



Technical Standards and Safety Authority  
 345 Carlingview Drive  
 Toronto, Ontario M9W 6N9  
 www.tssa.org

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 B31.3 for unlisted components where applicable, and ISO 10380  
(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 D. Hose type fittings. In support of this application, the following information and/or test data are attached as follows:  
ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents  
(drawings, calculations, test reports, etc.)

Declared before me at Solon in the State of Ohio  
 the 23<sup>rd</sup> day of Feb AD 2018.

Commissioner for Oaths:  
Jamie L Ristau (Printed name)  
Jamie L Ristau (Signature)  
 Jamie L Ristau  
 Resident Portage County  
 Notary Public, State of Ohio  
 My Commission Expires: 03/06/2019  
[Signature] (Signature of Declarer)

**FOR OFFICE USE ONLY**

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 "D".

CRN: ΦD2Φ616.54  
 Registered by: RABIE HARR  
 Dated: 2019/01/15



**NOTE:** This registration expires on: Aug 15, 2028

## Attachment B: Scope of Registration for Swagelok FJ Series Hose Assemblies (Category D)

### Product Scope

The table below represents the scope of Swagelok FJ series hose assemblies covered by this submission for CRN approval. These hose assemblies are assembled by Hose Master LLC and have been evaluated in accordance with ASME B31.3 and ISO 10380. The referenced product catalog(s) do not represent the full scope of the submission but rather detail some of the most common options.

### Summary Table

Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction
					@Min Temperature	@Max Temperature	
FJ Series Metal Hose	Core 316 SS, 316L SS (ASTM A240)  Braid 304 SS or 316L SS (ASTM A478)  Weld Collar 304 SS, 304L SS (ASTM A269)  or 316 SS, 316L SS (ASTM A269)  End Connections Strain-Hardened 316 SS (ASTM A479)	1/4	Tube Fitting [TA, TM, SL, SM]	1/4" through 1/2" 4mm to 10mm	1600 @-325°F	1184 @800°F	ASME B31.3 ISO 10380
			Rotatable Male VCR Metal Gasket Face Seal Fittings [RM]	1/4" through 1/2"	1600 @-325°F	1184 @800°F	
			Rotatable Female VCR Metal Gasket Face Seal Fittings [RF]	1/4" through 1/2"	1600 @-325°F	1184 @800°F	
			Female VCO O-Ring Face Seal Fittings [VF]	1/4"	1600 @-325°F	1376 @500°F	
			SAE 37° (JIC) Female Swivel [AS]	1/4" through 3/8"	1600 @-325°F	1184 @800°F	
			Female Pipe Threads, NPT [PF]	1/4" through 1/2"	1600 @-60°F	1488 @400°F	
			Male Pipe Threads, NPT [PM]	1/4" through 1/2"	1600 @-60°F	1488 @400°F	
			ISO/BSP Tapered (ISO 7) [MT][FT]	1/4" through 1/2"	1600 @-60°F	1488 @400°F	
			Tube Butt Welds [TB]	1/4"	1600 @-325°F	1184 @800°F	

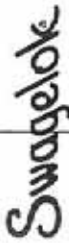




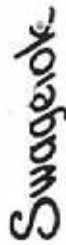


Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction	
					@Min Temperature	@Max Temperature		
FJ Series Metal Hose	Core 316 SS, 316L SS (ASTM A240)	3/8	Tube Fitting [TA, TM, SL, SM]	1/4" through 1/2" 4mm to 10mm	1470 @-325°F	1088 @800°F	ASME B31.3 ISO 10380	
			Rotatable Male VCR Metal Gasket Face Seal Fittings [RM]	1/4" through 1/2"	1470 @-325°F	1088 @800°F		
			Rotatable Female VCR Metal Gasket Face Seal Fittings [RF]	1/4" through 1/2"	1470 @-325°F	1088 @800°F		
			Female VCO O-Ring Face Seal Fittings [VF]	3/8"	1470 @-325°F	1264 @500°F		
	Weld Collar 304 SS, 304L SS (ASTM A269) or 316 SS, 316L SS (ASTM A269)	3/8	SAE 37° (JIC) Female Swivel [AS]	3/8" through 1/2"	1470 @-325°F	1088 @800°F		
			Female Pipe Threads, NPT [PF]	1/4" through 1/2"	1470 @-60°F	1367 @400°F		
	End Connections Strain-Hardened 316 SS (ASTM A479)	3/8	Male Pipe Threads, NPT [PM]	1/4" through 1/2"	1470 @-60°F	1367 @400°F		
			ISO/BSP Tapered (ISO 7) [MT][FT]	3/8"	1470 @-60°F	1367 @400°F		
				Tube Butt Welds [TB]	3/8" through 1/2"	1470 @-325°F		1088 @800°F



