VWR® Capsule Filter

VWR capsule filters are designed for reliable filtration performance across a wide range of application



VWR® capsule filters incorporate an asymmetric PES membrane engineered to deliver a strong balance of high flow rates, high flux, low protein adsorption, and reliable retention efficiency. This combination helps to minimize product loss while ensuring effective removal of contaminants, making the filters particularly suitable for the sterile processing of sensitive fluids in both pharmaceutical and food & beverage applications.

Additionally, the double-layer PES membrane design increases dirt-holding capacity, prolongs filter life, and enables higher throughput. It also improves process consistency and dependability when handling complex or particulate-rich solutions, resulting in robust and efficient filtration. Furthermore, the filters are tested and verified for bacterial retention performance in accordance with industry standards.

VWR® Capsule Filter

Good manufacturing practices

All products are manufactured under a robust quality management system and are compliant with ISO 9001 standards.

- 100% integrity tested using water-based methods
- Pre-sterilized and ready to use, with a sterility assurance level (SAL) of 10^{-6}
- **Bacterial retention:** 0.2 µm membrane lot samples demonstrate retention of ≥10^7 CFU/cm² (*Brevundimonas diminuta*, ATCC 19146)
- **Mycoplasma retention:** 0.1 µm membrane lot samples demonstrate retention of ≥10^7 CFU/cm² (*Acholeplasma laidlawii*), tested according to modified ASTM F838
- Excellent chemical compatibility across a wide range of solutions
- Hydrostatic pressure resistance of ≥10.3 bar for at least 30 minutes
- Endotoxin level: <0.25 EU/mL, determined using the Limulus Amebocyte Lysate (LAL) test
- Each filter is individually double-packed to maintain sterility

TECHNICAL PARAMETERS

Materials of construction	Filter Membrane	Hydrophilic PES
	Up/Down stream Support	PP (USP Class VI)
	Core/Cage/End Cap/Shell	PP (USP Class VI)
Sealing process:		thermal bonding
Operating Conditions	Maximum Operating Pressure	6.0 bar@25℃(liquid) 4.1 bar@25℃(gas)
	Maximum Operating Temperature	80℃（176℉）@1.0bar
	Autoclave-Compatible version	Autoclave steam sterilization: 30min@121℃ up to 5 cycles
	Disinfection Method (Autoclave-Compatible version)	Hot water disinfection: 60min@90℃
	Gamma-Compatible version*	Gamma 20-35kGy
	Steam sterilized in-line	Not applicable
	Sterile (gamma irradiated)	Not recommended for re-sterilization
Biological Safety	Bio-compatibility	Meet USP <87> in vitro Cytotoxicity Test Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics
	Endotoxins Level	<0.25EU/ml; (LAL) Limulus Amebocyte Lysate test in accordance with USP <85>
fiber Releasing & Particle Shedding	After appropriate washing/flushing, the product complies with the definition of "non-fiber releasing" as defined in 21 CFR 210.3(b)(6), and the release of insoluble particles meets the particulate matter limits for Large Volume Injections for Single Dose Infusion specified in USP <788>.	

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RoHS	Complies with the limit values of the 10 restricted substances defined in the EU RoHS Directive 2011/65/EU and its amending Directive (EU) 2015/863.

*Not recommended for autoclaved

Typical applications include sterile filtration of:

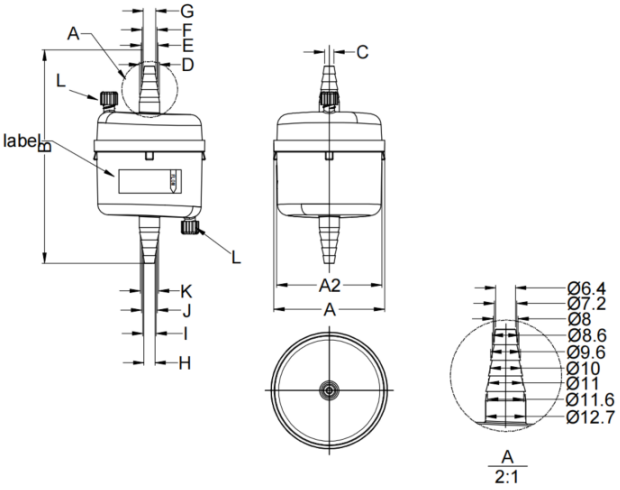
- Buffer, media and reagent manufacturing, protein purification and cell culture and bioburden filtration
- Red wine, beer, juice, and purified water
- Water for injection (WFI), cleaning solutions, purified water, and deionized water
- Large-volume parenterals (LVPs), active pharmaceutical ingredients (APIs), buffers, ophthalmic formulations, disi nfectants, and related formulations
- Vaccines, serums, biological products, and aqueous antibiotic solutions

