

ZenCap® Full Size Capsules

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 12 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



Applications

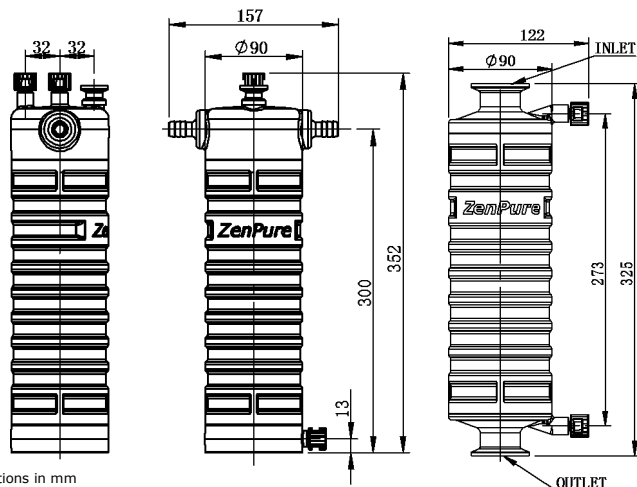
Clarification	Water & Wine
Hard Particle	Food & Beverages
Cell Removal	Pharmaceuticals
Chemicals	Biologics
Inks, Dyes	Oils, Waters
Cosmetics	Diagnostics

Specifications

Materials of Construction:	Media: Charged Nylon, Depth PP, Polyethylene, PTFE, Glass Fiber, PP Membrane, Cellulose, 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:	Nine 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 77°F/25°C Gas: 4.1 bar (60psi) at 77°F/25°C Minimum Burst Pressure: 8.3 bar (120psi) at 77°F/25°C Maximum Forward Differential Pressure: 5 bar (72psi) at 68°F/20°C Maximum Reverse Differential Pressure: 3.0 bar (44psi) at 68°F/20°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

Specification (cont.)

Autoclavable & Sanitizable:

Capsules can be autoclaved once at 125°C for 60 minutes or chemically sanitized in situ using common sanitizing agents or hot water, at 80°C for 20 cycles for 30 min (dependent on time and temperature).

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	Construction Material
L	I = In-Line T = T-Line	1 - 10" 2 - 20" 3 - 30" 4 - 40"	CN = Charged Nylon DP = Depth PolyPro E = Polyethylene F = PTFE G = Glass Fiber M = PolyPro Membrane N = Nylon NS = Nylon Screen P = PolyPro Media S = PES TS = Polyester Screen CEP = Cellulose with DE*	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	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 4QP = 1/2" Male Quick connect TC = 1-1/2" Tri-Clamp	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 4QP = 1/2" Male Quick connect TC = 1-1/2" Tri-Clamp	Blank = Polypropylene -E = Polyethylene -GP = Gamma Stable Polypropylene -N = Nylon Options -ETO = Ethylene Oxide Sterilization Orings Blank = O-Ring Silicon (Standard) -OE = O-Ring EPDM -ON = O-Ring Nitrile -OV = O-Ring Viton
90mm Diameter Capsule for full size cartridges								
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 LT25045020CTCTC								
Example 2 - ZenCAP L Series Capsule, T-Line, GF0.5um/PES 0.2um, 10" filter, with all vent and drains, 1.5" Tri-Clamp fittings I/O, would be LT1G050S020CTCTC								
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)											
Charged Nylon	Depth PP	Polyethylene	PTFE	Glass Fiber	PP Membrane	Cellulose w/DE	Nylon	Nylon Screen	PP Media	PES	Polyester Screen
010 = 0.10	002 = 0.2	020 = 0.20	010 = 0.1	005 = 0.5	010 = 0.1	015 = 0.15	010 = 0.10	100 = 10	003 = 0.3	004 = 0.04	400 = 40
020 = 0.20	005 = 0.5	100 = 1.0	020 = 0.2	010 = 1.0	020 = 0.2	040 = 0.40	020 = 0.20	200 = 20	006 = 0.6	010 = 0.1	600 = 60
045 = 0.45	010 = 1.0	150 = 1.5	045 = 0.45	030 = 3.0		050 = 0.50	045 = 0.45	400 = 40	010 = 1.0	020 = 0.2	730 = 73
065 = 0.65	015 = 1.5	250 = 2.5	100 = 1.0	050 = 5.0		060 = 0.60	065 = 0.65	600 = 60	030 = 3.0	045 = 0.45	
080 = 0.80	025 = 2.5		300 = 3.0	100 = 10.0		085 = 0.85	080 = 0.80	10X = 100	050 = 5.0	065 = 0.65	
120 = 1.20	045 = 4.5		500 = 5.0	200 = 20.0		150 = 1.50	120 = 1.20	20X = 200	100 = 10.0	080 = 0.8	
	100 = 10		999 = 10.0	300 = 30.0		250 = 2.50			200 = 20.0	120 = 1.2	
	200 = 20					300 = 3.00			300 = 30.0		
						400 = 4.00			500 = 50.0		
						600 = 6.00			700 = 70.0		
						01X = 10.0**					

** - Does not have DE

