

Statutory Declaration (Registration of Fittings)

TSK-1008

I. Declaration Information

I, David H. Peace
Vice President of Engineering
(company title, e.g. vice president, plant manager, chief engineer)
 (must be in a position of authority in the manufacturing plant where the fitting is produced)

of: Swagelok Company
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.


located at: 29500 Solon Road (See Attachment A) Solon, Ohio 44139-3492
(Plant Address - Apt/Street) (City, Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel Safety Act** (check one)

Comply with the requirements of ASME B31.1 and ASME B31.3 which specifies the dimensions, (title of recognized North American Standard) Materials of construction, pressure / temperature ratings and identification marking of the fittings, or

Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, The British Standards Institution as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Category A Type Fittings

In support of this application, the following information, calculations and / or test data are attached:
ISO 9001:2008 Certificate, Catalog Information, Support Documents, Attachment B

II. Declaration

DECLARED before me at Solon In the State Ohio
 this 2nd day of July, 2014

Jamie L. Ristau Jamie L. Ristau
(print name) Registrar, Portage County
 Notary Public, State of Ohio
 My Commission Expires: 03/26/2019

Jamie L. Ristau 
(Signature of Commissioner of Oaths) (Signature)

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Safety Act** and CSA B51, Clause 4.2, and is accepted for registration in Category _____

(Registration Number) _____ (Date Registered - MM DD YYYY) _____ (Expiry Date - MM DD YYYY) _____
(For the Administrator / Chief Inspector)

Technical Safety Authority of Saskatchewan
 Boiler & P.V. Safety Unit
 CRN 0A 12577-53
 File 9425
 REGISTERED
 Date 23 July 2014
 Design Survey Office

Attachment B. Scope of Registration for Swagelok Stainless Steel Tube Fittings (Category A)

This document represents the scope of Swagelok Stainless Steel Tube Fittings covered by this submission for CRN approval. These Swagelok Tube Fittings have been evaluated in accordance with ASME B31.1-2010 for unlisted components and ASME B31.3-2010 for unlisted components. The minimum temperature rating is -20°F for B31.1 applications.

Summary Table

Product Description or Series	Material	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code of Construction
			-60°F to 100°F	At 1200°F	
Gaugeable Tube Fittings and Adapter Fittings	316 Stainless Steel	Swagelok End Connection 1/16 - 2 inch (Fractional) 3mm - 50 mm (Metric)	See Table on Page 2	See Table on Page 2	ASME B31.3 (Unlisted Components) ASME B31.1 (Unlisted Components)

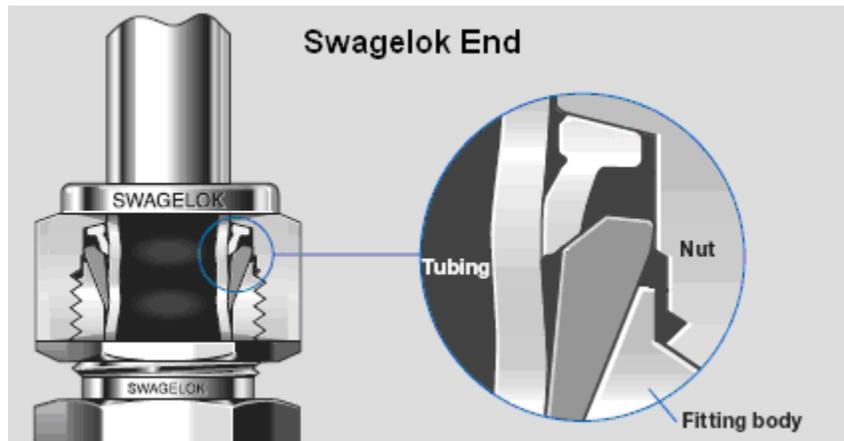
Stainless Steel Swagelok Tube Fitting Pressure Rating Table

Swagelok End Connection Size	Maximum Allowable Working Pressure (1)	
	-60°F to 100°F	At maximum temperature 1200°F (648.90°C)
1/16	12 000 psig	3840 psig
1/8	10 900 psig	3488 psig
3/16	10 200 psig	3264 psig
1/4	10 200 psig	3264 psig
5/16	8 000 psig	2560 psig
3/8	7500 psig	2400 psig
1/2	6700 psig	2144 psig
5/8	6000 psig	1920 psig
3/4	5800 psig	1856 psig
7/8	4800 psig	1536 psig
1	4700 psig	1504 psig
1 1/4	4800 psig	1536 psig
1 1/2	4900 psig	1568 psig
2	3600 psig	1152 psig
3 mm	670 bar	214 bar
6 mm	710 bar	227 bar
8 mm	520 bar	166 bar
10 mm	580 bar	185 bar
12 mm	470 bar	150 bar
14 mm	430 bar	137 bar
15 mm	400 bar	128 bar
16 mm	400 bar	128 bar
18 mm	370 bar	118 bar
20 mm	380 bar	121 bar
22 mm	340 bar	108 bar
25 mm	320 bar	102 bar
28 mm	330 bar	105 bar
30 mm	310 bar	99 bar
32 mm	330 bar	105 bar
38 mm	310 bar	99 bar
50 mm	270 bar	86 bar

