



FLUIDLOOP TECHNOLOGIES

FILTRATION SOLUTIONS

GEAR BOX - HYDRAULIC RESERVOIRS

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ABOUT US

FLUIDLOOP TECHNOLOGIES, LLC is an exciting new OEM company specializing in affordable Kidney-Loop filtration **designed for small volume gear-boxes and hydraulic reservoirs 0-100 gals.**

FLUIDLOOP TECHNOLOGIES is a U.S. company, based in Western Washington State, USA.

FLUIDLOOP TECHNOLOGIES Patent Pending design is simple, allowing customers to use their own filter, or a factory supplied filter to remove dirt and moisture out of machinery gear box or hydraulic fluid.

FLUIDLOOP TECHNOLOGIES has a growing network of distributors located throughout North America. Contact us to find a Distributor near your location.

MARKETS SERVED

The FL-1000 can be used in almost any industry where small volume gear boxes and hydraulic reservoirs 0-100 gals are used; pulp and paper, metal working, mining, general manufacturing, marine, mobile applications and more.

CONTACT US

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FL-1000 INTRODUCTION

What is the FLUIDLOOP FL-1000?

Portable hand-carry, wall-mounted, or machine mounted Kidney Loop filtration **targeting small gearbox and small hydraulic reservoirs up to 100 gals.**

What makes FL-1000 different?

Compact, simple, affordable design.

Variable-speed pump that can be adjusted to different viscosities.

Adjustable pump psi that can be adjusted to different viscosities.

Low-Flow, ideal for small volume gearboxes and small hydraulic units up to 100 gals.

Customers can use factory supplied filters, or their own spin-on filter of choice.

Filter selection for both dirt and water removal

Where can the FL-1000 be used?

Almost any industry where gear boxes and small hydraulic reservoirs 0-100 gals are used; pulp and paper, metal working, mining, general manufacturing, marine, mobile applications and more.



FL-1000
Tank Reservoir
Mounted - with optional Filler
Breather Adapter



FL-1000 with Small Depth Filter



FL-1000v2 with Heavy Duty
Pump/Motor & Carry Stand

FL-1000v2 FEATURES

- Simple compact design eliminating bulky hand-cart mounted pumps/motors
- Variable-speed stainless steel AISI 316L pump that will adjust to different viscosities
- Updated heavy-duty, high torque brushless motor with electromagnetic drive, resulting in an exceptionally reliable, pulsation-free, leak free, energy efficient unit
- IP55 motor enclosure
- Low-Flow, ideal for small volume gear boxes and small hydraulic units up to 100 gals
- Flow rates 0.03-0.67/gpm (1.8-40/gph)*
- Use factory supplied filters, or customers own spin-on filter of choice up to 5"
- Filter selections for both dirt and water removal
- Clear Inlet/outlet hose for visual flow
- Sample Port for fluid testing
- Standard 120v wall power with adapter
- Machine mount or portable with optional Hand Carry Stand

* Actual flow rates depend on filter selection, psi, viscosity and temperature of the oil (low rates for Depth filters will be on the lower end of the range)



FL-1000V2 with Hand Carry



Sample Port for Fluid Testing



PSI Gauge

FL-1000 BENEFITS

What are the benefits?

Kidney Loop filtration on small volume gearboxes and reservoirs can provide the same benefits and life extension as larger systems, including reduction in downtime and replacement costs.

Improve Machine Reliability

One of the most frequent causes of equipment failures (and unplanned downtime) is the contamination of fluid systems.

While many large hydraulic systems have filtration, many gearboxes and small hydraulic units are frequently overlooked.

