Pharmsteri[™] APFP PP Liquid Capsule and Cartridge Filter

APFP series filters provide economical particle removal filtration for pharmaceutical and food and beverage applications

Pharmsteri™ APFP (autoclave, pre-filtration, PP) filters join our portfolio of filtration solutions that help ensure reliable product processing. Constructed of polypropylene, with wide pore size range from 0.1 μ m to 20 μ m and various layer configurations, Pharmsteri APFP PP capsule and cartridge filters are economical and efficient for removing particulate and colloidal contaminants in various pharmaceutical as well as food and beverage applications.

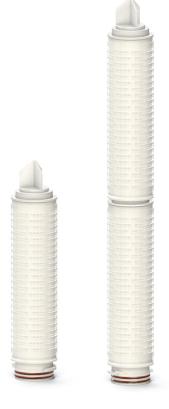
Cartridge filters are compatible with existing stainless steel process systems, and are more economical for large scale manufacturing. Single-use capsule filters provide end users unparalleled flexibility and adaptability in a smaller footprint.

Various capsules and cartridge sizes enable seamless scalability from lab-scale study to pilot and full-scale commercial manufacturing. Multiple connector types and codes are available to ensure easy integration with both single-use and stainless-steel systems.

APPLICATIONS

- Pharmaceutical
 - Facility water
 - Buffers
 - LVP/SVP
 - Bulk chemicals

- · Food and Beverage
 - Facility water
 - Drinking water
 - Prefiltration for draft beer
 - Clarification for wine/drinks



Allows high flow and low pressure, lowering cost of ownership

FEATURES & BENEFITS

All polypropylene construction	Provides excellent chemical compatibility, allowing use in a broad range of applications
Optimized form factor	Allows high flow and low pressure drop, lowering cost of ownership
All components meet USP <88> Class VI Plastics Test	Provides biosafety insurance and global regulatory compliance
Broad chemical compatibility	pH 1~14, allows use in a range of chemicals including acids and bases

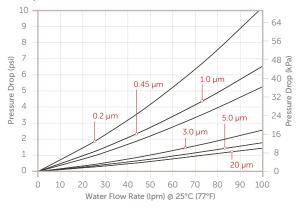


SPECIFICATIONS

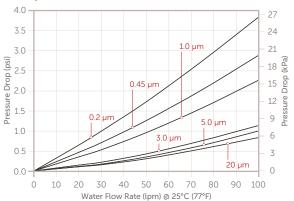
Retention ratings	0.1, 0.2, 0.45, 1.0, 3.0, 5.0, 10, 20 μm		
Material	Media	Polypropylene	
	Support	Polypropylene	
	Sleeve, core, top, end caps	Polypropylene	
	O-ring	Silicone	
	Gasket (Code F)	Silicone	
Sealing technology	Thermal bonding without adhesives		
Filtration area	≥0.22 m ₂ for 5" ≥0.43 m ₂ per 10"		
Maximum operation	Maximum operating pressure:		
conditions	Capsule: 5.5 bar @ 25°C (77°F)		
	Maximum forward differential pressure: Capsule: 4.2 bar @ 25°C (77°F), 2.0 bar @ 60°C (140°F) Cartridge: 4.2 bar @ 25°C (77°F), 2.0 bar @ 80°C (176°F)		
	Maximum operating temperature:		
	Capsule: 60°C (140°F)		
	Cartridge: 80°C (176°F)		
Multiple sterilization cycles	20 cycles of steam-in-place (SIP) sterilization (cartridge only) or autoclave, 30 min at 127°C (261°F)		
Endotoxin releasing	<0.25 EU/mL as determined by the LAL test		
тос	<0.5 mg/L after a water flush of 11 L/10" cartridge		
Conductivity	≤1.3 µS/cm after water flush of 11 L/10″ cartridge		
Particle release	Meets the requirements for WFI set by USP		
NVR	<50 mg/10" cartridge, after autoclave and a 24-hour extraction in 50% ethanol with vibration		
Material toxicity	All components meet the requirement of USP <88> Reactivity Test for Class VI Plastics		
Quality	Manufactured in accordance with ISO 9001 and ISO 13485 certified quality management system		

