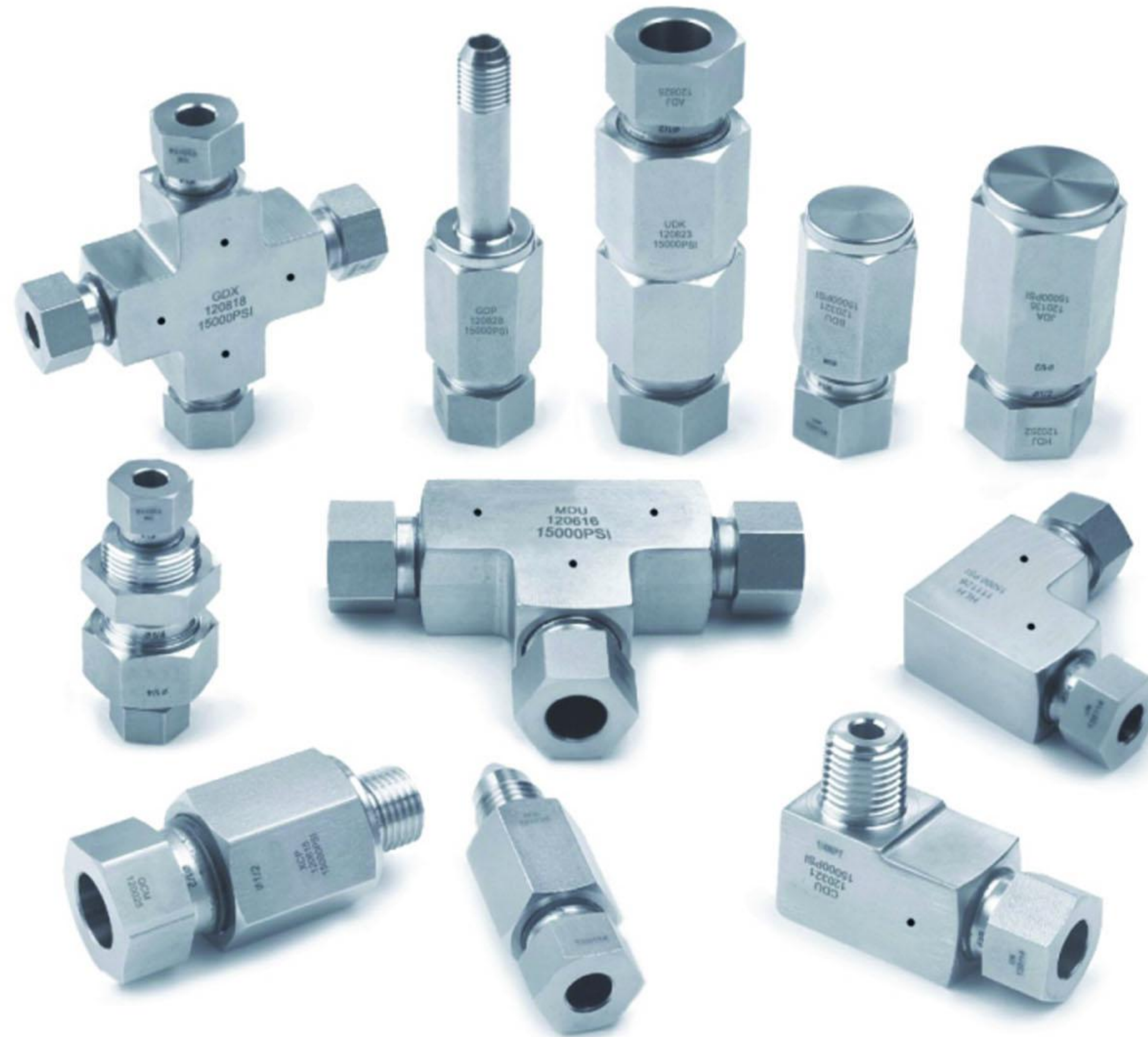


# C-LOK

C-LOK Instrument Valve Co.,Ltd.

## 15 Series Tube Fittings and Tubes

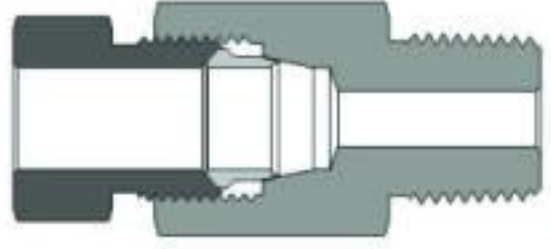
15,000 psi (1034 bar)



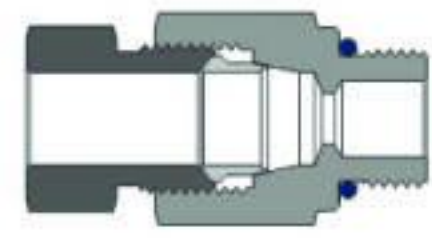
# Contents

## 15 Series Tubing

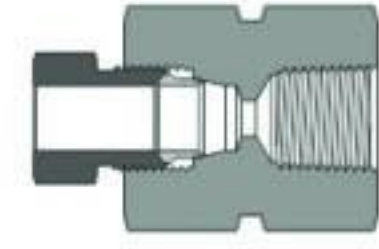
**08** Male Connectors  
NPT Thread - CM



**08** Heavy-Duty  
SAE/MS - CM

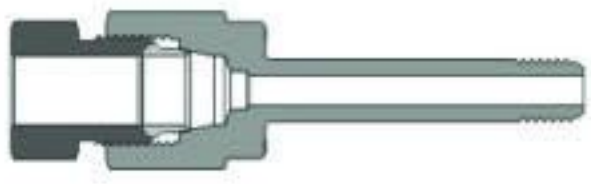


**08** Female Connectors -  
CF

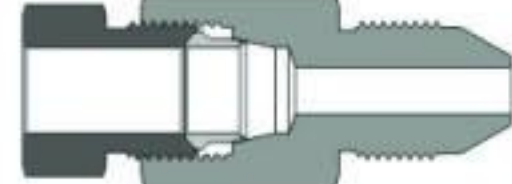


## 20 Series Cone and Thread Adapters

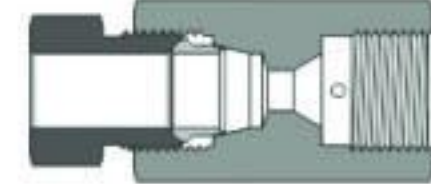
**09** Female Connectors



**09** Unions



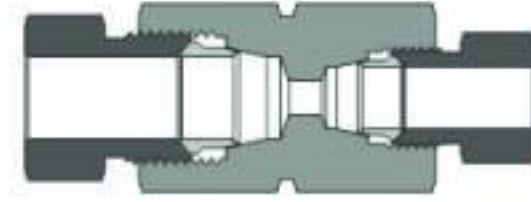
**10** Large Hex Unions



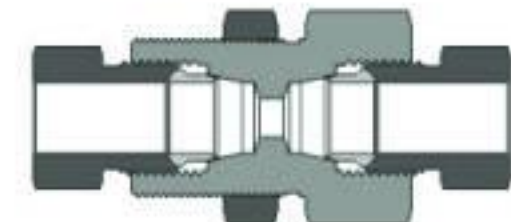
**10** Reducing Adapters



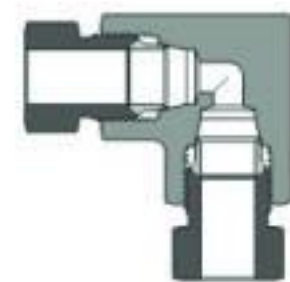
**10** Bulkhead Unions



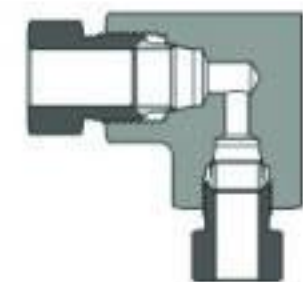
**11** Bulkhead Lock Nuts



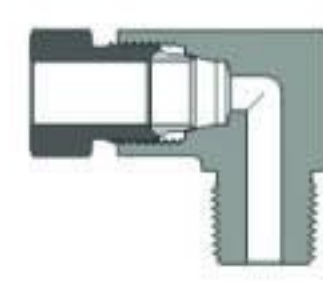
**11** Tube Plugs



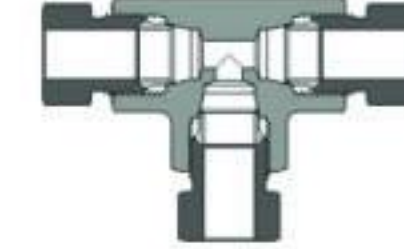
**12** Tube Caps



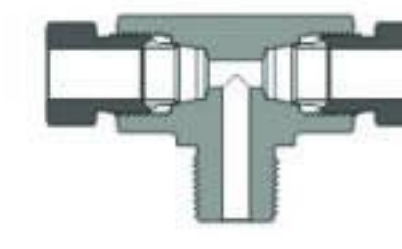
**12** Male Elbows



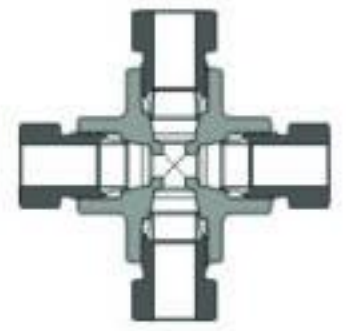
**13** Adjustable Male Elbows



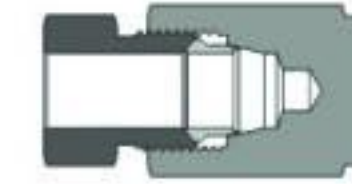
**13** 45° Male Elbows



**13** Female Elbows



**14** Union Elbows



**14** Male Branch Tees



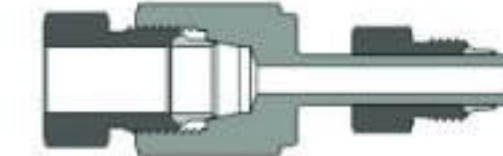
**14** Adjustable Male  
Branch Tees



**14** Male Run Tees



**15** Female Branch Tees



**15** Female Run Tees



**15** Union Tees



# 15 Series Tube Fittings and Tubes

## Features

- Pressures up to 15000 psig (1034 bar).
- Fittings are easy to disconnect and retighten.
- Every fitting is stamped with size, material, and heat code.
- Radius junction design with elbows provides smooth flow path.
- Male nut threads are molybdenum disulfide-based lubricant to minimize the friction.
- Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads.



