



Donaldson Delivers

# Hydraulic Filtration Solutions for Mobile and Industrial Applications

Spin-ons • Cartridges • In-tank • Low Pressure • Medium Pressure • High Pressure • Duplex • Accessories

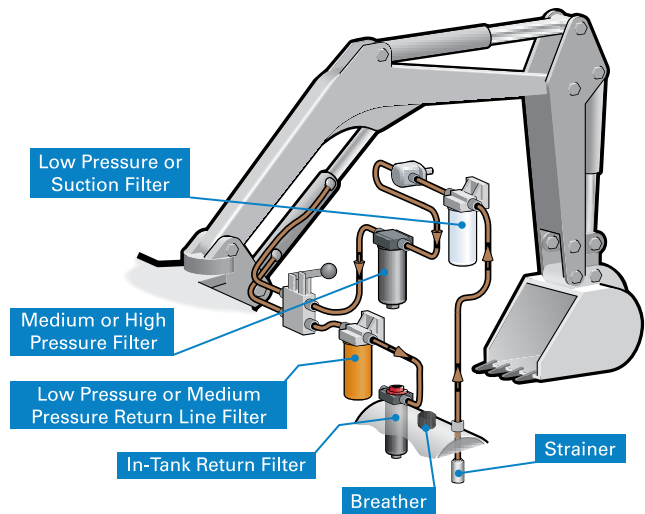




# Filtration Solutions Engineered for All Types of Equipment

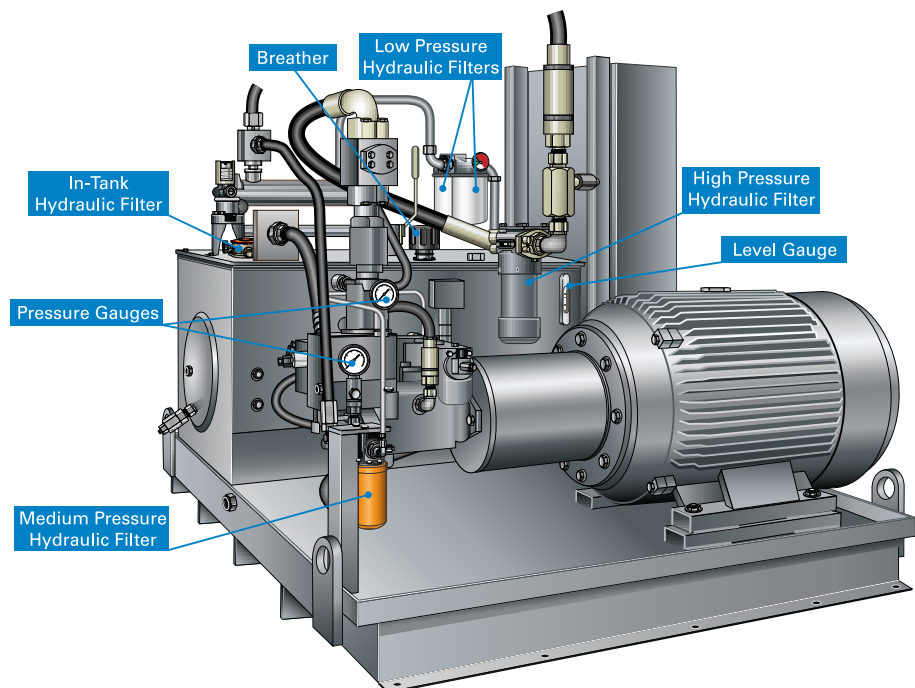
## The Best Solutions for Clean, Dry Oil

Donaldson hydraulic filters and accessories reduce a broad range of contaminants to keep sophisticated equipment running smoothly, resulting in efficient systems with superior performance – in the factory and on heavy-duty mobile equipment.



## Comprehensive Product Line

Donaldson has proven performance in thousands of applications – offering the industry's largest selection of replacement hydraulic, lube and gear oil filtration products for contamination control.

