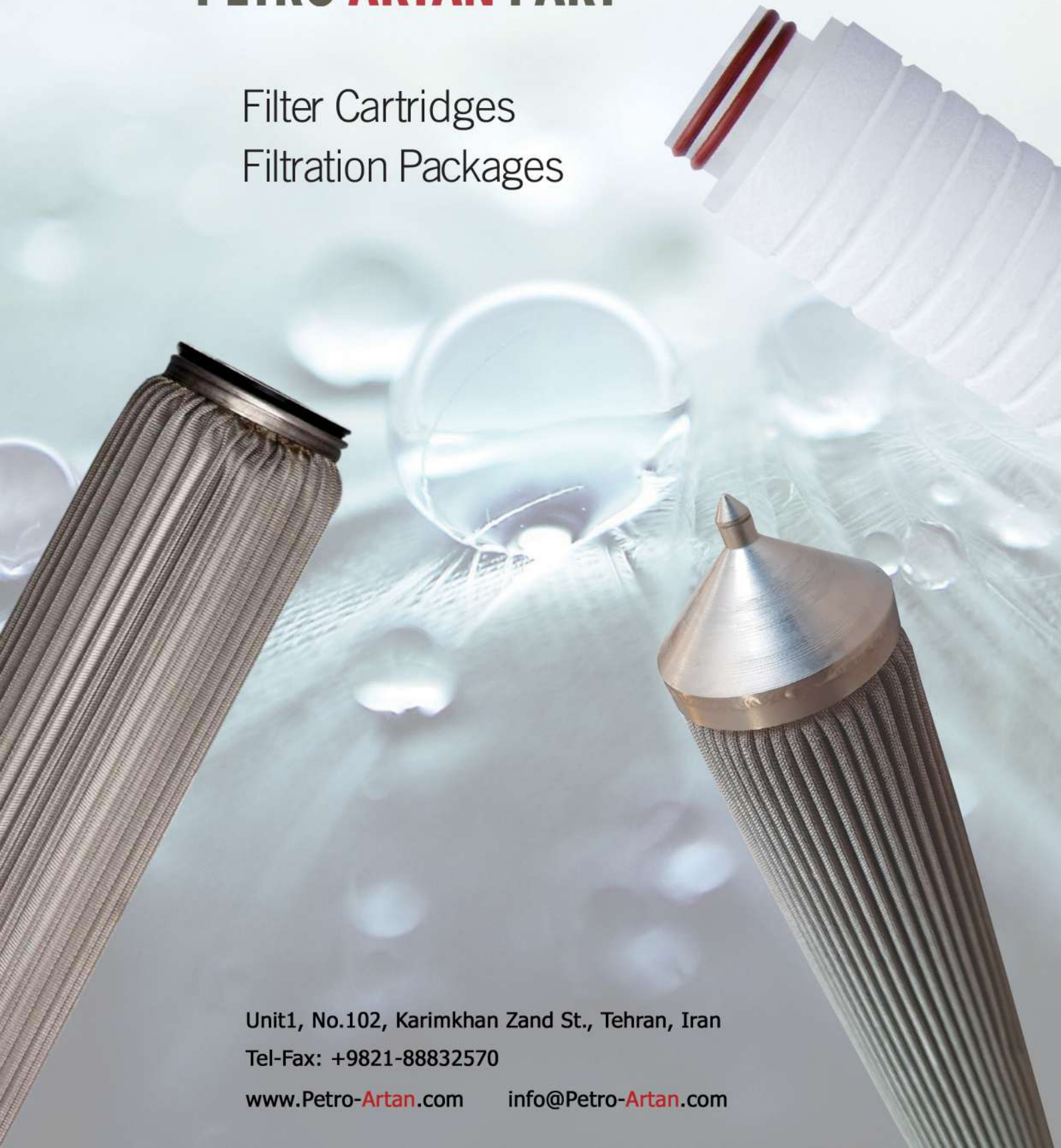




PETRO ARTAN PART

Filter Cartridges
Filtration Packages



Unit1, No.102, Karimkhan Zand St., Tehran, Iran

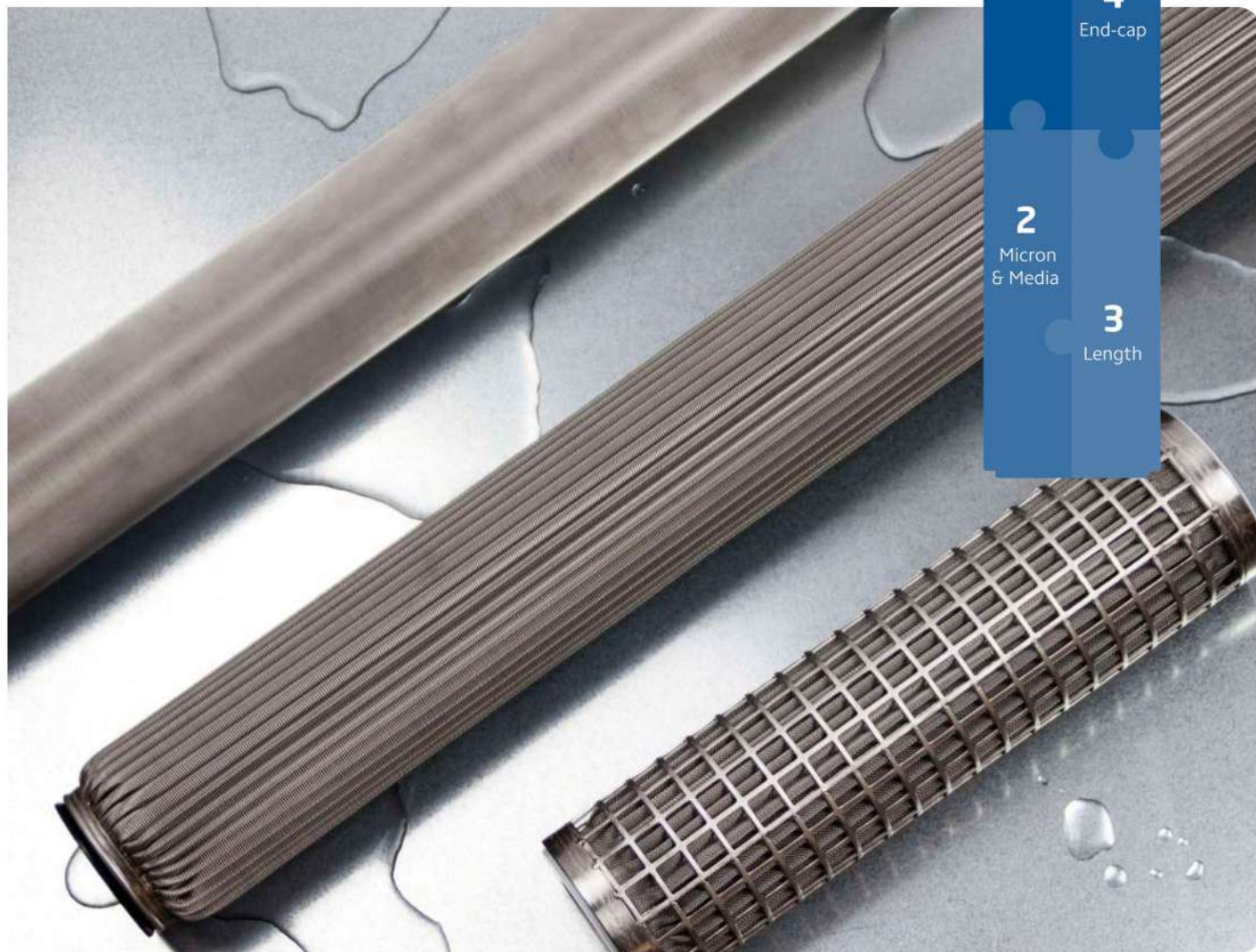
Tel-Fax: +9821-88832570

www.Petro-Artan.com

info@Petro-Artan.com

How to Select Your Stainless Steel Filter

Four simple steps are all it takes to select a stainless steel cartridge.



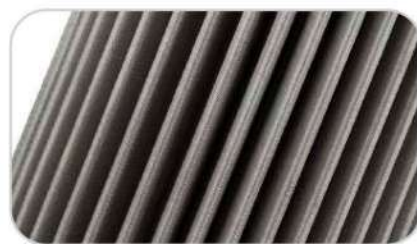
1 Filtration Grade

Select the filtration grade suitable for your application.



Premier

Fully TIG welded, this cartridge is suitable for temperatures up to 360°C.



Standard

Pleated for higher dirt holding. Offers 3 times surface area of the Economic.



Economic

Welded with a cylindrical stainless steel mesh surface, complete with gasket.

1

Grade

4

End-cap

2

Micron & Media

3

Length

2 Micron & Media

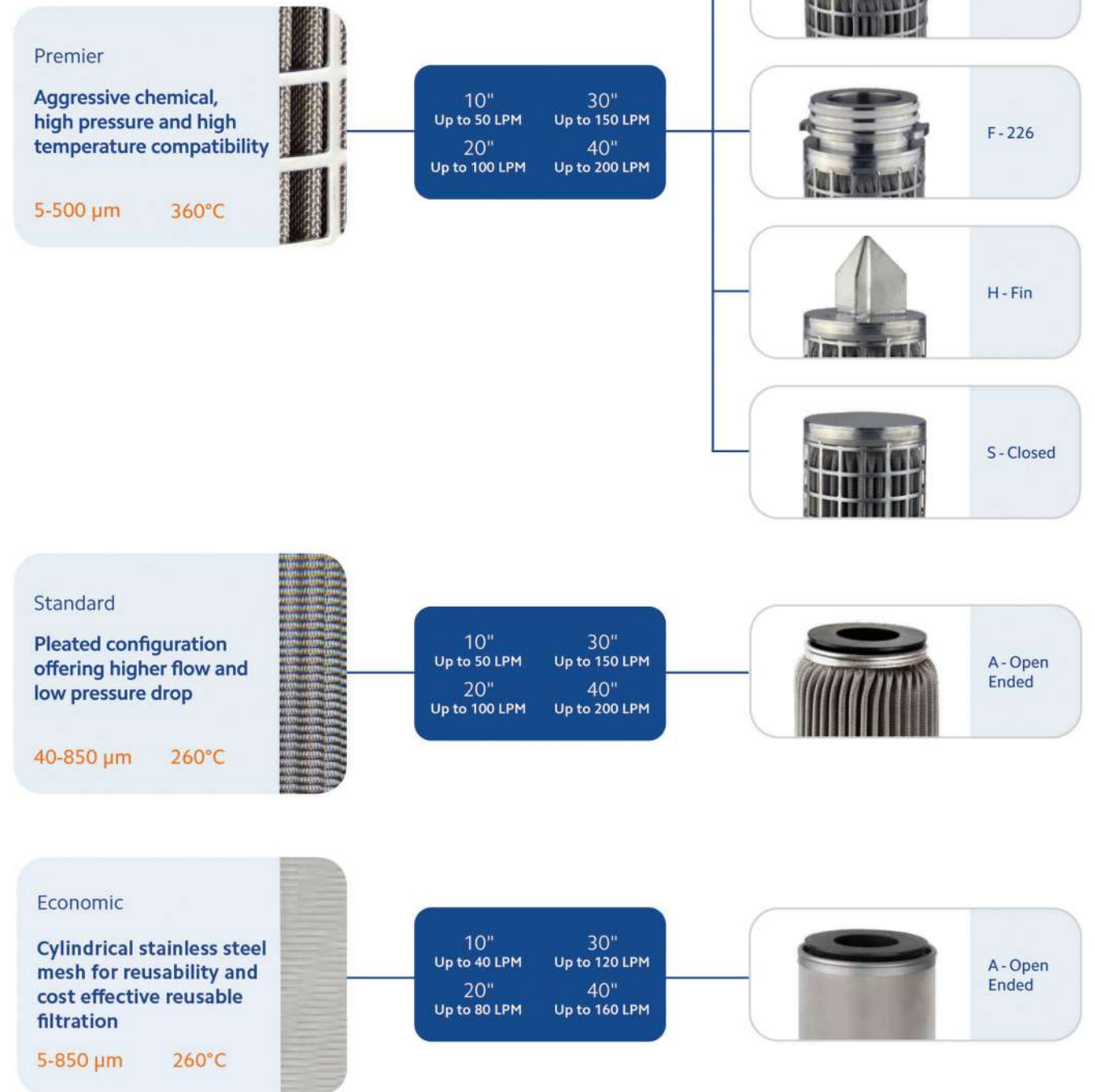
Select media based on required performance, micron and reusability.

