Electric Oil Pumps

OPM

GEARED

Heavy duty oil pump designed to transfer bulk oils, hydraulic oils, used oil etc.

Air cooled motor with thermal protection

Non-corroding aluminum die cast pump body

Sintered powder metal gears

Self-priming, positive displacement design

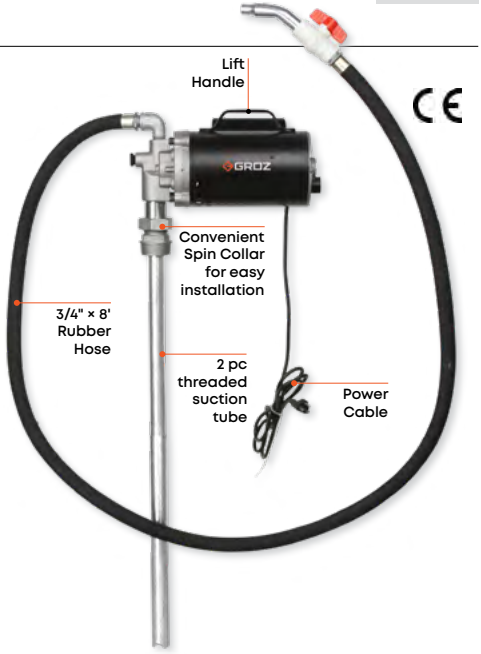
Built-in 2" bung adaptor for mounting on drums/tanks

High horsepower to flow ratio assures adequate power to pump viscous fluids at low temperatures

Pump has an internal bypass valve to bypass flow, if the discharge pressure exceeds the relief valve setting

Can be used to transfer used oil with a screen fitted onto the suction tube

Duty Cycle
30 minutes ON / 30 minutes OFF



SPECIFICATIONS

	AC REGULAR FLOW		AC HIGH FLOW	
	OPM/115	OPM/220	OPM/115/HF	OPM/220/HF
DESCRIPTION	Heavy Duty, 115V AC	Heavy Duty, 220V AC	High Flow Heavy Duty, 115V AC	High Flow Heavy Duty, 220V AC
FLOW	Upto 15 LPM (4 GPM)	Upto 11.5 LPM (3 GPM)	Upto 30 LPM (8 GPM)	Upto 23 LPM (6 GPM)
MOTOR	1/2 HP 115V AC,60 Hz	1/2 HP 220V AC,50 Hz	1/2 HP 115V AC,60 Hz	1/2 HP 220V AC,50 Hz
AMP	9 Amp	6 Amp	9 Amp	6 Amp
RPM	1600	1300	3400	2800
SUCTION PIPE	34" long			
HOSE	3/4" × 8'			
INLET/ OUTLET	1" NPT/ 3/4" NPT			
DISPENSING NOZZLE	Ball Valve			
POWER CABLE LENGTH	8'			
MAX. WORKING PRESSURE	65 PSI (4.5 BAR)			
WETTED COMPONENTS	Aluminum, Steel, Cast Iron, Nylon, NBR, Zinc, Polypropylene, PVC			
RECOMMENDED USE	Oils up to a viscosity of SAE 90, Synthetic Oils, Used Oils, Hydraulic Oils, Cutting Oils, Non-Flammable Oil Based Solvents			

CAT NR.	ORD. NR.	DESCRIPTION
OPM/115	45550	Electric oil pump with 115V AC motor
OPM/220	45551	Electric oil pump with 220V AC motor
OPM/115/HF	45555	Electric oil pump with high flow 115V AC motor
OPM/220/HF	45556	Electric oil pump with high flow 220V AC motor

SAFETY INFORMATION

- Keep the work area clean and dry. Damp or wet work areas can result in injury.
- Store idle equipment. When not in use, tools and equipment should be stored in a dry location to inhibit rust
- Use the right tool for the job. Do not attempt to force small equipment to do the work of larger industrial equipment.
- Do not modify this equipment and do not use this equipment for a purpose for which it was not intended.
- Check for damaged parts. Before using this product, carefully check that it will operate properly and perform its intended function. Replace damaged or worn parts immediately.

