

LA 50Hz & 60Hz
SERIES
SUBMERSIBLE AXIAL
FLOW PUMPS



LA-2250/2260
(Well type)



LA-2250/2260
(Stand type)



LA-2875/28100
(Well type)



LA-2875/28100
(Stand type)

LA

FEATURE

- High efficiency motor connects directly to the impeller for the best energy savings.
- Strong material and construction, double mechanical seal, epoxy resin cable entry, IP68 waterproof.
- Shaft and impeller has been precisely balanced for a quiet and long life performance.
- Standard protection is miniature thermal protector and mechanical seal leakage detector. Optional protection devices available.
- The 3D computerized impeller and vanes conductive design, creates a higher pump efficiency.
- Sacrificial Anode : Sacrificial Anodes are highly active metals that are used to prevent a less active material surface from corroding. Sacrificial Anode reduces the rusting corrosion in sea water and increase the lifetime of the pump.



Axial impeller



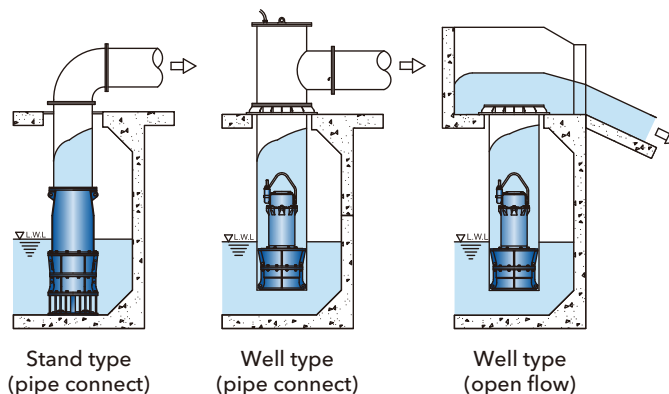
Sacrificial Anode

SUBMERSIBLE AXIAL FLOW PUMPS STATION ADVANTAGES

- Sample design and construction for pump station.
- Frugal space makes it easier for installing and maintaining.
- Reduced expense in the pump station construction and installation.

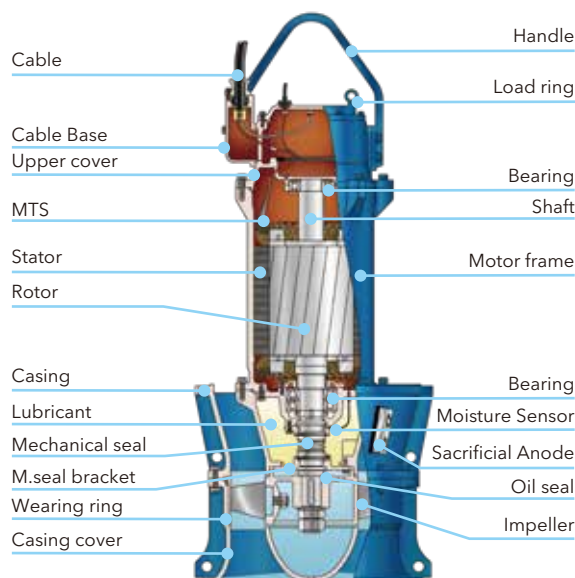
APPLICATIONS

- Water supply or drainage for industrial.
- Water supply for cooling in the power plant.
- Used for large volume dewatering.
- Large scale aquaculture farming.
- Flooding Control.
- Others : Extraction of water from dock and river.



