



# 200 Series Regulators

# 213 SERIES

The 213 Series regulators deliver non-corrosive, high purity or liquefied gases (up to grade 4.5) for applications requiring constant low pressure control and delivery regardless of supply pressure variations. 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 two delivery pressure ranges, the 213 satisfies any high purity application requiring atmospheric pressures below 5 PSIG (350 mBAR).

- Dual Stage
- Chrome-Plated Forged Brass Body
- 316L Stainless Steel Diaphragm
- Five Port Configuration

## Typical Applications

- Low pressure inert blanketing of chemicals and fuel tanks
- Gas supply purging
- Gas system charging
- Fuel gas supply control
- Calibration gas control



213 1331-580 shown

## Features

- CAPSULE® Seat**  
Increased serviceability and life
- 316L Stainless Steel Diaphragm**  
No inboard diffusion
- Forged Body**  
Durable, long-lasting construction
- Large Convoluted Diaphragm**  
Stable pressure control
- Standard Relief Valve**  
Diaphragm and gauge protection
- Chrome-Plated Forged Brass Body**  
High purity design
- Substantial Flow Capacity at Low Outlet Pressure**  
Supply multiple user locations
- Pressure Ranges 0.05-2.0 to 0.1-5.0 PSIG (4-140 mBAR to 7-350 mBAR)**  
Excellent pressure control in 0.05 to 0.1 PSIG (4 to 7 mBAR) increments
- 3000 and 4500 PSIG (210 and 415 BAR) Inlet Pressure Rating**  
Safe use with high pressure cylinders

## Materials

- Body**  
Chrome-plated forged brass
- Bonnet**  
Chrome-plated die-cast zinc
- Seat**  
PCTFE (first stage)  
PTFE (second stage)
- Filter**  
10 micron sintered bronze
- Diaphragm**  
316L stainless steel
- Internal Seals**  
PTFE

## Specifications

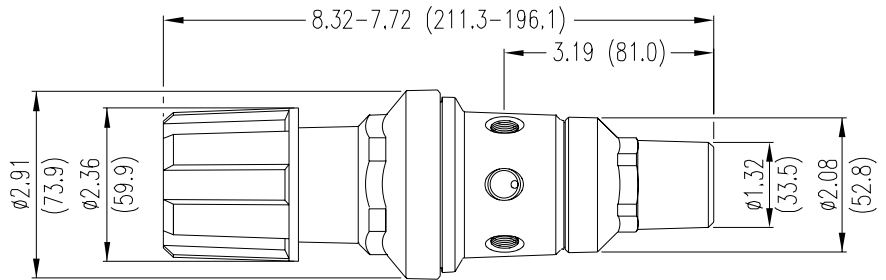
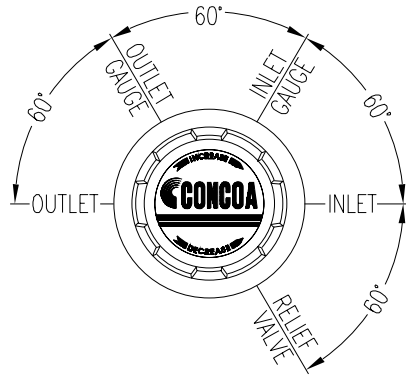
- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)  
4500 PSIG (310 BAR) Optional
- Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- Gauges**  
**Inlet:** 2 1/2" (68mm) diameter chrome-plated brass  
**Outlet:** 2 1/2" (68mm) diameter steel case with brass connection
- Ports**  
1/4" FPT
- Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
- Cv**  
0.02  
See page 208 for flow curves
- Weight (213 1331-580)**  
5.1 lbs. (2.3 kg)

CRN 0H5216.5R1

# 200 Series Regulators



## Installation Dimensions



REGULATORS

## Ordering Information

213	A	B	C	D	-CON	Options	
Series 213	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections	Installed Options
	<b>1:</b> 0-2 PSIG (0-140 mBAR)	0-5 PSIG/ (0-350 mBAR)	<b>0:</b> None	<b>0:</b> 1/4" FPT port	<b>0:</b> Bare body	<b>000:</b> 1/4" FPT	<b>B:</b> Protocol alarm station (110/220 VAC)
	<b>2:</b> 0-5 PSIG (0-350 mBAR)	0-10 PSIG/ (0-700 mBAR)	<b>3:</b> 0-4000 PSIG/ 0-275 BAR	<b>1:</b> 1/4" MPT	<b>1:</b> Standard assembly (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube	<b>C:</b> Protocol switchover station
			<b>5:</b> 0-1000 PSIG/ 0-70 BAR	<b>2:</b> 1/4" tube fitting	<b>2:</b> Standard assembly (BAR/PSIG gauges)	<b>TF4:</b> 1/4" tube	<b>H:</b> Protocol switchover station with alarm (110/220 VAC)
			<b>6:</b> 0-400 PSIG/ 0-27 BAR	<b>3:</b> Diaphragm valve 1/4" tube fitting		<b>TF6:</b> 3/8" tube	<b>M:</b> Protocol station
			<b>8:</b> 0-6000 PSIG/ 0-415 BAR*	<b>5:</b> Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	<b>Q:</b> Protocol purge station
			<b>9:</b> 0-600 PSIG/ 0-42 BAR	<b>6:</b> 1/8" tube fitting			<b>T:</b> Tee purge
		*Max inlet 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®		<b>7:</b> 3/8" tube fitting			
				<b>8:</b> Diaphragm valve 1/8" tube fitting			
				<b>9:</b> Diaphragm valve 1/4" FPT			
				<b>A:</b> 3/8" BSP RH fitting			
				<b>B:</b> Diaphragm valve 3/8" tube fitting			
				<b>C:</b> 3/8" BSP LG fitting			
				<b>D:</b> 6mm brass hose barb			
				<b>G:</b> 1/8" stainless steel tube fitting			
				<b>H:</b> 1/4" stainless steel tube fitting			
				<b>M:</b> 6mm tube fitting			
				<b>S:</b> Diaphragm valve 6mm tube fitting			