

Little GIANT[®] Pump Company

4-M D



Features

- Thermally Protected, Open, Fan-Cooled Motor
- Ball Bearings
- 6' Power Cord with 3-Prong Plug
- (No plug on 230V)
- Specific Gravity to 1.1
- Fluid Temperature to 150 Degrees F.
- Ambient Air Temperature to 77 Degrees F.
- NOTE: Consult your local distributor or the factory for applications with higher ambient temperatures, specific gravities and viscosities.

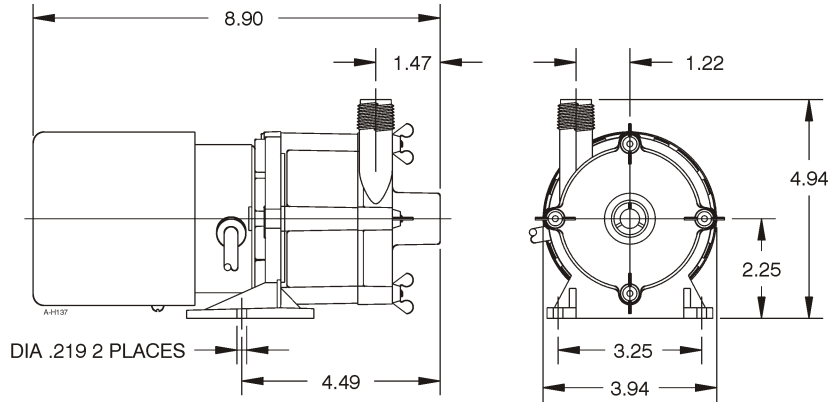
Construction

- Volute — Glass-filled Polypropylene
- Housing — Glass-filled Polypropylene
- Impeller — Glass-filled Polypropylene & Ceramagnet "A" (Barium Ferrite)
- Shaft — Titanium
- Thrust Washers — Titanium
- O-Ring — Nitrile

The Little Giant MD series features leakproof, seal-less magnetic drives and are designed for in-line, non submersible use. Volute and magnet housing are glass-filled polypropylene for excellent chemical resistance. Impeller is glass-filled polypropylene and Ceramagnet "A" (Barium Ferrite). Shaft and thrust washers are Titanium for excellent wear and trouble-free service. Pumping heads are easily rotated, cleaned or serviced with no special tools required. Spindle shaft is supported at both ends to prevent impeller damage during start-up and stop of pump.

Little Giant Pump Co.

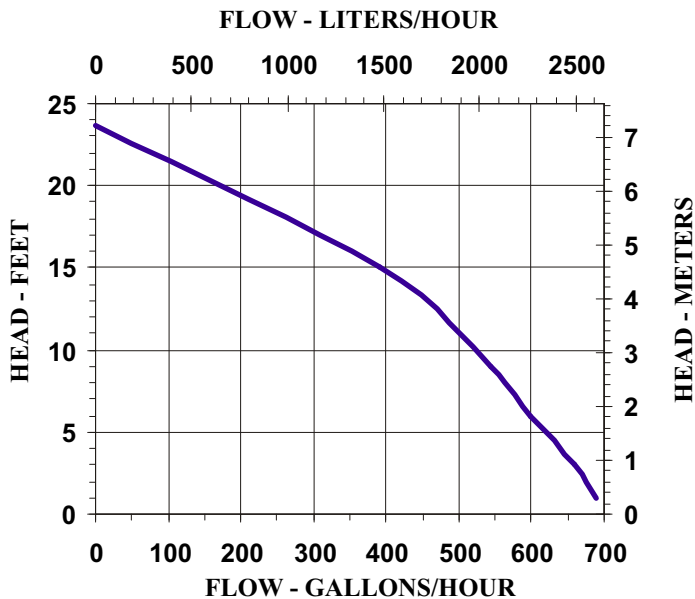
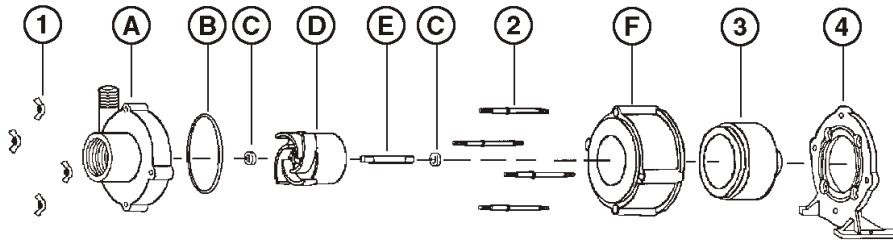
4-MD



