

Models AG3820, AG3830

Ultra High Purity, High Flow Line Regulators

Capable of flow rates up to 1500 scfh at inlet pressures of 500 psig, these line regulators are ideal for high flow delivery systems requiring high leak integrity and guaranteed gas purity levels. Model AG3820 is suitable for non-corrosive service, while Model AG3830 is designed for corrosive gas applications.

Standard Features

- 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.
- In-line Porting permits direct installation of regulator in piping system.
- 2½" Gauge reads easily for more precise settings.
- Threaded Holes in Rear of Regulator permit front panel mounting.

Optional Features

- Mounting Ring permits regulator to be panel mounted (AG3830 Model only)
- Compression Fittings installed in inlet and outlet ports allow connection to ¼" tubing.
- Regulator mounting plate allows for easy mounting of regulator to wall or panel.
- 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

Gauge Size: 2½" Dial

Operating Temp. Range: -40°F to 140°F

Flow Coefficient:

AG3820: $C_v = 0.4$

AG3830: $C_v = 0.6$

Inlet and Outlet Connections:

¼" NPT female

Approximate Weight: 4 lbs.

Materials of Construction

Body:

AG3820: Brass Bar Stock

AG3830: Type 316 SS Bar Stock

Gauge:

AG3820: Brass

AG3830: Type 316 Stn. Stl.

Bonnet:

AG3820: Brass

AG3830: 300 Series Stn. Stl.

Other Metal Parts Exposed to Gas:

AG3820: Brass & Stn. Stl.

AG3830: Type 316 Stn. Stl.

Seat:

AG3820: Teflon®

AG3830: PCTFE

Diaphragm:

AG3820: Type 302 Stn. Stl.

AG3830: Type 316 Stn. Stl.

Seals: Teflon®



AG3820 Regulator



AG3830 Regulator
with Optional Mounting Plate

Table I

Part Number		Delivery Pressure		
Brass	Stainless Steel	Range (psig)	Gauge (dual scale) (psig)	(bar)
AG3820-30	AG3830-30	4-30	0-60	0-4
AG3820-75	AG3830-75	6-75	0-100	0-7
AG3820-150	AG3830-150	10-150	0-200	0-14
-----	AG3830-250	20-250	0-400	0-27
AG3820-300	-----	20-300	0-400	0-27

Optional Equipment

Equipment	Part No.
Panel Mounting Ring for Model AG3830*	PM3803
Regulator Mounting Plate and Hardware*	RP2
Inboard Helium Leak Test and Test Report	HT1000
Outboard Helium Leak Test and Test Report	HT1001
Compression Fittings (two required)*	
¼" compression for Model AG3820	SG6704
¼" compression for Model AG3830	SG6714

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