

427 SERIES REGULATORS



The 427 Series single stage 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.

Typical Applications

- Semiconductor Process Gases
- Photovoltaic Manufacturing
- Ultra-High Purity Gases
- Pharmaceutical Processing
- Aerospace Systems
- Nanotechnology Research



427 4001-01-001 shown

Features

CAPSULE® Seat Design features integral 360° filtration in both stages

316L Stainless Steel Barstock Body provides increased corrosion resistance

Cleanroom Assembly eliminates contamination at installation

Front and Rear Panel-Mountable facilitates a variety of system configurations

Metal-to-Metal Diaphragm Seal prevents gas contamination

Butt-welded Face Seal Connections provide the highest leak integrity available

Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR) accommodates a broad range of applications

Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR)

Body: 316L stainless steel barstock

Bonnet: Chrome-plated brass barstock

Seat: PTFE

Filter: 10-micron 316 stainless steel mesh

Temperature Range: -40°F to 140°F (-40°C to 60°C)

Diaphragm: 316L stainless steel

Cv: 0.1 See *flow curves attached*

Helium Leak Integrity: 1×10^{-9} scc/sec

Internal Seals: PTFE

Ports (bare body): 1/4 in face seal connection

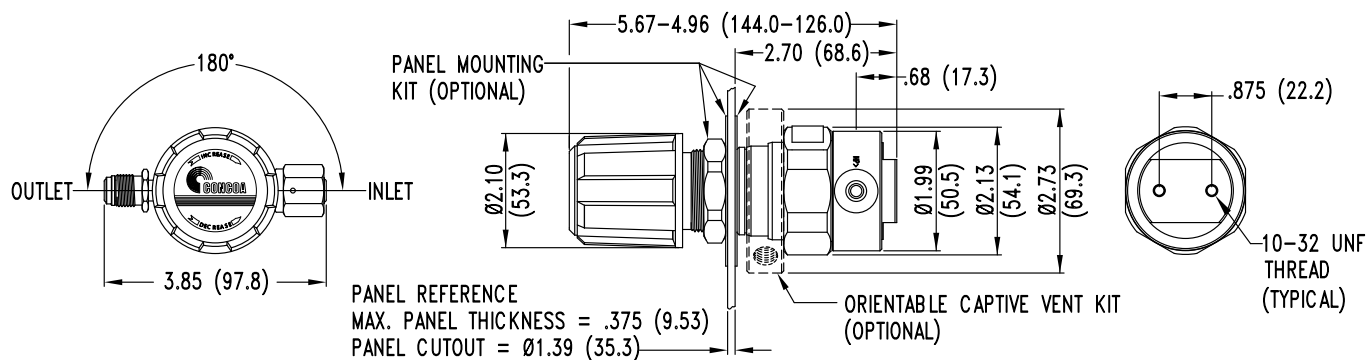
Weight (427 4001-001): 2.24 lbs. (1.02 kg)

Conformances: Cleanliness meets or exceeds CGA G-4.1; PED 2014/68/EU; ANSI/ASME B40.1; CRN OH5216

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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

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