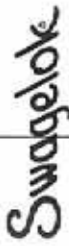


Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction
					@Min Temperature	@Max Temperature	
FJ Series Metal Hose	<u>Core</u> 316 SS, 316L SS (ASTM A240)  <u>Braid</u> 304 SS or 316L SS (ASTM A478)  <u>Weld Collar</u> 304 SS, 304L SS (ASTM A269)  or 316 SS, 316L SS (ASTM A269)  <u>End Connections</u> Strain-Hardened 316 SS (ASTM A479)	1/2	Tube Fitting [TA, TM, SL, SM]	1/4" through 3/4"	1110 @-325°F	821 @800°F	ASME B31.3 ISO 10380
			Rotatable Male VCR Metal Gasket Face Seal Fittings [RM]	1/4" through 3/4"	1110 @-325°F	821 @800°F	
			Rotatable Female VCR Metal Gasket Face Seal Fittings [RF]	1/4" through 3/4"	1110 @-325°F	821 @800°F	
			Female VCO O-Ring Face Seal Fittings [VF]	1/2"	1110 @-325°F	955 @500°F	
			SAE 37° (JIC) Female Swivel [AS]	1/2" through 5/8"	1110 @-325°F	821 @800°F	
			Female Pipe Threads, NPT [PF]	3/8" through 1/2"	1110 @-60°F	1032 @400°F	
			Male Pipe Threads, NPT [PM]	1/4" through 3/4"	1110 @-60°F	1032 @400°F	
			ISO/BSP Tapered (ISO 7) [MT][FT]	3/8" through 1/2"	1110 @-60°F	1032 @400°F	
			Tube Butt Welds [TB]	1/2"	1110 @-325°F	821 @800°F	



Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction
					@Min Temperature	@Max Temperature	
FJ Series Metal Hose	<u>Core</u> 316 SS, 316L SS (ASTM A240)  <u>Braid</u> 304 SS or 316L SS (ASTM A478)  <u>Weld Collar</u> 304 SS, 304L SS (ASTM A269) or 316 SS, 316L SS (ASTM A269)  Erid Connections Strain-Hardened 316 SS (ASTM A479)	3/4	Tube Fitting [TA, TM, SL, SM]  Rotatable Male VCR Metal Gasket Face Seal Fittings [RM]  Rotatable Female VCR Metal Gasket Face Seal Fittings [RF]  Female VCO O-Ring Face Seal Fittings [VF]  SAE 37° (JIC) Female Swivel [AS]  Female Pipe Threads, NPT [PF]  Male Pipe Threads, NPT [PM]  ISO/BSP Tapered (ISO 7) [MT][FT]  Tube Butt Welds [TB]	1/2" through 1"  1/2" through 3/4"  1/2" through 1"  1/2" through 3/4"  3/4"  1/2" through 3/4"  1/2" through 1"  3/4" through 1"  3/4"	860 @-325°F  860 @-325°F  860 @-325°F  860 @-325°F  860 @-325°F  860 @-60°F  860 @-60°F  860 @-60°F  860 @-325°F	636 @800°F  636 @800°F  636 @800°F  740 @500°F  636 @800°F  800 @400°F  800 @400°F  800 @400°F  636 @800°F	ASME B31.3 ISO 10380





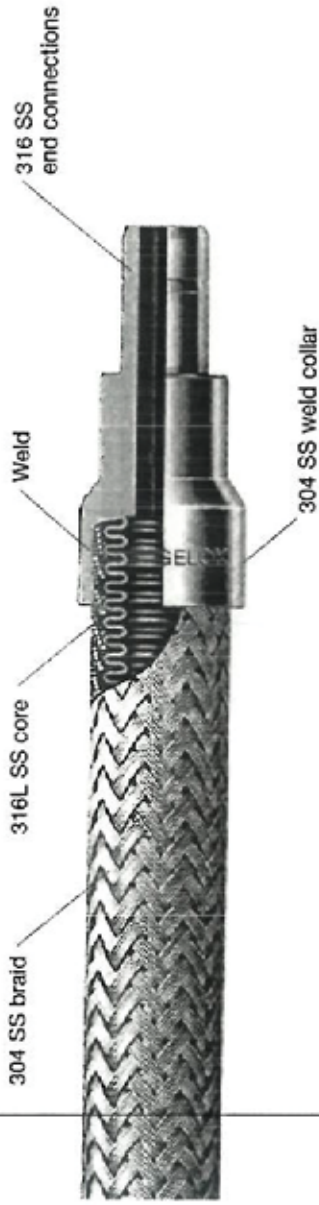
Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction
					@Min Temperature	@Max Temperature	
F.J Series Metal Hose	<u>Core</u> 316 SS, 316L SS (ASTM A240)  <u>Braid</u> 304 SS or 316L SS (ASTM A478)  <u>Weld Collar</u> 304 SS, 304L SS (ASTM A269)  or 316 SS, 316L SS (ASTM A269)  <u>End Connections</u> Strain-Hardened 316 SS (ASTM A479)	1	Tube Fitting [TA, TM, SL, SM]	1/2" through 1"	680 @-325°F	503 @800°F	ASME B31.3 ISO 10380
			Rotatable Male VCR Metal Gasket Face Seal Fittings [RM]	1"	680 @-325°F	503 @800°F	
			Rotatable Female VCR Metal Gasket Face Seal Fittings [RF]	1"	680 @-325°F	503 @800°F	
			Female VCO O-Ring Face Seal Fittings [VF]	1"	680 @-325°F	585 @500°F	
			SAE 37° (JIC) Female Swivel [AS]	1"	680 @-325°F	503 @800°F	
			Female Pipe Threads, NPT [PF]	1"	680 @-60°F	632 @400°F	
			Male Pipe Threads, NPT [PM]	1/2" through 1"	680 @-60°F	632 @400°F	
			ISO/BSP Tapered (ISO 7) [MT][FT]	1"	680 @-60°F	632 @400°F	
			Tube Butt Welds [TB]	3/4" through 1"	680 @-325°F	503 @800°F	



