

305 Series Regulator

CRN OH 5216.5C

Single Stage
Chrome-Plated
Brass Barstock Body
316L Stainless Steel
Diaphragm
Custom Calibration



305-8301 shown

The 305 Series regulators are specifically designed for use in the medical laboratory for blood gases, laser gases, and other clinical gas applications where minor fluctuations in outlet pressure due to diminishing inlet supply pressure can be tolerated.

Custom Calibration

In addition to a standard 2-15 lpm flow gauge for CO₂ in laser applications, CONCOA also offers a custom 2-15 lpm calibration for any non-corrosive gas or mixture. The outlet orifice is sized to the flow requirement for a specific gas using a thermal mass flowmeter.

Typical Applications

- *Blood gases*
- *Laser gases*
- *Medical research*
- *Pharmaceutical manufacturing*
- *University laboratories*

300 Advantage

- *Capsule® seat*
Increased serviceability and life
- *316L stainless steel diaphragm*
No inboard diffusion
- *Low wetted surface area*
Minimal purge requirements
- *Field-adjustable pressure limit*
Safeguard downstream equipment
- *Convolute diaphragm*
Smooth pressure changes
- *Compact design*
Easily transported and integrated

Materials

Body
Chrome-plated brass barstock

Bonnet
Chrome-plated die cast zinc

Seat
PTFE

Filter
10 micron sintered bronze

Diaphragm
316L stainless steel

Internal Seals
PTFE

Specifications

Maximum Inlet Pressure
3000 PSIG (210 BAR)

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

Gauges
2" diameter chrome-plated

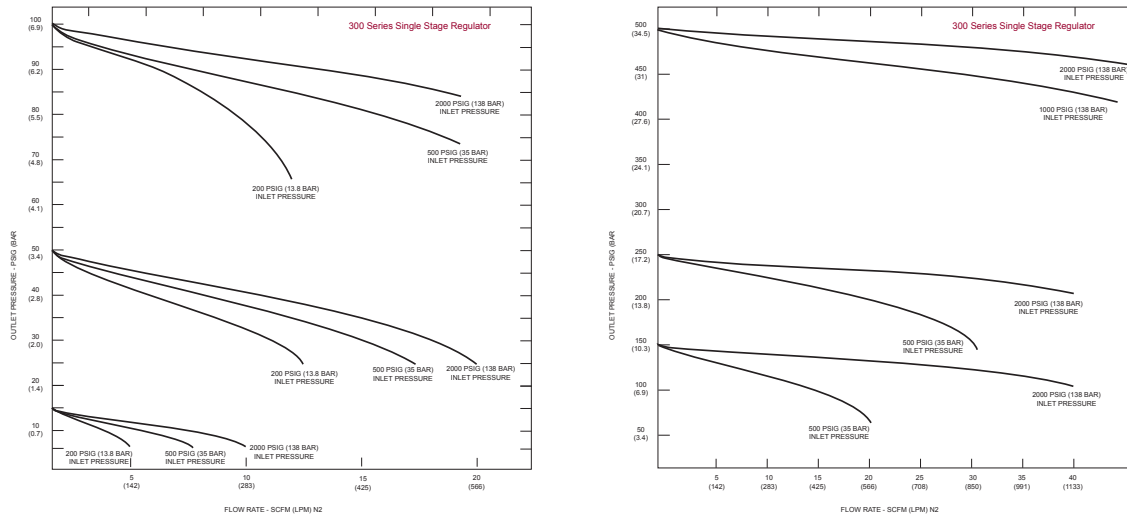
Ports
¼" FPT

Helium Leak Integrity
1 x 10⁻⁸ scc/sec

Cv
0.1

Weight (305-8381-M1L)
2.8 lbs. (1.29 kg)

Flow Performance Curves



Ordering Information *(For information about how to use this table please see page 4.)*

305	A	B	C	D	-Inlet	
Series 305	Outlet Pressure 1: 0-15 2: 0-30 3: 0-50 5: 0-100 6: 0-200 7: 0-500 8: 2-15 LPM CO ₂ 9: Custom Calibration	Outlet Gauge 0-30 PSIG 0-60 PSIG 0-100 PSIG 0-200 PSIG 0-400 PSIG 0-1000 PSIG 2-15 LPM Flowgauge Custom Flowgauge	Inlet Gauge 0: None 3: 0-4000 PSIG	Outlet Assemblies 0: ¼" FPT Port 1: ¼" MPT 2: ¼" Tube Fitting 3: Diaphragm Valve ¼" Tube 4: Diaphragm Valve ¼" MPT 5: Needle Valve ¼" MPT 6: ⅛" Tube Fitting 7: ⅜" Tube Fitting 8: Medical DISS outlet (See selection chart below) 9: ¼" Hose Barb (50 PSIG maximum) A: ⅜" BSP Right Hand Fitting	Assembly/Gauges 0: Bare Body 1: Standard Assembly (PSIG/kPa Gauges) 2: Standard Assembly (BAR/PSIG Gauges)	Connections See selection chart below

300 Series Special Application Regulators

Inlet/Outlet Selection Chart *(Availability is limited to the combinations shown)*

Gas Service	Inlet (Threaded)	Inlet (Yoke)	Outlet (Medical DISS)		
Air	CGA 346	CGA 950	1160		
Argon	CGA 580	not available	1060	1120	
Carbon Dioxide	CGA 320	CGA 940	1080		
Carbon Dioxide < 7% and Oxygen	CGA 280	CGA 880	1020	1180	1200
Carbon Dioxide > 7% and Oxygen	CGA 500	CGA 940	1020	1060	1080
Clinical Blood Gas Mixtures	CGA 500	CGA 973	1020	1060	1080
Cyclopropane	not available	CGA 920	1100		
Ethylene	not available	CGA 900	1140		
Helium	CGA 580	not available	1060	1120	
Helium < 80% and Oxygen	CGA 280	CGA 890	1020	1180	1200
Helium > 80% and Oxygen	CGA 500	CGA 930	1020	1060	1080
Krypton	CGA 580	not available	1060	1120	
Methylene Fluoride	CGA 320	not available	1080		
Neon	CGA 580	not available	1060	1120	
Nitrogen	CGA 580	CGA 960	1060	1120	
Nitrogen and Oxygen < 23.5%	CGA 280	CGA 890	1020	1180	1200
Nitrous Oxide	CGA 326	CGA 910	1040		
Nitrous Oxide 47.5% - 52.5% and Oxygen	CGA 280	CGA 965	1020	1180	1200
Oxygen	CGA 540	CGA 870	1240		
Tetrafluoromethane	CGA 580	not available	1060	1120	
Xenon	CGA 580	not available	1060	1120	
Xenon and Oxygen < 20%	CGA 280	CGA 890	1020	1180	1200