3 Length

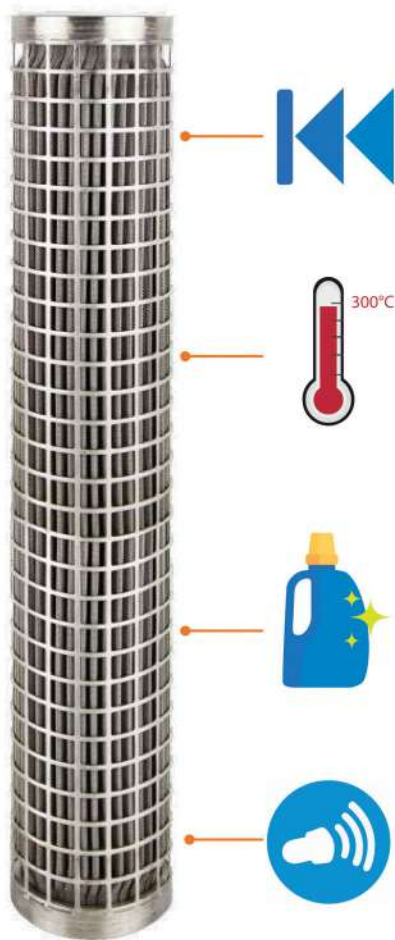
Choose the cartridge length based on the expected flow rate of the application.

4 End-Cap

Select an end-cap based on suitability for an existing housing or the required seal.



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

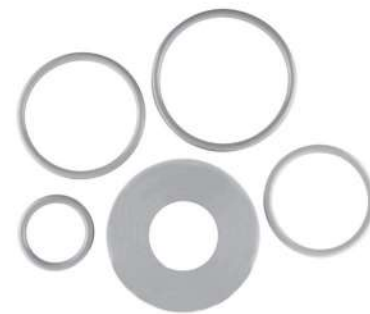
Due to the inert properties of the stainless steel media, aggressive chemicals and solvents can be successfully used to dissolve and remove both contaminant on the surface of the cartridge and finer embedded particulate within the depth of the media. Prior to reuse the cartridge is typically flushed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

Cartridge Micron Rating	Challenge Particulate Size							
	5µm	10µm	20µm	40µm	75µm	100µm	250µm	500µm
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

Materials of Construction

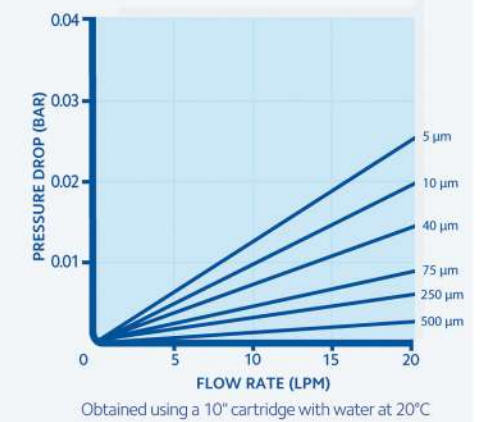
- Filter media: 316L Stainless Steel
- Support media: 316L Stainless Steel
- Core: 316L Stainless Steel
- Cage: 316L Stainless Steel
- Seal: EPDM / Teflon® / Viton®

Configurations

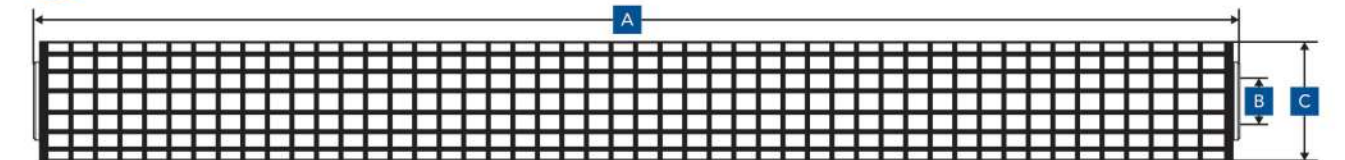
- Micron (µm): 5, 10, 20, 40, 75, 100, 250, 500
- Length ("): 10, 20, 30, 40
- End Caps: AA, EH, ES, FH, FS
- Seal: E = EPDM, T = Teflon®, V = Viton®

Compliance

MOP & NPC



Dimensions & Packaging



Length	A (mm)					B (mm)	C (mm)	Packaging	
	AA	EH	ES	FH	FS			Box Qty	Box Weight (kg)
10"	250	319	275	317	273	27	65	1	0.5
20"	508	569	525	567	523	27	65	1	1
30"	750	819	775	817	773	27	65	1	1.5
40"	1000	1069	1025	1067	1023	27	65	1	2

Note: Dimensions ± 2mm

Bauble Point Test



PAP

PETRO ARTAN PART

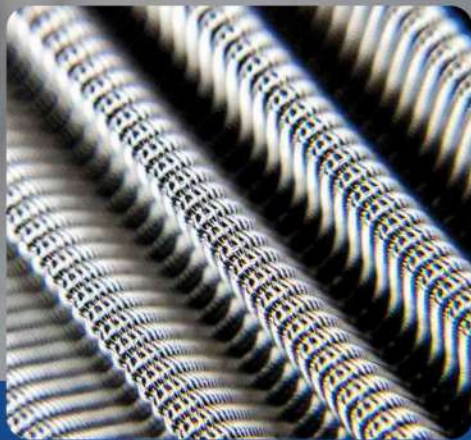


Standard Range

Increased Surface Area and Higher Dirt Loading Capacity

The all-welded pleated construction of the Standard range, offers over 3 times the surface area of the Economic, significantly improving permeability. The enhanced media construction, comprising of support

media either side of the filtration layer, results in higher dirt holding capacity, longer production times and fewer cartridge cleaning cycles.



Key Features

- Pleating mesh construction provides over 3 times the surface area of the Economic range
- Additional mesh layers introduce depth characteristics for higher dirt holding
- Support layer increases rigidity for high viscosity fluids and heavily loaded solutions

Typical Applications

- Cosmetics
- Pharmaceutical
- Industrial Water Treatment

Specification

- Efficiency: 90%
- Surface Area: 0.16 m² per 10"
- Max. Operating Temperature: 260°C
- Max. Operating Pressure Differential: 4.2 bar
- Max. Operating Reverse Pressure Differential: 1 bar

Materials of Construction

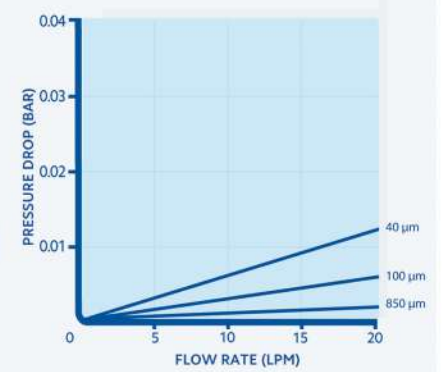
- Filter media: 316L Stainless Steel
- Core: 316L Stainless Steel
- Support media: 316L Stainless Steel
- Cage (optional): 316L Stainless Steel
- Seal: Buna / EPDM / Teflon® / Viton®

Configurations

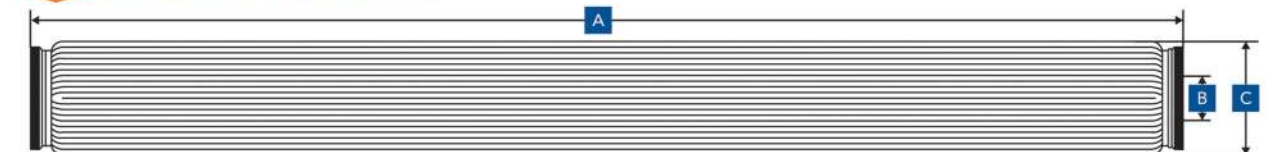
- Micron (µm): 40, 75, 100, 250, 500, 850
- Length ("): 9¼, 10, 20, 30, 40
- Seal: B = Buna, E = EPDM, T = Teflon®, V = Viton®

Compliance

MOP & NPC



Dimensions & Packaging



Length	Dimensions (± 2mm)			Packaging	
	A (mm)	B (mm)	C (mm)	Box Qty	Box Weight (kg)
9¼"	248	27	67	1	0.5
10"	254	27	67	1	0.5
20"	508	27	67	1	1
30"	762	27	67	1	1.5
40"	1016	27	67	1	2

Laboratory



PAP
PETRO ARTAN PART



Economic Range
Entry Level Reusable Filtration

The cylindrical design provides a simple sleeve of filter media which is protected and supported by a woven mesh and central core. The media, central core and end fitting are welded together to ensure

cartridge integrity and to eliminate the risk of bypass. The cartridge is cleanable and re-useable which makes the Economic ideal for applications requiring low on-going costs.

