

DeltaDepth®



DeltaDepth® Polypropylene Depth Filter

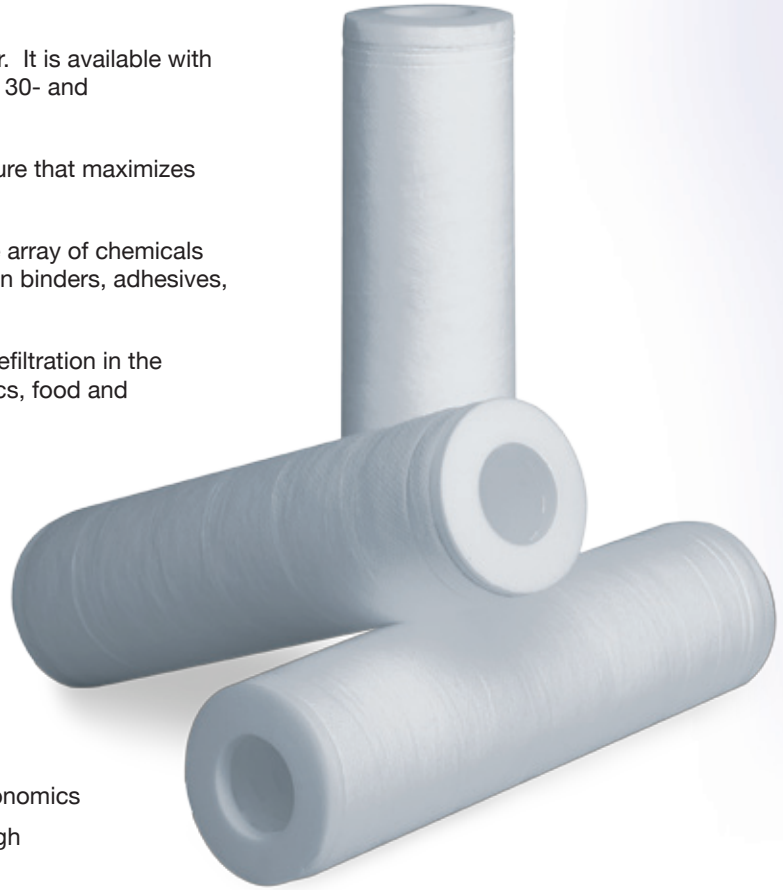
The DeltaDepth® filter is a nominally-rated polypropylene depth filter. It is available with ratings of 0.5 µm, 1 µm, 5 µm, 10 µm, 25 µm and 50 µm in 10-, 20-, 30- and 40-inch lengths.

The filter's unique spiral construction creates a gradient pore structure that maximizes service life and flow rates.

DeltaDepth® filters are extremely robust and compatible with a wide array of chemicals and cleaning agents. The filter is free of surfactants, lubricants, resin binders, adhesives, antistatic or release agents and other additives.

The DeltaDepth® filter can be used for clarification, polishing and prefiltration in the pharmaceutical/biological, cosmetics/personal care, microelectronics, food and beverage, water purification and chemical process industries.

The filter is also highly effective in filtering potable water, photographic chemicals, paints and coatings, and electroplating fluids.



Features and Benefits

- Gradient-density media provides high flow rates
- Rigid support core enables use at high flows and differential pressures
- High dirt-holding capacity gives long service life for improved economics
- Integral media structure resists contaminant unloading even at high differential pressures
- Wide chemical compatibility allows for versatility in applications and cleaning/maintenance
- Wide range of lengths and connections retrofits existing housings

Typical Applications

Pharmaceutical/Biological

Blood products
Growth media
Buffers
Protein solutions
Topicals, orals, otics
Product and process water
Fermentation liquids
Acids, bases, solvents
Pre-chromatography

Cosmetics/Personal Care

Aftershaves, mouthwashes
Oils, lotions, shampoos
Perfumes, colognes

Microelectronics

Acids, bases, solvents
CMP slurries
Photochemicals
Magnetic coatings
Wafer cleaning

Chemical Process

Alkalies, solvents
Organic/inorganic acids
Process water

Food and Beverage

Beer and wine
Bottled and spring water
Juices and soft drinks
Edible oils
Vinegar
Make-up and process water
Sweeteners

Water Purification Systems

Post carbon beds, pre-RO
Pre/post DI
UPW
Water reclaim

Potable Water

Photographic

Chemicals and emulsions
Process water/rinse water

Metal Finishing

Electroplating
Paint/resin coating

Materials of Construction

Filter Media: Polypropylene
 Core: Polypropylene
 End Caps: Polypropylene
 Sealing Method: Thermal bonding
 O-rings: Buna, EPR, silicone,
 Teflon® over silicone,
 Teflon® over Viton®
 Gaskets: Polyethylene

DeltaDepth® filter cartridges meet the requirements as specified in the current USP Class VI plastics tests. All materials of construction listed above are FDA approved for food contact use per CFR Title 21,177. DeltaDepth® cartridges are manufactured in conformance to cGMP. No binders, lubricants, adhesives, surfactants, anti-static or release agents are used in its construction. Filters comply with European Commission Directive 2002/72/EC and subsequent amendments up to 2008/39/EC and Commission Regulation (EU) No 10/2011.

