

TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ON M9W 6N9

Date: July 22, 2022
Account #: 35231
Journal #: 80699

Attn: TSSA

Re: Application for Design Registration

The design, as detailed in your, 0C15674.5R1 - SWAGELOK, for a Fitting is accepted for registration as follows:

Registered To: SWAGELOK COMPANY **CRN:** 0C15674.51

Drawing #: Renewal for Swagelok FKB Serie

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

Reviewer's Notes:

As required by CSA B51 4.2.1, this registration expires on 14-Jun-2032. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void. Any additional conditions of registration stated in TSSA CRN# 0C15674.5R1 registration shall apply to BC registration.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

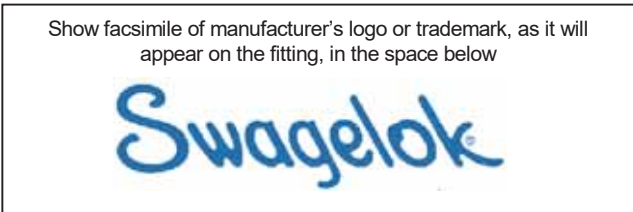
Emilia Tam

emilia.tam@technicalsaftybc.ca
Design Administration

cc:



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org



STATUTORY DECLARATION Registration of Fittings

I, Joel Feldman, 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 B31.3 Chapter IX as an unlisted component

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

ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents
(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____
the _____ day of _____ AD 20_____.

Commissioner for Oaths:

Unable to get a notary signature or seal due to COVID-19 situation
(Printed name)

(Signature)

DocuSigned by:

3/2/2022 | 8:53 AM EST

C87CBBFFD3F14B7
(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 C.

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: **JUNE 14, 2032**

Technical Standards and Safety Authority	Boilers and Pressure Vessels Safety Program
REGISTERED	
C.R.N.: 0C15674.5R1	
Signed:	
Date: June 14, 2022.	

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

Attachment A. Swagelok Manufacturing Locations

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

THIS IS PART OF CRN
0C15674.5R1

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program

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

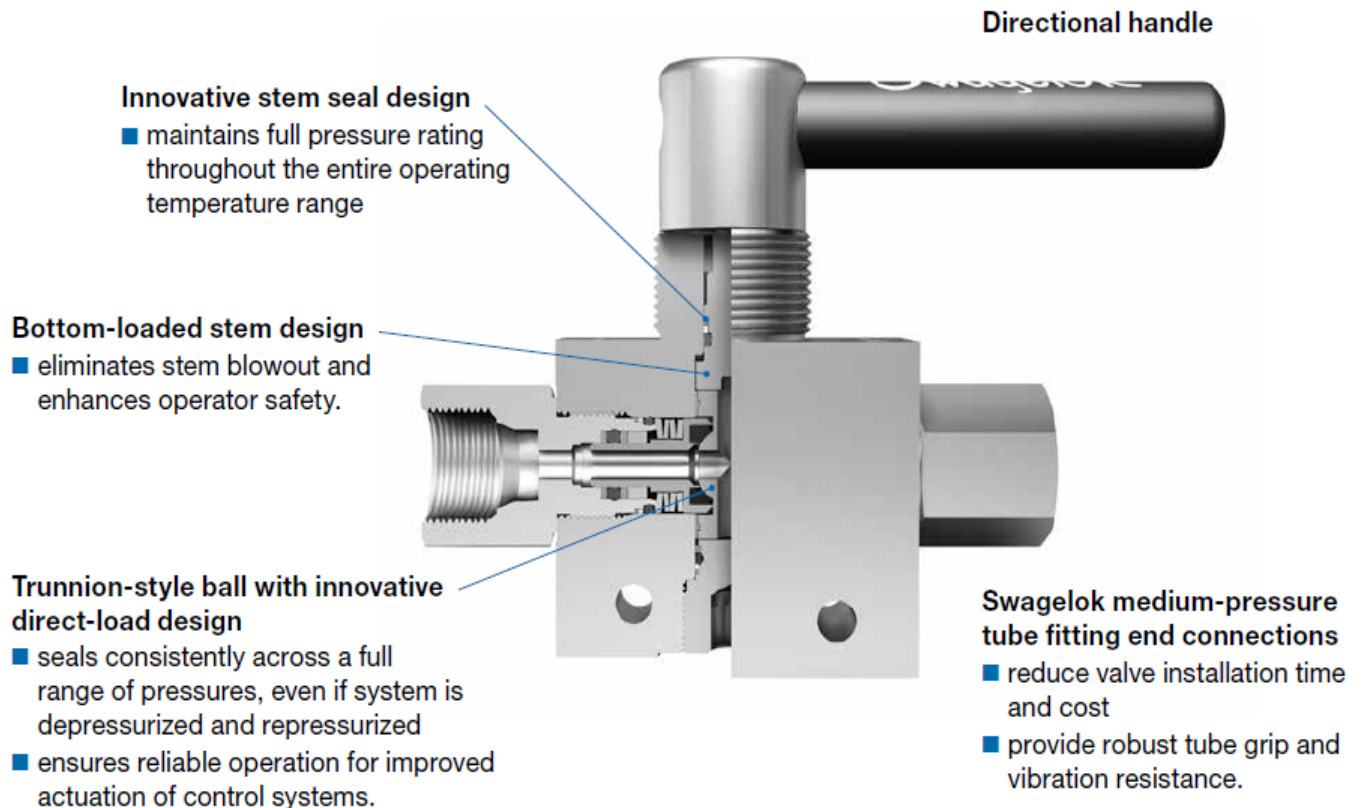
Attachment B. Scope of CRN Registration for Swagelok FKB Series Medium Pressure Ball Valves (Category C)

