

428 SERIES REGULATORS



The 428 Series single stage regulators are intended for primary pressure control of the highest purity gases or other applications that require face seal connections. They are also ideal for 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



428 4401-01-001 shown

Features

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

316L Stainless Steel Diaphragm prohibits inboard diffusion

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

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

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

Materials and Specifications

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

Body: 316L stainless steel barstock

Bonnet: Chrome-plated brass barstock

Gauge: 2 in (50 mm) diameter stainless steel

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

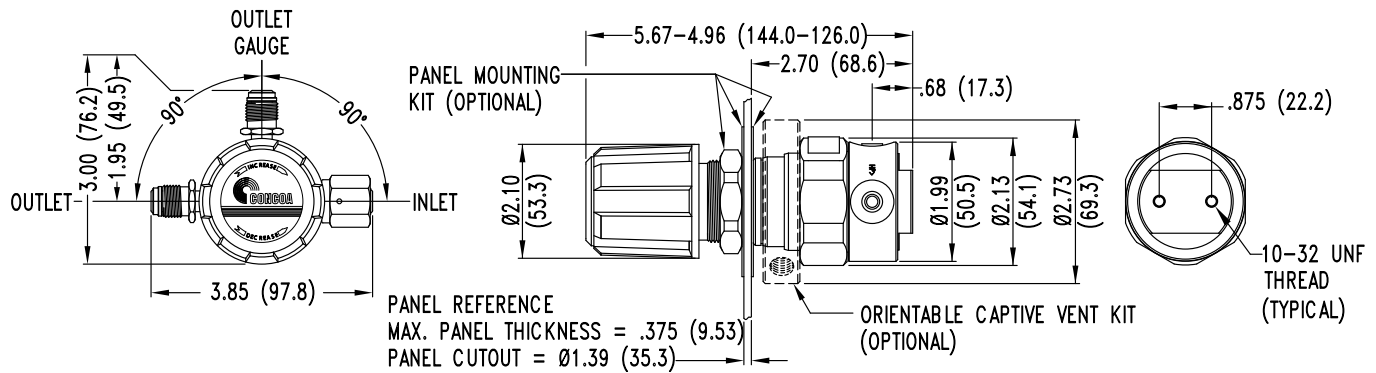
Weight (428 4401-001): 2.46 lbs. (1.12 kg)

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

428	A	B	C	D
Series 428	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)	1: 30"-0-30 PSIG/-1-0-2 BAR		2: Male face seal/male face seal
	3: 0-50 PSIG (0-3.5 BAR)	2: 30"-0-60 PSIG/-1-0-4 BAR		3: Male face seal/female face seal
	4: 0-100 PSIG (0-7 BAR)	3: 30"-0-100 PSIG/-1-0-7 BAR		4: Female face seal/female face seal
	5: 0-250 PSIG (0-17 BAR)	4: 30"-0-200 PSIG/-1-0-14 BAR		
	6: 0-500 PSIG (0-34 BAR)	5: 0-400 PSIG/0-27 BAR		
	7: 0-150 PSIG (0-10 BAR)	6: 0-1000 PSIG/0-70 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	Inboard Helium Leak certification to less than 1×10^{-9} cc/sec

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Flow Curves for 428 Series

