Régie du bâtiment	
Québec	

(a) Design Qualification

REGISTERED



CRN: CSA - 0A21487.56

Statutory Declaration Registration of Fittings

Registration Process administered by CSA Group per CSA B51

l^1	Joel Feldman				
	Vice President, Engineering				
	(Position eg, president, plant manager, chief eng.)				
Ω£	Swagelok Company				
٠.	(name of company)				
Loc	cated at Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)				
	(prant address)				
do	solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act				
K1	7				
Ы	comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which ar required				
Or	N BETTER N DE COMO				
_					
	are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with code and standard, and are designed to the best current engineering practice, as shown by the supporting test				
	data				
	(A)				
	GP GROUP.				
(b)	Quality control of Manufacture				
l fix	rther declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of				
IS	O 9001:2015 and has been verified by the following authority or authorized agency BSI				
The	e fittings ² covered by this declaration, for which I seek registration, are <u>Category A. Fitting</u>				
_					
In s	support of the application, the following information, calculations and/or test data are attached:				
_	SO 9001:2015 Certificate. Attachment A. Attachment B. Catalog Information and other Support Documents				
De	blaged before me at 5000				
Marin.					
iŋ t	heat of Onio				
	Day of Charch AD 20 19				
I DE	AD 20 19				
15	Starte Name				
77	Signature of Declarer				
06					
	For Official Use Only				
_	The application is accepted for registration in Category A in accordance with the Boilers and Pressure Vessels Act and				
	SA Standard B51.				
	7				
Т	This registration must be revalidated after ten (10) years from the date of acceptance. Jun - 10 - 2029				
	72 (01)100 0 020				
F	Registered Number CRN CSA - DA 21487.56 For the Champspector A. BANWATT				
-	Date				

All fittings are required to be registered in the name of the Manufacturer.

¹ Three completed copied of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.

This form shall be completed and signed by the president of highest official in the manufacturing plan where the fitting is produced.

Canadian Registration Number Submittal #M-TUBEFIT-2019
Category A: Swagelok Monel Tube Fittings

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Attachment B. Scope of Registration for Swagelok Alloy 400, (ASTM B164 / B564), Tube Fittings (Category A)

This document represents the scope of Swagelok Alloy 400 Tube Fittings covered by this submission for CRN approval. These Swagelok Tube Fittings have been evaluated in accordance with ASME B31.3 for unlisted components and ASME B31.1 for unlisted components.

Summary Table

Product Description	on Material	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code
or Series			Up to 100°F	At maximum temperature	Construction
Tube (ASTI Fittings and B164		Swagelok tube fitting 1/8 – 1 inch 6mm - 25mm	See Table on Page 2	See Table on Page 2	ASME B31.3 (Unlisted Components) ASME B31.1 (Unlisted Components)
	B164 / B564)	NPT Male 1/16 - 1 inch	9200-4400 psig	6900 – 3300 psig @ 800°F (426°C)	
		NPT Female 1/16 - 1 inch	5600-3700 psig	4200 – 2775 psig @ 800°F (426°C)	



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Alloy 400 Swagelok Tube Fitting Pressure Rating Table

	Maximum Allowable Working Pressure (1)		
Swagelok End Connection Size	Up to 100°F	At maximum temperature 800°F (426°C)	
1/8	10,100 psig	7575 psig	
3/16	9500 psig	7125 psig	
1/4	9500 psig	7125 psig	
5/16	7300 psig	5475 psig	
3/8	6100 psig	4575 psig	
1/2	4400 psig	3300 psig	
5/8	5600 psig	4200 psig	
3/4	4600 psig	3450 psig	
7/8	4500 psig	3375 psig	
1"	4300 psig	3225 psig	
6 mm	620 bar	465 bar	
8 mm	450 bar	337.5 bar	
10 mm	350 bar	262,5 bar	
12 mm	290 bar	217.5 bar	
14 mm	270 bar	202.5 bar	
15 mm	330 bar	247.5 bar	
16 mm	320 bar	240 bar	
18 mm	300 bar	225 bar	
20 mm	290 bar	217.5 bar	
22 mm	310 bar	232.5 bar	
25 mm	290 bar	217.5 bar	

Note (1): Values based on thickest wall alloy 400 tubing per Swagelok Tubing Data Sheet MS-01-107.



