



ANALYTIC SERIES PRESSURE REGULATORS

Analytical Brass

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 two-stage design yields a delivery pressure change of less than 0.05/100 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 chrome-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.

Chrome Nickel-Plated Brass Body

provides long-lasting good looks; will not tarnish.

Panel Mount Bonnets

front and rear.

Specifications

Maximum Rated Inlet Pressure	3,500 psig
Outlet Pressure Ranges	0-25, 0-50, 0-100, 0-250 psig
Flow Capacity	Cv=0.06
Ambient Operating Temperature	-40° F to +165°F
Designed Leak Rate	Bubble-Tight (helium)
Weight	4.7 lbs
Ports (6)	¼" FNPT
Inlet	¼" FNPT
Outlet	¼" MNPT Instrument Valve
Decay Inlet Characteristic	0.05 psi/100 psi

Materials

Body	Chrome Nickel-Plated Brass
Bonnet	Chrome Nickel-Plated Brass
Seat	PTFE
Diaphragm	316 Stainless Steel
Gauges	2½" Nickel-Plated Brass
Filter	Nickel-Plated Bronze
Valve Stem	316 Stainless Steel
Valve Spring	18-8 SS
Outlet Valve	Needle valve with ¼ MNPT
Trim	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-AS244A (CGA)	Brass	3,500	25	250	250	0-4,000	30" Hg-0-30
Y12-AS244B (CGA)	Brass	3,500	50	450	500	0-4,000	0-60
Y12-AS244D (CGA)	Brass	3,500	100	900	500	0-4,000	0-200
Y12-AS244F (CGA)	Brass	3,500	250	1500	500	0-4,000	0-400

Available Options

Product Number	Description
Y99-26120	¼" FNPT x ¼" Compression Brass
Y99-26140	¼" FNPT x ½" Compression Brass
Y15-QMB1	Quick Mounting Option for 1 Cylinder
Y15-QMB2	Quick Mounting Option for 2 Cylinders