

TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ON M9W 6N9

Date: July 10, 2019
Account #: 35231
Journal #: 73719

Attn: TANYA FRANCIS

Re: Application for Design Registration

The design, as detailed in your, CRN: 0D21357.5, for a Fitting is accepted for registration as follows:

Registered To: SWAGELOK COMPANY **CRN:** 0D21357.51

Drawing #: MS-01-180

Drawing Revision: Q

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

Reviewer's Notes:

As required by CSA B51 4.2.1, this registration expires on 01-May-2029. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void. Any additional conditions of registration stated in TSSA CRN# 0D21357.5 registration shall apply to BC registration.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

Janina Mihailescu

janina.mihailescu@technicalsaftybc.ca
Design Administration

cc:



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

Swagelok

STATUTORY DECLARATION Registration of Fittings

I, Joel Feldman, 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 USA (440) 248-4600 (440) 349-5970
(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 Association for Rubber Products Manufacturers (ARPM) 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 9001:2015 which has been verified by the following authority, BSI

The items covered by this declaration, for which I seek registration, are category D. Hose Assemblies type fittings. In support of this application, the following information and/or test data are attached as follows:
ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents
(drawings, calculations, test reports, etc.)

Declared before me at Solon in the state of Ohio
 the 14th day of March AD 2019.

Commissioner for Oaths:

Brenda Hammel
(Printed name)
Brenda Hammel
(Signature)

Joel C. Feldman
(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: 0021357.5
 Registered by: [Signature]
 Dated: May 1, 2019
 NOTE: This registration expires on: May 1, 2023

Technical Standards and Safety Authority **Boilers and Pressure Vessels Safety Program**

REGISTERED

C.R.N.: 0021357.5
 Signed: [Signature]
 Date: May 1, 2019

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request. For scope of registration see attachments A and B [Signature]



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

This document represents the scope of Swagelok's PB Series Hose and assemblies covered by this submission for CRN approval. These hose assemblies have been evaluated in accordance with the Association for Rubber Products Manufacturers (ARPM) Handbook.

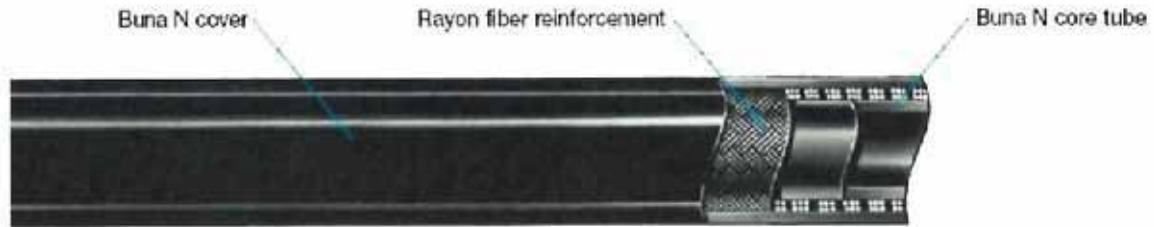
Summary Table

Product Series	Pressure Retaining Material	End Connections & Sizes	Nom. Hose Size (in)	Maximum Working Pressure (psig)			Design Code of Construction
				Min. Temp.	@ 70°F	Max. Temp.	
PB Series Hose (Eaton)	Core: Vinyl Nitrile (ARPM Class A) Braid: 1-Braid Fiber End Connections: 316 SS (ASTM A479) or C36000 Brass (ASTM B16)	Male ISO/BSP Threads (ISO 7) 1/4"-1" [MT]	1/4"	350 @ -40°F	350	100 @ 200°F	ARPM Handbook
			3/8"				
		Male NPT Threads 1/4"-1" [PM]	1/2"	300 @ -40°F	300	80 @ 200°F	
			3/4"				
PB Series Hose (ContiTech)	Core: Buna N Braid: Rayon Fiber End Connections: 316 SS (ASTM A479) or C36000 Brass (ASTM B16)	Tube Adapter 1/4"-1" [TA] 6-25MM [TM]	1"	300 @ -20°F			
		Tube Fitting 1/4"-1" [SL]					

THIS IS PART OF
 CRN 0D21357-5
 Technical Standards & Safety Authority
 Division of Pressure Vessels

