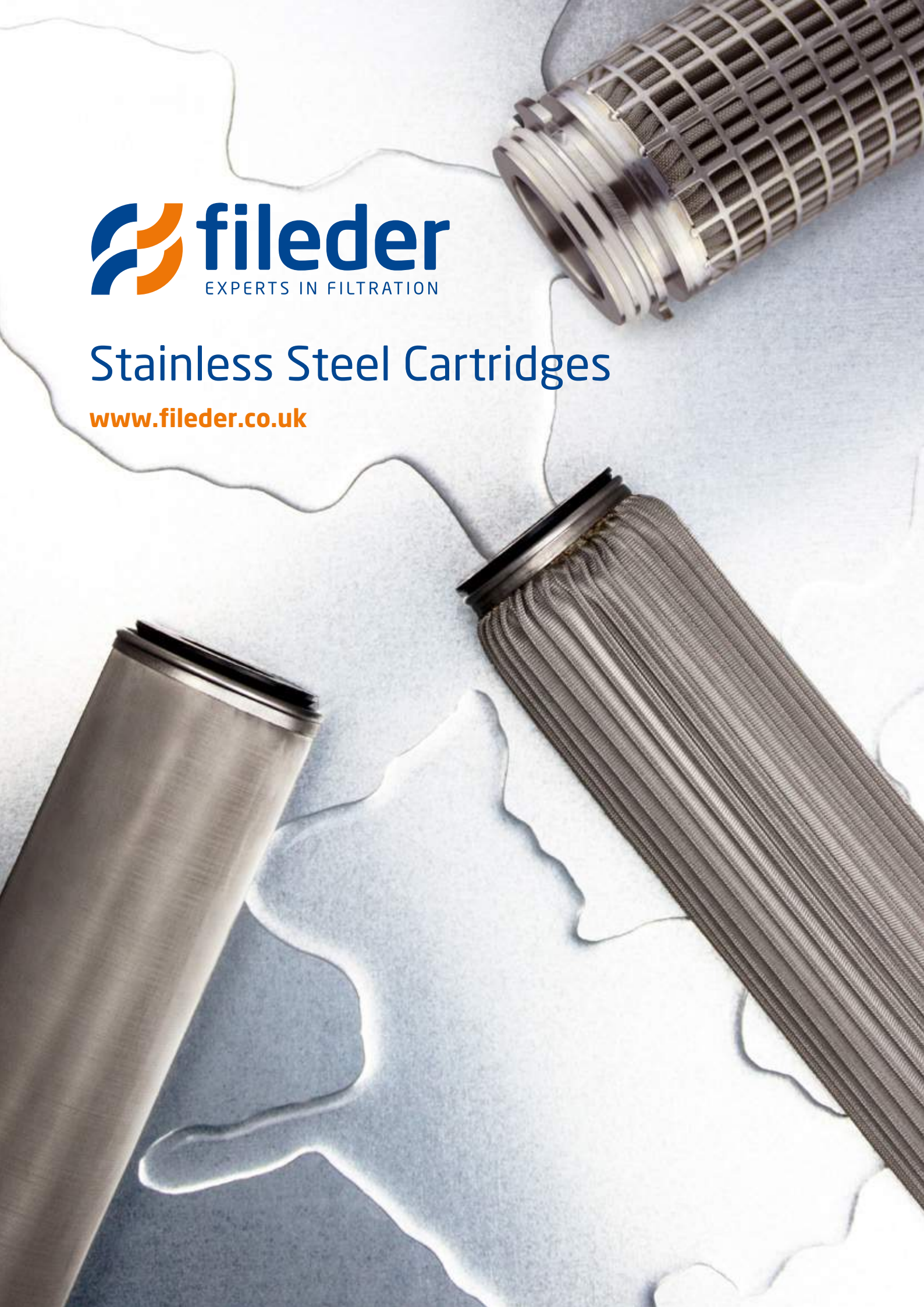
