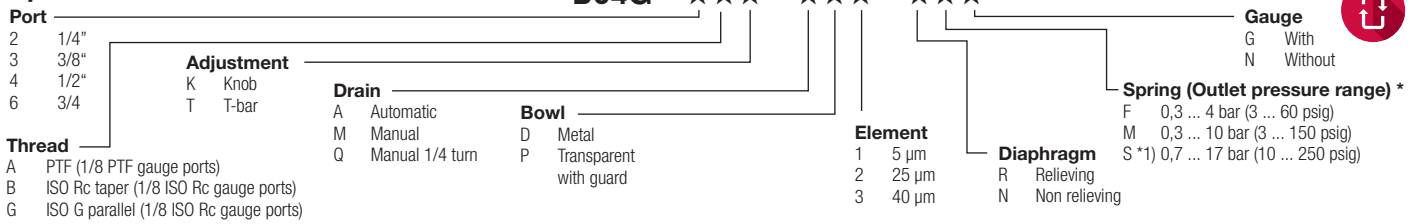


## Option selector



\* 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.  
\*1) Units with 17 bar (250 psig) adjustment range are available only with the T-bar adjustment, therefore substitute T at the 7th digit and S at the 12th position.

## Technical features

Fluid: Compressed air  
 Maximum pressure:  
 Transparent bowl: 10 bar (150 psig)  
 Metal bowl: 17 bar (250 psig)  
 Operating temperature\*:  
 Transparent bowl: -20° to +50°C (0° to +125°F)  
 Metal bowl: -20° to +80°C (0° to +175°F)  
 \* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).  
 Particle removal: 5 µm, 25 µm, or 40 µm filter element  
 Air quality: Within ISO 8573-1, Class 3 and Class 5 (particulates)  
 Typical flow with 10 bar (150 psig) inlet pressure, 6,3 bar (90 psig) set pressure and 1 bar (15 psig) droop from set: 106 dm<sup>3</sup>/s (225 scfm)  
 Automatic drain connection: 1/8"  
 Automatic drain operating conditions:  
 Bowl pressure required to close drain: Greater than 0,3 bar (5 psig)  
 Bowl pressure required to open drain: Less than 0,2 bar (3 psig)  
 Minimum air flow required to close drain: 1 dm<sup>3</sup>/s (2 scfm)  
 Manual operation: Depress pin inside drain outlet to drain bowl  
 Nominal bowl size: 0,2 litre (7 fluid oz)  
 Materials:  
 Body: Zinc  
 Bonnet: Aluminium  
 Valve: Brass  
 Bowl:  
 Metal: Aluminium  
 Transparent, optional: Polycarbonate  
 Metal bowl liquid level indicator lens, standard: Grilamid  
 Metal bowl sight glass, optional: Pyrex  
 Element: Sintered plastic  
 Elastomers: Synthetic rubber

## Replacement Items

Service kit, contains required items circled:  
 Relieving 4383-200  
 Non relieving 4383-201  
 Prismatic sight glass 4380-040  
 Pyrex sight glass 4380-041  
 Filter element, 5 µm 4338-01  
 Filter element, 40 µm 4338-02  
 Manual drain 684-84  
 Automatic drain 3000-97  
 Tamper resistant cover (knob adjustment only) 4355-51

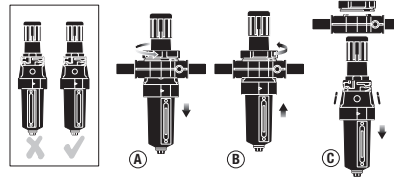
## Panel Mounting Dimensions

Panel mounting hole diameter: 52 mm (2.06")  
 Panel thickness: 6 mm (0.25") max.

## Installation

1. Install unit vertically 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.
2. Before assembling the basic unit into the yoke the port seal o-rings should be lightly smeared with o-ring grease.
  3. Locate clamp ring under lugs on top of yoke, offer basic unit into yoke with directional arrows correctly aligned (an interference fit prevents assembly if misaligned) before engaging and fully tightening the clamp ring.
  4. Turn bowl or bowl guard fully clockwise into body before pressurizing. Lock symbols on body and bowl guards must align.



5. Install a pressure gauge or plug the gauge ports. Gauge ports can also be used as additional outlets for regulated air.
6. Auto-drain units may be fitted with a short drain pipe and connector, minimum 5 mm bore, to the G1/8 bottom outlet.

