

425 SERIES REGULATORS



The 425 Series, four-port, single stage regulators are intended for secondary pressure control of ultra-high purity and corrosive gases or as point-of-use pressure control in ultra-high purity gas distribution systems.

Typical Applications

- Bulk Gas Distribution Systems
- Gas and Liquid Chromatography
- Ultra-High Purity Carrier Gases
- Zero, Span, and Calibration Gases
- High Purity Chamber Pressurization
- Liquefied Hydrocarbon Gas Control
- Control of Cryogenic Gases
- Corrosive Gases



425 2021-01-000 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
Pipe Away Relief Valve vents exhaust gases safely
Pressure Ranges from 0-15 to 0-500 PSIG (0-1 to 0-34 BAR) accommodate a broad range of applications

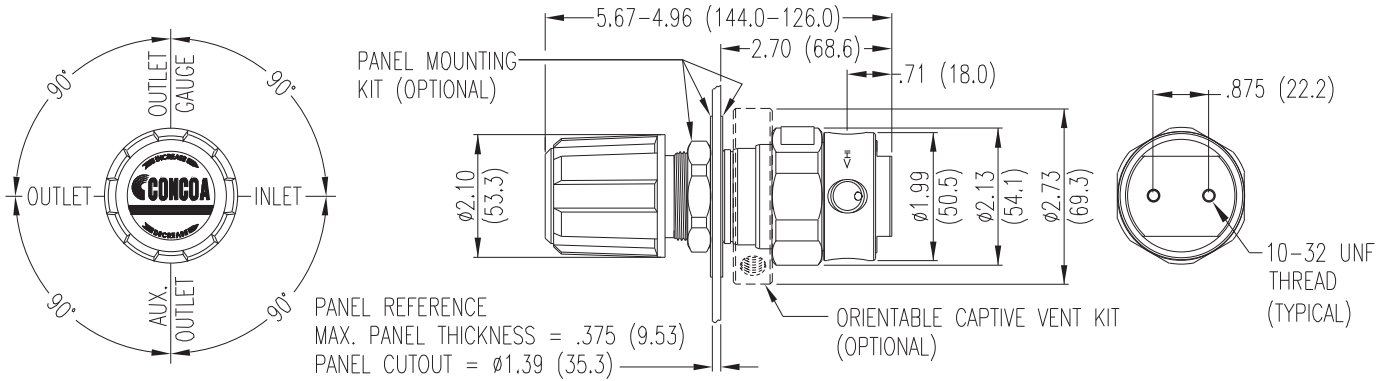
Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR)
Body: 316L stainless steel barstock
Bonnet: Chrome-plated brass barstock
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 Max outlet 50 PSIG (3.5 BAR) or less; 0.2 Max outlet above 50 PSIG (3.5 BAR) *See flow curves attached*
Helium Leak Integrity: 1×10^{-9} scc/sec
Internal Seals: PTFE
Ports (bare body): 1/4 in FNPT
Weight (425 2021-000): 2.58 lbs. (1.17 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

425	A		B		C	D	-CON	Options	
Series 425	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies		Assembly/Gauges		Inlet Connections	Installed Options
	1: 0-15 PSIG (0-1 BAR)	30"-0-30 PSIG/-1-0-2 BAR	0: None	0: 1/4" FNPT Port		0: Bare body		000: 1/4" FNPT	M: Protocol station
	2: 0-50 PSIG (0-3.5 BAR)	30"-0-100 PSIG/-1-0-7 BAR		1: 1/4" MNPT		1: Cleanroom Assembly (PSIG/kPa Gauges)		TF2: 1/8" tube	Q: Protocol purge station
	3: 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/-1-0-14 BAR		2: 1/4" tube fitting		2: Cleanroom Assembly (BAR/PSIG Gauges)		TF4: 1/4" tube	S: Stainless steel bonnet
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/0-27 BAR		3: Diaphragm valve 1/4" tube fitting		6: Mirror Image (PSIG/kPa Gauges)		TF6: 3/8" tube	
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/0-70 BAR		4: Diaphragm valve 1/4" MNPT		7: Mirror Image (BAR/PSIG Gauges)		M06: 6mm tube	
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/-1-0-14 BAR		5: Needle valve 1/4" MNPT					
	*Standard assembly does not include relief valve.			6: 1/8" tube fitting					
				7: 3/8" tube fitting					
				8: Diaphragm valve 1/8" tube fitting					
				9: Diaphragm valve 1/4" FNPT					
				M: 6mm tube fitting					
				S: Diaphragm valve 6mm tube fitting					

*Standard assembly does not include relief valve.

Related Options

Part No.	Description
550 0001	Captured vent kit
550 0002	Panel mount kit
476 0002	Helium Leak certification

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Flow Curves for 425 Series

