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: Swagelok Company

MANUFACTURERS ADDRESS: 29500 Solon Road, Solon, Ohio 44139 USA

PLANT LOCATIONS: Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)

CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY

(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 ☐ Class 2 ☐ Class 3 ☐, (Meeting AECB or ASME requirements)

TITLE OF THE STANDARD OF CONSTRUCTION: ASME B31.1 for unlisted components, ASME B31.3 for unlisted components

SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT: Swagelok

TYPE OF CONSTRUCTION: FORGED ☐ WELDED ☐ WROUGHT ☒ CAST ☐ OTHER ☐ DESCRIBE OTHER:

LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:

ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents

DECLARATION:

I Joel Feldman (name of declarant) 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: J. E. Feldman

Declared before me at Solon, Ohio

This 14th day of March AD 2019

Commissioner of Oaths or Notary Public: (sign) Brenda Hummel

(Affix Official seal to the right)

USE THIS SPACE FOR OFFICIAL SEAL

This space for Regulatory Authority use

This registration must be revalidated after ten (10) years from the date of acceptance.

CRN: 0A21487.5

FID#: 1214

Notes: ALLOY 400 TUBE FITTINGS - D1

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 JUNE 10, 2029 - D1.6

BOILER & PRESSURE VESSEL ACT & REGULATIONS NOVA SCOTIA

Date July 26/19

C.R.N. 0A21487.58

Dwg. as described

Signed Yvonne Perry

1 of 1 Part

Attachment B. Scope of Registration for Swagelok Alloy 400, (ASTM B164 / B564), Tube Fittings (Category A)

This document represents the scope of Swagelok Alloy 400 Tube Fittings covered by this submission for CRN approval. These Swagelok Tube Fittings have been evaluated in accordance with ASME B31.3 for unlisted components and ASME B31.1 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	
Gaugeable Tube Fittings and Adapter Fittings	Alloy 400 (ASTM B164 / B564)	Swagelok tube fitting 1/8 – 1 inch 6mm - 25mm	See Table on Page 2	See Table on Page 2	ASME B31.3 (Unlisted Components) ASME B31.1 (Unlisted Components)
		NPT Male 1/16 - 1 inch	9200-4400 psig	6900 – 3300 psig @ 800°F (426°C)	
		NPT Female 1/16 - 1 inch	5600-3700 psig	4200 – 2775 psig @ 800°F (426°C)	

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Boilers & Pressure Vessels
Safety Program

Alloy 400 Swagelok Tube Fitting Pressure Rating Table

Swagelok End Connection Size	Maximum Allowable Working Pressure (1)	
	Up to 100°F	At maximum temperature 800°F (426°C)
1/8	10,100 psig	7575 psig
3/16	9500 psig	7125 psig
1/4	9500 psig	7125 psig
5/16	7300 psig	5475 psig
3/8	6100 psig	4575 psig
1/2	4400 psig	3300 psig
5/8	5600 psig	4200 psig
3/4	4600 psig	3450 psig
7/8	4500 psig	3375 psig
1"	4300 psig	3225 psig
6 mm	620 bar	465 bar
8 mm	450 bar	337.5 bar
10 mm	350 bar	262.5 bar
12 mm	290 bar	217.5 bar
14 mm	270 bar	202.5 bar
15 mm	330 bar	247.5 bar
16 mm	320 bar	240 bar
18 mm	300 bar	225 bar
20 mm	290 bar	217.5 bar
22 mm	310 bar	232.5 bar
25 mm	290 bar	217.5 bar

Note (1): Values based on thickest wall alloy 400 tubing per Swagelok Tubing Data Sheet MS-01-107.

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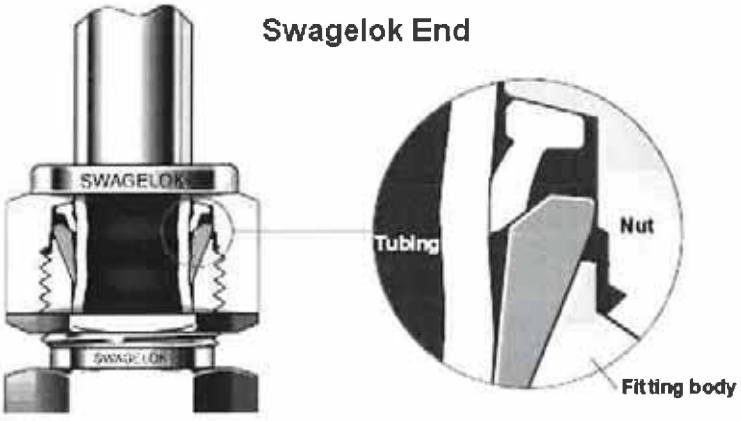
Product Description

Swagelok Fittings are furnished in a variety of configurations and shapes (straight, elbow, tee or cross). Swagelok Fittings consist of at least one Swagelok End – a proprietary two-ferrule mechanical-grip design. The "Configurations" section covers other available end connections.



