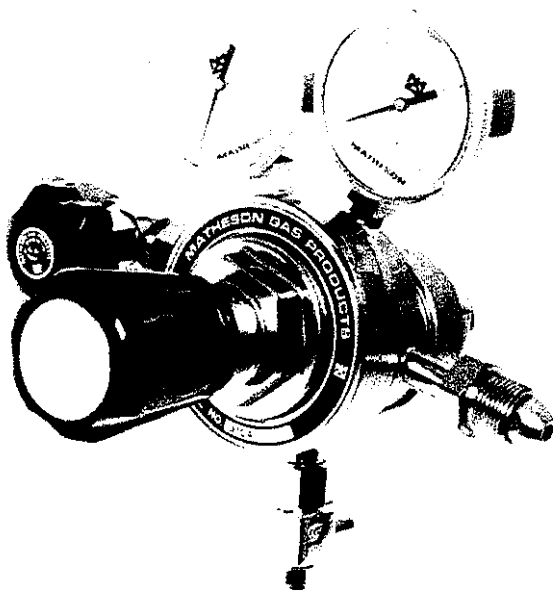


# Regulators & Gauges

## Model 3100 Series

### Brass Dual Stage High Purity Regulator



The Model 3100 Series Regulators are designed for high purity gases and incorporate metal diaphragms to reduce the effects of diffusion and outgassing. These regulators provide the sensitive pressure control demanded by analytical instrument users.

### Applications

The Model 3100 Series Regulators are recommended for applications where precise pressure control is required regardless of pressure changes at the inlet of the regulator. Typical applications include use of these regulators for carrier and sampling gases, gas chromatography, and related analytical techniques. The Model 3100 Series is compatible with gases that are non-corrosive in nature and gases that are compatible with materials in the process stream.

### Design Features

- Can be helium leak certified to  $2 \times 10^{-8}$  scc/sec
- Bonnet ported and threaded to pipe gases away from work area
- Brass body with stainless steel diaphragms
- Porous metal filter at inlet to the regulator
- Interstage relief valve to protect second stage from over pressurization
- Equipped with an outlet diaphragm valve
- 1/4" Gyrolok® compression tube outlet standard

### Materials of Construction

Body:	Chrome-plated Forged Brass
Bonnets:	Chrome-plated Forged Brass
Diaphragms:	302 Stainless Steel
Seats:	Kel-F® 1st Stage High Pressure Viton® 2nd Stage Low Pressure
Seal:	Viton®

### Specifications

Maximum Inlet Pressure:	3000 psig (20,700 kPa)
6239 Relief Valve	650 psig (non-adjustable)
Maximum Flow Rate:*	Model 3102: 150 SCFH (71 SLPM) Model 3104: 630 SCFH (300 SLPM)
(At 2000 psig, N <sub>2</sub> )	
Operating Temperature:	0 to 150°F (-17 to 65°C)
Body Porting:	1/4" NPT female
Porting Configuration:	2 High, 2 Low, 1 Interstage
Shipping Weight:	8 lbs

### Models Available

Model Number	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
3102C-CGA	0-15 psig	-30°-0-30 psig	0-3000 psig
3104C-CGA	4-100 psig	0-200 psig	0-3000 psig
3104C-CP-CGA*	4-100 psig	0-200 psig	0-3000 psig
3106C-CGA	10-250 psig	0-400 psig	0-3000 psig

\* Low Temperature Model (Down to -40°C)

### Options

Description	Model Number	Reference
Tee Purge Assembly	4753-CO-A	page 326
Cross Purge Assembly	4774-CO-A	page 326
Swagelok® 1/4" Tube Fitting	CON-0070-BO	
Cylinder Quick Coupler Inlet	QC(CGA)-4-B	page 331
Inboard Helium Leak Rate Certification	MSP-0012-XX	page 228
Combination Inboard/Outboard Helium Leak Rate Certification	MSP-0013-XX	page 228
Bonnet Venting Kits (2 required)	KIT-0202-BK	

\* For flow diagrams refer to page 268.

Please order Matheson Tech-Brief TB-128 for additional information.