

Masterfilter MC series

The Masterfilter *MasterCap* MC capsule filters are used for removal of micro-organisms and fine particles from liquids. Made of polypropylene and high-performance filtration media such as PES, PVDF, Polypropylene and Glass Fiber the MC-I and MC-T are the ideal filters to satisfy the highest standards in a broad range of applications. It is especially designed for self-contained assemblies in Pharmaceutical, Microelectronics and Food and Beverage. No adhesives or glue are used in manufacturing and all bonding is by thermal welding. *MasterCap* MC filters are available in T-style and in In-line configuration.

Applications

- Bio-Pharmaceutical: Serum filtration, Tissue culture media, Viscous biological liquids, Blood derivatives, Ophthalmic, Oncological products, Microbiological growth media
- Microelectronics: Metal and oxide CMP slurries, Chemical rinse solutions, Acids, Bases, Solvents

Features and Benefits

- Single-use filtration systems save cleaning time and validation cost
- Available in 5", 10", 20" and 30" lengths to optimise flow rates and throughput
- Capsules are available in pre-sterilised packages
- No housing maintenance required
- High throughput
- T-style and Inline versions available

Materials of Construction

- Outer shell: - Polypropylene
- Filter media: - Double layer Polyether sulfone
 - - PVDF
 - - PTFE
 - - Single layer Polyether sulfone
 - - Absolute rated high efficiency Polypropylene
 - - Glass fiber
 - - Double layer Nylon 66 positive charged
- Sealing: Thermal bonding



Operating Parameters

- Max. differential pressure Liquids: 5.5 bar at 25 °C, 1.0 bar at 80 °C
- Max. operation pressure Gas: 4.0 bar at 0 - 60 °C, 2.1 bar at 60 °C

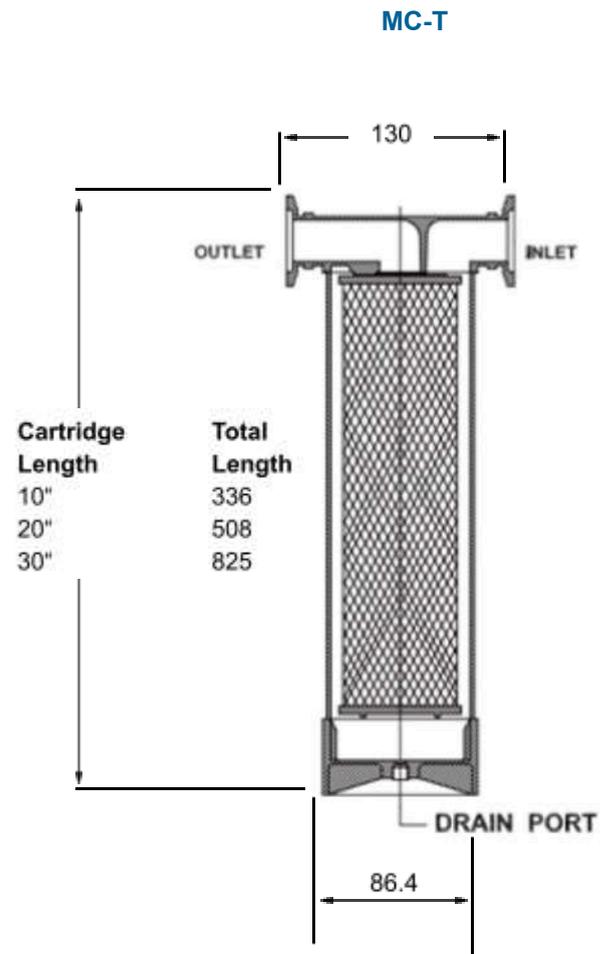
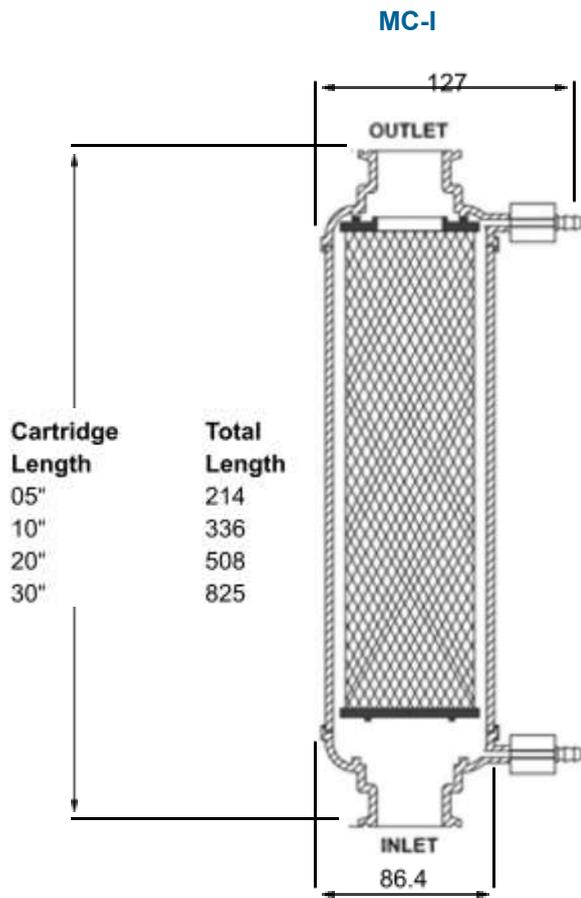
Quality Standards

- Quality Assurance: These products are manufactured in a facility which adheres to ISO 9001:2015 Practices

Biological Standards

- Extractable (NVR): < 30mg/10" (Test procedures: steam sterilized for 30min. at 121 °C, then soaked in purified water for 24 hours)
- Oxidability: Meets FDA requirements for oxide test (Test procedures: steam sterilized for 30min. at 121 °C, then soaked in purified water for 24 hours)
- Endotoxin: < 20 EU/ml, according to LAL test
- Material safety: Meets UPS 88, for class VI-121 °C plastics

Dimensions



MasterCap MC Capsule Filter

Single Use Assembly



Part Numbers (MC-I = Inline, MC-T = T-Style)

MC-I DPES - 045020 - 10 - C
 MC-T

Code	Membrane media
DPES	Double layer PES
PVD	Hydrophilic PVDF
NYPC	Hydrophilic Nylon 6.6
L	Hydrophilic PTFE
PES	Single layer PES
T	Hydrophobic PTFE
PVDH	Hydrophobic PVDF
APK	Absolute rated high efficiency PP
GFK	Glass fiber

Code	Removal rating [µm]
020020	0.2 + 0.2
020010	0.2 + 0.1
045020	0.45 + 0.2
010	0.1
020	0.2
045	0.45
020020	0.2 + 0.2
045020	0.45 + 0.2
120045	1.2 + 0.2
0010	0.1
0020	0.2
0045	0.45
020	0.2
002	0.2
020	0.2
0020	0.2
0050	0.5
0100	1
0300	3
0500	5
1000	10
0100	1
0500	5

Code	Cartridge Length	
	[inch]	[mm]
05*	5	128
10	10	254
20	20	508
30	30	762
40		

Code	Inlet / Outlet Connection
C	1-1/2" Tri-clamp

e.g. part number: MC-I-DPES-045020-10-C
 MasterCap MC-I DPES, 0.45 + 0.2 µm, 10" Length, 1-1/2" Tri-clamp

Vent / drain MC-I: 6 mm Hose Barb connection and valve
 Vent / drain MC-T: 6 mm Hose barb connection

Contact Masterfilter: www.masterfilter.eu info@masterfilter.eu