

# **HF** **HeadlineFilters**

## **Operation and Installation Instructions: Revision for Adsorber Housings. December 2014**

### **Warning**

A filter housing is a pressure vessel, it must never be used above its stated maximum allowable working pressure and must be used within its stated temperature range. Ensure that these items are used in well-designed piping systems with suitable indicators to warn users and servicing personnel of the presence of pressure and high temperatures, wherever possible use pressure limiting or safety devices. Remember that the pressure rating is reduced at high temperatures. Consult Headline Filters for guidance.

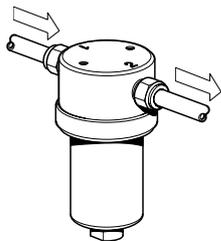
It is the responsibility of the user to ensure that the materials of construction of the filter housing, gasket and adsorbent media are suitable for the intended application. During every servicing, a visual inspection must be made of the surfaces of the housing for signs of corrosion, erosion or general wear. The housing must be removed from service if any of these signs are evident as there are no corrosion allowances used in the design of these filters. It is not recommended that these filters be used on unstable fluids.

The following items have not been taken into account during the design of the filter housing -

- a. Static pressure and mass of contents
- b. Traffic, wind and earthquake loading
- c. Reaction forces and moments resulting from mounting
- d. Corrosion, erosion and fatigue
- e. Decomposition of unstable fluids.
- f. External fire

### **Installing the Filter Housing**

As the filter housing is a pressure vessel the system connections and accessory outlets must be leak tight. It is normally good practice to use a pipe sealant on the fittings prior to connecting to the filter housing ports. This will allow disassembly at a later time, if required. Any sealant such as PTFE tape, paste or other compound may be used if compatible with the filtered media. The torque value of the fittings will depend upon the quality of the fittings and the type of sealant used but should typically be between 40Nm and 75Nm. Ensure the fittings get inspected during servicing and re-tightened if necessary. It is not recommended that heads and bowls from different filter assemblies are swapped.



The flow direction of the adsorber housing are indicated by the engraved numbers on the top of the Head, port 1 is the inlet, and port 2 the outlet.

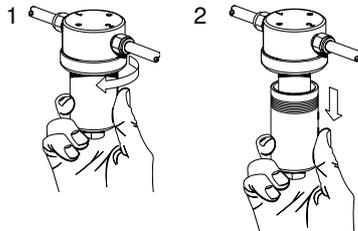
When installing any housing care should be taken to ensure the head and bowls are kept as a pair. It is not recommended that heads and bowls from different filter assemblies be swapped.

Wherever possible, installation of filter housings should be made using an appropriate mounting bracket to avoid excessive loads on the piping.

## Changing the Adsorbent media

When the adsorbent material has become exhausted and no longer gives the desired results, the housing can be simply emptied and re-filled. Ensure the operator is aware of any health and safety risks associated from the handling of the adsorbent media.

Ensure there is no pressure in the housing and then unscrew and remove the bowl,



Remove the perforated stainless steel support plate and the filter pad underneath it.

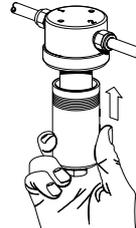
Carefully pour out and collect the spent adsorbent material, this must be disposed of according to local authority regulations.

Dependent upon the nature of the media being used, it may be necessary to clean the housing prior to re-filling. Ensure suitable measures are in place to protect the operator from the inhalation of any media dust.

Ensure the housing is clean and dry.

Refill the Bowl with the required adsorbent media then replace the filter pad and then the perforated stainless steel support plate on top of the media. Ensure the filter pad is clean or replace with a new one.

Before replacing the housing bowl ensure that the mating threads and sealing faces are clean and damage free. It is recommended that the threads and sealing faces are lubricated with a small amount of silicone grease before assembly. Screw the Bowl back into place by hand.

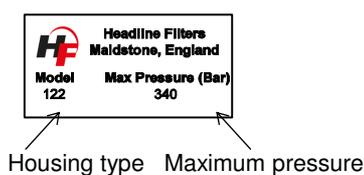


## Service Intervals

As every adsorbent application is different with so many variable factors, it is impossible to predict a precise service life. In the case of some adsorbents which change state upon becoming exhausted, it is clear when they need replacing. In other circumstances the operator would need to monitor the performance of the media and replace it at suitable intervals.

Ensure that gaskets are changed at suitable intervals. The interval time will depend on service and operating conditions, but it should be at least every three months.

## Explanation of Housing Label



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