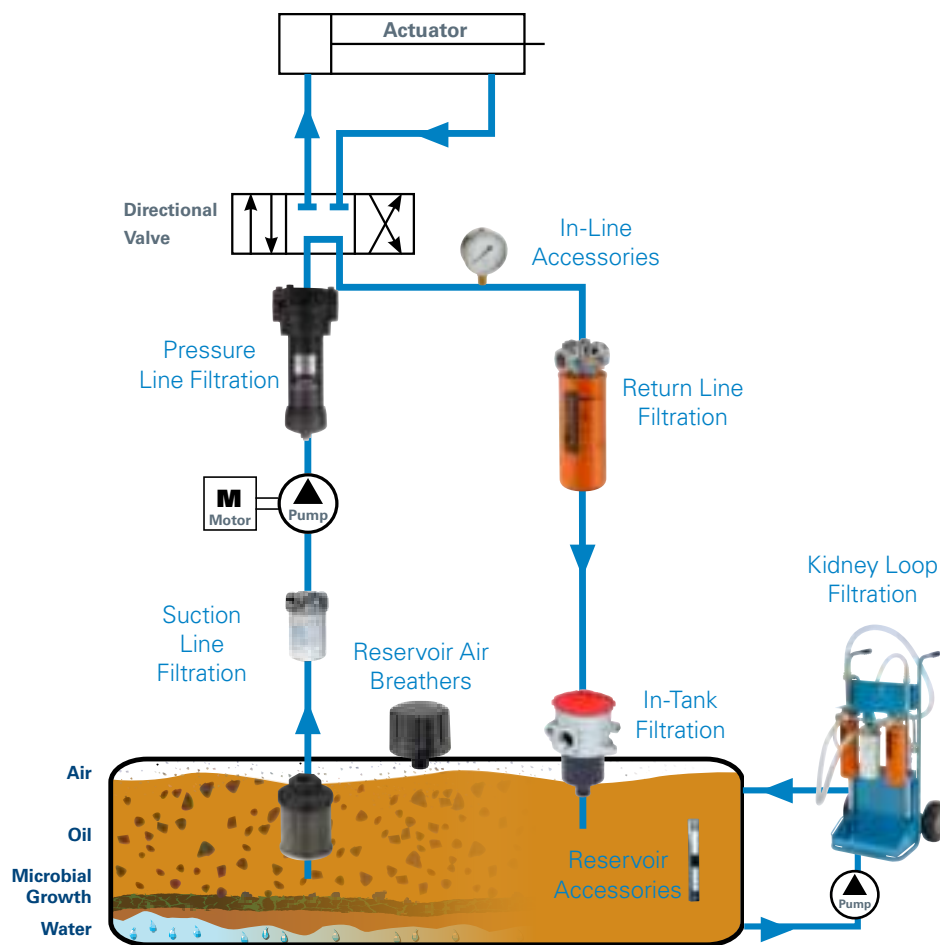




# Your Total System Supplier

Count on Donaldson to have the right filters, contamination control products and services to protect critical components in hundreds of applications.

Whether it's located outdoors on equipment or inside a crowded manufacturing plant, hydraulic components need clean oil for maximum life and optimal productivity.



## Reservoir Tank

Water in reservoir tanks is a serious threat to hydraulic systems. Dirt, particles and microbial growth are also common contaminants existing in tanks.

### FULL PRODUCT RANGE

The industry's largest selection of in-stock filters and accessories – manufactured with consistent, high-quality performance.

### EXPERT TECHNICAL SUPPORT

Prompt, accessible and knowledgeable customer service experts.

### HIGH-PERFORMANCE FILTRATION

Increase dirt-holding capacity and lower  $\Delta P$  with Donaldson high-performance DT filters.

### OFF-LINE FILTRATION

Filter carts, filter panels and Filter Buddy™ handheld filtration.

### WATER REMOVAL

Systems and products designed to prevent water ingress and remove entrained water.

### VACUUM DEHYDRATORS & COALESCERS

Quick removal of free water, dissolved water, particles and gases.