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	EFA (cm^2)	Water Flow Rate (L/min@ 20KPa)	Min. bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78592-348	514-1499	Hydrophilic PES	0.2/0.2	500	0.8	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-346	514-1501	Hydrophilic PES	0.8/0.45	500	1.3	≥1.8bar (26.1psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-338	514-1500	Hydrophilic PES	0.2/0.2	1000	1.6	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-340	514-1503	Hydrophilic PES	0.8/0.2	1000	1.8	≥3.5bar (47.8psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-344	514-1498	Hydrophilic PES	0.2/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78592-342	514-1502	Hydrophilic PES	0.45/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78754-436	514-1504	Hydrophilic PES	0.8/0.2	500	0.8	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-420	514-1505	Hydrophilic PES	0.8/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78754-426	514-1506	Hydrophilic PES	0.8/0.2	250	0.4	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50

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78754-416	514-1507	Hydrophilic PES	0.8/0.45	1000	1.7	≥1.8bar (26.1psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-412	514-1508	Hydrophilic PES	0.65/0.2	1000	1.8	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78754-424	514-1509	Hydrophilic PES	0.65/0.2	250	0.4	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-432	514-1510	Hydrophilic PES	0.65/0.2	500	0.75	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78754-434	514-1511	Hydrophilic PES	0.1/0.1	500	0.6	≥4.2bar (60.9psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-414	514-1512	Hydrophilic PES	0.1/0.1	1000	1.2	≥4.2bar (60.9psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-428	514-1513	Hydrophilic PES	0.8/0.2	250	0.4	≥3.5bar (50.7psi)	IN 1/4 “NPT OUT 1/4 - 1/2"(6.5-12.7mm) Stepped HB	1	50
78754-418	514-1514	Hydrophilic PES	0.65/0.2	1000	1.6	≥3.5bar (50.7psi)	1.0" TC in/out	1	50
78754-422	514-1515	Hydrophilic PES	0.65/0.2	2100	3.5	≥3.5bar (50.7psi)	1.0" TC in/out	1	50
78754-438	514-1516	Hydrophilic PES	0.65/0.2	500	0.8	≥3.5bar (50.7psi)	1.0" TC in/out	1	50
78754-430	514-1517	Hydrophilic PES	0.65/0.2	250	0.4	≥3.5bar (50.7psi)	1/2" TC in/out	1	50
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	/	/	/	/	/	1	125

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Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
A2	OD of Filter	68±2
B	Total length	122±2
C	min Inlet/Outlet 1 (1/4"-1/2")	6.4±0.3
D	max Inlet/Outlet 4 (1/4"-1/2")	12.7±0.3
E	max Inlet/Outlet 3 (1/4"-1/2")	11±0.3
F	max Inlet/Outlet 2 (1/4"-1/2")	9.6±0.3
G	max Inlet/Outlet 1 (1/4"-1/2")	8±0.3
H	min Inlet/Outlet 2 (1/4"-1/2")	7.2±0.3
I	min Inlet/Outlet 3 (1/4"-1/2")	8.6±0.3
J	min Inlet/Outlet 4 (1/4"-1/2")	10±0.3
K	min Inlet/Outlet 5 (1/4"-1/2")	11.6±0.3
L	Vent	1/4"

