A Quick Look at Swagelok Medium- & High-Pressure Solutions

Swagelok’s medium- and high-pressure valves, fittings, and fluid-control devices are engineered to handle all the pressure that comes your way.
Create strong, reliable connections faster—even in high-risk, high-vibration environments. Swagelok delivers high-quality performance when the pressure is at its highest.

Our patented FK series medium-pressure tube fitting provides reliable, leak-tight performance specifically for these high-vibration environments. Looking to maintain your cone and thread system? Swagelok carries a range of options in various alloys and sizes up to 1½ inches, and anti-vibration options to help ensure a leak-tight system.

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Standing up to the pressure starts with a legacy of quality and ongoing innovation backed by unmatched expertise. Swagelok Company is a long-time designer, manufacturer and provider of high-quality fluid system products, assemblies and services, all of which help make our customers successful. And that success comes without compromising the safety of those working in high-risk environments.

Our products and services are readily available through a dedicated network of more than 200 authorized Swagelok sales and service centers in 70 countries, giving you the global reach of our fluid system knowledge tailored to your local market.

Fittings
Eliminate downtime due to leaks with the safe, reliable, efficient leak-tight protection of Swagelok fittings.

FK Medium-Pressure Gaugeable Tube Fittings and Adapter Fittings
Easy to install, the simple two-piece design of the Swagelok medium-pressure tube fittings and adapters offers a leak-tight gas seal and vibration resistance in applications up to 20,000 psig (1378 bar), with proven performance on a variety of tubing types and materials.

Cone & Thread Fittings
Medium pressure for up to 20,000 psig (1378 bar); high pressure for up to 60,000 psig (4134 bar) maximum working pressure.

Strain-hardened 316 stainless steel supplied complete with gland and collars. NACE-compliant materials and anti-vibration connection components are available to increase the dependability of your system.
Valves
Maximize the performance and reliability of your fittings with matching fluid system components designed to handle the pressure of your operation.

Ball Valves
Swagelok ball valves offer quarter-turn operation in a compact design, providing positive shutoff in applications up to 20,000 psig (1378 bar). Subsea service ball valves are also available in a range of sizes and connection types, including NACE-compliant for sour gas applications.

The advanced design of the FKB Series ball valve reduces seal wear and improves the reliability of connections across a full range of operating pressures and temperatures. The CTB Series ball valve delivers reliable performance with cone & thread end connections. Both include a trunnion-style ball with a direct-load design to deliver leak-tight performance, and a bottom-loaded stem design to eliminate stem blowout and ensure operator safety.

Check Valves
Available in three designs to fit a variety of applications: ball-seal, soft-seal, and dual-seal. In C&T/NPT and tube fitting connections, it handles a maximum working pressure of up to 60,000 psig (4134 bar); nominal crack pressure of 15 psig (1.0 bar).

Single/Double Block & Bleed Valves
Reduce your system footprint and achieve positive isolation with single block and bleed valve (needle/needle) or double block and bleed valve (ball/needle/ball or needle/needle/needle) options.

Needle Valves
Six body styles available with cone and thread, tube fitting, and NPT end connections, plus solutions to handle maximum working pressures of up to 60,000 psig (4134 bar). The non-rotating, two-piece stem assembled NVT design needle valves fully open in just four to five turns. The NVT design also allows for easy panel mounting with an integral bonnet locking mechanism to prevent accidental disassembly.

Relief Valves
Maximum working pressure of up to 20,000 psig; proportional lift design available customer adjustable or factory set.
**Tubing**

Optimize your system performance with medium- and high-pressure tubing from Swagelok: your single, trusted source for all medium- and high-pressure components.

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**Medium-Pressure Tubing**

Put it all together with heavy-wall annealed or cold-drawn, ⅛ hard tubing. With increased material strength that allows for reduced wall thickness and enhanced flow through the same diameter tube, this is the perfect match for Swagelok medium-pressure gaugeable tube fitting and adapter fittings. And it handles the pressure (up to 20,000 psig (1378 bar)) your operation brings to it.

**Medium- and High-Pressure Cone & Thread Tubing**

Need a tubing solution for a high-pressure application? Medium- and high-pressure cone and thread tubing provides a maximum working pressure of up to 60,000 psig (4134 bar) and is readily available in various lengths. Custom lengths and pre-coned and threaded tube nipples are also available.

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**Training, Tools, and Accessories**

Complete your assembly capabilities with tools and accessories, no matter the connection type integrated within your system.

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**FK Series**

Ensure optimal and easy installation of our FK fittings with these convenient tools:

- Medium Pressure Tube Fitting (FK Series) Installation Essentials Training Course
- Preswaging Tool
- Depth Marking Tool
- Multihead Hydraulic Swaging Unit (MHSU)
- Medium-Pressure Gap Inspection Gauge

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**Cone & Thread**

Gain access to training and tools to assist with your cone and thread needs. We offer:

- Medium-Pressure Cone and Thread Essentials Training Course
- Cone and Thread Tool Kit
- Tube Bending Equipment

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Refer to our medium- and high-pressure product catalogs (MS-02-472 and MS-02-474) for more details on these products, or contact your Swagelok service representative.