

L-ring Face Seal Fittings

TFO Series



FITOK Group

FITOK GmbH (Headquarter)
Sprendlinger 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-SF-03-EN-150916

FITOK
Valves and Fittings

www.fitokgroup.com

L-ring Face Seal Fittings

TFO Series

Features

- ⦿ Reduced internal entrapment
- ⦿ Lubricant-free L-ring seal
- ⦿ Controlled L-ring extrusion, no overtightening
- ⦿ Standard surface finish is a roughness average of 20 μin.(0.51 μm)Ra
- ⦿ Butt weld connection ensures system unhindered
- ⦿ Each fitting is stamped with size,material and heat code

Technical Data

- ⦿ Sizes range from 1/4" to 1"
- ⦿ Standard Materials of Constructions

Construction	Materials	Designator
Body/Gland	316L stainless steel	6L
Nut	316 stainless steel	SS
Seal	PTFE	T

Materials traceable, certification available upon request

- ⦿ Working Pressure at 100°F (37°C)

Tube OD.	Working Pressure psig (bar)
1/4 in.	2500 (172)
1/2 in.	2000 (137)
3/4 in.	1500 (103)
1 in.	
12 mm	2000 (137)

- ⦿ Working Temperature
Temperature ranges for TFO fittings are governed by the L-ring materials.

Material	Working Temperature
PTFE	-50°F to 450°F(-45°C to 232°C)

Testing

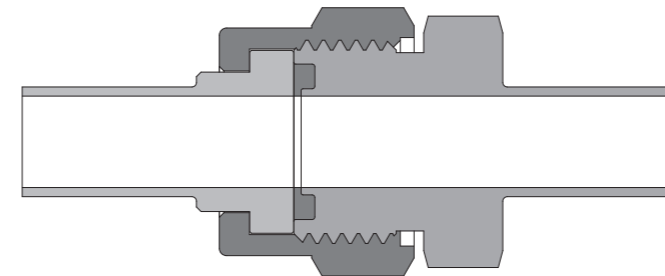
TFO fitting is tested with helium at a maximum leak rate of 4x10⁻⁹ std cm³/s.

Ordering Information

- ⦿ Dimensions are for reference only and are subject to change.
- ⦿ Each component should be ordered separately.
- ⦿ Add the material designator as a prefix, technology grade as a suffix to the basic ordering number to get the complete ordering number.
- ⦿ Standard Process Specification
FC-01 standard cleaning and packaging, Is applied to all the fittings for general industrial procedure. No suffix is required.
Example: **6L-G-TFO4-TB4**.
- ⦿ Special Cleaning and Packaging
FC-02 special cleaning and packaging, following ASTM G93 level C, add -F2 as a suffix to the basic ordering number.
Example: **6L-G-TFO4-TB4-F2**.

Installation Instructions

1. Assemble the gland, nut and gasket as below, finger tighten the nut.

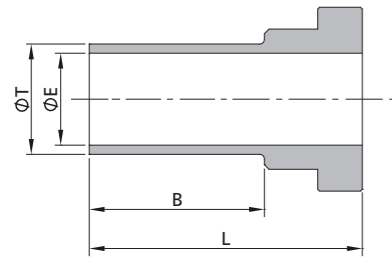


2. Tighten the nut 1/8 turn with a wrench while holding the body of the fitting steady.

Cautions

- ⦿ For the best sealing result, the L-ring should be replaced each time the groove housing is dismantled.
- ⦿ When welding is applied to the body, the L-ring should be removed to prevent possible damage.
- ⦿ Tungsten Inert Gas Welding (TIG) is recommended.
- ⦿ Do not loosen or tighten fittings when system is pressurized.

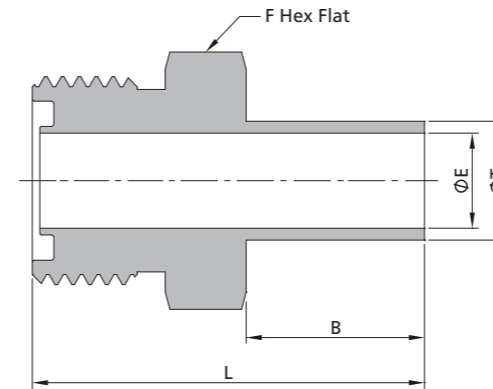
Gland



T-Tube OD. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)		
			L	B	E
1/4	0.035	6L-G-TFO4-TB4	0.67(17.0)	0.25(6.4)	0.18(4.6)
		6L-G-TFO4-TB4-12			
1/2	0.049	6L-G-TFO8-TB8	1.17(29.7)	0.75(19.1)	0.40(10.2)
		6L-G-TFO8-TB8×0.065			0.37(9.4)
3/4	0.065	6L-G-TFO12-TB12	1.24(31.5)		0.62(15.7)
1		6L-G-TFO16-TB16	1.45(36.8)	0.96(24.4)	0.87(22.1)
Metric					
12 mm	1 mm	6L-G-TFO8-MTB12	1.17(29.7)	0.75(19.1)	0.39(10)

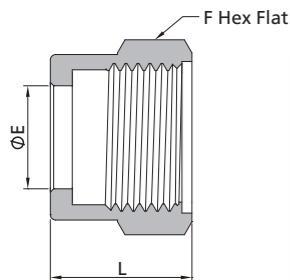
NOTE: -MTB12 gland and body use -TFO8 L-ring and nut.

Tube Butt Weld Body



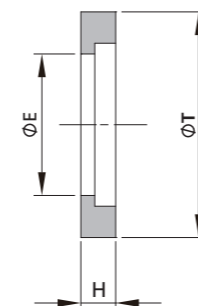
T-Tube OD. (in.)	Wall Thickness (in.)	Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/4	0.035	6L-CW-TFO4-TB4	1.03(26.2)	0.25(6.4)	0.18(4.6)	5/8(15.88)
		6L-CW-TFO4-TB4-12	1.53(38.9)			
1/2	0.049	6L-CW-TFO8-TB8	1.65(41.9)	0.75(19.1)	0.40(10.2)	15/16(23.8)
		6L-CW-TFO8-TB8×0.065			0.37(9.4)	
3/4	0.065	6L-CW-TFO12-TB12	1.75(44.4)		0.62(15.7)	1 5/16(33.34)
1		6L-CW-TFO16-TB16	1.99(50.5)	0.96(24.4)	0.87(22.1)	15/8(47.63)
Metric						
12 mm	1 mm	6L-CW-TFO8-MTB12	1.65(41.9)	0.75(19.1)	0.39(10)	15/16(23.8)

Nut



Ordering Number	Dimension, in. (mm)		
	L	E	F
SS-N-TFO4	0.75(19.1)	0.39(9.9)	11/16(17.46)
SS-N-TFO8	0.84(21.3)	0.61(15.5)	1(25.4)
SS-N-TFO12	0.90(22.9)	0.94(23.9)	1 1/2(38.1)
SS-N-TFO16		1.25(31.8)	1 3/4(44.45)

L-ring Seal



Basic Ordering Number	Dimension, in. (mm)		
	T	E	H
-GT-TFO4	0.38(9.6)	0.18(4.6)	0.07(1.8)
-GT-TFO8	0.64(16.2)	0.40(10.2)	0.10(2.5)
-GT-TFO12	0.92(23.4)	0.62(15.7)	
-GT-TFO16	1.30(33.0)	0.87(22.1)	0.14(3.6)