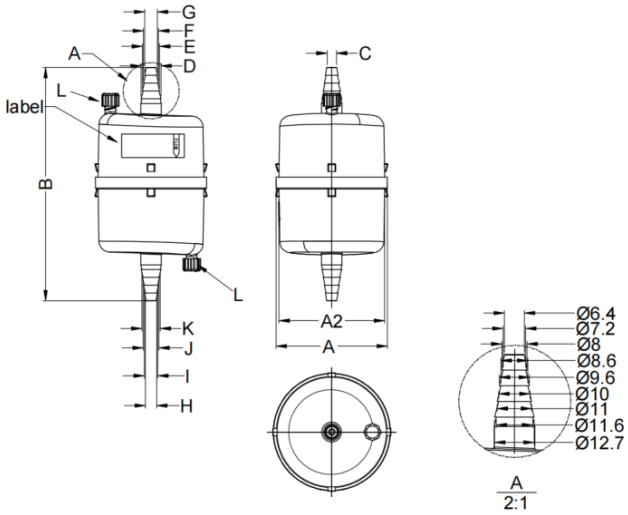
VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78592-348	514-1499	Hydrophilic PES	0.2/0.2	500	0.8	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-346	514-1501	Hydrophilic PES	0.8/0.45	500	1.3	≥1.8bar (26.1psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-436	514-1504	Hydrophilic PES	0.8/0.2	500	0.8	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-434	514-1511	Hydrophilic PES	0.1/0.1	500	0.6	≥4.2bar (60.9psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50

Optional accessories（The related drawing is on the last page）

VWR NA P/N	VWR EU P/N	Membrane material	compatible capsule filter connector	Pcs/ pk	Pcs/ case
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	1/4"-1/2" Step hosebarb （connect OUT side）	1	125

VWR® Capsule Filter



Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
A2	OD of Filter	68±2
B	Total length	146±2
C	min Inlet/Outlet 1 (1/4"-1/2")	6.4±0.3
D	max Inlet/Outlet 4 (1/4"-1/2")	12.7±0.3
E	max Inlet/Outlet 3 (1/4"-1/2")	11±0.3
F	max Inlet/Outlet 2 (1/4"-1/2")	9.6±0.3
G	max Inlet/Outlet 1 (1/4"-1/2")	8±0.3
H	min Inlet/Outlet 2 (1/4"-1/2")	7.2±0.3
I	min Inlet/Outlet 3 (1/4"-1/2")	8.6±0.3
J	min Inlet/Outlet 4 (1/4"-1/2")	10±0.3
K	min Inlet/Outlet 5 (1/4"-1/2")	11.6±0.3
L	Vent	1/4"

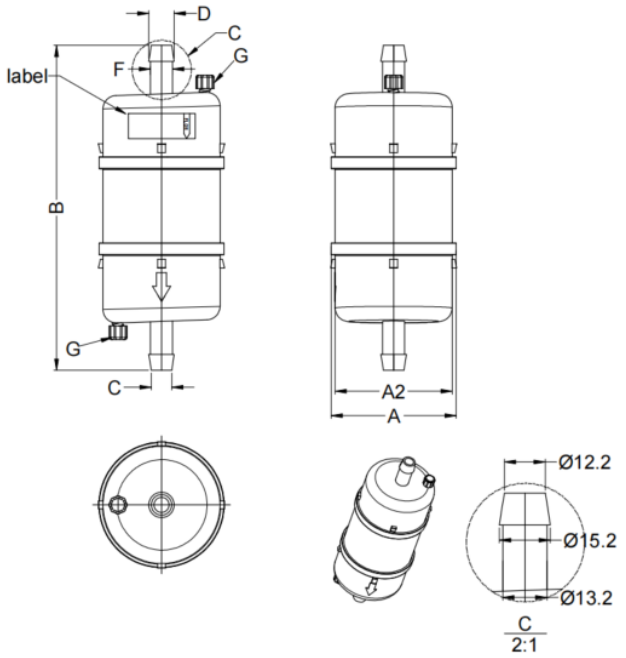
VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78592-338	514-1500	Hydrophilic PES	0.2/0.2	1000	1.6	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78592-340	514-1503	Hydrophilic PES	0.8/0.2	1000	1.8	≥3.5bar (47.8psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-416	514-1507	Hydrophilic PES	0.8/0.45	1000	1.7	≥1.8bar (26.1psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-414	514-1512	Hydrophilic PES	0.1/0.1	1000	1.2	≥4.2bar (60.9psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50

Optional accessories（The related drawing is on the last page）

VWR NA P/N	VWR EU P/N	Membrane material	compatible capsule filter connector	Pcs/ pk	Pcs/ case
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	1/4"-1/2" Step hosebarb （connect OUT side）	1	125

