

# Weld Fittings

## Ultrahigh-Purity and Industrial



- 1/8 to 1 in. and 6 to 18 mm
- 316, 316L, 316L VAR, and 316L VIM/VAR stainless steel materials
- Fittings for manual or automatic welding equipment

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## Technical Data

### Materials

Material	Designator	Specifications
<b>Bar Stock</b> <sup>①</sup>		
316 stainless steel	SS	ASTM A479/ ASME SA479 and ASTM A276
316L stainless steel	316L	
316L VIM/VAR stainless steel	6LV <sup>②</sup>	
<b>Forgings</b> <sup>③</sup>		
316 stainless steel	SS	ASTM A182/ ASME SA182 and ASTM A314
316L stainless steel	316L	

- ① Includes straight configurations and all Micro-Fit weld fittings.
- ② Straight Micro-Fit configurations are 316L VAR.
- ③ Includes all elbows, crosses, and tees, excluding Micro-Fit weld fittings.

### Cleaning

**Standard:** Weld fittings are cleaned to *Swagelok Standard Cleaning and Packaging Specification (SC-10)*.

**Special:** Weld fittings are available specially cleaned and packaged to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C.

**Ultrahigh-purity:** A variety of fittings are available with controlled surface finishes, electropolished, and specially cleaned. The wetted surfaces are finished to 5 µin. (0.13 µm) *R<sub>a</sub>*. For more information, see *Swagelok Ultrahigh-Purity Process Specification (SC-01)*.

Fitting Type	Cleaning Available		
	Standard	Special	Ultrahigh-Purity
Micro-Fit (miniature tube butt weld)	x	x	x
Tube butt weld	x	x	x
Automatic tube weld	x	x	x
Automatic socket weld	x	x	
Tube socket weld	x	x	
Pipe adapter	x	x	

## Pressure Ratings Basis

Catalog pressure ratings shown are for temperatures from –20 to 100°F (–28 to 37°C).

Pressure ratings from –20 to 100°F (–28 to 37°C) are based on an allowable stress value of 20 000 psi (1378 bar) according to ASME B31.3 code. Pressure derating factors for applications at temperatures greater than 100°F (37°C) were determined from this pressure code and are listed in the table below.

Consult ASME Boiler and Pressure Vessel Code, ASME B31.1, B31.3, or other applicable codes for information on weld setup, technique, and additional considerations for welded systems.

The choice of fitting, pipe, and tubing material being welded is critical. Using the same materials will ensure the same coefficients of expansion and will reduce the possibility of poor welds, out-of-roundness, or dimensional changes that are detrimental to a good weld.

Pipe threads are based upon the requirements of ANSI B1.20.1 (NPT) and SAE AS 71051 (ANPT) for tapered pipe threads.

**Table 1:** Elevated Temperature Factors

Material Form	Bar Stock	Forgings
<b>Specification</b>	ASTM A479/ ASME SA479 and ASTM A276	ASTM A182/ ASME SA182 and ASTM A314
<b>Material Type</b>	316 and 316L <sup>①</sup>	316L
<b>°F (°C)</b>	<b>Factor</b>	
–20 (–28) to 100 (37)	1.00	1.00
200 (93)	0.86	0.71
300 (148)	0.78	0.63
400 (204)	0.71	0.57
500 (260)	0.66	0.53
600 (315)	0.63	0.50
650 (343)	0.62	0.49
700 (371)	0.60	0.48
750 (398)	0.60	0.47
800 (426)	0.59	0.46
850 (454)	0.58	0.45
900 (482)	0.57	—
950 (510)	0.57	—
1000 (537)	0.56	—

① 316L limited to 850°F (454°C).

**Conversion Examples:** To determine elevated temperature pressure ratings to B31.3 code rules, multiply the published room temperature ratings by the derating factor at the elevated temperature.

To convert room temperature pressures to B31.1 code rules, multiply the published room temperature rating by 0.94.

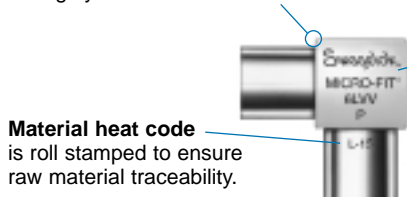
To determine elevated temperature pressure ratings to B31.1 code rules, multiply the published room temperature ratings by 0.94 and then by the evaluated temperature factor.

## Micro-Fit Weld Fittings

### Compact design

- accommodates tubing systems requiring miniaturization
- allows close component spacing
- provides flow and service ratings equal to larger weld fittings.

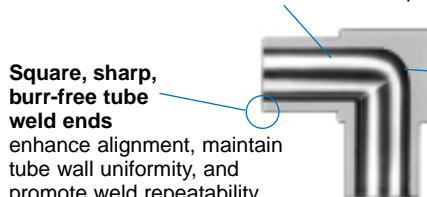
**Rounded body block** helps prevent damage to other components during system fabrication or maintenance.



**Material heat code** is roll stamped to ensure raw material traceability.

**Laser etch marking** identifies manufacturer, material, and, when applicable, ultrahigh-purity cleaning.

**Ultrahigh-purity cleaning** with 5 µin. (0.13 µm) *R<sub>a</sub>* surface finish is available. Standard surface finish is 10 µin. (0.25 µm) *R<sub>a</sub>*.



**Square, sharp, burr-free tube weld ends** enhance alignment, maintain tube wall uniformity, and promote weld repeatability.

**Radius junction** allows for a smooth flow transition and eliminates pockets and entrapment zones.

## Ordering Information and Dimensions

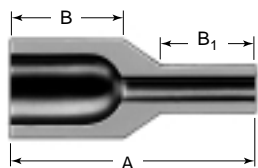
### Ultrahigh-Purity

To order ultrahigh-purity fittings manufactured according to *Swagelok Ultrahigh-Purity Process Specification (SC-01)*, add **P** as a suffix to the ordering number. Example: 6LV-4MW-6-2**P**

### Special Cleaning

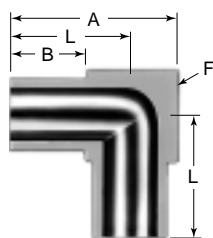
To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number. Example: 6LV-4MW-6-2-**SC11**

### Reducing Union



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions			Pressure Rating
					A	B	B <sub>1</sub>	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/4	0.035	1/8	0.028	6LV-4MW-6-2	0.75 (19.1)	0.42 (10.7)	0.25 (6.4)	5100 (351)
3/8		1/4						6LV-6MW-6-4
1/2	0.049	1/4	0.035	6LV-8MW-6-4				3700 (254)
1/2		3/8		6LV-8MW-6-6				3300 (227)

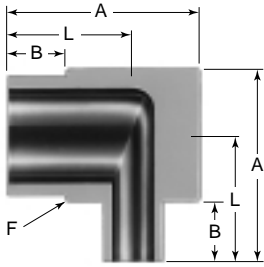
### 90° Union Elbow



Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/8	0.028	6LV-2MW-9	0.56 (14.2)	0.25 (6.4)	5/16	0.41 (10.4)	8500 (585)
1/4	0.035	6LV-4MW-9					5100 (351)
3/8		6LV-6MW-9	0.69 (17.5)		7/16	0.47 (11.9)	3300 (227)
1/2	0.049	6LV-8MW-9	0.81 (20.6)		9/16	0.53 (13.5)	3700 (254)
<i>Dimensions, mm (in.)</i>							<i>bar (psig)</i>
6	1	6LV-6MMW-9	14.2 (0.56)	6.4 (0.25)	(5/16)	10.4 (0.41)	420 (6095)
8		6LV-8MMW-9	17.5 (0.69)				(7/16)
10		6LV-10MMW-9			20.6 (0.81)	(9/16)	
12		6LV-12MMW-9	200 (2902)				

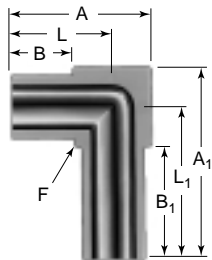
Dimensions are for reference only and are subject to change.

