



# 300 Series Regulators

# 307 SERIES

The 307 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases or as point of use pressure control in high purity gas distribution systems.

- Single Stage
- Chrome-Plated Brass Barstock Body
- Four Port Configuration
- Real Inlet

## Typical Applications

- Bulk gas distribution systems
- Gas and liquid chromatography
- High purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization
- Liquefied hydrocarbon gas control
- Control of cryogenic gas



307 2031-580 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
- Convolutd Diaphragm**  
Smooth pressure changes
- Compact Design**  
Easily transported and integrated into systems
- Chrome-Plated Brass Barstock Body**  
Smooth surface finish
- Rear Panel-Mountable**  
Easy installation
- Pressure Ranges 0-15 to 0-200 PSIG (0-1 to 0-14 BAR)**  
Broad range of applications
- 3000 PSIG (210 BAR) Inlet Pressure Rating**  
Safe use with high pressure cylinders

## 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

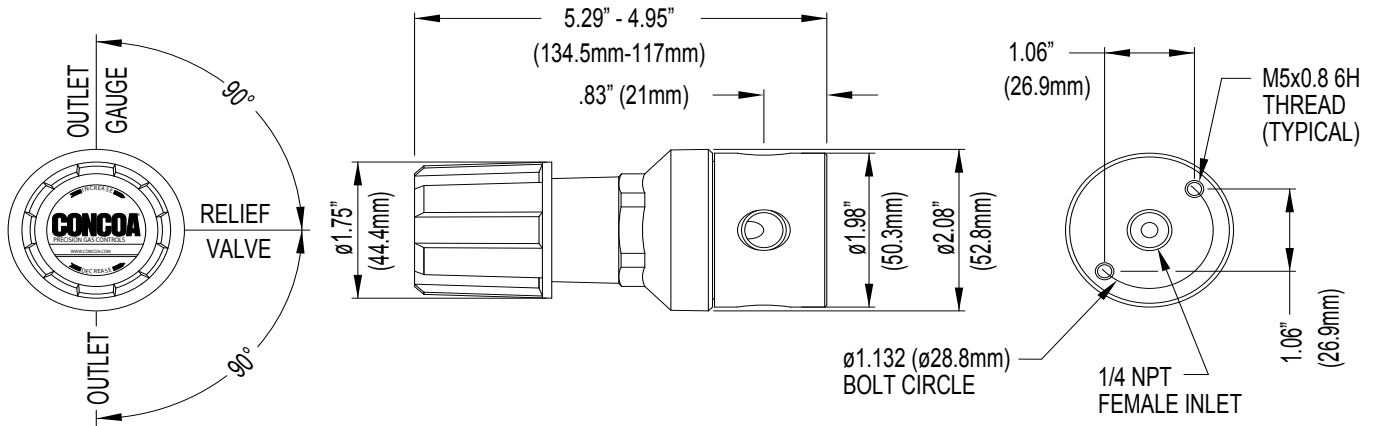
## Specifications

- 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 (307 2031-580)**  
2.9 lbs. (1.29 kg)

# 300 Series Regulators



## Installation Dimensions



## Ordering Information

307	A	B	C	D	-CON	Options	
Series 307	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	<b>M00:</b> 1/4" FPT	None
	<b>2:</b> 0-30 PSIG (0-2 BAR)	0-60 PSIG/ 0-4 BAR		<b>1:</b> 1/4" MPT	<b>1:</b> Standard assembly (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube	
	<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>TF4:</b> 1/4" tube	
	<b>4:</b> 0-150 PSIG (0-10 BAR)	0-200 PSIG/ 0-14 BAR		<b>3:</b> Diaphragm valve 1/4" tube fitting		<b>TF6:</b> 3/8" tube	
	<b>5:</b> 0-100 PSIG (0-7 BAR)	0-200 PSIG/ 0-14 BAR		<b>4:</b> Diaphragm valve 1/4" MPT		<b>M06:</b> 6mm tube	
	<b>6:</b> 0-200 PSIG (0-14 BAR)	0-400 PSIG/ 0-27 BAR		<b>5:</b> Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	
	<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> DISS outlet			
				<b>9:</b> Diaphragm valve 1/4" FPT			
				<b>A:</b> 3/8" BSP RH fitting			
				<b>B:</b> Diaphragm valve 1/8" tube fitting			
				<b>M:</b> 6mm tube fitting			
				<b>S:</b> Diaphragm valve 6mm tube fitting			

## Related Options

Order No.	Description
835 0204	Rear Panel mount kit
476 0002	Helium Leak certification

**Flow Curves for  
302, 304, 305, 307, 322, 324, 327, 402, 408, 420, 422, 426, 427, 428, 429 Series Regulators**