NOTE: Designs and dimensions may vary for various reasons (i.e. type of motor). This information should be used as general guide rather than an unqualified guarantee. Specifications are subject to change without prior notice.

Specifications

Model No.	Item No.	Intake	Discharge	Listing(s)	HP	Volts	Hertz	Amps	Watts	Performance (GPH @ Head)					Shut Off		Pwr. Cord (ft)	Weight (Lbs.)
										1'	3'	6'	9'	15'	Feet	PSI		
4-MD	582002	1/2" FNPT	1/2" MNPT	UR/C-CSA	1/12	115	60	2.4	213	690	660	600	545	390	23.7	10.3	6	8.50
4-MD	582012	1/2" FNPT	1/2" MNPT	UR/C-CSA	1/12	230	60	1.4	212	690	660	600	545	390	23.7	10.3	6	8.50
4-MD	582098	1/2" FNPT	1/2" MNPT	PUMP HEAD LESS MOTOR													2.17	



Replacement Parts

ITEM	PART NO.	DESCRIPTION
A	183070	Volute
B	924007	O-Ring
C	921067	Thrust Washer
D	182137	Impeller
E	182056	Shaft
F	182005	Housing
1	920003	Wing Nut
2	911403	Stud, Collared
3	182602	Drive Magnet
4	180031	Mtg. Bracket

Note: Parts A-F Contact Fluid.

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Little GIANT®

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MODEL
4-MD
5-MD

INTRODUCTION

This instruction sheet provides you with the information required to safely own and operate your Little Giant pump. Retain these instructions for future reference.

The Little Giant pump you have purchased is of the highest quality workmanship and material, and has been engineered to give you long and reliable service. Little Giant pumps are carefully tested, inspected, and packaged to ensure safe delivery and operation. Please examine your pump carefully to ensure that no damage occurred during shipment. If damage has occurred, please contact the place of purchase. They will assist you in replacement or repair, if required.

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE, OR SERVICE YOUR LITTLE GIANT PUMP. KNOW THE PUMP'S APPLICATION, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

SAFETY GUIDELINES



CAUTION: To reduce the risk of electrical shock, remove the pump from power before attempting to service or remove any part.

Read all instructions and safety guide lines thoroughly. Failure to follow the guidelines and instructions could result in serious bodily injury and/or property damage.

Do not pump flammable liquids such as gasoline or fuel oil.

Make sure pump is grounded.

During operation, the area surrounding the pump may be covered with water; take care when handling the pump.

Do not disconnect plumbing connections when pump is in operation.

Do not stand in water when changing fuses.

PUMP CONSTRUCTION

The patented Little Giant magnetic drive pump design consists of a cylindrical drive magnet attached to the motor shaft, which rotates

around a chemical-resistant plastic separator housing. Inside this housing is a magnet fixed to the impeller. The impeller assembly is free to rotate on a spindle that is supported at both ends. The spindle is held captive and does not turn. Front and rear thrust washers are utilized as wear bearings. The washers are held captive and do not revolve. This prevents wear on the shaft. With the magnetic coupling the motor drives the impeller. This coupling eliminates the conventional shaft seal and its possibility of leakage.

PUMP MATERIALS

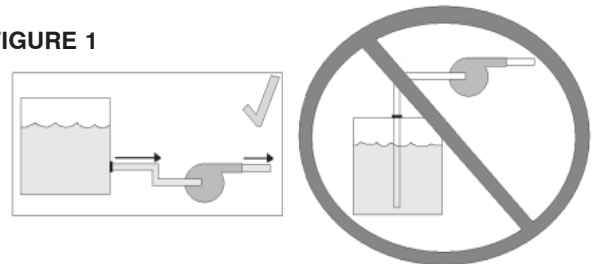
The pump's plastic parts are made of glass-filled polypropylene. The spindle shaft and thrust washers are titanium. The impeller-driven magnet is uncoated Ceramagnet A (barium ferrite) type ceramic, and the static O-ring seal is Buna-N.