Key Features

- All-Welded construction for strength and robustness
- 316L Stainless Steel cylindrical mesh allows for easy cleaning and re-use
- Wide range of micron ratings

Typical Applications

- High pressure and high temperature applications
- Aggressive chemical compatibility

Specification

- Efficiency: 80%
- Surface Area: 0.05 m² per 10"
- Max. Operating Temperature: 260°C
- Max. Operating Pressure Differential: 4.2 bar

Materials of Construction

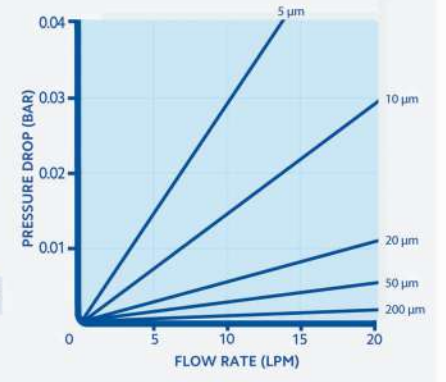
Filter media 316L Stainless Steel	Core 316L Stainless Steel
Support media 316L Stainless Steel	Seal Buna / EPDM / Teflon® / Viton®

Configurations

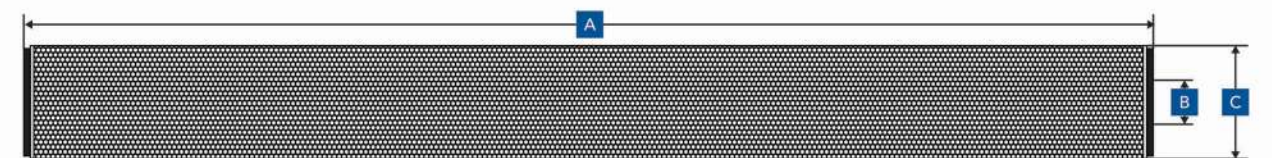
Micron (µm)							
5	10	20	40	75	100	200	
250	500	850					
Length (")							
9¾	10	20	30	40			
Seal							
B = Buna	E = EPDM	T = Teflon®	V = Viton®				

Compliance

MOP & NPC



Dimensions & Packaging



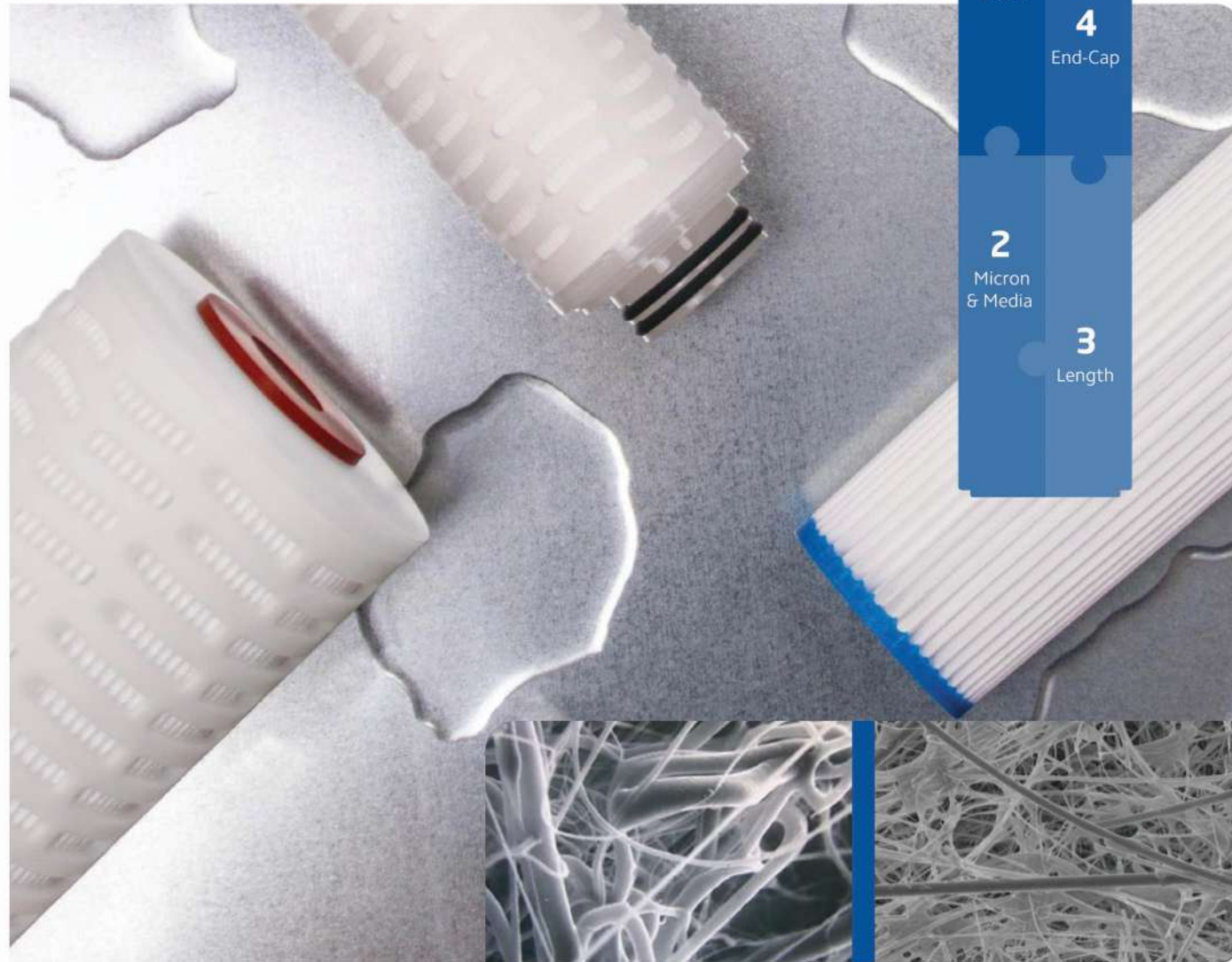
Length	Dimensions (± 2mm)			Packaging	
	A (mm)	B (mm)	C (mm)	Box Qty	Box Weight (kg)
9¾"	248	27	64	1	0.5
10"	254	27	64	1	0.5
20"	508	27	64	1	1
30"	762	27	64	1	1.5
40"	1016	27	64	1	2

Robot Arm Weld



How to Select your Pleated Filter

Four simple steps are all it takes to select a pleated filter.



1 Filtration Grade

Select the filtration grade suitable for your application.



Standard

An entry level mono layer WRAS approved general grade filter.



Premier

Multi-layered, high efficiency superior cartridge for precise classification.



Specialist

Targeted filtration for specific industry requirements.

2 Micron & Media

Select media based on required performance, micron and suitability.

<p>Polyester Offers high flow and low pressure drop 0.5-50 µm 38°C</p>	
<p>Polypropylene 98% efficient cartridge with high dirt holding 0.1-100 µm 82°C</p>	
<p>Glass Fibre 99.99% efficient, suitable for repeated sterilisation 0.45-10 µm 82°C</p>	
<p>Polyethersulfone Absolute bacteria removal to Log 7 reduction 0.05-0.65 µm 82°C</p>	
<p>Polytetrafluoroethylene Hydrophobic media for air, gas and venting 0.1-1 µm 82°C</p>	
<p>Nylon Aggressive chemical compatibility 0.1-1 µm 82°C</p>	
<p>Crypto - Glass Fibre Certified <i>Cryptosporidium</i> removal 0.45-1 µm 82°C</p>	
<p>Bubble Point - PES Beverage grade integrity testable 0.2-1.2 µm 82°C</p>	

3 Length

Choose the cartridge length based on the expected flow rate of the application.

<p>4 7/8" Up to 10 LPM 9 3/4" Up to 15 LPM 20" Up to 30 LPM 30" Up to 45 LPM</p>	<p>40" Up to 60 LPM 9 3/4" BB Up to 50 LPM 20" BB Up to 90 LPM</p>
<p>5" (Junior) Up to 10 LPM</p>	
<p>4 7/8" Up to 10 LPM 9 3/4" BB Up to 50 LPM 20" BB Up to 90 LPM</p>	
<p>9 3/4" Up to 15 LPM</p>	
<p>10" Up to 15 LPM 20" Up to 30 LPM</p>	
<p>30" Up to 45 LPM 40" Up to 60 LPM</p>	
<p>10" Up to 15 LPM 20" Up to 30 LPM</p>	
<p>30" Up to 45 LPM 40" Up to 60 LPM</p>	

4 End-Cap

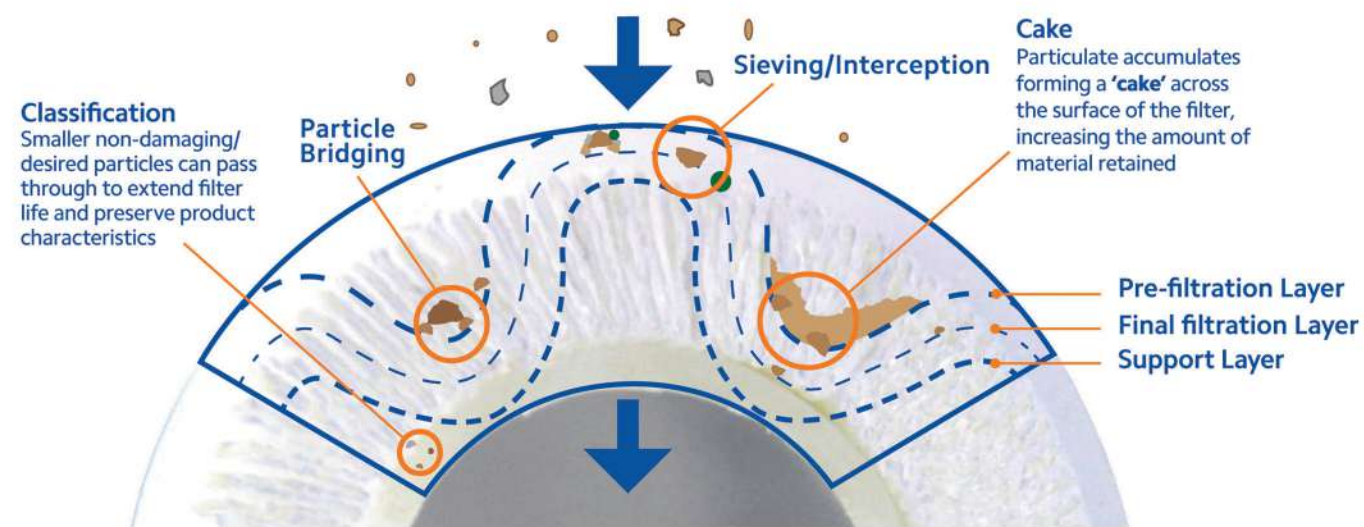
Select an end-cap based on suitability for an existing housing or the required seal.

	Vinyl Plastisol
	A - Open Ended
	C - 213
	E - 222 M - 224
	F - 226
	G - Recessed end
	H - Fin
	Q - 222 with stainless steel support
	Z - 226 with stainless steel support

Pleated Technology

Pleated filters are widely used as effective surface filtration due to their excellent flow rates and high efficiency.

Pleating dramatically increases available surface area whilst maintaining high dirt loading and low pressure drops. Much of the media used in pleated cartridges also has some depth characteristics, thanks to its multi-layer construction, thereby aiding particle retention and classification.

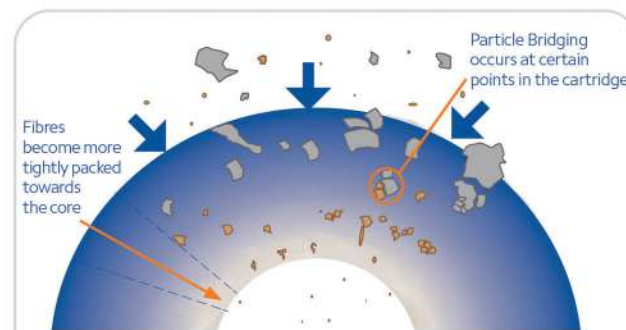


Surface Filtration Technology

Pleated filters are the ideal technology of choice over depth filtration for retention of known or uniformly sized particles.

The Standard (SPE) range of cartridges features a single layer media, which filters on the principles of direct interception and 'caking' where multiple particles accumulate across the media pore. Over time this leads to partial closure, which can increase efficiency and the chance to target finer particles.

The entire Premier range includes support and pre-filtration layers providing an element of depth characteristics. These layers retain larger particles, ensuring the specified micron rating of the cartridge can be utilised for exacting classification.



Depth Filtration Technology

The fibres become more tightly packed throughout a depth cartridge, progressively reducing the size of particles that can pass through the filter.

Advantage: Economic to produce.

Disadvantage: Higher pressure drop means a shorter service life compared to pleated cartridges.

Premier Pleat Construction

The Premier Pleat, Crypto and Bubble Point ranges are all constructed with a rigid inner core and outer polypropylene cage. Offering protection for the pleat pack, the cage also allows a variety of end-caps to be thermally bonded to the cartridge. This secure construction technique prevents bypass, creating a seal strong enough for repeated steam or chemical sterilisation as well as cartridge integrity testing.