**Reducing 90° Union Elbow**



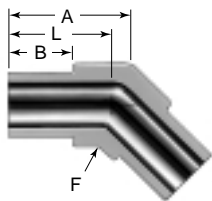
Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
					A	B	F Flat	L	
<b>Dimensions, in. (mm)</b>									<b>psig (bar)</b>
3/8	0.035	1/4	0.035	6LV-6MW-9-4	0.69 (17.5)	0.25 (6.4)	7/16	0.47 (11.9)	3300 (227)
1/2	0.049	1/4		6LV-8MW-9-4	0.81 (20.6)			9/16	0.53 (13.5)
1/2		3/8		6LV-8MW-9-6		0.53 (13.5)	3300 (227)		
<b>Dimensions, mm (in.)</b>									<b>bar (psig)</b>
8	1	6	1	6LV-8MMW-9-6M	17.5 (0.69)	6.4 (0.25)	(7/16)	11.9 (0.47)	310 (4499)
10		6		6LV-10MMW-9-6M	20.6 (0.81)			(9/16)	13.5 (0.53)
12		6		6LV-12MMW-9-6M		20.6 (0.81)	(9/16)		
12		8		6LV-12MMW-9-8M					

**Extended Leg 90° Union Elbow**



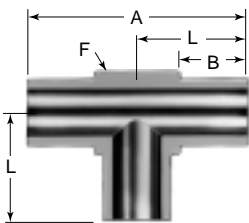
Tube OD	Wall Thickness	Ordering Number	Dimensions							Pressure Rating	
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>		
<b>Dimensions, in. (mm)</b>										<b>psig (bar)</b>	
1/4	0.035	6LV-4MW-9-03442	0.56 (14.2)	0.76 (19.3)	0.25 (6.4)	0.45 (11.4)	5/16	0.41 (10.4)	0.61 (15.5)	5100 (351)	
		6LV-4MW-9-03443		0.81 (20.6)		0.50 (12.7)			0.66 (16.8)		
		6LV-4MW-9-03444		0.76 (19.3)		0.45 (11.4)			0.61 (15.5)		0.61 (15.5)
		6LV-4MW-9-03445		0.81 (20.6)		0.50 (12.7)			0.66 (16.8)		0.66 (16.8)

**45° Union Elbow**



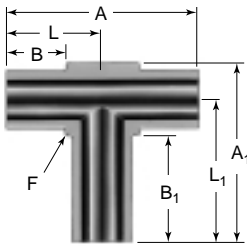
Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<b>Dimensions, in. (mm)</b>							<b>psig (bar)</b>
1/4	0.035	6LV-4MW-5	0.47 (11.9)	0.25 (6.4)	5/16	0.41 (10.4)	5100 (351)
3/8		6LV-6MW-5	0.56 (14.2)			0.47 (11.9)	3300 (227)
1/2		0.049	6LV-8MW-5	0.64 (16.2)	9/16	0.53 (13.5)	3700 (254)

**Union Tee**



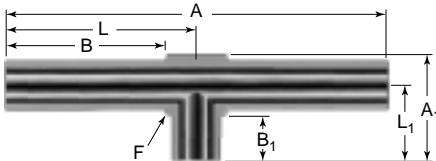
Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<b>Dimensions, in. (mm)</b>							<b>psig (bar)</b>
1/8	0.028	6LV-2MW-3	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	8500 (585)
1/4	0.035	6LV-4MW-3					5100 (351)
3/8		6LV-6MW-3	0.94 (23.9)		7/16	0.47 (11.9)	3300 (227)
1/2	0.049	6LV-8MW-3	1.06 (26.9)		9/16	0.53 (13.5)	3700 (254)
<b>Dimensions, mm (in.)</b>							<b>bar (psig)</b>
6	1	6LV-6MMW-3	20.8 (0.82)	6.4 (0.25)	(5/16)	10.4 (0.41)	420 (6095)
8		6LV-8MMW-3	23.9 (0.94)				(7/16)
10		6LV-10MMW-3			240 (3483)		
12		6LV-12MMW-3	26.9 (1.06)		(9/16)	13.5 (0.53)	200 (2902)

**Extended Branch Leg Union Tee**



Tube OD	Wall Thickness	Ordering Number	Dimensions							Pressure Rating
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>	
<i>Dimensions, in. (mm)</i>										
1/4	0.035	6LV-4MW-3-03446	0.82 (20.8)	0.76 (19.3)	0.25 (6.4)	0.45 (11.4)	5/16	0.41 (10.4)	0.61 (15.5)	5100 (351)

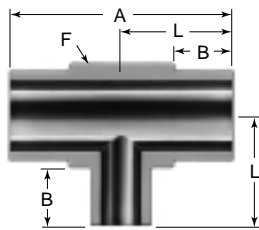
**Extended Run Leg Union Tee**



Tube OD	Wall Thickness	Ordering Number	Dimensions							Pressure Rating
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>	
<i>Dimensions, in. (mm)</i>										
1/4	0.035	6LV-4MW-3-03921	1.96 (49.8)	0.56 (14.2)	0.83 (21.1)	0.25 (6.4)	5/16	0.98 (24.9)	0.41 (10.4)	5100 (351)

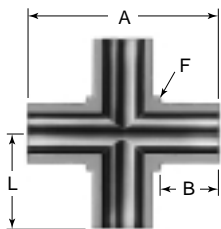
NOTE: There may be a slight mismatch between run ends at drill intersection.

**Reducing Tee**



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
					A	B	F Flat	L	
<i>Dimensions, in. (mm)</i>									
3/8	0.035	1/4	0.035	6LV-6MW-3-6-4	0.94 (23.9)	0.25 (6.4)	7/16	0.47 (11.9)	3300 (227)
1/2	0.049	1/4		6LV-8MW-3-8-4	1.06 (26.9)		9/16	0.53 (13.5)	3700 (254)
1/2		3/8		6LV-8MW-3-8-6		3300 (227)			
<i>Dimensions, mm (in.)</i>									
10	1	6	1	6LV-10MMW-3-10M-6M	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	240 (3483)
12		6		6LV-12MMW-3-12M-6M	26.9 (1.06)		(9/16)	13.5 (0.53)	200 (2902)
12		8		6LV-12MMW-3-12M-8M					

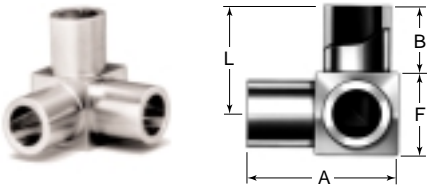
**Union Cross**



Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<i>Dimensions, in. (mm)</i>							
1/8	0.028	6LV-2MW-4	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	8500 (585)
1/4	0.035	6LV-4MW-4			7/16	0.47 (11.9)	3300 (227)
3/8		6LV-6MW-4	9/16		0.53 (13.5)	3700 (254)	
1/2	0.049	6LV-8MW-4					
<i>Dimensions, mm (in.)</i>							
6	1	6LV-6MMW-4	20.6 (0.81)	6.4 (0.25)	(5/16)	10.4 (0.41)	420 (6095)
8		6LV-8MMW-4	23.9 (0.94)		7/16	11.9 (0.47)	310 (4499)
10		6LV-10MMW-4		26.9 (1.06)	(9/16)	13.5 (0.53)	240 (3483)
12		6LV-12MMW-4					200 (2902)

Dimensions are for reference only and are subject to change.

