

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 from 0-15 to 0-350 PSIG (0-1 to 0-24 BAR) accommodate 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

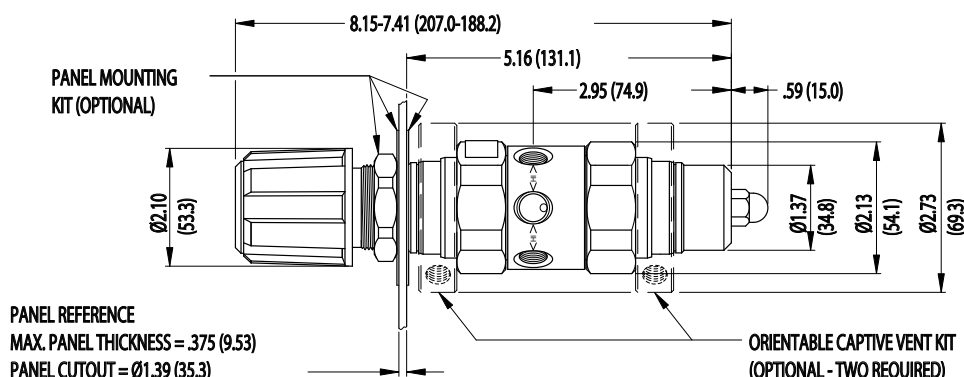
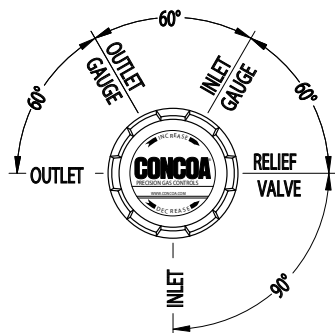
Weight (415 3311-580): 5.09 lbs. (2.31 kg)

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 and others available.
			G: 0-4000 PSIG/0-275 BAR†	6: 1/8" tube fitting		
			*Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®.	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		
			†Maximum inlet pressure 3500 PSIG (240 BAR) with PCTFE seat CAPSULE.			

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

