

CSP Cast Iron Submersible Drainage Pump



Submersible drainage pump with Vertical float switch



Submersible drainage pump with Wide angle float switch

Performance Range

- Flow rate up to 3200 USgpm.
- Dynamic head up to 38 feet.

Direction of rotation

- Clockwise as seen from the motor rear end.

Features

- Rugged cast iron construction.
- Complete cast iron pump casing & impeller against plastic material used in cast iron pump by some competitors.
- The rotating assembly is supported by ball bearings which provides longer life.
- High quality mechanical seal.
- Float control switch is completely enclosed preventing any damage during transit & operation.
- Semi open cast iron impeller which can pass solids up to 3/8" diameter.
- Long 10 feet power cord (20 feet & 30 feet are optional).
- Energy efficient permanent split capacitor motor design which saves electricity resulting into lower cost of operation against shaded pole motors.
- Class-F motor insulation which can handle higher motor temperature.
- Thermally protected motors which prevents motor from burn out.

Applications

- For clean water containing solids up to 3/8" grain size.
- As a sump pump for household applications.
- For draining flooded rooms or tanks.
- Extractions of water from ponds, flowing water or pits for collection of rain water.

Minimum sump pit diameter Factory switch settings

MODEL			MINIMUM SUMP PIT DIA.(inch)
0.25 HP	0.33 HP	0.5 HP	
CSP 021	CSP 031	CSP 051	12
CSP 021T	*	*	15
*	CSP 031T	*	16
*	*	CSP 051T	16

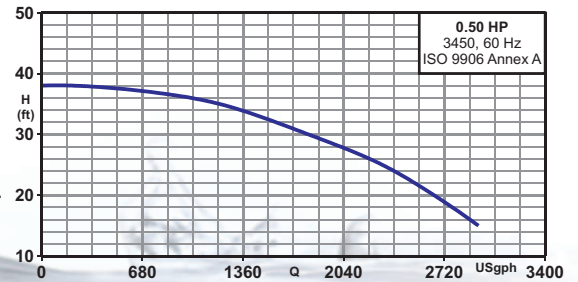
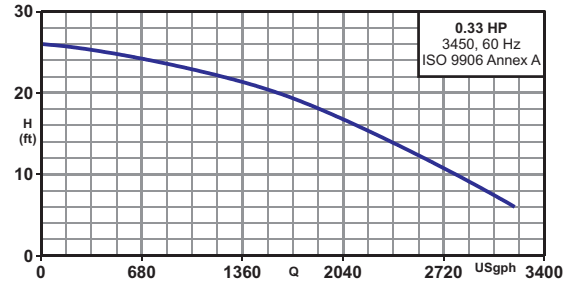
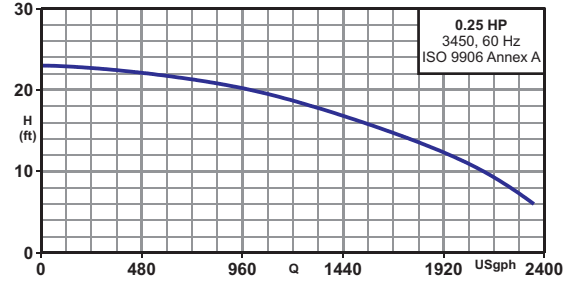
MODEL	FACTORY SWITCH SETTING (inch)	
	TURN ON	TURN OFF
CSP 021 / 031	9	2
CSP 021T / 031T	11	4
CSP 051	10	3
CSP 051T	13	4

Performance Table

MODEL	HP	kw	AMP	l/min Usgph	25	50	76	101	126	151	177	202	Max. lift (no flow) (feet)	Max.Solid passage size (inch)	Dimensions and weight		
															400	800	1200
CSP 021 CSP 021T	0.25	0.18	4.5	H ft.	22.4	21.0	18.8	15.5	11.4	-	-	-	23.0	3/8	9.0	12.0	26.4
CSP 031 CSP 031T					25.1	23.8	22.0	20.0	17.0	13.7	10.0	6.0	26.0	3/8	9.0	12.0	27.5
CSP 051 CSP 051T	0.50	0.37	5.6	H ft.	37.9	36.7	35.0	31.9	28.0	23.7	17.5	-	38.0	3/8	10.0	12.5	36.3

Note : The above shown performance is nominal performance and may vary from pump to pump.

Performance Curve



Motor Specifications

- 115 V, 60 Hz, 1 Phase, 3450 RPM
- Oil Filled ; Thermally Protected

Operating Conditions

- Ambient temperature : Max. +112° F
- Liquid temperature : +32° F to +122° F

Model Designation

AUTOMATIC SUMP PUMP WITH	MODEL		
	0.25 HP	0.33 HP	0.50 HP
Vertical float switch	CSP 021	CSP 031	CSP 051
Wide - angle float switch	CSP 021T	CSP 031T	CSP 051T
Discharge Size : 1-1/2" FNPT			

MSP Corrosion Proof Submersible Drainage Pump



Submersible drainage pump with Vertical float switch



Submersible drainage pump with Wide angle float switch

Performance Range

- Flow rate up to 3150 USgpm.
- Dynamic head up to 32 feet.

Direction of rotation

- Clockwise as seen from the motor rear end.

Features

- Corrosion free engineering thermoplastic construction.
- Attractive appearance.
- The rotating assembly is supported by ball bearings which provides longer life.
- High quality mechanical seal.
- Float control switch is completely enclosed preventing any damage during transit & operation.
- Long 10 feet power cord (20 feet & 30 feet are optional).
- Energy efficient permanent split capacitor motor design which saves electricity resulting into lower cost of operation against shaded pole motors.
- Class-F motor insulation which can handle higher motor temperature.
- Thermally protected motors which prevents motor from burn out.

Applications

- For clean water containing solids up to 3/8" grain size.
- As a sump pump for household applications.
- For draining flooded rooms or tanks.
- Extractions of water from ponds, flowing water or pits for collection of rain water.

Minimum sump pit diameter Factory switch settings

MODEL			MINIMUM SUMP PIT DIA.(inch)
0.25 HP	0.33 HP	0.50 HP	
MSP 021	MSP 032	MSP 051	13
MSP 021T	*	*	15
*	MSP 032T	*	16
*	*	MSP 051T	17

MODEL	FACTORY SWITCH SETTING(inch)	
	TURN ON	TURN OFF
MSP 021 / 032	9	2
MSP 021T / 032T	11	4
MSP 051	10	3
MSP 051T	13	4

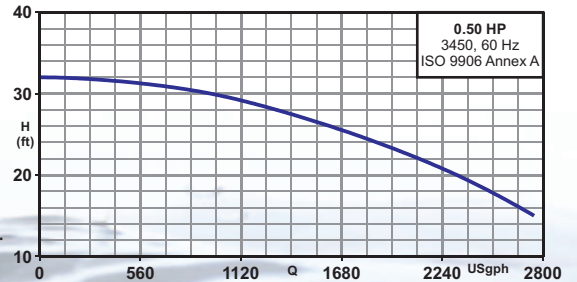
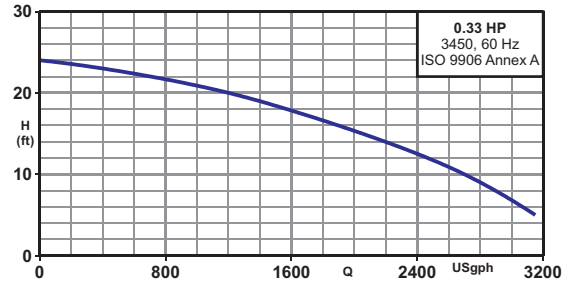
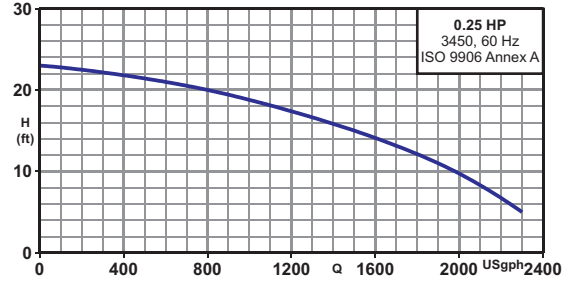
AUTOMATIC SUMP PUMP WITH	MODEL		
	0.25 HP	0.33 HP	0.50 HP
Vertical float switch	MSP 021	MSP 032	MSP 051
Wide - angle float switch	MSP 021T	MSP 032T	MSP 051T
Discharge Size : 1-1/2" FNPT			

Performance Table

MODEL	HP	kw	AMP	l/min Usgph	25	50	76	101	126	151	177	Max. lift (no flow) (feet)	Max.Solid passage size (inch)	Dimensions and weight		
					400	800	1200	1600	2000	2400	2800			Main width (inch)	Height (inch)	Gross weight (lbs)
MSP 021 MSP 021T	0.25	0.18	4.5	H ft.	21.8	20.0	17.3	14.0	9.7	-	-	23.0	3/8	9.5	12.0	13.6
MSP 032 MSP 032T	0.33	0.25	5.0		23.0	21.7	20.0	17.9	15.2	12.6	9	24.0	3/8	9.5	13.0	14.3
MSP 051 MSP 051T	0.50	0.37	5.6		31.6	30.6	28.8	26.0	23.0	19.2	-	32.0	3/8	10.0	13.0	16.7

Note : The above shown performance is nominal performance and may vary from pump to pump.

Performance Curve



Motor Specifications

- 115 V, 60 Hz, 1 Phase, 3450 RPM
- Oil Filled ; Thermally Protected

Operating Conditions

- Ambient temperature : Max. +113° F
- Liquid temperature : +32° F to +122° F

Model Designation

Drainage Pumps (0.5 HP to 3.0 HP)

Performance Range

- Flow rate up to 255 USgpm.
- Dynamic head up to 97 feet.

Applications

- Slushy water, waste water without solids, sump drainage.
- Drainage application, flood control.
- Dewatering for fish pond or basement.

Features

- New design for light weight, elegant shape with best quality.
- Unfastening the bolts between the oil casing and the upper pump casing allows the body to be separated for easy maintenance.
- All pumps are furnished with double mechanical seal. All pumps up to 1 HP have carbon/ceramic sealing faces at both water end and motor end. All pumps starting with 2 HP and above have Sic sealing faces at the water end and carbon/ceramic sealing faces at the motor end.
- Available with Sic/Sic mechanical Shaft seal for pumping sandy water for 1 HP (Optional).

Special Features on Request

- Other voltages.
- Available in 50Hz.

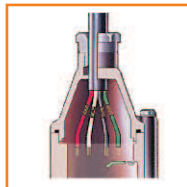
Thermal overload protector

- Equipped with automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and locked impeller.



Cable base

- Epoxy resin seal cable base to prevent water intrusion into motor through the cable wire.



