The R230 is designed for applications that require high flow capacity and accurate process control. A poppet valve which is balanced by utilizing a rolling diaphragm, insures a constant output pressure even during wide supply pressure variations. Stability of regulated pressure is maintained under varying flow conditions through the use of an aspirator tube which adjusts the air supply in accordance with the flow velocity.

### Applications

The R230 regulators are an ideal choice for any application that calls for accurately maintained output pressure under high flow conditions. This includes, but is not limited to such applications as:
- **Test Equipment**
- **Gas Mixing**
- **Valve Operators**
- **Positioning Cylinders**
- **Laboratory Equipment**
- **Web Tensioning**
- **Clutch & Brake Controls**
- **Roll Loading**
- **Test Panels**
- **Actuators**

### Ordering Information

<table>
<thead>
<tr>
<th>In / Out Ports</th>
<th>Reduced Pressure Range (PSIG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Port Size</strong></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>R230-02E</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note: The data for Reduced Pressure Range is approximate and may vary slightly depending on specific application requirements.*
### Technical Information

#### R230 Regulator Kits & Accessories

- **Mounting Bracket Kit**: 446-707-025

#### Specifications

- **Constant Bleed Rate**: 1.0 to 12.5 SCFH (Depending upon output pressure)
- **Gauge Ports**: Two Ports 1/4" (Can be used as additional Full Flow 1/4 Inch Outlet Ports)
- **Effect of Supply Pressure Variation**: Less than 0.1 PSIG for 100 PSIG (6.89 bar) change
- **Exhaust (Relief) Capacity**: 4 SCFM with downstream pressure 5 PSIG above set pressure. Exhaust commences at 0.01 PSIG above set pressure.
- **Flow Capacity**: At 100 PSIG (6.89 bar) Supply, 80 PSIG (5.5 bar) Outlet, 80 SCFM (37.8 dm³/s)
- **Operating Temperature Range**: -40°C to 71°C (-40°F to 160°F)

#### Operating Pressure Range

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PSIG</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>5</td>
<td>0.35</td>
</tr>
<tr>
<td>Maximum</td>
<td>250</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Threads</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust (Relief) Capacity</td>
<td>4.0 SCFM (Downstream pressure 5 PSIG above set pressure)</td>
</tr>
<tr>
<td>Repeatability / Sensitivity</td>
<td>±0.010 PSIG (±0.00068 bar)</td>
</tr>
<tr>
<td>Response</td>
<td>±0.00068 ms</td>
</tr>
<tr>
<td>Weight</td>
<td>±0.00068 lb</td>
</tr>
</tbody>
</table>

#### Materials of Construction

- **Adjusting Stem & Spring**: Steel
- **Biased Spring**: Stainless Steel
- **Body, Bonnet**: Aluminum
- **Control Knob**: Plastic
- **Diaphragm**: Buna-N Elastomer and Polyester Fabric
- **Seals**: Buna-N
- **Valve Poppet**: Brass
- **Valve Poppet Seat**: Buna-N

### Warning

**WARNING**

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

**CAUTION:**

**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.