

GSD INDUSTRIAL CO., LTD.

ZDB、HDB
轴、混流潜水电泵



川源股份有限公司



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概述

General

ZDB 型轴流潜水电泵和 HDB 型混流潜水电泵是传统的轴流泵和混流泵电动机机组的更新换代产品，驱动水泵的电动机是干式全封闭潜水三相异步电动机，该型潜水电泵可长期浸入水中运行，具有传统机组一系列无可比拟的优点。

- * 由于电机与水泵构成一体，无须在安装现场进行耗工、耗时的电机、传动机构、水泵轴线对中的装配工序，现场安装方便、快速。
- * 由于潜入水中运行，可以大大简化泵站的土工及建筑结构工程，减少安装面积，节约工程造价30%~40%。
- * 噪声低，泵站内无高温，改善操作环境，可按要求建成全地下泵站，保持地面的环境风貌。
- * 潜水电机采用双重或三重机械密封，F级（耐温155℃）绝缘，防护等级为IP68(IEC)。泵段采用全国统一设计的水力模型，可靠性高，且与传统水泵性能一致，便于用户选型。
- * 操作方便，易于实现遥控和自动控制。
- * 采用该型潜水电泵是解决水位涨落大的沿江、湖泊地区建泵站，解决电机防洪问题最彻底的办法，且省去了机泵间的长轴和中间轴承，使机组运行更为稳定可靠。

ZDB、HDB 两型潜水电泵，可供农田排灌之用，也可用于工矿船坞、城市建设、供水工程、电站给排水之用。轴流潜水电泵适用于低扬程、大流量场合，混流潜水电泵效率高、汽蚀性能好，适用于水位变化较大及扬程要求较高的场合，输送介质为原水或轻度污水，其最高被输送液体温度50℃。

The ZDB model axial-flow submersible electric pump and HDB model mixed-flow submersible electric pump are the upgraded and updated product of electrical motor set of conventional axial-flow pump and mixed-flow pump, the electric motor of hydraulic pump is an asynchronous motor of dry totally-enclosed submersible which can be operated in water for long term with the advantages the conventional motor series can't match.

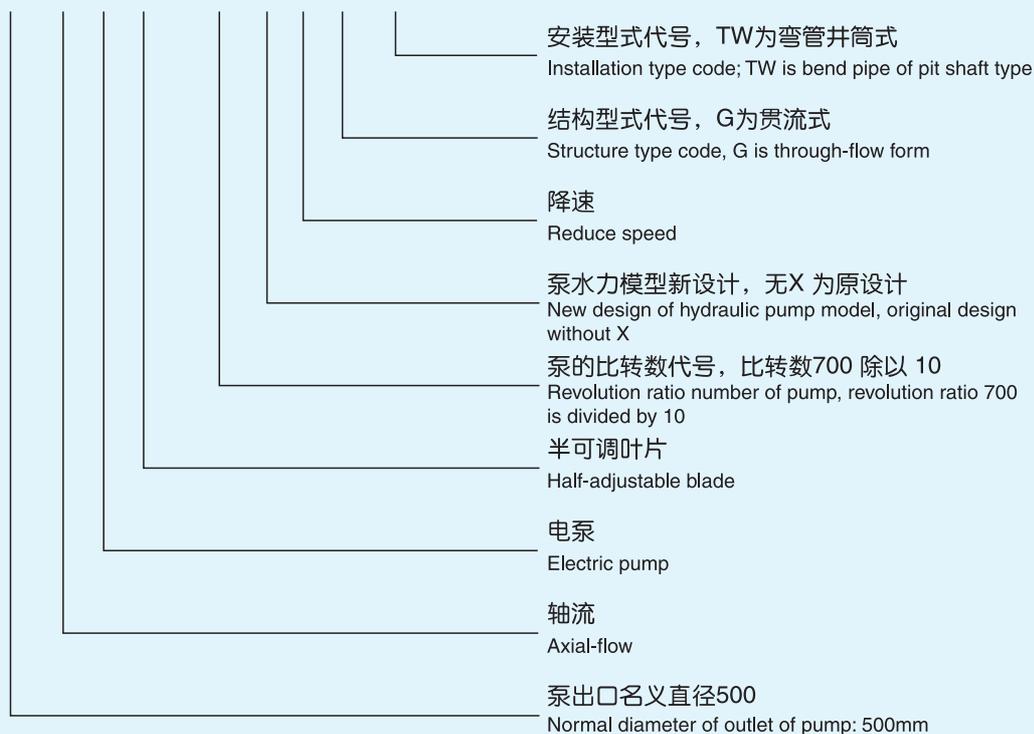
- * Because the electric motor is combined with the hydraulic pump, the assembly procedure is no longer necessary for lining up axis of electric motor, transmission mechanism and hydraulic pump on site, which costs labor and time. Now the installation on-the-spot becomes easy and fast.
- * Because of its operation submerged into water, the electric pump can greatly simplify geotechnical engineering and building structure engineering of pump station, reduce erection space and save 30%~40% construction cost.
- * Low noise, no high temperature in pump station, improving the operational environment and underground pump station can be built according to the requirement, as a result, the environmental scene on the ground can be maintained.
- * Submersible electric pump has double and triple mechanical seal and F grade insulation(155℃ thermostable) with protection grade IP68(IEC). The pump has hydraulic model of nationwide unified design, which has high reliability and has the same performance of the conventional hydraulic pump so that the customer can select the model easily.
- * Convenient operation, and easy to realize remote control and automatic control.
- * Adopting this type of submersible electric pump is the most thorough approach for building pump station along the river and lake area where the water level fluctuate greatly, as well as for resolving the problem of flood prevention of pump; moreover, the major shaft and intermediate shaft are not required any more, and the machine set can operate more steady and liable.

The two models ZDB and HDB submersible electric pump can be used in irrigation and drainage of agricultural field, and can also be used in supply and sewerage water of factory, mine, dock, urban construction, water supply works and power station. The Axial-flow submersible electric pump applies to the condition of low lift head, high flow-rate; while the mixed-flow submersible electric pump is very efficient with high performance of cavitation erosion. It is applicable for the occasion where the water level changes greatly and the requirement to the lift head is high. The conveyance medium is untreated water or lightly polluted water. The highest temperature of the conveyed resolution is 50℃.

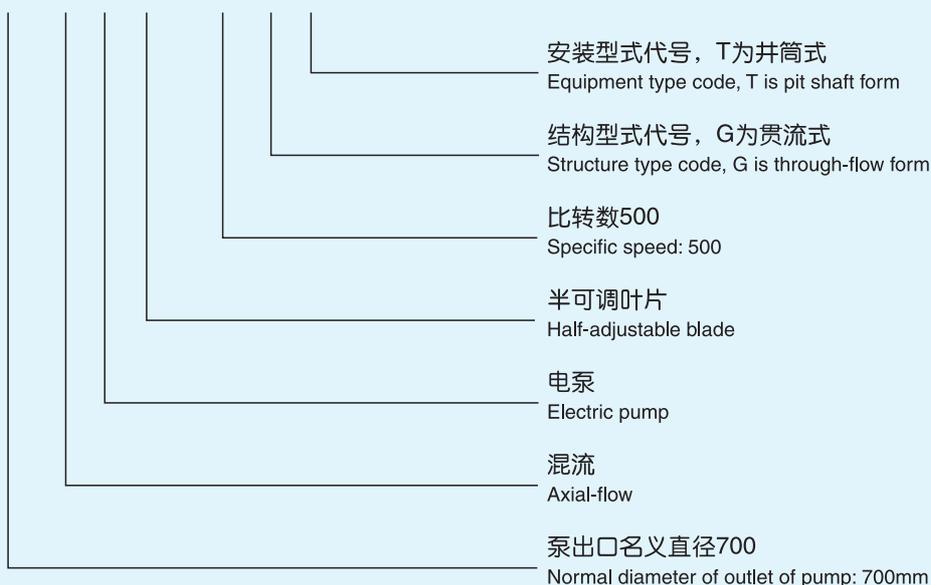
型号说明

Description of model

a. 500 Z D B - 70 X J G TW

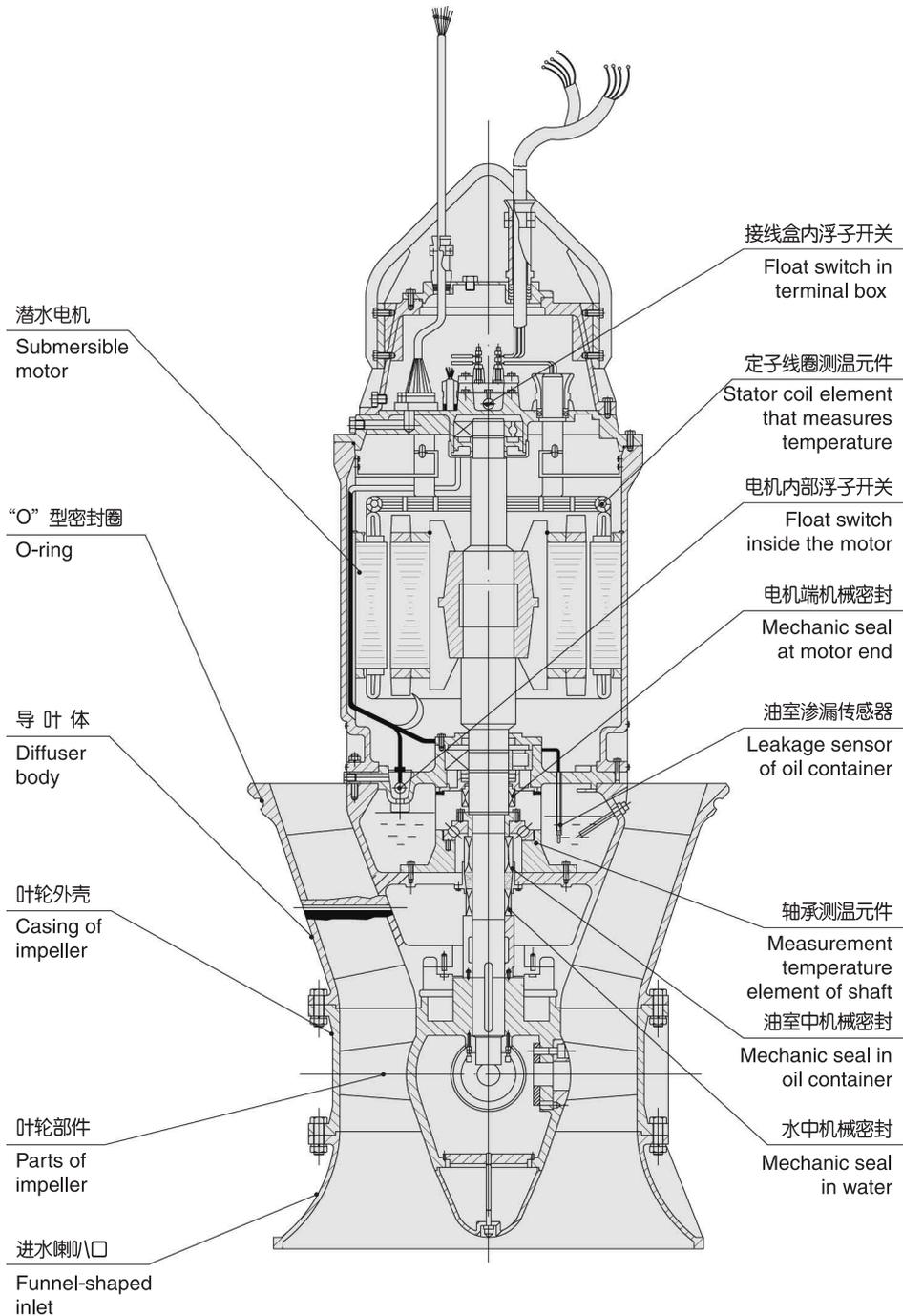


b. 700 H D B - 50 G T



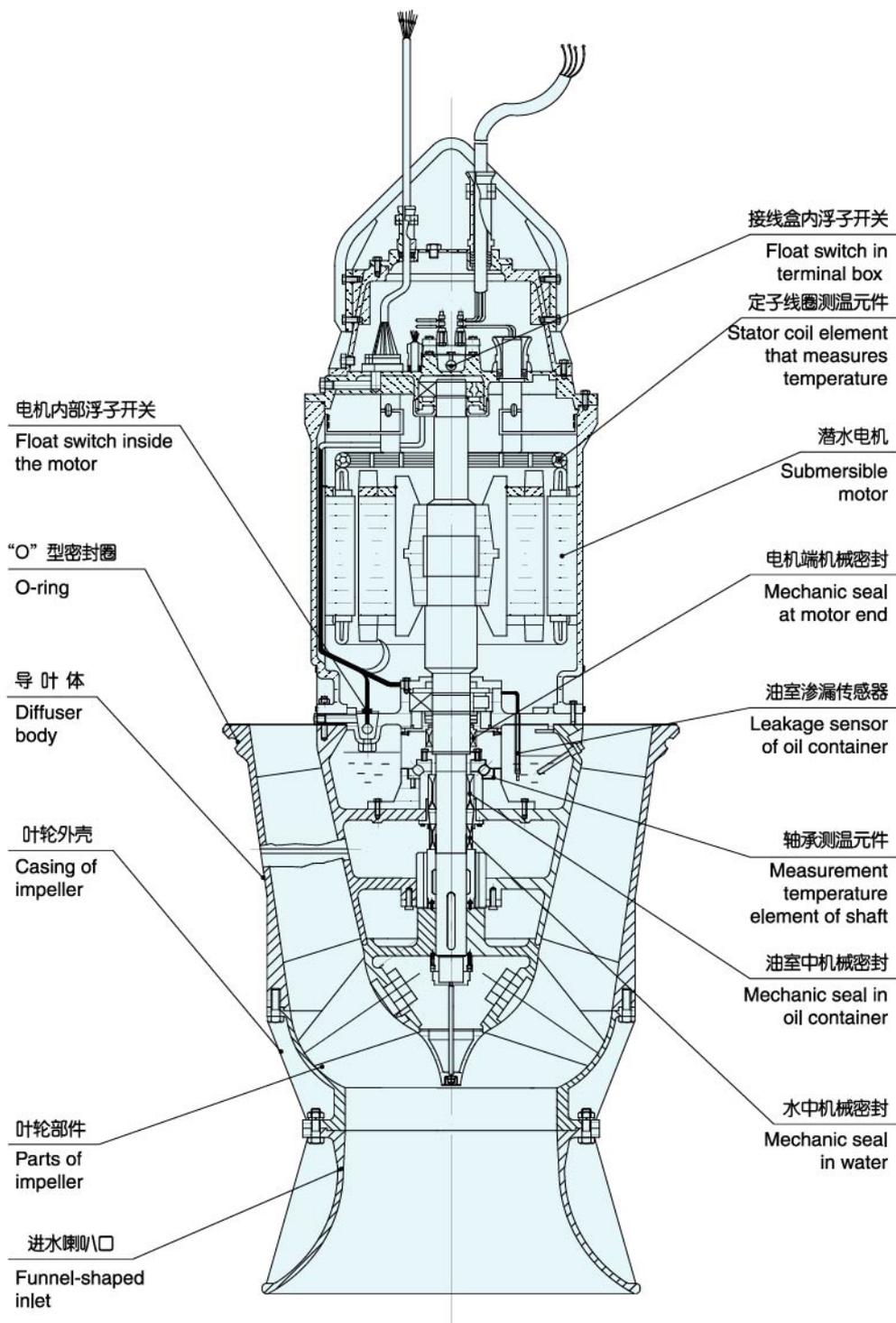
结构简图(ZDB型轴流潜水电泵)

