Vacuum Filtration

EXTRACTO

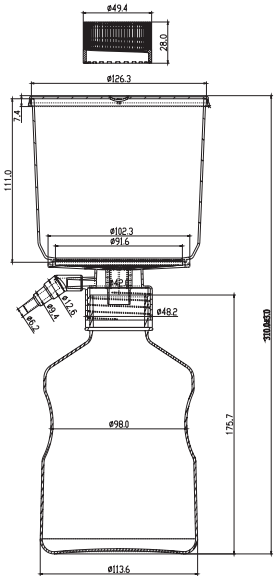
GVS Vacuum Filters are very useful in large volume samples separation and purification.

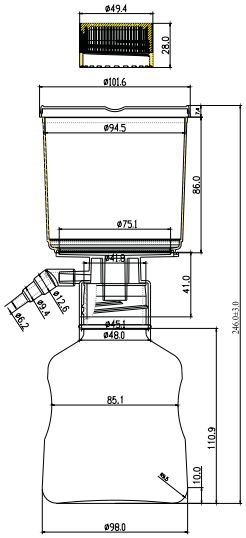
Characteristics

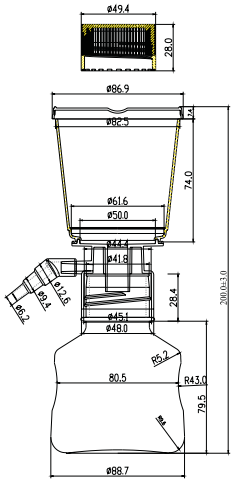
- Available with 5 membrane sorts of PVDF, PES, MCE ,Nylon and CA
- 3 membrane pore sizes of 0.10 μm, 0.22 μm and 0.45 μm
- 4 volumes size of 150, 250, 500 and 1000 ml
- Light weight and heavy wall construction
- Large knurls on the reservoir bottle cap for easy screw
- Designed wide and easy access 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
- Non-pyrogenic
- Gamma irradiation sterilized

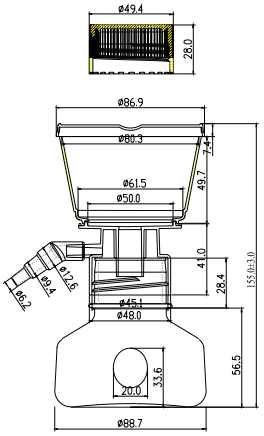
Features

- Vacuum packaged in easy tear-to-open plastic bag and receiver bottle cap is individually wrapped
- Each individual unit is lot-numbered for easy identification and tracking









Housing Material	Capacity (ml)	Full Unit Overall Height (mm)	Filter Diameter (mm)	Working Volume (mm)	Hold-up Volume (ml)	Linker and Cap Material	Fitting Outlet (mm)	Maximum Operating Temperature (°C)
ABS	150	156	50	150	3	PP	45	45
ABS	250	200	50	250	3	PP	45	45
ABS	500	500	75	500	3	PP	45	45
ABS	1000	1000	91	1000	3	PP	45	45

Disposable Filtration Products

GVS Laboratory Filtration Products series, including syringe filters and Vacuum Filters, are designed specifically for the filtration of culture media and organic solvents in research and industrial laboratories They are purpose-built with features designed to bring the highest levels of performance and purity to your research A variety of membrane types and membrane areas are for choice that offer the wide applicability range for separation and purification of most liquid samples to meet different laboratory needs. The filtration products should be driven by syringes or vacuum pumps. All the products are manufactured with high quality material [Acrilonitrile butadiene stirene (ABS), Polypropylene (PP) or Polystyrene (GPPS)] and by proven technique, which assure them work under pressure and still hold integrity.

