

UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK
NUNAVUT

NOVA SCOTIA
YUKON

PRINCE EDWARD ISLAND
NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

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| 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><input checked="" type="radio"/> A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers <input type="radio"/> B Flanges: all flanges <input type="radio"/> C Valves: all line valves <input type="radio"/> D Expansion joints, flexible connections, and hose assemblies: all types <input type="radio"/> E Strainers, filters, separators, and steam traps <input type="radio"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters <input type="radio"/> G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs <input type="radio"/> H Pressure retaining components that do not fall into one of the above categories <input type="radio"/> 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>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, Vice President, Engineering (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 ISI 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 18th day of March AD 2020
 Commissioner of Oaths or Notary Public: (sign) [Signature]
 (Affix Official seal to the right)

USE THIS SPACE FOR THE
OFFICIAL SEAL

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| This space for Regulatory Authority use This registration must be revalidated after ten (10) years from the date of acceptance | |
| CRN: <u>0A22505.5</u> FID#: <u>1214</u> Brass pipe fittings. 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. CRN expires <u>June 17, 2030 - DG</u> | Newfoundland Labrador Service NL Registered <u>0A22505.50</u> Date <u>20/07/22</u> Engineering and Inspection Services Registered by: <u>[Signature]</u> UNDER THE AUTHORITY OF THE PUBLIC SAFETY ACT AND THE BOILER, PRESSURE VESSEL AND COMPRESSED GAS REGULATIONS |



THIS IS PART OF CRN
 0A22505.5
 Technical Standards and Safety Authority
 Boilers and Pressure Vessels Safety
 Program

Canadian Registration Number Submittal
 Category A: Swagelok Brass Pipe Fittings

Date: March 13, 2020
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Attachment B. Scope of Registration for Swagelok Brass Pipe Fittings (Category A)

This document represents the scope of Swagelok Brass Pipe Fittings covered by this submission for CRN approval. These Swagelok Pipe Fittings have been evaluated in accordance with ASME B31.1-2018 for unlisted components and ASME B31.3-2018 for unlisted components.

Summary Table

| Product Description or Series | Material | Port Connections and Sizes | Maximum Allowable Working Pressure | | Design Code of Construction |
|----------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|------------------------------------|-------------------------|-------------------------------------|
| | | | Up to 100°F | At maximum temperature | |
| Pipe Straight Fittings (includes pipe plugs and pipe caps) | Brass C36000 (ASTM B16) Bar | Male NPT & Male ISO-7 (tapered) (RT) 1/16 – 2 inch | 5500 - 1900 psig | 718 - 248 psig @400°F | ASME B31.3 (Unlisted Components) |
| | | Female NPT & Female ISO-7 (tapered) (RT) 1/16 – 2 inch | 3300 - 1900 psig | 431 - 248 psig @400°F | |
| | | Male NPT & Male ISO-7 (tapered) (RT) 1/16 – 2 inch | 5500 - 1900 psig | 4950 - 1710 psig @200°F | ASME B31.1 (Unlisted Components) |
| | | Female NPT & Female ISO-7 (tapered) (RT) 1/16 – 2 inch | 3300 - 1900 psig | 2970 - 1710 psig @200°F | |
| Pipe Shaped Fittings (See the Configurations section for size limitation on crosses.) | Brass C37700 (ASTM B283) Forging | Male NPT & Male ISO-7 (tapered) (RT) 1/8 – 1 inch | 2700 - 2100 psig | 352 - 274 psig @400°F | ASME B31.3 (Unlisted Components) |
| | | Female NPT & Female ISO-7 (tapered) (RT) 1/8 – 1 inch | 2700 - 2100 psig | 352 - 274 psig @400°F | |
| | | Male NPT & Male ISO-7 (tapered) (RT) Male 1/8 – 1 inch | 2700 - 2100 psig | 2430 - 1890 psig @200°F | ASME B31.1 (Unlisted Components) |
| | | Female NPT & Female ISO-7 (tapered) (RT) 1/8 – 1 inch | 2700 - 2100 psig | 2430 - 1890 psig @200°F | |

Product Description

Swagelok Pipe Fittings are furnished in a variety of configurations and shapes (straight, elbow, tee or cross).



Configurations

1. Nipples, Adapters, Couplings, Reducers

Male & Female NPT, Male & Female RT (ISO Taper), adapters and reducing to other sizes



2. Elbows / Street Elbows / Tees / Street Tees / Crosses

Male and Female NPT, Male & Female RT (ISO Taper), adapters and reducing to other sizes.

Elbows and Tees are limited to a maximum size of one-inch in brass.

Crosses are limited to a maximum size of three-quarter-inch in brass.



3. Caps and Plugs

Male NPT, RT (ISO Taper)



Product Options:

The sealant options for tapered pipe threads (NPT and ISO-7), such as curable resin with PTFE and PTFE tape, affect pressure and/or temperature ratings shown in the above Summary Table, but the ratings with these options are less than or equal to those shown in the table.

Additional options that do not affect pressure and/or temperature ratings may be made available within the scope of this approval. Examples of these would include the following:

1. Special marking
2. Special cleaning
3. Wire drills
4. Snubbers and orifice plates

All of the options noted above are within the scope of this approval.

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 does not represent the full scope of the registration but rather details some of the most common options.

- Pipe Fittings Catalog MS-01-147, Rev. P

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 |