Dial-Air™ Regulator
R21

Features
- Balanced Valve Design
- Non-Rising Pressure Adjusting Dial
- High-Relief Flow (3/16" Relief Orifice)
- Two 1/4" NPT Gauge Ports, Usually Used for Additional Outlets
- Piston Operated

Specifications

| Flow Capacity* | 1/4   | 117 SCFM (55 dm³/s) |
|               | 3/8   | 180 SCFM (85 dm³/s) |
|               | 1/2   | 195 SCFM (92 dm³/s) |
|               | 3/4   | 220 SCFM (103 dm³/s) |
| Adjusting Range Pressure | 0 to 40 PSIG (0 to 2.8 bar) |
|                    | 0 to 160 PSIG (0 to 11 bar) |
| Bleed Rate        | 0.05 SCFM (0.024 dm³/s) |
| Gauge Port (2 ea.) | NPT / BSPT-Rc | 1/4 |
| Maximum Supply Pressure | 300 PSIG (20.7 bar) |
| Operating Temperature | 32° to 150°F (0° to 65.5°C) |
| Port Size         | NPT / BSPP-G | 1/4, 3/8, 1/2, 3/4 |

Materials of Construction

- Body: Zinc
- Bonnet: Zinc / Brass
- Piston: Acetal
- Seals: Nitrile
- Springs: Steel
- Valve Assembly: Brass / Nitrile / Acetal

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.

WARNING

Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Dimensions

<table>
<thead>
<tr>
<th>Models</th>
<th>Inches (mm)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Unit</td>
<td></td>
<td>2.60 (66)</td>
<td>3.19 (81)</td>
<td>3.14 (79.8)</td>
<td>.95 (24)</td>
<td>4.09 (104)</td>
<td>2.20 (55.9)</td>
<td>—</td>
<td>1.61 (41)</td>
<td>2.08 (52.8)</td>
<td>18 (4.6)</td>
<td>2.07 (52.6)</td>
</tr>
<tr>
<td>R21-XX-000</td>
<td></td>
<td>2.60 (66)</td>
<td>3.19 (81)</td>
<td>3.14 (79.8)</td>
<td>.95 (24)</td>
<td>4.09 (104)</td>
<td>2.20 (55.9)</td>
<td>—</td>
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<td>2.08 (52.8)</td>
<td>18 (4.6)</td>
<td>2.07 (52.6)</td>
</tr>
<tr>
<td>With Gauge (order separately)</td>
<td></td>
<td>2.60 (66)</td>
<td>3.19 (81)</td>
<td>3.14 (79.8)</td>
<td>.95 (24)</td>
<td>4.09 (104)</td>
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<td>R21-XX-XXX</td>
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<td>3.19 (81)</td>
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<td>3.19 (81)</td>
<td>2.20 (55.9)</td>
<td>1.33 (33.8)</td>
<td>1.61 (41)</td>
<td>2.08 (52.8)</td>
<td>18 (4.6)</td>
<td>1.11 (28.2)</td>
</tr>
<tr>
<td>Remote Operated</td>
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<td>2.60 (66)</td>
<td>3.19 (81)</td>
<td>2.24 (56.9)</td>
<td>.95 (24)</td>
<td>3.19 (81)</td>
<td>2.20 (55.9)</td>
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</tr>
</tbody>
</table>

NOTE: Panel mounting requires (2) 11/16" (69mm) diameter holes and (4) 7/32" (5.5mm) screw holes. Unit can be mounted on material up to 1-1/4" (32mm) thick.
Filters, Regulators, Lubricators

Pneumatic Division
Richland, Michigan
www.wilkersoncorp.com

Ordering Information

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Port Size</th>
<th>High Flow 5 to 160 PSIG (0.4 to 11 bar)</th>
<th>Low Pressure 2 to 40 PSIG (0.1 to 3 bar)</th>
<th>Remote 5 to 160 PSIG (0.4 to 11 bar)</th>
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</thead>
<tbody>
<tr>
<td>Relieving</td>
<td>1/4</td>
<td>R21-02-000</td>
<td>R21-02-L00</td>
<td>R21-02-R00</td>
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<tr>
<td></td>
<td>3/8</td>
<td>R21-03-000</td>
<td>R21-03-L00</td>
<td>R21-03-R00</td>
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<tr>
<td></td>
<td>1/2</td>
<td>R21-04-000</td>
<td>R21-04-L00</td>
<td>R21-04-R00</td>
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<tr>
<td></td>
<td>3/4</td>
<td>R21-06-000</td>
<td>R21-06-L00</td>
<td>R21-06-R00</td>
</tr>
</tbody>
</table>

Options - To order an option supplied with the unit model, add the appropriate coded suffix letter in the designated position of the model number.

Replacement Kits
- Adjustment Dial Knob ........................................... RRP-16-024-000
- Conversion Kit (Series A to Series B) ......................... RRP-95-766
- Cover Kit (Remote) -
  - Bonnet and Nitrile, O-ring (Series B) ...................... RRP-95-910
  - Bonnet and Fluorocarbon, O-ring (Series B) ............ RRP-95-911
- O-ring, Repair Kit............................................. GRP-95-260
- Piston, Bottom and O-ring Seal................................ RRP-95-192
- Spring, Regulating, Belleville Washer -
  - 2 to 40 PSIG (0.1 to 3 bar) .............................. RRP-95-906
  - 5 to 160 PSIG (0.4 to 11 bar) ........................... RRP-95-905
- Valve, Main with U-cup Seal.................................... RRP-95-151
- Valve, Main with U-cup Seal and Bottom Plug -
  - Nitrile Elastomers ........................................... RRP-95-914
  - Fluorocarbon Elastomers ................................... RRP-95-915
- Valve, Main (Remote) with U-cup Seal ......................... RRP-96-952

Valve, Main (Remote) with U-cup Seal and Bottom Plug -
- Nitrile Elastomers ........................................... RRP-95-912
- Fluorocarbon Elastomers ................................... RRP-95-913
- Valve, Pilot with O-ring and Valve Spring .................. RRP-96-934

Accessories
- Wall Mounting Bracket, Gauge Port Adapter, 1/4" NPT ........................................ RRP-95-590
- Gauge, Pressure -
  - 0 to 60 PSIG (0 to 4 bar), 2" Dial Face,
    1/4" NPT, CBM ............................................. K4520N14060
  - 0 to 160 PSIG (0 to 11 bar), 2" Dial Face,
    1/4" NPT, CBM ............................................. K4520N14160
  - 0 to 160 PSIG, 1-3/4" Digital Round,
    1/4" NPT .................................................. K4517N14160D
- Tamper Resistant Kit........................................... RRP-95-585

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