

60 Series Tube Fittings and Tubing

60,000 psi (4137 bar)



FITOK Group

FITOK GmbH (Headquarter)
Spremlinger Landstr. 115, 63069 Offenbach am Main, Germany
Tel.: +49 69 8900 4498 Fax: +49 69 8900 4495

FITOK, Inc.
13843 North Promenade Blvd., Suite 750, Stafford, Texas 77477, USA
Tel.: +1 281 888 0077 Fax: +1 281 582 4051

FITOK Incorporated
1-4F, Block C, Zone E, Yingtailong Industrial Park, Dalang Street,
Longhua District, Shenzhen, 518109, China
Tel.: +86 755 2803 2500 Fax: +86 755 2803 2619

FITOK Middle East Oil Equipment Trading LLC
208-209, Makateb Tower, Airport Road, P.O.Box 185412, Deira, Dubai, UAE
Tel.: +971 4 2959 853 Fax: +971 4 2959 854

info@fitokgroup.com
www.fitokgroup.com

FK-IC-HF-03-EN-150826

FITOK
Valves and Fittings

www.fitokgroup.com

Contents

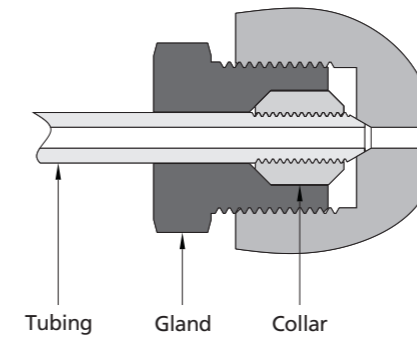
Glands - G	02
Collars - CO	02
Plugs - TP	02
Union Couplings - U	03
Reducing Union Couplings - U	03
Union Couplings (Slip Type) - SU	03
Bulkhead Couplings - BU	04
Caps - TC	04
Elbows - LU	04
Tees - TTT	05
Crosses - C	05

Anti-Vibration Gland Assemblies - AVGA	06
Coned and Threaded Nipples - CTN	06
60 Series Tubing	07

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.
- ⦿ Material is high tensile 316 stainless steel.
- ⦿ Every fitting is stamped with size, material and heat code.

Composition



Working Pressure

⦿ Working pressures for 60 series tube end connections used in this catalog are identified below.

Tube O.D. in.	Working Pressure, psig (bar)				
	-423 to 100°F (-252 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	60000 (4137)	60000 (4137)	57750 (3982)	54250 (3740)	50700 (3496)
3/8	60000 (4137)	60000 (4137)	57750 (3982)	54250 (3740)	50700 (3496)
9/16	60000 (4137)	60000 (4137)	57750 (3982)	54250 (3740)	50700 (3496)

Data in this table is applied only to the working temperature below 800°F (427°C). For the working temperature above 800°F (427°C), please consult FITOK Group, then we will provide you relative solutions.

Working Temperature

⦿ Temperature Rating: -423°F (-252°C) to 1200°F (649°C).

Installation Instructions

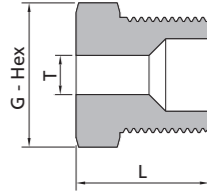
⦿ Refer to the **Tools and Installation Instructions**.

Cautions:

⦿ Do not loosen or tighten fittings under pressure.

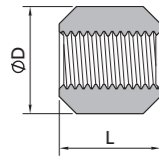
Dimensions

Glands



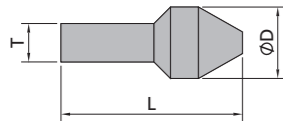
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		G	L
1/4	SS-G-6FH4	0.63 (15.9)	0.82 (20.8)
3/8	SS-G-6FH6	0.81 (20.6)	1.13 (28.7)
9/16	SS-G-6FH9	1.19 (30.2)	1.50 (38.1)

Collars



Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-CO-6FH4	0.38 (9.6)	0.38 (9.6)
3/8	SS-CO-6FH6	0.50 (12.7)	0.54 (13.7)
9/16	SS-CO-6FH9	0.81 (20.6)	0.62 (15.8)

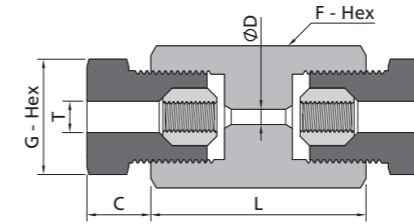
Plugs



Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-TP-6FH4	0.38 (9.6)	1.04 (26.4)
3/8	SS-TP-6FH6	0.50 (12.7)	1.35 (34.3)
9/16	SS-TP-6FH9	0.81 (20.6)	1.89 (48.0)

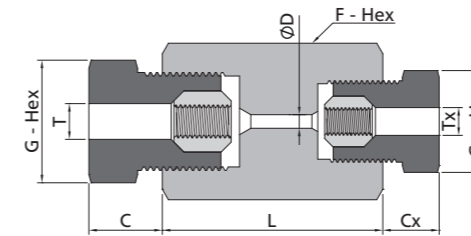
Dimensions are for reference only, subject to change.