Tips on choosing membrane MCE (Mixed Cellulose Ester)

By the mixture of nitrocellulose and cellulose acetate, hydrophilic, chemical compatibility, low protein adsorption. The use temperature can not be higher than 40°C, the optimum pH range is 3-6. Particle analysis, particle removal, biochemical analysis, HPLCsample preparation for general media and aqueous solutions.
Can not be used to filter ethanol and alkaline solution.

NY (Nylon)

Providing a broad range of chemical compatibility of the filtration of either aqueous or organic solvents, hydrophilic, can be used in a broad pH range.

PVDF (Polyvinylidene fluoride)

Extremely low protein-binding, for filtration of non-aggressive aqueous and mild organic solutions, or were maximizing protein recovery is important.

PES (Polyethersulfone}

Low-affinity for proteins and extractable with substantially faster flow rates than PVDF; suitable for pre-filtration and filtration of buffers and culture media.

CA (Cellulose Acetate)

Lowest binding material available Hydrophilic and high throughput Strength and dimension stability Uniform pore structure.

Ordering information

Membrane Material	Pore Size (µm)	Capacity (ml)	Membrane Diameter (mm)	Qty	Cat No.
MCE	0,22	150	Ø50	12/Pk	EXVF0150BNC02AZS
	0,22	250	Ø50	12/Pk	EXVF0250BNC02AZS
	0,22	500	Ø75	12/Pk	EXVF0500BNC02BZS
	0,22	1000	Ø91	12/Pk	EXVF1000BNC02CZS
	0,45	150	Ø50	12/Pk	EXVF0150BNC04AZS
	0,45	250	Ø50	12/Pk	EXVF0250BNC04AZS
	0,45	500	Ø75	12/Pk	EXVF0500BNC04BZS
	0,45	1000	Ø91	12/Pk	EXVF1000BNC04CZS
PES	0,1	150	Ø50	12/Pk	EXVF0150BPS01AZS
	0,1	250	Ø50	12/Pk	EXVF0250BPS01AZS
	0,1	500	Ø75	12/Pk	EXVF0500BPS01BZS
	0,1	1000	Ø91	12/Pk	EXVF1000BPS01CZS
	0,22	150	Ø50	12/Pk	EXVF0150BPS02AZS
	0,22	250	Ø50	12/Pk	EXVF0250BPS02AZS
	0,22	250	Ø75	12/Pk	EXVF0250BPS02BZS
	0,22	500	Ø75	12/Pk	EXVF0500BPS02BZS
	0,22	1000	Ø91	12/Pk	EXVF1000BPS02CZS
	0,45	150	Ø50	12/Pk	EXVF0150BPS04AZS
	0,45	250	Ø50	12/Pk	EXVF0250BPS04AZS
	0,45	250	Ø75	12/Pk	EXVF0250BPS04BZS
	0,45	500	Ø75	12/Pk	EXVF0500BPS04BZS
	0,45	1000	Ø91	12/Pk	EXVF1000BPS04CZS
PVDF	0,1	150	Ø50	12/PK	EXVF0150BPV01AZS
	0,1	250	Ø50	12/PK	EXVF0250BPV01AZS
	0,1	500	Ø75	12/PK	EXVF0500BPV01BZS
	0,1	1000	Ø91	12/PK	EXVF1000BPV01CZS
	0,22	150	Ø50	12/PK	EXVF0150BPV02AZS
	0,22	250	Ø50	12/PK	EXVF0250BPV02AZS
	0,22	500	Ø75	12/PK	EXVF0500BPV02BZS
	0,22	1000	Ø91	12/PK	EXVF1000BPV02CZS
	0,45	150	Ø50	12/PK	EXVF0150BPV04AZS
	0,45	250	Ø50	12/PK	EXVF0250BPV04AZS
	0,45	500	Ø75	12/PK	EXVF0500BPV04BZS
	0,45	1000	Ø91	12/PK	EXVF1000BPV04CZS

