

445 SERIES REGULATORS



The 445 Series regulators are intended for secondary pressure control of ultra-high purity gases including corrosive and toxic gases, or point-of-use pressure control in high purity gas distribution systems. Unlike most pipeline equipment, the CONCOA 445 Series regulator is rated to full cylinder pressure to ensure safe use in high pressure applications. The stainless steel body provides enhanced corrosion resistance and prevents contamination of the gas stream.

Typical Applications

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



445 3021-01-000 shown

Features

CAPSULE® Seat Design increases serviceability and life

Metal-to-Metal Diaphragm Seal prevents gas contamination

Front and Rear Panel-Mountable allows easy installation

Pipe Away Relief Valve vents exhaust gases safely

Captured Vent Capable Bonnet prohibits exposure in the unlikely event of diaphragm failure

Pressure Ranges from 0-15 to 0-500 PSIG (0-1 to 0-34 BAR) facilitate 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 below; 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

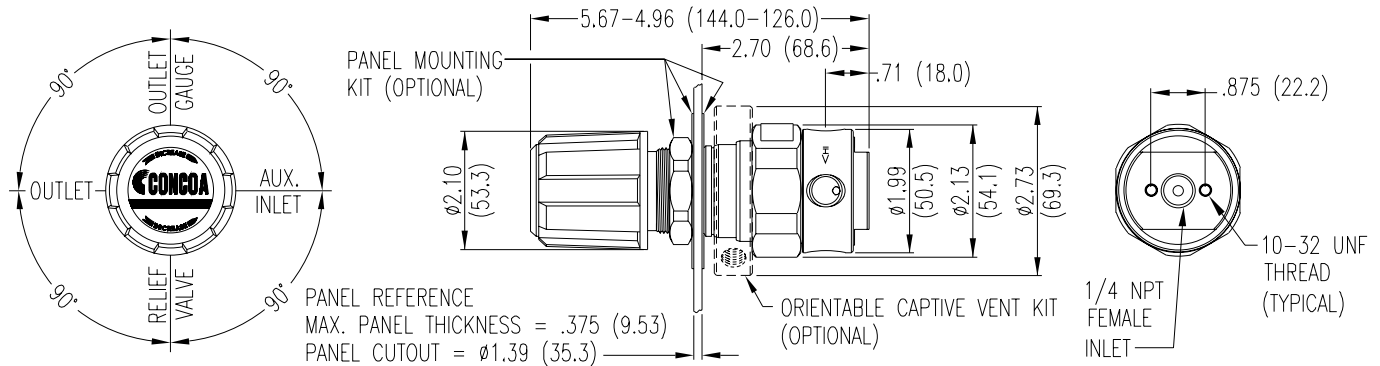
Weight (445 3021-000): 2.57 lbs. (1.17 kg)

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

445	A	B	C	D	-CON	Options	
Series 445	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	None
	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	
	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	
	4: 0-250 PSIG (0-17 BAR)	0-400 PSIG/0-27 BAR		3: Diaphragm valve 1/4" tube fitting		TF6: 3/8" tube	
	5: 0-500 PSIG (0-34 BAR)**	0-1000 PSIG/0-70 BAR		4: Diaphragm valve 1/4" MNPT		M06: 6mm tube	
	7: 0-150 PSIG (0-10 BAR)	30"-0-200 PSIG/-1-0-14 BAR		5: Needle valve 1/4" MNPT			
	<i>*Standard assembly does not include relief valve.</i>			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			

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 445 Series

