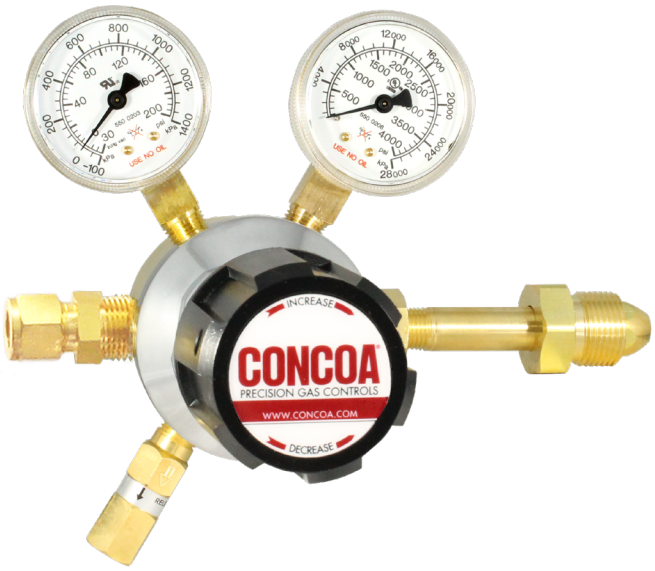
485 Series Regulators

The 485 Series regulator provides primary source pressure control in numerous high flow inert gas applications such as high flow purging, non-corrosive process gas control, manifold, and line regulation. Internal pressure equalization mitigates the delivery pressure variation from changing flows that are typical in pipelines.



485 3311-01-580 shown

Typical Applications

- Bulk Gas Distribution Systems
- Gas and Liquid Chromatography
- High Purity Carrier Gases
- Zero, Span, and Calibration Gases
- High Purity Chamber Pressurization
- Liquefied Hydrocarbon Gas Control
- Control of Cryogenic Gases

Features

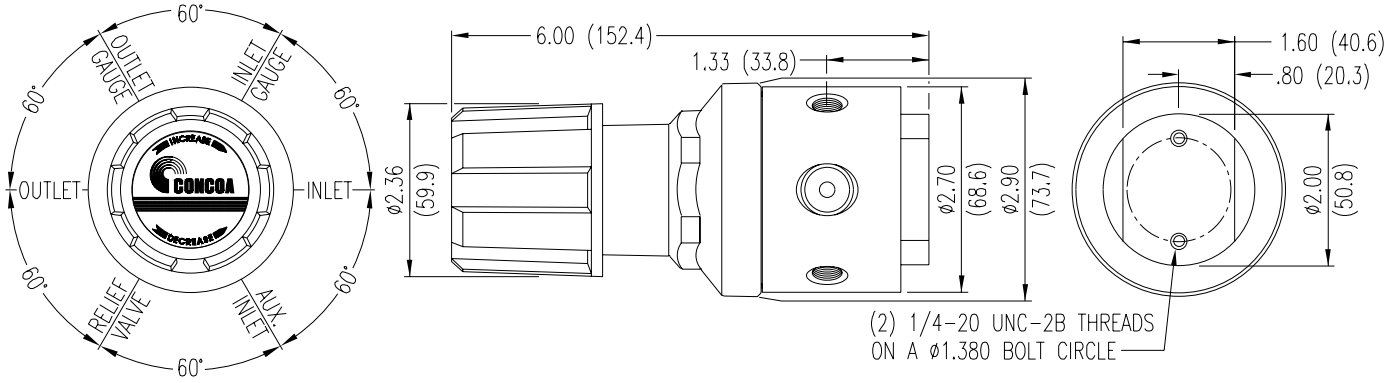
Balanced Stem Seat ensures constant delivery pressure at high flows
316L Stainless Steel Diaphragm prevents inboard diffusion
Cleanroom Assembly eliminates contamination at installation
Rear Panel-Mountable facilitates a variety of system configurations
Pipe Away Relief Valve vents exhaust gas safely
Pressure Ranges 0-15 to 0-250 PSIG (0-1 to 0-17 BAR) serves a range of applications

Materials and Specifications

Maximum Inlet Pressure (bare body): 3000 PSIG (210 BAR)
Body: Brass barstock
Bonnet: Chrome-plated, die-cast zinc
Gauges: 2 in (50 mm) diameter brass
Seat: PCTFE
Filter: 40-micron 316L stainless steel mesh
Temperature Range: -40°F to 140°F (-40°C to 60°C)
Diaphragm: 316L stainless steel
Cv: 1.0 *See flow curves attached*
Helium Leak Integrity: 1 x 10^{-8} scc/sec
Internal Seals: PTFE
Ports (bare body): 1/2 in FNPT (inlet/outlet); 1/4 in FNPT (gauges, relief valve, and auxiliary inlet)
Weight (485 3311-580): 5.95 lbs. (2.7 kg)
Conformances: Cleanliness meets or exceeds CGA G-4.1; PED 2014/68/EU; ANSI/ASME B40.1; CRN OH5216

485 Series Regulators

Installation Dimensions



Ordering Information

485	A		B	C	D	-CON	Options
Series 485	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges	Inlet Connections	Installed Options
	1: 0-15 PSIG (0-1 BAR)	30"-0-30 PSIG/ -1-0-2 BAR	**0:** None	**0:** 1/2" FNPT port	**0:** Bare body	**000:** 1/2" FNPT	**B:** Protocol alarm station with pressure switch gauges
	2: 0-40 PSIG (0-3 BAR)	30"-0-60 PSIG/ -1-0-4 BAR	**3:** 0-4000 PSIG/ 0-275 BAR	**1:** 1/2" tube fitting	**1:** Standard assembly (PSIG/kPa gauges)	**TF8:** 1/2" tube	**C:** Protocol switchover station
	3: 0-120 PSIG (0-8 BAR)	30"-0-200 PSIG/ -1-0-14 BAR	**5:** 0-1000 PSIG/ 0-70 BAR	**5:** Needle valve 1/4" MNPT	**2:** Standard assembly (BAR/PSIG gauges)	**M12:** 12mm tube	**E:** Protocol alarm station with intrinsically safe transducer for hazardous environments
	4: 0-200 PSIG (0-14 BAR)	0-400 PSIG/ 0-27 BAR	**6:** 0-400 PSIG/ 0-28 BAR	**P:** 12 mm tube fitting	**6:** Mirror image (PSIG/kPa gauges)	*CGA DIN 477 BS 341 and others available.*	**H:** Protocol switchover alarm station with pressure switch gauges
	5: 0-250 PSIG (0-17 BAR)	0-400 PSIG/ 0-27 BAR	**7:** 0-200 PSIG/ 0-17 BAR		**7:** Mirror image (BAR/PSIG gauges)		**J:** Protocol alarm station with standard transducer for non-hazardous environments
			9: 0-600 PSIG/ 0-42 BAR				**K:** Protocol switchover alarm station with standard transducer for non-hazardous environments
							M: Protocol station
							Q: Protocol purge station*
							X: Protocol Switchover alarm station with intrinsically safe transducer for hazardous environments
							**Not available with 4500 PSIG (310 BAR) max inlet pressure.*

485 Series Regulators

Flow Curves for 485 Series