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^{-8} scc/sec

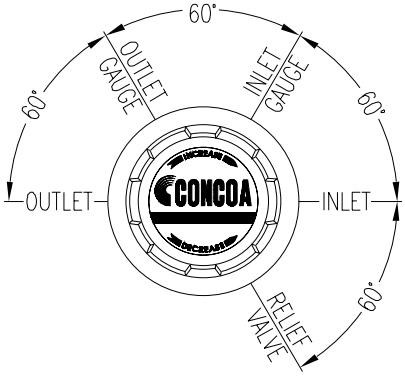
Cv
0.02
See page 208 for flow curves

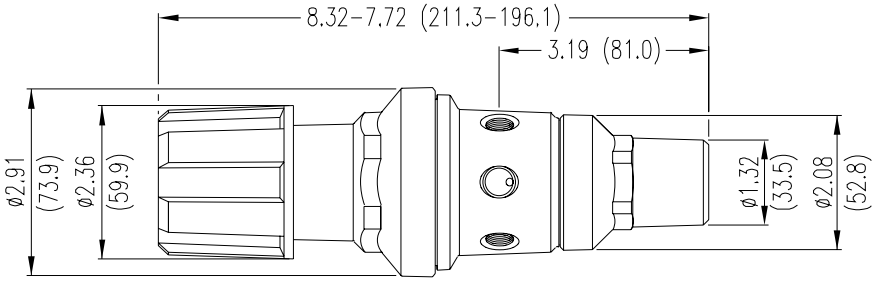
Weight (213 1331-580)
5.1 lbs. (2.3 kg)

CRN 0H5216.5R1

200 Series Regulators

Installation Dimensions





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
	1: 0-2 PSIG (0-140 mBAR)	0-5 PSIG/ (0-350 mBAR)	**0:** None	**0:** 1/4" FPT port	**0:** Bare body	**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	**1:** 1/4" MPT	**1:** Standard assembly (PSIG/kPa gauges)	**TF2:** 1/8" tube	**C:** Protocol switchover station
			5: 0-1000 PSIG/ 0-70 BAR	**2:** 1/4" tube fitting	**2:** Standard assembly (BAR/PSIG gauges)	**TF4:** 1/4" tube	**E:** Protocol alarm station with intrinsically safe transducer for hazardous environments
			6: 0-400 PSIG/ 0-27 BAR	**3:** Diaphragm valve 1/4" tube fitting		**TF6:** 3/8" tube	**H:** Protocol switchover alarm station with pressure switch gauges
			8: 0-6000 PSIG/ 0-415 BAR*	**5:** Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	**J:** Protocol alarm station with standard transducer for non hazardous environments
			9: 0-600 PSIG/ 0-42 BAR	**6:** 1/8" tube fitting			**K:** Protocol switchover alarm station with standard transducer for non hazardous environments
				7: 3/8" tube fitting			**M:** Protocol station
			**Max inlet 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®*	**8:** Diaphragm valve 1/8" tube fitting			**Q:** Protocol purge station
				9: Diaphragm valve 1/4" FPT			**T:** Tee purge
				A: 3/8" BSP RH fitting			**X:** Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
				B: Diaphragm valve 3/8" tube fitting			
				C: 3/8" BSP LG fitting			
				D: 6mm brass hose barb			
				G: 1/8" stainless steel tube fitting			
				H: 1/4" stainless steel tube fitting			
				M: 6mm tube fitting			
				S: Diaphragm valve 6mm tube fitting			

Flow Curves for 213