305 Series Regulator

Single Stage

Chrome-Plated Brass Barstock Body

316L Stainless Steel Diaphragm

Custom Calibration

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.

305-8301 shown

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 Series 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
- Convoluted diaphragm
  Smooth pressure changes
- Compact design
  Easily transported and intetgrated into systems

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

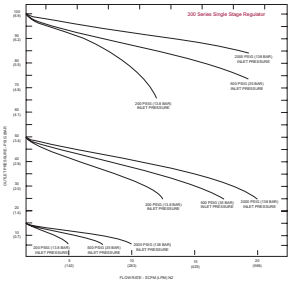
Helium Leak Integrity
1 x 10^{-8} scc/sec

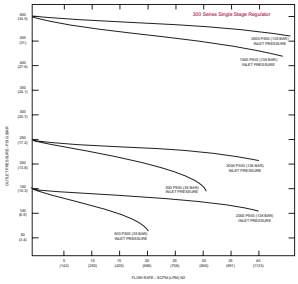
Cv
0.1

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

300 Series Regulators

Flow Performance Curves





Ordering Information

305	A		B	C	D	-Inlet	Options
Series 305	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Connections	Installed Options
	1: 0-15	0-30 PSIG	0: None	0: ¼" FPT Port	0: Bare Body	See Inlet/Outlet selection chart below (Availability is limited to the combinations shown)	A: Protocol Station with 110VAC Remote Alarm
	2: 0-30	0-60 PSIG	3: 0-4000 PSIG	1: ¼" MPT	1: Standard Assembly (PSIG/kPa Gauges)		B: Protocol Station with 220VAC Remote Alarm
	3: 0-50	0-100 PSIG		2: ¼" Tube Fitting	2: Standard Assembly (BAR/PSIG Gauges)		C: Protocol Switchover Station
	5: 0-100	0-200 PSIG		3: Diaphragm Valve ¼" Tube Fitting			G: Protocol Switchover Station with 110VAC Remote Alarm
	6: 0-200	0-400 PSIG		4: Diaphragm Valve ¼" MPT			H: Protocol Switchover Station with 220VAC Remote Alarm
	7: 0-500	0-1000 PSIG		5: Needle Valve ¼" MPT			M: Protocol Station
	8: 2-15 LPM CO_2	2-15 LPM Flowgauge		6: ⅛" Tube Fitting			Q: Protocol Purge Station
	9: Custom Calibration	Custom Flowgauge		7: ⅜" Tube Fitting			
				8: Medical DISS Outlet			
				9: ¼" Hose Barb			
				A: ⅜" BSP Right Hand Fitting			

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