

# SELECTION GUIDE PCY SERIES HOUSINGS

### **Description**

Pall PCY Series Filter Housings are constructed of glass filled polypropylene. They accept either a single 10" or 20" length Pall AB, RF, or UNI LOC<sup>TM</sup> style filter element. An AB style filter has a 2³/₄" outer diameter while RF and UNI LOC style cartridges have a 2¹/₂" outer diameter. The AB and UNI LOC style cartridges are available in various pleated filter media types, while the AB and RF styles are available as depth filters. The RF and UNI LOC cartridges are double open ended (DOE) filters while the AB style filter is single open ended (SOE). Refer to brochure SUM 100 for filter element selection.

PCY Series housings are typically used for flow rates up to 15 GPM. Refer to Figure 1 for pressure drop information on the housing without cartridges installed. The housing pressure drop must be added to the filter cartridge pressure drop to calculate the pressure drop across the entire filter assembly.

The inlet and outlet connections are 1" NPT. The housing cover and bowl are threaded together and are sealed with an O-ring.

## **Specifications**

- 1. Design Ratings:
  - Pressure: 150 PSIG (1034 KPA)
  - Temperature: 32° to 100° F (0° to 38° C) The pressure rating of a PCY Series filter housing is up to five times greater than competitive polypropylene filter housings. This higher pressure rating provides

greater safety.

- The polypropylene housing is not recommended for compressed air or gas service. It is suitable only for liquids which are compatible with polypropylene under long-term conditions. The housing is not recommended for acid service at the pressure shown. Contact the Pall Corporation Sales Department for detailed compatibility information.
- 3. The housing cover has two 1/4" NPT connections, while the bowl has a 1/4" NPT drain connection. These connections may be used as vent, drain, and pressure gauge locations.

## **Element Sealing Mechanism**

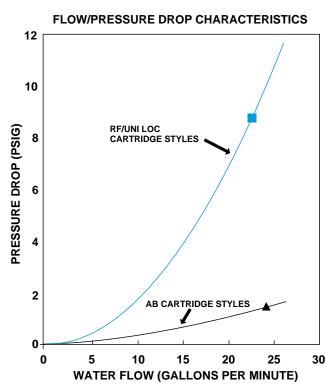
Pall UNI LOC cartridges and RF style filter elements are aligned within the housings by installing the cartridges onto a tie rod. The filters are then secured in place by a polypropylene seal nut. When fully engaged, the tie rod/seal nut assembly forms knife edge sealing surfaces which are imbedded into both the top and bottom of the filter cartridge. The UNI LOC pleated cartridges are provided with gaskets into which the knife edges seal at both ends. The knife edges imbed directly into the filter medium with RF depth style filters.

Pall Code 3 and 8 AB style filter elements are single open ended cartridges with two external O-rings (size 222). These O-rings provide the filter-to-housing seal.



Standard PCY Series Housing

Figure 1. Aqueous Pressure Drop Curve



#### **Table 1. Selection Guide**

Δ	Cartridge	Minimum Clearance for Element Removal IN/MM		Housing	HousingWeight	
Code	Height Inches	RF/UNI LOC Cartridge Style	AB Style	Length (L) IN/MM	Empty	KG Full
1	10	13/330	6/152	408/16 1/16	5/2.3	9/4.1
2	20	23/584	6/152	657.2/25 %	7/3.2	15/6.8

## **Housing Part Number**

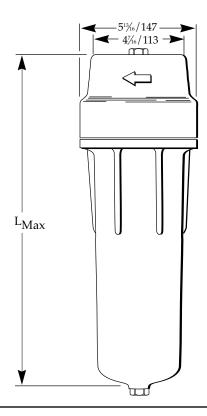
PCY △ 3 GN16 W PCY △ 8 GN16 W PCY △ RF GN16 W

Code	Cartridge Style	
3	SOE, Flat Top, Double 222 O-ring	
8	SOE, Finned End, Double 222 O-ring	
RF	RF ( 2 1/2" O.D., DOE Depth Filter)	
KF	UNI LOC Cartridge (2 ½" O.D., DOE Pleated Filter)	

11	
Code	Housing O-ring
H13	Buna-N
Н	Viton
H4	Silicone
J	Ethylene/ Propylene

Code	Connection
16	1" NPT

## Figure 2. Engineering Drawing Dimensional View Of A Standard PCY Series Housing



#### Notes:

- 1. See Table 1 for **L** maximum.
- 2. Engineering housing drawing shown, contains a double open ended RF style filter element. Housings are also available to accommodate single open ended Pall AB style, code 3 and 8 filter elements. These elements seal in the housing via two external, size 222 O-rings.
- 3. Housing suitable for use only with liquids. Liquids must be compatible with polypropylene under long term conditions.
- 4. Prevent liquids from freezing.
- 5. Do not expose to pressure transients within or outside the design pressure range.
- 6. When properly tightened, the gap between cover and bowl shall be  $^{1}\!/\!\!s^{n}$  or less.
- 7. Dimensions are expressed as  $\ensuremath{\mathsf{IN}}\xspace/\ensuremath{\mathsf{MM}}\xspace.$



Pall Corporation Fluid Processing Groups

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