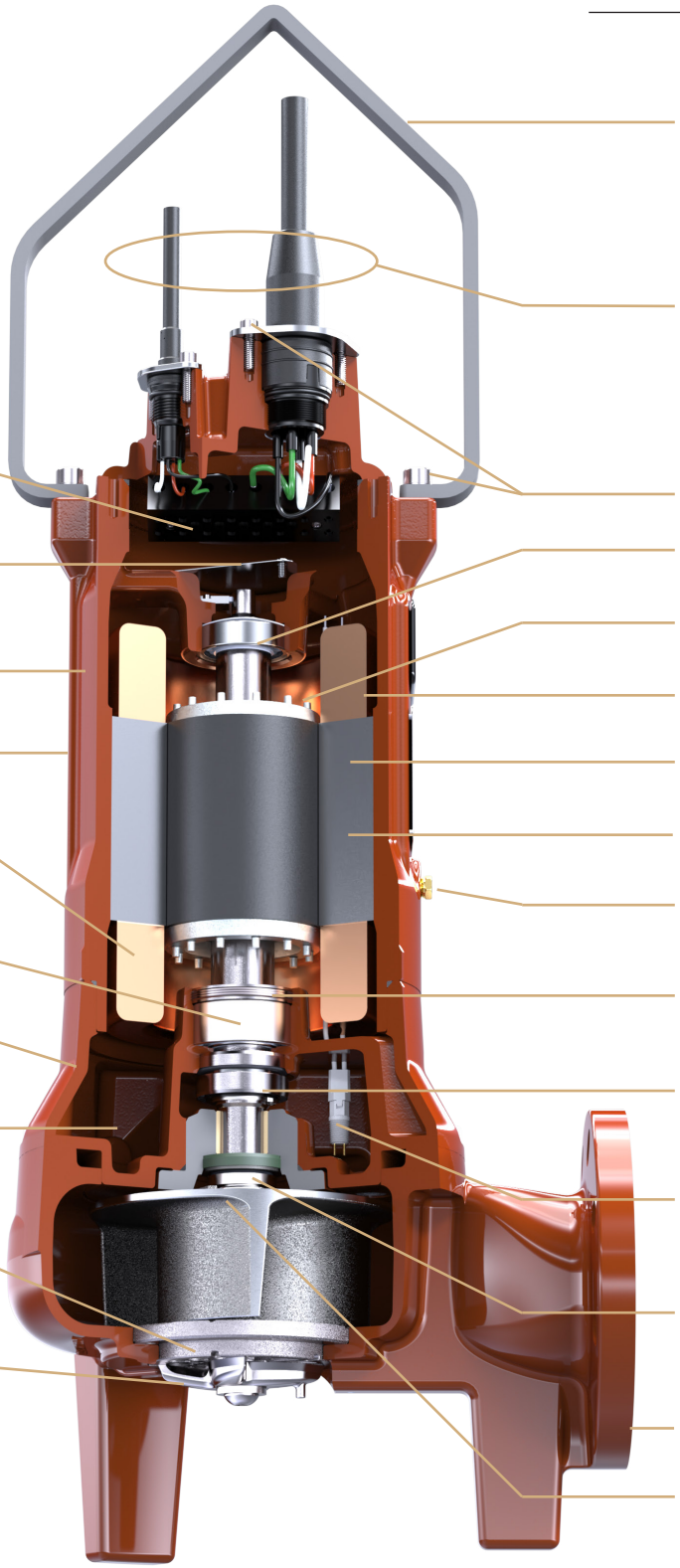
Liberty Pumps
Engineered Products

Technical Data

LGF07-Series - 60 Hz



Optional heavy-duty quick-connect cords



Stainless steel lifting bale - sized for ease of use

Standard quick-connect cords

Terminal block for internal wiring

Rotor shaft grounding brush protects bearings during VFD operation (3-phase models)

Heavy-duty Class 30 cast iron motor housing

Protective powder coat finish

Press fit stator enhances heat transfer allowing for cooler motor temperatures

Lower bearing double row angular contact ball bearing

Buna-N O-rings seal all joints

MidTherm™ Cooling allows oil to be cooled by pumped media

440 stainless steel cutter plate spiraled for solids clearing, hardened to 58Rc

440 stainless steel rotary cutter hardened to 58Rc

All hardware 316 stainless steel

Upper deep groove ball bearing

Oil-filled motor chamber cools motor and lubricates bearings

Inverter duty rated Class H insulation

NEMA® IE3 premium efficiency motor construction

One-piece 416 stainless steel rotor shaft

Stator locking pin prevents stator movement

Bearing locking ring eliminates axial shaft movement

Upper (inner) seal – carbon graphite sintered on silicon carbide with Viton® elastomers and stainless steel components