Structural diagram (ZDB model axial-flow submersible electric pump)



结构简图(HDB型潜水混流电泵)

Structural diagram (HDB model mixed-flow submersible electric pump)



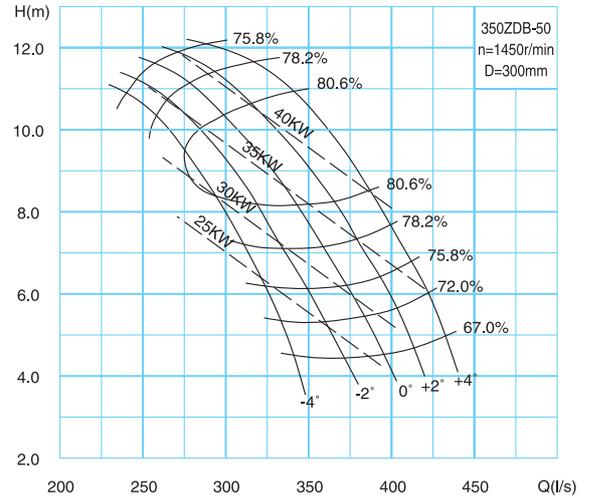


性能参数表及性能曲线

Performance parameter and performance curve

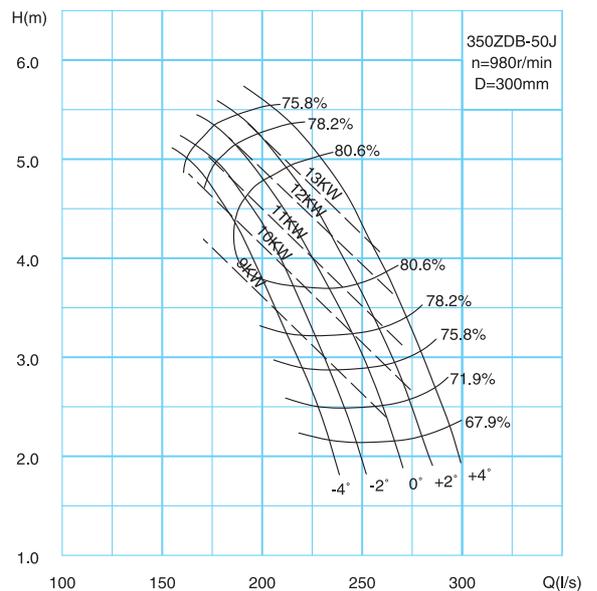
350ZDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter			
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power					
-4°	914	254	10.5	1450	33.27	37	78.58	300			
	1033	287	8.82		30.79		80.60				
	1137	316	6.82		27.07		78.04				
-2°	972	270	10.6		35.50	40	79.05		300		
	1101	306	8.97		33.39		80.60				
	1213	337	6.94		29.36		78.09				
0°	1037	288	10.8		38.30	45	79.64			300	
	1177	327	9.08		36.12		80.60				
	1296	360	7.07		31.87		78.30				
+2°	1112	309	10.9		41.30	45	79.96				300
	1253	348	9.20		38.94		80.60				
	1372	381	7.20		34.05		77.96				
+4°	1310	364	9.89	44.06	45	80.10	300				
	1346	374	9.35	42.54		80.60					
	1454	404	7.35	37.52		77.60					



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叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter			
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power					
-4°	608	169	4.88	980	10.38	15	77.93	300			
	673	187	4.34		9.87		80.59				
	706	196	3.97		9.46		80.60				
-2°	648	180	4.92		11.04	15	78.67		300		
	716	199	4.39		10.63		80.60				
	752	209	4.02		10.22		80.60				
0°	698	194	4.97		11.90	15	79.44			300	
	767	213	4.44		11.50		80.60				
	803	223	4.08		11.07		80.60				
+2°	749	208	5.02		12.81	15	79.94				300
	817	227	4.50		12.43		80.60				
	853	237	4.15		11.96		80.60				
+4°	814	226	5.10	14.09	15	80.21	300				
	878	244	4.58	13.59		80.60					
	911	253	4.23	13.02		80.60					



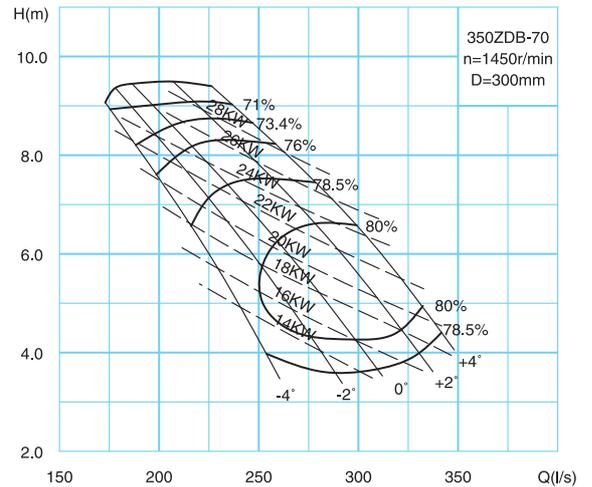


性能参数表及性能曲线

Performance parameter and performance curve

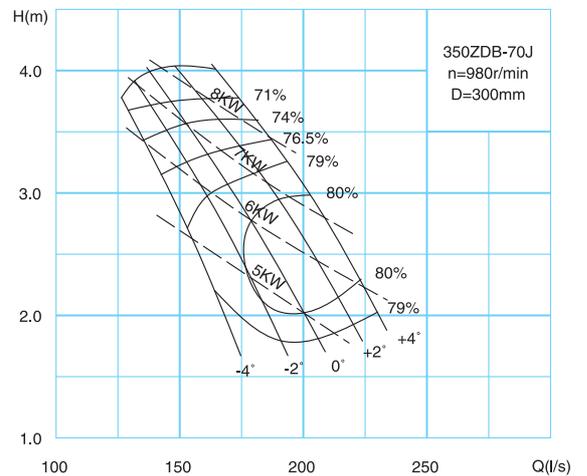
350ZDB-70

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	716	199	7.56	1450	20.2	22	76.3	300
	824	229	5.74		16.8	22	79.5	
	918	255	3.92		13.1	22	77.9	
-2°	770	214	7.65	1450	21.6	22	77.1	300
	896	249	5.88		18.7	22	80.1	
	1008	280	4.10		14.7	22	79.7	
0°	817	227	7.73	1450	23.3	30	77.0	300
	954	265	5.99		20.3	30	80.1	
	1076	299	4.26		16.0	30	80.1	
+2°	896	249	7.87	1450	26.0	30	76.9	300
	1037	288	6.17		22.7	30	80.1	
	1159	322	4.46		18.3	30	80.0	
+4°	958	266	7.99	1450	28.4	37	75.7	300
	1098	305	6.31		24.5	37	80.1	
	1213	337	4.60		20.0	37	79.3	



350ZDB-70J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	490	136	3.41	980	5.94	7.5	76.5	300
	558	155	2.63		5.03	7.5	79.4	
	623	173	1.77		3.86	7.5	77.8	
-2°	526	146	3.47	980	6.41	7.5	77.5	300
	605	168	2.73		5.60	7.5	80.1	
	680	189	1.89		4.38	7.5	79.8	
0°	554	154	3.53	980	6.92	11	77.0	300
	641	178	2.80		6.10	11	80.1	
	724	201	2.00		4.92	11	80.1	
+2°	601	167	3.62	980	7.74	11	76.5	300
	688	191	2.92		6.82	11	80.1	
	774	215	2.13		5.61	11	80.1	
+4°	637	177	3.70	980	8.60	11	74.9	300
	727	202	3.01		7.44	11	80.1	
	810	225	2.23		6.14	11	80.1	

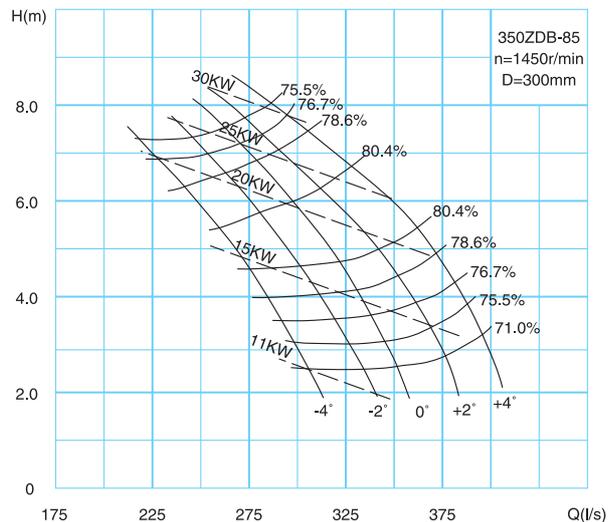


性能参数表及性能曲线

Performance parameter and performance curve

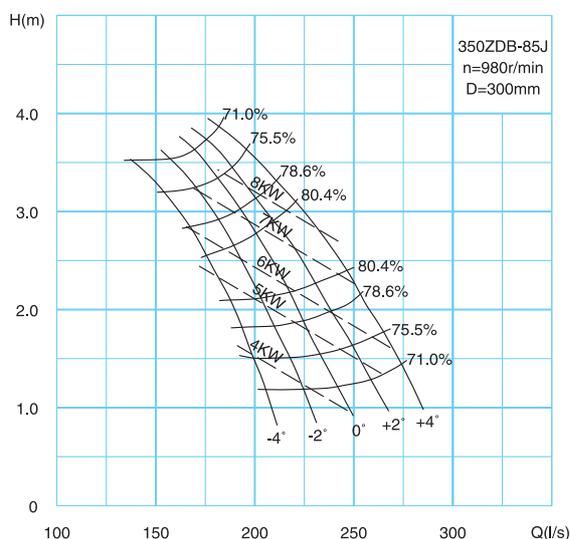
350ZDB-85

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter	
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power			
-4°	828	230	6.98	1450	20.8	30	75.79	300	
	968	269	5.01		16.4		80.40		
	1094	304	2.64		11.2		70.3		
-2°	900	250	7.15		23.3	30	75.30		
	1048	291	5.22		18.5		80.40		
	1177	327	2.89		13.0		71.49		
0°	965	268	7.30		25.9	37	74.05		
	1116	310	5.41		20.5		80.40		
	1246	346	3.10		14.3		73.43		
+2°	1012	281	7.41		27.2	37	75.06		
	1184	329	5.61		22.5		80.40		
	1332	370	3.39		16.5		74.43		
+4°	1073	298	7.59	29.2	37	75.89			
	1274	354	5.84	25.2		80.40			
	1411	392	3.67	18.9		74.76			



350ZDB-85J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter	
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power			
-4°	583	162	3.00	980	6.2	7.5	77.47	300	
	644	179	2.41		5.3		80.40		
	713	198	1.55		4.0		75.15		
-2°	634	176	3.09		6.9	11	77.32		
	695	193	2.51		5.9		80.40		
	770	214	1.66		4.5		76.85		
0°	677	188	3.17		7.5	11	76.52		
	742	206	2.60		6.5		80.40		
	817	227	1.77		5.1		77.18		
+2°	709	197	3.23		8.1	11	77.34		
	785	218	2.70		7.2		80.40		
	868	241	1.90		5.8		77.84		
+4°	756	210	3.33	8.8	11	78.06			
	835	232	2.82	8.0		80.40			
	922	256	2.04	6.6		77.96			



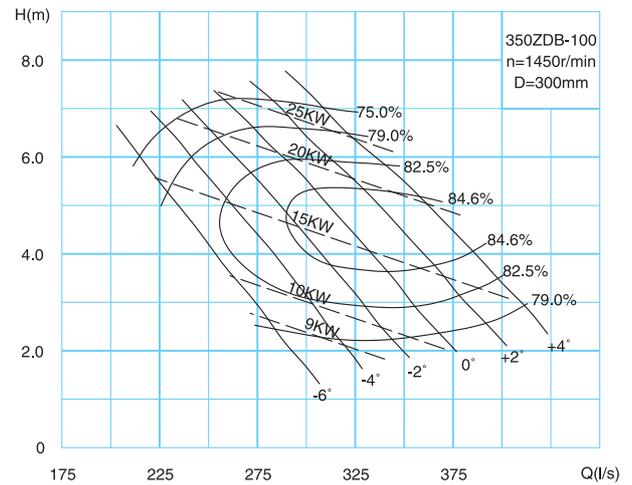


性能参数表及性能曲线

Performance parameter and performance curve

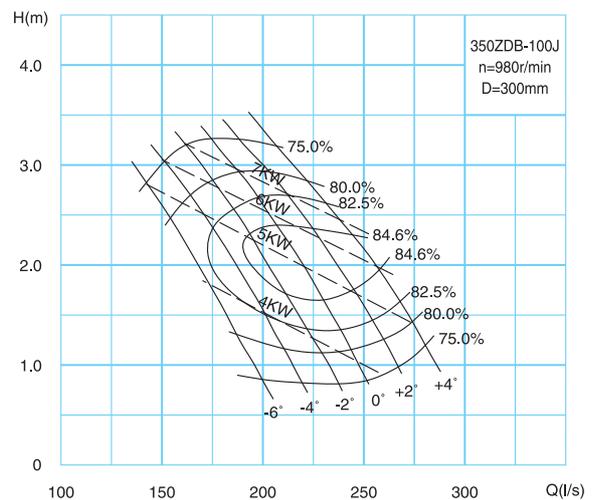
350ZDB-100

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter	
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power			
-6°	788	219	5.79	1450	15.7	18.5	79.31	300	
	936	260	3.77		11.7		82.19		
	1040	289	2.17		8.4		73.26		
-4°	871	242	5.96		17.6	22	80.39		
	1022	284	3.98		13.2		84.12		
	1127	313	2.42		9.5	78.15			
-2°	940	261	6.12		19.4		80.58		
	1094	304	4.18		14.7		84.60		
	1206	335	2.65		11.0		79.23		
0°	1008	280	6.30		21.5	30	80.51		
	1170	325	4.39		16.5		84.60		
	1282	356	2.89		12.6		80.05		
+2°	1076	299	6.47	23.8		79.85			
	1246	346	4.62	18.5		84.60			
	1361	378	3.15	14.5		80.44			
+4°	1141	317	6.65	26.8	37	77.07			
	1318	366	4.85	20.6		84.60			
	1440	400	3.40	16.5		80.98			



