Fast response  
Minimum overshoot during flow changes  
Constant bleed feature provides maximum sensitivity to system changes  
Relieving feature allows reduction of downstream pressure when the system is dead-ended

**Technical data**

**Technical data**

**Fluid:** Compressed air, neutral gases  
**NOTE:** Contact technical support for use with other media.  
**Note:** 5 micron prefiltration and oil-free air required.

**Inlet pressure range***

| Low Pressure Models | 8 to 150 psig (0.55 to 10.3 bar) |
| High Pressure Models | 10 to 200 psig (0.7 to 13.8 bar) |

* Inlet pressure must be at least 7 psig (0.5 bar) greater than the adjusted outlet pressure for proper operation.

**Operating temperature***

32° to 160°F (0° to 70°C)

**Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).**

**Repeatability**

Low Pressure Models: 0.02 psig (0.001 bar) for flow change; 0.05 psig (0.004 bar) when turning supply off and on

High Pressure Models: 0.08 psig (0.006 bar) for flow change; 0.16 psig (0.011 bar) when turning supply off and on

**Constant bleed feature:** Under dead-end conditions, a small, constant bleed of pilot air will escape thru the relief passage in the bottom plug. This will be accompanied by a slight residual outlet pressure of 1 to 4 inches H2O (2.5 to 10 millibar).

**Gauge ports:** 1/4" PTF

**Materials**

Body and bonnet: zinc  
Main valve: polycarbonate  
Main valve seat: PTFE  
Pilot valve: stainless steel  
Pilot valve seat: aluminum  
Main diaphragm: nitrile  
Pilot diaphragm: Low Pressure Models:302 SS  
High Pressure Models: nitrile  
Bottom plug: brass  
Elastomers: nitrile, chloroprene, polyurethane

**Ordering information**

Models listed have PTF threads, hand wheel adjustment, and relieving diaphragm. A gauge is not included.

<table>
<thead>
<tr>
<th>ISO Symbol</th>
<th>Port Size</th>
<th>Outlet Pressure Adjustment Range*</th>
<th>Model Number</th>
<th>Flow scfm (dm³/s)</th>
<th>Weight lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Relieving" /></td>
<td>1/4&quot;</td>
<td>0.4 to 10 psig (0.03 to 0.69 bar)</td>
<td>11-018-146 (low pressure)</td>
<td>12 (5.66)†</td>
<td>1.4 (0.64)</td>
</tr>
<tr>
<td><img src="image" alt="Relieving" /></td>
<td>1/4&quot;</td>
<td>1.0 to 60 psig (0.1 to 4.1 bar)</td>
<td>11-018-100 (low pressure)</td>
<td>12 (5.66)†</td>
<td>1.4 (0.64)</td>
</tr>
<tr>
<td><img src="image" alt="Relieving" /></td>
<td>1/4&quot;</td>
<td>3 to 150 psig (0.2 to 10.3 bar)</td>
<td>11-018-110 (high pressure)</td>
<td>12 (5.66)††</td>
<td>1.4 (0.64)</td>
</tr>
</tbody>
</table>

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
† Typical flow with 100 psig (7 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.125 psig (0.009 bar) droop from set.
†† Typical flow with 200 psig (14 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.250 psig (0.017 bar) droop from set.

**Service Kits**

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure Models</td>
<td>2787-01</td>
</tr>
<tr>
<td>High Pressure Models</td>
<td>2787-02</td>
</tr>
</tbody>
</table>

Service kit includes o-rings, seals, pilot diaphragm, pilot spring, main diaphragm, main valve, main valve seat, diffuser screen, constant bleed orifice and orifice filter
11-018 Precision Air Pressure Regulator
1/4" Port Size

Typical Performance Characteristics

**LOW PRESSURE MODELS - FLOW CHARACTERISTICS**
INLET PRESSURE: 100 psig (7 bar)
RANGE: 1 to 60 psig (0.1 to 4.1 bar)

**LOW PRESSURE MODELS - REGULATION CHARACTERISTICS**
INLET PRESSURE: 150 psig (10.3 bar)
RANGE: 1 to 60 psig (0.1 to 4.1 bar)

**HIGH PRESSURE MODELS - FLOW CHARACTERISTICS**
INLET PRESSURE: 200 psig (14 bar)
RANGE: 3 to 150 psig (0.2 to 10.3 bar)

**HIGH PRESSURE MODELS - REGULATION CHARACTERISTICS**
INLET PRESSURE: 200 psig (14 bar)
RANGE: 3 to 150 psig (0.2 to 10.3 bar)

Panel mounting hole diameter: 0.47" (12 mm)
Maximum panel thickness: 0.094" (2.4 mm)