**Tribow**



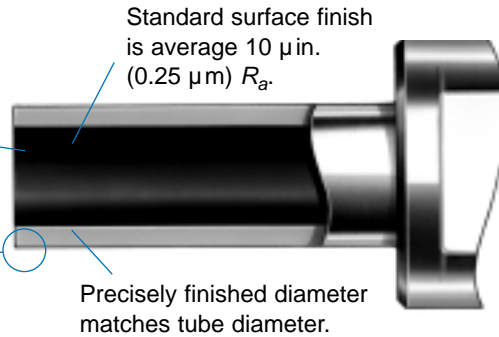
This unique design has weld ends in three planes at 90° to each other. It permits greater flexibility in designing systems, especially where space is limited.

Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/4	0.035	6LV-4MW-91	0.56 (14.2)	0.25 (6.4)	5/16	0.41 (10.4)	5100 (351)
3/8		6LV-6MW-91	0.69 (17.5)		7/16	0.47 (11.9)	3300 (227)
1/2	0.049	6LV-8MW-91	0.81 (20.6)		9/16	0.53 (13.5)	3700 (254)
<i>Dimensions, mm (in.)</i>							<i>bar (psig)</i>
6	1	6LV-6MMW-91	14.2 (0.56)	6.4 (0.25)	(5/16)	10.4 (0.41)	420 (6095)

**Tube Butt Weld Fittings**

Controlled surface finish is available for ultrahigh-purity systems. For more information, see *Swagelok Ultrahigh-Purity Process Specification (SC-01)*.

Tube ends are machined with a square face and corners to enhance alignment and maintain tube wall uniformity.



**Ordering Information and Dimensions**

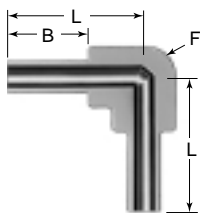
**Ultrahigh-Purity**

To order ultrahigh-purity fittings manufactured according to *Swagelok Ultrahigh-Purity Process Specification (SC-01)*, add **P** as a suffix to the ordering number. Example: 316-4TB7-9**P**

**Special Cleaning**

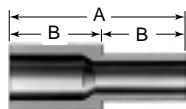
To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number. Example: 316L-4TB7-9-**SC11**

**90° Union Elbow**



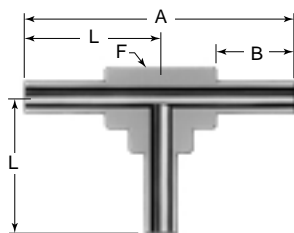
Tube OD	Wall Thickness	Ordering Number	Dimensions			Pressure Rating	
			B	F Flat	L		
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/4	0.035	316L-4TB7-9	0.75 (19.1)	7/16	1.23 (31.2)	5100 (351)	
3/8		316L-6TB7-9			1.20 (30.5)	3300 (227)	
1/2	0.049	316L-8TB7-9		11/16	1.34 (34.0)	3700 (254)	
3/4		316L-12TB7-9	15/16	1.46 (37.1)	2400 (165)		
<i>Dimensions, mm (in.)</i>							<i>bar (psig)</i>
6	1	316L-6MTB7-9	19.1 (0.75)	(7/16)	31.2 (1.23)	420 (6095)	
8		316L-8MTB7-9				310 (4499)	
10		316L-10MTB7-9		(11/16)	34.0 (1.34)	240 (3483)	
12		316L-12MTB7-9				200 (2902)	
18	1.5	316L-18MTB7-9	(15/16)	37.6 (1.48)			

## Reducing Union



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions		Pressure Rating
					A	B	
<b>Dimensions, in. (mm)</b>							
							<i>psig (bar)</i>
3/8	0.035	1/4	0.035	316L-6TB7-6-4	1.50 (38.1)	0.75 (19.1)	3300 (227)
1/2	0.049	1/4	0.049	316L-8TB7-6-4			3700 (254)
1/2		3/8	0.035	316L-8TB7-6-6			3300 (227)
3/4		1/2	0.049	316L-12TB7-6-8			2400 (165)
1	1/2	316L-16TB7-6-8					
1	3/4	316L-16TB7-6-12					
<b>Dimensions, mm (in.)</b>							<i>bar (psig)</i>
10	1	6	1	316L-10MTB7-6-6M	38.1 (1.50)	19.1 (0.75)	240 (3483)
10		8		316L-10MTB7-6-8M			
12		6		316L-12MTB7-6-6M			200 (2902)
12		8		316L-12MTB7-6-8M			
12		10		316L-12MTB7-6-10M			
18		1.5		6			1.5
18	12		316L-18MTB7-6-12M				

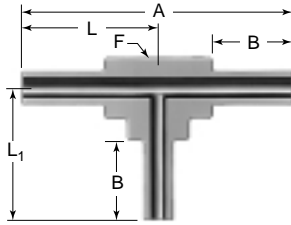
## Union Tee



Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<b>Dimensions, in. (mm)</b>							<i>psig (bar)</i>
1/4	0.035	316L-4TB7-3	2.46 (62.5)	0.75 (19.1)	7/16	1.23 (31.2)	5100 (351)
3/8		316L-6TB7-3	2.40 (61.0)			1.20 (30.5)	3300 (227)
1/2	0.049	316L-8TB7-3	2.68 (68.1)		11/16	1.34 (34.0)	3700 (254)
3/4		316L-12TB7-3	2.91 (73.9)		15/16	1.46 (37.1)	2400 (165)
<b>Dimensions, mm (in.)</b>							<i>bar (psig)</i>
6	1	316L-6MTB7-3	62.5 (2.46)	19.1 (0.75)	(7/16)	31.2 (1.23)	420 (6095)
8		316L-8MTB7-3				310 (4499)	
10		316L-10MTB7-3			240 (3483)		
12		316L-12MTB7-3					
18	1.5	316L-18MTB7-3		(15/16)	37.6 (1.48)	200 (2902)	

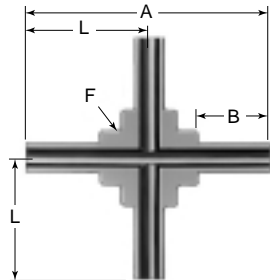
Dimensions are for reference only and are subject to change.

