



REGISTRATION OF A PRESSURE FITTING DESIGN

December 11, 2024

TSSA
345 Carlingview Dr.
Toronto, ON
Canada
M9W 6N9

Attention: Cecylia Garbacz

File Number: 101934

Re: Manufacturer: Swagelok

Item: Hose Assemblies

Catalog or Drawing: Per Swagelok Attachments A & B (June 4, 2024)

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

0D22889.53

Expiry Date: 2030-12-16

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,

Athan Syrgiannis, P.Eng.

Codes and Standards Compliance

Remarks:

Revision to existing CRN. Conditional upon compliance with the notes on the TSSA registration.

A valid quality control program must be maintained at the production facilities for the fitting registration to remain valid until the expiry date.

See Attachment A for list of manufacturing locations and Attachment B for Scope of Registration.



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, James Nordholt, 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

(Plant Address)

(440) 248-4600

(Telephone No.)

(440) 349-5970

(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 Manufactureres (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 SOLON in the STATE of OHIO

the 31st day of MAY AD 20 24

Commissioner for Oaths:

JEFFREY C TRUMBULL

(Printed name)

[Signature]

(Signature)



JEFFREY C. TRUMBULL

Notary Public
State of Ohio

Recorded in Lake County
Certificate # 2020-RE-813693

My Commission Expires
April 15, 2025

[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 _____

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: _____

**Technical
Safety Authority
of Saskatchewan**

Registration No. 0D22889.53

File No. 101934

Registered

Date: December 11, 2024

Expiry Date: December 16, 2030

Codes & Standards Compliance Office

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.



Canadian Registration Number Submittal
Category D Swagelok Nylon and Polyethylene Hose

| | |
|-------------------------------------|-------------------|
| | |
| Registration No. | 0D22889.53 |
| File No. | 101934 |
| Registered | |
| Date: | December 11, 2024 |
| Expiry Date: | December 16, 2030 |
| Codes & Standards Compliance Office | |

June 4, 2024
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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 | <u>Smooth Bore Core</u> SAE nonconductive nylon (7N) <u>Core Covered By</u> Synthetic fiber reinforcement <u>Hose Cover</u> Polyurethane cover <u>End Connections</u> 316 SS | Swagelok Tube Fitting [SL SM] 1/4" – 1/2" (6-12mm) | 1/4 | 2750 | 1750 | Association for Rubber Products Manufacturers (ARPM) Hose Handbook |
| | | Swagelok Tube Adapter [TA TM] 1/4" – 1/2" (6-12mm) | | | | |
| | | Female 37° JIC with female swivel nut [AN, AS] 1/4" – 1/2" | 3/8 | 2250 | 1750 | |
| 7R Nylon Hose | <u>Smooth Bore Core</u> Nylon (7R) <u>Core Covered By</u> Synthetic fiber reinforcement <u>Hose Cover</u> Polyurethane cover <u>End Connections</u> 316 SS | Male ISO/BSP Tapered (ISO 7) Pipe Threads [MT] 1/4" – 1/2" | 1/2 | 2000 | 1500 | |
| | | Male NPT Tapered Pipe Fitting [PM] 1/4" – 1/2" | | | | |
| | | Swagelok Tube Fitting [SL SM] 1/4" – 1/2" (6-12mm) | 1/4 | 1750 | 2000 | |
| 8R Nylon Hose | <u>Smooth Bore Core</u> Nylon Blend Thermoplastic <u>Core Covered By</u> Synthetic fiber reinforcement | Swagelok Tube Adapter [TA TM] 1/4" – 1/2" (6-12mm) | 3/8 | 2250 | 1750 | |
| | | Female 37° JIC with female swivel nut [AN, AS] 1/4" – 1/2" | | | | |
| | | Male ISO/BSP Tapered (ISO 7) Pipe Threads [MT] 1/4" – 1/2" | 1/2 | 2000 | 1500 | |
| 8R Nylon Hose | <u>Smooth Bore Core</u> Nylon Blend Thermoplastic <u>Core Covered By</u> Synthetic fiber reinforcement | Male NPT Tapered Pipe Fitting [PM] 1/4" – 1/2" | | | | |
| | | Swagelok Tube Fitting [SL SM] 1/4" – 1" (6-25mm) | 1/4 | 5000 | 3250 | |
| | | Swagelok Tube Adapter [TA TM] 1/4" – 1" (6-25mm) | 3/8 | 4000 | 3250 | |
| | | | 1/2 | 3500 | 2750 | |