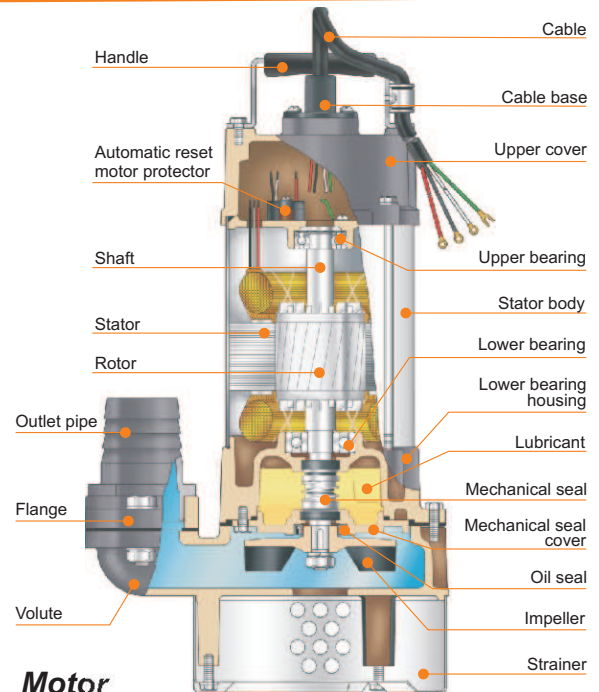
U Type Impeller

- This impeller can generate rapid rotating vortex to handle fluid mixed with long fiber, the majority of abrasive solids do not touch impeller to minimize impeller wear.



Float Switch

- Excellent quality float switch Provided with epoxy resin sealed connector.



Motor

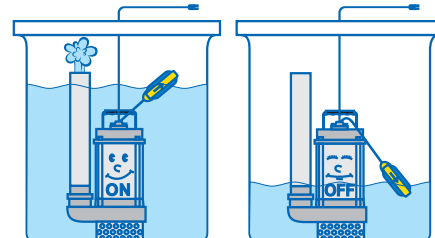
- 2 - pole dry submersible motor
- 60Hz (n = 3450 RPM)
- Single phase : 230 V $\pm 10\%$
- Three phase : 230 V $\pm 10\%$ (up to 3 H.P.)
380 V, 460 V $\pm 10\%$
- Protection IP 68
- Insulation class : F

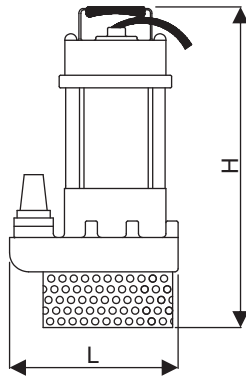
Operating Conditions

- Ambient temperature : +32° F to +122° F
- Liquid temperature : Max. +122° F
- Max. Starts per hour : 30 at regular intervals.
- Duty rating :
S1 - When pump is completely submerged.
S3 - When pump is partially submerged.

Float Switch Pump

- The pumps are equipped with wide angle on/off level control float switch for easy and simple automatic operation.
- Applications : Slushy water, dewatering, drainage application.
- Type : 0.5-2 HP Single-phase pumps.
0.5-1 HP Three-phase pumps.

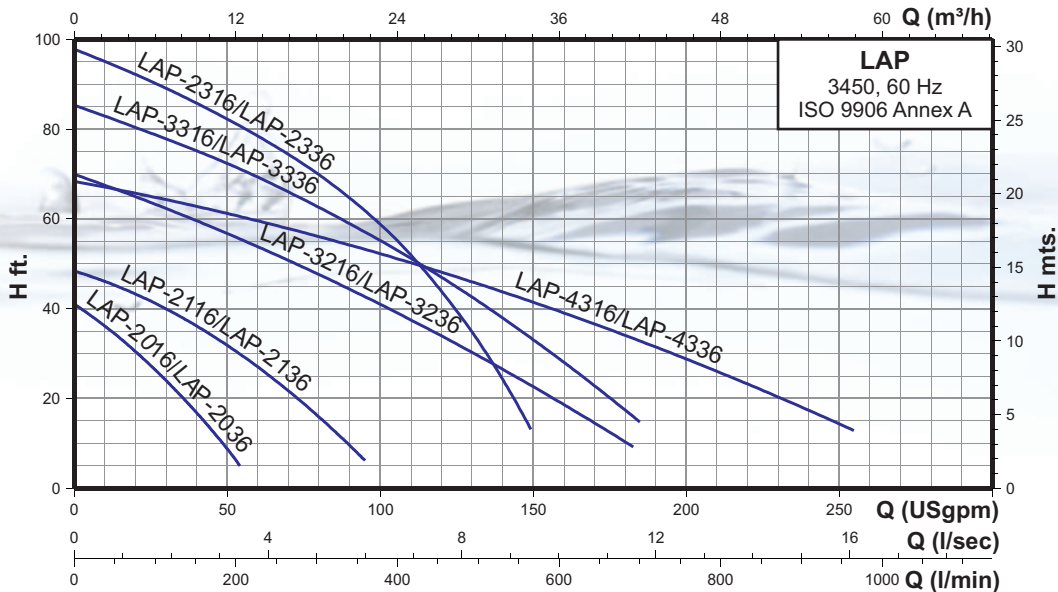




DIMENSIONS

Model		Disc. Inch (mm)	Dimensions (inch)			Solid Passage(inch)	Net Weight(lbs)	Gross Weight(lbs)	Volume (ft ³)
Single Phase	Three Phase		Length	Width	Height				
LAP-2016/2016F	-	2 (50)	8.94	6.30	14.30	0.31	33	37	1.30
-	LAP-2036/2036F		8.94	6.30	14.30		33	37	1.30
LAP-2116/2116F	-	2 (50)	10.91	7.01	17.32	0.39	42	46	1.59
-	LAP-2136/2136F		10.91	7.01	17.32		40	44	1.59
LAP-3216/3216F	-	3 (80)	16.22	8.19	22.40	0.43	97	152	5.16
-	LAP-3236/3236F		16.22	8.19	18.50		88	143	5.16
LAP-2316/2316F	-	2 (50)	11.02	8.50	22.52	0.43	101	154	5.16
-	LAP-2336/2336F		11.02	8.50	19.41		95	145	5.16
LAP-3316/3316F	-	3 (80)	15.16	8.50	22.64	0.43	104	156	5.16
-	LAP-3336/3336F		15.16	8.50	19.49		95	147	5.16
LAP-4316/4316F	-	4 (100)	15.35	8.19	22.99	0.43	104	158	5.16
-	LAP-4336/4336F		15.35	8.19	19.49		95	150	5.16

PERFORMANCE CHART AT n = 3450 RPM FOR DRAINAGE PUMPS



PERFORMANCE DATA AT n = 3450 RPM

Model		Power		Voltage*	Start Method	l/min Usgpm	95	189	284	379	473	568	662	757	946
Single Phase	Three Phase	HP	KW												
LAP-2016/2016F	-	0.5	0.37	230V	Capacitor	H ft.	25	50	75	100	125	150	175	200	250
-	LAP-2036/2036F			460V	Direct		27.5	8.5	-	-	-	-	-	-	-
LAP-2116/2116F	-	1.0	0.75	230V	Capacitor		41.5	32	18.5	-	-	-	-	-	-
-	LAP-2136/2136F			460V	Direct		63.5	57	49	41	32	22.5	12.5	-	-
LAP-3216/3216F	-	2.0	1.50	230V	Capacitor		90.5	82	72	58.5	39	13	-	-	-
-	LAP-3236/3236F			460V	Direct		79	72	64	55	45	33	20	-	-
LAP-2316/2316F	-	3.0	2.20	230V	Capacitor		65	61	57	52	47	41.5	35	29.5	14.5
-	LAP-2336/2336F			460V	Direct										
LAP-3316/3316F	-	3.0	2.20	230V	Capacitor										
-	LAP-3336/3336F			460V	Direct										
LAP-4316/4316F	-	3.0	2.20	230V	Capacitor										
-	LAP-4336/4336F			460V	Direct										

Note : Subscript "F" pumps will be provided with a float switch.
Pumps are available for 380 V three phase power supply on request.

Sewage Pumps (1.0 HP to 3.0 HP)

Performance Range

- Flow rate up to 342 USgpm.
- Dynamic head up to 85 feet.

Applications

- Drainage of sewage from the building basements, hotel, industry, process plant, waste water from factories.
- Emptying septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.

Features

- A precision manufactured motor is achieved utilizing a laminated sheet steel production process combined with the highest standard of quality control. The stator and wiring impregnated with varnish and then heat dried in an industrial oven. This ensures a 100% quality manufactured motor with stable characteristics and a high efficiency.
- Standard accessories include: Thermoplastic rubber cable with an epoxy resin sealed stainless steel cable base, AC thermal motor protector, dual mechanical seal and lip seal design.

Special Features on Request

- Other voltages.
- Available in 50Hz.

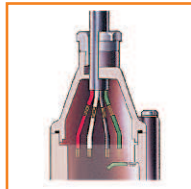
Thermal overload protector

- Equipped with Automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and locked impeller.



Cable base

- Epoxy resin seal cable base to prevent water intrusion into motor through the cable wire.



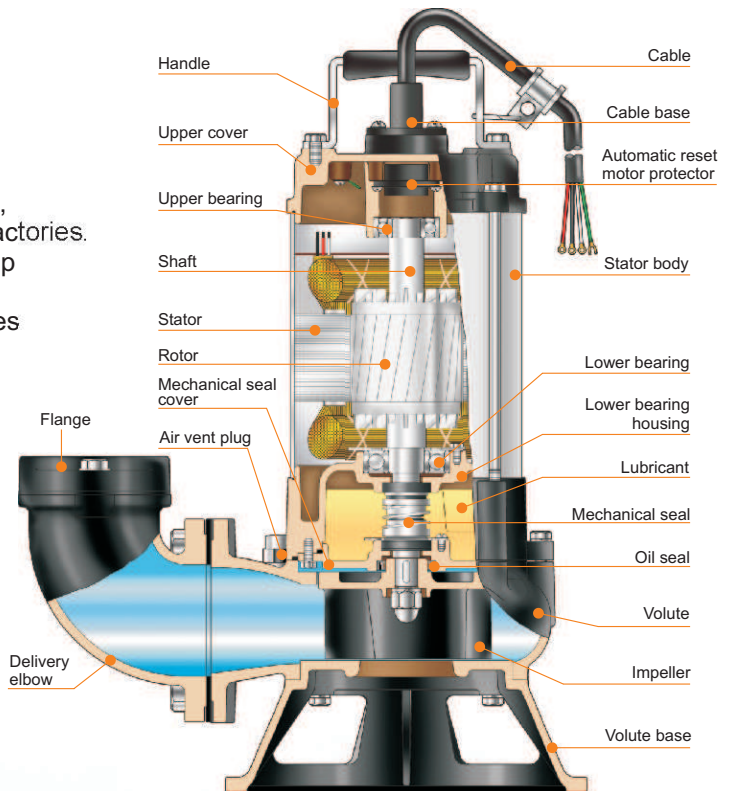
P Type Impeller

- Semi-open impeller cutting foreign particles, and preventing clog by solid media.



