

SG3600 Series

Ultra High Pressure Regulators

These piston-type regulators are designed for use on 6000 psig (6K) cylinders. The stainless steel models are designed for applications requiring inlet pressures up to 10,000 psig. Both brass and stainless steel models are available as line regulators.

Warning: Self-relieving regulators should not be used in a confined area or with flammable gases. Injury or death may result.

Standard Features

- Large Low-Torque Handle allows easy adjustment of delivery pressure.
- Filter traps foreign matter, extends regulator life and reduces maintenance.
- Outlet Metering Valve provides flow control (cylinder regulators only).
- Self-Relieving Models automatically vent downstream pressure should it exceed delivery pressure setting and permits operator to reduce pressure setting by venting downstream pressure through hand-knob.

Optional Features

- Mounting Ring permits regulator to be panel mounted.

Specifications

Maximum Inlet Pressure: See Tables

Inlet Pressure Gauge: See Tables

Delivery Pressure Range: See Tables

Delivery Pressure Gauge: See Tables

Gauge Size: 2 1/2" Dial

Operating Temp. Range: -65°F to 140°F

Flow Coefficient:

Regulator: Cv = 0.06

Outlet Valve: Cv = 0.45

Inlet Connection:

Self-Relieving Cylinder Regulators:

CGA 347, 677, 680 or 702 as ordered

Non-Relieving Cylinder Regulators:

CGA 347, 677, 680, 695, 701*,

702 or 703 as ordered

Line Regulators: 1/4" NPT female

Outlet Connection:

Cylinder Regulators:

1/4" NPT male (on outlet valve)

Line Regulators: 1/4" NPT female

Supply Pressure Effect: 1.0 psi per 100 psi

Approximate Weight: 7 lbs

* Special cleaning for oxygen service is required if inlet pressure exceeds 3000 psig and/or CGA 701 is requested. See Optional Equipment Table.

Optional Equipment

Equipment	Part No.
Panel Mounting Ring	PM3804
Oxygen Cleaning for inlet pressures above 3000 psig (required for CGA 701)	OC100

Materials of Construction

Body and Gauges: See Tables

Outlet Valve: Type 316 Stainless Steel

Bonnet:

Brass Regulators: Brass

Stainless Steel Regulators:

Electroless Nickel-Plated Brass

Other Metal Parts Exposed to Gas:

Brass Regulators: Brass and Stn. Stl.

Stainless Steel Regulators:

Type 303 and Type 316 Stn. Stl

Seat: PCTFE

Seals:

Regulator: Viton®

Outlet Valve: PTFE



SG3610
Cylinder Regulator



SG3611
Line Regulator

Table I, Non-Relieving Cylinder Regulators

Part No.	Body Material	Gauge Material	Inlet Pressure (psig)		Delivery Pressure (psig)	
			Max.	Gauge	Range	Gauge
SG3610-(CGA)	Brass	Brass	6000	0-7500	400-6000	0-7500
SG3612-(CGA)	Brass	Brass	6000	0-7500	300-3500	0-4000
SG3614-(CGA)	Brass	Brass	6000	0-7500	200-1500	0-2000
SG3620-(CGA)	Type 303 SS	Type 316 SS	10,000	0-10,000	300-6000	0-7500
SG3622-(CGA)	Type 303 SS	Type 316 SS	10,000	0-10,000	200-3500	0-4000

Table II, Self-Relieving Cylinder Regulators

Part No.	Body Material	Gauge Material	Inlet Pressure (psig)		Delivery Pressure (psig)	
			Max.	Gauge	Range	Gauge
SG3600-(CGA)	Brass	Brass	6000	0-7500	400-6000	0-7500
SG3602-(CGA)	Brass	Brass	6000	0-7500	300-3500	0-4000
SG3604-(CGA)	Brass	Brass	6000	0-7500	200-1500	0-2000

Where "(CGA)" is indicated in Tables I and II, insert appropriate Compressed Gas Association connection number to complete the part number. For example: SG3610-677. Order by complete part number.

Table III, Line Regulators

Part No.	Body Material	Gauge Material	Inlet Pressure (psig)		Delivery Pressure (psig)	
			Max.	Gauge	Range	Gauge
SG3611	Brass	Brass	6000	None	400-6000	0-7500
SG3613	Brass	Brass	6000	None	300-3500	0-4000
SG3621	Type 303 SS	Type 316 SS	10,000	None	300-6000	0-7500
SG3623	Type 303 SS	Type 316 SS	10,000	None	200-3500	0-4000