



MSP Filter Cartridges

■ Polypropylene

Depth Series

Depth Cartridges with Controlled Density of Depth Media offer High Efficiency Filtration

Parker's MSP Cartridges are high efficiency depth cartridges with fixed pore structure. Melt-blown polypropylene sheet manufactured by special requirements is used as filter media. Inter-layer of filter media has higher density than outer-layers, so this guarantees higher performance and higher dirt holding capacity.

MSP cartridges are available in 1 μm , 3 μm , 5 μm , 10 μm , 15 μm , 25 μm , 50 μm , 75 μm , and, 100 μm pore size (95% removal: $\beta=20$).

Applications

- Food and Beverage
- High Tech Coating
- Chemical Processing
- Photographic Chemical
- DI Water
- Inorganic Acids
- Membrane Prefiltration



Features and Benefits

- Fixed pore structure provides high efficiency (95%) filtration.
- Microfine melt-blown material provides better performance than similar types of products from competition.
- No surfactants or binders are present to interrupt product quality or cause foaming.
- Double-open-end cartridges have polyolefin gaskets thermally welded to both ends eliminating fluid bypass between the cartridge and the vessel seal.
- Thermal inter-layer bonding structure eliminates contaminant unloading and channeling.
- All polypropylene media provides broad chemical compatibility for a variety of applications.
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact.
- Graded density layering provides prefiltration matrix prior to high efficiency particle barrier.

Parker Hannifin Korea Ltd.

Depth Series

Specifications

Filtration Ratings:

- 1 μm , 3 μm , 5 μm , 10 μm , 15 μm , 25 μm , 50 μm , 75 μm , 100 μm

Materials of construction:

- Filter media : 100% Melt-blown Polypropylene
- Core : Polypropylene
- Integrally Welded Gaskets : Polyolefin

Dimensions:

- 1.1 in (28 mm) ID \times 2.56 in (66 mm) OD
- 10, 20, 30, 40 in nominal lengths

Recommended Operating Conditions:

- Maximum Temperature:
 - @ 60 psid(4.1bar):80 °F(27 °C)
 - @ 35 psid(2.4bar):160 °F(71 °C)
 - @ 15 psid(1.0bar):200 °F(93 °C)
- Maximum Recommended Flow Rate: 5 gpm per 10 in length
- Change Out ΔP : 35 psi(2.4bar)
- Maximum Operating Pressure @ Ambient Temperature: 60psi(4.1bar)

Liquid Particle Retention Ratings(μm) @ Removal Efficiency of:

Beta Ratio Efficiency	$\beta = 100$ 99%	$\beta = 50$ 98%	$\beta = 20$ 95%	$\beta = 10$ 90%
MSP1	2.2	1.8	1	0.8
MSP3	5	4.1	3	2.7
MSP5	10	8	5	4.8
MSP10	22	13	10	9.7
MSP15	31	19	15	14
MSP25	40	31	25	24
MSP50	60	52	50	47
MSP75	90	82	75	62
MSP100	-	-	100	80

$$\text{Beta Ratio}(\beta) = \frac{\text{Upstream Particle Count @ Specified Particle Size and Larger}}{\text{Downstream Particle Count @ Specified Particle Size and Larger}}$$

$$\text{Percent Removal Efficiency} = \left(\frac{\beta - 1}{\beta} \right) \times 100$$

Single Pass Test using AC Test dust in water at a flow rate of 2.5 gpm per 10 in.(9.5lpm per 254mm).

Ordering Information

MSP	10	M	10	A	TC
Cartridge Code	Micro Rating (Nominal, μm)	Filter Media	Nominal Length (in)	Core material	End Cap configuration
MSP Depth Cartridge	1	M=FDA Polypropylene	9-4 =9 3/4	A=FDA Polypropylene	SC=2-226/Flat
	3		10 =10		SF=2-226/Fin
	5		19-4 =19 1/2		TC=2-222/Flat
	10		20 =20		TF=2-222/Fin
	15		29-4 =29 1/4		
	25		30 =30		
	50		39-4 =39		
	75		40 =40		
	100				

Parker Hannifin Korea Ltd.