

C-LOK

C-LOK Instrument Valve Co.,Ltd.

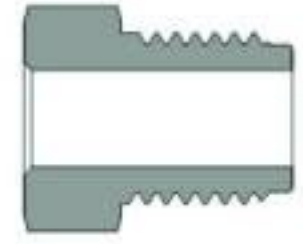
20 Series Tube Fittings

20,000 psi (1379 bar)



Contents

02 Glands - G



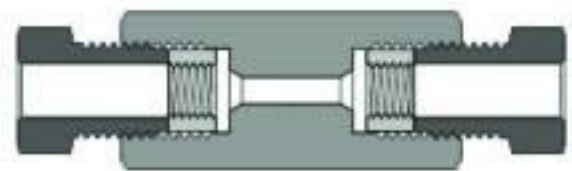
02 Collars - CO



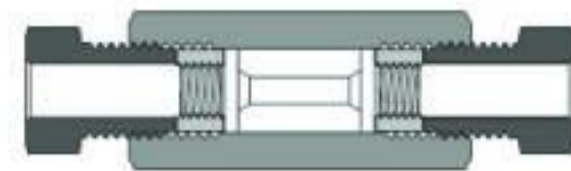
02 Plugs - TP



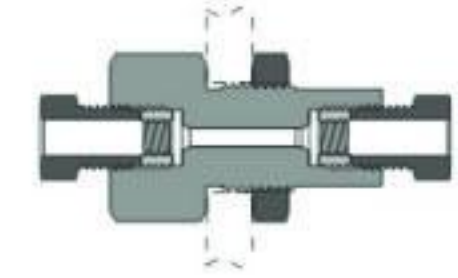
02 Union Couplings - U



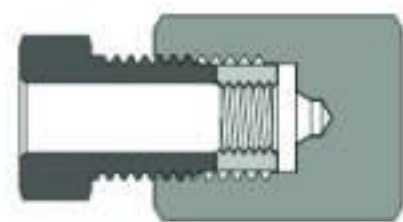
03 Union Couplings (Slip Type) - SU



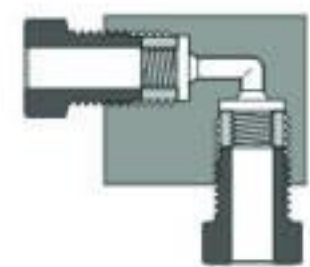
03 Bulkhead Couplings - BU



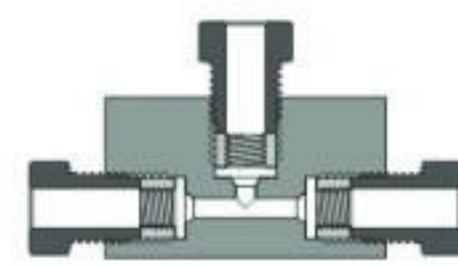
03 Caps - TC



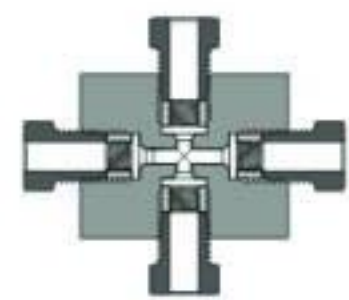
04 Elbows - LU



04 Tees - TTT



05 Crosses - C



06 Anti-Vibration Gland Assemblies - AVGA



06 Coned and Threaded Nipples - CTN



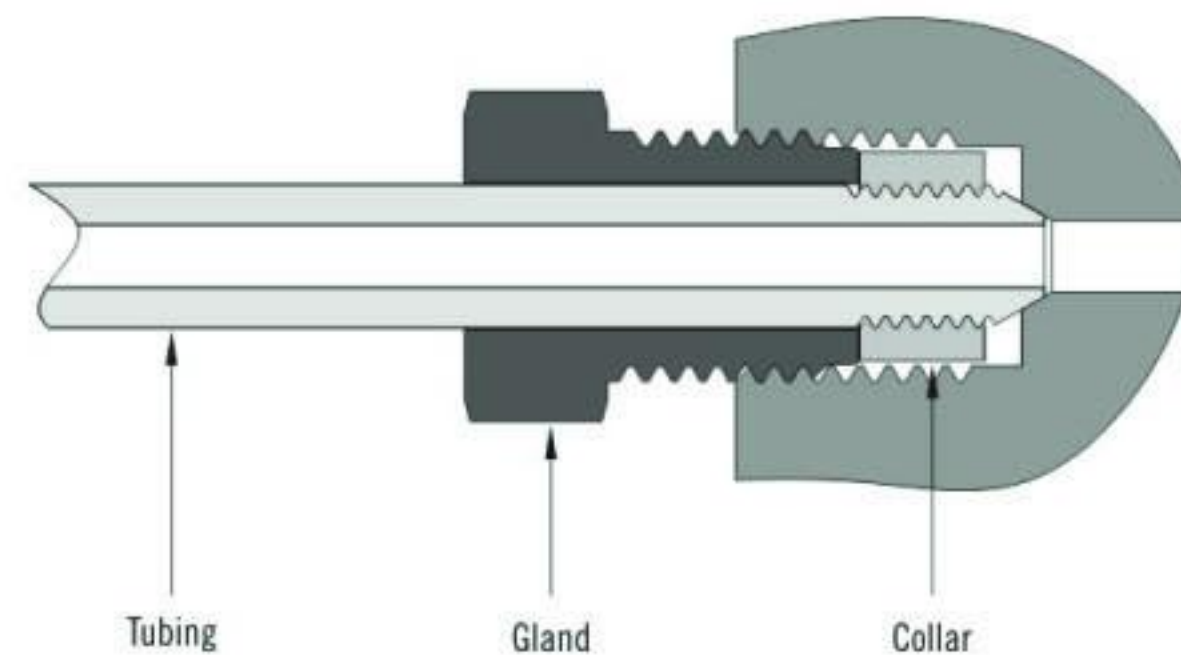
07 20 Series Tubing

20 Series Tube Fittings

Features

- Coned-and-Threaded Connection.
- Metal-to-metal seal provides perfect leak-tight service from critical vacuum to high pressure.
- Anti-vibration connection components available.