**Reducing Tee**



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions					Pressure Rating
					A	B	F Flat	L	L <sub>1</sub>	
<b>Dimensions, in. (mm)</b>										
3/8	0.035	1/4	0.035	316L-6TB7-3-6-4	2.39 (60.7)	0.75 (19.1)	7/16	1.20 (30.5)	1.23 (31.2)	3300 (227)
1/2	0.049			316L-8TB7-3-8-4	2.67 (67.8)		11/16	1.34 (34.0)	1.34 (34.0)	3700 (254)
		316L-8TB7-3-8-6		2.91 (73.9)	15/16		1.46 (37.1)	1.35 (34.3)	3300 (227)	
3/4		316L-12TB7-3-12-6				1.48 (37.6)		2400 (165)		
	316L-12TB7-3-12-4									
<b>Dimensions, mm (in.)</b>										
8	1	6	1	316L-8MTB7-3-8M-6M	62.2 (2.45)	19.1 (0.75)	(7/16)	31.3 (1.23)	31.3 (1.23)	310 (4499)
10				316L-10MTB7-3-10M-6M	67.8 (2.67)		(11/16)	34.0 (1.34)	34.0 (1.34)	240 (3483)
		316L-10MTB7-3-10M-8M		200 (2902)						
12		316L-12MTB7-3-12M-6M								
		316L-12MTB7-3-12M-8M								

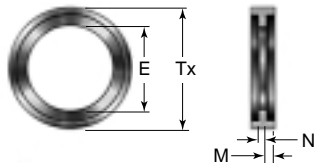
**Union Cross**



Tube OD	Wall Thickness	Ordering Number	Dimensions				Pressure Rating
			A	B	F Flat	L	
<b>Dimensions, in. (mm)</b>							
1/4	0.035	316L-4TB7-4	2.45 (62.2)	0.75 (19.1)	7/16	1.23 (31.2)	5100 (351)
3/8		316L-6TB7-4	2.39 (60.7)			1.20 (30.5)	3300 (227)
1/2	0.049	316L-8TB7-4	2.61 (66.3)		11/16	1.34 (34.0)	3700 (254)
<b>Dimensions, mm (in.)</b>							
6	1	316L-6MTB7-4	62.2 (2.45)	19.1 (0.75)	(7/16)	31.3 (1.23)	420 (6095)
8		316L-8MTB7-4					310 (4499)
10		316L-10MTB7-4	64.8 (2.55)		(5/8)	34.0 (1.34)	240 (3483)
12		316L-12MTB7-4		200 (2902)			

**ATW Weld Ring**

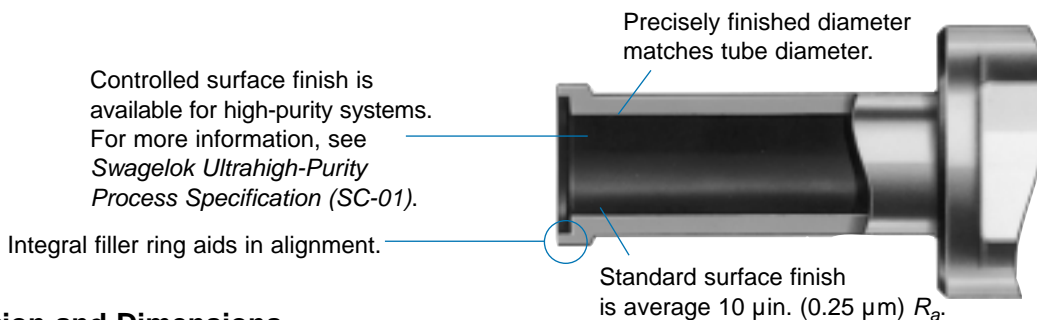
ATW weld rings are used with tube butt weld fittings. The ring helps align weld joints and adds material to the weld zone during manual or orbital welding.



Tube OD	Ordering Number	Dimensions			
		E	M Typical	N	Tx
<b>Dimensions, in. (mm)</b>					
1/4	316L-4-ATW-R	0.20 (5.2)	0.02 (0.51)	0.01 (0.25)	0.28 (7.1)
3/8	316L-6-ATW-R	0.32 (8.1)			0.41 (10.4)
1/2	316L-8-ATW-R	0.42 (10.9)			0.54 (13.7)



## Automatic Tube Weld Fittings



### Ordering Information and Dimensions

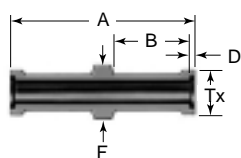
#### Ultrahigh-Purity

To order ultrahigh-purity fittings manufactured according to *Swagelok Ultrahigh-Purity Process Specification (SC-01)*, add **P** as a suffix to the ordering number. Example: 316L-4-ATW-6LP

#### Special Cleaning

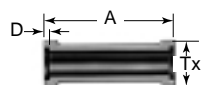
To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number. Example: 316L-4-ATW-6L-SC11

#### Locator Union



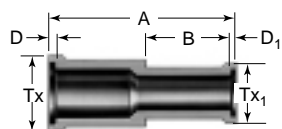
Tube OD	Wall Thickness	Ordering Number	Dimensions					Pressure Rating
			A	B	D	F	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/4	0.035	316L-4-ATW-6L	1.69 (42.9)	0.75 (19.1)	0.02 (0.5)	0.36 (9.1)	0.29 (7.4)	5100 (351)
3/8		316L-6-ATW-6L	1.71 (43.4)		0.03 (0.8)	0.42 (10.7)	0.41 (10.4)	3300 (227)
1/2	0.049	316L-8-ATW-6L	1.73 (43.9)		0.04 (1.0)	0.60 (15.2)	0.55 (14.0)	3700 (254)

#### Union



Tube OD	Wall Thickness	Ordering Number	Dimensions			Pressure Rating	
			A	D	Tx		
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/4	0.035	316L-4-ATW-6	1.00 (25.4)	0.02 (0.5)	0.29 (7.4)	5100 (351)	
3/8		316L-6-ATW-6		0.03 (0.8)	0.41 (10.4)	3300 (227)	
1/2	0.049	316L-8-ATW-6		0.04 (1.0)	0.55 (14.0)	3700 (254)	
3/4		316L-12-ATW-6			0.80 (20.3)	2400 (165)	
1	0.065	316L-16-ATW-6		1.25 (31.8)	1.06 (26.9)		
<i>Dimensions, mm (in.)</i>							<i>bar (psig)</i>
6	1	316L-6-MATW-6	31.8 (1.25)	0.5 (0.02)	6.8 (0.27)	420 (6095)	
8		316L-8-MATW-6		0.8 (0.03)	8.9 (0.35)	310 (4499)	
10		316L-10-MATW-6		10.9 (0.43)	240 (3483)		
12		316L-12-MATW-6		13.2 (0.52)	200 (2902)		
18	1.5	316L-18-MATW-6		1.0 (0.04)	19.3 (0.76)		

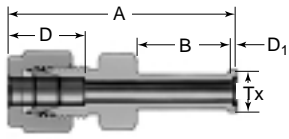
#### Reducing Union



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions						Pressure Rating
					A	B	D	D <sub>1</sub>	Tx	Tx <sub>1</sub>	
<i>Dimensions, in. (mm)</i>											<i>psig (bar)</i>
3/8	0.035	1/4	0.035	316L-6-ATW-6-4	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					0.04 (1.0)	0.55 (14.0)	3700 (254)		
1/2		3/8					0.03 (0.8)	0.41 (10.4)	3300 (227)		
<i>Dimensions, mm (in.)</i>											<i>bar (psig)</i>
8	1	6	1	316L-8-MATW-6-6M	39.9 (1.57)	19.1 (0.75)	0.8 (0.03)	0.5 (0.02)	8.9 (0.35)	6.8 (0.27)	310 (4499)
12		6					1.0 (0.04)	13.2 (0.52)	200 (2902)		
12		8					40.4 (1.59)	0.8 (0.03)	8.9 (0.35)		

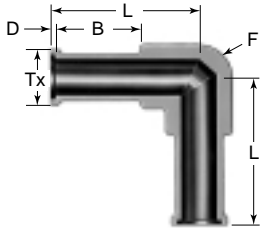
Dimensions are for reference only and are subject to change.

