

SENTINEL® Filter Bag Range



## Fully-welded construction for high efficiency and superior sealing

Eaton's SENTINEL filter bags are suitable for a wide range of applications such as the filtration of paints and varnishes, inks, chemicals, process water and many more.

SENTINEL filter bags comply with the industry standard of a bypass-free filter bag construction. They are available in polypropylene and polyester.

### Features and benefits

- Fully-welded construction with patented SENTINEL seal ring provides 100% bypass-free filtration
- The pressure-activated SENTINEL seal ring provides a flexible, chemically resistant seal which adapts to any bag filter housing
- Material is free from silicone and crater-forming substances<sup>1</sup>
- Special surface treatment significantly reduces fiber release
- Stable and flexible welded seams that adapt to the restrainer basket

- The handles in the ring make replacing the filter bag quick and easy
- Eaton strongly recommends the use of an insertion tool that facilitates the insertion of the filter bag into the bag filter housing and ensures the correct alignment of the filter bag inside the restrainer basket

### Filter specifications

#### Materials

Needle felt polypropylene or polyester

#### Seal rings

Welded polypropylene or polyester SENTINEL seal ring

#### Retention ratings

1, 5, 10, 25, 50, 100, 200 µm

### Dimensions/Parameters

#### Sizes

01: Ø 7 x 17" L (180 x 430 mm)  
02: Ø 7 x 32" L (180 x 810 mm)  
03: Ø 4 x 9" L (100 x 230 mm)  
04: Ø 4 x 15" L (100 x 380 mm)

#### Filter area

01: 2.6 ft<sup>2</sup> (0.24 m<sup>2</sup>)  
02: 5.2 ft<sup>2</sup> (0.48 m<sup>2</sup>)  
03: 0.9 ft<sup>2</sup> (0.08 m<sup>2</sup>)  
04: 1.7 ft<sup>2</sup> (0.16 m<sup>2</sup>)

#### Max. operating temperatures

Polypropylene: 194 °F (90 °C)  
Polyester: 302 °F (150 °C)

#### Max. differential pressure

36.2 psi (2.5 bar)

#### Recommended change-out pressure for disposal<sup>2</sup>

11.6 – 21.7 psi (0.8 – 1.5 bar)

#### Max. flow rates<sup>3</sup>

01: 88 GPM (20 m<sup>3</sup>/h)  
02: 176 GPM (40 m<sup>3</sup>/h)  
03: 26 GPM (6 m<sup>3</sup>/h)  
04: 53 GPM (12 m<sup>3</sup>/h)



Powering Business Worldwide

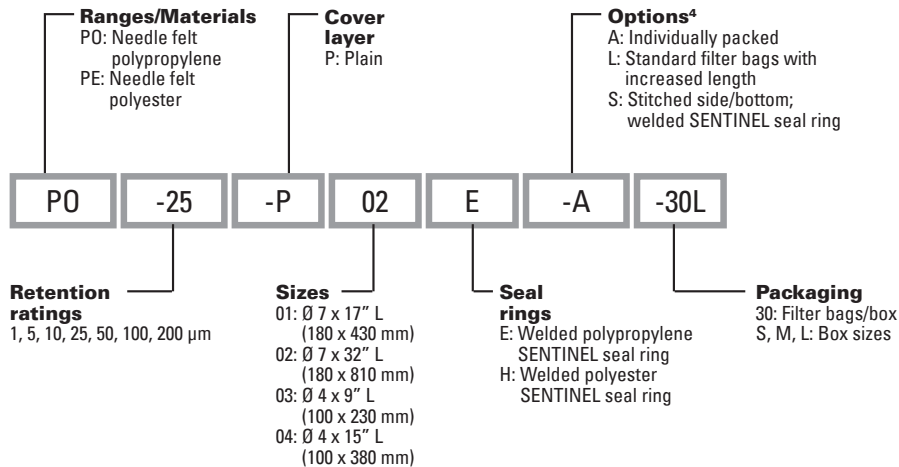


## SENTINEL Filter Bag Range

### Retention ratings

Materials	Codes	Retention ratings (µm)							Welded SENTINEL seal rings	Max. operating temperatures °F (°C)	Sizes			
		1	5	10	25	50	100	200			01	02	03	04
Polypropylene	PO	■	■	■	■	■	■	■	E	194 (90)	■	■	■	■
Polyester	PE	■	■	■	■	■	■	■	H	302 (150)	■	■	■	■

### Ordering information



<sup>1</sup> Based on an accepted paint compatibility test (see document QUC-STA-10).

<sup>2</sup> Depending on the respective application requirements.

<sup>3</sup> For liquids with a dynamic viscosity of 1 mPa·s @ 68 °F (20 °C).

<sup>4</sup> Further options upon request (see document SAL-L-12).



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US  
 EF-FTB-08  
 08-2014

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**POLYLINE™ Single Bag Filter Housing**



*Choice of PPL or PVDF construction for ultra-pure or corrosive applications*

Eaton's POLYLINE single bag filter housing is an all-plastic, rugged polypropylene or PVDF construction for superior corrosion resistance. The glass fiber reinforced polypropylene withstands high-pressure and temperature combinations.

This single bag filter housing has no metal components to rust, corrode or contaminate the process media and is ideal for contamination sensitive or severely corrosive applications. Units come standard with filter bag size 01 or 02 polypropylene or size 02 PVDF restrainer baskets.

