

Adapter / Check Valve

IC series' strainer and base can be removed and equipped with Adapter or Check Valve instead. And thus IC Series can be installed on land.

# **PRODUCT FEATURES**



# Epoxy Cable Base

An epoxy resin seal cable base prevents moisture from entering the motor through the core wires.



# **Auto-cut Protector**

Automatic On/Off motor protector to prevent motor burn out due to high temperature and excess amperage draw.(There's no autocut for Pump above L-200A.)



#### Food Grade Lubricant

High level of medical & food grade white mineral oil; it's harmless to creatures and environment.It's harmless to plant for agriculture and fishes/shrimps for aquaculture. Meanwhile, it can meet the demand of high quality



#### Mechanical Seals

**Check Valve** 

CHV

Double mechanical seal have two waterproof sliding surface and provide best seal effect. Silicon carbide / Silicon carbide which is abrasion resistance and could be operation for long-term (it's optional from L-200A



# High Efficiency Dry Motors

All stator coils need to be treated with insulating varnish procedure to achieving the best insulation, efficiency and durability.



 ${\sf Professionalism \cdot Innovation \cdot Service \cdot Commitment}$ HCP PUMP MANUFACTURER CO., LTD. www.hcppump.com



Distributor:

**DICLEN6-2001** 





60Hz
SERIES

Submersible Dewatering Pumps Large Volume Submersible Pumps

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IC(W-Well Type)



#### **FEATURES**

- ■The internal casting is treated with High solids Epoxy coating, which can improve the anti-corrosion and extend the product lifetime.
- Standard design, incorporating a dry motor with thermal Auto-cut Protector that prevents the motor from over heating. Equipped with a cast iron motor frame for a faster heat dissipation. As well as an abrasion resistant mechanical seal and an additional oil seal.
- ■Water cooled motor to ensure a long life in continuous and intermittent operation, with high efficiency and
- ■An exceptional High-lift and suction impeller design, which allows for dewatering of underground or circulating water applications.
- For above or below surface water applications; the IC pump strainer can be easily removed and replaced with a check valve, which allows for dewatering up to max. 8m deep of underground water and water circulation applications. (W–Well Type)
- New casing cover, with metric thread bolt hole that is easier for valve and adapter connection.
- ■The chrome steel impeller has been adopted for IC-32B~610, with hardness of HRC 25~30; better anti-corrosion, and extended product lifetime.
- High solids Epoxy coating prolong metals from corrosion and oxidization



IC-215

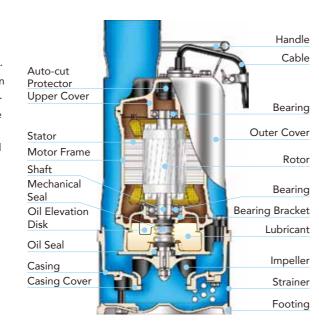


IC-32B~IC-610

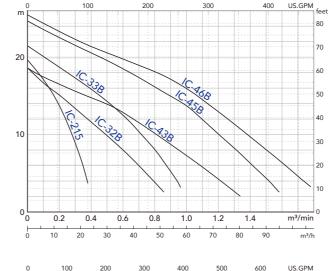
#### **APPLICATIONS**

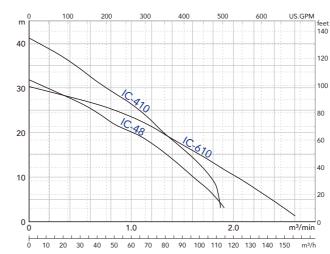
- Aquiculture water supply and drainage.
- ■Water supply for agricultural irrigation systems and underground water pumping.
- Landscape, water feature and horticulture
- Extraction of water from rivers, lakes and reservoirs.