350ZDB-100J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter	
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power			
-6°	497	138	2.95	980	5.2	7.5	76.71	300	
	612	170	1.93		3.9		82.62		
	688	191	1.16		2.8		77.00		
-4°	547	152	3.02		5.8	7.5	77.46		
	670	186	2.03		4.4		84.31		
	745	207	1.28		3.3		79.92		
-2°	598	166	3.10		6.5		77.63		
	716	199	2.12		4.9		84.60		
	796	221	1.39		3.7		81.23		
0°	641	178	3.17		7.2		76.72		
	767	213	2.22		5.5		84.60		
	846	235	1.50		4.2		82.85		
+2°	680	189	3.24	8.1	11	74.54			
	814	226	2.33	6.1		84.60			
	896	249	1.63	4.8		83.34			
+4°	724	201	3.33	9.3		70.26			
	860	239	2.43	6.8		83.39			
	950	264	1.76	5.5		83.08			

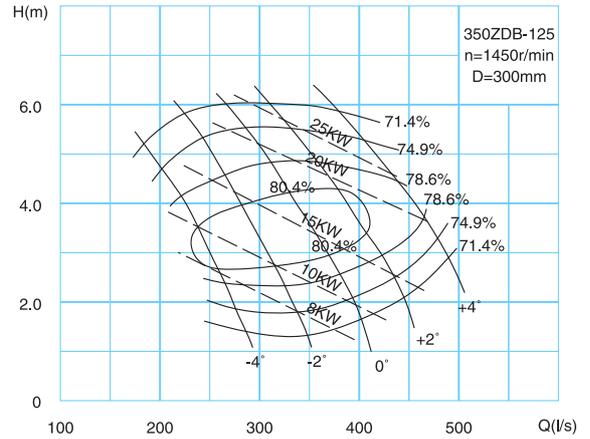


性能参数表及性能曲线

Performance parameter and performance curve

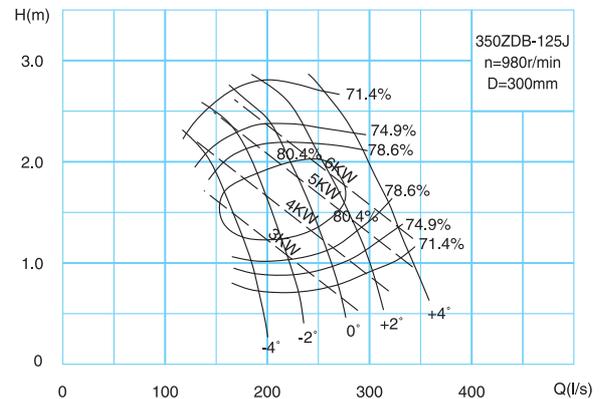
350ZDB-125

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	745	207	4.56	1450	12.1	15	76.66	300
	914	254	2.84		8.8		80.40	
	1004	279	1.72		6.4		73.61	
-2°	925	257	4.86		15.7	22	77.76	
	1091	303	3.19		11.8		80.40	
	1188	330	2.12		8.8		77.79	
0°	1080	300	5.17		19.9	30	76.50	
	1260	350	3.60		15.4		80.40	
	1368	380	2.59		12.3		78.71	
+2°	1202	334	5.46		23.9	30	74.95	
	1400	389	3.97		18.8		80.40	
	1516	421	3.01		15.7		79.02	
+4°	1364	379	5.88	31.0	37	70.42		
	1573	437	4.49	24.4		78.83		
	1692	470	3.58	21.1		78.05		



350ZDB-125J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	504	140	2.07	980	3.7	7.5	76.62	300
	612	170	1.35		2.8		80.40	
	695	193	0.66		1.7		71.66	
-2°	619	172	2.26		4.9	7.5	77.37	
	724	201	1.56		3.8		80.40	
	817	227	0.84		2.5		75.42	
0°	713	198	2.45		6.3	11	75.70	
	828	230	1.80		3.0		80.40	
	947	263	1.06		3.6		76.94	
+2°	788	219	2.61		7.6	11	73.97	
	911	253	2.01		6.2		80.10	
	1048	291	1.25		4.6		77.43	
+4°	875	243	2.84	10.0	11	67.57		
	1026	285	1.93	6.8		79.60		
	1166	324	1.50	6.3		76.14		



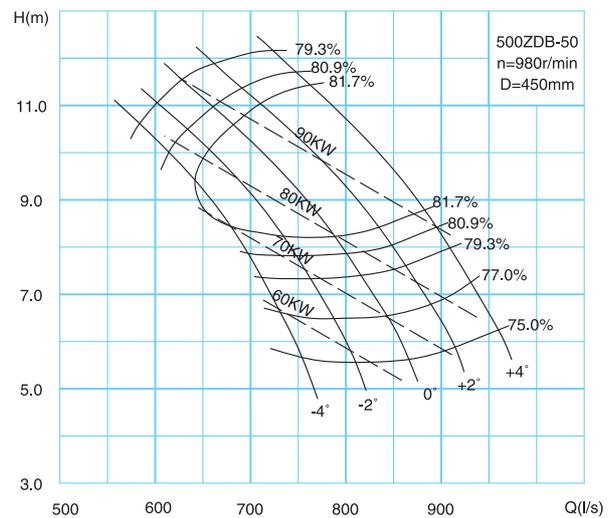


性能参数表及性能曲线

Performance parameter and performance curve

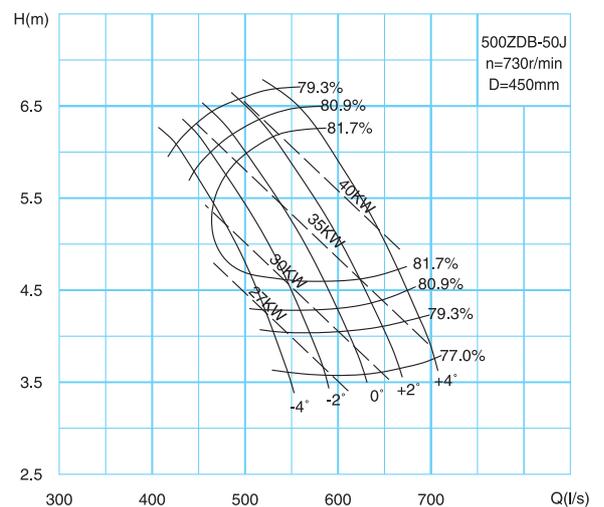
500ZDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter			
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power					
-4°	1969	547	11.3	980	78.2	90	77.50	450			
	2401	667	8.79		70.4		81.70				
	2689	747	5.99		58.6		74.89				
-2°	2099	583	11.4		83.5	110	78.02		450		
	2556	710	8.90		75.8		81.70				
	2869	797	6.13		63.8		75.09				
0°	2250	625	11.6		90.0	110	78.94			450	
	2728	758	9.02		82.0		81.70				
	3064	851	6.28		69.4		75.54				
+2°	2419	672	11.7		97.1	110	79.37				450
	2902	806	9.15		88.5		81.70				
	3240	900	6.44		76.1		74.65				
+4°	2635	732	12.0	107.5	110	80.12	450				
	3107	863	9.32	96.5		81.70					
	3420	950	6.60	82.6		74.42					



500ZDB-50J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter			
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power					
-4°	1559	433	5.98	730	31.8	37	79.80	450			
	1778	494	4.93		29.2		81.70				
	1948	541	3.75		25.2		78.82				
-2°	1656	460	6.04		33.9	45	80.24		450		
	1890	525	5.01		31.6		81.70				
	2077	577	3.85		27.6		78.84				
0°	1771	492	6.12		36.5	45	80.85			450	
	2012	559	5.10		34.2		81.70				
	2210	614	3.97		30.2		79.09				
+2°	1897	527	6.21		39.5	45	81.19				450
	2135	593	5.20		37.0		81.70				
	2336	649	4.08		32.9		78.94				
+4°	2059	572	6.34	43.7	45	81.45	450				
	2286	635	5.33	40.6		81.70					
	2473	687	4.21	36.0		78.68					

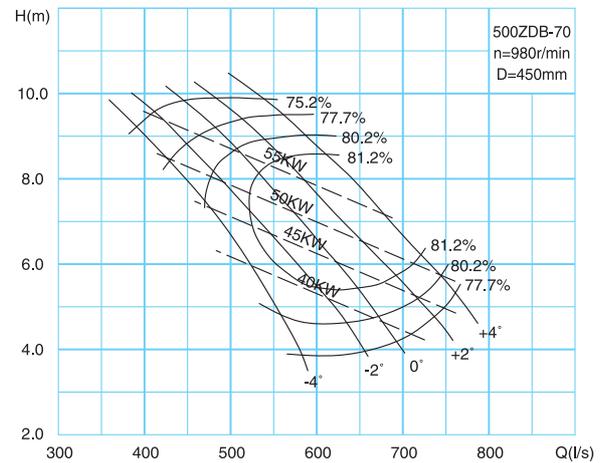


性能参数表及性能曲线

Performance parameter and performance curve

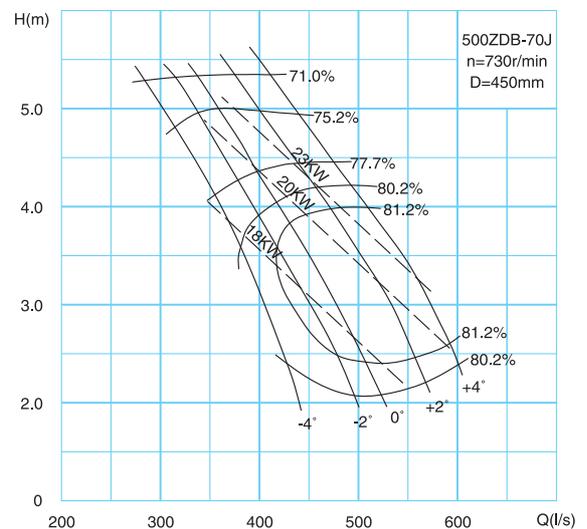
500ZDB-70

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1370	380	9.44	980	50.2		70.0	450
	1760	489	7.00		42.2		79.6	
	2050	571	4.35		31.0		78.5	
-2°	1720	479	8.20	980	51.7	55	74.5	450
	2010	559	6.43		44.0		80.0	
	2250	625	4.90		40.8		73.5	
0°	2099	583	7.00	980	50.1		79.9	450
	2160	600	6.30		45.6		81.2	
	2510	695	3.90		34.5		77.0	
+2°	2340	650	6.60	980	51.6		81.5	450
	2560	711	5.60		47.6		82.0	
	2660	741	4.67		41.6	75	81.5	
+4°	2600	722	6.20	980	53.7		81.7	450
	2700	750	5.60		49.6		83.0	
	2858	794	4.40		43.4		79.0	



500ZDB-70J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1020	282	5.32	730	21.6		68.2	450
	1310	364	3.95		18.0		78.4	
	1530	426	2.45		13.3		77.2	
-2°	1170	326	5.16	730	22.6		73.0	450
	1500	416	3.62		18.7		78.8	
	1675	465	2.76		17.5		71.9	
0°	1480	410	4.16	730	21.5	30	77.8	450
	1610	447	3.56		19.5		80.1	
	1870	520	2.16		14.6		75.6	
+2°	1710	474	3.95	730	22.8		80.4	450
	1910	530	3.10		19.9		80.9	
	1990	552	2.63		17.7		80.4	
+4°	1640	454	4.44	730	26.2		75.4	450
	1860	544	3.52		22.9		82.0	
	2100	582	2.82		20.4		81.5	

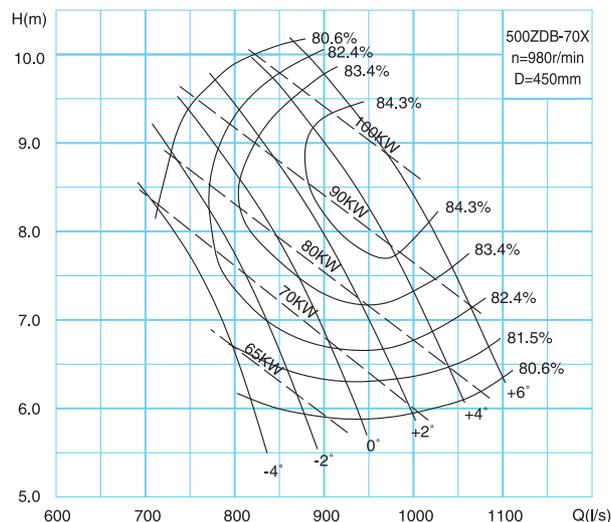


性能参数表及性能曲线

Performance parameter and performance curve

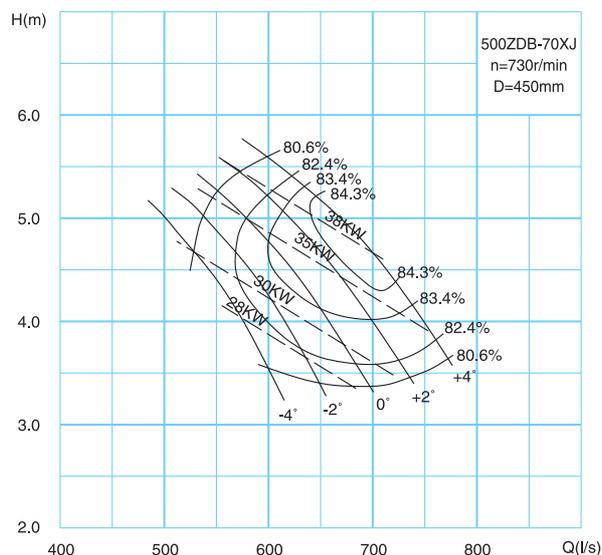
500ZDB-70X

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2243	623	8.94	980	69.9	90	78.13	450
	2711	753	7.67		69.1		81.89	
	3013	837	5.47		58.4		76.80	
-2°	2574	715	9.11		80.5	79.35		
	2858	794	7.86		73.9	82.77		
	3190	886	5.72		62.9	78.95		
0°	2718	755	9.29		85.8	110	80.18	
	3020	839	8.08		79.5	83.62		
	3373	937	5.99		68.6	80.24		
+2°	2869	797	9.48		91.1	81.31		
	3172	881	8.29		84.9	84.30		
	3546	985	6.26		74.7	80.98		
+4°	3042	845	9.71	98.3	132	81.83		
	3355	932	8.56	92.8	84.30			
	3726	1035	6.57	82.0	81.29			
+6°	3193	887	9.93	105.2	82.07			
	3510	975	8.81	99.9	84.30			
	3906	1085	6.68	87.3	81.42			



