



**BOILERS AND PRESSURE VESSELS
SAFETY DIVISION**
3300 Bloor Street West
4th Floor, West Tower
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 & 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) (See Attachment A) (Telephone #) (Fax #)

do solemnly declare that the fittings listed hereunder, which are subject to the Technical Standards and Safety Act, 2000, and Regulations for Boilers and Pressure Vessels 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, Support Documents, Catalog Information, Attachments B, C, D, E, F, G, H, & J.
(drawings, calculations, test reports, etc.)


Declared before me at Cuyahoga Co. in the State of Ohio
the 7th day of October AD 2010.

Commissioner for Oaths:

LANA C. SUTPHIN
(Printed name)

Lana C. Sutphin LANA C. SUTPHIN, Notary Public [Signature]
(Signature) State of Ohio - Portage County My Commission Expires Jan. 29, 2012 (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, 2000, and Regulations for Boilers and Pressure Vessels and CSA S  B51 and is accepted for registration in Category D.


CRN: CSA-OD14205.56

Registered by: AMARJIT BANWATT

Dated: 24 May 2011

NOTE: This registration expires on NOV 18, 2020

[Revised August 24, 2001]


CSA INTERNATIONAL
REGISTERED
 C.R.N.: CSA-OD14205.56
 Signed: [Signature]
 Date: 24 May 2011
 178 Rexdale Blvd., Toronto, ON M9W 1R3

Note: See the attachment for the scope of the registration

Attachment E. Scope of Registration for Swagelok Coreflex PTFE (NC) Hose Assemblies (Category D)

This document represents the scope of Swagelok Coreflex NC PTFE Hose Assemblies covered by this submission for CRN approval. These Swagelok Coreflex NC 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			
N Series	Core: Convuluted Bore Carbon Black-filled (PTFE) [NC] Covered by: Insulating Wrap & Aramid Fiber Braid With: Annealed 316 Stainless Steel End Connections OR 316 Strain Hardened End Connections OR 316L Stain Hardened Stainless Steel End Connections & 300 Series Stainless Steel Crimp on Collar	Swagelok Tube Fitting: 1/8" to 2" & 3, 6,10,12,18,25,38,50 mm	3/8"	1250	140	Rubber Manufacturers Association Handbook		
		Swagelok Tube Adapters:1/8" to 2" & 3, 6,10,12,18,25,38,50 mm						
		Female Pipe Threads NPT:1/8" to 2"						

* 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.

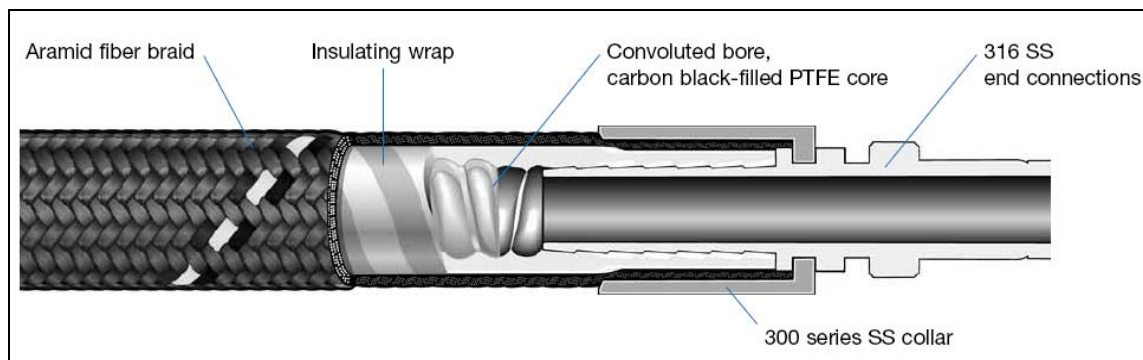
Working Pressure for N Series PTFE Hose (NC Series)							
Hose Size (in)		Temperature in (°F)					
		-65	0 to 100	200	300	400	450
3/8"	Max. Working Pressure (PSIG)	1250	1250	500	365	165	140
1/2"	Max. Working Pressure (PSIG)	720	750	340	235	160	130
3/4"	Max. Working Pressure (PSIG)	375	375	275	165	85	80

Product Description

NC series is standard Swagelok virgin Convuluted PTFE-lined hose with a Nomex insulating wrap and fiber braid reinforcement.

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 within the scope of this approval. Examples of these would include 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
- Flange and Sanitary Ends - gaskets

All of the above options, those that affect pressure and/or temperature ratings and those that do not, 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 (NC) 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