R82G -Pressure Regulators
Excelon® Plus Modular System

> Port size: 1/4" ... 3/8" (ISO G/PTF)
> Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
> Push to lock adjusting knob with built in tamper resistant feature
> Easy to read flush mounted integrated pressure gauge as standard

Technical features

| Medium: Compressed air only |
| Maximum supply pressure: 20 bar (290 psi) |
| Outlet pressure ranges: 0.3 ... 10 bar (4 ... 145 psi), 0.3 ... 4 bar (4 ... 58 psi) optional, 0.7 ... 17 bar (10 ... 247 psi) optional |
| Gauge: Integrated as standard Gauge port 1/8 as option |
| Port size: G1/4, G3/8, 1/4 PTF, 3/8 PTF |
| Diaphragm Type: Relieving |
| Flow: 33 dm³/s (port size: 1/4") and 31 dm³/s (port size: 3/8") at inlet pressure 10 bar (145 psi), 6,3 bar (91 psi) set pressure and a Δp: 1 bar (14,5 psi) drop from set. |
| Ambient/Media temperature: -20 ... +65°C (-4 ... +149°F) |
| Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F). |
| Atex: Regulators RB2 are in conformity with Atex 2014/34/EU II 2 GD Ex h IIC T6 Gb EX h IIIC T85°C Db |

Technical data R82G—standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Pressure range (bar)</th>
<th>Adjustment</th>
<th>Integrated gauge (bar)</th>
<th>Weight (kg)</th>
<th>Model *1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Symbol]</td>
<td>G1/4</td>
<td>0.3 ... 10</td>
<td>Knob</td>
<td>0 ... 10</td>
<td>0.23</td>
<td>R82G-2GK-RMG</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>G3/8</td>
<td>0.3 ... 10</td>
<td>Knob</td>
<td>0 ... 10</td>
<td>0.23</td>
<td>R82G-3GK-RMG</td>
</tr>
</tbody>
</table>

*1) All models shown here are supplied with integrated gauge applicable for flow direction left to right. With flow direction right to left please use the online configurator [www.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact IMI Norgren.
### Flow characteristics

**Inlet pressure:** 10 bar (145 psi)

**Range:** 0.3...10 bar (4...145 psi)

**Port size:** 1/4”

**Diagram:**

![Outlet pressure vs. Air flow graph for Port size 1/4”](image)

**Inlet pressure:** 10 bar (145 psi)

**Range:** 0.3...10 bar (4...145 psi)

**Port size:** 3/8”

**Diagram:**

![Outlet pressure vs. Air flow graph for Port size 3/8”](image)

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*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator [www.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact IMI Norgren.

*2) Units with 17 bar outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position. T-bar handle only available with 17 bar option.

*3) 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.
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**Accessories**

- **Quikclamp**
  - Page 3
  - B20014-51KIT

- **Quikclamp® with bracket assembled**
  - Page 3
  - B20016-52KIT

- **Neck mounting bracket and panel nut**
  - Page 4
  - B20068-51KIT

- **Panel mounting nut**
  - Page 4
  - B20048-89KIT

- **Mounting bracket**
  - Page 4
  - B20024-50KIT

- **Integrated gauge 10 bar gauge**
  - Page 3
  - B20073-01KIT

- **Integrated gauge 20 bar gauge**
  - Page 3
  - B20073-02KIT

- **Integrated gauge 4 bar gauge**
  - Page 3
  - B20073-03KIT

- **Gauge adaptor kit 1/8 PTF**
  - Page 4
  - B20100-01KIT

- **Gauge adaptor kit R 1/B**
  - Page 4
  - B20100-02KIT

- **Pressure sensing block 1/4 PTF**
  - Page 4
  - B20016-50KIT

- **Pressure sensing block G1/4**
  - Page 4
  - B20016-51KIT

- **Porting block 3/8" PTF**
  - Page 4
  - B20018-50KIT

- **Porting block G3/B**
  - Page 4
  - B2002B-53KIT

- **Pressure switch interface block (18D pressure switch) G1/4**
  - Page 5
  - 052310900000000

- **Service Kits**
  - R82 / B82 Elastomere kit
  - FRLB82-Kit

- **Port Adaptors**
  - Page 5
  - 0881300

- **Digital pressure switch 51D (+1...10 bar) *2**
  - Page 5
  - 0860810

- **Connector 84-82 Series *3**
  - Page 7
  - 4417-01

- **Pressure switch 18D (0,5...8bar) *1**
  - Page 5
  - 0881300

- **Connector 84-82 Series *3**
  - Page 7
  - 4417-01

- **Center back connection, white face**
  - For full technical specification see datasheet 8.900.900

- **Gauges**
  - For regulators with gauge port instead of integrated port

<table>
<thead>
<tr>
<th>Pressure range (bar)*3) (MPa)</th>
<th>(ps)</th>
<th>ø</th>
<th>Thread size</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...6</td>
<td>0...6</td>
<td>0...84</td>
<td>40 mm</td>
<td>R1/8</td>
</tr>
<tr>
<td>0...10</td>
<td>0...1</td>
<td>0...145</td>
<td>40 mm</td>
<td>R1/8</td>
</tr>
<tr>
<td>0...25</td>
<td>0...25</td>
<td>0...362</td>
<td>40 mm</td>
<td>R1/8</td>
</tr>
</tbody>
</table>

*3) primary scale
Dimensions

Dimensions in mm
Projection/First angle

Accessories

Quikclamp® with wall bracket

Quikclamp®

Main ports 1/4", 3/8", (ISO G/PTF)
Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports
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Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under "Technical features/data".

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.