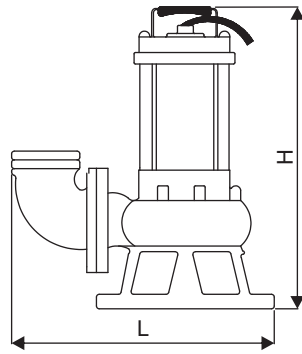
U Type Impeller

- This impeller can generate rapid rotating vortex to handle fluid mixed with long fiber, the majority of abrasive solids do not touch impeller to minimize impeller wear.



Specification

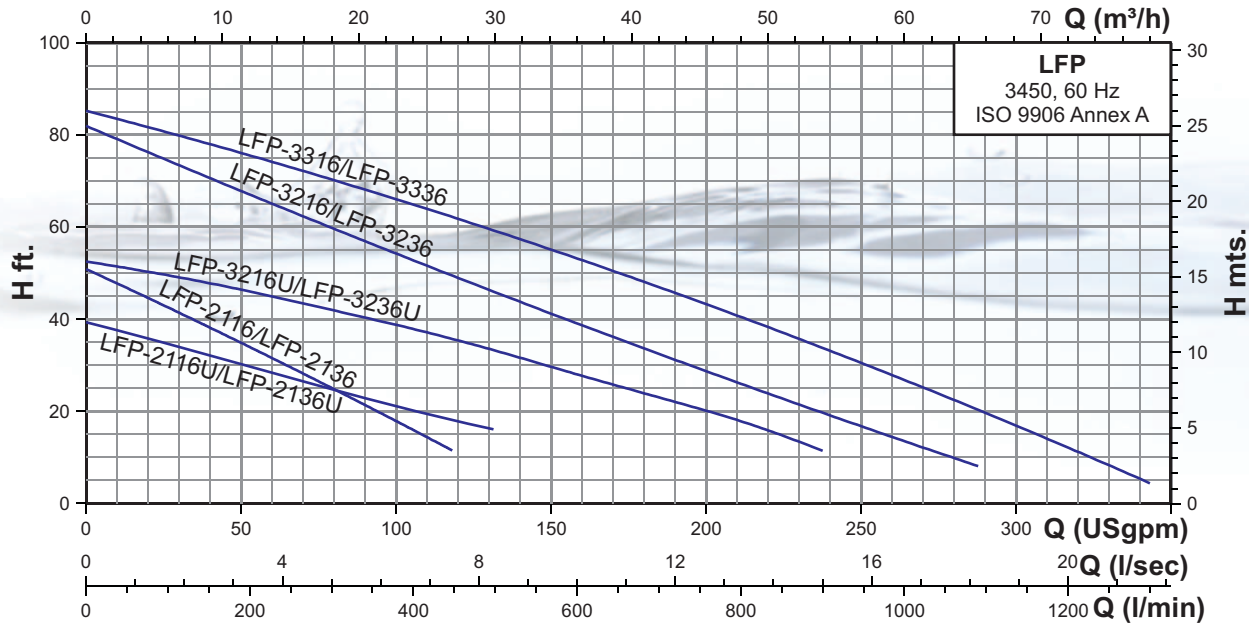
Diameter (inch)		2" - 3"	
Pumping liquid	Ambient temp	Max. +122° F	
	Liquid temp	+32° F to +122° F	
	Liquid nature	Suitable for sewage waste water (with or without solids) from septic tanks, building basements and waste water form factories.	
	Max. depth of Installation	98.4 feet (30m)	
Pump	Structure	Impeller	Semi - open
		M.seal	Double Mechanical seal
		Bearing	Ball type bearing
	Material	Impeller	Grey Iron
		Volute	Grey Iron
		Upper cover	Grey Iron
		Volute base	Grey Iron
M.seal	Motor side	Carbon v/s Ceramic (1 - 3 HP)	
	Pump side	Carbon v/s Ceramic (1 HP) Silicon Carbide v/s Silicon Carbide (2 - 3 HP)	
Motor	Insulation	F Class	
	Frequency	60 Hz	
	Thermal Protector	Automatic reset motor protector	
	Material	Stator body	AISI 304
		Shaft	AISI 410
Cable		Thermoplastic rubber	
Protection	IP 68		
Duty	S1 - When pump is completely submerged. S3 - When pump is partially submerged.		
Voltage	1 Ph. 230 V ±10%, 3 Ph. 380 V, 460 V ±10% 3Ph. 230 V ±10% (up to 3.0 H.P.)		



DIMENSIONS

Model		Disc. Inch (mm)	Impeller Type	Dimensions (inch)			Solid Passage (inch)	Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)
Single Phase	Three Phase			Length	Width	Height				
LFP-2116/2116F	-	2 (50)	P	11.97	9.25	18.70	0.91	46	50	2.54
-	LFP-2136/2136F			11.97	9.25	18.70		44	48	2.54
LFP-2116U/2116UF	-	2 (50)	U	10.43	7.55	17.91	1.37	46	50	2.54
-	LFP-2136U/2136UF			10.43	7.55	17.91		44	48	2.54
LFP-3216/3216F	-	3 (80)	P	17.01	10.24	23.62	1.26	97	156	6.32
-	LFP-3236/3236F			17.01	10.24	19.88		88	147	6.32
LFP-3216U/3216UF	-	3 (80)	U	17.01	10.24	23.62	0.59	97	156	6.32
-	LFP-3236U/3236UF			17.01	10.24	19.88		88	147	6.32
LFP-3316/3316F	-	3 (80)	P	17.01	10.24	24.41	1.38	106	161	6.32
-	LFP-3336/3336F			17.01	10.24	20.87		95	152	6.32

PERFORMANCE CHART AT n = 3450 RPM FOR SEWAGE PUMPS



PERFORMANCE DATA AT n = 3450 RPM

Model		Power		Voltage	Start Method	l/min Usgpm	95	189	284	379	473	568	663	757	852	946	1041	1136	1230																																							
Single Phase	Three Phase	HP	KW				25	50	75	100	125	150	175	200	225	250	275	300	325																																							
LFP-2116/2116F	-	1.0	0.75	230V	Capacitor	H ft.	43.5	34.5	26	17	-	-	-	-	-	-	-	-	-																																							
-	LFP-2136/2136F			460V	Direct																																																					
LFP-2116U/2116UF	-	1.0	0.75	230V	Capacitor															75	67.5	61.5	54	47.5	41.5	35	28.5	22.5	17	11	-	-																										
-	LFP-2136U/2136UF			460V	Direct																																																					
LFP-3216/3216F	-	2.0	1.50	230V	Capacitor																												50	46.5	42.5	39	35	30	25	20	15	-	-	-	-													
-	LFP-3236/3236F			460V	Direct																																																					
LFP-3216U/3216UF	-	2.0	1.50	230V	Capacitor																																									81	76	71.5	66	60.5	55	49	43	37	30	24	17	10
-	LFP-3236U/3236UF			460V	Direct																																																					
LFP-3316/3316F	-	3.0	2.20	230V	Capacitor																																																					
-	LFP-3336/3336F			460V	Direct																																																					

Note : Subscript "F" pumps will be provided with a float switch.
Pumps are available for 380 V three phase power supply on request.

Performance Range

- ▶ Flow rate up to 2100 USgpm.
- ▶ Dynamic head up to 137 feet.

Applications

- ▶ Drainage of waste water from the liberation tank, purifying tank and sewage tank in water treatment plant.
- ▶ Drainage of waste water containing fibrous additives from leather factory, dyeing factory and food processing factory.
- ▶ Sewage management, accumulated water, septic tank, stock farm.
- ▶ Pumping sewage from single and multi family dwellings.
- ▶ Hotels, restaurants, schools and public buildings.

Features

- ▶ International standard design : Thermoplastic rubber cable, thermal overload protector, silicon carbide mechanical seal, high grade cast iron, good quality and performance.
- ▶ P / E multiple impeller designs to handle solids laden sewage and/or fibrous substance.
- ▶ For extra protection, an oil seal ring has been installed under the oil chamber. This lip seal helps prevent the ingress of silt and sand into the lower seal chamber.
- ▶ Superior abrasion resistant mechanical shaft seal manufactured with silicon carbide to ensure the best seal effect.
- ▶ Full range offering low to high head and flow capabilities, with compact and easy installation. Also available with guide rail system, which allows automatic remote connection and disconnection without entering the pit.
- ▶ A water detector arrangement is provided in the seal chamber. In case of seal failure if water enters the seal chamber, a signal can be send to the control panel so that the pump operator is made aware of a potential seal leakage problem.

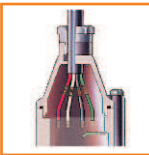
Thermal overload protector

- ▶ Equipped with Automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and locked impeller.



Cable base

- ▶ Epoxy resin seal cable base to prevent water intrusion into motor through the cable wire.



P Type Impeller

- ▶ Semi-open impeller enable cutting of delicate materials to prevent clogging.



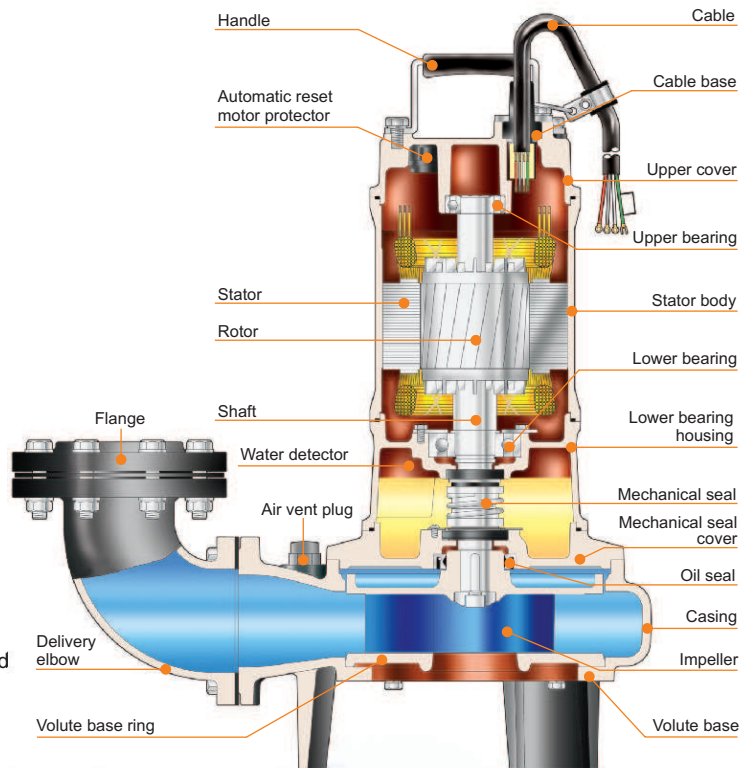
E Type Impeller

- ▶ Single channel non-clog impeller, allows large solids passage preventing clogging and allowing effective drainage/dewatering for higher head applications with solids laden media. (10.0 HP to 60 HP)



U Type Impeller

- ▶ Vortex impellers create a hydraulic passage, allowing long fibrous materials to pass through without any contact with the impeller. Pump of U type impeller (3 Phase) operating in a higher current when reverse, please adjust into fit directions.

