

**Oil Removal Filter
F39 - ★★ - ★★**

TECHNICAL DATA

Fluid: Compressed air
 Maximum pressure:
 Transparent bowl: 10 bar (150 psig)
 Metal bowl: 17 bar (250 psig)
 Operating temperature*:
 Transparent bowl: -34° to +50°C (-30° to +125°F)
 Metal bowl: -34° to +65°C (-30° 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:
 1/8" Ports: 2,8 dm³/s (6.0 scfm)
 1/4" Ports: 3 dm³/s (6.4 scfm)
 Drain connection: 1/8" pipe thread
 Automatic drain operation: Spitter type drain operates momentarily when a rapid change in air flow occurs or when supply pressure is reduced.
 Nominal bowl size: 31 ml (1 fluid ounce)
 Materials:
 Body: Zinc
 Bowl:
 Transparent: Polycarbonate
 Metal: Zinc
 Element: Synthetic fiber and polyurethane foam
 Elastomers: Neoprene and nitrile

REPLACEMENT ITEMS

Service Kit (includes items circled
 on exploded view):4141-10
 Manual drain (20, 26)773-03
 Auto drain (21, 22) (27, 28).....3654-02

INSTALLATION

- 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.
- Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
- On filters equipped with an automatic drain, slip 1/4" I.D. flexible tube over protrusion on bottom of bowl. Avoid restrictions in the tube. Bowl protrusion is also threaded to accept 1/8" pipe thread fitting.
- Turn bowl fully clockwise into body before pressurizing.
- Install a Norgren general purpose filter with a 5 µm element upstream of the oil removal filter to obtain maximum element service life.

SERVICING

- Depress manual drain to expel accumulated liquids. Keep liquids below element (31).
- Replace filter element when pressure drop across element exceeds 0,7 bar (10 psig).

DISASSEMBLY

- Filter can be disassembled without removal from air line.
- Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
- Turn bowl counterclockwise and remove from body.
- Disassemble in general accordance with the item numbers on exploded view. Do not remove the manual drain unless replacement is necessary. Remove and replace only if it malfunctions.

CLEANING

- Element (31) cannot be cleaned. Clean plastic bowl with warm water only. Clean other parts with warm water and soap.
- Rinse and dry parts. Blow out internal passages in body (1) with clean, dry compressed air.
- 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

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

	Torque in N-m (Inch Pounds)
31 (Element)	0,56 to 1,13 (5 to 10)
23, 29 (Bowl)	0,56 to 1,13 (5 to 10)
20, 26 (Manual drain valve)	0,17 to 0,28 (1.5 to 2.5)

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.

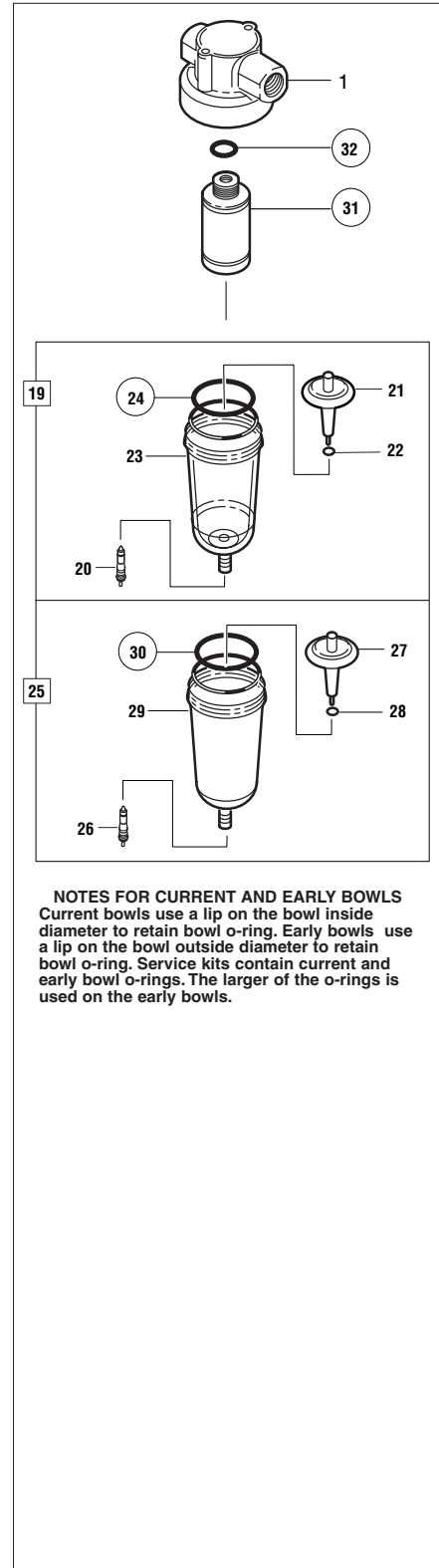
WARNING

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.

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



NOTES FOR CURRENT AND EARLY BOWLS
 Current bowls use a lip on the bowl inside diameter to retain bowl o-ring. Early bowls use a lip on the bowl outside diameter to retain bowl o-ring. Service kits contain current and early bowl o-rings. The larger of the o-rings is used on the early bowls.