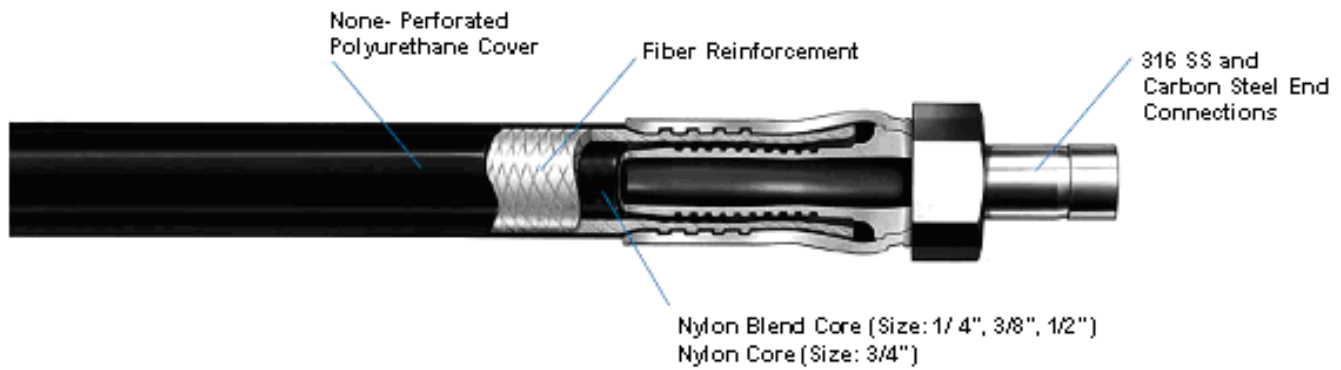


| | | | | | | |
|--|---|---|-----|------|------|--|
| | Hose Cover Polyurethane cover | Female 37° JIC with female swivel nut [AN, AS] 1/4" – 1" | 3/4 | 2250 | 1500 | |
| | End Connections 316 SS | Male ISO/BSP Tapered (ISO 7) Pipe Threads [MT] 1/4" – 1" Male NPT Tapered Pipe Fitting [PM] 1/4" – 1" | 1 | 2000 | 1125 | |

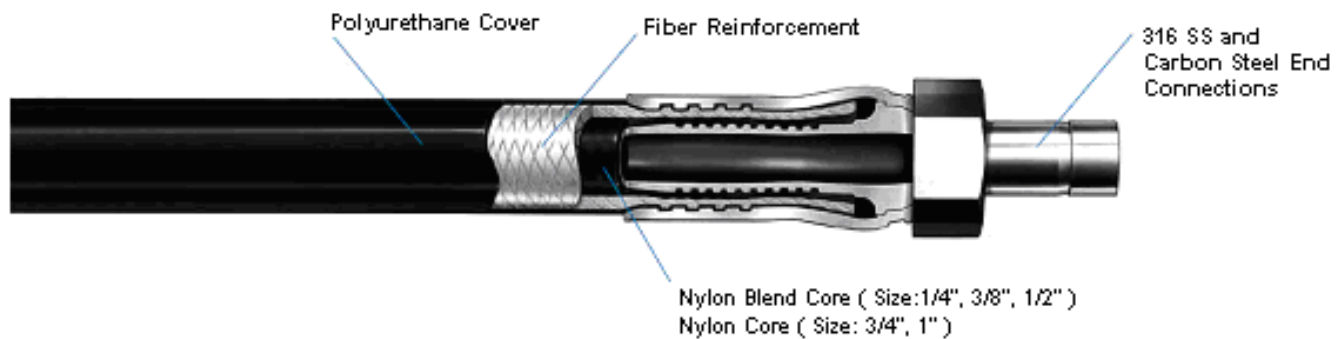
| Product Description or Series | Pressure retaining Material | End Connections and Sizes | Nominal Hose Size (in.) | Maximum Pressure at Temperature (psig) | | Design Code of Construction |
|-------------------------------|---|---|-------------------------|--|------------------|--|
| | | | | Up to 70°F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

