

308 Series Regulator

Single Stage
Chrome-Plated
Brass Barstock Body
316L Stainless Steel
Diaphragm



308-3301 shown

Electrically Heated

The 308 Series regulators are specifically designed to prevent freeze-up problems associated with high flows of carbon dioxide and nitrous oxide. As CO₂ or N₂O passes through a regulator seat, dry ice can form if the flow is too high, causing the regulator to freeze up.

Typical Applications

- Chemical storage blanketing
- Anaerobic chambers
- Inert gas purging
- Atomic absorption oxidizer gas
- Semiconductor reactor furnace
- Inductively coupled plasma systems
- Ph control

Advanced Features

- Chrome-plated brass barstock body
Smooth surface finish
- Three 50 watt heaters
Maintain gas flow up to 350 scfh
- 316L stainless steel diaphragm
Unaffected by low temperatures

300 Advantage

Materials

Specifications

- *Capsule® seat*
Increased serviceability and life
- *316L stainless steel diaphragm*
No inboard diffusion
- *Low wetted surface area*
Minimal purge requirements
- *Field-adjustable pressure limit*
Safeguard downstream equipment
- *Convolutd diaphragm*
Smooth pressure changes
- *Compact design*
Easily transported and integrated into systems

Body
Chrome-plated brass barstock

Bonnet
Chrome-plated die cast zinc

Seat
PTFE

Filter
10 micron sintered bronze

Diaphragm
316L stainless steel

Internal Seals
PTFE

Maximum Inlet Pressure
3000 psig (210 BAR)

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

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

Gauges
2" diameter chrome-plated

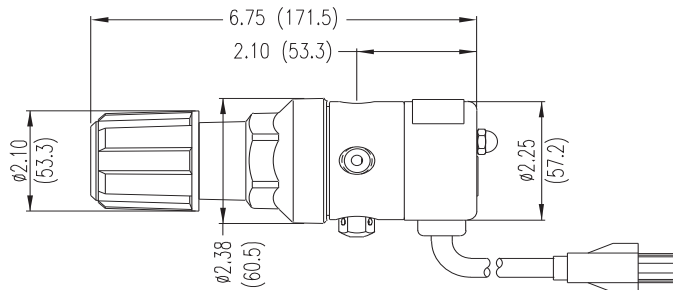
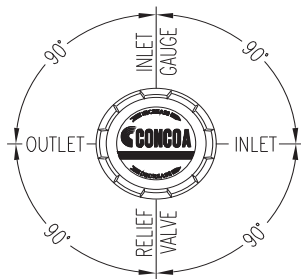
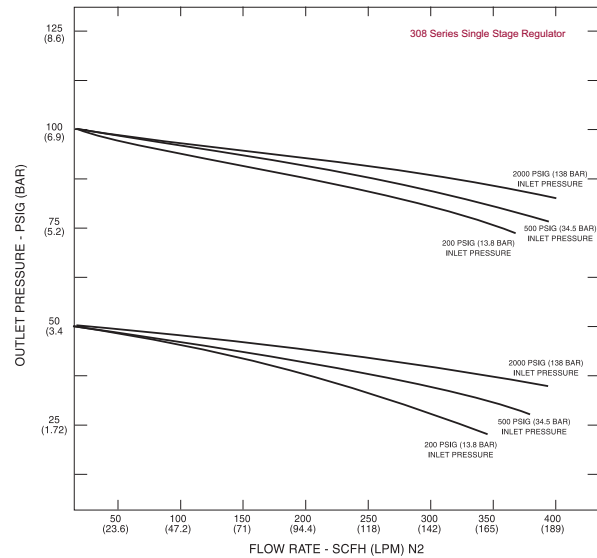
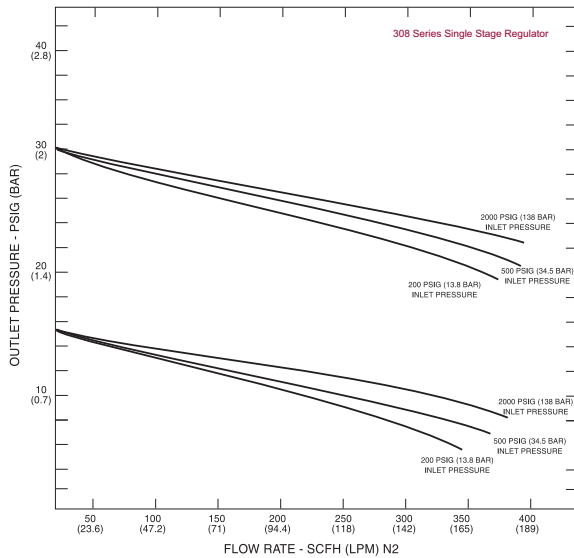
Ports
¼" FPT

Helium Leak Integrity
1 x 10⁻⁸ scc/sec

Cv
0.1

Weight (308-3031-320)
5.4 lbs. (2.45 kg)

Flow Performance Curves



Ordering Information *(For information about how to use this table please see page 4.)*

308	A		B	C	D	-Inlet	Options
Series 308	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/ Gauges	Inlet Connections	Installed Options
	1: 0-15	0-30 psig	0: None	0: 1/4" FPT Port	0: Bare Body	000: 1/4" FPT	A: Protocol
	2: 0-30	0-60 psig	3: 0-4000 psig	1: 1/4" MPT	110 VAC	TF2: 1/8" Tube	Alarm
	3: 0-50	0-100 psig		2: 1/4" Tube Fitting	1: Standard Assembly	TF4: 1/4" Tube	Station
	5: 0-100	0-200 psig		3: Diaphragm Valve	110 VAC	TF6: 3/8" Tube	(110V)
				1/4" Tube Fitting	(psig/kPa Gauges)	M06: 6mm Tube	B: Protocol
				4: Diaphragm Valve	2: Bare Body		Alarm
				1/4" MPT	220 VAC*	CGA	Station
				5: Needle Valve	3: Standard Assembly	DIN 477	(220V)
				1/4" MPT	220 VAC*	BS 341	C: Protocol
				6: 1/8" Tube Fitting	(psig/kPa Gauges)	and others	Switchover
				7: 3/8" Tube Fitting	4: Standard Assembly	available	Station
				8: Diaphragm Valve	110 VAC		G: Protocol
				1/8" Tube Fitting	(BAR/psig Gauges)		Switchover
				9: Diaphragm Valve	5: Standard Assembly		Station with
				1/4" FPT	220 VAC		Alarm
				A: 3/8" BSP	(BAR/psig Gauges)*		(110V)
				Right Hand Fitting			H: Protocol
				M: 6mm Tube Fitting			Switchover
				S: Diaphragm Valve			Station with
				6mm Tube Fitting			Alarm
							(220V)

**230 volt models are CE (European health & safety) marked*