

## Filter Cart

The Donaldson Filter Cart provides a convenient portable mode of off-line/kidney loop filtration, flushing and fluid transfer. Use it with your in-plant machinery and hydraulic equipment to achieve and maintain proper ISO cleanliness levels.

Dual in-series HMK05 pressure filters can provide coarse/fine particle removal or, install a water absorbing filter to obtain particulate and water removal. A SP50/60 suction filter is required to protect the pump. The powerful one horsepower motor won't bog down and when coupled with a gear pump, it provides efficient fluid transfer and filtration. Convenient features include a rear mounted motor for better balance, a removable angled drip tray and clear braided hoses.

### Notice

Donaldson Filter Carts include electric motors and indoor use is recommended. Exposure to rain, snow and other elements may cause electric motors to fail. Failures that result from misapplication, improper use or storage are not covered by the Donaldson warranty.

Reference the aftermarket warranty: document no. F110064.

### Fluid Compatibility

Not for use with diesel fuel or gasoline. For fuel solutions, please contact the Donaldson Clean Solutions team at [clean.solutions@donaldson.com](mailto:clean.solutions@donaldson.com) or 800-374-1374.

[shop.donaldson.com](http://shop.donaldson.com)

### Applications

- Transferring New Oil
- Cleaning Stored Oil
- System Draining
- Line Flushing
- Hose Cleaning
- Kidney Loop Filtration
- Repairs & Equipment Rebuild Flushing
- Flushing During Equipment Commissioning



Features	Benefits
<b>Rugged and durable frame</b>	Enables long service life
<b>High efficiency media</b>	Cost effective filtration
<b>Two pressure filters</b>	Two-stage filtration – coarse/fine or particulate/water
<b>Safety relief valve</b>	Prevents over pressurizing and damage to pump, hoses and filters
<b>Overload protected switch</b>	Prevents motor from overheating

Applications	
<b>Filter new fluid</b>	New fluids are usually above the recommended ISO cleanliness levels
<b>Offline filtration</b>	Filter cart can be used to supplement existing filtration
<b>Water removal</b>	Using Donaldson water removal filters to remove free water from the system.
<b>Transferring fluid</b>	Fluid is transferred from a storage container (tote, drum, tank, etc.) to a machine's reservoir
<b>Flushing</b>	After repairs & builds machines need to be flushed thoroughly before returning to service. During equipment commissioning, new machines have original fabrication debris and dirt that has ingressed during transport and storage.



