



## Model 3120A 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 3120A 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
- 10 micron metal filter protects seat from contamination
- Panel mountable, front bonnet and back bonnet threaded
- Optional interstage relief valve available
- Bonnet vent holes size: 1/8" FNPT

### Materials of Construction

Gauges:	Chrome plated brass
Body:	Chrome plated brass barstock
Bonnets:	Chrome plated brass
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 3120A: 480 SCFH (225 SLPM) Model 3121A: 960 SCFH (451 SLPM) Model 3122A: 1200 SCFH (564 SLPM) Model 3126A: 1400 SCFH (658 SLPM) Model 3128A: 2000 SCFH (940 SLPM)
(At 2500 psig, N <sub>2</sub> )	
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

Model Number*	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3120A-CGA	0-15 psig	30"-0-30 psig	0-4000 psig
3121A-CGA	0-50 psig	30" vac-0-100 psig	0-4000 psig
3122A-CGA	0-125 psig	30" vac-0-200 psig	0-4000 psig
3126A-CGA	0-250 psig	0-400 psig	0-4000 psig
3128A-CGA	10-500 psig	0-1000 psig	0-4000 psig

\*Note: Some CGA limitations may apply.

### Options

Model Number	Description
4753-CGA	Tee Purge Assembly
4774-CGA	Cross Purge Assembly
CON-0069-SA	Bonnet Venting Adapter 1/4" TB x 1/8" MNPT (2 Required)
KIT-0204-SA	Bonnet Panel Mounting Kit
CON-0070-BO	Swagelok 1/4" Tube Fitting (Brass)
MSP-0012-XX	Inboard Helium Leak Rate Certification
MSP-0013-XX	Combination Inboard/Outboard Helium Leak Rate Certification