



Model 3810A Series Dual-Stage High-Purity Stainless Steel Regulator



Description

High-purity regulators designed for analytical applications using non-corrosive or semi-corrosive gases.

Gas Chromatography Detectors requiring the Dual-Stage Model 3810A Series 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.

Applications

- Supply of carrier gas/detector support gas for a variety of gas chromatography applications (see table below for details).
- Supply of calibration standards to on-line process analyzers, emission monitoring systems, etc.
- Supply of high-purity non-corrosive or semi-corrosive gases to applications requiring constant delivery pressure.

Design Features/Components

- High-purity 316 stainless steel barstock body
- High-purity 316 stainless steel diaphragm
- Metal to metal seals minimize diffusion of contaminants
- 2" inlet and delivery pressure gauges
- Bonnet ported and threaded to pipe gases away from work area
- Equipped with outlet diaphragm valve
- 1/4" compression tube outlet connection
- 10 micron metal filter protects seat from contamination
- Optional interstage relief valve available
- Panel mountable, front and back bonnet threaded
- Bonnet vent hole size: 1/8" NPTF

Materials of Construction

Gauges:	316 stainless steel
Body:	316 stainless steel
Bonnets:	Chrome plated brass barstock
Diaphragms:	316 stainless steel
Seats:	1st Stage – Teflon 2nd Stage – Teflon
Seals:	Metal to metal

Specifications

Maximum Inlet Pressure:	3000 psig (20,700 kPa)
Maximum Flow Rate:	Model 3810A: 1200 SCFH (564 SLPM) Model 3813A: 960 SCFH (451 SLPM) Model 3816A: 1400 SCFH (658 SLPM)
(At 2000 psig, N ₂)	
Flow Capacity (Cv):	0.06
Operating Temperature:	-40°F to 140°F (-40°C to 60°C)
Porting (Regulator Body):	1/4" NPT Female
Porting Configuration:	2 High, 3 Low, 1 Interstage
Shipping Weight:	5 lbs

Ordering Information

Part Number *	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
SEQ3811ACGA	0-15 psig	30" vac-0-30 psig	0-4000 psig
SEQ3813ACGA	0-50 psig	30" vac-100 psig	0-4000 psig
SEQ3810ACGA	0-125 psig	30" vac-0-200 psig	0-4000 psig
SEQ3816ACGA	0-250 psig	0-400 psig	0-4000 psig
SEQ3818ACGA	0-500 psig	0-1000 psig	0-4000 psig

For No Lube applications, specify Part Number SEQ38xxANLCGA.

*Note: For ordering, replace letters "CGA" with the valve outlet CGA number for the gas cylinder you are using. Some CGA limitations may apply.

Options

Part Number	Description
SEQ4754CGA	Tee Purge Assembly
SEQ4774CGA	Cross Purge Assembly
SEQCON0069SA	Bonnet Vent Adapter 1/4" TB x 1/8" MNPT (2 Required)
SEQPMK2N	Bonnet Panel Mounting Kit - 2 Nuts
SEQOPN0301SA	Swagelok 1/4" Tube Fitting (Stainless Steel)
SEQMSP0012XX	Inboard Helium Leak Rate Certification
SEQMSP0013XX	Combination Inboard/Outboard Helium Leak Rate Certification