- Fittings are easy to disconnect and retighten.
- 316 stainless steel is standard material. Other materials are available upon request.
- Every fitting is stamped with size, material, and heat code.

Composition



Technical Data

- Available sizes are 1/4", 3/8", 9/16", 3/4" and 1".
- Temperature Rating: -325 to 800°F (-198 to 427°C).
- Working Pressure:

T-Tube O.D. (in.)	Working Pressure, psi (bar)				
	-325 to 100°F (-198 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	20000 (1379)	20000 (1379)	19250 (1327)	18050 (1244)	16800 (1158)
3/8	20000 (1379)	20000 (1379)	19250 (1327)	18050 (1244)	16800 (1158)
9/16	20000 (1379)	20000 (1379)	19250 (1327)	18050 (1244)	16800 (1158)
3/4	20000 (1379)	20000 (1379)	19250 (1327)	18050 (1244)	16800 (1158)
1	20000 (1379)	20000 (1379)	19250 (1327)	18050 (1244)	16800 (1158)

Installation Instructions

- refer to the Tools and Installation.

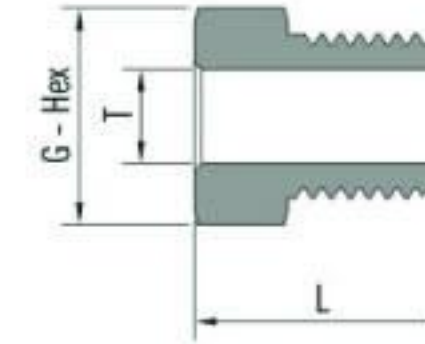
Cautions

- Do not loosen or tighten fittings when system is pressurized.