Cartridge Dimensions (nominal)

Diameter: 2.5" (6 cm)
 Nominal Lengths:
 10", 20", 30", 40" (25, 50, 75, 100 cm)

Nominal Filtration Ratings

0.5 µm, 1 µm, 5 µm, 10 µm,
 25 µm, 50 µm

Maximum Operating Temperatures & Pressures

Δp 80 psi @ 100 °F
 (Δp 5,5 bar @ 38 °C)

Δp 60 psi @ 150 °F
 (Δp 4,1 bar @ 66 °C)

Δp 30 psi @ 180 °F
 (Δp 2,1 bar @ 82 °C)

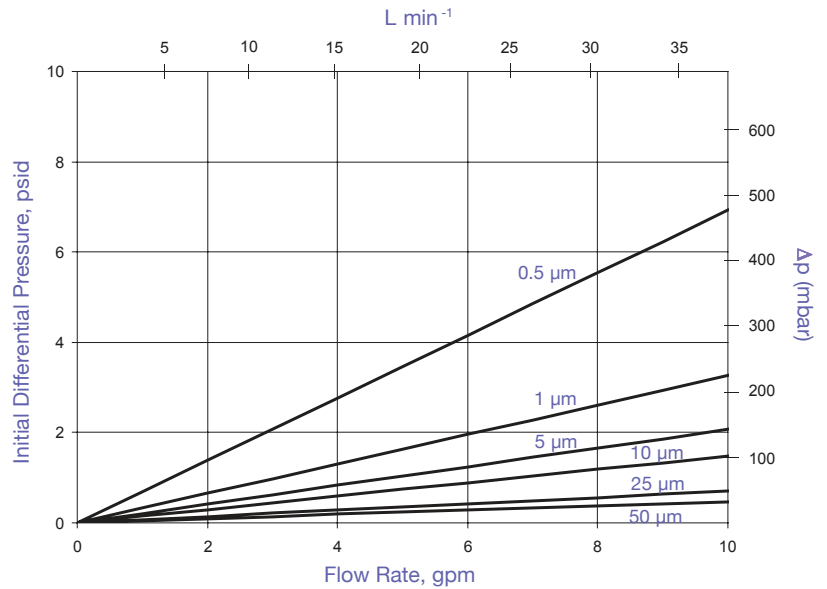
Sterilization

Steam-in-place (SIP):
 saturated steam @ 121-135 °C, 30-60 minutes
 [15 psi (1 bar) to 30 psi (2 bar), 30-60 minutes]
 Autoclave: 121-135 °C, 30-60 minutes

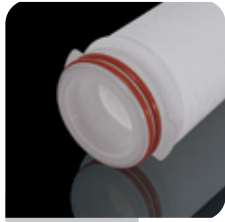
Sanitization

Hot water maximum 90 °C, 30 minutes

Typical Water Flow Rates per 10" Cartridge



End Cap Configuration



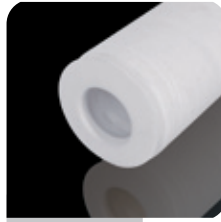
-226 O-ring

External -226 O-rings with locking tabs; open end for C6 and F6 SOE configurations



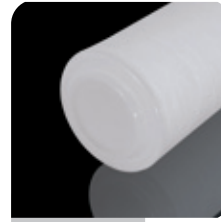
-222 O-ring

External -222 O-rings; open end for C2 and F2 SOE configurations



Flat Gasket

Flat Gasket; open end for GS and GL DOE configurations



Button Cap

Button Cap; closed end for C2 and C6 SOE configurations



Alignment Fin

Alignment Fin; closed end for F2 and F6 SOE configurations

DOE = Double Open End
SOE = Single Open End

Ordering Information

Filter Media	Nominal Rating (µm)	Cartridge Length	End Cap Configuration	Reinforcement Ring Option	O-Ring Material
DDN	0.5	—	F2	R	S
DDN = DeltaDepth® nominally-rated polypropylene depth filter	0.5 1 5 10 25 50	1 = 10" (25 cm) 2 = 20" (50 cm) 3 = 30" (75 cm) 4 = 40" (100 cm)	C2 = SOE; -222 O-rings, button cap end F2 = SOE; -222 O-rings fin end C6 = SOE; -226 O-rings button cap end F6 = SOE; -226 O-rings, fin end GS = DOE; flat gaskets (9.75", 19.5", 29.25", 39" length filters) GL = DOE; flat gaskets (10", 20", 30", 40" length filters)	(Blank) = Standard - no reinforcement ring R = Reinforcement ring; required for autoclave/SIP applications	B = Buna E = EPR S = Silicone T = Teflon® over silicone V = Viton® X = Teflon® over Viton® P = Polyethylene gaskets (GS/GL end caps only)