



## PRESSURE REGULATORS

Analytical



## Two-Stage Brass Regulators

**Description:** This analytical series of high-purity brass, two-stage regulators is recommended for non-corrosive analytical and process applications where precise pressure control is required. This series is ideally suited for chromatographic carrier gas applications including FID, TCD, ECD, HID, and non-corrosive gas mixtures for analytical instrumentation. These units feature stainless steel diaphragms and bar stock bodies with low internal volume and minimal dead space.

The check valve cylinder connection prevents air and contaminants from entering the gas stream during cylinder change out. This creates consistencies in processes and extends column life in GC applications. The needle valve model has the valve built into the regulator body reducing the gas path. The two-stage design yields a delivery pressure change of less than 0.26/100 psi inlet change, making this one of the most accurate regulators available from full cylinder to empty. An automatic reseating relief valve protects regulator components from over pressurization while the encapsulated filter assembly protect the valve seats and extend operating service life. These regulators are nickel-plated to maintain their appearance through years of service.

### Design Features

**Check Valve Cylinder Connections**

Prevents air and contaminants from entering process stream during cylinder change out

**Filtered Seat**

for added gas stream purity and extended service life.

**Stainless Steel Diaphragms**

eliminates outgassing associated with elastometric diaphragms.

**Bar Stock Body**

provides low internal volume.

**Encapsulated Filter Seat Assy**

protect valve seat, extend service life.

**Nickel-Plated Brass Body**

provides long-lasting good looks; will not tarnish.

**Panel Mount Bonnets**

front and rear.

### Specifications

<b>Maximum Rated Inlet Pressure</b>	3,500 psig
<b>Outlet Pressure Ranges</b>	0-25, 0-50, 0-100, 0-250 psig
<b>Flow Capacity</b>	Cv=0.058
<b>Ambient Operating Temperature</b>	-40° F to +165°F
<b>Designed Leak Rate</b>	Bubble-Tight (helium)
<b>Weight</b>	4.4 lbs
<b>Ports (4)</b>	¼" FNPT
<b>Inlet</b>	¼" FNPT
<b>Outlet</b>	¼" MNPT
<b>Decay Inlet Characteristic</b>	0.26/100 psi

