

# Hydro-Guard<sup>®</sup> CoLD R Series Filter Cartridges

# Continuous Length, Backflushable, Precoat, Condensate Filter

Hydro-Guard CoLD R filter elements are manufactured using the CoLD Melt™ fiber production process. The CoLD Melt process permits the creation of multiple filtration zones within a single filter cartridge. The reverse graded pore density, multi-zone design provides customers with even precoating, efficient backflushing, and long filter life. Many power plants around the world have switched from string wound technology to Hydro-Guard CoLD R products for improved condensate polishing.



Product Feature	Product Benefit	Customer Benefit
Continuous Length Element	Uniform resin precoat	<ul><li>Improved deionization performance</li><li>Optimized resin capacity utilization</li></ul>
Co-Located Large Diameter Melt Fibers	<ul> <li>Resists collapse or compression under increasing differential pressure</li> <li>Rigid pore structure results in more consistent, reliable and reproducible filtration compared to string wound configurations</li> </ul>	<ul> <li>Reduced possibility of resin bleedthrough</li> <li>Stable filtration performance over the life of the element</li> </ul>
Reverse Graded Pore Density Structure	<ul><li>Enhanced surface filtration</li><li>High-efficiency backflushing</li></ul>	<ul> <li>Longer element service life reduces number of filter change-outs and filter disposal costs</li> <li>Minimizes worker exposure in radioactive applications</li> </ul>
All Polypropylene Construction	<ul> <li>Reduced extractables - free of adhesives, binders and surfactants</li> <li>No rinse-up required</li> <li>Incinerable</li> </ul>	<ul> <li>No filtration related chemistry excursions</li> <li>Reduced start-up costs</li> <li>Reduced filter disposal costs</li> </ul>

# **Performance Specifications**

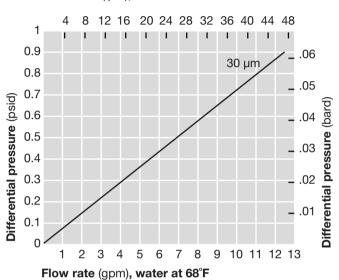
Maximum operating temperature 65°C (150°F)

Maximum differential pressure

2.07 bard (30 psid) @ 65°C (150°F)

# Typical Flow vs. Differential Pressure for Application Sizing<sup>1</sup>

Flow rate (lpm), water at 20°C



Unit conversion: 1 bar = 14.5 psi



## **Product Specifications**

### Materials of construction

Filter media: Polypropylene
End caps: Polypropylene
Sealing: Thermal bond

Gasket/O-ring material: Sulfur-free EPDM (standard)

### **Ordering Information**

Pall Part Number = HGCOLDR 1 - 2 - P - 3 - 4 - 5

Table 1

Code	Filter grades (µm)	
5	5	
30	30	

Table 2

Code	Cartridge lengths cm/in	
50	127/50	
60	152/60	
70	178/70	
80	203/80	

Table 3

Code	Seal material
E	Sulfur-free EPDM

<sup>1</sup> Flow rate is for a 152 cm/60 inch 30 µm cartridge. For liquids other than water, multiply differential pressure by fluid viscosity (cP).

#### Table 4

Code	End configurations - bottom
COOP	Fine threaded connection for bottom tube sheet vessels
M8TVO	Extended neck, double O-ring seal for top tube sheet vessels
PAK-F	One turn, easy install/remove connection with double seal integrity for bottom tube sheet vessels
PBQ	Double-open-end filter for bottom tube sheet vessels

#### Table 5

Code	End configurations - top
Н	% HEX - 2.5 inch elongated hex nut and cotter pin for connection with vessel lattice strips
S	% STUD - 1.5 inch threaded stud and either nut or cotter pin for connection with vessel lattice strips
FIN	SPEAR - Bottom retaining devise for top tube sheet filters
DOE	Double-open-end filter for top tube sheet vessels

# End configurations - bottom







End configurations - top



COOP

PAK - F



% HEX (H)

PBQ



DOE





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