

8000 SERIES SPECIAL PURPOSE REGULATORS



The 8000 Series medium duty heated welding and blanketing regulator provides primary control of condensable industrial gases like Carbon Dioxide and Nitrous Oxide requiring outlet pressures up to 125 PSIG. The 8000 Series regulator has an integral heating system consisting of three heating cartridges, a primary thermostat for automatic temperature control, and a secondary safety thermostat cutout. As gas passes through the regulator seat, the thermostatically controlled heater provides steady and reliable heat to maintain vapor phase of the gas stream while the chloroprene diaphragm provides accurate pressure control. Combined with rugged materials of construction and a wide range of flow and pressure regulation configurations, the 8000 series is an ideal choice for MIG and TIG welding and blanketing applications.

Typical Applications

- Oxy-fuel Heating, Cutting, and Welding
- Modified Atmosphere Packaging (MAP)
- Industrial Additive Manufacturing
- Thermal Spray



Features

Thermostatically Controlled Heater at 95-120°F (35 - 49°C) prevents regulator freeze up
Pressure or Flow Gauge Models offer process flexibility
2" (50mm) Diaphragm with Integral Self-Seating Relief Valve ensures tamper-proof safety

Materials and Specifications

Body: Brass barstock

Bonnet: Chrome-plated, die cast zinc

Gauges: 2" (50 mm) diameter plated brass

Filter: 35-micron sintered bronze

Diaphragm: Chloroprene

Cv: 0.15

Internal Seals: PTFE

Heaters: 3 @ 50 watts each (110 or 220 VAC)

Temperature Range (thermostat): 95°F to 120°F (35°C to 49°C)

Conformances: Cleanliness meets or exceeds CGA G-4.1; ANSI/ASME B40.1; CRN OH5216.5R2

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Ordering Information

Part Number	Gas Service	Seat	Inlet Connection	Max Inlet Pressure	Outlet Connection	Outlet Pressure/Flowrate	Pressure Gauges
806 8005-01-1 (110V)	Carbon Dioxide	PTFE	CGA 320	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	0-125 SCFH (0-9 BAR)	200 SCFH & 4000 PSIG
806 8008-01-1 (220V)	Carbon Dioxide	PTFE	CGA 320	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	0-125 SCFH (0-9 BAR)	200 SCFH & 4000 PSIG
806 8010-01-1 (110V)	Argon, Nitrogen, Helium (inerts)	PTFE	CGA 580	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	0-125 PSIG (0-9 BAR)	200 PSIG & 4000 PSIG
806 8020-01-1 (220V)	Argon, Nitrogen, Helium (inerts)	PTFE	CGA 580	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	0-125 PSIG (0-9 BAR)	200 PSIG & 4000 PSIG
806 8039-01-1 (110V)	Nitrous Oxide	PTFE	CGA 326	3000 PSIG (210 BAR)	1/4" FNPT	0-125 PSIG (0-9 BAR)	200 PSIG & 4000 PSIG
806 8040-01-1 (220V)	Nitrous Oxide	PTFE	CGA 326	3000 PSIG (210 BAR)	1/4" FNPT	0-125 PSIG (0-9 BAR)	200 PSIG & 4000 PSIG
806 8075-01-1 (110V)	Argon or Argon / Carbon Dioxide	PTFE	CGA 580	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	30 PSIG (2 BAR) Preset	60 SCFH Argon / Carbon Dioxide & 4000 PSIG
806 8077-01-1 (110V)	Argon or Argon / Carbon Dioxide	PTFE	CGA 580	3000 PSIG (210 BAR)	5/8"-18 "B" RH Int.	0-125 SCFH (0-9 BAR)	200 SCFH & 4000 PSIG
High-pressure Regulators							
806 8061-01-1 (110V)	Argon, Nitrogen, Helium (inerts)	PCTFE	CGA 680	5500 PSIG (380 BAR)	1/4" FNPT	0-125 PSIG (0-9 BAR)	200 PSIG & 6000 PSIG
806 8062-01-1 (220V)	Argon, Nitrogen, Helium (inerts)	PCTFE	CGA 680	5500 PSIG (380 BAR)	1/4" FNPT	0-125 PSIG (0-9 BAR)	200 PSIG & 6000 PSIG