500ZDB-70XJ

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1843	512	4.87	730	30.9	37	79.07	450
	1987	552	4.38		29.0		81.71	
	2174	604	3.46		25.5		80.32	
-2°	1955	543	4.96		32.9	80.32		
	2102	584	4.48		31.0	82.61		
	2300	639	3.59		27.6	81.52		
0°	2063	573	5.06		35.1	80.99		
	2218	616	4.59		33.2	83.55		
	2430	675	3.73		29.9	82.60		
+2°	2174	604	5.17		37.3	82.17		
	2333	648	4.70		35.4	84.30		
	2556	710	3.85		32.3	83.06		
+4°	2182	606	5.54	41.3	79.76			
	2466	685	4.84	38.6	84.30			
	2696	749	4.00	35.3	83.20			



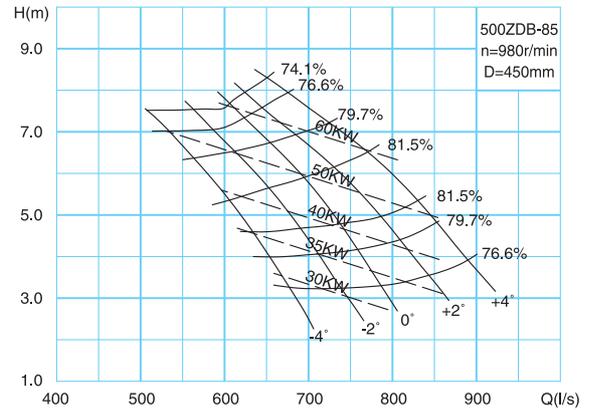


性能参数表及性能曲线

Performance parameter and performance curve

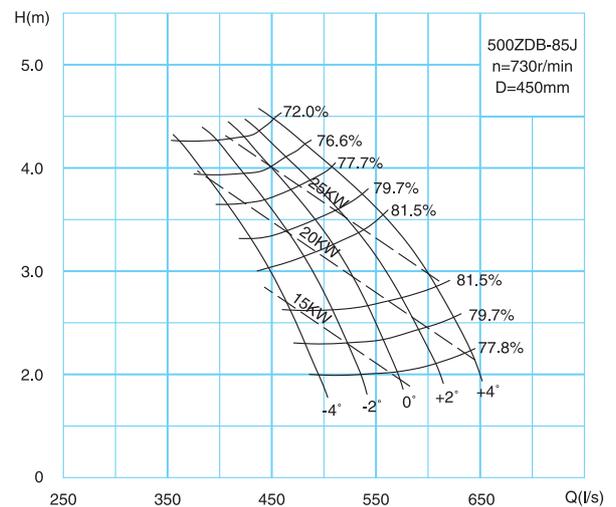
500ZDB-85

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1937	538	6.93	980	51.1	55	71.55	450
	2178	605	5.38		39.2		81.50	
	2466	685	3.01		27.8		72.59	
-2°	2102	584	7.10		52.4	65	77.52	
	2358	655	5.59		46.3		81.50	
	2657	738	3.26		31.6		74.66	
0°	2257	627	7.27		58.0	80	77.01	
	2520	700	5.78		48.7		81.50	
	2812	781	3.47		34.5		77.12	
+2°	2362	656	7.39		61.3	80	77.52	
	2664	740	5.97		53.1		81.50	
	3006	835	3.75		39.7		77.25	
+4°	2520	700	7.58	66.2	80	78.57		
	2837	788	6.21	58.9		81.50		
	3186	885	4.03	45.2		77.34		



500ZDB-85J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1346	374	4.21	730	20.7	30	74.72	450
	1613	448	3.03		16.3		81.50	
	1775	493	2.08		12.9		78.06	
-2°	1465	407	4.30		23.2	30	73.81	
	1746	485	3.15		18.4		81.50	
	1912	531	2.22		14.7		78.82	
0°	1559	433	4.38		25.6	37	72.71	
	1681	517	3.27		20.3		81.50	
	2030	564	2.35		16.4		79.38	
+2°	1627	452	4.44		27.1	37	72.56	
	1969	547	3.38		22.2		81.50	
	2160	600	2.51		18.5		79.78	
+4°	1721	478	4.53	29.2	37	72.82		
	2092	581	3.52	24.6		81.50		
	2290	636	2.67	20.8		80.04		



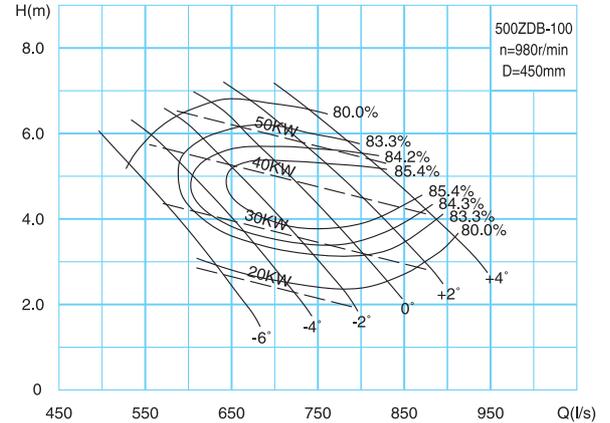


性能参数表及性能曲线

Performance parameter and performance curve

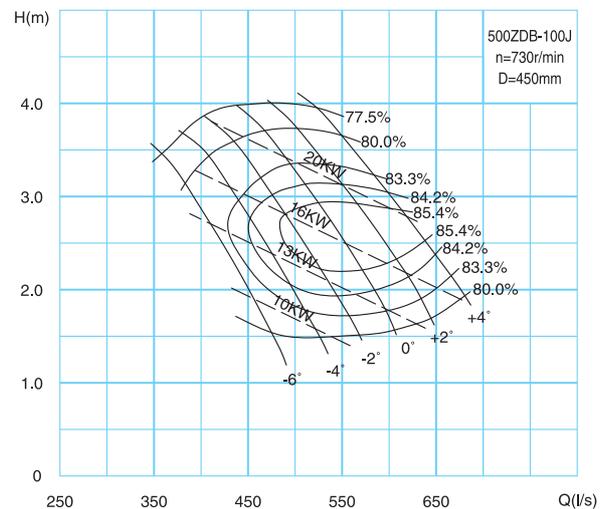
500ZDB-100

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	1886	524	5.46	980	34.7	55	80.75	450
	2149	597	26.8		26.8		83.15	
	2390	664	2.07		17.2		78.18	
-4°	2070	575	5.63		39.0	65	81.46	
	2344	651	4.02		30.2		85.09	
	2596	721	2.32		20.2		81.29	
-2°	2236	621	5.80		43.1	55	81.92	
	2513	698	4.22		33.8		85.40	
	2776	771	2.55		23.4		82.52	
0°	2405	668	5.99		47.9	55	81.89	
	2686	746	4.43		37.9		85.40	
	2952	820	2.79		26.7		83.92	
+2°	2556	710	6.17	53.1	65	80.87		
	2858	794	4.66	42.5		85.40		
	3136	871	3.06	31.0		84.20		
+4°	2707	752	6.36	59.9	65	78.28		
	3020	839	4.89	47.2		85.16		
	3316	921	3.34	35.8		84.15		



500ZDB-100J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	1361	378	3.22	730	14.8	22	80.75	450
	1584	440	2.20		11.4		83.15	
	1717	477	1.50		9.0		78.18	
-4°	1498	416	3.33		16.7	30	81.46	
	1724	479	2.33		12.9		85.09	
	1865	518	1.64		10.2		81.29	
-2°	1613	448	3.43		18.4	22	81.92	
	1847	513	2.45		14.4		85.40	
	1994	554	1.78		11.3		82.52	
0°	1732	481	3.54		20.4	22	81.89	
	1973	548	2.59		16.3		85.40	
	2120	589	1.92		13.2		83.92	
+2°	1836	510	3.64	22.5	30	80.87		
	2092	581	2.72	18.1		85.40		
	2250	625	2.07	15.1		84.20		
+4°	1948	541	3.76	25.5	30	78.28		
	2207	613	2.86	20.2		85.16		
	2376	660	2.23	17.1		84.15		



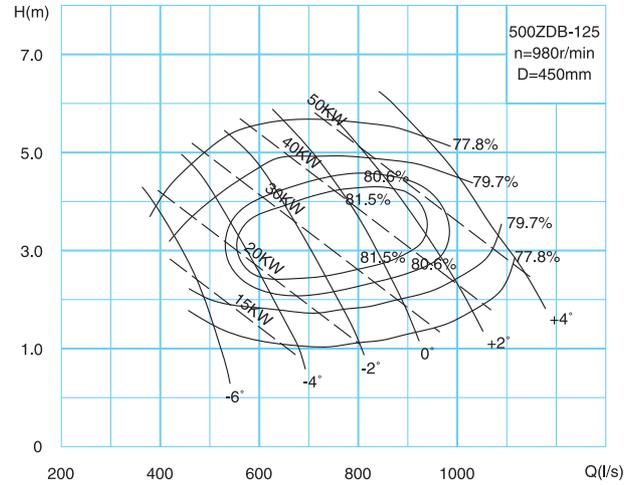


性能参数表及性能曲线

Performance parameter and performance curve

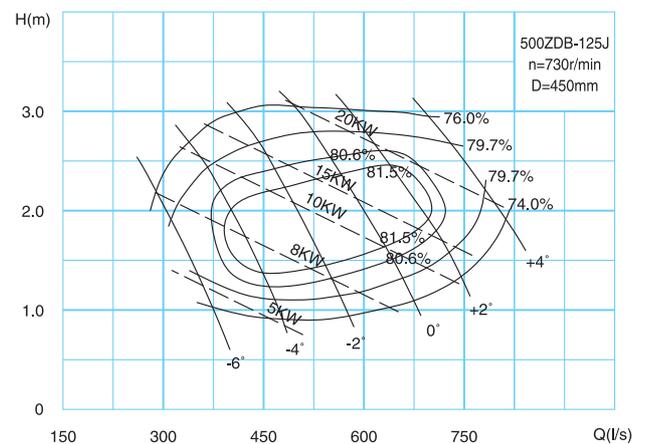
500ZDB-125

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	1447	402	3.74	980	18.9	37	77.84	450
	1681	467	2.56		15.1		77.79	
	2599	522	1.01		6.9		74.59	
-4°	1850	514	4.05		25.3	65	80.52	
	2088	580	2.91		20.3		81.50	
	3128	660	1.41		12.2		75.05	
-2°	2239	622	4.42		33.4	80	80.65	
	2473	687	3.32		27.4		81.50	
	3654	765	1.89		17.7		79.86	
0°	2599	722	4.82		42.6	80	80.00	
	2855	793	3.80		36.2		81.50	
	4165	867	2.42		25.3		81.44	
+2°	2873	798	5.17	51.4	80	78.63		
	3150	875	4.21	44.3		81.50		
	4558	966	2.88	33.3		82.00		
+4°	3236	899	5.69	67.8	80	73.92		
	3528	980	4.80	58.3		79.16		
	5036	1069	3.50	45.1		81.25		



500ZDB-125J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	1012	281	2.30	730	8.4	11	75.81	450
	1231	342	1.50		6.4		79.00	
	1379	383	0.88		4.6		71.90	
-4°	1318	366	2.44		11.0	15	79.33	
	1541	428	1.67		7.9		81.50	
	1688	469	1.07		6.5		75.60	
-2°	1620	450	2.62		14.5	22	79.93	
	1840	511	1.87		11.5		81.50	
	1994	554	1.29		8.8		79.55	
0°	1886	524	2.80		18.2	30	79.04	
	2128	591	2.10		14.9		81.50	
	2304	640	1.55		12.1		80.37	
+2°	2099	583	2.97	21.9	30	77.64		
	2362	656	2.30	18.1		81.50		
	2552	709	1.79	15.4		80.63		
+4°	2383	662	3.22	28.5	37	73.27		
	2660	739	2.60	23.6		79.70		
	2851	792	2.11	20.5		79.73		