Membrane Material	Pore Size (µm)	Capacity (ml)	Membrane Diameter (mm)	Qty	Cat No.
Nylon	0,22	150	Ø50	12/PK	EXVF0150BNY02AZS
	0,22	250	Ø50	12/PK	EXVF0250BNY02AZS
	0,22	500	Ø75	12/PK	EXVF0500BNY02BZS
	0,22	1000	Ø91	12/PK	EXVF1000BNY02CZS
	0,45	150	Ø50	12/PK	EXVF0150BNY04AZS
	0,45	250	Ø50	12/PK	EXVF0250BNY04AZS
	0,45	500	Ø75	12/PK	EXVF0500BNY04BZS
	0,45	1000	Ø91	12/PK	EXVF1000BNY04CZS
CA	0,22	150	Ø50	12/PK	EXVF0150BCA02AZS
	0,22	250	Ø50	12/PK	EXVF0250BCA02AZS
	0,22	500	Ø75	12/PK	EXVF0500BCA02BZS
	0,22	1000	Ø91	12/PK	EXVF1000BCA02CZS
	0,45	150	Ø50	12/PK	EXVF0150BCA04AZS
	0,45	250	Ø50	12/PK	EXVF0250BCA04AZS
	0,45	500	Ø75	12/PK	EXVF0500BCA04BZS
	0,45	1000	Ø91	12/PK	EXVF1000BCA04CZS
PES Hi-Flo	0,22	150	Ø50	12/PK	EXVF0150BPX02AZS
	0,22	250	Ø50	12/PK	EXVF0250BPX02AZS
	0,22	500	Ø75	12/PK	EXVF0500BPX02BZS
	0,22	1000	Ø91	12/PK	EXVF1000BPX02CZS
	0,45	150	Ø50	12/PK	EXVF0150BPX04AZS
	0,45	250	Ø50	12/PK	EXVF0250BPX04AZS
	0,45	500	Ø75	12/PK	EXVF0500BPX04BZS
	0,45	1000	Ø91	12/PK	EXVF1000BPX04CZS

Bottle Top Filter

GVS Bottle Top Filters are very useful in research laboratories for sterilization or laboratory fluid clarification

- Available with 5 membrane sorts of PVDF, PES, MCE,CA and Nylon
- 3 membrane pore sizes of 0.10 µm, 0.22 µm and 0.45 µm
- 4 volume sizes of 150, 250, 500 and 1000ml
- Light weight and heavy wall construction
- Designed wide and easy access bottle mouth for efficiently and stably
- Non-pyrogenic
- Gamma irradiation sterilized
- Packaged in easy peel-to-open plastic bag
- Each individual unit is lot-numbered for easy identification

Membrane Material	Pore Size (µm)	Capacity (ml)	Membrane Diameter (mm)	Qty	Cat No.
PES	0.10	150	Ø50	24/PK	EXBT0150BPS01AWS
	0.10	250	Ø50	24/PK	EXBT0250BPS01AWS
	0.10	500	Ø75	24/PK	EXBT0500BPS01BWS
	0.10	1000	Ø91	24/PK	EXBT1000BPS01CWS
	0,22	150	Ø50	24/PK	EXBT0150BPS02AWS
	0,22	250	Ø50	24/PK	EXBT0250BPS02AWS
	0,22	250	Ø75	24/PK	EXBT0250BPS02BWS
	0,22	500	Ø75	24/PK	EXBT0500BPS02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BPS02CWS
	0,45	150	Ø50	24/PK	EXBT0150BPS04AWS
	0,45	250	Ø50	24/PK	EXBT0250BPS04AWS
	0,45	250	Ø75	24/PK	EXBT0250BPS04BWS
	0,45	500	Ø75	24/PK	EXBT0500BPS04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BPS04CWS
PVDF	0.10	150	Ø50	24/PK	EXBT0150BPV01AWS
	0.10	250	Ø50	24/PK	EXBT0250BPV01AWS
	0.10	500	Ø75	24/PK	EXBT0500BPV01BWS
	0.10	1000	Ø91	24/PK	EXBT1000BPV01CWS
	0,22	150	Ø50	24/PK	EXBT0150BPV02AWS
	0,22	250	Ø50	24/PK	EXBT0250BPV02AWS
	0,22	500	Ø75	24/PK	EXBT0500BPV02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BPV02CWS
	0,45	150	Ø50	24/PK	EXBT0150BPV04AWS
	0,45	250	Ø50	24/PK	EXBT0250BPV04AWS
	0,45	500	Ø75	24/PK	EXBT0500BPV04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BPV04CWS