Developments in 2018 see a new outer cage design that increases its void volume by over 10%. Whilst maintaining cartridge strength, increasing the open area allows a more uniform distribution of flow across the entire pleat pack ensuring low pressure drop and maximised dirt holding capacity.



Identification

Lot Coded

- Laser etched lot code on membrane and Crypto cartridges
- Traceable back to raw materials

QR Code

- Links directly to further information for each product

Barcode

- Product traceability
- Stock management integration

Packaging

Four Protective Layers

- Vacuum sealed inner packaging
- Tough outer polybag layer provides additional protection
- Individual product boxes
- Heavy duty outer carton

Efficiency

The removal efficiency of a filter is dependent on the criteria at which it is tested, along with the size and type of particulate challenge. The below table shows the efficiency of each PPP when using particle count analysis with AC Fine and AC Coarse Test Dust at various particulate challenges.

Cartridge Micron Rating	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
0.1 µm	95%	96%	98%	99%	99%	99%					
0.2 µm	93%	95%	97%	98%	98%	99%					
0.45 µm	82%	88%	96%	97%	98%	99%	99%				
1 µm	80%	82%	94%	96%	97%	98%	99%	99%			
3 µm				86%	96%	97%	98%	98%	99%		
5 µm					90%	96%	97%	98%	99%	99%	
10 µm							97%	98%	98%	99%	99%
20 µm							91%	97%	98%	99%	99%
30 µm								97%	97%	98%	99%
50 µm									96%	97%	98%
100 µm										95%	97%

Standard Diameter

With over 2000 possible configurations, the 70mm diameter range has the greatest diversity of micron ratings, lengths and end-caps available.



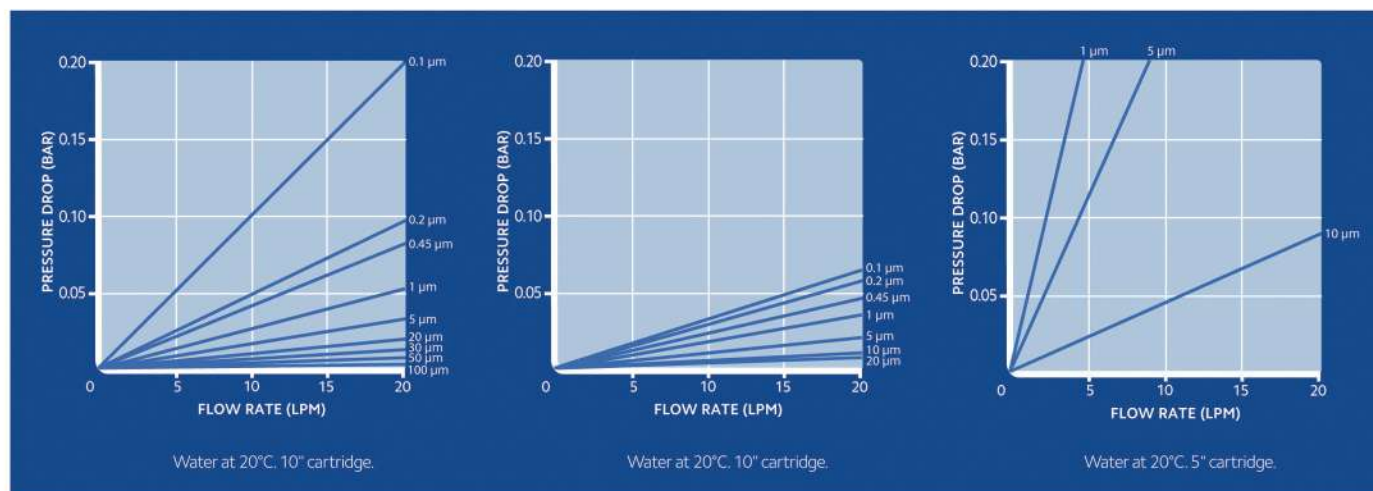
Large Diameter

The PPP-BB, in 9¾" and 20", offers compact high efficiency filtration for flow rates up to 3 times the equivalent 70mm diameter cartridge.



Junior

Designed to retrofit Filterite LMO, Advanta and Nuclepore housings.



Materials of Construction

Filter Media Polypropylene	Core Polypropylene
Support Media Polypropylene	Cage Polypropylene
End-cap Polypropylene Polypropylene with stainless steel ring (Q and Z)	Seal Silicone (as standard)

Compliance

MOP & NPC

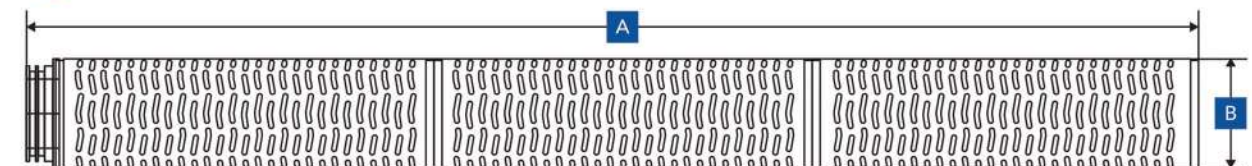
Configurations

Micron (µm)	0.1 0.2 0.45 1 3 5 10
	20 30 50 100
Length (")	4¾ 9¾ 10 20 30 40
	5 = Junior
End-cap	AA CG EG EH FG FH MG
	MH QG ZH 120
Seal	S = Silicone E = EPDM V = Viton®
Diameter	Standard Large = BB

Specification

Efficiency	95-99%
Max. Operating Temperature	82°C
Max. Sterilising Cycles	5 x 20 min cycles at 120°C Requires stainless steel encapsulated end-caps Q (222) and Z (226). Not applicable for Junior and Large Diameter cartridges.
Surface Area	0.56 m ² per 10" 1.55 m ² per 10"BB 0.26 m ² per Junior
Max. Operating Pressure Differential	6 bar at 21°C

Dimensions & Packaging



Length (")	A (mm)					B (mm)	Packaging	
	AA	CG	EG/FG/MG/QG	EH/FH/MH/ZH	120		Box Qty	Box Weight (kg)
4¾	125	114	-	-	-	70	18	2
5 (Junior)	-	-	-	-	136	55	18	4
9¾	248	-	-	-	-	70	9	4
10	-	241	270	310	-	70	9	4
20	508	506	520	560	-	70	9	7
30	750	-	770	810	-	70	9	10
40	1000	-	1020	1060	-	70	9	14
9¾BB	248	-	-	-	-	115	4	3
20BB	508	-	-	-	-	115	4	6

Portable Particle Counter



End-Caps

Pleated Cartridge Configurations

Where product codes indicate an optional end-cap is available, a choice can be made from the following styles. End-cap variations are made to suit housing

designs and application requirements, which dictate the reliability and integrity of the seal, along with the ease of cartridge change out.



AA
Double Open Ended

Open-end gaskets, for use with housings containing a knife edge seal mechanism.



CG
213 with Closed Recess

Single internal O-ring, seals onto housings that have a spigot.



EG / MG
222/224 with Closed Recess

Double external O-rings seal into female housing receiver with a closed, recessed end, which is for housings with spigots.



EH / MH
222/224 with Fin Adaptor

Double external O-rings seal into female housing receiver whilst the Fin locates into housing plate holes to maintain vertical orientation.



FG
226 with Closed Recess

Bayonet type tabs lock into female housing receiver whilst the recessed end locates into housings with spigots.



FH
226 with Fin Adaptor

Bayonet type tabs lock into female housing receiver whilst the Fin locates into housing plate holes to maintain vertical orientation.

Stainless Steel Encapsulated End-Caps



QG
222 with Closed Recess

Suitable for high temperature housings, the QG configuration is suitable for repeated sterilisation and offers one of the best seals possible with its double O-ring fitting and stainless steel insert.



ZH
226 with Fin Adaptor

Suitable for multi-round high temperature housings, the ZH configuration provides the most positive seal with double O-rings and twin locking tabs. The encapsulated stainless steel insert makes the Z fitting suitable for repeated sterilisation.

Seals

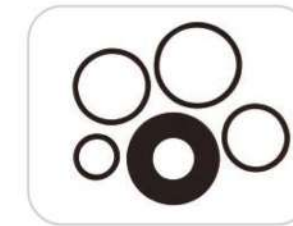
Pleated Cartridge Configurations

Providing a water-tight seal between the housing and cartridge, O-rings and gaskets are essential to the integrity of the filter and come in a range

of materials, including Silicone, EPDM, Teflon® and Viton® to suit most applications.



