



# 213 DUAL STAGE CHROME PLATED BRASS LOW PSIG REGULATOR

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).

## Highlighted Features

- 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
- ❖ Gas and liquid chromatography



Features	Materials	Specifications
<p><b>CAPSULE® Seat</b> Increased serviceability and life</p> <p><b>316L Stainless Steel Diaphragm</b> No inboard diffusion</p> <p><b>Forged Body</b> Durable, long-lasting construction</p> <p><b>Large Convoluted Diaphragm</b> Stable pressure control</p> <p><b>Standard Relief Valve</b> Diaphragm and gauge protection</p> <p><b>Chrome-Plated Forged Brass Body</b> High purity design</p> <p><b>Substantial Flow Capacity at Low Outlet Pressure</b> Supply multiple use locations</p> <p><b>Pressure Ranges 0.05-2.0 to 0.1-5.0 PSIG (4-140 mBAR to 7-350 mBAR)</b> Excellent pressure control in 0.05 to 0.1 PSIG (4 to 7 mBAR) increments</p> <p><b>3000 and 4500 PSIG (210 and 415 BAR) Inlet Pressure Rating</b> Safe use with high pressure cylinders</p>	<p><b>Body</b> Chrome-plated forged brass</p> <p><b>Bonnet</b> Chrome-plated die-cast zinc</p> <p><b>Seat</b> PCTFE (first stage) PTFE (second stage)</p> <p><b>Filter</b> 10 micron sintered bronze</p> <p><b>Diaphragm</b> 316L stainless steel</p> <p><b>Internal Seals</b> PTFE</p>	<p><b>Maximum Inlet Pressure</b> 3000 PSIG (210 BAR) 4500 PSIG (310 BAR) optional</p> <p><b>Temperature Range</b> -40°F to 140°F (-40°C to 60°C)</p> <p><b>Gauges</b> <b>Inlet:</b> 2 1/2" (68mm) diameter chrome-plated brass <b>Outlet:</b> 2 1/2" (68mm) diameter steel case with brass connection</p> <p><b>Ports</b> 1/4" FPT</p> <p><b>Helium Leak Integrity</b> 1 x 10<sup>-8</sup> scc/sec</p> <p><b>Cv</b> 0.2 <i>Flow curves on pages to follow</i></p> <p><b>Weight (213 1331-580)</b> 5.1 lbs. (2.3 kg)</p>

## Order Information

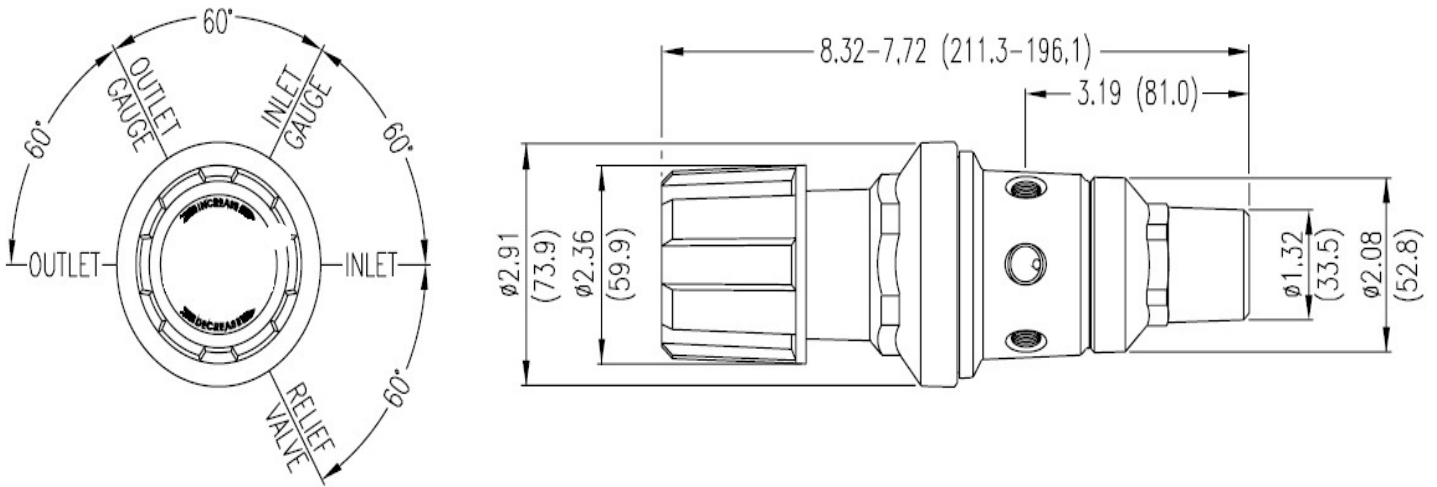
Model	A		B	C	D	-CON	Installed Options
Series	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Gauges	Inlet Connections	
213	1: 0-2 PSIG (0-140 mBAR)	0-5 PSIG/ (0-350 mBAR)	0: None	0: 1/4" FPT port 1: 1/4" MPT 2: 1/4" tube fitting	0: Bare body 1: Standard assembly (PSIG/kPa gauges)	000: 1/4" FPT	B: Protocol alarm station with pressure switch gauges
	2: 0-5 PSIG (0-350 mBAR)	0-10 PSIG/ (0-700 mBAR)	3: 0-4000 PSIG/ 0-275 BAR 5: 0-1000 PSIG/ 0-70 BAR 6: 0-400 PSIG/ 0-27 BAR 8: 0-600 PSIG/ 0-415 BAR <sup>1</sup> 9: 0-6000 PSIG/ 0-42 BAR	3: Diaphragm valve 1/4" tube fitting 4: Diaphragm valve 1/4" MPT 5: Needle valve 1/4" MPT 6: 1/8" tube fitting 7: 3/8" tube fitting 8: Diaphragm valve 1/8" tube fitting 9: Diaphragm valve 1/4" FPT A: 3/8" BSP RH fitting B: Diaphragm valve 1/4" FPT C: 3/8" BSPLH fitting D: 6mm brass hose barb (not available if A=4 or 5) G: 1/8" stainless steel tube fitting H: 1/4" stainless steel tube fitting M: 6mm tube fitting S: Diaphragm valve 6mm tube fitting	2: Standard assembly (BAR/PSIG gauges)	TF2: 1/8" tube TF4: 1/4" tube TF6: 3/8" tube  CGA DIN 477 BS 341 and others available	C: Protocol switchover station  E: Protocol alarm station with intrinsically safe transducer for hazardous environments  H: Protocol switchover alarm station with pressure switch gauges J: Protocol alarm station with standard transducer for non-hazardous environments  K: Protocol switchover alarm station with standard transducer for non-hazardous environments  M: Protocol station Q: Protocol purge station T: Tee purge <sup>2</sup> X: Protocol switchover alarm station with intrinsically safe transducer for hazardous environments

