



# 400 Series Regulators

# 428 SERIES

The 428 Series regulators are intended for secondary pressure control of the highest purity gases or as point of use pressure control in high purity gas distribution systems.

- Single Stage
- 316L Stainless Steel Barstock Body
- Three Port Configuration
- Face Seal Connections

## Typical Applications

- Semiconductor process gases
- Photovoltaic manufacturing
- Ultra-high purity gases
- Pharmaceutical processing
- Aerospace systems
- Nanotechnology research



428 3302-001 shown

## Features

- Metal-to-Metal Diaphragm Seal**  
No possibility of gas contamination
- CAPSULE® Seat**  
Increased serviceability and life
- Butt-Welded Face Seal Connections**  
Highest leak integrity available
- 316L Stainless Steel Barstock Body**  
Increased corrosion resistance
- Front and Rear Panel-Mountable**  
Versatile system configuration
- 3000 PSIG Inlet Pressure Rating**  
Safe use with high pressure cylinders
- Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR)**  
Broad range of applications

## Materials

- Body**  
316L stainless steel barstock
- Bonnet**  
Chrome-plated brass barstock
- Seat**  
PTFE
- Filter**  
Patented 10 micron 316 mesh
- Diaphragm**  
316L stainless steel
- Internal Seals**  
PTFE

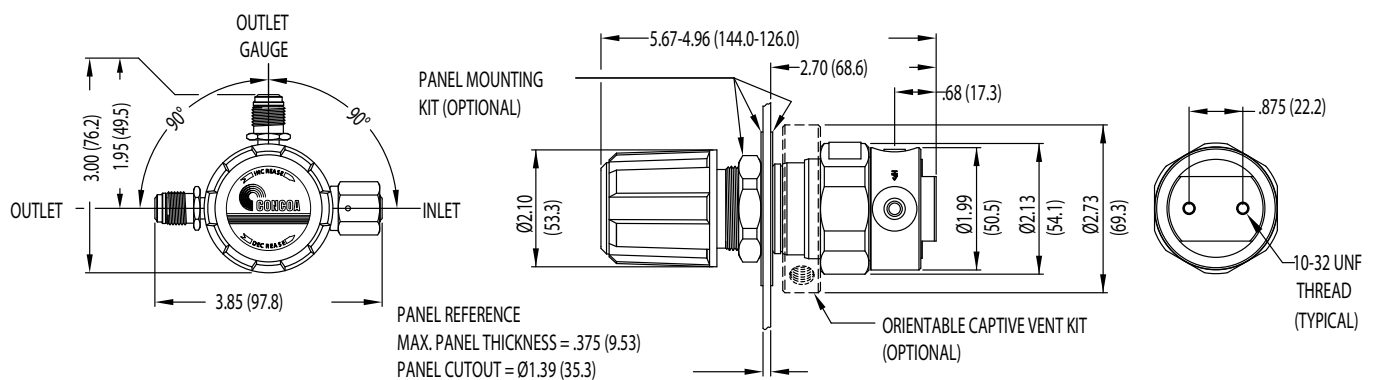
## Specifications

- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)
- Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- Gauge**  
2" (53mm) diameter stainless steel
- Ports**  
1/4" face seal connection
- Helium Leak Integrity**  
1 x 10<sup>-9</sup> scc/sec
- Cv**  
0.1  
*See page 202 for flow curves*
- Weight (428 3302-001)**  
2.46 lbs. (1.12 kg)

# 400 Series Regulators



## Installation Dimensions



REGULATORS

## Ordering Information

428	A	B	C	D
Series 428	Outlet Pressure	Outlet Gauge	Inlet Gauge	Connections - inlet/outlet
	<b>1:</b> 0-15 PSIG (0-1 BAR)	<b>0:</b> None	<b>0:</b> None	<b>1:</b> Female face seal/male face seal
	<b>2:</b> 0-30 PSIG (0-2 BAR)	<b>1:</b> 30"-0-30 PSIG/-1-0-2 BAR		<b>2:</b> Male face seal/male face seal
	<b>3:</b> 0-50 PSIG (0-3.5 BAR)	<b>2:</b> 30"-0-60 PSIG/-1-0-4 BAR		<b>3:</b> Male face seal/female face seal
	<b>4:</b> 0-100 PSIG (0-7 BAR)	<b>3:</b> 30"-0-100 PSIG/-1-0-7 BAR		<b>4:</b> Female face seal/female face seal
	<b>5:</b> 0-250 PSIG (0-17 BAR)	<b>4:</b> 30"-0-200 PSIG/-1-0-14 BAR		
	<b>6:</b> 0-500 PSIG (0-34 BAR)	<b>5:</b> 0-400 PSIG/0-27 BAR		
	<b>7:</b> 0-150 PSIG (0-10 BAR)	<b>6:</b> 0-1000 PSIG/0-70 BAR		

## Related Options

Options	Order No.	Description
Panel mount kit	550 0002	To mount the regulator using bonnet threads. Material: Nickel-plated brass
Captured vent kit	550 0001	360° Orientation, pipes vented gases to safe location in the event of diaphragm failure. Material: Nickel-plated brass
Helium Leak certification	476 0002	Inboard Helium Leak certification to less than $1 \times 10^{-9}$ cc/sec

