PEPLYN HA Filter Cartridges

- liquid filters
- polypropylene





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 HA combines both of these features in its advanced pleated construction.

PEPLYN HA utilises polypropylene filter media and support materials, which balance a high surface area and closely controlled porosity, in a configuration that maximises the cleaning efficiency of the cartridge.

Capture of larger particles is predominantly on the surface of the media, where the rigid, open pleat structure ensures that backwash cleaning provides effective removal. Smaller particles are retained throughout the depth of the graded density PEPLYN media, providing accurately defined retention under wide extremes of operating conditions.

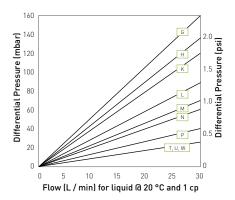
Features and Benefits

- Ideally suited for raw water filtration where the longevity of the filter can be enhanced by repetitive backwashing
- Trap filtration (also known as police or guard filtration) removing precoat and body fed particles that have been released from powder filters, for example; in a brewing process
- Removal of carbon and resin fines downstream from treatment processes
- Clarification of CIP solutions prior to their use with fine prefilter cartridges and microporous membranes



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
 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
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		Max. Forward dP		
°C	°F	(bar)	(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) 0.7 m² (7.53 ft²)

Cleaning and Sterilisation

PEPLYN HA 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 HA 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.

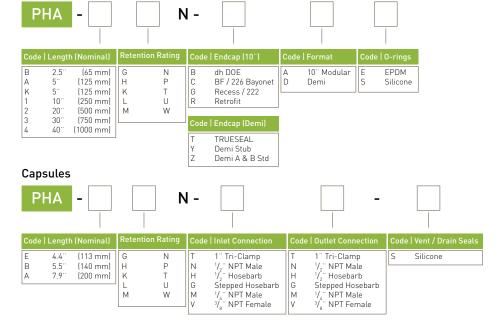
Efficiency Beta Ratio			ng at Vari 99.90% 1000	ous Effic 99% 100	iencies 95% 20	90% 10
G	3.0	2.8	1.8	1.0	0.9	0.7
Н	5.0	4.7	4.5	3.5	2.3	1.0
K	10.0	8.0	7.0	4.8	3.8	2.8
L	15.0	12.0	10.0	7.2	6.0	4.5
М	20.0	16.0	14.0	10.0	8.0	6.0
N	25.0	20.0	17.0	12.0	9.0	7.0
P	32.0	27.0	24.0	18.0	13.0	10.0
Т	50.0	40.0	34.0	28.0	20.0	17.0
U	70.0	55.0	50.0	40.0	30.0	25.0
W	125.0	100.0	80.0	70.0	50.0	40.0

Recommended Rinse Volume

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

Ordering Information

Cartridges



Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any atteration. This publication is for general information only and customers are requested to contact our Process Filtration Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's Standard conditions of sale.