

## Operating Manual

### Precision Pressure Regulator

#### General information

Every compressed air driven device needs a certain operating pressure. In practice, this is not always equal to the line pressure. It is the task of the pressure reducer or pressure regulator to produce a certain operating pressure (secondary pressure) and to keep it constant regardless of the air flow rate (primary pressure).

#### Pressure adjustment

Before commissioning the pressure regulating system, the pressure reducer must be switched off by unscrewing the setting knob / setting spindle (counterclockwise).

To change the outlet pressure, the setting knob must be pulled up as far as possible (not for regulators with spindle). Turning the setting knob / spindle clockwise generates an increase in the output pressure.

Turning the setting knob / spindle counterclockwise reduces the output pressure. In the case of reversible regulators, the output pressure follows the setting of the setting knob / spindle; the regulator is vented.

For non-reversible regulators, the outlet pressure must be reduced via the flow rate, or the system is vented at another point. Non-reversing regulators cannot automatically reduce an overpressure on the output side. To secure the setting, the setting knob must be pressed down again. For regulators with a spindle, the pressure range can be fixed by the lock nut.

#### Installation

In order for the regulator to function properly, all lines must be blown out before installing the regulator in order to avoid deposits and other foreign materials / objects. The regulator must be installed in the line so that the air flows in the direction of the arrows embossed on the housing (IN to Out).

Installation should be carried out as close as possible to the equipment being operated. To ensure a pressure-tight installation, sealing paste or Teflon tape should be used for the external threads. To ensure a proper flawless operation of the regulator, it should only be operated with finely filtered air!

#### Maintenance and cleaning

It is not necessary to remove the regulator from the line for cleaning. If the regulator is operating unevenly or the outlet pressure constantly increases, this is usually a sign of contamination in the area of the valve seat. To be able to work safely on the regulator, the air supply must be switched off and the lines must be vented. Remove the cover / knurled screw. Remove the valve seat, clean and grease the O-rings. The regulator can then be assembled and the system put back into operation.

**Attention: Only approved grease may be used for special media, such as oxygen.**