

Instructions For Use

Pentair Single Round Polypropylene Bag Housings

Instruction Scope

This document provides the necessary information to ensure the correct installation, operation and maintenance procedures for the removal and change out of the bag filter. For safety and environmental protection reasons, the safety instructions given in this document must be strictly followed. Although these instructions offer a reference to correct practices for a range of products, some system installations will not be included. The person installing or maintaining the equipment should have the following:

- Sufficient training in filter bags and housings
- Knowledge of fluid being filtered and chemical compatibility
- Knowledge of water and filtration system installation.
- Suitable plumbing skills



When to change a filter bag

Regular maintenance and/or replacement of a filter bag is recommended to ensure that the system's integrity is preserved and remains effective. The following parameters should be used to determine when the bag should be replaced:

Parameter / Instrument	Detail
Differential Pressure	When the differential pressure is greater than 1 bar (14.5 psi)
Filter Capacity	When the calculated or approximate volume or daily capacity of the bag has been reached.

Housing Type	Maximum Operating Parameters	
	Pressure (bar)	Temperature (°c)
PBH-410	6.2	38
PBH-420	6.2	38



Installation & Bag Changeout

Tools Required

- Protective/waterproof clothing & gloves (further PPE may be needed depending on liquid being filtered)
- Safety glasses
- Cloths/ mop/ bucket for any spillages
- Suitable container for water drained from the system
- Food grade lubricant (such as DOW corning or petroleum jelly)
- Soapy warm water
- Clean warm water for rinsing
- Unscented bleach (5.25% Sodium Hypochlorite)
- Replacement filter bag suitable for housing
- Bowl removal tool (specific to each housing – please see below)

Housing Type

PENTAIR PBH-410 Big Blue Housing
PENTAIR PBH-420 Big Blue Housing

Bowl Removal Tool

SW3 Spanner (supplied with housing)
SW4 Spanner (supplied with housing)

Personnel

Only qualified and professional personnel, with the necessary training and experience are recommended to carry out the necessary work. Knowledge of the applicable regulations, safety rules and operator considerations are required prior to installation.

Pre-installation checks

Before starting work please check the following:

- Ensure that there are no signs of damage to the packaging and that the product has not come into contact with liquid or any external contamination during transport, storage or handling.
- Ensure that the type of fluid being filtered is compatible with the housing and cartridge materials. Also check that all relevant PPE is available.
- Make sure the incoming liquid line has been turned off and depressurised.
- The workspace is clear of any obstructions or electrical hazards.
- All protective packaging has been removed before cartridge installation.

Full product specification: including minimum operating temperature, recommended changeout pressure drop and maximum flow rates can be found on the relevant product datasheet available from our website.

Procedure

NOTE: If installing a filter bag for the first time in a new system follow steps, 1,4 & 7 onwards.

1. Close the stopcock or turn off the incoming liquid supply.
2. Depressurise the housing(s) using the pressure relief valve or vent, if present, or by opening an outlet downstream of the system.
3. Drain any remaining liquid in the housing through the drain valve, if present.
4. Remove filter housing sump using the appropriate bowl removal tool (discard any remaining liquid in the sump if appropriate).
5. Remove the used bag from the housing and dispose of according to local authority recommendations.
6. Remove the O-ring from the sump and wipe both the groove and O-ring clean. Put to one side.

NOTE: When opening a housing to change a filter, it is usual for the O-ring to stick and remain attached to the head.

7. Clean and sanitise the sump and basket with warm soapy water or application suitable fluid then, wipe the inside of the sump with a non-abrasive cloth. Rinse with clean water and replace basket in sump.
8. Inspect the O-ring for any damage, such as nicks or cuts and replace with a new O-ring if necessary (contact your supplier for information regarding replacement O-rings).
9. Re-lubricate the O-ring with an even coating of lubricant and place back into the groove in the sump.
10. Remove the new filter bag from its packaging and place into the sump. Ensure the bag is securely fitted in the basket.
11. Screw the sump of the housing back onto the head, tightening by hand only and ensuring that it is not cross threaded. **DO NOT** use the bowl removal spanner as this may lead to over tightening or damage to the housing.
12. Repeat for each individual filter bag needing to be replaced. Make sure that the correct filter bag is in the correct housing.

NOTE: Generally, larger micron rating filtration should be situated upstream of lower micron ratings. Check the direction of flow on the filter housing head if unsure.

13. Slowly turn the liquid supply back on, allow the system to fill and check for leaks. If leaks are detected re-check the housing O-ring. Air can be purged from the system using the pressure relief valve or vent, if present, or by opening an outlet downstream of the system.
14. Flush the bag thoroughly by discarding the liquid passed through the system during the first 5 minutes of start-up or until the liquid runs clear.
15. The system is now ready to use.