



Technical Catalogue

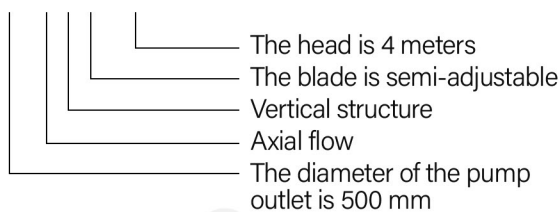


ZLDB Series

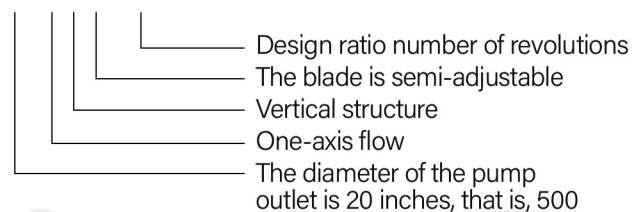
Axial-Flow Pump

Model meaning

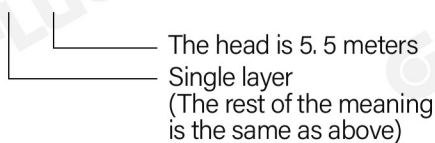
500 Z L B - 4



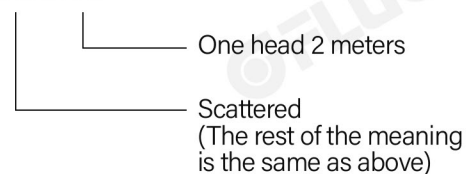
20 Z L B- 100



500 Z L B - 5.5



700 Z L K-2



Structure description

The ZLB/ZLDB type axial flow pump is a vertical structure, which is mainly composed of the main body part of the water pump and the transmission part.

1. The main part of the water pump

The pump shaft is made of high-quality carbon steel and is supported by two rubber (or plastic) bearings on the upper and lower sides. During operation, water is provided to lubricate the shaft. Under good bearing conditions, a bearing at the upper end of the pump shaft is mostly high above the water surface, so a short tube is installed on the packing letter (or sealing cover) for use before starting. It is used to lubricate the bearing with clear water (after starting the water outlet, the irrigation can be stopped). The bearing neck is a high-quality carbon steel bushing, the surface is coated with hard. Network to improve wear resistance and corrosion resistance. Other main parts such as: horn tube, impeller seat, impeller housing, guide vane body, bearing seat, elbow, packing. The seat and coupling are all made of cast iron. The packing seat is equipped with packing to improve the sealing of the pump. The steering of the impeller of the water pump, from the suction port, is counterclockwise (clockwise from top to bottom). The impeller housing of the water pump (or connected to the guide vane body and the inlet horn) and the two adjacent surfaces of the impeller are spherical, which ensures that the blades are. At any installation angle, there is a small gap between the outer circle of the impeller and the impeller housing to reduce the loss of reflux water. According to the needs of use, this type of water pump can be used at the speed or deceleration of the "working performance table" or adjust the installation angle of the blades to change the flow rate and lift. Process, expand the scope of use. The blades are made of high-quality cast iron, and the impellers are all statically balanced and calibrated out of the factory. The blade is tightened with a blade nut (or blade tight ring) It is fixed to the impeller seat, and the adjacent surface of the blade and the impeller seat is engraved with an angle line. When the water pump leaves the factory, the installation angle of the blades is generally "zero" degrees, and the user can. According to needs, adjust the blade installation angle according to the working performance table. Before installation, the user must re-fasten the blade nut once to prevent loosening. And an accident occurred.

Water pump transmission part

According to the power situation of each region and the needs of users, the transmission method should be determined when ordering. There are three types of transmission for ZLB/ZLDB axial flow water pumps.
way.

(1) Vertical motor direct transmission device

The motor is fastened to the motor seat by bolts, one end of the drive shaft is connected to the motor by a nylon pin coupling, and the other end is connected to the motor by a rigid coupling. The water pump is connected, and the drive shaft is made of high-quality carbon steel. Other parts such as motor seat, bearing box, bearing cover base, etc. are all made of cast iron. Water pump During operation, all its axial forces (that is, the sum of the water pressure on the impeller of the water pump and the weight of all the rotors of the water pump) are in the motor seat (or bearing seat). Installed bearings to withstand. The axial displacement of the water pump rotor can be adjusted by the nut in the transmission device, which simplifies the installation and installation of the entire water pump unit. Easy and reliable maintenance.

(2) Vertical motor triangle belt drive device

The vertical motor is bolted to the rack, and the rack is bolted to the guide rail. The bolts enable the rack to slide on the guide rail to adjust the looseness of the belt tight. The radial force during operation is borne by the radial bearings on the pulley and motor.

(3) Vertical semi-cross flat belt drive

The pulley is made of cast iron, fixed between the bearing seat and the nut and installed on the drive shaft. The radial force of the drive shaft and the weight of the rotating parts of the water pump And the axial force in operation are supported by ball bearings.

Pump support

The weight of the pump body (excluding the rotor part) is borne by the foundation or beam supporting the pump body, the rotor part of the pump, and the transmission device (including the main transmission part). The weight of the sub-and power unit) and the axial force of the pump are borne by the floor foundation supporting the transmission device.

Drive shaft

The drive shaft of the axial flow pump should not be too long, otherwise it will cause difficulties in installation and maintenance. For this reason, the length of the drive shaft is stipulated and supplied in accordance with the regulations. Yes, when the user orders, it should be selected according to the "L" size specified in the installation drawing and the pump room design should be carried out.

Complete supply range of pumps

- (1) 1 axial flow pump body;
- (2) 1 set of transmission device;
- (3) 1 set of check valve;
- (4) 1 set of special disassembly and assembly tools.

Note: According to user needs, additional supporting supplies are available

- (1) Electric motor;
- (2) 30° elbow pipe, telescopic pipe, straight pipe, diffusion pipe;
- (3) Wearing parts (including blades, rubber bearings, etc.).

Installation and operation.

1. Check whether the pump shaft and drive shaft are bent due to transportation, and if so, they need to be straightened.
2. The installation elevation of the water pump must be in accordance with the provisions in the installation drawing to meet the requirements of cavitation margin and start-up.
3. The pool should be equipped with a sewage barrier before entering the water to avoid debris from bringing in the water pump. The flow rate of water passing through the sewage shed should not exceed 0.3 m/s as appropriate.
4. Before the installation of the water pump, it is necessary to check the installation angle of the lades, whether they meet the requirements, and whether they are loose.
5. After installation, check whether the nuts of each coupling and each foot bolt are tightened. When tightening the nuts on the drive shaft and water pump shaft, Pay attention to the direction of its thread rotation.
6. The drive shaft and the water pump shaft must be installed on the same vertical line, and the tolerance is less than 0.03mm/M.
7. Gate valves should not be installed on the water pump outlet pipeline. If so, it must be fully turned on before starting.
8. When using the check valve, it is best to install a balance clock to balance the weight of the door cover, reduce the resistance of the water outlet, and make the water pump operate more economically.
9. Lubricate the bearings of the transmission device with grease. During maintenance, the oil chamber should be removed and cleaned, and the grease should be re-injected, the amount of which is already filled with the oil chamber. 1/2-2/3 is appropriate to avoid excessive bearing temperature rise during operation. Special attention must be paid to the fact that rubber bearings must not touch oils.
10. Before the water pump starts, water or soapy water should be injected into the short pipe of the upper packing letter to lubricate the rubber or plastic bearings until the water pump is in normal operation. After that, it can be stopped.
11. Before each start of the water pump, the coupling should be rotated three or four times, paying attention to whether there is any uneven weight and other phenomena. If so, the reason must be checked and set. After the method is eliminated, it will run again.
12. Before starting, check the direction of rotation of the motor so that it conforms to the steering of the water pump, and then connect it to the water pump.
13. When the water pump is running, you should always pay attention to the following points:
 - (1) Whether the immersion depth of the impeller is sufficient, that is, whether the water inlet level is too low, so as not to affect the flow rate or produce noise.
 - (2) Whether there is friction between the outer circle of the impeller and the impeller shell, whether there is debris burned on the blade, and whether the rubber or plastic bearing is too tight or burned out to avoid the shaft. Increased power.
 - (3) Whether the fastening bolts are loose, and whether the center of the pump shaft and the drive shaft are consistent to avoid vibration of the unit.

Possible failures and troubleshooting methods

1. The water pump is overloaded

Possible failure	Exclusion method
1. The installation angle of the blade exceeds the specified. 2. The head is too high or the outlet pipe is clogged or the outlet pipe gate valves of the road are not all opened. 3. The water inlet pipe is blocked. 4. The speed exceeds the regulations 5. There is friction between the outer circle of the impeller and the impeller shell. 6. There are debris around the blade. 7. The inlet tank does not meet the design requirements.	1. Adjust the blade angle to within the power range of the motor used. 2. Clean the outlet pipe and open the valve. 3. Clean up the inlet pool. 4. Replace the motor or pulley so that the speed meets the requirements of the water pump rated speed. 5. Readjust and try to eliminate. 6. Clean up debris and prevent recurrence. 7. The pool is too small and should be enlarged; the center distance of the two pumps is too large. It is small and should be removed; there is a vortex in the water inlet, try to eliminate it; The water pump is too close to the wall or bottom of the pool and should be enlarged.

2. There is noise or vibration in the operation of the water pump

Possible failure	Exclusion method
1. The immersion depth of the water pump is not enough. 2. There is friction between the outer circle of the impeller and the impeller shell. 3. The foundation is not strong enough or the bottom of the pump, motor, and transmission device. 4. There are debris around the blade. 5. The pump shaft nut or coupling pin screw is loose. 6. The bearing or bushing has been worn out. 7. The blade is broken and damaged by hard debris. 8. Several water pumps are installed in the same pool and are improperly arranged to prevent each other. 9. The pump shaft or drive shaft is bent or installed out of center.	1. Reduce the installation elevation of the water pump. 2. Check the verticality of the impeller parts and the pump shaft. 3. Check and strengthen the foundation and tighten the nuts, the foot nut is loose. 4. Clean up debris and prevent recurrence. 5. Check and tighten all nuts. 6. Replace the bearing or bushing. 7. Replace the blade. 8. Rearrange or add partitions to the water inlet pool / Coherent interference. Straighten or adjust the pump shaft and drive shaft so that they are in on the same vertical line.

3. The water pump does not discharge water

Possible failure	Exclusion method
1. The direction of rotation of the blade does not conform to the design. 2. The blade immersion depth is not enough. 3. The blade is broken and damaged by hard debris	1. Adjust the direction of rotation of the water pump. 2. Reduce the installation elevation of the water pump. 3. Replace the blade.

Reduce the amount of water

Possible failure	Exclusion method
1. The depth of entry of the impeller is not enough. 2. Wear of the outer circle of the impeller. 3. The head is too high. 4. The speed is too low. 5. The installation angle of the blade does not meet the requirements. 6. There are debris around the blade.	1. Refer to the installation diagram of the water pump to reinstall to ensure that the leaf. 2. Replace the impeller. 3. Try to adjust the head to within the range of use, and check. 4. Replace the motor or pulley to increase the speed of the water pump. 5. Adjust the installation angle of the blade. 6. Clean up debris and prevent recurrence.

Simple calculation instructions

The main technical parameters of axial flow pump are: 1. Head: 2. Flow rate: 3. Rotation speed: 4. Shaft power; 5. efficiency.

