



HPR100 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.

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.

Interchange (See Interchange Guide for Exact Cross Reference and Complete Part Numbers)

Triple R
TR-20430

Hy-Pro
HPR100L4-3AB

ΔP FACTORS

Media Code	Element Length L4	
	psid/gpm	bar/lpm
1M	0.3598	0.00655
3M	0.2208	0.00402
6M	0.1438	0.00262
10/12A	0.1091	0.00199
10/12M	0.0909	0.00166
25A	0.0693	0.00126
25M	0.0577	0.00105
*W	0.0120	0.00022

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:

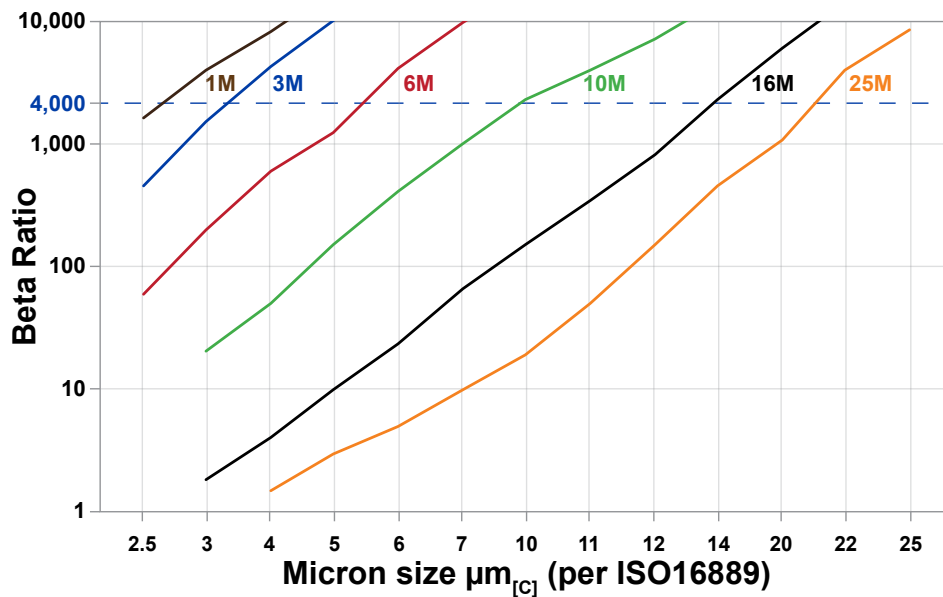
$\Delta P \text{ Element} = \Delta P \text{ Curve} \times \text{Actual Viscosity cSt}/32 \times \text{Actual SG}/0.86$

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

HPR100L 4 -

Table 1 Overall Length	
Code	Overall Length
4	~4.120" (~10.465 cm)

Table 3 Seal	
Code	Seal
B	Nitrile (Buna)
V	Fluorocarbon (Viton)
E-WS**	EPR + Stainless Steel Support Mesh (Skydrol Specific Fluid Applications)

**For Phosphate Ester use Viton®

Table 2 Media Selection	
Code	Media Selection
1M	$\beta_{3[ci]} \geq 4000$
3M	$\beta_{4[ci]} \geq 4000$
3A	$\beta_{4[ci]} \geq 4000$ + Water Removal
3SF*	$\beta_{4[ci]} \geq 4000$ Dynafuzz
6M	$\beta_{6[ci]} \geq 4000$
6A	$\beta_{6[ci]} \geq 4000$ + Water Removal
6SF*	$\beta_{6[ci]} \geq 4000$ Dynafuzz
10M	$\beta_{11[ci]} \geq 4000$
10A	$\beta_{11[ci]} \geq 4000$ + Water Removal
10SF*	$\beta_{11[ci]} \geq 4000$ Dynafuzz
25M	$\beta_{22[ci]} \geq 4000$
25A	$\beta_{22[ci]} \geq 4000$ + Water Removal
25SF*	$\beta_{22[ci]} \geq 4000$ 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)