

220 Analytical Two-Stage Regulator

These high purity two-stage regulators are recommended for high purity, non-corrosive pure gases and mixtures in applications where constant delivery pressures are required. These regulators are ideally suited for the control of carrier gases or calibration mixtures used in gas chromatography such as thermal conductivity, flame ionization, flame photometry, and electron capture. This two stage design allows for precise control from full to nearly empty cylinders and is recommended in applications where constant delivery pressures, regardless of fluctuations in cylinder pressure, are required. An automatic reseating relief valve protects the regulator components from over pressurization. These regulators are able to withstand vacuums generated during purging operations.



220 Features

- Large 1-3/4" Stainless Steel Diaphragm
- Dual Filters
- Stem Type Seat Mechanism
- Self Reseating Relief Valve
- Rugged Brass Construction
- Chrome Plated Body, Bonnet, and Gauges

220 Typical Applications

- Non-Corrosive Gases
- Gas Chromatography
- Sampling Systems
- FoodPro™ Gases
- Process Analyzers
- Purging Systems
- Atomic Absorption Analysis

Materials of Construction

Body	Electroless Nickel Plated Brass Bar Stock
Bonnet 1st Stage	Electroless Nickel Plated Brass Bar Stock
Bonnet 2nd Stage	Electroless Nickel Plated Brass Forging
Seat	Teflon®
Seat Retainer	Brass
Diaphragm 1st Stage	Stainless Steel
Diaphragm 2nd Stage	Stainless Steel
Gauge	2 1/2" Chrome Plated
Filters (2)	316 Stainless Steel
Valve Stem	316 Stainless Steel
Valve Spring	316 Stainless Steel
Outlet Valve	Chrome Plated Brass

220 Specifications

Maximum Inlet Pressure	3000 PSIG
Temp. Operating Range	-40° F to 165°F
Ports (4)	1/4" FNPT
Design Leak Rate	Bubble Tight 1 x 10 ⁻⁵ ccs Helium
Flow Coefficient Cv	0.05
Outlet Pressure Rise	0.026/100 PSIG
Weight	5 lbs.

How to Order: *Specify a number from each category*

Model Number	Max. Outlet Pressure PSIG	Delivery Gauge		Outlet Fittings	CGA Inlet Fittings	Accessories	Options
		Range PSIG	Graduations PSIG				
220	15	30" Hg 0-30	1	00 1/4" FNPT	00 None	00 None	00 None
221	50	0-60	2	20 Chrome Needle Valve with 1/4" MNPT Outlet	02 CGA 320		
222	100	0-200	5	40 Chrome Needle Valve with 1/4" FNPT Outlet	03 CGA 326		
223	150	0-200	5	41 Chrome Needle Valve with 1/8" Brass Swagelok	05 CGA 346		
				42 Chrome Needle Valve with 1/8" Stainless Steel Swagelok	06 CGA 350		
					08 CGA 540		
					09 CGA 580		
					10 CGA 590		
					13 CGA 296		