

320 Stainless Steel Two-Stage Regulator

This stainless steel high purity two-stage regulator is designed for corrosive and non-corrosive gases requiring precise and stable delivery pressure control. These regulators provide constant pressure regardless of inlet pressure fluctuations. This stainless steel regulator offers high corrosion resistance and wetted parts of 316 Stainless Steel and Teflon® for high purity applications. This regulator features a unique metal diaphragm seal. 1/16" FNPT captured vent ports are provided for both stages to allow for venting of hazardous gases in the event of a diaphragm failure. This regulator is designed to withstand internal vacuums during purging operations.



320 Features

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

320 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 1st Stage Electroless Nickel Plated Brass
 Bonnet 2nd Stage Electroless Nickel Plated Brass
 Seat Teflon®
 Seat Retainer 316 Stainless Steel
 Diaphragm 1st Stage Stainless Steel
 Diaphragm 2nd Stage Stainless Steel
 Gauge 2 1/2" Stainless Steel
 Filters (2) 316 Stainless Steel
 Valve Stem 316 Stainless Steel
 Valve Spring 316 Stainless Steel

320 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 0.05
 Outlet Pressure Rise 0.04/100 PSIG
 Weight 5 lbs.

How to Order: Specify a number from each category

Model Number	Max. Outlet Pressure PSIG	Delivery Gauge Range PSIG	Graduations PSIG	Outlet Fittings	CGA Inlet Fittings	Accessories	Options
320	25	30" Hg 0-30	1	00 1/4" FNPT	00 None	00 None	00 None
321	50	0-100	2	66 1/4" MNPT Stainless Steel Needle Valve	20 CGA SS 320	01 Panel Mount Kit	01 Captured Vent Fitting
322	100	0-200	5	67 1/4" MNPT Stainless Steel Diaphragm Valve	21 CGA SS 326	02 Helium Leak Certification	1/8" Stainless Steel
323	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	Swagelok
				69 1/4" FNPT 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		