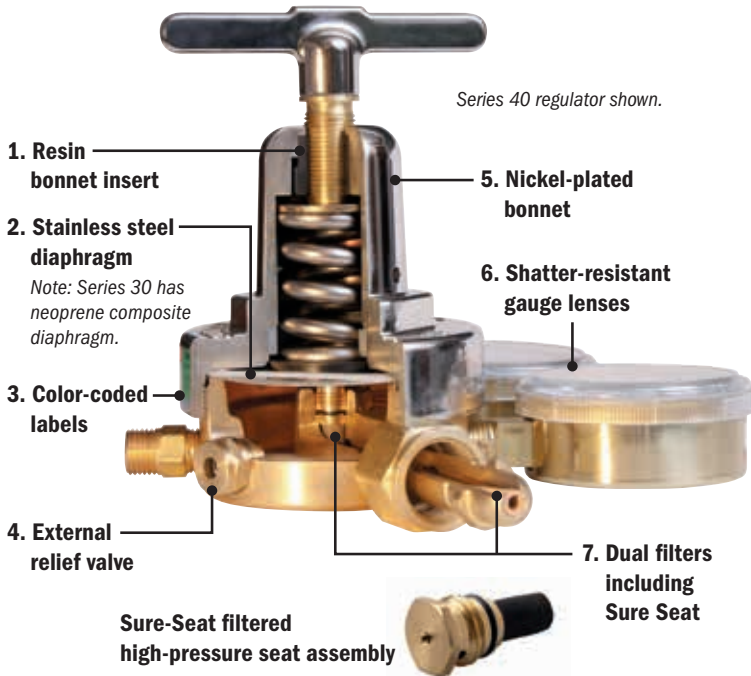


Regulators



Construction features

- 1 Resin bonnet insert**
Allows smooth, easy adjustment even at high-pressure levels.
- 2 Stainless steel diaphragm**
Resists corrosion, leaking and freeze-up if used with liquid (cryogenic) gases for extended service life.
Note: Series 30 has neoprene composite diaphragm.
- 3 Color-coded labels**
Supply performance capabilities, easy gas service identification and technical information.
- 4 External relief valve**
Protects regulator from damage due to inadvertent high-pressure surge. Relief valve will release excessive pressure and automatically reset.
- 5 Nickel-plated bonnet**
Along with brass body protect against corrosion.
- 6 Shatter-resistant gauge lenses**
2.5-inch corrosion-resistant polished brass gauges with shatter-resistant polycarbonate lenses.
Note: Series 30 has 2-inch painted steel gauges.
- 7 Dual filters including Sure Seat™**
Protect high-pressure seat from debris for reliable operation and long service life.

Regulators

Flow data may be obtained from MillerWelds.com/flowdata

Stock Number Definition (Example: 40-15-510)

40 Series
15 Maximum outlet pressure
510 Cylinder CGA connection

Heavy-Duty Single-Stage



Series 40™



Series 40 regulator shown with HB190 Hard Hat™ gauge/regulator guard.

Brass construction for dependable service in corrosive atmospheres.

Series 40 single-stage regulators comprise a complete line of versatile regulators for welding, cutting, heating and other industrial applications. Heavy-duty construction and simplified design provide high gas flow and longer trouble-free operation. Stainless steel diaphragm allows use with liquid gases.

Stock Number	Gas	Delivery Pressure	Gauges (2.5 inch/64 mm)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
40-175-540 40-175-540S*	Oxygen	0-175 PSIG 0-12 Bar	4000 PSIG 276 Bar	200 PSIG 14 Bar	CGA 540	9/16"-18 RH "B"	3000 PSIG 207 Bar
40-275-540		0-275 PSIG 0-19 Bar		400 PSIG 28 Bar			
40-15-300 40-15-300S*	Acetylene	0-15 PSIG 0-1 Bar	400 PSIG 28 Bar	30 PSIG 2 Bar	CGA 300	9/16"-18 LH "B"	400 PSIG 28 Bar
40-15-510 40-15-510S*							
40-50-510		LP Gas (Propane, Propylene or Natural Gas)	0-50 PSIG 0-3 Bar	400 PSIG 28 Bar	60 PSIG 4 Bar	CGA 510	9/16"-18 LH "B"
40-275-580	Nitrogen	0-275 PSIG 0-19 Bar	4000 PSIG 276 Bar	400 PSIG 28 Bar	CGA 580	5/8"-18 RH Internal	3000 PSIG 207 Bar

*Includes HB190 Hard Hat gauge guard.



