ZCore*

FACT SHEET

Z.Plex* Technology Depth Filter for High Temperature Applications

Features and Benefits

- Greater contaminant capacity compared to filters with equivalent removal efficiency. (Note: 90% removal efficiency at rating using ASTM F-795 Retention based on Veolia efficiency test protocol).
- Resists contaminant unloading even at high differential pressures.
- Engineered specifically for high temperature filtration. High Temperature Capability (table 3).
- Unique construction maintains structural integrity while significantly increasing dirt holding capacity.
- Polypropylene core greatly enhances strength and temperature resistance.
- Melt-bonded exterior ensures no media migration and prevents premature surface blinding.

Applications

- High temperature applications
  - Food and beverage
  - Chemicals
  - Oil and gas
- High viscosity fluids filtration
- High pressure drop applications

Specifications

Table 1: Specifications and Performance Information

Ratings	0.5, 1, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50, 75, 100, 120, 150, 200 microns (nominal)	
Inner Diameter		1.1 in (2.79 cm)
Outer Diameter	0.5-3 micron	2.75 in (6.99 cm)
	5-200 micron	2.55 in (6.48 cm)
Lengths		
10 in (25.4 cm)		30 in (76.2 cm)
20 in (50.8 cm)		40 in (101.6 cm)
Longer lengths up to 70 in may be available upon request		
Materials of Construction		
Filter Media		Polypropylene
Adapters		Polypropylene
Elastomer		Buna, EPDM, Silicone, Viton[1] Santoprene[2] (flat gasket only)
Performance Conditions		
Maximum pressure drop:		
60 psid (4.1 bar) @ 86°F (30°C)		
25 psid (1.7 bar) @ 150°F (66°C)		
15 psid (1.0 bar) @ 180°F (82°C)		
Recommended change-out pressure drop:		
35 psid (2.4 bar) @ 77°F (25°C)		

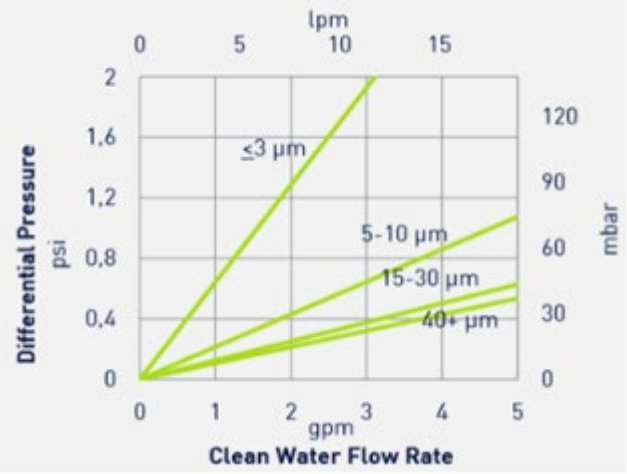
Efficiency Information

Table 2: Removal efficiency based on a modified ASTM 795 procedure

Micron Rating (nominal)	Removal Rating (µm) Efficiency 90.0%
≤1 µm	2.4
3 µm	4.4
5 µm	11.6
10 µm	13.7
15 µm	18.2
20 µm	24.5

Table 3: Operational Limits

Maximum forward differential pressure	15 psid (1.03 bar) at 180°F (82°C) 25 psid (2.07 bar) at 150°F (66°C) 60 psid (4.14 bar) at 86°F (30°C)
Maximum recommended change-out pressure	35 psid (2.41 bar)



Graph 1: ZCore clean water flow rate based on a 10 in length filter

Quality

ZCore filters are manufactured under a quality management system that has been certified to meet ISO 9001 standards. Each filter is assigned a lot code to ensure traceability of the data and materials used in the manufacturing process.

Each filter is assigned a lot code to ensure traceability of the data and materials used in the manufacturing process. ZCore can be autoclaved for 30 min at 250F (121C) under no end load conditions. The autoclaved cartridges must feature single open-end connections (222 o-ring with closed end). Filter cartridges should be allowed to cool to normal system operating temperatures prior to use.

Certifications

- U.S. FDA 21CFR 177.1520 food contact requirements
- Article 3 of the EU Framework Regulation No. 1935/2004/EC safety requirements
- EU Plastics Regulation No. 10/2011 (may be used as intended in all compliant EU Member states)
- USP class VI-121°C Plastics criteria
- NSF 61 criteria
- ISO 9001 criteria

Veolia filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia representative for more information.

Ordering Information

Replace the numbers with your desired values from each column. Columns 3, 4, and 5 are optional depending on the desired configuration.

Example: ZCore 05-40-XK

ZCore	1	-	2	-	3	4	5

Table 4: Ordering Information

	1		2	3	4	5
Type	**Micron Rating (nominal)**		**Cartridge Length**	**End #1 Adapter**	**End #2 Adapter**	**Elastomer Material**
ZCore	95 = 0.5 µm 01 = 1 µm 03 = 3 µm 05 = 5 µm 07 = 7 µm 10 = 10 µm 15 = 15 µm 20 = 20 µm 25 = 25 µm	30 = 30 µm 40 = 40 µm 50 = 50 µm 75 = 75 µm 100 = 100 µm 120 = 120 µm 150 = 150 µm 200 = 200 µm	10 in (25.4 cm) 20 in (50.8 cm) 30 in (76.2 cm) 40 in (101.6 cm) *Longer lengths up to 70 in may be available upon request*	 E = 222 O-Ring  F = 226 O-Ring  L = Extended Core  X = Standard Plain End (no gasket)  Y = Flat Gasket	 H = Fin  K = Self Seal Spring  S = Closed End Cap  X = Standard Plain End no gasket)  Y = Flat Gasket	B = Buna E = EPDM P = Santoprene[2] (flat gasket only) S = Silicone V = Viton[1]

[1]Viton (registered mark of The Chemours Company)

[2]Santoprene (licensed to Advanced Elastomer Systems, L.P.)

[3]Absolute-rated filters have been designed and tested to reject at least 99% of particles of the listed micron size. Nominal-rated filters have a wider distribution of pore sizes and therefore a wider distribution of rejected particle sizes. The nominal rating is primarily used to compare efficiencies across a filter family and between filter manufacturers. Efficiency is dependent on particle shape, size, composition, application, and testing protocol.

ISO 9001 registered NSF

Veolia Water Technologies
Please contact us via:
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