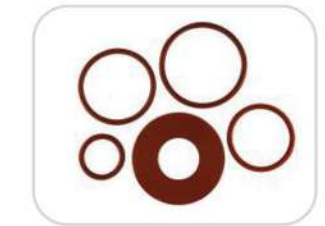
Silicone



EPDM



Teflon®



Viton®

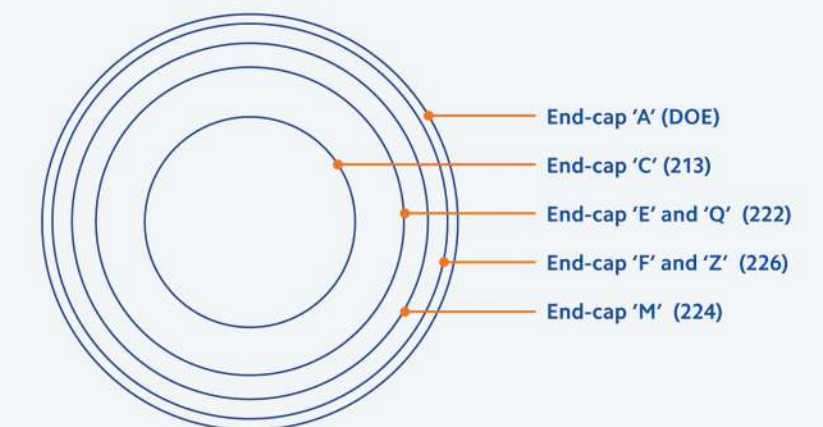
Chemical Compatibility

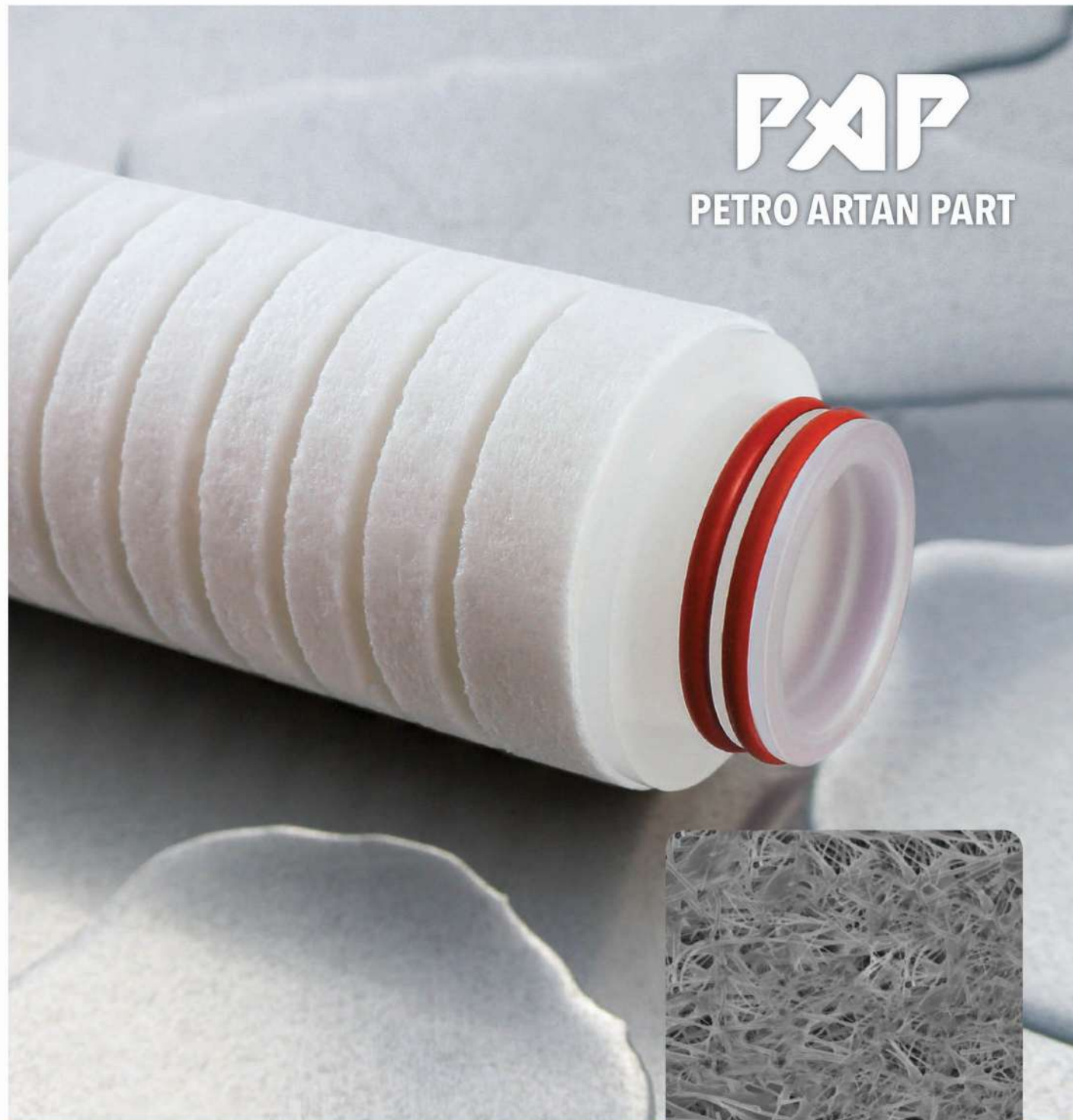
The below table details the different compatibility of each O-ring within different applications. (Source: Cole-Parmer)

	Silicone	EPDM	Teflon	Viton®
Beer	Excellent	Excellent	Excellent	Excellent
Whisky & Wine	Excellent	Excellent	Excellent	Excellent
Deionised Water	Fair	Excellent	Excellent	Excellent
Alcoholic Methyl	Excellent	Excellent	Excellent	Fair
Aromatic Hydrocarbons	Poor	Poor	Excellent	Excellent
Sodium Hydroxide	Excellent	Good	Excellent	Poor
Hydrochloric Acid	Poor	Poor	Excellent	Excellent
Synthetic Hydraulic Oil	Good	Excellent	Excellent	Excellent

O-ring Sizing

This actual size chart is a useful aid in identifying common replacement O-rings. Place your current O-ring onto the chart to match the size required.





PAP
PETRO ARTAN PART

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

Typical Applications

- Food and Beverage
- Chemical manufacture
- Incoming water

Specification

- Efficiency 85%
- Max. Operating Temperature 71°C
- Max. Operating Pressure Differential 2.5 bar at 21°C

Materials of Construction

- Filter Media** Polypropylene
- Core** Polypropylene
- End-cap (Optional)** Polypropylene
- Seal** Silicone (as standard, when end-caps specified)

Compliance

MOP & NPC

Configurations

Micron (µm)

1 5 10 20 50

Length (")

9 ¼ 9 ½ 20 30 40

End-cap

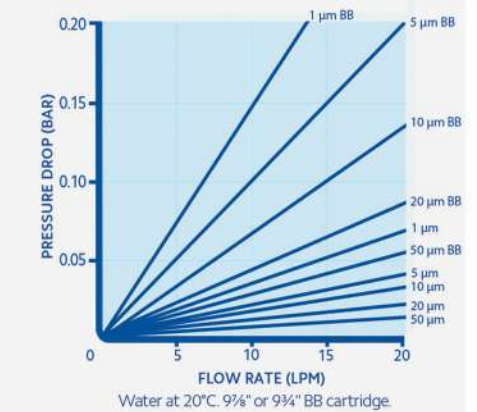
EH ES FH MH MS XK

Seal

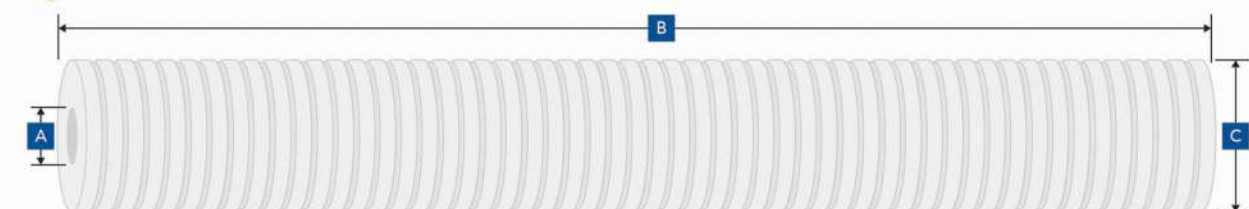
S = Silicone E = EPDM V = Viton®

Diameter

Standard Large = BB



Dimensions & Packaging



Length (")	Dimensions (mm)						C
	A	Blank	EH/MH	ES/MS	FH	XK	
9 ¼	28	250	317	278	322	310	63
20	28	508	575	536	580	568	63
30	28	762	829	790	834	822	63
40	28	1016	1083	1044	1088	1076	63
9 ½ BB	30	248	-	-	-	-	115
20 BB	30	508	-	-	-	-	115

Packaging	
Box Qty	Box Weight (kg)
15	4
15	8
15	12
15	16
4	2
4	4

Desktop Particle Counter





Wound Polypropylene 0.5-150 micron

The most popular wound cartridge media by far, the SPECTRUM wound polypropylene offers broad chemical compatibility and good temperature resistance at low cost. With over 50 years proven experience and in a variety of micron sizes, across standard and large

diameters, the SWP provides a basic filtration solution perfectly suited for first-stage and general particulate reduction. Whilst newer spun technologies offer higher efficiency and longer life cartridges, wounds still exceed filtration standards in many applications.

Key Features

- Tried and tested with over 20 years of experience
- Broad chemical compatibility

Typical Applications

- General particulate filtration
- Sand, silt and rust removal
- Batch process

Specification

- Efficiency 65%
- Max. Operating Temperature 65°C
- Max. Operating Pressure Differential 2 bar at 21°C

Materials of Construction

Filter Media
Polypropylene

Core
Polypropylene

Compliance

MOP & NPC

Configurations

Micron (µm)

0.5 1 5 10 25 50 75

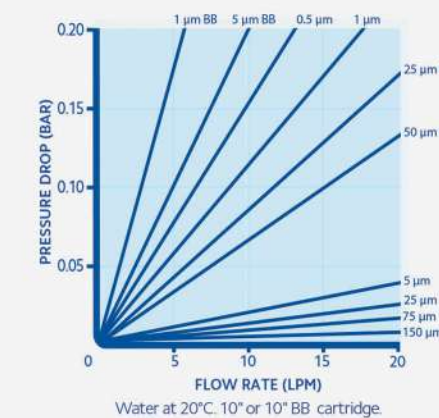
100 150

Length (")

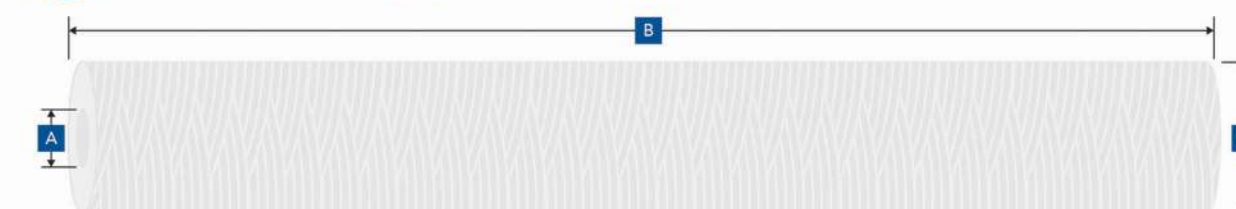
4 1/4 10 20 30 40

Diameter

Standard Large = BB



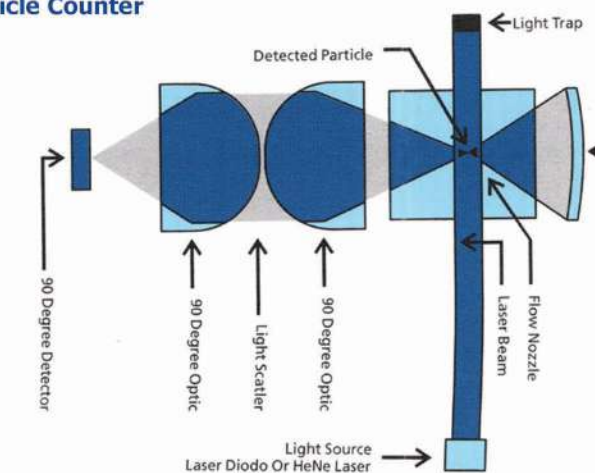
Dimensions & Packaging



Length (")	Dimension (mm)		
	A	B	C
4 1/4	28	124	63
10	28	254	63
20	28	508	63
30	28	762	63
40	28	1016	63
10BB	30	254	115
20BB	30	508	115

Packaging	
Box Qty	Box Weight (kg)
48	5
24	6
24	12
9	7
9	9
4	3.5
4	7

Top Down view of Particle Counter



How to Select Your Bag Filter

Four simple steps are all it takes to select a bag filter.



1 Filtration Grade

Select the filtration grade suitable for your application.



Economic

Single layer media, offering the widest micron range and media choice.



Standard

Effective pre-filter layer extends service life.



Premier

Multi-layer construction for highly efficient particle removal.

2 Micron & Media

Select media based on required performance, micron and reusability.

Economic Polypropylene
Suits majority of general applications
1-200µm 95°C

Economic Polyester
High temperature compatibility
1-200µm 150°C

Economic Nylon
Easy to wash and re-use
50-1000µm 160°C

Standard Polypropylene
Dual layered for increased service life
1-100µm 95°C

Premier Polypropylene
Highest efficiency graded filtration
0.5-25µm 95°C

3 Size

Choose the bag size based on the expected flow rate of the application.

Size 3
Up to 75 LPM

Size 4
Up to 150 LPM

Size 1
Up to 300 LPM

Size 2
Up to 600 LPM

Size 1
Up to 250 LPM

Size 2
Up to 500 LPM

Size 1
Up to 200 LPM

Size 2
Up to 400 LPM

4 Neck Seal

Select a neck ring based on suitability for an existing housing or the required seal.

