

CHROME-PLATED BRASS BAR STOCK LINE REGULATORS FOR ULTRA HIGH PURITY NON-CORROSIVE GASES (MODEL APL)

The Model APL line regulator is specially suited for point-of-use gas delivery systems requiring high leak integrity and minimal internal volume for maintaining guaranteed gas purity levels. The chrome-plated surfaces provide a polished appearance for ease of cleaning.



APL Regulator

STANDARD FEATURES

- Type 316L Stainless Steel Diaphragm minimizes diffusion of air into regulator and eliminates "off gassing" associated with elastomeric diaphragms, thus maintaining gas purity.
- High Purity Regulator Design permits vacuum purging of regulator.
- Low Internal Volume facilitates purging and reduces contamination potential.
- In-line Porting permits direct installation of regulator in piping system.
- Cartridge Seat Assembly provides for ease of maintenance and repair.
- Filter in Seat Assembly traps foreign matter, extends regulator life and reduces maintenance.
- Threaded Holes in Rear of Regulator permit front panel mounting.
- 1/8" NPT Female Bonnet Vent Port allows bonnet 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.
- 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.

SPECIFICATIONS

Maximum Inlet Pressure: 3000 psig
 Delivery Pressure Range: See Table I
 Delivery Pressure Gauge: See Table I
 Filter: 10 micron
 Gauge Size: 2" Dial
 Operating Temperature Range:
 -40°F to +140°F
 Flow Coefficient: $C_v = 0.08$
 Internal Volume:
 Regulator (body only): 5.0 cc
 Inlet and Outlet Connections:
 1/4" NPT female
 Approximate Weight: 2 lbs.

MATERIALS OF CONSTRUCTION

Body and Bonnet:
 Chrome-Plated Brass Bar Stock
 Gauge: Chrome-Plated Brass
 Filter: Nickel-Plated Sintered Bronze
 Other Metal Parts Exposed to Gas:
 Brass and Stainless Steel
 Seats and Seals: Teflon®
 Diaphragm: Type 316L Stainless Steel

TABLE I

Part No.	Delivery Pressure		
	Range (psig)	Gauge (dual scale) (psig)	(bar)
APL-30	2-30	-30"Hg-0-60	-1-0-4
APL-75	4-75	-30"Hg-0-100	-1-0-7
APL-150	10-150	-30"Hg-0-200	-1-0-14
APL-300	20-300	0-400	0-27
APL-500	30-500	0-600	0-41

OPTIONAL EQUIPMENT

Equipment	Part No.
Panel Mounting Ring*	0202-3116
Inboard Helium Leak Test and Test Report	HT1000
Outboard Helium Leak Test and Test Report	HT1001

* If selected, these items are not installed on the regulator. They are shipped as separate items.