

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

**Date:** February 1, 2021  
**Account #:** 35231  
**Journal #:** 77221

**Attn:** TSSA

**Re: Application for Design Registration**

The design, as detailed in your, 0D22889.5, for a Fitting is accepted for registration as follows:

**Registered To:** SWAGELOK COMPANY                      **CRN:** 0D22889.51

**Drawing #:** Scope of Registration

**Drawing Revision:** N/A

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:**

Scope of Registration: ATTACHMENT A AND B, MS-01-180 HOSE AND FLEXIBLE TUBING CATALOG

As required by CSA B51 4.2.1, this registration expires on 16-Dec-2030. 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# 0D22889.5 registration shall apply to BC registration.

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

Emilia Tam

[emilia.tam@technicalsaftybc.ca](mailto:emilia.tam@technicalsaftybc.ca)  
Design Administration

**cc:**



Technical Standards and Safety Authority  
345 Carlingview Drive  
Toronto, Ontario M9W 6N9  
www.tssa.org



### 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 Association for Rubber Products Manufacturers (ARPM) Hose 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 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 \_\_\_\_\_ in the \_\_\_\_\_ of \_\_\_\_\_  
the \_\_\_\_\_ day of \_\_\_\_\_ AD 20\_\_\_\_.

Commissioner for Oaths:

**Unable to get a notary signature or seal due to COVID-19 situation**  
(Printed name)  
**- October 21, 2020**  
(Signature)

DocuSigned by:  
  
10/22/2020 | 10:20 AM E  
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(Unique ID of Document)

#### 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: 0D22889.5  
Registered by:   
Dated: DECEMBER 16, 2020



This Document has been digitally signed. The stamp size has been optimized for 11 x 17 documents.

Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety Program  
**REGISTERED**  
C.R.N.: 0D22889.5  
Signed:   
Date: December 16, 2020.

NOTE: This registration expires on: **DECEMBER 16, 2030**



**THIS IS PART OF CRN**  
 0D22889.5  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety Program

Canadian Registration Number Submittal  
 Category D Swagelok Nylon and Polyethylene Hose

September 21, 2020  
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**Attachment B: Scope of Registration for Swagelok Nylon Series (7N, 7R, 8N & 8R) and Polyethylene Series (7P) Hose Assemblies (Category D)**

This document represents the scope of Swagelok Nylon Series (7N, 7R, 8N, 8R) and Polyethylene Series (7P) Hose 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**

Product Description or Series	Pressure retaining Material	End Connections and Sizes	Nominal Hose Size (in.)	Maximum Pressure at Temperature (psig)		Design Code of Construction
				At -40 to 70°F Temp.	At Maximum Temp. (200°F)	
7N Nylon Hose	<b><u>Smooth Bore Core</u></b> SAE nonconductive nylon (7N)  <b><u>Core Covered By</u></b> Synthetic fiber reinforcement  <b><u>Hose Cover</u></b> Polyurethane cover  <b><u>End Connections</u></b> 316 SS	Swagelok Tube Fitting [ <b>SL SM</b> ] 1/4" – 1/2" (6-12mm)  Female 37° JIC with female swivel nut [ <b>AN, AS</b> ] 1/4" – 1/2"  Male ISO/BSP Tapered (ISO 7) Pipe Threads [ <b>MT</b> ] 1/4" – 1/2"  Male NPT Tapered Pipe Fitting [ <b>PM</b> ] 1/4" – 1/2"	1/4	2750	1750	Association for Rubber Products Manufacturers (ARPM) Hose Handbook
			3/8	2250	1750	
			1/2	2000	1750	
7R Nylon Hose	<b><u>Smooth Bore Core</u></b> Nylon (7R)  <b><u>Core Covered By</u></b> Synthetic fiber reinforcement  <b><u>Hose Cover</u></b> Polyurethane cover  <b><u>End Connections</u></b> 316 SS	Swagelok Tube Fitting [ <b>SL SM</b> ] 1/4" – 1/2" (6-12mm)  Female 37° JIC with female swivel nut [ <b>AN, AS</b> ] 1/4" – 1/2"  Male ISO/BSP Tapered (ISO 7) Pipe Threads [ <b>MT</b> ] 1/4" – 1/2"  Male NPT Tapered Pipe Fitting [ <b>PM</b> ] 1/4" – 1/2"	1/4	1750	2000	
			3/8	2250	2000	
			1/2	2000	1500	
8R Nylon Hose	<b><u>Smooth Bore Core</u></b> Nylon Blend Thermoplastic  <b><u>Core Covered By</u></b> Synthetic fiber reinforcement  <b><u>Hose Cover</u></b> Polyurethane cover  <b><u>End Connections</u></b> 316 SS	Swagelok Tube Fitting [ <b>SL SM</b> ] 1/4" – 1" (6-12mm)  Female 37° JIC with female swivel nut [ <b>AN, AS</b> ] 1/4" – 1"  Male ISO/BSP Tapered (ISO 7) Pipe Threads [ <b>MT</b> ] 1/4" – 1"  Male NPT Tapered Pipe Fitting [ <b>PM</b> ] 1/4" – 1"	1/4	5000	3250	
			3/8	4000	3250	
			1/2	3500	2750	
			3/4	2250	1500	
			1	2000	1125	



