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Water Technologies & Solutions

fact sheet

High Flow Z* depth cartridge filter

manufactured with Z.Plex* technology

Figure 1: High Flow Z Filter
Inset picture: ergonomic designed handle for easy replacement

description and use

High Flow Z filters using patented Z.Plex filter technology and are manufactured in a large format depth filter...

At 7kg (15 lbs.) or more, the dirt holding capacity of a single High Flow Z filter is equivalent to greater than 50 conventional 2.5 by 40 inch depth cartridge filters (Fig. 2). This level of performance ensures lower total filtration costs by reducing filter consumption and by substantially reducing labor and overhead costs associated with filter replacement.

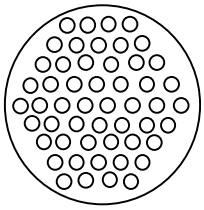

Figure 2: One High Flow Z filter vs. 50 Filters

Z.Plex technology benefits

- Very low flow resistance
- Excellent dirt holding capacity
- Enhanced resistance to surface blinding
- Good strength and thermal resistance
- All polypropylene construction for exceptional chemical resistance

typical applications

High Flow Z filters' proprietary depth filter matrix provides unmatched performance in these applications

- RO pre-filtration
- Well injection
- Produced water filtration
- Water flood / enhanced oil recovery
- Amine filtration
- Seawater filtration

general properties

High Flow Z filters are available with two nominal and four absolute pore size ratings. They are made of 100% polypropylene construction. Tables 1, 2 and 3 show additional specifications and performances.

Table 1: Specifications

Nominal Outside Diameter	6.5" (16.5 cm)
Nominal Inside Diameter	1.6" (4.1 cm)
Nominal Ratings	1, 5 microns
Absolute Ratings (99.9% efficiency at pore size)	15, 25, 40 and 70 microns

Table 2: Operating Conditions

Max. Differential Pressure	50 psid (3.44 bar) at ≤ 77°F (25°C)
Max. Operating Temperature	160°F (71°C) at ≤ 35 psid (2.41 bar)
Recommended Max. Water Flow	140 gpm (31.8 m³/hr)

Table 3: Clean Water Flow Performance (psi / mbar)

Model	HF.Zs01	HF.Zs05	HF.Za15	HF.Za25	HF.Za40	HF.Za70
dP@20gpm (4.5 m³/hr)	0.2 / 14	0.1 / 7	0.2 / 14	0.1 / 7	< 0.1 / 7	< 0.1 / 7
dP@40gpm (9 m³/hr)	0.5 / 34	0.4 / 28	0.5 / 34	0.4 / 28	0.3 / 21	0.2 / 14
dP@60gpm (13.5 m³/hr)	0.9 / 62	0.5 / 34	0.9 / 62	0.5 / 34	0.4 / 28	0.4 / 28
dP@80gpm (18 m³/hr)	1.4 / 97	0.9 / 62	1.4 / 97	0.9 / 62	0.7 / 78	0.6 / 41
dP@100gpm (22.5 m³/hr)	1.9 / 131	1.3 / 90	1.9 / 131	1.3 / 90	0.8 / 55	0.7 / 78

regulations

- SUEZ certifies that the resins used of for the manufacturing of the filter media and adapters meet the food contact requirements of the US FDA 21CFR 177.1520.
- High Flow Z filters meet the safety requirements of Article 3 of the EU framework regulation No. 1935/2004/EC and may be used in full compliance with the EU Plastics Regulation No. 10/2011.
- High Flow Z filters meet the criteria for USP Class VI-121°C Plastics
- High Flow Z filters are also certified NSF 61.

quality assurance

High Flow Z filters are manufactured under a quality management system that has been certified to meet ISO 9001 standards.

High Flow Z cartridge filters are made from thermally bonded fibers of polypropylene. SUEZ 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 SUEZ representative for more information.

Table 4: Ordering Information

Ordering Information: High Flow Z filters are available with 226 O-ring fittings and closed end cap with ergonomic design handle. Your Product Order Number will look like this: HFZ 05-40 FSS, if ordering with silicone O-rings. See further ordering details in Table 4.

Type	Micron Rating (µm)	Cartridge Length Inches (cm)	End #1 Adapter	End #2 Adapter	Elastomer Material
HF.Zs	**Nominal**	40 (101.6) nominal	F = 226 O-Ring	S = Closed End with ergonomically designed handle	B = Buna-N
	01 = 1				E = EPDM
	05 = 5				S = Silicone
HF.Za	**Absolute**				V = Viton®
	15 = 15				
	25 = 25				
I.D. = 1.6" (4.1 cm)	40 = 40				
O.D. = 6.5" (16.5 cm)	70 = 70				

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