

203 SERIES REGULATORS



The 203 Series regulators deliver non-corrosive, high purity or liquefied gases (up to grade 4.5) for applications requiring constant low pressure control from low inlet pressure sources below 200 PSIG. With delivery pressures as low as 0.1 PSIG (7 mBAR) that can be adjusted in 0.05 to 0.1 PSIG (4 to 7 mBAR) increments in tow delivery pressure ranges, the 203 Series satisfies any high purity application requiring atmospheric pressures below 5 PSIG (350 mBAR).

Typical Applications

- Fuel Gas Supply Control
- Calibration Gas Control
- Gas System Charging
- Gas Supply Purging
- Low Pressure Inert Blanketing of Chemicals and Fuel Tanks



203 1001-01-000 shown

Features

Forged Brass Body presents durable, long lasting construction

Standard Relief Valve protects diaphragm and gauge

316L Stainless Steel Diaphragm prevents inboard diffusion

Large Convuluted Diaphragm ensures smooth pressure changes

Field-Adjustable Pressure Limit safeguards downstream equipment

CAPSULE® Seat Technology increases product serviceability and life

Substantial Flow Capacity at Low Outlet Pressure supplies multiple user locations

Pressure Ranges 0.05-2.0 to 0.1-5.0 PSIG (4-140 mBAR to 7-350 mBAR) provides excellent pressure control

Materials and Specifications

Maximum Inlet Pressure: 200 PSIG (14 BAR)

Body: Chrome-plated forged brass

Bonnet: Chrome-plated die cast zinc

Gauges: 2 1/2 in (68 mm) diameter steel with brass connections

Seat: PTFE

Filter: 10-micron sintered bronze

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

Diaphragm: 316L Stainless steel

Cv: 0.02

Helium Leak Integrity 1 x 10⁻⁸ scc/sec

Internal Seals: PTFE

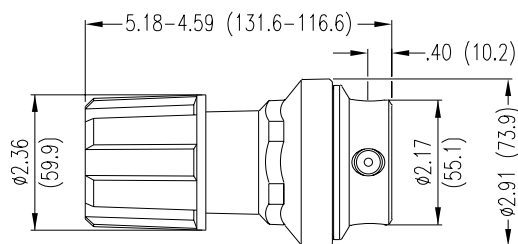
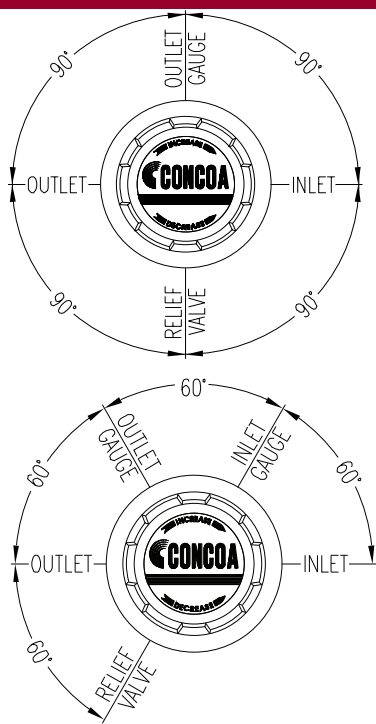
Ports (bare body): 1/4 in FNPT

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

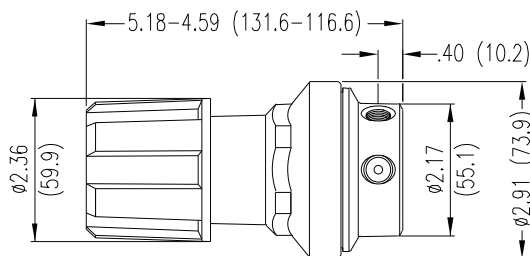
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Installation Dimensions



Four port configuration



Five port configuration

Ordering Information

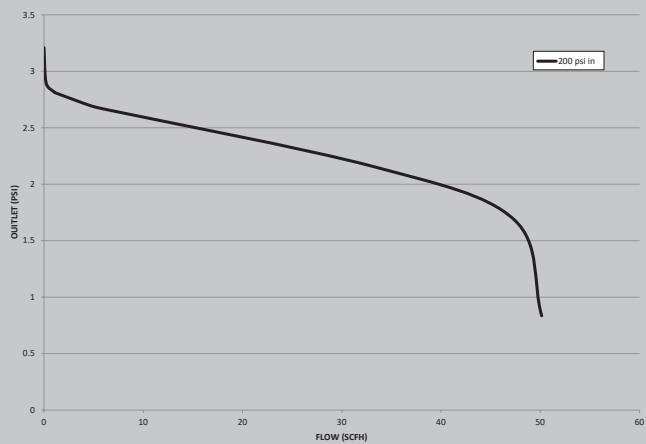
203	A	B	C	D	-CON	
Series 203	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections
	1: 0-2 PSIG (0-140 mBAR)	0-5 PSIG/ 0-350 mBAR	0: None	0: 1/4 in FPT port	0: Four port bare body	000: 1/4 in FPT
	2: 0-5 PSIG (0-350 mBAR)	0-10 PSIG/ 0-700 mBAR	6: 0-400 PSIG/ 0-27 BAR	1: 1/4 in MPT	1: Four port standard assembly (PSIG/kPa gauges)	TF2: 1/8 in tube
			7: 0-200 PSIG/ 0-14 BAR	2: 1/4 in tube fitting	2: Four port standard assembly (BAR/PSIG gauges)	TF4: 1/4 in tube
				3: Diaphragm valve 1/4 in tube fitting	A: Five port bare body	TF6: 3/8 in tube
				4: Diaphragm valve 1/4 in MPT	B: Five port standard assembly (PSIG/kPa gauges)	M06: 6 mm tube
				5: Needle valve 1/4 in MPT	C: Five port standard assembly (BAR/PSIG gauges)	CGA DIN 477 BS 341 and others available
				6: 1/8 in tube fitting		
				7: 3/8 in tube fitting		
				8: Diaphragm valve 1/8 in tube fitting		
				9: Diaphragm valve 1/4 in FPT		
				A: 3/8 in BSP RH fitting		
				B: Diaphragm valve 3/8 in tube fitting		
				C: 3/8 in BSP LH fitting		
				D: 6 mm brass hose barb		
				G: 1/8 instainless steel tube fitting		
				H: 1/4 in stainless steel tube fitting		
			M: 6 mm tube fitting			
			S: Diaphragm valve 6mm tube fitting			

REGULATOR FLOW CURVES



Flow Curves for 203

3 PSIG (0.2 BAR) Outlet



5 PSIG (0.3 BAR) Outlet

