Stainless Steel Two-Stage Models (Threaded Seat)

Description: This series of two-stage, high-purity stainless steel 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 corrosion resistance, and the threaded-seat design allows 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 x 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" compression 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 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

Filtered Seat
for added gas stream purity and extended service life.
Convoluted Stainless Steel Diaphragms
provide superior leak integrity without contamination from a non-metallic liner or seal.
Bonnet Vent Ports *(with optional bonnet vent adaptors)*
allow venting of hazardous gases in the event of diaphragm failure.
Standard Threaded Bonnet *(with optional collar-mount nuts)*
for easy panel mounting.
Diaphragm Packless Valve *(with 1/4" Compression 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, 0-500 psig
Flow Capacity	Cv=0.05
Ambient Operating Temperature	-40° F to +165° F
Designed Leak Rate	2 x10^{-8} ccs (helium)
Weight	4 lbs
Ports (5)	1/4" FNPT
Inlet	1/4" FNPT
Outlet	1/4" Compression
Decay Inlet Characteristic	0.04/100 psi

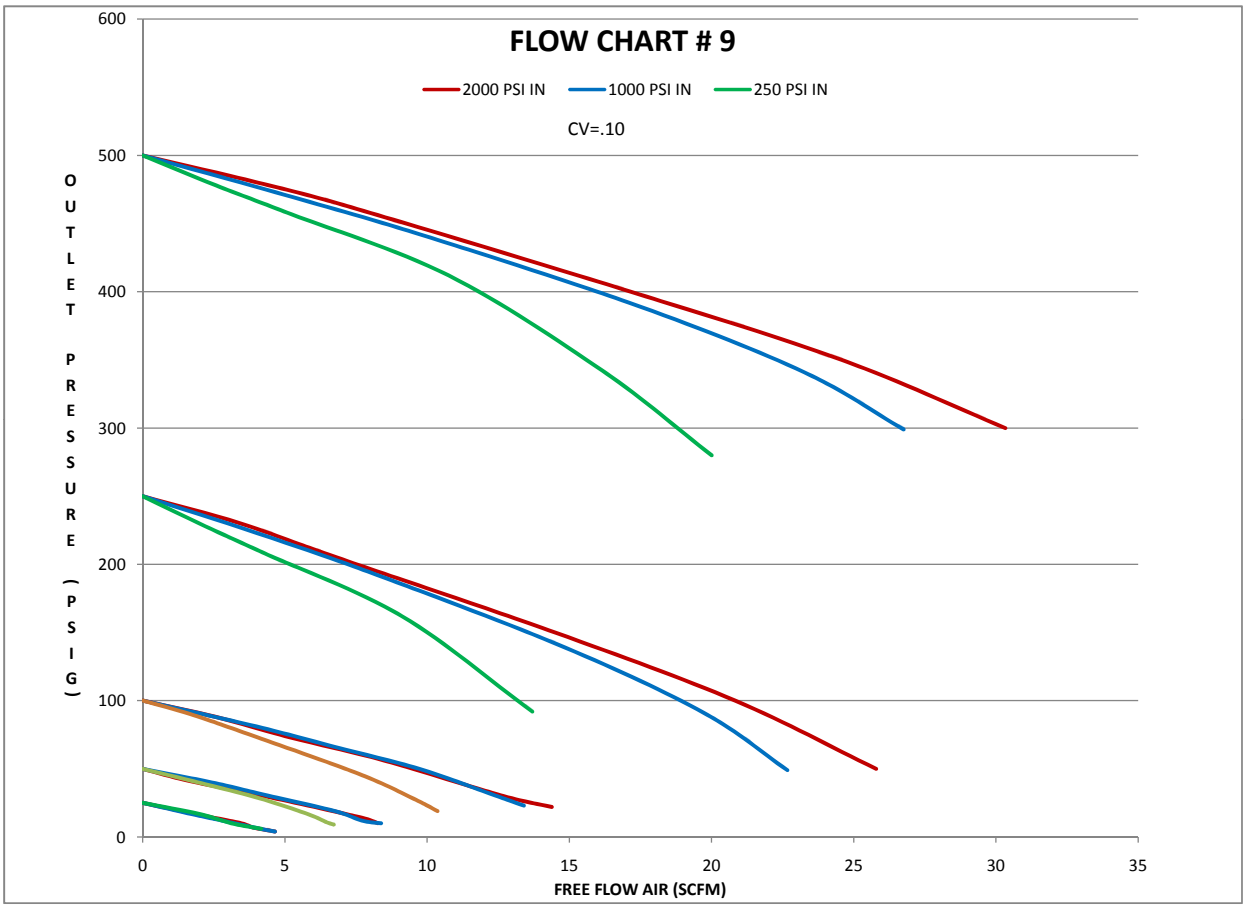
Materials	
Body	316 Stainless Steel
Bonnet	Nickel Plated Brass
Seat	PCTFE
Diaphragm	316 Stainless Steel
Gauges	2 1/2" Stainless Steel
Filter	316 Stainless Steel Continuous Wire
Outlet Valve	316 Stainless Steel
Trim	316 Stainless Steel

