

AG3840, AG3900 Series

High Delivery Pressure Regulators

These single-stage, piston sensed, pressure regulators are designed for applications requiring very high delivery pressures (up to 2500 psig). 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.



AG3900 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: 3000 psig

Inlet Pressure Gauge (dual scale):

Cylinder Regulators:
0–4000 psig / 0–275 bar
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 Temperature Range:
-15°F to 140°F

Flow Coefficient:
Regulator: Cv = 0.06
Outlet Valve: Cv = 0.17

Inlet Connections:

Cylinder Regulators:
AG3840: CGA 320, 326, 346,
350, 540, 580, or 590 as ordered
AG3900: CGA 290, 320, 326,
346, 350, 540, 580, or 590 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:

AG3840: Brass Bar Stock
AG3900: Type 316 SS Bar Stock

Gauges:

AG3840: Brass
AG3900: Type 316 SS

Bonnet:

AG3840: Brass Bar Stock
AG3900: 300 Series SS

Other Metal Parts Exposed to Gas:

AG3840: Brass and Str. Stl.
AG3900: Type 316 Str. Stl.

Seat: Teflon®

Seals: Viton® and Teflon®

Outlet Valve:

Seat: PCTFE

Diaphragm: Type 316 Stainless Steel

Table I, AG3840 Series (Brass)

Part No.	Type	Delivery Pressure		
		Range (psig)	Gauge (dual scale) (psig)	(bar)
AG3840-(CGA)	Cylinder	50–800	0–1000	0–69
AG3841-(CGA)	Cylinder	100–1500	0–2000	0–138
AG3842-(CGA)	Cylinder	200–2500	0–3000	0–207
AG3843	Line	50–800	0–1000	0–69
AG3844	Line	100–1500	0–2000	0–138
AG3845	Line	200–2500	0–3000	0–207

Optional Equipment

Equipment	Part No.
Panel Mounting Ring*	PM3803
Safety Mounting Brackets*	See page 62
Captured Venting Configuration:	
AG3840 Series	SG5651
AG3900 Series	SG5650

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

Table II, AG3900 Series (Stainless Steel)

Part No.	Type	Delivery Pressure		
		Range (psig)	Gauge (dual scale) (psig)	(bar)
AG3900-(CGA)	Cylinder	50–800	0–1000	0–69
AG3901-(CGA)	Cylinder	100–1500	0–2000	0–138
AG3902-(CGA)	Cylinder	200–2500	0–3000	0–207
AG3903	Line	50–800	0–1000	0–69
AG3904	Line	100–1500	0–2000	0–138
AG3905	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: AG3840–580 or AG3900–580. Order by complete part number.