

# 610 High Purity, Single-Stage Regulator

This single-stage high purity regulator is designed to prevent contamination of high purity systems and provide accurate regulation of non-corrosive gases. The specially designed and convoluted stainless steel diaphragm gives maximum accuracy and provides stable regulation of delivery pressure. This regulator is capable of withstanding an internal vacuum and available with a diffusion resistant, packless diaphragm outlet valve to maintain system purity. A 1/16" FNPT port in the bonnet is provided to vent hazardous gases in the event of a diaphragm failure.



## 610 Features

- Brass Electroless Nickel Plated Bar Stock Body
- Convoluted Stainless Steel Diaphragm
- 316 Stainless Steel Filter
- Stem Type Seat Mechanism
- Threaded Bonnet for Panel Mounting
- Body is Threaded for Rear Bracket Mounting
- Captured Vent in Bonnet (1/16" FNPT)
- Ultrasonically Cleaned

## 610 Typical Applications

- High-Purity Gas Handling
- Non-Corrosive Gases
- EPA Protocol Gases
- Gas Chromatography
- Process Analyzers
- Zero Gases, Span Gases, and Calibration Mixtures
- Research Sampling Systems
- Laser Gas Systems

## Materials of Construction

Body	Electroless Nickel Plated Brass Bar Stock
Bonnet	Electroless Nickel Plated Brass
Seat	Teflon®
Seat Retainer	Brass
Diaphragm	Stainless Steel
Gauge	.2 1/2" Chrome Plated
Filter	.316 Stainless Steel
Valve Stem	.316 Stainless Steel
Valve Spring	.316 Stainless Steel
Outlet Valve	Chrome Plated Brass

## 610 Specifications

Maximum Inlet Pressure	.3000 PSIG
Temp. Operating Range	-.40° F to 165°F
Ports (4)	.1/4" FNPT
Design Leak Rate	.1 x 10 <sup>-9</sup> ccs Helium
Flow Coefficient Cv	0.06
Outlet Pressure Rise	.075/100 PSIG
Weight	3.32 lbs.

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

Model Number	### Delivery Gauge			## Outlet Fittings	## CGA Inlet Fittings	## Accessories	## Options
	Max. Outlet Pressure PSIG	Range PSIG	Graduations PSIG				
610	25	30" Hg 0-30	1	00 1/4" FNPT	00 None	00 None	00 None
611	50	0-60	2	01 1/4" FNPT Chrome Diaphragm Valve	02 CGA 320	01 Panel Mount Kit	01 Captured Vent Fitting
612	100	0-200	5	02 1/4" FNPT Chrome Diaphragm Valve with 1/8" SS Swagelok	03 CGA 326	02 Helium Leak Certification	1/8" Stainless Steel Swagelok
613	250	0-400	10	81 1/8" Stainless Steel Swagelok	05 CGA 346	03 Panel Mount Kit and Certification	
614	500	0-1000	20	83 1/4" Stainless Steel Swagelok	06 CGA 350		
					08 CGA 540		
					09 CGA 580		
					10 CGA 590		
					13 CGA 296		