



TECHNICAL STANDARDS & SAFETY AUTHORITY
 14th Floor, Centre Tower
 3300 Bloor Street West
 Toronto, Ontario
 Canada M8X 2X4

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 44139-3492 (440) 248-4600 440-519-7384
(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
The RMA Handbook
(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 9001:2008 which has been verified by the following authority, The British Standards Institution.

The items covered by this declaration, for which I seek registration, are category D type fittings. In support of this application, the following information and/or test data are attached as follows:
ISO 9001:2008 Certificate, Catalog Information, Support Documents, Attachments A, B, C, D, E
(drawings, calculations, test reports, etc.)

Declared before me at Solon in the State of Ohio
 the 33 day of January AD 2014.

Commissioner for Oaths:

LORI A. SARVER
(Printed name) Lori A. Sarver, Notary Public
 State of Ohio, Summit County
 My Commission Expires April 13, 2015

[Signature] (Signature) [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: CSA-OD14205.56R

Registered by: A. BANWATT

Dated: MARCH 16 2016

NOTE: This registration expires on: DEC 21 2025

REGISTERED

CRN: CSA-OD14205.56R1

Signed: [Signature]

Date: 16/03/2016

178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3




Attachment B. Scope of Registration for Swagelok Coreflex PTFE (WC) Hose Assemblies (Category D)

Product Scope

This document represents the scope of Swagelok Coreflex WC PTFE Hose Assemblies covered by this submission for CRN approval. These Swagelok Coreflex WC PTFE Hose Assemblies have been evaluated in accordance with the Rubber Manufacturer's Association (RMA) Handbook and ASTM D380 Test Methods for Rubber Hose.

Summary Table

Product Description or Series	Pressure Retaining Material	End Connection & Sizes	Nom. Hose Size (in.)	Maximum Working Pressure in (Psig)		Design Code of Construction
				@ Min. -65°F	@ Max. 450°F	
W Series	Core: Carbon Black-filled (PTFE) [WC] Covered by: Fiber Braid & Insulating Wrap & 304 Series Stainless Steel Braid & Silicon Cover With: Annealed 316 Stainless Steel End Connections OR 316 Strain Hardened End Connections OR 316L Strain Hardened Stainless Steel End Connections & 300 Stainless Steel Crimp on Collar	Swagelok Tube Fitting: 1/8" to 2" & 3, 6,10,12,18,25,38,50 mm Swagelok Tube Adapters:1/8" to 2" & 3, 6,10,12,18,25,38,50 mm Female Pipe Threads NPT:1/8" to 2" Male Pipe Threads NPT: 1/8" to 2"	3/8"	750	750	Rubber Manufacturers Association Handbook
		Tube Stubs: 1/8" to 2" & 3, 6,8,10,12,18,25, 38, 50 mm *Sanitary Kwik -Clamps: 1/2" to 2" Tube Butt Welds: 1/2" to 2" Female VCO O-ring Face Seal Fitting: 1/8" to 2" Female VCR Metal Gasket Face seal Fitting: 1/8" to 2" *TS series Sanitary Clamps: 1/2" to 1"	1/2"	750	750	
		Male Pipe threads, ISO/BSP Tapered (ISO 7): 1/4" to 1" Male ISO/BSP Parallel Threads W/ 60° Male cone (ISO 228): 1/4" to 1" Female Pipe Threads, ISO/BSP Tapered (ISO 7): 1/4" to 1" Female ISO/BSP Parallel Threads (ISO 228): 1/4" to 1" Female Swivel ISO/BSP Parallel Threads W/ 30° Cone: 1/4" to 1/2" Female Swivel ISO/BSP Parallel Threads W/ 60° Cone:1/4" to 1/2" *ANSI 150 LB Lap Joint Flange: 1/2" to 2"	3/4"	750 @ Room Temperature		




0014205.56R1

2 of 4

ATTACHMENT TO

C.R.N. CSA-0014205.56R1

Signed: 

