

422 SERIES REGULATORS



The 422 Series, six-port, single stage regulators are intended for primary pressure control of ultra-high purity gases, including corrosive and toxic gases. They are ideal for applications that can tolerate minor fluctuations in outlet pressure due to diminishing inlet supply or applications where periodic readjustment of delivery pressure does not present a problem.

Typical Applications

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



422 3331-01-580 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 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); 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) optional

Body: 316L stainless steel barstock

Bonnet: Chrome-plated brass barstock

Gauges: 2 in (50 mm) diameter stainless steel

Seats: PTFE; PCTFE with 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) inlet option

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

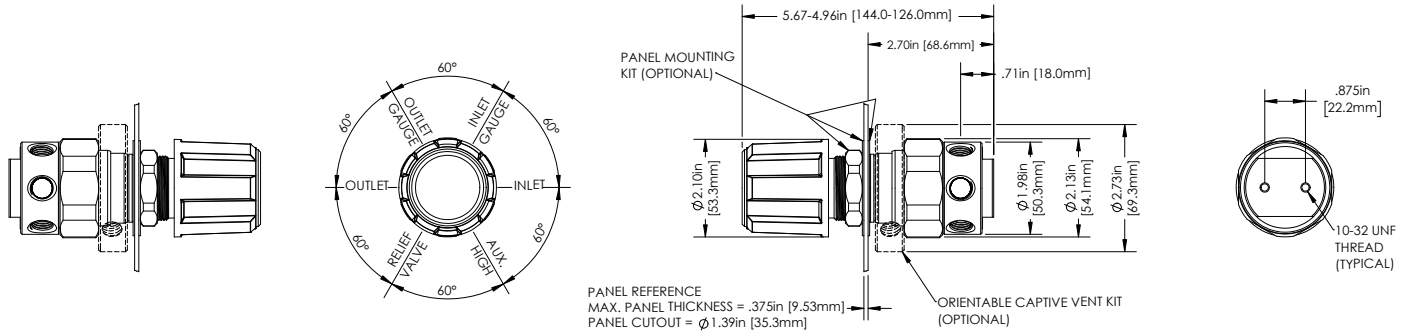
Ports (bare body): 1/4 in FNPT

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

422	A	B	C	D	-CON	Options	
Series 422	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	B: Protocol alarm station with pressure switch gauges
	2: 0-50 PSIG (0-3.5 BAR)	30"-0-100 PSIG/-1-0-7 BAR	3: 0-4000 PSIG/0-275 BAR	1: 1/4" MNPT	1: Cleanroom assembly (PSIG/kPa gauges)	TF2: 1/8" tube	C: Protocol switchover station
	3: 0-100 PSIG (0-7 BAR)	30"-0-200 PSIG/-1-0-14 BAR	5: 0-1000 PSIG/0-70 BAR	2: 1/4" tube fitting	2: Cleanroom assembly (BAR/PSIG gauges)	TF4: 1/4" tube	D: Deep purge*
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/0-27 BAR	6: 0-300 PSIG/0-21 BAR	3: Diaphragm valve 1/4" tube fitting	6: Mirror image (PSIG/kPa gauges)	TF6: 3/8" tube	E: Protocol alarm station with intrinsically safe transducer for hazardous environments
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/0-70 BAR	7: 0-400 PSIG/0-27 BAR	4: Diaphragm valve 1/4" MNPT	7: Mirror image (BAR/PSIG gauges)	M06: 6mm tube	H: Protocol switchover alarm station with pressure switch gauges
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/-1-0-14 BAR	8: 0-6000 PSIG/0-400 BAR*	5: Needle valve 1/4" MNPT	CGA DIN 477 BS 341 and others available.	J: Protocol alarm station with standard transducer for non-hazardous environments	
	*Not available with 4500 PSIG (310 BAR) maximum inlet pressure.		G: 0-4000 PSIG/0-275 BAR†	6: 1/8" tube fitting		K: Protocol switchover alarm station with standard transducer for non-hazardous environments	
	**Standard assembly does not include relief valve.		*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®.	7: 3/8" tube fitting		M: Protocol station	
				8: Diaphragm valve 1/8" tube fitting		Q: Protocol purge station*	
		†Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE.	9: Diaphragm valve 1/4" FNPT	S: Stainless steel bonnet			
			M: 6mm tube fitting	X: Protocol switchover alarm station with intrinsically safe transducer for hazardous environments			
			S: Diaphragm valve 6mm tube fitting	*Not available with 4500 PSIG (310 BAR) max inlet pressure			

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 422 Series Regulators

