DuoFluor DPVD Series Filter

Hydrophilic Double Layer PVDF Membrane Cartridge Filter

Masterfilter PVDN series

Masterfilter *DuoFluor* DPVD series filter cartridges are manufactured from an inherently hydrophilic PVDF membrane that offers a broad chemical and temperature resistance. Characterised by its low protein binding properties, the DPVD series is ideal for bioburden reduction, clarification and sterilisation of pharmaceutical and biological solutions.

The DPVD cartridges are available in multiple pore sizes with double layer PVDF membrane. The membranes are easily wettable and fully integrity testable to meet the pharmaceuticals levels for sterility assurance.

Applications

- Vaccines
- Chemicals and APIs
- Ophthalmic solutions
- Cold and hot WFI
- Biotech
- Sanitising agents
- Blood derivatives

Features and Benefits

- Inherently hydrophilic membrane
- Low in protein binding, extractables and non-fibre shedding
- Easily wettable
- High flowrate with low pressure drop

Materials of Construction

- Membrane: Hydrophilic double layer polyvinylidene fluoride (PVDF)
- Support layers: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Polypropylene
- O-rings: EPDM, Silicone, Viton, FEP/PFA encapsulated

Operating Parameters

- Maximum operating pressure: 6.9 bar at 25 °C, 4.0 bar at 60 °C, 2.4 bar at 80 °C
- Maximum differential pressure forward: 6.9 bar at 25 °C, 4.0 bar at 60 °C, 2.4 bar at 80 °C
- Maximum differential pressure reverse: 3.0 bar at 25 °C, 1.0 bar at 80 °C
- Steam sterilisation: 20 cycles for 30 minutes at 135 °C (< 0.3 bar, 5 psi) forward
- Autoclave: 30 cycles for 30 minutes at 130 °C
- Effective Filtration Area: 0.58 m² 10” module

Quality Assurance

- Retention of 10^7 cfu/cm² Brevundimonas diminuta (ATCC 19146) according to ASTM F838
- Cartridge is marked with unique serial number for identification and traceability
- All components meet the criteria for non-fibre releasing as defined in 21 CFR 210.3 (b) (6)
- DPVD is manufactured under ISO 9001:2015 GMP

Biological Standards

- Aqueous extraction less than 0.25 EU/ml as determined by Limulus Amebocyte Lysate (LAL), meeting requirements of USP<85>
- Meets the USP <88> Biological Toxicity Reactivity Test in vivo for Class VI-121°C plastics
- Meets USP <87> in vitro cytotoxicity test and autoclaved filter effluent meets the USP <788> for LVP
- All component materials meet the FDA indirect Food Additive requirements cited in 21 CFR 177-182

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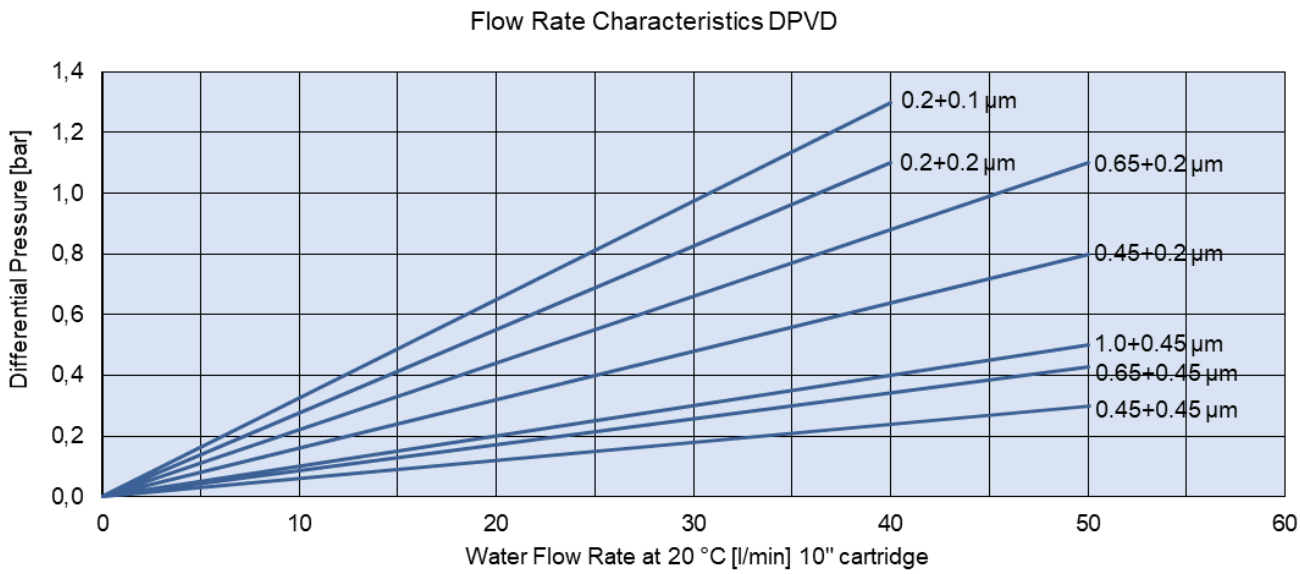
Flow Rate Characteristics



Part Numbers

DPVD	020	-	10	-	HSF	-	S

Code	Removal rating [µm]
020010	0.2+0.1
020020	0.2+0.2
045020	0.45+0.2
045045	0.45+0.45
065020	0.65+0.2
065045	0.65+0.45
100045	1.0+0.45

Code	Length [mm]	[inch]
05	127	5
10	254	10
20	508	20
30	762	30
40	1016	40

Code	End caps*
STC	Sartorius Code 28
HTC	222 O-ring/flat (Code 3)
HTF	222 O-ring/fin (Code 8)
HSF	226 O-ring/fin (Code 7)
HSC	226 O-ring/flat (Code 2)
HSM	Millipore LAGB
HST	MCY 4463 (Code 18)
SLV	MCY 4440
SLK	Sealkleen retrofit

*Other end caps on request

Code	O-rings
S	Silicone
E	EPDM
V	Viton
P	FEP/PFA encapsulated

e.g. part number: DPVD020020-10-HSF-S
Double Layer PVDF Membrane filter cartridge, 0.2+0.2 µm, 10” Length, Code 7 end caps, Silicone O-ring

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