1. Head (H): Refers to the vertical height of the transported liquid from the inlet to the outlet of the water pump plus the resistance loss of the pipeline, It is represented by a number of "meters" of water columns.

$$H=10P_jy+Z_2+V_2/2g$$

Among them: the pressure at the outlet of the P2 water pump (kg/cm²)

y The weight per unit volume of the transported liquid (kg/liter)

z₂-The vertical height (meters) between the horizontal plane of the measuring pressure and the water level V₂-The average speed (m/s) on the cross-section at the outlet of the water pump to measure the pressure P₂ g-Acceleration of gravity, the value of which is 9.81m/S²

2. Flow rate (Q): Refers to the volume of liquid transported by the pump per unit time expressed in (liters/sec) or (meters³/sec).
3. Speed (n): Refers to the speed (rpm) of the shaft of the water pump per minute.
4. Shaft power (N): Refers to the number of power consumed by the water pump at a certain flow and head when conveying liquid, expressed in kilowatts.
5. Efficiency (η) is the ratio of the effective power of the water pump to the power of the water pump shaft, expressed in 100%. This pump specifies that the flow rate when the number of revolutions is "n" is "Q", the head is "H", and the shaft power is "N". If necessary, the speed can be reduced to "n₂" for use., At this time, the flow rate will become "Q₂", the head is "H₂" and the shaft power is "N₂", the relationship between them is as follows:

$$Q_2= Qn_2/ n \quad H_2=H (n_2/ n)^2 \quad N_2=N(n_2/ n)^3$$

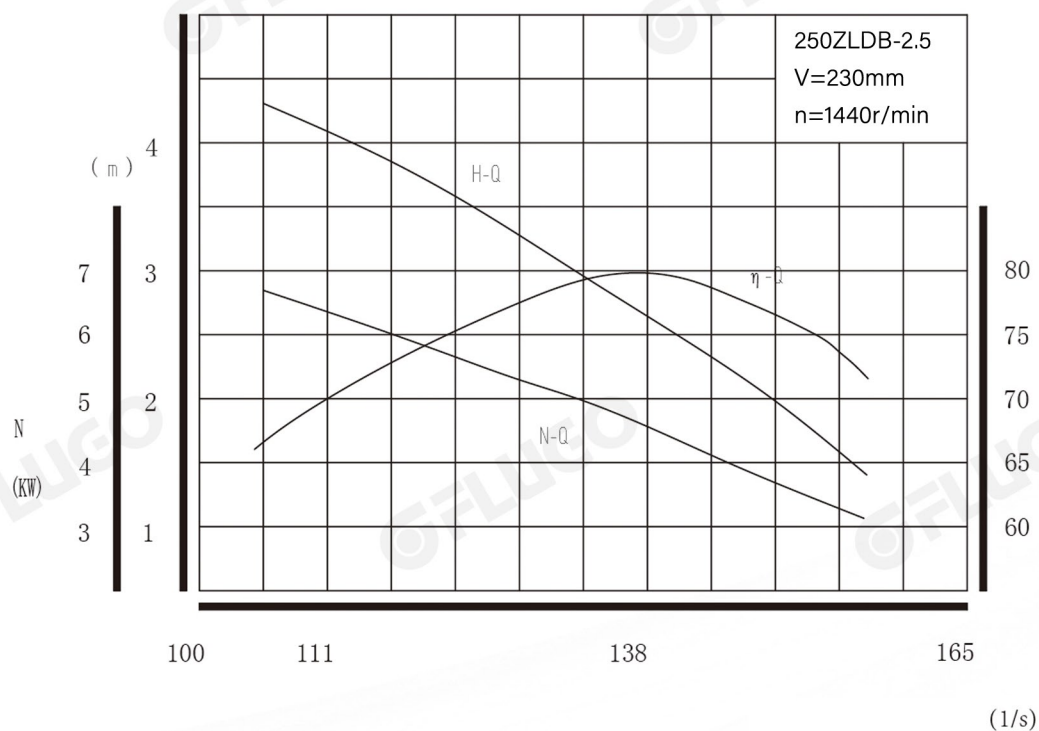
The number of revolutions specified in this pump is the maximum number of revolutions of the pump. The user shall not arbitrarily increase the number of revolutions, but it is allowed to reduce the number of revolutions.

Working performance table, graph and installation dimensions

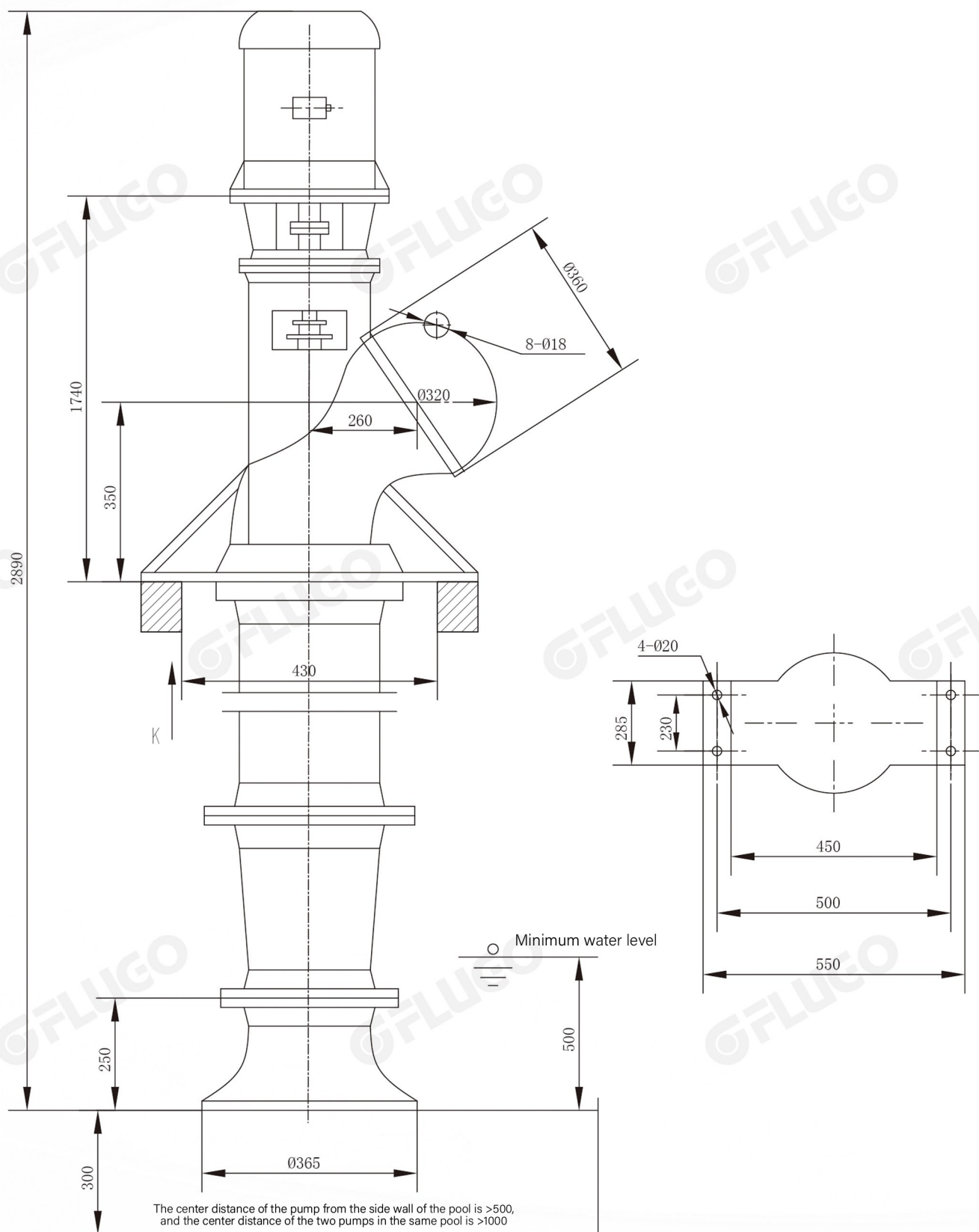
1. Working performance of 250ZLDB-2.5 axial flow pump

Flow Q		Head H (meters)	Speed n (RPM)	Power n (Kilowatts)		Efficiency η (%)	Blade diameter (mm)
Meter 3/hour	L/sec;			Matching power	Shaft power		
		1.56	1440			71.5	230
570	158.3	2.00			3.39	75.0	
550	152.8	2.54		5.5	3.99	79.3	
510	141.7				4.44		

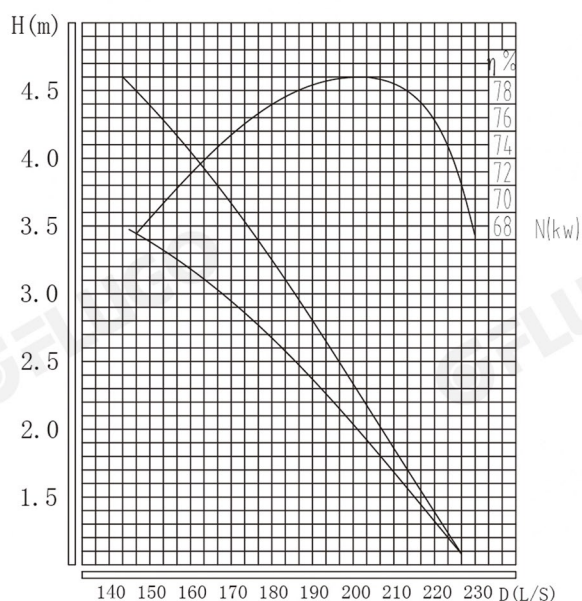
Performance graph of 250ZLDB-2.5 axial flow pump



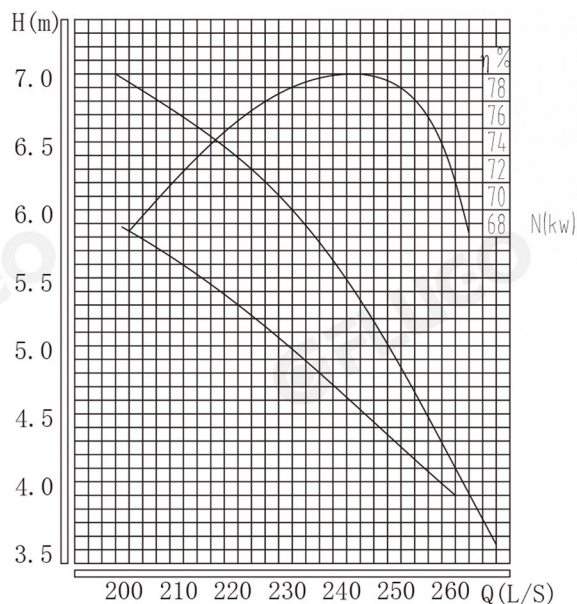
Installation diagram of 250ZLDB-2.5 axial flow pump