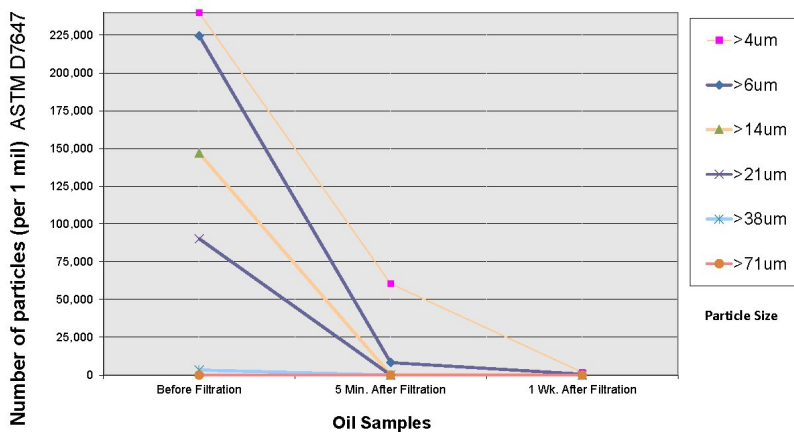


Gear oil samples at 0, 5min, 1 week



Gear oil sample at 5 weeks

OIL CONTAMINATION
Case Study Example
Gear Oil MOBIL SHC 629



Reduce equipment rebuilds and downtime by adding Kidney-loop filtration.

ACCESSORIES

HAND CARRY STAND

Add portability from one machine to the next with an optional **Hand-Carry Stand**.

Machined **MADE-IN-THE-USA** solid aluminum with Integral Drip Tray to prevent oil spills.

Includes mounting holes for the FL1000, and Rubber Isolation Feet.

FL-1000 Shown with optional Hand-Carry Stand



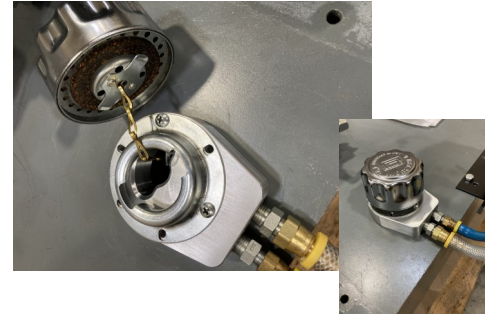
QUICK-DISCONNECT FITTINGS



Quick-Release Fittings for portable Hand-Carry connection.



80 Mesh Strainer for Inlet Suction Line



FILLER BREATHER ADAPTER

Tank Filler Breather Adapter with ports for Inlet & Outlet suction/return lines



FILTER ADAPTERS

Filter Adapters for factory supplied filters, or customers filters up to 5". Simply change the adapter to match the desired filter.

SPECIFICATIONS



Flow Rates *

- 0.03-0.67 gal/min (1.8-40/gph)*

*Actual flow rates depend on filter selection, psi, viscosity and temperature of the oil
(Flow rates for Depth filters will be on the lower end of the range)
Measured at 40° C, 50% approximate pump speed

Gear Oil Specs

- Typically up to ISO 220 **
- Synthetic Oil recommend for Heavier oils
- Service Sump Size typically 0-10 Gals

Oils that have a viscosity grade of **ISO 150 or higher are recommended to have a **Viscosity Index (VI) of 125 or greater**

Hydraulic oil Specs

- Typically AW 32, 46, 68, 100, 150
- Service Reservoir Typically Up to 100 Gals depending on flow rate

Pump/Motor

- Magnet Drive Gear Pump
- 24 VDC Supply Voltage
- Brushless Motor Assy
- Rated 3A, 50 Watt
- Speed Range from 150 to 3650 rpm

Operating Conditions

- Storage Temperate Range -40° to 70° C
- Operating Ambient Temperature Range 0°-70° C (32°-158° F)
- Max Fluid Temperature 120° C
- IP Rating: IP55
- Relative Humidity 8 to 90% (non condensing)
- Thermal motor protection shutdown temp 90° +/- 4° C (194° F)

Power

- Power Supply Standard 120v wall power with 24v adapter
- Amp draw 1.9-2.9, max 3-3.4 amps

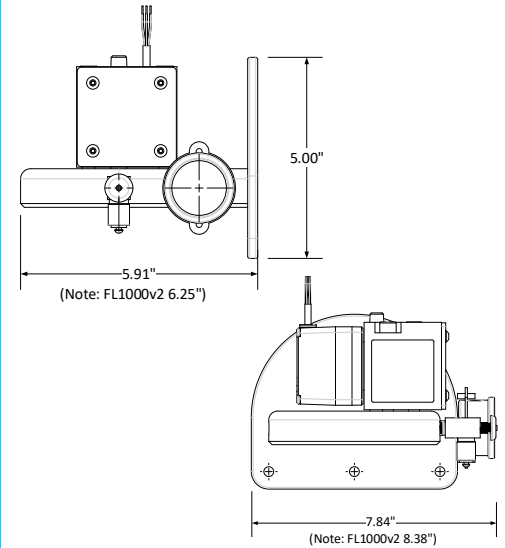
Dimensions (with Standard Pump, without filter)