Membrane Material	Pore Size (µm)	Capacity (ml)	Membrane Diameter (mm)	Qty	Cat No.
MCE	0,22	150	Ø50	24/PK	EXBT0150BNC02AWS
	0,22	250	Ø50	24/PK	EXBT0250BNC02AWS
	0,22	500	Ø75	24/PK	EXBT0500BNC02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BNC02CWS
	0,45	150	Ø50	24/PK	EXBT0150BNC04AWS
	0,45	250	Ø50	24/PK	EXBT0250BNC04AWS
	0,45	500	Ø75	24/PK	EXBT0500BNC04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BNC04CWS
PES Hi-Flo	0,22	150	Ø50	24/PK	EXBT0150BPX02AWS
	0,22	250	Ø50	24/PK	EXBT0250BPX02AWS
	0,22	500	Ø75	24/PK	EXBT0500BPX02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BPX02CWS
	0,45	150	Ø50	24/PK	EXBT0150BPX04AWS
	0,45	250	Ø50	24/PK	EXBT0250BPX04AWS
	0,45	500	Ø75	24/PK	EXBT0500BPX04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BPX04CWS
Nylon	0,22	150	Ø50	24/PK	EXBT0150BNY02AWS
	0,22	250	Ø50	24/PK	EXBT0250BNY02AWS
	0,22	500	Ø75	24/PK	EXBT0500BNY02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BNY02CWS
	0,45	150	Ø50	24/PK	EXBT0150BNY04AWS
	0,45	250	Ø50	24/PK	EXBT0250BNY04AWS
	0,45	500	Ø75	24/PK	EXBT0500BNY04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BNY04CWS
CA	0,22	150	Ø50	24/PK	EXBT0150BCA02AWS
	0,22	250	Ø50	24/PK	EXBT0250BCA02AWS
	0,22	500	Ø75	24/PK	EXBT0500BCA02BWS
	0,22	1000	Ø91	24/PK	EXBT1000BCA02CWS
	0,45	150	Ø50	24/PK	EXBT0150BCA04AWS
	0,45	250	Ø50	24/PK	EXBT0250BCA04AWS
	0,45	500	Ø75	24/PK	EXBT0500BCA04BWS
	0,45	1000	Ø91	24/PK	EXBT1000BCA04CWS

Solution Bottle

Capacity(ml)	Sterile	Package	Cat No.
150	Yes	24/PK	EXBO0150B000000WS
250	Yes	24/PK	EXBO0250B000000WS
500	Yes	24/PK	EXBO0500B000000WS
1000	Yes	24/PK	EXBO1000B000000WS

Tube Vacuum Filters

Description

150mL Top Vacuum Filter with 50mL centrifuge tube, Sterile

Purpose

Minimizes unnecessary transfers by filtering directly into 50mL centrifuge tube

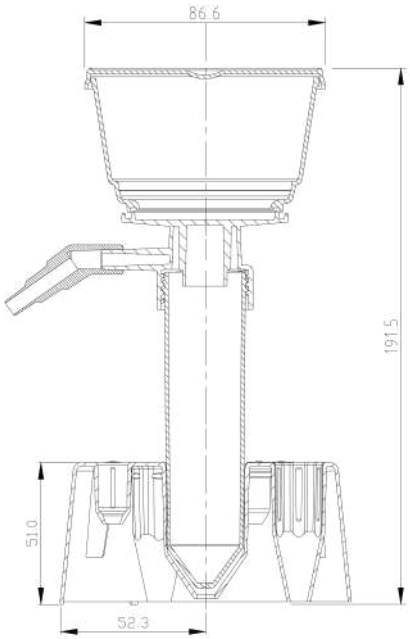
Materials

Housing: Lid, Cup(GPPS/General Polystyrene);
Connect(ABS/Acrylonitrile-Butadiene-Styrene);
Hose connector(PP/Polypropylene);

