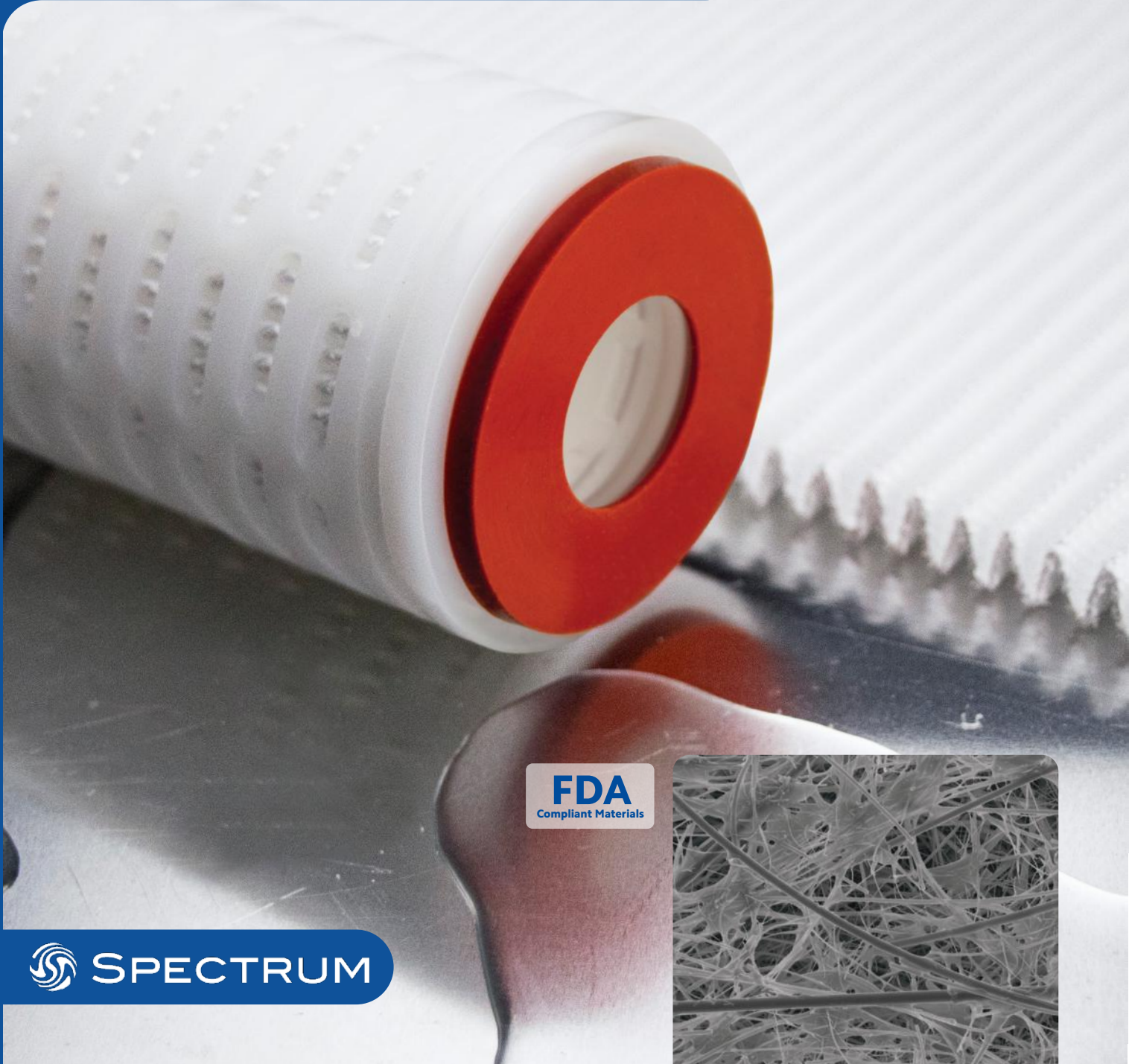


## Innovative Beverage Cartridge for Extended Service Life



 SPECTRUM

## Premier Pleat Depth Polypropylene

1-40 micron

The PPDP range presents a product development on the popular SPECTRUM Premier Pleat. Designed to combine the science of depth filtration with the benefits of a pleated cartridge, the increased pleat pack depth allows for a higher dirt holding capacity over standard pleated cartridges. The PPDP is ideal for beverage applications targeting a wide range of particulate size, as well as industry processes to remove softer, gelatinous contaminants.