This document represents the scope of the FKB Series Medium Pressure Ball Valves, covered by this submission for CRN approval. These products were designed and evaluated in accordance with ASME B31.3-2020 Chapter IX for unlisted components.

Summary Table

Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	Port Connections and Sizes	Maximum Rated Pressure (psig)		Design Code of Construction
				At 0 to 100°F	At maximum temperature	
6FKB (2-way) and (3-way)	Body	316 SS (ASTM A479)	Medium Pressure Tube Fitting 1/4", 3/8", 1/2" Female NPT 1/4", 3/8", 1/2"	15,000	15,000 at 250°F	ASME B31.3, Chapter IX (Unlisted Components)
8FKB (2-way) and (3-way)	Body	316 SS (ASTM A479)	Medium Pressure Tube Fitting 1/2", 9/16" Female NPT 1/2"	15,000	15,000 at 250°F	
12FKB (2-way)	Body	316 SS (ASTM A479)	Medium Pressure Tube Fitting 3/4"	15,000	15,000 at 250°F	
			Female NPT 3/4"	10,000	10,000 at 250°F	

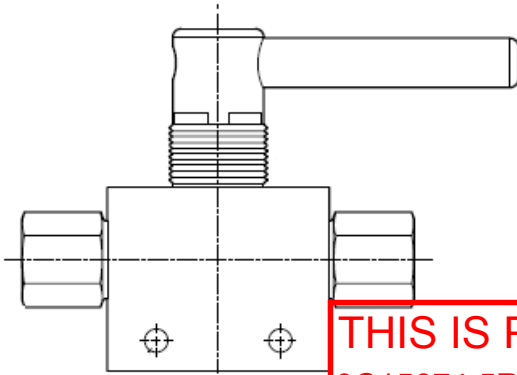
Product Illustration



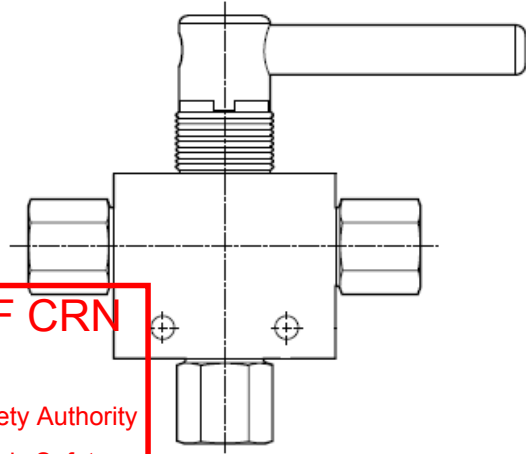
Configurations

Valves are available in 2-way and 3-way pattern, and either manually or pneumatically actuated.

2-Way (On-Off) Valve



3-Way (Switching) Valve



**THIS IS PART OF CRN
0C15674.5R1**

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program

Typical Product Characteristics:

Some of the product options 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 in the table. All of the following options are within the scope of this approval.

O-ring Stem Seal Options

HNBR Nitrile
Perfluorocarbon FFKM

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 handle options, actuator options, etc.

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.

- Medium- and High-Pressure Fittings, Tubing, Valves, and Accessories Product Catalog MS-02-472 Rev R