20 Series Tube Fittings

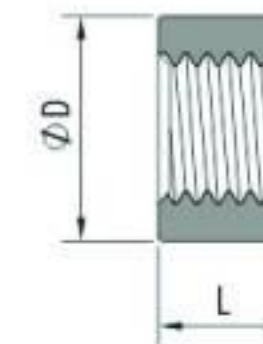
Dimensions

Glands



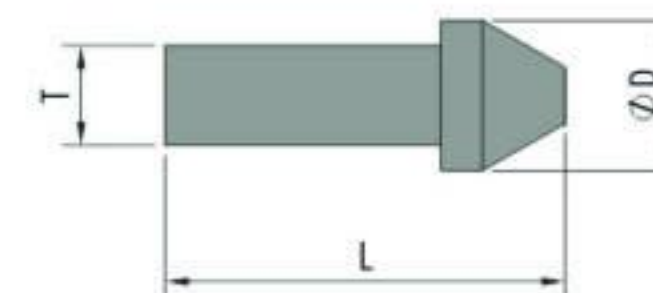
T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)	
		G	L
1/4	SS-G-20S4	0.50 (12.7)	0.58 (14.7)
3/8	SS-G-20S6	0.63 (15.9)	0.73 (18.5)
9/16	SS-G-20S9	0.94 (23.8)	0.88 (22.4)
3/4	SS-G-20S12	1.19 (30.2)	1.00 (25.4)
1	SS-G-20S16	1.38 (34.9)	1.38 (35.1)

Collars



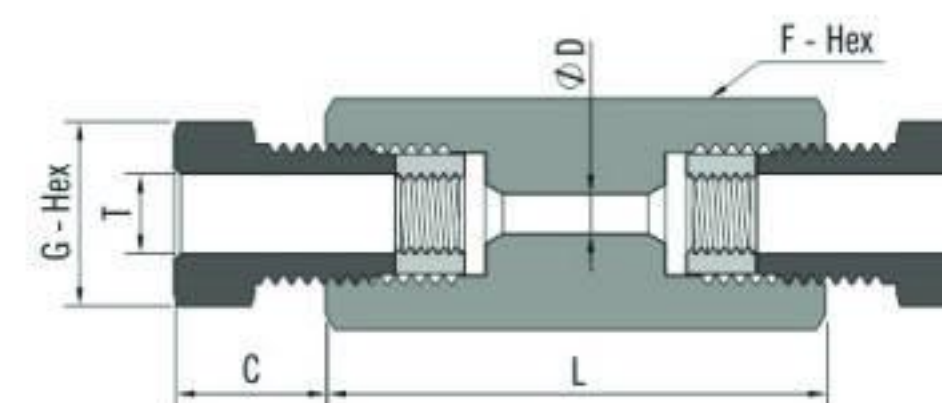
T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)	
		D	L
1/4	SS-CO-20S4	0.38 (9.7)	0.22 (5.6)
3/8	SS-CO-20S6	0.47 (11.9)	0.25 (6.4)
9/16	SS-CO-20S9	0.72 (18.3)	0.31 (7.9)
3/4	SS-CO-20S12	0.94 (23.8)	0.37 (9.4)
1	SS-CO-20S16	1.25 (31.8)	0.50 (12.7)

Plugs



T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)	
		D	L
1/4	SS-TP-20S4	0.38 (9.7)	0.94 (23.8)
3/8	SS-TP-20S6	0.47 (11.9)	1.18 (30.0)
9/16	SS-TP-20S9	0.72 (18.3)	1.40 (35.6)
3/4	SS-TP-20S12	0.94 (23.8)	1.69 (42.9)
1	SS-TP-20S16	1.25 (31.8)	2.20 (55.9)

Union Couplings

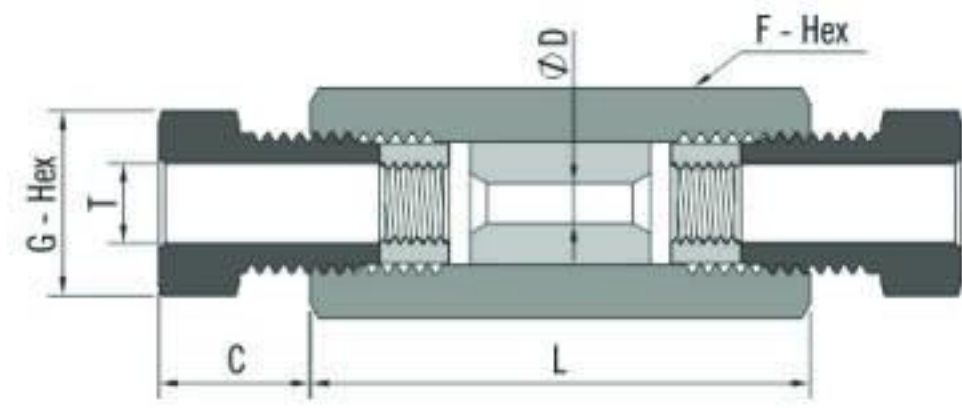


T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)				
		L	C	D	G	F
1/4	SS-U-20S4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-U-20S6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-U-20S9	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-U-20S12	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-U-20S16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Dimensions are for reference only, subject to change.