## Materials of Construction

Component	Material	ASTM
Body, ferrule	316 stainless steel	A276
Nut	316 stainless steel	A276

Wetted component listed italics.

## Working Pressure

Working pressure are dependent on the end connection with the lowest working pressures. Working pressure for the end connections used in this catalog are identified below.

### 15 Series Tube Ends

The maximum working pressure of the 15 Series tube ends at ambient temperature are rated by the used C-LOK 15 Series tubings. Refer to C-LOK 15 Series tubing data.

### Heavy-Duty SAE/MS Ends

Heavy-duty SAE/MS end connections listed in this catalog are rated to 63 Mpa (9137 psig), in according to SAE J1926-2.

### 20 Series Cone and Thread Ends

Cone and thread end connections listed in this catalog are manufactured to 20 Series cone and thread design standards and are rated to 20 000 psig (1379 bar).

### NPT Pipe Thread Ends<sup>①</sup>

NPT Size	Working Pressure, psig(bar)
1/16	15000 (1034)
1/8	
1/4	
3/8	
1/2	
3/4	10000 (689)
1	

① No allowance is made for corrosion, erosion, or elevated temperatures.

# 15 Series Tube Fittings and Tubes

## 2 Tube Fittings and Tubes

### Elevated Temperature Factors

To get the maximum working pressure at elevated temperature, use the maximum working pressure at ambient temperature to multiply the factors in the table below.

Temperature		Material
°F	°C	316
100	38	1
200	93	1
300	149	1
400	204	0.97
500	260	0.90
600	316	0.85
700	371	0.82
800	427	0.80

## Installation Instructions

### 15 Series Tube Fitting Assembly

1. Put nut and ferrule on tubing in proper sequence and orientation (Fig 1).
2. Install hand-tight into the body of the fitting or the valve, make sure that the tubing rests firmly on the shoulder of the port (Fig.2).
3. Tighten the nut until the tubing cannot be turned by hand, then scribe the nut and the body (Fig. 3).
4. Tighten the nut 1/4 turns with wrench while holding steady the body of the fitting or the valve (Fig.4).

Fig.1

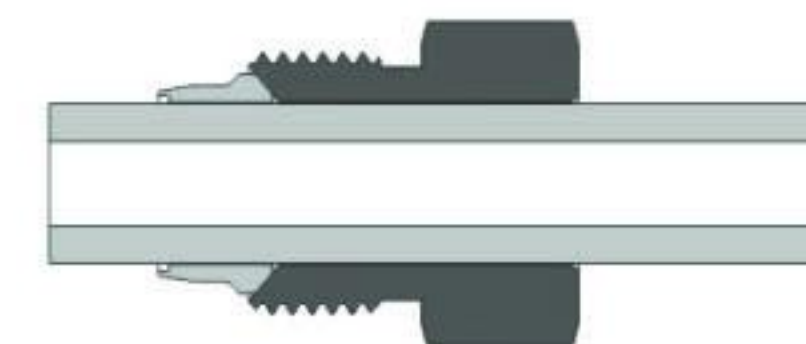


Fig.2

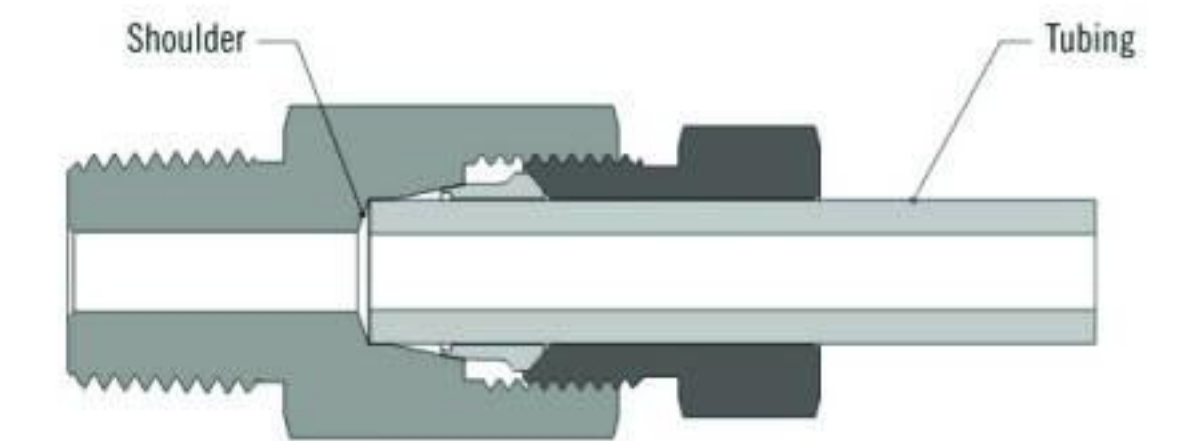


Fig.3

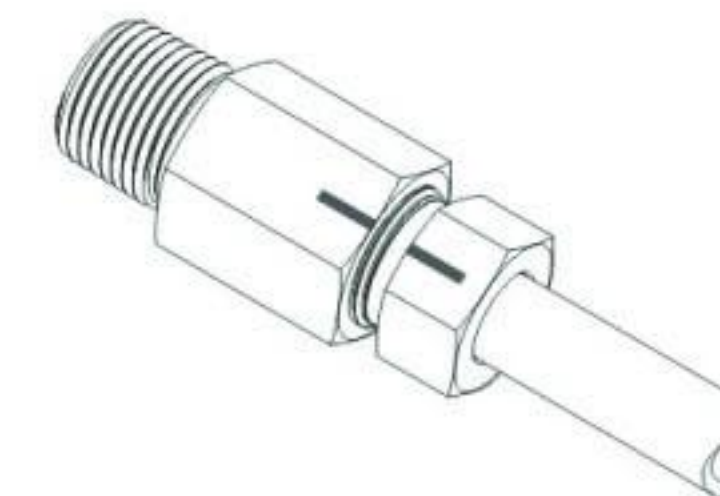
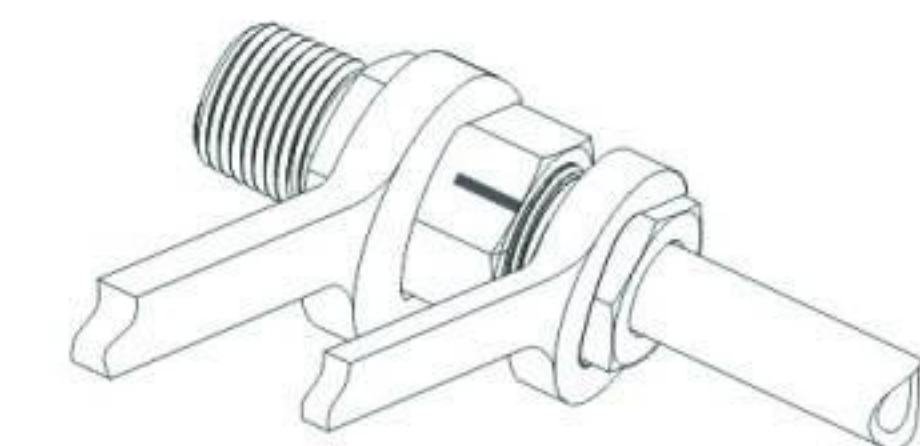


Fig.4



## Preswaging Tool

1. Put nut and ferrule on tubing in proper sequence and orientation (Fig.1).
2. Install hand-tight into the preswaging tool, make sure that the tubing rests firmly on the shoulder of the port (Fig.5).
3. Tighten the nut until the tubing cannot be turned by hand, then scribe the nut and the preswaging tool (Fig. 6).
4. Tighten the nut 1/4 turns with wrench while holding steady the preswaging tool.
5. Loosen the nut and remove the tubing with preswaged ferrule from the preswaging tool (Fig.7).  
Note: If the tubing sticks in the preswaging tool, remove the tube by gently rocking it back and forth. Do not turn the tubing.
6. Insert tubing with preswaged ferrule into the body of the fitting or the valve, rotate the nut finger-tight (Fig.8).
7. Tighten the nut 3/8 turns with wrench while holding steady the body.

