

MKL Series Filter Capsules (Mini Capsule)

Versatile Small Capsule filter

PureFlo® MKL Series capsules were designed for small-scale filtration, clarification, and filling applications in the pharmaceutical, biotechnology, food and beverage, medical, chemical, water industries worldwide. This family of products is particularly suitable for scale-up testing where a full size capsule or cartridge would be excessive. They are also very suitable for disposable Bio-bag applications.

The MKL capsules have a compact design that can incorporate 200, 300, 400 or 500 cm² of filtration material to meet the needs of different applications. We are currently offering nine different media options with 15 different fitting options. The different possible materials of construction can provide excellent compatibility with a wide-range of chemicals such as acids, bases and solvents. No adhesives, binders, or surfactants are used in the manufacturing process. All units are thermally-sealed and 100% integrity tested.



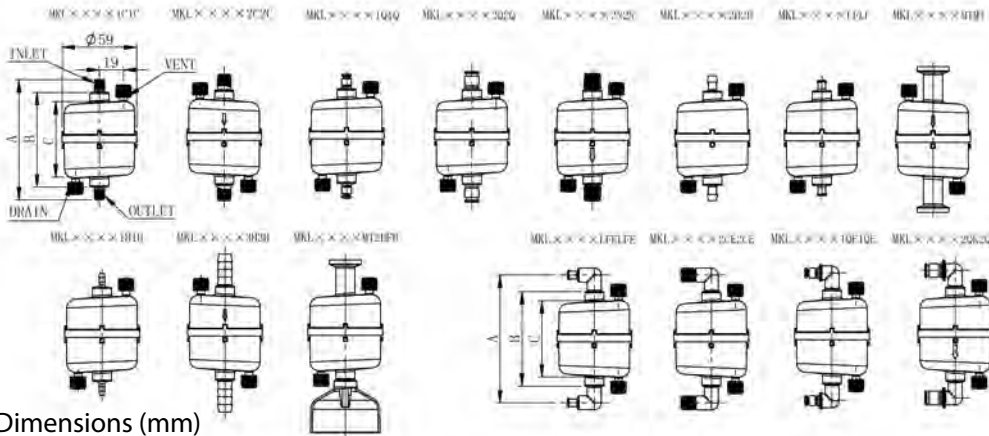
Applications	
Low flow	Ink
Lab scale testing	Beverages
Bio Bags	Pharmaceuticals
Fine Chemicals	Biologics
Vent Filter	Scale up processing
Water	Small volume

Specifications

Materials of Construction:	Media: Polypropylene, Nylon, PTFE, Polyethylene, Glass Fiber, and PES Media Supports: Polypropylene or Polyester Cage, Core, End Caps: Polypropylene or Polyethylene Sealing: Thermally-welded
Fitting Connections:	See ordering guide for the availability. Any inlet/outlet combinations. (Custom adaptors available upon request)
Nominal Dimensions:	Lengths: 3.9 in. (99mm) Diameter: 2.3 in. (60 mm)
Available Ratings:	0.04um to 70um (see Ordering Guide)
Operating Conditions:	Maximum Operating Pressure: Liquid: 5.5 bar (80psi) at 77°F/25°C Gas: 4.1 bar (60psi) at 77°F/25°C Maximum Forward Differential Pressure: 5.0 bar (72 psid) at 68°F/20°C Maximum Reverse Differential Pressure: 2.1 bar (30 psid) at 176°F/80°C Maximum Operating Temperature: PP & Gamma PP: 176°F/80°C HDPE: 140°F/60°C Minimum Burst Pressure: 8.3 bar (120 psid) at 77°F/25°C
Sterilization:	The filters can be sterilized by autoclaving for up to 25 cycles at 125°C (250°F) for 30 minutes, except for PE membrane. The filters can also be sanitized by hot water or common chemicals that are compatible with polypropylene.
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological Test for Plastic. (Except Blk PP)



MKL Series Filter Capsules



Dimensions (mm)

Fitting Code	Fitting Description	Size		
		A	B	C
1C	1/8" Compression	94	74	60
2C	1/8" Compression	99	74	60
1Q	1/8" Male Quick Coupling	97	74	60
2Q	1/4" Male Quick Coupling	102	74	60
2N	1/4" MNPT	100	74	60
2H	1/4" Hose Barb	98	74	60
LF	Female Luer Lock	90	74	60
MT	0.5" Tri Clamp	114	74	60
1H	1/8" Hose Barb	96	74	60
3H	3/8" Hose Barb	124	74	60
MT2HFB	0.5" Tri Clamp by 1.4" Hose Barb with Filling Bell	135	74	60
LFE	Female Luer Lock Elbow	100	74	60
2CE	1/8" Compression Elbow	100	74	60
1QE	1/8" Male Quick Coupling Elbow	100	74	60
2QE	1/4" Male Quick Coupling Elbow	100	74	60