PERFORMANCE DATA

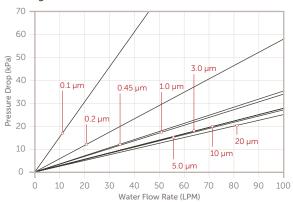
5" Capsule Filter



10" Capsule Filter



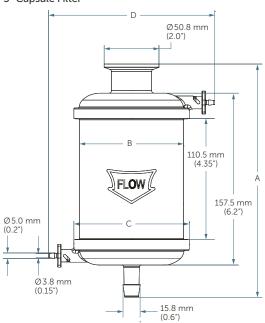
Cartridge Filter

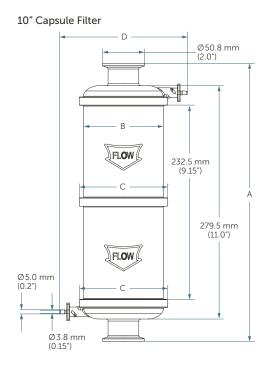


DIMENSIONS

Capsule Filters

5" Capsule Filter





Size – connections	Total length – A	Body diameter – B	Minimum width – C	Maximum width — D
5-inch TC-TC	213.2 mm (8.39")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")
5-inch TC-HB	216.5 mm (8.52")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")
5-inch HB-HB	219.5 mm (8.96")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")
10-inch TC-TC	335.5 mm (13.21")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")
10-inch TC-HB	339.0 mm (13.35")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")
10-inch HB-HB	342.0 mm (13.46")	96.0 mm (3.78")	107.0 mm (4.21")	153.0 mm (6.02")

DIMENSIONS

Cartridge Filters

Ø68 mm Code 0 Filter



Ø68 mm Code F Filter



Ø68 mm Code 5 Filter



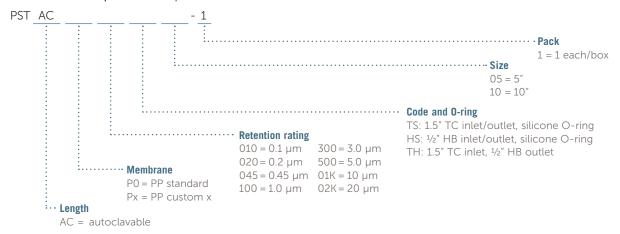
Ø68 mm Code 7 Filter



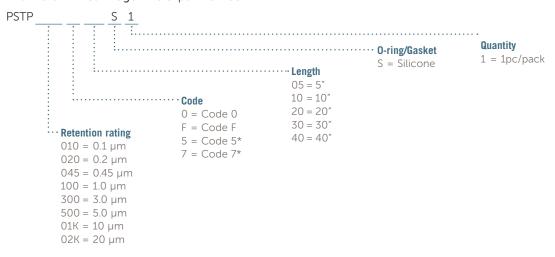
Length	A (Code 0)	B (Code F)	C (Code 5)	D (Code 7)
5"	160 mm (6.3")	137 mm (5.4")	-	-
10"	273.5 mm (10.8")	254 mm (10.0")	314 mm (12.4")	316 mm (12.0")
20"	518.5 mm (20.4")	500 mm (19.7")	559 mm (22.0")	561 mm (22.1")
30"	763.5 mm (30.1")	745 mm (29.3")	804 mm (31.7")	806 mm (31.7")
40"	1008 mm (39.7")	990 mm (39.0")	1048 mm (41.3")	1050 mm (41.3")

ORDERING INFORMATION

Pharmsteri PP Capsule Filters: part number



Pharmsteri PP Cartridge Filters: part number



^{*}Code 5 and code 7 are only available with 10", 20", 30", or 40" lengths.

FOR MORE INFORMATION

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