

Filter Cart

The Donaldson Filter Cart provides a convenient portable mode of off-line 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 or 800-518-7784.



Applications

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

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

Applications

Filter new fluid	New fluids are usually above the recommended ISO cleanliness levels
Offline filtration	Filter cart can be used to supplement existing filtration
Water removal	Using Donaldson water removal filters to remove free water from the system.
Transferring fluid	Fluid is transferred from a storage container (tote, drum, tank, etc.) to a machine's reservoir
Flushing	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

Clear braided hoses

- Visually shows fluid flowing
- 85 psi working pressure

Suction filter

- Protects pump



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

Overload protected switch

- Protects motor from overheating

Integrated safety relief valve

- Protects against overpressurizing
- Set at 85 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 cart 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 Max Viscosity 500 SUS / 108 cSt* X011297 <small>Filters ordered separately</small>	High Viscosity Max Viscosity 8000 SUS / 1700 cSt* X011298 <small>Filters ordered separately</small>
		
Operating Temperature Range:	----- -10° F to 160° F (-23° C to 71° C) -----	
Filter Bypass Valve Settings:	Suction – 5 psid/0.34 bar Pressure – 25 psid/1.7 bar	Suction – Y strainer Pressure – 25 psid/1.7 bar
Electrical Service:	----- 115 volts: 14 amp, single phase -----	
Cord Length:	----- 7 ft. /2.1 m cord with storage for 50 ft./15 m -----	
Gear Pump Flow Rate*:	10.4 gpm/38 lpm	2 gpm/8 lpm
TEFC** Motor:	----- 60 Hz: 1 hp -----	
Fluid Compatibility:	----- Mineral-based fluids, water glycols, polyol esters -----	
Dry Weight:	Approximately 140 lbs. (63.5 kg)	Approximately 175 lbs. (79.38 kg)
Dimensions:	Height: 47" (1194 mm) Width: 24" (610 mm) Length: 23" (585 mm) ----- Hose/Wand assembly length: 10' (3.05 m) -----	
Filter Notes:	Requires 3 filters: 2 pressure, 1 suction	Requires 4 pressure filters

Pressure Filter Choices

Media Type	$\beta_{x(c)} = 2$ <small>Rating based on ISO 16889</small>	$\beta_{x(c)} = 1000$	Length in mm	Donaldson Part No.	
Synteq Synthetic	<4 μ m		14.2 361	P564468	
	7 μ m		11.6 294	P170906	
	7 μ m		11.6 294	P171273 ¹	
	7 μ m		11.6 294	P165675	
	7 μ m		11.6 294	P171274 ¹	
	7 μ m		14.2 361	P179763	
	9 μ m		7.6 193	P176207	
	9 μ m		11.6 294	P176567	
	9 μ m		14.2 361	P170949	
	9 μ m		11.6 294	P165659	
	9 μ m		11.6 294	P171275 ¹	
	23 μ m		7.6 193	P176208	
	23 μ m		11.6 294	P165669	
	23 μ m		11.6 294	P171276 ¹	
	25 μ m		14.2 361	P173789	
	50 μ m		11.6 294	P165672	
	50 μ m		14.2 361	P170546	
	Water Absorbing	10 μ m		11.6 294	P179075

Suction Filter Choices

Media Type	$\beta_{x(c)} = 2$ <small>Rating based on ISO 16889</small>	Length in mm	Donaldson Part No.
Wire Mesh	150 μ m	6.7 170	P550275
	150 μ 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)
- Some part numbers are offered with the same beta ratings to maintain customer ordering patterns.
- Filters with seals made of Buna-N® are appropriate for most applications involving petroleum oil. Filters with seals made of Viton® (a fluorocopolymer) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F. Donaldson offers both types, as shown in the table above. Filters with seals made of Buna-N® are appropriate for most applications involving petroleum oil.
- Viton® and Buna-N® are registered trademarks of E. I. DuPont de Nemours and Company.

¹Viton® O-ring, Epoxy