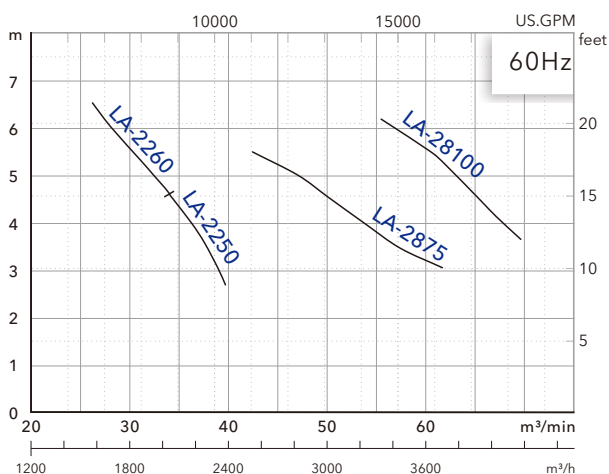
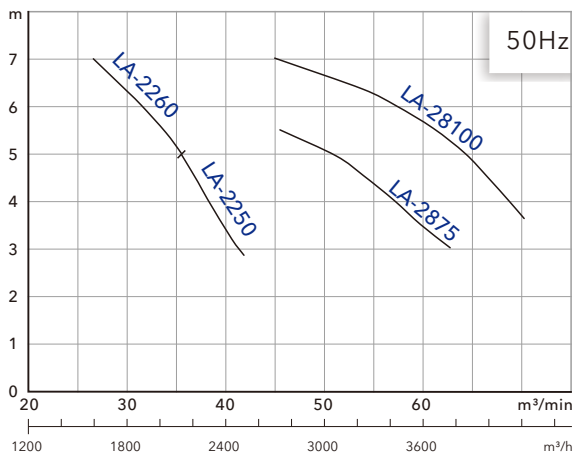
PROTECTOR DESCRIPTION (Optional)

- The Miniature Thermal Sesnsor (MTS) is mounted on the motor winding. The MTS sends a signal to the control box when the motor overheats. Consequently, the power supply is cut off, which prevents the pump from overload, overheating, etc.
- The Moisture Sensor (MS) is installed in the mechanical seal chamber, motor housing (optional) and the wiring chamber (optional). The MS detects moisture and sends a signal to the control box to prevent the pump from water leakage.
- The Bearing Thermal Sensor (BTS) is installed around the bearing. The BTS sends a signal to the control box when the bearing overheats to prevent the pump from overload, due to a damaged bearing.





PERFORMANCE CURVES



SPECIFICATIONS

Item	Description	
Limits of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Wastewater • Industry drainage • Agriculture irrigation • Aquaculture water
Type	Frequency	50Hz / 60Hz
	Motor	50Hz/8P (750rpm : 50~60HP) • 50Hz/10P (600rpm : 75~100HP) • 60Hz/10P (720rpm : 50~60HP) • 60Hz/12P (600rpm : 75~100HP) • Dry Motor
	Insulation	Clase H
	Protection	IP68
	Protector	MTS • MS
	Bearing	Ball Type
	M.seal	Double M.seals
	Impeller	Axial
Material	Upper Cover	FC200 / GG-20 / ASTM-30
	Motor Frame	FC200 / GG-20 / ASTM-30
	Shaft End	SUS420J2 / X30Cr13 / ASTM 420 F
	M.seal	SiC/SiC & SiC/SiC
	Casing	FC200 / GG-20 / ASTM-30
	Impeller	SCS14 / G-X6CrNiMo1810 / A744 CF-8M
	Cable	VCT or PNCT or H07RN-F
	Wearing ring	SCS13 / G-X6CrNiMo18-9 / A744 CF-8 (50~60HP) • ALBC3 / G-A110Ni / C95800 (75~100HP)
Footing / Outer cover		SS400 / ST-44-2 / A36 (Stand type)
Optional		Discharge and flange can be made to custom specification.

PRODUCT NOMENCLATURE

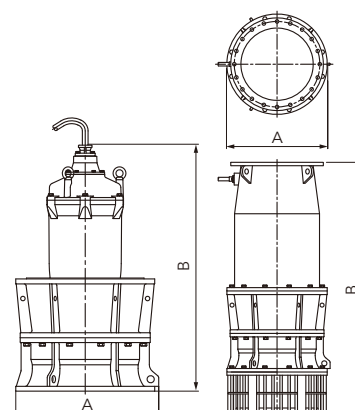
LA - 22 50
Type Discharge HP
inch

PERFORMANCE SPECS.

Note : Start Method: Y-D= STAR-DELTA.
The listed weight is not including cable and discharge.

