



Model 3420 Series High-Purity Brass Line Regulator



Description

High-purity brass line regulator designed for analytical applications with non-corrosive gases.

Applications

- Point-of-use regulation of high-purity gases used in chromatography or other analytical applications (see table below for details)

Design Features/Components

- High purity nickel plated brass barstock bodies
- High purity 316 stainless steel diaphragms
- Metal to metal seals minimize diffusion of contaminants
- 2-1/2" delivery pressure gauge
- Equipped with outlet diaphragm valve
- 1/4" compression tube inlet/outlet connection
- Porous metal filter protects seat from contamination
- Bonnet threaded for panel mounting
- Body screw thread tapped for back mounting

Materials of Construction

Gauge:	Chrome plated brass
Body:	Nickel plated brass barstock
Bonnet:	Stainless steel
Diaphragm:	316 stainless steel
Seat:	PFA Teflon
Seals:	Metal to metal

Specifications

Maximum Inlet Pressure:	400 psig (2,760 kPa)
Maximum Flow Rate:	Model 3421: 180 SCFH (85 SLPM)
(At 400 psig, N ₂):	Model 3423: 630 SCFH (300 SLPM)
	Model 3425: 850 SCFH (400 SLPM)
Flow Capacity (Cv):	0.15
Operating Temperature:	-15°F to 165°F (-26°C to 74°C)
Porting (Regulator Body):	1/4" NPT Female
Porting Configuration:	1 High, 3 Low
Shipping Weight:	5 lbs

Gas Chromatography Detectors requiring the Model 3420 Series Line Regulator

Detector Type	Detection Level
Flame Ionization Detector (FID)	All levels
Thermal Conductivity Detector (TCD)	All levels
Nitrogen Phosphorus Detector (NPD)	All levels
Flame Photometric Detector (FPD)	All levels
Photoionization Detector (PID)	All levels
Helium Ionization Detector (HID)	All levels
Electrolytic Conductivity Detector (ELCD or Hall Detector)	Levels >50 ppm
Electron Capture Detector (ECD)	Levels >50 ppm

Ordering Information

Model Number	Delivery Pressure Range	Delivery Pressure Gauge	Description
3421	2-30 psig	30" vac-0-60 psig	3421 w/valve, 1/4" compression
3421-2	2-30 psig	30" vac-0-60 psig	3421 w/valve, 1/8" compression
3421-NV	2-30 psig	30" vac-0-60 psig	3421 no valve, 1/4" compression
3421-NV-2	2-30 psig	30" vac-0-60 psig	3421 no valve, 1/8" compression
3423	4-100 psig	30" vac-0-200 psig	3423 w/valve, 1/4" compression
3423-2	4-100 psig	30" vac-0-200 psig	3423 w/valve, 1/8" compression
3423-NV	4-100 psig	30" vac-0-200 psig	3423 no valve, 1/4" compression
3423-NV-2	4-100 psig	30" vac-0-200 psig	3423 no valve, 1/8" compression
3425	10-250 psig	0-400 psig	3425 w/valve, 1/4" compression
3425-2	10-250 psig	0-400 psig	3425 w/valve, 1/8" compression
3425-NV	10-250 psig	0-400 psig	3425 no valve, 1/4" compression
3425-NV-2	10-250 psig	0-400 psig	3425 no valve, 1/8" compression

Note: These regulators cannot be supplied with CGA connections

Options

Model Number	Description
ADP-0163-BO	Bonnet Vent Fitting to 1/8" Hose
ADP-0162-BO	Bonnet Vent Adapter to 1/8" FNPT
KIT-0204-SA	Bonnet Panel Mounting Kit
CON-0070-BO	Swagelok 1/4" Tube Fitting (Brass) (2 Required)
MSP-0012-XX	Inboard Helium Leak Rate Certification
MSP-0013-XX	Combination Inboard/Outboard Helium Leak Rate Certification