## Hall Pyke



**Capsule filtration** 

**StarCaps®** 

The SMART choice for filtration

#### StarCaps® Capsule Filter Series

Ready-to-Use Capsule Filters · From R&D to Production



**StarCaps**® Capsule Filters are self-contained ready-to-use capsule filters. Available in varying sizes and filter media including depth filters, liquid sterile-grade filters and gas filters, they were developed to meet a wide range of pharmaceutical filtration requirements from R&D to Production.

StarCaps Capsule Filter Series eliminates cleaning validation requirements when compared to the traditional filter cartridge and housing combination.

#### **Features and Benefits**

- Can be used from R&D to Production
- Available in varying filter medias depending on application requirements
- · Disposable filter design reduces cleaning and maintenance cost
- · Thermally bonded with no adhesives or glues
- Sanitary flange and hose barb connections provide clean and easy connection

#### **Quality Standards**

- Manufactured in a facility which adheres to ISO 9001:2015
   Practices.
- · Full Regulatory Compliance with following:
  - •Bacterial Endotoxin :Aqueous extraction of autocalved filter contains <0.25 EU/ml as determined by Limulus Ameboyte Lysate (LAL),USP<85>.
  - Non-fiber Releasing :Component materials meet the criteria for a "Non-fiber-releasing filter " as defined in 21 CFR 210.3(b)(6).
  - •Component Material Toxicity :Meet the requirement of USP <87> In Vitro Cytotoxicity Test ; Meet the Criteria of USP <88> Biological Reactivity Test for Class VI-121 C plastics
  - •TOC/Conductivity at 25 °C: Autoclaved filter effluent meet the USP<643> for Total Organic Carbon and USP<645> for Water Conductivity per WFI requirements after a UPW flush of specified volume.
  - Particle Shedding: Autoclaved filter effluent meet the USP<788>for large volume Injections.
  - Indirect Food Additive: All component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177-182, and EU framework regulation [1935/2004/EC].

#### **Typical Applications**

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





#### **Materials of Construction**

Outer Shell	Gamma Stable Polypropylene							
		Code	Media					
Filter Media*	Membrane Media	SPSHR	Symmetric PES Membrane					
		APSB	Asymmetric PES Membrane					
		DPSDDT	Double-layer PES Membrane					
		LHPVNDR	PVDF Membrane					
		LHPVHBR	Charged PVDF Membrane					
		LHPF	Hydrophilic PTFE Membrane					
		GPF-P (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							

<sup>\*</sup> This table does not indicate all the available filtration media. For additional media options, please contact Cobetter or your Cobetter Sales Engineer.