VWR® Capsule Filter

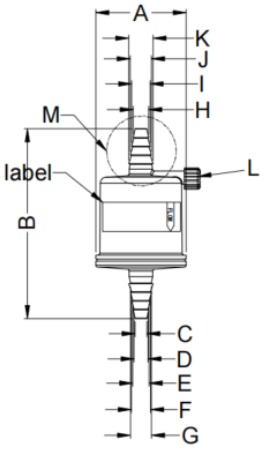


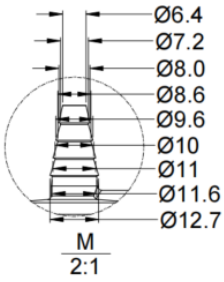
Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
A2	OD of Filter	68±2
B	Total length	194±2
C	min Inlet/Outlet (1/2")	12.2±0.3
D	max Inlet/Outlet 1 (1/2")	15.2±0.3
F	max Inlet/Outlet 2 (1/2")	13.2±0.3
G	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78592-344	514-1498	Hydrophilic PES	0.2/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78592-342	514-1502	Hydrophilic PES	0.45/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50
78754-420	514-1505	Hydrophilic PES	0.8/0.2	2100	3	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50

VWR® Capsule Filter





Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	47±2
B	Total length	97±2
C	min Inlet/Outlet 1 (1/4"-1/2")	6.4±0.3
D	min Inlet/Outlet 2 (1/4"-1/2")	7.2±0.3
E	min Inlet/Outlet 3 (1/4"-1/2")	8.6±0.3
F	min Inlet/Outlet 4 (1/4"-1/2")	10±0.3
G	min Inlet/Outlet 5 (1/4"-1/2")	11.6±0.3
H	max Inlet/Outlet 1 (1/4"-1/2")	8±0.3
I	max Inlet/Outlet 2 (1/4"-1/2")	9.6±0.3
J	max Inlet/Outlet 3 (1/4"-1/2")	11±0.3
K	max Inlet/Outlet 4 (1/4"-1/2")	12.7±0.3
L	Vent	¼"

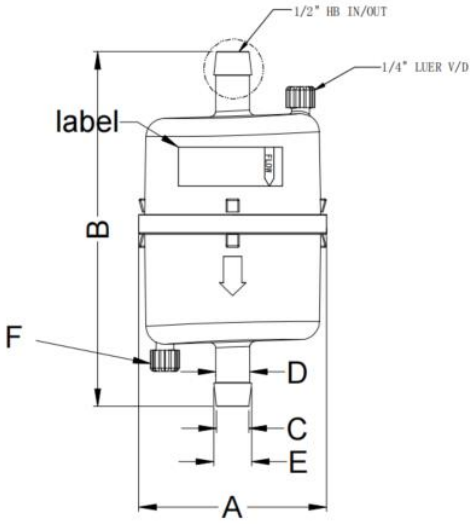
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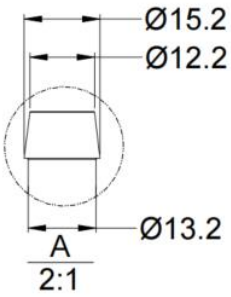
VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-426	514-1506	Hydrophilic PES	0.8/0.2	250	0.4	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50
78754-424	514-1509	Hydrophilic PES	0.65/0.2	250	0.4	≥3.5bar (50.7psi)	1/4-1/2" (6.5-12.7mm) Stepped HB	1	50

Optional accessories（The related drawing is on the last page）

VWR NA P/N	VWR EU P/N	Membrane material	compatible capsule filter connector	Pcs/ pk	Pcs/ case
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	1/4"-1/2" Step hosebarb （connect OUT side）	1	125

