NORGREN

F22

Installation & Maintenance Instructions

Stainless Steel Filter
F22 - ★0★ - ★★D★

Port
4....1/2"
6....Special ported 3/4-16 UNF †

Option
0....1/4" auto drain fitting
5....1/8" auto drain fitting or manual drain
7....Special ported 3/4-16 UNF equipped with 1/8" auto drain fitting or manual drain †

Drain
A....Automatic
M...Manual

Element
1....5 µm
2....25 µm

Thread Form
A....PTF
D....ISO G
S....Special ported 3/4-16 UNF †

† Special ported 3/4-16 UNF model: F22-**6**0**7**- x x D**S**. Drain type and element rating are indicated in positions 7 and 8 of model number.

TECHNICAL DATA

Fluid: Compressed air
Maximum pressure: 17 bar (250 psig)
Operating temperature: -34° to +80°C (-30° 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 3 and Class 5 (particulates)
Typical flow with 25 µm element at 6,3 bar (90 psig) inlet pressure, and 0,5 bar (7 psig) pressure drop: 57 dm^3/s (120 scfm)
Automatic drain connection:
- 00 Option: 1/4-18" NPTF
- 05 and 07 Option: 1/8" - will fit 1/8-27 and 1/8-28 pipe thread

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)
- Minimum air flow required to close drain: 1 dm^3/s (2 scfm)
- Manual operation: Depress pin inside drain outlet

Nominal bowl size: 0,2 liter (7 fluid ounce)
Materials - Metallic parts are NACE (National Association of Corrosion Engineers) approved metals meeting hardness requirements. NACE Recommendation MR-01-1975 (1980 Revision) "Material requirement - sulfite stress cracking resistant metallic material for oil field equipment".
- Body, bowl: Stainless steel
- Element: Sintered stainless steel
- Elastomers: Nitrile

REPLACEMENT ITEMS

Service kit, auto-drain (items 3, 10, 12, 13, 14, 15, 16, 26, 27, 29)
- 5 µm element .....F22-100A(5)
- 25 µm element F22-100A

Service kit, manual drain (items 3, 18, 19, 20, 21, 22, 23, 26, 27, 29)
- 5 µm element .....F22-100M(5)
- 25 µm element F22-100M

Bowl repair kit (items 3, 7, 8, 9).....5860-RK
Wall mounting bracket 18-001-962

INSTALLATION

1. Shut-off air pressure. Install filter in air line -
   - vertically (bowl down),
   - with air flow in direction of arrow on body,
   - upstream of regulators, lubricators, and cycling valves,
   - as close as possible to the air supply when used as a main line filter,
   - as close as possible to the device being serviced when used as a final filter.
2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
3. Flexible tube with 3 mm (0.125") minimum I.D. can be connected to the automatic drain. Avoid restrictions in the tube.
4. Before pressurizing, turn bowl clockwise into body until stop (approximately 5 turns), then unscrew no more than one full turn to position sight glass for best visibility.

SERVICING

1. Open manual drain to expel accumulated liquids. Keep liquids below baffle (24).
2. Replace filter element (26) when dirty or when pressure drop across element exceeds 0,7 bar (10 psig).

DISASSEMBLY

1. Filter can be disassembled without removal from air line.
2. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
3. 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 parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body (1) with clean, dry compressed air.
3. Inspect parts. Replace those found to be damaged.

ASSEMBLY

1. Lubricate seals and o-rings with o-ring grease. Apply a small amount of anti-seize lubricant to full length of threads on metal bowl.
2. Assemble filter as shown on the exploded view.
3. Torque Table

Item	Nm	(Inch-Pounds)
6 (retainer)	0,8 to 1,1	(7 to 10)
11, 15, 18 (nut)	2,3 to 2,8	(20 to 25)
24 (baffle)	1,1 to 1,4	(10 to 12)

CAUTION
Do not over torque retainer (6) as damage to gauge glass (9) will occur.

4. Turn bowl clockwise into body until stop (approximately 5 turns), then unscrew no more than one full turn to position sight glass for best visibility. Do not attempt to turn bowl when filter is pressurized.

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***.

Do not substitute any other bowl for the stainless steel bowl furnished with these products.

Before using these products with fluids other than air, for nonindustrial applications, or for life-support systems consult Norgren.