## UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK NUNAVUT NOVA SCOTIA YUKON PRINCE EDWARD ISLAND NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

MANUFACTURERS NAME: Swagelok Company	
MANUFACTURERS ADDRESS: 29500 Solon Road, Solon, Ohio 44139 USA	1
PLANT LOCATIONS: Headquarters: 29500 Solon Road, Solon, Ohio 4413	9 USA (See Attachment A)
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY	Y ONLY ITTLE OF THE STANDARD OF CONSTRUCTION
Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reduce B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters C Certified capacity-rated pressure relief devices acceptable as primary over pressure problems, pressure vessels, piping and fusible plugs	ASME B16.5 and ASME B31.3 Chapter IX, for unlisted components where applicable
H Pressure retaining components that do not fall into one of the above categories	
N Nuclear components: Class 1 □ Class 2 □ Class 3 □, (Meeting AECB or ASME re	quirements)
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON	THE PRODUCT  TYPE OF CONSTRUCTION  FORGED X WELDED D WROUGHT D  CAST D OTHER D  DESCRIBE OTHER.
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL IT	TEMS TO BE DEGISTEDED.
esponsibility for the quality of the end product do solemnly declare that the informing knowledge represents the product for which registration is sought. The diment emperature ratings, and identification markings are in accordance with the herein nanufacture of these fittings is regulated by a Quality Control Program which exte	named standards. I further declare that the standards to each plant where fabrication occurs in whole assistable for that purpose and I made it is in the standards.
Signature of Declarer:	
Declared before me at SOLON, ONIO Jamie L. Ristay S his 3rd day of May AD 2017 Resident Portage Count Commissioner of Oaths r Notary Public: (sign) Amue A Quality (Affix Official seal to the right)	MIG OFFICIAL STATES
This space for Regulatory Authority This registration must be revalidated after ten (10) years t	
CRN: 0A17712.2	Monforthans Labrador
FID#: 1214	Service NL
Notes:  1. All fittings shall be registered in the name of the Manufacturer.  2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.	Bioglotered OA1776.20 Date 17/09/3) Engineering and trispertion Services
The declaration shall be made by the person having full authority and esponsibility for the quality of the end product.     Quality control programs shall be resubmitted for validation.	UNDER THE AUTHERITY OF TWICE PUBLIC SAFETY ACT AND
at a maximum interval of five (5) years.	THE BOILER, PRESSURE VESSEL AND



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# 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...

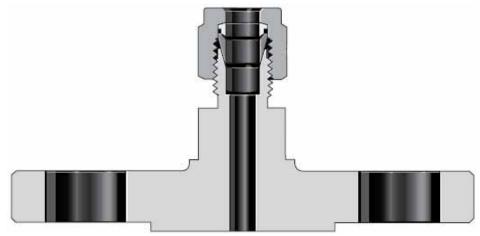
#### **Summary Table**

Product	Material	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code
Description or Series			Up to 100°F	At maximum temperature	of Construction
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.		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.





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Swagelok SS Tube Fitting Pressure Rating Table

Swagelok End Connection Size         Maximum Allowable Working Pressure (Connection Size)           -60°F to 100°F         At maximum tempera 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)
1/8"       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	ature
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	
1/4"       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	
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	
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5/8"       6000 psig       4560 psig         3/4"       5800 psig       4408 psig         7/8"       4800 psig       3648 psig         1"       4700 psig       3572 psig	
3/4"     5800 psig     4408 psig       7/8"     4800 psig     3648 psig       1"     4700 psig     3572 psig	
7/8" 4800 psig 3648 psig 1" 4700 psig 3572 psig	
1" 4700 psig 3572 psig	
1 1/4" 4900 noin 3724 noin	
1/4   4500 psig   5/24 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.





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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