Oil Removal Filter

F74 \* \* \* \* \* \* 

Body and Element
C... Standard
H... High flow

Port
3... 3/8"
4... 1/2"
6... 3/4"

Thread Form
A... PTF
B... ISO Rp taper
G... ISO G parallel

Service Indicator
D... With mechanical service indicator
E... With electrical service indicator*
N... Without indicator

Drain
A... Automatic
Q... Manual, 1/4 turn

Bowl
D... Metal with liquid level indicator
P... Transparent with guard

Element
0... Coalescing

* See Norgren publication IM-900.920 for specifications and electrical wire connections of the optional electric service indicator.

Current Metal Bowl

Current Plastic Bowl

Early Plastic/Early Metal Bowl
F74C, F74H
Installation & Maintenance Instructions

TECHNICAL DATA
Fluid: Compressed air
Maximum pressure:
- Transparent bowl: 10 bar (150 psig)
- Metal bowl: 17 bar (250 psig)
Operating temperature:
- Transparent bowl: -20°C to +50°C (0°F to +125°F)
- Metal bowl: -20°C to +65°C (0°F to +150°F)
* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).
Particle removal: Down to 0.01 µm
Air quality: Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content)
Maximum remaining oil content in outlet air: 0.01 ppm at +20°C (+70°F) with an inlet concentration of 17 ppm
Maximum flow at 6.3 bar (90 psig) inlet pressure to maintain stated oil removal performance:
- F74C: 16 dm³/min (33.9 scfm)
- F74H: 28 dm³/min (59.3 scfm)
Nominal bowl size: 0.2 litre (7 fluid ounce)
Manual drain connection: 1/8”
Automatic drain connection: 1/8”
Automatic drain operating conditions (float operated):
- Automatic drain connection: 1/8”
- Manual drain connection: 1/8”
- Nominal bowl size: 0.2 litre (7 fluid ounce)
- F74H: 28 dm³/min (3 psig)
- F74C: 16 dm³/min (5 psig)
Minimum air flow required to close drain: Greater than 0.3 bar
Bowl pressure required to close drain: Greater than 0.3 bar
Bowl pressure required to open drain: Less than 0.2 bar
Manual operation: Depress pin inside drain outlet to drain bowl

Materials:
- Body: Aluminum
- Bowl: Transparent with guard: Polycarbonate, steel guard
- Metal: Aluminum
- Metal bowl liquid level indicator lens: Transparent nylon
- Filter element: Synthetic fibre and polyurethane foam
- Elastomers: Neoprene and nitrile
- Mechanical service indicator materials:
  - Body: Transparent nylon
  - Internal parts: Acetal
  - Spring: Stainless steel
  - Elastomers: Nitrile

REPLACEMENT ITEMS
- Service kit (includes items indicated on exploded view)............. 4380-730
- Liquid level lens kit (34, 36, 37, 38)................................. 4380-050
- Filter element:
  - F74C (51, 52)...................................................... 4344-01
  - F74H (53, 54)...................................................... 4344-02
- Manual drain (18, 19, 20) (28, 29, 30)............................. 619-50
- Automatic drain (21, 22, 23) (31, 32, 33):
  - 1/8” NPT outlet.................................................... 3000-10
  - G 1/8” outlet....................................................... 3000-97
- Mechanical service Indicator (1)........................................ 5797-50
- Electrical service Indicator (8)........................................ 4020-51R

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 3mm (0.125”) minimum I.D. can be connected to the automatic drain. Avoid restrictions in the tube.
4. Push bowl, or bowl with guard, into body and turn fully clockwise before pressurizing.
5. Install a Norgren general purpose filter with a 5 µm element upstream of the oil removal filter to obtain maximum element service life.

SERVICING
2. Replace filter element when pressure drop across element exceeds 0.7 bar (10 psig). The mechanical service indicator shows approximately full red and the optional electrical service indicator provides an electrical output when pressure drop across element reaches 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. Remove bowl - push into body and turn counterclockwise.
4. Disassemble in general accordance with the item numbers on exploded view. Do not remove the drains or the service indicators (1, 8) unless replacement is necessary. Remove and replace only if they malfunction.

CLEANING
1. Element (51, 53) cannot be cleaned. Clean plastic bowl (25, 42) and lens (3, 36, 47) with warm water only. Do not submerge electrical service indicator (8) in water. Clean indicator (8) with dry, clean cloth. Clean other parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body (6, 7) with clean, dry compressed air.
3. Inspect parts. Replace those found to be damaged. Replace plastic bowl with a metal bowl if plastic bowl might be exposed to substances that are incompatible with polycarbonate.

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.

Poly carbonate plastic bowls can be damaged and possibly burst if exposed to such substances as certain solvents, strong alkalies, 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.

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

CAUTION
Water and oil vapors will pass through these units and could condense into liquid form downstream as air temperature drops. Install an air dryer and an oil vapor removal filter if water and oil vapors could have a detrimental effect on the application.

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

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