212 Series Regulators

The 212 Series regulators are designed for primary pressure control of non-corrosive, high purity, or gases supplied from cryogenic liquid cylinders (up to grade 4.5). Two stages of pressure regulation minimize any pressure variation, making the 212 Series regulator ideal for applications requiring constant pressure control and delivery regardless of any supply pressure variation arising from inlet pressure changes, such as the depletion of the supply cylinder.

2123331-01-580 shown

Typical Applications

- Control of Cryogenic Gases
- Non-corrosive Mixtures
- Gas and Liquid Chromatography
- Analytical Laboratory Applications

Features

Standard Relief Valve protects diaphragm and gauges

316L Stainless Steel Diaphragm prevents inboard diffusion

CAPSULE® Seat Technology increases product serviceability and life

High Flow Capacity permits multiple user locations

Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR); 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) optional

Body: Chrome-plated forged brass

Bonnet: Chrome-plated die cast zinc

Gauges: 2 1/2 in (63 mm) diameter plated case

Seats: PCTFE (first stage); PTFE (second stage)

Filter: 10-micron sintered bronze

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

Diaphragm: 316L Stainless steel

Cv: 0.28

Helium Leak Integrity 1 x 10^{-8} scc/sec

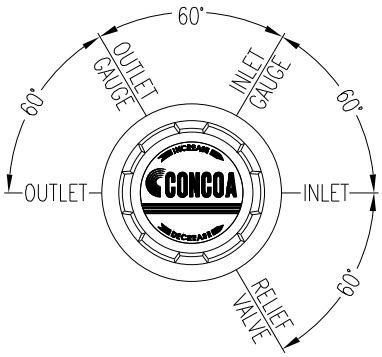
Internal Seals: PTFE

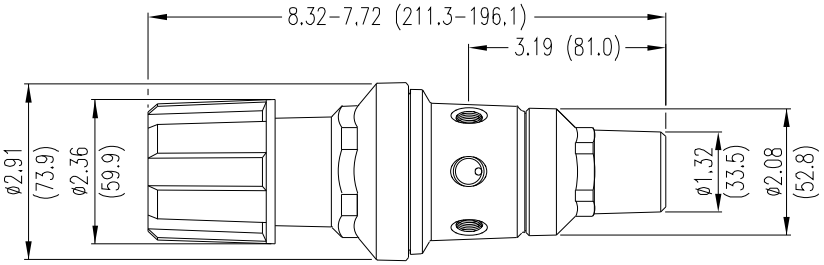
Ports (bare body): 1/4 in FNPT

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

212 Series Regulators

Installation Dimensions





Ordering Information

212	A		B	C	D	-CON	Options
Series 212	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections	Installed Options
	1: 0-15 PSIG (0-1 BAR)	0-30 PSIG/ 0-2 BAR	**0:** None	**0:** 1/4" FNPT port	**0:** Bare body	**000:** 1/4" FNPT	**B:** Protocol alarm station with pressure switch gauges
	2: 0-40 PSIG (0-3 BAR)	0-60 PSIG/ 0-4 BAR	**3:** 0-4000 PSIG/ 0-280 BAR	**1:** 1/4" MNPT	**1:** Standard assembly (PSIG/kPa gauges)	**TF2:** 1/8" tube	**C:** Protocol switchover station
	3: 0-120 PSIG (0-8 BAR)	0-200 PSIG/ 0-14 BAR	**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
	4: 0-200 PSIG (0-14 BAR)	0-400 PSIG/ 0-28 BAR	**6:** 0-400 PSIG/ 0-28 BAR	**3:** Diaphragm valve 1/4" tube fitting		**TF6:** 3/8" tube	**H:** Protocol switchover alarm station with pressure switch gauges
	5: 0-15 PSIG (0-1 BAR)*	0-30 PSIG/ 0-2 BAR with redline for acetylene use	**8:** 0-6000 PSIG/ 0-415 BAR*	**4:** Diaphragm valve 1/4" MNPT		**M06:** 6mm tube	**J:** Protocol alarm station with standard transducer for non-hazardous environments
	** Not available with 4500 PSIG (310 BAR) Max Inlet*		**9:** 0-600 PSIG/ 0-42 BAR	**5:** Needle valve 1/4" MNPT		*CGA DIN 477 BS 341 and others available*	**K:** Protocol switchover alarm station with standard transducer for non-hazardous environments
			G: 0-4000 PSIG/ 0-280 BAR†	**6:** 1/8" tube fitting			**M:** Protocol station
			**Max inlet 4500 PSIG (310 BAR) with PCTFE seat CAPSULE®*	**7:** 3/8" tube fitting			**Q:** Protocol purge station
				8: Diaphragm valve 1/8" tube fitting			**T:** Tee purge
			†Maximum inlet pressure 3500 (240 BAR) with PCTFE seat CAPSULE	**9:** Diaphragm valve 1/4" FNPT			**X:** Protocol switchover alarm station with intrinsically safe transducer for hazardous environments
				A: 3/8" BSP RH fitting			
				B: Diaphragm valve 3/8" tube fitting			
				C: 3/8" BSP LH fitting			
				D: 6mm hose barb, chrome			
				G: 1/8" stainless steel tube fitting			
				H: 1/4" stainless steel tube fitting			
				J: 9/16"-18 "B" LH fitting, bare brass			
				K: 9/16"-18 "B" RH fitting, bare brass			
				L: 5/8"-18 "Inert" RH fitting, bare brass			
				M: 6mm tube fitting			
				S: Diaphragm valve 6mm tube fitting			

212 Series Regulators

Flow Curves for 212 Series