# **PRODUCT NOMENCLATURE**



### **PERFORMANCE CURVES**





#### **SPECIFICATIONS**

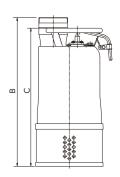
	ltem	Description
	Liquid Temp.	0~40°C (32~104°F)
Limits of Use	Liquid Temp. 0~40°C (3  Applications Agriculture Circulating water	Agriculture irrigation • Circulating water • Dewatering
	Frequency	60Hz
	Motor	2P (3600rpm) • Dry Motor
	Insulation	Class F (1.5~6HP) • Class F (7.5~10HP)
Tupo	Protection	IP68
туре	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Close
	Outer Cover	SUS304
	Upper Cover	FC200
	Motor Frame	SUS304 (1.5HP) • FC200 (2~10HP)
Material	Shaft	SUS403 (1.5~3HP) • SUS304 (5~10HP)
Material	M.seal	CA/CE & SiC/SiC
	Casing	FC200
	Impeller	BC (1.5HP) • Chrome Steel (2~10HP)
	Cable	VCT or H07RN-F or SJOW/SOW
	Optional	Pumps can be customized to fit specifications

#### PERFORMANCE SPECS.

Note: Weight Without Cable & Outlet, \*3.5" (90mm) optional by request.

	Output	Discharge	Phase	Start	Stan	dard	Solid	Weigh	t kg(lb)			nsion	s mm	
Model	HP(kW)	Inch(mm)	Ø	Method	m-m³/min	ft-GPM	Passage mm(inch)	1Ø	3Ø	Α	1Ø	3   3Ø	1Ø	ე   3Ø
IC-215	1.5(1.1)	2"(50)	1 3	Capacitor Direct	13.5-0.2	44-52	3.5(1/8")	28(62)	24(53)	210	431	372	482	423
IC-32B	2(1.5)	3"(80)	1	Capacitor Direct	9.5-0.5	31-132	10(3/8")	40(88)	36(79)	235	548	503	511	466
IC-33B	3(2.2)	3"(80)	1	Capacitor Direct	14-0.5	46-132	10(3/8")	44(97)	39(86)	235	578	503	541	466
IC-43B	3(2.2)	3"(80) • 3.5"(90) 4"(100)	1 3	Capacitor Direct	10-0.8	33-212	10(3/8")	44(97)	39(86)	235	593	518	556	481
IC-45B	5(3.7)	3.5"(90) 4"(100)	3	Direct	13-1.0	43-265	10(3/8")	-	44(97)	235	-	548	-	511
IC-46B	6(4.5)	3.5"(90) 4"(100)	3	Direct	15.5-1.0	51-265	10(3/8")	-	44(97)	235	-	548	-	511
IC-48	7.5(5.5)	4"(100)	3	Direct	20-1.0	66-265	10(3/8")	-	71(157)	286	-	550	-	610
IC-410	10(7.5)	4"(100)	3	Direct	26-1.0	85-265	10(3/8")	-	79(174)	286	-	550	-	610
IC-610	10(7.5)	6"(150)	3	Direct	17-1.5	56-395	10(3/8")	-	81(179)	286	-	550	-	610





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L-200A/250(L)A Inside view



## **FEATURES**

- Large flow capacities achieved with almost no vibration, or noise, by use of the axial and mix flow design.
- HIGH-QUALITY BRONZE: Widely acclaimed for its ability to withstand corrosion, even to the erosion of sea water and brine and is proved to be able to substantially extend time to service, used on the Upper Cover, Bearing Bracket, & M. Seal Bracket of our pumps. (L-200A/250A/300B only)
- POWER-SAVING & HIGH-EFFICIENCY ALBC3 (Aluminum Bronze) IMPELLER: Utilizes wear-resistant and anti-corrosion ALBC3 (Aluminum Bronze) Impeller, the same material as the propellers of boats and vessels.
- Robust construction and compact design with a dry motor, double mechanical seals and impeller flow guide vane for high efficiency.
- ■Pump manufactured with heavy duty housing, cable leads are isolated by hardened epoxy for water proofing, and double mechanical seals.
- High solids, epoxy coating prolongs metals from corrosion and oxidization.
- L Series are equipped with Sacrificial Anode. Sacrificial Anode are create from a metal alloy with a more negative electrochemical potential. Sacrificial Anode are highly active metals, that are used to prevent pump material surface from corroding.