Union Couplings



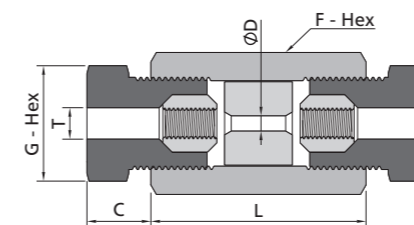
Tube						
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)				
		L	C	D	G	F
1/4	SS-U-6FH4	1.38 (34.9)	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8	SS-U-6FH6	1.75 (44.5)	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16	SS-U-6FH9	2.19 (55.6)	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)

Reducing Union Couplings



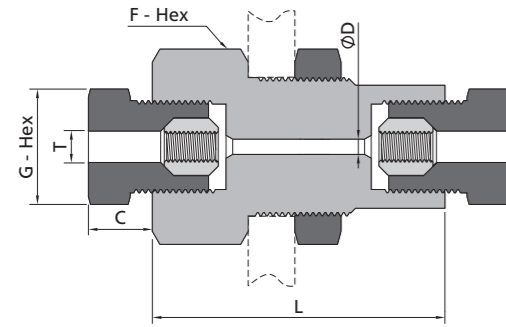
Tube									
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)						
			L	C	Cx	D	G	Gx	F
3/8	1/4	SS-U-6FH6-6FH4	1.63 (41.3)	0.61 (15.6)	0.47 (11.9)	0.09 (2.3)	0.81 (20.6)	0.63 (15.9)	1.00 (25.4)
9/16	1/4	SS-U-6FH9-6FH4	1.75 (44.5)	0.95 (24.1)	0.47 (11.9)	0.09 (2.3)	1.19 (30.2)	0.63 (15.9)	1.38 (34.9)
9/16	3/8	SS-U-6FH9-6FH6	2.00 (50.8)	0.95 (24.1)	0.61 (15.6)	0.13 (3.3)	1.19 (30.2)	0.81 (20.6)	1.38 (34.9)

Union Couplings (Slip Type)



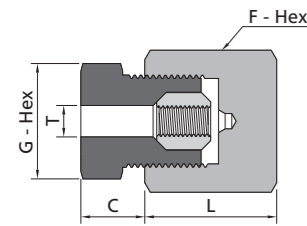
Tube					
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)			
		L	C	D	F
1/4	SS-SU-6FH4	1.38 (34.9)	0.47 (11.9)	0.09 (2.3)	0.75 (19.1)
3/8	SS-SU-6FH6	1.75 (44.5)	0.61 (15.6)	0.13 (3.3)	1.00 (25.4)
9/16	SS-SU-6FH9	2.19 (55.6)	0.95 (24.1)	0.19 (4.8)	1.38 (34.9)

Bulkhead Couplings



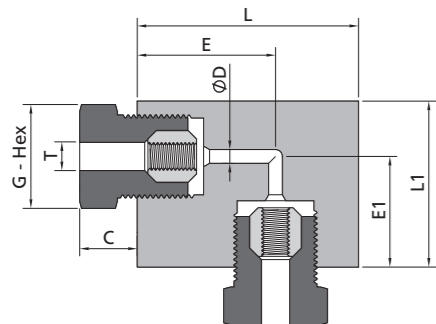
Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	SS-BU-6FH4	1.88 (47.8)	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
3/8	SS-BU-6FH6	2.38 (60.5)	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
9/16	SS-BU-6FH9	2.75 (69.9)	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)

Caps



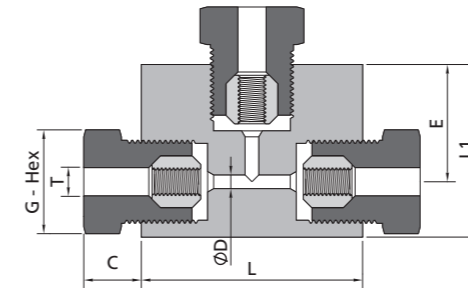
Tube		Dimensions, in. (mm)			
T - Tube O.D. in.	Ordering Number	L	C	G	F
1/4	SS-TC-6FH4	0.75 (19.1)	0.47 (11.9)	0.63 (15.9)	0.75 (19.1)
3/8	SS-TC-6FH6	1.13 (28.6)	0.61 (15.6)	0.81 (20.6)	1.00 (25.4)
9/16	SS-TC-6FH9	1.38 (34.9)	0.95 (24.1)	1.19 (30.2)	1.38 (34.9)

Elbows



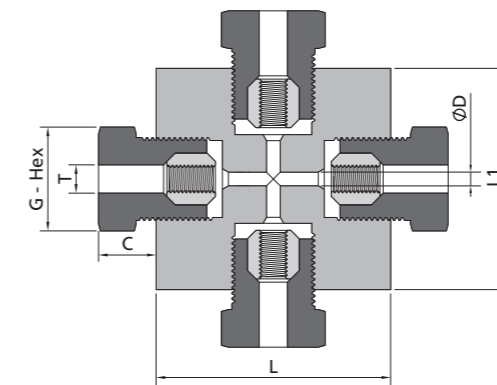
Tube		Dimensions, in. (mm)							
T - Tube O.D. in.	Ordering Number	C	D	G	L	E	L1	E1	Thickness
1/4	SS-LU-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	1.50 (38.1)	0.88 (22.4)	1.00 (25.4)	0.62 (15.7)	0.75 (19.1)
3/8	SS-LU-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.25 (31.8)	1.50 (38.1)	1.00 (25.4)	1.00 (25.4)
9/16	SS-LU-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	1.88 (47.8)	1.88 (47.8)	1.12 (28.4)	1.50 (38.1)

