



* 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: 0 bar (300 psig)
 Operating temperature: -40° to +80°C (-40° to +175°F)*
 * Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).
 Particle removal: 5 µm or 25 µm filter element
 Air quality: Within ISO 8573-1, Class 6 and Class 7 (particulates)
 Typical flow with 7 bar (100 psig) inlet pressure, 1 bar (15 psig) set pressure and a droop of 0,05 bar (1 psig) from set: 8 dm³/s (17 scfm)
 Maximum bleed flow at 2 bar (30 psig) outlet pressure (relieving models only): 1,5 cm³/s (0.003 scfm)
 Gauge ports: 1/4" PTF for PTF ISO G for ISO Rc and ISO G
 Materials:
 Body, bonnet, bowl: Aluminum
 Elements:
 5 µm: Ceramic pyrolyth
 25 µm: High density polyethylene
 Elastomers: Nitrile

SERVICE KITS

Regulator - items 4, 7, 8, 11, 16, 17:
 Relieving, 2 bar springR38-100R
 Relieving, 4 and 7 bar springR38-101R
 Non-relieving, 2 bar springR38-100NR
 Non-relieving, 4 and 7 bar spring .R38-101NR
 Filter - items 8, 10, 11, 13, 14:
 Filter, 5 µm element.....B38-100A-5
 Filter, 25 µm element.....B38-100A-25

PANEL MOUNTING DIMENSIONS

Panel mounting hole diameter: 42 mm (1.65")
 Maximum panel thickness: 6 mm (0.24")

INSTALLATION

- Shut off air pressure. Install filter/regulator in air line -vertically (bowl down),
 - with air flow in direction of arrow on body. In some cases **IN** is stamped next to the inlet port.
 - upstream of lubricators and cycling valves,
 - as close as possible to the device being serviced.
- Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior.
- Install a pressure gauge or plug the gage ports. Gage ports can also be used as additional outlets for regulated air.

ADJUSTMENT

- Before applying inlet pressure to filter/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.
 4. Tighten locknut (2) to lock pressure setting.

SERVICING

- Open manual drain to expel accumulated liquids. Keep liquids below element retainer (12).
- Replace filter element (14) when dirty (check inner surface of element), or when pressure drop across element exceeds 0,7 bar (10 psig).

DISASSEMBLY

- Filter/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 (1) fully counterclockwise.
- Disassemble in general accordance with the item numbers on exploded view. Do not remove the drain (10) unless replacement is necessary. Remove and replace drain only if it malfunctions.

CLEANING

- Clean parts with warm water and soap..
- Rinse and dry parts. Blow out internal passages in body (20) with clean, dry compressed air.
- Inspect parts. Replace those found to be damaged.

ASSEMBLY

- Lubricate threads of adjusting screw (1), recess of upper spring 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 (4) to body (20) so that relief hole is above outlet port.
- Torque Table

Item	Nm	(Inch-Pounds)
4, 8 (screws)	3,3 to 7,3	(30 to 66)
12 (element retainer)	1,3 to 1,7	(12 to 15)

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.
 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.

