

415 SERIES REGULATORS



The 415 Series dual stage regulators are intended for primary pressure control of ultra-high purity or corrosive gases. Two stages of pressure regulation effectively minimize pressure variations arising from inlet pressure changes due to the depletion of the supply cylinder. As a result, the 415 Series regulators are ideal for applications requiring constant pressure control and delivery, regardless of supply pressure variations. The CONCOA 415 Series regulator may be installed directly on a top-outlet cylinder or mounted using a bracket and connected to the source via a flexible hose.



415 3311-01-580 shown

Typical Applications

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

Features

Metal-to-Metal Diaphragm Seal prevents gas contamination

316L Stainless Steel Barstock Body provides increased corrosion resistance

Cleanroom Assembly eliminates contamination at installation

Pipe Away Relief Valve vents exhaust gases safely

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

Pressure Ranges 0-15 to 0-350 PSIG (0-1 to 0-24 BAR) accommodates a broad range of applications

Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR); or 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) options

Body: 316L stainless steel barstock

Bonnet: Chrome-plated brass barstock

Gauges: 2 in (50 mm) diameter stainless steel

Seat: 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 mesh

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

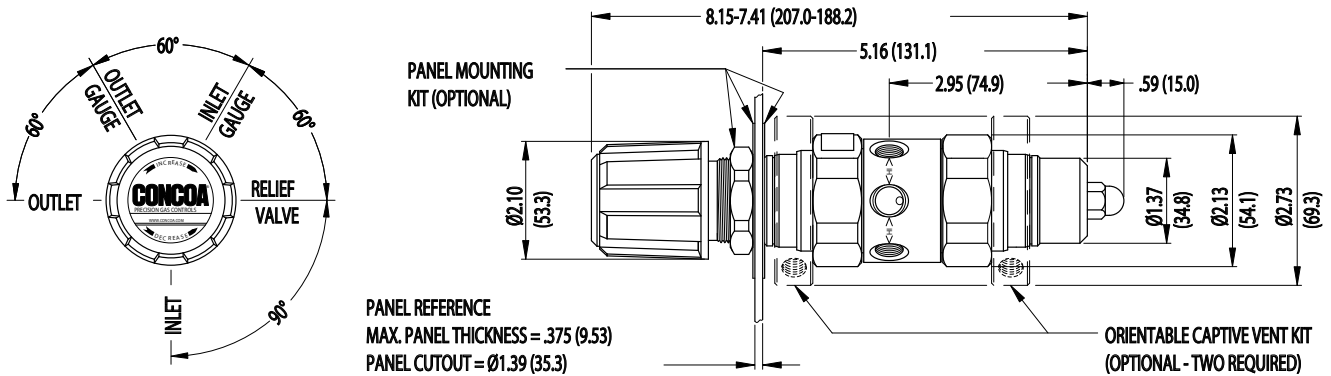
Weight (415 3311-580): 5.09 lbs. (2.31 kg)

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

415	A	B	C	D	-CON	
Series 415	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Inlet Connections
	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
	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
	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
	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		TF6: 3/8" tube
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/-1-0-14 BAR	7: 0-400 PSIG/0-27 BAR	4: Diaphragm valve 1/4" MNPT		M06: 6mm tube
	E: 0-350 PSIG (0-24 BAR)	0-400 PSIG/0-27 BAR	8: 0-6000 PSIG/0-415 BAR*	5: Needle valve 1/4" MNPT		CGA DIN 477 BS 341 <i>and others available.</i>
			G: 0-4000 PSIG/0-275 BAR†	6: 1/8" tube fitting		
			<i>*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®.</i>	7: 3/8" tube fitting		
			<i>†Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE.</i>	8: Diaphragm valve 1/8" tube fitting		
				9: Diaphragm valve 1/4" FNPT		
				M: 6mm tube fitting		
				S: Diaphragm valve 6mm tube fitting		

Related Options

Part No.	Description
550 0001	Captured vent kit (2 required)
550 0002	Panel mount kit
476 0002	Helium Leak certification

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Flow Curves for 415 Series