VWR® Capsule Filter



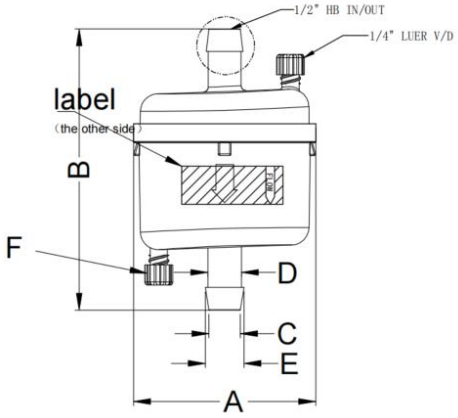


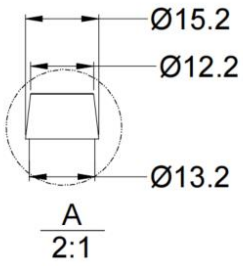
Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
B	Total length	136±2
C	min Inlet/Outlet (1/2")	12.2±0.3
D	max Inlet/Outlet 1 (1/2")	13.2±0.3
E	max Inlet/Outlet 2 (1/2")	15.2±0.3
F	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-412	514-1508	Hydrophilic PES	0.65/0.2	1000	1.8	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50

VWR® Capsule Filter



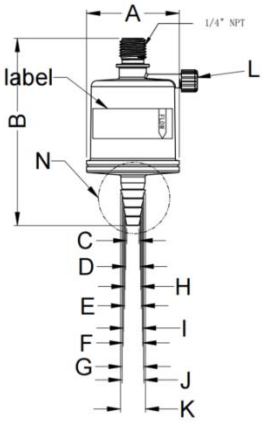


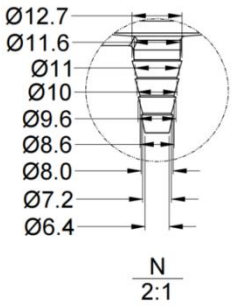
Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
B	Total length	111±2
C	min Inlet/Outlet (1/2")	12.2±0.3
D	max Inlet/Outlet 1 (1/2")	13.2±0.3
E	max Inlet/Outlet 2 (1/2")	15.2±0.3
F	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-432	514-1510	Hydrophilic PES	0.65/0.2	500	0.75	≥3.5bar (50.7psi)	1/2" (12.2-15.2mm) Single step HB	1	50

VWR® Capsule Filter





Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	47±2
B	Total length	94±2
C	min Inlet/Outlet 1 (1/4"-1/2")	6.4±0.3
D	min Inlet/Outlet 2 (1/4"-1/2")	7.2±0.3
E	min Inlet/Outlet 3 (1/4"-1/2")	8.6±0.3
F	min Inlet/Outlet 4 (1/4"-1/2")	10±0.3
G	min Inlet/Outlet 5 (1/4"-1/2")	11.6±0.3
H	max Inlet/Outlet 1 (1/4"-1/2")	8±0.3
I	max Inlet/Outlet 2 (1/4"-1/2")	9.6±0.3
J	max Inlet/Outlet 3 (1/4"-1/2")	11±0.3
K	max Inlet/Outlet 4 (1/4"-1/2")	12.7±0.3
L	Vent	¼"

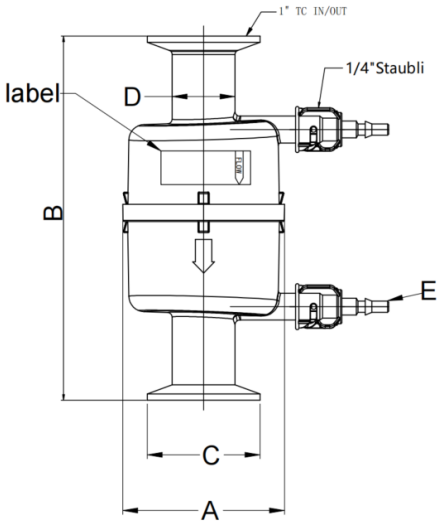
VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-428	514-1513	Hydrophilic PES	0.8/0.2	250	0.4	≥3.5bar (50.7psi)	IN 1/4 "NPT OUT 1/4 - 1/2"(6.5-12.7mm) Stepped HB	1	50

Optional accessories（The related drawing is on the last page）

VWR NA P/N	VWR EU P/N	Membrane material	compatible capsule filter connector	Pcs/ pk	Pcs/ case
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	1/4"-1/2" Step hosebarb （connect OUT side）	1	125