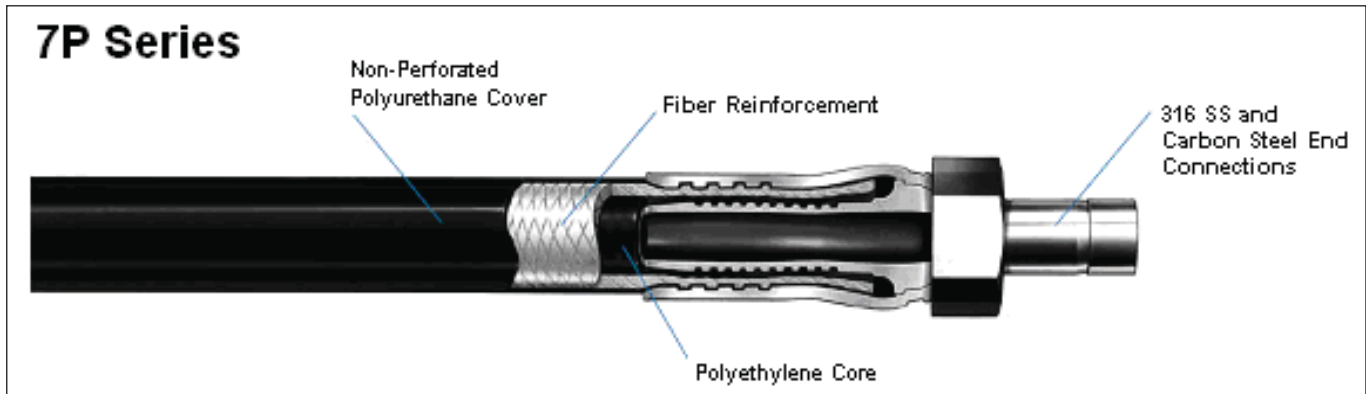
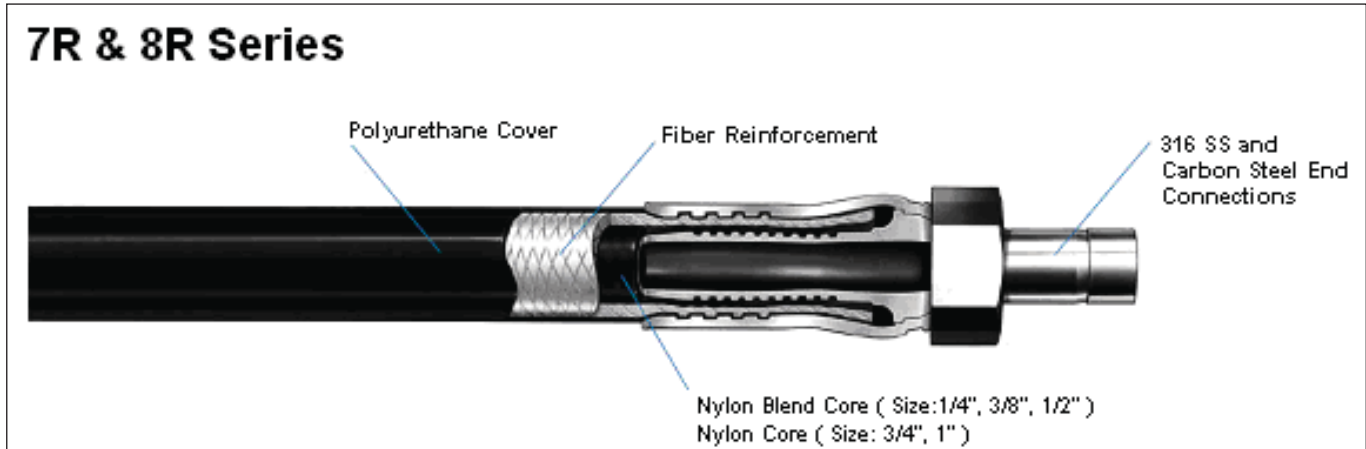
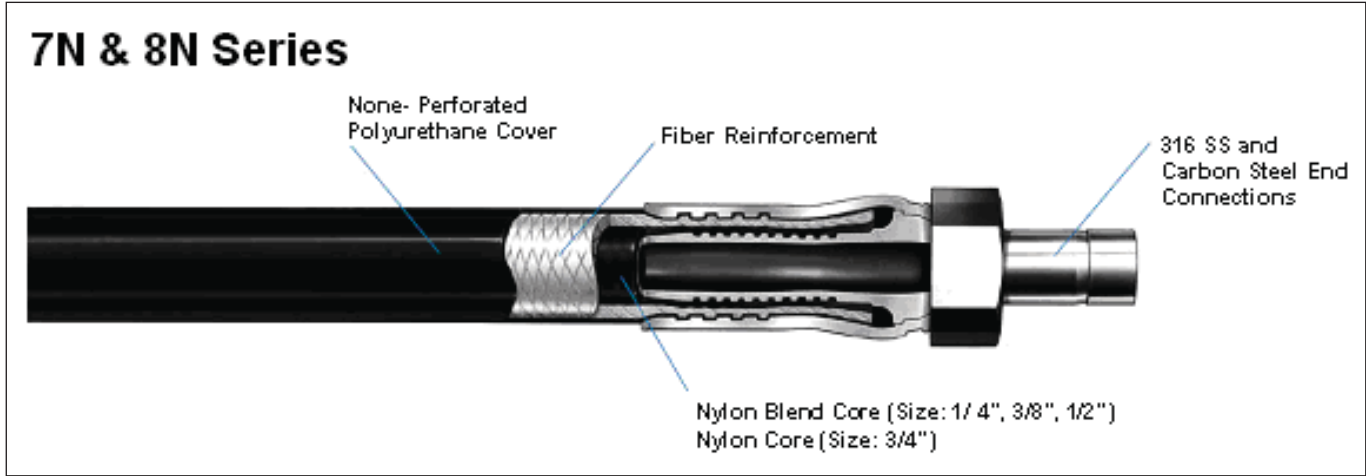
THIS IS PART OF CRN  
0D22889.5  
Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety  
Program

