



## Model 3420A 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 chrome plated brass barstock bodies
- High purity 316 stainless steel diaphragms
- Metal to metal seals minimize diffusion of contaminants
- 2-1/2" delivery pressure gauge
- Available with outlet diaphragm valve
- 1/4" or 1/8" compression tube inlet/outlet connection
- 10 micron metal filter protects seat from contamination
- Bonnet threaded for panel mounting
- Body screw thread tapped for back mounting, 10-32 UNF
- Bonnet vent hole size: 1/8" NPTF

### Materials of Construction

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

### Specifications

Maximum Inlet Pressure:	3000 psig (2,760 kPa)
Maximum Flow Rate: (At 400 psig, N <sub>2</sub> ):	Model 3420A: 650 SCFH (305 SLPM) Model 3421A: 1100 SCFH (517 SLPM) Model 3423A: 2400 SCFH (1175 SLPM) Model 3425A: 300 SCFH (1410 SLPM)
Flow Capacity (Cv):	0.08
Operating Temperature:	-15°F to 140°F (-26°C to 60°C)
Porting (Regulator Body):	1/4" NPT Female
Porting Configuration:	2 High, 2 Low
Shipping Weight:	5 lbs

### Gas Chromatography Detectors requiring the Model 3420A 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	Model Number	Delivery Pressure Range	Delivery Pressure Gauge
3420A	0-15 psig	30"-0-30 psig	3423A	0-125 psig	30"-0-200 psig
3420-NV	0-15 psig	30"-0-30 psig	3423A-NV	0-125 psig	30"-0-200 psig
3420A-2*	0-15 psig	30"-0-30 psig	3423A-2	0-125 psig	30"-0-200 psig
3420A-NV-2*	0-15 psig	30"-0-30 psig	3423A-NV-2	0-125 psig	30"-0-200 psig
3421A	0-50 psig	30"-0-60 psig	3425A	0-250 psig	0-400 psig
3421A-NV	0-50 psig	30"-0-60 psig	3425A-NV	0-250 psig	0-400 psig
3421A-2*	0-50 psig	30"-0-60 psig	3425A-2	0-250 psig	0-400 psig
3421A-NV-2*	0-50 psig	30"-0-60 psig	3425A-NV-2	0-250 psig	0-400 psig

Note: These regulators cannot be supplied with CGA connections  
\* 1/8" compression NV = No outlet valve

### Options

Model Number	Description
CON-0069-SA	Bonnet Vent Adapter 1/4" TB x 1/8" MNPT
PMK-2N	Bonnet Panel Mounting Kit - 2 Nuts
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