Fig.5

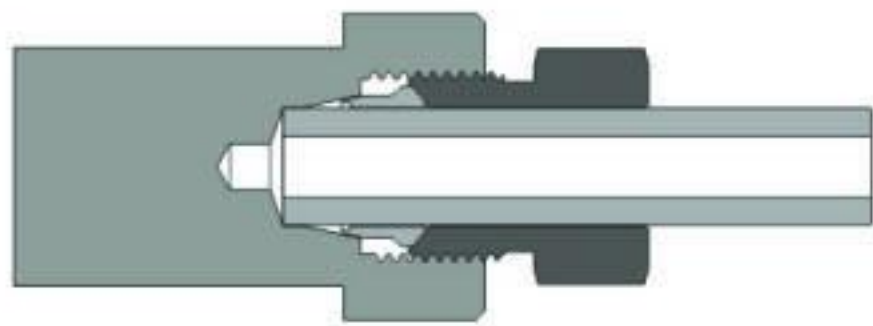


Fig.6

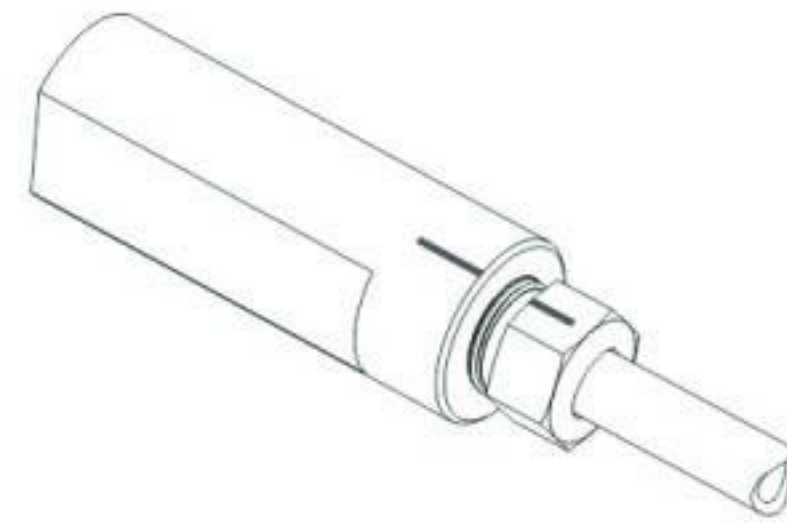


Fig.7

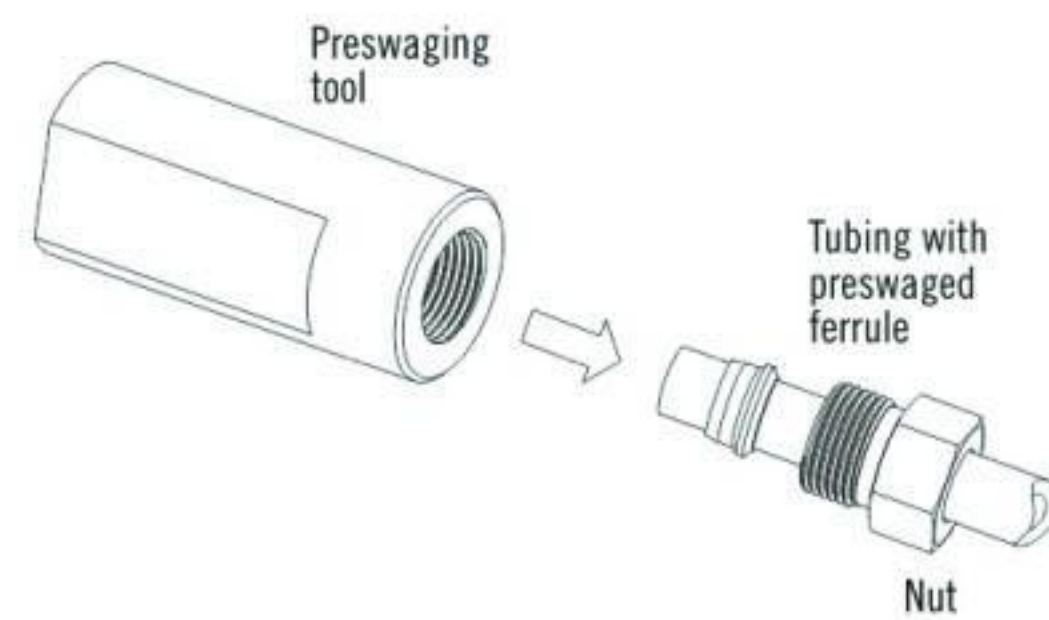
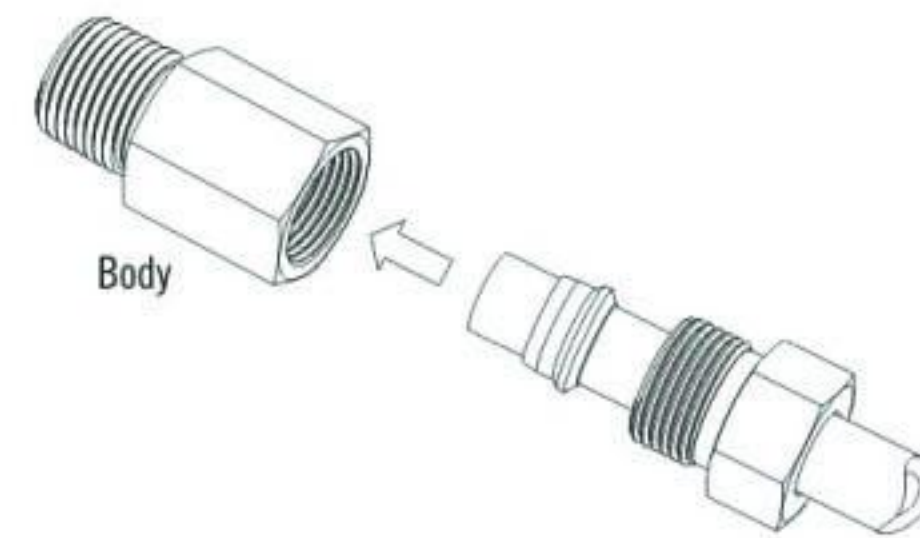


Fig.8



## Caps

The Cap's installation is the same as the 15 Series Tube Fitting.

## Plugs

Hold the body steady and tighten the plug one-quarter turn from the finger-tight position.

## Tube Adapters and Reducers

1. Insert tubing with preswaging ferrule into the fitting body, rotate the nut finger-tight.
2. Tighten the nut 1/4 turns with wrench while holding steady the fitting body.

## Port Connectors

1. For installation of the machined ferrule end of the port connector, the same as the Plugs.
2. For installation of the pre-swaged ferrule end of the port connector, the same as the Tube Adapters and Reducers.

## Reinstallation Instructions

- You may disassemble and reassemble the tube fitting many times.
1. Insert tubing with preswaged ferrule into the fitting body, rotate the nut finger-tight.
  2. Tighten the nut 3/8 turns with wrench while holding steady the fitting body. After frequent reassemblies, it may take less than 3/8 turn to affect a gas-tight seal and as little as 1/8 of a turn may be sufficient.

## Tools and Accessories

Preswaging Tool

Tube O.D.	Ordering Number
1/4 in.	PST-15S-4
3/8 in.	PST-15S-6
1/2 in.	PST-15S-8
9/16 in.	PST-15S-9
3/4 in.	PST-15S-12

Fig.9



## Features

- Working pressures up to 15 000 psig (1034 bar)
- Material, size, specification and heat code are indicated on the tubing surface

## Material Standards

C-LOK 15 Series Tube Fittings Used with Heavy-Wall Annealed Stainless Steel Tubing.

Grade	UNS	Specification
316/316L	S31600/S31603	ASTM A213, 269
		ASME SA213

## Working Pressure

- The allowable working pressures in the table below are based on ASME B31.3 at ambient temperature.
- To work out the allowable working pressure at elevated temperature, take allowable working pressure at ambient temperature to multiply the factors in the table of Elevated Temperature Factors in page 2.

Tube O.D. (in.)	Wall Thickness (in.)	Working Pressure <sup>①</sup> psig (bar)
1/4	0.083	15000 (1034)
1/4	0.065	10300 (710)
3/8	0.118	15000 (1034)
3/8	0.095	10000 (689)
1/2	0.156	15000 (1034)
1/2	0.134	11200 (772)
9/16	0.188	15000 (1034)
3/4	0.240	15000 (1034)
3/4	0.188	10000 (689)

① No allowance is made for corrosion, erosion, or elevated temperatures.

## Ordering Information

Tube O.D. (in.)	Wall Thickness (in.)	Basic Ordering Number	Weight lb/ft (kg/m)
1/4	0.083	SS-15T4-083-	0.15 (0.22)
1/4	0.065	SS-15T4-065-	0.13 (0.19)
3/8	0.118	SS-15T6-118-	0.33 (0.49)
3/8	0.095	SS-15T6-095-	0.29 (0.43)
1/2	0.156	SS-15T8-156-	0.58 (0.87)
1/2	0.134	SS-15T8-134-	0.53 (0.79)
9/16	0.188	SS-15T9-188-	0.77 (1.14)
3/4	0.240	SS-15T12-240-	1.33 (1.98)
3/4	0.188	SS-15T12-188-	1.15 (1.71)

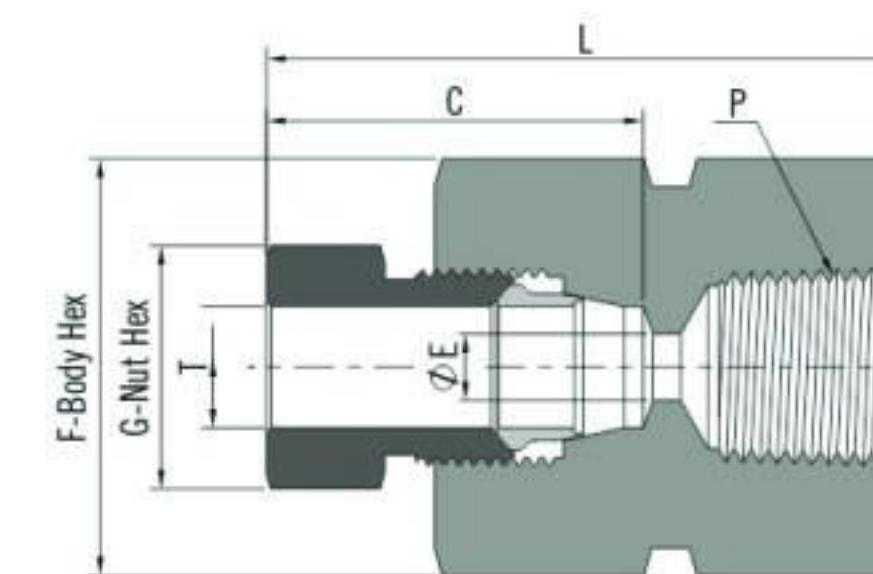
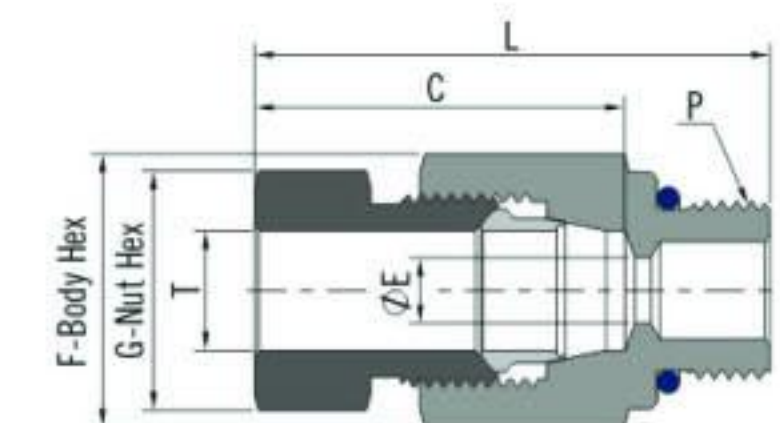
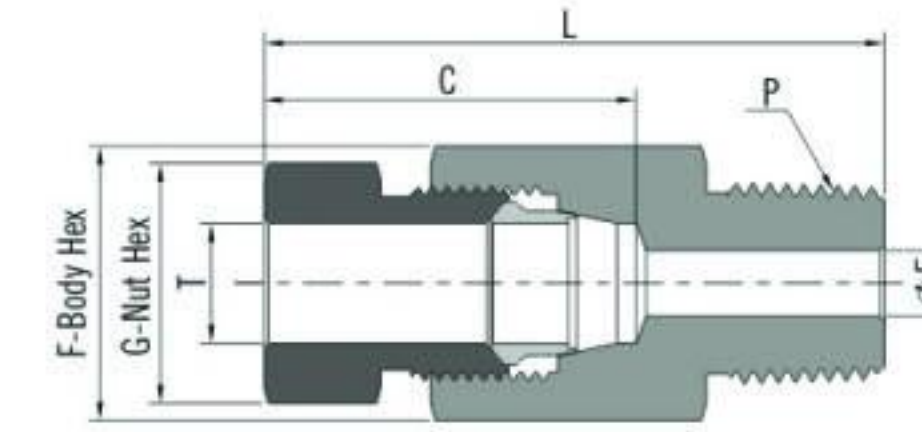
Add the actual foot (feet) /meter (meters) and "-MP" as a suffix to the basic ordering number to get the complete ordering number.