## Filter Cart Features

### Stainless steel wands

- Will not break, corrosion resistant

### Differential pressure indicators

- Lets you know when to change filters

### Two pressure filters mounted in series

- Allows for particulate/water removal or coarse/fine particle removal

### Removable angled drip tray

- Easy clean up, fluid will not leak out when tipped back

### Oil sampling valve

- Monitors filter performance and cleanliness of oil

### Motor/Pump

- Industrial brand  
10 gpm / 38 lpm flow

### Motor mounted on back

- Better balance
- Fluid will not drip on motor when changing filters

### Clear braided hoses

- Visually shows fluid flowing
- 85 psi working pressure

### Suction filter

- Protects pump

### Overload protected switch

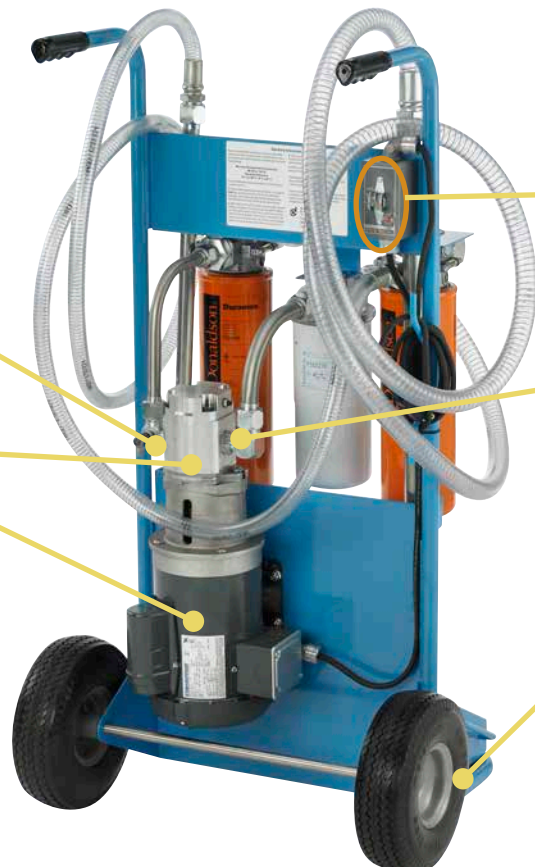
- Protects motor from overheating

### Integrated safety relief valve

- Protects against over pressurizing
- Set at 150 psi

### Foam filled tires

- Tires will not go flat



## Filter Cart Assembly Choices

NOTE: Filters ordered separately

### The Importance of Temperature When Selecting a Filter Cart

Consider operating temperature ranges when determining the proper viscosity filtration solution. It's crucial to select the proper viscosity option to maintain adequate flow and avoid restriction. Refer to the oil viscosity with temperature chart located on the front cover of the catalog.

**Example: ISO Grade 32 Hydraulic Oil @ 68°F = 86.7 (cSt)**

Assembly Part No.	Low Viscosity	High Viscosity
	Max Viscosity 500 SUS (108 cSt)* Filters ordered separately <b>X011297<sup>†</sup></b>	Max Viscosity 8000 SUS (1700 cSt)* Filters ordered separately <b>X011298<sup>†</sup></b>
<b>Operating Temperature Range:</b>	-10° F to 160° F (-23° C to 71° C)	-10° F to 160° F (-23° C to 71° C)
<b>Filter Bypass Valve Settings:</b>	Suction – 5 psid/0.34 bar Pressure – 25 psid/1.7 bar	Suction – Y strainer Pressure – 25 psid/1.7 bar
<b>Electrical Service:</b>	115 volts: 14 amp, single phase, 60 Hz	115 volts: 14 amp, single phase, 60 Hz
<b>Cord Length:</b>	7 ft. /2.1m cord with storage for 50 ft./15m	7 ft. /2.1m cord with storage for 50 ft./15m
<b>Gear Pump Flow Rate*:</b>	10.4 gpm/38 lpm	2 gpm/8 lpm
<b>TEFC** Motor:</b>	1 hp, 1800 RPM	1 hp, 1200 RPM
<b>Fluid Compatibility:</b>	Mineral-based fluids, water glycols, polyol esters	
<b>Dry Weight:</b>	Approximately 140 lbs. (63.5 kg)	Approximately 175 lbs. (79.38 kg)
<b>Dimensions:</b>	Height: 47" (1194mm) Width: 24" (610mm) Length: 23" (585mm) Hose/Wand assembly length: 10' (3.05m)	
<b>Filter Notes:</b>	Requires 3 filters: 2 pressure, 1 suction	Requires 4 pressure filters

<sup>†</sup>These part numbers now have relief valves in the pump. The relief valve setting is: 10.3 bar (150 PSI)

## Pressure Filter Choices

Media Type	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
Synteq Synthetic		<4 $\mu\text{m}$	14.2	361	P564468	
		6 $\mu\text{m}$	11.6	294	P165675	
		6 $\mu\text{m}$	11.6	294	P171274'	
		6 $\mu\text{m}$	14.2	361	P179763	
		11 $\mu\text{m}$	7.6	193	P176207	
		11 $\mu\text{m}$	11.6	294	P165659	
		11 $\mu\text{m}$	11.6	294	P573996'	
		11 $\mu\text{m}$	14.2	361	P170949	
		23 $\mu\text{m}$	7.6	193	P176208	
		23 $\mu\text{m}$	11.6	294	P165569	
		23 $\mu\text{m}$	11.6	294	P171276'	
		23 $\mu\text{m}$	14.2	361	P173789	
		50 $\mu\text{m}$	11.6	294	P165672	
		50 $\mu\text{m}$	14.2	361	P573353	
	Water Absorbing	10 $\mu\text{m}$		11.6	294	P179075

<sup>†</sup>Fluorocarbon o-ring, epoxy

## Suction Filter Choices

Media Type	$\beta_{x(c)} = 2$	Length		Part No.
	Rating based on ISO 16889	in	mm	
Wire Mesh	150 $\mu\text{m}$	6.7	170	P550275
	150 $\mu\text{m}$	10.7	271	P550276

\*Contact Donaldson for special order options. \*\*Totally Enclosed Fan-Cooled. Filter Notes: Refer to table in the Technical Reference Guide for fluid compatibility with our filter media. Thread sizes are 1 3/4"-12 UNF-2B (HMK05) and 1 1/2"-16 UN-2B (suction filter). Filters with seals made of fluorocarbon are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F. Filters with seals made of nitrile are appropriate for most applications involving petroleum oil.