

310 Stainless Steel Single-Stage Regulator



This stainless steel single-stage high purity regulator is designed to prevent contamination of high purity systems and provide accurate regulation of corrosive, non-corrosive or toxic gases. For corrosive applications, all parts in this regulator exposed to the flowing media are constructed of 316 Stainless Steel and Teflon®. 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.

310 Features

- 316 Stainless Steel Bar Stock Body
- Metal to Metal Diaphragm Seal
- Convoluted Stainless Steel Diaphragm
- Threaded Bonnet for Panel Mounting
- Body is Threaded for Rear Bracket Mounting
- Captured Vent in Bonnet (1/16" FNPT)
- Electro Polished
- Ultrasonically Cleaned

310 Typical Applications

- Regulation of Corrosive Gases
- Gas Chromatography
- Diffusion Furnaces
- Research Sampling Systems

- Laser Gas Systems
- Process Analyzers
- CEM and EPA Protocol Standards

Materials of Construction

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

310 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 ⁻⁹ ccs Helium
Flow Coefficient Cv	0.06
Outlet Pressure Rise	0.75/100 PSIG
Weight	3.32 lbs.



*EZ Mount Regulator Bracket
See page 157 for more details.*

How to Order: Specify a number from each category

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Model Number	Max. Outlet Pressure PSIG	Delivery Gauge		Outlet Fittings	CGA Inlet Fittings	Accessories	Options	
		Range PSIG	Graduations PSIG					
310	25	30" Hg 0-30	1	00 1/4" FNPT	00 None	00 None	00 None	
311	50	0-100	2	66 1/4" MNPT Stainless Steel Needle Valve	20 CGA SS 320	01 Panel Mount Kit	01 Captured Vent Fitting 1/8" Stainless Steel	
312	100	0-200	5	67 1/4" MNPT Stainless Steel Diaphragm Valve	21 CGA SS 326	02 Helium Leak Certification	02 Swagelok	
313	250	0-400	10	68 1/4" FNPT Stainless Steel Needle Valve and 1/8" Swagelok	22 CGA SS 330	03 Panel Mount Kit and Certification		
				69 1/4" FNPT Stainless Steel Diaphragm Valve and 1/8" Swagelok	23 CGA SS 350			
				70 1/4" FNPT Stainless Steel Diaphragm Valve	24 CGA SS 580			
				81 1/8" Stainless Steel Swagelok	25 CGA SS 660			
				83 1/4" Stainless Steel Swagelok	30 CGA SS 240			