



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 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 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 for gearbox and hydraulic reservoirs up to 50 gals with the standard pump. Large pump option available for 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 gearboxes and hydraulic units up to 50 gals with the standard pump. Large pump option available for hydraulic reservoirs 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 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 Long
Depth Filter



FL-1000 with Small Depth Filter



80 Mesh Strainer for Inlet Suction
Line included

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

FL-1000 FEATURES

- Variable-speed stainless steel AISI 316L pump that will adjust to different viscosities.
- Rotor-less motor, combined with a electromagnetic drive, resulting in a exceptionally reliable, pulsation-free, leak free, energy efficient unit.
- Low-Flow, ideal for gear boxes and hydraulic units up to 0-50 gals with the standard pump. Large pump option available for hydraulic reservoirs up to 100 gals.
- Flow rates Standard Pump 0.05-0.45/gpm (3-27/gph)*
- Flow rates Optional Large Pump up to 1/gpm*
- Can use factory supplied filters, or customers own spin-on filter of choice
- 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
- Wall or Equipment mount with Wall Mount Bracket
- Portable with Hand Carry Stand (Optional)

* Flow rates vary with pump selection, filter, viscosity and temperature of the oil



FL-1000 with Hand Carry Stand



Sample Port for Fluid Testing



PSI Gauge

FL-1000 BENEFITS

What are the benefits?

Kidney Loop filtration on gearboxes and smaller reservoirs can provide the same benefits and life extension as larger systems with filtration.

Reduce costly equipment rebuilds and downtime .

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.

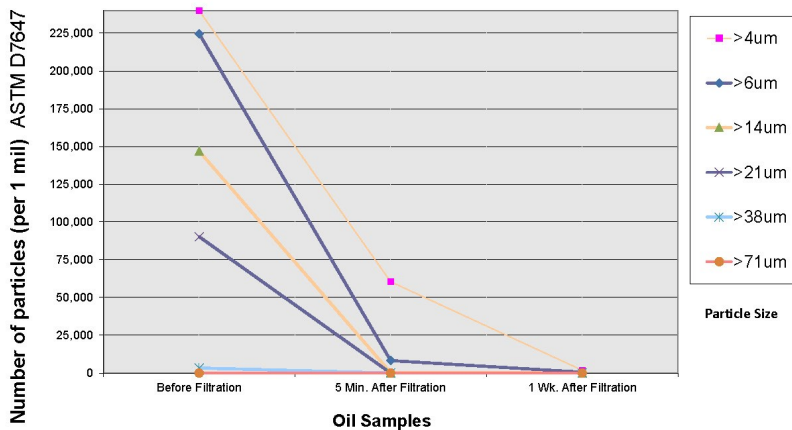


Gear oil samples at 0, 5min, 1 week



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

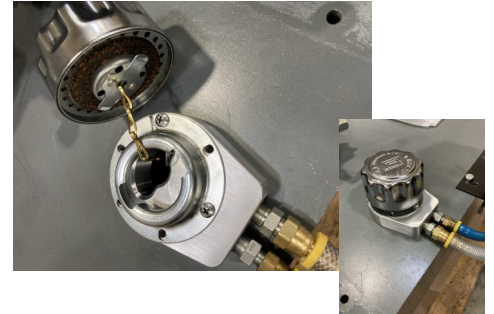
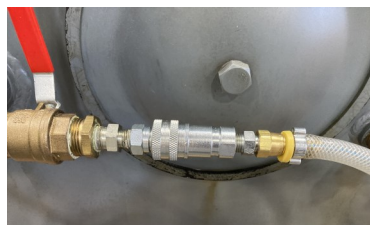


QUICK-DISCONNECT FITTINGS



Quick-Release Fittings for portable Hand-Carry connection.