Product Series	Pressure Retaining Material (Standard)	Nominal Hose Size (in)	Port Connections	Port Connection Sizes	Maximum Working Pressure (psig) at Temperature		Design Code of Construction
					@Min Temperature	@Max Temperature	
FJ Series Metal Hose	Core 316 SS, 316L SS (ASTM A240)	1 1/4	Tube Fitting [TA, TM, SL, SM]	1 1/4"	680 @-325°F	503 @800°F	ASME B31.3 ISO 10380
			Female Pipe Threads, NPT [PF]	1 1/4"	680 @-60°F	632 @400°F	
			Male Pipe Threads, NPT [PM]	1" through 1 1/4"	680 @-60°F	632 @400°F	
	ISO/BSP Tapered (ISO 7) [MT][FT]	1 1/4"	680 @-60°F	632 @400°F			
	Braid 304 SS or 316L SS (ASTM A478)	1 1/2	Tube Fitting [TA, TM, SL, SM]	1 1/2"	520 @-325°F	385 @800°F	
			Female Pipe Threads, NPT [PF]	1 1/2"	520 @-60°F	484 @400°F	
			Male Pipe Threads, NPT [PM]	1" through 1 1/2"	520 @-60°F	484 @400°F	
	Weld Collar 304 SS, 304L SS (ASTM A269) or 316 SS, 316L SS (ASTM A269) End Connections Strain-Hardened 316 SS (ASTM A479)	2	ISO/BSP Tapered (ISO 7) [MT][FT]	1 1/2" through 2"	520 @-60°F	484 @400°F	
			Tube Fitting [TA, TM, SL, SM]	2"	450 @-325°F	333 @800°F	
			Female Pipe Threads, NPT [PF]	2"	450 @-60°F	419 @400°F	
Male Pipe Threads, NPT [PM]			1 1/2" through 2"	450 @-60°F	419 @400°F		
			ISO/BSP Tapered (ISO 7) [MT][FT]	2"	450 @-60°F	419 @400°F	

## Product Illustration

All end connections are welded onto the hose using weld collars.



## Product Options:

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:

### Braid Options

- 316L SS

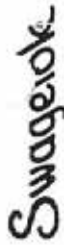
### Cover Options

- Armor guard - Interlocking, flexible 302 stainless steel.
- Fire jacket - Woven fiberglass coated with specially compounded aerospace-grade silicone rubber
- Thermosleeve - Braided fiberglass with saturated synthetic material coating.

### Tag and Marking Options

- Mat tag - Polyester tag with customer-specified text
- Lanyard tag - Stainless steel tag with customer-specified text
- Clamp tag - Stainless steel tag with customer-specified text





Canadian Registration Number Submittal/  
Swagelok Submission # FJ-HOSE-2018

February 21, 2018  
Page 8 of 8

Additional options that may affect pressure and/or temperature ratings may be made available within the scope of this approval. Examples of these would include the following:

End Connection Seals or Sealant Options

- VCO - O-rings
- VCR - Gasket
- Pipe Thread ends - thread sealant

Quality System

The Swagelok Company quality system complies with the requirements of ISO 9001:2015. The Swagelok Company maintains BSI Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate. The Swagelok FJ series hose assemblies are manufactured at Hose Master LLC and at the Swagelok Company locations in Solon, Ohio.

References

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

- Hose Assemblies, Bulk Hose, and End Connections Product Catalog MS-01-180