For example:

1. 10 feet length, outside diameter 1/2", wall thickness 0.156", 316 SS seamless tube, the complete ordering number is: SS-15T8-156-10-MP.

2. 3 meters length, outside diameter 3/4", wall thickness 0.188", 316 SS seamless tube, the complete ordering number is: SS-15T12-188-3M-MP.

## Male Connectors



T-Tube O.D. (in.)	P-NPT Size	Ordering Number	NPT Thread				
			Dimensions, mm				
			L	C	E	F	G
1/4	1/8	SS-CM-15S4-NT2	43.0	28.7	3.3	15.9	15.9
1/4	1/4	SS-CM-15S4-NT4	46.3	28.7	4.8	15.9	15.9
1/4	3/8	SS-CM-15S4-NT6	48.6	28.7	4.8	17.5	15.9
1/4	1/2	SS-CM-15S4-NT8	52.5	28.7	4.8	22.2	15.9
3/8	1/4	SS-CM-15S6-NT4	51.6	32.6	6.4	19.1	19.1
3/8	3/8	SS-CM-15S6-NT6	51.6	32.6	6.4	19.1	19.1
3/8	1/2	SS-CM-15S6-NT8	54.8	32.6	6.4	22.2	19.1
1/2	1/4	SS-CM-15S8-NT4	58.0	34.1	6.4	25.4	23.8
1/2	3/8	SS-CM-15S8-NT6	58.0	34.1	7.1	25.4	23.8
1/2	1/2	SS-CM-15S8-NT8	61.1	34.1	9.5	25.4	23.8
1/2	3/4	SS-CM-15S8-NT12	57.9	34.1	9.5	27.0	23.8
9/16	1/4	SS-CM-15S9-NT4	71.1	44.5	6.4	28.6	27.0
9/16	1/2	SS-CM-15S9-NT8	73.2	44.5	10.4	28.6	27.0
3/4	1/2	SS-CM-15S12-NT8	87.6	60.2	10.4	38.1	34.9
3/4	3/4	SS-CM-15S12-NT12	87.6	60.2	14.2	38.1	34.9
3/4	1	SS-CM-15S12-NT16	89.9	60.2	14.2	38.1	34.9

T-Tube O.D. (in.)	P-SAE/MS Thread Size	Ordering Number	Heavy-Duty SAE/MS				
			Dimensions, mm				
			L	C	E	F	G
1/4	7/16-20	SS-CM-15S4-SH7	43.2	28.7	4.8	15.9	15.9
1/4	9/16-18	SS-CM-15S4-SH9	44.2	28.7	4.8	19.1	15.9
3/8	7/16-20	SS-CM-15S6-SH7	48.5	32.6	5.1	19.1	19.1
3/8	9/16-18	SS-CM-15S6-SH9	49.5	32.6	6.4	19.1	19.1
1/2	7/16-20	SS-CM-15S8-SH7	57.0	34.1	5.1	25.4	23.8
1/2	9/16-18	SS-CM-15S8-SH9	57.0	34.1	7.1	25.4	23.8

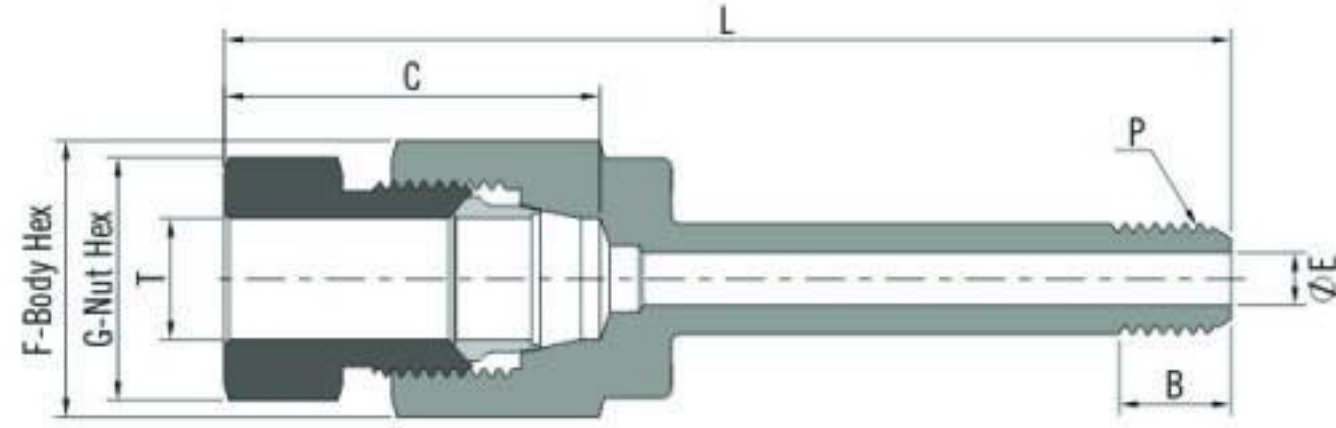
## Female Connectors

T-Tube O.D. (in.)	P-NPT Size	Ordering Number	NPT Thread				
			Dimensions, mm				
			L	C	E	F	G
1/4	1/4	SS-CF-15S4-NT4	52.5	28.7	4.8	25.4	15.9
3/8	1/4	SS-CF-15S6-NT4	58.0	32.6	6.4	25.4	19.1
1/2	1/4	SS-CF-15S8-NT4	64.3	34.1	7.1	25.4	23.8
1/2	1/2	SS-CF-15S8-NT8	70.7	34.1	9.5	38.1	23.8
3/4	1/2	SS-CF-15S12-NT8	90.3	60.2	14.2	38.1	34.9

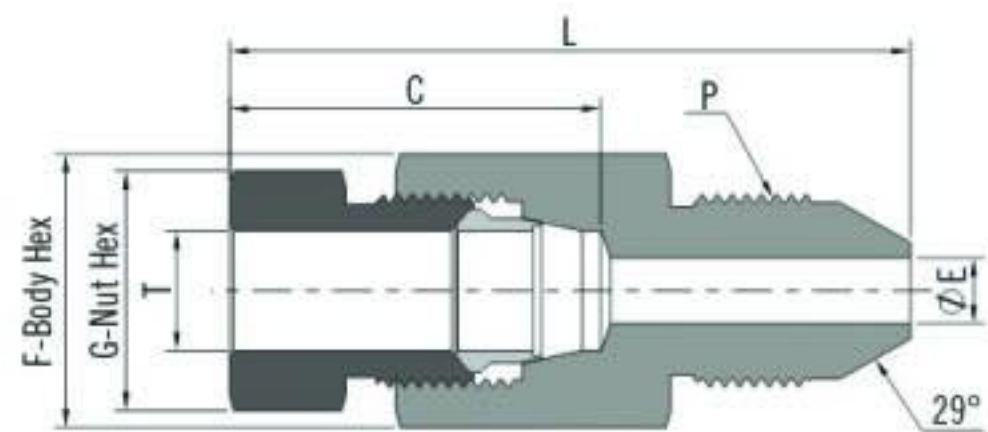
Dimensions are for reference only, subject to change.

# 15 Series Tube Fittings and Tubes

## 20 Series Cone and Thread Adapters



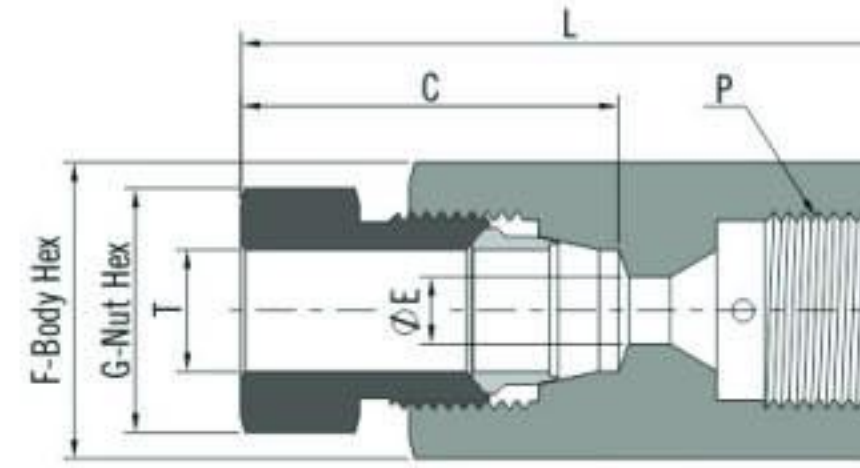
Fractional Tube				Cone and Thread Tube					
T-Tube O.D. (in.)	Cone and Thread Tube Size, in.	Ordering Number	P-Thread Size (in.)	Dimensions, mm					
				L	C	B	F	E	G
1/4	1/4	SS-CM-15S4-CT4	1/4-28 LH	70.6	28.7	7.9	2.8	15.9	15.9
3/8	3/8	SS-CM-15S6-CT6	3/8-24 LH	79.8	32.6	9.9	5.1	19.1	19.1
1/2	9/16	SS-CM-15S8-CT9	9/16-18 LH	97.6	34.1	11.9	7.1	25.4	23.8
3/4	9/16	SS-CM-15S12-CT9	9/16-18 LH	124.7	60.2	11.9	7.8	38.1	34.9



