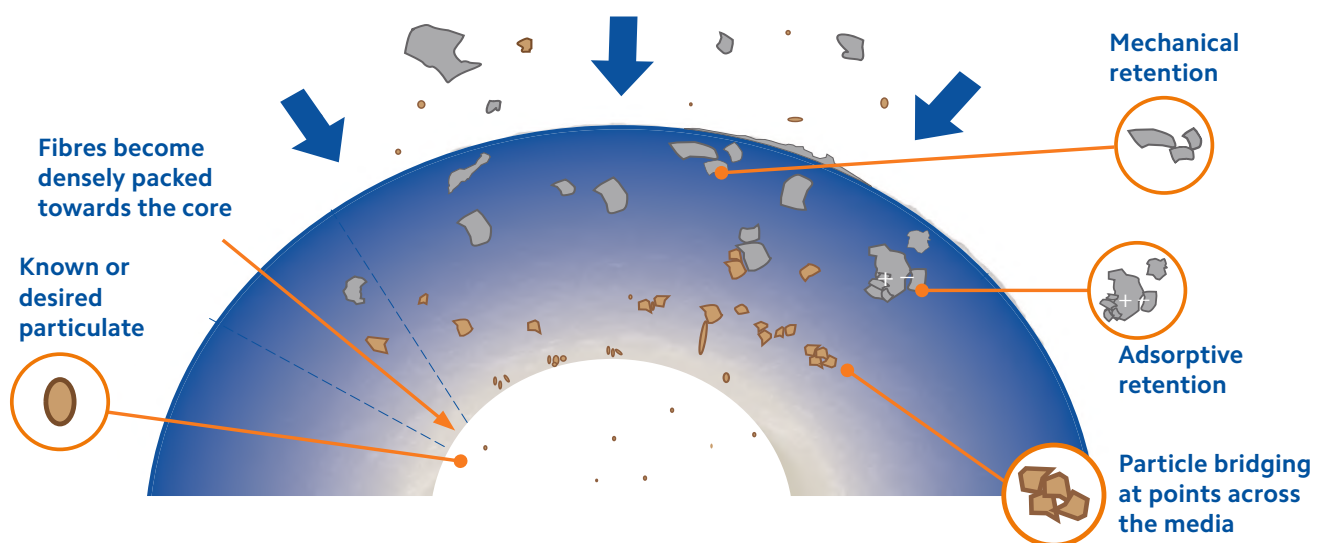


What is Depth Filtration?

Successfully used in a variety of applications, depth filtration utilises a thick layer of media to effectively trap and retain various particulate. Commonly specified as the first stage of a filtration cascade, more advanced manufacturing techniques have now developed depth cartridges suited to improving downstream filtration.

Cross-Section of a Depth Cartridge



How do Depth Filters Work?

As liquid from the inlet is sent twisting and turning on a tortuous path through the filter cartridge, particles become caught in the densely packed fibres of a depth filter - this sieving or interception is known as mechanical retention. With the introduction of graded-depth filtration, a broad range of particulate can be captured across the entirety of the depth media.

From outside to in, the media fibres become densely packed with larger particulate captured first, allowing smaller particles to be progressively intercepted. As well as the physical interception, fibres also naturally attract particles via Van de Waals force. This adhesion process is known as adsorptive retention.

Typical Applications

Depth filtration offers a myriad of solutions to suit many applications:

- Incoming water
- Pre-RO
- General pre-filtration
- Particulate removal
- High temperatures
- Aggressive solvents
- Food grade compatibility
- High viscosity liquids
- Adhesives
- Paints and inks

Technology Developments

For over 50 years, string wound cartridges have been used as a basic form of filtration. Development in manufacturing processes and technologies have resulted in more advanced cartridges with improved performance characteristics and capabilities.