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Category A: Swagelok Monel Tube Fittings

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Product Description

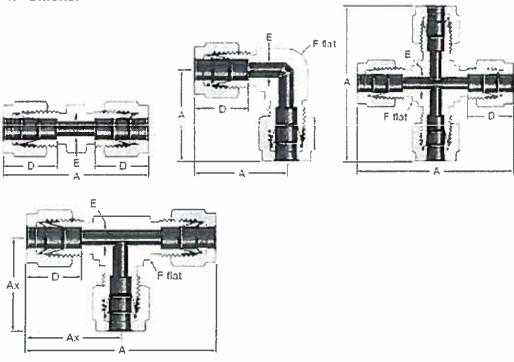
Swagelok Fittings are furnished in a variety of configurations and shapes (straight, elbow, tee or cross). Swagelok Fittings consist of at least one Swagelok End – a proprietary two-ferrule mechanical-grip design. The "Configurations" section covers other available end connections.



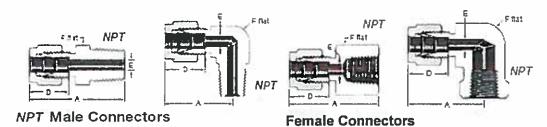


Configurations

1. Unions.



2. Male and Female connectors / adapters.





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Category A: Swagelok Monel Tube Fittings

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Product Options:

Some of the product options listed below affect the pressure-temperature ratings in the "Scope of Registration" section above, but in all cases the pressure ratings are the same or less than those shown in the table.

- 1. Tapered pipe threads (NPT) with sealant.
 - a. Curable resin with PTFE
 - b. PTFE tape
- 2. Bored through fittings
- 3. Plastic ferrules (Nylon, Teflon, Peek)

Additional options that do not affect pressure and/or temperature ratings may be made available within the scope of this approval. 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

Other options, not shown above, with pressure/temperature ratings equal to or less than shown in the Summary Table or do not affect pressure/temperature ratings may be made available under the scope of this approval

Quality System

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

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 Rev. Y
- Swagelok Tubing Data Sheet MS-01-107, Rev Q



Attachment A. Swagelok Manufacturing Locations

This document lists the Swagelok locations where end item or component level manufacturing activities take place.

Swagelok Company	Swagelok Company (Falon 1)
29500 Solon Road	348 Bishop Road
Solon, Ohio 44139	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (Highland)	Swagelok Company (Falon 2)
318 Bishop Road	358 Bishop Road
Highland Heights, Ohio 44143	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (OFC)	Swagelok Company (HPF)
29495 F.A. Lennon Drive	6050 Cochran Road
Solon, Ohio 44139	Solon, Ohio 44139
USA	USA
Swagelok Company (Atlantic)	Swagelok Company (Snow Metal)
26651 Curtiss Wright Parkway	6060 Cochran Road
Willoughby Hills, Ohio 44092	Solon, Ohio 44139
USA	USA
Swagelok Company (Micro) 26653 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Company (Alfred) 29500 Ambina Drive Solon, Ohio 44139
Swagelok Hose Services Company (SHSC)	Swagelok Company (Strongsville)
29900 Solon Industrial Parkway	15400 Foltz Road
Solon, Ohio 44139	Strongsville, Ohio 44119
Swagelok (China) Fluid System Technologies Ltd. Changshu Export Process Zone Changshu Economic Development Zone Changshu, Jiangshu 215513 China	Swagelok Limited Ballafletcher Road Tromode IM4 4RA Isle of Man