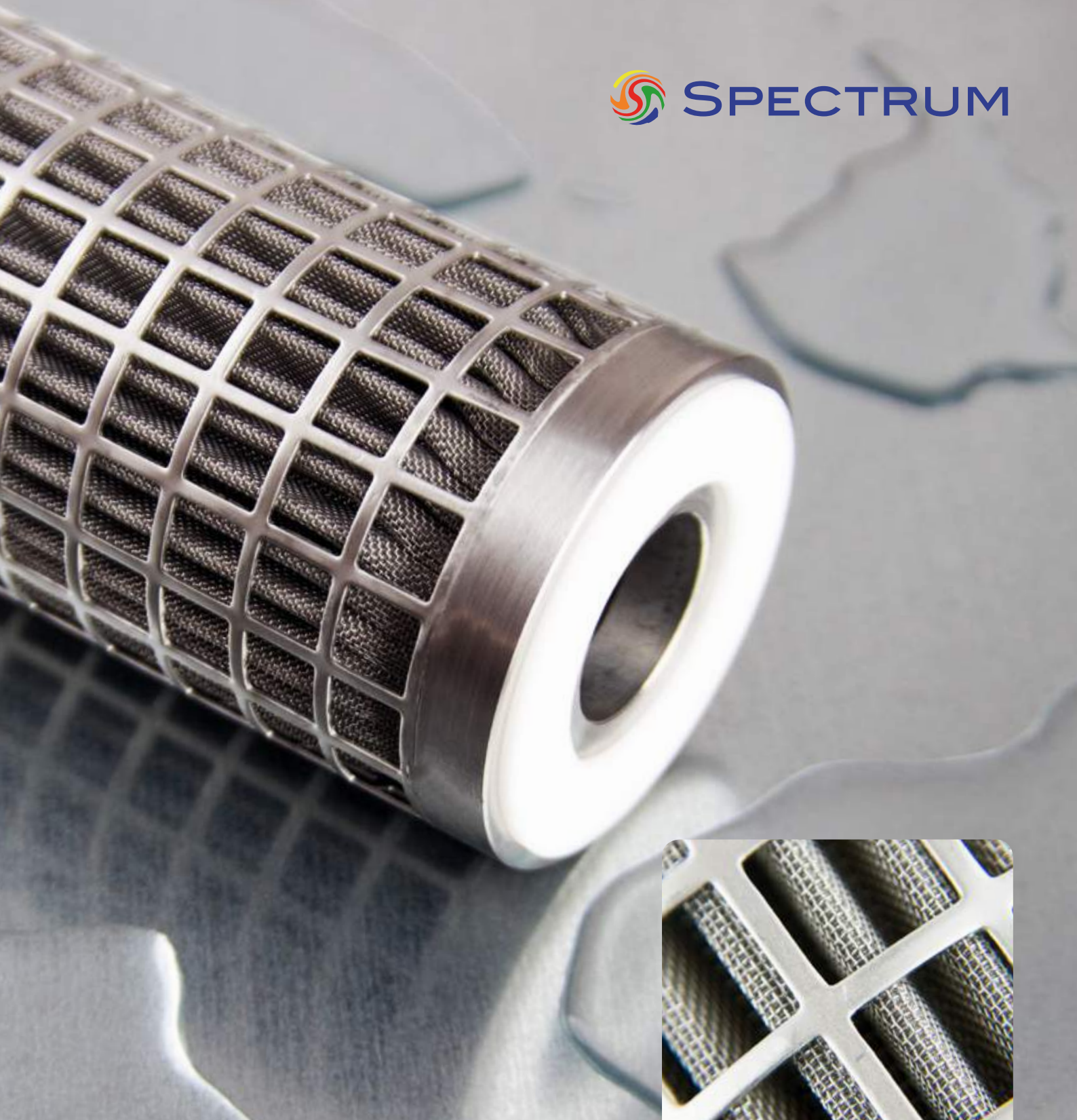




