



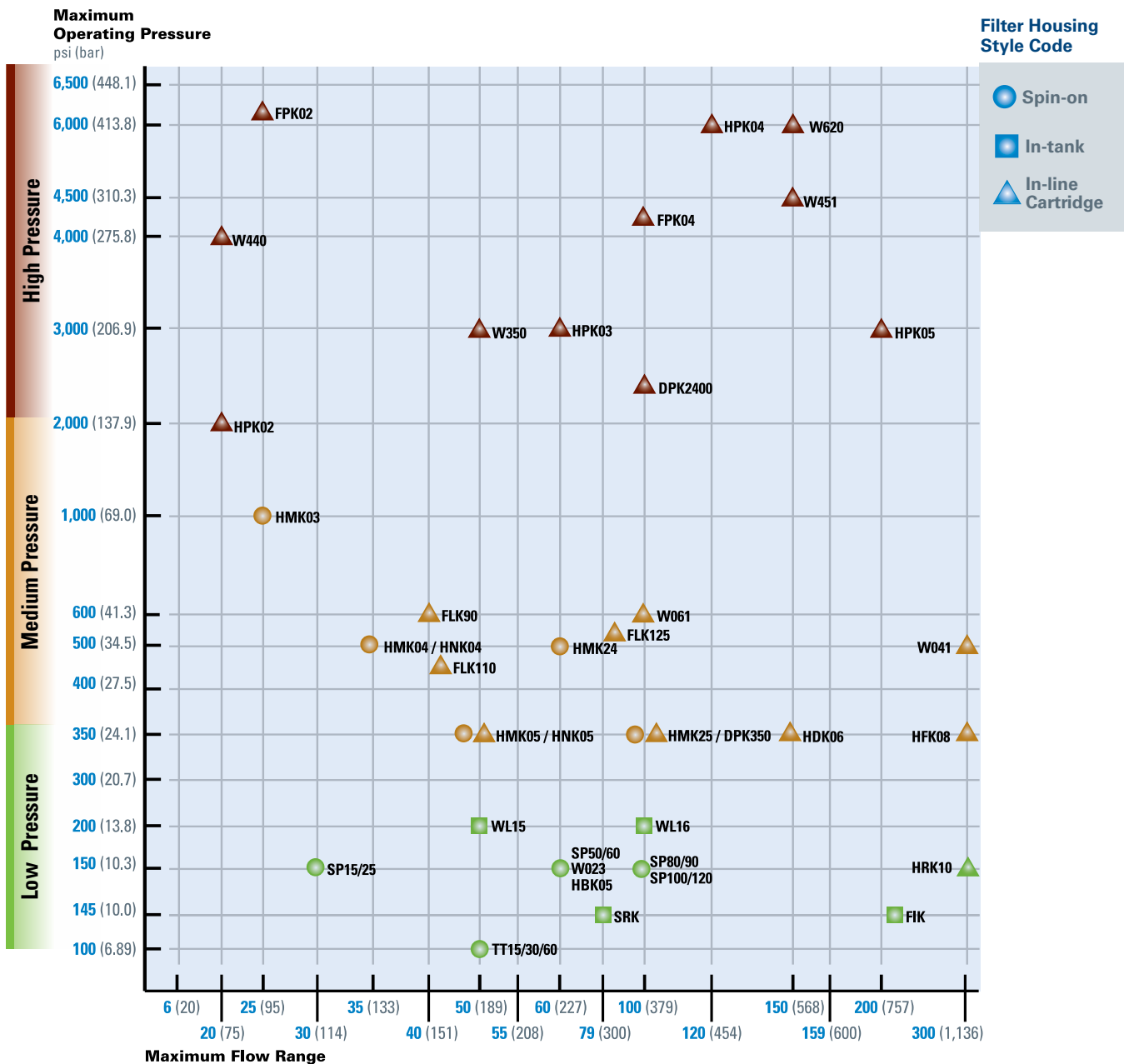
Donaldson  
FILTRATION SOLUTIONS

# Hydraulic Filter Housing Selection Guide



**SPIN-ONS • CARTRIDGES • IN-TANK • LOW PRESSURE • MEDIUM PRESSURE • HIGH PRESSURE • DUPLEX • ACCESSORIES**

Locate the Donaldson model closest to the intersection of the maximum operating pressure and maximum flow rate. If there is not a model at the exact intersection, select the nearest series to the right or above the intersection to ensure a filter that is adequate to handle the maximum operating pressure and flow rate has been selected.