**Swagelok Tube Fitting to Automatic Tube Weld Connector**



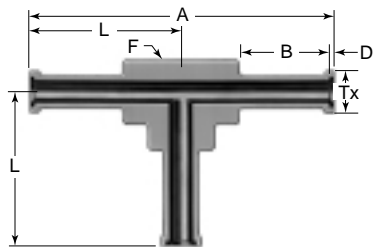
Tube OD	Tube OD	Wall Thickness	Ordering Number	Dimensions					Pressure Rating
				A	B	D	D <sub>1</sub>	T <sub>x</sub>	
<b>Dimensions, in. (mm)</b>									<b>psig (bar)</b>
1/4	1/4	0.035	316L-4-ATW-6-400	1.74 (44.2)	0.75 (19.1)	0.60 (15.2)	0.02 (0.5)	0.29 (7.4)	5100 (351)
3/8	3/8		316L-6-ATW-6-600	1.84 (46.7)		0.66 (16.8)	0.03 (0.8)	0.41 (10.4)	3300 (227)
1/2	1/2	0.049	316L-8-ATW-6-810	1.99 (50.5)		0.90 (22.9)	0.04 (1.0)	0.55 (14.0)	3700 (254)

**90° Union Elbow**



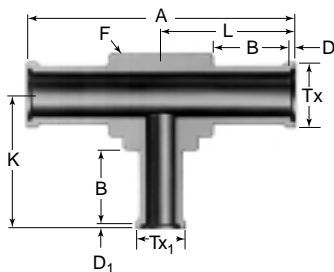
Tube OD	Wall Thickness	Ordering Number	Dimensions					Pressure Rating
			B	D	F Flat	L	T <sub>x</sub>	
<b>Dimensions, in. (mm)</b>								<b>psig (bar)</b>
1/4	0.035	316L-4-ATW-9	0.75 (19.1)	0.02 (0.5)	7/16	1.25 (31.8)	0.29 (7.4)	5100 (351)
3/8		316L-6-ATW-9		0.03 (0.8)		1.23 (31.2)	0.41 (10.4)	3300 (227)
1/2	0.049	316L-8-ATW-9	0.04 (1.0)	11/16	1.38 (35.1)	0.55 (14.0)	3700 (254)	
3/4		316L-12-ATW-9			1.50 (38.1)	0.80 (20.3)	2400 (165)	
1	0.065	316L-16-ATW-9	0.96 (24.4)	1 1/4	1.89 (48.0)	1.06 (26.9)	2400 (165)	
<b>Dimensions, mm (in.)</b>								<b>bar (psig)</b>
6	1	316L-6-MATW-9	19.1 (0.75)	0.5 (0.02)	(7/16)	31.8 (1.25)	6.8 (0.27)	351 (5100)
8		316L-8-MATW-9		0.8 (0.03)		32.0 (1.26)	8.9 (0.35)	227 (3300)
10		316L-10-MATW-9		1.0 (0.04)	(11/16)	34.8 (1.37)	10.9 (0.43)	254 (3700)
12		316L-12-MATW-9				35.1 (1.38)	13.2 (0.52)	199 (2888)
18	1.5	316L-18-MATW-9		(15/16)	38.6 (1.52)	19.3 (0.76)	206 (2989)	

**Union Tee**



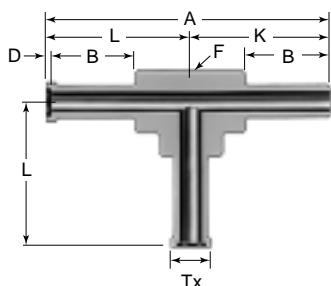
Tube OD	Wall Thickness	Ordering Number	Dimensions					Pressure Rating	
			A	B	D	F Flat	L		T <sub>x</sub>
<b>Dimensions, in. (mm)</b>								<b>psig (bar)</b>	
1/4	0.035	316L-4-ATW-3	2.50 (63.5)	0.75 (19.1)	0.02 (0.5)	7/16	1.25 (31.8)	0.29 (7.4)	5100 (351)
3/8		316L-6-ATW-3	2.46 (62.5)		0.03 (0.8)		1.23 (31.2)	0.41 (10.4)	3300 (227)
1/2	0.049	316L-8-ATW-3	2.76 (70.1)	0.04 (1.0)	11/16	1.38 (35.1)	0.55 (14.0)	3500 (241)	
3/4		316L-12-ATW-3	3.00 (76.2)			1.50 (38.1)	0.80 (20.3)	2400 (165)	
1	0.065	316L-16-ATW-3	3.78 (96.0)	0.96 (24.4)	1 1/4	1.89 (48.0)	1.06 (26.9)	2400 (165)	
<b>Dimensions, mm (in.)</b>								<b>bar (psig)</b>	
6	1	316L-6-MATW-3	63.5 (2.50)	19.1 (0.75)	0.5 (0.02)	(7/16)	31.8 (1.25)	6.8 (0.27)	454 (6589)
8		316L-8-MATW-3	64.0 (2.52)		0.8 (0.03)		32.0 (1.26)	8.9 (0.35)	323 (4687)
10		316L-10-MATW-3	69.6 (2.74)		1.0 (0.04)	(11/16)	34.8 (1.37)	10.9 (0.43)	254 (3686)
12		316L-12-MATW-3	70.1 (2.76)				35.1 (1.38)	13.2 (0.52)	206 (2989)
18	1.5	316L-18-MATW-3	77.2 (3.04)		(15/16)	38.6 (1.52)	19.3 (0.76)	206 (2989)	

**Reducing Tee**



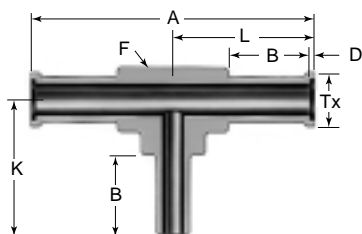
Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions								Pressure Rating							
					A	B	D	D <sub>1</sub>	F Flat	K	L	Tx		Tx <sub>1</sub>						
<i>Dimensions, in. (mm)</i>													<i>psig (bar)</i>							
3/8	0.035	1/4	0.035	316L-6-ATW-3-6-4	2.46 (62.5)	0.75 (19.1)	0.03 (0.8)	0.02 (0.5)	7/16	1.25 (31.8)	1.23 (31.2)	0.41 (10.4)	0.29 (7.4)	3300 (227)						
1/2	0.049	1/4		316L-8-ATW-3-8-4	2.76 (70.1)				0.04 (1.0)	0.03 (0.8)	11/16	1.38 (35.1)		1.38 (35.1)	0.55 (14.0)	0.41 (10.4)	3700 (254)			
1/2		3/8		316L-8-ATW-3-8-6								3.00 (76.2)	0.04 (1.0)	15/16	1.37 (34.8)		1.50 (38.1)	0.80 (20.3)	0.55 (14.0)	3300 (227)
3/4		3/8		316L-12-ATW-3-12-6											3.00 (76.2)		0.04 (1.0)	15/16	1.50 (38.1)	1.50 (38.1)
3/4	1/2	0.049	316L-12-ATW-3-12-8																	
<i>Dimensions, mm (in.)</i>													<i>bar (psig)</i>							
12	1	6	1	316L-12-MATW-3-12M6M	70.1 (2.76)	19.1 (0.75)	0.5 (0.02)	0.5 (0.02)	(11/16)	34.5 (1.36)	35.1 (1.38)	13.2 (0.52)	6.8 (0.27)	200 (2902)						