Tees



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	E	Thickness
1/4	SS-TTT-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.88 (22.4)	0.75 (19.1)
3/8	SS-TTT-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.56 (39.6)	1.06 (26.9)	1.00 (25.4)
9/16	SS-TTT-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.12 (53.8)	1.38 (35.0)	1.50 (38.1)

Crosses

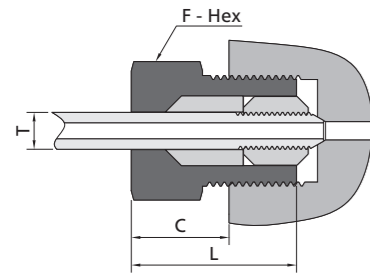


Tube		Dimensions, in. (mm)					
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	Thickness
1/4	SS-C-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.75 (19.1)
3/8	SS-C-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	2.12 (53.8)	1.00 (25.4)
9/16	SS-C-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.75 (69.9)	1.50 (38.1)

Anti-Vibration Gland Assemblies

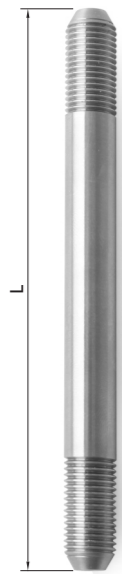
The extreme vibration or shock, such as mobile pressure systems or long tubing runs culminating at a compressor that the tubing systems are subjected to, will be prevented by using FITOK Anti-Vibration Gland Assemblies. These assemblies use the same reliable connection geometries as the standard FITOK 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. FITOK 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.



Tube				
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)		
		L	C	F
1/4	SS-AVGA-6FH4	0.81 (20.6)	0.47 (11.9)	0.63 (15.9)
3/8	SS-AVGA-6FH6	1.12 (28.4)	0.61 (15.6)	0.81 (20.6)
9/16	SS-AVGA-6FH9	1.50 (38.1)	0.95 (24.1)	1.19 (30.2)

Coned and Threaded Nipples



T - Tube O.D. in.	Tx - Tube I.D. in.	Ordering Number	L in. (mm)
1/4	0.083	SS-CTN-6FH4-2.75	2.75 (69.9)
1/4	0.083	SS-CTN-6FH4-3	3 (76.2)
1/4	0.083	SS-CTN-6FH4-4	4 (101.6)
1/4	0.083	SS-CTN-6FH4-6	6 (152.4)
1/4	0.083	SS-CTN-6FH4-8	8 (203.2)
1/4	0.083	SS-CTN-6FH4-10	10 (254.0)
1/4	0.083	SS-CTN-6FH4-12	12 (304.8)
3/8	0.125	SS-CTN-6FH6-3	3 (76.2)
3/8	0.125	SS-CTN-6FH6-4	4 (101.6)
3/8	0.125	SS-CTN-6FH6-6	6 (152.4)
3/8	0.125	SS-CTN-6FH6-8	8 (203.2)
3/8	0.125	SS-CTN-6FH6-10	10 (254.0)
3/8	0.125	SS-CTN-6FH6-12	12 (304.8)
9/16	0.188	SS-CTN-6FH9-4	4 (101.6)
9/16	0.188	SS-CTN-6FH9-6	6 (152.4)
9/16	0.188	SS-CTN-6FH9-8	8 (203.2)
9/16	0.188	SS-CTN-6FH9-10	10 (254.0)
9/16	0.188	SS-CTN-6FH9-12	12 (304.8)

60 Series Tubing

- Working pressure: 60000 psig (4137 bar).
- 316 and 304 stainless steel are standard materials. 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	0.083	316 SS	SS-HT-6FH4-	0.248/0.243 (6.30/6.17)
1/4	0.083	304 SS	S4-HT-6FH4-	0.248/0.243 (6.30/6.17)
3/8	0.125	316 SS	SS-HT-6FH6-	0.370/0.365 (9.40/9.27)
3/8	0.125	304 SS	S4-HT-6FH6-	0.370/0.365 (9.40/9.27)
9/16	0.188	316 SS	SS-HT-6FH9-	0.557/0.552 (14.15/14.02)
9/16	0.188	304 SS	S4-HT-6FH9-	0.557/0.552 (14.15/14.02)



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

For example:

- 10 feet length, O.D. is 1/4", I.D. is 0.083", 316 SS 60 series tube, the complete ordering number is: **SS-HT-6FH4-10**.
- 3 meters length, O.D. is 9/16", I.D. is 0.188", 304 SS 60 series tube, the complete ordering number is: **S4-HT-6FH9-3M**.