



200 Series Regulators

205 SERIES

The 205 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases (up to grade 4.5) or as point of use pressure control in high purity gas distribution systems.

- Single Stage
- Chrome-Plated Forged Brass Body
- 316L Stainless Steel Diaphragm
- Four Port Configuration



205 3021-000 shown

Typical Applications

- Point-of-use laboratory systems
- Gas supply purging
- Liquefied hydrocarbon gas control
- Control of cryogenic gases
- Bulk gas distribution systems

Features

- CAPSULE® Seat**
Increased serviceability and life
- 316L Stainless Steel Diaphragm**
No inboard diffusion
- Forged Body**
Durable, long-lasting construction
- Field-Adjustable Pressure Limit**
Safeguard downstream equipment
- Large Convoluted Diaphragm**
Smooth pressure changes
- Standard Relief Valve**
Diaphragm and gauge protection
- Chrome-Plated Forged Brass Body**
Economical high purity design
- High Flow Capacity**
Supply multiple user locations
- Pressure Ranges 0-15 to 0-200 PSIG (0-1 to 0-14 BAR)**
Broad range of applications
- 3000 PSIG (210 BAR) Inlet Pressure Rating**
Safe use with high pressure cylinders

Materials

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

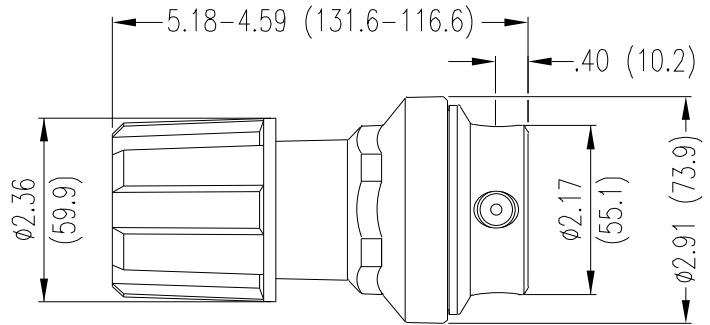
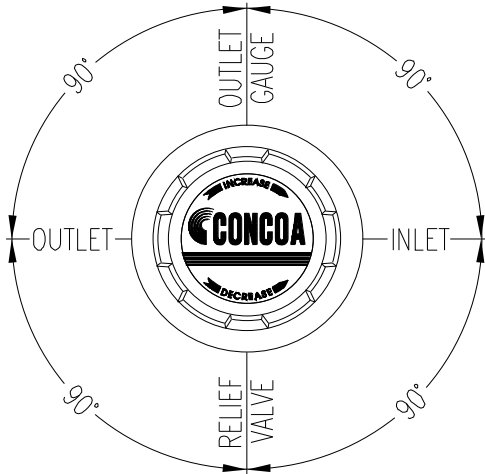
Specifications

- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Gauge**
2 1/2" (68mm) diameter chrome-plated brass
- Ports**
1/4" FPT
- Helium Leak Integrity**
1 x 10⁻⁸ scc/sec
- Cv**
0.28
See page 206 for flow curves
- Weight (205 3021-000)**
3.2 lbs. (1.44 kg)

200 Series Regulators



Installation Dimensions



REGULATORS

Ordering Information

| 205 | A | B | C | D | -CON | Options | |
|------------|--|----------------------|----------------|---|---|-----------------------|----------------------------------|
| Series 205 | Outlet Pressure | Outlet Gauge | Inlet Gauge | Outlet Assemblies | Assembly Gauges | Inlet Connections | Installed Options |
| | 1: 0-15 PSIG (0-1 BAR) | 0-30 PSIG/ 0-2 BAR | 0: None | 0: 1/4" FPT port | 0: Bare body | 000: 1/4" FPT | M: Protocol station |
| | 2: 0-40 PSIG (0-3 BAR) | 0-60 PSIG/ 0-4 BAR | | 1: 1/4" MPT | 1: Standard assembly (PSIG/kPa gauges) | TF2: 1/8" tube | Q: Protocol purge station |
| | 3: 0-120 PSIG (0-8 BAR) | 0-200 PSIG/ 0-14 BAR | | 2: 1/4" tube fitting | 2: Standard assembly (BAR/PSIG gauges) | TF4: 1/4" tube | |
| | 4: 0-200 PSIG (0-14 BAR) | 0-400 PSIG/ 0-27 BAR | | 3: Diaphragm valve 1/4" tube fitting | 6: Mirror image assembly (PSIG/kPa gauges) | TF6: 3/8" tube | |
| | 5: 0-15 PSIG (0-1 BAR)* | 0-30 PSIG/ 0-2 BAR | | 4: Diaphragm valve 1/4" MPT | 7: Mirror image assembly (BAR/PSIG gauges) | M06: 6mm tube | |
| | <i>*With redline for acetylene use</i> | | | 5: Needle valve 1/4" MPT | | | |
| | | | | 6: 1/8" tube fitting | | | |
| | | | | 7: 3/8" tube fitting | | | |
| | | | | 8: Diaphragm valve 1/8" tube fitting | | | |
| | | | | 9: Diaphragm valve 1/4" FPT | | | |
| | | | | A: 3/8" BSP RH fitting | | | |
| | | | | B: Diaphragm valve 3/8" tube fitting | | | |
| | | | | C: 3/8" BSP LH fitting | | | |
| | | | | D: 6mm brass hose barb | | | |
| | | | | G: 1/8" stainless steel tube fitting | | | |
| | | | | H: 1/4" stainless steel tube fitting | | | |
| | | | | M: 6mm tube fitting | | | |
| | | | | S: Diaphragm valve 6mm tube fitting | | | |

