

307 SERIES REGULATORS



The 307 Series single stage regulators are intended for secondary pressure control of non-corrosive, liquefied, or high purity (up to grade 5.5) gases. The 307 is also suitable for point-of-use pressure control in high purity gas distribution systems, especially in applications that can tolerate fluctuations in outlet pressure due to diminishing inlet supply or where inlet pressure is constant or under 500 PSIG (34 BAR).

Typical Applications

- Bulk Gas Distribution Systems
- Gas and Liquid Chromotography
- High Purity Carrier Gas
- Liquefied Hydrocarbon Gas Control
- Control of Cryogenic Gas
- High Purity Chamber Pressurization



3074031-01-M1L shown

Features

Rear Panel-Mountable allows easy installation

CAPSULE® Seat increases serviceability and life

Low Wetted Surface Area minimizes purge requirements

Convuluted Diaphragm provides smooth pressure changes

316L Stainless Steel Diaphragm prevents inboard diffusion

Field-Adjustable Pressure Limit safeguards downstream equipment

Pressure Ranges 0-15 to 0-200 PSIG (0-1 to 0-14 BAR) facilitates a range of applications

Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR)

Body: Chrome-plated brass barstock

Bonnet: Chrome-plated, die cast zinc

Gauges: 2 in (50 mm) diameter plated case

Seat: PTFE

Filter: 10-micron sintered bronze

Diaphragm: 316L stainless steel

Internal Seals: PTFE

Ports (bare body): 1/4 in FPT

Temperature Range: -40°F to 140°F (-40°C to 60°C)

Cv: 0.1 See flow curves attached

Helium Leak Integrity: 1×10^{-8} scc/sec

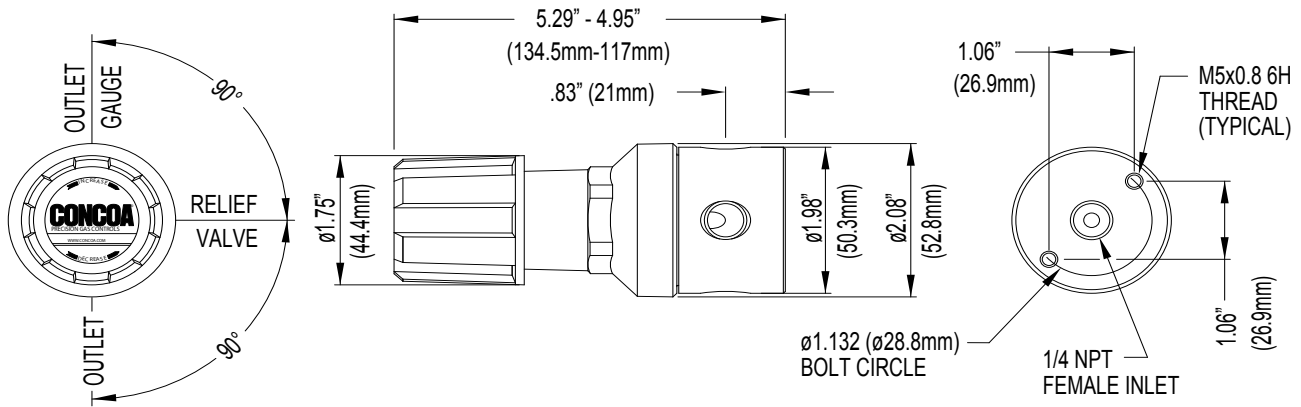
Weight (307 2031-580): 2.9 lbs (1.3 kg)

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

307	A	B	C	D	-CON	Options	
Series 307	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections	Installed Options
	1: 0-15 PSIG (0-1 BAR)	0-30 PSIG/0-2 BAR	0: None	0: 1/4 in FPT port	0: Bare body	M00: 1/4 in FPT	None
	2: 0-30 PSIG (0-2 BAR)	0-60 PSIG/0-4 BAR		1: 1/4 in MPT	1: Standard assembly (PSIG/kPa gauges)	TF2: 1/8 in tube	
	3: 0-50 PSIG (0-3.5 BAR)	0-100 PSIG/0-7 BAR		2: 1/4 in tube fitting	2: Standard assembly (BAR/PSIG gauges)	TF4: 1/4 in tube	
	4: 0-150 PSIG (0-10 BAR)	0-200 PSIG/0-14 BAR		3: Diaphragm valve 1/4 in tube fitting		TF6: 3/8 in tube	
	5: 0-100 PSIG (0-7 BAR)	0-200 PSIG/0-14 BAR		4: Diaphragm valve 1/4 in MPT		M06: 6 mm tube	
	6: 0-200 PSIG (0-14 BAR)	0-400 PSIG/0-27 BAR		5: Needle valve 1/4 in MPT		CGA DIN 477 BS 341 Medical DISS and others available	
	8: 2-15 LPM Carbon Dioxide	2-15 LPM flowgauge		6: 1/8 in tube fitting			
	9: Custom Calibration	Custom flowgauge		7: 3/8 in tube fitting			
				8: DISS outlet			
				9: Diaphragm valve 1/4 in FPT			
				A: 3/8 in BSP RH fitting			
				B: Diaphragm valve 1/8 in tube fitting			
				M: 6 mm tube fitting			
				S: Diaphragm valve 6 mm tube fitting			

Related Options

Part No.	Description
835 0204	Rear panel mount kit
476 0002	Helium Leak certification



Regulator Flow Curves

Flow Curves for 302, 304, 305, 307, 322, 324, 327, 401, 402, 408, 420, 422, 426, 427, 428, 429 Series