Performance graph of
300ZLDB-2.5 axial flow pump



Performance graph of
300ZLDB-5.5 axial flow pump



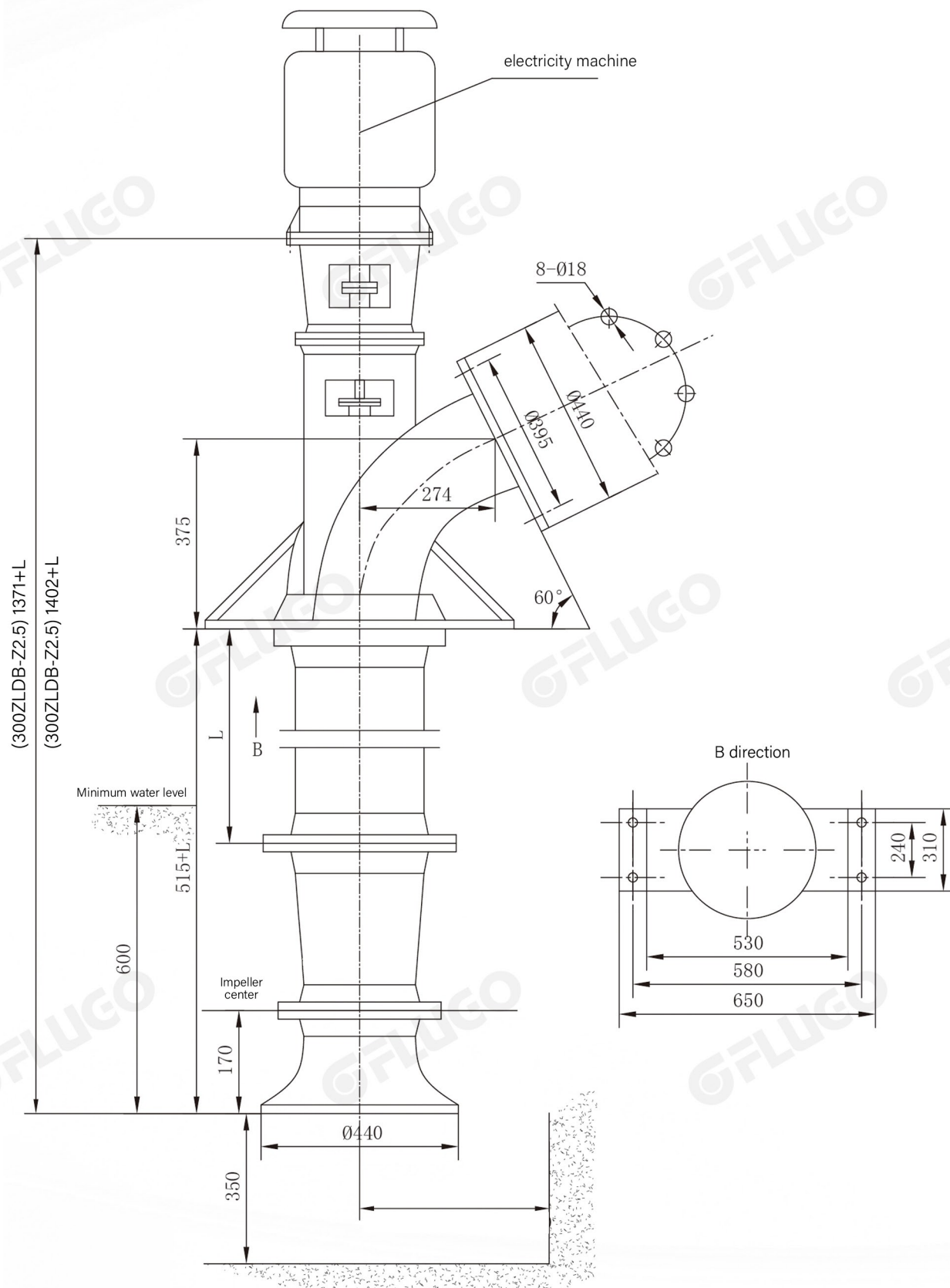
300ZLDB-2.5 axial flow pump performance table

Flow Q		Head H (meters)	Speed n (RPM)	Power n (Kilowatts)		Efficiency n (%)	Leaf wheel (d/mm)
Meter 3/hour	L/sec;	2.0 2.4 3.3	1460	Matching power	Shaft power	76.9 78.8 76.9	260
751	209			5.2	7.5kw		
726	202			6.0	Y132M-4		
643	179			7.5			
Remarks: When H>3.3m, it is equipped with 11KWY160-4 motor							

300ZLDB-5.5 axial flow pump performance table

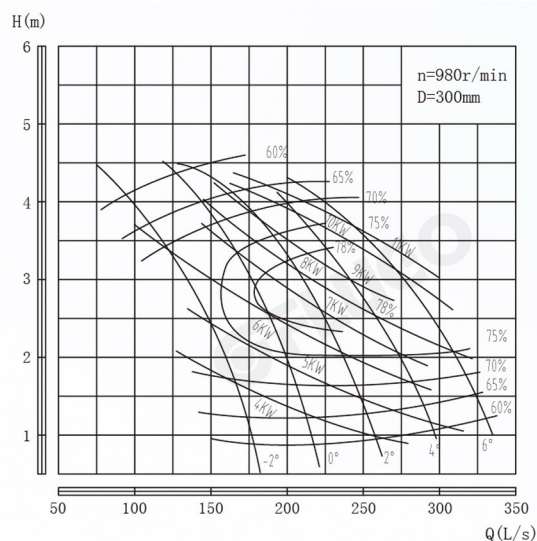
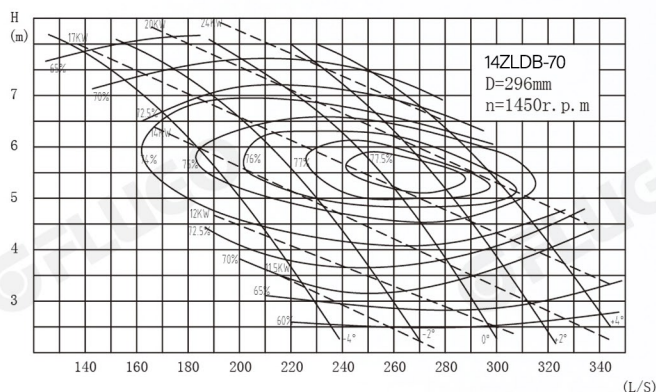
Flow Q		Head H (meters)	Speed n (RPM)	Power n (Kilowatts)		Efficiency n (%)	Leaf wheel (d/mm)
Meter 3/hour	L/sec;			Matching power	Shaft power		
932	259	4.3	1460	14.4	18.5kw Y180M-4	75.4	260
849	236	5.6		16.2		79.8	
758	211	6.7		18.4		75.4	

300ZLDB-2.5/5.5 axial flow pump installation dimensions diagram



Pump center distance from pool wall > 840
 "The distance between the two pumps in the pool is > 1680

PERFORMANCE CURVES OF 350ZLDB-70 (6) 350ZLDB-70(6) CHARACTERISTIC CURVES

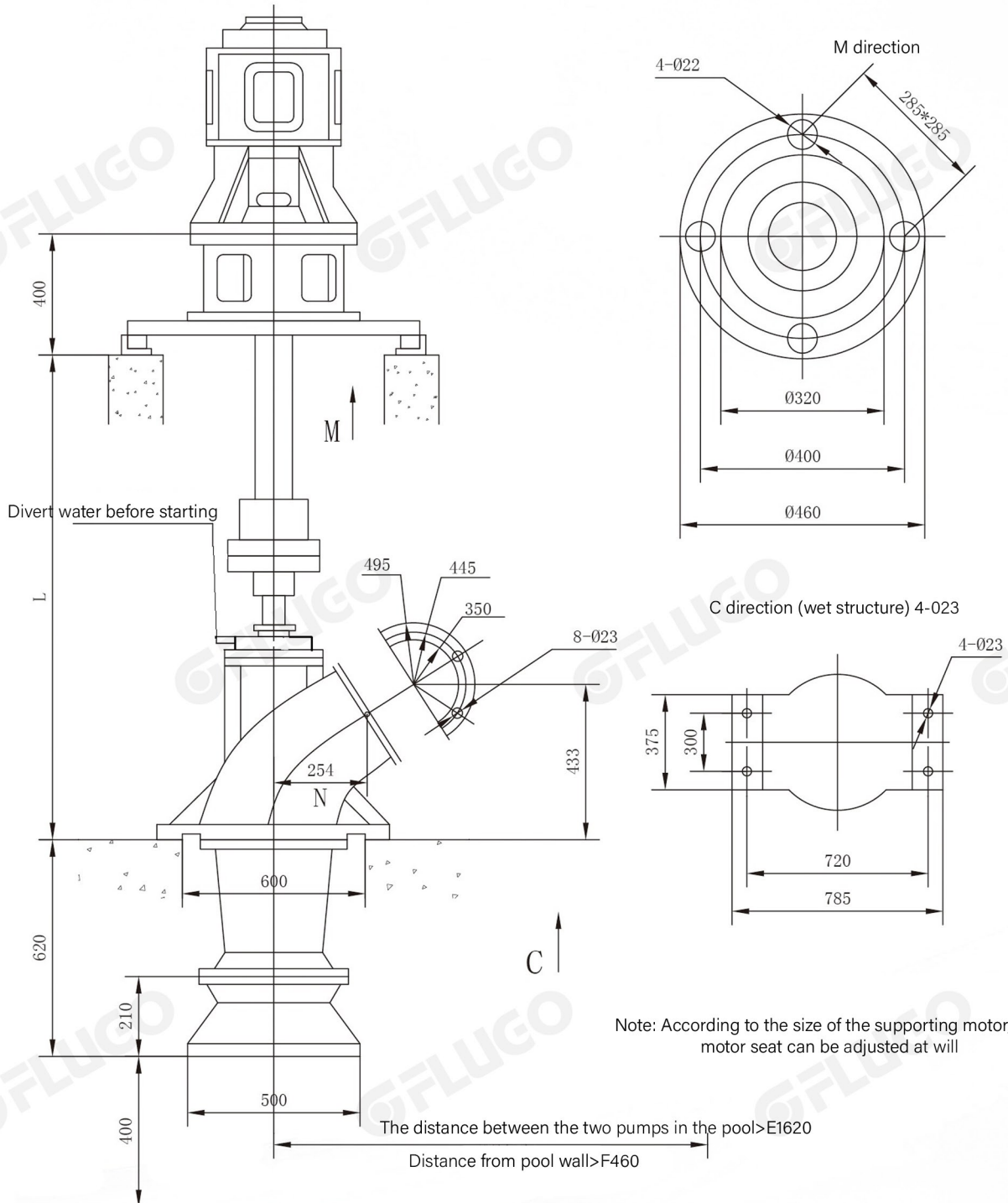


350ZLDB-70(6) CHARACTERISTIC DATA

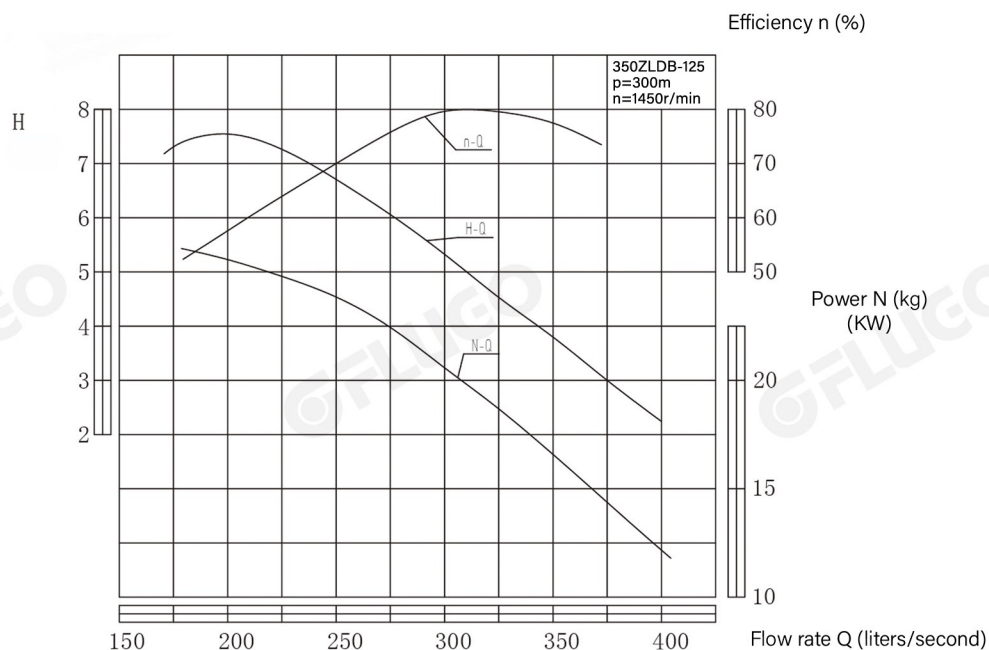
Blade installation angle.	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m3/h)	L/sec (L/S)			Shaft power	with power		
+4°	644	179	3.04	980	7.3		73.0	296
	724	201	2.40		6.2		76.6	
	785	218	1.78		5.4		70.8	
+2°	657	160	3.18		6.8		73.4	
	662	184	2.42		5.6		77.5	
	731	203	1.68		4.7		71.7	
0°	504	140	3.30		6.2	7.5	72.5	
	598	166	2.45		5.2		77.3	
	679	188	1.62		4.2		71.2	
-2°	432	120	3.40		5.7		70.6	
	259	147	2.50		4.7		76.6	
	605	168	1.60		3.8		70.2	
-4°	378	105	3.32		4.9		70.2	
	464	129	2.54		4.3		75.4	
	540	150	1.67		3.5		70.0	
+4°	936	260	6.60	1450	22.4		72.0	296
	1080	300	5.15		19.9		76.0	
	1170	325	3.76		17.1		70.0	
+2°	857	238	6.60		21.4		74.0	
	990	275	5.60		19.5		77.5	
	1091	303	3.60		15.3		70.0	
0°	745	207	7.20		20.2	22	72.5	
	882	245	5.50		17.1		77.2	
	1015	282	3.40		13.4		70.0	
-2°	648	180	7.30		18.0		71.5	
	792	220	5.40		15.2		76.5	
	900	250	3.40		11.9		70.0	
-4°	554	154	7.30		15.7		70.0	
	702	195	5.35		13.5		75.5	
	799	222	3.65		11.3		70.0	

