

# 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)** facilitates 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:**  $1 \times 10^{-9}$  scc/sec

**Internal Seals:** PTFE

**Ports (bare body):** 1/4 in FNPT

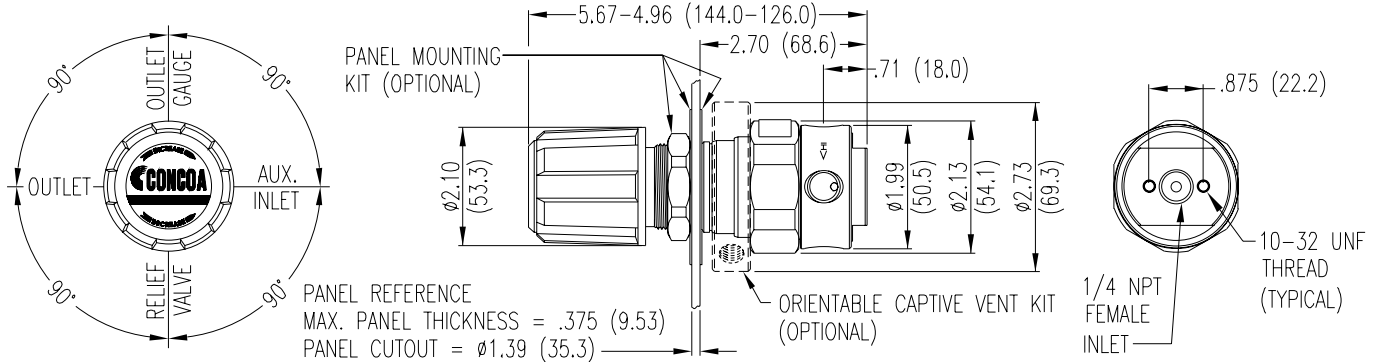
**Weight (445 3021-000):** 2.57 lbs. (1.17 kg)

**Conformances:** Cleanliness meets or exceeds CGA G-4.1; PED 2014/68/EU; ANSI/ASME B40.1; CRN OH5216

# 445 SERIES REGULATORS



## Installation Dimensions



## Ordering Information

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

# 445 SERIES REGULATORS



## Flow Curves for 445 Series