Fractional Tube				Male					
T-Tube O.D. (in.)	Cone and Thread Tube Size, in.	Ordering Number	P-Thread Size (in.)	Dimensions, mm					
				L	C	F	E	G	
1/4	1/4	SS-CM-15S4-MP4	7/16-20 UN	51.2	28.7	2.8	15.9	15.9	
1/4	3/8	SS-CM-15S4-MP6	9/16-18 UN	57.1	28.7	4.8	15.9	15.9	
3/8	3/8	SS-CM-15S6-MP6	9/16-18 UN	66.5	32.6	5.1	19.1	19.1	
3/8	9/16	SS-CM-15S6-MP9	13/16-16 UN	67.0	32.6	6.4	22.2	19.1	
1/2	9/16	SS-CM-15S8-MP9	13/16-16 UN	67.9	34.1	7.9	25.4	23.8	
9/16	9/16	SS-CM-15S9-MP9	13/16-16 UN	77.7	44.5	7.9	28.6	27.0	
3/4	9/16	SS-CM-15S12-MP9	13/16-16 UN	96.7	60.2	7.9	38.1	34.9	
3/4	3/4	SS-CM-15S12-MP12	3/4-14 NPSM	99.0	60.2	11.1	38.1	34.9	

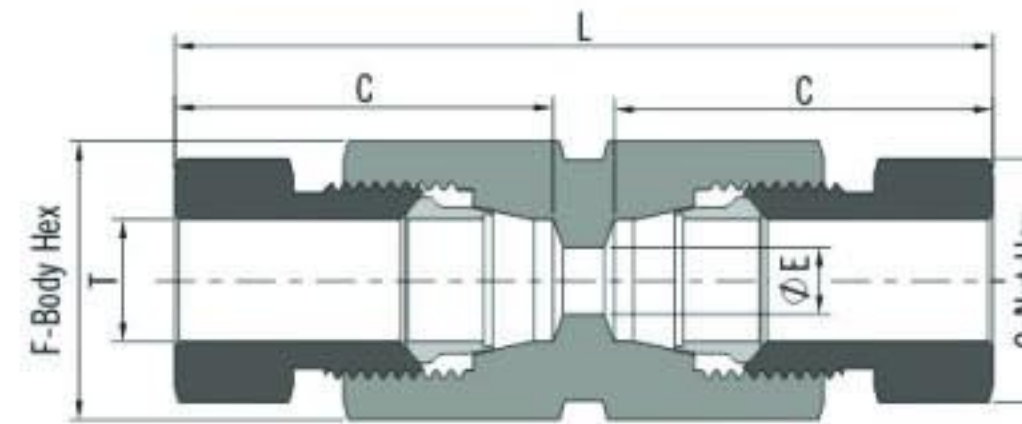
# 15 Series Tube Fittings and Tubes

## 20 Series Cone and Thread Adapters



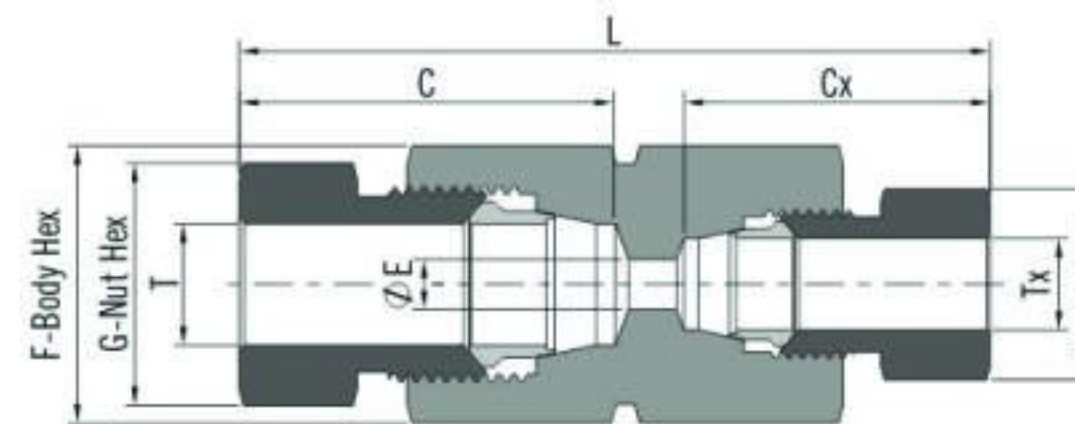
Fractional Tube				Female				
T-Tube O.D. (in.)	Cone and Thread Tube Size, in.	Ordering Number	P-Thread Size (in.)	Dimensions, mm				
				L	C	F	E	G
1/4	1/4	SS-CF-15S4-MP4	7/16-20 UN	50.0	28.7	2.8	17.5	15.9
3/8	3/8	SS-CF-15S6-MP6	9/16-18 UN	58.1	32.6	5.1	22.2	19.1
1/2	9/16	SS-CF-15S8-MP9	13/16-16 UN	66.1	34.1	7.9	27.0	23.8
9/16	9/16	SS-CF-15S9-MP9	13/16-16 UN	72.6	44.5	7.9	28.6	27.0
3/4	3/4	SS-CF-15S12-MP12	3/4-14 NPSM	98.5	60.2	11.1	38.1	34.9

## Unions



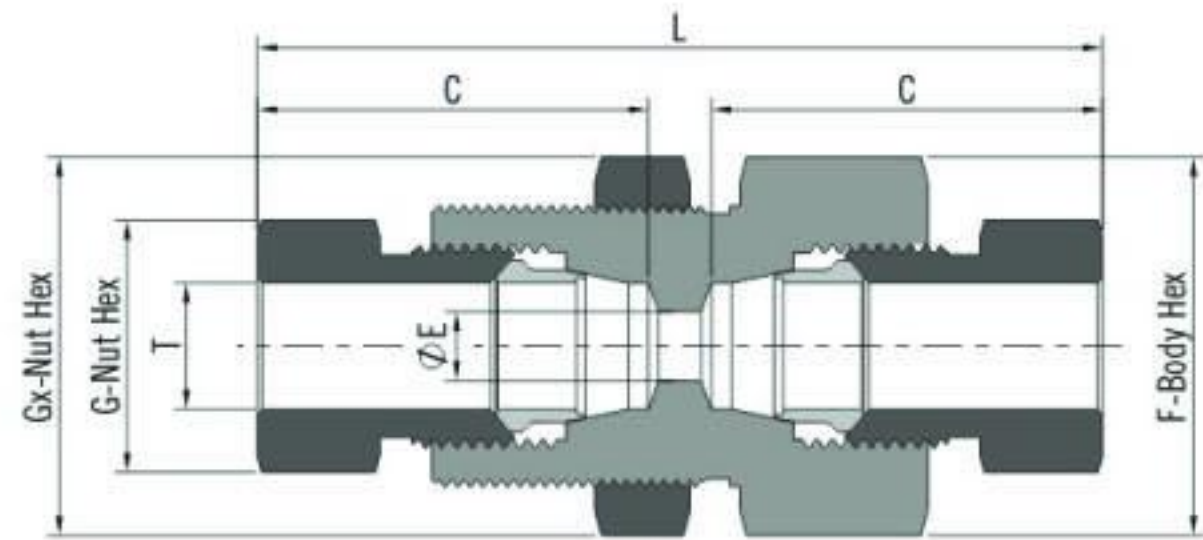
Fractional Tube		Dimensions, mm				
T-Tube O.D. (in.)	Ordering Number	L	C	F	E	G
		1/4	SS-U-15S4	63.5	28.7	4.8
3/8	SS-U-15S6	71.4	32.6	6.4	19.1	19.1
1/2	SS-U-15S8	77.8	34.1	9.5	25.4	23.8
9/16	SS-U-15S9	101.1	44.5	10.4	28.6	27.0
3/4	SS-U-15S12	132.9	60.2	14.2	38.1	34.9

## Reducing Unions



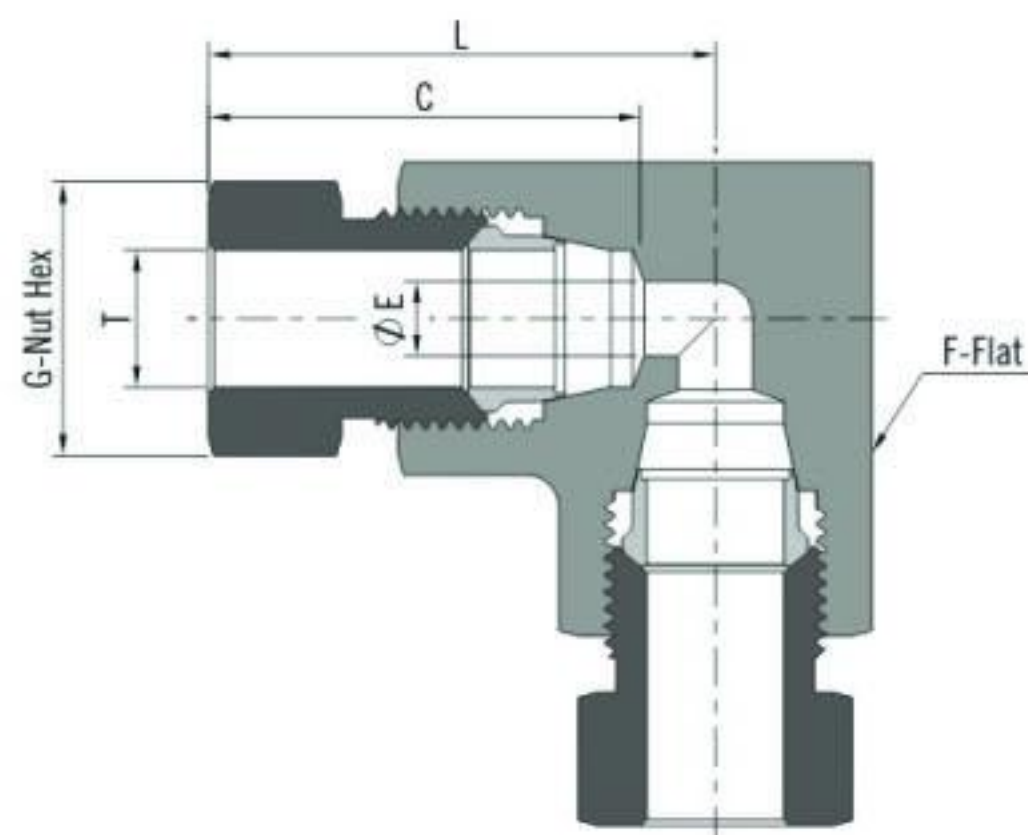
Fractional Tube				NPT Thread						
T-Tube O.D. (in.)	Tx-Tube O.D. (mm)	Ordering Number	P-Thread Size (in.)	Dimensions, mm						
				L	C	Cx	E	F	G	Gx
3/8	1/4	SS-U-15S6-15S4	9/16-18 UN	67.5	32.6	28.7	4.8	19.1	19.1	15.9
1/2	1/4	SS-U-15S8-15S4	9/16-18 UN	72.5	34.1	28.7	4.8	25.4	23.8	15.9
1/2	3/8	SS-U-15S8-15S6	9/16-18 UN	74.7	34.1	32.6	6.4	25.4	23.8	19.1
9/16	1/2	SS-U-15S9-15S8	9/16-18 UN	92.2	44.5	34.1	9.5	28.6	27.0	23.8
3/4	1/2	SS-U-15S12-15S8	9/16-18 UN	108.2	60.2	34.1	9.5	38.1	34.9	23.8

