

# 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.

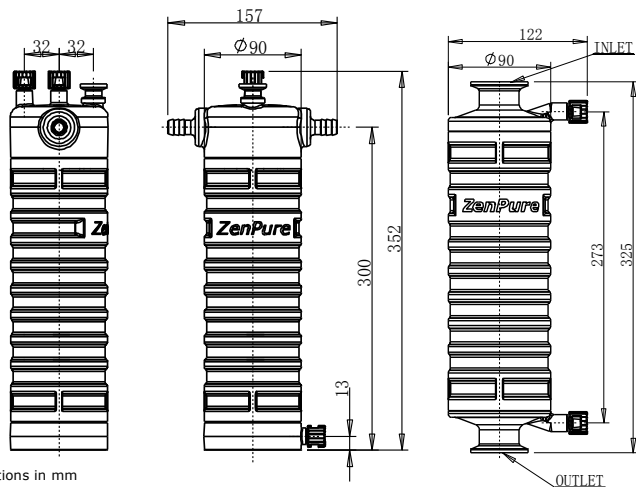


Applications	
Clarification	Water & Wine
Hard Particle	Food & Beverages
Cell Removal	Pharmaceuticals
Chemicals Biologics	
Inks, Dyes	Oils, Waters
Cosmetics Diagnostics	

### 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.

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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" 2 - 20" 3 - 30" 4 - 40"	C = Carbon Fiber CN = Charged Nylon DP = Depth PolyPro F = PTFE G = Glass Fiber N = Nylon NG = Natural Glass Fiber NN = Nylon Non-Woven Media NS = Nylon Screen P = PolyPro Media PS = PolyPro Screen RP = Wrapped PolyPro Media S = PES TS = Polyester Screen UE = Polyethylene	Pick From Pore Size Table	A = No vents B = 1/2" Sanitary vent C = 1/2" Sanitary vent, with upstream and down stream 1/4" Bleed Valve D = 1/2" Sanitary vent, with upstream 1/4" Bleed Valve E = 1/2" Sanitary vent, with down stream 1/4" Bleed Valve F = Inlet and Outlet 1/4" Bleed Valve G = Inlet 1/4" Bleed Valve H = Outlet 1/4" Bleed Valve Note: Option B,C, D & E not for In-Line	1QFV = 1/8" Female Quick connect w/Valve for Metal latch 1QV = 1/8" Male Quick connect w/Valve for Metal latch 2QFV = 1/4" Female Quick connect w/Valve for Metal latch 2QV = 1/4" Male Quick connect w/Valve for Metal latch 3H = 3/8" Hose Barb 4H = 1/2" Hose Barb 4Q = 1/2" Male Quick connect 5H = 9/16" Hose Barb 6H = 3/4" (19mm) Hose Barb 8H = 1" (25mm) Hose Barb TC = 1-1/2" Tri-Clamp 2T = 2" Tri-Clamp	1QFV 1QV 2QFV 2QV 3H 4H - N 4Q Sterilization 5H 6H 8H O-Rings TC 2T	Shell Material Prefilters	-G(pore Size)= Glass -E = Polyethylene -GP = Gamma Stable -P(pore Size)= PolyPro -S(pore Size) = PES -Nylon -Media PreFilter -PolyFilter
90mm Diameter Capsule for full size cartridges	Other configurations available C = C-Line S = S-Line L = L-Line							-Blank = Polypropylene -ETO = Ethylene Oxide Sterilization -OE = O-Ring EPDM -ON = O-Ring Nitrile -OV = O-Ring Viton	
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 LH1G050S020CTCTC									

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 = 0.05 010 = 0.10 020 = 0.20 045 = 0.45 065 = 0.65 080 = 0.80 120 = 1.20	002 = 0.2 005 = 0.5 010 = 1.0 015 = 1.5 025 = 2.5 045 = 4.5 100 = 10 200 = 20	010 = 0.1 020 = 0.2 045 = 0.45 015 = 1.0 300 = 3.0 500 = 5.0 999 = 10.0	002 = 0.2 004 = 0.45 005 = 0.5 010 = 1.0 030 = 3.0 045 = 0.45 050 = 5.0 065 = 0.65 080 = 0.80 100 = 10.0 200 = 20.0 300 = 30.0	005 = 0.05 010 = 0.10 020 = 0.20 045 = 0.45 050 = 5.0 080 = 0.80 120 = 1.20	005 = 0.5 010 = 1.0 030 = 3.0 050 = 5.0	010 = 1 030 = 3 050 = 5 100 = 10 200 = 20 400 = 40	100 = 10 200 = 20 400 = 40 600 = 60 10X = 100 20X = 200 25X = 250	003 = 0.3 006 = 0.6 010 = 1.0 030 = 3.0 050 = 5.0 070 = 7.0 100 = 10.0 200 = 20.0 300 = 30.0 400 = 40.0 500 = 50.0 700 = 70.0 10X = 100 15X = 150	10X = 100 21X = 210 26X = 260 30X = 300 35X = 350 46X = 460 50X = 500 98X = 980	003 = 0.3 005 = 0.6 010 = 1.0 030 = 3.0 050 = 5.0 070 = 7.0 100 = 10.0 200 = 20.0	004 = 0.04 010 = 0.1 020 = 0.2 045 = 0.45 065 = 0.65 080 = 0.8 120 = 1.2	400 = 40 600 = 60 730 = 73 100 = 1.0	010 = 0.1 020 = 0.20 045 = 0.45 100 = 1.0	