

ATTN: TSSA BPV NATIONAL REGISTRATION -
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DR
TORONTO ON M9W 6N9

Date: 25-Jun-2025
TSBC Account #: 061440
TSBC Admin Number: 117543
Canadian Registration Number: 0A6054.51

Re: Application for Design Registration

The design, as detailed in your Design Portal application 0A6054.5R3 - Swagelok Company for a Pressure Fitting is registered with the following notes and considerations:

Registered To:	Swagelok Company
Project Name:	0A6054.5R3 - Swagelok Company
Drawing #:	Attachment A & Attachment B Dated March 21, 2025
Drawing Revision:	N/A

Conditions of Registration:

(1) Fitting Registration Expiry Date: 23-Apr-2035 (2) The registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of quality management system lapse before the expiry date indicated above, this registration shall become void.

Reviewer's Notes:

Any additional conditions and considerations from the initial province of registration shall apply to this BC registration.

Full details of this submission including the scope of registration, design conditions, fabrication details, and calculations pertaining to this design are located in the above Admin Number on the Design Portal. For all other enquiries, please contact eim@technicalsafetybc.ca.

The Engineering Information Management Team



Attachment B. Scope of Registration for Swagelok PFA Tube Fittings (Category A)

This document represents the scope of Swagelok PFA Tube Fittings covered by this submission for CRN approval. These Swagelok PFA Tube Fittings have been evaluated in accordance with ASME B31.1-2024 for unlisted components and ASME B31.3-2024 for unlisted components.

Summary Table

The following table outlines key technical data for the products in scope of this application. Also included are standards for the materials of construction of PFA Tube Fittings.

Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material	Port Connections and Sizes	Maximum Allowable Working Pressure (See Note 1 & 2)		Design Code of Construction
				At Ambient Temperature (70°F)	At Maximum Temperature (400°F)	
PFA-220	Body	PFA 440-HP (ASTM D3307, Type 1)	PFA Tube Fitting 1/8"	150 psi	27 psi	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
PFA-420	Body	PFA 440-HP (ASTM D3307, Type 1)	PFA Tube Fitting 1/4"	150 psi	27 psi	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
PFA-620	Body	PFA 440-HP (ASTM D3307, Type 1)	PFA Tube Fitting 3/8"	125 psi	11 psi	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)
PFA-820	Body	PFA 440-HP (ASTM D3307, Type 1)	PFA Tube Fitting 1/2"	80 psi	6 psi	ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components)

Notes:

- (1) The maximum allowable working pressures in the above table are for Swagelok PFA tube fittings used with properly grooved Swagelok PFA tubing.
- (2) The maximum allowable working pressures in the above table are based on the highest pressure attained in hydrostatic burst pressure tests divided by ten. The Technical Standards and Safety Authority (TSSA) requires a 10-to-1 factor of safety for non-metallic components made with a non-automated fabrication process (TSSA Fitting Registration Guidelines – January 2023, Appendix “D”). The CRN pressure ratings are set to meet the TSSA requirement and are different than those shown in the current catalog.



Product Description

Swagelok PFA Tube Fittings are furnished in a variety of configurations and shapes (straight, elbow, or tee). Swagelok PFA Tube Fittings consist of at least one Swagelok Tube Fitting End, which have two-ferrule mechanical-grip design and should be assembled with properly grooved Swagelok PFA tubing. The Swagelok tube fitting end is a proprietary design, and the assembly consists of a body, nut, front and back ferrule.



Product Options:

The product options listed below do not affect the pressure-temperature ratings shown in the Summary Table and are within the scope of this registration.

- Caps and Plugs

Quality System

The Swagelok Company quality system complies with the requirements of BS EN ISO 9001:2015. The Swagelok Company maintains British Standards Institution (BSI) 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.

- PFA Tube Fittings MS-01-05, Rev J (October 2021)

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 (HPF) 6050 Cochran Road Solon, Ohio 44139 USA
Swagelok Company (OFC) 29495 F.A. Lennon Drive Solon, Ohio 44139 USA	Swagelok Company (Snow Metal) 6060 Cochran Road Solon, Ohio 44139 USA
Swagelok Precision Machining Services 1924 East 337th Street Eastlake, OH 44095 USA	Swagelok (China) Fluid System Technologies Ltd. Changshu Export Process Zone Changshu Economic Development Zone Changshu, Jiangshu 215513 China
Swagelok Company (Highland) 318 Bishop Road Highland Heights, Ohio 44143 USA	Swagelok Company (Strongsville) 15400 Foltz Road Strongsville, Ohio 44119
Swagelok Company (Atlantic) 26651 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Company (Alfred) 29500 Ambina Drive Solon, Ohio 44139
Swagelok Company (Micro) 26653 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Hose Services Company (SHSC) 29900 Solon Industrial Parkway Solon, Ohio 44139
Swagelok Company (Falon 1) 348 Bishop Road Highland Heights, Ohio 44143 USA	Swagelok Limited Ballafletcher Road Tromode IM4 4RA Isle of Man
Swagelok Company (Falon 2) 358 Bishop Road Highland Heights, Ohio 44143 USA	Swagelok Company (Valley City) 5370 Wegman Drive Valley City, Ohio 44280 USA