**Manifold Tee**



Tube OD	Wall Thickness	Ordering Number	Dimensions						Pressure Rating		
			A	B	D	F Flat	K	L		Tx	
<i>Dimensions, in. (mm)</i>									<i>psig (bar)</i>		
1/4	0.035	316L-4-ATW-3-4TB7-4A	2.48 (63.0)	0.75 (19.1)	0.02 (0.5)	7/16	1.23 (31.2)	1.25 (31.8)	0.29 (7.4)	5100 (351)	
3/8		316L-6-ATW-3-6TB7-6A	2.43 (61.7)			0.03 (0.8)	11/16	1.20 (30.5)	1.23 (31.2)	0.41 (10.4)	3300 (227)
1/2		316L-8-ATW-3-8TB7-8A	2.72 (69.1)					0.04 (1.0)	1.34 (34.0)	1.38 (35.1)	0.55 (14.0)

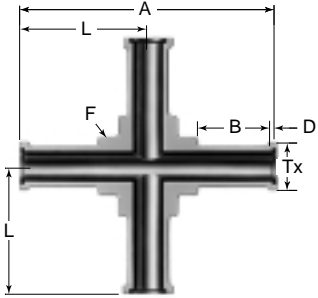
**Reducing Tee**



Tube OD	Wall Thickness	Tube OD	Wall Thickness	Ordering Number	Dimensions						Pressure Rating		
					A	B	D	F Flat	K	L		Tx	
<i>Dimensions, in. (mm)</i>											<i>psig (bar)</i>		
3/8	0.035	1/4	0.035	316L-6-ATW-3-6A-4TB7	2.46 (62.5)	0.75 (19.1)	0.03 (0.8)	7/16	1.23 (31.2)	1.23 (31.2)	0.41 (10.4)	3300 (227)	
1/2	0.049	1/4		316L-8-ATW-3-8A-4TB7	2.76 (70.1)			0.04 (1.0)	11/16	1.36 (34.5)	1.38 (35.1)	0.55 (14.0)	3700 (254)
1/2		3/8		316L-8-ATW-3-8A-6TB7									1.35 (34.3)

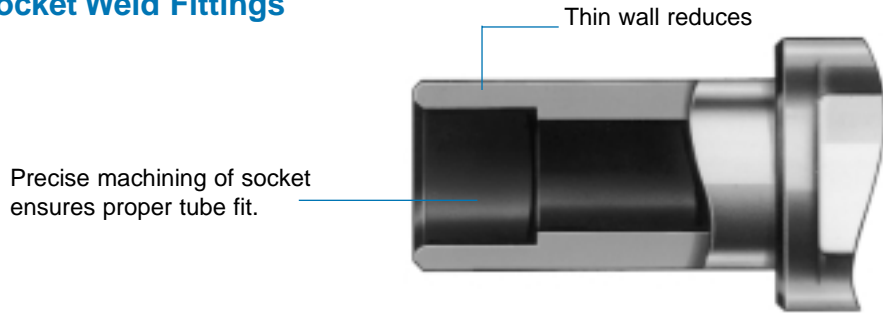
Dimensions are for reference only and are subject to change.

**Union Cross**



Tube OD	Wall Thickness	Ordering Number	Dimensions						Pressure Rating
			A	B	D	F Flat	L	Tx	
<i>Dimensions, in. (mm)</i>									<i>psig (bar)</i>
1/4	0.035	316L-4-ATW-4	2.50 (63.5)	0.75 (19.1)	0.02 (0.5)	7/16	1.25 (31.8)	0.29 (7.4)	5100 (351)
3/8		316L-6-ATW-4	2.46 (62.5)		0.03 (0.8)		1.23 (31.2)	0.41 (10.4)	3300 (227)
1/2	0.049	316L-8-ATW-4	2.70 (68.6)		0.04 (1.0)	5/8	1.35 (34.3)	0.55 (14.0)	3700 (254)
<i>Dimensions, mm (in.)</i>									<i>bar (psig)</i>
6	1	316L-6-MATW-4	63.5 (2.50)	19.1 (0.75)	0.5 (0.02)	(7/16)	31.8 (1.25)	6.8 (0.27)	420 (6095)
8		316L-8-MATW-4	64.0 (2.52)		0.8 (0.03)			8.9 (0.35)	310 (4499)

**Automatic Tube Socket Weld Fittings**



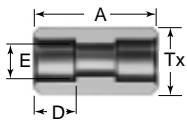
**Ordering Information and Dimensions**

**Special Cleaning**

To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number.

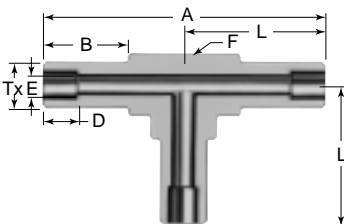
Example: 316L-4-ASW-6-SC11

**Union**



Tube OD	Ordering Number	Dimensions				Pressure Rating
		A	D	E	Tx	
<i>Dimensions, in. (mm)</i>						<i>psig (bar)</i>
1/4	316L-4-ASW-6	1.00 (25.4)	0.28 (7.1)	0.19 (4.8)	0.38 (9.7)	6800 (468)
3/8	316L-6-ASW-6		0.31 (7.9)	0.28 (7.1)	0.50 (12.7)	4900 (337)
1/2	316L-8-ASW-6		0.38 (9.7)	0.40 (10.2)	0.63 (16.0)	3800 (261)
3/4	316L-12-ASW-6		0.44 (11.2)	0.62 (15.7)	0.88 (22.4)	2700 (186)

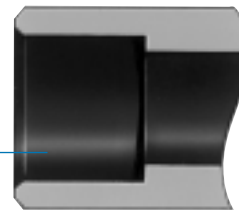
**Union Tee**



Tube OD	Ordering Number	Dimensions							Pressure Rating
		A	B	D	E	F Flat	L	Tx	
<i>Dimensions, in. (mm)</i>									<i>psig (bar)</i>
1/4	316L-4-ASW-3	2.46 (62.5)	0.75 (19.1)	0.28 (7.1)	0.19 (4.8)	7/16	1.23 (31.2)	0.38 (9.7)	6800 (468)
3/8	316L-6-ASW-3	2.68 (68.1)		0.31 (7.9)	0.28 (7.1)		11/16	1.34 (34.0)	0.50 (12.7)
1/2	316L-8-ASW-3			0.38 (9.7)	0.41 (10.3)	0.63 (16.0)			3800 (261)
3/4	316L-12-ASW-3	2.94 (74.7)		0.44 (11.2)	0.63 (15.9)	15/16	1.47 (37.3)	0.88 (22.4)	2700 (186)

# Tube Socket Weld Fittings

Precise machining of socket ensures proper tube fit.



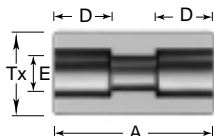
## Ordering Information and Dimensions

### Special Cleaning

To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number.

