

## ZenCap® Full Size Capsules Pharma Grade

### 10"-40" Disposable Process Filtration

ZenCap® capsule filter assemblies are ready-to-use, full size filters that offer high flows, increased throughputs, high strength, all with the convenience and cleanliness of a disposable and easy-to-install filter assembly. Designed for pre-filtration, clarification, and final filtration of medium to large scale batches (100L to 5000L), in the pharmaceutical, biotechnology, food and beverage, medical, chemical, and DI water.

ZenCap® capsule assemblies are available with a wide range of hydrophilic and hydrophobic filter media and pore sizes for liquid, gas, and venting applications. Process engineers can choose from 15 filtration medias to create any combination of **integrated** filtration train. These will allow the disposable processing to become truly flexible, clean, and optimal.

They can be built in a T-style or In-line configuration with nine inlet and outlet fitting connections that can be mixed and matched. The filtration shell is an all-polypropylene construction that provides excellent chemical compatibility with low extractables. The shell and supports can also be constructed in nylon, polyethylene or gamma stabilized PP shells for additional compatibility. No adhesives, binders, or surfactants are used in the manufacturing process.



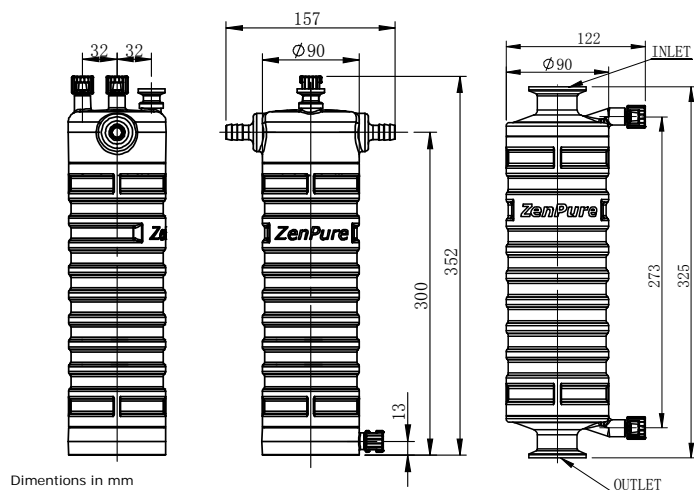
### Applications

Clarification	Water & Wine
Hard Particle	Food & Beverages
Cell Removal	Pharmaceuticals
Chemicals	Biologics
Inks, Dyes	Oils, Waters
Cosmetics	Diagnostics

### Specifications

Materials of Construction:	Media: Charged Nylon, Depth PP, Polyethylene, PTFE, Glass Fiber, PP Membrane, Nylon, Nylon Screen, PP media, PES, and Polyester Screen Media Supports: Polypropylene, PET, Nylon, or HDPE Shell, Cage, Core, End Caps: Polypropylene, Nylon, or HDPE Sealing: Thermally bonded
Fitting Connections:	12 Fittings - See Ordering Guide for availability. (Custom adaptors available upon request)
Nominal Dimensions:	Lengths: 10", 20", 30", 40" Diameter: 3.54" (90mm)
Effective Filtration Area:	See Cartridge Datasheet for more information (Dependent on Media)
Available Ratings:	0.04um - 200.0um (Dependent on Media)
Operating Conditions:	Maximum Forward Differential Pressure: Liquid: 5.5 bar (80psi) at 72°F/22°C Gas: 4.1 bar (60psi) at 72°F/22°C Minimum Burst Pressure: 8.3 bar (120psi) at 72°F/22°C Maximum Forward Differential Pressure: 5 bar (72psi) at 72°F/22°C Maximum Reverse Differential Pressure: 3.0 bar (44psi) at 72°F/22°C Maximum Operating Temperature: PP & Gamma PP: 176°F/80°C HDPE: 140°F/60°C
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological Test for Plastics.

## ZenCap® Full Size Capsules



Dimensions in mm

### Specifications (cont.)

#### Autoclavable & Sanitizable:

Capsules can be autoclaved 25 times at 257°F/125°C for 30 minutes (5 times for Nylon) or chemically sanitized in situ using common sanitizing agents or hot water at 194°F/90°C for a limited time (dependent on time and temperature). Capsules must not be in situ steam-sterilized.

#### Bacterial Endotoxin:

Effluent is non-pyrogenic per USP Bacterial Endotoxin (0.25 EU/ml), determined using Limulus Amebocyte Lysate (LAL) Test.