Tube: PP(Polypropylene); Cap: HDPE(High-density Polyethylene)

Stand: PP (Polypropylene)

Dimensions (Unit: mm)



Features

- Available with 5 membrane types of PVDF, PES, MCE, NYLON, CA
- 2 pore sizes: 0.22 and 0.45μm
- Membrane type and pore size printed on unit
- Tube stand is available with 1.5mL, 2.0mL, 15mL, 50mL conical centrifuge tubes
- Each polypropylene centrifuge tube is supplied with an individually wrapped cap for storage
- Designed hose connector can fit multiplicate hose diameters
- Effective filtration area of membrane: 15.16cm2
- Hold-up Volume after purge: ≤3mL
- DNase/RNase free and Non-pyrogenic
- Sterilized by irradiation SAL 10- 6 (ISO11137) Shelf Life: 3 years after month of production
- Manufactured in a class 100,000 clean room environment
- Manufactured under ISO13485 and ISO9001 quality management system

Membrane Performance Characteristics

Membrane material	PVDF	PVDF	MCE	MCE
Pore size	0.22μm	0.45μm	0.22μm	0.45μm
Average bubble point	56 psi	25 psi	51 psi	31 psi
Flow me(at 13psi)	7.2mL/min/cm^2	29mL/min/cm^2	18μL/min/cm^2	60μL/min/cm^2

Membrane material	Pore size	Water flow rate (mL/min/cm^2 @ 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	40.0~60.0
NYLON	0.45μm	16	29

STERILE R

Membrane Performance Characteristics

Membrane material	CA	CA
Pore size	0.22μm	0.45μm
Minimum bubble point	50	30
psi(kg/cm^2)	-3.5	-2.1
Typical flow rate, mL/min/cm2 @ 10psi (0.7kg/cm^2)	16.1 (-1.13)	54.7 (-3.85)

Tube Top Vacuum Filters

Ordering information

Product Code	Membrane Type	Pore Size	Capacity	Membrane Diameter	Sterilization	Packaging Configuration
EXBU0150BCA04AWS	CA	0.45μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BCA02AWS	CA	0.22μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BPS04AWS	PES	0.45μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BPS02AWS	PES	0.22μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BNC04AWS	MCE	0.45μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BNC02AWS	MCE	0.22μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BPV04AWS	PVDF	0.45μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BPV02AWS	PVDF	0.22μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BNY04AWS	NYLON	0.45μm	150mL	ø50mm	Yes	1/bag, 24/case
EXBU0150BNY02AWS	NYLON	0.22μm	150mL	ø50mm	Yes	1/bag, 24/case

Tube Vacuum Filters System

Ordering information

Product Code	Membrane Type	Pore Size	Capacity	Membrane Diameter	Sterilization	Packaging Configuration
EXVS0150BCA04AZS	CA	0.45μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BCA02AZS	CA	0.22μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BPS04AZS	PES	0.45μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BPS02AZS	PES	0.22μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BNC04AZS	MCE	0.45μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BNC02AZS	MCE	0.22μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BPV04AZS	PVDF	0.45μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BPV02AZS	PVDF	0.22μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BNY04AZS	NYLON	0.45μm	150mL	ø50mm	Yes	1/bag, 12/case
EXVS0150BNY02AZS	NYLON	0.22μm	150mL	ø50mm	Yes	1/bag, 12/case