400 Series Regulators

483 SERIES

The 483 Series regulator applications are wide and varied including high flow purging, non-corrosive process gas control, manifold and line regulation.

• Single Stage
• Ultra-High Flow
• Brass Barstock Body
• Four Port Configuration
• 316L Stainless Steel Diaphragm

Typical Applications

<table>
<thead>
<tr>
<th>Bulk gas distribution systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas and liquid chromatography</td>
</tr>
<tr>
<td>High purity carrier gases</td>
</tr>
<tr>
<td>Zero, span, and calibration gases</td>
</tr>
<tr>
<td>High purity chamber pressurization</td>
</tr>
<tr>
<td>Liquefied hydrocarbon gas control</td>
</tr>
<tr>
<td>Control of cryogenic gases</td>
</tr>
</tbody>
</table>

Features

- Metal-to-Metal Diaphragm Seal
  - No possibility of gas contamination
- ISOFLOW Technology
  - Internal equalization provides constant delivery pressure at high flows
- Brass Barstock Body
  - Smooth surface finish
- Rear Panel-Mountable
  - Versatile system configuration
- Pressure Ranges 0-15 to 0-250 PSIG (0-1 to 0-17 BAR)
  - Broad range of applications
- 3000 PSIG (210 BAR) Inlet Pressure Rating
  - Safe use with high pressure cylinders
- Pipe Away Relief Valve
  - Safely vents exhaust gases

Materials

- Body
  - Brass barstock
- Bonnet
  - Chrome-plated die-cast zinc
- Seat
  - PCTFE
- Filter
  - 40 micron 316L stainless steel mesh
- 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" (53mm) diameter brass
- Ports
  - 1/2" FPT (inlet/outlet)
  - 1/4" FPT (gauge/relief valve)
- Helium Leak Integrity
  - 1 x 10^-8 scc/sec
- Cv
  - 1.0
  - See page 204 for flow curves
- Weight (483 3001-000)
  - 4.79 lbs. (2.17 kg)

CRN 0C17947.5
# 400 Series Regulators

## Installation Dimensions

### Ordering Information

<table>
<thead>
<tr>
<th>Series 483</th>
<th>Outlet Pressure</th>
<th>Outlet Gauge</th>
<th>Inlet Gauge</th>
<th>Outlet Assemblies</th>
<th>Assembly/Gauges</th>
<th>Inlet Connections</th>
<th>Installed Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 0-15 PSIG (0-1 BAR)</td>
<td>30”-0-30 PSIG/ -1-0-2 BAR</td>
<td>0: None</td>
<td>0: 1/2” FPT port</td>
<td>0: Bare body</td>
<td>000: 1/2” FPT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: 0-40 PSIG (0-3 BAR)</td>
<td>30”-0-60 PSIG/ -1-0-4 BAR</td>
<td>1: 1/2” tube fitting</td>
<td>1: Standard assembly (PSIG/kPa gauges)</td>
<td>TF8: 1/2” tube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3: 0-120 PSIG (0-8 BAR)</td>
<td>30”-0-200 PSIG/ -1-0-14 BAR</td>
<td>5: Needle valve 1/4” MPT</td>
<td>2: Standard assembly (BAR/PSIG gauges)</td>
<td>M12: 12mm tube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4: 0-200 PSIG (0-14 BAR)</td>
<td>0-400 PSIG/ 0-27 BAR</td>
<td>P: 12mm tube fitting</td>
<td>6: Mirror image assembly (PSIG/kPa gauges)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: 0-250 PSIG (0-17 BAR)</td>
<td>0-400 PSIG/ 0-27 BAR</td>
<td>7: Mirror image assembly (BAR/PSIG gauges)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Related Options

<table>
<thead>
<tr>
<th>Options</th>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel mount kit</td>
<td>835 0204</td>
<td>To mount the regulator from the rear</td>
</tr>
</tbody>
</table>
Flow Curves for 483, 484, 485, 486 Series