



Technical Standards and Safety Authority
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 Toronto, Ontario M9W 6N9
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Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

Swagelok

STATUTORY DECLARATION Registration of Fittings

I, David H. Peace, Vice President of Engineering
(Name and Position, e.g. President, Plant Manager, Chief Engineer)
 of Swagelok Company
(Name of Manufacturer)

Located at 29500 Solon Road, Solon, Ohio 44139 USA (440) 248-4600 (440) 349-5970
(Plant Address) (Telephone No.) (Fax No.)

- do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B16.5, ASME B31.3 Chapter IX, for unlisted components where applicable
(Title of recognized North American Standard)
 which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;
- 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, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001:2015 which has been verified by the following authority, BSI

The items covered by this declaration, for which I seek registration, are category A. Fittings type fittings. In support of this application, the following information and/or test data are attached as follows:
ISO 9001:2015 Certificate, Catalog Information, Support Documents, Attachment A, Attachment B
(drawings, calculations, test reports, etc.)

Declared before me at Solon in the State of Ohio
 the 3rd day of May AD 20 17.

Commissioner for Oaths:
Jamie L Ristau Resident Portage County
(Printed name) Notary Public, State of Ohio My Commission Expires: 03/08/2019
Jamie L Ristau
(Signature)

[Signature]
(Signature of Declarer)

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To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category "A"

CRN: 0A17712.24
 Registered by: Rabie Herb
 Dated: 2017/10/20



NOTE: This registration expires on: June 9, 2027

**Attachment B: Scope of Registration for 316 SS ASME (ANSI) Flange Adapters
(Category A)**

Product Scope

The table below presents the scope of Swagelok ANSI Flange Adapters with tube connections covered by this submission for CRN approval. The referenced product catalogues do not represent the full scope of the submission but rather detail some of the most common options..

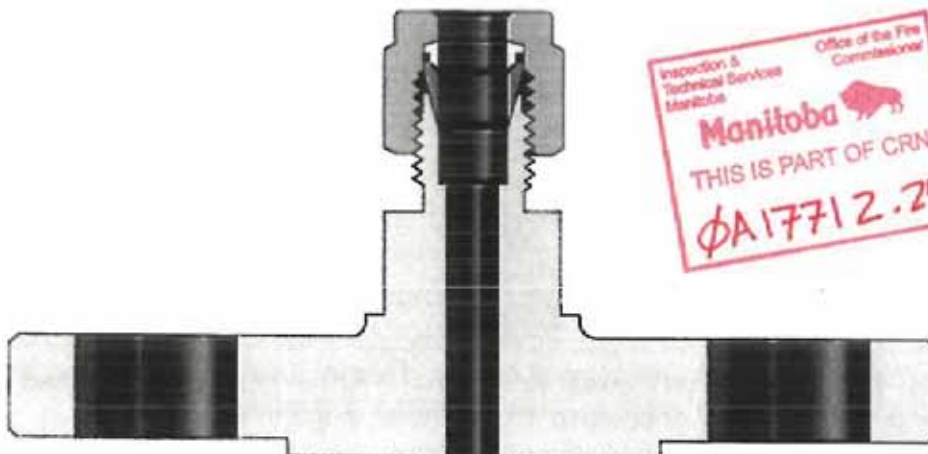
Summary Table

Product Description or Series	Material	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code of Construction
			Up to 100°F	At maximum temperature	
Swagelok Flange Adapters	F316 SS ASTM A182	Swagelok End Connection 1/16 - 2 inch (Fractional) 3mm - 50 mm (Metric)	As documented in ASME B16.5 Class and pressure ratings. See "Swagelok SS Tube Fitting Pressure Rating Table" on p.2 as the fitting end may be a limiting factor.		<ul style="list-style-type: none"> • ASME B16.5 • ASME B31.1 for unlisted components • ASME B31.3 for unlisted components

Product Description And Ratings

The Swagelok Flange Fitting body is a combination of a flange end designed and machined to ASME B16.5 dimensions and requirements, and Swagelok's proprietary design tube fitting end which is identical to the design approved in Swagelok SS Tube Fitting CRN 0A12577.5 (0A10622.2 for Alberta). Flange pressure ratings are based on Class and pressure-temperature ratings as documented in ASME B16.5-2013. Actual flange product ratings may be reduced due to the tube fitting end acting as the limiting factor (see table below for Tube fitting pressure ratings)

An example flange adapter section view is shown below. All Swagelok Flange Fitting wall thicknesses are the same or thicker than those noted in the above Swagelok SS Tube Fitting CRNs.



Swagelok SS Tube Fitting Pressure Rating Table

Swagelok End Connection Size	Maximum Allowable Working Pressure (1)	
	-60°F to 100°F	At maximum temperature 1000°F (537°C) (2)
1/16"	12 000 psig	9120 psig
1/8"	10 900 psig	8284 psig
3/16"	10 200 psig	7752 psig
1/4"	10 200 psig	7752 psig
5/16"	8 000 psig	6080 psig
3/8"	7500 psig	5700 psig
1/2"	6700 psig	5092 psig
5/8"	6000 psig	4560 psig
3/4"	5800 psig	4408 psig
7/8"	4800 psig	3648 psig
1"	4700 psig	3572 psig
1 1/4"	4900 psig	3724 psig
1 1/2"	4900 psig	3724 psig
2"	3600 psig	2736 psig
3 mm	670 bar	509 bar
6 mm	710 bar	540 bar
8 mm	520 bar	395 bar
10 mm	580 bar	441 bar
12 mm	470 bar	357 bar
14 mm	430 bar	327 bar
15 mm	400 bar	304 bar
16 mm	400 bar	304 bar
18 mm	370 bar	281 bar
20 mm	380 bar	289 bar
22 mm	340 bar	258 bar
25 mm	320 bar	243 bar
28 mm	330 bar	251 bar
30 mm	310 bar	236 bar
32 mm	330 bar	251 bar
38 mm	310 bar	236 bar
50 mm	270 bar	205 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.

Note (2): The working pressure ratings for stainless steel Swagelok end connections are based on the allowable working pressure for stainless steel tubing (TP316 A269 listed in ASME B31.3), and are de-rated for use at 1000°F by a derating factor of 0.76 per the Swagelok Tubing Data publication MS-01-107.



Quality System

The Swagelok Company quality system complies with the requirements of BS EN ISO 9001:2015. Swagelok Company maintains BSI Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate.

References

The product catalogs noted below do not represent the full scope of registration, but rather details some of the most common options.

- Flange Adapters MS-02-200
- Tubing Data Sheet MS-01-107