## Bulkhead Unions



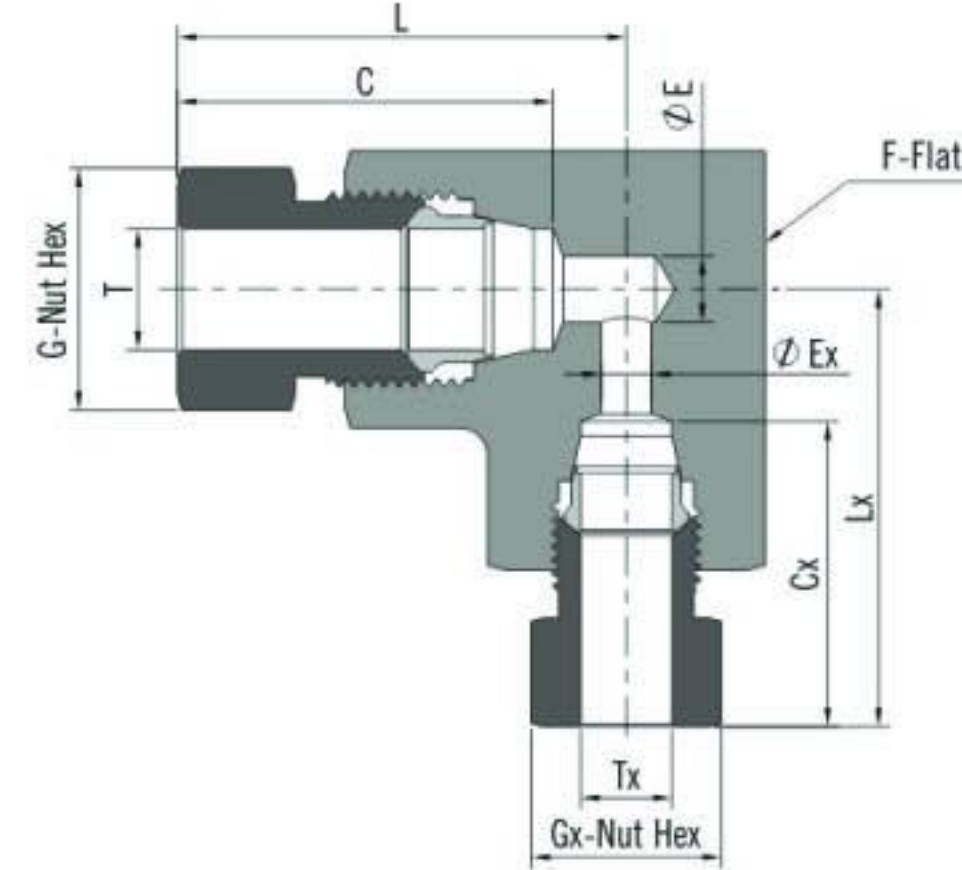
T-Tube O.D. (in.)	Ordering Number	Dimensions, mm							
		L	C	E	F	G	Gx	Panel Hole Size	Maximum Panel Thickness
1/4	SS-BU-15S4	80.8	28.7	4.8	25.4	15.9	25.4	23.8	9.5
3/8	SS-BU-15S6	74.7	32.6	6.4	25.4	19.1	25.4	23.8	9.5
1/2	SS-BU-15S8	87.4	34.1	9.5	34.9	23.8	34.9	28.5	9.5
9/16	SS-BU-15S9	106.1	44.5	10.4	41.3	27.0	41.3	33.7	9.5
3/4	SS-BU-15S12	132.9	60.2	14.2	47.6	34.9	47.6	41.7	9.5

## Union Elbows



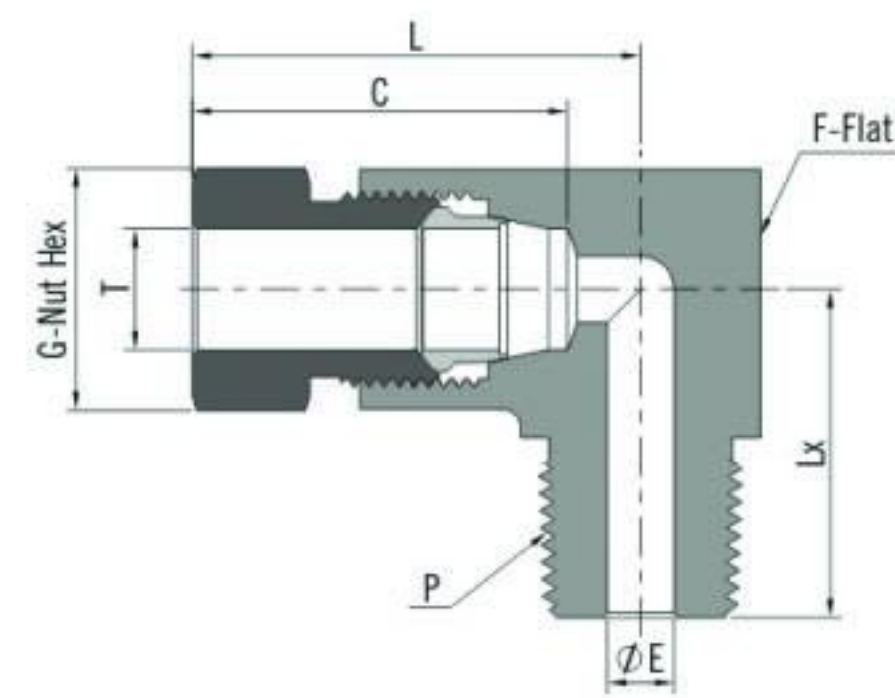
T-Tube O.D. (in.)	Ordering Number	Dimensions, mm				
		L	C	F	E	G
1/4	SS-LU-15S4	36.6	28.7	4.8	15.9	15.9
3/8	SS-LU-15S6	38.9	32.6	6.4	19.1	19.1
1/2	SS-LU-15S8	45.2	34.1	9.5	25.4	23.8
9/16	SS-LU-15S9	56.9	44.5	10.4	38.1	27.0
3/4	SS-LU-15S12	76.9	60.2	14.2	38.1	34.9

## Union Reducing Elbows



T-Tube O.D. (in.)	Tx-Tube O.D. (in.)	Ordering Number	Dimensions, mm							
			L	Lx	C	Cx	E	F	G	Gx
3/8	1/4	SS-LU-15S6-15S4	40.9	35.6	32.6	28.7	4.8	19.1	19.1	15.9
1/2	1/4	SS-LU-15S8-15S4	48.5	42.9	34.1	28.7	4.8	25.4	23.8	15.9
1/2	3/8	SS-LU-15S8-15S6	48.5	46.2	34.1	32.6	6.5	25.4	23.8	19.1
9/16	1/2	SS-LU-15S9-15S8	56.9	54.4	44.5	34.1	9.5	38.1	27.0	23.8
3/4	1/2	SS-LU-15S12-15S8	76.9	63.8	60.2	34.1	9.5	38.1	34.9	23.8