Medium-Duty Single-Stage

Series 30™



Sure-Seat™ filtered high-pressure seat assembly.



Series 30 regulator shown with H195 Hard Hat™ gauge/regulator guard.

Rugged medium-duty industrial-grade regulators.

Series 30 single-stage regulators are extremely durable and contain our exclusive Sure Seat™ filtered seat technology for extended seat and regulator life. Filtered seats prevent contamination from entering the seating area, reducing repair costs and downtime. These highly accurate regulators are manufactured with a rugged forged body, corrosion-resistant bright nickel-plated bonnet and a highly durable neoprene composite diaphragm.

Stock Number	Gas	Delivery Pressure	Gauges (2 inch/51 mm)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
30-100-540	Oxygen	0-100 PSIG 0-7 Bar	4000 PSIG 276 Bar	150 PSIG 10 Bar	CGA 540	9/16"-18 RH "B"	3000 PSIG 207 Bar
30-20-540		0-20 PSIG 0-1 Bar		30 PSIG 2 Bar			
30-100-9 British fitting		0-100 PSIG 0-7 Bar		150 PSIG 10 Bar	G5/8"A-14 RH British fitting		
30-15-510	Acetylene	0-15 PSIG 0-1 Bar	400 PSIG 28 Bar	30 PSIG 2 Bar	CGA 510	9/16"-18 LH "B"	400 PSIG 28 Bar
30-15-300					CGA 300		
30-15-520					CGA 520		
30-15-200					CGA 200		
30-15-9 British fitting					G5/8"A-14 RH British fitting		
30-50-510	LP Gas (Propane, Propylene or Natural Gas)	0-50 PSIG 0-3 Bar	400 PSIG 28 Bar	60 PSIG 4 Bar	CGA 510	9/16"-18 LH "B"	400 PSIG 28 Bar
30-50-9 British fitting					G5/8"A-14 RH British fitting		
30-150-580	Argon/ Nitrogen	0-150 PSIG 0-10 Bar	4000 PSIG 276 Bar	200 PSIG 14 Bar	CGA 580	5/8"-18 RH Internal	3000 PSIG 207 Bar
30-100-320	CO ₂	0-100 PSIG		150 PSIG 10 Bar	CGA 320		
30-100-350	Hydrogen/ Methane	0-7 Bar			CGA 350	9/16"-18 LH "B"	

Series 30™ Single-Stage Regulator Twin Packs



HTP2 – CGA 510 inlet connection for acetylene and LP cylinders
HTP5 – CGA 300 acetylene inlet connection

Feature benefits

1. Solid brass industrial construction
2. Durable PTFE high-pressure seat
3. Convenient and economical
4. 100-percent tested and inspected

Stock Number	Gas	Regulator	Specs
HTP2	Oxygen	30-100-540	Delivery Pressure: 0-100 PSIG Inlet Connection: CGA 540
	LP or Acetylene	30-15-510	Delivery Pressure: 0-15 PSIG Inlet Connection: CGA 510
HTP5	Oxygen	30-100-540	Delivery Pressure: 0-100 PSIG Inlet Connection: CGA 540
	Acetylene	30-15-300	Delivery Pressure: 0-15 PSIG Inlet Connection: CGA 300

Regulators

Two-Stage



Series 30™



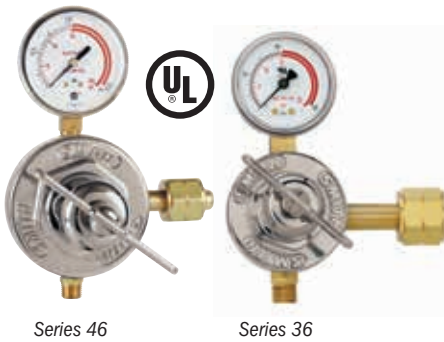
Series 30 two-stage regulators drop cylinder pressure to working pressure in two stages for consistent and accurate outlet pressure and flow regardless of inlet pressure. Recommended where outlet pressure and flow must be maintained without variation.