Wall/Equipment Mounted	With Hand Carry Stand
W 8.38"	W 8.38"
H 5.00"	H 17.97"
D 6.25"	D 14"

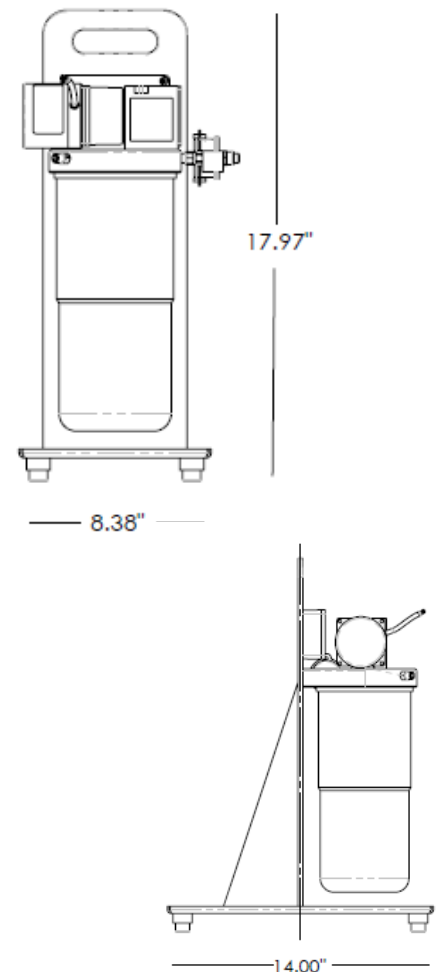
Weight (without Filter and fluid)

Wall/Equipment Mounted	With Hand Carry Stand
8.2 lbs.	13.4 lbs.

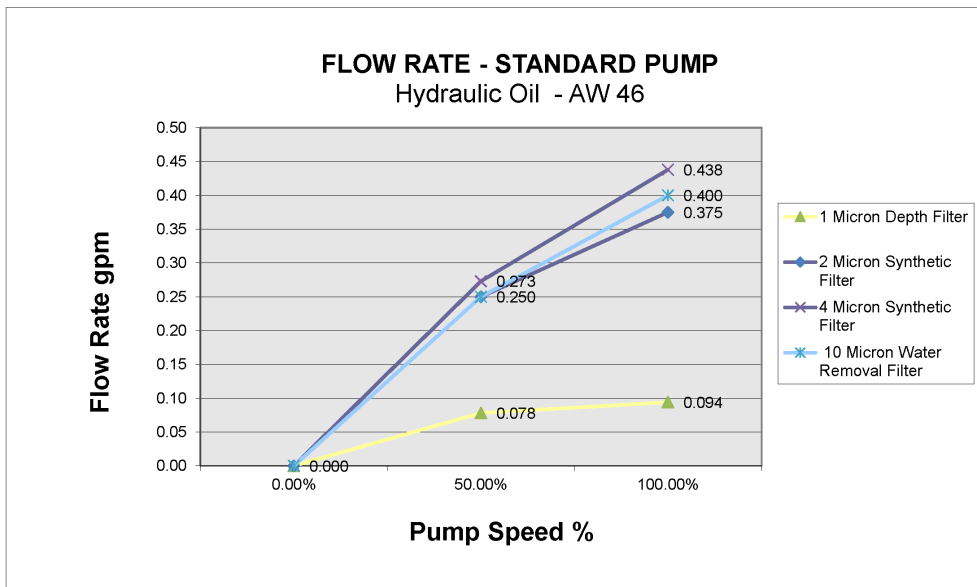
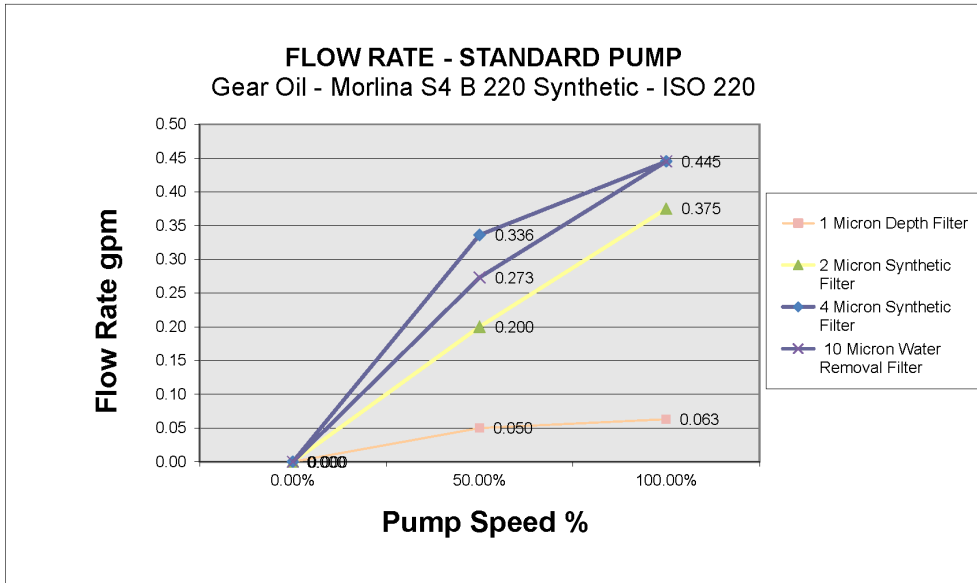
Dimensions—Wall Mount