## Adjustment

1. Before applying inlet pressure to filter/regulator, turn adjustment (1 or 6) counterclockwise to remove all force on regulating spring (12).
2. Apply inlet pressure, then turn adjustment (1 or 6) 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

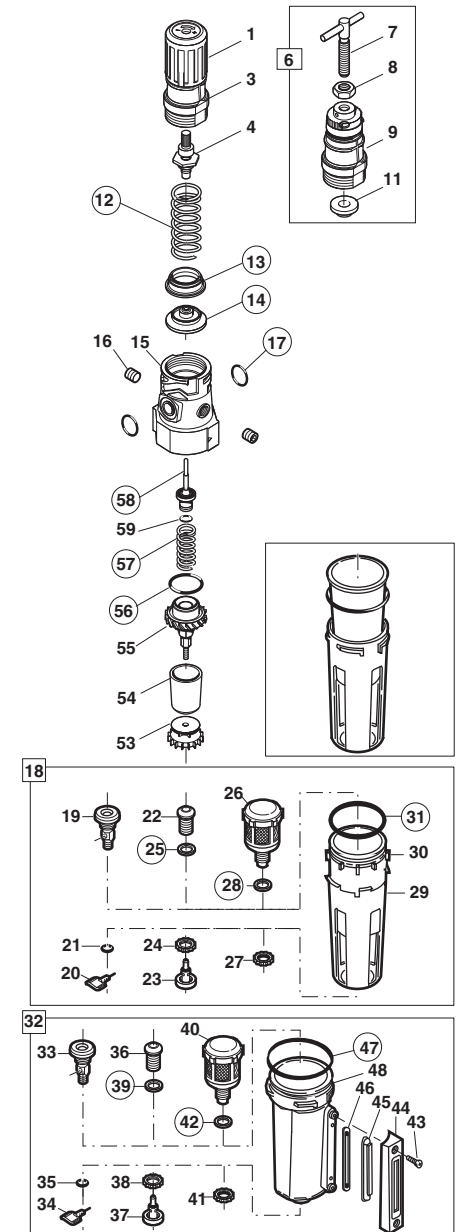
With non-relieving filter/regulators, make pressure reductions with some air flow in the system. If made under no flow (dead-end) conditions, the filter/regulator will trap the over-pressure in the downstream line.

4. 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.
5. T-BAR adjustment. Tighten lock nut (8) to lock pressure setting.

## Servicing

1. Open manual drain to expel accumulated liquids. Keep liquids below baffle (53).

2. To operate automatic drain manually, lift operating pin in bottom outlet with a blunt rod.
3. Clean or replace filter element when dirty.



**Disassembly**

1. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero. Turn adjustment (1 or 7) fully counterclockwise.
2. For ease of maintenance the unit can be removed from the yoke by unscrewing the clamp ring, which will jack the unit out downwards.
3. To disassemble the filter section lift and turn the filter bowl counterclockwise and remove with bowl o-ring.
4. Disassemble in general accordance with the item numbers on exploded view. Do not remove the drains or the service indicator unless replacement is necessary. Remove and replace only if they malfunction.
5. To disassemble the regulator section turn the adjuster (1 or 7) counter-clockwise to relieve compression on the adjusting spring (12). Unscrew the bonnet assembly (3 or 9) using the spanner flats provided. Remove the adjusting spring (12), slip ring (13) and diaphragm (14).

Inspect all components for damage, foreign matter and cleanliness and reassemble using service replacement parts where necessary.

**Cleaning**

1. Partial cleaning of the filter element is possible by washing the element in soapy water and blowing out thoroughly with compressed air. Replacement by a clean element is recommended. Clean plastic bowl and lens (45) with warm water only. Clean other 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. Replace plastic bowl with a metal bowl if plastic bowl shows signs of cracking or cloudiness.

**Assembly**

1. Lubricate o-rings with o-ring grease.
2. Check valve for free movement in the valve guide.
3. Assemble the unit as shown on the exploded view.
4. Torque Table  
Torque in

Item	Nm (Inch-Pounds)
3, 9 (Bonnet) (227 to 273)	25 ... 30
55 (Valve guide) (18 to 25)	2 ... 2,7 max

  5. Assemble baffle (53), contact + 1/4 turn.
  6. Turn bowl or bowl with guard fully clockwise into body.

**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 alkalis, 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.

**Use in potentially explosive atmospheres**

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

- Only non-flammable gaseose 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.

