

PureFlo® Z-Series Mid-Size Capsule Filters

PureFlo® Z-Series Mid-sized Capsule Filters are gamma-stable and ideally suited for integration into single-use applications. These filter capsules feature an asymmetric hydrophilic PES membrane that demonstrates exceptional capacity and flow performance in liquid applications. The Z-Series Mid-Size Capsule Filters offer mid-scale filtration in a variety of applications in the biopharmaceutical industry. The Z-Series product family has been designed for easy pre- and post-use integrity testing, assuring easy wetting for quick and accurate integrity test results.

The compact design and available inlet and outlet fittings allow efficient integration of Z-Series Mid-sized Capsule Filters into a wide range of single-use systems. Z-Series Mid-sized Capsule Filters provide biopharmaceutical manufacturers with a filtration solution configured to meet their process needs.

| Typical Uses | |
|--|---|
| Applications | Process Fluids* |
| Prefiltration Bioburden Reduction Sterile Filtration | WFI Buffer Cell culture medium Bulk drug substance Final drug product |

*Chemical compatibility information available upon request.

| | | |
|---|--|---|
| Materials of Construction | Media: Polyethersulfone (PES) Media Supports: Polyester Cage, Core, and Shell: Polypropylene End Caps: Nylon O-Rings: Silicone | |
| Fitting Connections | See ordering guide for availability. (Custom adaptors available upon request) | |
| Nominal Dimensions | Body Length: 52 mm (1.5") to 257 mm (10") (See ordering guide for details) Diameter: 70 mm (2.75") | |
| Effective Filtration Area (Single-layer) | 1.5": 710 cm ² (0.76 ft ²); 2.5": 1400 cm ² (1.51 ft ²); 5.0": 2700 cm ² (2.91 ft ²); 7.5": 4100 cm ² (4.41 ft ²); 10": 5400 cm ² (5.81 ft ²) | |
| Operating Conditions | Maximum Operating Pressure | Liquid: 5.5 bar (80 psi) at 22°C (72°F) |
| | Maximum Forward Differential Pressure | 5 bar (72 psi) at 22°C (72°F) |
| | Maximum Reverse Differential Pressure | 3 bar (44 psi) at 22°C (72°F) |
| | Maximum Operating Temperature | 80°C (176°F) |
| Integrity Testing* | 0.1 µm (see ordering guide for grades) | 60% isopropyl alcohol bubble point ≥ 1.6 bar (23 psi) using air at 22°C |
| | 0.2 µm (see ordering guide for grades) | Water bubble point ≥ 3.5 bar (50 psi) using air at 22°C |
| USP Class VI | All components or raw materials used in this product conform to the requirements of USP Class VI Biological Reactivity Tests for Plastics. | |
| USP Cleanliness | Effluent from this product meets the requirements for a "non-fiber releasing" filter as defined by 21 CFR 210.3 (b) (6) and the harmonized requirements set forth by the USP <788>, EP, and JP for Particulate Matter in Injections. | |
| Bacterial Endotoxins | An aqueous extraction of this product contains <0.25 EU/ml as determined by the Limulus Amebocyte Lysate (LAL) Test. | |
| Bacterial Retention | 0.1 µm and 0.2 µm grades are quantitatively retentive towards <i>Brevundimonas diminuta</i> (ATCC #19146) at a minimum challenge level of 10 ⁷ CFU per cm ² of filtration area, consistent with ASTM F838-05. | |
| Sterilization | This product can be autoclaved up to 25 cycles at 125 °C (257 °F) for 30 minutes. This product is compatible with gamma irradiation up to 50 kGy. | |

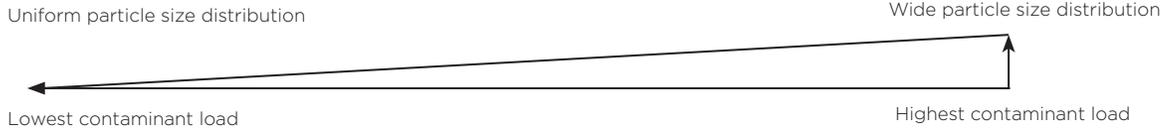
*All filters are 100% integrity tested.



PureFlo® Z-Series Mid-size Capsule Filters

PureFlo Z-Series Mid-size Capsule Filters Ordering Guide

| Filtration Media Grades | | |
|--|---|---|
| SINGLE LAYER | DUAL LAYER | |
| PES (S) | PES with built-in (fine) PES prefilter (ZS) | PES with built-in (coarse) PES prefilter (XS) |
| S004 = 0.04 µm S010 = 0.1 µm S020 = 0.2 µm S045 = 0.45 µm S065 = 0.65 µm S080 = 0.8 µm S120 = 1.2 µm | ZS010 = 0.1 µm ZS020 = 0.2 µm ZS045 = 0.45 µm | XS010 = 0.1 µm XS020 = 0.2 µm |



| PureFlo Capsule Filter | Filter Media Grade | Internal Filter Length | Inlet Fitting | Outlet Fitting | Options |
|-------------------------------|---|---|--|--|--|
| SZV = Z-Series Capsule | Select from Filtration Media Grades (above) | H = 1.5" S = 2.5" L = 5" E = 7.5" K = 10" | 1H 1Q 2H 2N 2Q 2QP 2QF 3H 4H 4Q 5H MT ST TC | 1H = 1/8" hose barb 1Q = 1/8" male quick coupling 2H = 1/4" hose barb 2H-FB = 1/4" hose barb with filling bell 2H-FC = 1/4" hose barb with filling bell with cap 2N = 1/4" MNPT 2Q = 1/4" male quick coupling 2QP = 1/4" male quick coupling (for plastic latch) 2QF = 1/4" female quick coupling with metal latch 3H = 3/8" hose barb 3H-FB = 3/8" hose barb with filling bell 3H-FC = 3/8" hose barb with filling bell with cap 4H = 1/2" hose barb 4Q = 1/2" male quick coupling (for plastic latch) 5H = 9/16" hose barb MT = 1/2" tri-clamp ST = 1.5" tri-clamp (high temperature PP) with SS insert TC = 1.5" tri-clamp | Vent & Drain - N = No vent/drain near inlet - NI = No vent/drain near inlet - NO = No vent/drain near outlet (Leave blank for one vent/drain near inlet and one vent/drain near outlet) |

Example: SZVZS020STCTC (SZV Z-Series Pharma Grade Capsule, 0.2 µm PES final membrane with built-in (fine) PES prefilter, 2.5" internal filter, 1.5" tri-clamp fittings inlet/outlet)

Custom adapters are available upon request.



Saint-Gobain Performance Plastics
 Filtration Technologies
 50 W. Watkins Mill Rd
 Gaithersburg, MD 20878 USA
 Tel: (301) 407-2720
 Fax: (240) 566-5774
www.filtration-fls.saint-gobain.com

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