Dimensions—Hand-Carry Stand



SPECIFICATIONS



Flow Rates

*Flow rates **0.03-0.67 gpm (1.8-40 gph)**. Actual flow rates depend on oil selection, filter selection, psi, oil viscosity, temperature of the oil and cleanliness of the filter.

Flow rates for Depth filters will be on the lower end of the range)

* Measured at 40°C, 50% approximate pump speed

Gear oil Specs

- Typically up to ISO 220 **
- Synthetic Oil recommend for Heavier oils.
- Service Sump Size
Typically 0-10 Gals.

Oils that have a viscosity grade of **ISO 150 or higher are recommended to have a **Viscosity index (VI) of 125 or greater**.

Hydraulic oil Specs

- Typically AW 32, 46, 68, 100, 150
- Service Reservoir Typically
Up to 100 Gals



SPECIFICATIONS

FILTER/FLOW RATE TESTING INFORMATION

FILTER	TYPE	DIM.	MEDIA	EFFICIENCY	GEAR OIL ¹	HYDRAULIC	RESERVOIR/ SUMP SIZE GALS
					FLOW RATE	OIL ²	
2 Micron Dirt Removal Filter	1.5 qt-Med, Spin-on, dirt removal	H 7.5"	Synthetic	Absolute efficiency of 98.7 percent at 2 Microns	0.20/gpm	0.25-0.28/gpm	Hydraulic 0-100
P/N FLA-2MICRON		W 4.25"			(12/gph) ³	(15-16.8/gph) ³	Gear oil 0-10
4 Micron Dirt Removal Filter	Large Capacity, Spin-on, dirt removal	H 10.66"	Synthetic	4 Micron Efficiency Beta 1000	0.34/gpm	0.19--0.30/gpm	Hydraulic 0-50
P/N FLD-4MICRON		W 5.08"			(20/gph) ³	(11.4-18/gph) ³	Gear oil 0-10
10 Micron Filter with Water Removal Capacity	Large Capacity, Spin-on, 300ml water removal capacity	H 10.66"	Synthetic	10 Micron Efficiency	0.27/gpm	0.25/gpm	Hydraulic 0-50
P/N FLD-10MICRON-W		W 5.04"		Beta2, Water Absorbent	(16.4/ gph) ³	(15/gph) ³	Gear oil 0-10
1 Micron Depth Filter	2.0 qt, Spin-on, Depth Filter - particulate & water removal	H 10.25"	Depth	1 Micron	0.063/gpm	0.03-0.05/gpm	Hydraulic 0-25
P/N FLH-1MICRON-DFL		W 4.32"		Beta3 =250	(3.75 gph) ³	(1.80-3.0/gph) ³	Gear oil 0-10
OTHER FILTERS	Provided by customer						
Customers own spin-on filter of choice up to 5 in. in diameter	Optional filter adapters are available for other brands of filters						