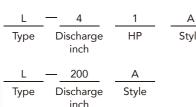
### **APPLICATIONS**

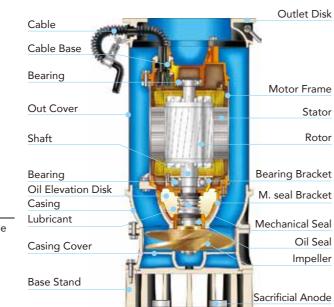
- Aquiculture water pumping and drainage, for large volume water applications.
- ■Water supply for landscape, water features, cooling in the power plant or drainage for industry.
- Water extraction from rivers, lakes and reservoirs.
- Flood control or used for large volume dewatering.
- Others: Extraction of water from dock and river.



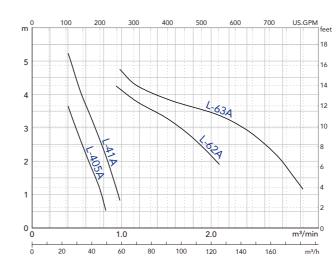


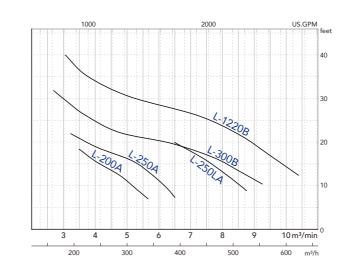
# **PRODUCT NOMENCLATURE**





### **PERFORMANCE CURVES**





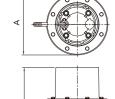
#### **SPECIFICATIONS**

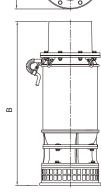
	Item	Description
	Liquid Temp.	0~40°C (32~104°F)
Limits of Use	Applications	Agriculture irrigation ● Agriculture water ● River water
	Frequency	60Hz
	Motor	2P (3600rpm:0.5~1HP) • Dry Motor 4P (1800rpm:2~20HP) • Dry Motor
	Insulation	Class B (0.5~1HP) ◆ Class F (2~3HP) ◆ Class H (7.5~20HP)
Туре	Protection	IP68
	Protector	Auto-cut (0.5~3HP) • None (7.5~20HP)
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Axial (L-300B/1220B : Mixed flow )
	Outer Cover	SUS304
	Upper Cover	FC200 (0.5~3HP) • BC6 (7.5~20HP)
	Motor Frame	FC200 (0.5~3HP) • SUS304 (7.5~20HP)
	Shaft	SUS304
Material	M.seal	CA/CE & SiC/SiC (0.5~3HP) CA/CE & CA/CE (7.5~20HP)
	Casing	FC200
	Impeller	ALBC3
	Strainer	SUS304
	Cable	VCT or H07RN-F or SOW/STOW
(	Optional	Pumps can be customized to fit specifications

### PERFORMANCE SPECS.

Note: Weight Without Cable & Outlet, \*3.5" (90mm) optional by request.

									,		,	
	Output	Discharge	Phase	Start	Stan	dard	Solid	Weig	ht kg(lb)	Dime	ensions	mm
Model	HP(kW)	Inch(mm)	Ø	Method	m-m³/min	ft-GPM	Passage mm(inch)	1Ø	3Ø	Α	1Ø	3Ø
L-405A	0.5(0.4)	3.5"(90) 4"(100)	3	Capacitor Direct	1.5-0.7	5-185	10(3/8")	25(55)	25(55)	225	478	478
L-41A	1(0.75)	3.5" (90) 4"(100)	1 3	Capacitor Direct	3-0.7	10-185	10(3/8")	26(57)	26(57)	225	478	478
L-62A	2(1.5)	6"(150)	3	Direct	2-2.0	7-530	20(3/4")	-	51(112)	305	-	597
L-63A	3(2.2)	6"(150)	3	Direct	3.3-2.0	10-530	20(3/4")	-	52(115)	305	-	597
L-200A	7.5(5.5)	8"(200)	3	Direct	4.5-4.0	15-1060	22(7/8")	-	119(262)	340	-	923
L-250A	10(7.5)	10"(250)	3	Direct	4-5.5	13-1450	22(7/8")	-	162(357)	380	-	1029
L-250LA	15(11)	10"(250)	3	Direct	4-8.0	13-2110	22(7/8")	-	156(344)	380	-	1029
L-300A	15(11)	10"(250) 12"(300)	3	Direct	5.5-7.0	18-1850	33(11/4")	-	197(434)	430	-	1082
L-1220B	20(15)	10"(250) 12"(300)	3	Direct	5.5-9.0	18-2380	33(11/4")	-	210(463)	430	-	1082





