

11/1/2020

TSSA 345 Carlingview Drive Toronto, Ontario M9W 6N9 CA

Dear Cecylia Garbacz

Re: Reciprocal CRN Registration in Manitoba

Your application indicates that a CRN has been received in another Canadian Jurisdiction, and therefore your CRN has been registered in Manitoba as follows:

File Number:74-R1043CRN:0D22735.54Scope:Crimped Swagelok FC series PTFE- Attachment A anManufacturer:SWAGELOKExpiry Date:14/Oct/30

Please find attached invoice for registration.

As indicated by the Regulatory Reconciliation and Cooperation Table and the Reconciliation Agreement for the Canadian Registration Number (CRN) for Pressure Equipment, a CRN issued in any Canadian Jurisdiction will be accepted for use in Manitoba.

In accordance with Steam and Pressure Plants Regulation and CSA B51, it is the manufacturer's responsibility to file a Manufacturers Data Report, including partial data reports, with our office, prior to shipping pressure equipment to Manitoba.

Please contact me directly via email at <u>Cheryl.Lashek@gov.mb.ca</u> for any questions or concerns.

Cheryl Lashek, P.Eng Director, ITSM Inspection and Technical Services Office of the Fire Commissioner 508 - 401 York Avenue, Winnipeg Manitoba R3C 0P8 T (204) 945-3507 | F (204) 948-2309



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

made

STATUTORY DECLARATION Registration of Fittings

	(1	Name and Position, e.g. President, Plant	Manager, Chief Engineer)	
of Swagelok	Company			8
		(Name of Manufactu	irer)	
Located at	29500 Solon Road, Solor	i, Ohio 44139 USA	(440) 248-4600	(440) 349-5970
	(Pla	nt Address)	(Telephone No.)	(Fax No.)
and Pr	essure Vessels Regulation	gs listed hereunder, which are s n, comply with all of the requiren Manufacturers (ARPM) Hose		ds and Safety Act, Boiler
which s	specifies the dimensions, mate	(Title of recognized North Americ erials of construction, pressure/tem	ean Standard) perature ratings, identification marki	ng the fittings and service;
		as supported by the attache	can standard and are therefore m d data which identifies the dimension arking of the fitting for identification	ons, material of construction
I further decla		hese fittings is controlled by a qu d by the following authority, BSI	ality system meeting the requirem	ents of ISO 9001:2015
The items cove		ich I seek registration, are category	D. Hose	type fittings. In support o
this application	, the following information and	/or test data are attached as follows		
<u>- 1999 - 1999 - 1997 - 1997 - 1997</u> 1		(drawings, calculations, test	reports, etc.)	2000 A
Declared bef	fore me at	in th	10	of
the	day of	AD 20		
		References and all the		
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*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request. PV 09553 (04/17) The hoses service application is for Liquid, Air or Gas Service.



Canadian Registration Number Submittal Category D Crimped Swagelok FC series PTFE Hose

Attachment B: Scope of Registration for Crimped Swagelok FC series PTFE Hose Assemblies (Category D)

This document represents the scope of the Swagelok Coreflex FC series hose and crimped assemblies covered by this submission for CRN approval. These products have been evaluated in accordance with the Association for Rubber Products Manufacturers (ARPM) Hose Handbook.

Summary Table

FC	Maximum Pressure (psig)						
series Hose Size	At Minimum Temp. (-65°F)	Room temperature (0°-100°F)	At Maximum Temp. (450°F)	Pressure Retaining Material	End Connections and Sizes	Design Code of Construction	
1/4"	455	800	160		Swagelok Tube Fitting [SL, SM] 1/8" – 2" (3-50mm)		
3/8"	480	650	170	Carbon Black filled virgin PTFE Braid Fiberglass Braid Reinforcement <u>End</u> Connections 316 SS Crimp on Collar 304 SS	Core Carbon Black filled virgin PTFEMale & Female NPT T Pipe Fitting [PM, PF]Braid Fiberglass Braid ReinforcementMale & Female ISO/B (ISO 7) Pipe Threads 1/4" – 1"Braid Fiberglass Braid ReinforcementMale 37° JIC & Femal with female swivel nut 1/4" – 2"End Connections 316 SSTube Butt Welds [TB] Male & Female VCO 0 seal Fitting [VF, VM] 1/8" – 2"	Male & Female NPT Tapered Pipe Fitting [PM, PF] 1/8" – 2" Male & Female ISO/BSP Tapered (ISO 7) Pipe Threads [MT, FT]	Association for Rubber Products Manufacturers (ARPM) Hose Handbook
1/2"	450	450	225			Tube Butt Welds [TB] 1/2" – 1" Male & Female VCO O-ring Face seal Fitting [VF, VM]	
3/4"	325	325	160		Male & Female VCR Metal Gasket Face seal Fitting [RF, RM] 1/8" – 2" Female ISO/BSP Parallel Threads (ISO 228) [FS] 1/4" – 1"		



Canadian Registration Number Submittal 0D22735.5 Category D Crimped Swagelok FC series PTFE Hose Technical Standards and Safety Authority

Product Description

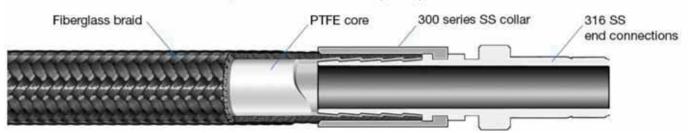
THIS IS PART OF CRN 0D22735.5 Technical Standards and Safety Authority Boilers and Pressure Vessels Safety Program

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Swagelok's FC series hose is a carbon black filled virgin PTFE liner with fiberglass braid reinforcement. All FC series hoses undergo production testing in accordance with ASTM D380 "Test Methods for Rubber Hose" (version current to hose production date).

Configurations

All end connection inserts are crimped onto the hose using crimp collars.



Product Options:

Additional options that do not affect pressure and/or temperature ratings may be made available and are within the scope of this approval. Examples of these would include, but not limited to, the following:

Cover Options

- Armor guard Interlocking, flexible 302 stainless steel.
- Fire jacket Woven fiberglass coated with specially compounded aerospace-grade silicone rubber
- Spiral guard Helical HDPE plastic

Tag and Marking Options

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

End Connection Seals or Sealants Options

- VCO O-rings
- 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.

References

The 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.

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.	Swagelok Limited
Changshu Export Process Zone	Ballafletcher Road
Changshu Economic Development Zone	Tromode
Changshu, Jiangshu	IM4 4RA
215513 China	Isle of Man