



Model 3430 Series

Single-Stage High-Purity Stainless Steel Line Regulator



Description

High-purity stainless steel line regulators designed for analytical applications with non-corrosive or semi-corrosive gases.

Applications

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

Gas Chromatography Detectors requiring the Model 3230 Series Line Regulator

Detector Type	Detection Level
Electrolytic Conductivity Detector (ELCD or Hall Detector)	Levels <50 ppm
Electron Capture Detector (ECD)	Levels <50 ppm
Mass Selective Detector or Mass Spec (MSD or MS)	All levels
Atomic Emission Detector (AED)	All levels

Note: A small amount of polychlorotrifluoroethylene is added to the threads to facilitate assembly. For ECD, MS or AED applications where method detection limits are sub-ppm, it is recommended to use a No Lube (-NL) model.

Design Features/Components

- High-purity 316 stainless steel barstock body construction.
- High-purity 316 stainless steel diaphragms
- Metal to metal seals minimize diffusion of contaminants
- 2" delivery pressure gauge
- Bonnet ported and threaded to pipe gases away from work area
- Bonnet threaded for panel mounting
- Body screw thread tapped for back mounting
- Equipped with outlet diaphragm valve
- Porous metal filter protects seat from contamination
- 1/4" compression tube inlet/outlet connection (1/4" FPT optional)
- Additional low pressure port is included

Materials of Construction

Gauge:	316 stainless steel
Body:	316 stainless steel
Bonnets:	Stainless steel
Diaphragm:	316 stainless steel
Seat:	Teflon
Seals:	Metal to metal

Specifications

Maximum Inlet Pressure:	400 psig (2,760 kPa)
Maximum Flow Rate:	Model 3431: 180 SCFH (85 SLPM)
(At 400 psig, N ₂):	Model 3432: 630 SCFH (300 SLPM)
	Model 3433: 850 SCFH (400 SLPM)
Flow Capacity (Cv):	0.15
Operating Temperature:	-40°F to 165°F (-40°C to 74°C)
Porting (Regulator Body):	1/4" NPT Female
Porting Configuration:	1 High, 3 Low
Shipping Weight:	5 lbs

Ordering Information

Model Number	Delivery Pressure Range	Delivery Pressure Gauge
3431	2-30 psig	30" vac-0-60 psig
3431-NV (No Valve)	2-30 psig	30" vac-0-60 psig
3432	4-100 psig	30" vac-0-200 psig
3432-NV (No Valve)	4-100 psig	30" vac-0-200 psig
3433	10-250 psig	0-400 psig
3433-NV (No Valve)	10-250 psig	0-400 psig

Note: These regulators cannot be supplied with CGA connections rated higher than 400 psig.

Options

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