Pleated depth filters are increasingly being specified for applications that require higher dirt loading capabilities, while maintaining consistent flow rates and low pressure drop.

Manufactured from WRAS approved materials, the all polypropylene construction of the PPDP provides reliability and excellent compatibility with a range of fluids. With 1 to 40 micron options available, the high efficiency media provides an effective final filtration solution or pre-filtration to absolute membrane media downstream.



### Breweries

The complex diversity of beer production involves varying fluid types and particulate loading. PPDP delivers excellent removal of a wide range of particulate size while retaining desirable characteristics.



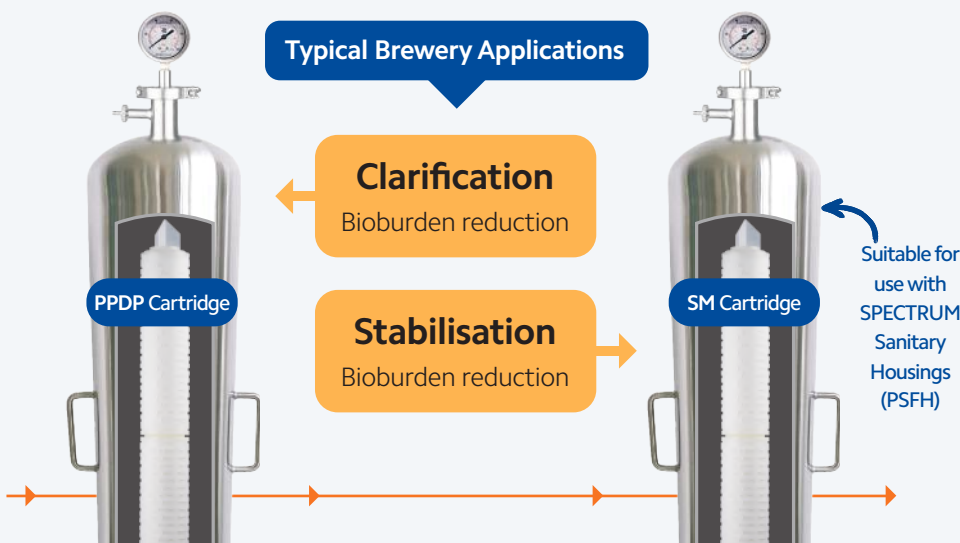
### Spirits and Liquors

With an increased dirt holding capacity, the PPDP are perfectly suited to the production of spirits and liquors, which typically have a higher level of particulate and 'pulp' compared to traditional clear spirits.



### Swarf Removal

Ensuring effective removal of swarf is critical in many machining applications. PPDP provides high efficiency particle removal to protect expensive equipment.



## Hygiene and Traceability

- Manufactured in a clean room environment, protecting against unwanted contaminants.
- Each cartridge has double layered packaging. The inner plastic wrap is vacuum sealed and a tough outer layer provides further protection and cleanliness.
- Individually labelled and boxed for security and ease of product identification.



# Higher Dirt Holding

Pleated filters are typically used in applications that require high efficiency filtration, removing unwanted contaminant above a specific micron size whilst allowing the passage of desirable characteristics.

A limitation of this type of filtration is 'blinding' whereby significantly larger particulate will prematurely block the cartridge pores. The PPDP has been developed with a thicker pleat pack, increasing dirt holding capacity and removing a wider range or larger particulate without premature blinding.

