

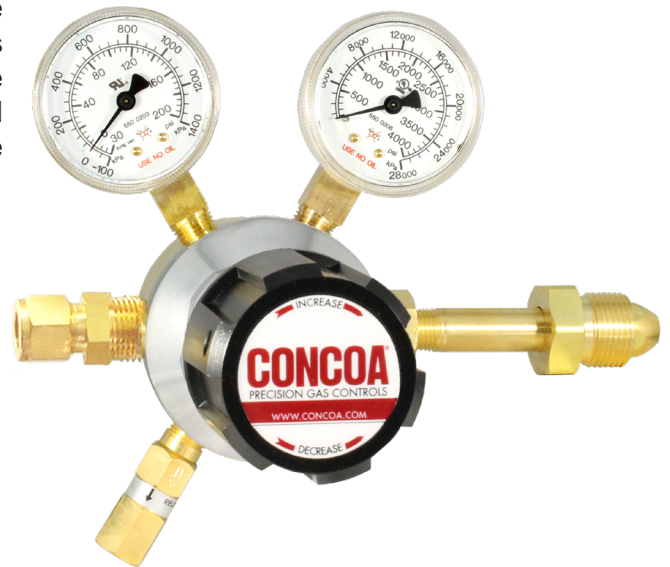
485 SERIES REGULATORS



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.

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



485 3311-01-580 shown

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 from 0-15 to 0-250 PSIG (0-1 to 0-17 BAR) serve 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: 1×10^{-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)

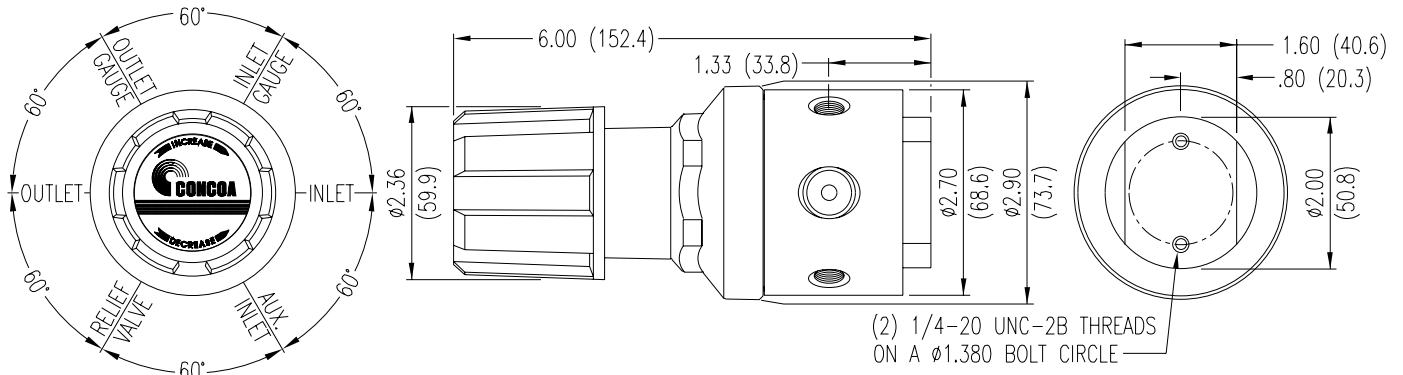
Weight (485 3311-580): 5.95 lbs. (2.7 kg)

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

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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.

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Flow Curves for 485 Series

