

## REGISTRATION OF A PRESSURE FITTING DESIGN

September 9, 2024

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

**Attention: Cecylia Garbacz**

**File Number: 101422**

**Re: Manufacturer: Swagelok**

**Item: Pressure Regulators**

**Catalog or Drawing: Per Scope of Registration Attachment B (July 2, 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:

**0C25329.53**

**Expiry Date: 2034-07-04**

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:**

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 Swagelok manufacturing locations.

NOTE: You cannot save the DATA you entered on this form, you must print a copy and FAX it or MAIL it!



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 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 type fittings. In support of this application, the following information and/or test data are attached as follows:

ISO:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents

(drawings, calculations, test reports, etc.)

Declared before me at SOLON, OH in the STATE of OHIO

the 15 day of FEBRUARY AD 2024.

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: \_\_\_\_\_

**Technical Safety Authority of Saskatchewan**

Registration No. 0C25329.53

File No. 101422

Registered

Date: September 9, 2024

Expiry Date: July 4, 2034

Codes & Standards Compliance Office

NOTE: This registration expires on: \_\_\_\_\_

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

## Attachment B. Scope of CRN Registration for Swagelok Processes Pressure Regulators sizes 08 (1/2") to 24 (1.5") (Category C)

This document represents the scope of the Swagelok Process Pressure Regulators (SGRS, SGRD, SHRS, SHRD, SGBS, SGBD, SHBS, SGRA, and SGBA Series) covered by this submission for CRN approval. These products comply with the requirements of ASME B31.1-2020 "Power Piping" as an unlisted component per Section 104.7.2 and ASME B31.3-2022 "Process Piping" as an unlisted component per Section 304.7.2.

**Note:**

The temperature ratings in the table below in most cases exceed those shown in the product catalog. The pressure retaining components are designed to be safe at the temperature rating as demonstrated in the Code Compliance Summary, but the Swagelok factory must be consulted to determine which seat and seal materials listed in the Typical Product Characteristics section below are suitable for use at this temperature.

### Summary Table

Product Series & Size	Main Pressure Bearing Component	Main Pressure Bearing Material	Port Connections and Sizes	Maximum Rated Pressure						Design Code of Construction
				At -49°F to 100°F			At maximum temperature			
				Inlet	Outlet	Dome	Inlet	Outlet	Dome	
SGRS08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRS12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRS16	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRS24	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1.5" ASME B16.5 Flange 1.5"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGBS08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

Registration No. 0C25329.53

File No. 101422

Registered

Date: September 9, 2024

Expiry Date: July 4, 2034

Codes & Standards Compliance Office

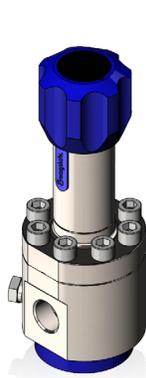


Product Series & Size	Main Pressure Bearing Component	Main Pressure Bearing Material	Port Connections and Sizes	Maximum Rated Pressure						Design Code of Construction
				At ambient temperature			At maximum temperature			
				Inlet	Outlet	Dome	Inlet	Outlet	Dome	
SGBS12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGBS16	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGBS24	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1.5" ASME B16.5 Flange 1.5"	6000psi @100°F	6000psi @100°F	N/A	1450psi @356°F	1450psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRD08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	6000psi @100°F	6000psi @100°F	413bar @38°C	1450psi @356°F	1450psi @356°F	1450psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRD12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" " ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	413bar @38°C	1450psi @356°F	1450psi @356°F	1450psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRD16	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	413bar @38°C	1450psi @356°F	1450psi @356°F	1450psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRD24	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1.5" ASME B16.5 Flange 1.5"	6000psi @100°F	6000psi @100°F	413bar @38°C	1450psi @356°F	1450psi @356°F	1450psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRA08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	6000psi @100°F	6000psi @100°F	250psi @100°F	1450psi @356°F	1450psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SGRA12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	6000psi @100°F	6000psi @100°F	250psi @100°F	1450psi @356°F	1450psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

