



HP107 Series

Hy-Pro Filter Element Upgrades

Hy-Pro G8 Dualglass

High Performance Filter Elements

Performance

Temperature Rating

Buna: -30°F (-34°C) – 250°F (121°C)

EPR: -70°F (-57°C) – 250°F (121°C)

Viton: -15°F (-26°C) – 400°F (204°C)

Standard Element Collapse

ΔP 150 PSI (10.3 Bar)

Tested to ISO Quality Standards

ISO 2941	Collapse and burst resistance
ISO 2942	Fabrication and Integrity test
ISO 2943	Material compatibility with fluids
ISO 3724	Flow fatigue characteristics
ISO 3968	Pressure drop vs. flow rate
ISO 16889	Multi-pass performance testing

Media

G8 media pleat pack features our latest generation of graded density glass media that delivers required cleanliness while optimizing dirt capacity.

Available media selections include G8 Dualglass, Stainless Steel Mesh Media, Dynafuzz (Stainless Fiber Media), and Water Removal Media. Seal options include Nitrile (Buna), Fluorocarbon (Viton), and EPR. Call or consult the Hy-Pro online Interchange Guide at www.hyprofiltration.com.

Fluid Compatibility

Petroleum based fluids, water glycols, polyol esters, phosphate esters, HWBF. Contact Hy-Pro for seal selection assistance. For Skydrol applications, please select Option M for metal end caps (Table 1) and Option E-WS for EPR seals and stainless steel support mesh (Table 4).

Water Removal

Media code "A" specifies G8 Dualglass media co-pleated with water removal scrim to produce a filter that can remove water while maintaining $\beta_{x[c]} > 4000$ efficiency down to $3\mu_{[c]}$.

Dynamic Filter Efficiency

DFE rated elements perform true to rating even under demanding variable flow and vibration conditions. Today's industrial and mobile hydraulic circuits require elements that deliver specified cleanliness under all circumstances. Wire mesh supports the media to ensure against cyclical flow fatigue, temperature, and chemical resistance failures possible in filters with synthetic support mesh.



ΔP FACTORS

Media Code	Element Length							
	L10		L16		L18		L36	
	psid/gpm	bar/lpm	psid/gpm	bar/lpm	psid/gpm	bar/lpm	psid/gpm	bar/lpm
1M	0.0982	0.00179	0.0652	0.00119	0.0545	0.00099	0.0256	0.00047
3M	0.0603	0.00110	0.0400	0.00073	0.0335	0.00061	0.0157	0.00029
6L	0.0393	0.00072	0.0260	0.00047	0.0218	0.00040	0.0102	0.00019
10/12A	0.0298	0.00054	0.0198	0.00036	0.0165	0.00030	0.0078	0.00014
10/12M	0.0248	0.00045	0.0165	0.00030	0.0138	0.00025	0.0065	0.00012
25A	0.0189	0.00034	0.0125	0.00023	0.0105	0.00019	0.0049	0.00009
25M	0.0158	0.00029	0.0105	0.00019	0.0087	0.00016	0.0041	0.00007
*W	0.0033	0.00006	0.0022	0.00004	0.0018	0.00003	0.0009	0.00002

Adjusted Pressure Drop

Pressure drop factor based on viscosity 150 SUS / 32 cSt, and specific gravity = 0.86. Element ΔP varies with viscosity and specific gravity. To adjust ΔP factor for different viscosities use the following formula:

Kinematic Viscosity in SUS:

$\Delta P \text{ Element} = \Delta P \text{ Curve} \times \text{Actual Viscosity SUS}/150 \times \text{Actual SG}/0.86$

Kinematic Viscosity in cSt:

