



MicroFine

Membrane filter elements



MicroFine filter cartridges are provided with a pleated absolute membrane made from polyethersulfone or nylon 66 both hydrophilic, to offer the best performance in aqueous liquid service.

A version provided with a pleated absolute membrane made from PTFE is available for tank sterile venting, PTFE is also suitable for gas and solvent filtration mostly in pharmaceutical applications.

Please select the most appropriate filter element from tables 1, 2 and 3 taking into account the actual working conditions of your process.

Our staff is always at your disposal for technical and commercial support, please do not hesitate to contact us.

Table 1 - MicroFine materials and compatibility

TYPE	Membrane material	Structure material	Main applications
MFPS	polyethersulfone - hydrophilic	polypropylene	bottled water, acid-bases-oxidizing agents, dialysis pure water
MFPE	polyethersulfone - hydrophilic (electronic grade)	polypropylene	chemicals, deionized water in electronics
MFN	nylon 66	polypropylene	water in pharma and cosmetic
MFNP	nylon 66 electrostatically charged	polypropylene	pyrogens removal
MFNV	nylon 66	polypropylene	for wine filtration
MFT	PTFE - hydrophobic	polypropylene	sterile venting, solvents, sterile compressed air and gases

Table 2 - MicroFine working conditions

TYPE	Available micron ratings	Filter area per 10" module	Autoclave sterilization at 121°C	"In situ" sterilization at 121°C	Max working temperature
MFPS	0.1 - 0.2 - 0.45 - 0.65 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water
MFPE	0.03 - 0.1 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water
MFN	0.2 - 0.45 - 0.65 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water
MFNP	0.2 - 0.45 - 0.65 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water
MFNV	0.45 - 0.65 - 0.80 - 1.20 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water
MFT	0.05 - 0.1 - 0.2 - 0.45 - 1.0 micron	0,5 m ²	max 40 hours	max 40 hours	65°C fluid water

Table 3 - MicroFine, integrity test data

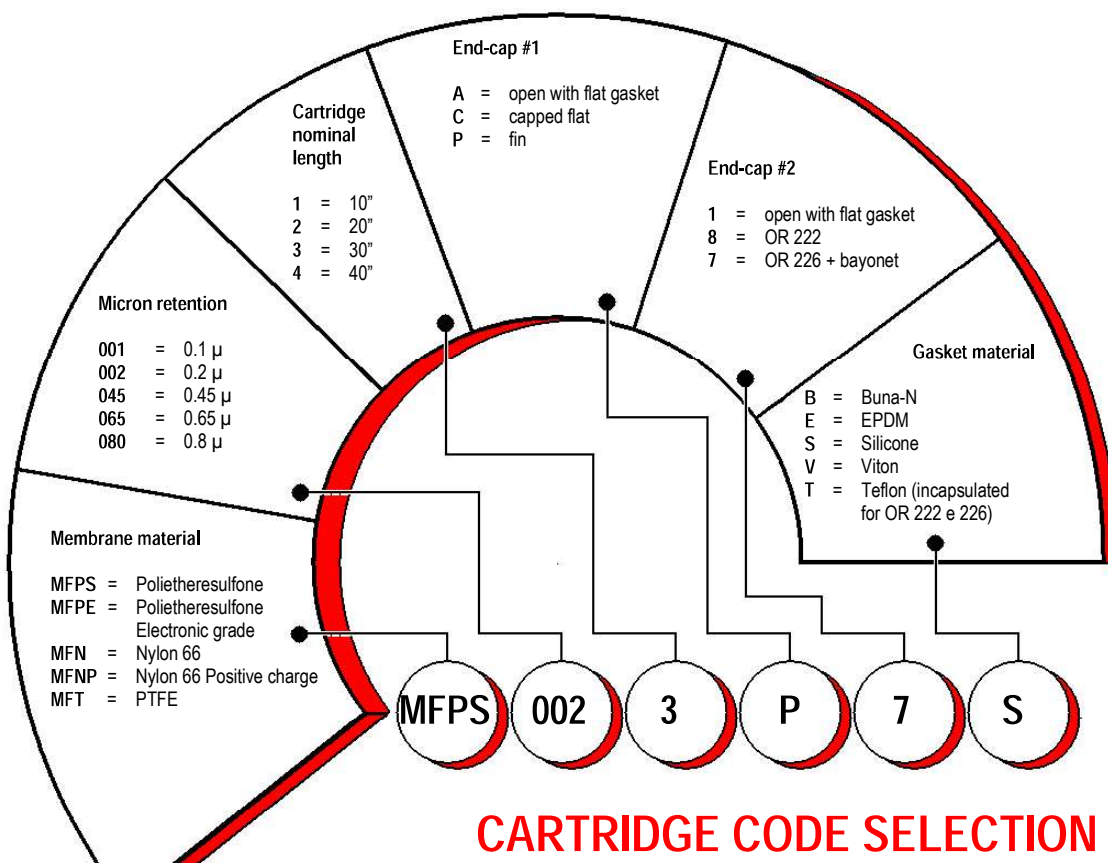
TYPE	Micron rating	Fluid	Diffusion pressure	Diffusion flow	Extractables in water
MFPS001	0.1 µm	Water	2.76 bar	< 12 cc/min	< 25 EU/ml
MFPS002	0.2 µm	Water	2.07 bar	< 12 cc/min	< 25 EU/ml
MFPS045	0.45 µm	Water	1.38 bar	< 10 cc/min	< 25 EU/ml
MFPS065	0.65 µm	Water	0.90 bar	< 5 cc/min	< 25 EU/ml
MFN002	0.2 µm	Water	2.20 bar	< 30 cc/min	< 25 EU/ml
MFN045	0.45 µm	Water	1.70 bar	< 20 cc/min	< 25 EU/ml
MFN065	0.65 µm	Water	0.90 bar	< 20 cc/min	< 25 EU/ml
MFT91	0.1 µm	60% IPA	1.38 bar	< 15 cc/min	< 25 EU/ml
MFT92	0.2 µm	60% IPA	0.90 bar	< 15 cc/min	< 25 EU/ml
MFT94	0.45 µm	60% IPA	0.62 bar	< 10 cc/min	< 25 EU/ml

All MicroFine are individually tested to check integrity before final packing.
Production batch and micron rating are impressed on each element to guarantee product traceability.

The component materials of MicroFine cartridges, meet the current test criteria:

United States code of Federal Regulations
Title 21
USP24 Class VI – 121°C

Additionally, the component materials have been recognized as suitable for use in articles intended for repeated food contact per 21 CFR



AKRO SRL - BRASOV