



* 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.

TECHNICAL DATA

Fluid: Compressed air

Maximum pressure: 20 bar (290 psig)

Operating temperature*:

-40° ... +80°C (-40° ... +176°F)*

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+36°F).

Typical flow with 7 bar (102 psig) inlet pressure, 1 bar (14,5 psig) set pressure and 0,05 bar (0,7 psig) drop from set: 8 dm³/s (17 scfm)

Maximum bleed flow at 2 bar (29 psig) outlet pressure (relieving models only): 1,5 cm³/s (0.003 scfm)

Gauge ports: 1/4", thread form same as main ports

Materials:

Body, bonnet, base: Aluminum

Adjusting screw: Steel

Elastomers, diaphragm: Nitrile

REPLACEMENT ITEMS (STANDARD OPTION)

Service Kit (includes items circled on exploded view):

Relieving

2 bar R38-100R

4 & 7 bar R38-101R

Non relieving

2 bar R38-100NR

4 & 7 bar R38-101NR

PANEL MOUNTING DIMENSIONS

Panel mounting hole diameter: 41 mm (1.61")

Maximum panel thickness: 0 ... 6 mm (0 ... 0.24")

INSTALLATION

- Shut off air pressure. Install filter/regulator in air line
 - with air flow in direction of arrow on body.
 - upstream of lubricators and cycling valves,
 - as close as possible to the device being serviced.
 - at any angle.
- Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
- Install a pressure gauge or plug the gauge ports. Gauge ports can also be used as additional outlets for regulated air.

ADJUSTMENT

- Before applying inlet pressure to regulator, turn adjustment (1) counterclockwise to remove all force on regulating spring (6).
- Apply inlet pressure, then turn adjustment (1) clockwise to increase and counterclockwise to decrease outlet pressure setting.
- 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.

- Once required pressure is achieved tighten locknut (2) to lock setting.

DISASSEMBLY

- Regulator can be disassembled without removal from air line.
- Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
- Turn adjustment screw counterclockwise to remove all force on regulating spring (6).
- Disassemble in general accordance with the item

CLEANING

- Clean parts with warm water and soap
- Rinse and dry parts. Blow out internal passages in body (16) with clean, dry compressed air.
- Inspect parts. Replace those found to be damaged.

ASSEMBLY

- Lubricate threads of adjusting screw (1), recess of upper sprint rest (5), and o-rings with a light coat of good quality o-ring grease.
 - Assemble the unit as shown on the exploded view. Assemble bonnet (3) to body (16) so that relief hole is above outlet port.
 - Torque Table
- | | |
|--------------|-------------------------------|
| Item | Torque In
Nm (Inch-Pounds) |
| 4, 8 (screw) | 7,3/3,3 (66/30) |

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.

USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

Code of device according EC directive 94/9/EC

Ex II 2 GD c TX

- Only non-flammable gaseous to be used as a medium.
- Surface temperature dependant on process fluid temperature and ambient temperature - must be below the ignition temperature of the flammable gas or dust.
- Earth unit and/or pipework to avoid electrostatic discharge.
- Precautions should be taken to prevent hazard from adiabatic compression.
- Use wet cloth for cleaning.
- Protect the unit from object falling onto it.
- Avoid contact with corrosive environment.
- For servicing the unit it is recommended to carry out this work outside of the danger zone.
- For details of ignition hazard assessment contact Norgren.

