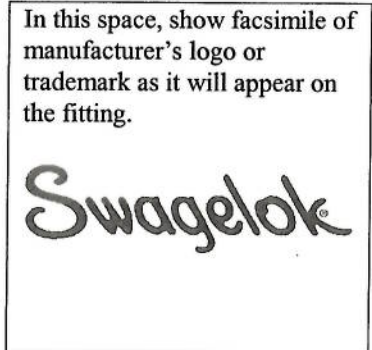




the pressure equipment safety authority

STATUTORY DECLARATION
Registration of Fittings



I, David H. Peace,

Vice President of Engineering

(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)

of Swagelok Company

(name of manufacturer)

located at Headquarters: 29500 Solon Road, Solon, Ohio 44139-3492 (See Attachment A)

(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

- comply with the requirements of ASME B31.1 and ASME B31.3 which specifies the dimensions, (title of recognized North American Standard) materials of construction, pressure/temperature ratings and identification marking of the fittings, 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, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, British Standards Institution as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Category C Type Fittings

In support of this application, the following information, calculations and/or test data are attached:

ISO 9001:2008 Certificate, Support Documents, Attachment B, Catalog Information

DECLARED before me at Solon in the State of Ohio
 this 31 day of October, 2013
 (Month) (Year)
 (print) LORI A. SARVER Lori A. Sarver, Notary Public
 (sign) [Signature] State of Ohio, Summit County
 My Commission Expires April 13, 2015 (Signature of Applicant)
 (A Commissioner for Oaths)

For Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category "C"

Registration Number: 0C15741.24

(For the Administrator/Chief Inspector of Alberta)

Date Registered: 2015/11/18

Expiry Date: 2025/06/24



Attachment B. Scope for Swagelok RHPS Series Pressure Regulators (RS, RSH, RD, RDH and BS) (Category C)

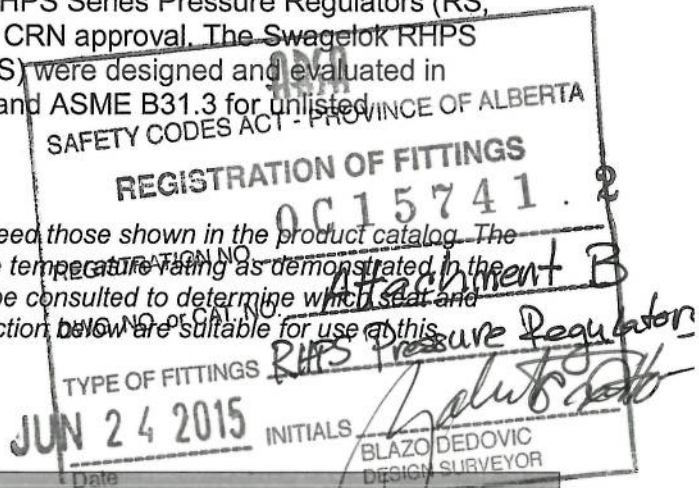
Product Scope

This document represents the scope of the Swagelok RHPS Series Pressure Regulators (RS, RSH, RD, RDH and BS) covered by this submission for CRN approval. The Swagelok RHPS Series Pressure Regulators (RS, RSH, RD, RDH and BS) were designed and evaluated in accordance with ASME B31.1 for unlisted components and ASME B31.3 for unlisted components.

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 seal and seal materials listed in the Typical Product Characteristics section below are suitable for use at this temperature.

Summary Table



Product Series	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	Inlet	Outlet	
RS6	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	1015 psi @ 100 °F	406 psi @ 100 °F	1015 psi @ 302 °F	406 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS10	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	290 psi @ 100 °F	1015 psi @ 302 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS15	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1-1/12" Female ISO/BSP 1-1/2" ASME B16.5 Flange 1-1/2"	1015 psi @ 100 °F	290 psi @ 100 °F	1015 psi @ 302 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS20	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 2" Female ISO/BSP 2" ASME B16.5 Flange 2"	1015 psi @ 100 °F	290 psi @ 100 °F	1015 psi @ 302 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH2	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/4"	6800 psi @ 100 °F	4500 psi @ 100 °F	6800 psi @ 302 °F	4500 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

Product Series	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	Inlet	Outlet	
RSH4	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2" Female ISO/BSP 1/2" ASME B16.5 Flange 1/2"	5800 psi @ 100 °F	4900 psi @ 100 °F	5800 psi @ 302 °F	4900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH6	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	5800 psi @ 100 °F	5800 psi @ 100 °F	5800 psi @ 302 °F	5800 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH8	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	5800 psi @ 100 °F	5700 psi @ 100 °F	5800 psi @ 302 °F	5700 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH10	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	5800 psi @ 100 °F	3625 psi @ 100 °F	5800 psi @ 302 °F	3625 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH15	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1-1/12" Female ISO/BSP 1-1/2"	5800 psi @ 100 °F	3625 psi @ 100 °F	5800 psi @ 302 °F	3625 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH15	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1-1/2"	5700 psi @ 100 °F	3625 psi @ 100 °F	5700 psi @ 100 °F	3625 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH20	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 2" Female ISO/BSP 2"	5800 psi @ 100 °F	290 psi @ 100 °F	4400 psi @ 302 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RSH20	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 2"	5500 psi @ 100 °F	290 psi @ 100 °F	5500 psi @ 100 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

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Product Series	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	Inlet	Outlet	
RD2	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/4"	5800 psi @ 100 °F	4500 psi @ 100 °F	5800 psi @ 302 °F	4500 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD6DP	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD10	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD15	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1-1/12" Female ISO/BSP 1-1/2" ASME B16.5 Flange 1-1/2"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD20	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 2" Female ISO/BSP 2" ASME B16.5 Flange 2"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD25	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 2-1/2" Female ISO/BSP 2-1/2" ASME B16.5 Flange 2-1/2"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD30	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 3"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD40	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 4"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

