



## Confirmation of Product Type Approval

**Company Name:** SWAGELOK COMPANY

**Address:** 31400 AURORA ROAD OH 44139-3492 United States

**Product:** Tube Fittings

**Model(s):** Tube Fitting Components (See Description)

**Endorsements:**

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	20-2058516-PDA	09-DEC-2020	08-DEC-2025
Manufacturing Assessment (MA)	20-4487492	20-OCT-2020	01-NOV-2025
Product Quality Assurance (PQA)	NA	NA	NA

**Tier**

3 - Type Approved, unit certification not required

**Intended Service**

Marine & Offshore Applications - Tubing / Piping Systems

**Description**

Tees, Straight, 45° & 90° Elbows Configuration Unions, Port, Connections, Reducers, Caps & Plugs, Adapters, Crosses, etc.

For specific details on Gaugeable Tube Fittings and Adapter Fittings refer to Swagelok Catalog MS-01-140.

**Ratings**

For Ratings, Sizes, Configurations, Material, etc. refer to the latest Swagelok Catalog MS-01-140.

Stainless Steel Size 1/16" to 2" (2-50mm)

Carbon Steel Size 1/16" to 2" (2-50mm)

Alloy 400 Size 1/8" to 1" (3-25mm)

Brass Size 1/8" to 1-1/8" (3-28mm)

**Service Restrictions**

Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Brass fittings are not to be used in oil systems. Brass fittings are not to be used in systems where pressure pulsation other than water hammer is expected (e.g. systems using positive displacement pumps). Fittings with o-rings are not to be used in systems with flammable fluids. Back Ferrules for the 1 inch and 25 mm, the design pressure is not to exceed 3,750 psi.

### Comments

The Manufacturer has provided a declaration about the control of or the lack of Asbestos in this product.

For your ready reference find here the link to the Swagelok Catalog that defines the Pressure Ratings, <http://www.swagelok.com> then search for ms-01-140.pdf - ABS has no control over the content and any questions are to be deferred to ABS for resolution.

Where indicated as 'permanent' in 4-6-1/7.1.4 TABLE 2 of the Marine Vessels Rules, the tubing fitting is to bear permanent identification, such as the manufacturer's name or trademark, the standard of compliance, material identity, pressure rating, etc., as required by the standard of compliance or the manufacturer's specification. Such markings may be cast or forged integral with, stamped on, or securely affixed by the nameplate on the component, and are to serve as a permanent means of identification of the component throughout its service life.

### Notes, Drawings and Documentation

Declaration no design changes to Swagelok tube fittings, Revision: 1,

01-140R12\_TubeFitting (Gaugeable Tube Fittings and Adapter Fittings),

02-10R4\_SpecialAlloys (Special Alloy, Fluid System Components),

02-200R4\_FlangeAdapters, Carbon Steel Tube Fittings Burst Test, Brass Tube Fittings Burst Test, Monel Tube Fittings Burst Test, Impulse Test Summary for SS Swagelok Tube Fittings,

Lab Test Method Proof and Burst Hydraulic for Tube Fitting Reassembly, Southwest Labs Qualification

Lab Test Method Tensile Pull,

Lab Test Fitting Remake Procedure,

Standard Test Method for Helium Leak Testing,

Lab Test Method for Vibration Fatigue Test,

Hydraulic Pressure Test Procedure,

Summary of Vibration Test Performance Data Using a Shaker Table for 316 SS Swagelok Tube Fittings,

Tests of Swagelok Mechanically Attached Fittings Tested in accordance with ASTM F 1387-99(2012) Standard Specification.

NK Type Approval Testing of Alloy 400 Swagelok Tube Fittings,

NK Type Approval Testing of Brass Swagelok Tube Fittings,

NK Type Approval Testing of Carbon Steel Swagelok Tube Fittings,

Rotary Flex and Pressure Impulse Test of Alloy 400 Swagelok Tube Fittings with Alloy 400 Tubing,

Rotary Flex and Pressure Impulse Test of Carbon Steel Swagelok Tube Fittings with Carbon Steel,

Rotary Flex and Pressure Impulse Test of 316 SS Swagelok Tube Fittings with SS Tubing,

Tensile Pull Test of SS Swagelok Tube Fittings with SS Tubing,

Tensile Pull Test of 316 SS Swagelok Tube Fittings with SS Tubing,

Hydrostatic Pressure Test of 316 SS Swagelok Tube Fittings with SS Heavy-Wall Tubing,

Hydrostatic Pressure Test of SS Swagelok Tube Fittings on Extra Heavy Wall Tubing,

Positive Pressure Helium Leak Test and Nitrogen Gas Seal Test with Repeated Reassembly of 316 SS Swagelok Tube Fittings with Heavy-Wall SS Tubing,

Nitrogen Gas Seal Test with Repeated Reassembly of 316 SS Swagelok Tube Fittings with Thin-Wall Tubing,

Nitrogen Gas Seal Test with Repeated Reassembly of SS Swagelok Tube Fittings,

Fire Test with Water Quench (Reference API 607) of SS Swagelok Tube Fittings.

**Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 08/Dec/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

**ABS Rules**

The Rules for Conditions of Classification, 2020 Marine Vessels Rules 1-1-4/7.7, 1-1-A3,1-1-A4, which covers the following:

2020 Rules for Building and Classing Marine Vessels: 4-6-1/Table 1 & 2, 4-6-1/7.1, 4-6-1/7.5.2, 4-6-2/3, 4-6-2/5.9, 4-6-2/7.

The Rules for Conditions of Classification, Offshore Units and Structures, 2020 Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2020 Rules for Building and Classing Mobile Offshore Units: 4-2-1/9.1, 4-2-2/1.3, 4-2-2/11, 4-2-2/17.

**International Standards**

NA

**EU-MED Standards**

NA

**National Standards**

ASME B31.1 (2020), SAE J1926/3\_201609, ASTM F1387-19 (2019)

**Government Standards**

NA

**Other Standards**

Swagelok Catalog MS-01-140, RevAD, September 2020



A handwritten signature in black ink, appearing to read "James J. Wick".

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 11-Dec-2020 8:34

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.