Canadian Registration Number Submittal  
Category D Swagelok Nylon and Polyethylene Hose

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Product Description or Series	Pressure retaining Material	End Connections and Sizes	Nominal Hose Size (in.)	Maximum Pressure at Temperature (psig)		Design Code of Construction
				Up to 70°F Temp.	At Maximum Temp.	
8N Nylon Hose	<p><b>Smooth Bore Core</b> SAE nonconductive nylon</p> <p><b>Core Covered By</b> Synthetic fiber reinforcement</p> <p><b>Hose Cover</b> Polyurethane cover</p> <p><b>End Connections</b> 316 SS</p>	<p>Swagelok Tube Fitting <b>[SL]</b> 3/4"</p> <p>Female 37° JIC with female swivel nut <b>[AS]</b> 3/4"</p> <p>Male ISO/BSP Tapered (ISO 7) Pipe Threads <b>[MT]</b> 3/4"</p> <p>Male NPT Tapered Pipe Fitting <b>[PM]</b> 3/4"</p>	3/4	2250 @ -40°F to 70°F	1750 @ 200°F	Association for Rubber Products Manufacturers (ARPM) Hose Handbook
7P Polyethylene Hose	<p><b>Smooth Bore Core</b> Polyethylene</p> <p><b>Core Covered By</b> Synthetic fiber reinforcement</p> <p><b>Hose Cover</b> Polyurethane cover</p> <p><b>End Connections</b> 316 SS</p>	<p>Swagelok Tube Fitting <b>[SL SM]</b> 1/4"–1" (6–25mm)</p> <p>Female 37° JIC with female swivel nut <b>[AS]</b> 1/4" – 1"</p> <p>Male ISO/BSP Tapered (ISO 7) Pipe Threads <b>[MT]</b> 1/4" – 1"</p> <p>Male NPT Tapered Pipe Fitting <b>[PM]</b> 1/4" – 1"</p>	1/4	2750 @ -10°F to 70°F	1500 @ 150°F	
			3/8	2250 @ -10°F to 70°F	2250 @ 150°F	
			1/2	2000 @ -10°F to 70°F	1750 @ 150°F	
			3/4	1250 @ -10°F to 70°F	900 @ 150°F	
			1	1500 @ -10°F to 70°F	1200 @ 150°F	

**Product Description**





**Product Options:**

Additional options and non-pressure boundary alterations that do not affect pressure ratings are within the scope of this approval. Examples of these options include but are not limited to:

- Spring guards (such as S – Full length spring guard and S2 – Short length spring guard)
- Sleeves (such as F – Fire jacket sleeve with metallic tie lock bands; F1 – Thermo sleeve with metallic tie lock bands)
- Tags and special markings
- Pipe Thread Sealants
- Special Testing

**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, Rev. U.

**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