

Gas Purification/Management

Plumbing/Regulation: *In-Line Pressure Regulators and Gauges*

In-Line Pressure Regulator

Install an in-line pressure regulator downstream of a gas cylinder regulator to adjust pressure closer to the point of use. 400 psig maximum input pressure. $\frac{1}{8}$ in. Swagelok nuts and ferrules included.



Description	Cat. No.	Qty
General Purpose version (outlet pressure 0-50 psi, $\frac{1}{8}$ in. brass fittings)	23883	1 ea
High Purity version (outlet pressure 0-100 psi, $\frac{1}{8}$ in. stainless steel fittings)	23882	1 ea
Ultra-High Purity version (outlet pressure 0-100 psi, $\frac{1}{8}$ in. stainless steel fittings)	23884	1 ea

In-Line Pressure Regulator (economy model)

The economy in-line pressure regulator is an inexpensive version for general lab applications. Use it with gas streams for pneumatic control, and other non-chromatographic purposes. 400 psig maximum input pressure. $\frac{1}{8}$ in. brass Swagelok nuts and ferrules included.

Description	Cat. No.	Qty
Regulator body (outlet pressure 0-60 psi), gauge, and panel mount bracket	23831-U	1 ea
Regulator body only (outlet pressure 0-60 psi)	23832-U	1 ea
Gauge only	23833-U	1 ea
Panel mount bracket with nut	23834-U	1 ea

In-Line Pressure Gauge Kit

Install a pressure gauge in the gas delivery system to measure pressure at any given point. For example, install one upstream and downstream of the High Capacity Gas Purifier. When the pressure drop across the purifier exceeds 10 psi, the converter tube should be replaced. Kit contains:

- 2 in. (5 cm) diameter steel and copper alloy gauge (0-100 psi)
- NPT to Swagelok adapter
- $\frac{1}{8}$ in. tee
- 18 in. ($\frac{1}{2}$ m) of $\frac{1}{8}$ in. copper line
- assembly and installation instructions

Nuts and ferrules included.



20392

1 ea

In-Line Pressure Gauge

Install a pressure gauge in the gas delivery system to measure pressure at any given point. For example, install one upstream and downstream of the High Capacity Gas Purifier. When the pressure drop across the purifier exceeds 10 psi, the converter tube should be replaced. Contains:

- 2 in. (5 cm) diameter steel and copper alloy gauge
- NPT to Swagelok adapter
- $\frac{1}{8}$ in. tee

Nuts and ferrules included.



Description	Cat. No.	Qty
0-30 psi	20469	1 ea
0-60 psi	20470	1 ea
0-100 psi	22423	1 ea
0-30 psi, gauge only (tee not included)	20393	1 ea
0-60 psi, gauge only (tee not included)	20394	1 ea

Flow Regulation and Measurement

In addition to pressure, flow is another parameter that can be regulated and measured. Several products allow the precise control of flow to achieve the desired specifications. As important as metering is, the flow must also be accurately measured. A rotameter is commonly employed for this function. The added benefit of a rotameter is its ability to both regulate and measure flow.

Fine Metering Valve

Use for very accurate flow regulation. Install a flow measuring device downstream. Nuts and ferrules included. An optional vernier handle (Cat. No. 22122, order separately) is available for added convenience.



Description	Cat. No.	Qty
brass, straight arms: $\frac{1}{8}$ in.	22116	1 ea
brass, angle arms: $\frac{1}{8}$ in.	22114	1 ea
stainless steel, straight arms: $\frac{1}{8}$ in.	22117	1 ea
stainless steel, angle arms: $\frac{1}{8}$ in.	22115	1 ea
brass, angle arms: $\frac{1}{16}$ in.	22118	1 ea
stainless steel, straight arms: $\frac{1}{16}$ in.	22121	1 ea