Actual flow rates depend on oil selection, filter selection, psi, viscosity and temperature of the oil (Flow rates for Depth filters will be on the lower end of the range)

¹ Shell Morlina S4 B 220—ISO 220

² AW 46

³ Measured at 40°C, 50% approximate pump speed

WARRANTIES & LIMITATIONS OF LIABILITY

DEFINITIONS

“FLT” is defined as “FLUIDLOOP TECHNOLOGIES, LLC, a Limited Liability Company.

“Purchaser” is defined as person or entity purchasing goods or service from FLT.



WARRANTY

A. FLT warrants, except as hereinafter provided, each product sold hereunder which is assembled by it to be free from defects in assembly under normal use and service, in the manner originally intended, for a period of six months after shipment thereof to the original purchaser.

B. FLT'S WARRANTY EXTENDS ONLY TO THE PRODUCTS ASSEMBLED BY IT AND IS, TO THE EXTENT PERMITTED BY LAW, IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY PRIOR WRITTEN OR ORAL REPRESENTATIONS REGARDING SUCH PRODUCTS MADE BY FLT, ITS EMPLOYEES, AGENTS OR REPRESENTATIVES.

C. PRODUCTS, OR COMPONENTS THEREOF, SUPPLIED BY ANY OTHER PARTY TO FLT WHICH ARE NOT ASSEMBLED BY FLT ARE COVERED ONLY BY THE INDIVIDUAL WARRANTY OF SUCH OTHER PARTY, AND COPIES OF SUCH WARRANTIES WILL BE FURNISHED UPON REQUEST.

D. FLT reserves the right to inspect products claimed defective under warranty either at the Purchaser's location or at FLT. A defective product is not to be returned to FLT's plant unless authorized by FLT. Products so returned shall be returned to FLT's facility, freight prepaid. Any product proving defective due to faulty assembly within six months from date of shipment will be replaced or repaired free of charge, F.O.B. FLT's facility. FLT assumes no liability for labor charges incidental to the adjustment, service, repair, removal or replacement of the product or other costs, or for the expense of repairs made outside of its facility except when made pursuant to FLT's prior written consent. FLT, at its option, may ship a replacement or replacements immediately under standard billing and make warranty adjustments after inspection of the defective product by means of a credit memorandum.

THIS WARRANTY SPECIFICALLY EXCLUDES ALL PURCHASER COSTS INCURRED IN REMOVAL AND HANDLING THE ALLEGED DEFECTIVE PRODUCT AS WELL AS ALL PURCHASER COSTS IN INSTALLATION OF REPLACEMENT PRODUCTS WHETHER TEMPORARY OR PERMANENT.

DELAYS

FLT shall not be liable for any damages, costs, or expenses, or for delays in performance due to circumstances beyond its reasonable control, including without limiting the generality of the foregoing, any priority system established by any agency of the United States Government, fires, floods, storms, and other acts of God, accidents, strikes, insurrections, war, shortages of materials, lack of transportation and failure of performance of subcontractors and/or suppliers for similar reasons. Failure of FLT to perform for these reasons aforesaid shall not be grounds for Purchaser's cancellation of its order but the delivery date shall be extended accordingly.

LIMITATION OF LIABILITY

No claim made hereunder by the Purchaser, whether as to goods delivered or for non-delivery shall be greater than the purchase price of the goods in respect of which such claim is made, and FLT shall under no circumstances be liable for any damages including consequential, incidental, ancillary, special or punitive damages. FLT assumes no responsibility for bodily harm resulting from improper use of goods. To the fullest extent of the law, Purchaser shall defend and hold harmless FLT, including its affiliates, parents, and subsidiaries, from and against all claims, damages, loss, and expenses including but not limited to attorney's fees and disbursements incurred by FLT as part of a loss or damage arising out of or resulting from Purchaser's negligent acts in handling all products purchased, sold, resold, distributed, installed or maintained by Purchaser or its agents.



FLUIDLOOP TECHNOLOGIES

SALES CONTACT:

