StarCaps® Capsule Filter Series
Ready-to-Use Capsule Filters for R&D and Production

Cobetter StarCaps Capsule Filters are self-contained
ready-to-use capsule filters for contaminant, bacteria,
and particle removal in bio-pharmaceutical applications.

StarCaps Capsule Filter Series feature a linear filter
design and sanitary flange flexible connectors.

ENFISO
ENGINEERED FILTRATION SOLUTIONS

Features and Benefits

- Different options of filtration media are available from pre-filtration to sterile filtration media
- Disposable filter design reduces cleaning time and maintenance costs
- Wide range of sizes available to meet all R&D and production requirements
- Thermally bonded with no adhesives or glues used
- Flange and hose barb inlet/outlet connection provides a sanitary and easy connection

Typical Applications

- Biological Fluids
- Buffer Solutions
- Chemicals
- Cleaning and Disinfecting Solutions
- Injectable Solutions
- Gas Filtration

Quality Assurance*

- StarCaps® Capsule Filters are manufactured per ISO 9001

- **Cleanliness**
  All components of StarCaps® Capsule Filters meets the requirements for non-fiber releasing according to Regulation 21 CFR

- **TOC & Conductivity**
  StarCaps® Capsule Filters flushed water: TOC <0.5 mg/L and conductivity ≤5.1μS/cm@25°C

- **Microbiological Retention**
  Sterilzing-grade StarCaps® Capsule Filters are all validated according to ASTM F838

- **Integrity**
  100% Integrity Tested

* The item listed above does not provide all the available information. For additional information, please contact Cobetter or your Cobetter Sales Engineer.

Materials of Construction

Outer Shell	Gamma Stable Polypropylene		
		Code	Media
Filter Media*	Membrane Media	SPSHR	Symmetric PES Membrane
		APSBR	Asymmetric PES Membrane
		DPSDDT	Double-layer PES Membrane
		LHPVND	PVDF Membrane
		LHPVHBR	Charged PVDF Membrane
		LHPF	Hydrophilic PTFE Membrane
		GPFL (for gas)	Hydrophobic PTFE Membrane
		LPF (for liquids)	Hydrophobic PTFE Membrane
	Depth Media	APP	Absolute-Rated Polypropylene
		HPP	Nominal-Rated Polypropylene
		PFSA2	Multi-layer Polypropylene
		LGFP	Glass Fiber
Sealing Material	Please see the Ordering Information below		
Inlet & Outlet Vent/Drain Ports	According to Ordering Information		

* This table does not indicate all the available filtration media. For additional media options, please contact Cobetter or your Cobetter Sales Engineer.
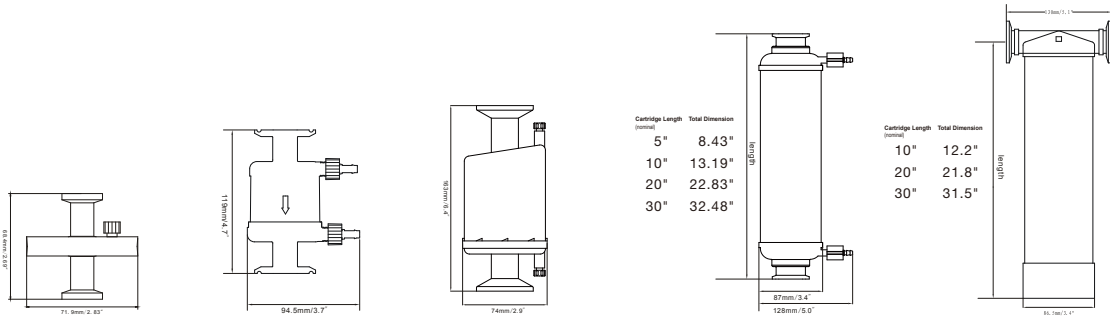
Operating Conditions

| Max. Operating Pressure/ Liquid		5.2 bar @0°C- 38°C
		3.1 bar @60°C
Max.Operating Pressure/ Gas		5.2 bar @0°C- 38°C
		3.1 bar @60°C
Sterilization	Membrane Capsule Filter	Withstand autoclave up to 200 cycles (130°C; 30min)
	Depth Capsule Filter	withstand autoclave up to 20 cycles (125°C; 30min)

Dimensions

WSF table (in diagram):

Cartridge Length (nominal)	Total Dimension
5"	8.43"
10"	13.19"
20"	22.83"
30"	32.48"

UCF-T table (in diagram):

Cartridge Length (nominal)	Total Dimension
10"	12.2"
20"	21.8"
30"	31.5"

Item	KZ50	PKZ	STKZ	WSF	UCF-T
Diameter	¢71.9mm	¢94.5mm	¢74.0mm	¢128.0mm	¢130.0mm
Length	68.4mm	119mm	163mm	214/ 315/ 580/ 825mm	310/ 554/ 800mm
Inlet/Outlet	1" Sanitary Flange				
Vent/Drain	Luer Lock	6mm Hose Barb	M5	6mm Hose Barb	6mm Hose Barb
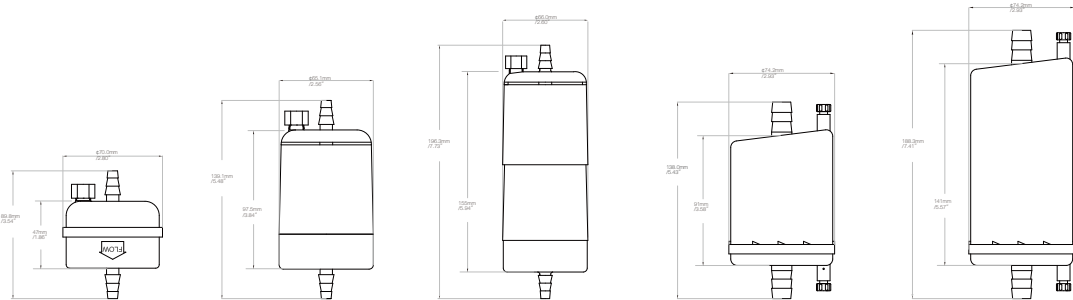
Item	92WM	WM	195WM	STBT1	STBT2
Diameter	¢70.0 mm	¢65.1 mm	¢66.0 mm	¢74.2 mm	¢74.2 mm
Length	89.8 mm	139.1 mm	196.3 mm	138.0 mm	188.3 mm
Inlet/Outlet	6-9mm Stepped hose barb			12mm Stepped hose barb	
Vent/Drain			1/8"NPT		

Ordering Information

KZ50 SPSHR 0010 P

Capsule Code	Filtration Media Code	Retention Rating
KZ50	SPSHR	0010(0.1μm),0022(0.22μm),0045(0.45μm)
PKZ	APSBR	0022(0.22μm),0045(0.45μm),0065(0.65μm),0080(0.8μm),0120(1.2μm)
STKZ	DPSDDT	2210(0.22μm+0.1μm),2222(0.22μm+0.22μm),4522(0.45μm+
WSF		0.22μm),4545(0.45μm+0.45μm),6522(0.65μm+0.22μm),6545(0.65μm+0.45μm)
UCF-T	LHPVND	0022(0.22μm),0045(0.45μm),0065(0.65μm)
	LHPVHBR	0022(0.22μm),0045(0.45μm),0065(0.65μm)
92WM	LHPF	0022(0.22μm),0045(0.45μm)
WM	GPFL	0010(0.1μm),0022(0.22μm
195WM	LPF	0010(0.1μm),0022(0.22μm),0045(0.45μm),0100(1μm),0500(5μm)
STBT1	APP	0010(0.1μm) to 2000(20μm)
STBT2	HPP	0010(0.1μm) to 2000(20μm)
	PFSA2	0020(0.2μm) to 150H(150μm)
	LGFP	0010(0.1μm) to 0500(5μm)

Length* -P
05=5"
10=10"
20=20"
30=30"

* Length only applicable to WSF
and UCF-T Capsule Filter