Product Description

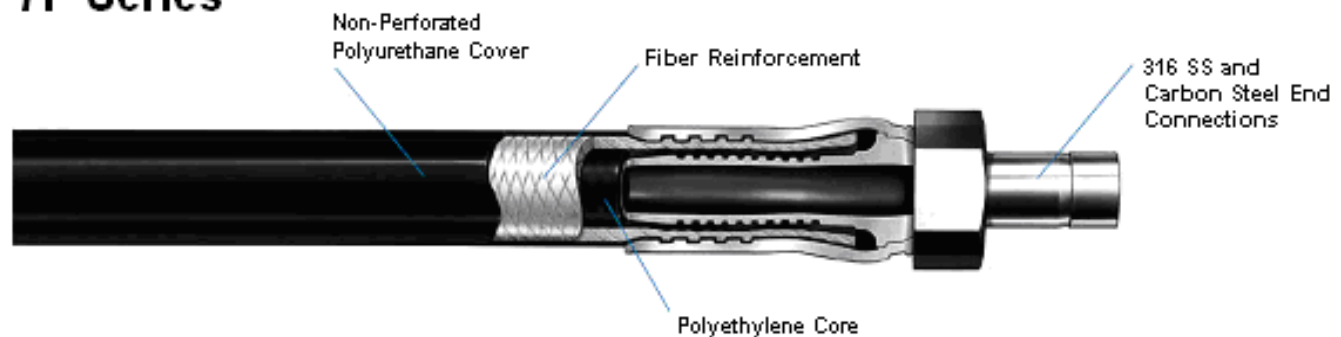
7N & 8N Series



7R & 8R Series



7P Series





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.

| | |
|---|-------------------|
|  Technical Safety Authority of Saskatchewan | |
| Registration No. | 0D22889.53 |
| File No. | 101934 |
| <input type="button" value="Registered"/> | |
| Date: | December 11, 2024 |
| Expiry Date: | December 16, 2030 |
| <small>Codes & Standards Compliance Office</small> | |

| | |
|--|---|
| Swagelok Company 29500 Solon Road Solon, Ohio 44139 USA | Swagelok Company (HPF) 6050 Cochran Road Solon, Ohio 44139 USA |
| Swagelok Company (OFC) 29495 F.A. Lennon Drive Solon, Ohio 44139 USA | Swagelok Company (Snow Metal) 6060 Cochran Road Solon, Ohio 44139 USA |
| Swagelok Precision Machining Services 1924 East 337th Street Eastlake, OH 44095 USA | Swagelok (China) Fluid System Technologies Ltd. Changshu Export Process Zone Changshu Economic Development Zone Changshu, Jiangshu 215513 China |
| Swagelok Company (Highland) 318 Bishop Road Highland Heights, Ohio 44143 USA | Swagelok Company (Strongsville) 15400 Foltz Road Strongsville, Ohio 44119 |
| Swagelok Company (Atlantic) 26651 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA | Swagelok Company (Alfred) 29500 Ambina Drive Solon, Ohio 44139 |
| Swagelok Company (Micro) 26653 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA | Swagelok Hose Services Company (SHSC) 29900 Solon Industrial Parkway Solon, Ohio 44139 |
| Swagelok Company (Falon 1) 348 Bishop Road Highland Heights, Ohio 44143 USA | Swagelok Limited Ballafletcher Road Tromode IM4 4RA Isle of Man |
| Swagelok Company (Falon 2) 358 Bishop Road Highland Heights, Ohio 44143 USA | Swagelok Company (Valley City) 5370 Wegman Drive Valley City, Ohio 44280 USA |

Note: Hose assembly of end connections at Swagelok Authorized Sales and Services Centers is under scope of this CRN.