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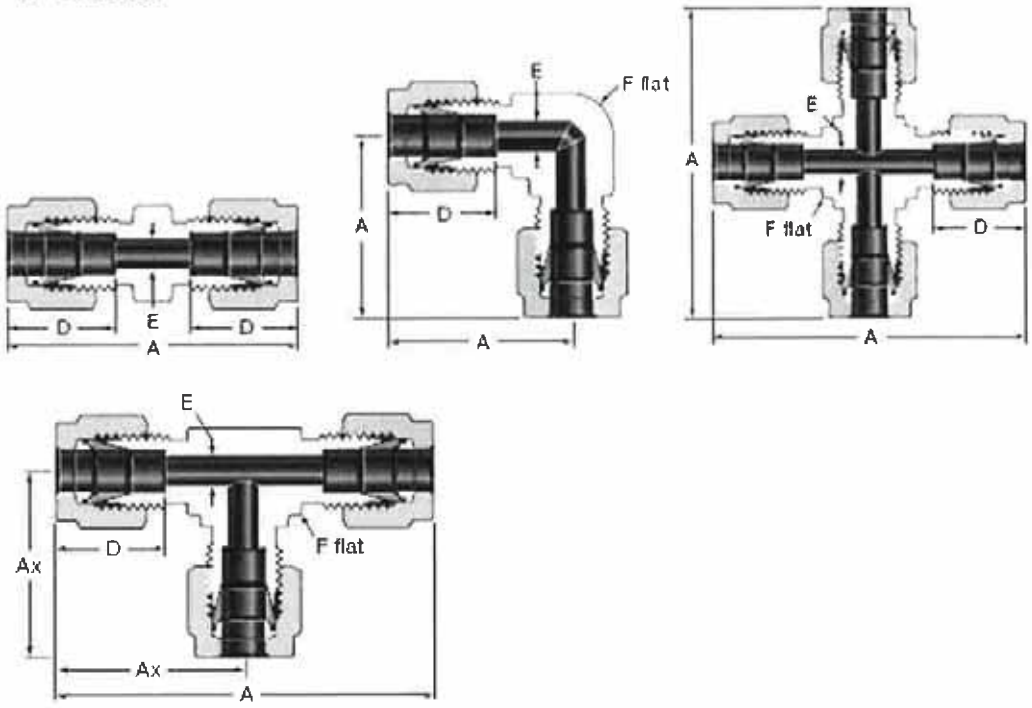
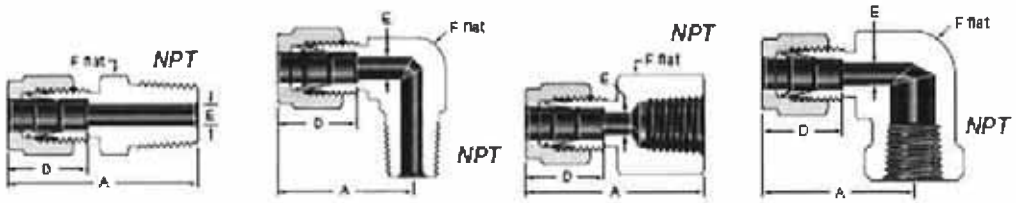
Configurations

1. **Unions.**



2. **Male and Female connectors / adapters.**



NPT Male Connectors

Female Connectors

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Product Options:

Some of the product options listed below affect the pressure-temperature ratings in the "Scope of Registration" section above, but in all cases the pressure ratings are the same or less than those shown in the table.

1. Tapered pipe threads (NPT) with sealant.
    a. Curable resin with PTFE
    b. PTFE tape
2. Bored through fittings
3. Plastic ferrules (Nylon, Teflon, Peek)

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. bulkhead configurations
5. Snubbers/frits and orifice plates
6. Equivalent metric or fractional hex sizes

Other options, not shown above, with pressure/temperature ratings equal to or less than shown in the Summary Table or do not affect pressure/temperature ratings may be made available under 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 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.

- Gaugeable Tube Fittings and Adapter Fittings MS-01-140 Rev. Y
- Swagelok Tubing Data Sheet MS-01-107, Rev Q

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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 (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

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