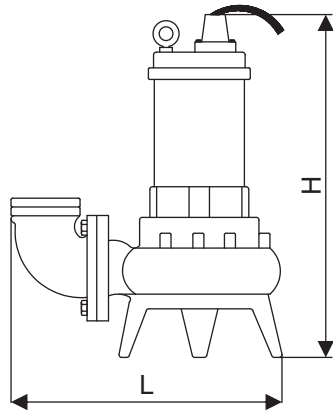


Specification

Pumping liquid	Diameter(mm)	3" - 4" - 6"	
	Ambient temp	Max. +122° F	
	Liquid temp	+32° F to +122° F	
	Liquid nature	Suitable for sewage waste water (with or without solids) from septic tanks, building basements and waste water form factories.	
	Max. depth	98.4 feet (30m)	
Pump	Structure	Impeller	P type : semi - open, Non - clog E type : Enclosed single channel U type : Semi-vortex
		M.seal	Double mechanical seal
		Bearing	Ball type bearing
	Material	Impeller	Grey Iron
		Volute	Grey Iron
		Upper cover	Grey Iron
		Volute base ring	Grey Iron
Mechanical seal	Motor side - Carbon v/s Ceramic Pump side - Silicon carbide v/s Silicon carbide		
Motor	Type	Dry motor	
	Insulation	F Class	
	Frequency	60 Hz	
	Thermal Protector	Automatic reset motor protector (up to 10 HP) PTC sensors (above 10 HP)	
	Material	Stator body	Grey Iron
		Shaft	AISI 410
Cable		Thermoplastic rubber	
Protection	IP 68		
Duty	S1 - When pump is completely submerged. S3 - When pump is partially submerged.		
Voltage	3Ph. 380V, 460V ±10% 3Ph. 230V ±10% (up to 3.0 H.P.)		

Special Features on request

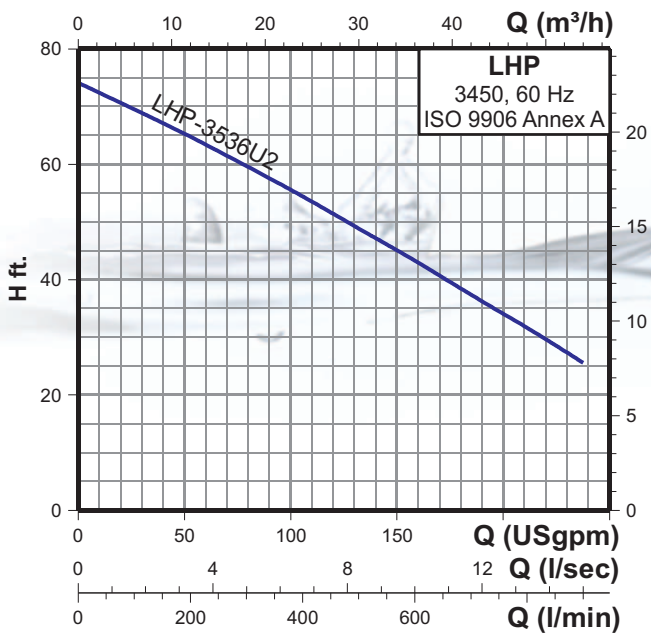
- ▶ Other Voltages, Available in 50Hz.



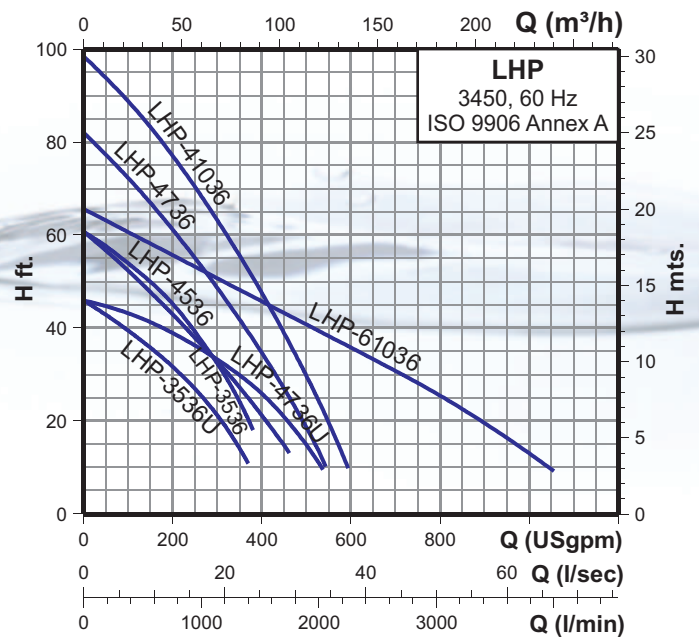
DIMENSIONS

Model	Disc. Inch (mm)	Impeller Type	Dimensions (inch)			Solid Passage (inch)	Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)
			Length	Width	Height				
LHP-3536U2	3" (80)	P	18.90	8.66	23.43	2.20	128	205	6.57
LHP-3536	3" (80)	U	22.83	12.20	25.59	2.20	180	279	10.17
LHP-3536U	3" (80)	P	21.73	11.26	27.36	2.99	176	275	9.71
LHP-4536	4" (100)	P	22.83	12.20	25.59	1.97	185	284	10.06
LHP-4736	4" (100)	E	27.60	15.91	31.89	1.57	321	453	16.77
LHP-4736U	4" (100)	U	27.60	15.91	31.89	2.56	315	447	16.77
LHP-41036	4" (100)	E	27.60	15.91	33.46	1.57	359	469	17.48
LHP-61036	6" (150)	E	33.46	18.60	35.62	2.76	506	697	23.41

PERFORMANCE CHART AT n = 3450 RPM



PERFORMANCE CHART AT n = 1750 RPM



PERFORMANCE DATA AT n = 3450 RPM

Model	Power		Voltage	Start Method	Flow Rate									
	HP	KW			l/min	95	189	284	379	473	568	662	757	852
LHP-3536U2	5.0	3.70	460V	Direct	H (ft)	69	65.5	60.5	55.5	50.5	45	39.5	34	28.5

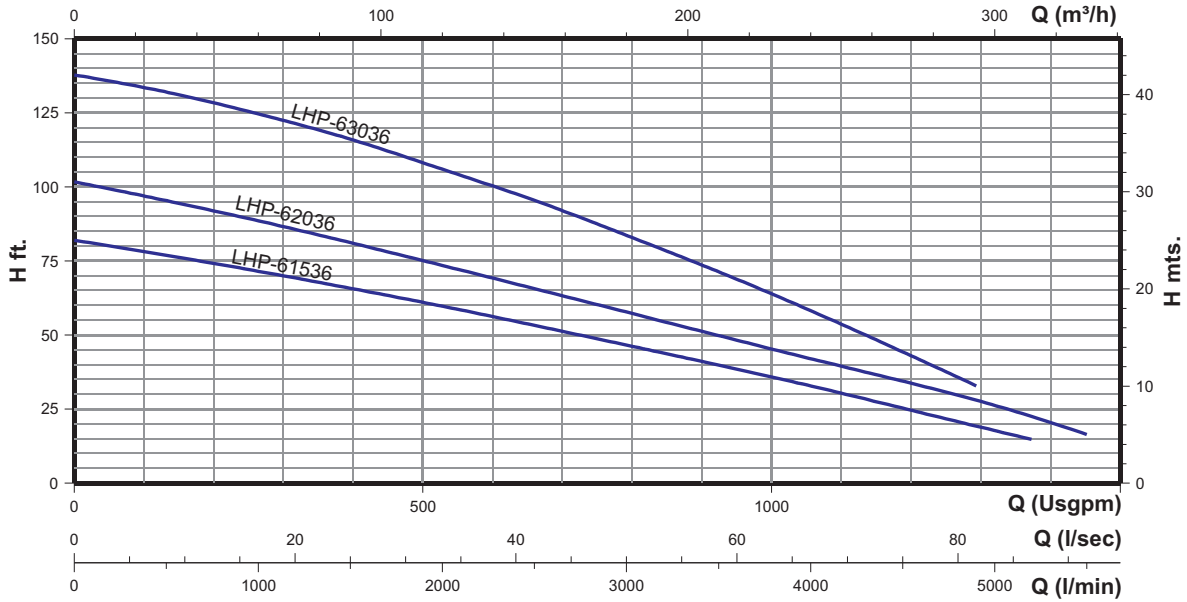
PERFORMANCE DATA AT n = 1750 RPM

Model	Phase	Power		Voltage	Start Method	l/min	Flow Rate															
		HP	KW				USgpm	50	100	150	200	225	300	400	500	600	700	800	900	1000		
LHP-3536	3Ø	5.0	3.7	460V	Direct	H (ft)	57.5	53.5	50	45	42.5	32.5	-	-	-	-	-	-	-	-		
LHP-3536U	3Ø	5.0	3.7	460V	Direct		42.5	39	36	31.5	30	21.5	-	-	-	-	-	-	-	-		
LHP-4536	3Ø	5.0	3.7	460V	Direct		57	52.5	47.5	43	40	33	21	-	-	-	-	-	-	-		
LHP-4736	3Ø	7.5	5.5	460V	Direct		77.5	72.5	67	61.5	57.5	48	35	19	-	-	-	-	-	-		
LHP-4736U	3Ø	7.5	5.5	460V	Direct		44.5	43	41.5	39	37.5	33	26	15	-	-	-	-	-	-		
LHP-41036	3Ø	10.0	7.5	460V	Direct		94	88.5	83	77	73	63	47.5	30	-	-	-	-	-	-		
LHP-61036	3Ø	10.0	7.5	460V	Direct		63	61	58	56	54	51	46	40.5	36	31	25.5	19.5	13	-		

Note : Pumps are available for 380 V three phase power supply on request.