Stock Number	Gas	Delivery Pressure	Gauges (2 inch/51 mm)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
35-125-540	Oxygen	0-125 PSIG 0-9 Bar	4000 PSIG 276 Bar	150 PSIG 10 Bar	CGA 540	9/16"-18 RH "B"	3000 PSIG 207 Bar
35-15-510	Acetylene	0-15 PSIG 0-1 Bar	400 PSIG 28 Bar	30 PSIG 2 Bar	CGA 510	9/16"-18 LH "B"	400 PSIG 28 Bar
35-50-580	Inert	0-50 PSIG 0-3 Bar	4000 PSIG 276 Bar	60 PSIG 4 Bar	CGA 580	5/8"-18 RH Internal	3000 PSIG 207 Bar

Single-Stage Station



Series 46™ (Heavy-Duty) and Series 36™ (Medium-Duty)



Series 46 and Series 36 brass line regulators are rugged, accurate and corrosion-resistant with shatter-resistant polycarbonate gauge lenses. The Series 46 regulators feature a stainless steel diaphragm and 2.5-inch (64 mm) gauges while the Series 36 has a neoprene composite diaphragm and 2-inch (51 mm) gauges.

Stock Number	Gas	Delivery Pressure	Gauges Diameter Inches (mm)	Inlet Connection	Outlet Connection	UL Listed Max Inlet Pressure
46-175	Oxygen	0-175 PSIG	2.5 (64)	CGA024	9/16"-18 RH "B"	200 PSIG / 14 Bar
36-150		0-12 Bar	2 (51)			500 PSIG / 35 Bar
46-15	Acetylene	0-15 PSIG	2.5 (64)	CGA025	9/16"-18 LH "B"	100 PSIG / 7 Bar
36-15		0-1 Bar	2 (51)			200 PSIG / 14 Bar
46-50	LP Gas	0-50 PSIG	2.5 (64)	CGA025	9/16"-18 LH "B"	100 PSIG / 7 Bar
36-50		0-3 Bar	2 (51)			500 PSIG / 35 Bar

Oxygen "C" size inlet connection CGA024 (7/8"-14 RH). Fits station valve NCG No. M960R, Rego. No. 7160.

Fuel gases "C" size inlet connection CGA025 (7/8"-14 LH). Fits station valve NCG No. M961R, Rego. No. 7161.

Note: Body inlet is 1/4-inch (6 mm) NPT.

Three-Stage Nitrogen Low-Pressure Blanketing



This preset regulator is specially designed to deliver a highly accurate and consistent low-pressure supply of nitrogen to oil-filled power transformers. Available with or without electronic pressure switch. The regulator will deliver and maintain 0.50 PSIG in the head space of oil-filled transformers. A built-in self-relieving valve set at 8 PSIG protects the system from over-pressurization due to temperature variation. Both models come with rapid-fill bypass pressure valve allowing rapid filling of the transformer with 6 PSIG of pressure.

Stock Number	Preset Outlet Pressure			Bypass Rapid Fill/Purge	Inlet Connection	Outlet Connection	Max Inlet Pressure
	1st Stage	2nd Stage	3rd Stage (delivery pressure)				
16391 (without pressure switch)	150 PSIG	8 PSIG into 3rd stage	0.4-0.6 PSIG into outlet	6 PSIG	CGA580	1/2" FNPT	3000 PSIG
16347-3 (with pressure switch)	into 2nd stage						

Note: Operation temperature: -40° to +180° Fahrenheit.

Operation voltage (model 16347-3): 5 amps at 12/24 volts DC or 125 volts AC. 3 amps at 250 volts.

Pressure switch setting: Adjustable from 70-300 PSIG (ships preset at 250 PSIG), 3/32-inch Allen head screw switch.

Switch wiring: Normally open or normally closed (DPDT), three 18-inch flying leads.