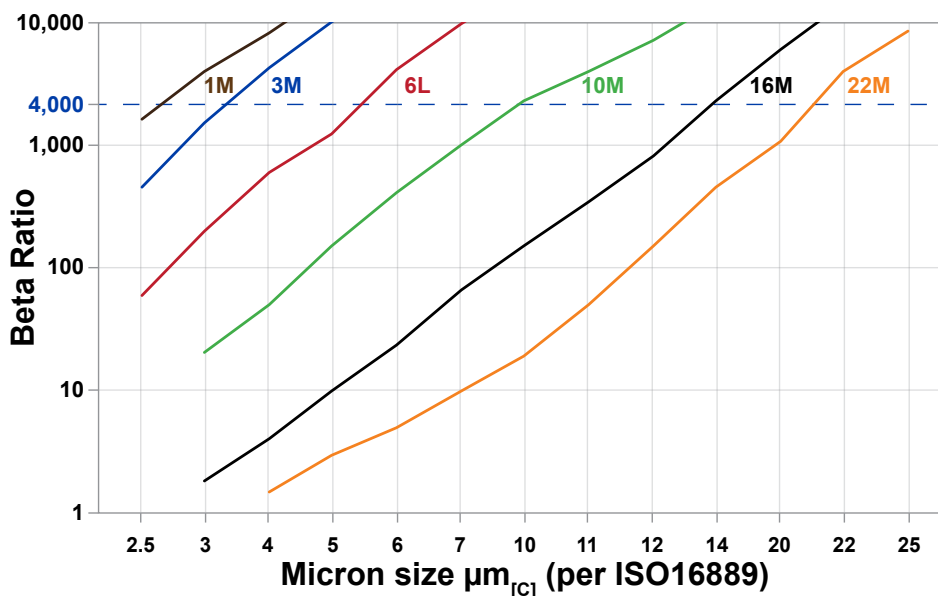
$\Delta P \text{ Element} = \Delta P \text{ Curve} \times \text{Actual Viscosity cSt}/32 \times \text{Actual SG}/0.86$

Centistoke to SUS conversion:

1 cSt = 4.63 SUS

FILTER ELEMENT MEDIA PERFORMANCE

Glass Media Filtration Efficiency (Beta Ratio) vs Micron Size



Efficiency, Apparent Dirt Holding Capacity, H₂O Capacity Numbers Based on Viscosity 150 SUS (32cSt) at 100°F (40°C)

FILTER ELEMENT PART NUMBER BUILDER

HP107 Table 1 L Table 2 - Table 3 Table 4

Table 1 End Cap Option	
Code	
OMIT	Standard End Caps (Plastic)
M	Metal End Caps (Skydrol Specific Fluid Applications)

Table 2 Overall Length	
Code	
10	~10.068" (~25.57 cm)
16	~14.643" (~37.19 cm)
18	~17.290" (~43.92 cm)
36	~35.593" (~90.41 cm)

Table 4 Seal	
Code	
B	Nitrile (Buna)
V	Fluorocarbon (Viton)
E-WS	EPR + Stainless Steel Support Mesh (Skydrol Specific Fluid Applications)

Table 2 Media Selection	
Code	
1M	$\beta_{3[c]} \geq 4000$
3M	$\beta_{4[c]} \geq 4000$
3A	$\beta_{4[c]} \geq 4000 + \text{Water Removal}$
3SF*	$\beta_{4[c]} \geq 4000$ Dynafuzz
6L	$\beta_{6[c]} \geq 4000$
6A	$\beta_{6[c]} \geq 4000 + \text{Water Removal}$
6SF*	$\beta_{6[c]} \geq 4000$ Dynafuzz
10M	$\beta_{11[c]} \geq 4000$
10A	$\beta_{11[c]} \geq 4000 + \text{Water Removal}$
10SF*	$\beta_{11[c]} \geq 4000$ Dynafuzz
25M	$\beta_{22[c]} \geq 4000$
25A	$\beta_{22[c]} \geq 4000 + \text{Water Removal}$
25SF*	$\beta_{22[c]} \geq 4000$ Dynafuzz
25W*	25 μ Nominal Wire Mesh
40W*	40 μ Nominal Wire Mesh
50W*	50 μ Nominal Wire Mesh
74W*	74 μ Nominal Wire Mesh
149W*	149 μ Nominal Wire Mesh
250W*	250 μ Nominal Wire Mesh

*Limited availability (call factory)