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# **Optional Outlet Set**

#### PRODUCT NOMENCLATURE

L2F	4 (3.5) —	175—180	LKF	6	125	* 125	LOF	4	127
Туре	Discharge Discharge (upper flange) (lower flange)	PCD	Туре	Discharge		PCD	Туре	Discharge	PCD



Pump Outlet

Optional Outlet for IC-32B~46B Optional Outlet for IC-32B~46B \ L405A~L-41A



Optional Outlet for IC-48~610







Thread Connection: LOT Flange connection: LOF Double Flange set: LKF

Optional Outlet for L-62A&L-63A





LOF4(6): PCD.175\* 4 openings PVC adapter: IP6 6" connection outlet with 4" Flange

IC Series Submersible Dewatering Pumps		Standard S	Threaded Outlet Specification			
Model	Specifications	Double F	Double Flange Set			
IC-32B	2HP*3"	1.252.4	45.170	2" Disabassa / DE ilassa d		
IC-33B	3HP*3"	LZF3-1	45-160	3" Discharge / PF thread		
	3HP*3"	L2F3-1	45-160	3" Discharge / PF thread		
IC-43B	3HP*3.5"	L2F4(3.5)	3.5" Discharge / PF thread			
	3HP*4"	L2F4-1	4" Discharge / PF thread			
IC-45B	5HP*3.5"	L2F4(3.5)	)-175-180	3.5" Discharge / PF thread		
IC-43B	5HP*4"	L2F4-1	65-190	4" Discharge / PF thread		
IC-46B	6HP*3.5"	L2F4(3.5)	)-175-180	3.5" Discharge / PF thread		
IC-40B	6HP*4"	L2F4-1	65-190	4" Discharge / PF thread		
		THREAD CONNECTION	FLANGE CONNECTION	DOUBLE FLANGE SET		
IC-48	7.5HP*4"	LOT4-127	LOF4-175-190*127	LKF4-175*127		
IC-410	10HP*4"	LO14-127	LOF4-1/3-190"12/	LNF4-1/3"12/		
IC-610	10HP*6"	LOT6-127	LOF6-240*127	LKF6-240*127		

	Large Volume rsible Pumps	Standard Specifications	Threaded Outlet Specification
Model	Specifications	Double Flange Set	Threaded Odder Specification
L-405A	0.5HP*3.5"	L2F4(3.5)-175-180	3.5" Discharge / PF thread
L-403A	0.5HP*4"	L2F4-165-190	4 " Discharge / PF thread
1 41 4	1HP*3.5" L2F4(3.5)-175-180		3.5" Discharge / PF thread
L-41A	1HP*4"	L2F4-165-190	4 " Discharge / PF thread
L-62A	2HP*6"	6" Female thread	-
L-63A	3HP*6"	6" Female thread	-
L-200A	7.5HP*8"	Including: LOP8-285	-
L-250A	10HP*10"	Including: LOP10-325	-
L-250LA	15HP*10"	Including: LOP10-325	-
L-300B	15HP*10"	Including: LOP10(12)-389	-
L-300B	15HP*12"	Including: LOP12-389	-
L-1220B	20HP*10"	Including: LOP12-389	-
L-1220B	20HP*12"	Including: LOP12-389	-

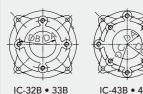
\*\*The LOP PVC Pipe is a regular accessory and it is built in L-200A, L-250(L)A and L-300B.

