

DNV Filter Cartridges

Positive-Charged Zeta PES & Nylon Membrane-Endotoxin Removal

DNV Filter Cartridges are composed of a modified PES and Nylon membrane with positive-charged Zeta particles. This specially designed filter allows for negative-charged particles and endotoxins to be absorbed, even particles smaller than filter removal rating.

Features and Benefits

- Inherently hydrophilic membrane
- Modified PES and Nylon membrane with positive-charged Zeta particles absorbs small particles and endotoxins
- Low pressure drop and long service life

Quality Standards

- Manufactured in a facility which adheres to ISO 9001:2015 Practices .
- Full Regulatory Compliance with following :
 - Bacterial Endotoxin :Aqueous extraction of autoclaved filter contains <0.25 EU/ml as determined by Limulus Amebocyte Lysate (LAL),USP<85>.
 - Non-fiber Releasing :Component materials meet the criteria for a " Non-fiber-releasing filter " as defined in 21 CFR 210.3(b)(6).
 - Component Material Toxicity :Meet the requirement of USP <87> In Vitro Cytotoxicity Test ; Meet the Criteria of USP<88> Biological Reactivity Test for Class VI-121 C plastics
 - TOC/Conductivity at 25 C : Autoclaved filter effluent meet the USP<643> for Total Organic Carbon and USP<645> for Water Conductivity per WFI requirements after a UPW flush of specified volume .
 - Particle Shedding : Autoclaved filter effluent meet the USP<788>for large volume Injections .
 - Indirect Food Additive: All component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177-182 ,and EU framework regulation [1935/2004/EC].

Typical Applications

- LVP and SVP
- Normal Sterile Saline
- Pharmaceutical-Grade Water

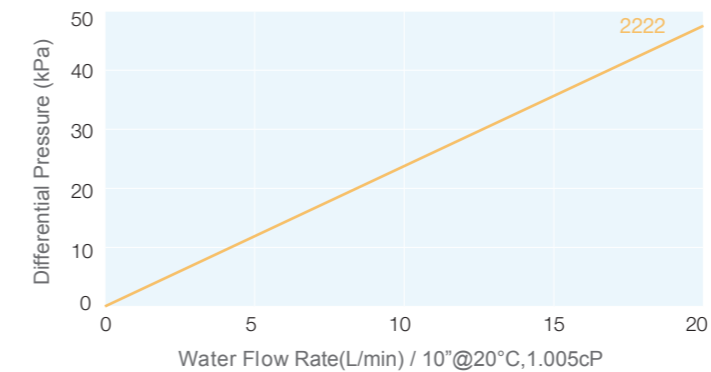
Materials of Construction

Filter Media	Positive-Charged Zeta PES & Nylon Membrane
Cage/Support	Polypropylene
Core/End Caps	Polypropylene

Operating Conditions

Max. Operating Pressure	6.9 bar (100 psi) at 25 °C 4.0 bar (58 psi) at 60 °C 2.4 bar (35 psi) at 80 °C
Max. Differential Pressure	Forward 6.9 bar (100 psi) at 25 °C 4.0 bar (58 psi) at 60 °C 2.4 bar (35 psi) at 80 °C Reverse 3.0 bar (44 psi) at 25 °C 1.0 bar (15 psi) at 80 °C
Bubble Point	BP: ≥ 0.32 MPa (water), 0.22+0.22µm
Effective Filtration Area	0.58m ² / 68-10 inch

Pressure Drop and Flow Rate



Ordering Information

DNV	Removal Ratings	End Cap	Nominal Length	Seal Material	-P
	2222 =0.22+0.22µm	HSF=226 /Fin (PBT Insert) HSC=226 /Flat (PBT Insert) HTF=222 /Fin (PBT Insert) HTC=222 /Flat (PBT Insert) DOE=Double Open End	05=5" 10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM V=Viton P=PFA/Viton	