Polypropylene or stainless steel ring

Industry favourite polypropylene flanged neck

Polypropylene flared neck for most positive seal

Polypropylene flanged neck for a positive housing seal

Polypropylene flanged neck for a positive housing seal



PAP

PETRO ARTAN PART

Media

- Polypropylene Felt (P)**
- Glazed surface finish to prevent fibre migration into the filtrate
 - Broadest chemical compatibility
 - Single layer media with welded seams

- Polyester Felt (E)**
- Excellent for high temperature solvent compatibility
 - Single layer media with welded seams
 - Glazed surface finish avoids fibre migration

- Nylon Mesh (N)**
- Suitable for washing and re-using
 - Monofilament mesh with stitched seams provides a high strength media
 - Binded Seams

Compliance

MOP & NPC

Neck Seal



Ring seal fits a wide range of housings (E/ES)



Industry favourite (retrofit for FSI, GAF and Hayward) flanged neck (S)



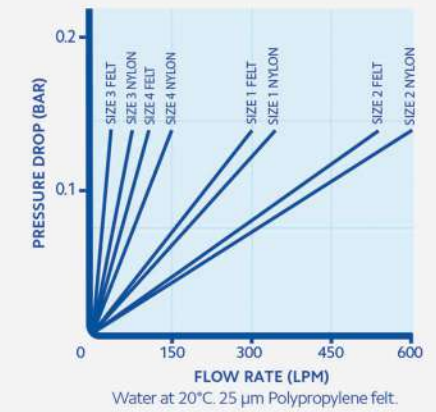
Optimal flanged neck for most positive seal (P)

Specification

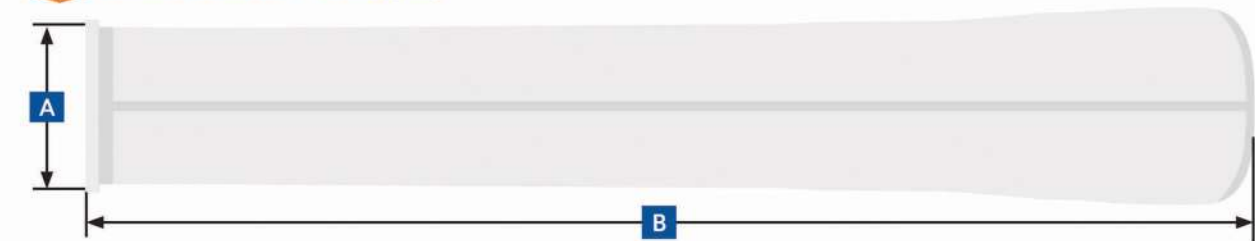
Neck Material
Polypropylene (E, S, P)
Stainless Steel (ES)

Max. Operating Temperature
Polypropylene - 95°C
Polyester - 150°C (with ES Neck)
Nylon - 160°C (with ES Neck)

Max. Operating Pressure Differential
1 bar



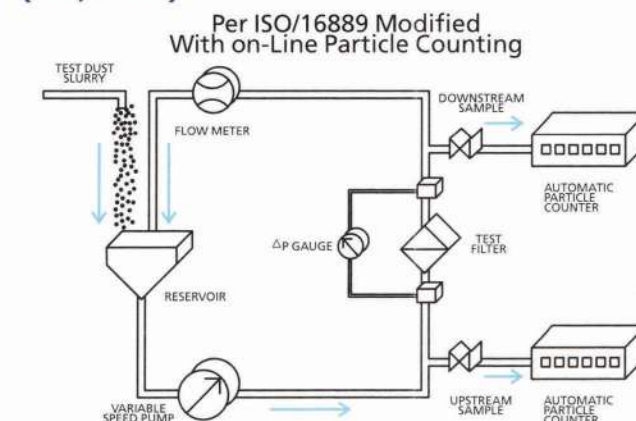
Dimensions & Packaging



Bag Size	Dimensions		
	A (mm)	B (mm)	Area (m ²)
3	102	229	0.07
4	102	356	0.12
1	178	406	0.23
2	178	813	0.41

Box Qty	Packaging		
	Box Weight (kg) Polypropylene	Box Weight (kg) Polyester	Box Weight (kg) Nylon
50	3	3	2
50	4	4	2
50	8	8	3
50	15	15	4

On-Line Particle Counter (ISO/16889)



Economic Range

1-1000 micron

Utilising a traditional single layer manufacturing method, the SPECTRUM Economic range offers the greatest option in terms of filtration media and neck seal type, providing a suitable solution for most bulk solid removal applications.

Economic felt bags also benefit from an all welded seam construction, meaning they are capable of holding several kgs whilst maintaining filter integrity. Heavy duty handles make changeouts simple, avoiding operator contact with the unwanted filtrate.

Flow rates up to 150 LPM

Inox Size 3 & 4 Housing

Size 3 and 4 bag filters are ideally suited to batch processes or multi-line applications where economic costs and frequent changeouts are required. The

reduced footprint of a size 3 and 4 bag housing also makes these suitable for applications with space limitations.

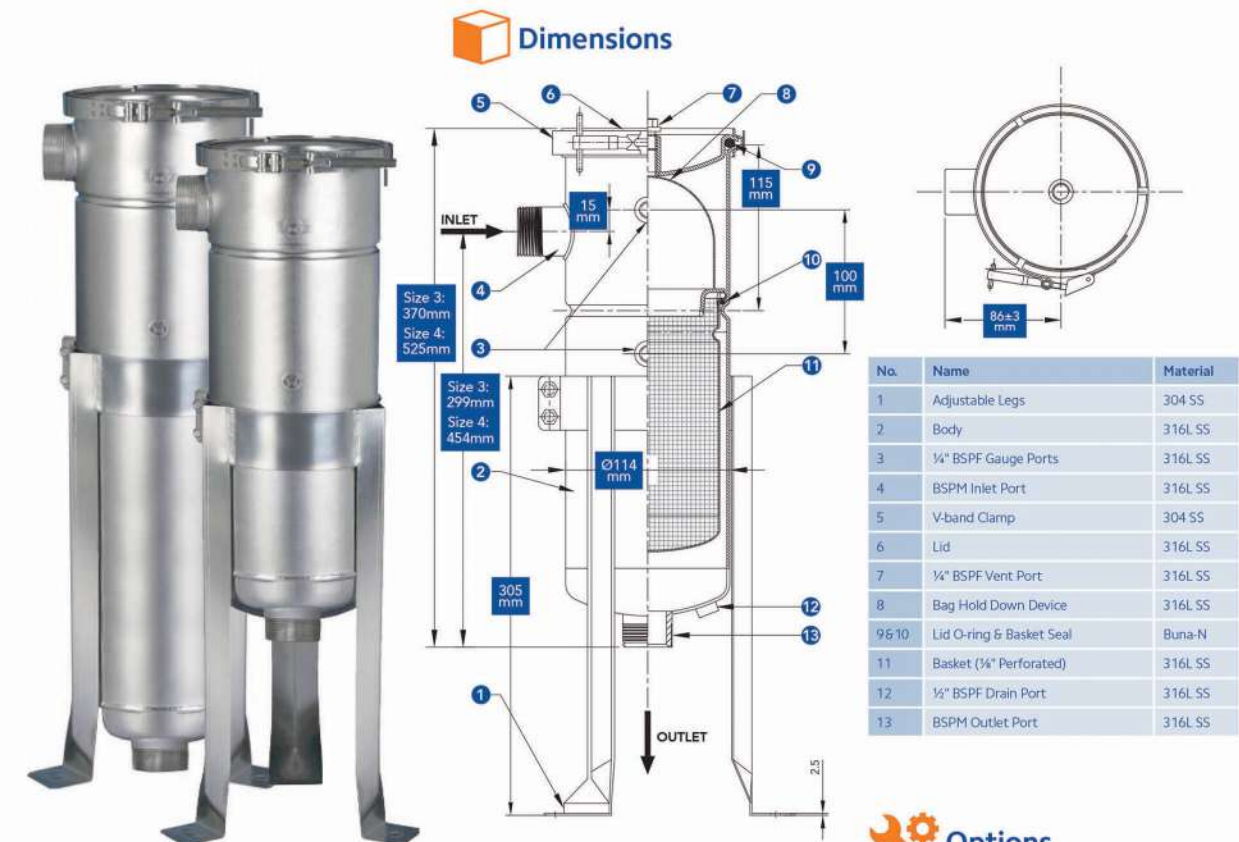


No. of Bags	Bag Size	Port Size	Gauge Ports	Gauges	Mounting Legs	Weight (kg)
1	3	1.5"	✓	Optional	✓	5
1	4	1.5"	✓	Optional	✓	10

Specification

Pressure Rating
10 bar
Material
Polycoated 316L Stainless Steel
Temperature Rating
120°C

Standard Housing



Options



Gauges (PG3)
11 bar 1/4" glycerine filled stainless steel back mounted pressure gauge.

Flow rates up to 300 LPM

Inox Size 1 Housing

The SPECTRUM size 1 stainless steel housings range come available in both Standard, v-band clamp closure and Premier, swing-bolt configurations.

Premier housings come complete with pressure gauges providing essential pressure drop information to effectively monitor system performance.



No. of Bags	Bag Size	Port Size	Gauge Ports	Gauges	Mounting Legs	Weight (kg)
1	1	2" BSPM	✓	Optional	✓	19
1	1	3" BSPM	✓	Optional	✓	19
1	1	2" BSPM	✓	✓	✓	29
1	1	3" BSPM	✓	✓	✓	29
1	1	2" DN50	✓	✓	✓	34
1	1	3" DN80	✓	✓	✓	34

Specification

Pressure Rating
10 bar

Material
Polycoated 316L Stainless Steel

Temperature Rating
120°C

Standard Housing

Dimensions

3 MOUNTING LEGS
120° APART
Ø12.7mm HOLES

Ø322.5 mm

100 mm INLET

150 mm

34 mm

108 mm

737 mm

560 mm

Ø202 mm

OUTLET

No.	Name	Material
1	Adjustable Legs	304 SS
2	Body	316L SS
3	¼" BSPF Gauge Ports	316L SS
4	BSPM Inlet Port	316L SS
5	V-band Clamp	304 SS
6	Lid	316L SS
7	¼" BSPF Vent Port	316L SS
8	Bag Hold Down Device	316L SS
9	Lid O-ring	Buna-N
10	Basket (¼" Perforated)	316L SS
11	½" BSPF Drain Port	316L SS
12	BSPM Outlet Port	316L SS

Options



Gauges (PG3)
11 bar ¼" glycerine filled stainless steel back mounted pressure gauge.

Premier Housing

Dimensions

3 MOUNTING LEGS
120° APART
Ø12.7mm HOLES

Ø322.5 mm

108 mm INLET

150 mm

34 mm

108 mm

494 mm

705 mm

OD Ø195mm
ID Ø191mm

OUTLET

No.	Name	Material
1	Adjustable Legs	304 SS
2	Body	316L SS
3	¼" BSPF Gauge Ports with Gauges	316L SS
4	BSPM/Flange Inlet Port	316L SS
5 & 6	Swing-bolt Nut & Pin	316L SS
7	¼" BSPF Vent Port	316L SS
8	Lid	316L SS
9	Bag Hold Down Device	316L SS
10	Lid O-ring	Buna-N
11	Basket (¼" Perforated)	316L SS
12	½" BSPF Drain Port	316L SS
13	BSPM/Flange Outlet Port	316L SS

Options



Flange Connections
DN50 and DN80 316L stainless steel flange connections for ease of installation and to provide security at higher flow rates.

