

REGISTERED



CRN: CSA-OC 21018.56

Statutory Declaration Registration of Fittings

Registration Process administered by CSA Group per CSA B51

(a) Design Qualification

I¹ Joel Feldman
Vice President, Engineering
(Position eg, president, plant manager, chief eng.)

Of Swagelok Company
(name of company)

Located at Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)
(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:

- comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required: B31.1 & B31.3
- Or
- are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with _____ code and standard, and are designed to the best current engineering practice, as shown by the supporting test data.

(b) Quality control of Manufacture

I further declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of ISO 9001:2015, and has been verified by the following authority or authorized agency BSI

The fittings² covered by this declaration, for which I seek registration, are Category C. Valves

In support of the application, the following information, calculations and/or test data are attached:
ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents

Declared before me at Solon Jamie L. Ristau
State of Ohio Resident Portage County
Notary Public, State of Ohio
The 07th Day of December AD 2018
My Commission Expires: 03/06/2019

Jamie L. Ristau Joel C. Feldman
A (Commissioner for oaths) Signature of Declarer³

For Official Use Only

The application is accepted for registration in Category C in accordance with the Boilers and Pressure Vessels Act and CSA Standard B51.

This registration must be revalidated after ten (10) years from the date of acceptance. Jan - 22 - 2029

Registered Number CRN CSA-OC 21018.56 For the Chief Inspector R.W. Barnes
Date Mar - 24 - 2019

1 **Three completed copied of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.**

2 **All fittings are required to be registered in the name of the Manufacturer.**

3 **This form shall be completed and signed by the president of highest official in the manufacturing plan where the fitting is produced.**



Attachment B: Scope of CRN Registration for Swagelok Bellows-Sealed, B Series Valves (Category C)

Product Scope

This document represents the scope of Bellows-Sealed, B Series Valves covered by this submission for CRN approval. These Bellows-Sealed, B Series Valves have been evaluated in accordance with ASME B31.1 and B31.3 for unlisted components.

Table 1 – Summary Table

Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code of Construction
				@100°F	At Max. Temp.	
4B, 6B, 8B (*see below)	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Fitting 1/4", 3/8", 1/2", 6mm, 10mm, 12mm Tube Socket & Butt Weld 1/4", 3/8", 1/2", 3/4" Male VCR 1/4", 1/2" Butt Welded Female VCR 1/4", 1/2"	1000 psig	BG ¹ :400 psig@600°F BW ² :200 psig@900°F BK ³ :830 psig@200°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
		Alloy 400 N04400 (ASTM B164)		700 psig	BG ¹ :375 psig@500°F BW ² :375 psig@500°F BK ³ :610 psig@200°F	
		Brass C36000 (ASTM B16)	Tube Fitting 1/4", 3/8", 1/2", 6mm, 10mm, 12mm Tube Socket & Butt Weld 1/4", 3/8", 1/2", 3/4"	1000 psig	BG ¹ :150 psig@400°F BK ³ :710 psig@200°F	
4BK, 6BK, 8BK (1 Series Air Actuated)	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Fitting 1/4", 3/8", 1/2", 6mm, 10mm, 12mm Tube Socket & Butt Weld 1/4", 3/8", 1/2", 3/4" Male VCR 1/4", 1/2" Butt Welded Female VCR 1/4", 1/2"	Normally closed: 125 psig Normally open: 500 psig Double actuating: 700 psig	Max temp = 200°F, WP same as 100°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
		Alloy 400 N04400 (ASTM B164)			Normally closed: 125 psig@200°F Normally open: 500 psig@200°F Double actuating: 610 psig@200°F	
		Brass C36000 (ASTM B16)	Tube Fitting 1/4", 3/8", 1/2", 6mm, 10mm, 12mm Tube Socket & Butt Weld 1/4", 3/8", 1/2", 3/4"		Max temp = 200°F, WP same as 100°F	

- * Mode of operation: hand operated and 3 series air actuated (all materials), 5 series air actuated (316 and Alloy 400 only)
- ¹ BG Series has a gasket body-to-bellows seal
- ² BW Series has a welded body-to-bellows seal
- ³ BK Series has a PCTFE (soft) stem tip and a gasket bonnet seal

THIS IS PART OF
2018-4-10 CRN 0021018.5

Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

C.R.N. **CSA-0021018.56**

Signed: *[Signature]*

178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

Product Description

All B Series Valves have the same features as shown below.

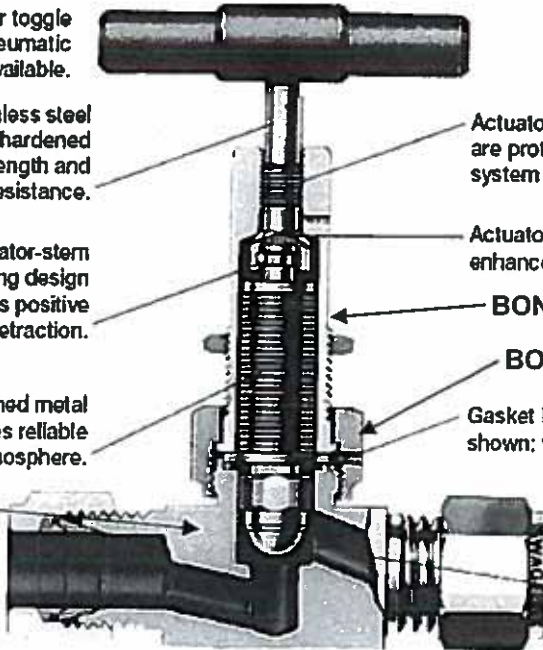
Bar, round, or toggle handle; pneumatic actuation also available.