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



## Low Pressure

Low pressure filters are the most commonly used type of filter in hydraulic circuits, used most often in return line applications.

Donaldson low pressure filters are rated for working pressures up to 350 psi (2400 kPa). In-tank and in-line configurations are available to accommodate virtually any application.

## Medium Pressure

Medium pressure filters can be used in applications up to 2000 psi (13790 kPa). Donaldson offers both spin-on and in-line cartridge-style filters.

Donaldson Duramax® filters are the highest rated medium pressure spin-on filters available. Duramax filters are proven, reliable, long-lasting and easy to install.



## High Pressure

High pressure filters are positioned between pumps and critical components such as cylinders, motors and valves. They help protect these critical components from catastrophic failure.

Donaldson heavy-duty high pressure filters are rated for working pressures up to 6500 psi (44818 kPa). Various porting sizes and types, including manifold style, are available for a wide range of applications.





## Donaldson Blue® Cartridges

Donaldson Blue hydraulic filters deliver better system protection than the competitors' best filters. They deliver the optimal balance of efficiency, capacity and flow restriction.

Donaldson Blue hydraulic filters help protect equipment, reduce maintenance cost and increase equipment uptime – which has a direct impact on your bottom line.

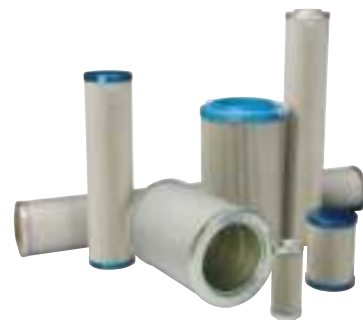


Full line of hydraulic in-line and reservoir accessories available, including advanced T.R.A.P.™ reservoir breather technology.



## DT High-Performance Cartridges

Donaldson high-performance DT cartridge filters provide protection from the particles and contaminants that reduce the effectiveness of lubricant and hydraulic fluid. DT cartridge filters feature an advanced pleat pack design and are engineered to fit many competitive applications.



## Off-Line Filtration

The Donaldson Filter Cart, Filter Panel and Filter Buddy™ offer convenient off-line filtration, flushing and fluid transfer. Off-line filtration supplements system cleanliness. Use with industrial and mobile equipment to achieve and maintain proper ISO cleanliness levels.