Flow rates up to 600 LPM

Inox Size 2 Housing

The largest of the single-round range, the size 2 stainless steel bag housings provide a solution to high flow rate and bulk solid removal applications.

With high dirt loading capabilities, systems and processes can stay online for longer.



No. of Bags	Bag Size	Port Size	Gauge Ports	Gauges	Mounting Legs	Weight (kg)
1	2	2" BSPM	✓	Optional	✓	26
1	2	3" BSPM	✓	Optional	✓	26
1	2	2" BSPM	✓	✓	✓	35
1	2	3" BSPM	✓	✓	✓	35
1	2	2" DN50	✓	✓	✓	40
1	2	3" DN80	✓	✓	✓	40

Specification

Pressure Rating
10 bar

Material
Polycoated 316L Stainless Steel

Temperature Rating
120°C

Standard Housing

Dimensions

3 MOUNTING LEGS
120° APART
Ø12.7mm HOLES

Ø322.5 mm

100 mm INLET

34 mm

150 mm

108 mm

Ø202 mm

1132 mm

955 mm

OUTLET

No.	Name	Material
1	Adjustable Legs	304 SS
2	Body	316L SS
3	¼" BSPF Gauge Ports	316L SS
4	BSPM Inlet Port	316L SS
5	V-band Clamp	304 SS
6	Lid	316L SS
7	¼" BSPF Vent Port	316L SS
8	Bag Hold Down Device	316L SS
9	Lid O-ring	Buna-N
10	Basket (¼" Perforated)	316L SS
11	½" BSPF Drain Port	316L SS
12	BSPM Outlet Port	316L SS

Options

Gauges (PG3)
11 bar ¼" glycerine filled stainless steel back mounted pressure gauge.

Premier Housing

Dimensions

3 MOUNTING LEGS
120° APART
Ø12.7mm HOLES

Ø322.5 mm

INLET

108 mm

34 mm

34 mm

1095 mm

884 mm

OD Ø195mm
ID Ø191mm

OUTLET

No.	Name	Material
1	Adjustable Legs	304 SS
2	Body	316L SS
3	¼" BSPF Gauge Ports with Gauges	316L SS
4	BSPM/Flange Inlet Port	316L SS
5 & 6	Swing-bolt Nut & Pin	316L SS
7	¼" BSPF Vent Port	316L SS
8	Lid	316L SS
9	Bag Hold Down Device	316L SS
10	Lid O-ring	Buna-N
11	Basket (¼" Perforated)	316L SS
12	½" BSPF Drain Port	316L SS
13	BSPM/Flange Outlet Port	316L SS

Options

Flange Connections
DN50 and DN80 316L stainless steel flange connections for ease of installation and to provide security at higher flow rates.

Flow rates up to 4,000 LPM

Inox Multi-Round Housing

Designed to suit industry standard size 2 bag filters, multi-round heavy duty housings are suited to high-volume, high dirt-loading and demanding applications.

Each housing utilises a swing-bolt closure system, davit arm assembly and pressure gauges supplied as standard to simplify bag filter operation and changeouts.

No. of Bags	Bag Size	Port Size	Gauge Ports	Gauges	Mounting Legs	Weight (kg)
2	2	3" DN80	✓	✓	✓	105
3	2	4" DN100	✓	✓	✓	135
4	2	4" DN100	✓	✓	✓	170
5	2	4" DN100	✓	✓	✓	265
6	2	6" DN150	✓	✓	✓	300

Specification

Pressure Rating
10 bar

Material
Polycoated 316L Stainless Steel

Temperature Rating
120°C

Premier Housing



Davit Arm

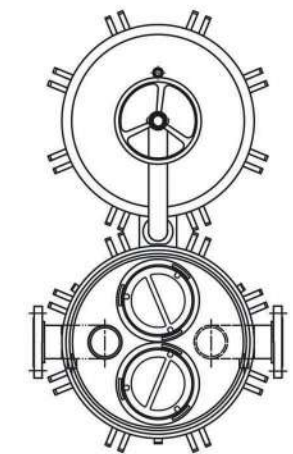
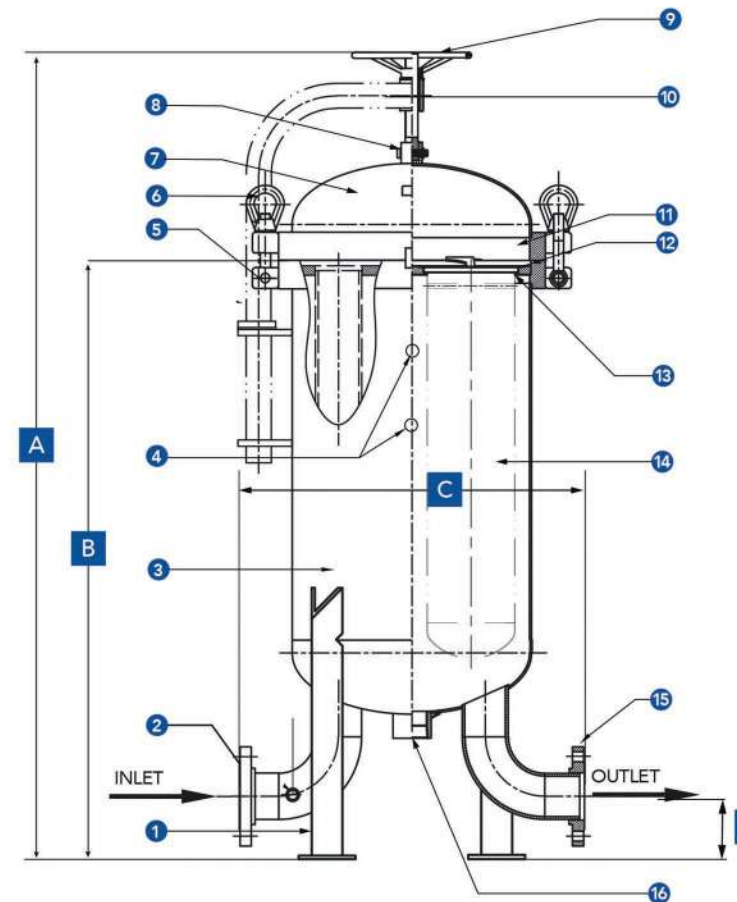
Included as standard, the davit lifting arm improves operator safety, whilst making filter change-out quicker, cleaner and more efficient.



Precise Design

The engineered design ensures each bag is securely fitted and held in place, providing a positive seal to minimise particulate bypass.

Dimensions



No.	Name	Material
1	Mounting Legs	304L SS
2	Flange Inlet	316L SS
3	Body	316L SS
4	1/4" FNPT Gauge Ports with Gauges	316L SS
5 & 6	Eyebolt Nut & Pin	Zinc Plated Steel
7	Lid	316L SS
8	1/2" FNPT Vent Port	316L SS
9&10	Handle & Davit Arm	Zinc Plated Steel
11&12	Basket Seal	Buna-N
13	Bag Hold-Down Device	316L SS
14	Basket (1/8" Perforated)	316L SS
15	Flange Outlet	316L SS
16	1/4" FNPT Drain Port	316L SS

Flow Rate (LPM)	A (mm)	B (mm)	C (mm)	D (mm)
800	1540	1143	660	120
1350	1589	1155	762	127
1800	1589	1155	762	127
2250	1761	1087	850	233
3400	1761	1168	990	152

Stainless Steel Multi-Round Housings

From 3 round to 36 round

Offered in two versions, Standard and Premier, excepting flow rates from 11 to 3600 lpm. The Premier range incorporates swing bolt closures and, in the larger sizes, a davit arm assembly, for easy and safe housing maintenance. The Premier range is supplied with pressure gauges as well as DN flanged connections for simple line connection. The Standard range is manufactured from the same high quality material and to the same design standards as the Premier range, however the closing device is the industry accepted V-band clamp and the ports are threaded. To provide the flexibility both the Premier and Standard ranges are supplied complete with a universal cartridge plate.



Maximum Flowrate Capacity



Legs

Supplied as standard on all housings, enabling housing to be secured to the floor for safety and security.

Standard Features

V-Band Clamp



Premier Features

Davit Arm Assembly



Swing Bolts



Pressure Gauges



Baffle Plate

Placed on the inlet, the baffle plate deflects the water up into the housing, distributing flow across all cartridges.

Pressure Gauges

Allows for easy monitoring of differential pressure.



Stainless Steel Multi-Round Housings

Premier

Designed with the user in mind, the swing bolt and hinged lid or Davit arm assembly enables cartridge changeout to be achieved with no loose parts, heavy lifting or tools required. Manufactured with lids weighing up to 60 kg, these heavy-duty housings ensure all health and safety angles are covered by this Premier housing feature, whilst also providing reduced labour operation for engineers carrying out cartridge changeouts. Extensive stock holding, along with complete technical back up, ensures confidence in finding the correct housing for each application. All housings come complete with a universal plate which is capable of accepting both DOE and 222 fittings.



Cartridge Compatibility

Designed to enhance the performance of the SPECTRUM cartridge range, whilst accommodating all industry standard cartridges.



Which Size Housing?

SPECTRUM Premier multi-round housings range in size from 7 round to 36 round, with flow rates from 27 to 3600 litres per minute.



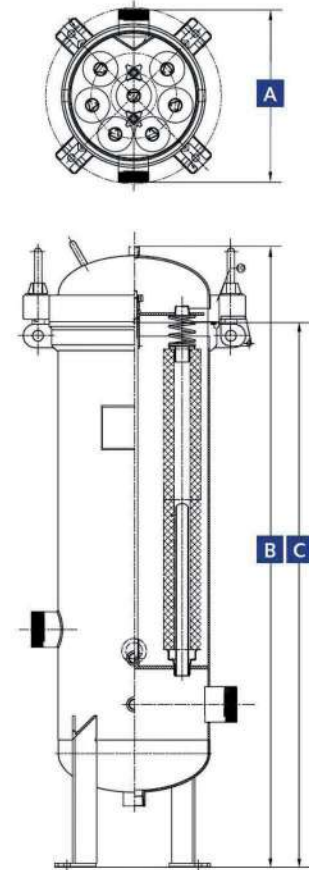
Multi-Round Inox Filter Housings

Premier - 7 Round

The Premier range benefits operators with a swing bolts and hinged lid configuration which keep the head secured to the vessel during cartridge changeout. Additional drain ports also assist cartridge changeout allowing for complete emptying of the housing, while the supplied pressure gauges provide accurate differential pressure readings for filter monitoring. The 7 round housings accept seven cartridges in 30" or 40" with 2" BSPM inlet and outlet connections with the 40" being the first in the range to be available with 3" flanged connection.



Technical Drawing



Key Features

- Swing bolt closure for a secure seal
- Universal cartridge adaptors securely hold 222, DOE or AA cartridges
- Drain ports allow for quick and easy cartridge change-outs
- Protective polycoat finish

Flow Rate (lpm)

	Carbon	Depth	Pleated
30"	80	420	525
40"	106	560	700

Specification

Port Sizes (")

2 BSPM	3F DN80 Flange
-----------	----------------------

Cartridge Compatibility (")

30	40
----	----

End-Cap Compatibility



Temperature (°C)

120

Pressure Rating (bar)

10

Materials

Head & Body - 316L Stainless Steel - Polycoated
Eye Nut & Swing Bolt - 304 & Zinc Plated Steel
Legs - 304 Stainless Steel
O-Ring - Buna-N



Description	Box Weight (kg)
PAP INOX Premier Filter Housing 7 X 30" 2" BSPM with Gauges	50
PAP INOX Premier Filter Housing 7 X 40" 2" BSPM with Gauges	55
PAP INOX Premier Filter Housing 7 X 40" 3" DN80 Flange with Gauges	57

Multi-Round Inox Filter Housings

Premier - 12 Round

Larger Premier housings, starting from the 12 round, offer additional peace-of-mind by utilising a swing bolt and Davit arm assembly. This feature, safely and effortlessly moves the housing lid to one side during changeout, eliminating the need for heavy lifting and significantly reducing downtime. Accommodating flowrates up to 1200 litres per minute, these housings include 3" DN80 inlet and outlet connections on the 12 x 30" version and 4" DN100 on the 12 x 40". Drain ports for complete emptying of the housing during changeout and pressure gauges to provide accurate differential pressure readings for filter monitoring.