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Installation diagram of 350ZLDB-70, 350ZLDB-100 axial flow pump Mounting Map of 350ZLDB-70, 350ZLDB-100 Type Axial Pump



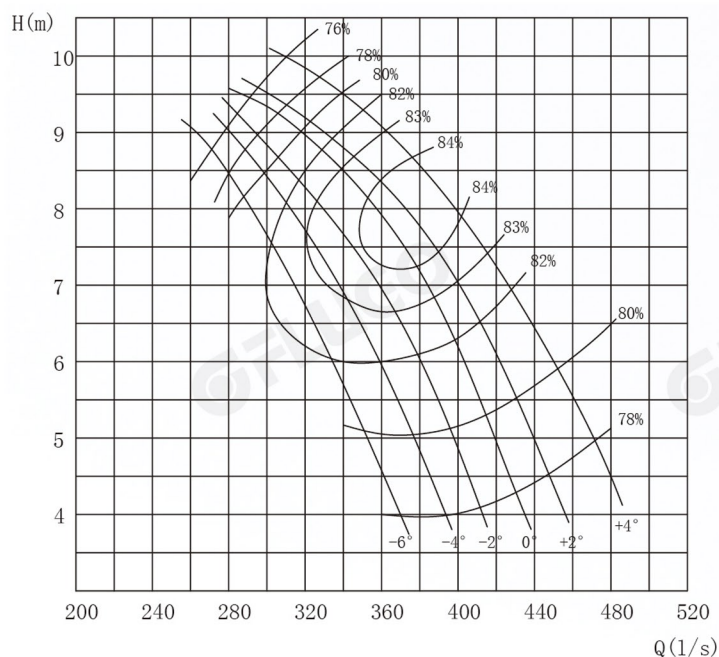
350ZLDB-125 CHARACTERISTIC CURVES



350ZLDB-125 CHARACTERISTIC DATA

Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency n (%)	Impeller diameter D (mm)
Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
1044	290	1.61	1100	5.90	S195	77.6	
954	265	2.20		7.12		80.3	
888	246.7	2.64		8.03		79.4	
1120	311	1.85	1180	7.29	Y160M-4	77.6	
1022	284	2.53		8.78	11KW	80.3	
954	265	3.03		9.92		79.4	
1235	343	2.25	1300	9.74	Y160L-4	77.6	300
1127	313	3.07		11.73	15KW	80.3	
1084	301	3.41		12.62		80.0	
1386	385	2.84	1460	13.80	Y180M-4	77.6	
1307	363	3.55		15.83	18.5KW	80.0	
1267	352	3.87		16.64		80.3	
1397	388	2.88	1470	14.09	Y180L-4	77.6	
1274	354	3.93		16.98	(B5)	80.3	
1123	312	5.19		20.39	22KW	77.8	

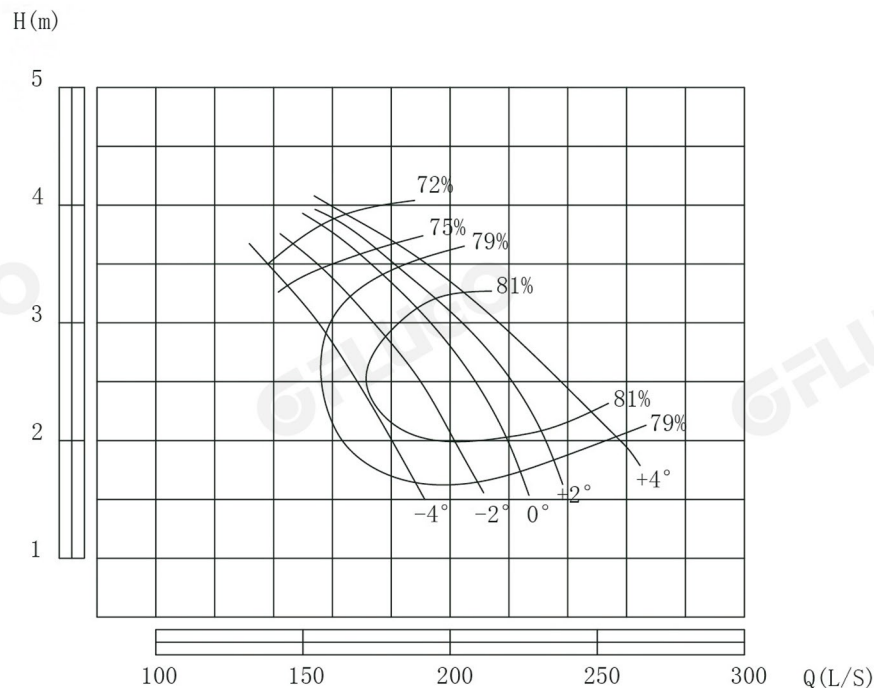
350ZLDB-7.3 CHARACTERISTIC CURVES



350ZLDB-7.3 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (kW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-6°	1317.6	366	3.91	1470	16.51		78	300
	1130.4	314	7.19		26.84		82.4	
	975.6	271	8.76		30.61		76.0	
-4°	1407.6	391	3.99		15.99	Y225S-4 (B _s) 37KW	78	
	1184.4	329	7.34		28.51		83	
	1000.8	278	9.02		32.33		76	
-2°	1479.6	411	4.11		21.22	Y255M-4 (B _s) 45KW	78	
	1260.0	350	7.42		30.66		83	
	1026.0	285	9.25		33.99		76	
0°	1548.0	430	4.37		23.61	Y255M-4 (B _s) 45KW	78.0	
	1310.4	364	7.77		32.55		85.1	
	1054.8	293	9.46		35.74		76.0	
+2°	1605.6	446	4.56		25.55	Y255M-4 (B _s) 45KW	78.0	
	1350.0	375	7.93		34.42		84.5	
	1076.4	299	9.60		37.01		76.0	
+4°	1688.4	469	4.93		29.05	Y255M-4 (B _s) 45KW	78	
	1411.2	392	8.35		38.19		84	
	1126.8	313	9.91		40.00		76	

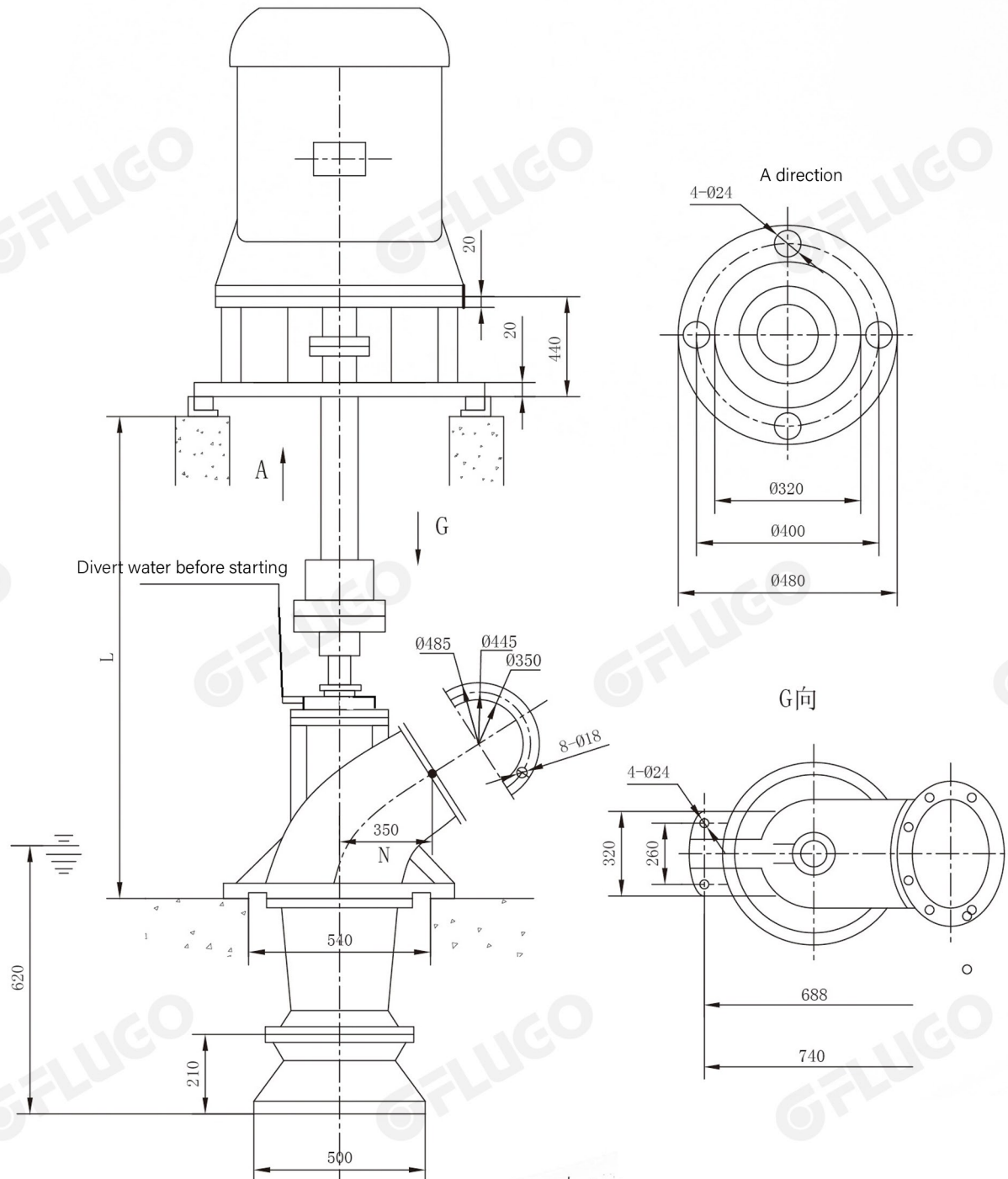
350ZLDB-3 CHARACTERISTIC CURVES



350ZLDB-3 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
+4°	679	188.5	1.68	970	3.93		79	300
	568	157.8	2.90		5.68		79	
	495	137.4	3.51		6.57		72	
+2°	761	208.0	1.66		4.28	Y160L-6	79	
	636	176.6	2.85		6.09	(B5)	81	
	557	154.7	3.44		6.95	11KW	75	
0°	808	224.4	1.77		4.93		79	
	679	188.5	3.09		7.05		81	
	604	167.9	3.57		7.84		75	
-2°	847	235.4	1.87		5.46	Y180L-6 (B5) 15KW	79	
	710	197.2	3.14		7.49		81	
	627	174.2	3.61		8.22		75	
-4°	925	257.0	2.50		7.97		79	
	765	209.0	3.21		8.10		81	
	677	182.0	3.67		8.73		75	

Installation diagram of 350ZLDB-125 axial flow pump Mounting Map of 350ZLDB-125 Type Axial Pump

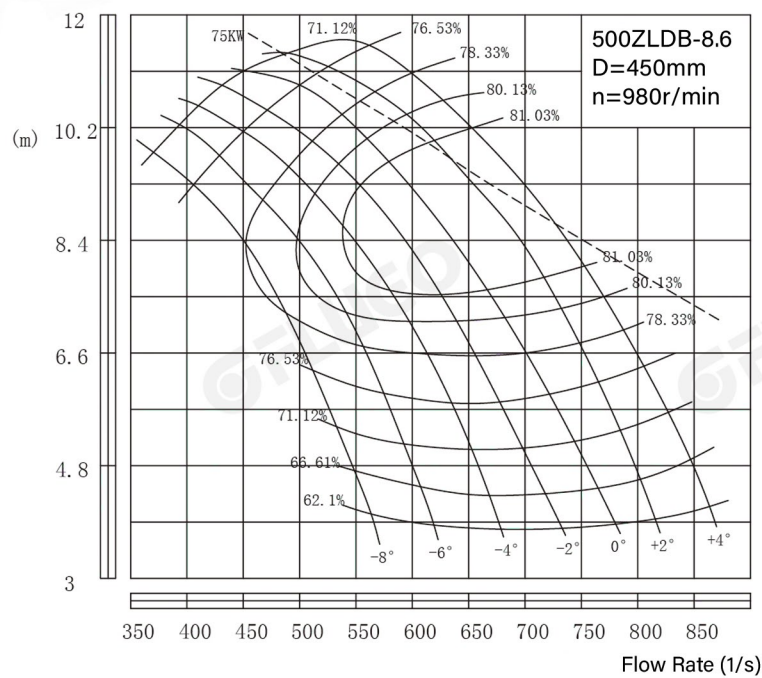


The center of the pump is >750 from the side wall of the pool,
The center distance of the two pumps in the same pool is >1500

Notes:

1. Pump casing weight 300kg. rotor weight 60kg Thrust Load 5390N.
2. L=1400~3500, to equip medium bearing as L>2400mm.

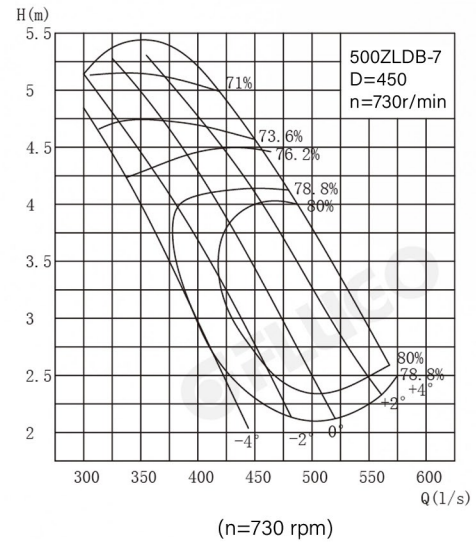
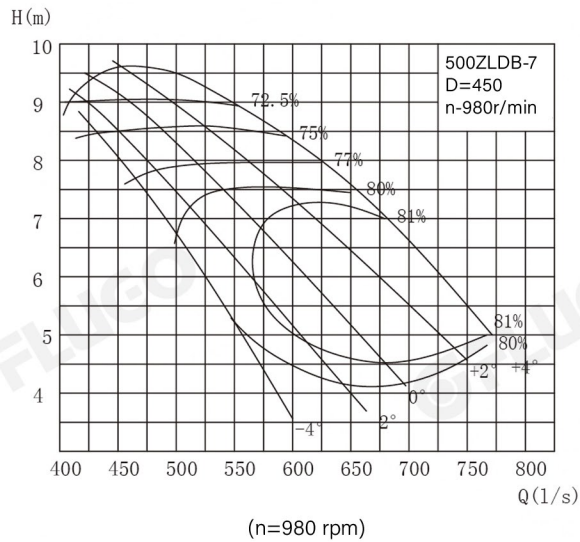
500ZLDB-50(8.6) CHARACTERISTIC CURVES



500ZLDB-50(8.6) CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency n (%)	Impeller diameter D (mm)
	Meters 3/hour (m3/h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-6°	1981.1	550.3	6.85	980	47.89	Y315S-6 JSL-11-6 75KW	78.33	450
	1843.2	512.0	8.00		50.07		80.20	
	1522.4	422.9	9.78		53.62		75.63	
-4°	2183.4	606.5	6.65		50.48		78.33	
	1987.2	552.0	8.25		55.10		81.03	
	1599.5	444.3	10.12		58.29		75.63	
-2°	2368.1	657.8	6.61		54.42		78.33	
	2131.2	592.0	8.50		60.90		81.03	
	1698.1	471.7	10.48		64.08		75.63	
0°	2536.2	704.5	6.67		58.82		78.33	
	2300.0	638.9	8.54		66.00		81.03	
	1801.8	500.5	10.82		70.21		75.63	
+2°	2683.1	745.3	6.80		63.44	Y315M-6 90KW	78.33	
	2430.0	675.0	8.70		70.64		81.50	
	2212.2	614.5	10.02		74.50		75.63	
+4°	2826.4	785.1	7.04		69.18	JSL-11-6 95KW	78.33	
	2556.0	710.0	9.00		76.87		81.50	
	2170.8	603.0	11.06		83.48		75.63	

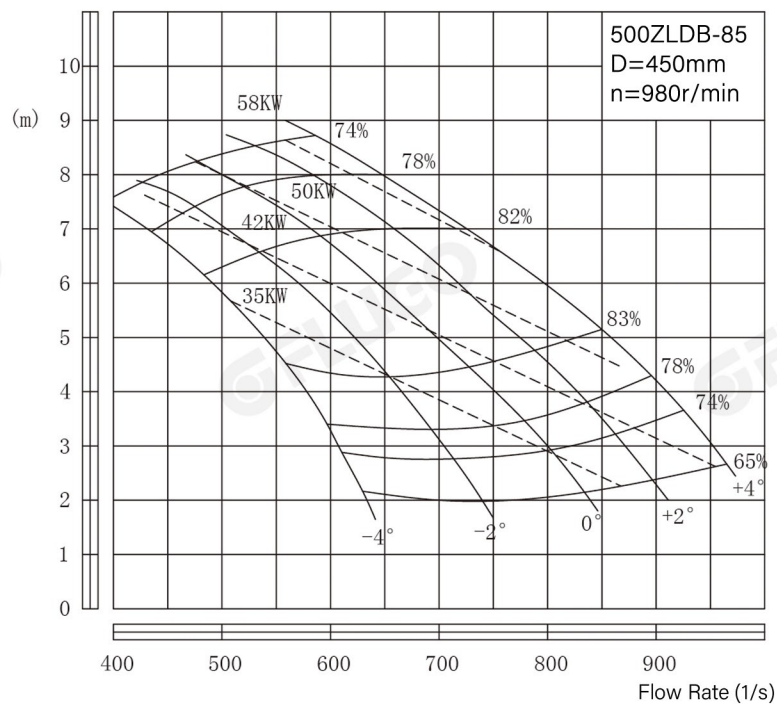
500ZLDB-7(20ZLDB-70) CHARACTERISTIC CURVES



500ZLDB-7(20ZLDB-70) CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
+4°	2500	700	6.20	980	53.2	55	80.0	450
	2700	750	5.23		47.19		81.5	
	2858	794	4.10		43.09		76.0	
+2°	2340	650	6.60		50.98		81.5	
	2560	711	5.50		44.29		82.0	
	2660	741	4.67		40.43		80.5	
0°	2099	583	6.82		48.79		79.9	
	2160	600	6.43		46.58		81.2	
	2150	696	4.12		36.51		77.0	
-2°	1720	479	8.08		50.93		74.5	
	2010	559	6.30		43.16		80.0	
	2250	625	4.68		36.53		78.5	
-4°	1370	380	9.36		49.82		70.0	
	1760	489	6.83		41.14		79.6	
	2060	571	4.45		31.73		78.5	
+4°	1640	454	4.44	730	26.21	30	75.4	450
	1960	545	3.02		19.97		80.8	
	2100	582	2.35		17.64		76.0	
+2°	1710	475	3.68		21.31		80.4	
	1910	530	2.74		17.66		80.6	
	1990	552	2.33		16.00		78.8	
0°	1480	410	4.08		21.08		77.8	
	1610	447	3.48		19.04		80.1	
	1870	520	2.06		13.89		75.6	
-2°	1175	326	4.84		21.31		72.6	
	1500	416	3.38		17.49		78.8	
	1675	465	2.76		16.80		71.9	
-4°	1020	282	5.12		20.76		68.2	
	1310	364	3.70		19.84		78.4	
	1530	426	2.40		12.98		77.2	

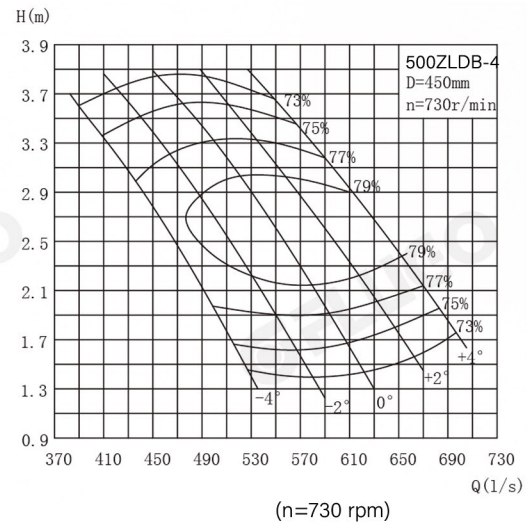
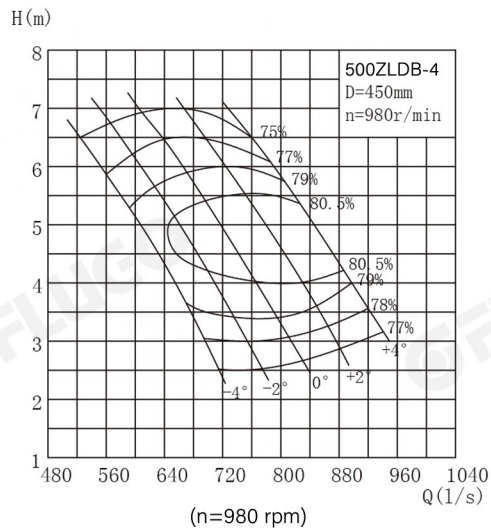
500ZLDB-85 CHARACTERISTIC CURVES



500ZLDB-85 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-4°	1436	399	7.35	980	38.8		74	450
	2034	565	4.36		29.1		83	
	2224	618	2.87		22.7		74	
-2°	1573	437	7.80		45.1	Y280M-6	74	
	2199	66	5.34		37.6	55KW	85	
	2577	716	2.77		26.2	(B _s)	74	
0°	1731	481	8.17		52.0		74	
	2512	698	5.24		42.2		85	
	2898	805	2.87		30.6		74	
+2°	1904	529	8.48		59.4	Y315S-6	74	
	2743	762	5.44		47.8	75KW	85	
	3117	866	3.13		35.9	(V ₁)	74	
+4°	2077	577	8.73		66.7		74	
	2930	814	5.81		54.5		85	
	3333	926	3.60		44.1		74	

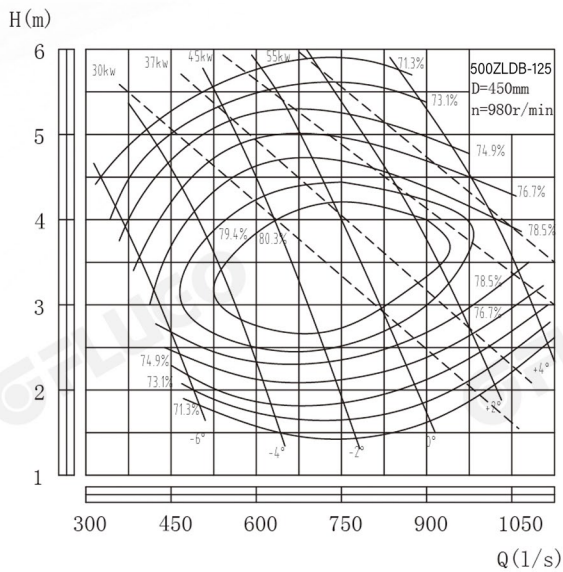
500ZLDB-4(20ZLDB-100) CHARACTERISTIC CURVES



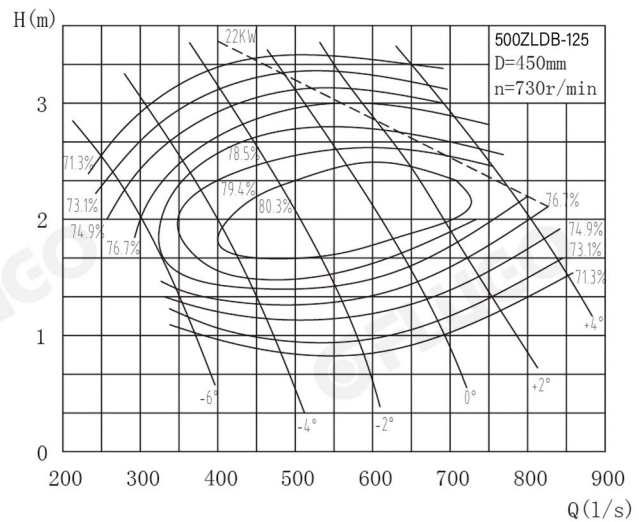
500ZLDB-4(20ZLDB-100) CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
+4°	2952	820	5.23	980	51.4	55	81.80	450
	3060	850	4.72		47.9		82.10	
	3276	910	3.58		40.9		78.50	
+2°	2628	730	5.81		51.6		80.65	
	2869	797	4.80		43.6		82.50	
	3078	855	3.48		36.7		79.45	
0°	2304	640	6.42		51.6		78.10	
	2646	735	4.65		40.8		82.15	
	2862	795	2.43		33.4		80.05	
-2°	2070	575	6.57		48.2		76.90	
	2448	680	4.61		37.5		81.90	
	2646	735	3.40		30.6		80.05	
-4°	1926	535	6.32		43.9		76.70	
	2268	620	4.44		33.7		81.30	
	2430	675	3.41		28.4		79.50	
+4°	2228	619	2.80	730	21.3	22	79.95	450
	2275	632	2.63		20.3		80.10	
	2412	670	2.10		17.8		77.60	
+2°	1980	550	3.13		21.3		79.10	
	2131	592	2.58		18.6		80.40	
	2268	630	2.04		18.1		78.50	
0°	1764	490	3.40		21.1		77.40	
	1980	550	2.55		17.1		80.20	
	2124	590	1.95		14.4		78.30	
-2°	1548	430	3.63		20.4		75.00	
	1822	506	2.56		15.9		79.75	
	1962	545	1.94		13.2		78.35	
-4°	1440	400	3.48		18.2		75.00	
	1692	470	2.45		14.2		79.25	
	1800	500	1.94		12.2		77.70	

500ZLDB-125 CHARACTERISTIC CURVES (high speed)



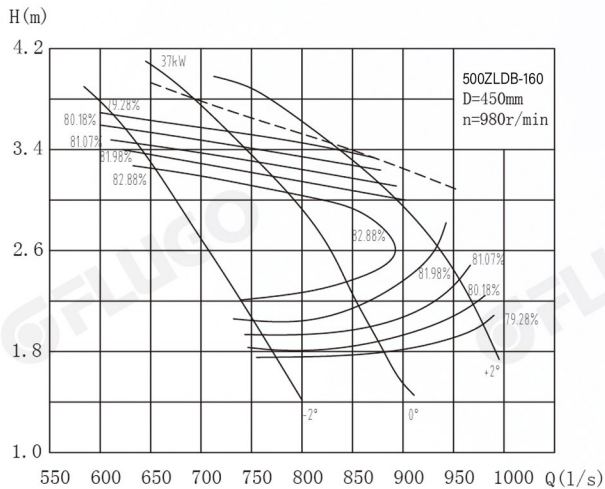
500ZLDB-125 CHARACTERISTIC CURVES (low speed)



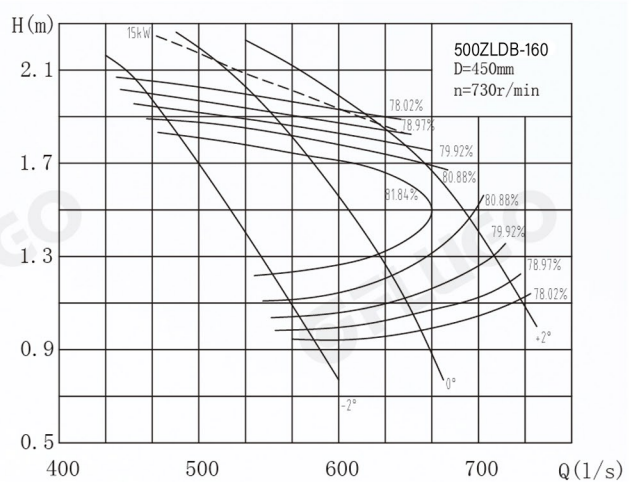
500ZLDB-125 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency n (%)	Impeller diameter D (mm)
	Meters 3/hour (m3/h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-4°	1620	450	4.55	980	26.5	Y225M-6	75.0	450
	1962	545	3.20		21.3	(B _s)	80.5	
	2196	610	2.00		16.0	30KW	75.0	
-2°	2070	575	4.75		34.4	Y250M-6	78.0	
	2394	665	3.30		26.4	(B _s)	81.5	
	2700	750	1.90		18.6	37KW	75.0	
0°	2484	690	4.80		41.4	Y280S-6	78.5	
	2844	790	3.50		32.9	(B _s)	82.5	
	3204	890	2.00		23.8	45KW	73.5	
+2°	2808	780	5.10	730	51.0	Y280M-6	76.5	450
	3240	900	3.60		39.0	(B _s)	82.0	
	3410	975	2.50		31.9	(B _s)	75.0	
+4°	3636	1010	4.0		51.2	55KW	79.5	
	3834	1065	3.6		49.2		76.5	
-2°	1573	437	2.75		15.1	Y225S-8	78.0	
	1822	506	1.90		11.6	(B _s)	81.5	
	2050	570	1.10		8.2	18KW	75.0	
0°	1890	525	2.78		18.2	Y225M-8 (B _s)	78.5	
	2160	600	2.02		14.5		82.5	
	2434	676	1.16		10.5		73.5	
+2°	2232	620	2.70		20.9	22KW	78.5	
	2462	684	2.08		17.2		82.0	
	2668	741	1.45		14.0		75.0	

500ZLDB-160 CHARACTERISTIC CURVES (high speed)



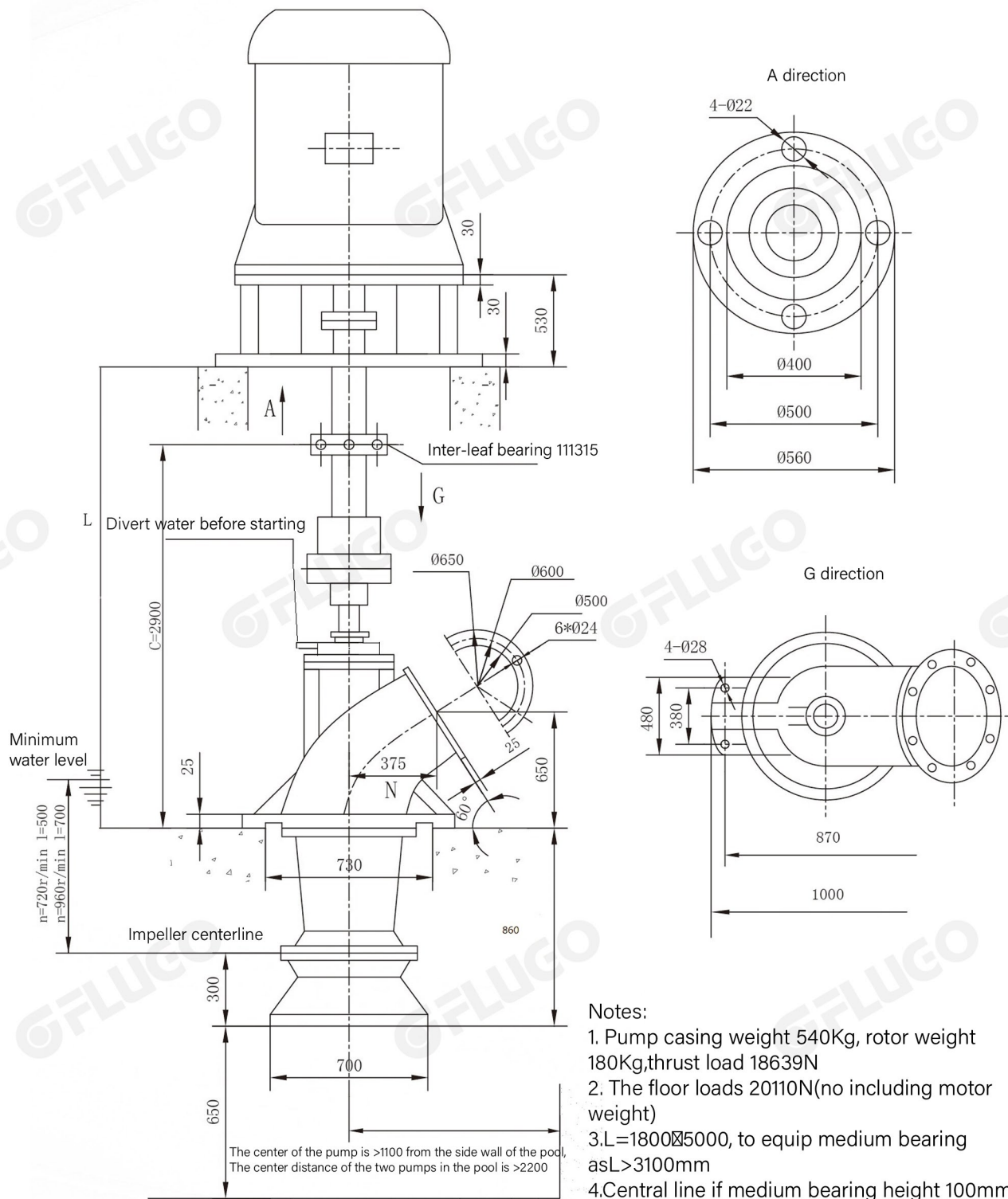
500ZLDB-160 CHARACTERISTIC CURVES (low speed)



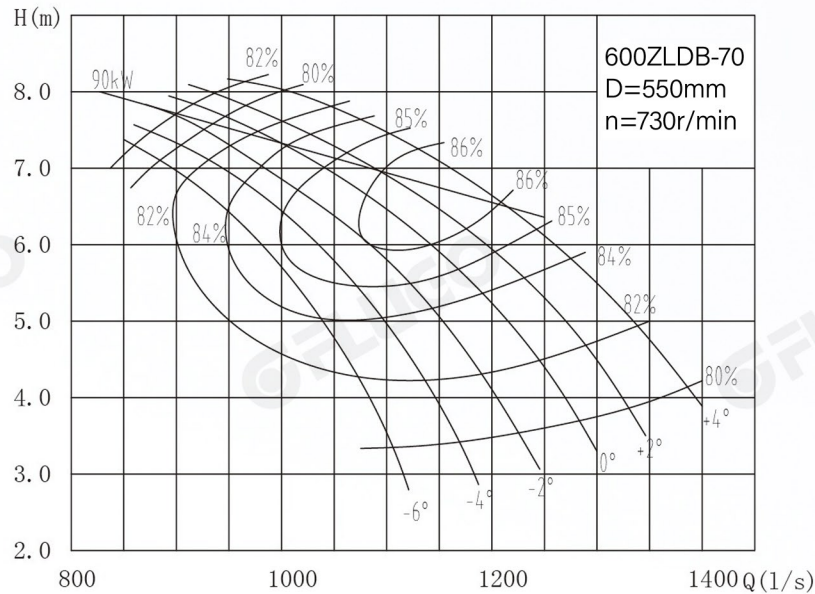
500ZLDB-160 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-2°	2192.4	609.0	3.72	980	28.0	Y250M-6 (B ₅) 37KW	79.28	450
	2545.2	707.0	2.56		21.1		84.23	
	2804.4	779.0	1.71		16.5		79.28	
0°	2568.6	713.5	3.57		31.5	Y280S-6 (B ₅) 45KW	79.28	
	2956.3	821.2	2.57		25.1		84.23	
	3157.6	877.1	1.79		19.4		79.28	
+2°	2989.1	830.3	3.41		35.0	Y200L-8 (B ₅) 15KW	79.28	
	3194.3	887.3	3.02		32.0		81.98	
	3473.6	964.9	2.13		25.1		80.18	
-2°	1633.3	453.7	2.06	730	11.7	Y225S-8 (B ₅) 18.5KW	78.01	450
	1896.1	526.7	1.42		8.80		83.27	
	2040.1	566.7	1.06		7.40		79.98	
0°	1913.4	531.5	1.98		13.2		78.02	
	2202.1	611.7	1.43		10.4		82.32	
	2321.6	644.9	1.03		8.30		78.97	
+2°	2226.6	618.5	1.89		14.7		78.01	
	2379.6	661.0	1.68		13.5		80.89	
	2587.3	718.7	1.18		10.5		78.97	

Mounting Map of 500ZLDB Type Axial Pump



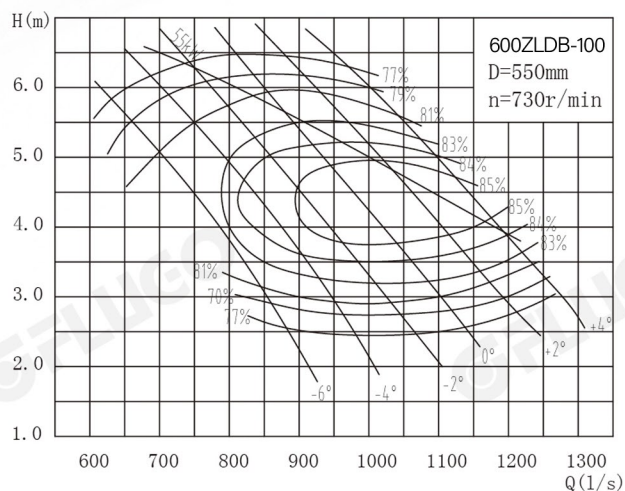
600ZLDB-70 CHARACTERISTIC CURVES



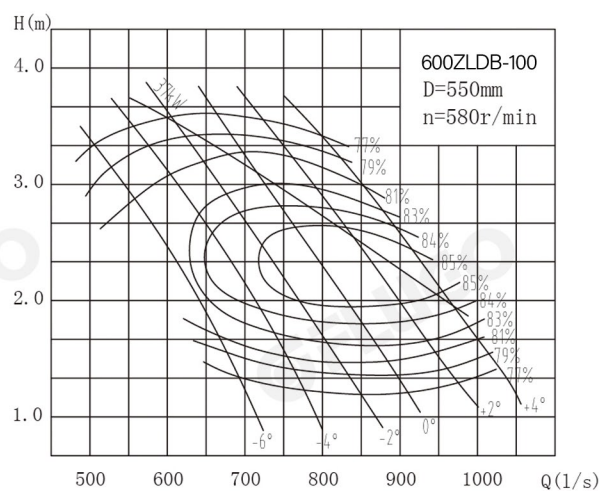
600ZLDB-70 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (kW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-6°	2987.5	829.86	7.26	730	75.7		78	
	3528.0	980.00	5.62		64.3		84	
	4037.3	111.47	3.24		44.5		80	
-4°	3065.7	851.57	7.46		79.8	Y315L1-8 90KW	78	
	3672.0	1020.00	5.90		69.4		85	
	4310.9	1197.48	3.32		48.7		80	
-2°	3138.3	871.74	7.63		83.6		78	
	3816.0	1060.00	6.18		75.5		85	
	4528.7	1257.97	3.44		53.0		80	
0°	3222.0	895.00	7.84		88.2		76	550
	4032.0	1120.00	6.35		81.0		86	
	4740.9	1316.91	3.63		58.6		80	
+2°	3277.9	910.52	7.96		91.1	Y315L2-8 110KW	78	
	3744.0	1040.00	6.60		78.2		86	
	4902.8	1361.89	3.80		63.4		80	
+4°	3439.8	955.49	8.18		98.2		78	
	4302.0	1195.00	6.95		94.6		86	
	5165.2	1434.79	4.11		72.2		80	

600ZLDB-100 CHARACTERISTIC CURVES
(high speed)



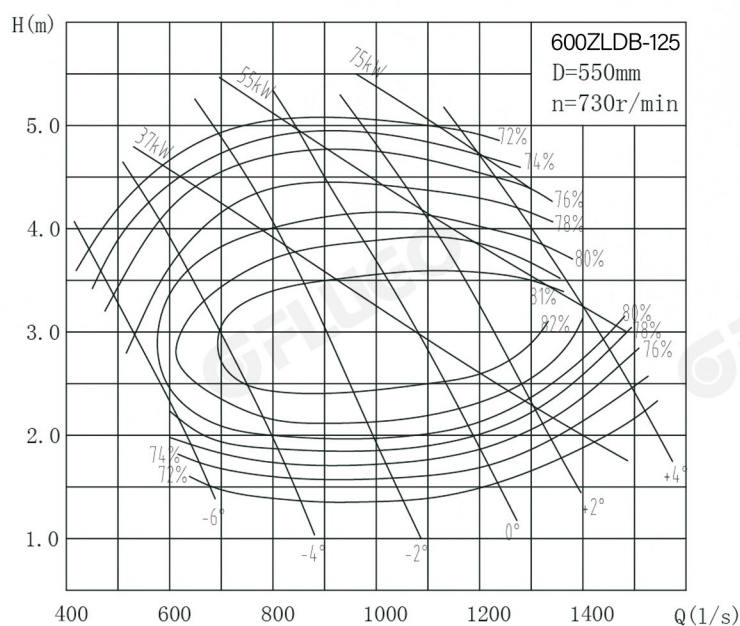
600ZLDB-100 CHARACTERISTIC CURVES
(low speed)



600ZLDB-100 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m3/h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-6°	2556	710	4.45	730	38.2	Y280M-8 (B _s) 45KW	81.0	550
	2808	780	3.49		32.7		81.6	
	3132	870	2.43		26.2		79.0	
-4°	3024	840	4.00		39.2	Y280M-8 (B _s) 45KW	84.0	
	3132	870	3.54		35.8		84.4	
	3348	930	2.66		29.9		81.0	
-2°	3132	870	4.45		45.2	Y280M-8 (B _s) 55KW	84	
	3420	950	3.49		38.2		85	
	3672	1020	2.52		31.1		81	
0°	3348	930	4.47		47.9		85	
	3672	1020	3.59		42.2		85	
	3852	1070	2.95		37.3		83	
+2°	4104	1140	3.37		44.3		85	
	4176	1160	2.90		39.7		83	
+4°	4176	1160	3.79		50.7		85	
	4284	1190	3.41		47.4		84	
-6°	2016	560	2.88	580	19.5	Y225M-6 30KW	81	550
	2484	690	1.43		12.2		79	
-4°	2182	606	3.15		23.1		81	
	2412	670	2.50		19.5		84	
	2707	752	1.54		14.0		81	
-2°	2311	642	3.26		25.3		81	
	2585	718	2.53		21.0		85	
	2851	792	1.75		16.6		82	
0°	2498	694	3.36		28.2	Y315S-10 45KW	81	
	2880	800	2.36		21.8		85	
	3161	878	1.60		17.0		81	
+2°	2761	767	3.20		29.3		82	
	3096	860	2.36		23.4		85	
	3287	913	1.60		20.3		82	
+4°	2952	820	3.25		32.3	37KW	81	
	3240	900	2.60		27.0		85	
	3492	970	2.00		23.3		82	

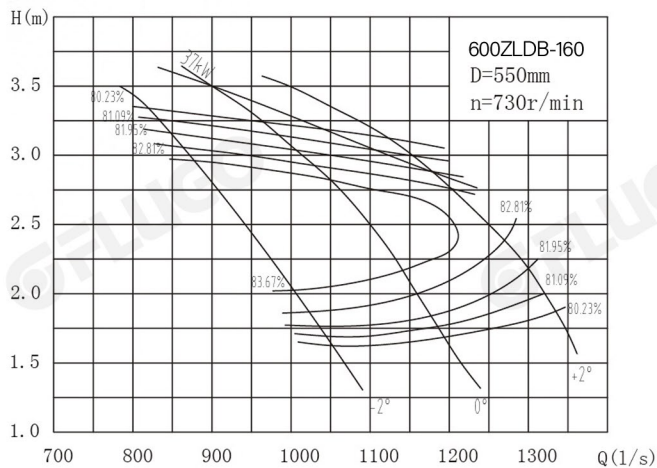
600ZLDB-125 CHARACTERISTIC CURVES



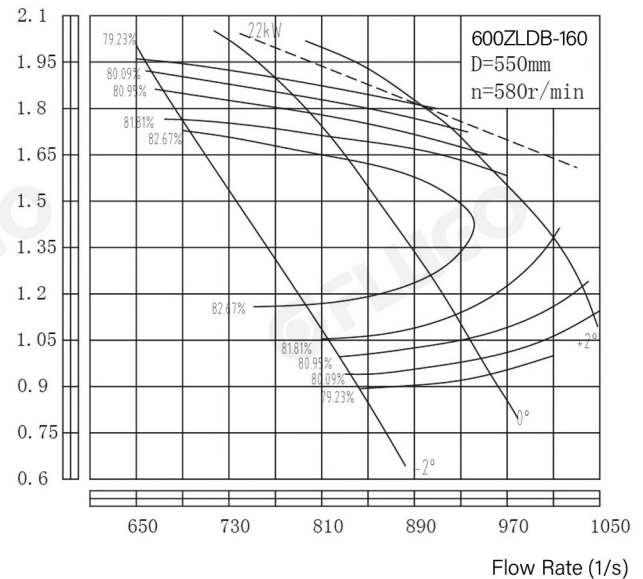
600ZLDB-125 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-6°	1652.7	459.1	3.85	730	24.1	Y280S-8 (B ₅) 37KW	72	550
	2102.4	584.0	2.65		19.0		80	
	2423.5	673.2	1.60		14.7		72	
-4°	2010.2	558.4	4.45		33.8	Y280M-8 (B ₅) 55KW	72	
	2707.2	752.0	2.65		23.8		82	
	3182.8	884.1	1.23		14.8		72	
-2°	2546.3	707.3	4.94		47.6	Y315M-8 75KW	72	
	3312.0	920.0	2.95		32.4		82	
	3864.2	1073.4	1.28		18.7		72	
0°	3048.8	846.9	5.07		58.4	Y315L1-8 90KW	72	
	3888.0	1080.0	3.10		39.3		83.5	
	4545.4	1262.6	1.49		25.6		72	
+2°	3540.2	983.4	5.80		68.0	Y315L1-8 90KW	72	
	4435.2	1232.0	3.20		47.1		82	
	5047.9	1402.2	1.75		33.4		72	
+4°	4277.5	1188.2	4.94		79.9	Y315L1-8 90KW	72	
	5040.0	1400.0	3.50		59.3		81	
	5572.8	1548.0	2.26		47.6		72	

600ZLDB-160 CHARACTERISTIC CURVES
(high speed)