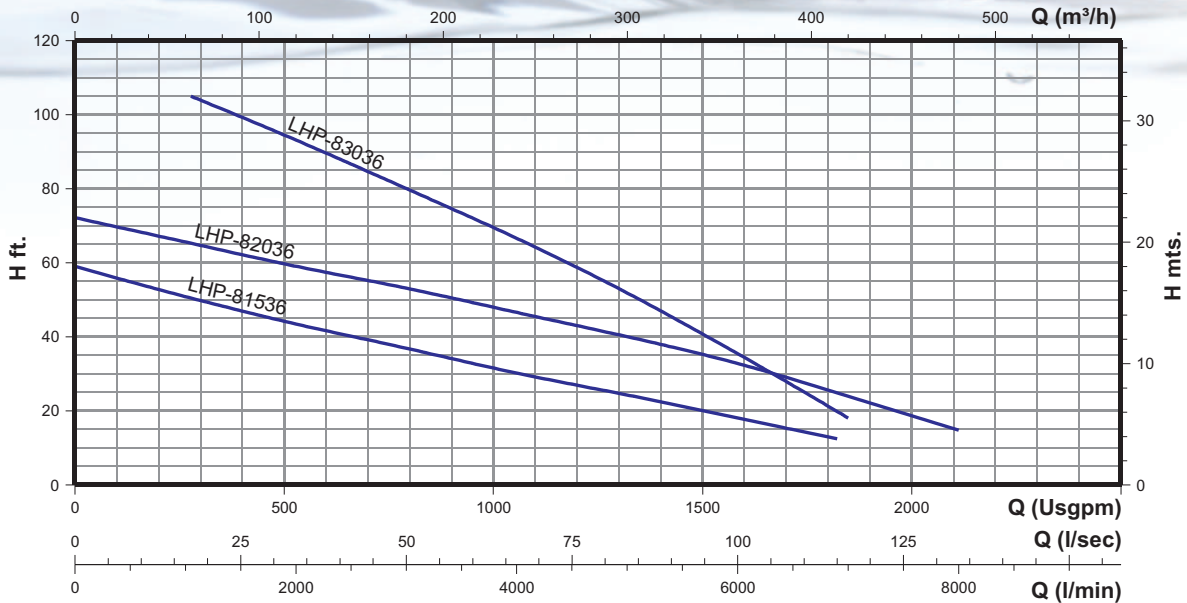
Heavy Duty Sewage Pumps (15 HP to 30 HP)

PERFORMANCE CHART AT n = 1750 RPM



Model	Power		Voltage	Start Method	l/min Usgpm	379	946	946	1893	2839	3785	4356	4732
	HP	KW				100	250	250	500	750	1000	1150	1250
LHP-61536	15.0	11.0	460V	Y - Δ	H ft.	78	72.5	72.5	61.5	48.5	36	28	22
LHP-62036	20.0	15.0	460V	Y - Δ		96.5	89	89	75	60	45	36	30
LHP-63036	30.0	22.0	460V	Y - Δ		138.5	125	125	108	87.5	64	50	37

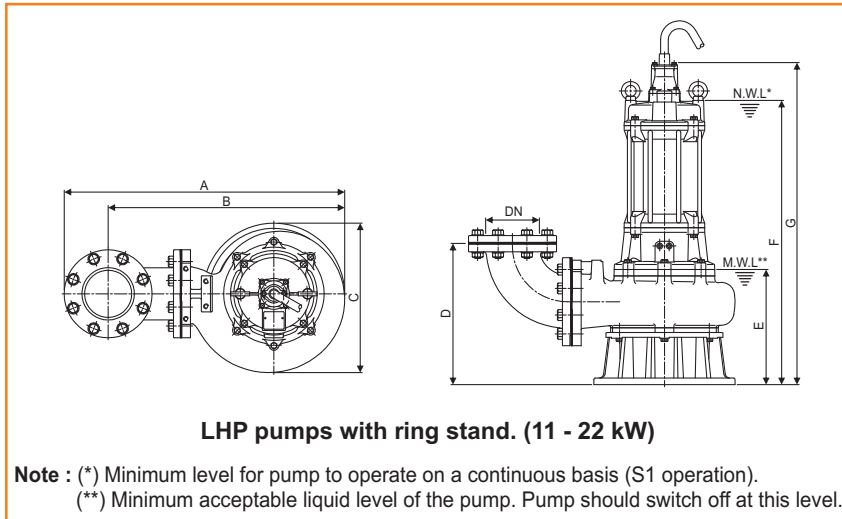
PERFORMANCE CHART AT n = 1750 RPM



Model	Power		Voltage	Start Method	l/min Usgpm	946	1893	2839	3785	4732	5678	6624	7576
	HP	KW				250	500	750	1000	1250	1500	1750	2000
LHP-81536	15.0	11.0	460V	Y - Δ	H ft.	51.5	44	38	32	26	20	14	-
LHP-82036	20.0	15.0	460V	Y - Δ		66	60	54	48	42	35.5	27.5	18.5
LHP-83036	30.0	22.0	460V	Y - Δ		106	95	82	69.5	56	40.5	24.5	-

Note : Pumps are available for 380 V three phase power supply on request.

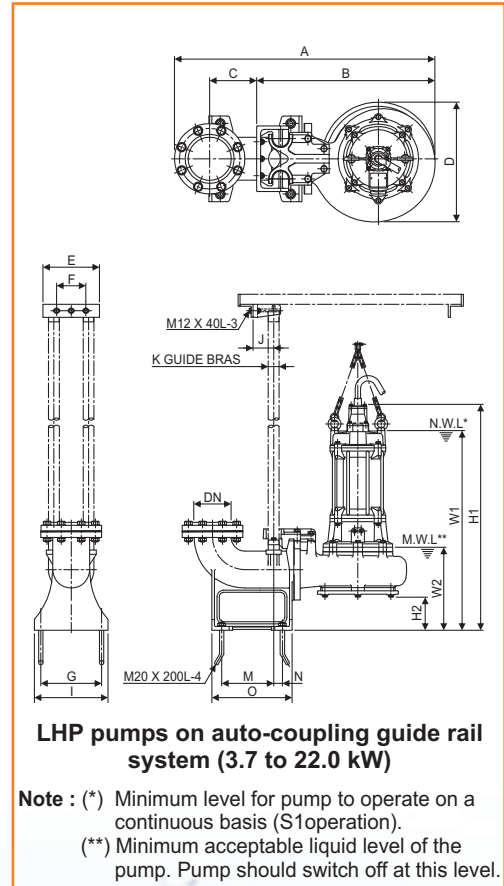
Figure 1



DIMENSIONS Figure 1

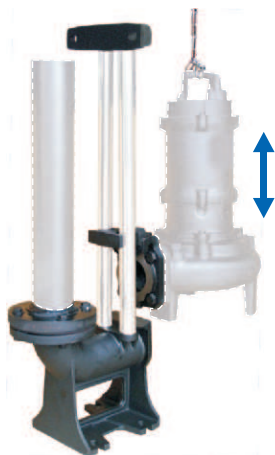
Model	Disc. Inch (mm)	Dimensions (inch)							Solid Passage (inch)	Net Weight (lbs.)	Gross Weight (lbs.)	Volume (ft ³)
		A	B	C	D	E	F	G				
Three Phase												
LHP - 61536	6" (150)	33.39	27.76	18.58	17.40	14.45	37.72	42.32	2.76	579	796	29.63
LHP - 62036	6" (150)	31.85	26.22	17.72	15.24	12.99	34.84	39.41	2.99	418	636	29.63
LHP - 63036	6" (150)	33.46	27.83	19.53	15.75	13.70	34.57	37.20	2.99	510	794	29.10
LHP - 81536	8" (200)	37.56	30.91	19.76	18.98	14.76	38.03	42.68	2.95	609	856	35.27
LHP - 82036	8" (200)	37.60	30.91	18.50	17.40	14.49	38.03	42.52	2.95	627	873	35.27
LHP - 83036	8" (200)	37.01	30.31	20.08	16.46	12.80	33.66	36.38	2.99	682	1001	55.08

Figure 2



DIMENSIONS Figure 2

Model	Disc. Inch (mm)	Dimensions inch																
		A	B	C	D	E	F	G	I	J	K	M	N	O	W1	W2	H1	H2
Three Phase																		
LHP - 4536	4" (100)	31.97	21.10	6.69	12.20	11.42	9.65	7.87	9.72	2.76	1.97	7.87	0.87	11.22	25.59	10.24	28.27	2.95
LHP - 4736	4" (100)	35.63	24.80	6.69	15.94	11.42	9.65	7.87	9.72	2.76	1.97	7.87	0.87	11.22	27.36	11.61	31.14	4.88
LHP - 4736U	4" (100)	35.63	24.80	6.69	15.94	11.42	9.65	7.87	9.72	2.76	1.97	7.87	0.87	11.22	27.36	11.61	31.14	4.88
LHP - 41036	4" (100)	35.63	24.80	6.69	15.94	11.42	9.65	7.87	9.72	2.76	1.97	7.87	0.87	11.22	28.94	11.61	32.72	4.88
LHP - 61036	6" (150)	38.78	25.91	7.36	18.58	10.24	5.31	11.02	13.39	3.74	1.97	9.45	1.57	14.57	32.68	15.35	36.61	0.87
LHP - 61536	6" (150)	38.78	25.91	7.36	18.58	10.24	5.31	11.02	13.39	3.74	1.97	9.45	1.57	14.57	38.58	15.31	43.19	0.87
LHP - 62036	6" (150)	37.24	24.37	7.36	17.72	10.24	5.31	11.02	13.39	3.74	1.97	9.45	1.57	14.57	35.83	13.98	40.39	0.98
LHP - 63036	6" (150)	38.03	30.12	6.69	19.53	9.65	3.94	7.87	9.65	2.76	1.97	6.93	0.94	11.02	35.12	14.25	37.76	0.55
LHP - 81536	8" (200)	41.89	26.06	9.06	19.76	11.81	6.89	12.60	13.78	3.74	1.97	10.59	1.61	15.75	38.74	15.47	43.39	0.71
LHP - 82036	8" (200)	41.89	26.06	9.06	18.50	11.81	6.89	12.60	13.78	3.74	1.97	10.59	1.61	15.75	38.74	15.20	43.23	0.71
LHP - 83036	8" (200)	50.39	34.84	9.06	20.08	12.60	11.02	11.02	13.78	3.94	1.57	7.87	3.15	14.57	35.08	14.21	37.80	1.42



Grinder Pumps (1 HP to 5.0 HP)

Performance Range

- ▶ Flow rate up to 85 USGpm.
- ▶ Dynamic head up to 117 feet.

Applications

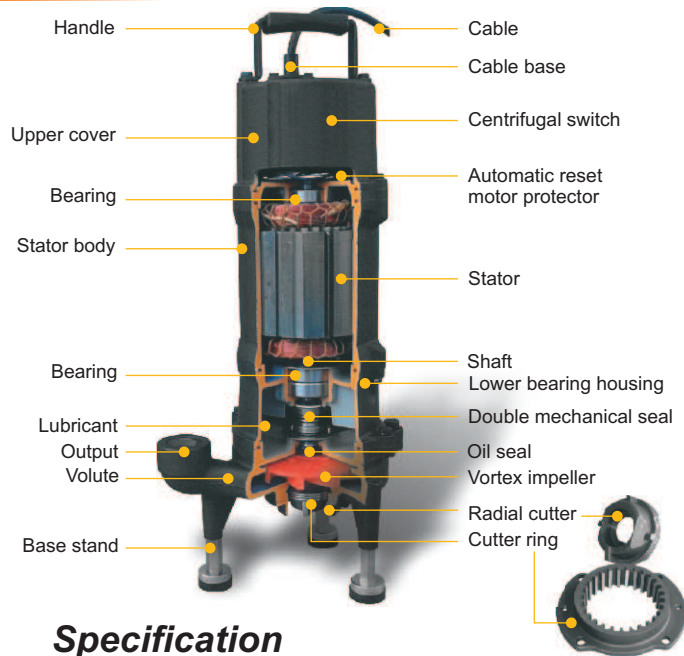
- ▶ Used in pressure sewage system.
- ▶ Drainage of waste water from individual residences, apartments, buildings, recreational developments, motels.
- ▶ Transferring waste water of commercial buildings, industrial plants, waste water sampling, small hospitals.
- ▶ Schools, federal, state and local parks' waste water drainage.
- ▶ To transfer various waste water and sewage.