## Male Elbows

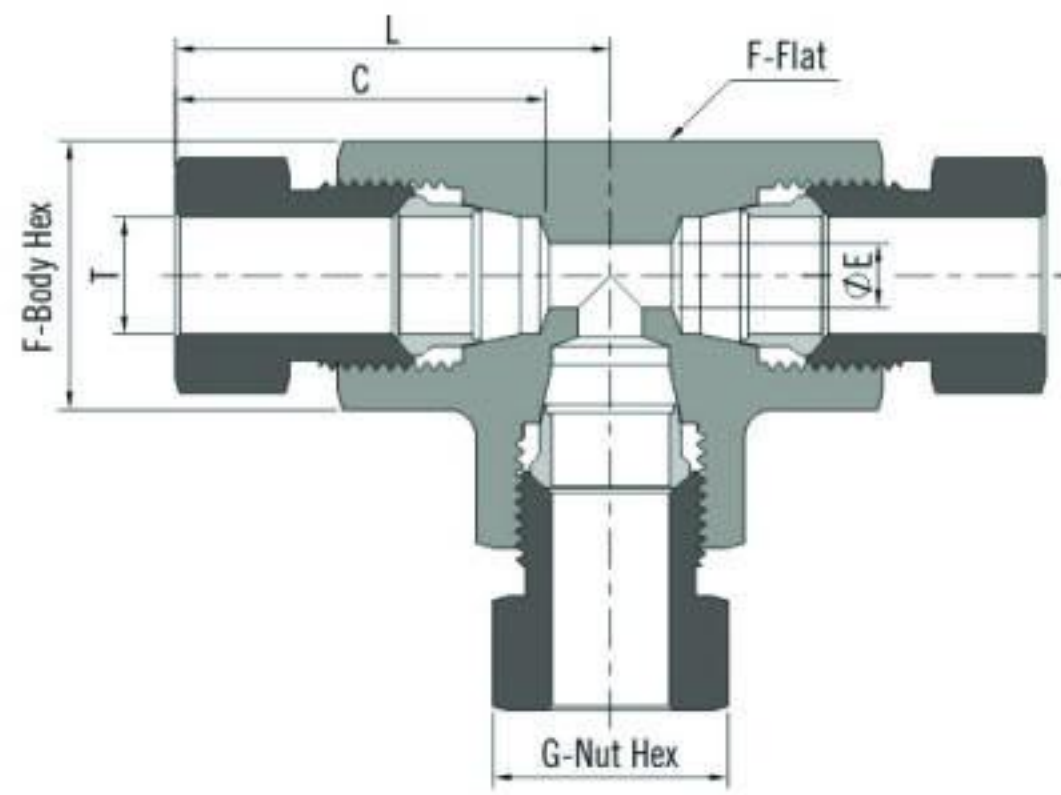


T-Tube O.D. (in.)	P-NPT Size	Ordering Number	Dimensions, mm					
			L	Lx	C	E	F	G
1/4	1/4	SS-LM-15S4-NT4	37.1	24.6	28.7	4.8	19.1	15.9
1/4	3/8	SS-LM-15S4-NT6	37.1	24.6	28.7	4.8	19.1	15.9
1/4	1/2	SS-LM-15S4-NT8	42.4	34.8	28.7	4.8	25.4	15.9
3/8	1/4	SS-LM-15S6-NT4	34.1	24.6	32.6	6.4	19.1	19.1
3/8	3/8	SS-LM-15S6-NT6	34.1	24.6	32.6	6.4	19.1	19.1
3/8	1/2	SS-LM-15S6-NT8	45.7	34.8	32.6	6.4	25.4	19.1
1/2	1/4	SS-LM-15S8-NT4	47.8	30.0	34.1	6.4	25.4	23.8
1/2	3/8	SS-LM-15S8-NT6	47.8	30.0	34.1	7.1	25.4	23.8
1/2	1/2	SS-LM-15S8-NT8	47.8	34.8	34.1	9.5	25.4	23.8
9/16	1/2	SS-LM-15S9-NT8	56.9	43.9	44.5	10.4	38.1	27.0
3/4	1/2	SS-LM-15S12-NT8	76.9	43.9	60.2	10.4	38.1	34.9
3/4	3/4	SS-LM-15S12-NT12	76.9	43.9	60.2	14.2	38.1	34.9



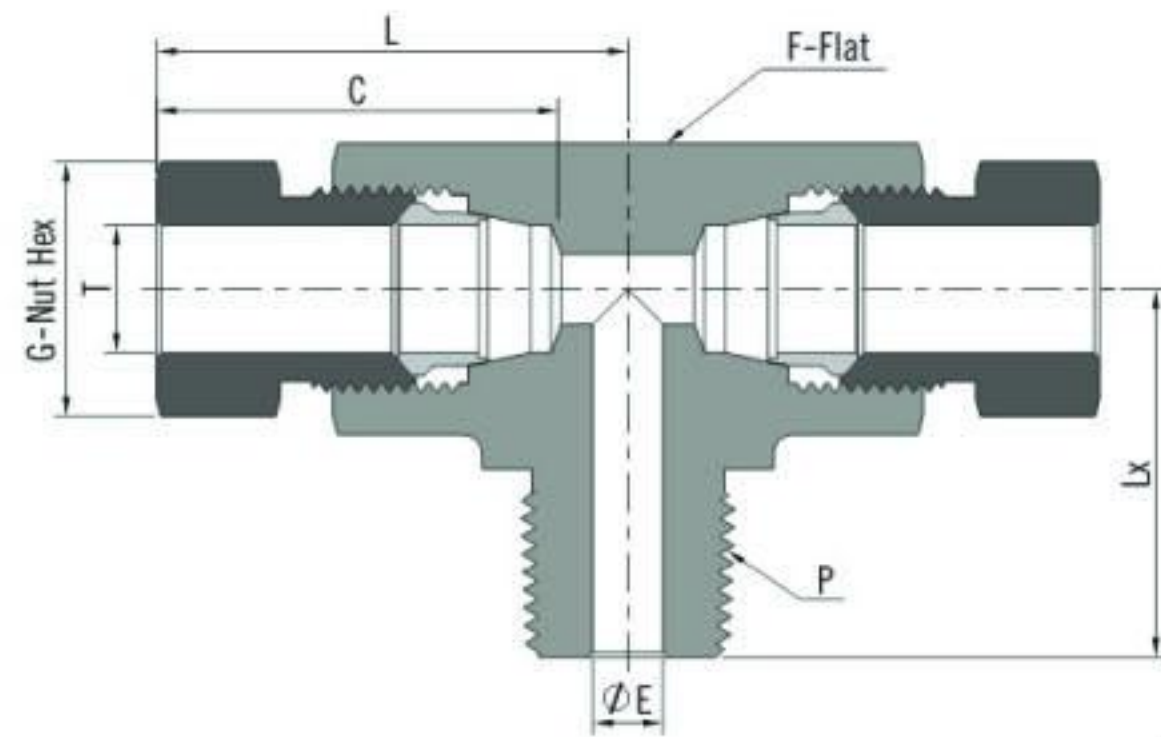
# 15 Series Tube Fittings and Tubes

## Union Tees



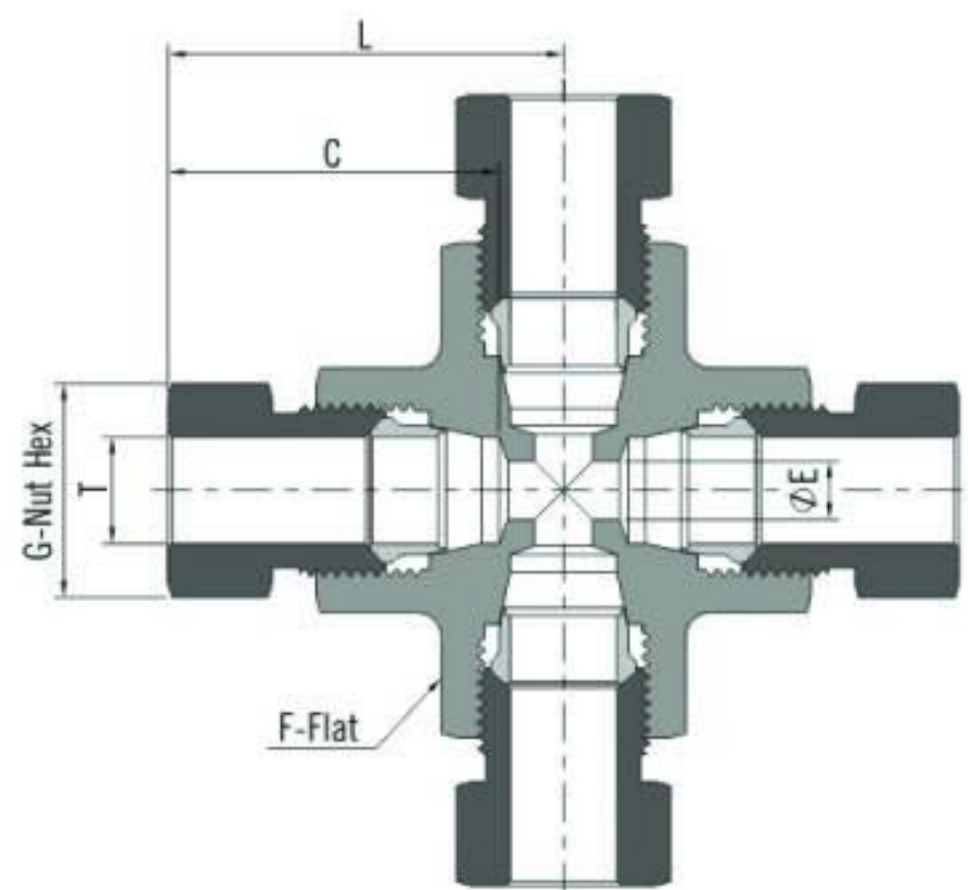
Fractional Tube		Dimensions, mm				
T-Tube O.D. (in.)	Ordering Number	L	C	E	F	G
1/4	SS-TTT-15S4	36.6	28.7	4.8	15.9	15.9
3/8	SS-TTT-15S6	38.9	32.6	6.4	19.1	19.1
1/2	SS-TTT-15S8	45.2	34.1	9.5	25.4	23.8
9/16	SS-TTT-15S9	56.9	44.5	10.4	38.1	27.0
3/4	SS-TTT-15S12	76.9	60.2	14.2	38.1	34.9

## Male Branch Tees



Fractional Tube		NPT Thread		Dimensions, mm				
T-Tube O.D. (in.)	P-NPT Size	Ordering Number	L	Lx	C	E	F	G
1/4	1/8	SS-TTM-15S4-NT2	36.6	19.8	28.7	4.8	15.9	15.9
1/4	1/4	SS-TTM-15S4-NT4	37.1	24.6	28.7	4.8	19.1	15.9
3/8	1/4	SS-TTM-15S6-NT4	40.4	24.6	32.6	6.4	19.1	19.1
1/2	1/4	SS-TTM-15S8-NT4	47.8	30.0	34.1	6.4	25.4	23.8
1/2	3/8	SS-TTM-15S8-NT6	47.8	30.0	34.1	7.1	25.4	23.8
3/4	3/4	SS-TTM-15S12-NT12	76.9	46.0	60.2	14.2	38.1	34.9