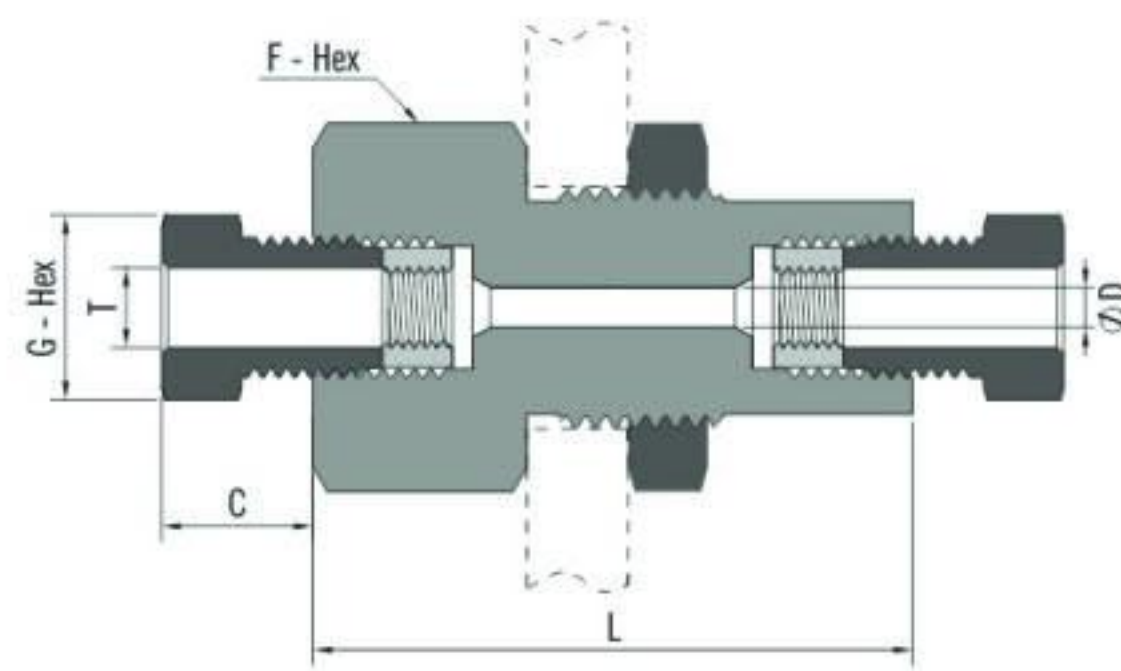
20 Series Tube Fittings

Union Couplings (Slip Type)



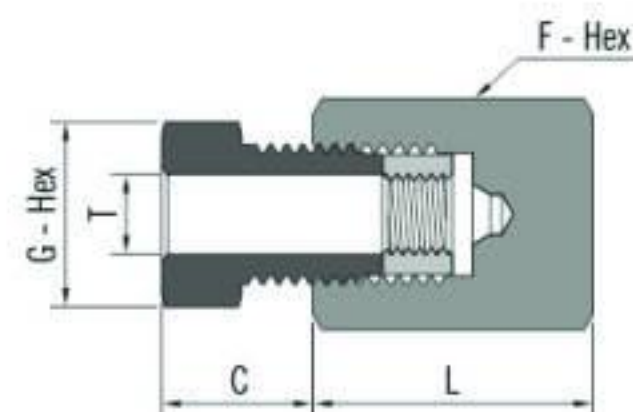
T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)				
		L	C	D	G	F
1/4	SS-SU-20S4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-SU-20S6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-SU-20S9	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-SU-20S12	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-SU-20S16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Bulkhead Couplings



T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)						
		L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	SS-BU-20S4	1.88 (47.8)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.00 (25.4)	0.81 (20.6)	0.38 (9.7)
3/8	SS-BU-20S6	2.00 (50.8)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.06 (27.0)	0.94 (23.8)	0.38 (9.7)
9/16	SS-BU-20S9	2.38 (60.5)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
3/4	SS-BU-20S12	2.62 (66.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)
1	SS-BU-20S16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	2.13 (54.0)	1.94 (49.2)	0.38 (9.7)

