Filter cartridge end cap configurations

amafiltergroup filter cartridges are available in several industry standard end cap configurations. This allows amafiltergroup filter cartridges to be retro fitted into many existing filter cartridge housings. Samples of the various end cap configurations can be seen below.

Double open end (DOE)

One common option available is the double open end variant (DOE). This option is used mainly for medium to coarse filtration. It is not recommended for very fine or sterile filtration and high temperature applications.

The cartridge is sealed in the housing by means of a mechanical top seal. The bottom end of the cartridge is open and located in the housing septum allowing flow of the filtrate to the clean side.

Cartridges are sealed by "seat cups" at both ends employing a "knife seal" with the cartridge. Springs on top of the seat cup at the closed end employ sufficient force to create a good seal. A tube guide running through the centre of the cartridge ensures correct positioning of the cartridge.

DOE cartridges are available in three different styles:

- X0: No end caps. The cartridge media acts as the seal.
- X9: No end caps, but soft polyethylene gaskets.
- X4: Moulded end caps, with a wide variety of gasket materials available.

X 9 Soft gaskets (polyethylene) X 4 End caps with gaskets

Single open end (SOE)

Single open end (SOE) cartridges employ a double Oring seal at the open end of the filter cartridge. The closed end cap can be either flat or fin type.

The double O-ring seal offers a much more secure seal than DOE, and is considered mandatory to sterile filtration.

SOE cartridges are available in four different styles:

- X3: two 222 O-rings at the open end and a flat end cap at the closed end.
- X8: two 222 O-rings at the open end and an end cap with a fin at the closed end.
- X6: two 226 O-rings and a two lug bayonet fitting at the open end. The closed end has a flat end cap.
- X7: two 226 O-rings and a two lug bayonet fitting at the open end. The closed end has a fin.

The bayonet on X6 and X7 will securely locate the cartridge in the housing septum, where as the X3 and X8 will be secured by means of "tie rods" and top plate. Fin end caps make for easier fitting of the top plate and tie rods.

The preferred option for sterile filtration is the X7 / X6 version.

amafiltergroup offers a wide range of sanitary housings as standard (AFS range for sterile filtration).

Cartridges with X3 end cap will also fit into the amafiltergroup range of industrial cartridge filter housings (AFL [metal], AFW, AFM and AFK).

Details can be found in our filter housing Data Sheets.



222 O-rings and flat end

222 O-rings and fin end

226 O-rings, bayonet and flat end

226 O-rings, bayonet and fin end

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