



UHP Two Stage Bar Stock Regulators

The AGC brass bar stock regulators are designed to regulate ultra high purity non-corrosive gases commonly used in our gas chromatograph applications requiring both high reliability and diffusion resistance. The metal to metal diaphragm to body seal design assures maximum diffusion resistance. Convolute stainless steel diaphragms provide enhanced performance and excellent accuracy. The two-stage design provides constant pressure control regardless of changes in cylinder (inlet) pressure.

Specifications

- Maximum Inlet Pressure: 3000 psig
- Inlet Pressure Gauge (dual scale): 0–4000 psig / 0–275 bar
- Delivery Pressure Range: See Table 1
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- Filters: 40 micron
- Gauge Size: 2" Dial
- Operating Temperature Range: -4°C to 60°C
- Flow Coefficient:
- Regulator: Cv = 0.05
- Outlet Valve: Cv = 0.17
- Bonnet Vent Connection: 1/16" NPT female
- Inlet Connection: CGA 296, 320, 326, 346, 350, 540, 580, 590, or 660 as ordered
- Outlet Connection: 1/4" NPT female
- Supply Pressure Effect: 0.04 psi per 100 psi
- Approximate Weight: 2.3 Kg.

Table 1

Delivery Pressure		
Range (psig)	Gauge (dual scale) (psig)	(bar)
2-30	-30" Hg-0-60	0-4
4-75	-30" Hg-0-100	0-7
10-150	-30" Hg-0-200	0-14
20-300	0-400	0-27
30-500	0-600	0-41

To discuss which part may be suitable for your application or for further information please contact:

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Standard Features

- Metal to Metal Diaphragm to Body Seal (without back-up o-ring) assures maximum diffusion resistance.
- High Purity Regulator Design permits vacuum purging of regulator.
- Diaphragm Seal Outlet Valve maintains gas purity.
- Filter traps foreign matter, extends regulator life and reduces maintenance.
- 1/16" NPT Female Bonnet Vent Ports allow bonnets to be connected to a vent line or disposal system as a precaution in the unlikely event of a diaphragm failure.

Optional Features

- Mounting Ring permits regulator to be panel mounted.
- Quick Mount Assembly provides for convenient and safe wall-mounted installation.
- Internal (Inboard) Helium Leak Test and Test Report determines inboard leak rate of gas from regulator to atmosphere; test report certifies leak rate of less than 2×10^{-8} sccs air equivalent.
- External (Outboard) Helium Leak Test and Test Report determines outboard leak rate of gas from regulator to atmosphere; test report certifies leak rate of less than 5×10^{-7} sccs air equivalent.

Materials of Construction

Body, Bonnet and Outlet Valve:
Brass Bar Stock
Gauges: Brass
Filter: Sintered Bronze
Other Metal Parts Exposed to Gas:
Brass and Stainless Steel
Seats: PCTFE
Friction Sleeves: Teflon®
Diaphragms: Type 316 Stainless Steel