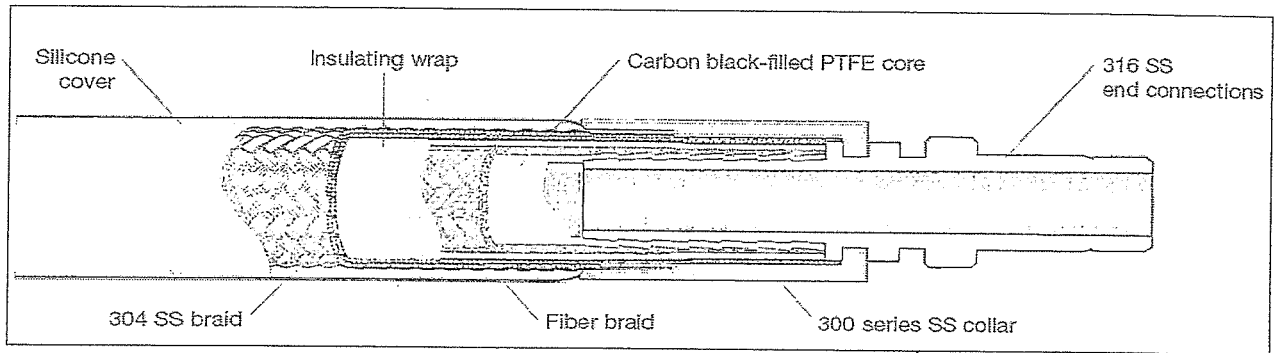
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* All sanitary clamps including Kwik clams and ANSI 150 Lb flanges have pressure rating lower than the bulk hose. For exact rating of these fitting see Swagelok hose and flexible tubing catalog.

Working Pressure for W Series PTFE Hose (WC Series)						
Hose Size (in)		Temperature in (°F)				
		-65 to 100	200	300	400	450
3/8"	Max. Working Pressure (PSIG)	750	750	750	750	750
1/2"	Max. Working Pressure (PSIG)	750	750	750	750	750
3/4"	Max. Working Pressure (PSIG)	NA	NA	NA	NA	NA

Product Illustration

WC series is standard Swagelok virgin PTFE-lined hose with fiber braid reinforcement, ceramic wrap insulation, 304 stainless steel reinforcement, and a silicone cover. All end connection inserts are crimped onto the hose using crimp collars. OD14205.56R1



Typical Product Characteristics

Some of the product options listed below do not affect the pressure-temperature ratings shown in the Summary Table. All of the following options are within the scope of this registration:

Cover Options

- Armor guard - Interlocking, flexible 304 stainless steel.
- Fire jacket - Woven fiberglass coated with specially compounded aerospace-grade silicone rubber
- Spiral guard - Helical HDPE plastic

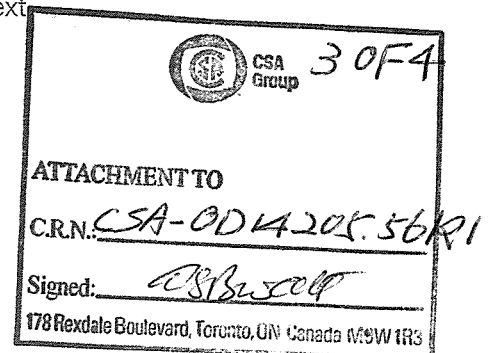
Tag and Marking Options

- Mat tag - Polyester tag with customer-specified text
- Perma tag - Polyester tag encapsulated in platinum-cured silicone 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
- Flange and Sanitary Ends - gaskets

All of the above options are within the scope of this approval.




Quality System

The Swagelok Company quality system complies with the requirements of BS EN ISO 9001:2008. The Swagelok Company maintains British Standards Institution Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate. The Swagelok Coreflex PTFE Hose Assemblies (WC) are manufactured at a Swagelok Company location in Solon, Ohio.

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

 CSA Group	4 OF 4
ATTACHMENT TO	
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Signed: <u>[Signature]</u>	
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