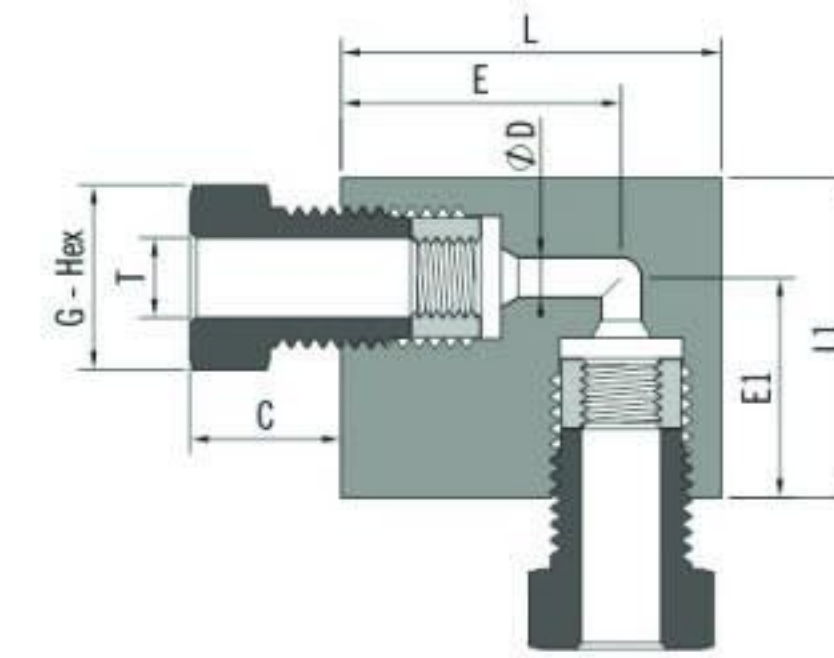
Caps



T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)			
		L	C	G	F
1/4	SS-TC-20S4	1.00 (25.4)	0.38 (9.7)	0.50 (12.7)	0.63 (15.9)
3/8	SS-TC-20S6	1.19 (30.2)	0.44 (11.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-TC-20S9	1.50 (38.1)	0.53 (13.5)	0.94 (23.8)	1.00 (25.4)
3/4	SS-TC-20S12	1.88 (47.7)	0.62 (15.7)	1.19 (30.2)	1.38 (34.9)
1	SS-TC-20S16	2.50 (63.5)	0.72 (18.3)	1.38 (34.9)	1.75 (44.5)