Product Series	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	Inlet	Outlet	
RDH6	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	5800 psi @ 100 °F	5800 psi @ 100 °F	5800 psi @ 302 °F	5800 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH6DP	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	5800 psi @ 100 °F	3335 psi @ 100 °F	5800 psi @ 302 °F	3335 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH8	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	5800 psi @ 100 °F	5700 psi @ 100 °F	5800 psi @ 302 °F	5700 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH10	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	5800 psi @ 100 °F	3625 psi @ 100 °F	5800 psi @ 302 °F	3625 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH15	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1-1/12" Female ISO/BSP 1-1/2"	5800 psi @ 100 °F	3400 psi @ 100 °F	5800 psi @ 302 °F	3400 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH15	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 1-1/2"	5700 psi @ 100 °F	3625 psi @ 100 °F	5700 psi @ 100 °F	3625 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH20	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 2" Female ISO/BSP 2"	5800 psi @ 100 °F	2900 psi @ 100 °F	5800 psi @ 100 °F	2900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH20	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 2"	5500 psi @ 100 °F	2900 psi @ 100 °F	5500 psi @ 100 °F	2900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

The products shown in the table below are a part of the above product families and were previously registered under CRN registration number 0C15099.5C

Product Series	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	Inlet	Outlet	
RDH25	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 2-1/2"	4060 psi @ 100 °F	2900 psi @ 100 °F	4060 psi @ 100 °F	2900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH30	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 3"	4060 psi @ 100 °F	1900 psi @ 100 °F	4060 psi @ 100 °F	1900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RDH40	Body	Stainless Steel (UNS S31603 / ASTM A479)	ASME B16.5 Flange 4"	4040 psi @ 100 °F	1900 psi @ 100 °F	4040 psi @ 100 °F	1900 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
BS10	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	290 psi @ 100 °F	1015 psi @ 302 °F	290 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS2	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/4"	5800 psi @ 100 °F	4500 psi @ 100 °F	5800 psi @ 302 °F	4500 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS4	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2" Female ISO/BSP 1/2" ASME B16.5 Flange 1/2"	1015 psi @ 100 °F	406 psi @ 100 °F	1015 psi @ 302 °F	406 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RS8	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	406 psi @ 100 °F	1015 psi @ 302 °F	406 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
RD6	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 3/4" Female ISO/BSP 3/4" ASME B16.5 Flange 3/4"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

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Product Series	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	Inlet	Outlet	
RD8	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	1015 psi @ 100 °F	1015 psi @ 302 °F	1015 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
BS4	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1/2" Female ISO/BSP 1/2" ASME B16.5 Flange 1/2"	1015 psi @ 100 °F	406 psi @ 100 °F	1015 psi @ 302 °F	406 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
BS8	Body	Stainless Steel (UNS S31603 / ASTM A479)	Female NPT 1" Female ISO/BSP 1" ASME B16.5 Flange 1"	1015 psi @ 100 °F	203psi @ 100 °F	1015 psi @ 302 °F	203 psi @ 302 °F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

Product Illustration

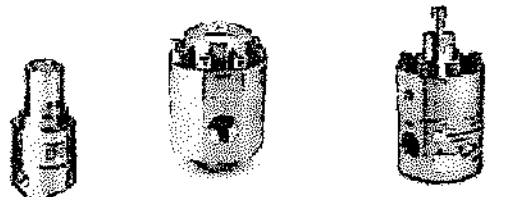


RS(H)2

RS(H)4, 6, 8

RS(H)10, 15, 20

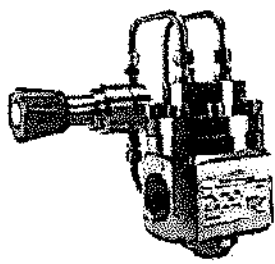
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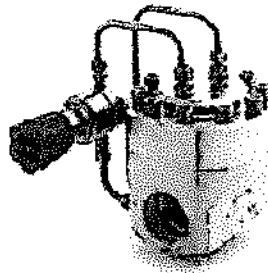
RD2

RD(H)6, 8

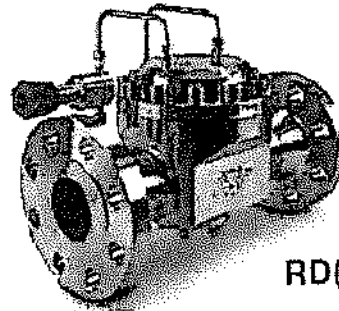
RD(H)6DP



RD(H)10, 15



RD(H)20, 25



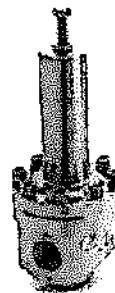
RD(H)30



BS(H)2



BS(H)4, 6, 8



BS(H)10, 15

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, FFKM, HNBR
- Diaphragm Materials: FKM, Nitrile, EPDM, FFKM, HNBR, PTFE, 316SS
- Piston Seal Materials: FKM, Nitrile, EPDM, FFKM, HNBR
- Seat Materials: FKM, Nitrile, EPDM, FFKM, HNBR, PCTFE, PEEK, Polyurethane

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 BS EN ISO 9001:2008. The Swagelok Company maintains British Standards Institution Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate. The Swagelok RHPS Series Pressure Regulators (RS, RSH, RD, RDH and BS) are manufactured and assembled at Swagelok Company locations in Solon, Ohio and Tromode, Isle of Man, British Isles.

References

The product catalog does not represent the full scope of registration, but rather details some of the most common options.

- RHPS Series Pressure Regulator Catalog MS-02-430, R1

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