# Selecting the Proper Hydraulic Filter

Sensitive hydraulic circuits are vulnerable to a variety of contaminants that result in inefficiency, downtime and excessive repair costs. It is important to remember that protecting and maintaining the most sensitive components within a circuit will result in effective contamination control.

With the broad range of housing styles and filters available from Donaldson, how do you choose the right filter to reliably protect your systems and equipment? Follow these recommended steps to identify the correct Donaldson filter and parts required for efficient contamination control.

## 1 Determine the system operating pressure and flow rate

Start by identifying two key factors in the hydraulic system operating environment for the component being protected.

- nominal and maximum operating pressure
- nominal and maximum flow rate

## 2 Select the filter housing model

Refer to the *Hydraulic Filter Model Series Selection Guide on the front* to select the filter housing that meets your requirements.

- Pressure families are color coded for low, medium and high models.
- Housing styles are identified by their shape code: spin-on, in-tank and in-line
- Porting type options

## 3 Consider application factors when selecting the filter

After the appropriate housing is identified, other application factors must be considered when selecting the appropriate filter. Use the filter choice tables to determine a specific part number.

- components being protected
- ISO Code desired
- fluid type and material compatibility
- oil viscosity (SUS/cSt) & temperature
- vibration/cyclic flow surges
- media type
- flow rate (GPM/LPM)
- maximum allowable pressure drop
- efficiency / beta rating
- seal options
- standard vs. high-performance filters
- servicing and installation convenience

## 4 Choose the appropriate line and reservoir accessories

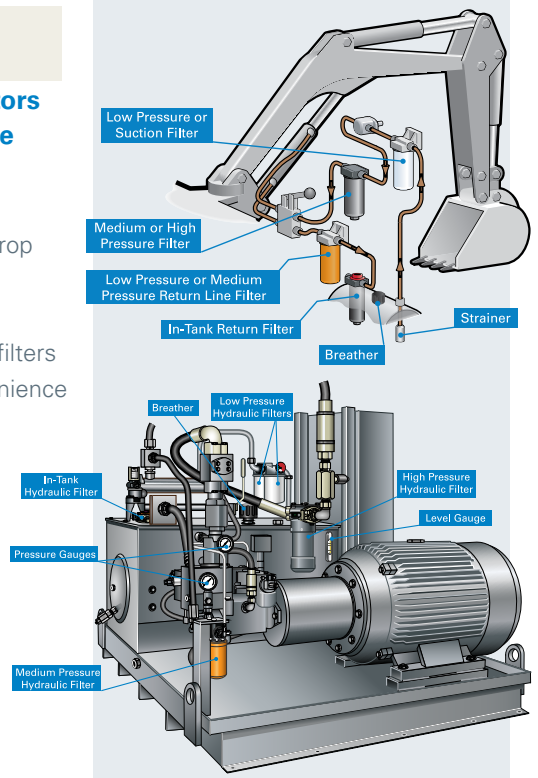
Items such as breathers, suction strainers, and gauges are important parts of an overall hydraulic system.

## 5 On-going contamination control practices

To optimize system performance and lengthen component life, new oil should be filtered before being transferred into a reservoir or gearbox. Monitor the condition of fluids and identify wear and contamination with regular fluid analysis.

## Performance Under Pressure <sup>any</sup>

Donaldson hydraulic filters and accessories reduce a broad range of contaminants to keep sophisticated equipment running smoothly, resulting in efficient systems with superior performance. Whether it's located outdoors on equipment or inside a crowded manufacturing plant, hydraulic components need clean hydraulic and lubrication oil for maximum life and optimal productivity.



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