DAVEY

microlene

Installation and Operating Instructions



PLEASE READ IMPORTANT CAREFULLY

Filterpure Industrial Bag Housings

Model: FPBAGX40
Material: 316SS
Maximum Pressure: 1000kPa
Maximum Working Temperature: 110ºC

WARNING:
Maximum operating pressure for this stainless steel filter 1000kPa (150psig). If this pressure can be exceeded or if operating close to this pressure fit a suitable pressure limiting valve in the supply prior to the filter housing.

This industrial filter housing operates under pressure. Under no circumstances should service be undertaken on the housing unless the internal pressure of the unit has been relieved. Failure to observe this warning will expose persons to the possibility of personal injury and may result in damage to the system or other property.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

DO NOT DISASSEMBLE ANY COMPONENTS UNTIL YOU HAVE FULLY READ THESE INSTRUCTIONS!

Please pass these instructions on to the operator of this equipment.

Distributed in Australia and New Zealand by Davey Water Products Pty Ltd.

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Congratulations on your purchase of a high quality, Microlene Filterpure Industrial Bag Filter Housing.

All components have been designed and manufactured to give trouble free, reliable operation.

This housing is suitable, at the operating parameters stated, for all liquids classified as Group 2. This fluid group is as defined in the European Pressure Equipment Directive 97/12/EC.

Design Data

Working Temperature	110ºC
Maximum Working Pressure	Liquid10Bar g

Connections

Inlet	the highest of the 2 larger connections
Outlet	the lowest of the 2 larger connections
Vent	located in the lid of the housing
Drain	located in the bottom

1) INSTALLATION

1.1) Vent

Fit the blanking cap/plug (supplied) or the vent and gauge kit as appropriate, to the lid.
Seal with the aid of PTFE tape or and appropriate sealant, as required.

1.2) Inlet/Outlet

Connect the inlet and outlet pipework to the housing connections.

For threaded connections use PTFE tape or an appropriate sealant as a seal.

For flanged connections us a suitable gasket, and for dairy connections use the correct sealing ring.

1.3) Before Operating



It is important that the pipe work to and from the filter is adequately supported.



Before operating we recommend that the filter is flushed thoroughly.



Important safety notes. Please read before using this housing.

1. Never attempt to open the housing whilst it is under pressure.
2. Never operate the housing outside the permitted operating parameters as stated (i.e. over pressure, under vacuum, over or under temperature).
3. Housing using Vee clamps should not be used in cyclic pressure or shock load environments, or where highly viscous fluids could solidify the closure seal.
4. For safety, it is recommended that a pressure relief device is installed in the system to prevent over-pressurisation.
5. Never use the housing for liquids other than those it is rated for, and ensure that the housing and seal materials are compatible with the process fluid.
6. Care must be taken to protect operators from hot surfaces if the housing is being run at high temperatures.
7. Failure of the filter housing could result from misuse - please ensure that these installation, operating and maintenance procedures are strictly adhered to.

The following factors have not been considered in the design of this housing, as they are either negligible or not considered appropriate for this product, unless specifically stated:

1. Static pressure/head
2. Traffic, wind and earthquake loading
3. Decomposition effects of unstable fluids
4. Creep, fatigue and corrosion allowances
5. External fire

2) OPERATION

2.1) Opening the Filter Housing



Always ensure the that the system is not under pressure before opening the housing.

If the filter has been in service, refer to the instructions given in **2.6 Removing the Filter from Service**.

Otherwise, unscrew the clamp bolts with a suitable spanner.

Swing the clamps clear of the cover.

Remove the lid and o-ring, and store them in a safe place where they cannot get dirty or damaged.

Remove the basket compression plate.

2.2) Fitting the Perforated Basket

The housing is supplied with a perforated bag support basket.

There is an inner gasket fitted under the basket.

Check the o-ring groove and inner gasket for any damage, and place inner gasket in the groove.

Place the basket into position, ensuring that the inner gasket does not become dislodged.

2.3) Fitting the Filter Bags

Push the bag into the basket that is situated in the housing and check that the filter bag ring is fitted flush to the basket flare.

Position the bag compression plate onto the top of the bag ring, with the large plate fitting against the bag in the basket lip.