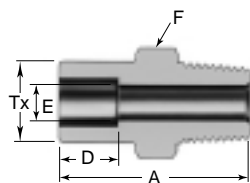
Example: SS-4-TSW-6-**SC11**

### Union



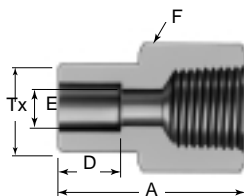
Tube Socket Size	Ordering Number	Dimensions				Pressure Rating
		A	D	E	Tx	
<i>Dimensions, in. (mm)</i>						<i>psig (bar)</i>
1/4	SS-4-TSW-6	0.75 (19.1)	0.28 (7.1)	0.19 (4.8)	0.48 (12.2)	10 700 (737)
3/8	SS-6-TSW-6	0.88 (22.4)	0.31 (7.9)	0.28 (7.1)	0.60 (15.2)	8 100 (558)
1/2	SS-8-TSW-6	1.06 (26.9)	0.38 (9.7)	0.41 (10.4)	0.73 (18.5)	6 600 (454)
3/4	SS-12-TSW-6	1.31 (33.3)	0.44 (11.2)	0.63 (16.0)	1.04 (26.4)	5 900 (406)
1	SS-16-TSW-6	1.44 (36.6)	0.62 (15.7)	0.88 (22.4)	1.36 (34.5)	5 600 (385)

### Male Connector



Tube Socket Size	NPT Male Pipe Size	Ordering Number	Dimensions					Pressure Rating
			A	D	E	F Flat	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/4	1/4	SS-4-TSW-1-4	1.15 (29.2)	0.28 (7.1)	0.19 (4.8)	9/16	0.48 (12.2)	8000 (551)
3/8	1/4	SS-6-TSW-1-4	1.25 (31.8)	0.31 (7.9)	0.28 (7.1)	5/8	0.60 (15.2)	
3/8	3/8	SS-6-TSW-1-6				11/16		7700 (530)
3/8	1/2	SS-6-TSW-1-8	1.47 (37.3)	0.38 (9.7)	0.38 (9.7)	7/8	0.73 (18.5)	
1/2	1/4	SS-8-TSW-1-4	1.31 (33.3)			0.38 (9.7)		0.38 (9.7)
1/2	3/8	SS-8-TSW-1-6		1.53 (38.9)	0.47 (11.9)		0.47 (11.9)	
1/2	1/2	SS-8-TSW-1-8						

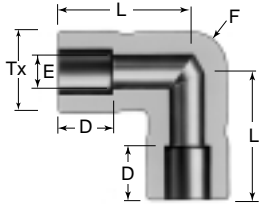
### Female Connector



Tube Socket Size	NPT Female Pipe Size	Ordering Number	Dimensions					Pressure Rating
			A	D	E	F Flat	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/8	1/8	SS-2-TSW-7-2	0.83 (21.1)	0.10 (2.5)	0.09 (2.3)	9/16	0.29 (7.4)	6500 (447)
1/4	1/8	SS-4-TSW-7-2	1.05 (26.7)	0.28 (7.1)	0.19 (4.8)		3/4	
1/4	1/4	SS-4-TSW-7-4	1.18 (30.0)			0.31 (7.9)		0.28 (7.1)
3/8	1/4	SS-6-TSW-7-4	1.24 (31.5)	0.38 (9.7)	0.41 (10.4)		7/8	
1/2	3/8	SS-8-TSW-7-6	1.36 (34.5)			1.59 (40.4)		1 1/16
1/2	1/2	SS-8-TSW-7-8	1.59 (40.4)	1.73 (43.9)	1 5/16		1 5/16	
3/4	3/4	SS-12-TSW-7-12	1.73 (43.9)			0.44 (11.2)		0.63 (16.0)

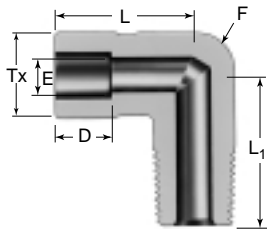
Dimensions are for reference only and are subject to change.

**90° Union Elbow**



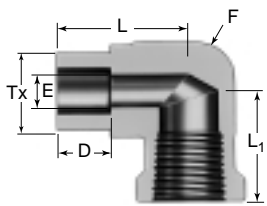
Tube Socket Size	Ordering Number	Dimensions					Pressure Rating
		D	E	F Flat	L	Tx	
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/4	SS-4-TSW-9	0.28 (7.1)	0.19 (4.8)	7/16	0.91 (23.1)	0.53 (13.5)	10 700 (737)
3/8	SS-6-TSW-9	0.31 (7.9)	0.28 (7.1)	1/2	1.04 (26.4)	0.64 (16.3)	8 100 (558)
1/2	SS-8-TSW-9	0.38 (9.7)	0.41 (10.4)	11/16	1.17 (29.7)	0.81 (20.6)	6 600 (454)
3/4	SS-12-TSW-9	0.44 (11.2)	0.63 (16.0)	1	1.56 (39.6)	1.12 (28.4)	5 900 (406)
1	SS-16-TSW-9	0.62 (15.7)	0.88 (22.4)	1 1/4	1.92 (48.8)	1.44 (36.6)	5 600 (385)

**90° Male Elbow**



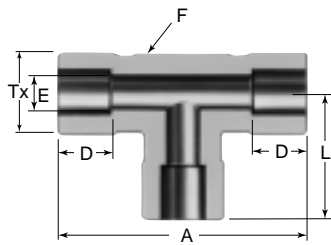
Tube Socket Size	NPT Male Pipe Size	Ordering Number	Dimensions						Pressure Rating
			D	E	F Flat	L	L <sub>1</sub>	Tx	
<i>Dimensions, in. (mm)</i>									<i>psig (bar)</i>
1/4	1/4	SS-4-TSW-2-4	0.28 (7.1)	0.19 (4.8)	1/2	0.79 (20.1)	1.05 (26.7)	0.48 (12.2)	8000 (551)
3/8	1/4	SS-6-TSW-2-4	0.31 (7.9)	0.28 (7.1)		1.04 (26.4)		0.64 (16.3)	
3/8	3/8	SS-6-TSW-2-6			11/16	0.97 (24.6)	1.17 (29.7)	0.60 (15.2)	
3/8	1/2	SS-6-TSW-2-8			13/16	1.02 (25.9)	1.45 (36.8)	0.73 (18.5)	
1/2	1/2	SS-8-TSW-2-8	0.38 (9.7)	0.41 (10.4)	13/16	1.08 (27.4)	1.45 (36.8)	0.73 (18.5)	6600 (454)

**90° Female Elbow**



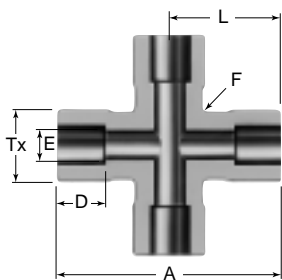
Tube Socket Size	NPT Male Pipe Size	Ordering Number	Dimensions						Pressure Rating
			D	E	F Flat	L	L <sub>1</sub>	Tx	
<i>Dimensions, in. (mm)</i>									<i>psig (bar)</i>
1/4	1/4	SS-4-TSW-8-4	0.28 (7.1)	0.19 (4.8)	11/16	0.90 (22.9)	1.17 (29.7)	0.48 (12.2)	7400 (509)
3/8	1/4	SS-6-TSW-8-4	0.31 (7.9)	0.28 (7.1)		0.99 (25.1)		0.60 (15.2)	
3/8	1/2	SS-6-TSW-8-8			1	1.13 (28.7)	1.56 (39.6)	0.73 (18.5)	
1/2	1/2	SS-8-TSW-8-8	0.38 (9.7)	0.41 (10.4)	1	1.19 (30.2)	1.56 (39.6)	0.73 (18.5)	5700 (392)

