

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 or 800-374-1374.

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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
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

Clear braided hoses

- Visually shows fluid flowing
- 85 psi working pressure

Differential pressure indicators

- Lets you know when to change filters

Suction filter

- Protects pump

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

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 Max Viscosity 500 SUS (108 cSt)* Filters ordered separately X011297[‡]	High Viscosity Max Viscosity 8000 SUS (1700 cSt)* Filters ordered separately X011298[‡]
	Operating Temperature Range: -10° F to 160° F (-23° C to 71° C)	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, 60 Hz	115 volts: 14 amp, single phase, 60 Hz
Cord Length:	7 ft. /2.1m cord with storage for 50 ft./15m	7 ft. /2.1m cord with storage for 50 ft./15m
Gear Pump Flow Rate*:	10.4 gpm/38 lpm	2 gpm/8 lpm
TEFC** Motor:	1 hp, 1800 RPM	1 hp, 1200 RPM
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" (1194mm) Width: 24" (610mm) Length: 23" (585mm)	
	Hose/Wand assembly length: 10' (3.05m)	
Filter Notes:	Requires 3 filters: 2 pressure, 1 suction	Requires 4 pressure filters

*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	$\alpha_{x(c)} = 1000$	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 23369	Rating based on ISO 16889		in	mm		
Synteq Synthetic			<4 μ m	14.2	361	P564468	
			6 μ m	11.6	294	P165675	
			6 μ m	11.6	294	P171274 ¹	
			6 μ m	14.2	361	P179763	
Alpha-Web	10 μ m			14.2	361	DBH0949	
Synteq Synthetic			11 μ m	7.6	193	P176207	
			11 μ m	11.6	294	P165659	
			11 μ m	11.6	294	P573996 ¹	
			11 μ m	14.2	361	P170949	
			23 μ m	7.6	193	P176208	
			23 μ m	11.6	294	P165569	
			23 μ m	11.6	294	P171276 ¹	
			23 μ m	14.2	361	P173789	
			50 μ m	11.6	294	P165672	
			50 μ m	14.2	361	P573353	
Water Absorbing		10 μ m		11.6	294	P179075	Absorbs 300 ml water

¹Fluorocarbon 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 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). 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.