



## Model 3430 Series 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 <sub>2</sub> ): | 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 |