Note (1): Values based on thickest wall tubing. Thinner tubing may be used but in all cases the ratings are less than, or equal to, those shown in the table.

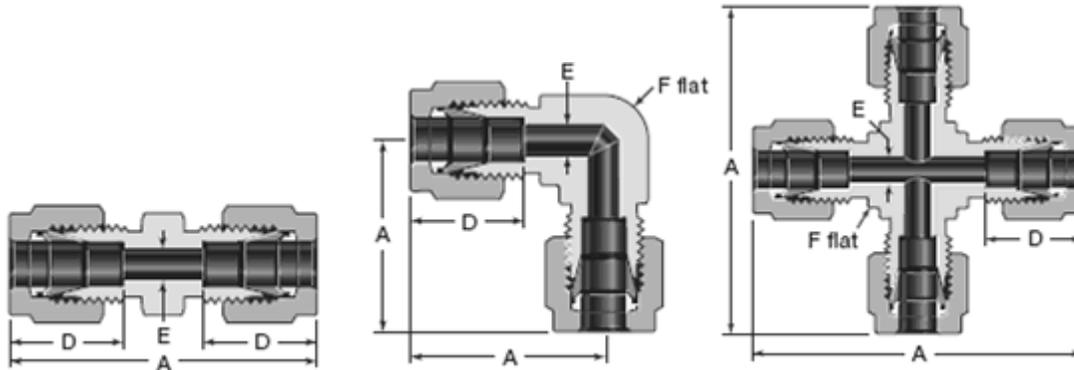
Product Description

Swagelok Fittings are furnished in a variety of configurations and shapes (straight, elbow, tee or cross). Swagelok Fittings consist of at least one Swagelok End – a two-ferrule mechanical-grip design. The Swagelok end is a proprietary design, and the assembly consists of Swagelok body, nut, front and back ferrule (see detail). The table above, as well as the “Configurations” section, covers a variety of other end connections.

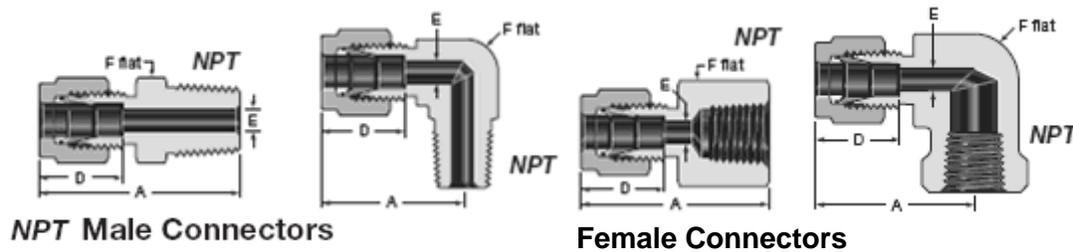


Configurations

1. Unions.

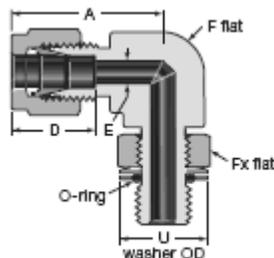


2. Male and Female connectors / adapters.

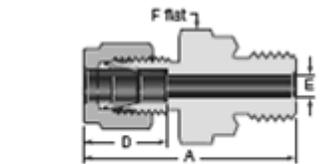


NPT Male Connectors

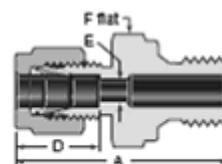
Female Connectors



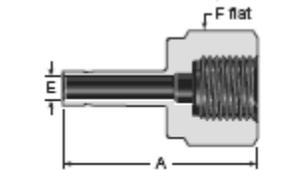
Positionable, ISO/BSP Parallel Thread (PR)



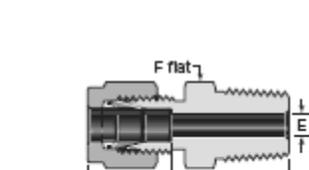
ISO/BSP Parallel Thread (RP)



