



# 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
- Rear 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 202 for flow curves

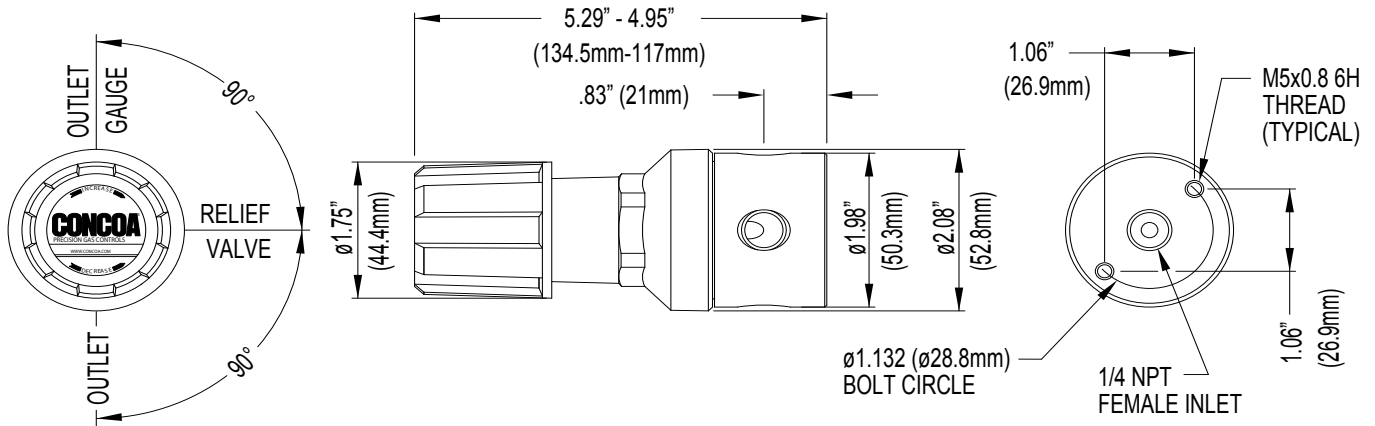
### Weight (307 2031-580)

2.9 lbs. (1.29 kg)

# 300 Series Regulators



## Installation Dimensions



REGULATORS

## 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 Medical DISS and others available	
	<b>8:</b> 2-15 LPM Carbon Dioxide	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



# Regulator Flow Curves

## Flow Curves for 302, 304, 305, 307, 322, 324, 327, 401, 402, 408, 420, 422, 426, 427, 428, 429 Series

