



# 300 Series Regulators

## 315 Series Regulator

Dual Stage

Chrome-Plated Brass  
Barstock Body

316L Stainless Steel  
Diaphragm

Custom Calibration

The 315 Series regulators are specifically designed for use in the medical laboratory for blood gases, laser gases, and other clinical gas applications requiring constant pressure control and delivery regardless of supply pressure variations.

Custom Calibration

In addition to a standard 2-15 lpm flow gauge for CO<sub>2</sub> 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



315-5301 shown

### 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
- Convuluted diaphragm  
Smooth pressure changes
- Compact design  
Easily transported and integrated into systems

### Materials

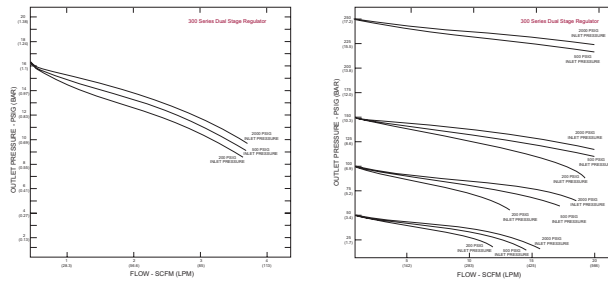
- Body  
Chrome-plated brass barstock
- Bonnet  
Chrome-plated die cast zinc
- Seat  
PTFE
- Filter  
10 micron sintered bronze
- Diaphragm  
316L stainless steel
- Internal Seals  
PTFE

### 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  
1/4" FPT
- Helium Leak Integrity  
1 x 10<sup>-8</sup> scc/sec
- Cv  
0.1
- Weight (315-8381-M1L)  
4.2 lbs. (1.90 kg)

# 300 Series Regulators

## Flow Performance Curves



## Ordering Information

| 315        | A                           | B                  | C              | D                                    | -Inlet                                 | Options   |   |
|------------|-----------------------------|--------------------|----------------|--------------------------------------|--|---|---|
| Series 315 | Outlet Pressure             | Outlet Gauge       | Inlet Gauge    | Outlet Assemblies                    | Assembly Gauges                        | Connections   | Installed Options                                       |
|            | 1: 0-15                     | 0-30 PSIG          | 0: None        | 0: 1/4" FPT Port                     | 0: Bare Body                           | See Inlet/Outlet selection chart below<br>(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: 1/4" MPT                          | 1: Standard Assembly (PSIG/kPa Gauges) |   | B: Protocol Station with 220VAC Remote Alarm            |
|            | 3: 0-50                     | 0-100 PSIG         |                | 2: 1/4" Tube Fitting                 | 2: Standard Assembly (BAR/PSIG Gauges) |   | C: Protocol Switchover Station                          |
|            | 5: 0-100                    | 0-200 PSIG         |                | 3: Diaphragm Valve 1/4" Tube Fitting |  |   | G: Protocol Switchover Station with 110VAC Remote Alarm |
|            | 6: 0-200                    | 0-400 PSIG         |                | 4: Diaphragm Valve 1/4" MPT          |  |   | H: Protocol Switchover Station with 220VAC Remote Alarm |
|            | 8: 2-15 LPM CO <sub>2</sub> | 2-15 LPM Flowgauge |                | 5: Needle Valve 1/4" MPT             |  |   | M: Protocol Station                                     |
|            | 9: Custom Calibration       | Custom Flowgauge   |                | 6: 1/8" Tube Fitting                 |  |   | Q: Protocol Purge Station                               |
|            |                             |                    |                | 7: 3/8" Tube Fitting                 |  |   |   |
|            |                             |                    |                | 8: Medical DISS Outlet               |  |   |   |
|            |                             |                    |                | 9: 1/4" Hose Barb                    |  |   |   |
|            |                             |                    |                | A: 3/8" 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        |

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