



300 Series Regulators

308 SERIES

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

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

Typical Applications

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



308 3301-580 shown

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
- Convolute Diaphragm**
Smooth pressure changes
- Compact Design**
Easily transported and integrated into systems
- Three 50-Watt Heaters**
Maintain gas flow up to 350 SCFH (165 LPM)
- 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 brass barstock
- Seat**
PTFE
- Filter**
10 micron sintered bronze
- Diaphragm**
316L stainless steel
- Internal Seals**
PTFE
- Electrical Housing**
NEMA 4

Specifications

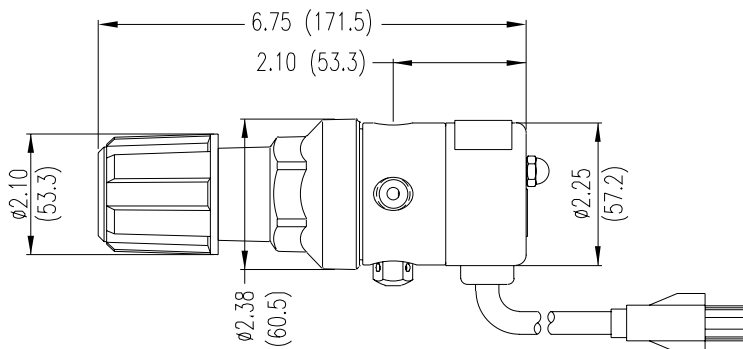
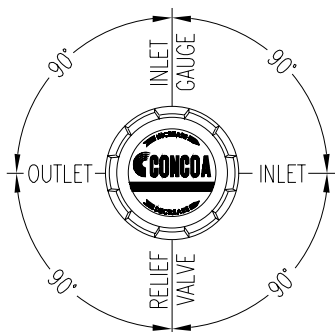
- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
- Temperature Range (Thermostat)**
95°F to 120°F (35°C to 49°C)
- Heaters**
3 @ 50 watts each (110 or 220 VAC)
- Gauges**
2" (53mm) diameter chrome-plated brass
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁸ scc/sec
- Cv**
0.1
See page 205 for flow curves
- Weight (308 3301-330)**
5.4 lbs. (2.45 kg)

CRN 0H5216.5R1

300 Series Regulators



Installation Dimensions



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 PSIG (0-1 BAR)	0-30 PSIG/ 0-2 BAR	0: None	0: 1/4" FPT port	0: Bare body 110 VAC	000: 1/4" FPT	B: Protocol alarm station with pressure switch gauges			
	2: 0-30 PSIG (0-2 BAR)	0-60 PSIG/ 0-4 BAR	3: 0-4000 PSIG/ 0-275 BAR	1: 1/4" MPT	1: Standard assembly 110 VAC (PSIG/kPa gauges)	TF2: 1/8" tube	C: Protocol switchover station			
	3: 0-50 PSIG (0-3.5 BAR)	0-100 PSIG/ 0-7 BAR		2: 1/4" tube fitting	2: Bare body 220 VAC*	TF4: 1/4" tube	D: Deep purge*			
	5: 0-100 PSIG (0-7 BAR)	0-200 PSIG/ 0-14 BAR		3: Diaphragm valve 1/4" tube fitting	3: Standard assembly 220 VAC* (PSIG/kPa gauges)	TF6: 3/8" tube	E: Protocol alarm station with intrinsically safe transducer for hazardous environments			
	7: 0-175 PSIG (0-12 BAR)	0-400 PSIG/ 0-27 BAR		4: Diaphragm valve 1/4" MPT	4: Standard assembly 110 VAC (BAR/PSIG gauges)	M06: 6mm tube	H: Protocol switchover alarm station with pressure switch gauges			
				5: Needle valve 1/4" MPT	5: Standard assembly 220 VAC (BAR/PSIG gauges)*					
				6: 1/8" tube fitting	*220 volt models are CE marked	CGA DIN 477 BS 341 and others available	J: Protocol alarm station with standard transducer for non hazardous environments			
				7: 3/8" tube fitting	K: Protocol switchover alarm station with standard transducer for non hazardous environments					
				8: Diaphragm valve 1/8" tube fitting				M: Protocol station		
				9: Diaphragm valve 1/4" FPT					Q: Protocol purge station	
				A: 3/8" BSP RH fitting						X: Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
				M: 6mm tube fitting						
S: Diaphragm valve 6mm tube fitting										

Flow Curves for 308 Series