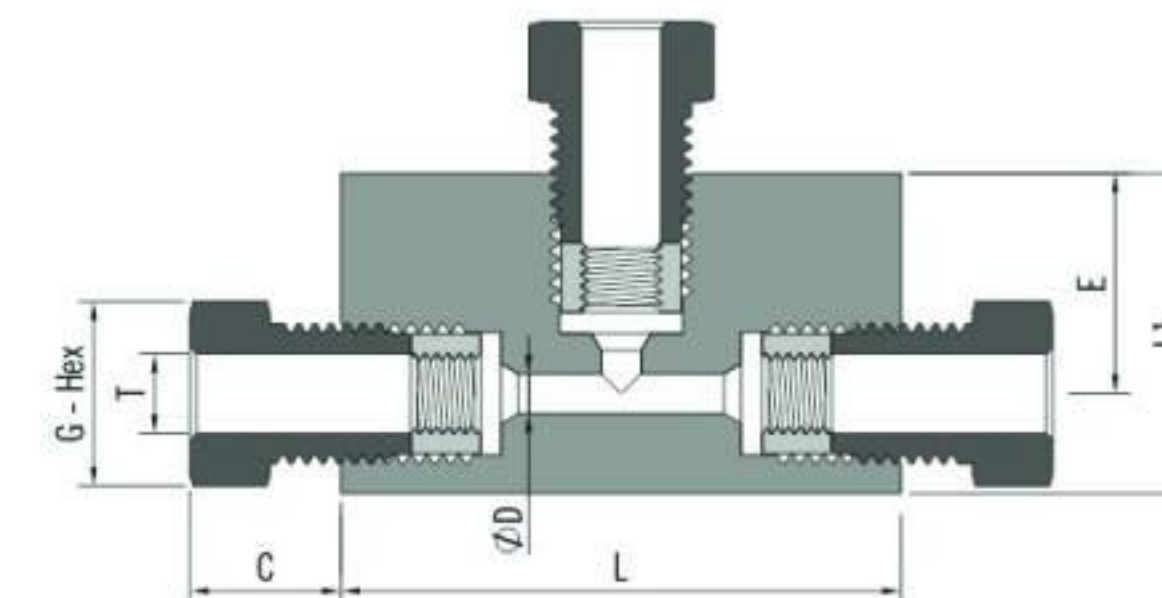
20 Series Tube Fittings

Elbows

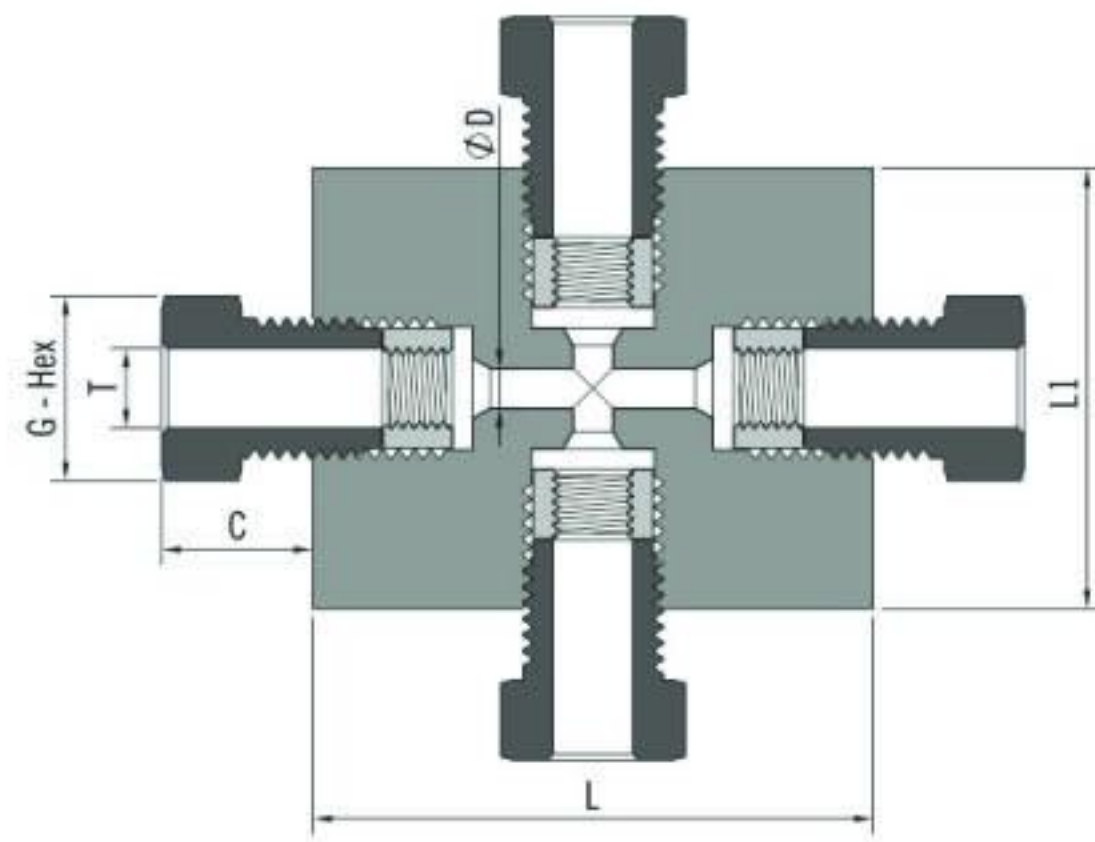


T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)							
		C	D	G	L	E	L1	E1	Thickness
1/4	SS-LU-20S4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.12 (28.4)	0.75 (19.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-LU-20S6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.38 (34.9)	1.00 (25.4)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-LU-20S9	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.75 (44.5)	1.25 (31.8)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	SS-LU-20S12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	2.25 (57.2)	1.50 (38.1)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	SS-LU-20S16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	3.00 (76.2)	2.06 (52.3)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

