



400 Series Regulators

427 SERIES

The 427 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
- Two Port Configuration
- Face Seal Connections

Typical Applications

Semiconductor process gases
Gas and liquid chromatography
Ultra-high purity carrier gases
Zero, span, and calibration gases
Liquefied hydrocarbon gas control
Control of cryogenic gases



427 4004-001 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 (210 BAR) 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)

Ports
1/4" face seal connection

Helium Leak Integrity
1 x 10⁻⁹ scc/sec

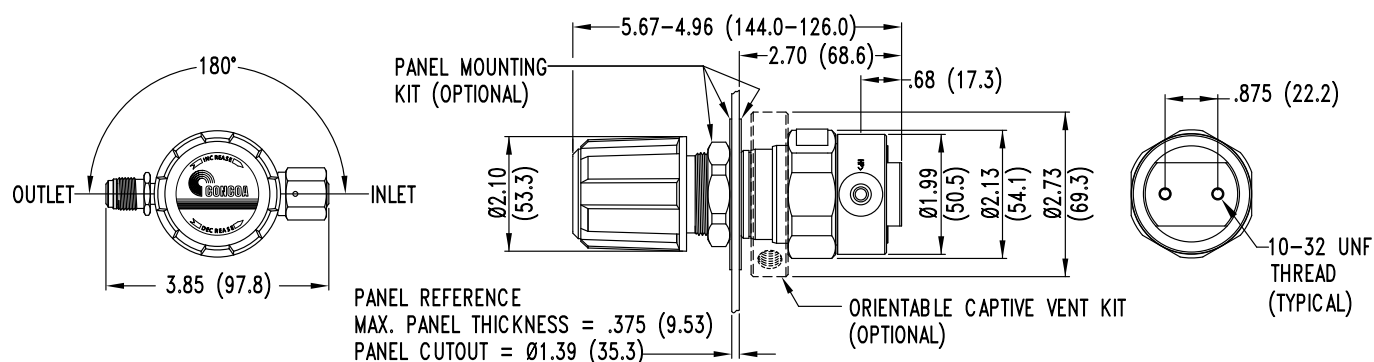
Cv
0.1
See page 188 for flow curves

Weight (427 4004-001)
2.24 lbs. (1.02 kg)

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Installation Dimensions



Ordering Information

427	A	B	C	D
Series 427	Outlet Pressure	Outlet Gauge	Inlet Gauge	Connections - inlet/outlet
	1: 0-15 PSIG (0-1 BAR)	0: None	0: None	1: Female face seal/male face seal
	2: 0-30 PSIG (0-2 BAR)			2: Male face seal/male face seal
	3: 0-50 PSIG (0-3.5 BAR)			3: Male face seal/female face seal
	4: 0-100 PSIG (0-7 BAR)			4: Female face seal/female face seal
	5: 0-250 PSIG (0-17 BAR)			
	6: 0-500 PSIG (0-34 BAR)			
	7: 0-150 PSIG (0-10 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 x 10 ⁻⁹ cc/sec

OUTLET PRESSURE - PSIG (BAR)

