**Installation & Maintenance Instructions**

**Filter/Regulator**

### TECHNICAL DATA

**Fluid:** Compressed air

- **Maximum pressure:**
  - Transparent bowl: 10 bar (150 psi)
  - Metal bowl: 17 bar (250 psi)

- **Operating temperature:**
  - Transparent bowl: -20°C to +50°C (0°F to +125°F)
  - Metal bowl: -20°C to +85°C (0°F to +185°F)

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

- **Metal bowl:** 17 bar (250 psi)
- **Transparent bowl:** 10 bar (150 psi)

**Air quality:** Within ISO 8573-1, Class 3 and Class 5 (particulates)

**Flow:**
- Normal: 5 dm³/s (10 scfm)
- Maximum: 38 dm³/s (80 scfm)

**Particles:**
- 5 µm, 25 µm, or 40 µm filter element

**Service Kit (includes items circled on exploded view):**
- **Nonrelieving**
  - Element: Sintered polypropylene
  - Valve: Brass
  - Bonnet: Acetal
  - Body: Zinc
  - Long bowl: 65 ml (2.2 fluid ounce)
  - Manual operation: Depress pin inside drain outlet
  - Bowl pressure required to close drain: Greater than 0.3 bar (5 psig)
  - Manual operation: Lift stem to drain bowl

- **Relieving**
  - Element: Sintered polypropylene
  - Valve: Brass
  - Bonnet: Acetal
  - Body: Zinc
  - Long bowl: 65 ml (2.2 fluid ounce)
  - Manual operation: Lift stem to drain bowl
  - Bowl pressure required to close drain: Greater than 0.3 bar (5 psig)

**Nonrelieving**

<table>
<thead>
<tr>
<th>Item</th>
<th>Torque in Nm (Inch-Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>0.7 to 0.9 (5 to 7)</td>
</tr>
<tr>
<td>36</td>
<td>1.9 to 2.5 (17 to 22)</td>
</tr>
<tr>
<td>52</td>
<td>0.5 to 0.7 (4 to 6)</td>
</tr>
<tr>
<td>54</td>
<td>0.7 to 0.9 (6 to 8)</td>
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**Relieving**

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<tbody>
<tr>
<td>27</td>
<td>2.3 to 2.8 (20 to 25)</td>
</tr>
<tr>
<td>36A</td>
<td>2.3 to 2.8 (20 to 25)</td>
</tr>
<tr>
<td>54</td>
<td>0.7 to 0.9 (6 to 8)</td>
</tr>
</tbody>
</table>

**Operation:**

1. Shut off air pressure. Install filter/regulator in air line - vertically (bowl down).
2. With air flow in direction of arrow on body, upstream of lubricators and cycling valves, as close as possible to the device being serviced.
3. Connect piping to proper ports using pipe thread sealant
4. Lubricate the following items with o-ring grease.
5. Install filter/regulator in air line - INSTALLATION Panel thickness: 2 to 4 mm (0.06" to 0.16") Panel mounting hole diameter: 40 mm (1.57")

### Panel Mounting Dimensions

<table>
<thead>
<tr>
<th>Panel mounting hole diameter</th>
<th>Panel thickness</th>
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<td>40 mm (1.57&quot;)</td>
<td>2 to 4 mm (0.06&quot; to 0.16&quot;)</td>
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**Installation:**

1. Shut off air pressure. Install filter/regulator in air line - vertically (bowl down), with air flow in direction of arrow on body, upstream of lubricators and cycling valves, as close as possible to the device being serviced.
2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.

**Cleaning:**

1. Clean plastic bowl (29, 38) with warm water only. Clean other parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body (16) with clean, dry compressed air. Blow air through filter element (53) from inside to outside to remove surface contaminants.
3. Inspect parts. Replace those found to be damaged.
4. Install plastic bowl with a metal bowl if plastic bowl shows signs of cracking or cloudiness.

**Assembly:**

1. Lubricate the following items with o-ring grease.
2. Apply inlet pressure, then turn adjustment (1 or 7) clockwise to increase and counterclockwise to decrease pressure setting.
3. Always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce to some pressure less than that desired, then bring up to the desired pressure.

**Note:**

With non-relieving filter/regulators, make pressure reductions with some air flow in the system. If made under no flow (dead-end) conditions, the filter/regulator will trap the over-pressure in the downstream line.

**KNOB ADJUSTMENT:**

- Push knob down to lock pressure setting. Pull knob up to release. Install tamper resistant cover (see Replacement Items) to make setting tamper resistant.
- 1 BAR ADJUSTMENT: Tighten nut (8) to lock pressure setting.

**Service Kit:**

1. Filter/regulator can be disassembled without removal from air line.
2. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
3. Turn adjustment (1 or 7) fully counterclockwise.
4. Remove bowl - push into body and turn fully clockwise.
5. Disassemble in general accordance with the item numbers on exploded view. Do not remove the drains unless replacement is necessary. Remove and replace drains only if they malfunction.
CAUTION
Water vapor will pass through these units and could condense into liquid form downstream as air temperature drops. Install an air dryer if water condensation could have a detrimental effect on the application.

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.
Polycarbonate plastic bowls can be damaged and possibly burst if exposed to such substances as certain solvents, strong alkalies, compressor oils containing ester-based additives or synthetic oils. Fumes of these substances in contact with the polycarbonate bowl, externally or internally, can also result in damage. Clean with warm water only.
Use metal bowl in applications where a plastic bowl might be exposed to substances that are incompatible with polycarbonate.
If outlet pressure in excess of the filter/regulator pressure setting could cause downstream equipment to rupture or malfunction, install a pressure relief device downstream of the filter/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.