VWR® Capsule Filter

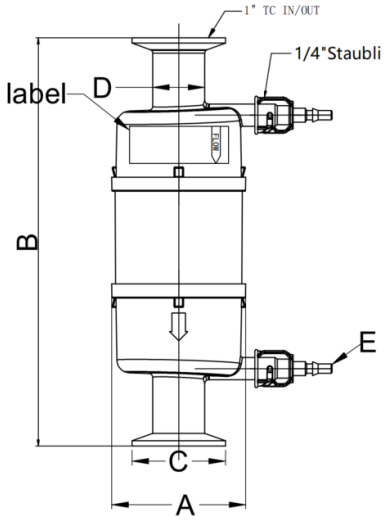


Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
B	Total length	162.4±2
C	max Inlet/Outlet 1 (2")	50.4±0.3
D	max Inlet/Outlet 2 (1")	25.4±0.3
E	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-418	514-1514	Hydrophilic PES	0.65/0.2	1000	1.6	≥3.5bar (50.7psi)	1.0" TC in/out	1	50

VWR® Capsule Filter

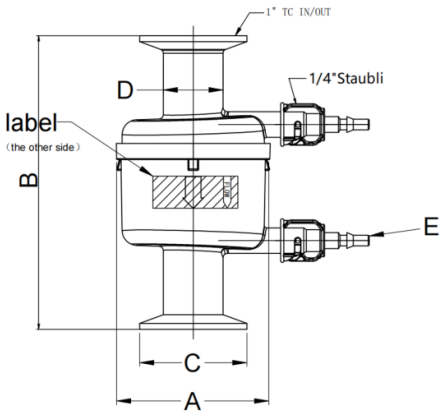


Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
B	Total length	219.9±2
C	max Inlet/Outlet 1 (2")	50.4±0.3
D	max Inlet/Outlet 2 (1")	25.4±0.3
E	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (μm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-422	514-1515	Hydrophilic PES	0.65/0.2	2100	3.5	≥3.5bar (50.7psi)	1.0" TC in/out	1	50

VWR® Capsule Filter

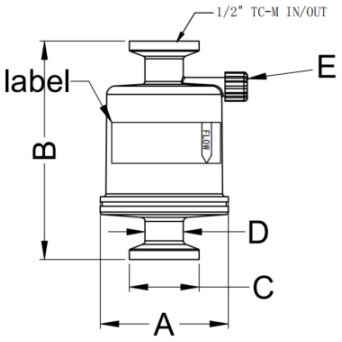


Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	72±2
B	Total length	137.9±2
C	max Inlet/Outlet 1 (2")	50.4±0.3
D	max Inlet/Outlet 2 (1")	25.4±0.3
E	Vent	1/4"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-438	514-1516	Hydrophilic PES	0.65/0.2	500	0.8	≥3.5bar (50.7psi)	1.0" TC in/out	1	50

VWR® Capsule Filter

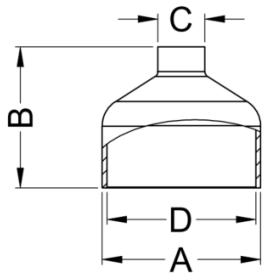


Detailed list		
Item NO	Item	Size(mm)
A	OD of Filter	47±2
B	Total length of filter	79.5±2
C	max Inlet/Outlet 1 (1")	25.4±0.3
D	max Inlet/Outlet 2 (1/2")	14±0.3
E	Vent	¼"

VWR Part number:

VWR NA P/N	VWR EU P/N	Membrane material	Pore size (µm)	Single EFA (cm2)	Water Flow Rate (L/min@ 20KPa)	Initial bubble point (Water)	Connector Inlet/Outlet	Pcs/ pk	Pcs/ case
78754-430	514-1517	Hydrophilic PES	0.65/0.2	250	0.4	≥3.5bar (50.7psi)	1/2" TC in/out	1	50

VWR® Capsule Filter



Detailed list		
Item NO	Item	Size(mm)
A	OD of filling bell 1	60
B	Total length of filling bell	52
C	OD of filling bell 2	16
D	ID of filling bell	57

VWR Part number:

VWR NA P/N	VWR EU P/N	Material	compatible capsule filter connector	Pcs/ pk	Pcs/ case
78754-410	514-1518	FILLING BELL (PC Bell /PP cover)	1/4"-1/2" Step hosebarb （connect OUT side）	1	125