



300 Series Regulators



- Single Stage
- Chrome-Plated Brass Barstock Body
- 316L Stainless Steel Diaphragm
- Electrically Heated
- NEMA 4



308 3301 shown

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

Features

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

Convuluted Diaphragm

Smooth pressure changes

Compact Design

Easily transported and integrated into systems

Three 50-Watt Heaters

Maintain gas flow up to 350 SCFH

316L Stainless Steel Diaphragm

Unaffected by low temperatures

NEMA 4 Housing

For either indoor or outdoor use

Materials

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

Electrical Housing

NEMA 4

Specifications

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 brass

Ports

1/4" FPT

Helium Leak Integrity

1 x 10⁻⁸ scc/sec

Cv

0.1

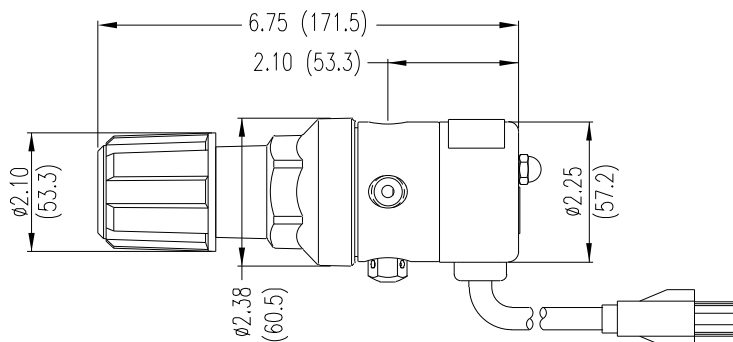
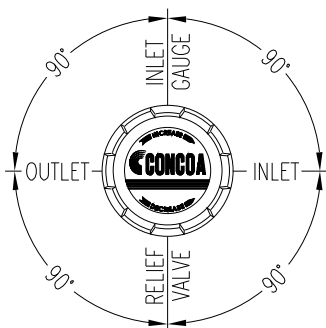
Weight (308 3031-320)

5.4 lbs. (2.45 kg)

300 Series Regulators



Installation Information



300 SERIES

Ordering Information

308	A	B	C	D	-CON	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 110 VAC	000: 1/4" FPT	A: Protocol alarm station (110V)
	2: 0-30	0-60 PSIG	3: 0-4000 PSIG	1: 1/4" MPT	1: Standard assembly 110 VAC (PSIG/kPa gauges)	TF2: 1/8" tube	B: Protocol alarm station (220V)
	3: 0-50	0-100 PSIG		2: 1/4" tube fitting	2: Bare body 220 VAC*	TF4: 1/4" tube	C: Protocol switchover station
	5: 0-100	0-200 PSIG		3: Diaphragm valve 1/4" tube fitting	3: Standard assembly 220 VAC* (PSIG/kPa gauges)	TF6: 3/8" tube	G: Protocol switchover station with alarm (110V)
	7: 0-175	0-400 PSIG		4: Diaphragm valve 1/4" MPT	4: Standard assembly 110 VAC (BAR/PSIG gauges)	M06: 6mm tube	H: Protocol switchover station with alarm (220V)
		5: Needle valve 1/4" MPT		5: Standard assembly 220 VAC (BAR/PSIG gauges)*	CGA DIN 477 BS 341 and others available	M: Protocol station	
		6: 1/8" tube fitting		*220 volt models are CE marked		Q: Protocol purge station	
		7: 3/8" tube fitting					
		8: Diaphragm valve 1/8" tube fitting					
		9: Diaphragm valve 1/4" FPT					
		A: 3/8" BSP RH fitting					
		M: 6mm tube fitting					
S: Diaphragm valve 6mm tube fitting							

Carbon Dioxide Flow
308 Series Heated Regulators at 100 PSIG & 175 PSIG Delivery Pressure