### Materials

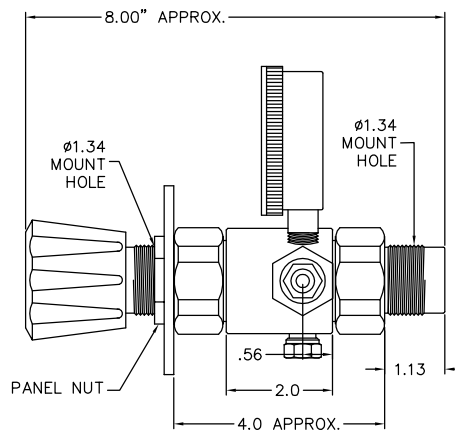
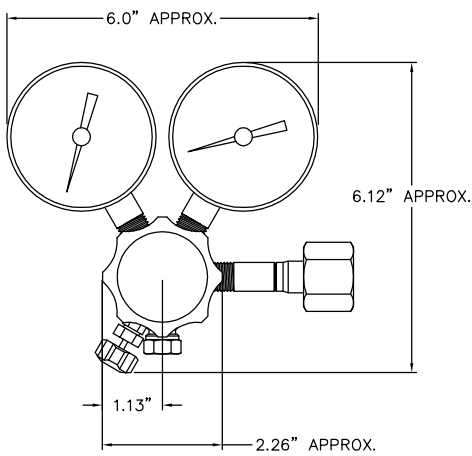
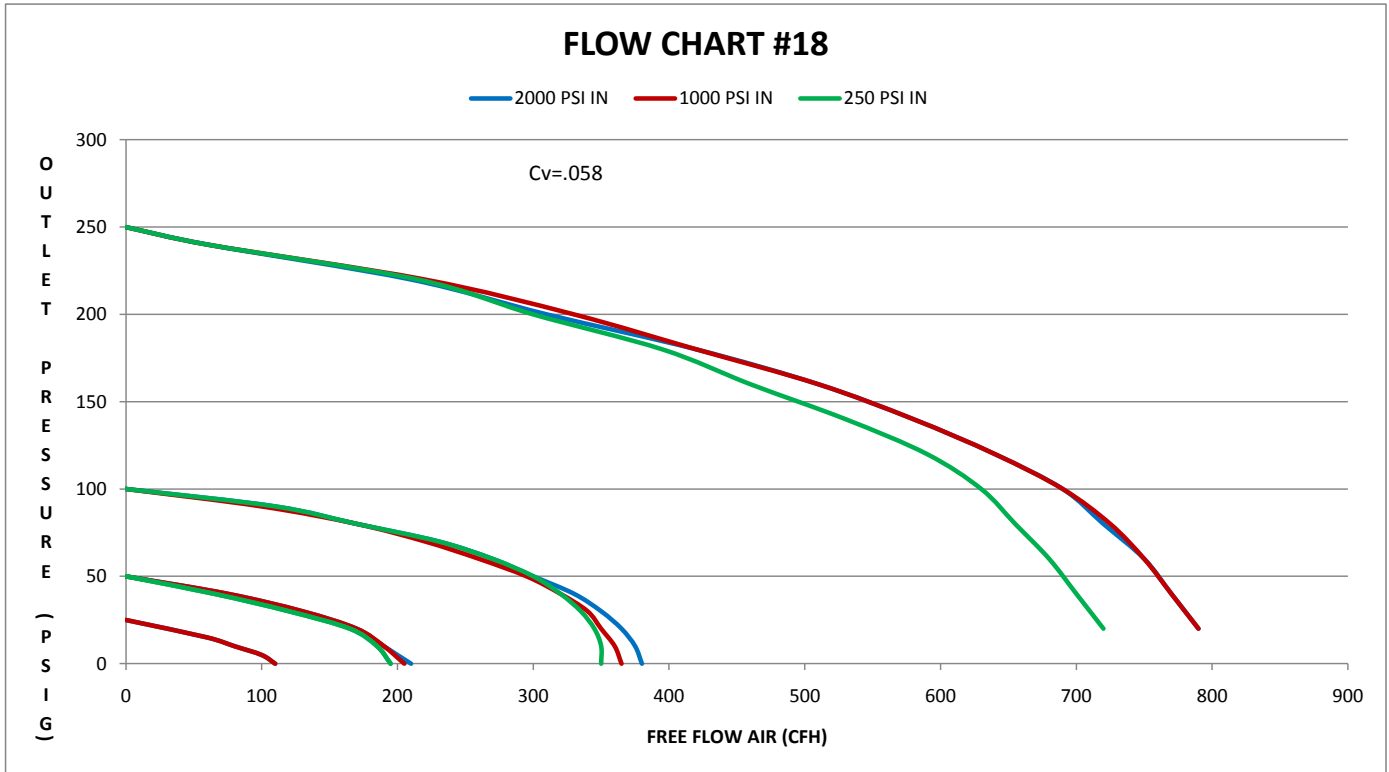
<b>Body</b>	Nickel-Plated Brass
<b>Bonnet</b>	Nickel-Plated Brass
<b>Seat</b>	PTFE
<b>Diaphragm</b>	316 Stainless Steel
<b>Gauges</b>	2 ½" Nickel-Plated Brass
<b>Filter</b>	316 Stainless Steel and Bronze
<b>Valve Stem</b>	316 Stainless Steel
<b>Valve Spring</b>	316 Stainless Steel
<b>Outlet Valve</b>	Needle valve in body
<b>Trim</b>	Nickel-Plated Brass

### Ordering Information

Product Number	Material	Max Inlet Pressure (psig)	Max Outlet Pressure (psig)	Capacity (scfh @ Max Del. Pressure)	Relief Valve Setting (psig)	Inlet Gauge Range (psig)	Delivery Gauge Range (psig)
Y12-244A(CGA)	Brass	3,500	25	250	85	0-4,000	30" Hg-0-30
Y12-244B(CGA)	Brass	3,500	50	450	150	0-4,000	0-60
Y12-244D(CGA)	Brass	3,500	100	900	150	0-4,000	0-200
Y12-244F(CGA)	Brass	3,500	250	1500	350	0-4,000	0-400

### Available Options

Product Number	Description
Y99-26120	¼" FNPT x ¼" Compression
Y99-26140	¼" FNPT x ⅜" Compression
Y15-QMB1	Quick Mounting Option for 1 Cylinder
Y15-QMB2	Quick Mounting Option for 2 Cylinders



TWO STAGE REGULATOR

