

CRN: CSA-OC21140.56

**Technical** 

Safety Authority ation Process administration 308)788-7112 Toll Free: (866)530-8599

of Saskatchevan Group per CSA B51

Websile: www.tsask.ca

Websile: www.tsask.ca

Email: boilerpermits@tsask.ca Website: www.tsask.ca

### Statutory Declaration (Registration of Fittings)

2202 2nd Ave.

Regina, SK S4R 1K3

			TSK-1008					
1.	Declaration Information							
I.	Joel Feldman	In this space, show facsimile of						
*,	Vice President, Engineering	manufacturer's logo or trademark as it will appear on the fitting.						
	(company title, e.g. vice president, plant mar	2						
	(must be in a position of authority in the manufacturing plant where the fitting is produced)							
of:	Swagelok Company (name of manufactu	ner)	3					
loc	ated at: Headquarters; 29500 Solon Road	Solon, Ohio	44139 USA					
,,,,	(Plant Address - Apt/Street)	(City,Prov)	(Postal Code)					
	solemnly declare that the fittings listed hereinu sel Safety Act (check one)	nder, which are subject to the Sask	atchewan Boiler and Pressure					
(6	Comply with the requirements of ASME B		ch specifies the dimensions,					
(iille 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 manufaction.								
	to comply with	giized Noitti Aitierican statioaid an	as supported by the attached					
	data which identifies the dimensions, mater	rials of construction, pressure / temp	***					
	for such ratings, and the marking of the fittings for identification.							
veri of t	ther declare that the manufacturer of these fitt fied by the following authority, BSI nese fittings to the stated standard. The fitting egory C. Valves	as beir	ng suitable for the manufacturer					
In s	upport of this application, the following informa	ation, calculations and / or test data	are attached:					
	9001:2015 Certificate, Attachment A							
Do	cuments							
II.	Declaration							
DE	CLARED before me at 50\00	In the State	of Dhio					
this OTE day of December 2018								
	Marie I D STAIL	Jamle L. Ristau	11:32					
7	osini namel	resident Portage County (Signature)						
Acceptable Subject of Onlo Commission Expires: 03/08/2019								
(	ignature of Commissioner of Oaths)							
III.	Office Use Only							
Tol	he best of my knowledge and belief, the application	meets the requirements of the Boiler a	and Pressure Vessel Safety Act and					
CS	NB51, Clause 4.2, and is accepted for registration in	May : 29 - 2019	Feb-22.2029					
-\	Registration Number)	(Date Registered, MM DD YYY)	(Expiry Date – MM DD YYYY)					
	201 William & William William (1972)	(For the Administratory Class Inspector)	7.w. Barnes					
		Group						

Swagelok

Canadian Registration Number Submittal #U-BELLOWS-2018

Category C: Swagelok U Series Bellows Valves

Date: December 6, 2018

Page 1 of 4

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

This document represents the scope of Swagelok's U Series Bellows-Sealed Valves covered by this submission for CRN approval. These valves were designed and evaluated in accordance with ASME B31.1:2016 for unlisted components and B31.3:2016 for unlisted components.

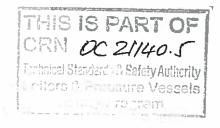
<u>Table 1 – Summary Table</u>

	Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	Port Connections and Sizes	Maximum Rated Pressure			10.003937070
Product Description				At 100°F	Maximum Temperature		Design Code of
or Series				UG & UW	UG1	UW²	Construction
4U	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Fitting 1/4",6mm Tube Socket Weld 1/4" Butt Weld 3/8"	2500 psig	2500 psig @ 650°F	250 psig @ 1200°F	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
			Female VCR 1/4"	2500 psig	2500 psig @ 650°F	480 psig @ 1000°F	
6U	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Fitting 3/8",10mm Tube Socket Weld 3/8" Butt Weld 1/2"	2500 psig	2500 psig @ 650°F	250 psig @ 1200°F	
			Female VCR 1/2"	2500 psig	2500 psig @ 650°F	480 psig @ 1000°F	
8U	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Fitting 1/2", 12mm Tube Socket Weld 1/2" Butt Weld 3/4"	2500 psig	2500 psig @ 650°F	250 psig @ 1200°F	
			Female VCR 1/2"	2500 psig	2500 psig @ 650°F	480 psig @ 1000°F	
12U	Body, Bonnet, Bonnet nut	316 SS (ASTM A479)	Tube Socket Weld 3/4" Pipe Butt Weld 3/4" Tube Butt Weld 1"	2500 psig	2500 psig @ 650°F	250 psig @ 1200° F	_

<sup>&</sup>lt;sup>1</sup> – U-Series with a gasket bonnet seal

<sup>&</sup>lt;sup>2</sup> – U-Series with a welded bonnet seal





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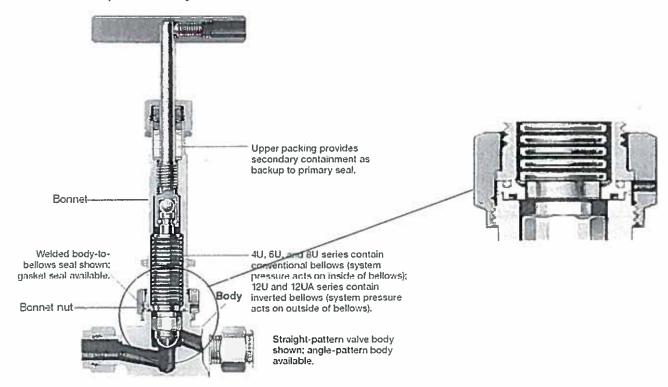
Canadian Registration Number Submittal #U-BELLOWS-2018
Category C: Swagelok U Series Bellows Valves