WARNING!

- Read and understand all instructions. Failure to follow all instructions listed above may result in electric shock, fire and/or serious injury.

PACKAGE CONTENT

DESCRIPTION	QUANTITY
Pump & motor assembly fitted with power cable	1
Suction tube (2 parts)	1
Bung adaptor	1
Elbow	1
Hose	1
Ball valve	1
Discharge spout	1
PTFE tape	1
O.I.P.M.	1

TOOLS NEEDED

- Adjustable spanner

BEFORE INSTALLATION

- **Eyes protection:** Wear a protective mask or protective eyewear.
- **Skin protection:** Avoid repeated and prolonged contact of fluids with the skin by wearing impermeable protective gloves.
- Check that the product has not suffered any damage during transport or storage. Clean the inlet and outlet openings, removing any dust or residual packing material.
- Keep the pump away from heat and sharp edges. Check the pump for wear and make certain that all connections are secure.

INSTALLATION

(Refer "EXPLODED VIEW")

1. Wrap around PTFE tape on the following male threaded joints. This will ensure a leak-proof connection
   - Male threads on the elbow (10)
   - Male threads on the fitting ends of the hose (20)
   - Male threads between the 2 suction tube (19) parts
   - Male threads on the suction tube (19) end that fits into the pump inlet.
2. Now hand tighten the elbow (10) to the pump outlet. Once the elbow (10) can no longer be hand tighten, take the adjustable spanner & tighten the elbow (10) by about half a turn. Open end of the elbow (10) should be facing away and not in the direction of the motor (1).
3. Take the bung adaptor (14) & hand tighten it onto the 2" drum opening. Bung adaptor (14) has a large 2" thread & a small 1-1/2" thread. 2" thread goes into the drum, whereas the 1-1/2" thread is for connecting the bung adaptor (14) to the pump.
4. Connect the two halves of the suction tube (19). Now connect the suction tube (19) to the pump inlet and hand tighten it.
5. Lift the pump from the handle and insert the suction tube (19) into the drum through the 2" opening on the drum. Use the convenient spin collar (13) mounted at the pump inlet to fasten the pump onto the Bung adaptor (14).
6. Ensure that there is about 2" (50 mm) gap between the bottom of the tank / drum & inlet of the suction tube (19) allowing easy entry of media into the suction tube (19).
7. Take about 30 ml of oil being dispensed & pour it into the pump outlet through the elbow (10). This will ensure that the gear (7) stays lubricated & makes it easier for the pump to prime.
8. Take the hose (20) & connect one threaded end to the elbow (10) at the pump outlet. Hose (20) has a hex nut at the threaded end which can be tightened to the elbow (10) using adjustable spanner.
9. Connect the other end of the hose (20) to the ball valve (21).
10. Connect the discharge spout (22) to the ball valve (21).
11. Turn the toggle switch (24) to 'OFF' (up) position and connect the power cable (23) to the AC power socket.
12. The pump is now ready for use.

In-line pump installation

This pump can additionally be mounted on a wall for in-line operation. This is particularly done in a shop environment where the pump may be used with waste oil.

Note: For waste oil application, pump already has a strainer installed at the bottom of the suction tube (19).

Pump can be installed using a mounting bracket (not provided, but can be ordered separately). This bracket is a simple right angle bracket with two mounting holes that uses the motor (1) mounting holes on one side of the motor (1) to attach it to the bracket. The bolts (6) used to mount the pump to the motor (1) are removed and then reinstalled through the two holes in the

mounting bracket. The other leg of the bracket has 4 mounting holes to mount the bracket to a wall or post. The pump is mounted such that the suction port is down and the outlet port is pointing up

OPERATING INSTRUCTIONS

(Refer "EXPLODED VIEW")