(Set of two)



FILLER BREATHER ADAPTER

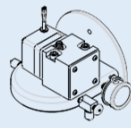




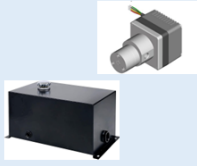
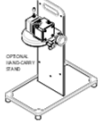


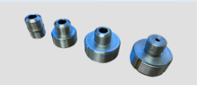
Tank Filler Breather Adapter with ports for Inlet & Outlet suction/return lines



FILTER ADAPTERS

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

OPTIONS CHART

ITEM	DESCRIPTION	INCLUDED WITH STANDARD UNIT	
FL-1000 Filtration Unit	Filtration unit for gear-boxes and hydraulic reservoirs 0-50 gals	X	
Standard Pump	Compact Brushless Magnet drive gear pump Flow Rates from 0.05-0.45/gpm (3-27/gph)	X	
Wall Mount Bracket	For Stationary-mounting on machine, or wall	X	
Fittings & Hoses	Fittings, Inlet/Outlet hoses and connectors	X	
Filter	One (1) Spin-on Filter of choice See Filter Spec Sheet	X	
Inlet Hose Strainer	80 Mesh Strainer for Inlet Suction Line Included	X	
Large Pump Option	Compact Brushless Magnet drive gear pump Flow Rates up to 1/gpm depending on application For larger Hydraulic tanks 50-100 gals	OPTIONAL	
Hand Carry Stand	Custom solid aluminum machined Hand Carry Stand for the FL-1000 Add portability	OPTIONAL	
Quick Disconnects	Quick-Release Fittings for portable Hand-Carry connection (Set of Two)	OPTIONAL	
Filler-Breather Adapter	Tank Filler Breather Adapter with ports for Inlet & Outlet suction/return lines	OPTIONAL	
Filter Adapters	Filter Adapters for factory supplied filters, or customer's filters up to 5". Simply change the adapter to match the desired filter.	OPTIONAL	

SPECIFICATIONS

Applications

Standard pump recommended for gearbox and hydraulic reservoirs 0-50 gals (depending on oil selection, viscosity and temperature)

Large pump option available for larger hydraulic reservoirs 50-100 gals (depending on oil selection, viscosity and temperature)

Pump/Motor Operating Working Conditions

Speed Range from 300 to 5000 rpm

Min Ambient Temperature 5°C/41°F

Max ambient Temperature 40°C/104°F at the maximum torque (70 C/158 F at 70 mNm torque)

Max Fluid Temperature 55 C/131 F at the maximum torque (95 c.203 F at the lower torque)

