



Model 3120 Series Dual-Stage High-Purity Brass Regulator



Description

High-purity brass regulators designed for use with analytical applications. For use with non-corrosive gases.

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.
- High purity applications with non-corrosive gases requiring a constant delivery pressure.

Gas Chromatography Detectors requiring the Dual-Stage Model 3120 Series 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

Design Features/Components

- High-purity nickel plated brass barstock body
- High-purity 316 stainless steel diaphragm
- Metal to metal seals minimize diffusion of contaminants
- 2-1/2" inlet and delivery pressure gauges
- Equipped with outlet diaphragm valve
- Bonnet ported and threaded to pipe gases away from work area
- 1/4" compression tube outlet connection
- Porous metal filter protects seat from contamination
- Panel mountable
- Optional interstage relief valve available

Materials of Construction

Gauges:	Chrome plated brass
Body:	Nickel plated brass barstock
Bonnets:	Stainless steel
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 3121: 130 SCFH (60 SLPM) Model 3122: 300 SCFH (140 SLPM) Model 3126: 500 SCFH (235 SLPM) Model 3128: 500 SCFH (235 SLPM)
(At 2500 psig, N ₂)	
Flow Capacity (Cv):	0.05
Operating Temperature:	-40°F to 165°F (-40°C to 74°C)
Porting (Regulator Body):	1/4" NPT Female
Porting Configuration:	2 High, 2 Low, 1 Interstage
Shipping Weight:	5 lbs

Ordering Information

Model Number*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3121-CGA	2-30 psig	30" vac-0-60 psig	0-3000 psig
3122-CGA	4-100 psig	30" vac-0-200 psig	0-3000 psig
3126-CGA	10-250 psig	0-400 psig	0-3000 psig
3128-CGA	15-350 psig	0-1000 psig	0-3000 psig

*Note: Some CGA limitations may apply.

Options

Model Number	Description
4753-CGA	Tee Purge Assembly
4774-CGA	Cross Purge Assembly
ADP-0162-BO	Bonnet Venting Adapter to 1/8" NPT (2 Required)
ADP-0163-BO	Bonnet Vent Fitting to 1/8" Hose Barb (2 Required)
KIT-0204-SA	Bonnet Panel Mounting Kit
CON-0070-BO	Swagelok 1/4" Tube Fitting (Brass)
QCA(CGA)-4-B	Cylinder Quick Coupler Inlet
MSP-0012-XX	Inboard Helium Leak Rate Certification
MSP-0013-XX	Combination Inboard/Outboard Helium Leak Rate Certification