

**B54G - ★★D - ★★★ - ★★★**

Port	Thread Form	Adjustment	Drain	Bowl	Element	Temperature (Material)	Outlet Pressure Range*	Bracket
4 1/2"	A NPT	D Screw Driver	A Auto Drain	C Long Bowl	1 5µm	R -40 to 80°C (Nitrile)	K 0.5 to 7 bar (7.3 to 101.5 psig)	J inclusive
6 3/4"	V ISO G parallel		D Manual Drain	G Short Bowl	2 25µm	F -20 to +80°C (FKM)	M 0.5 to 10 bar (7.3 to 145 psig)	K Without
8 1"					3 40µm			

\*Outlet Pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressure outside of the specified ranges

**TECHNICAL DATA**

Fluid: Compressed air  
Maximum inlet pressure:

Manual drain: 31 bar (450 psig)

Auto drain: 17 bar (247 psig)

Operating temperature\*:

-40° to +80°C (-40° to +176°F)

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Particle removal: 5µm, 25µm, or 40µm 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: 75 dm<sup>3</sup>/s (159 scfm)

Manual drain bowl size: 0,017 litre (0.7 fluid ounce)

Auto drain bowl size: 0,025 litre (1 fluid ounce)

Auto drain connection: 1/4 NPT

Automatic drain operating conditions (float operated):

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)

Manual operation: Depress pin inside drain outlet to drain bowl

Gauge ports: 1/4 NPT as per main ports

Materials:

Body: Stainless steel

Bonnet: Stainless steel

Valve: Stainless steel

Bowl: Stainless steel

Element: Stainless steel

Elastomers: FKM or NBR

**REPLACEMENT ITEMS**

Service Kit (includes items circled on exploded view):

Filter element, 5µm (17)	5984-01(N)
Filter element, 25µm (17)	A080874-02
Filter element, 40µm (17)	A080874-03
Manual drain (FKM) (7,11,12,13,14,19,22,23,24)	A1923-S05
Manual drain (NBR) (7,11,12,13,14,19,22,23,24)	A1923-S07
Auto drain (FKM) (7,11,12,13,14,19,26)	A1923-S06
Auto drain (NBR) (7,11,12,13,14,19,26)	A1923-S08
Adjusting screw	5973-99

**INSTALLATION**

1. Shut-off air pressure. Install filter/regulator in air line
  - vertically (bowl down),
  - with air flow in direction of arrow on body,
  - upstream of lubricators and cycling valves,
  - as close as possible to the device being serviced.
2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
3. Check and ensure all the screws are tightened before pressurizing.
4. Install a pressure gauge or plug the gauge ports. Gauge ports can also be used as additional outlets for regulated air.

**ADJUSTMENT**

1. Before applying inlet pressure to filter/regulator, turn adjustment (1) counterclockwise to remove all force on regulating spring (6).
2. Apply inlet pressure, then turn adjustment (1) 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.
4. **ADJUSTING SCREW ADJUSTMENT.** Turn the lock nut (2) down to lock pressure setting.

**SERVICING**

1. Open manual drain to expel accumulated liquids. Keep liquids below element retainer (18).
2. At approximately 6 months intervals it is advisable to remove the bowl assembly by removing the securing screws (21) and unscrewing element retainer (18) to remove the elements (17) for inspection. Since the direction of air flow is from the inside of the element to outside, a clean exterior is not an indication of freedom from contamination. If the filter element shows evidence of blockage, replace with new element.
3. Clean the element retainer (18) before replacing the filter element – avoiding excessive overtightening of the retainer.
4. Inspect the bowl O-ring (19) for damage and renew if necessary.
5. Clean or replace filter element when dirty.

**DISASSEMBLY**

1. Filter/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 (1) fully counterclockwise.
4. Remove bowl – loosen screws (21) counterclockwise with screwdriver.
5. Disassemble in general accordance with the item numbers on exploded view. Do not remove the drains unless replacement is necessary. Remove and replace drains only if they malfunction.

**CLEANING**

1. Clean all the parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body (10) with clean, dry compressed air. Blow air through filter element (17) to remove surface contaminants.

**ASSEMBLY**

1. Lubricate threads and nose of adjusting screw (1) and bottom of upper spring rest (5) at regular intervals with suitable grease MOLYCOTE 1000.
2. Lubricate seals (11, 14, 19) with light coat of lubricant MOLYCOTE DC111.
3. Assemble the unit as shown on the exploded view.
4. **Torque Table**

Item	Torque in Nm (Inch-Pounds)
4,21 (Screw)	4,9 to 5,9 (43,4 to 52,2)
16 (Cent-post)	1,3 to 1,7 (11,5 to 15)
18 (Cent-post)	1,3 to 1,7 (11,5 to 15)
26 (Auto drain)	2,3 to 2,8 (20 to 25)

**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 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 maybe 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.