Features

- ▶ Durable heavy duty finned cast iron construction.
- ▶ Grinder is complete unit, light weight, compact, and portable, easy to be installed.
- ▶ Double protection at connection box: barrier grommet, barrier epoxy, prevent water ingress to the motor area, assuring a longterm reliable operation. Additionally, epoxy encapsulation and stripped leads positively eliminate wicking from the cable.
- ▶ Two balls bearing construction support shaft and rotor.
- ▶ Dry type motor with high efficiency and low current. Equipped with auto reset motor protector, prevent the motor damage from abnormal heat and current.
- ▶ The dual silicon carbide mechanical seal system, extra oil seal protection protects the motor from sewage contamination, to provide you exceptionally long pump service life.
- ▶ An excellent vortex impeller and casing water cavity housing design. Provide high efficiency and power saving, handling ground slurry and sewage without clogging or binding.
- ▶ Radial cutter and cutter ring: corrosion resistant material, hardened to 55 - 60 Rockwell C.

Cutting Ability Demonstration

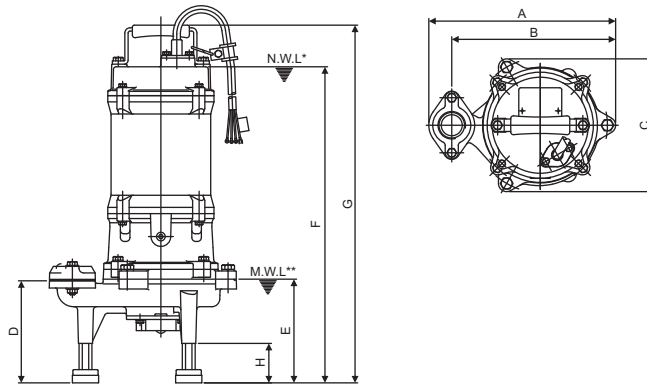
- ▶ Specialized one single strong shaft with impeller and radial cutter, dramatically reduces the torque requirement on the motor, cuts with less horsepower, and increases the pump's efficiency. What's more, it prevents clogging with some troublesome objects such as sanitary napkins, plastic, rubber, disposable diapers and cloth items. The design of Lubi Pumps grinder prevents clogging, binding and roping. They chop up almost anything and everything in order for you to get a continuous, long - term pumping service.



Specification

Horse Power		1.2, 1.5, 2, 3, 5 HP	
Pumping liquid	Ambient temp	Max. +122° F	
	Liquid temp	+32° F to +122° F	
	Liquid nature	Suitable for pumping waste water of commercial buildings, hotels & restaurants, hospitals, industrial plants & kitchen waste.	
Pump	Construction	Impeller	Vortex
		Cutting Cons.	Grinding
		Mech. seal	Double Mechanical seal
		Upper Bearing	Ball Bearing
	Material	Lower Bearing	Two ball Bearings
		Impeller	Grey Iron
		Volute	Grey Iron
		Radial Cutter	AISI 440
Motor	Cutter Ring	AISI 440	
	Mechanical seal	Motor side - Carbon v/s Ceramic Pump side - Silicon carbide v/s Silicon carbide	
	Type	Dry motor	
	Insulation	F Class	
Motor	Frequency	50 Hz	
	Thermal Protector	Automatic reset motor protector	
		Water detector (optional)	
	Material	Stator body	Grey Iron
		Shaft	AISI 410
Cable		Thermoplastic rubber	
Protection	IP 68		
Duty	S1 - When pump is completely submerged. S3 - When pump is partially submerged.		
Voltage	1Ph. 230V ±10%, 3Ph. 380V, 460V ±10% 3Ph. 230V ±10% (up to 3.0 H.P.)		



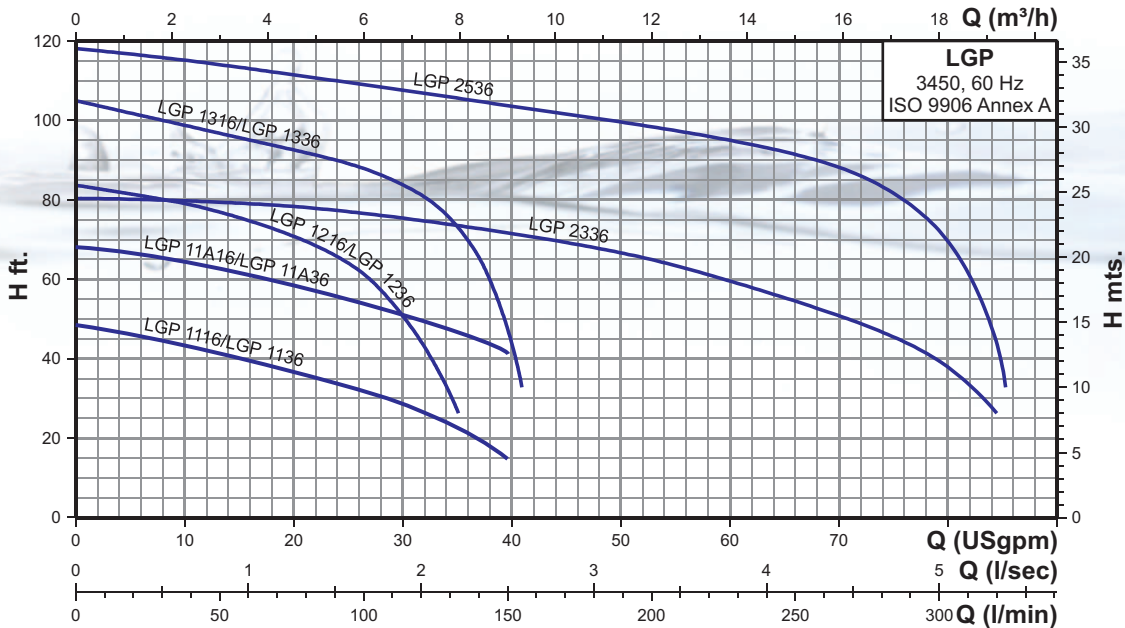


Note : (*) Minimum level for pump to operate on a continuous basis (S1 operation).
 (**) Minimum acceptable liquid level of the pump. Pump should switch off at this level.

DIMENSIONS

Model	Phase	Disc. Inch (mm)	Dimensions (inch)								Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)
			A	B	C	D	E	F	G	H			
LGP-1116/1116F	1Ø	1 1/4" (32)	11.26	9.84	7.99	6.14	6.30	19.80	22.44	2.40	62	125	3.88
LGP-1136/1136F	3Ø												
LGP-11A16/11A16F	1Ø	1 1/4" (32)	11.26	9.84	7.99	6.14	6.30	21.38	24.02	2.40	75	141	4.45
LGP-11A36/11A36F	3Ø												
LGP-1216/1216F	1Ø	1 1/4" (32)	11.26	9.84	7.99	6.14	6.30	21.38	24.02	2.40	84	154	4.45
LGP-1236/1236F	3Ø												
LGP-1316/1316F	1Ø	1 1/4" (32)	11.26	9.84	7.99	6.14	6.30	21.38	24.02	2.40	88	158	4.45
LGP-1336/1336F	3Ø												
LGP-2336/2336F	3Ø	2" (50)	16.38	13.35	7.68	8.90	6.30	20.55	23.35	2.40	112	189	5.51
LGP-2536	3Ø												

PERFORMANCE CHART AT n = 3450 RPM FOR GRINDER PUMPS



PERFORMANCE DATA AT n = 3450 RPM

Model	Phase	Power		Voltage*	Start Method	l/min	38	76	114	152	189	227	265	303																																
		HP	KW				10	20	30	40	50	60	70	80																																
LGP-1116/1116F	1Ø	1.0	0.75	230V	Capacitor	H ft.	43	37	28	-	-	-	-	-																																
LGP-1136/1136F	3Ø			460V	Direct																																									
LGP-11A16/11A16F	1Ø	1.5	1.1	230V	Capacitor										64	58	51.5	-	-	-	-	-																								
LGP-11A36/11A36F	3Ø			460V	Direct																																									
LGP-1216/1216F	1Ø	2.0	1.5	230V	Capacitor																		79	71	51	-	-	-	-	-																
LGP-1236/1236F	3Ø			460V	Direct																																									
LGP-1316/1316F	1Ø	3.0	2.2	230V	Capacitor																										99	92.5	84	44	-	-	-	-								
LGP-1336/1336F	3Ø			460V	Direct																																									
LGP-2336/2336F	3Ø	3.0	2.2	460V	Direct																																		80	78	75	71.5	66.5	59.5	50.5	38
LGP-2536	3Ø			5.0	3.7																																									

Note : Subscript "F" pumps will be provided with a float switch.
 Pumps are available for 380 V three phase power supply on request.

Construction Drainage Pumps (1.5 HP to 10 HP)

Performance Range

- Flow rate up to 634 USgpm.
- Dynamic head up to 137 feet.

Applications

- Civil engineering dewatering of tunneling and ground works, also for storm water sewers.
- Dewatering of fluids containing solid sediments.

Features

- Specifically designed for civil engineering applications, where a heavy duty, light weight, top discharge design, is required which is easy to handle. The double outer casing, water cooled motor makes it particularly suitable for low water level applications.
- A fully waterproof IP 68 stainless steel structure, combined with a high grade silicon carbide double mechanical seals.
- The GAS range of pumps are compact, strong and easy to operate in any situation.
- Special designed high efficient and wear resistant HCR (High Chrome) impeller.
- Multi impeller design suitable from high head with small capacity to low head with large capacity of application requirement.
- Optional discharge connection(hose, flange and thread connection)

Special Features on Request

- Other voltages.
- Available in 50Hz.

Thermal overload protector

- Equipped with Automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and locked impeller.

HCR Impeller

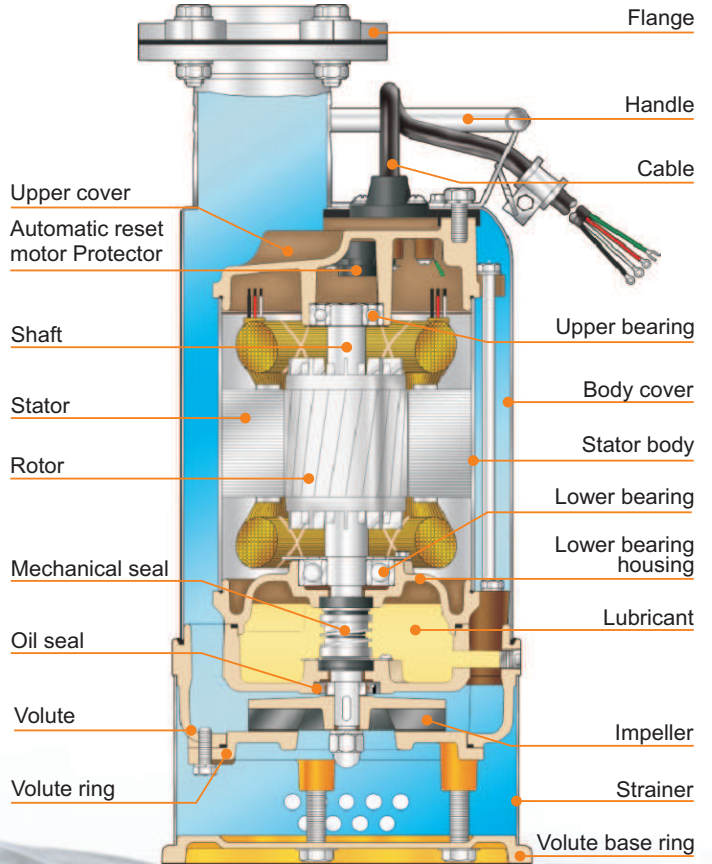
- The GAS impeller is manufactured with a high chrome alloy (HCR) steel with a hardness of 55 - 60 Rc., which makes it resistant to prolonged use in abrasive applications.