**Union Tee**



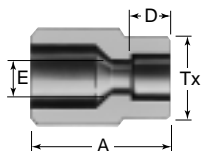
Tube Socket Size	Ordering Number	Dimensions						Pressure Rating
		A	D	E	F Flat	L	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/8	SS-2-TSW-3	1.18 (30.0)	0.10 (2.5)	0.09 (2.3)	7/16	0.59 (15.0)	0.29 (7.4)	12 600 (868)
1/4	SS-4-TSW-3	1.72 (43.7)	0.28 (7.1)	0.19 (4.8)		0.86 (21.8)	0.53 (13.5)	10 700 (737)
3/8	SS-6-TSW-3	2.08 (52.8)	0.31 (7.9)	0.28 (7.1)	1/2	1.04 (26.4)	0.64 (16.3)	8 100 (558)
1/2	SS-8-TSW-3	2.34 (59.4)	0.38 (9.7)	0.41 (10.4)	11/16	1.17 (29.7)	0.81 (20.6)	6 600 (454)
3/4	SS-12-TSW-3	2.94 (74.7)	0.44 (11.2)	0.63 (16.0)	1 1/4	1.47 (37.3)	1.04 (26.4)	5 900 (406)
1	SS-16-TSW-3	3.84 (97.5)	0.62 (15.7)	0.88 (22.4)		1.92 (48.8)	1.45 (36.8)	5 600 (385)

**Union Cross**



Tube Socket Size	Ordering Number	Dimensions						Pressure Rating
		A	D	E	F Flat	L	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/4	SS-4-TSW-4	1.72 (43.7)	0.28 (7.1)	0.19 (4.8)	7/16	0.86 (21.8)	0.53 (13.5)	10 700 (737)
3/8	SS-6-TSW-4	2.08 (52.8)	0.31 (7.9)	0.28 (7.1)	1/2	1.04 (26.4)	0.64 (16.3)	8 100 (558)
1/2	SS-8-TSW-4	2.34 (59.4)	0.38 (9.7)	0.41 (10.4)	11/16	1.17 (29.7)	0.81 (20.6)	6 600 (454)
3/4	SS-12-TSW-4	3.12 (79.2)	0.44 (11.2)	0.63 (16.0)	1	1.56 (39.6)	1.20 (30.5)	5 900 (406)
1	SS-16-TSW-4	3.84 (97.5)	0.62 (15.7)	0.88 (22.4)	1 1/4	1.92 (48.8)	1.45 (36.8)	5 600 (385)

**Tube Butt Weld to Tube Socket Weld**



Tube OD	Wall Thickness	Tube Socket Size	Ordering Number	Dimensions				Pressure Rating
				A	D	E	Tx	
<i>Dimensions, in. (mm)</i>								<i>psig (bar)</i>
1/4	0.08 (2.0)	1/8	SS-4-MTW-A-2TSW	0.56 (14.2)	0.10 (2.5)	0.09 (2.3)	0.29 (7.4)	12 600 (868)
3/8	0.07 (1.8)	1/4	SS-6-MTW-A-4TSW	0.75 (19.1)	0.28 (7.1)	0.19 (4.8)	0.48 (12.2)	8 200 (564)
1/2	0.09 (2.2)	1/4	SS-8-MTW-A-4TSW	0.88 (22.4)			0.50 (12.7)	
1/2		3/8	SS-8-MTW-A-6TSW		0.31 (7.9)	0.60 (15.2)		
3/4	0.11 (2.8)	1/2	SS-12-MTW-A-8TSW	1.12 (28.4)	0.38 (9.7)	0.41 (10.4)	0.75 (19.1)	6 300 (434)
1	0.13 (3.2)	1/2	SS-16-MTW-A-8TSW	1.38 (35.1)			0.73 (18.5)	5 300 (365)

**Pipe Butt Weld Fittings**

37 1/2° chamfer ensures proper weld (not included on 1/4 in. size).

Male weld end can be butt or socket welded.



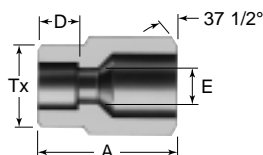
**Ordering Information and Dimensions**

**Special Cleaning**

To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number.

Example: SS-4-MPW-A-4TSW-SC11

**Tube Socket Weld to Pipe Butt Weld**



Tube Size	Pipe Size (Sch 80)	Ordering Number	Dimensions				Pressure Rating
			A	D	E	Tx	
<i>Dimensions, in. (mm)</i>							<i>psig (bar)</i>
1/4	1/4	SS-4-MPW-A-4TSW	0.88 (22.4)	0.28 (7.1)	0.19 (4.8)	0.48 (12.2)	10 300 (709)
3/8	3/8	SS-6-MPW-A-6TSW	1.03 (26.2)	0.31 (7.9)	0.28 (7.1)	0.60 (15.2)	8 100 (558)
1/2	3/8	SS-6-MPW-A-8TSW	1.00 (25.4)	0.38 (9.7)	0.42 (10.7)	0.73 (18.5)	6 600 (454)
1/4	1/2	SS-8-MPW-A-4TSW	1.12 (28.4)	0.28 (7.1)	0.19 (4.8)	0.48 (12.2)	7 800 (537)
3/8	1/2	SS-8-MPW-A-6TSW		0.31 (7.9)	0.28 (7.1)	0.60 (15.2)	
1/2	1/2	SS-8-MPW-A-8TSW	1.19 (30.2)	0.38 (9.7)	0.40 (10.2)	0.73 (18.5)	6 600 (454)
3/8	3/4	SS-12-MPW-A-6TSW	1.50 (38.1)	0.31 (7.9)	0.28 (7.1)	0.60 (15.2)	
1/2	3/4	SS-12-MPW-A-8TSW		0.38 (9.7)	0.41 (10.3)	0.73 (18.5)	
3/4	3/4	SS-12-MPW-A-12TSW		0.44 (11.2)	0.63 (16.0)	1.05 (26.7)	5 900 (406)
3/8	1	SS-16-MPW-A-6TSW	1.38 (35.1)	0.31 (7.9)	0.28 (7.1)	0.60 (15.2)	6 000 (413)
1/2	1	SS-16-MPW-A-8TSW	1.56 (39.6)	0.44 (11.2)	0.41 (10.4)	0.73 (18.5)	

Dimensions are for reference only and are subject to change.

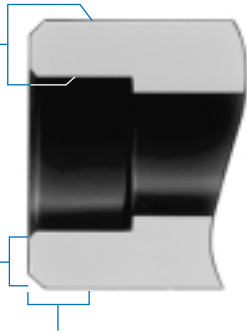


## Pipe Socket Weld Fittings

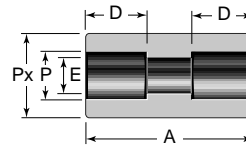
Quality machining of all surfaces ensures consistent welding to pipe.

Heavy wall, plus strength of material, ensures long life in severe service applications.

Socket depth equals or exceeds requirements of ANSI B16.11 and ensures proper pipe support.



## Union



P Pipe Size	Ordering Number	Dimensions				Pressure Rating
		A	D	E	Px	
<i>Dimensions, in. (mm)</i>						<i>psig (bar)</i>
1/4	SS-4-PSW-6	1.06 (26.9)	0.39 (9.9)	0.36 (9.1)	0.88 (22.4)	8100 (558)
3/8	SS-6-PSW-6	1.12 (28.4)		0.49 (12.4)	1.03 (26.2)	7100 (489)
1/2	SS-8-PSW-6			0.62 (15.7)	1.25 (31.8)	6800 (468)
3/4	SS-12-PSW-6	1.75 (44.5)	0.51 (13.0)	0.82 (20.8)	1.47 (37.3)	5800 (399)
1	SS-16-PSW-6			1.05 (26.7)	1.86 (47.2)	6100 (420)

## Ordering Information and Dimensions

### Special Cleaning

To order Micro-Fit weld fittings with special cleaning and packaging to ensure compliance with product cleanliness requirements as stated in ASTM G93 Level C, add **-SC11** to the ordering number.

Example: SS-4-PSW-6-SC11

## Swagelok Welding System

For information on the Swagelok welding system, see the *Swagelok Welding System* catalogs.



### Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.