

PEPLYN HD Filter Cartridges

- liquid filters
- polypropylene

The two ways to increase the lifetime of a filter are to increase the amount of contamination it can handle, or to improve the effectiveness of cleaning procedures.

PEPLYN HD combines both of these capabilities in an advanced pleated construction. PEPLYN HD utilises high depth pleated polypropylene media that balances high contaminant loading capacity with efficient cleaning.

Capture of particles is throughout the depth of the media, larger particles being retained in the outer prefiltration layers, whilst the inner graded density PEPLYN media provides accurately defined retention under wide extremes of operating conditions. The lifetime of PEPLYN HD is enhanced by its ability to withstand frequent backwash cleaning.

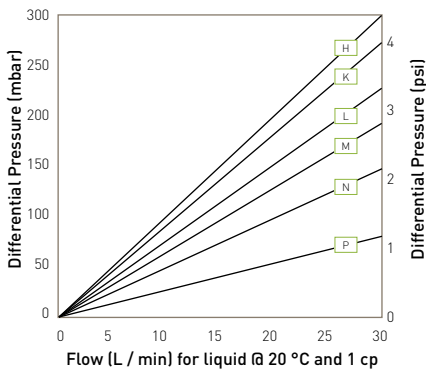
Features and Benefits

- Raw water filtration for the protection of downstream process such as RO membranes
- Trap filtration removing pre-coat and body fed particles that have been released from powder filters
- Removal of carbon and resin fines downstream from treatment processes



Note: PEPLYN is a registered trademark of Parker domnick hunter

Performance Characteristics



For K size for a given flow rate multiply 10" size differential pressure by 2

10" Size (250 mm) Cartridge

Specifications

Materials of Construction

- Filtration Media: Polypropylene
- Prefilter Media: Polypropylene
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: Polypropylene
- Outer Protection Cage: Polypropylene
- End Caps: Polypropylene
- End Cap Insert (if applicable): 316L Stainless Steel
- Standard o-rings/gaskets: Silicone / EPDM
- Capsule Body: Polypropylene
- Capsule Vent Seals: Silicone

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature °C	Temperature °F	Max. Forward dP (bar)	Max. Forward dP (psi)
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
>100 (steam)	>212 (steam)	0.3	4.0

Capsules may be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 barg (72.51 psig) for liquids and 4.0 barg (58.01 psig) in air / gas.

Effective Filtration Area (EFA)

10" (250 mm) 0.3 m² (3.22 ft²)

Cleaning and Sterilisation

PEPLYN HD cartridges can be repeatedly steam sterilised in situ or autoclaved at up to 135 °C (275 °F). They can be sanitised with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals. Capsules can be repeatedly autoclaved up to 135 °C (275 °F).

For detailed operational procedures and advice on cleaning and sterilisation, please contact the Technical Support Group through your usual Parker domnick hunter contact.

Retention Characteristics

The retention characteristics of PEPLYN HD filter cartridges have been determined by a single-pass technique using suspensions of ISO 12103 Pt. 1 A2 Fine and A4 Course test dust in water.

Efficiency Beta Ratio	Micron Rating at Various Efficiencies					
	10000	5000	1000	100	20	10
H	4.8	4.0	3.2	2.6	1.9	1.6
K	9.0	8.2	6.9	5.0	3.7	3.4
L	12.0	10.0	7.8	5.9	4.6	4.0
M	14.0	10.0	9.2	6.9	6.1	5.0
N	17.0	14.0	12.0	9.0	7.0	6.0
P	22.0	18.0	15.0	12.0	9.4	6.8

Recommended Rinse Volume

Prior to use - 10 litres per 10" (250 mm) filter cartridge.



Ordering Information

Cartridges

PHD - [] - [] N - [] - [] - []

Code Length (Nominal)	Retention Rating	Code Endcap (10")	Code Format	Code O-rings
B 2.5" (65 mm)	H M	B dh DOE	A 10" Modular	E EPDM
A 5" (125 mm)	K N	C BF / 226 Bayonet	D Demi	S Silicone
K 5" (125 mm)	L P	G Recess / 222		
1 10" (250 mm)		R BF / 222 Bayonet		
2 20" (500 mm)				
3 30" (750 mm)				
4 40" (1000 mm)				

Code Endcap (Demi)
T TRUESEAL
Y Demi Stub
Z Demi A & B Std

Capsules

PHD - [] - [] N - [] - [] - []

Code Length (Nominal)	Retention Rating	Code Inlet Connection	Code Outlet Connection	Code Vent / Drain Seals
E 4.4" (113 mm)	H M	T 1" Tri-Clamp	T 1" Tri-Clamp	S Silicone
B 5.5" (140 mm)	K N	N 1/2" NPT Male	N 1/2" NPT Male	
A 7.9" (200 mm)	L P	H 1/2" Hosebarb	H 1/2" Hosebarb	
		G Stepped Hosebarb	G Stepped Hosebarb	
		M 1/4" NPT Male	M 1/4" NPT Male	
		V 3/8" NPT Female	V 3/8" NPT Female	

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