Tees



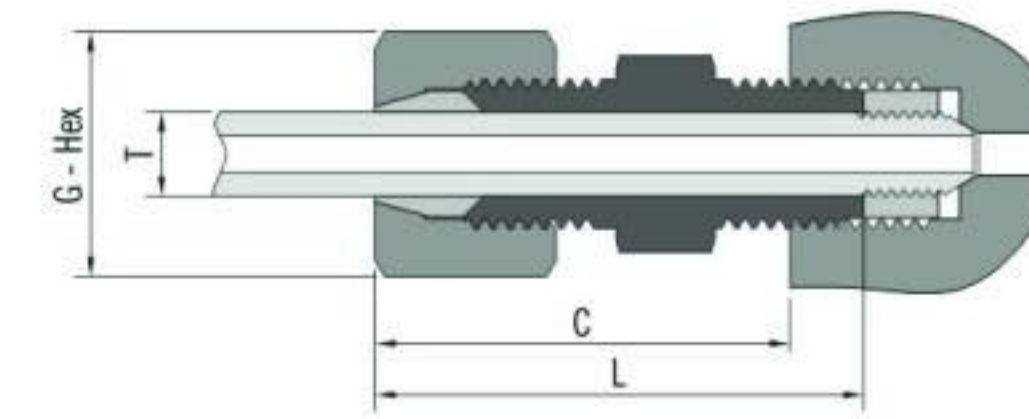
T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)						
		C	D	G	L	L1	E	Thickness
1/4	SS-TT-20S4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-TT-20S6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-TT-20S9	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	SS-TT-20S12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	SS-TT-20S16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)



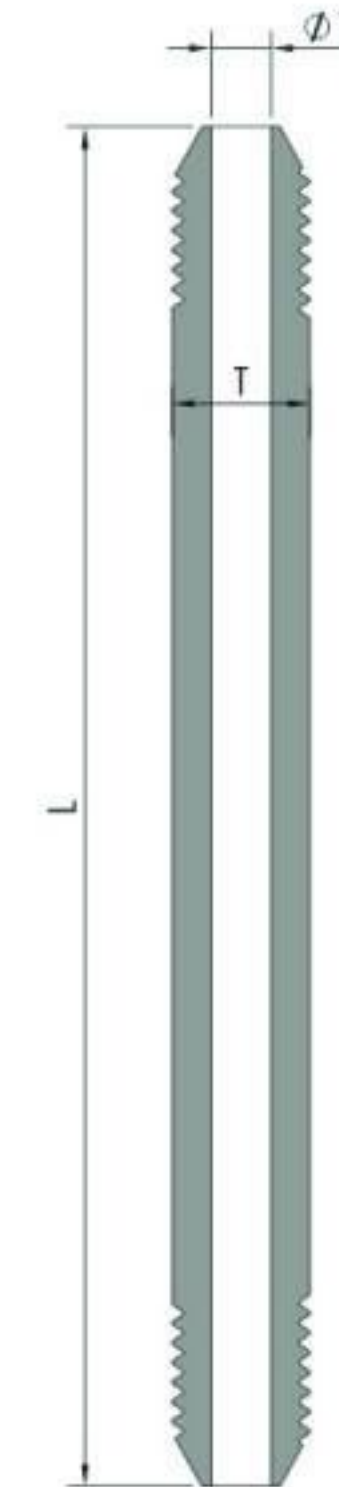
T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)					
		C	D	G	L	L1	Thickness
1/4	SS-C-20S4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.50 (38.1)	0.63 (15.9)
3/8	SS-C-20S6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	2.00 (50.8)	0.75 (19.1)
9/16	SS-C-20S9	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	2.50 (63.5)	1.00 (25.4)
3/4	SS-C-20S12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	3.00 (76.2)	1.38 (34.9)
1	SS-C-20S16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	4.12 (104.6)	1.75 (44.5)

The extreme vibration or shock, such as mobile pressure systems or long tubing runs culminating at a compressor that the tubing systems are subjected to, will be prevented by using C-LOK Anti-Vibration Gland Assemblies. These assemblies use the same reliable connection geometries as the standard C-LOK fittings, with the added advantage of essentially unlimited vibrational fatigue life.

A coned and threaded tube, when subjected to unusual or excessive vibration, may fail prematurely and break at the last thread. C-LOK Anti-Vibration Gland Assembly acts to move the fulcrum of vibration away from the threaded part of the tube and onto the strong, solid wall of the tubing. A wedge-like collet firmly holds the assembly in place, virtually eliminating premature tubing failure while reliably maintaining a leakage-free connection between the tube and the connection seat.



