

## HYDRO-GUARD® PPB Series Backflushable Filter Cartridges

### The Most Extensively Used Backflushable Pleated Filter in Power Plant Condensate

- Backflushable Pleated Filter Designed Specifically for Use in Power Plants
- The Hydro-Guard PPB is Used in Condensate With or Without Resin Precoat
- Constructed With the Highest Purity Materials (no fillers, talcs, TiO<sub>2</sub> or surfactants) for Minimal Rinse-up Time
- Surface Area Exceeds That of Conventional Condensate Filters by a 20:1 ratio for Lower Pressure Drops, Increased Filter Life and Longer Backflush Cycles
- Eliminates Costs Associated with Use and Disposal of Powdered Resins
- Iron Oxide and Suspended Copper are Typically Reduced by 98%<sup>+</sup>
- Absolute Construction and Surface Retention for Efficient Backflushing and Particle Removal



### Performance Specifications

**Maximum Operating Temperature:**  
180°F (82.2°C)

**Maximum Differential Pressure:**  
40 psid (2.8 bar) @ 150°F (65°C)

Product Feature	Product Benefit	Customer Benefit
Backflushable filter element	Longer on stream life Reduced number of filter changeouts	Lower disposal costs Reduced personnel exposure to radiation during filter changeouts
High surface area	Longer run times Higher dirt holding capacity	Lower operating costs Fewer backflushes for reduced disposal costs
All Polypropylene	Virtually no extractables Incinerable Radiation Resistant No rinse-up required	Concerns eliminated with regard to chemistry changes Reduced startup costs (i.e. downtime rinse-up water, etc.)
Modular design	High structural integrity	Easy retrofit into existing pressure vessels
Absolute Construction	Highly efficient particle removal	Less damage from iron and copper in boiler and turbine Quicker plant startups Fewer boiler cleanings

## Product Specifications

### Materials of Construction

Filter Media:	Polypropylene
Support Material:	Polypropylene
Hardware:	Polypropylene
Sealing:	Thermal Bond
Gasket/O-ring Materials:	EPDM (standard), Others available

### Pressure Drop/Flow Data

Model	Delta Pressure $\Delta P = (k)$ (Flow Rate)
HGPPB1	$\Delta = (0.50)$ Flow Rate
HGPPB2	$\Delta = (0.40)$ Flow Rate
HGPPB4	$\Delta = (0.05)$ Flow Rate
HGPPB10	$\Delta = (0.03)$ Flow Rate
HGPPB18	$\Delta = (0.01)$ Flow Rate
HGPPB42	$\Delta = (0.01)$ Flow Rate

This information is with water at ambient temperatures. Differential pressures are in PSID based on flow in GPM through a 10" (25.4 cm) element.



HGPPB also offered in tubesheet and cage designs.

### Part Numbers/Ordering Information

HGPPB - ■ - ● - P - ◆ - ▼ (e.g. HGPPB-2-70-P-E-DOE)

Code ■	Filter Grades*
1	1 $\mu$ m
2	2 $\mu$ m
4	4 $\mu$ m
10	10 $\mu$ m
18	18 $\mu$ m
42	42 $\mu$ m

\* Based on typical application usage.

\*\* For details, contact Pall Corporation.

<sup>1</sup> - Registered trademark of DuPont Dow.

Code ●	Cartridge Lengths (nominal)
10	10" (25.4 cm)
20	20" (50.8 cm)
30	30" (76.2 cm)
40	40" (102 cm)
50	50" (127 cm)
60	60" (152.4 cm)
70	70" (178 cm)
80	80" (203.2 cm)

Code ◆	Gasket/O-ring Materials
S	Silicone
N	Buna N
V	Viton <sup>1</sup> A
E	EPDM

Code ▼	End Configurations
DOE	DOE with elastomer gasket seal and endcaps
M3	SOE flat closed end, external 222 O-rings (retrofits other manufacturers' Code 0)**
M6	SOE flat closed end, external 226 O-rings (retrofits other manufacturers' Code 6)**
M7	SOE fin end, external 226 O-rings (retrofits other manufacturers' Code 7)**
M8	SOE fin end, external 222 O-rings (retrofits other manufacturers' Code 5)**
COOP	Fine thread direct screw in
TVO	Extended neck for better sealing
PAK	Easy installation and removal; double seals for high integrity
PEA	Retrofit for 2" (5.1 cm) seat cups
AERO	Connects directly to tube sheet without additional hardware



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