Spun Bonded Fibres

Advanced range of solutions for efficient prefiltration or particulate classification

- The most popular option for sediment reduction
- More precise filtration over wound technology
- Particulate is retained throughout the depth of the filter media
- Increased void volume (available space for particulate to be retained) maximises dirt holding capacity
- Suitable for applications from batch process to drinking water

Wound String Fibres

Ideal for high temperature and chemical compatibility applications

- Tried and tested technology
- Cost effective particulate filtration
- Multiple options of filter media and core material
- Suitable for high temperature and aggressive chemicals
- Wide micron rating options from 0.5 to 150 micron

Specialist Materials

Ideal for high viscosity and high temperature applications

- Specially designed for more challenging applications
- Technologies applied to overcome high viscosity processes
- Products for superior performance in paint and ink applications
- Cartridges infused with antibacterial additives

Depth Filtration with End-Cap Options



FDA
Compliant Materials

WRAS
APPROVED MATERIAL



 **SPECTRUM**

TruDepth Premier Spun Polypropylene

1-50 micron

With higher efficiency and a longer service life than both the Economic and Standard spun, the PSP is the most versatile and adept cartridge in the TruDepth range. The deep grooved construction significantly increases the surface area, maximising the dirt holding capacity of the cartridge whilst the integral support core increases pressure and temperature operating conditions. Available with a range of end-caps for added seal security and operator ease for fitting in multi-round housings.

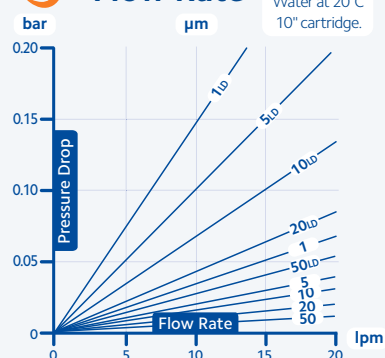


Key Features

- Deep-grooved finish for highest surface area and lowest pressure drop
- End-cap options for secure sealing
- A 4mm thick polypropylene core increases strength and temperature performance



Flow Rate



Materials of Construction

Filter Media
Polypropylene

End-cap (Optional)
Polypropylene

Core
Polypropylene

Seal
Silicone (as standard,
when end-caps specified)



Configurations

Micron (µm)

1 5 10 20 50

Length (")

9¾ 9⅞ 20 30 40

End-cap

EH ES FH MH MS XK

Seal

S = Silicone E = EPDM V = Viton®

Diameter

Regular Large = LD



Specification

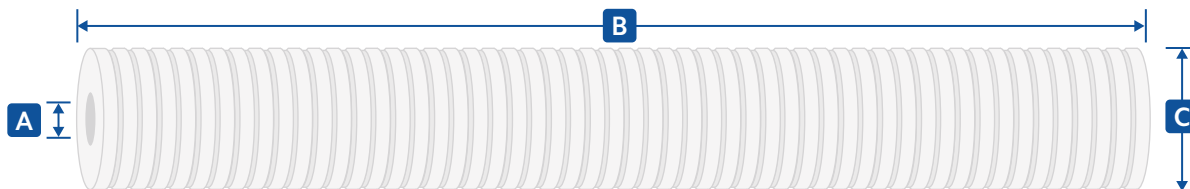
Efficiency
85%

Max. Operating Temperature
71°C

Max. Operating Pressure Differential
2.5 bar at 21°C



Dimensions



	Dimensions (mm)					
	A	B				C
Length (")		Blank	EH/MH	ES/ MS	FH	XK
9¾	28	250	317	278	322	310
20	28	508	575	536	580	568
30	28	762	829	790	834	822
40	28	1016	1083	1044	1088	1076
9¾LD	30	248	-	-	-	-
20LD	30	508	-	-	-	-

Part Number

Code	Micron	Length	End-cap	Seal
PSP	1, 5, 10, 20, 50	9¾, 20, 30, 40	Blank	Blank
			EH, ES, FH, MH, MS, XK	S, E, V
		9¾LD, 20LD	Blank	Blank

e.g. PSP-5-40EHS