This will compress the bag and basket against the inner gasket.

2.4) Closing the Filter Housing

For the Bolted closure filter housing - check the housingtop ring and groove, the o-ring and lid for any dirt or damage.

Clean away any foreign objects and replace defective parts as necessary.

Place the o-ring into the groove at the top of the housing.

Position the lid evenly over the housing, ensuring the seal is not disturbed.

Swing the screw clamps up into position ensuring that the clamp locates correctly in the grooves on both the lid and housing top ring.

Screw the clamps down evenly.

Before tightening ensure the lid is set squarely on the housing top ring.

Finally nip down the screw clamps with a spanner in a diagonal basis across the filter housing.

DO NOT over tighten.

2.5) Putting the Filter into Service

Ensure the inlet and outlet valves are shut.

Ensure that the drain valves (if fitted) are closed or the drain plugs are fitted.

Open the vent valve or plug.

Gradually, open the inlet valve on the upstream side of the filter housing whilst ensuring that the down stream valve remains closed.

As the housing fills, air will be expelled from the vent.

When all the air has been expelled, fluid will begin to flow from the vent.

For safety reasons, it is important to ensure that vent and drain connections are secure and that released fluid is disposed of to an appropriate drain or container.

Appropriate measures should be taken if the liquid is hazardous.

Close the vent valve or plug, then slowly open the outlet valve.



The filter is now in service and no attempt should be made to open the cover.

Regular venting of the housing, by opening the vent to permit any trapped air to vent to atmosphere, will maintain the operating efficiency of the filter.



For safety reasons, it is important to ensure that venting is ONLY performed via a valve, which is opened with extreme care and that released fluid is disposed of to an appropriate drain or container.
Appropriate measures should be taken if the liquid is hazardous.

The filter can be operated until the increase in the pressure differential across the filter reaches approximately 1.5Bar (25psi), at this point the cartridge should be replaced.

2.6) Removing the Filter from Service

Close the outlet valve.

Close the inlet valve.



The filter housing will still be under pressure at this point.

Before opening the filter housing, the pressure must be relieved. This can be done either by carefully opening the vent valve or plug or the drain valve or plug, whichever is most appropriate.

Before opening the closure, open both the dirty drain and clean drain valves or plugs to allow all of the fluid to drain out of the housing. The vent must be open to allow the housing to drain properly. If the fluid is hazardous, appropriate measures should be taken before opening the closure.



For safety reasons it is important to ensure that vent and drain connections (such as any valves or hoses) are secure and that released fluid is disposed of to an appropriate drain or container.

3) MAINTENANCE

3.1) General

The filter housing will require very little maintenance.

The outer surface should be kept clean and free from dirt. This will prevent contamination of the filter during bag change.

The V clamp should be maintained as follows: A small amount of a suitable lubricant should be used on the sliding surfaces of the clamp.

The ‘T’ bar thread must be periodically greased. We recommend the use of a molybdenum based grease which will adhere to the thread. Binding of the thread could occur if they are not lubricated regularly.

Inspect the o-rings each time the filter housing is opened and replace as required.

The housing **must** be checked for any visible signs of corrosion or wear damage internally and externally on a routine basis.

Internal examination should be carried out via the housing closure.

3.2) Replacing the Filter Bag

Open the filter housing according to the instructions given in the section **2.1 Opening the Filter Housing**.

The new filter bags should be installed according to the instructions described under **2.3 Fitting Filter Bags**.

3.3) Filter Cartridge Disposal

The spent filter cartridges should be disposed of in a responsible manner. The filter itself can be disposed of by incineration or as landfill by an authorized contractor; however, it is important for the user to check how the contaminant contained in the filter should be disposed of.

Davey® Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within one year of the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 232 839 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey One Year Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey One Year Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey One Year Guarantee.

Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under the Australian or New Zealand legislation and does not affect any rights or remedies that may be available to you under the Australian or New Zealand Consumer Legislation.

In Australia, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Support Centre on the number listed below.

For a complete list of Davey Dealers visit our website (davey.com.au) or call:

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*** Installation and operating instructions are included with the product when purchased new. They may also be found at davey.com.au**