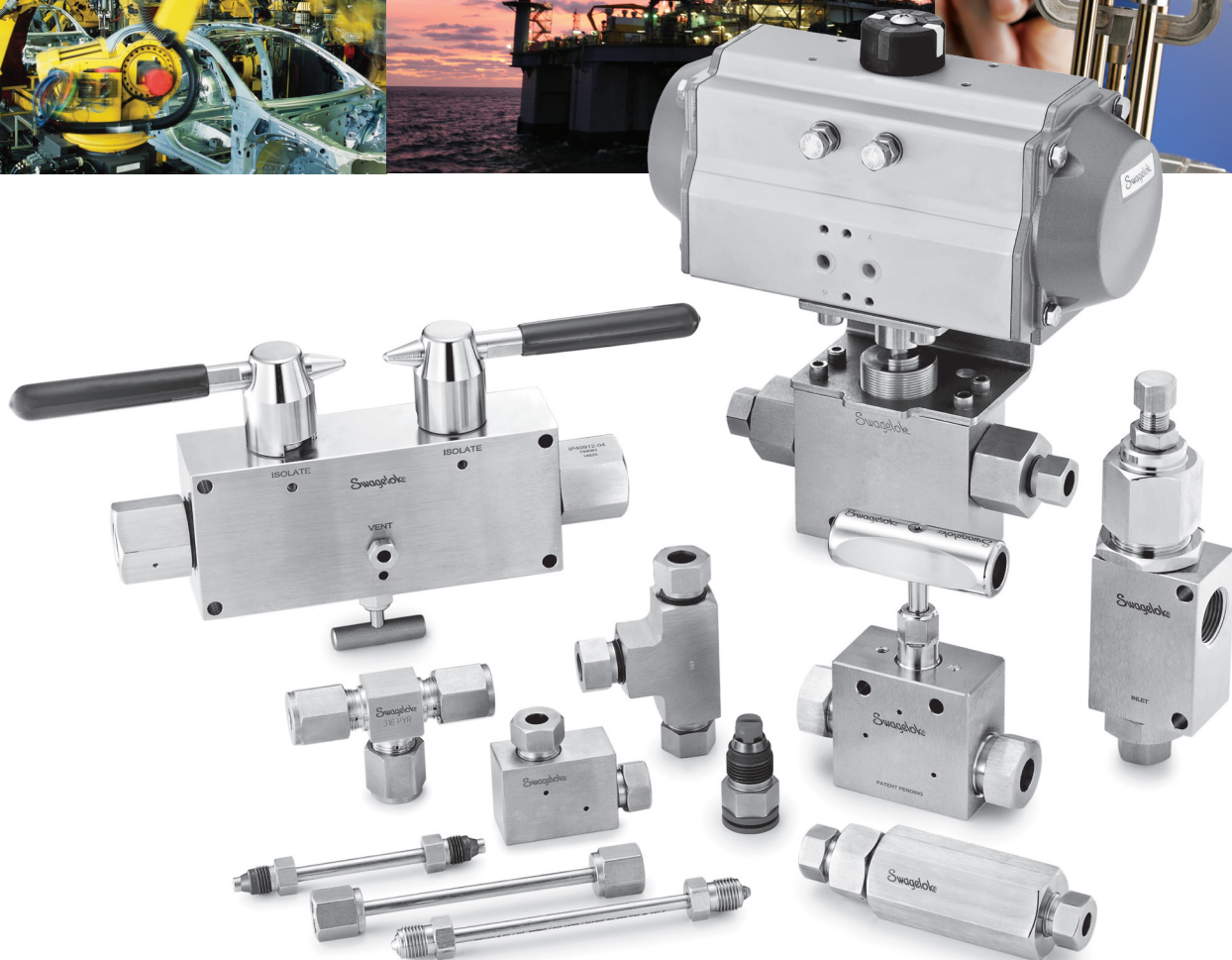


A Quick Look at Swagelok Medium- & High-Pressure Solutions

Swagelok's medium- and high-pressure valves and fittings are engineered to handle all the pressure that comes your way.

- Improve system uptime
- Reduce installation costs
- Boost safety and environmental compliance



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 fitting provides reliable, leak-tight performance in high-vibration environments. Looking to maintain your traditional 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.

Product Type	Maximum Working Pressure, psig (bar)	
	Medium Pressure	High Pressure
Ball Valves	Up to 20 000 (1 378)	
Check Valves		Up to 60 000 (4 134)
Cone & Thread Fittings, Adapters, and Couplings		Up to 60 000 (4 134)
Double Block & Bleed Valves		
FK Medium-Pressure Gaugeable Tube Fittings		
Needle Valves		Up to 60 000 (4 134)
Relief Valves		
Tubing		Up to 60 000 (4 134)
FK Medium-Pressure Gaugeable Tube Fittings in 2507 Alloy	Up to 22 500 (1 551)	

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

Lower installation cost and reduce downtime due to leaks with the safe and reliable leak-tight protection of Swagelok fittings.



