

DUREDUNTY® FILTER CARTRIDGES

DOUBLE-LAYER HYDROPHILIC PES MEMBRANE FILTERS DELIVER EXCELLENT RELIABILITY IN FILTRATION AND STERILIZATION

Duredunty® Filter Cartridges use a unique double-layer PES membrane which provides excellent reliability in filtration and sterilization. They are designed for the filtration of a broad range of pharmaceutical products and the removal of particles, cysts, and bacteria in aqueous filtration applications, while providing superior flow rates and high particle removal efficiency when compared to other sterilizing grade filter cartridges.

FEATURE	BENEFIT
Double-layer hydrophilic PES membrane	Requires no pre-wetting
	Asymmetric pre-filter layer provides longer service life and lower filtration cost
	Broad chemical compatibility (pH 1-14)
	The double-layer provides added safety when compared to normal PES filters
	Design allows for multiple autoclave cycles and extended use

QUALITY STANDARDS

Quality Assurance	These products are manufactured in a facility which adheres to ISO 9001:2015 Practices. 100% Integrity tested and Lot traceable.
Bacterial Retention	Retention of 10^7 cfu/cm ² <i>Brevundimonas diminuta</i> (ATCC® 19146) according to ASTM F838
TOC / Conductivity at 25°C	Autoclaved filter effluent meets the USP <643> for Total Organic Carbon and USP <645> for Water Conductivity per WFI requirements after a UPW flush
Particle Shedding	Autoclaved filter effluent meets the requirements in USP <788> for large volume parenterals/injections
Non-Fiber Releasing	Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3 (b) (6)
Bacterial Endotoxin	Aqueous extraction of autoclaved filter contains < 0.25 EU/mL as determined by Limulus; Amebocyte Lysate (LAL), USP <85>
USP <87> Cytotoxicity	Meet the requirement of USP <87> In Vitro Cytotoxicity Test
USP <88> Biological Toxicity	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics.
Indirect Food Additive	All component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182.

SPECIFICATIONS

Filter media	Double-layer PES membrane (Asymmetric PES + Symmetric PES)
Supports/core/cage/end caps	Polypropylene

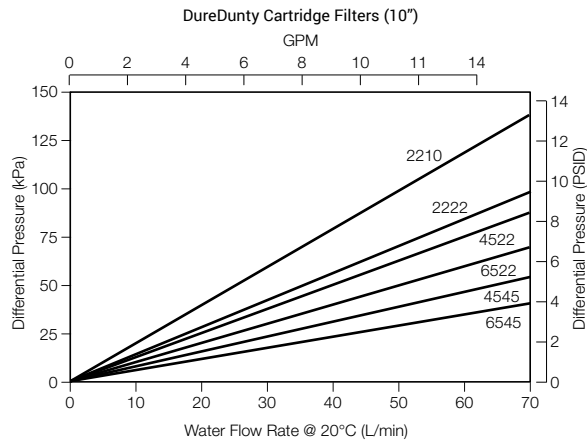


Typical Applications

- Biological Vaccines
- Blood Products
- LVP and SVP
- Lyophilization Freeze-dried Powder
- Ophthalmic Solutions
- Sterile API
- Sterile Water
- Endoscope Reprocessing

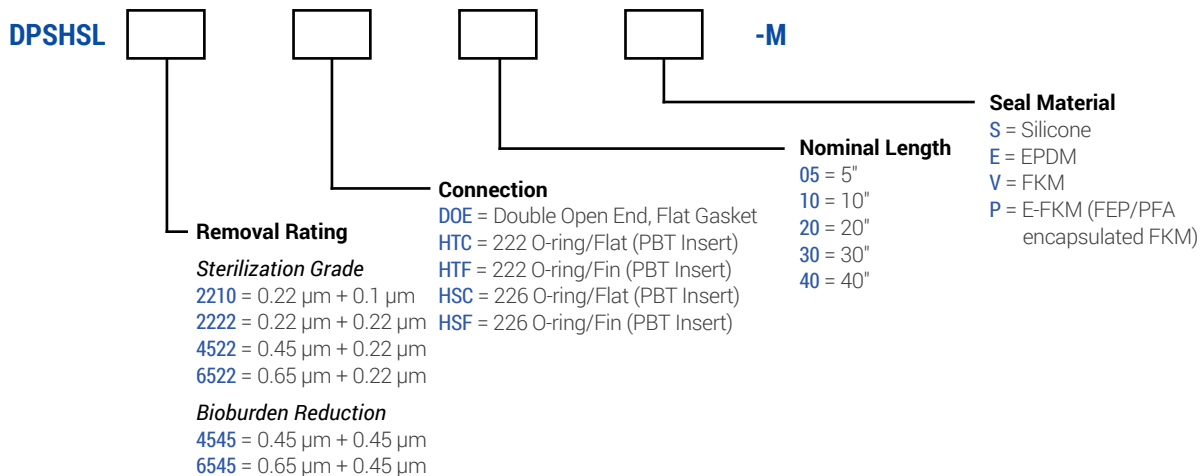
Effective filtration area	0.6m ² (6.5 ft ²)/ Ø69-10 inch
O-rings	Silicone, EPDM, FKM, FEP/PFA encapsulated FKM
O-ring internal insert	PBT
Cartridge diameter	69 mm (2.7 in.)
Max. Operating pressure	0.69 MPa (6.9 bar, 100 psi) at 25°C; 0.40 MPa (4.0 bar, 58 psi) at 60°C; 0.24 MPa (2.4 bar, 35 psi) at 80°C
Max. Differential pressure	Forward: 0.69 MPa (6.9 bar, 100 psi) at 25°C; 0.40 MPa (4.0 bar, 58 psi) at 60°C; 0.24 MPa (2.4 bar, 35 psi) at 80°C Reverse: 0.3 MPa (3.0 bar, 44 psi) at 25°C; 0.1 MPa (1.0 bar, 15 psi) at 80°C
Bubble point	0.34 MPa (3.4 bar, 49 psi) wetted with water of 20°C, 0.22 µm + 0.22 µm 0.34 MPa (3.4 bar, 49 psi) wetted with water of 20°C, 0.45 µm + 0.22 µm 0.32 MPa (3.2 bar, 46 psi) wetted with water of 20°C, 0.65 µm + 0.22 µm
Steam sterilization	up to 100 cycles for 30 minutes at 135°C at Max.Differential Pressure of 0.3 bar (4.3 psi)
Autoclave	up to 200 cycles for 30 minutes at 130°C

FLOW RATES



ORDERING INFORMATION

EXAMPLE: **DPSHSL2222HSF10S-M** = 0.22 µm + 0.22 µm, 226/Fin, 10" filter with silicone seals



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