PureFlo MKL Series Filter Capsule Ordering Guide

PureFlo Capsule Filters	Filter Media	Pore size (Micron)	Surface Area	Inlet Fitting	Outlet Fitting	Option
MKL = Capsule filter Standard grade MKP = Pharma grade (For PTFE, PES and PE Media only)	CN = Charged Nylon DP = Depth PolyPro E = Polyethylene F = PTFE G = Glass Fiber M = PolyPro Mem N = Nylon NS = Nylon Screen P = PolyPro Media HF = Hydrophilic PTFE S = PES	Pick From Pore Size Table	A = 200cm ²	1C = 1/8" Compression	1C = 1/8" Compression	-E = Polyethylene shell and HDPE media support for gamma sterilization -GP = Gamma stable polypropylene shell -N = No vent or drain fittings -NI = No vent or drain inlet -NO = NO vent or drain outlet -NY = Nylon Shell -BLK = Black PP Shell -BLK = Black PP Shell -ETO = Ethylene oxide -O-Ring for Quick Coupling
			B = 300cm ²	1H = 1/8" Hose Barb	1H = 1/8" Hose Barb	
			C = 400cm ²	1Q = 1/8" Male Quick Coupling	1Q = 1/8" Male Quick Coupling	
			D = 500cm ²	1QE = 1/8" Male Quick Coupling Elbow	1QE = 1/8" Male Quick Coupling Elbow	
				2C = 1/4" Compression	2C = 1/4" Compression	
				2CE = 1/4" Compression Elbow	2CE = 1/4" Compression Elbow	
				2H = 1/4" Hose barbs	2H = 1/4" Hose barbs	
				2H-FB = 1/4" Hose barbs with Filling Bell	2H-FB = 1/4" Hose barbs with Filling Bell	
				2N = 1/4" MNPT	2N = 1/4" MNPT	
				2NO = 1/4" MNPT+EP O-Ring	2NO = 1/4" MNPT+EP O-Ring	
				2Q = 1/4" Male Quick Coupling for Metal latch	2Q = 1/4" Male Quick Coupling for Metal latch	
				2QE = 1/4" Male Quick Coupling for Metal latch Elbow	2QE = 1/4" Male Quick Coupling for Metal latch Elbow	
				2QF = 1/4" Female Quick Coupling with Metal latch	2QF = 1/4" Female Quick Coupling with Metal latch	
				3H = 3/8" Hose Barb	3H = 3/8" Hose Barb	
				3H-FB = 3/8" Hose barbs with Filling Bell	3H-FB = 3/8" Hose barbs with Filling Bell w/ Cap	
				LF = Female Luer Lock	LF = Female Luer Lock	
				LFE = Female Luer Lock Elbow	LFE = Female Luer Lock Elbow	
				MT = 1/2" Tri clamps	MT = 1/2" Tri clamps	

Example - MKL Series, PTFE, 1.0um, 500cm², 1/4" Hose Barb I/O is MKLF100D2H2H

Pore size (Micron)										
Charged Nylon (CN)	Depth PP (DP)	Polyethylene (E)	PTFE (F)	Glass Fiber (G)	Polypro Membrane (M)	Nylon (N)	Nylon Screen (NS)	PP Media (P)	Phylic PTFE	PES (S)
005 = 0.05	002 = 0.2	020 = 0.20	010 = 0.1	005 = 0.5	010 = 0.1	005 = 0.05	100 = 10	003 = 0.3	Request	005 = 0.05
010 = 0.10	005 = 0.5	100 = 1.0	020 = 0.2	010 = 1.0	020 = 0.2	020 = 0.10	200 = 20	006 = 0.6		010 = 0.1
020 = 0.20	010 = 1.0	150 = 1.5	045 = 0.45	030 = 3.0		020 = 0.20	400 = 40	010 = 1.0		020 = 0.2
045 = 0.45	015 = 1.5	250 = 2.5	100 = 1.0	050 = 5.0		045 = 0.45	600 = 60	030 = 3.0		045 = 0.45
065 = 0.65	025 = 2.5		300 = 3.0	100 = 10.0		065 = 0.65	10X = 100	050 = 5.0		065 = 0.65
080 = 0.80	045 = 4.5		500 = 5.0	200 = 20.0		080 = 0.80	20X = 200	100 = 10.0		080 = 0.8
120 = 1.20	100 = 10.0		999 = 10.0	300 = 30.0		120 = 1.20		200 = 20.0		120 = 1.2
	200 = 20.0							300 = 30.0		
	Only available in Surface Area A (<200cm ²)	Only available in Surface Area C (400cm ²)		Only available in Surface Area C (400cm ²)			Only available in Surface Area A	Only available in Surface Area C (400cm ²)		