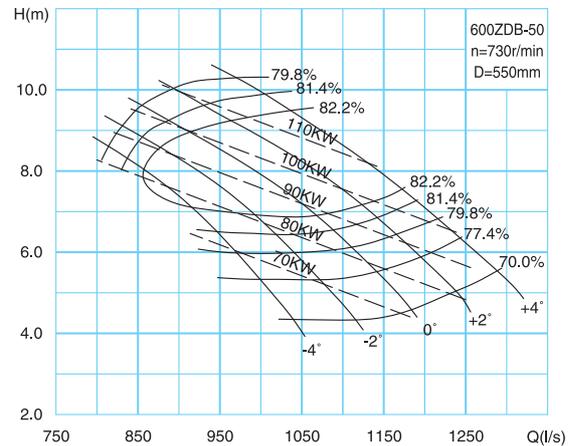


性能参数表及性能曲线

Performance parameter and performance curve

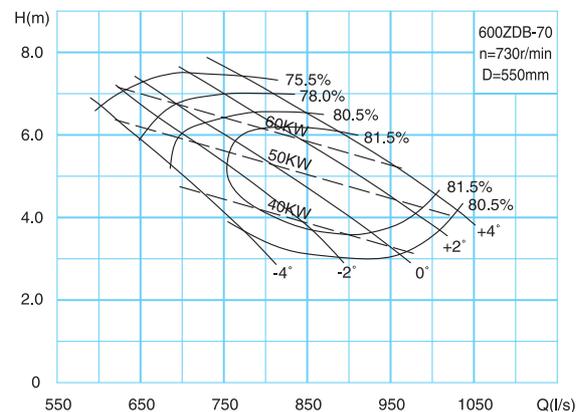
600ZDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2812	781	9.02	730	86.5	95	79.81	550
	3222	895	7.47		79.7		82.20	
	3668	1019	4.86		64.9		74.84	
-2°	2981	828	9.15		92.5	110	80.29	
	3434	954	7.56		86.0		82.20	
	3917	1088	4.98		70.9		74.97	
0°	3179	883	9.30		99.6	110	80.82	
	3884	1079	7.66		98.6		82.20	
	4180	1161	5.12		77.3		75.42	
+2°	3391	942	9.48		108.0	132	81.05	
	3902	1084	7.78		100.6		82.20	
	4421	1228	5.25		84.6		74.71	
+4°	3665	1018	9.73	119.5	132	81.23		
	4180	1161	7.92	109.7		82.20		
	4666	1296	5.40	92.2		74.41		



600ZDB-70

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2232	620	6.40	730	50.0	65	77.80	550
	2621	728	4.54		40.0		80.93	
	2797	777	3.62		34.5		79.88	
-2°	2408	669	6.46		53.8	65	78.81	
	2869	797	4.65		44.6		81.50	
	3071	853	3.75		38.5		81.45	
0°	2556	710	6.52		57.6	65	78.77	
	3056	849	4.74		48.4		81.50	
	3283	912	3.86		42.3		81.50	
+2°	2808	780	6.63		64.3	75	78.87	
	3323	923	4.88		54.2		81.50	
	3553	987	4.00		47.5		81.50	
+4°	3002	834	6.71	70.4	80	77.90		
	3510	975	4.98	58.4		81.50		
	3726	1035	4.10	51.0		81.50		

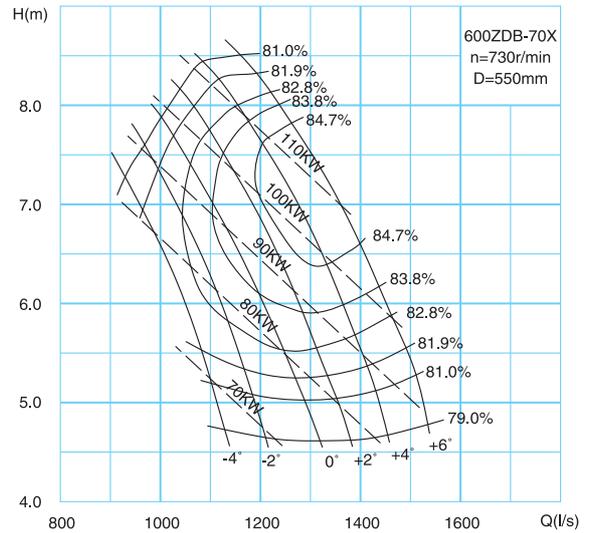


性能参数表及性能曲线

Performance parameter and performance curve

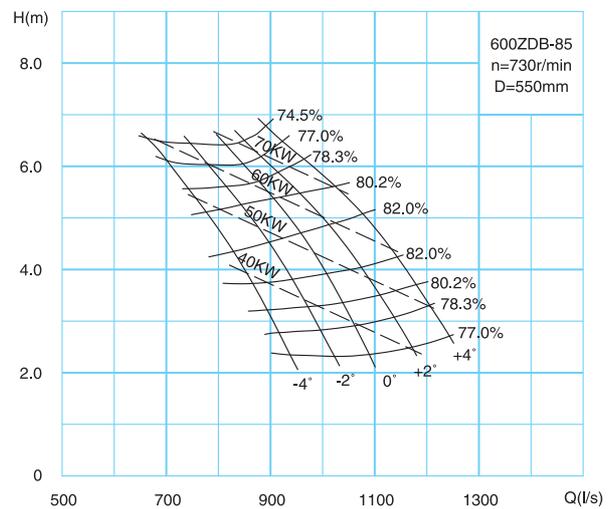
600ZDB-70X

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	3920	914	7.42	730	84.8	95	78.45	550
	3715	1032	6.23		76.6		82.32	
	4064	1129	4.72		66.7		78.36	
-2°	3492	970	7.59		90.6	110	79.67	
	3924	1090	6.40		83.2		82.24	
	4298	1194	4.92		72.0		80.02	
0°	3686	1024	7.71		96.2	110	80.45	
	4144	1151	6.58		88.4		84.03	
	4903	1362	5.14		84.3		81.44	
+2°	3895	1082	7.88		102.4	132	81.60	
	4352	1209	6.77		94.7		84.70	
	4774	1326	5.37		85.1		82.03	
+4°	4126	1146	8.07	110.4	132	82.14		
	4597	1277	6.99	103.3		84.70		
	5018	1394	5.62	93.3		82.30		
+6°	4334	1204	8.25	118.2	132	82.36		
	4817	1338	7.21	111.7		84.70		
	5263	1462	5.88	102.3		82.42		



600ZDB-85

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2560	711	5.98	730	53.9	65	77.3	550
	2984	829	4.35		43.1		82.0	
	3391	942	2.26		29.2		71.6	
-2°	2783	773	6.12		60.5	75	76.6	
	3229	897	4.53		48.6		82.0	
	3650	1014	2.48		33.6		73.3	
0°	2984	829	6.25		67.3	80	75.5	
	3449	958	4.71		53.9		82.0	
	3866	1074	2.67		37.4		75.2	
+2°	3114	865	6.35		70.9	85	76.0	
	3643	1012	4.87		58.9		82.0	
	4129	1147	2.92		43.1		76.2	
+4°	3316	921	6.50	76.1	95	77.1		
	3877	1077	5.08	65.4		82.0		
	4374	1215	3.16	49.1		76.6		

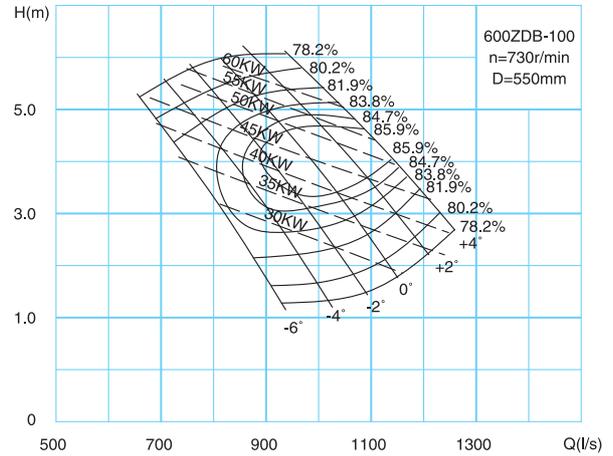


性能参数表及性能曲线

Performance parameter and performance curve

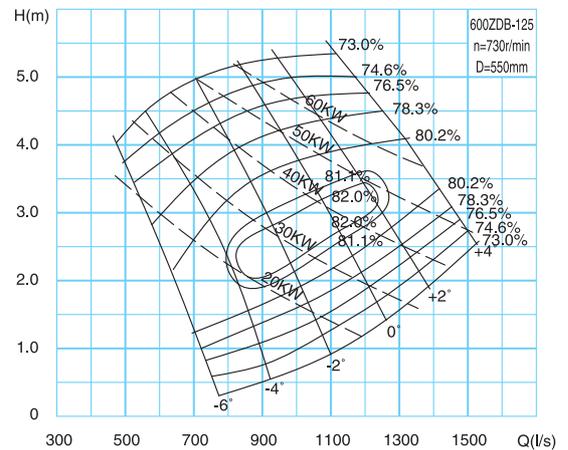
600ZDB-100

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	2488	691	4.81	730	40.12	55	81.22	550
	2916	810	3.17		30.20		83.36	
	3233	898	1.80		21.30		74.48	
-4°	2732	759	4.95	730	45.48	65	82.06	550
	3182	884	3.36		34.01		85.62	
	3510	975	2.01		24.32		79.00	
-2°	2952	820	5.10	730	49.72	65	82.46	550
	3406	946	3.53		38.11		85.90	
	3748	1041	2.21		28.05		80.40	
0°	3172	881	5.25	730	58.30	75	82.43	550
	3640	1011	3.72		45.40		85.90	
	3985	1107	2.42		34.40		80.98	
+2°	3373	937	5.40	730	64.50	80	81.63	550
	3870	1075	3.91		51.00		85.90	
	4234	1176	2.65		39.70		81.65	
+4°	3578	994	5.56	730	72.60	80	79.22	550
	4090	1136	4.11		56.60		85.90	
	4471	1242	2.89		45.60		81.95	



600ZDB-125

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	1800	500	3.57	730	24.9	30	75.47	550
	2293	637	2.10		18.0		78.24	
	2628	730	0.89		9.0		75.95	
-4°	2329	647	3.82	730	33.0	37	78.65	550
	2833	787	2.42		24.4		82.00	
	3172	881	1.24		15.8		73.41	
-2°	2866	796	4.14	730	43.7	55	79.32	550
	3355	932	2.79		33.3		82.00	
	3719	1033	1.68		23.3		78.17	
0°	3326	924	4.47	730	55.6	65	77.84	550
	3859	1072	3.21		44.0		82.00	
	4259	1183	2.18		33.7		80.20	
+2°	3676	1021	4.75	730	67.0	75	76.04	550
	4244	1179	3.56		53.8		82.00	
	4680	1300	2.61		44.0		80.92	
+4°	4136	1149	5.16	730	88.1	95	70.65	550
	4748	1319	4.08		71.5		79.08	
	5184	1440	3.18		59.7		80.44	

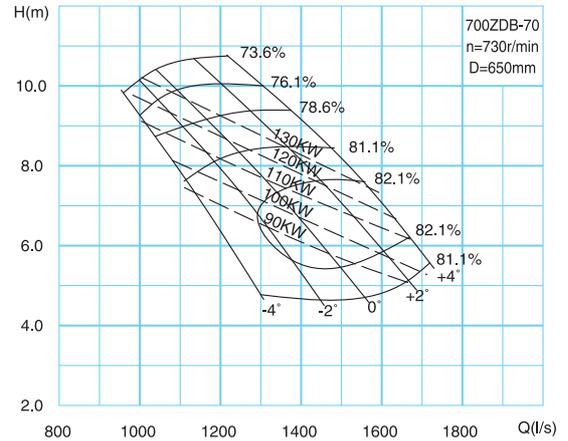


性能参数表及性能曲线

Performance parameter and performance curve

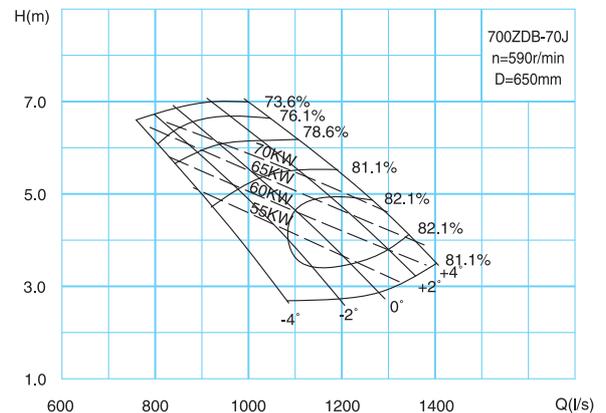
700ZDB-70

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	3638	1024	8.93	730	114.60	132	78.23	650
	4147	1152	7.10		98.79		81.17	
	4694	1304	4.71		75.48		79.77	
-2°	3964	1101	9.05	730	123.51	155	79.09	650
	4518	1255	7.27		109.23		81.89	
	5159	1433	4.86		83.78		81.50	
0°	4205	1168	9.15	730	132.68	155	78.97	650
	4799	1333	7.41		118.25		81.89	
	5530	1536	4.99		91.76		81.89	
+2°	4604	1279	9.34	730	148.55	180	78.84	650
	5216	1449	7.63		132.36		81.89	
	5990	1664	5.16		103.34		81.46	
+4°	4907	1363	9.50	730	163.48	180	77.65	650
	5530	1536	7.81		143.62		81.89	
	6271	1742	5.27		112.08		80.30	



700ZDB-70J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2988	830	5.80	590	60.25	80	78.33	650
	3557	988	3.93		46.88		81.20	
	3942	1095	2.52		34.62		78.14	
-2°	3229	897	5.85	590	64.72	80	79.49	650
	3906	1085	4.01		52.08		81.90	
	4327	1202	2.63		38.55		80.39	
0°	3438	955	5.90	590	69.41	80	79.59	650
	4172	1159	4.09		56.74		81.90	
	4655	1293	2.73		43.13		80.23	
+2°	3776	1049	5.98	590	77.18	110	79.68	650
	4532	1259	4.19		63.15		81.90	
	5026	1396	2.85		49.47		78.85	
+4°	4043	1123	6.05	590	84.27	110	79.04	650
	4784	1329	4.27		67.93		81.90	
	5238	1455	2.93		54.93		76.49	

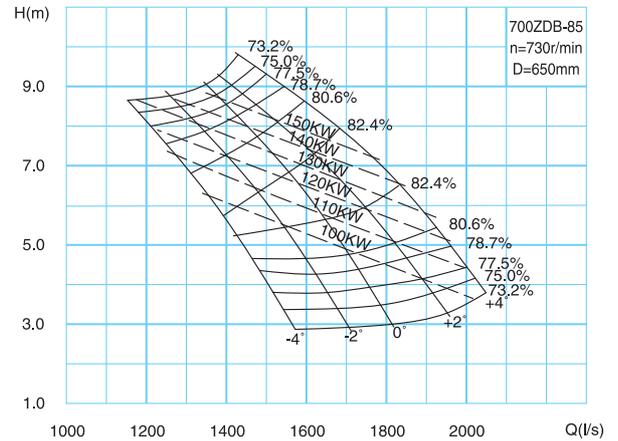


性能参数表及性能曲线

Performance parameter and performance curve

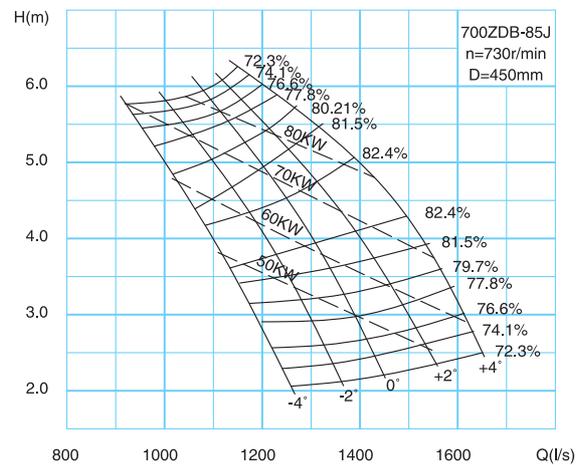
700ZDB-85

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	4514	1254	7.51	730	114.72	132	80.48	650
	4914	1365	6.12		99.39		82.40	
	5551	1542	3.36		69.59		72.99	
-2°	4900	1361	7.71	730	127.73	155	80.54	650
	5324	1479	6.34		111.57		82.40	
	5987	1663	3.65		79.59		74.77	
0°	5260	1461	7.91	730	140.02	180	80.91	650
	5688	1580	6.56		123.32		82.40	
	6343	1762	3.89		87.11		74.14	
+2°	5522	1534	8.02	730	148.89	180	81.01	650
	6019	1672	6.78		134.88		82.40	
	6786	1885	4.21		100.27		77.59	
+4°	5904	1640	8.30	730	163.54	180	81.60	650
	6419	1783	7.05		149.56		82.40	
	7189	1997	4.52		113.91		77.69	



700ZDB-85J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	3539	983	5.17	590	63.20	90	78.84	650
	4018	1116	3.86		51.25		82.40	
	4507	1252	2.15		36.26		72.78	
-2°	3852	1070	5.29	590	70.22	110	79.03	650
	4349	1208	4.01		57.63		82.40	
	4871	1353	2.26		40.75		73.57	
0°	4126	1146	5.41	590	77.53	110	78.40	650
	4640	1289	4.15		63.65		82.40	
	5177	1438	2.36		44.52		74.74	
+2°	4338	1205	5.51	590	82.11	110	79.28	650
	4925	1368	4.30		69.99		82.40	
	5562	1545	2.49		50.11		75.27	
+4°	4558	1266	5.56	590	87.55	110	80.21	650
	5245	1457	4.47		77.49		82.40	
	5922	1645	2.62		56.76		74.44	

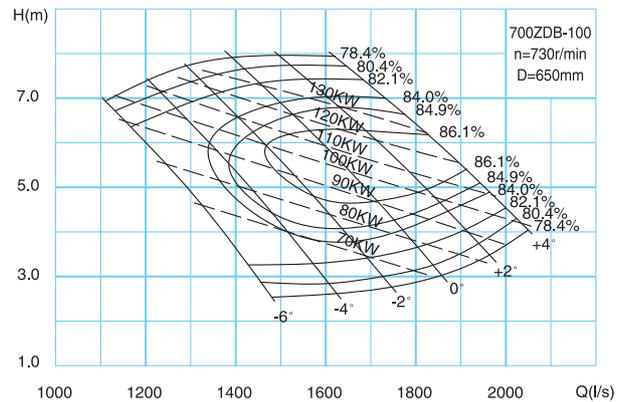


性能参数表及性能曲线

Performance parameter and performance curve

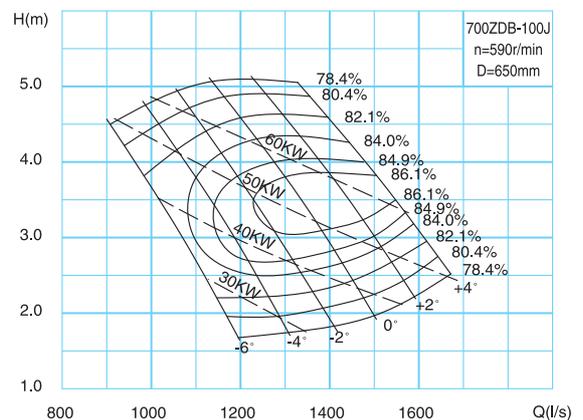
700ZDB-100

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	4144	1151	6.63	730	91.33	110	81.92	650
	4727	1313	4.75		72.65		84.16	
	5332	1481	2.53		48.96		75.03	
-4°	4547	1263	6.82		102.77	132	82.17	
	5159	1433	4.99		81.33		86.20	
	5792	1609	2.81		54.22		81.75	
-2°	4914	1365	7.00		112.48	155	83.28	
	5533	1537	5.20		90.90		86.20	
	6196	1721	3.07		63.90		81.06	
0°	5285	1468	7.21		124.75	180	83.18	
	5926	1646	5.44		101.84		86.20	
	6592	1831	3.34		74.40		80.59	
+2°	5623	1562	7.41	137.25	180	82.68		
	6304	1751	5.69	113.32		86.20		
	7006	1946	3.65	87.80		79.31		
+4°	5969	1658	7.62	154.21	180	80.32		
	6671	1853	5.95	125.72		85.98		
	7409	2058	3.96	97.49		81.96		



700ZDB-100J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	3308	919	4.40	590	48.73	65	81.36	650
	3848	1069	3.01		37.60		83.89	
	4362	1184	1.80		27.39		76.27	
-4°	3647	1013	4.53		54.72	80	82.21	
	4208	1169	3.17		42.35		85.78	
	4651	1292	1.91		30.30		79.85	
-2°	3938	1094	4.65		60.31	95	82.69	
	4507	1252	3.31		47.19		86.10	
	5000	1389	2.03		34.32		80.54	
0°	4234	1176	4.78		66.59	95	82.76	
	4824	1340	3.47		52.95		86.10	
	5339	1483	2.14		38.83		80.67	
+2°	4511	1253	4.91	73.69	95	81.85		
	5134	1426	3.64	59.10		86.10		
	5702	1584	2.27	43.64		80.77		
+4°	4784	1329	5.05	82.64	95	79.62		
	5429	1508	3.81	65.42		86.10		
	6066	1685	2.41	49.55		80.34		

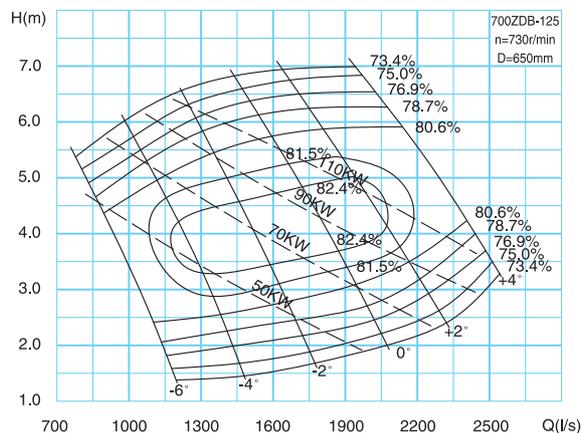


性能参数表及性能曲线

Performance parameter and performance curve

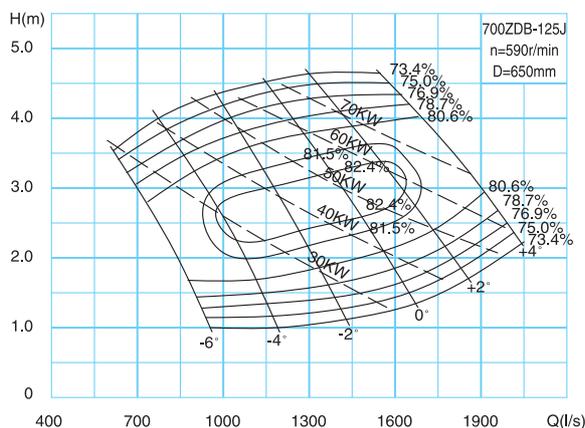
700ZDB-125

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	2981	828	4.95	730	52.87	65	76.00	650
	3892	1081	2.63		36.00		77.43	
	4388	1219	1.08		16.09		80.21	
-4°	3881	1078	5.27		70.18	95	80.21	
	4802	1334	3.04		48.65		82.40	
	5306	1474	1.54		31.01		76.23	
-2°	4781	1328	5.67		92.03	110	80.21	
	5688	1580	3.51		65.98		80.40	
	6239	1733	2.08		46.36		76.23	
0°	5573	1548	6.08		116.96	132	78.89	
	6570	1825	4.06		88.16		82.40	
	7171	1992	2.72		67.42		78.78	
+2°	6178	1716	6.45	140.76	180	77.09		
	7250	2014	4.54	108.79		82.40		
	7909	2197	3.29	88.95		79.67		
+4°	6991	1942	6.99	183.82	220	72.40		
	8122	2256	5.22	142.22		81.18		
	8773	2437	4.03	122.19		78.80		



700ZDB-125J

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-6°	2146	596	3.67	590	29.61	45	72.42	650
	3010	836	2.04		21.01		79.60	
	3388	941	1.13		14.38		72.56	
-4°	2909	808	3.81		39.61	45	76.19	
	3776	1049	2.23		27.83		82.40	
	4158	1155	1.34		20.05		75.69	
-2°	3697	1027	4.01		51.80	65	77.94	
	4518	1255	2.46		36.73		82.40	
	4928	1369	1.60		27.05		79.40	
0°	4345	1207	4.20		64.30	80	77.29	
	5260	1461	2.73		47.46		82.40	
	5720	1589	1.92		37.29		80.20	
+2°	4871	1353	4.38	76.27	110	76.18		
	5857	1627	2.98	57.69		82.40		
	6361	1767	2.21	47.81		80.07		
+4°	5569	1547	4.65	98.64	110	71.50		
	6620	1839	3.33	73.71		81.45		
	7117	1977	2.59	63.93		78.52		



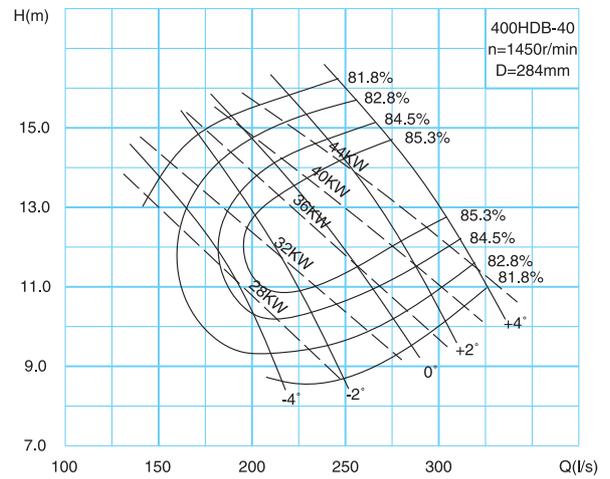


性能参数表及性能曲线

Performance parameter and performance curve

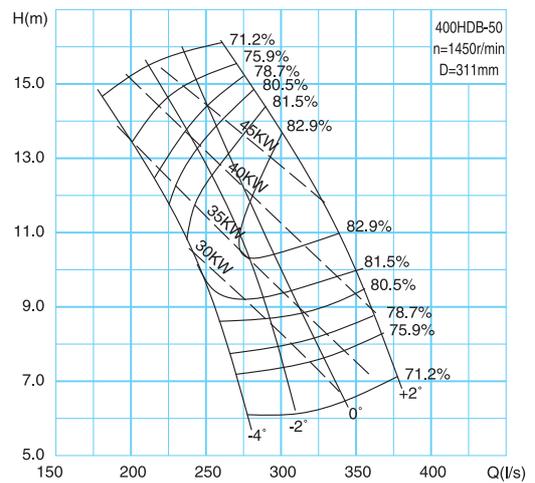
400HDB-40

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	630	175	13.8	1450	29.25	37	80.95	284
	756	210	11.7		28.38		84.89	
	868	241	8.61		24.72		82.28	
-2°	752	209	14.0	34.59	40	82.93		
	864	240	11.8	32.55		85.30		
	983	273	8.79	28.70		81.95		
0°	799	222	14.9	39.25	45	82.62		
	925	257	13.0	38.40		85.30		
	1094	304	8.98	32.90		81.36		
+2°	925	257	15.2	45.53	65	84.11		
	1030	286	13.5	44.38		85.30		
	1217	338	9.21	37.79		80.76		
+4°	1026	285	15.5	51.39	65	84.27		
	1130	314	13.8	49.80		85.30		
	1328	369	9.44	41.57		82.16		



400HDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	666	185	14.43	1450	35.51	40	73.7	311
	864	240	10.60		30.64		81.4	
	986	274	6.62		23.87		74.5	
-2°	810	225	14.63	41.91	45	77.0		
	986	274	10.82	35.10		82.8		
	1102	306	6.85	27.62		74.4		
0°	889	247	14.76	45.76	65	78.1		
	1076	299	11.00	38.94		82.8		
	1206	335	7.08	31.13		74.7		
+2°	1008	280	14.98	51.60	65	79.7		
	1206	335	11.28	44.74		82.8		
	1350	375	7.43	36.37		75.1		

