The 402 Series regulators are intended for primary pressure control of non-corrosive, high purity or liquefied gases, or for applications where minor fluctuations in outlet pressure due to diminishing inlet supply can be tolerated.

- Single Stage
- Brass Barstock Body
- Six Port Configuration
- 316L Stainless Steel Diaphragm

### Typical Applications

- Bulk gas distribution systems
- Gas and liquid chromatography
- High purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization
- Liquefied hydrocarbon gas control
- Control of cryogenic gases
- EPA protocol standards

### Features

- Metal-to-Metal Diaphragm Seal
  - No possibility of gas contamination
- CAPSULE® Seat
  - Increased serviceability and life
- Brass Barstock Body
  - Smooth surface finish
- Front Panel-Mountable
  - Easy installation
- 10 Micron Filtration in Both Stages
  - Fail-safe seat performance
- Pressure Ranges 0-15 to 0-500 PSIG (0-1 to 0-34 BAR)
  - Broad range of applications
- Pipe Away Relief Valve
  - Safely vents exhaust gases

### Materials

- **Body**
  - Brass barstock
- **Bonnet**
  - Brass barstock
- **Seat**
  - PTFE
  - PCTFE with 3500 PSIG (240 BAR) or 4500 PSIG (310 BAR) inlet option
- **Filter**
  - 10 micron sintered bronze
- **Diaphragm**
  - 316L stainless steel
- **Internal Seals**
  - PTFE

### Specifications

- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
  - 3500 PSIG (240 BAR) optional
  - 4500 PSIG (310 BAR) optional
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Gauges**
  - 2" (53mm) diameter brass
- **Ports**
  - 1/4" FPT
- **Helium Leak Integrity**
  - 1 x 10^-9 scc/sec
- **Cv**
  - 0.1
  - See page 202 for flow curves
- **Weight (402 1331-580)**
  - 3.99 lbs. (1.81 kg)

CRN 0H15806.5R1
400 Series Regulators

Installation Dimensions

Ordering Information

<table>
<thead>
<tr>
<th>402</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-CON</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series 402</strong></td>
<td><strong>Outlet Pressure</strong></td>
<td><strong>Outlet Gauge</strong></td>
<td><strong>Inlet Gauge</strong></td>
<td><strong>Outlet Assemblies</strong></td>
<td><strong>Assembly/Gauges</strong></td>
<td><strong>Inlet Connections</strong></td>
</tr>
<tr>
<td>1</td>
<td>0-15 PSIG (0-1 BAR)*</td>
<td>30'-0-30 PSIG/1-0-2 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>
</tr>
<tr>
<td>2</td>
<td>0-50 PSIG (0-3.5 BAR)</td>
<td>30'-0-100 PSIG/1-0-7 BAR</td>
<td>3: 0-4000 PSIG/0-275 BAR</td>
<td>1: 1/4&quot; MPT</td>
<td>1: Cleanroom assembly (PSIG/PA gauges)</td>
<td>TF2: 1/8&quot; tube</td>
</tr>
<tr>
<td>3</td>
<td>0-100 PSIG (0-7 BAR)</td>
<td>30'-0-200 PSIG/1-0-14 BAR</td>
<td>5: 0-1000 PSIG/0-70 BAR</td>
<td>2: 1/4&quot; tube fitting</td>
<td>2: Cleanroom assembly (BAR/PSIG gauges)</td>
<td>TF4: 1/4&quot; tube</td>
</tr>
<tr>
<td>4</td>
<td>0-250 PSIG (0-17 BAR)</td>
<td>0-400 PSIG/0-27 BAR</td>
<td>6: 0-300 PSIG/0-21 BAR</td>
<td>3: Diaphragm valve 1/4&quot; tube fitting</td>
<td>6: Mirror image (PSIG/PA gauges)</td>
<td>TF6: 3/8&quot; tube</td>
</tr>
<tr>
<td>5</td>
<td>0-500 PSIG (0-34 BAR)**</td>
<td>0-1000 PSIG/0-70 BAR</td>
<td>7: 0-400 PSIG/0-27 BAR</td>
<td>4: Diaphragm valve 1/4&quot; MPT</td>
<td>7: Mirror image (BAR/PSIG gauges)</td>
<td>MO6: 6mm tube</td>
</tr>
<tr>
<td>6</td>
<td>0-150 PSIG (0-10 BAR)</td>
<td>30'-0-200 PSIG/1-0-14 BAR</td>
<td>8: 0-6000 PSIG/0-400 BAR*</td>
<td>5: Needle valve 1/4&quot; MPT</td>
<td>CGA DIN 477 BS 341 and others available</td>
<td>J: Protocol alarm station with standard transducer for non hazardous environments</td>
</tr>
<tr>
<td>7</td>
<td>0-150 PSIG (0-10 BAR)</td>
<td>0-30 PSIG /1-0-14 BAR***</td>
<td>6: 1/8&quot; tube fitting</td>
<td>7: 3/8&quot; tube fitting</td>
<td>B: Diaphragm valve 1/8&quot; tube fitting</td>
<td>K: Protocol switchover alarm station with standard transducer for non hazardous environments</td>
</tr>
</tbody>
</table>

*Not available with 4500 PSIG (310 BAR) maximum inlet pressure

**Standard assembly does not include relief valve

***With redline for acetylene use.

*Maximum inlet pressure 4500 PSIG (310 BAR) with PTFE seat CAPSULE®

†Maximum inlet pressure 3500 PSIG (240 BAR) with PTFE seat CAPSULE®

Related Options

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>550 0002</td>
<td>Panel mount kit</td>
</tr>
<tr>
<td>550 0001</td>
<td>Captured vent kit</td>
</tr>
<tr>
<td>476 0002</td>
<td>Helium Leak certification</td>
</tr>
</tbody>
</table>
Regulator Flow Curves

Flow Curves for 302, 304, 305, 307, 322, 324, 327, 401, 402, 408, 420, 422, 426, 427, 428, 429 Series

Flow Curves for 312, 315, 332, 411, 412, 414, 415, 430, 432 Series