**Features**

- All plastic construction with smooth interior surfaces makes it easy to clean
- Compression hold down creates 360 degree sealing between the filter bag and the bag filter housing

- Removable, "no tools required" spin-off cover for quick filter bag change-outs. Just a few turns of the cover using the built-in handle and the housing opens and closes with little effort
- Standard design available with threaded or flanged connections
- Vent/bleed valve installed on the housing cover and an integral mounting flange for rock-solid installation without the need for support legs
- Dual outlets allow either in-line or loop piping connections with other outlet used as a drain

**Options**

- Available in glass fiber reinforced polypropylene or PVDF
- Viton® seals and gaskets for the cover and restrainer basket are standard. EPDM seals and gaskets are available
- Multiple I/O connections to suit application
- Round bottom restrainer basket size 01 or 02 available in polypropylene

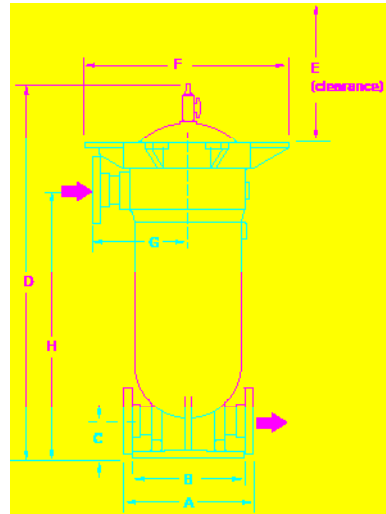
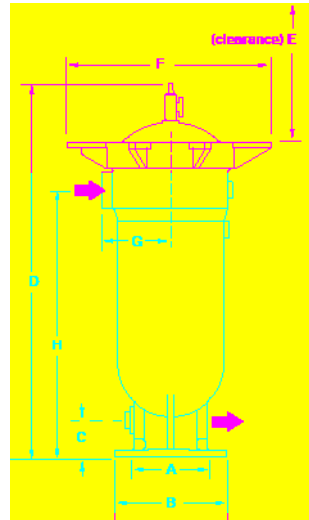
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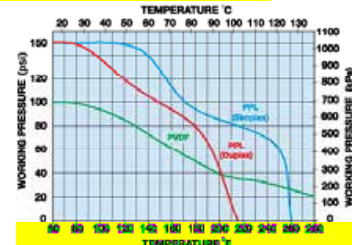
## POLYLINE Single Bag Filter Housing

### Applications

- Coarse filtration > 500 µm ✓
- Medium filtration > 10 µm ✓
- Fine filtration < 10 µm ✓
- Pre-filtration ✓
- Safety filtration ✓
- High volume ✓
- Batch filtration ✓
- Circuit filtration ✓
- Continuous filtration ✓
- Solvents, paints ✓
- Fats and oils ✓
- Catalyst, activated carbon ✓
- Acids, bases ✓
- Petrochemicals ✓
- Water, waste water ✓
- Chemical industry ✓
- Pharmaceuticals ✓
- Metal cleaning ✓
- Automotive ✓
- Electronics ✓
- Food and beverage ✓
- Paint and lacquer ✓
- Water treatment ✓
- Galvanic industry ✓



### Operating temperature/ pressure for POLYLINE single bag filter housings



### Dimensions - inch (mm)

Models	A	B	C	D	E	F	G	H
PBF-0101 (thread)	6.50 (165)	10.00 (254)	3.25 (83)	34.12 (867)	20.00 (508)	18.38 (467)	6.13 (156)	23.88 (607)
PBF-0102 (thread)	6.50 (165)	10.00 (254)	3.25 (83)	50.12 (1273)	36.00 (914)	18.38 (467)	6.13 (156)	39.88 (1013)
PBF-0101 (flange)	5.69 (145)	10.00 (254)	3.25 (83)	34.12 (867)	20.00 (508)	18.38 (467)	8.63 (219)	23.88 (607)
PBF-0102 (flange)	5.69 (145)	10.00 (254)	3.25 (83)	50.12 (1273)	36.00 (914)	18.38 (467)	8.63 (219)	39.88 (1013)

Dimensions for reference only and approximate. Exact dimensions for installation purposes available on request.

### Technical data

Models	No. of filter bags	Size	Flow rate <sup>1</sup> GPM (m³/h)	Max. pressure psi (bar)	Max. temp. °F (°C)	Housing volume gal (l)	Housing weight lb (kg)	I/O connections
PBF-0101 (thread)	1	1	53 (12)	150 @ 70 °F (10 @ 21 °C)	240 @ 70 psi (115 @ 4.8 bar)	9.5 (36)	49 (22.3)	2" thread
PBF-0102 (thread)	1	2	106 (24)	150 @ 70 °F (10 @ 21 °C)	240 @ 70 psi (115 @ 4.8 bar)	9.5 (36)	63 (28.6)	2" thread
PBF-0101 (flange)	1	1	53 (12)	150 @ 70 °F (10 @ 21 °C)	240 @ 70 psi (115 @ 4.8 bar)	6.6 (25)	53 (24.0)	2" flange
PBF-0102 (flange)	1	2	106 (24)	150 @ 70 °F (10 @ 21 °C)	240 @ 70 psi (115 @ 4.8 bar)	9.5 (36)	66 (30.0)	2" flange

<sup>1</sup> Maximum theoretical flow based on water viscosity, filter bag specific.

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US  
 EF-FBH-15  
 03-2017