#### **Effective Filtration Area**

Capsule	SPSHR	APSB	DPSDDT	LHPVNDR	LHPVHB	DLHPVNDR	DLHPVHBR
KZ50	33cm <sup>2</sup>	33cm <sup>2</sup>	33cm <sup>2</sup>	33cm <sup>2</sup>	33cm <sup>2</sup>	33cm²	33cm <sup>2</sup>
PKZ	370cm <sup>2</sup>	440cm <sup>2</sup>	370cm <sup>2</sup>	370cm <sup>2</sup>	370cm <sup>2</sup>	350cm <sup>2</sup>	350cm <sup>2</sup>
STKZ	1170cm <sup>2</sup>	1430cm <sup>2</sup>	1170cm <sup>2</sup>	1140cm <sup>2</sup>	1140cm <sup>2</sup>	1140cm²	1140cm <sup>2</sup>
WSF 5inch	2660cm <sup>2</sup>	2640cm <sup>2</sup>	2660cm <sup>2</sup>	2760cm <sup>2</sup>	2760cm <sup>2</sup>	2640cm <sup>2</sup> -2660cm <sup>2</sup>	2640cm <sup>2</sup> -2660cm <sup>2</sup>
WSF 10inch	5080cm <sup>2</sup>	4995cm <sup>2</sup>	4970cm <sup>2</sup>	5220cm <sup>2</sup>	5220cm <sup>2</sup>	4990cm <sup>2</sup> -5030cm <sup>2</sup>	4990cm <sup>2</sup> -5030cm <sup>2</sup>
UCF-T 5inch	2660cm <sup>2</sup>	2640cm <sup>2</sup>	2660cm <sup>2</sup>	2760cm <sup>2</sup>	2760cm <sup>2</sup>	2640cm <sup>2</sup> -2660cm <sup>2</sup>	2640cm <sup>2</sup> -2660cm <sup>2</sup>
UCF-T 10inch	4970cm <sup>2</sup>	4995cm <sup>2</sup>	4970cm <sup>2</sup>	5220cm <sup>2</sup>	5220cm <sup>2</sup>	4990cm <sup>2</sup>	4990cm <sup>2</sup>
92WM	390cm <sup>2</sup>	470cm <sup>2</sup>	430cm <sup>2</sup>	390cm <sup>2</sup>	390cm <sup>2</sup>	380cm <sup>2</sup> -500cm <sup>2</sup>	380cm <sup>2</sup> -500cm <sup>2</sup>
WM	720cm <sup>2</sup>	870cm <sup>2</sup>	800cm <sup>2</sup>	720cm <sup>2</sup>	720cm <sup>2</sup>	800cm <sup>2</sup> -1030cm <sup>2</sup>	800cm <sup>2</sup> -1030cm <sup>2</sup>
195WM	1320cm <sup>2</sup>	1530cm <sup>2</sup>	1350cm <sup>2</sup>	1320cm <sup>2</sup>	1320cm <sup>2</sup>	1420cm <sup>2</sup> -1820cm <sup>2</sup>	1420cm <sup>2</sup> -1820cm <sup>2</sup>
STBT1	1140cm <sup>2</sup>	1430cm <sup>2</sup>	1170cm <sup>2</sup>	1140cm <sup>2</sup>	1140cm <sup>2</sup>	1140cm²	1140cm <sup>2</sup>
STBT2	2060cm <sup>2</sup>	2520cm <sup>2</sup>	2060cm <sup>2</sup>	2060cm <sup>2</sup>	2060cm <sup>2</sup>	2060cm <sup>2</sup>	2060cm <sup>2</sup>
LHPF	GPF-P	LPF	APP		HPP	PFSA2	LGFP
33cm <sup>2</sup>	33cm²	33cm²	33cm <sup>2</sup>		33cm <sup>2</sup>	33cm <sup>2</sup>	33cm²
580cm <sup>2</sup>	490cm <sup>2</sup>	610cm <sup>2</sup>	340cm <sup>2</sup>		340cm <sup>2</sup>	200cm <sup>2</sup>	180cm <sup>2</sup>
1790cm <sup>2</sup>	1640cm <sup>2</sup>	1570cm <sup>2</sup>	930cm <sup>2</sup>		1000cm <sup>2</sup>	420cm <sup>2</sup>	570cm <sup>2</sup>
4110cm <sup>2</sup>	3870cm <sup>2</sup>	3870cm <sup>2</sup>	1920cm <sup>2</sup> - 3000cm <sup>2</sup>		2400cm <sup>2</sup>	370cm <sup>2</sup> -1260cm <sup>2</sup>	840cm <sup>2</sup> -1560cm <sup>2</sup>
7690cm <sup>2</sup>	7230cm <sup>2</sup>	7240cm <sup>2</sup>	3630cm <sup>2</sup> - 5670cm <sup>2</sup>		4540cm <sup>2</sup>	840cm <sup>2</sup> -2440cm <sup>2</sup>	1590cm <sup>2</sup> -1950cm <sup>2</sup>
4110cm <sup>2</sup>	3870cm <sup>2</sup>	3870cm <sup>2</sup>	1920cm <sup>2</sup> - 3000cm <sup>2</sup>		2400cm <sup>2</sup>	370cm <sup>2</sup> -1260cm <sup>2</sup>	840cm <sup>2</sup> -1560cm <sup>2</sup>
7690cm <sup>2</sup>	7230cm <sup>2</sup>	7240cm <sup>2</sup>	3630cm <sup>2</sup> - 5670cm <sup>2</sup>		4540cm <sup>2</sup>	840cm <sup>2</sup> -2440cm <sup>2</sup>	1590cm <sup>2</sup> -2950cm <sup>2</sup>
580cm <sup>2</sup>	910cm <sup>2</sup>	560cm <sup>2</sup>	460cm <sup>2</sup>		390cm <sup>2</sup>	220cm <sup>2</sup>	230cm²
1070cm <sup>2</sup>	1740cm <sup>2</sup>	1130cm <sup>2</sup>	870cm <sup>2</sup>		740cm <sup>2</sup>	440cm <sup>2</sup>	410cm <sup>2</sup>
1890cm <sup>2</sup>	3060cm <sup>2</sup>	1930cm <sup>2</sup>	1150cm <sup>2</sup>		1300cm <sup>2</sup>	780cm <sup>2</sup>	730cm <sup>2</sup>
1790cm <sup>2</sup>	1640cm <sup>2</sup>	1570cm <sup>2</sup>	930cm²		1000cm <sup>2</sup>	570cm <sup>2</sup>	570cm <sup>2</sup>
3150cm <sup>2</sup>	2880cm <sup>2</sup>	2790cm <sup>2</sup>	1700cm <sup>2</sup>		1820cm <sup>2</sup>	970cm <sup>2</sup>	1098cm <sup>2</sup>

5bar / 20°C (forward)

#### **Operating Conditions**

Max. Differential Pressure

Max. Continuous Operating Temperature 40°C

\* Sterile-grade Capsule Filters are Integrity Tested. Please contact your Cobetter Sales Engineer for the Integrity Test Data related to your sterile-grade filter.

Integrity Test Data related to your sterile-grade filter

\*\* StarCap Capsule Filters can be autoclaved 50-200 cycles (each cycle lasting 30min under 130°C).

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Please contact your Cobetter Sales Engineer to received specific information regarding autoclaving conditions.

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