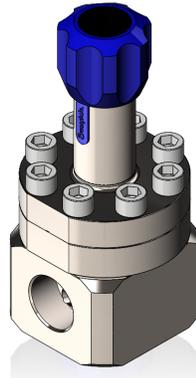


Product Series & Size	Main Pressure Bearing Component	Main Pressure Bearing Material	Port Connections and Sizes	Maximum Rated Pressure						Design Code of Construction
				At ambient temperature			At maximum temperature			
				Inlet	Outlet	Dome	Inlet	Outlet	Dome	
SHRS08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	250psi @100°F	250psi @100°F	N/A	188psi @356°F	188psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRS12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	250psi @100°F	250psi @100°F	N/A	188psi @356°F	188psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRS16	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" ASME B16.5 Flange 1"	250psi @100°F	250psi @100°F	N/A	188psi @356°F	188psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRS24	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1.5" ASME B16.5 Flange 1.5"	250psi @100°F	250psi @100°F	N/A	188psi @356°F	188psi @356°F	N/A	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRD08	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2"	250psi @100°F	250psi @100°F	250psi @100°F	188psi @356°F	188psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRD12	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1/2" Female NPT 3/4" ASME B16.5 Flange 3/4" Female NPT 1" ASME B16.5 Flange 1"	250psi @100°F	250psi @100°F	250psi @100°F	188psi @356°F	188psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRD16	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" ASME B16.5 Flange 1"	250psi @100°F	250psi @100°F	250psi @100°F	188psi @356°F	188psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
SHRD24	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1.5" ASME B16.5 Flange 1.5"	250psi @100°F	250psi @100°F	250psi @100°F	188psi @356°F	188psi @356°F	188psi @356°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

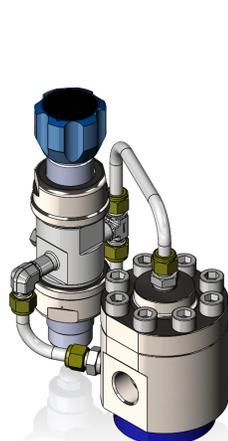
**Product Illustration**



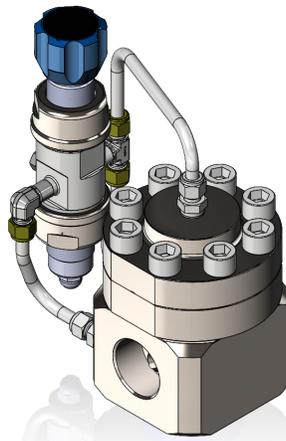
**SGRS12**



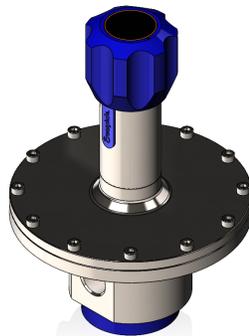
**SGRS24**



**SGRD12**



**SGRD24**



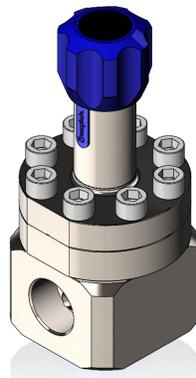
**SHRS12**



**SGRA12**



**SGBS12**



**SGBS24**



**Typical Product Characteristics:**

Some of the product options listed below 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:

- Body Seal Materials: FKM, Nitrile, EPDM, HNBR
- Diaphragm Materials: FKM, Nitrile, EPDM, HNBR
- Piston Seal Materials: FKM, Nitrile, EPDM, HNBR
- Seat Materials: FKM, Nitrile, EPDM, HNBR, PCTFE, PEEK

Some of the product options listed below do not affect the pressure-temperature ratings shown in the Summary Table. All of the following options are within the scope of this registration:

- Handle Type
- Cleaning options
- Panel Mounting
- Feedback Loops
- Handle color
- Anti-tamper
- Laser Etching
- ASTM G93 cleaning
- NACE Components
- External Feedback
- External Feedback to the Pilot

**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 below does not represent the full scope of the registration but rather details some of the most common options.

- MS-02-492 Process Pressure Regulators Rev. -

## 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 (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	

