# FILTER ELEMENT REPLACE-MENT PROCEDURE



Models rated for 20 - 780 scfm (0.58 - 22.08 m<sup>3</sup>/min)

### **Maintenance**

## A. When to Replace Filter Element

NOTE: Types KPF, KOR, KOX, and KVF - complete element is replaced; Type KFS - unless separator core is damaged outer sleeve only is replaced.

- 1. Types KFS, KPF, KOR, and KOX
  - a. Initial (dry) pressure drop: 1 psi (0.07 kgf/cm²) to 2 psi (0.14 kgf/cm²)
  - b. Operating pressure drop: As filter becomes liquid loaded (wetted), pressure drop will increase to 2 to 6 psi (0.14 to 0.42 kgf/cm²). Further pressure drop occurs as element loads with solid particles.

FOR MAXIMUM FILTRATION EFFICIENCY, REPLACE ELEMENT WHEN PRESSURE DROP REACHES 10 PSI (0.7 KGF/CM²) (INDICATOR IN RED AREA) OR ANNUALLY, WHICHEVER OCCURS FIRST.

NOTE: Pressure drop may temporarily increase when flow is resumed after flow stoppage. Pressure drop should return to normal within one hour.

NOTE: Type KOR and KOX - During normal operation bottom of foam sleeve will have a band of oil. Spotting above the band indicates that liquids are accumulating faster than they can be drained and that prefiltration is required.

- 2. Type KVF
  - Adsorption capacity 1000 hours at rated capacity.
    Element life is exhausted when odor can be detected downstream of the filter.

### B. Procedure for Element Replacement

WARNING: THIS FILTER IS A PRESSURE CONTAINING DEVICE. DEPRESSURIZE BEFORE SERVICING. If filter has not been depressurized before disassembly, an audible alarm will sound when the bowl begins to be removed from the head. If this occurs, stop disassembly, isolate and completely depressurize filter before proceeding.

- Isolate filter (close inlet and outlet valves if installed) or shut off air supply.
- Depressurize filter by slowly opening manual drain valve.
- 3. Remove bowl
  - a. For models rated for 20-170 scfm (0.58-4.83 m³/min) bayonet mount push bowl up, turn bowl 1/8th turn to your left, and pull bowl straight down
  - b. For models rated for 250-780 scfm (7.08-22.08 m<sup>3</sup>/min) threaded bowls unscrew bowl from head using hand, strap wrench or C spanner.

- 4. Clean filter bowl
- 5. Replace element
  - a. Replacing complete element
    - 1) Pull off old element and discard
    - Make certain o-ring inside top of replacement element is in place and push element onto filter head.

NOTE: Types KOR, KOX, and KVF - Do not handle elements by outside foam cover. Handle by bottom end cap only.

- b. Type KFS replacing sleeve only
  - 1) Pull element straight down to remove.
  - Remove bolt and bottom cap and remove disposable filter sleeve.
  - Clean separator core with soap and water if necessary.
  - 4) Slide new filter sleeve over separator core and replace bottom cap and hand tighten bolt.
  - 5) Make certain o-ring inside top of element is in place and push element onto filter head.
- 6. After making certain that o-ring inside top of bowl (and on bayonet mount heads, wave spring) are in place, reassemble bowl to head.

NOTE: Make certain o-ring is generously lubricated. (use lubricant provided)

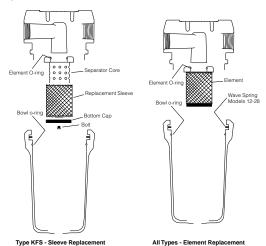
NOTE: Wave spring ends should be pointed down to prevent the wave spring from interfering with reassembly.

NOTE: Threaded bowl to head connection, generously lubricate threads with a high grade/temperature lubricant good for 150°F, 66°C. (use lubricant provided)

NOTE: For models with flow rating of 20 scfm (.57 m³/min) manufactured before 12/99 make certain spacer in bowl is in place before reassembling.

## C. Auto Drain Mechanism

It is recommended that drain mechanism be replaced annually.



KAESER COMPRESSORS SERVICE DEPARTMENT: (724) 745-3038

P.O. Box 946 • Fredericksburg, VA 22404 Tel: 540/898-5500 • FAX: 540/898-5520