Protector

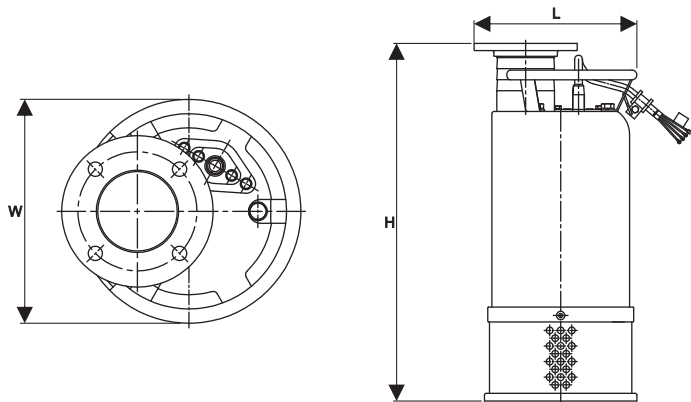


Impeller



Specification

		1.5 to 5 HP		7.5 to 10 HP		
HP		1.5 to 5 HP		7.5 to 10 HP		
Diameter (inch)		2" - 3"		3"	4" - 6"	
Pumping liquid	Ambient temp	Max. +122° F				
	Liquid temp	+32° F to +122° F				
	Liquid nature	Suitable for dewatering at civil engineering sites and pumping of storm water				
	Max depth	98.4 feet (30m)				
Pump	Structure	Impeller	Open	Open	Enclosed	
		Mech. seal	Double Mechanical seal			
		Bearing	Ball type bearing			
	Material	Body Cover	AISI-304			
		Upper cover	Grey Iron			
		Volute	Hard Ductile Iron			
		Impeller	High Chrome			
Wear Ring	-	HCR				
M. seal	Motor Side	Carbon v/s Ceramic				
	Pump Side	Silicon Carbide v/s Silicon Carbide				
Motor	Type	Dry motor				
	Insulation	F Class				
	Frequency	60Hz				
	Thermal Protector	Automatic reset motor protector				
	Material	Strator body	AISI 304		Grey Iron	
Shaft		AISI 410				
Cable		Thermoplastic rubber				
Protection		IP 68				
Duty		S1 - When pumps completely or partially submersed.				
Voltage		1 Ph. 230 V ±10%, 3 Ph. 380 V, 460 V ±10% 3 Ph. 230 V ±10% (up to 3.0 H.P.)				

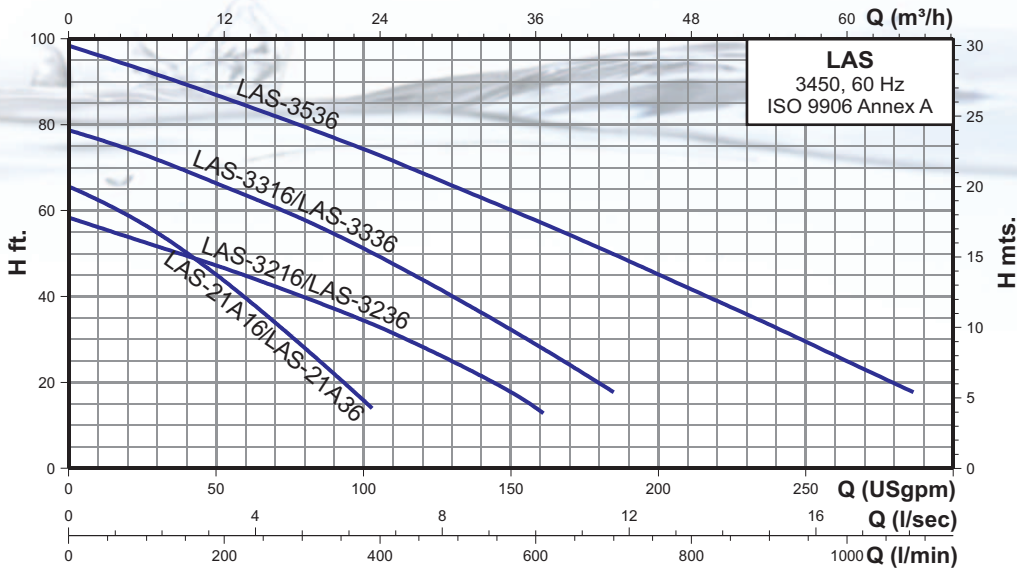


LAS 21A16, 21A36 LAS 3216, 3236, 3316, 3336, 3536 LAS 3736, 4736, 6736, 41036, 61036

DIMENSIONS

Model		Disc. Inch (mm)	Dimensions (inch)			Solid Passage (inch)	Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)
Single Phase	Three Phase		Length	Width	Height				
LAS-21A16/21A16F	-	2" (50)	8.27	8.27	20.08	0.31	64	108	2.72
-	LAS-21A36/21A36F		8.27	8.27	17.13	0.31	55	99	2.40
LAS-3216/3216F	-	3" (80)	9.84	9.45	24.80	0.43	95	150	3.92
-	LAS-3236/3236F		9.84	9.45	21.06	0.43	86	141	3.43
LAS-3316/3316F	-	3" (80)	9.84	9.45	25.39	0.43	103	158	3.99
-	LAS-3336/3336F		9.84	9.45	22.05	0.43	92	147	3.57
-	LAS-3536	3" (80)	9.84	9.45	23.62	0.43	101	156	3.78
-	LAS-3736	3" (80)	11.42	11.42	27.17	0.39	163	224	5.30
-	LAS-4736	4" (100)	11.42	11.42	27.17	0.39	167	229	5.30
-	LAS-6736	6" (150)	11.42	11.42	29.33	0.39	172	233	5.65
-	LAS-41036	4" (100)	11.42	11.42	27.17	0.39	167	229	5.30
-	LAS-61036	6" (150)	11.42	11.42	29.33	0.39	176	238	5.65

PERFORMANCE CHART AT n = 3450 RPM FOR CONSTRUCTION DRAINAGE PUMP



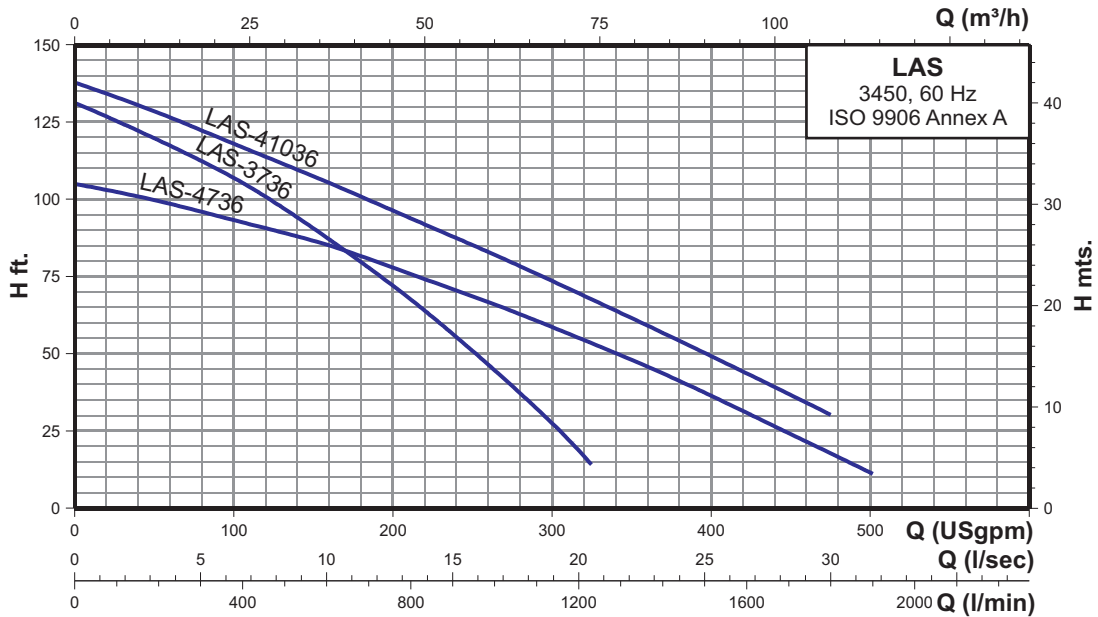
PERFORMANCE DATA AT n = 3450 RPM

Model		Power		Voltage*	Start Method	l/min Usgpm	95	189	284	379	473	568	662	757	852	946	1041	
Single Phase	Three Phase	HP	KW				25	50	75	100	125	150	175	200	225	250	275	
LAS-21A16/21A16F	-	1.5	1.1	230V	Capacitor	H ft.	57	45	31	15.5	-	-	-	-	-	-	-	
-	LAS-21A36/21A36F			460V	Direct		53	47.5	41	34.5	26.5	17.5	-	-	-	-	-	
LAS-3216/3216F	-	2.0	1.5	230V	Capacitor		73	66.5	59	51.5	42	32	22	-	-	-	-	
-	LAS-3236/3236F			460V	Direct		93	87	80.5	74	67	60	53	45	37.5	29.5	22	
LAS-3316/3316F	-	3.0	2.2	230V	Capacitor													
-	LAS-3336/3336F			460V	Direct													
-	LAS-3536	5.0	3.7	460V	Direct													

Note : Subscript "F" pumps will be provided with a float switch.
Pumps are available for 380 V three phase power supply on request.