Date: December 6, 2018

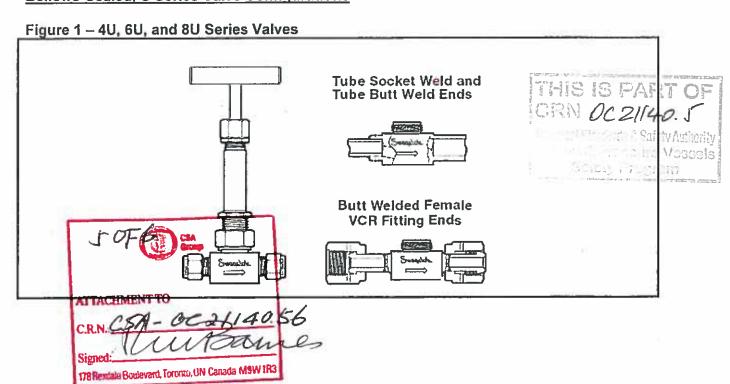
Page 2 of 4

## Figure 1 – Pressure Retaining Components (typical 4U, 6U, or 8U hand operated valve)

Although the 12U Series Valve has a different internal design, all U Series Valves have the same configuration for pressure retaining components as shown bellow. The pressure retaining shell is made up of the body, the bonnet nut, and the bonnet as noted.



#### Bellows-Sealed, U Series Valve Configurations



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Canadian Registration Number Submittal #U-BELLOWS-2018 Category C: Swagelok U Series Bellows Valves

Date: December 6, 2018 Page 3 of 4

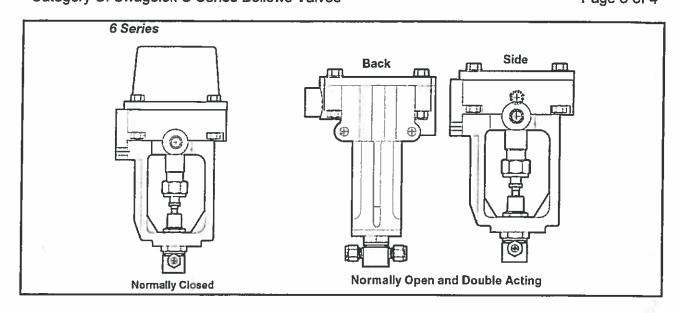
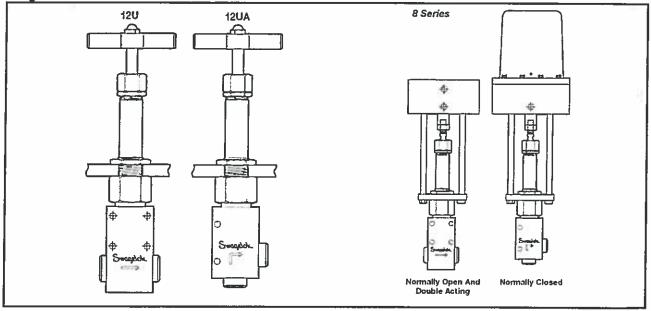


Figure 2 - 12U and 12UA Series Valves







Canadian Registration Number Submittal #U-BELLOWS-2018
Category C: Swagelok U Series Bellows Valves

Date: December 6, 2018
Page 4 of 4

#### **Product Options:**

The U 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

- 316 SS (regulating)
- Cobalt-based alloy (spherical)
- PCTFE/D1430 (cylindrical)
- Polyimide (conical)

#### Gaskets

- PTFE-coated 316 SS
- Silver-plated 316 SS

Additional options and non-pressure boundary alterations that do not affect pressuretemperature 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. The Sealed-Bellows, U Series Valves are made at a Swagelok Company location in Solon, Ohio.

#### 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, U Series Catalog – MS-01-38 Rev J

PART OF PART O



# Attachment A. Swagelok Manufacturing Locations

This document lists the Swagelok locations where end item or component level manufacturing activities take place.

Swagelok Company	Swagelok Company (Falon 1)
29500 Solon Road	348 Bishop Road
Solon, Ohio 44139	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (Highland)	Swagelok Company (Falon 2)
318 Bishop Road	358 Bishop Road
Highland Heights, Ohio 44143	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (OFC)	Swagelok Company (HPF)
29495 F.A. Lennon Drive	6050 Cochran Road
Solon, Ohio 44139	Solon, Ohio 44139
USA	USA
Swagelok Company (Atlantic)	Swagelok Company (Snow Metal)
26651 Curtiss Wright Parkway	6060 Cochran Road
Willoughby Hills, Ohio 44092	Solon, Ohio 44139
USA	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)	Swagelok Company (Strongsville)
29900 Solon Industrial Parkway	15400 Foltz Road
Solon, Ohio 44139	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



