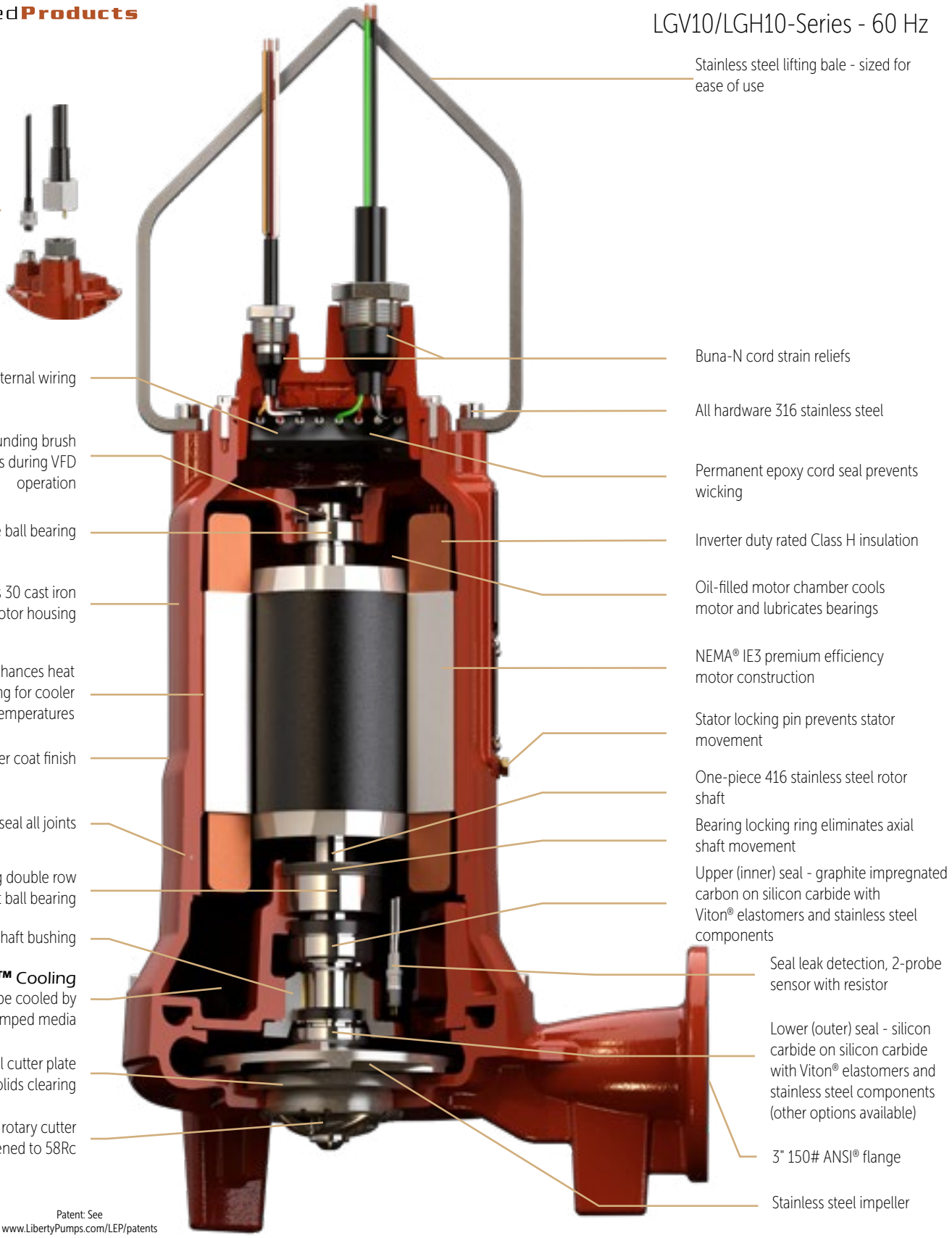
Liberty Pumps
Engineered Products

Technical Data

LGV10/LGH10-Series - 60 Hz



Optional heavy-duty quick-connect cords

Stainless steel lifting bale - sized for ease of use

Terminal block for internal wiring

Buna-N cord strain reliefs

Rotor shaft grounding brush protects bearings during VFD operation

All hardware 316 stainless steel

Upper deep groove ball bearing

Permanent epoxy cord seal prevents wicking

Heavy-duty Class 30 cast iron motor housing

Inverter duty rated Class H insulation

Press fit stator enhances heat transfer allowing for cooler motor temperatures

Oil-filled motor chamber cools motor and lubricates bearings

Protective powder coat finish

NEMA® IE3 premium efficiency motor construction

Buna-N O-rings seal all joints

Stator locking pin prevents stator movement

Lower bearing double row angular contact ball bearing

One-piece 416 stainless steel rotor shaft

Bronze shaft bushing

Bearing locking ring eliminates axial shaft movement

MidTherm™ Cooling
Allows oil to be cooled by pumped media

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

440 stainless steel cutter plate spiraled for solids clearing

Seal leak detection, 2-probe sensor with resistor

440 stainless steel rotary cutter hardened to 58Rc

Lower (outer) seal - silicon carbide on silicon carbide with Viton® elastomers and stainless steel components (other options available)

3" 150# ANSI® flange

Stainless steel impeller

Patent: See www.LibertyPumps.com/LEP/patents

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Model Number	LGH103A	LGH104A	LGH105A	LGV103A	LGV104A	LGV105A
HP	10	10	10	10	10	10
Volts	200/230*	460	575	200/230*	460	575
Phase	3	3	3	3	3	3
Hz	60	60	60	60	60	60
RPM	3450	3450	3450	3450	3450	3450
FLA	52/44	21.5	16	43/37	19	14.5
LRA	230	115	88	230	115	88
Max kW Input	16.3	15.8	14.8	13.6	13.8	13.2
NEMA Code	A	A	A	A	A	A
Service Factor	1	1	1	1	1	1
Power Factor (%)	93	92	92	92	92	92
KVA Code	J	J	J	J	J	J
Std Impeller Diameter (in)	7.5	7.5	7.5	7.0	7.0	7.0
Shut-Off Head w/Std Impeller (ft)	205	205	205	165	165	165
Min Head w/Std Impeller (ft)	50	50	50	50	50	50
Max Flow @ Min Head (GPM)	140	140	140	248	248	248
Power Cord Type & Diameter	Type W, 1 in	Type W, 1 in	SOOW, 0.72 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.*

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Motor Insulation Class	H 180°C
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	Graphite Impregnated Carbon - Rotating Silicon Carbide - Stationary Viton® Elastomers
Lower (Outer) Seal Material (Standard)	Silicon Carbide on Silicon Carbide Viton® Elastomers
Lower (Outer) Seal Material (Optional)	Tungsten Carbide on Tungsten Carbide 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	Horizontal 3 in 150# ANSI®
Protective External Finish	Powder Coat
Seal Fail Detection	Dual Probe - 2 Wire with Resistor 200K ohm Resistance
Thermal Protection	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	380 lbs (approx)
Cuts Per Minute	Over 400,000
Cutter Material	Hardened 440 Stainless Steel
Certifications	CSA Certified to CSA and UL® Standards CAN/CSA C22.2 No. 108-14 ANSI/UL 778 6th Ed

Specifications are subject to change without notice.

7000 Apple Tree Avenue - Bergen, NY 14416
Phone 800-543-2550 - Fax 585-494-1839 - www.LibertyPumps.com/LEP