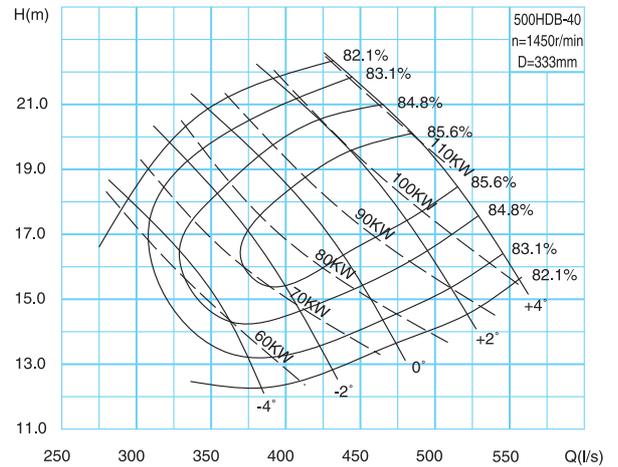


性能参数表及性能曲线

Performance parameter and performance curve

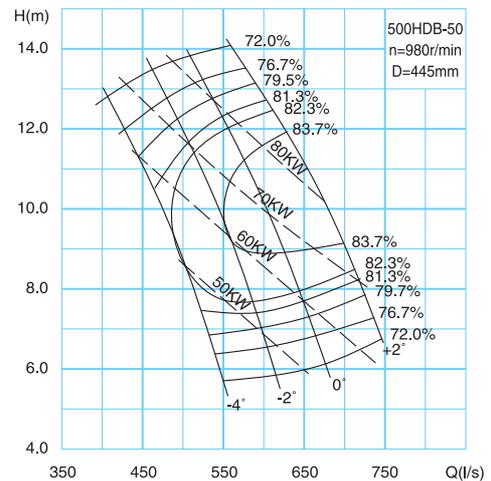
500HDB-40

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	932	259	19.58	1450	61.67	75	80.62	333
	1271	353	15.07		61.14		85.30	
	1310	364	14.14		59.47		84.85	
-2°	1159	322	19.89	1450	76.52	85	82.06	333
	1343	373	17.21		73.56		85.55	
	1483	412	14.46		68.83		84.86	
0°	1314	365	20.15	1450	86.33	110	83.52	333
	1512	420	17.52		84.28		85.60	
	1656	460	14.82		79.22		84.37	
+2°	1523	423	20.54	1450	100.24	130	84.98	333
	1602	445	19.50		99.38		85.60	
	1843	512	15.25		91.91		83.29	
+4°	1688	469	20.89	1450	112.67	130	85.25	333
	1764	490	19.86		111.46		85.60	
	2009	558	15.68		104.33		82.22	



500HDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1620	450	11.1	980	60.26	65	81.27	445
	1731	481	9.72		55.68		82.32	
	1948	541	6.36		44.22		76.28	
-2°	1854	515	11.4	980	69.56	80	82.75	445
	1962	373	9.98		63.71		83.70	
	2171	603	6.64		51.27		76.57	
0°	2027	563	11.6	980	76.59	90	83.60	445
	2146	596	10.2		71.21		83.70	
	2376	660	6.92		58.11		77.05	
+2°	2264	629	11.9	980	87.67	110	83.70	445
	2394	665	10.6		82.57		83.70	
	2650	736	7.34		67.87		78.04	

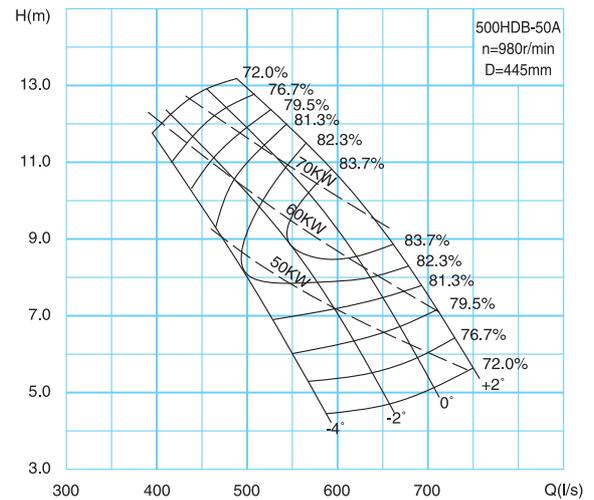


性能参数表及性能曲线

Performance parameter and performance curve

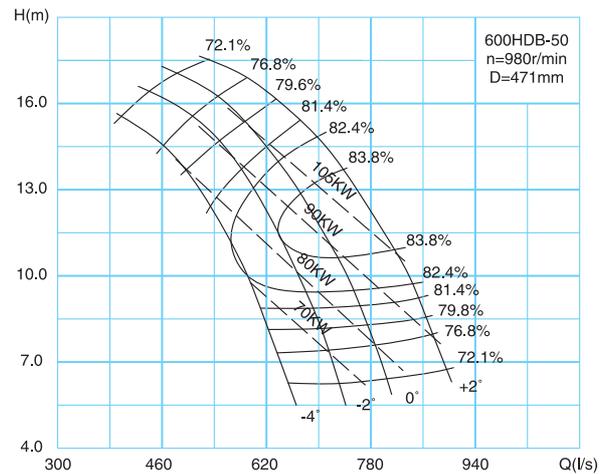
500HDB-50A

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1620	450	10.2	980	55.56	65	81.0	445
	1800	500	8.00		47.59		82.4	
	1973	548	6.08		40.33		81.0	
-2°	1656	460	11.2		62.36	75	81.0	
	1951	542	9.00		57.07		83.8	
	2214	615	6.50		48.38		81.0	
0°	1800	500	11.9		72.02	80	81.0	
	2070	575	10.0		67.27		83.8	
	2412	670	6.70		54.33		81.0	
+2°	1926	535	12.2		79.02	90	81.0	
	2178	606	10.5		74.44		83.8	
	2563	712	7.00		60.32		81.0	



600HDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1602	445	14.3	980	81.0	95	77.0	471
	2088	580	10.2		72.4		82.5	
	2304	640	7.42		60.5		77.0	
-2°	1710	475	15.2		92.0	115	77.0	
	2322	645	11.0		83.8		83.0	
	2574	751	7.5		68.3		77.0	
0°	1847	513	15.9		104.0	115	77.0	
	2459	683	12.0		95.8		83.9	
	2844	790	7.65		77.0		77.0	
+2°	2052	570	16.8		122.0	130	77.0	
	2808	780	12.0		109.4		83.9	
	3186	885	7.9		89.1		77.0	

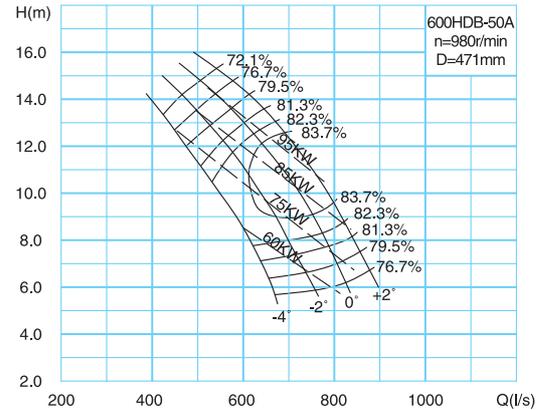


性能参数表及性能曲线

Performance parameter and performance curve

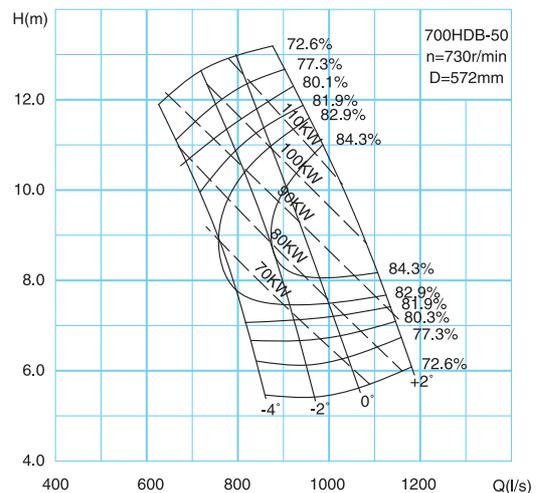
600HDB-50A

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	1602	445	12.9	980	73.09	95	77.0	471
	2106	585	9.00		62.57		82.5	
	2412	670	5.80		49.48		77.0	
-2°	1782	495	13.65		86.03	115	77.0	
	2322	645	10.0		75.37		83.9	
	2718	755	5.90		56.72		77.0	
0°	1926	535	14.2		96.73	130	77.0	
	2520	700	10.5		85.88		83.9	
	2952	820	5.25		54.80		77.0	
+2°	2027	575	14.7		105.40	130	77.0	
	2700	750	11.0		96.40		83.9	
	3118	880	6.70		73.90		77.0	



700HDB-50

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2531	703	10.30	730	87.02	110	81.58	572
	2725	757	8.96		80.21		82.90	
	3060	850	5.89		63.89		76.82	
-2°	2902	806	10.60		101.03	130	82.91	
	3092	859	9.21		92.01		84.30	
	3420	950	6.16		73.90		77.64	
0°	3164	879	10.8		110.89	130	83.93	
	3366	935	9.42		102.43		84.30	
	3733	1037	6.42		82.77		78.86	
+2°	3535	982	11.1		126.77	155	84.30	
	3758	1044	9.74		118.26		84.30	
	4165	1157	6.81		98.02		78.81	

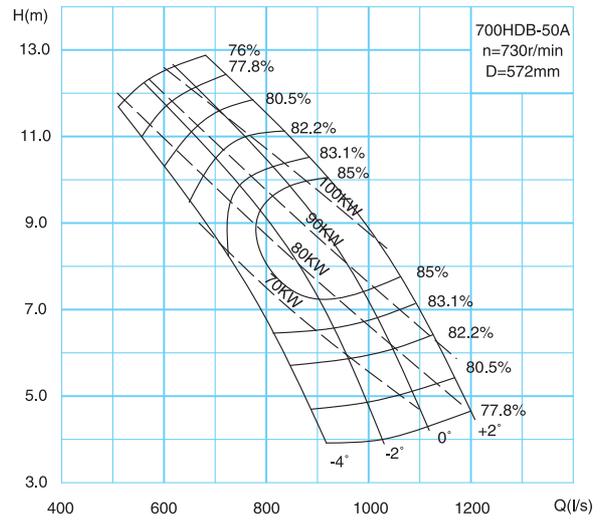


性能参数表及性能曲线

Performance parameter and performance curve

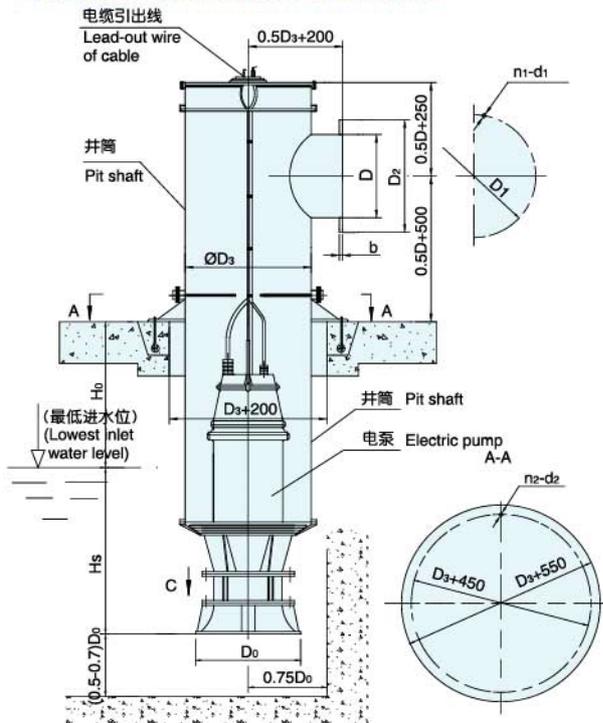
700HDB-50A

叶片 安装 角度 Installation angle	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (KW)		效率 EFF. (%)	叶轮 直径 D(mm) Impeller diameter
	(m³/h)	(l/s)			轴功率 Shaft power	电机功率 Motor power		
-4°	2124	590	10.5	730	75.92	80	80.0	572
	2794	776	7.30		66.91		83.0	
	3197	888	4.70		50.83		80.5	
-2°	2363	656	11.1		86.74	90	82.3	
	3078	855	8.20		81.34		84.5	
	3604	1001	4.80		58.88		80.0	
0°	2552	709	11.6		100.16	110	80.5	
	3341	928	8.60		92.60		84.5	
	3913	1087	5.10		67.10		81.0	
+2°	2747	763	12.0		111.93	132	80.2	
	3582	995	9.00		103.90		84.5	
	4201	1167	5.50		76.74		82.0	

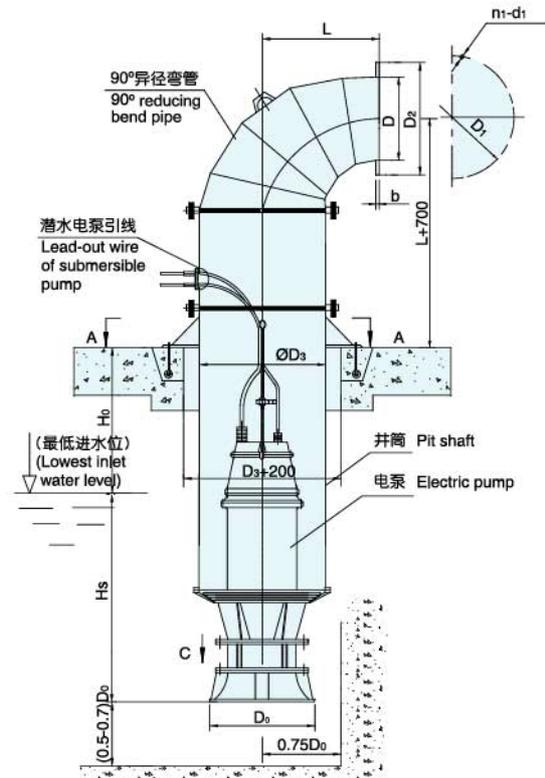


外形及安装尺寸

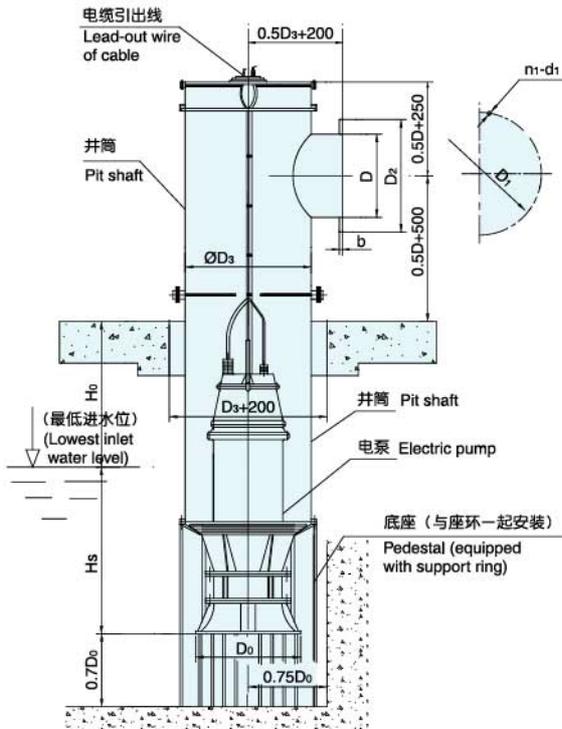
Outline and Installation Dimension



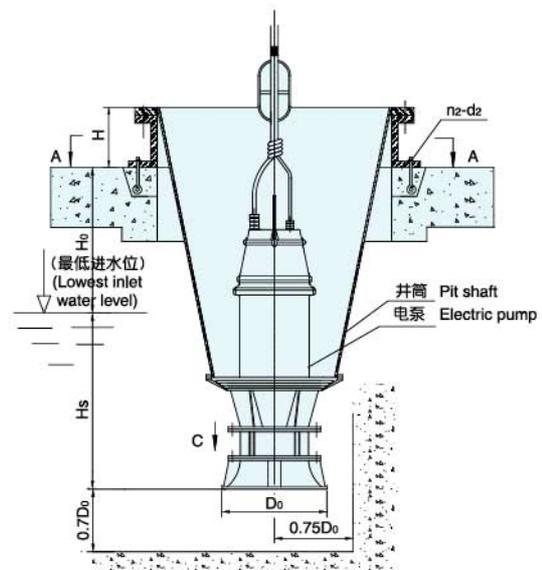
井筒安装外形尺寸 (GT)
Outline dimensions of pit shaft equipment (GT)



