Process and Water™
Design Solutions & Proven Equipment

Process and Water Filter
fact sheet

Resin bonded filter cartridge

The Hypure AF filter (Figure 1) is a resin- bonded filter cartridge suitable for a wide range of applications. Hypure utilizes phenolic impregnated acrylic and polyester fibers for efficiency and long life. Uses for Hypure include adhesives, coatings, inks, and many more applications for both aqueous and solvent based fluids.

features and benefits

- High dirt holding capacity
- Wide range of micron retention
- Faster flow rates
- High efficiency
- Less change-outs
- Consistent quality

applications

- Printing inks
- Water
- Hot, non-aqueous fluids
- Adhesives
- Antifreeze
- Insecticides
- Photo resists
- Solvents
- Paints and varnishes
- Thinners
- Fuels and Lubricating oils
- Coolants
- Coatings

general properties

Tables 1, 2, 3, and 4 provide information on dimensions and flow performance.

Table 1: Materials of Construction

Media	Phenolic impregnated acrylic and polyester fibers
Adapters	Nylon, Polypropylene

Table 2: Nominal Dimensions

Outside Diameter	2 9/16" (65 mm)	
Inside Diameter	1 1/8" (28.6 mm)	
Available pore sizes	2, 5, 10, 15, 25, 50, 75, 100, 125, 150 µm	
Available lengths	9 ¾" (24.8 cm)	29 ¼" (74.3 cm)
	10" (25.4 cm)	30" (76.2 cm)
	19 ½" (49.5 m)	39" (99.1 cm)
	20" (50.8 cm)	40" (101 cm)

Table 3: Maximum Operational Limits

Temperature	250°F (121°C)
Flow rate	5 gpm per 10 in. length or 18.9 lpm per 254 mm length
Forward pressure drops	150 psid (10 bar) @ 70°F (21°C) 125 psid (8.6 bar) @ 100°F (38°C) 90 psid (6.2 bar) @ 150°F (65°C) 65 psid (4.5 bar) @ 180°F (82°C) 25 psid (1.7 bar) @ 250°F (121°C)

Recommended Change Out pressure drop	50 psi (3.5 bar)

flow factors

Rating (µm)	Flow Factors
2	0.08
5	0.04
10	0.02
25	0.012
50	0.01
75	0.006
125	0.0013
150	0.001

length factor

1. Clean ΔP is PSI differential at start
2. Viscosity is centipoise
3. Flow Factor is ΔP/GPM at 1 cps for 10 in. (single)

pressure differential calculation

$$\text{Clean } \Delta P \text{ (psid)} = \frac{\text{Flow rate (gpm)} \times \text{Viscosity (cP)} \times \text{Flow Factor}}{\text{10in equivalent (TIE)}}$$

ordering information

Type	Nominal Micron Rating (µm)	Length, inch (cm)	End #1 Adapter	End #2 Adapter	Elastomer Material
HAF	02 = 2	9 ¾ (24.8)	E = 222 O-ring	S = Solid End	O-Rings
	05 = 5	10 (25.4)	L = Extended Core	X = Plain End (no gasket)	S= Silicone
	10 = 10	19½ (49.5)	X = Standard Plain End (no gasket)		V = Viton[1]
	15 = 15	20 (50.8)			B = Buna
	25 = 25	29¼ (74.3)			
	50 = 50	30 (76.2)			[1]Viton is a registered trademark of Dupont
	75 = 75	39 (99.1)			
	100 = 100	40 (101.6)			
	125 = 125				
	150 = 150				

Adapters: E (222)- Nylon, L (Extended Core) - Polypropylene

All filters – 15 per case.

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