Unit Protection Level IP52

Max Relative Humidity 30% without Condense

Storage Temperature -20 C + 85 C/-4 F + 186 F

Power

Standard 120v wall power with 24v adapter

Mounting

Wall or Equipment mount with Wall Mount Bracket

Miscellaneous

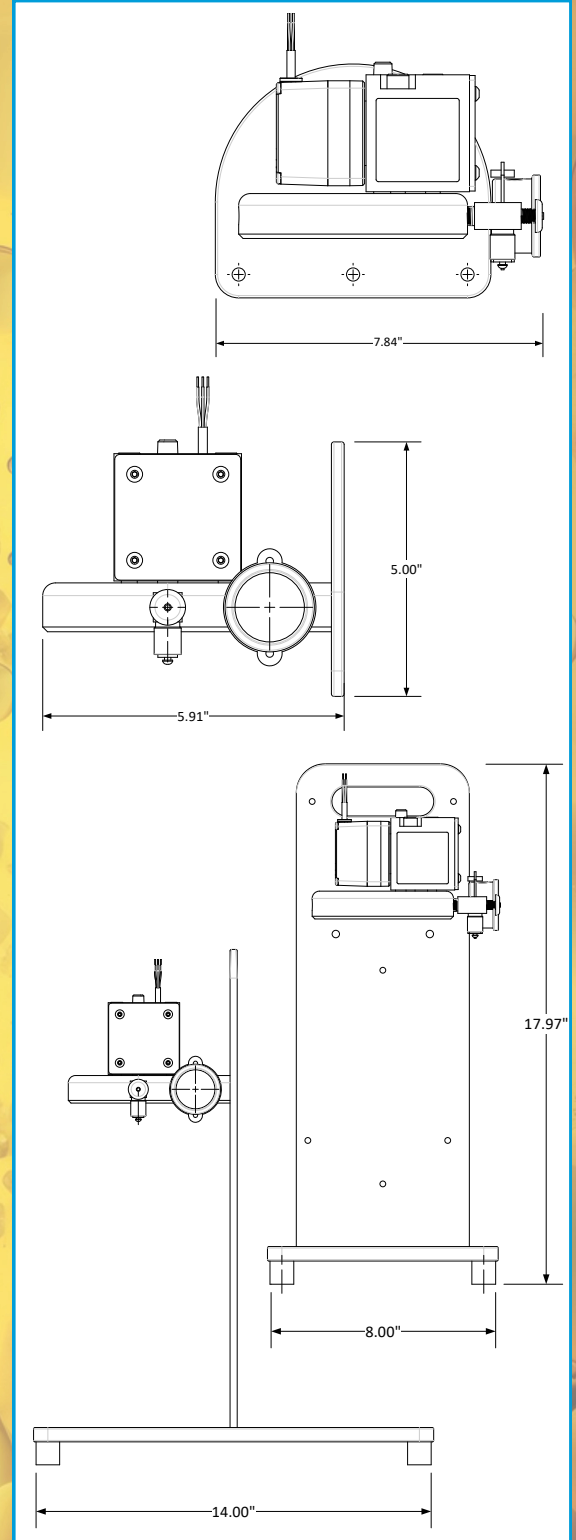
Washdown rated - No

Dimensions (with Standard Pump, without filter)

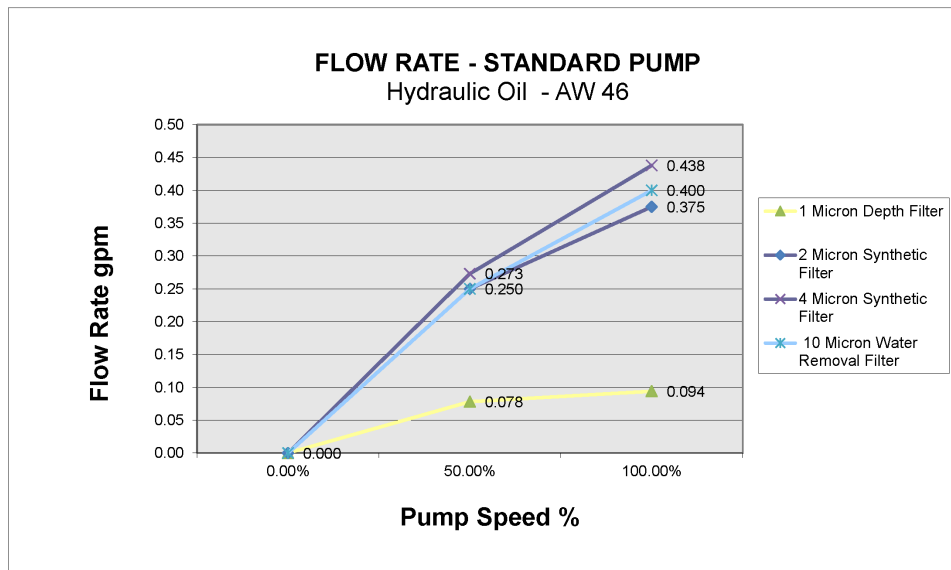
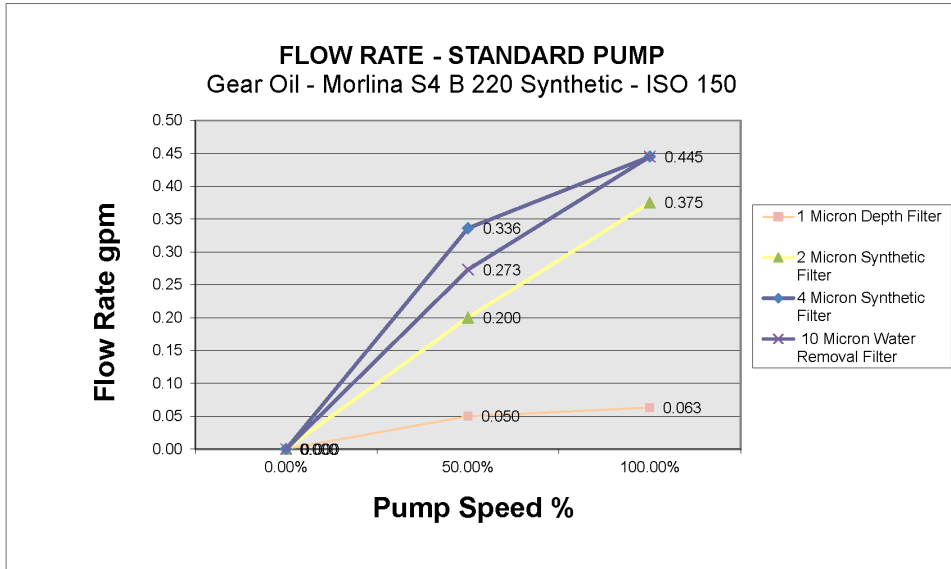
Wall/Equipment Mounted	With Hand Carry Stand
W 7.84"	W 8.00"
H 5.00"	H 17.97"
D 5.91"	D 14"