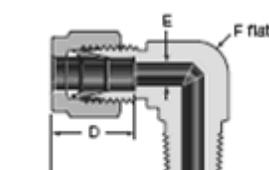
ISO/BSP Parallel Thread (RS)



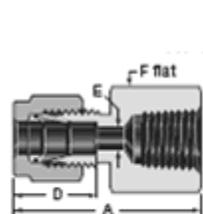
ISO/BSP Parallel Thread (RG, Gauge)



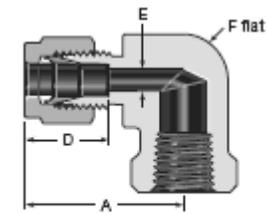
ISO/BSP Tapered Thread (RT)



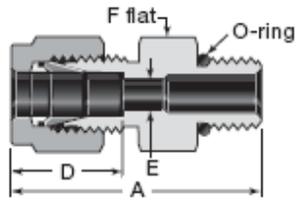
ISO/BSP Tapered Thread (RT)



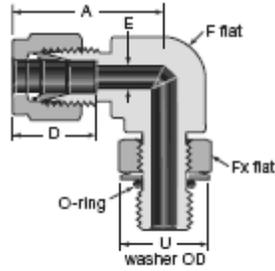
ISO/BSP Tapered Female Thread (RT)



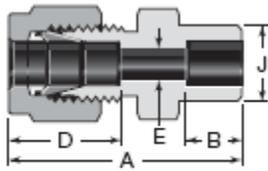
ISO/BSP Tapered Female Thread (RT)



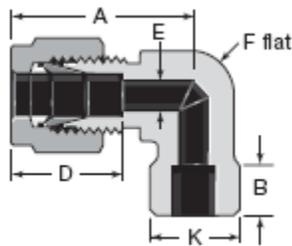
SAE/MS Straight Thread Stud (ST)



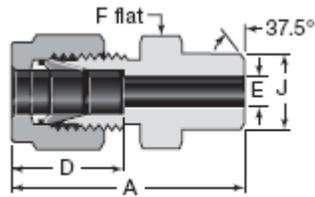
Positionable. SAE/MS Straight Thread (ST)



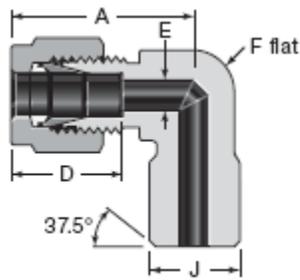
Tube Socket Weld



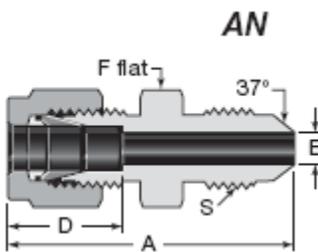
Tube Socket Weld



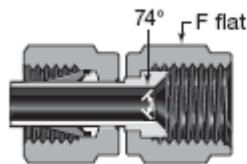
Male Pipe Weld



Male Pipe Weld



AN



AN Female

(For dimensions see catalog.)

Product Options:

These product options were previously registered under 0A12577.56 (this application enclosed). These options listed below affect pressure and/or temperature ratings shown in the above Summary Table, but in all cases the ratings are less than, or equal to, those shown in the table.

1. Bored-Through Fittings.
2. RP gaskets:
 - a. Copper
 - b. Nickel
 - c. PTFE
3. RS gaskets:
 - a. Metal-and-elastomer bonded
 - b. Non-bonded stainless steel
 - c. Copper
4. RG gaskets:
 - a. Copper
 - b. Nickel
 - c. PTFE
5. Sealant for tapered pipe threads (NPT and ISO-7):
 - a. Curable resin with PTFE
 - b. PTFE tape

Additional options that do not affect pressure and/or temperature ratings may be made available within the scope of this approval. For fittings not listed in scope table, reference 0A12577.56 (this application is enclosed). Examples of these would include the following:

1. Special marking
2. Special cleaning
3. Wire drills
4. Bulkhead configurations
5. Snubbers/frits and orifice plates
6. Equivalent metric or fractional hex sizes

All of the above options, those that affect pressure and/or temperature ratings and those that do not, are within the scope of this approval.

Quality System

The Swagelok Company quality system complies with the requirements of BS EN ISO 9001:2008. The Swagelok Company maintains British Standards Institution Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate. The tube fittings and adapter fittings are made at a Swagelok Company location in Solon, Ohio.

References

The product catalog does not represent the full scope of the registration but rather details some of the most common options.

- Gaugeable Tube Fittings and Adapter Fittings MS-01-140, R16