50Hz	Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Head (m)	Standard		Well type			Stand type		
							m³/min	m³/h	Dimensions mm		Weight kg	Dimensions mm		Weight kg
									A	B		A	B	
LA-2250	50(37)	22"(550)	3	Y-D / DOL	4	38	2280	803	1380	755	803	1960	1130	
LA-2260	60(45)	22"(550)	3	Y-D / DOL	6	31	1860	803	1380	755	803	1960	1130	
LA-2875	75(55)	28"(700)	3	Y-D / DOL	3.5	60	3600	870	2150	1530	930	2720	2060	
LA-28100	100(75)	28"(700)	3	Y-D / DOL	5	60	3600	870	2150	1600	930	2720	2130	

60Hz	Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard		Well type			Stand type		
						m³/min	ft-GPM	Dimensions mm		Weight kg(lb)	Dimensions mm		Weight kg(lb)
								A	B		A	B	
LA-2250	50(37)	22"(550)	3	Y-D / DOL	4-36	13-95	10	803	1380	755 (1664)	803	1960	1130 (2491)
LA-2260	60(45)	22"(550)	3	Y-D / DOL	6-28	20-7400	40	803	1380	755 (1664)	803	1960	1130 (2491)
LA-2875	75(55)	28"(700)	3	Y-D / DOL	3.5-60	12-15850	50	870	2150	1530 (3373)	930	2720	2060 (4542)
LA-28100	100(75)	28"(700)	3	Y-D / DOL	5-60	16-15850	50	870	2150	1600 (3527)	930	2720	2130 (4696)

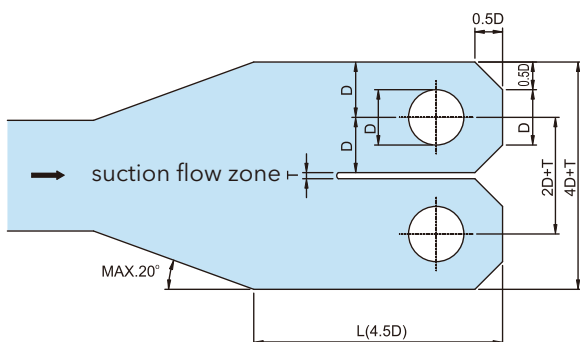
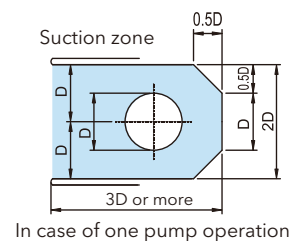




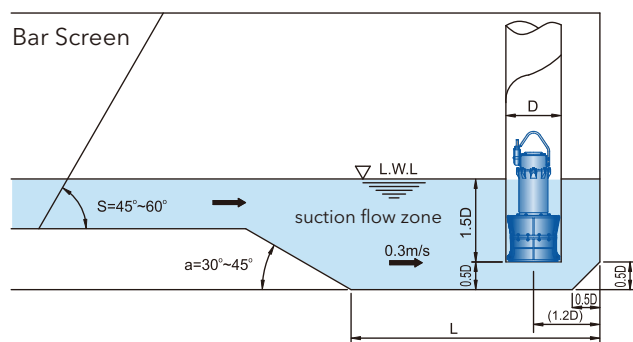
SUCTION FLOW ZONE DESIGN REFERENCE FOR SUBMERSIBLE AXIAL FLOW PUMPS

Several problems might arise if the insufficient shape and dimensions of the suction flow zone are decided at the design stage and from the hydro-dynamical point of view. Problems such as: eddy current of the surface water, air mixing with the water, heavy turbulence of water flow and the formation of stagnant water. In order to prevent or to reduce these causes, there are several things that need to be considered:

- The liquid of suction flow speed should be kept constant (flow speed 0.3~0.5m/s).
- Suction flow zone of water depth and floor slop variation of slope angle should be $30^{\circ}\sim 45^{\circ}$.
- Suction flow zone should fill up with concrete.
- In two pump operations, eddy current protection wall must be installed in the suction zone.
- In a two pump operation, any sudden obstacles at the suction flow zone must be avoided and maximum divergent angle must not exceed 20° .



In case of two pump operation



Equipped with a protection device against eddy current



Professionalism · Innovation · Service · Commitment
HCP PUMP MANUFACTURER CO., LTD.
www.hcppump.com



Distributor:

DLAEN0-2307