

# **Swagelok Hose**

## Engineered to add flexibility to fluid system solutions

From all metal to PTFE or PFA lined to rubber, Swagelok offers a broad range of hose products for a variety of fluid systems. In fact, with Swagelok you'll find some of the most innovative designs in our hoses. Whether your system requires all-metal stainless steel, flexibility or an over-braid, you can count on Swagelok to meet your needs. Our hoses are expertly crafted from quality materials and tested to stringent standards all backed by the Swagelok Limited Lifetime Warranty.

#### **Hose Selection Made Easy**

Consider the 7 areas below when selecting a hose



**Size:** Determine the I.D (internal diameter) and O.D (outside diameter along with the most likely route for the hose installation to calculate the length.

**Temperature:** What are the min. and max. temperatures the hose will be exposed to with regard to the media and environment?

**Application:** Consider desired flow. Hose connection size, core tube construction and routed installation may all impact flow. What about movement? Will the hose be installed in a dynamic application? If so, this will require additional considerations.

Material: Identify the system media, the environment and required drainability. This will help determine the materials of construction.

**Pressure:** What are the min. and max. pressures (or vacuum) within and outside the hose assembly?

**Ends Connections:** What is the style, type and orientation? Clarify any space constraints. Hose assemblies with elbows and union ball joints may help resolve these issues.

**Delivery:** Do you have any special delivery requirements or specific quality, testing and packaging needs? Are any special markings required, such as tagging?

### Typical Hose Applications Include:

- CNG Fill Transfer
- Bottled Gas Manifolds
- Production Load Cells
- Solvent Transfer
- Caustic Wash Down Lines
- Pneumatic Controllers
- Chemical Additive Delivery
- Air Damper Controls
- Portable Measurement Equipment
- Hydraulic Presses and Machinery
- Process Tool Cooling Lines
- Hydraulic Control Systems
- Grab Samples
- Testing Equipment
- Pump Seal Lines
- High Vibration Dissipation
- Gas Mixing and Production
- Gas Cylinder Filling







#### **Swagelok Hoses**

We have a range of hoses that can meet a variety of industry, pressure, temperature and application needs.

Industry	Hose Options	Series	Key Feature(s)	Patented	Pressure Range PSI (BAR)	Size	Inner-core	Cover
General Industrial	Increased flexibility exceeds other smoothbore PTFE stainless steel braided designs.	Х	Flexibility	Yes	1000 - 3500 (68.9 - 241)	1/4 - 1 inch	Smoothbore PTFE	Stainless Steel
	Flexible solutions in high- temperature vacuum or general purpose applications where permeation is undesirable.	FJ/FM	Permeation Resistance / Temp	No	450 - 3100 (31 - 213)	1/4 - 2 inch	Convoluted Metal	Stainless Steel
	FX is a new hose series suitable for high pressure corrosive environments. Like the FJ and FM series the FX is also a flexible solution in high-temperature vacuums or where permeation is undesirable.	FX	Permeation Resistance / Pressure	No	4500 - 6000 (310 - 413)	1/4 or 1/2 inch	Convoluted Metal	Double Braided Stainless Steel
Chemical	Convoluted inner core offers extreme flexibility with the benefits of PTFE compatibility. Larger sized hoses are available up to 2 inches.	С	Flexibility	No	525 - 1500 (36.1 - 103)	1/2 - 2 inch	Convoluted PTFE	Stainless Steel
Pharm/Biotech	Smoothbore PTFE / PFA is required due to purity requirements. Both the U and S series hoses offers superb flexibility and come with smooth silicone covers for external cleanability. S series is good in 1/8 - 3/4 inch sizes while U series is recommended in 1 - 2 inch sizes. Ideal for load cell / weight scale applications and steam lines where exterior insulating protection may be required.	S		Yes	1000 - 3000 (68.9 - 206)	1/8 - 1 inch	Smoothbore PTFE or PFA	Silicone
			Flexibility / Smooth Silicone Cover/ Cleanable	Yes	150 - 300 (10.3 - 20.6)	1/2 - 2 inch		
Laboratory	The availability of these products in PTFE and 1/8 inch size makes them ideal for laboratory lines.	В	Available in 1/8 inch size	No	3000 (206)	1/8 inch	Smoothbore PTFE	Stainless Steel
		S		Yes	1000 - 3000 (68.9 -206)	1/8 - 1 inch	Smoothbore PTFE	Silicone
Semiconductor	The W series hose is designed with a PTFE core for chemical compatibility with heat exchanger fluids and provides flexibility in combination with insulating properties.	W	Insulating design	Yes	500 - 750 (34.4 - 51.6)	3/8 - 3/4 inch	Smoothbore PTFE - Static Dissipative	Silicone (Blue/ White/Red/ Black)
Food & Beverage	PFA is the ideal material choice as it does not impart taste or odour as rubber does. The U series offers the required flexibility and is available in larger sizes needed in these applications.	U	Flexibility / imparts no taste / no odour / cleanable	Yes	150 - 300 (10.3 - 20.6)	1/2 - 2inch	Smoothbore PFA	Silicone

For further information on the hose solutions we offer, download our Catalogue MS-01-180 or to discuss your specific application needs, contact us and book an appointment with your dedicated Business Development Engineer.