Construction Drainage Pumps (7.5 HP to 10.0 HP)

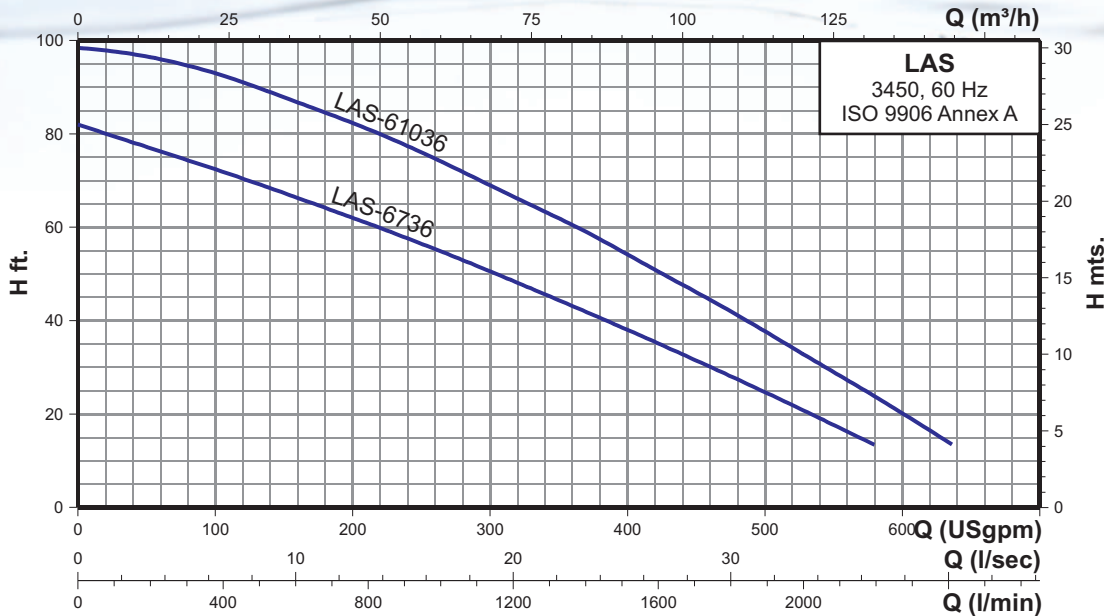
PERFORMANCE CHART AT n = 3450 RPM FOR CONSTRUCTION DRAINAGE PUMP



PERFORMANCE DATA AT n = 3450 RPM

Model	Power		Voltage	Start Method	l/min Usgpm	189	284	379	473	568	662	757	852	946	1136	1325	1514	1703	1893
	HP	KW				50	75	100	125	150	175	200	225	250	300	350	400	450	500
LAS-4736	7.5	5.5	460V	Direct	H ft.	100	96	93	90	87	82	78	73	68.5	59	48	36	24	12
LAS-3736				Direct		120	112	107	100	90	80	72	62.5	50.5	27.5	-	-	-	-
LAS-41036	10.0	7.5	460V	Direct		128	122	118	113	107.5	102	96	91.5	85	73.5	61	49.5	36	-

PERFORMANCE CHART AT n = 3450 RPM FOR CONSTRUCTION DRAINAGE PUMP



PERFORMANCE DATA AT n = 3450 RPM

Model	Power		Voltage	Start Method	l/min Usgpm	189	379	568	757	1136	1514	1893	2271
	HP	KW				50	100	150	200	300	400	500	600
LAS-6736	7.5	5.5	460V	Direct	H ft.	77.5	72.5	67.5	62	50.5	37.5	25	-
LAS-61036				Direct		97	92.5	87.5	82.5	69	54	37.5	20

Note : Pumps are available for 380 V three phase power supply on request.

Large Volume Water Pumps (3 to 15 HP)

Performance Range

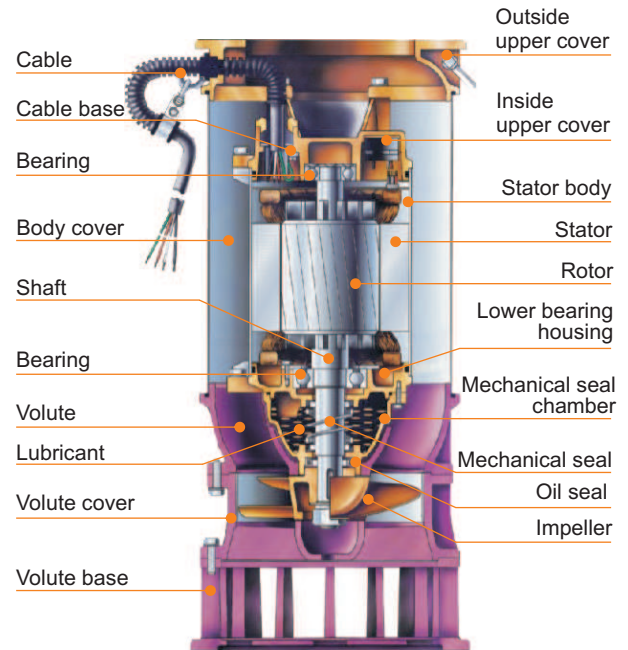
- ▶ Flow rate up to 2376 USgpm.
- ▶ Dynamic head up to 20 feet.

Applications

- ▶ Suitable for agriculture water and river water.
- ▶ Aquaculture water pumping and drainage for large volume water applications.
- ▶ Water supply for landscape and water features.
- ▶ Water extracting from rivers, lakes and reservoirs.
- ▶ Flood control.

Features

- ▶ Large flow capacities achieved with almost no vibration or noise by use of propeller or mix flow design, giving easy operation and energy savings.
- ▶ Robust construction and compact design with a dry motor, double mechanical seal and impeller flow guide vane for high efficiency.
- ▶ Simple operation and maintenance.



Flood control



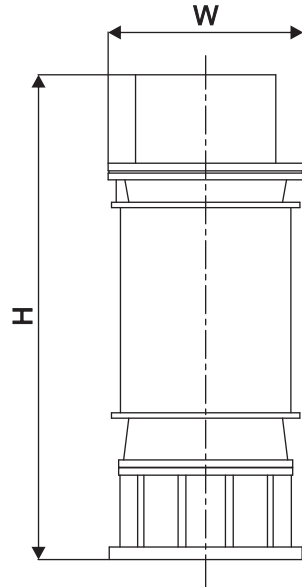
Aquafarm dewatering



Ditch dewatering

Specification

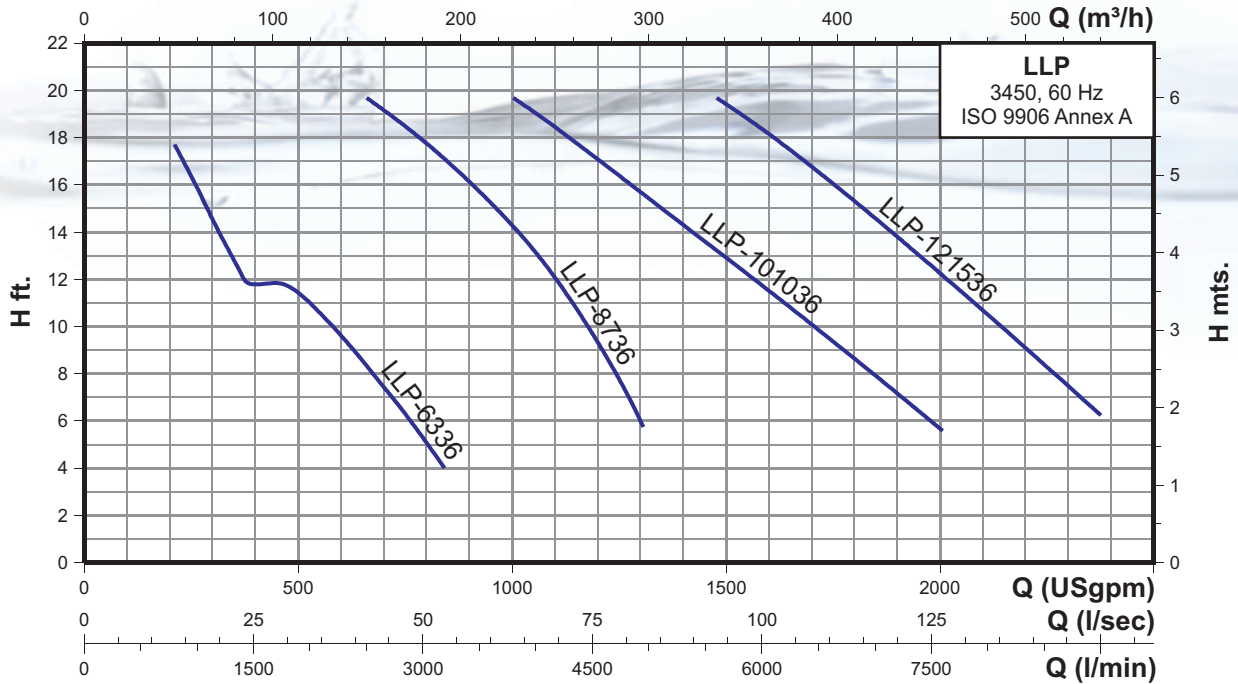
Diameter (inch)		8" - 10" - 12"	
Pumping liquid	Ambient temp	Max. +122° F	
	Liquid temp	+32° F to +122° F	
	Liquid nature	Suitable for aquaculture water pumping, flood control and water extraction for rivers, lakes & reservoirs.	
	Max. depth	98.4 feet (30m)	
Pump	Structure	Impeller	Propeller / Mixed Flow
		M.seal	Double Mechanical seal
		Bearing	Ball type bearing
	Material	Body Cover	AISI 304
		Impeller	Bronze
		Volute	Grey Iron
		Upper cover	Bronze
M.seal	Carbon v/s Ceramic		
Motor	Insulation	F Class	
		Frequency	60 Hz
	Material	Stator body	AISI 304
		Shaft	AISI 304
		Cable	Thermoplastic rubber
Protection	IP 68		
Duty	S1 - When pump is completely or partially submersed		
Voltage	3 Ph. 380 V, 460 V ±10% 3 Ph. 230 V ±10% (up to 3.0 H.P.)		



DIMENSIONS

Model	Disc. Inch (mm)	Dimensions (inch)		Solid Passage (inch)	Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)
		Width	Height				
LLP-6336	6"(150)	11.22	25.12	0.79	114	200	5.61
LLP-8736	8"(200)	13.39	36.34	0.87	268	387	9.60
LLP-101046	10"(250)	14.96	39.96	0.87	361	502	12.15
LLP-121536	12"(300)	16.93	42.40	0.91	460	620	15.25

PERFORMANCE CHART AT n = 1750 RPM FOR HEAVY DUTY SEWAGE PUMPS



PERFORMANCE DATA AT n = 1750 RPM

Model	Power		Voltage	Start Method	l/min Usgpm	1136	1514	1893	2271	3028	3785	4542	4921	5678	6435	7571	8328	8706
	HP	KW				300	400	500	600	800	1000	1200	1300	1500	1700	2000	2200	2300
LLP-6336	3.0	2.2	460V	Direct	H ft.	14.5	11.8	11.4	9.6	5	-	-	-	-	-	-	-	-
LLP-8736	7.5	5.5	460V	Direct		-	-	-	-	17.7	14.3	9.3	6	-	-	-	-	-
LLP-101036	10.0	7.5	460V	Direct		-	-	-	-	-	19.6	17	15.7	12.9	10	5.7	-	-
LLP-121536	15.0	11.0	460V	Direct		-	-	-	-	-	-	-	-	19.4	16.7	12.2	9.1	7.4

Note : Pumps are available for 380 V three phase power supply on request.