1. Switch on the AC power socket.
2. Make sure that the ball valve (21) is open.
3. Discharge spout (22) should be facing the container into which the media is to be dispensed.
4. Turn the toggle switch (24) to 'ON' (down) position to start the motor (1).
5. In less than a minute, the pump will be primed & media will start dispensing from the Discharge spout (22).
6. Dispensing action can be stopped by turning the toggle switch (24) to 'OFF' (up) position. It is suggested not to close ball valve (21) to stop flow.
   Note: Ball valve (21) is primarily designed as a non-drip which is closed after motor (1) is shut down.
7. **Max. 20 Starts / Hour**: Time gap between motor stop & restart must be minimum 3 minutes.
8. Motor (1) is air cooled & thermally protected which means that the pump can be run for a long time. If due to any reason, the motor (1) gets heated, it will stop automatically.
9. The pump however must never be run dry (no media in the drum) as that can possibly cause irreparable damage to the motor (1).
10. In case ball valve (21) is used to control flow & is closed with the motor (1) on, there will be no media flowing out of the discharge spout (22); instead media will go back into the pump. Pump has a built-in relief valve that will get activated & bypass the media. The ball valve (21) however must never be kept close for more than 5 minutes with the motor (1) switched on.
11. Once Dispensing is completed, switch off the toggle switch (24) & disconnect the power cable (23) from the AC power socket.

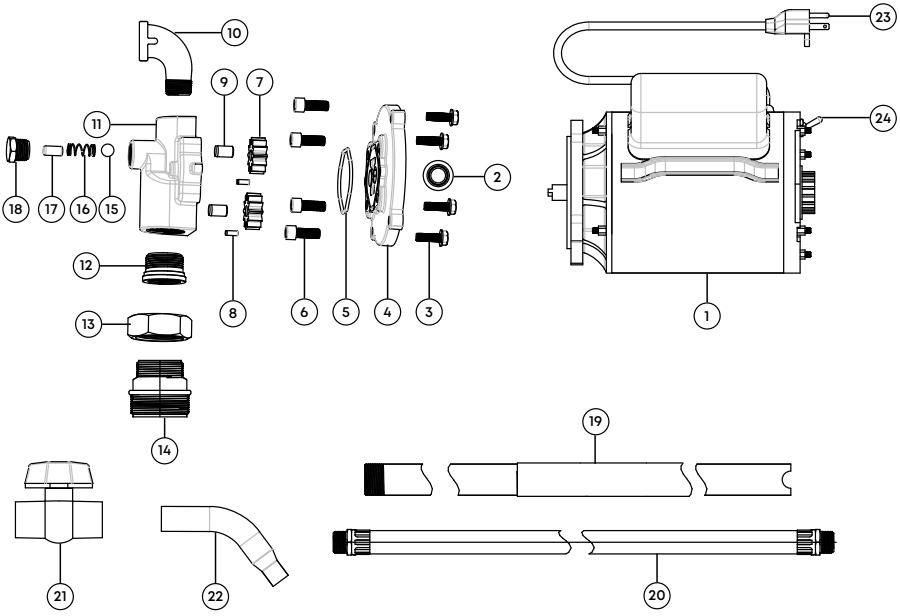
MAINTENANCE

The pump has been designed to require a minimum amount of maintenance. The only maintenance job required is cleaning the strainer at the bottom of the suction tube.

WARNING!

- Always make sure the pump is switched 'OFF' and liquid has been drained from the pump before cleaning

EXPLODED VIEW



PARTS LIST

REF NO.	PARTS DESCRIPTION	QUANTITY
1	Motor	1
2	Shaft seal	1
3	Cap screw (M8 x 1.25)	4
4	Body cover	1
5	O-Ring	1
6	Bolt (3/8-16 UNS)	4
7	Gear	2
8	Dowel	2
9	Gear shaft	2
10	Elbow (3/4"NPT)	1
11	Pump body	1
12	Bung fitting	1

REF NO.	PARTS DESCRIPTION	QUANTITY
13	Spin collar	1
14	Bung adaptor	1
15	Ball (relief valve)	1
16	Spring (relief valve)	1
17	Pin (3/8 x 3/4)	1
18	Plug (1/2" NPT)	1
19	Suction tube (with strainer)	2
20	Hose (8' x 3/4" ID)	1
21	Ball valve	1
22	Discharge spout	1
23	Power cable	1
24	Toggle switch	1