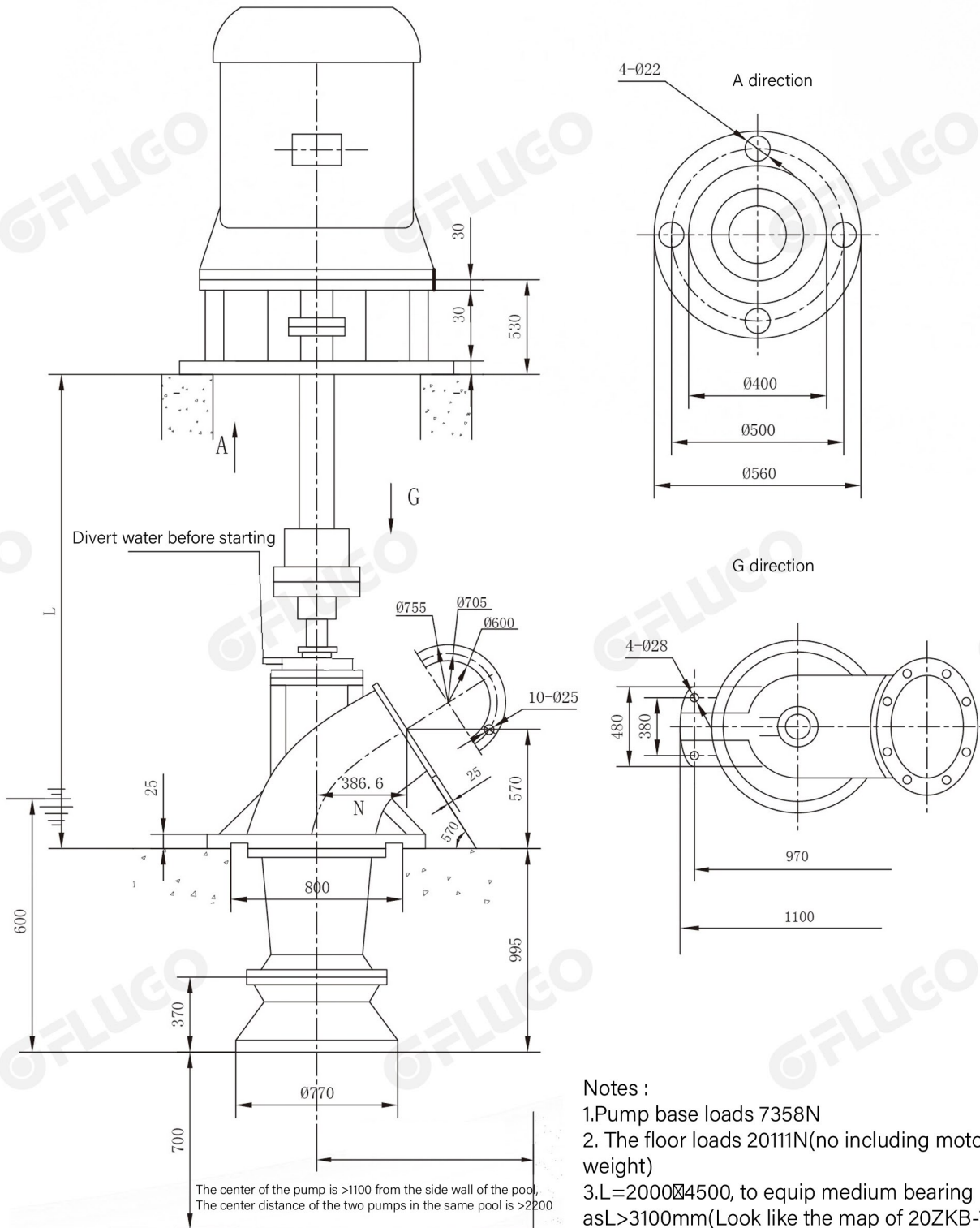
600ZLDB-160 CHARACTERISTIC CURVES
(low speed)



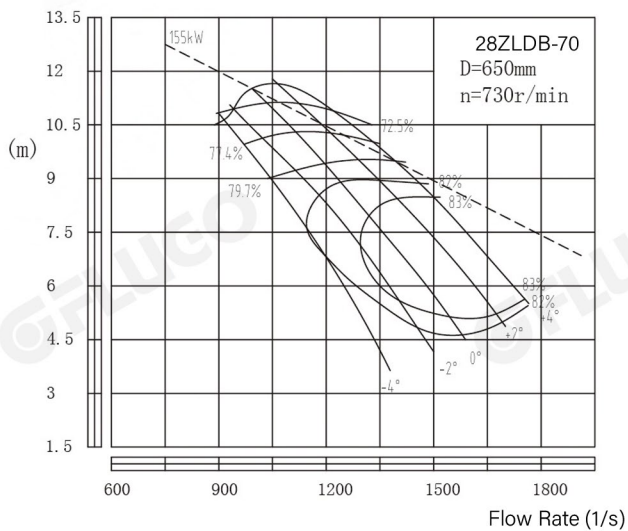
600ZLDB-160 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-2°	2980.8	828.0	3.08	730	31.2	Y280S-8	80.23	550
	3463.2	962.0	2.12		23.5	(B _s)	84.96	
	3813.8	1059.4	1.42		18.4	37KW	80.23	
0°	3493.4	970.4	2.96		35.1	Y280M-8 (B _s) 45KW	80.23	
	4168.8	1158	1.77		24.2		82.81	
	4294.8	1193	1.48		21.6		80.23	
+2°	4065.1	1129.2	2.83		39.1	45KW	80.23	
	4345.2	1207	2.51		35.9		82.81	
	4728.3	1312.3	1.76		27.9		81.09	
-2°	2368.8	658	1.95	580	15.9		79.23	
	2750.4	764	1.34		12.0		83.96	
	2926.8	813	1.05		10.3		81.81	
0°	2775.6	771	1.87		17.84	Y200L2-6 22KW	79.23	550
	3261.6	906	1.35		14.43		83.1	
	3355.2	932	1.04		11.74		80.95	
+2°	3229.2	897	1.79		19.9		79.23	
	3452.4	959	1.58		18.2		81.81	
	3754.8	1043	1.12		14.2		80.09	

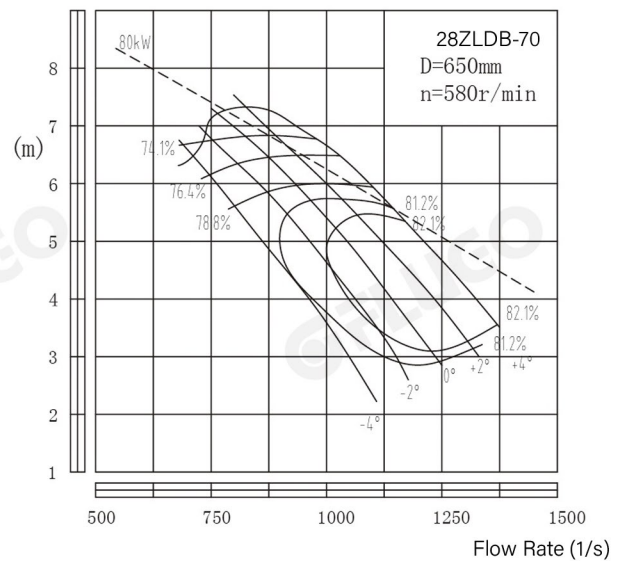
Mounting Map of 600ZLDB Type Axial Pump



700ZLDB-70(7.3) CHARACTERISTIC CURVES
(high speed)



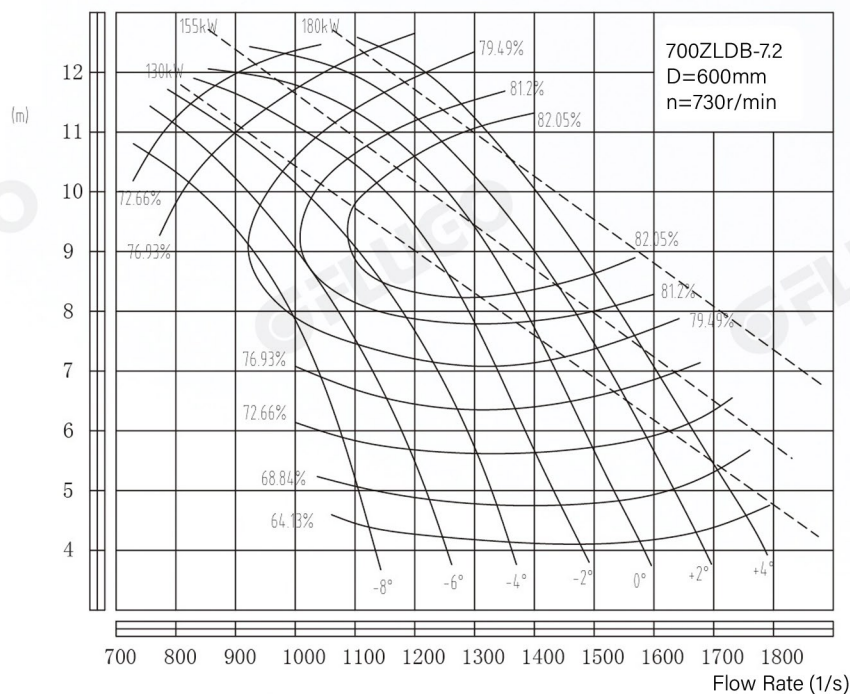
700ZLDB-70(7.3) CHARACTERISTIC CURVES
(low speed)



700ZLDB-70(7.3) CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-4°	3060	850	10.9	730	124	JSL-12-8 155KW	73.2	650
	3940	1094	8.11		116		81.7	
	4590	1270	5.04		78.2		80.7	
-2°	3520	977	10.6		131.5		77.1	
	4500	1250	7.46		110.5		82.7	
	5040	1400	5.68		102.0		76.2	
0°	4430	1230	8.72		129		81.2	
	4860	1350	7.30		115		83.1	
	5580	1550	4.53		86.8		79.4	
+2°	5110	1420	8.11		136		83.5	
	5710	1585	6.39		118		83.8	
	5960	1657	5.41		105		83.5	
+4°	5870	1630	7.25		137		84.8	
	6280	1744	5.80		108		84.3	
-4°	2430	675	6.9	580	63.5	JSL-12-10 80KW	72.0	650
	3125	869	5.12		54.0		80.9	
	3640	1013	3.18		39.6		79.8	
-2°	2795	776	6.7		67.0		76.1	
	3570	993	4.7		56.4		81.3	
	4000	1110	3.58		51.8		75.2	
0°	3520	976	5.5		65.6		80.3	
	3830	1064	4.6		58.3		82.4	
	4440	1235	2.86		44.2		78.4	
+2°	4100	1130	5.12		68.6		82.7	
	4540	1260	4.02		60.0		83.1	
	4740	1316	3.41		53.4		82.7	
+4°	4660	1296	4.55		69.0		84.1	
	5000	1389	3.65		59.6		83.6	

700ZLDB-9.2 CHARACTERISTIC CURVES



700ZLDB-9.2 CHARACTERISTIC DATA

Blade installation	Flow Q		Head H (m)	Speed n (r/min)	Power P (KW)		Efficiency η (%)	Impeller diameter D (mm)
	Meters 3/hour (m ³ /h)	L/sec (L/S)			Shaft power	Equipped with motor and power		
-8°	3980.0	1105.6	5.07	730	80.34		68.4	600
	3427.2	952.0	8.50		100.00		79.0	
	2704.1	751.1	10.68		108.24		72.7	
-6°	4134.8	1148.6	4.24		80.93	JSL-12-8 130KW	64.1	
	4010.4	1032.0	8.75		108.63		81.5	
	3893.0	785.4	11.07		117.31		72.7	
-4°	4697.8	1304.9	5.60		98.6		72.7	
	4010.4	1114.0	9.00		119.7		82.1	
	3893.0	1081.4	9.39		121.3		82.1	
-2°	5112.0	1420.0	5.25		104.4	JSL-12-8 155KW	70.0	
	4334.4	1204.0	9.00		128.8		82.5	
	3102.8	861.9	11.70		136.1		72.7	
0°	5190.8	1441.9	4.81		106.0		72.7	
	4654.3	1292.8	9.24		142.0		82.1	
	3436.3	954.5	11.32		137.7		76.9	
+2°	5738.1	1593.9	5.85		125.8	JSL-13-8 180KW	72.7	
	4896.0	1360.0	9.50		152.6		83.0	
	3878.6	1077.4	12.05		165.5		76.9	
+4°	6017.2	1671.4	6.14		138.5		72.7	
	5162.4	1434.0	9.75		165.1		83.0	
	4748.5	1319.0	11.07		174.5		82.0	

Authorized Distributor



ZLDB Series - Axial-flow Pump