Stainless steel actuator is hardened for strength and wear resistance.

Actuator-stem coupling design ensures positive stem retraction.

Precision-formed metal bellows provides reliable seal to atmosphere.

BODY



Actuator threads are protected from system contaminants.

Actuator backstop enhances bellows life.

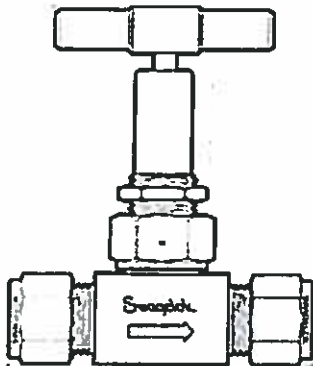
BONNET

BONNET NUT

Gasket body-to-bellows seal shown; welded seal available.

Nonrotating spherical stem tip shown; conical and regulating stem tips available.

Configurations



Tube Socket Weld and Tube Butt Weld Ends

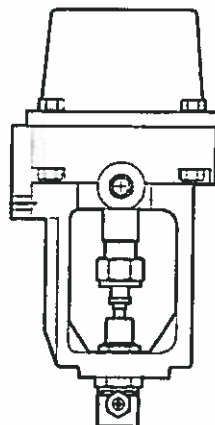


Butt Welded Female VCR Fitting Ends

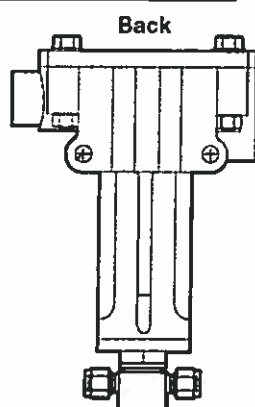


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Offshore & Pressure Vessels
Safety Products

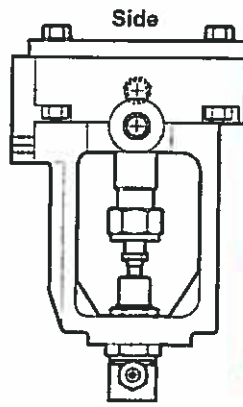
5 Series Actuator



Normally Closed

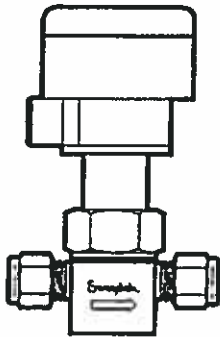


Normally Open and Double Acting

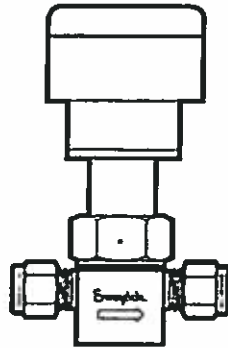


CSA Group 3074
ATTACHMENT TO
C.R.N. CSA-0021018.56
Signed: *Shut Same*
178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

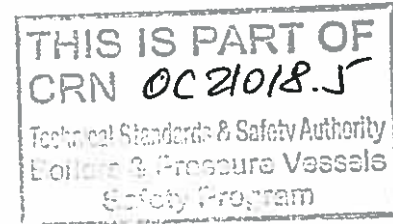
1 Series Actuator



**Normally Closed
and Double Acting**



Normally Open



Product Options:

The B Series valve stem tips and gaskets listed below affect pressure and/or temperature ratings shown in the above Summary Table, but in all cases the ratings are less than those shown below:

Stem Tips

- Alloy K-500 (regulating)
- Alloy K-500 (conical)
- Chrome-plated 316 SS (regulating)
- Cobalt-based alloy (spherical)
- PCTFE (conical)

Gaskets

- PTFE-coated 316 SS
- Silver-plated 316 SS
- PTFE-coated alloy 400
- Silver-plated alloy 400

Additional options and non-pressure boundary alterations that do not affect pressure-temperature ratings may be made available within the scope of this registration. Examples of these would include, but not be limited to, handle options, indicator switches, actuators, etc.

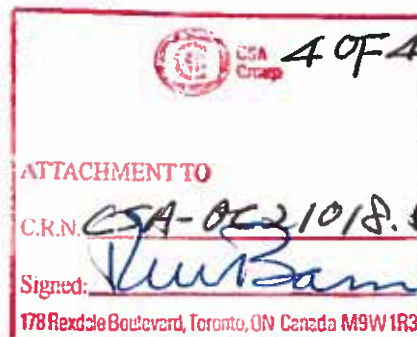
Quality System

The Swagelok Company quality system complies with the requirements of ISO 9001:2015. The Swagelok Company maintains British Standards Institution 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.


- Bellows-Sealed Valves, B Series Catalog – MS-01-22, R13



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


10F4
ATTACHMENT TO
C.R.N. CSA-0021018.56
Signed: [Signature]
 178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

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 Pressure Vessels
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