Stainless Steel Cartridges

www.fileder.co.uk





Premier Range

Premium Solution for Challenging Applications

Premier cartridges utilise the ultimate in material and construction technology to produce a high performance cartridge which is specifically designed to suit the most challenging filtration environments. The pleat pack is precision

engineered with layers of woven stainless steel media, fully TiG welded to eliminate potential extractables, whilst the added outer cage provides additional protection for the pleated media ensuring cartridge integrity during back flushing.

Manufactured entirely from 316L stainless steel, the inert and reusable properties of the Premier range of cartridges are designed for use in a range of applications including cosmetics, food and beverage, power generation and chemical processing.



Chemical

The PPS offers a reliable filtration solution due to compatibility with both aggressive acids and solvents



Cosmetics

Strong stainless steel can withstand high pressure usually required to flow high viscosity liquids



Adhesives

Capable of high temperature cleaning, contaminants such as paint and glues can be incinerated and the cartridge reused.

Premier End-Caps

The SPECTRUM Premier Stainless Steel cartridges benefit from the addition of end-caps, lowering the risk of bypass. With Teflon® Seals supplied as standard, these cartridges have the widest range of chemical compatibility.



AA-Double Open Ended

Open-end gaskets are suitable for housings that require a knife edge seal and are most suited for non-critical applications.



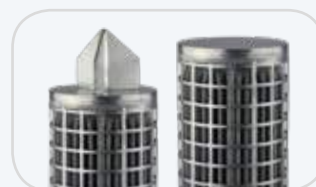
ES - 222 / Closed End

Double 222 size external O-rings seal into female housing receiver.



FS - 226 / Closed End

Bayonet type tabs lock into the housing, which prevents the cartridge from moving during filtration, especially in high flow applications.



FH - Fin / Closed End

The Fin locates into plate holes to maintain its vertical position, which is particularly useful for the longer cartridges such as 30" and 40".

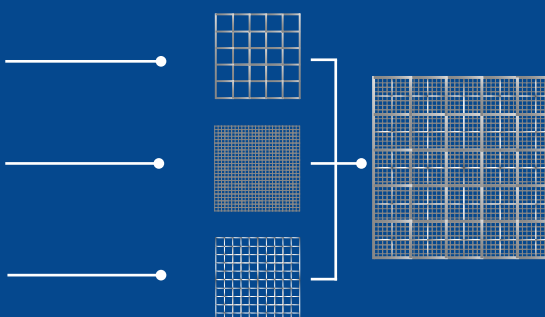
Construction

Additional support layers add depth characteristics to the media of the Premier range. This dramatically increases the dirt holding capacity of the cartridge, improving service life and reducing operation downtime.

Outer support layer provides coarse particulate removal to protect the main filtration layer from premature blinding.

Main filtration layer specifically targets particulate at the micron rating of the cartridge for selective removal of unwanted contaminants.

Providing structural integrity and protection of the pleat pack, the **inner support layer** is constructed from unyielding polypropylene.



The exacting construction of the PPS results in a robust cartridge capable of withstanding cleaning procedures which would typically damage or destroy consumable polymeric cartridges. These cleaning processes enable stainless steel cartridges to be repeatedly reused, eliminating the disposal of expended single use cartridges, commonly deemed environmentally unacceptable. Depending on the characteristics of the contaminant and the solution there are different methods of cleaning that can be used.



Reverse flow

Typically used when the majority of the contaminant is larger than the pore size of the filter media and remains on the surface of the cartridge, reverse flow is the simplest form of cleaning. Performed either in situ or externally, reverse flowing flushes the contaminant from the surface of the cartridge at pressures as low as 1 bar. The outer cage of the PPS means that higher pressure can be used to remove heavier loading.

High temperature burnout

The most aggressive form of cartridge cleaning, high temperature burnout is used to remove hardened adhesives, glues and paints. Exposing the cartridges to temperatures up to 300°C, collected contaminant is incinerated before being flushed and rinsed with filtered water.

Chemical cleaning

Due to the inert properties of the stainless steel media, aggressive chemicals and solvents can be successfully used to dissolve and remove both contaminant on the surface of the cartridge and finer embedded particulate within the depth of the media. Prior to reuse the cartridge is typically flushed with filtered water.

Ultrasonic cleaning

Using high-frequency sound waves, this technology breaks down hard, non-deformable particulate retained by the filter media. Once the contamination has been broken down, the cartridge is typically rinsed before use.

