

UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK
NUNAVUT

NOVA SCOTIA
YUKON

PRINCE EDWARD ISLAND
NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

| | |
|--|---|
| MANUFACTURERS NAME: <u>Swagelok Company</u> | |
| MANUFACTURERS ADDRESS: <u>29500 Solon Road, Solon, Ohio 44139 USA</u> | |
| PLANT LOCATIONS: <u>Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)</u> | |
| <p align="center">CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY</p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/>, (Meeting AECB or ASME requirements)</p> | <p align="center">TITLE OF THE STANDARD OF CONSTRUCTION</p> <p align="center">ASME B31.1 for unlisted components, ASME B31.3 for unlisted components</p> |
| <p>SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT</p> <p align="center" style="font-size: 2em;">Swagelok</p> | <p align="center">TYPE OF CONSTRUCTION</p> <p>FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input checked="" type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:</p> |
| <p>LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:</p> <p>ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents</p> | |

DECLARATION:
 I Joel Feldman (see note 2) employed by Swagelok Company and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BSI as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: [Signature]
 Declared before me at Solon, Ohio
 This 07th day of December AD 2018
 Commissioner of Oaths
 or Notary Public: (sign) [Signature]
 (Affix Official seal to the right)



This space for Regulatory Authority Use
 This registration must be revalidated after ten (10) years from the date of completion

CRN: 0C21018.5
 FID#: 1214

Notes:
 1. All fittings shall be registered in the name of the Manufacturer.
 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.
 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.

DEPT. OF JUSTICE PUBLIC SAFETY
 BOILER & PRESSURE VESSEL ACT

REGISTRATION ONLY
 CRN 0C21018.57

[Signature]
 CHIEF BOILER INSPECTOR
 DATE Feb. 15, 2019

BLRs PVs
 FITTINGS NUCLEAR COMPONENTS

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

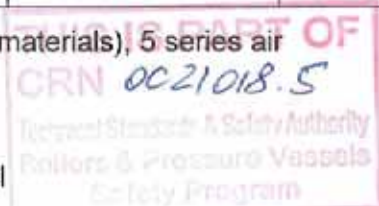
| Product Series | Main Pressure Bearing Component | Main Pressure Bearing Material | Port Connections and Sizes | Maximum Allowable Working Pressure | | Design Code of Construction |
|--|---------------------------------|---------------------------------|--|--|---|---|
| | | | | @100°F | At Max. Temp. | |
| 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

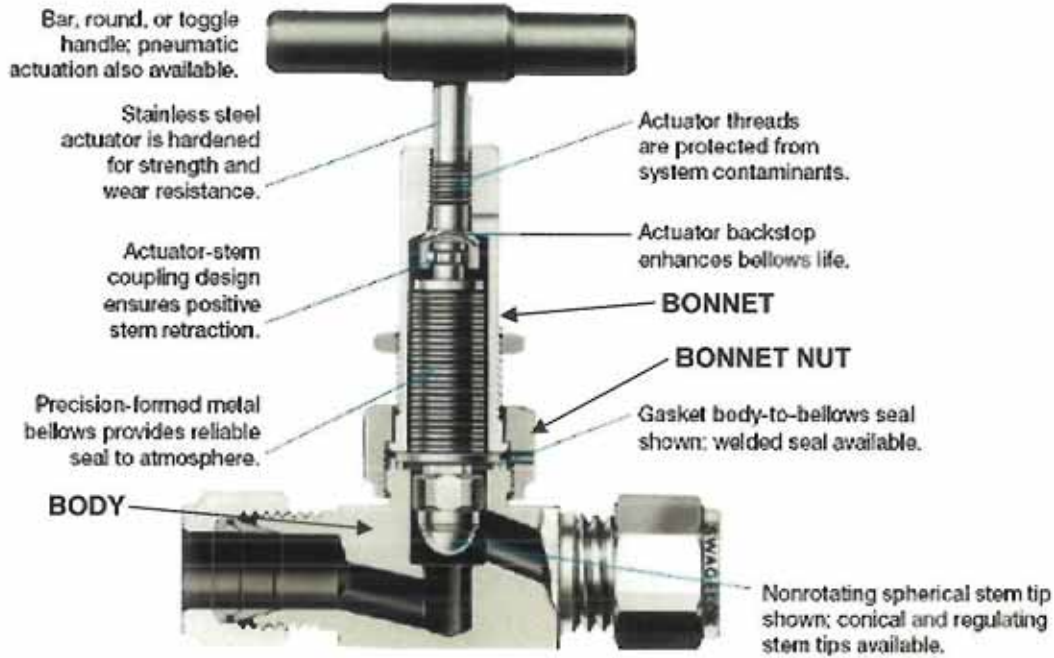
² BW Series has a welded body-to-bellows seal

³ BK Series has a PCTFE (soft) stem tip and a gasket bonnet seal

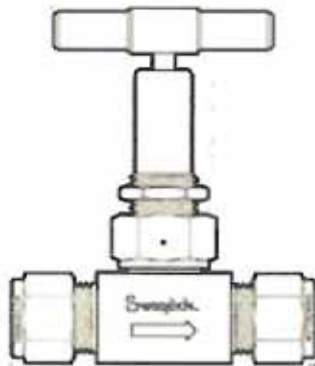


Product Description

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



Configurations



Tube Socket Weld and
Tube Butt Weld Ends

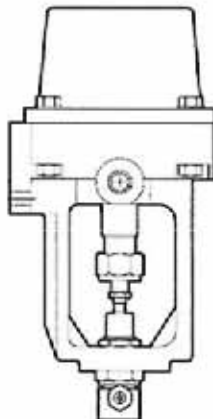


Butt Welded Female
VCR Fitting Ends

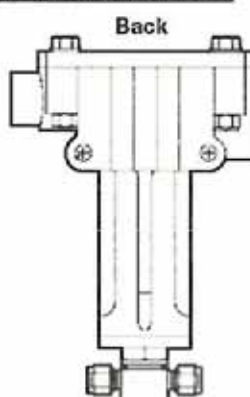


THIS IS PART OF
CRN 0C21018.5
Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

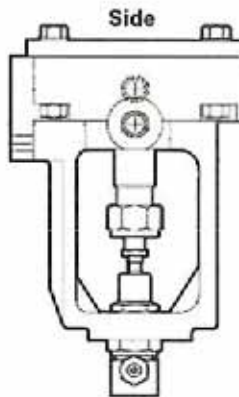
5 Series Actuator



Normally Closed



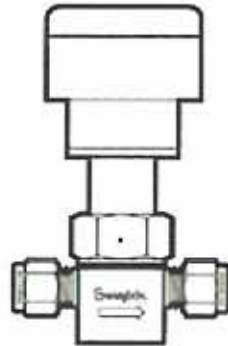
Normally Open and Double Acting



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.

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|---|--|
| 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 |