IP6 PVC Pipe is optional accessory for purchase for L-62A and L-63A.

Lower Flange and Double Flange are optional accessories for purchase for IC-32B/33B/43B/45B/46B, L-405A and L-41A.

Hose Connection, Thread Connection, Flange Connection and Double Flange Set are optional accessories for purchase for IC-48, IC-410 and IC-610.

#### **CASING COVER**



	Mode
	IC-32E IC-33E
IC-43B • 45B	IC-43E IC-45E

Model		mm	Bolt		
Wiodei	DA	DB	DC	Size	
IC-32B IC-33B	67	125		M12x25L	
IC-43B IC-45B	80	125	150	M12x25L	

	Model	m	m	Bolt
	IVIOGEI	DA	DB	Size
	IC-46B	90	150	M12x25L
	IC-48 IC-410	87	150	M12x25L
IC-46B • IC-48 • IC-410 • IC-610	IC-610	97	175	M12x25L

#### HIGH SOLIDS EPOXY COATING

- HIGH SOLIDS EPOXY COATING is a concoction of special epoxy resin, hardener, chemical-tolerant paint, with superior water/vapor transmission rate. It features high density and high anti-corrosion capability and is particularly effective for and can be firmly attached to metals like iron and steel to form an anti-corrosion layer on their surface. Furthermore, it can penetrate and attach to the already-rusty surface of a metal. It has proven to be able to effectively prevent and protect metals from corrosion and oxidization.
- ■HCP HIGH SOLIDS EPOXY COATING is an ecological paint of very high solid content and very low content of solvent. Its dry film thickness can reach 100µm and above, compared to a regular paint whose dry film thickness is merely  $30\mu m. \ The \ extraordinary$ toughness, anti-abrasion properties, plus excellent resistance to chemicals and sea water make it widely acclaimed and adopted as the best solution in the industry.
- ■HCP has been a pioneer in the pump industry as well as the first one to apply HIGH SOLIDS EPOXY COATING to our IC & L Type and pumps above  $7\frac{1}{2}$  HP . Such innovative improvement will offer extended protection for our pumps and prolong their life expectancy substantially.



# Sacrificial Anode Protection System

- Corrosion, the arch enemy for metals, especially when the metal is sunk in brine or sea water, could cause electrolysis and accelerate the corrosion. The pump in sea water normally suffers from rapid corrosion which causes the damage to its components.
- For better protection against brine-inflicted corrosion, we suggest application of Sacrificial Anode Plate to the pump. Sacrificial Anode Plate will release positive particles and turn the pump into negative. The positive Sacrificial Anode will dissolve slowly in sea water and release electrons which can prevent the oxidization of the pump until it is exhausted. During the process, Sacrificial Anode Plate will protect the pump and its components from corrosion for an extended period of time and prolong the pump's life expectancy. If the pump is intended to be operated in sea water for more than 4 hours a day, the use of Sacrificial Anode is strongly recommended as it can offer extra protection against the corrosion of sea water and effectively extend the life expectancy of the pump.
- \* Entire L Series are equipped with Sacrificial Anode. Sacrificial Anode would be optional for other models.

were seriously eroded by sea water in just five



After five months of operation, the corrosion of below photo), while the Sacrificial Anode Plate was gradually worn out. Recommendation: Replace the Sacrificial Anode Plate when 3/4 of the plate



# Without Sacrificial Anode Plate, frame and cover Sacrificial Anode Specifications

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Sacrificial Anode Specifications									
Model	Applicable Pump	Installation	Quantity						
Z-80*30*M10	L-405A ~ 63A (Standard)		1						
Z-80*30*M10	L-300B~1220B (Standard)		2						
AC-LR80C	L-200A ~ 250(L)A (Standard)		2						
AC-LR80A	IC-215 (Optional)		1						
AC-R80	IC-32B ~ 46B (Optional)		1						
AC-100	IC-48 ~ 610 (Optional)		2						

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