	19.1 (0.75)	200 (2902)
18	1.5	12	1.0	-WU2-MTB18-MTB12	38.1 (1.50)	19.1 (0.75)	200 (2902)

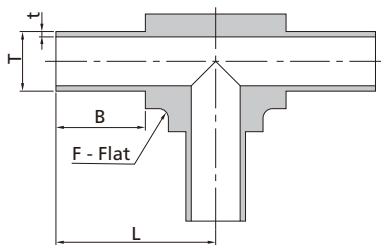
## 90° Union Elbows



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	-WL2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	-WL2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	-WL2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)
3/4	0.049	-WL2-TB12	1.46 (37.1)	0.75 (19.1)	15/16 (23.8)	2400 (165)

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	-WL2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	-WL2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	-WL2-MTB10	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	-WL2-MTB12	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)
18	1.5	-WL2-MTB18	37.6 (1.48)	19.1 (0.75)	23.8 (15/16)	200 (2902)

## 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	
1/4	0.035	-WT2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	-WT2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	-WT2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	3700 (254)
3/4	0.049	-WT2-TB12	1.46 (37.1)	0.75 (19.1)	15/16 (23.8)	2400 (165)

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	-WT2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	-WT2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	-WT2-MTB10	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	-WT2-MTB12	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)
18	1.5	-WT2-MTB18	37.6 (1.48)	19.1 (0.75)	23.8 (15/16)	200 (2902)

Fittings

Valves

Regulators

Filters

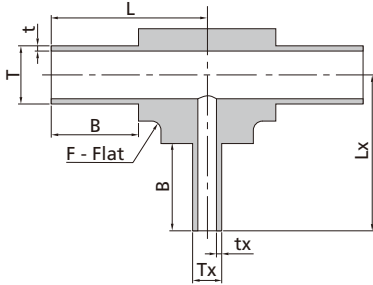
Tubing

Integrated Systems

Other Products

Technical Information

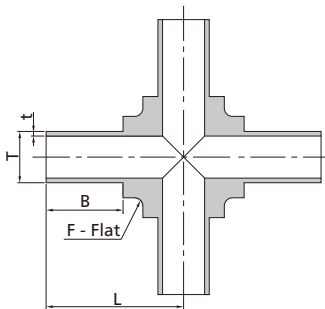
## Reducing Tees



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	Lx	B	F	
3/8	0.035	1/4	0.035	-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	-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	-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	-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	-WT2-TB12-TB12-TB6	1.46 (37.1)	1.35 (34.3)	0.75 (19.1)	15/16 (23.8)	2400 (165)

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	Lx	B	F	
8	1.0	6	1.0	-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	-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	-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	-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	-WT2-MTB12-MTB12-MTB8	34.0 (1.34)	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)

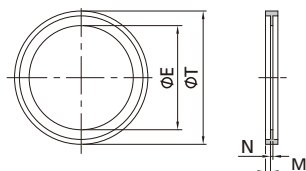
## Union Crosses



Fractional						
T-Tube O.D. (in.)	t-Wall Thickness (in.)	Basic Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	B	F	
1/4	0.035	-WC2-TB4	1.23 (31.2)	0.75 (19.1)	7/16 (11.1)	5100 (351)
3/8	0.035	-WC2-TB6	1.20 (30.5)	0.75 (19.1)	7/16 (11.1)	3300 (227)
1/2	0.049	-WC2-TB8	1.34 (34.0)	0.75 (19.1)	11/16 (17.5)	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	-WC2-MTB6	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	420 (6095)
8	1.0	-WC2-MTB8	31.2 (1.23)	19.1 (0.75)	11.1 (7/16)	310 (4499)
10	1.0	-WC2-MTB10	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	240 (3483)
12	1.0	-WC2-MTB12	34.0 (1.34)	19.1 (0.75)	17.5 (11/16)	200 (2902)

## Weld Rings



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