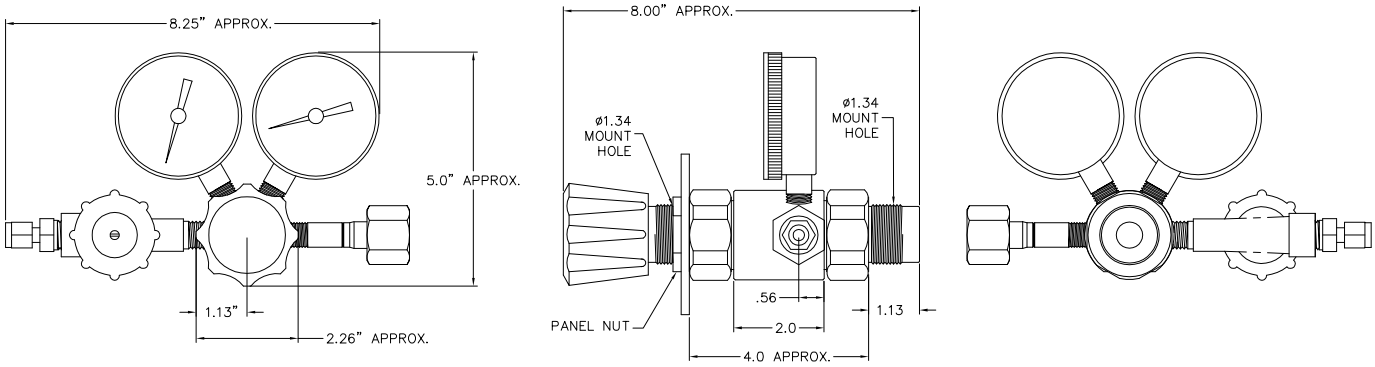
Ordering Information

Product Number	Material	Max Inlet Pressure (psig)	Max Outlet Pressure (psig)	Capacity (scfh @ Max Del. Pressure)	Inlet Gauge Range (psig)	Delivery Gauge Range (psig)
Y12-C645A (CGA)	316 SS	3,000	25	190	0-4,000	30" Hg-0-30
Y12-C645B (CGA)	316 SS	3,000	50	270	0-4,000	0-60
Y12-C645D (CGA)	316 SS	3,000	100	380	0-4,000	0-200
Y12-C645F (CGA)	316 SS	3,000	250	850	0-4,000	0-400
Y12-C645G (CGA)	316 SS	3,000	500	1,000	0-4,000	0-600

Available Options

Product Number	Description
Y99-CHROMNUTS	Panel Mounting Nut
Y99-BONNETADP	Bonnet Vent Adaptor
Y99-4VCR	1/4" VCR® connection on Inlet/Outlet (VCR x 1/4" MNPT)





TWO STAGE REGULATOR