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor runs but pump will not prime	Low oil level	Refill the tank / Drum
	Strainer at the bottom of the suction tube (19) is clogged.	Remove and clean or replace the strainer at the bottom of the suction tube (19).
	Air leak in suction tube (19)	Inspect all joints in suction tube (19), make sure all threaded joint have sealant applied.
	Air lock in system	Insert about 8 oz. (240 ml) of oil through the elbow (10) into the pump outlet & then operate the pump.
	Motor (1) does not run at a proper speed	Check electric connections. Ensure that the voltage supply is proper.
	Worn or damaged gears (7)	Remove body cover (4) and inspect gears (7). Replace it, if worn or damaged
Oil leaking from motor	Damaged seal due to use with media not suitable for use with pump	Replace seal with genuine replacement seal from manufacturer and use only recommended media with the pump.

Motor pumps but output flow is low	Strainer at the bottom of the suction tube (19) is clogged.	Remove and clean or replace the strainer at the bottom of the suction tube (19).
	Air leakage through suction tube (19)	Check to make sure all joint of suction tube (19) are sealed
	Suction tube (19) too close to the bottom of the tank.	Ensure that there is about 2" (50 mm) gap between the bottom of the tank / drum & inlet of the suction tube (19) allowing easy entry of media into the suction tube (19)
	Low oil level	Refill the tank / Drum
	Worn or damaged gears (7)	Remove body cover (4) and inspect gears (7). Replace it, if worn or damaged
	Damaged motor (1)	Replace the motor (1)
	Clogged suction tube (19), hose (20), or discharge spout (22)	Inspect and clean the suction tube (19), hose (20) & discharge spout (22)
Motor stalls when nozzle is closed	Relief valve is stuck	Inspect relief valve, making sure ball (15) is free. Replace if damaged
	Low supply voltage	Check supply voltage
	Gears (7) damaged and binding	Inspect gears (7). Gears should turn freely. Replace if damaged
	Damaged motor (1)	Replace the motor (1)
Motor overheating	Gears (7) damaged and binding	Inspect gears (7). Gears should turn freely. Replace if damaged
	Operating the pump for extended time with spout (22) closed	Do not exceed 5 minutes of operation with spout (22) closed
	Strainer at the bottom of the suction tube (19) is clogged.	Remove and clean or replace the strainer at the bottom of the suction tube (19).
	Clogged suction tube (19), hose (20), or discharge spout (22)	Inspect and clean the suction tube (19), hose (20) & discharge spout (22)
	Operating the pump for more than 30 minutes continuously	Limit operation to 30 minutes per hour
Pump does not turn on with toggle switch	Electrical problem	Check that the supply voltage is proper
	Defective toggle switch (24)	Check and replace toggle switch (24) if defective
	Damaged motor (1)	Replace the motor (1)

DISPOSAL

The components or the used product must be given to companies that specialize in the disposal and recycling of industrial waste.

NOTE

NOTE

GROZ WARRANTY POLICY

Groz makes all efforts to ensure that its products meet the highest standards of quality and durability and warrants to the original purchaser its range of products for a period of 12 months from Groz Invoice date, against defects in materials and workmanship. If the Groz product is part of a set, only the portion that is defective is subject to this warranty.

This warranty does not apply to damage due directly or indirectly, to misuse, abuse, wear and tear, negligence or accident, repairs or alterations outside Groz plants, or to lack of maintenance. Groz shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of its products. It is upto the user to determine suitability and safety of the product for their intended use, and the user assumes all risks and liability herewith.

In no event, shall Groz's liability exceed the invoiced cost of the product In case of identification of defect covered under this warranty, the same must be notified in writing to Groz /Groz designated authorized service location. Proof of purchase date must accompany the complaint. Groz reserves the right to call back the faulty unit, all charges including transportation prepaid. On verification of the defect, the unit will be repaired or replaced with a new or reconditioned product or part of equal utility or a full refund given at Groz's discretion. The repaired /replaced units will be returned to the user freight prepaid, using most economical freight carrier. However if determined that the defect resulted from causes not within the scope of the warranty, then the cost of returning the product would be to buyer's account.

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