### PureFlo ZenCap Filter Capsule Ordering Guide

ZenCap Capsule Series	Configuration	Length	Filter Media	Pore size (Micron)	Vents **	Input Fitting	Output Fitting	Options			
L = Pharma Grade	I = In-Line  T = T-Line	1 - 10"	C = Carbon Fiber	Pick From Pore Size Table	A = No vents	1QFV = 1/8" Female Quick connect w/Valve for Metal latch	1QFV	Shell Material	Prefilters		
		2 - 20"	CN = Charged Nylon		B = 1/2" Sanitary vent	1QV = 1/8" Male Quick connect w/Valve for Metal latch	1QV	Blank = Polypropylene	-G(pore Size)= Glass		
90mm Diameter Capsule for full size cartridges	Other configurations available  C = C-Line S = S-Line L = L-Line	3 - 30"	DP = Depth PolyPro		C = 1/2" Sanitary vent, with upstream and down stream 1/4"	2QFV = 1/4" Female Quick connect w/Valve for Metal latch	2QFV	-E = Polyethylene	Fiber PreFilter		
		4 - 40"	F = PTFE		D = 1/2" Sanitary vent, with upstream Bleed Valve	2QV = 1/4" Male Quick connect w/Valve for Metal latch	2QV	-GP = Gamma Stable Polypropylene	-P(pore Size)= PolyPro Media Prefilter		
			G = Glass Fiber		D = 1/2" Sanitary vent, with upstream 1/4" Bleed Valve	3H = 3/8" Hose Barb	3H	-N = Nylon	-S(pore Size) = PES Prefilter		
			N = Nylon		E = 1/2" Sanitary vent, with down stream 1/4" Bleed Valve	4H = 1/2" Hose Barb	4H	Sterilization			
			NG = Natural Glass Fiber		F = Inlet and Outlet 1/4" Bleed Valve	4Q = 1/2" Male Quick connect	4Q	-ETO = Ethylene Oxide Sterilization			
			NN = Nylon Non-Woven Media		G = Inlet 1/4" Bleed Valve	5H = 9/16" Hose Barb	5H	O-Rings			
			NS = Nylon Screen		H = Outlet 1/4" Bleed Valve	6H = 3/4" (19mm) Hose Barb	6H	Blank = O-Ring Silicon (Standard)			
			P = PolyPro Media		Note: Option B,C, D &E not for In-Line	8H = 1" (25mm) Hose Barb	8H	-OE = O-Ring EPDM			
			PS = PolyPro Screen			TC = 1-1/2" Tri-Clamp	TC	-ON = O-Ring Nitrile			
			RP = Wrapped PolyPro Media			2T = 2" Tri-Clamp	2T	-OV = O-Ring Viton			
			S = PES								
			TS = Polyester Screen								
			UE = Polyethylene								
Example 1 - ZenCap L Series Capsule, T-Line, PES 0.45um/0.2um, 20" filter, with all vent and drains, 1.5" Tri-Clamp fittings I/O, would be LT2S045020CTCTC											
Example 2 - ZenCap L Series Capsule, In-Line, GF0.5um/PES 0.2um, 10" filter, with all vent and drains, 1.5" Tri-Clamp fittings I/O, would be LI1G050S020CTCTC											
Notes: For -E or -GP options, the standard pleat support will be PET for gamma stability					** 14" Drain bleed Valve standard on all T-Line filters Except for option A						

Notes: For -E or -GP options, the standard pleat support will be PET for gamma stability

\*\* 1/4" Drain bleed Valve standard on all T-Line filters Except for option A.

Pore size (Micron)														
Carbon Fiber (C)	Charged Nylon (CN)	Depth PP (DP)	PTFE Phobic (F)	Glass Fiber (G)	Nylon (N)	Natural Glass Fiber (NG)	Nylon Non-Woven Media (NN)	Nylon Screen (NS)	PP Media (P)	Polypro Screen (PS)	Wrapped PP Media (RP)	PES (S)	Polyester Screen (TS)	Polyethylene (UE)
Leave Blank	005 = 0.05	002 = 0.2	010 = 0.1	002 = 0.2	005 = 0.05	005 = 0.5	010 = 1	100 = 10	003 = 0.3	10X = 100	003 = 0.3	004 = 0.04	400 = 40	010 = 0.1
	010 = 0.10	005 = 0.5	020 = 0.2	004 = 0.45	010 = 0.10	010 = 1.0	030 = 3	200 = 20	006 = 0.6	21X = 210	005 = 0.6	010 = 0.1	600 = 60	020 = 0.20
	020 = 0.20	010 = 1.0	045 = 0.45	005 = 0.5	020 = 0.20	030 = 3.0	050 = 5	400 = 40	010 = 1.0	26X = 260	010 = 1.0	020 = 0.2	730 = 73	045 = 0.45
	045 = 0.45	015 = 1.5	100 = 1.0	010 = 1.0	045 = 0.45	050 = 5.0	100 = 10	600 = 60	030 = 3.0	30X = 300	030 = 3.0	045 = 0.45		100 = 1.0
	065 = 0.65	025 = 2.5	300 = 3.0	030 = 3.0	065 = 0.65		200 = 20	10X = 100	050 = 5.0	35X = 350	050 = 5.0	065 = 0.65		
	080 = 0.80	045 = 4.5	500 = 5.0	050 = 5.0	080 = 0.80		400 = 40	20X = 200	070 = 7.0	46X = 460	070 = 7.0	080 = 0.8		
	120 = 1.20	100 = 10	999 = 10.0	100 = 10.0	120 = 1.20			25X = 250	100 = 10.0	50X = 500	100 = 10.0	120 = 1.2		
		200 = 20		200 = 20.0					200 = 20.0	98X = 980	200 = 20.0			
				300 = 30.0					300 = 30.0					
									400 = 40.0					
									500 = 50.0					
									700 = 70.0					
									10X = 100					
									15X = 150					

### Your Local Distributor:

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