Weight (with Standard Pump, without Filter)

Wall/Equipment Mounted	With Hand Carry Stand
6.4 lbs.	11.0 lbs.



SPECIFICATIONS



Flow Rates-Standard Pump

*Flow rates 0.05-0.45/gpm (3-27/gph) depending on oil selection/viscosity/temperature, filter selection, and cleanliness of the filter. (0-50 gal reservoir)

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

Large Pump Option

- Large Pump Option available for Hydraulic Reservoirs 50-100 Gals.
- Flow Rate Large Pump up to 1 gal/min *

Gear oil Specs

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

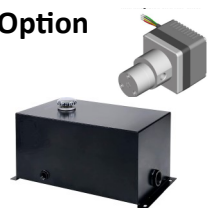
**Oils that have a viscosity grade of ISO 150 or higher and 150 cst @ 40C or higher need to have a Viscosity index (VI) of 125 or greater.

Hydraulic oil Specs

- Typically AW 32, 46, 68.
- Service Reservoir Typically Up to 50 Gals (Standard Pump)

Large Pump Option

available for Hydraulic Reservoirs 50-100 Gal.



SPECIFICATIONS

FILTER INFORMATION

FILTER	TYPE	DIM.	MEDIA	EFFICIENCY	GEAR OIL ¹	HYDRAULIC OIL ²	RESERVOIR/ SUMP SIZE GALS
					FLOW RATE	FLOW RATE	
2 Micron Dirt Removal Filter	1.5 qt-Med, Spin-on, dirt removal filter	H 7.5"	Synthetic	Absolute efficiency of 98.7 percent at 2 Microns	0.20/gpm	0.25/gpm	Hydraulic 0-50
P/N FLA-2MICRON		W 4.25"			(12/gph) ³	(15/gph) ³	Gear oil 0-10
4 Micron Dirt Removal Filter	Large Capacity, Spin-on, dirt removal filter	H 10.66"	Synthetic	4 Micron Efficiency Beta 1000	0.34/gpm	0.27/gpm	Hydraulic 0-50
P/N FLD-4MICRON		W 5.08"			(20/gph) ³	(16.4/gph) ³	Gear oil 0-10
10 Micron Filter with Water Removal Capacity	Large Capacity, Spin-on, 300ml water removal capacity filter	H 10.66"	Synthetic	10 Micron Efficiency	0.27/gpm	0.25/gpm	Hydraulic 0-50
P/N FLD-10MICRON-W		W 5.04"		Beta 2, Water Absorbent	(16.4/ gph) ³	(15/gph) ³	Gear oil 0-10
1 Micron Short Depth Filter	1.5 qt, Spin-on, Depth filter	H 5.7"	Depth	1 Micron	0.05/gpm	0.062/gpm	Hydraulic 0-25
P/N FLH-1MICRON-DFS		W 4.32"			(3/gph) ³	(3.72/gph) ³	Gear oil 0-10
1 Micron Long Depth Filter	2.0 qt, Spin-on, Depth filter	H 10.25"	Depth	1 Micron	0.063/gpm	0.078 gpm	Hydraulic 0-25
P/N FLH-1MICRON-DFL		W 4.32"			(3.75 gph) ³	(4.69 gph) ³	Gear oil 0-10
OTHER FILTERS	Provided by Distributor						
Customers own spin-on filter of choice up to 5 in. in diameter	Optional filter adapters are available for other brands of filters						

¹ Shell Morlina 24 B 220—ISO 150 - STANDARD PUMP

² AW 46 - STANDARD PUMP

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

Note: PSI will increase as filter collects particulates

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.

SALES CONTACT: