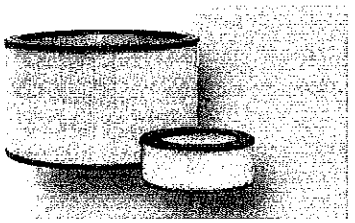
FILTER ELEMENTS

Three types of filter elements are available for Universal's cartridge filters and filter-silencers. The pleated paper elements provide the highest efficiency and are considered standard. Pleated felt and wire mesh elements are available for less demanding service, with respect to efficiency. The three types of elements are completely interchangeable and will fit the CCS, CS, CF, or CCF filter housings.

SERVICE INTERVALS: Paper and felt elements are typically cleaned or replaced when the air flow resistance has increased by 4 inches of water over the initial clean resistance. The maximum restriction recommended across the filter elements is 20 inches of water, but this value may be greater than the equipment can tolerate for best efficiency. The wire mesh elements should be cleaned when they are visibly dirty and re-treated with Universal Oil-Free Adhesive or motor oil. Resistance is typically not a good indicator for cleaning wire mesh elements; a periodic cleaning schedule is recommended.



Pleated Paper Element

SPECIFICATIONS:

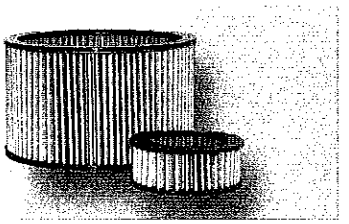
- High-quality industrial grade filter paper—pleated and oven-cured during production.
- Oven-cured plastisol end caps with molded sealing beads (larger elements for pipe sizes (P) 10 in., 12 in., 14 in., and 16 in. have metal end caps and closed-cell rubber gaskets).
- Media efficiency: 99.5% on 2 microns; 97% on 1 micron.
- Maximum operating temperature: 200° F for units with ½ in. through 16 in. pipe sizes.

SERVICE INSTRUCTIONS:

Because of the low cost of the paper element, it is generally treated as a consumable and replaced when dirty. However, depending upon customer preference, the paper element may be cleaned with compressed air and reused.

Compressed Air Cleaning:

Carefully direct compressed air (100 PSI maximum) through the dry element, opposite the normal direction of flow. After cleaning, inspect carefully for holes or cracks. If damaged, replace element.



Pleated Felt Element

SPECIFICATIONS:

- Durable polyester felt media — pleated.
- Oven-cured plastisol end caps with molded sealing beads (larger elements for pipe sizes (P) 10 in., 12 in., 14 in., and 16 in. have metal end caps with closed cell rubber gaskets).
- Media efficiency: 99% on 10 microns.
- Maximum operating temperature: 200° F for units with ½ in. through 8 in. pipe sizes.

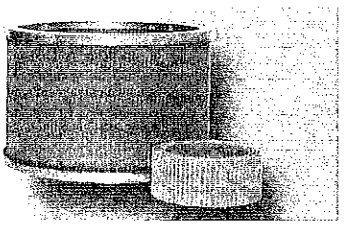
  250° F for units with 10 in. through 16 in. pipe sizes using elements with metal end caps.

SERVICE INSTRUCTIONS:

Pleated felt elements may be cleaned with compressed air (as described for paper elements) or water and reused.

Water Cleaning:

Rap gently to dislodge accumulated dirt, soak thoroughly approximately 15 minutes in warm water and mild detergent. Rinse thoroughly under low-pressure water. Air dry—do not dry with compressed air. After cleaning, inspect carefully for holes or cracks. If damaged, replace element.



Wire Mesh Element

SPECIFICATIONS:

- Galvanized wire-mesh media—corrugated construction.
- Larger elements for pipe sizes (P) 6 in., 8 in., 10 in., 12 in., 14 in., and 16 in. have metal end caps.
- For best efficiency, wire mesh elements must be treated with oil or oil-free adhesive.
- May be cleaned and reused indefinitely.
- Wire mesh elements are considered "roughing" filters and are not recommended for applications that require efficient filtration of fine particles.
- Approximate efficiency: 93% on 10 microns. Efficiency will vary with element oil or adhesive coverage.
- Maximum operating temperature: 200° F for ½ in. through 16 in. with oil-free adhesive (the flash point for oil-free adhesive is 235° F).

  300° F for ½ in. through 16 in. without oil-free adhesive. Filter efficiency is much lower without oil-free adhesive on the filter. Higher temperatures can be used with uncoated ½ in. through 5 in. filter elements without end caps.

SERVICE INSTRUCTIONS:

New elements are delivered pre-treated with Universal Silencer's oil-free adhesive. See the back page for details. For best efficiency, wire mesh elements must be re-treated after each cleaning. Spray the element on both sides with Universal Oil-Free Adhesive, P/N 81-0323, following the directions on the container. For oil treatment, dip the element in SAE 30-50 motor oil and drain thoroughly before using.

To clean wire mesh elements, wash in solvent or warm water and detergent in a container large enough for complete immersion of element. Rinse completely, drain, and either air dry or use compressed air. After cleaning and drying, re-treat the element with oil-free adhesive or oil as described.

P (nom.)	Replacement Element Part No.		
	Paper	Felt	Wire
½	81-0470	81-1202	81-1035
¾	81-0470	81-1202	81-1035
1	81-0470	81-1202	81-1035
1¼	81-0471	81-1203	81-1036
1½	81-0471	81-1203	81-1036
2	81-0471	81-1203	81-1036
2½	81-1063, 81-0472 (old)	81-1205, 81-1204 (old)	81-1038, 81-1037 (old)
3	81-1063, 81-0472 (old)	81-1205, 81-1204 (old)	81-1038, 81-1037 (old)
3½	81-1063	81-1205	81-1038
4	81-1063	81-1205	81-1038
5	81-1063, 81-0474 (old)	81-1205, 81-1206 (old)	81-1038, 81-1039 (old)
6	81-0475	81-1207	81-1040
8	(2) 81-0475	(2) 81-1207	(2) 81-1040, (1) 81-1199 (old)
10	81-1163	81-1209	81-1200
12	81-1163	81-1209	81-1200
14	81-1164	81-1210	81-1201
16	81-1164	81-1210	81-1201