

# 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 low 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

**CAPSULE® Seat Technology** increases product serviceability and life

**Substantial Flow Capacity at Low Outlet Pressure** supplies multiple user locations

**Low Pressure Ranges** provide precise, stable control for high-purity, low-pressure applications

## 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 (63 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:**  $1 \times 10^{-8}$  scc/sec

**Internal Seals:** PTFE

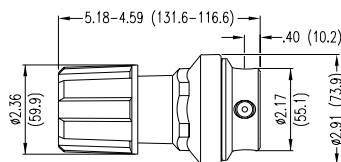
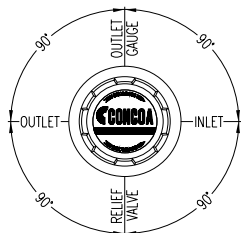
**Ports (bare body):** 1/4 in FNPT

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

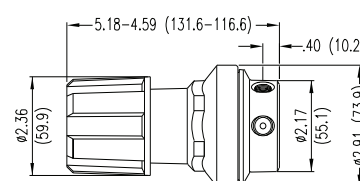
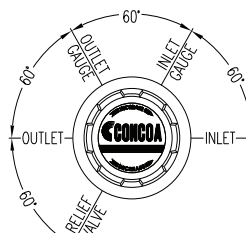
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## Installation Dimensions



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
	<b>1:</b> 0-2 PSIG (0-140 mBAR)	<b>0-5</b> PSIG/ 0-350 mBAR	<b>0:</b> None	<b>0:</b> 1/4" FNPT port	<b>0:</b> Four port bare body	<b>000:</b> 1/4" FNPT
	<b>2:</b> 0-5 PSIG (0-350 mBAR)	<b>0-10</b> PSIG/ 0-700 mBAR	<b>6:</b> 0-400 PSIG/ 0-28 BAR	<b>1:</b> 1/4" MNPT	<b>1:</b> Four port standard assembly (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube
			<b>7:</b> 0-200 PSIG/ 0-14 BAR	<b>2:</b> 1/4" tube fitting	<b>2:</b> Four port standard assembly (BAR/PSIG gauges)	<b>TF4:</b> 1/4" tube
				<b>3:</b> Diaphragm valve 1/4" tube fitting	<b>A:</b> Five port bare body	<b>TF6:</b> 3/8" tube
				<b>4:</b> Diaphragm valve 1/4" MNPT	<b>B:</b> Five port standard assembly (PSIG/kPa gauges)	<b>M06:</b> 6 mm tube
				<b>5:</b> Needle valve 1/4" MNPT	<b>C:</b> Five port standard assembly (BAR/PSIG gauges)	<b>CGA DIN 477 BS 341 and others available.</b>
				<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>A:</b> 3/8" BSP RH fitting		
				<b>B:</b> Diaphragm valve 3/8" tube fitting		
				<b>C:</b> 3/8 in BSP LH fitting		
				<b>D:</b> 6 mm chrome hose barb		
				<b>G:</b> 1/8 instainless steel tube fitting		
				<b>H:</b> 1/4 in stainless steel tube fitting		
				<b>J:</b> 9/16"-18 "B" RH fitting, bare brass		
				<b>K:</b> 9/16"-18 "B" LH fitting, bare brass		
				<b>L:</b> 5/8"-18 "Inert" RH fitting, bare brass		
				<b>M:</b> 6 mm tube fitting		
				<b>S:</b> Diaphragm valve 6mm tube fitting		

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## Flow Curves for 203 Series