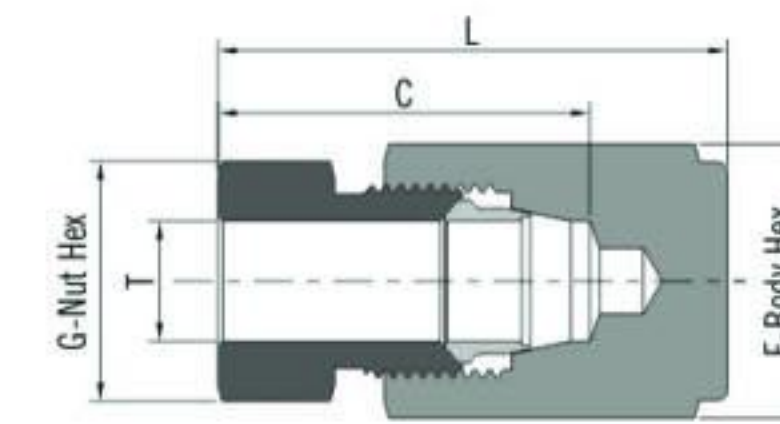
## Union Crosses



Fractional Tube		Dimensions, mm				
T-Tube O.D. (in.)	Ordering Number	L	C	E	F	G
1/4	SS-C-15S4	36.6	28.7	4.8	15.9	15.9
3/8	SS-C-15S6	38.9	32.6	6.4	19.1	19.1
1/2	SS-C-15S8	45.2	34.1	9.5	25.4	23.8

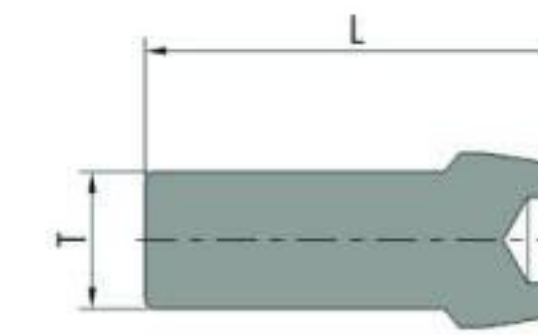
# 15 Series Tube Fittings and Tubes

## Caps



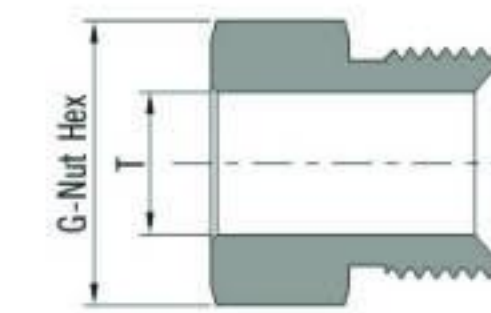
Fractional Tube		Dimensions, mm			
T-Tube O.D. (in.)	Ordering Number	L	C	F	G
1/4	SS-TC-15S4	36.6	28.7	15.9	15.9
3/8	SS-TC-15S6	41.3	32.6	19.1	19.1
1/2	SS-TC-15S8	45.3	34.1	25.4	23.8
9/16	SS-TC-15S9	56.9	44.5	28.6	27.0
3/4	SS-TC-15S12	76.9	60.2	38.1	34.9

## Plugs



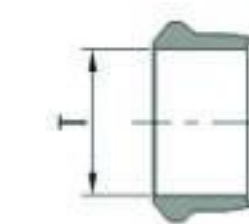
Fractional Tube		Dimensions, mm
T-Tube O.D. (in.)	Ordering Number	G
1/4	SS-TP-15S4	26.2
3/8	SS-TP-15S6	29.4
1/2	SS-TP-15S8	31.8
9/16	SS-TP-15S9	39.5
3/4	SS-TP-15S12	52.8

## Nuts



Fractional Tube		Dimensions, mm
T-Tube O.D. (in.)	Ordering Number	G
1/4	SS-N-15S4	15.9
3/8	SS-N-15S6	19.1
1/2	SS-N-15S8	23.8
9/16	SS-N-15S9	27.0
3/4	SS-N-15S12	34.9

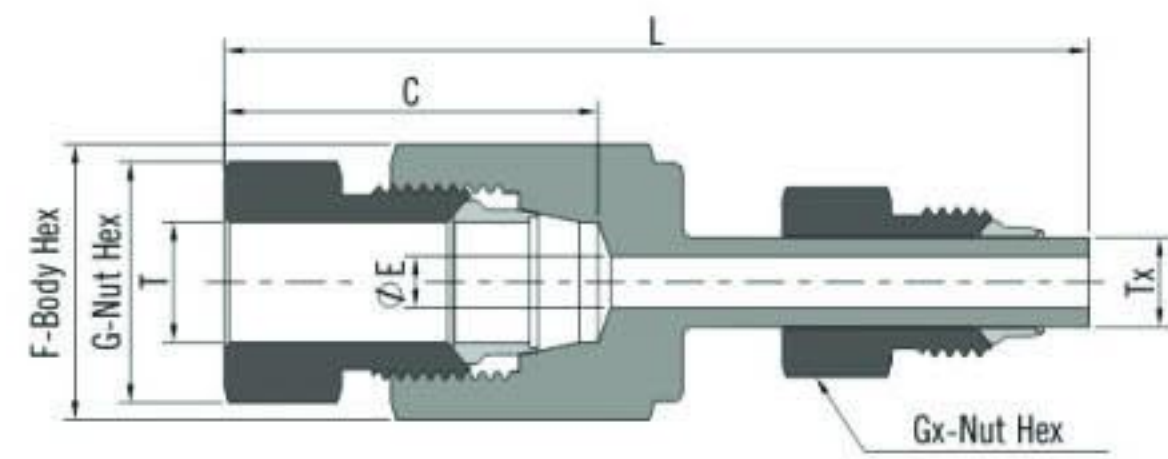
## Ferrules



Fractional Tube		Ordering Number
T-Tube O.D. (in.)		
1/4		SS-FE-S4
3/8		SS-FE-S6
1/2		SS-FE-S8
9/16		SS-FE-S9
3/4		SS-FE-S12

# 15 Series Tube Fittings and Tubes

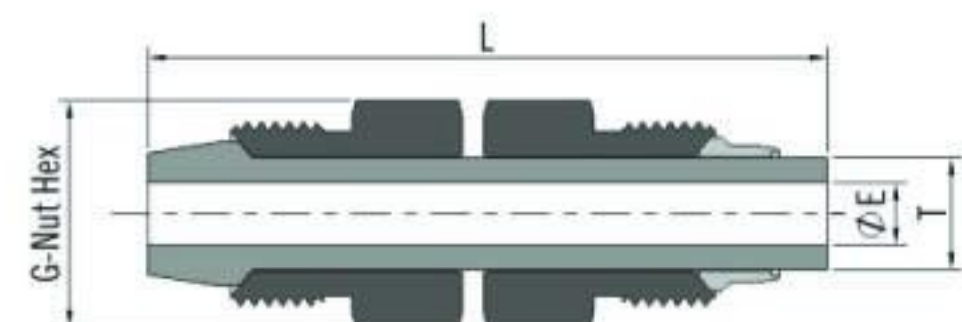
## Reducers



Fractional Tube

T-Tube O.D. (in.)	Tx-Tube O.D. (in.)	Ordering Number	Dimensions, mm					
			L	C	E	F	G	Gx
1/4	3/8	SS-R-15S4-FM6	75.4	28.7	4.8	15.9	15.9	19.1
1/4	1/2	SS-R-15S4-FM8	84.1	28.7	4.8	15.9	15.9	23.8
3/8	1/2	SS-R-15S6-FM8	89.4	32.6	6.4	19.1	19.1	23.8
1/2	3/8	SS-R-15S8-FM6	92.7	34.1	5.3	25.4	23.8	19.1
1/2	3/4	SS-R-15S8-FM12	118.4	34.1	9.5	25.4	23.8	34.9
9/16	3/4	SS-R-15S9-FM12	121.7	44.5	10.4	28.6	27.0	34.9
3/4	9/16	SS-R-15S12-FM9	125.2	60.2	7.9	38.1	34.9	27.0

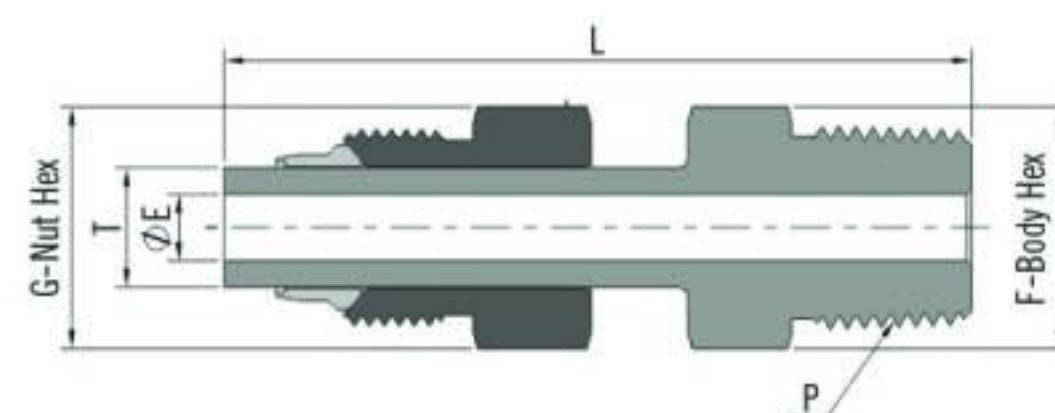
## Port Connectors



Fractional Tube

T-Tube O.D. (in.)	Ordering Number	Dimensions, mm		
		L	E	G
1/4	SS-P-15S4	54.3	3.0	15.9
3/8	SS-P-15S6	64.5	5.3	19.1
1/2	SS-P-15S8	75.9	7.1	23.8
9/16	SS-P-15S9	83.6	9.7	27.0
3/4	SS-P-15S12	111.5	10.7	34.9

## Adapters



Fractional Tube

NPT Thread

T-Tube O.D. (in.)	P-NPT Size	Ordering Number	Dimensions, mm			
			L	E	F	G
1/4	1/4	SS-AM-FM4-NT4	55.4	3.0	15.9	15.9
3/8	1/4	SS-AM-FM6-NT4	64.3	5.3	15.9	19.1
3/8	1/2	SS-AM-FM6-NT8	70.6	5.3	22.2	19.1
1/2	1/4	SS-AM-FM8-NT4	65.8	6.4	15.9	23.8
1/2	1/2	SS-AM-FM8-NT8	76.2	7.1	22.2	23.8
9/16	1/2	SS-AM-FM9-NT8	86.5	7.9	22.2	27.0
3/4	3/4	SS-AM-FM12-NT12	99.6	10.0	27.0	34.9