**NOTES:**

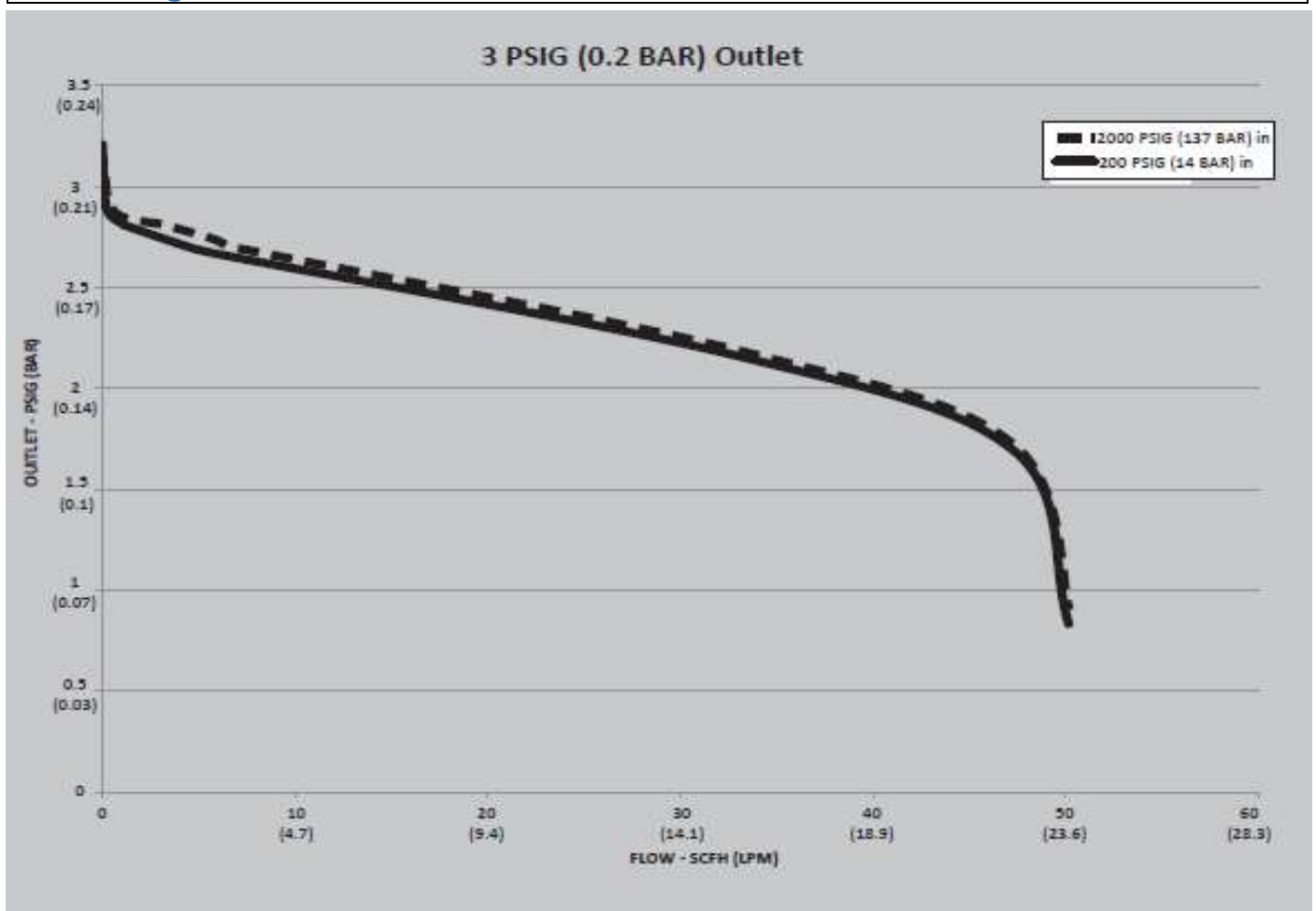
<sup>1</sup> Maximum inlet 4500 PSIG (310 BAR) with PCTFE Seat CAPSULE®