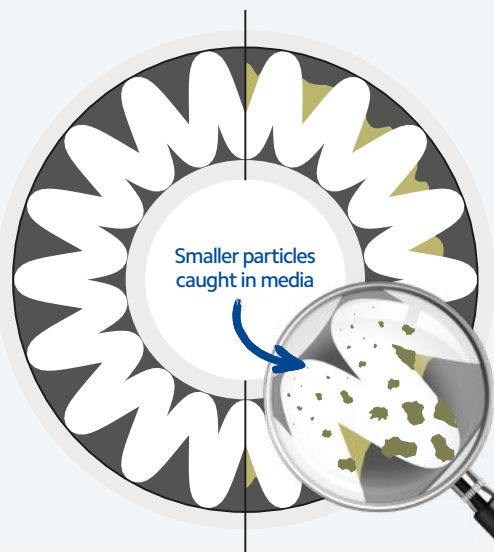
## Difference between 'Standard Pleat' and 'Premier Pleat Depth'



Smaller particles escape through media

**Standard Pleated Cartridge**

Traditional pleated cartridges use single layers of media to produce a pleat pack that delivers exacting classification.



Smaller particles caught in media

**Premier Pleated Depth Cartridge**

The thicker pleat pack of the PPDP provides high efficiency graded removal of contaminant, whilst maintaining high flow rate and low pressure drop.

## Efficiency

		Challenge Particulate Size										
		0.1 µm	0.2 µm	0.45 µm	1 µm	3 µm	5 µm	10 µm	20 µm	30 µm	50 µm	100 µm
Cartridge Micron Rating	1 µm	95	96	98	99	99+						
	3 µm	92	95	97	98	99	99+					
	5 µm	83	90	95	97	98	99	99+				
	10 µm		82	91	95	96	97	99	99+			
	20 µm				80	88	95	97	99	99+		
	40 µm						86	95	97	98	99	99+



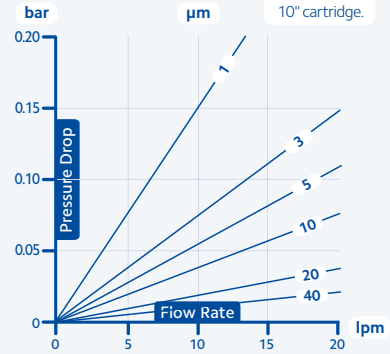
## Key Features

- Combines surface and depth filtration technology to provide high efficiency filtration with a high dirt holding capacity
- All polypropylene construction is suitable for a variety of fluids from water to beer, cider and wine



## Flow Rate

Water at 20°C  
10" cartridge.



## Materials of Construction

### Filter Media

Melt Blown  
Polypropylene

### Support Media

Polypropylene

### End-cap

Polypropylene

### Core

Polypropylene

### Cage

Polypropylene

### Seal

Silicone (EPDM/Viton)



## Configurations

### Micron (µm)

1 3 5 10 20 40

### Length (")

9¾ 10 20 30 40

### End-cap

AA CG EG EH FG FH

### Seal

S = Silicone E = EPDM V = Viton®



## Specification

### Efficiency

99%

### Max. Operating Temperature

80°C

### Surface Area

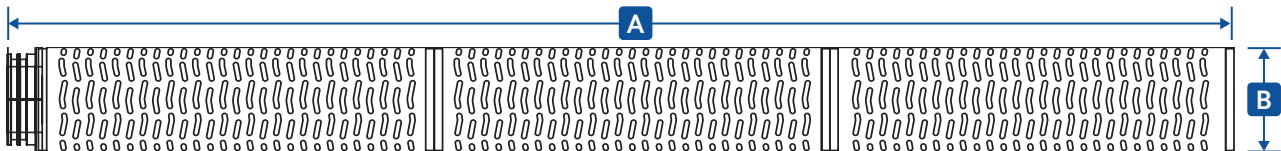
0.3m<sup>2</sup> per 10"

### Max. Operating Pressure Differential

4 bar at 21°C



## Dimensions



Length	A (mm)						B (mm)
	AA	CG	EG	EH	FG	FH	
9¾"	248	-	-	-	-	-	70
10"	-	243	270	310	270	310	70
20"	508	500	519	560	520	561	70
30"	750	-	769	812	770	815	70
40"	1000	-	1018	1060	1019	1062	70

## Part Number

Code	Micron	Length	End-cap	Seal
PPDP	1, 3, 5, 10, 20, 40	9¾, 10, 20, 30, 40	AA, CG, EG, EH, FG, FH	S, E, V

e.g. PPDP-1-20-AAS

