UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS NEW BRUNSWICK **NOVA SCOTIA** PRINCE EDWARD ISLAND NEWFOUNDLAND AND LABRADOR NUNAVUT YUKON NORTHWEST TERRITORIES MANUFACTURERS NAME: Swagelok Company MANUFACTURERS ADDRESS: 29500 Solon Road, Solon, Ohio 44139 USA PLANT LOCATIONS: Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A) CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY THILE OF THE STANOWED OF CONSTRUCTION A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges ASME B31.3 for C Valves: all line valves unlisted components 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 G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on bolliers, pressure vessels, piping and fasible plugs

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 requirements) SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT DITE OF CONSTRUCTION PORGED O WELDED II WROUGHT M LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents DECLARATION: [Joe! Feldman, Vice President, Engineering (see note 3) employed by_ Swagelok Company and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BSI as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under Signature of Declarer: Declared before me at USETHIS SPACE This 18th day of OFFICIA Commissioner of Oaths/ or Notary Public: (sign) VC (Affix Official seal to the right) This space for Regulatory Authority use CRN: OD21780.5 DEPT OF JUSTICE PUBLIC SAFETY **BOILER & PRESSURE VESSELACT** FID#: __1214 PLSERIES HOSE ASS. - 4"16" REGISTRATION ONLY 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. 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product. 4. Quality control programs shall be resubmitted for validation CHIEF BOILER INSPECTOR e meximum interval of five (5) years. RNEARES SEPT. 15, 2029 - D.G. 10/18/2019

☐ PVe

☐FITTINGS ☐ NUCLEAR COMPONENTS

□ BLRs



Canadian Registration Number Submittal Category D Submission # FL-HOSE-2019

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

The table below represents the scope of Swagelok FL series hose assemblies covered by this submission for CRN approval. These hose assemblies have been evaluated in accordance with ASME B31.3:2016 Process Piping as unlisted components. The referenced port connections and product catalog(s) do not represent the full scope of the submission but rather detail some of the most common options.

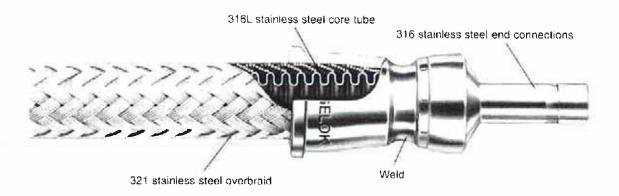
Summary Table

Product Series	Pressure Retaining Material	Nom. Hose Size (in)	End Connections & Sizes	Maximum Working Pressure (psig)		Design Code of
				Up to 100°F	@ Max. Temp.	Construction
Technic	OD 2178	1/4 Te SS ()88-2)	Tube Fitting [TA, TM, SL, SM] 1/4" – 1/2" (6mm – 10mm) Male & Female VCR Metal Gasket Face Seal Fittings [RM, RF] 1/4" – 1/2" SAE 37° (JIC) Female Swivel [AS] 1/4" – 3/8"	1500	840 @850°F	ASME B31.3 (Unlisted Components)
			Tube Butt Welds [TB]			
	<u>Core</u> 316L SS		Female VCO O-Ring Face Seal Fittings [VF] 1/4"	1500	975 @500°F	
	(EN 10088-2) Braid 321 SS (EN 10088-3)		Male & Female Pipe Threads, NPT [PM, PF] 1/4" – 1/2" ISO/BSP Tapered (ISO 7) [MT][FT] 1/4" – 1/2"	1500	1050 @400°F	
	End Connections Strain- Hardened 316 SS, 316L SS, or 316LV SS (ASTM A479)	1/2	Tube Fitting [TA, TM, SL, SM] 1/4" – 3/4" (6mm – 18mm) Male & Female VCR Metal Gasket Face Seal Fittings [RM, RF] 1/4" – 3/4" SAE 37° (JIC) Female Swivel [AS] 1/2" – 5/8" Tube Butt Welds [TB] 1/2"	1200	672 @850°F	
			Female VCO O-Ring Face Seal Fittings [VF] 1/2"	1200	780 @500°F	
			Male Pipe Threads, NPT [PM] 1/4" – 3/4" Female Pipe Threads, NPT [PF] 3/8" – 1/2" ISO/BSP Tapered (ISO 7) [MT][FT] 3/8" – 1/2"	1200	840 @400°F	



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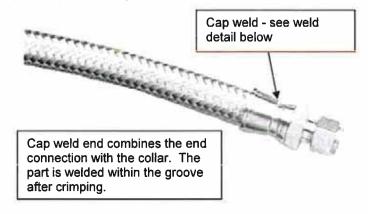
Product Illustration

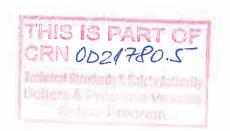


Configuration Example:

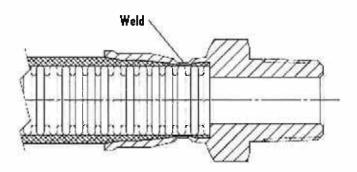
FL hoses are available in two sizes with many end types, end sizes, and possible overall lengths.

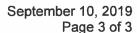
The corrugated tubing and braid are attached to the end connection with a Gas Tungsten Arc Weld (GTAW) cap weld process.





Weld Detail:







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Product Options:

Additional options and non-pressure boundary alterations that do not affect pressure ratings may be made available within the scope of this approval. Examples of these would include the following:

- Cover Options (ex. fire jacket, thermosleeve, etc.)
- Tag and Marking Options (ex. tags, lanyards, retaining clamps, etc.)
- Special Testing Options (ex. hydrostatic pressure test, inboard helium leak test, nitrogen leak test, etc.)
- Other Options (ex. traceable certificates for product).

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 (ex. VCO O-rings, VCR gaskets, pipe thread sealant, etc.)

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.

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, Rev. S



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		