<sup>2</sup> Not available with 4500 PSIG (310 BAR) max inlet B: Diaphragm valve 3/8" pressure

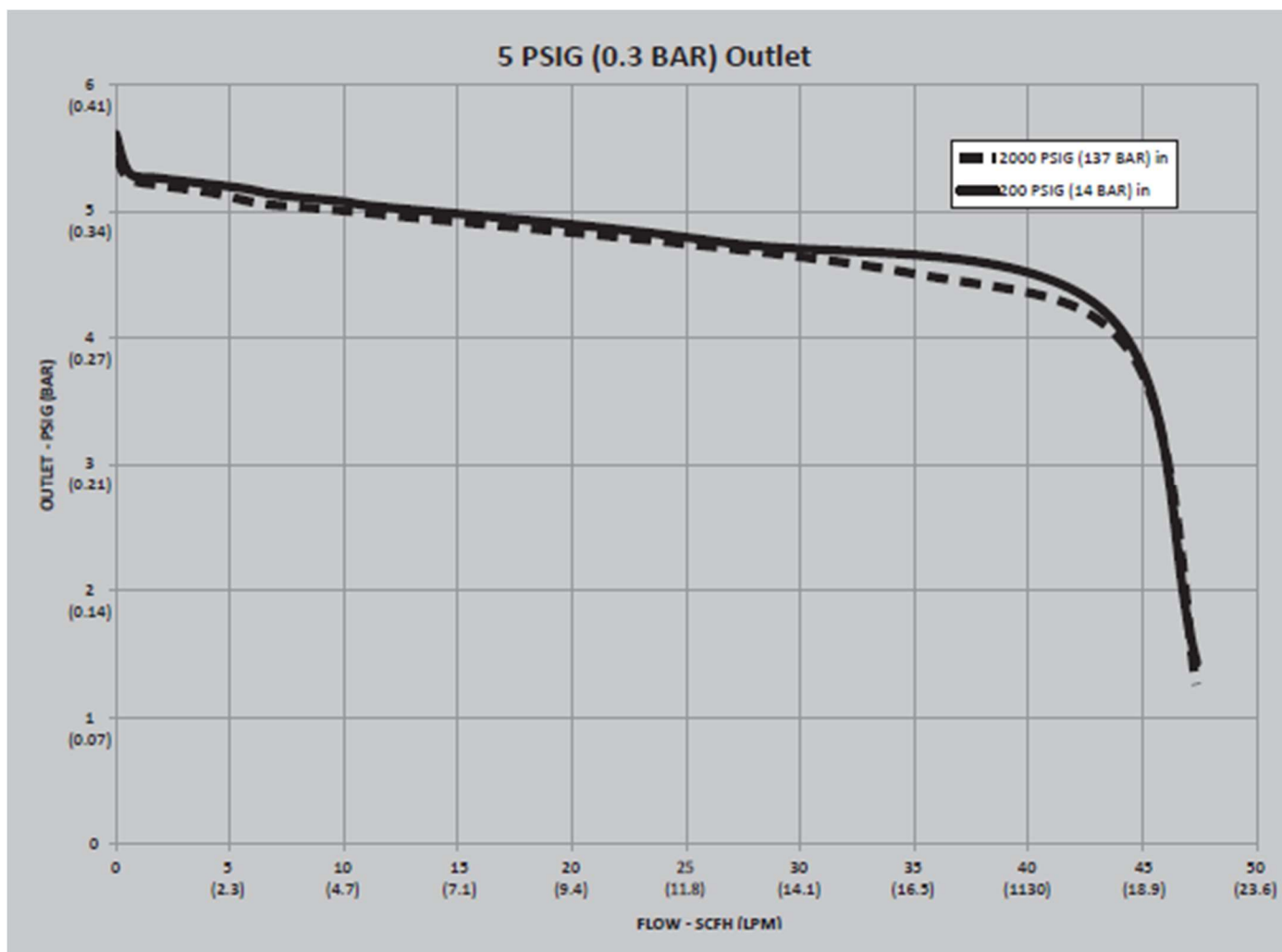
## Installation Dimensions



## 213 Regulator Flow Curves



## 213 Regulator Flow Curves - continued



*Can't find what you need? We will be happy to assist you to find the right regulator to fit your needs.*