

High-Purity Pressure Regulators

Brass Two-Stage Models



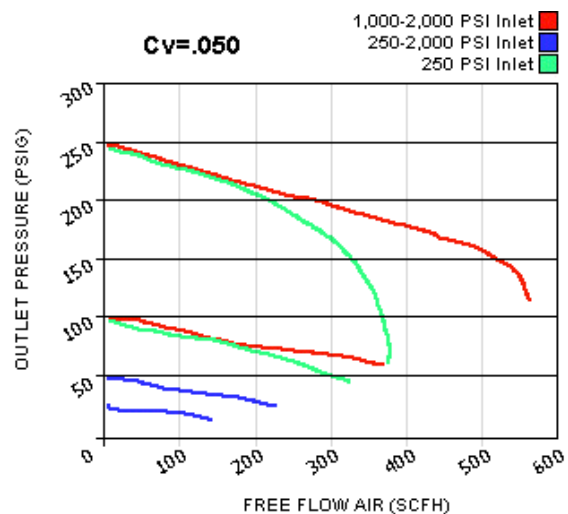
Description: This series of two-stage, high-purity regulators is designed for non-corrosive analytical and process applications requiring precise, stable, delivery pressure control. The two-stage design yields a delivery pressure change of less than 0.04/100 psi inlet change.

Convoluted stainless steel diaphragms provide excellent regulating characteristics and allow for internal vacuum purging. The metal-to-metal diaphragm seal prevents contamination by eliminating the need for a soft seal and provides a leak-rate design of less than 2×10^{-8} ccs helium. This minimizes cleanup time in vacuum purging and yields lower residual contaminant levels.

A diaphragm packless outlet valve with a 1/4" Swagelok® fitting is provided for flow control and to maintain system purity. Captured bonnet ports with optional vent adaptors are standard on both stages and allow for the venting of hazardous gases in the event of diaphragm failure. These regulators are ultrasonically cleaned for the most demanding high-purity service.

Design Features

- **Convoluted Stainless Steel Diaphragms**
-provide superior leak integrity without contamination from non-metallic liner or seal.
- **Bonnet Vent Ports** (w/ optional bonnet vent adaptors)
-allow venting of hazardous gases in the event of diaphragm failure.
- **Standard Threaded Bonnet** (w/ optional collar mount nuts)
-permits panel mounting.
- **Diaphragm Packless Valve** (w/ 1/4" Swagelok® fitting)
-promotes system purity.
- **Four Outlet Pressure Ranges**
-provide application pressure compatibility.



Specifications

Maximum Rated Inlet Pressure	3,000 PSIG
Outlet Pressure Ranges	0-25, 0-50, 0-100, 0-250 PSIG
Flow Capacity	Cv=0.050
Ambient Operating Temperature	-40° F to +165° F
Designed Leak Rate	2×10^{-8} ccs (helium)

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(continued)

Specifications	
Weight	4 lbs
Ports (5)	¼" FNPT
Inlet	¼" FNPT
Outlet	¼" Swagelok®
Decay Inlet Characteristic	0.04/100 PSI

Materials	
Body	Nickel-Plated Brass
Bonnet	Nickel-Plated Brass
Seat	PCTFE and Teflon®
Diaphragm	316 Stainless Steel
Gauges	2½" Nickel-Plated Brass
Filter	316 Stainless Steel
Outlet Valve	Nickel-Plated Brass
Trim	Nickel-Plated Brass

Ordering Information							
Product Number	Material	Max Inlet Press. (PSIG)	Max Outlet Press. (PSIG)	Capacity (scfh @ Max Del. Press.)	Inlet Gauge Range (PSIG)	Delivery Gauge Range (PSIG)	Price
Y12-N145A(CGA)	Brass	3,000	25	190	0-4,000	30" Hg-0-30	\$409.00
Y12-N145B(CGA)	Brass	3,000	50	270	0-4,000	0-60	\$409.00
Y12-N145D(CGA)	Brass	3,000	100	380	0-4,000	0-200	\$409.00
Y12-N145F(CGA)	Brass	3,000	250	850	0-4,000	0-400	\$409.00

Available Options		
Product Number	Description	Price
Y99-HT(CGA)	Hand-Tight CGA Connection	\$77.00
Y99-BONNETADP	Bonnet Vent Adaptor	\$10.00
Y99-4VCR	Male VCR Connections on Inlet/Outlet	\$50.00
Y99-SMPNLNUT	Panel Mount Nut (2 required)	\$9.00