



# 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

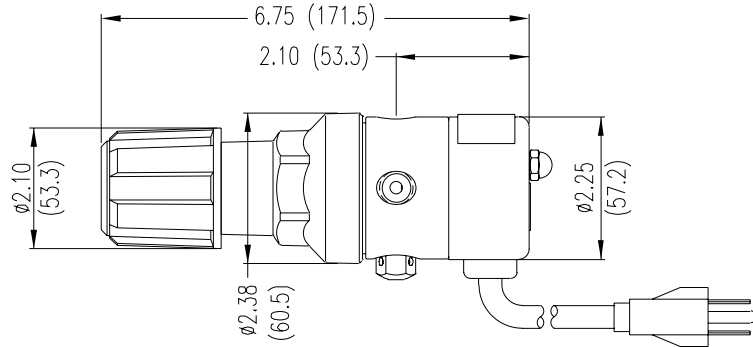
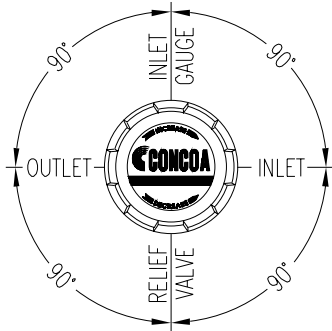
- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)
- Temperature Range (Thermostat)**  
95°F to 120°F (35°C to 49°C)
- Heaters**  
3 @ 50 watts each (110 or 220 VAC)
- Gauges**  
2" (53mm) diameter chrome-plated brass
- Ports**  
1/4" FPT
- Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
- Cv** 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

CRN 0H5216.5R1

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## 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
	<b>1:</b> 0-15 PSIG (0-1 BAR)	0-30 PSIG/ 0-2 BAR	<b>0:</b> None	<b>0:</b> 1/4" FPT port	<b>0:</b> Bare body 110 VAC	<b>000:</b> 1/4" FPT	<b>B:</b> Protocol alarm station with pressure switch gauges
	<b>2:</b> 0-30 PSIG (0-2 BAR)	0-60 PSIG/ 0-4 BAR	<b>3:</b> 0-4000 PSIG/ 0-275 BAR	<b>1:</b> 1/4" MPT	<b>1:</b> Standard assembly 110 VAC (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube	<b>C:</b> Protocol switchover station
	<b>3:</b> 0-50 PSIG (0-3.5 BAR)	0-100 PSIG/ 0-7 BAR		<b>2:</b> 1/4" tube fitting	<b>2:</b> Bare body 220 VAC*	<b>TF4:</b> 1/4" tube	<b>D:</b> Deep purge*
	<b>5:</b> 0-100 PSIG (0-7 BAR)	0-200 PSIG/ 0-14 BAR		<b>3:</b> Diaphragm valve 1/4" tube fitting	<b>3:</b> Standard assembly 220 VAC* (PSIG/kPa gauges)	<b>TF6:</b> 3/8" tube	<b>E:</b> Protocol alarm station with intrinsically safe transducer for hazardous environments
	<b>7:</b> 0-175 PSIG (0-12 BAR)	0-400 PSIG/ 0-27 BAR		<b>4:</b> Diaphragm valve 1/4" MPT	<b>4:</b> Standard assembly 110 VAC (BAR/PSIG gauges)	<b>M06:</b> 6mm tube	<b>H:</b> Protocol switchover alarm station with pressure switch gauges
				<b>5:</b> Needle valve 1/4" MPT	<b>5:</b> Standard assembly 220 VAC (BAR/PSIG gauges)*	CGA DIN 477 BS 341 and others available	<b>J:</b> Protocol alarm station with standard transducer for non hazardous environments
				<b>6:</b> 1/8" tube fitting	*220 volt models are CE marked		<b>K:</b> Protocol switchover alarm station with standard transducer for non hazardous environments
				<b>7:</b> 3/8" tube fitting			<b>M:</b> Protocol station
				<b>8:</b> Diaphragm valve 1/8" tube fitting			<b>Q:</b> Protocol purge station
				<b>9:</b> Diaphragm valve 1/4" FPT			<b>X:</b> Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
				<b>A:</b> 3/8" BSP RH fitting			
				<b>M:</b> 6mm tube fitting			
				<b>S:</b> Diaphragm valve 6mm tube fitting			

REGULATORS