

Selecting the Correct Filter Housing

How to select the Correct Filter Housing -

The wide range of filter housing and element combinations enable us to supply the most suitable equipment for your application and specifications.

To select the correct filter housing and element the following information about the application is required -

1	Maximum pressure
2	Maximum temperature
3	Chemical & physical composition of the sample
4	Type of duty - inlet, particulate, coalescing, bypass, membrane
5	Contaminant to be removed
6	Maximum flow rate
7	Line size and port type
8	Level of filtration required
9	Relative importance of cost, response time, service life and interval

Items 1, 2 and 3 will determine the materials of construction of the filter housing, including the element and gaskets. Filter housings are available in a wide variety of materials to ensure there is a product for even the most specialised applications. As well as our range of standard materials a wide range of exotic materials are also available.

Item 4 will determine the configuration of the housing, one port for inlet filters, two ports for in-line housings and three ports for coalescing, bypass or fast loop housings.

Items 5, 6, 7, 8 and 9 will establish the most appropriate size of filter. This is generally a compromise between those factors favouring a small filter (fast response time, smallest space requirement, lowest cost, minimised adsorption losses) and those factors favouring a large filter (long service intervals, low pressure drop). The exact choice will therefore depend on the relative importance of these factors in each particular application.



Additional Assistance

Our representatives have a vast experience of specifying successful installations and we will be pleased to help you select the best solution for your filtration problem.

We also have an Applications Form available for you to complete and return and this will ensure we have all the information required to make a selection for your individual application.

Service Intervals

A disposable microfibre filter element continues to filter at its original efficiency as long as it is kept in service. The life of the element is determined by the increase in flow resistance caused by trapped solids. The element should be changed when the flow falls below an acceptable level, or the pressure drop becomes too high. In any case the element should be replaced before the pressure drop across it reaches 0.7 Bar. The disposable microfibre filter elements cannot be cleaned as the solids are trapped within the depth of the element not on the surface.

Installing the Filter Housing

Given that filter housing is a pressure vessel, any connections and accessory outlets must be leak-tight.

Therefore, a good pipe sealant (PTFE tape, paste etc.) should be used on all fittings prior to connecting the filter housing ports. This will also allow for disassembly at a later time, if required.

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

Full installation instructions are included with each filter housing.