FK Medium-Pressure Gaugeable Fittings and Adapters

Simple and easy to install Swagelok’s innovative FK medium-pressure compression fittings and adapters offer a leak-tight gas seal and vibration resistance in applications up to 22 500 psig (1551 bar). FK fittings are offered in 316 stainless steel, alloy 2507 super duplex (NACE and NORSOK-compliant), and alloy 625 (NACE-compliant) with proven performance on a variety of tubing types and materials.

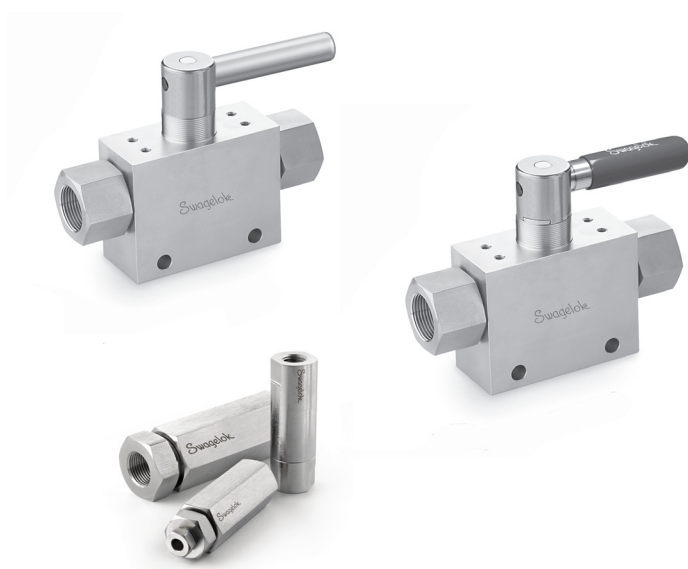
Cone & Thread Fittings

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 fittings supplied complete with gland and collars. Alloy 2507 super duplex (NACE-compliant) and alloy 625 (NACE-compliant) fittings anti-vibration connection components are available.

Valves

Maximize the performance and reliability of your system with robust valves containing integral FK, integral cone and thread or NPT end connections designed to handle the pressure of your operation. Materials offered include 316 stainless steel, alloy 2507 super duplex (NACE-compliant), and alloy 625 (NACE-compliant).



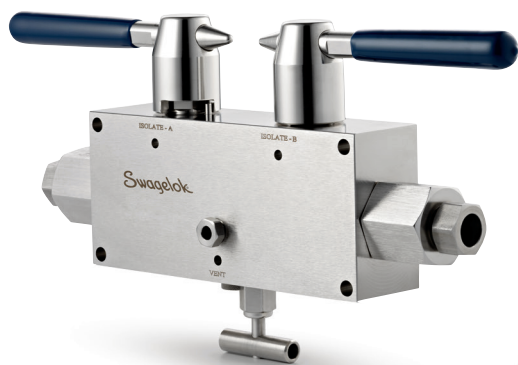
Ball Valves

Swagelok ball valves offer smooth quarter-turn operation in a compact design, providing positive shutoff in applications up to 20 000 psig (1378 bar). Air actuated options available.

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. These rugged valves handle a maximum working pressure of up to 60 000 psig (4134 bar) with a nominal cracking 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. Available for working pressures up to 20 000 psig (1378 bar)

Needle Valves

Six body styles are available 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.



Medium-Pressure Tubing for FK

Put it all together with heavy-wall annealed or cold-drawn, $\frac{1}{8}$ hard 316 stainless steel tubing. Enhanced corrosion protection can be realized by using annealed alloy 2507 super duplex tubing. With its increased material strength that allows for reduced wall thickness and enhanced flow through the same diameter tube, this is the perfect match for the Swagelok FK fitting made in either 316 stainless steel or alloy 2507 super duplex. Swagelok's medium-pressure tubing handles pressure up to 22 500 psig (1551 bar).

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.

Training, Tools, and Accessories

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

FK Series

Ensure simple and safe installation of our FK fittings with these convenient tools:

- Medium Pressure (FK Series) Installation Essentials Training Course
- Depth Marking Tool
- Medium-Pressure Gap Inspection Gauge
- Tube Bending Equipment

Cone & Thread

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

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

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 authorized Swagelok service representative.**