Replaceable gaskets after cleaning

After all cleaning processes it is recommended that gaskets are replaced to ensure a positive seal and reduce the risk of bypass, offering peace of mind. Filerder supplies a range of replacement gaskets and O-rings, available upon request.



Efficiency

		Challenge Particulate Size							
		5µm	10µm	20µm	40µm	75µm	100µm	250µm	500µm
Cartridge Micron Rating	5µm	95%	97%	99%	99+%	99+%			
	10µm		95%	96%	98%	99%	99+%		
	20µm			95%	96%	97%	98%	99%	
	40µm				95%	97%	98%	99%	99%
	75µm					96%	98%	99%	99%
	100µm						96%	98%	99%
	250µm							96%	98+%
	500µm								96%



Key Features

- Fully TIG welded 316L stainless steel and strengthened cage
- End-cap configuration options
- Highest temperature tolerances in the range

Typical Applications

- High pressure differential applications
- Environments where fewer cartridge cleans required

Specification

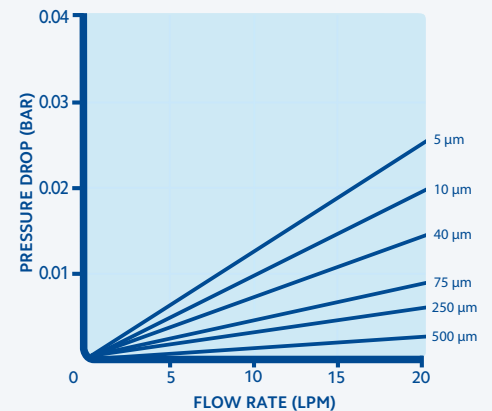
Efficiency
95%

Surface Area
0.175 m² per 10"

Max. Operating Temperature
360°C at 5 bar

Max. Operating Pressure Differential
5 bar

Max. Operating Reverse Pressure Differential
3 bar



Obtained using a 10" cartridge with water at 20°C

Materials of Construction

Filter media
316L Stainless Steel

Cage
316L Stainless Steel

Support media
316L Stainless Steel

Seal
EPDM / Teflon® / Viton®

Core
316L Stainless Steel

Compliance

FDA Compliant Materials

Configurations

Micron (μm)

5 10 20 40 75 100

250 500

Length (")

10 20 30 40

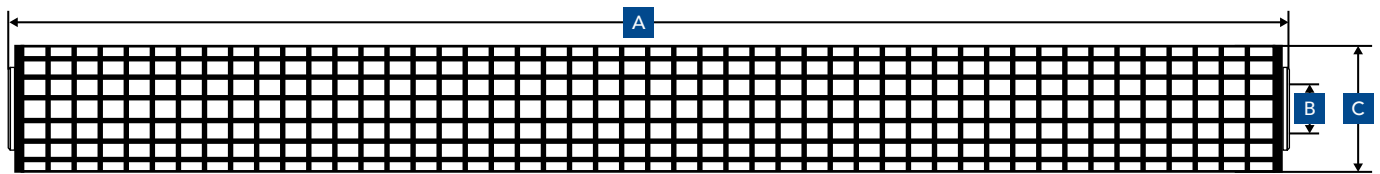
End Caps

AA EH ES FH FS

Seal

E = EPDM T = Teflon® V = Viton®

Dimensions & Packaging



Length	A (mm)					B (mm)	C (mm)
	AA	EH	ES	FH	FS		
10"	250	319	275	317	273	27	65
20"	508	569	525	567	523	27	65
30"	750	819	775	817	773	27	65
40"	1000	1069	1025	1067	1023	27	65

Packaging	
Box Qty	Box Weight (kg)
1	0.5
1	1
1	1.5
1	2

Note: Dimensions ± 2mm

Part Number

Code	Micron	Length	End-Cap	Seal
PPS	5, 10, 20, 40, 75, 100, 250, 500	10, 20, 30, 40	AA, EH, ES, FH, FS	E, T, V

e.g. PPS-200-40FHE

