200 Series Regulators

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

**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

![Diagram of 200 Series Regulator](image)

## Ordering Information

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

Flow Curves for 212 Series

Flow Curves for 205, 206 Series