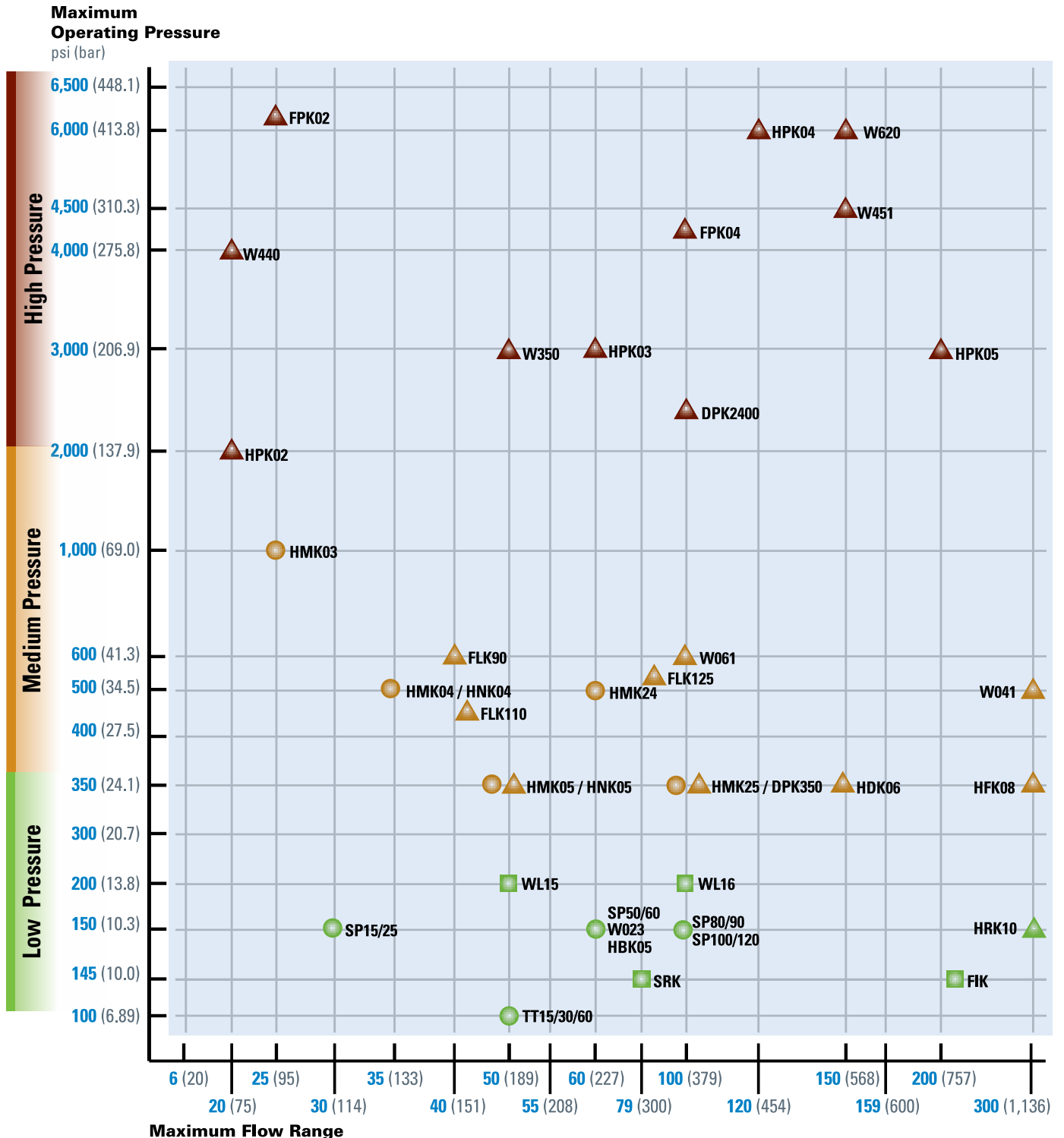
# Hydraulic Filter Assembly Selection Guide

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.

Pressure families are color coded in the selection chart for low, medium and high model series. Filter housing styles are identified by their shape.

## Housing Style Code

Spin-on
  In-tank Housing / Cartridge
  In-line Housing / Cartridge



## Selecting the Proper 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 left 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.**

- ISO Code
- fluid type
- oil viscosity (SUS/cSt) & temperature
- components being protected
- 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 service indicators, breathers, 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 off-line before being transferred into a reservoir or gearbox. Monitor the condition of fluids and identify wear and contamination with regular fluid analysis.**



## DT High-Performance Cartridge Filters

DT cartridges are engineered to fit many competitive applications and are constructed to meet specific application housing requirements, including standard collapse, high collapse and coreless designs.

- Extended filter life
  - 73% higher dirt-holding capacity
  - 47% lower pressure drop
- Synteq™ Media Technology
  - Better cleanliness
  - Superior system protection



For the most current part interchanges and application information, visit [crossreference.donaldson.com](http://crossreference.donaldson.com)



## Hydraulic Filtration Product Guide

When you need hydraulic filtration systems for new and existing equipment applications, consider Donaldson as your single source. Donaldson filters and accessories are the best way to protect equipment and hydraulic-powered vehicles of all shapes and sizes – no matter the industry.

*See the F112100 Hydraulic Filtration Product Guide for complete details on our product offering.*

## Single Filtration Source

Donaldson has lube, fuel, coolant and air filters for all types of vehicles and equipment.



# Finding your Donaldson filter online has never been easier.



### DISCOVER.

Go online to **donaldson.com** to learn which filter you need.

### DECIDE.

Finding filters easier than easy at **shop.donaldson.com**.



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Brochure No. F111376 ENG (4/18)

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