INSTALLATION

This Little Giant pump is completely pre-assembled and pretested at the factory, and is ready for immediate use. The pump may be installed in any position. It may be mounted vertically with the pump head down. Ensure that proper plumbing connections are made; see specifications table to determine what size intake and discharge your pump has. Use a thread sealer on all pipe connections and hand-tighten only. Make sure the wing nuts are tight before operating the pump. The motor nameplate lists all electrical data. Make sure the pump is connected to proper voltage before operating. When wiring pumps with no plug, the green (or green/yellow) wire is ground, and the other two are line (live).

Do not allow the models to run dry (without liquid). These pumps are not submersible; operate the pumps only in the in-line mode. Do not put the units in liquid. Pump should be installed in a dry area and protected from splash. These pumps are not self priming; they must be installed so that the pump head (volute) is flooded when the pump is started. That is, the inlet of the pump must be below the level of the surface of the liquid being pumped (Figure 1).

FIGURE 1



Do not restrict the intake side of the pump. Connections on the intake side should not be of smaller inside diameter pipe or tubing or hose than the intake inside diameter of the intake thread designation. If reduced flow is required restrict the discharge side. Installing a valve or other type of restriction device on the discharge side is the proper method for reducing flow from the pump. When using a valve the pump can be throttled to provide various flow rates and pressures without harming the motor or the pump parts.

SPECIFICATIONS																						
MODEL	INTAKE SIZE	DISCHARGE SIZE	MOTOR						MOTOR TYPE**	MAX. PSI	SHUTOFF HEAD (FT.)	GALLONS PER MINUTE @ HEAD							DIMENSIONS			WEIGHT PACKED (LBS.)
			VOLTS	HERTZ	PHASE	H.P.	WATTS	AMPS				1'	3'	6'	9'	15'	18'	24'	H	W	L	
4-MD*	1/2" FNPT	1/2" MNPT	115	60	1	1/12	213	2.4	OPEN-FC	10.2	23.7	11.5	11.0	10.0	9.1	6.5	4.7	--	4.3"	4.0"	8.9"	8.5
				50			214	3.1				7.1	16.4	13.3	12.7	11.8	10.0	4.3				
5-MD	1/2" FNPT	1/2" MNPT	115	60	1	1/8	200	2.1	OPEN-FC PSC	15.0	34.6	15.1	14.6	13.3	12.5	10.6	9.6	7.3	5.6"	5.4"	8.3"	9.3
				50			155	1.9				9.7	22.4	13.8	13.3	12.3	11.2	8.8				

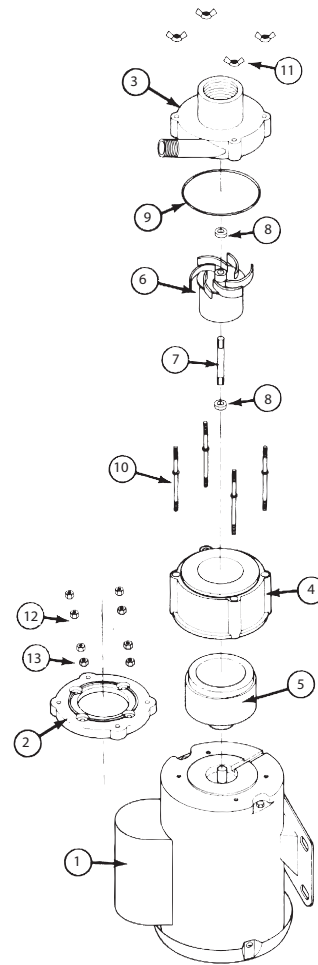
*Not recommended for 50Hz operation. Possible motor overheating will occur in some applications.

**Open = Open motor, FC = fan cooled, PSC = permanent split capacitor

NOTE: Data shown is catalog performance. 230V data is the same as 115V for each frequency.