16391

without pressure switch

16347-3

with pressure switch

HVAC/Refrigeration Purge/Leak Test



Our single-stage nitrogen regulator is specially designed to meet the specifications of HVAC refrigerant purging applications. This regulator is used with nitrogen to test HVAC systems to locate leaks and to purge an area for installation and repair. Its compact size is suitable for use where space is limited.

- Economical and accurate
- Solid brass body provides durability
- Large durable nylon knob for easy pressure adjustment
- Highly accurate 2-inch (51 mm) gauges with shatter-resistant lenses
- Special option: Heavy-duty charging hose has 7/16"-20 RH connections with core (see page 38)

Stock Number	Gas	Delivery Pressure	Gauges (2 inch/51 mm)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
30-450-580	Nitrogen	0-450 PSIG 0-31 Bar	4000 PSIG 276 Bar	600 PSIG 41 Bar	CGA 580	7/16"-20 External Flair Fitting	3000 PSIG 207 Bar

Heavy-Duty High-Pressure



Due to specific configurations, we cannot accept returns of 820 Series regulators.

820 Series



820 Series high-pressure regulators are for use on cylinders with a wide variety of non-corrosive inert gases. Piston-sensor design gives structural reliability in high-pressure use. Low-torque-control adjusting screw permits easy adjustment of pressures in closed or dead end systems.

Model Series	Delivery Pressure	Inlet Gauge (2.5 inch/64 mm)		Outlet Gauge (2.5 inch/64 mm)		Max Inlet Pressure
		Range	Graduations	Range	Graduations	
823	0-500 PSIG	0-10,000 PSIG	200 PSIG	0-1000 PSIG	100 PSIG	6000 PSIG
824	0-1000 PSIG			0-4000 PSIG		
825	0-2000 PSIG	0-4000 PSIG				
826	0-4000 PSIG	0-6000 PSIG				
827	0-6000 PSIG	0-6000 PSIG				

Typical applications

- High-pressure testing
- Purging and charging
- Calibration kits
- Airline charging carts
- Chemical plants
- Manufacturing processes
- Research and development
- Laboratories

Model Configuration

Option 1 Outlet Pressure: **825** - **66** - **26** **Option 3** CGA Inlet Fittings (Additional inlet fittings available. SS=stainless steel.)

Option 2 Outlet Fittings	Option 3 CGA Inlet Fittings	Max CGA Inlet Pressure (PSIG)
00 None	00 None	
66 Stainless steel needle valve with 1/4" (6 mm) MPT	08 CGA 540 (Oxygen)	3000
	09 CGA 580 (Inert)	3000
	26 CGA SS 347	5500
	27 CGA SS 677	7500
	28 CGA SS 680	5500

Rear-Entry Liquid Cylinder



Due to specific configurations, we cannot accept returns of 250 Series regulators.

250 Series



Features

- Rear-entry connection provides clearance of liquid cylinder ring allowing easier gauge reading
- Easy-to-read single-scale 2.5-inch gauge
- Ideal for non-corrosive high-purity applications
- Nickel-plated brass body for corrosion resistance
- Large 1-7/8-inch SST diaphragm for precise control of pressure
- Easy-to-adjust hand knob

Note: Use Series 40™ heavy-duty regulators constructed with a stainless steel diaphragm for high-volume or liquid (cryogenic) cylinder applications.

Model Series	Delivery Pressure	Outlet Gauge (2.5 inch/64 mm)		Max Inlet Pressure
		Range	Graduations	
252	0-100 PSIG	0-200 PSIG	5 PSIG	3500 PSIG
254	0-200 PSIG	0-400 PSIG	10 PSIG	
255	0-350 PSIG	0-400 PSIG	10 PSIG	
256	0-500 PSIG	0-1000 PSIG	20 PSIG	

Model Configuration

Option 1 Outlet Pressure: **252** - **20** - **08** **Option 3** CGA Inlet Fittings

Option 2 Outlet Fittings	Option 3 CGA Inlet Fittings
252 0-100 PSIG	00 1/4" (6 mm) FNPT
254 0-200 PSIG	02 CGA 320
255 0-350 PSIG	08 CGA 540
256 0-500 PSIG	09 CGA 580
	82 9/16"-18 RH "B"