Technical Drawing



Key Features

- Swing bolt closure for a secure seal
- Universal cartridge adaptors securely hold 222, DOE or AA cartridges
- Drain ports allow for quick and easy cartridge change-outs
- Protective polycoat finish

Flow Rate (lpm)

	Carbon	Depth	Pleated
30"	137	720	900
40"	182	960	1200



Specification

Port Sizes (")

3F DN80 Flange	4F DN100 Flange
-------------------	--------------------

Cartridge Compatibility (")

30	40
----	----

End-Cap Compatibility



Temperature (°C) Pressure Rating (bar)

120	10
-----	----

Materials

Head & Body - 316L Stainless Steel - Polycoated
Eye Nut & Swing Bolt - 304 & Zinc Plated Steel
Legs - 304 Stainless Steel O-Ring - Buna-N

Description	Box Weight (kg)
PAP INOX Premier Filter Housing 12X30" 3" DN80 Flange with Gauges	129
PAP INOX Premier Filter Housing 12X40" 4" DN100 Flange with Gauges	137

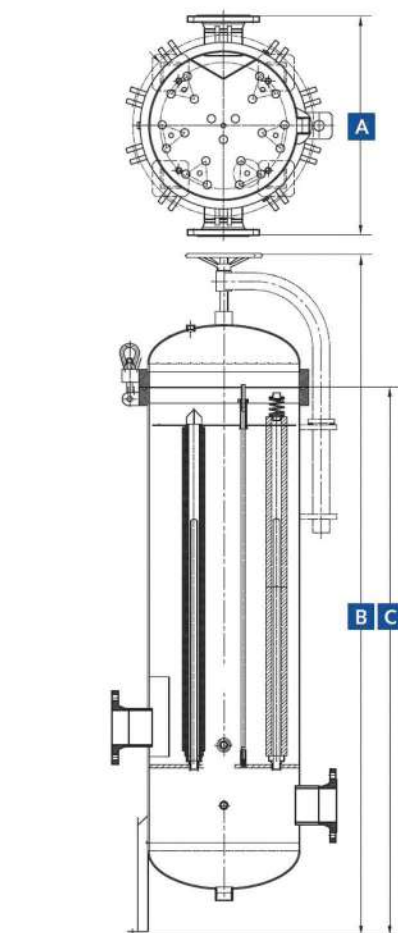
Multi-Round Inox Filter Housings

Premier - 21 Round

The 21 round housing utilises a swing bolt and Davit arm assembly to safely and effortlessly move the housing lid to one side, eliminating the need for heavy lifting and significantly reducing downtime during changeout. Providing effective filtration equivalent to 84 10" cartridges, this housing is supplied with 4" DN100 inlet and outlet connections, drain ports for complete emptying of the housing during changeout and pressure gauges to provide accurate differential pressure readings for filter monitoring.



Technical Drawing



Key Features

- Swing bolt closure for a secure seal
- Universal cartridge adaptors securely hold 222, DOE or AA cartridges
- Drain ports allow for quick and easy cartridge change-outs
- Protective polycoat finish

Flow Rate (lpm)

	Carbon	Depth	Pleated
30"	239	1260	1575
40"	319	1680	2100



Specification

Port Sizes (")

4F
DN100 Flange

Cartridge Compatibility (")

30 40

End-Cap Compatibility



Temperature (°C)

120

Pressure Rating (bar)

10

Materials

Head & Body - 316L Stainless Steel - Polycoated
Eye Nut & Swing Bolt - 304 & Zinc Plated Steel
Legs - 304 Stainless Steel
O-Ring - Buna-N

Description	Box Weight (kg)
PAP INOX Premier Filter Housing 21X30" 4" DN100 Flange with Gauges	218
PAP INOX Premier Filter Housing 21X40" 4" DN100 Flange with Gauges	237

High Flow vs Traditional Cartridges

Enhanced Design

- Offers up to 350% higher flowrate than regular diameter cartridge alternatives
- Reduced footprint can provide the perfect solution to limited floorspace installations
- Swing-bolt closures allow tool-free changeout, significantly reducing valuable labour time

Reduced Costs

- Engineered housings allow higher flow rates in a comparably smaller design offering significant cost savings
- Replacement high flow cartridges can cost over 80% less than regular diameter cartridges for the same flow rate system

1 Round 1300 lpm

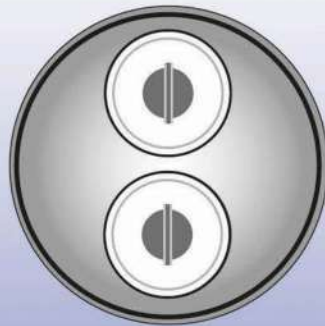


1 High Flow Cartridge

VS

13 Pleated Cartridges
(40" Length)

2 Round 2600 lpm

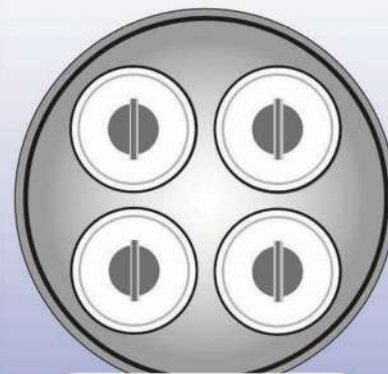


2 High Flow Cartridges

VS

26 Pleated Cartridges
(40" Length)

4 Round 5200 lpm

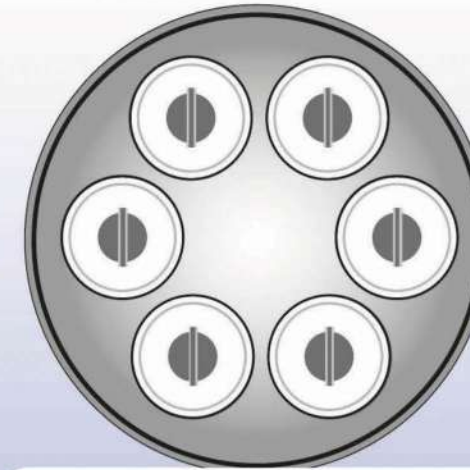


4 High Flow Cartridges

VS

52 Pleated Cartridges
(40" Length)

6 Round 7800 lpm

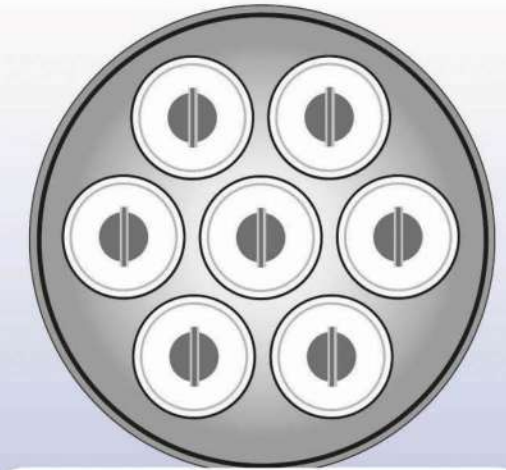


6 High Flow Cartridges

VS

78 Pleated Cartridges
(40" Length)

7 Round 13,300 lpm

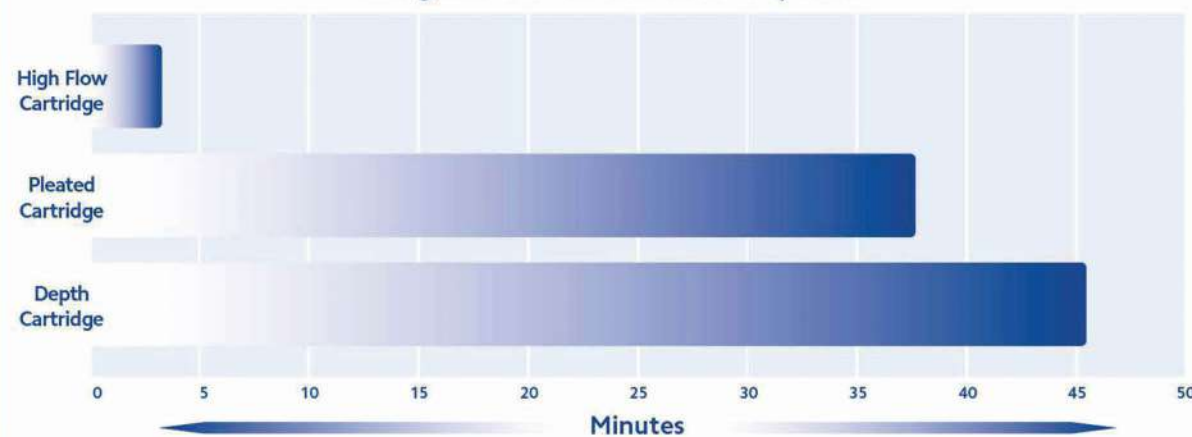


7 High Flow Cartridges

VS

133 Pleated Cartridges
(40" Length)

Changeout time for a 1300 LPM system



Higher Dirt Holding

- Increased surface area and multi-layered graded density filter matrix provides greater dirt holding capacity
- A single 40" high flow cartridge can hold as much as 7kg of dirt, equivalent to almost 5 x 40" regular cartridges
- Increased dirt holding capacity results in fewer changeouts and less system downtime

Simple to Install

- Simple to install, highflow cartridges have an ergonomic and robust handle for easy changeout
- 6" diameter pleated design creates massive surface area allowing huge flow rates and low pressure drops
- Inside-to-out flow pattern ensures particulate is retained within the cartridge during changeout



Inox High Flow Filter Housings

Features

Manufactured from 316L stainless steel, the PAP Inox High Flow range is supplied with a host of easy-to-use features such as swing bolt and Davit arm closure mechanisms for reduced change out time, included pressure gauges for accurate pressure drop monitoring, a housing top plate to reduce bypass and flanged inlet and outlet ports to suit typical industry pipework.

Cartridge Compatibility

PAP High Flow filters are high surface area filters developed to suit large scale applications where maximum efficiency is required.



Gauges

Pressure gauges (supplied as standard) optimise service life, acting as a visual indicator for cartridge changeout.



Pressure Vent

Used to depressurise the housing and allow safe handling.

Housing Body

316L stainless steel body with glass beaded finish provides durability.

Top Plate

Once cartridges are installed a top plate is fitted for safety and security to prevent bypass.



Mounting Legs

Heavy duty, stainless steel, saddle style legs bolt to the floor, offering stability and security.

Drains

Enables efficient draining of the unit to allow quick and easy changeout.

Davit Arm Assembly

Manufactured as standard on all multi-round systems, the Davit arm assembly enables quick cartridge changeout and safe operation.



Flange

Supporting easy engineering and high flow rates, all multi-round systems come with flanged connections.

