BIOFIL®	Document Number	Revision	Page	Date
	VF002	A3	1 of 2	05-26-2021
PRODUCT DATA SHEET	Vacuum Filtration			

250mL Vacuum Filtration

Description: 250mL Vacuum Filtration, Sterile

Purpose: Vacuum filters are very useful in large volume samples separation and purification.

Materials

Housing: Lid, Cup, Bottle (GPPS/General Polystyrene);
Cap (HDPE/High-density Polyethylene); Tip (PP/Polypropylene);
Connect (ABS/Acrylonitrile-Butadiene-Styrene)

Features

- Available with 6 membrane types of PVDF, PES, MCE, Nylon, CA and PES Express
- Volume: 250mL
- 3 pore sizes: 0.1, 0.22 and 0.45µm
- Light weight and heavy wall construction
- Large knurls on the reservoir bottle cap for easy screw
- Designed wide and easy access bottle mouth for efficiently and stably pour out
- Engraved graduation ensure veracity
- Ergonomically designed sidewalls and collar can simplify tightening/loosening and adjustments
- Designed hose connector can fit multiplicate hose diameters
- Every product is printed with a batch number for traceability
- Autoclavability: No
- Temperature range: -20°C to +50°C
- DNase/RNase free and non-pyrogenic
- Sterilized by irradiation SAL10^{-6} (ISO11137)
- Shelf Life: 3 years after month of production
- Manufactured in a Class 100,000 cleanroom environment
- Manufactured under ISO13485 and ISO9001 quality management system

Funnel Capacity	Filter Diameter	Process Volume	Hold-up Volume after purge	Fitting outlet (Thread)	Full Unit Overall Height
250mL	50mm	250mL	≤3mL	45mm	200mm
250mL	75mm	250mL	≤3mL	45mm	180mm

PVDF=Polyvinylidene Fluoride, PES=Polyethersulfone, MCE=Mixed Cellulose Ester

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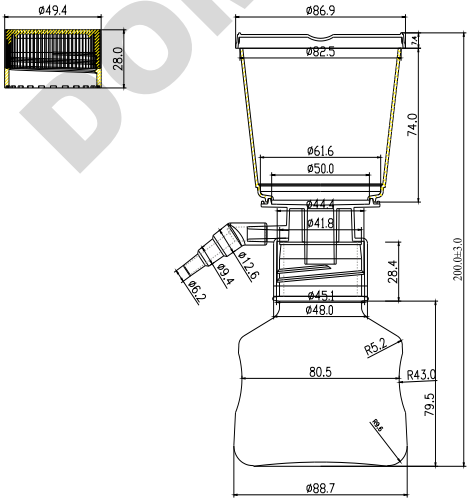
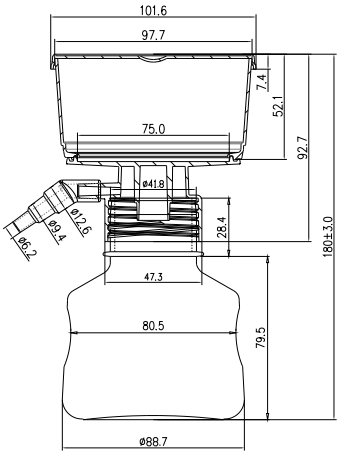
Dimensions (Unit:mm)



50mm



75mm

Pore size	0.1 µm	0.22 µm	0.45 µm	0.22 µm	0.45 µm	0.1 µm
Membrane Material	PVDF	PVDF	PVDF	MCE	MCE	PES
Average Bubble Point	80 psi	56 psi	25 psi	51psi	31psi	29psi
Flow Time (at 13 psi)	≤2.5 mL/min/cm²	7.2 mL/min/cm²	29 mL/min/cm²	18 µL/min/cm²	60 µL/min/cm²	11 mL/min/cm²

Membrane	Pore Size(µm)	Water flow rate (mL/min/cm²@0.7bar,10psi)	Water bubble point (psi)
PES	0.22µm	19.3-34.6	53.0-69.0
PES	0.45µm	38.0-100.0	36.0-48.0
NYLON	0.22µm	8.07-14.08	40-60
NYLON	0.45µm	16.0	29.0

CA Membrane Performance Characteristics

Pore Size	0.22µm	0.45µm
Minimum Bubble Point psi (kg/cm²)	50 (3.50)	30 (2.10)
Typical Flow Rate, mL/min/cm² @ 10psi (0.7 kg/cm²)	16.1 (1.13)	54.7 (3.85)

Pore size	0.22 µm	0.45 µm
Membrane Material	PES Express	PES Express
Bubble Point	⩾20 psi	⩽22.2 psi
Flow Rate	Roll Average⩽115 sec/500 mL	⩽72 seconds

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Cat. No.	Membrane Material	Pore Size(µm)	Capacity(mL)	Membrane Diameter(mm)	Effective Filtration Area(cm²)	Qty. per bag/case
FPV103250	PVDF	0.1	250	Ø50	15.16	1/12
FPV203250		0.22	250	Ø50	15.16	1/12
FPV403250		0.45	250	Ø50	15.16	1/12
FMC201250	MCE	0.22	250	Ø50	15.16	1/12
FMC401250		0.45	250	Ø50	15.16	1/12
FPE104250	PES	0.1	250	Ø50	15.16	1/12
FPE204250		0.22	250	Ø50	15.16	1/12
FPE404250		0.45	250	Ø50	15.16	1/12
FPE244250		0.22	250	Ø75	38.04	1/12
FPE444250		0.45	250	Ø75	38.04	1/12
FNY202250	NYLON	0.22	250	Ø50	15.16	1/12
FNY402250		0.45	250	Ø50	15.16	1/12
FCA206250	CA	0.22	250	Ø50	15.16	1/12
FCA406250		0.45	250	Ø50	15.16	1/12
FPE234250	PES Express	0.22	250	Ø50	15.16	1/12
FPE434250		0.45	250	Ø50	15.16	1/12

Drawn	Approved
Date 26 **May** 2021	Date 26 **May** 2021
Name Alex Fang	Name James