

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

Date: April 2, 2020
Account #: 35231
Journal #: 75370

Attn: CECYLIA GARBACZ

Re: Application for Design Registration

The design, as detailed in your, CRN#0C22209.5, for a Fitting is accepted for registration as follows:

Registered To: SWAGELOK COMPANY **CRN:** 0C22209.51

Drawing #: Scope of Registration

Drawing Revision: N/A

Conditions Of Registration:

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.

Scope of Registration: Stamped attachment A and B. SWAG ELOK D Series needle valves

Reviewer's Notes:

As required by CSA B51 4.2.1, this registration expires on 27-Feb-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# 0C22209.5 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 ASME B31.1 for unlisted components, and ASME B31.3 for unlisted components
(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 C. Valves 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 25th day of Nov AD 20 19.

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 C

CRN: OC22209.5
 Registered by: [Signature]
 Dated: Feb 27, 2020

NOTE: This registration expires on: Feb 27, 2030

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

OFFICE REGISTERED

CR.N: OC22209.5

Signed: [Signature]

Date: Feb 27, 2020

*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 attached Stamped Attachment A and B

Attachment B: Scope of CRN Registration for Swagelok D Series Needle Valves (Category C)

This document represents the scope of the Swagelok D Series Needle Valves covered by this submission for CRN approval. These products were designed and evaluated in accordance with ASME B31.1-2018 for unlisted components and ASME B31.3-2018 for unlisted components.

Summary Table

Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	Port Connections, Sizes	Maximum Rated Pressure (psig)		Design Code of Construction
				At -65 to 100°F	@ max temperature	
OD	Body	F316 SS (ASTM A182)	Tube Fitting 1/8" Female NPT 1/8" Male NPT 1/8"	3000	2065 @ 450°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
14D	Body	F316 SS (ASTM A182)	Tube Fitting 1/4", 6MM Male NPT 1/4"	3000	2065 @ 450°F	
16D	Body	F316 SS (ASTM A182)	Tube Fitting 3/8" Female NPT 1/4" Male NPT 1/4", 3/8", 1/2"	3000	2065 @ 450°F	
14D	Body	Alloy 400 (ASTM B564)	Tube Fitting 1/4", 6MM Male NPT 1/4"	3000	2380 @ 450°F	
16D	Body	Alloy 400 (ASTM B564)	Tube Fitting 3/8" Female NPT 1/4" Male NPT 1/4", 3/8", 1/2"	3000	2380 @ 450°F	
OD	Body	Brass C37700 (ASTM B283)	Tube Fitting 1/8" Female NPT 1/8" Male NPT 1/8"	3000	2350 @ 200°F	
14D	Body	Brass C37700 (ASTM B283)	Tube Fitting 1/4", 6MM Male NPT 1/4"	3000	2350 @ 200°F	ASME B31.1 (Unlisted Components)
16D	Body	Brass C37700 (ASTM B283)	Female NPT 1/4" Male NPT 1/4", 3/8", 1/2" Tube Fitting 3/8"	3000 2200	2350 @ 200°F 1760 @ 200°F	



Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	Port Connections, Sizes	Maximum Rated Pressure (psig)		Design Code of Construction
				At -65 to 100°F	@ max temperature	
OD	Body	Brass C37700 (ASTM B283)	Tube Fitting 1/8" Female NPT 1/8" Male NPT 1/8"	3000	390 @ 400°F	ASME B31.3 (Unlisted Components)
14D	Body	Brass C37700 (ASTM B283)	Tube Fitting 1/4", 6MM Male NPT 1/4"	3000	390 @ 400°F	
16D	Body	Brass C37700 (ASTM B283)	Female NPT 1/4" Male NPT 1/4", 3/8", 1/2"	3000	390 @ 400°F	
			Tube Fitting 3/8"	2200	390 @ 400°F	

Product Illustrations



Typical Product Characteristics:

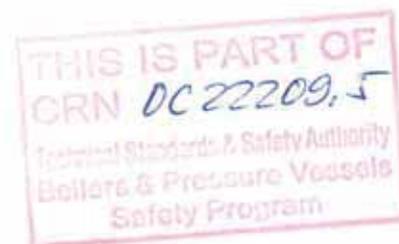
Some of the product options listed below could affect the pressure-temperature ratings shown in the Summary Table, but in all cases the ratings are less than those shown in the Summary Table. All of the following options are within the scope of this registration:

Valve Seat Material

PCTFE
 PEEK

Stem Seal Material

Fluoroelastomer (FKM) – standard
 Perfluoroelastomer (FFKM)
 Nitrile
 Ethylene propylene
 Silicone



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 registration, but rather details some of the most common options.

- D Series Needle Valve Catalog MS-01-42, Rev H



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) 353 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