ITEM NO.	PART NO.	DESCRIPTION*	MODEL AND CATALOG NUMBERS					
			4-MD			5-MD		
			582002	582012	582098	583002	583012	583098
1	977409	MOTOR, 115 VOLT	1	--	--	--	--	--
1	977909	MOTOR, 220/240 VOLT	--	1	--	--	--	--
1	977410	MOTOR, 115 VOLT**	--	--	--	1	--	--
1	977910	MOTOR, 220/240 VOLT**	--	--	--	--	1	--
2	180031	ADAPTER W/BASE	1	1	1	--	--	--
2	183031	ADAPTER	--	--	--	1	1	1
3	183070	VOLUTE	1	1	1	1	1	1
4	182005	HOUSING, MAGNET	1	1	1	1	1	1
5	182602	DRIVE MAGNET ASSEMBLY	1	1	1	--	--	--
5	183602	DRIVE MAGNET ASSEMBLY	--	--	--	1	1	1
6	182137	IMPELLER/MAGNET ASSEMBLY	1	1	1	--	--	--
6	183142	IMPELLER/MAGNET ASSEMBLY	--	--	--	1	1	1
7	182056	SHAFT	1	1	1	1	1	1
8	921067	WASHER, THRUST	2	2	2	2	2	2
9	924007	O-RING	1	1	1	1	1	1
10	911403	STUD, COLLARED	4	4	4	4	4	4
11	920003	NUT, WING #8-32	4	4	4	4	4	4
12	920006	NUT, WING #8-32	4	4	--	--	--	--
12	920008	NUT, HEX #10-32	--	--	--	4	4	--
13	921075	WASHER, #8 PLAIN	4	4	--	--	--	--

*Parts list applies to product numbers shown. Other models are available, but parts may vary. For other models, contact parts depot, factory, or distributor for replacement parts. Be sure to give the six-digit product number and model number when requesting parts.
 **With sleeve bearing.



LITTLE GIANT WARRANTY STATEMENT

Your Little Giant product is guaranteed to be in perfect condition when it leaves our factory. It is warranted against defective materials and workmanship for a period of 12 months (90 day warranty on Models: 1-AA-OM, GKPK-SC, PP-1, PPS-1, PP-12, PPS-12, PP-230 and Cooler King) from date of purchase by the user. No warranty on brush wear in Model 35-OM and impeller or cam in Models PP-1, PP-12, and PP-230. Any product that should fail for either of the above two reasons and is still within the warranty period, will be repaired or replaced if returned prepaid to our factory. All defective products returned under warranty will be fully inspected to determine "CAUSE OF FAILURE" before any warranty is approved. Little Giant will honor the warranty within the warranty time period specified on satisfactory written proof of purchase. **DISCLAIMER:** Any oral statements about the product made by the seller, the manufacturer, the representatives or any other parties, do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Seller's and manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the manufacturer of the product as described above. Neither seller nor the manufacturer shall be liable for any injury, loss or damage, direct, incidental or consequential (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss), arising out of the use or the inability to use the product, and the user agrees that no other remedy shall be available to it. Before using, the user shall determine the suitability of the product for his intended use, and user assumes all risk of liability

whatsoever in connection therewith. The warranty and remedy described in this limited warranty is an EXCLUSIVE warranty and remedy and is IN LIEU OF any other warranty or remedy, expressed or implied, which other warranties and remedies are hereby expressly EXCLUDED, including but not limited to any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Warranty will be VOID if any of the following conditions are found:

1. Sealed motor housing opened.
2. Product connected to voltage other than indicated on name plate.
3. Cord cut off to a length less than three feet.
4. Pump allowed to operate dry (fluid supply cut off).
5. Pump used to circulate anything other than fresh water, light oils, or other mild liquids at approximately room temperature.
6. Product abuse by customer.

The National Electric Code requires a ground fault circuit interrupter (GFCI) be installed in the branch circuit supplying fountain equipment rated above 15 volts. Little Giant offers a variety of GFCI's and recommends each pump be used with a GFCI.

For parts or repair, please contact 1.888.572.9933
 For technical assistance, please contact 1.888.956.0000

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