

AG3850, AG3910 Series

High Inlet Pressure, High Delivery Pressure Regulators

These single-stage, piston sensed, pressure regulators are designed for use with inlet pressures up to 5000 psig; such as required for use on 3500 psig (3K) and 4500 psig (HC-500) cylinders. Constructed of either brass or stainless steel, they are available in both cylinder and line configurations.

These regulators are commonly used in high pressure sampling systems, calibration systems, aircraft service and test stand equipment.



AG3850 Regulator

Standard Features

- High Delivery Pressures up to 2500 psig.
- Piston Sensor Design ensures safe reliable service.
- Filter traps foreign matter, extends regulator life and reduces maintenance.
- Diaphragm Seal Outlet Valve provides for on/off flow control (cylinder regulators only).
- 1/16" NPTF 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
- Captured Venting Configuration provides 1/16" NPTF vent port and stem packing allowing for complete capturing of bonnet when connected to a vent line or disposal system.

Specifications

Maximum Inlet Pressure: 5000 psig

Inlet Pressure Gauge:

Cylinder Regulators: 0–5000 psig

Line Regulators: None

Delivery Pressure Range: See Tables I & II

Delivery Pressure Gauge: See Tables I & II

Filter: 40 micron

Gauge Size: 2" Dial

Operating Temp. Range: -15°F to 140°F

Flow Coefficient:

Regulator: Cv = 0.06

Outlet Valve: Cv = 0.17

Inlet Connections:

Cylinder Regulators: CGA 347, 350, 580, 680 or 695 as ordered

Line Regulators: 1/4" NPT female

Outlet Connection: 1/4" NPT female

Approximate Weight: 3 lbs.

Materials of Construction

Body and Outlet Valve:

AG3850: Brass Bar Stock

AG3910: Type 316 SS Bar Stock

Gauges:

AG3850: Brass

AG3910: Type 316 SS

Bonnet:

AG3850: Brass Bar Stock

AG3910: 300 Series SS

Other Metal Parts Exposed to Gas:

AG3850: Brass and Stn. Stl.

AG3910: Type 316 Stn. Stl.

Seat: Teflon®

Seals: Viton® and Teflon®

Outlet Valve:

Seat: PCTFE

Diaphragm: Type 316 Stn. Stl.

Table I, AG3850 Series (Brass)

Part No.	Type	Delivery Pressure		
		Range (psig)	Gauge (dual scale) (psig)	(bar)
AG3850-(CGA)	Cylinder	50–800	0–1000	0–69
AG3851-(CGA)	Cylinder	100–1500	0–2000	0–138
AG3852-(CGA)	Cylinder	200–2500	0–3000	0–207
AG3853	Line	50–800	0–1000	0–69
AG3854	Line	100–1500	0–2000	0–138
AG3855	Line	200–2500	0–3000	0–207

Table II, AG3910 Series (Stainless Steel)

Part No.	Type	Delivery Pressure		
		Range (psig)	Gauge (dual scale) (psig)	(bar)
AG3910-(CGA)	Cylinder	50–800	0–1000	0–69
AG3911-(CGA)	Cylinder	100–1500	0–2000	0–138
AG3912-(CGA)	Cylinder	200–2500	0–3000	0–207
AG3913	Line	50–800	0–1000	0–69
AG3914	Line	100–1500	0–2000	0–138
AG3915	Line	200–2500	0–3000	0–207

Where "(CGA)" is indicated above, insert appropriate Compressed Gas Association connection number to complete the part number. Example: AG3850–347 or AG3910–347. Order by complete part number.

Optional Equipment

Equipment	Part No.
Panel Mounting Ring*	PM3803
Captured Venting Configuration:	
AG3850 Series	SG5651
AG3910 Series	SG5650

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