



# 300 Series Regulators

# 315 SERIES

The 315 Series regulators are specifically designed for use in the medical laboratory for blood gases, laser gases, and other clinical gas applications requiring constant pressure control and delivery regardless of supply pressure variations.

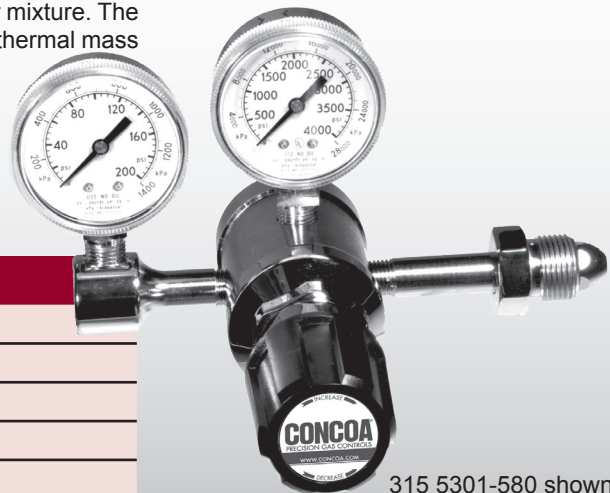
## Custom Calibration

In addition to a standard 2-15 LPM flowgauge for CO<sub>2</sub> in laser applications, CONCOA also offers a custom 2-15 LPM calibration for any non-corrosive gas or mixture. The outlet orifice is sized to the flow requirement for a specific gas using a thermal mass flowmeter.

- Dual Stage
- Chrome-Plated Brass Barstock Body
- 316L Stainless Steel Diaphragm
- Custom Calibration

## Typical Applications

- Blood gases
- Laser gases
- Medical research
- Pharmaceutical manufacturing
- University laboratories



315 5301-580 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

## 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

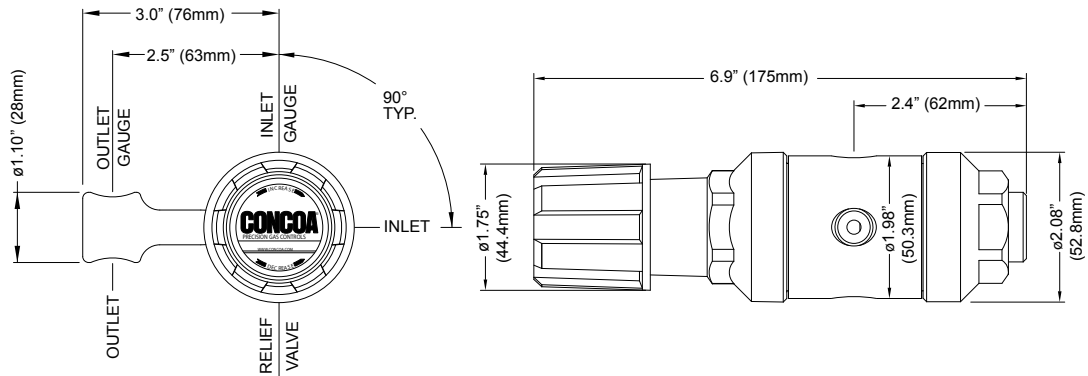
## Specifications

- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)
- Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- 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 188 for flow curves*
- Weight (315 5301-580)**  
4.2 lbs. (1.90 kg)

# 300 Series Regulators



## Installation Dimensions



## Ordering Information

315	A	B	C	D	-CON	Options	
Series 315	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	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	See inlet selection chart for limited CGA connections. DIN 477, BS 341 and others available.	<b>B:</b> Protocol alarm station (110/220 VAC)
	<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 (PSIG/kPa gauges)		<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> Standard assembly (BAR/PSIG gauges)		<b>H:</b> Protocol switchover station with alarm (110/220 VAC)
	<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>M:</b> Protocol station
	<b>6:</b> 0-200 PSIG (0-14 BAR)	0-400 PSIG/ 0-27 BAR		<b>4:</b> Diaphragm valve 1/4" MPT			<b>Q:</b> Protocol purge station
	<b>7:</b> 0-500 PSIG (0-34 BAR)	0-1000 PSIG/ 0-70 BAR		<b>5:</b> Needle valve 1/4" MPT			
	<b>8:</b> 2-15 LPM CO <sub>2</sub>	2-15 LPM flowgauge		<b>6:</b> 1/8" tube fitting			
	<b>9:</b> Custom calibration	Custom flowgauge		<b>7:</b> 3/8" tube fitting			
				<b>8:</b> Medical DISS outlet			
				<b>9:</b> 1/4" hose barb			
				<b>A:</b> 3/8" BSP RH fitting			

Gas Service	Inlet (Threaded)	Inlet (Yoke)	Outlet (Medical DISS)			
			Primary	DISS Part No.	Optional	DISS Part No.
Air	CGA 346	CGA 950	1160	830 5686	N/A	
Argon, Neon, Krypton, Xenon	CGA 580	CGA 985	N/A		N/A	
Carbon dioxide	CGA 320	CGA 940	1080	830 6042	N/A	
Carbon dioxide < 7% and oxygen	CGA 280	CGA 880	1200	830 6043	1020	830 6047
Carbon dioxide > 7% and oxygen	CGA 500	CGA 940	1080	830 6042	1020	830 6047
Clinical blood gas mixtures	CGA 500	CGA 973	1020	830 6046	1080	830 6042
Ethylene	CGA 350	CGA 900	1140	830 6049	N/A	
Helium	CGA 580	CGA 930	1060	830 6048	N/A	
Helium < 80% and oxygen	CGA 280	CGA 890	1180	830 6045	1020	830 6047
Helium > 80% and oxygen	CGA 500	CGA 930	1060	830 6048	1020	830 6047
Nitrogen	CGA 580	CGA 960	1120	830 6044	N/A	
Nitrogen and oxygen > 23.5%	CGA 280	CGA 890	2040		N/A	
Nitrous oxide	CGA 326	CGA 910	1040	830 4264	N/A	
Nitrous oxide 47.5% - 52.5% and oxygen	CGA 280	CGA 965	2020	830 6046	N/A	
Oxygen	CGA 540	CGA 870	1240	803 0051	N/A	
Xenon and oxygen > 20%	CGA 280	CGA 890	1020	830 6047	1180	
Non-flammable, noncorrosive gas mixtures labeled as drugs or medical devices without another connection assignment	CGA 500	CGA 973	1020	830 6047	N/A	

