

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



STATUTORY DECL		
Registration of Fit	tings	
I, David H. Peace, Vice President of Engineering		
(Name and Position, e.g. President, Plant Menager,	. Chief Engineer)	
of Swagelok Company		
(Name of Manufacturer)		
Located at 29500 Solon Road, Solon, Ohio 44139-3492	(440) 248-4600	440-519-7384
(Plant Appress)	(Telephone No.)	(Fax No.)
✓ do solemnly declare that the fittings listed hereunder, which are subject to and Pressure Vessels Regulation, comply with all of the requirements of The RMA Handbook		Is and Safety Act, Boilers
(Title of recognized North American Stands which specifies the dimensions, materials of construction, pressure/temperature		on the fittings and convices
milion appearings the difficultations, makenings of consuderon, pressure/temperature	roungs, rocinitoatori maiNi	ng and muninga and activities,
or are not covered by the provisions of a recognized North American star as supported by the attached data w		
pressure/temperature ratings and the basis for such ratings, the marking of		
		100 0001-2008
I further declare that the manufacture of these fittings is controlled by a quality sys which has been verified by the following authority, The British St	stem meeting the requirem landards Institution	ents of 150 9001:2008
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, Attachm		
(drawings, calculations, test reports, et	(c.)	
Declared before me at	State	of Shio
the 33 day of January AD 20 14.		
Commissioner for Oaths:		
LORI A. SARVER	210	
(Printed name) Lori A. Sarver, Notary Public	/11//	
State of Ohio, Summit County My Commission Expires April 13, 2015	William	
(Signeture)	(Signature of I	Declarer)
FOR OFFICE USE ONLY	,	
To the best of my knowledge and belief, the application meets the requirements of the		Bothery and
Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation, an		Property Pessels
CSA Standard B51 and is accepted for registration in Category	Total Spring Street	Store - Strain
CRN: 0014205.5 R1		RED
Registered by: Liliana Constantinescy	00/4	205.5 RI
Dated: Dec. 21, 2015	Signed:	
NOTE: This societystics expires on: Dec 21 2025	Dec 2	1 2015

PV 09553 (11/12)

Scope of registration, revised disignator 3/8" and 1/2" CORE-FLEX W HOSES - ATTACHMENT BREV. B'(see attached)

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

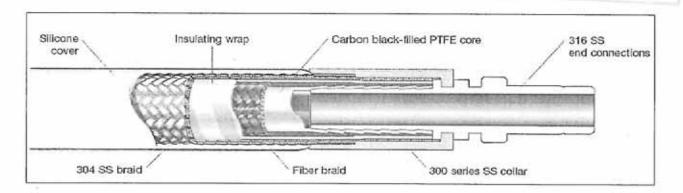
Product Description or Series	Pressure Retaining Material	End Connection & Sizes	Nom. Hose Size (in.)	Maximum Working Pressure in (Psig)		Design Code	
				@ Min65°F	@ Max. 450°F	Construction	
W Series	Core: Carbon Black-filled (PTFE) [WC] Covered by: Fiber Braid & Insulating Wrap & 304 Series Stainless Steel Braid & Silicon Cover	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" 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	ragelok Tube Fitting: 1/8" to 2" 3, 6,10,12,18,25,38,50 mm ragelok Tube Adapters:1/8" to 2" 3, 6,10,12,18,25,38,50 mm male Pipe Threads NPT:1/8" to 2" 3/8" be Stubs: 1/8" to 2" 3, 6,8,10,12,18,25, 38, 50 mm anitary Kwik —Ctamps: 1/2" to 2" the Butt Welds: 1/2" to 2" male VCO O-ring Face Seal Fitting: 3" to 2"	IN OD14 skal Standards & orn & Press Sallety Pre	Saluty Authorit		
	With: Annealed 316 Stainless Steel End Connections OR 316 Strain Hardened End Connections OR 316L Stain Hardened Stainless Steel End Connections & 300 Stainless Steel Crimp on Collar Fitting: 1/8* to *TS series Sar Male Pipe thre (ISO 7): 1/4* t Male ISO/BSP 60* Male cone Female Pipe T Tapered (ISO Female ISO/B: (ISO 228): 1/4* Female Swivel Threads W/ 50	Fitting: 1/8" to 2" "TS series Sanitary Clamps: 1/2" to 1" 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	1/2"	750	750	Rubber Manufacturen Association Handbook	
		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"	75 @ Room Te			

^{*} 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.

Hose	Working Pressure for W Series PTFE Hose (WC Series) Temperature in (°F)					
Size (in)		-65 to	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.



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

VV14205.JR1