T-Tube O.D. (in.)	Ordering Number	Dimensions, in (mm)		
		L	C	G
1/4	SS-AVGA-20S4	1.19 (30.2)	0.94 (23.8)	0.63 (15.9)
3/8	SS-AVGA-20S6	1.50 (38.1)	1.19 (30.2)	0.81 (20.6)
9/16	SS-AVGA-20S9	1.78 (45.2)	1.41 (35.8)	0.94 (23.8)
3/4	SS-AVGA-20S12	2.00 (50.8)	1.59 (40.4)	1.25 (31.8)
1	SS-AVGA-20S16	2.38 (60.5)	1.69 (42.9)	1.50 (38.1)



T-Tube O.D. (in.)	Tx-Tube I.D. (in.)	Ordering Number	L in (mm)
1/4	0.109	SS-CTN-20S4-2.75	2.75 (69.9)
1/4	0.109	SS-CTN-20S4-3	3 (76.2)
1/4	0.109	SS-CTN-20S4-4	4 (101.6)
1/4	0.109	SS-CTN-20S4-6	6 (152.4)
1/4	0.109	SS-CTN-20S4-8	8 (203.2)
1/4	0.109	SS-CTN-20S4-10	10 (254.0)
1/4	0.109	SS-CTN-20S4-12	12 (304.8)
3/8	0.203	SS-CTN-20S6-3	3 (76.2)
3/8	0.203	SS-CTN-20S6-4	4 (101.6)
3/8	0.203	SS-CTN-20S6-6	6 (152.4)
3/8	0.203	SS-CTN-20S6-8	8 (203.2)
3/8	0.203	SS-CTN-20S6-10	10 (254.0)
3/8	0.203	SS-CTN-20S6-12	12 (304.8)
9/16	0.312	SS-CTN-20S9-4	4 (101.6)
9/16	0.312	SS-CTN-20S9-6	6 (152.4)
9/16	0.312	SS-CTN-20S9-8	8 (203.2)
9/16	0.312	SS-CTN-20S9-10	10 (254.0)
9/16	0.312	SS-CTN-20S9-12	12 (304.8)
3/4	0.438	SS-CTN-20S12-4	4 (101.6)
3/4	0.438	SS-CTN-20S12-6	6 (152.4)
3/4	0.438	SS-CTN-20S12-8	8 (203.2)
3/4	0.438	SS-CTN-20S12-10	10 (254.0)
3/4	0.438	SS-CTN-20S12-12	12 (304.8)
1	0.562	SS-CTN-20S16-6	6 (152.4)
1	0.562	SS-CTN-20S16-8	8 (203.2)
1	0.562	SS-CTN-20S16-10	10 (254.0)
1	0.562	SS-CTN-20S16-12	12 (304.8)

20 Series Tube Fittings

20 Series Tubing

- Work pressure: 20000 psi (1379 bar).
- 316 and 304 stainless steel are standard material. Other materials are available upon request.
- Material, size, and heat code are indicated on the tubing surface.

T-Tube O.D. (in.)	Tx-Tube I.D. (in.)	Material	Basic Ordering Number	Tolerance O.D. in. (mm)
1/4	0.109	316 SS	SS-MT-20S4-	0.248/0.243 (6.30/6.17)
1/4	0.109	304 SS	S4-MT-20S4-	0.248/0.243 (6.30/6.17)
3/8	0.203	316 SS	SS-MT-20S6-	0.370/0.365 (9.40/9.27)
3/8	0.203	304 SS	S4-MT-20S6-	0.370/0.365 (9.40/9.27)
9/16	0.312	316 SS	SS-MT-20S9-	0.557/0.552 (14.15/14.02)
9/16	0.312	304 SS	S4-MT-20S9-	0.557/0.552 (14.15/14.02)
3/4	0.438	316 SS	SS-MT-20S12-	0.745/0.740 (18.92/18.80)
3/4	0.438	304 SS	S4-MT-20S12-	0.745/0.740 (18.92/18.80)
1	0.562	316 SS	SS-MT-20S16-	0.995/0.990 (25.27/25.14)
1	0.562	304 SS	S4-MT-20S16-	0.995/0.990 (25.27/25.14)

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

For example:

1. 10 feet length, O.D. is 3/8", I.D. is 0.203", 316 SS 20 Series tube, the complete ordering number is: SS-MT-20S6-10.
2. 6 meters length, O.D. is 3/4", I.D. is 0.438", 304 SS 20 Series tube, the complete ordering number is: S4-MT-20S12-6M.