R38 - ★★★ - ★★★★

Port	Material	Mounting Options	Diaphragm	Gauge	Spring (Outlet Pressure Range) *	Thread Form
2 1/4"	4 Stainless steel (standard)	0 None	R Relieving	N Without	C 0,04 ... 2 bar (0,6 ... 29 psig)	A PTF
	5 Stainless steel and FPM	1 Bracket and nut	N Non relieving		F 0,07 ... 4 bar (1 ... 58 psig)	B ISO Rc taper
	6 Stainless steel and fluorosilicon	2 Nut only			K 0,25 ... 7 bar (3,6 ... 102 psig)	D ISO G
		3 Handwheel and nut			M 0,4 ... 10 bar (5,8 ... 145 psig)	K API
		4 Handwheel with bracket and nut				
		5 Handwheel				

* 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:
Manual drain: 31 bar (450 psig)
Automatic drain: 17 bar (247 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)
Gauge ports:
1/4" as per main ports
Materials:
Body: Stainless steel
Bonnet: Stainless steel
Base: Stainless steel
Adjusting screw: Stainless steel
Elastomers: Synthetic rubber
Diaphragm insert: Acetal resin, stainless steel and nitrile.
Other parts stainless steel

REPLACEMENT ITEMS (STANDARD OPTION)

Service Kit (includes items circled on exploded view):

Relieving	
2 bar	R38-100R
4 & 7 bar	R38-101R
10 bar	R38-102R
Non relieving	
2 bar	R38-100NR
4 & 7 bar	R38-101NR
10 bar	R38-102NR

PANEL MOUNTING DIMENSIONS

Panel mounting hole diameter: 41 mm (1.61")
Panel thickness: 0 ... 6 mm (0 ... 0.24")

INSTALLATION

1. Shut off air pressure. Install filter/regulator in air line
- upstream of lubricators and cycling valves,
- with air flow in direction of arrow on body.
- as close as possible to the device being serviced.
- at any angle.

2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
3. Install a pressure gauge or plug the gauge ports. Gauge ports can also be used as additional outlets for regulated air.
4. Install a Norgren general purpose filter upstream of the regulator.

ADJUSTMENT

1. Before applying inlet pressure to filter/regulator, turn adjustment (2) counterclockwise to remove all force on regulating spring (7).
2. Apply inlet pressure, then turn adjustment (2) clockwise to increase and counterclockwise to decrease outlet 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.

4. Once required pressure is achieved tighten locknut (3) to lock setting.

DISASSEMBLY

1. 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 screw fully counterclockwise.
4. Disassemble in general accordance with the item numbers on exploded view.

CLEANING

1. Clean parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body with clean, dry compressed air.
3. Inspect parts. Replace those found to be damaged.

ASSEMBLY

1. Lubricate threads and nose of adjusting screw (2) at regular intervals with suitable grease eg. Speerol APT2.
2. Lubricate seals (16, 36, 37) with light coat of good quality grease.
3. Assemble the unit as shown on the exploded view.
4. Torque Table

Item	Torque in Nm (Inch-Pounds)
4 (screws, stainless steel model)	7,3/3,3 (66/30)

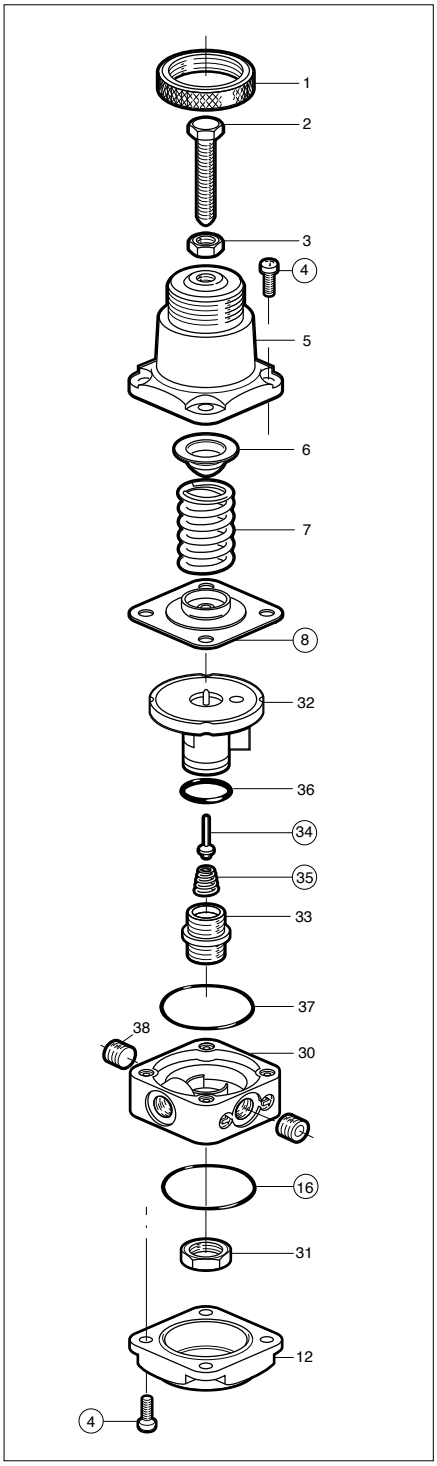
WARNING

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 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.

USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

Code of device according EC directive 94/9/EC
Ex II 2 GD c TX

- Only non-flammable gasese 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.



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