



# Nine Steps to Proper Filter Housing Selection

## NINE STEPS

1. Maximum Pressure
2. Maximum Temperature
3. Chemical & Physical Composition of the Stream
4. Type of Filtration
  - a. Particulate, Coalescing, Bypass, Fast Loop. Liquid or Vacuum
5. Contaminant to be Removed
6. Maximum Flow Rate
7. Line Size and Port Size
8. Level of Filtration Required
9. Relative Importance of Cost, Response Time, Ease of Service, and Interval

**= Your Filter Solution**

With a comprehensive selection of filter housings and element configurations, we provide optimized solutions engineered to meet your precise application and specification needs.

**To select the correct filter housing the following information about the application is required**

### 1. Maximum pressure



**Low Pressure Rating**

**Low Temperature Rating**



**High Pressure Rating**

**High Temperature Rating**

### 2. Maximum temperature

### 3. Chemical & physical composition of the stream



Aluminum



Nylon



Stainless Steel

Parameters 1, 2, and 3 define the required materials of construction for the filter housing assembly, including the element and sealing gaskets. A broad selection of standard and advanced alloy materials is available to meet the performance and compatibility requirements of highly demanding operating conditions.

### 4. Type of filtration required: Particulate, coalescing, bypass, fast loop, liquid, or vacuum



Item 4 defines the housing configuration requirements. Inlet filters utilize a single-port design; in-line housings are configured with two ports; and coalescing, bypass, or fast loop housings require three ports. Liquid-liquid housings may incorporate alternative configurations as specified in Item 9. Vacuum inlet filters are commonly supplied with two ports, whereas exhaust housings are equipped with three ports to facilitate coalescing performance.

### 5. Contaminant to be removed



Oil



Water



Dirt

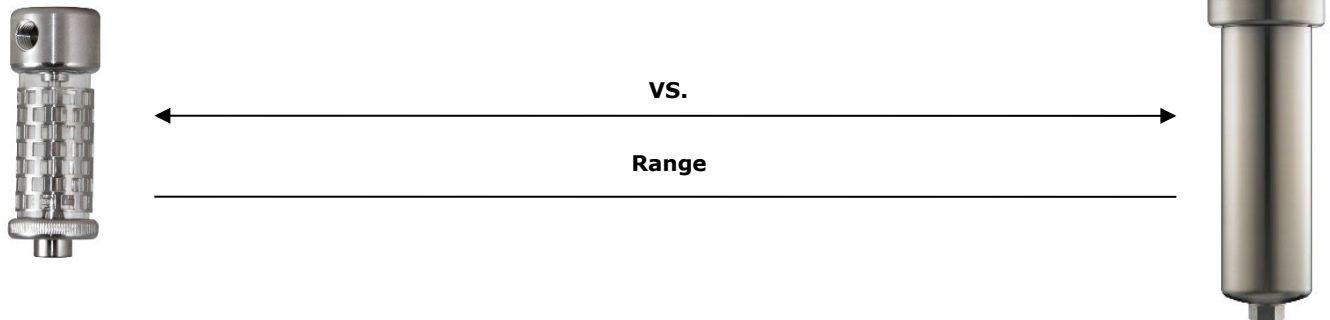


Chemicals

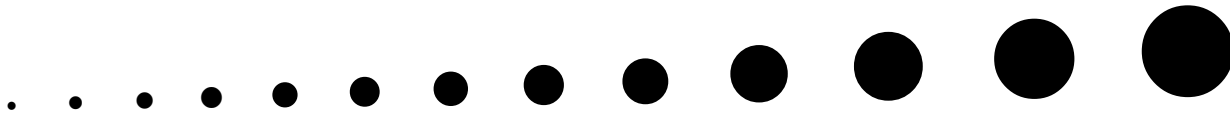
### 6. Maximum flow rate



### 7. Line size and port type



### 8. Level of filtration required



### 9. Relative importance of cost, response time, ease of service and interval



Cost



Ease of Service



Quick Service Time

Parameters 5 through 9 establish the optimal filter sizing. The final selection is generally a trade-off between design considerations that support smaller housings (rapid system response, compact footprint, lower capital cost) and those that justify larger units (longer service life and lower differential pressure).

**The exact choice will therefore depend on the relative importance of these factors in each particular application.**