Product Illustrations

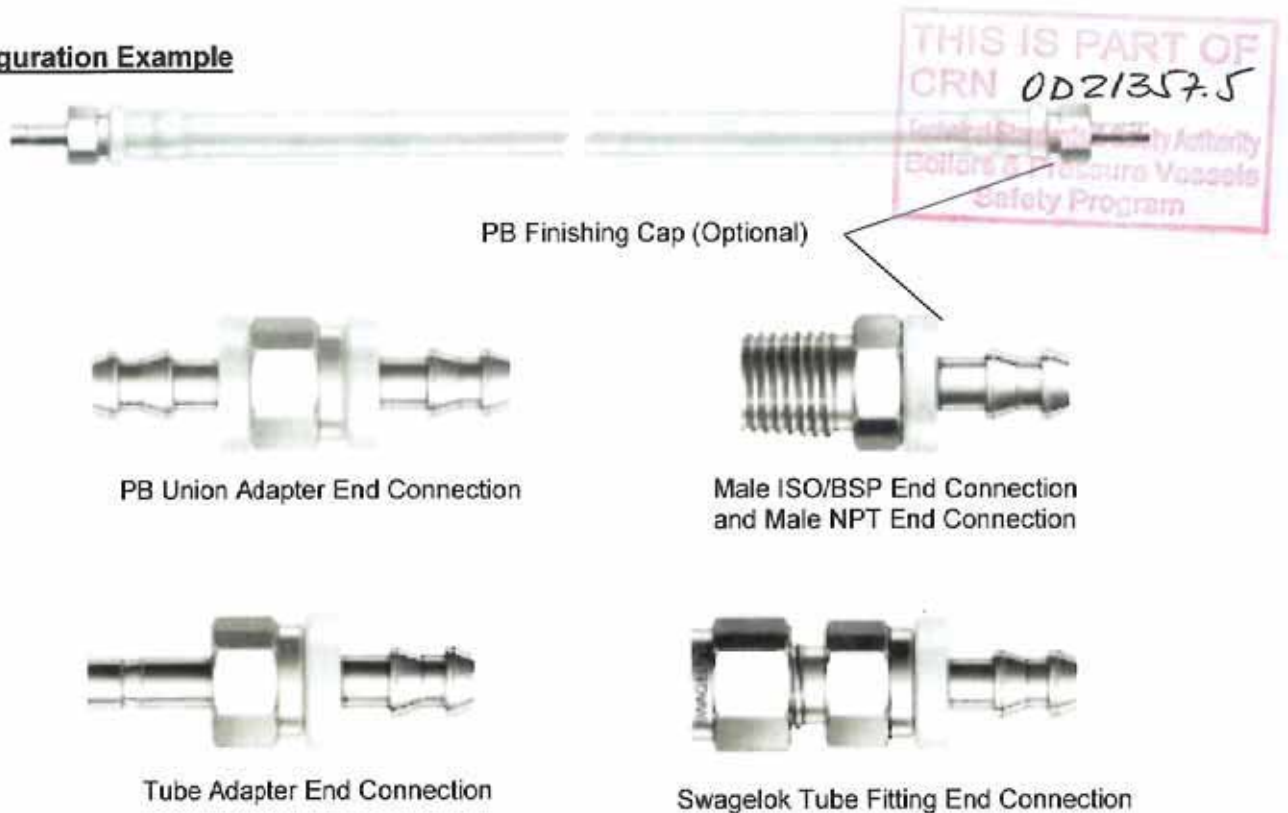
ContiTech Hose



Eaton Hose



Configuration Example



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, but are not limited to:

- Hose Color Options
- Tag and Marking Options (ex. tags, lanyards, retaining clamps, etc.)
- End Connection Seals or Sealant Options (ex. pipe thread sealant)
- Special Testing Options (ex. proof pressure tests)

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 and Flexible Tubing Product Catalog MS-01-180, Rev. Q



Attachment A. Swagelok Manufacturing Locations

This document lists the Swagelok locations where end item or component level manufacturing activities take place.

Swagelok Company 29500 Solon Road Solon, Ohio 44139 USA	Swagelok Company (Falon 1) 348 Bishop Road Highland Heights, Ohio 44143 USA
Swagelok Company (Highland) 318 Bishop Road Highland Heights, Ohio 44143 USA	Swagelok Company (Falon 2) 358 Bishop Road Highland Heights, Ohio 44143 USA
Swagelok Company (OFC) 29495 F.A. Lennon Drive Solon, Ohio 44139 USA	Swagelok Company (HPF) 6050 Cochran Road Solon, Ohio 44139 USA
Swagelok Company (Atlantic) 26651 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Company (Snow Metal) 6060 Cochran Road Solon, Ohio 44139 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) 29900 Solon Industrial Parkway Solon, Ohio 44139	Swagelok Company (Strongsville) 15400 Foltz Road 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