Seal leak detection, 2-probe sensor with resistor

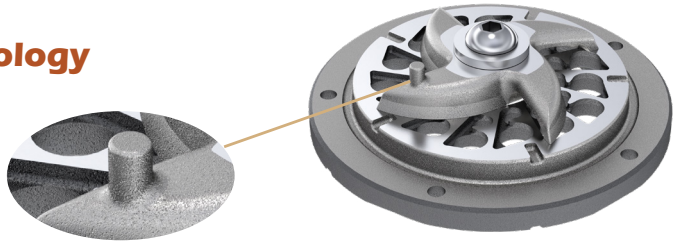
Lower (outer) seal – dense silicon carbide on graphite impregnated silicon with Viton® elastomers and stainless steel components

4" 150# ANSI® (DIN 100–PN10) flange

Stainless steel impeller

NEW!

WadBuster™ Technology disperses material and helps reduce wadding on the cutter head, improving flow and cutting performance



Patents/Patents Pending: See www.LibertyPumps.com/LEP/patents

Technical Data

LGF07-Series - 60 Hz

Model Number	LGF072A	LGF073A	LGF074A	LGF075A
HP	7.5	7.5	7.5	7.5
Volts	230	200/230*	460	575
Phase	1**	3	3	3
Hz	60	60	60	60
RPM	1750	1750	1750	1750
FLA	41	29/25	12	10
LRA	129	120	59.3	38.9
Max kW Input	8.9	8.3	8.3	8.2
NEMA Code	–	A	A	A
Service Factor	1	1	1	1
Power Factor (%)	98	80	80	80
KVA Code	F	M	M	K
Std Impeller Diameter (in)	7.6	7.6	7.6	7.6
Shut-Off Head w/Std Impeller (ft)	47	47	47	47
Min Head w/Std Impeller (ft)	10	10	10	10
Max Flow @ Min Head (GPM)	465	465	465	465
Power Cord Type & Diameter	Type W, 1 in	Type W, 1 in	SOOW,0.72 in	SOOW,0.72 in

** System voltages: 208 and 240 volts with utilization voltages: 200 and 230 volts. These pumps are able to be rewired to 460 volts in the field.*

*** Single-phase motors require capacitors. Liberty Pumps control panel or capacitor kits are recommended for proper operation and warranty. Refer to "Control Panel" section.*

Liberty Pumps
Engineered Products

Technical Data

LGF07-Series - 60 Hz

Motor Insulation Class	H 180°C
Max Stator Temp	125°C if thermostats are connected
Impeller Type	Semi-Open
Impeller Material	Stainless Steel
Control Cord Type & Diameter	18/5 SOOW, 0.375 in
Power Cord Length (Options)	35, 50, 100 ft
Heavy-duty Quick-connect Cords	Optional
Upper (Inner) Seal Material	Carbon Graphite Sintered - Rotating Silicon Carbide - Stationary Viton® Elastomers
Lower (Outer) Seal Material	Dense Silicon Carbide - Rotating Graphite Impregnated Silicon Carbide - Stationary Viton® Elastomers
Max Water Temp for Continuous Duty	40°C
Min Fluid Level for Continuous Operation	Motor Housing Fully Submerged
Fluid pH Range	4–10
Starts Per Hour	30
Shaft Material	416 Stainless Steel
Fastener Material	316 Stainless Steel
O-Ring Elastomers	Buna-N

Upper Bearing	Single Row Deep Groove
Lower Bearing	Double Row Angular Contact
Oil Type	ISO® VG10 Turbine Oil
Max Submersion Depth	75 ft
Discharge (Std)	Horizontal 4-inch 150# ANSI® (DIN 100-PN10)
Protective External Finish	Powder Coat
Seal Fail Detection	Dual Probe - 2 Wire with Resistor 200K ohm Resistance
Thermal Protection	1-phase - 2 Hermetically Sealed Thermostats 3-phase - 3 Hermetically Sealed Thermostats 125°C Opening Temperature 105°C Closing Temperature 3A @ 120VAC, 1A @ 240 VAC
Volute Material	Class 30 Cast Iron
Pump Weight	270 lbs (approx)
Cuts Per Minute	200,000
Cutter Material	Hardened 440 Stainless Steel
Certifications	CSA Certified to CSA and UL® Standards
Features	IE3 Level Premium Efficient Motor in accordance with NEMA® MG1. Inverter Duty rated magnet wire and insulation for use with PWM Type VFDs in accordance with NEMA® MG1 Parts 30 and 31. Rotor Shaft Grounding Brush standard. Moisture sensing probe with integrated resistor. Serviceable cutter and cutter plate.

Specifications are subject to change without notice.

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