

BRASS HIGH PURITY 1-STAGE REGULATOR Series 3100

DESCRIPTION

The Series 3100 single stage regulators are designed and constructed for both high purity, low volume use and general purpose applications. They provide outstanding performance, yet they are rugged and versatile enough for the laboratory or plant. The relative low cost of these units has established them as the pressure regulator of choice in many plants and laboratories.

FEATURES

- Small internal volume - less than 5 cc.
- High purity diffusion resistant, metal diaphragm construction.
- Encapsulated seat.
- Diffusion resistant, brass diaphragm packless control valve installed on outlet as standard.
- Designed to pass an inboard helium leak-rate test of 1×10^{-9} cc per sec.
- All parts ultrasonically cleaned prior to assembly.
- Rear panel mounting holes.

APPLICATIONS

The 3100 Series regulators are ideally suited for use with small cylinders of Research Purity or Ultra High Purity gases. The small internal volume and high purity design result in more efficient use of expensive materials because it takes less gas to fill the internal cavity. They are also useful for less critical pressure reduction applications, where the precise control of pressure or flow is not required.

Special 3103A model for acetylene.



SPECIFICATIONS

Max. Inlet Pressure: 3000 psig
Operating Temp. Range: -40° to +185°F.
Flow Coefficient (C_v): 0.08 Standard, 0.2 optional **
Inlet and Outlet: 1/4" NPT female

MATERIALS OF CONSTRUCTION

Body: brass
Poppet: 316L stainless steel
Nozzle: brass
Seat: Teflon®
Diaphragm: stainless steel
Diaphragm Seal: Teflon®
Inlet Filter: stainless steel
Bonnet: nickel plated aluminum
Gauges: brass
Knob: aluminum - black anodized

HOW TO ORDER***

| Model Number | Del. Press. Range psig | Del. Press. Gauge psig | Inlet Press. Gauge psig |
|---------------|---------------------------|---------------------------|----------------------------|
| 3101-25-CGA* | 5-25 | 0-60 | 0-4000 |
| 3101-50-CGA* | 5-50 | 0-100 | 0-4000 |
| 3101-100-CGA* | 10-100 | 0-200 | 0-4000 |
| 3101-250-CGA* | 10-250 | 0-400 | 0-4000 |
| 3101-500-CGA* | 100-500 | 0-1000 | 0-4000 |
| 3102-25-CGA* | 5-25 | 0-60 | 0-1000 |
| 3102-50-CGA* | 5-50 | 0-100 | 0-1000 |
| 3102-100-CGA* | 10-100 | 0-200 | 0-1000 |
| 3102-250-CGA* | 10-250 | 0-400 | 0-1000 |
| 3103A-15-510 | 0-15 | 0-30 redline | 0-400 |
| 3103-25-CGA* | 5-25 | 0-60 | 0-400 |
| 3103-50-CGA* | 5-50 | 0-100 | 0-400 |
| 3103-100-CGA* | 10-100 | 0-200 | 0-400 |

*Specify CGA Connection Number when ordering.

** Add "HF" to basic model number (i.e., 3101HF -25-CGA).

***For panel mounting bonnet add "PM" to base number (i.e., 3101PM-25-CGA).

OUTLET OPTIONS

| | P/N Suffix |
|--------------------------|------------|
| No Outlet Valve | NV |
| 1/4" Compression Fitting | T4F |
| 1/8" Compression Fitting | T2F |
| 1/4" NPT Male | P4M |
| 1/4" Hose Barb | 4HB |



EZ3100 Bracket (see page 91).