**Pilot Regulator/Low Flow Regulator**  
**Relieving Type**  
**R*** - **2*** - **N***  

<table>
<thead>
<tr>
<th>Type</th>
<th>Mounting</th>
<th>Bleed Type</th>
<th>Spring (Outlet Pressure Range)</th>
<th>Thread Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 .. R40 Conventional Pilot</td>
<td>00 .. R40, In line mounted</td>
<td>B .. Constant bleed **</td>
<td>E .. 0.3 to 3.5 bar (5 to 50 psig) (R40 only)</td>
<td>A .. PTF</td>
</tr>
<tr>
<td>41 .. R41 Feedback Pilot *</td>
<td>04 .. R41, In line mounted</td>
<td>R .. Non-bleed</td>
<td>L .. 0.3 to 8.5 bar (5 to 125 psig) (R40 only)</td>
<td>B .. ISO Rc taper</td>
</tr>
<tr>
<td>05 .. R40, Integrally mounted to the R18 regulator</td>
<td>05 .. R40, Integrally mounted to the R18 regulator</td>
<td></td>
<td>M .. 0.7 to 17 bar (10 to 250 psig) (R40 only)</td>
<td>G .. ISO G parallel</td>
</tr>
<tr>
<td>06 .. R41, Internally mounted to the R18 regulator</td>
<td>06 .. R41, Internally mounted to the R18 regulator</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The R41 feedback pilot regulator is only available as a constant bleed (B in 7th position) with a 17 bar (250 psig) spring (S in 9th position) e.g., R41-2xx-BL4x.

** The constant bleed feature, which provides maximum sensitivity to system changes, allows a very small amount of air to constantly escape to atmosphere.

† 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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**Installation & Maintenance Instructions**

### Technical Data

**Fluid** Compressed air

- **Inlet pressure range:** 0.7 bar (10 psig) to 31 bar (450 psig) maximum
- **Operating temperature:** -20°C to +80°C
- **Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).**
- **Maximum bleed rate occurs under dead-end (no flow) conditions.**
- **Maximum bleed rate occurs under dead-end (no flow) conditions.**
- **Maximum bleed rate occurs under dead-end (no flow) conditions.**

**Main Ports:**
- PTF: 1/4" PTF, ISO G, or ISO Rc
- G: ISO G parallel
- A: PTF
- B: ISO Rc taper

**Panel Mounting Dimensions**
- Panel mounting hole diameter: 48 mm (1.89"")
- Panel thickness: 2 to 3 mm (0.06" to 0.13")

**Installing (Applications where the Norgren R40 or R41 will be used as a pilot regulator with Norgren pilot operated regulators)**

- See instructions shipped with the Norgren pilot regulator.

**Installation (Applications where the R40 will be used as a pilot regulator with Norgren pilot operated regulators)**

- Before applying inlet pressure to regulator, turn knob adjustment counterclockwise to remove all force on regulating spring.
- Apply inlet pressure, then turn adjustment clockwise to increase and counterclockwise to decrease pressure setting.
- Always approach the desired pressure from a lower pressure setting, first reduce to some pressure less than that desired, then bring up to the desired pressure.
- Push locking knob IN to lock pressure setting. Pull locking OUT to release. Install tamper resistant wire (see Replacement Items) to make setting tamper resistant.

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**Cleaning**

- Clean parts with warm water and soap. Do not submerge knob type bonnets (1) in solution, as lubricant will be removed.
- Inspect parts. Replace those found to be damaged.

**Assembly**

1. Lubricate o-rings and outer surface of tube (6) with a light coat of good quality o-ring grease.
2. Lubricate threads on bonnet (1) and guide plug (8) with a small amount of anti-seize compound.
3. Assemble the unit as shown on the exploded view.
4. Torque Table

<table>
<thead>
<tr>
<th>Item</th>
<th>Torque (N.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnet</td>
<td>46 to 54 Nm</td>
</tr>
<tr>
<td>Guide plug</td>
<td>3.4 to 5.6 Nm</td>
</tr>
</tbody>
</table>

**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 Data*. If outlet pressure in excess of the regulator pressure setting could cause downstream equipment to rupture or malfunction, install a pressure relief device downstream of the regulator. The relief pressure and flow capacity of the relief device must satisfy system requirements.
- The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during the service life. If a pressure gauge is to be used with these products and if inaccurate indications may be hazardous to personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use.

Before using these products with fluids other than air, for non industrial applications, or for life-support systems consult Norgren.