井筒弯管安装外形尺寸 (GTW)
Outline dimensions of pit shaft of bend pipe equipment (GTW)



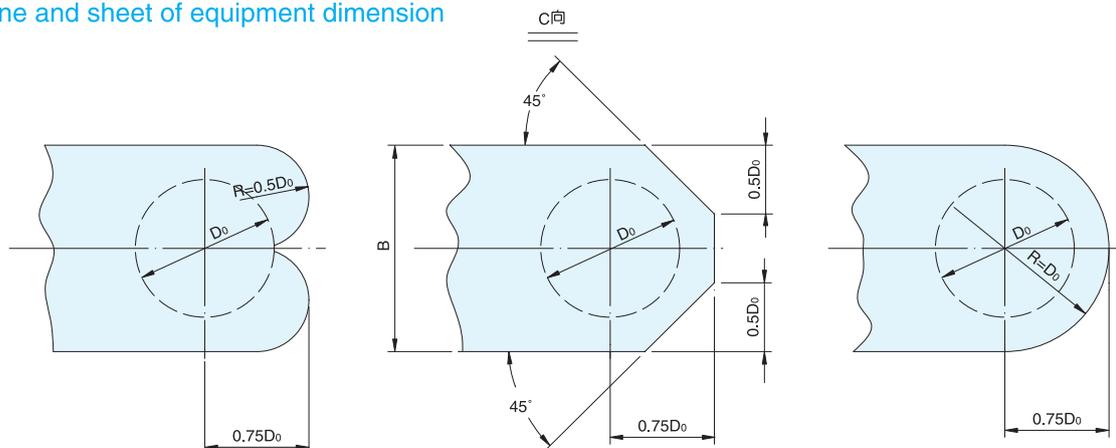
井筒落地安装外形尺寸 (GD)
Outline dimensions of ground pit shaft equipment (GD)



井筒敞开安装外形尺寸 (GK)
Outline dimensions of open pit shaft equipment (GK)

外形及安装尺寸表

Outline and sheet of equipment dimension

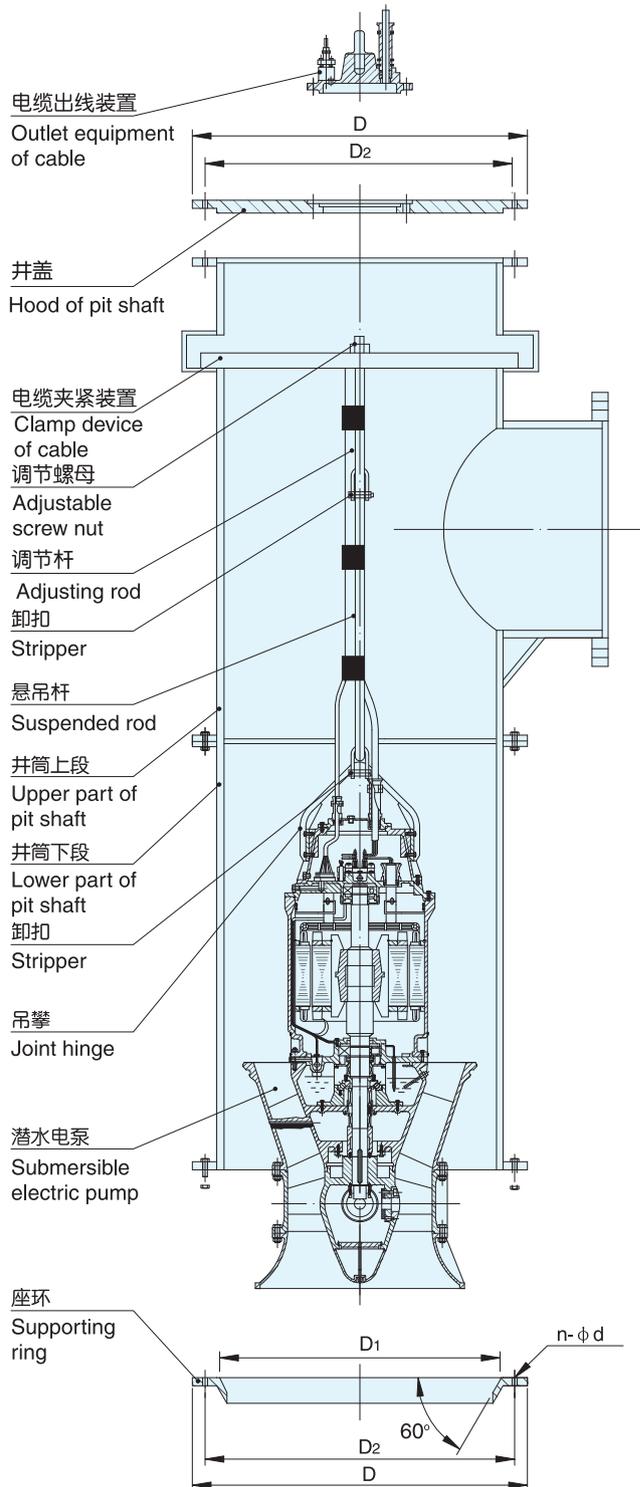


单位(Unit): mm

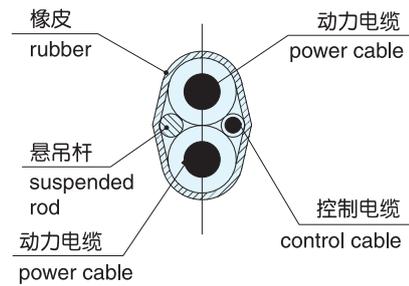
序号 No.	电泵型号 Type	Hs	H ₀	D ₀	D ₃	n ₂ -d ₂	D	D ₁	D ₂	b	n ₁ -d ₁	H	L	电泵重量 Weight of pump (Kg)	井筒重量 Weight of pit shaft (Kg/m)
1	350ZDB	800	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	500 (445)	600 (500)	6-Ø22配 M20 × 300	400	495	540	16	8-Ø22	—	545	420	120
							—	—	—	—	—	~400			
2	500ZDB	1000	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	700	820	8-Ø30	600	705	755	18	10-Ø25	—	695	850	160
							—	—	—	—	—	—			
3	600ZDB	—	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	—	—	—	800	920	980	18	12-Ø22	—	785	1500	200
							—	—	—	—	—	~400			
4	700ZDB	1700	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	920	1020	—	800	920	980	18	12-Ø22	—	785	1500	200
							—	—	—	—	—	~400			
5	400HDB	600	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	500	600	6-Ø22	400	495	540	16	8-Ø22	—	545	560	120
6	500HDB	—	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	700	700	—	600	705	755	—	10-Ø25	—	695	850	160
7	600HDB	900	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	830	1020	8-Ø30配 M24 × 400	800	920	980	18	—	—	785	1800	200
							—	—	—	—	—	—			
8	700HDB	—	H ₀ 由用户定, 合同中应注明H ₀ 值 Ho is specified by the user, whose value should be given out in the contract.	920	—	—	800	920	980	—	12-Ø25	—	785	1800	200

轴、混流潜水电泵井筒式安装系统零部件

Spare parts of installation system of pit shaft type axial-flow and mixed-flow submersible electric pump



电缆绑扎示意
Picture of cable bundle



型号 TYPE	D	D ₁	D ₂	n-φ d
350ZDB	655	500	605	12-φ 23
400HDB	755	600	705	12-φ 23
500Z(H)DB	980	800	920	16-φ 30
600Z(H)DB 700Z(H)DB	1175	1000	1120	24-φ 30



轴、混流潜水电泵及安装系统成套范围：

Complete set range of axial-flow, mixed-flow submersible electric pump and equipment system:

序号 No.	名称 Name	安装形式 Installation formation				备注 Remarks
		井筒式 GT Pit shaft type GT	落地井筒 式GD Ground pit shaft type GD	弯管井筒 式GTW Bend pipe and pit shaft type GTW	开敞式 GK Open type GK	
1	轴、混流潜水电泵 Axial-flow, mixed-flow submersible electric pump	☆	☆	☆	☆	订货时注明泵型、流量、扬程、 电压、安装形式 Indicate pump type, flow rate, lift head, voltage and equipment formation when order goods
2	座环 Supporting ring	☆	☆	☆	☆	HT200或Q235-A HT200 or Q235-A
3	钢制井筒 Pit shaft of steel	☆	☆	☆		Q235-A 或 1Cr18NiTi(用户自定) Q235-A or 1Cr18NiTi (determined by user)
4	扩散管 Diverging pipe				☆	
5	过墙管 Wall pipe	☆	☆	☆	☆	
6	排水管 Drain pipe	○	○	○	○	
7	异径弯管 Reducing bend pipe		☆			
8	井盖 Hood of pit shaft	☆	☆			
9	悬吊杆 Suspended rod	☆	☆	☆	☆	
10	电缆夹装置 Clamp equipment of cable	☆	☆	☆	☆	
11	泵座 Pump base	○	○	○		HT200或Q235-A HT200 or Q235-A
12	电缆出线装置 Outlet equipment of cable	☆	☆	☆	☆	
13	密封垫 Gasket	☆	☆	☆	☆	
14	标准紧固件 Standard fastener	☆	☆	☆	☆	ZnD 或 A2-70 ZnD or A2-70
15	地脚螺栓 Foundation bolt	☆	☆	☆	☆	
16	拍门 Beat gate	○	○	○	○	铸铁拍门或浮箱拍门 Beat gate of cast or beat gate of float tank
17	专用启动柜 Exclusive starting rail span	○	○	○	○	
18	动力电缆 Power cable	☆	☆	☆	☆	随机电缆长 12 米或订货时注明长度 Electric cable is 12 meters long or indicate length when place an order
19	控制电缆 Control cable	☆	☆	☆	☆	
20	水位控制器 Water-level controller	○	○	○	○	
21	机械密封 Mechanic seal	○	○	○	○	备品、备件订货时注明数量 Indicate the number of spare parts when place an order
22	O型密封圈 O-ring	○	○	○	○	
23	轴承 Bearing	○	○	○	○	
24	专用工具 Special tool	○	○	○	○	

说明Note: ☆为必购件，是采用该种安装形式所必备的零部件；

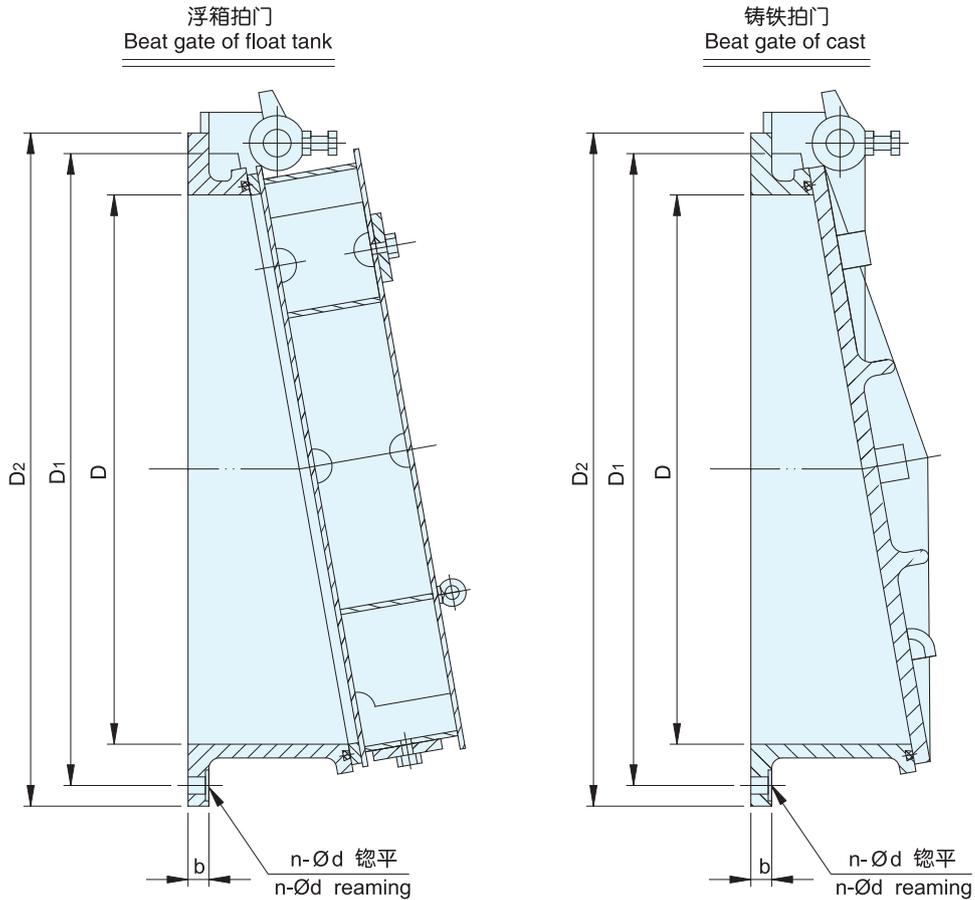
is the parts to be purchased parts, which are necessary for this type of installation formation.

○为选购件，由用户根据需要决定采购与否及数量。

is the optional parts, which the user determines whether to buy or not and the quantity according to his requirement.

拍门

Beat gate



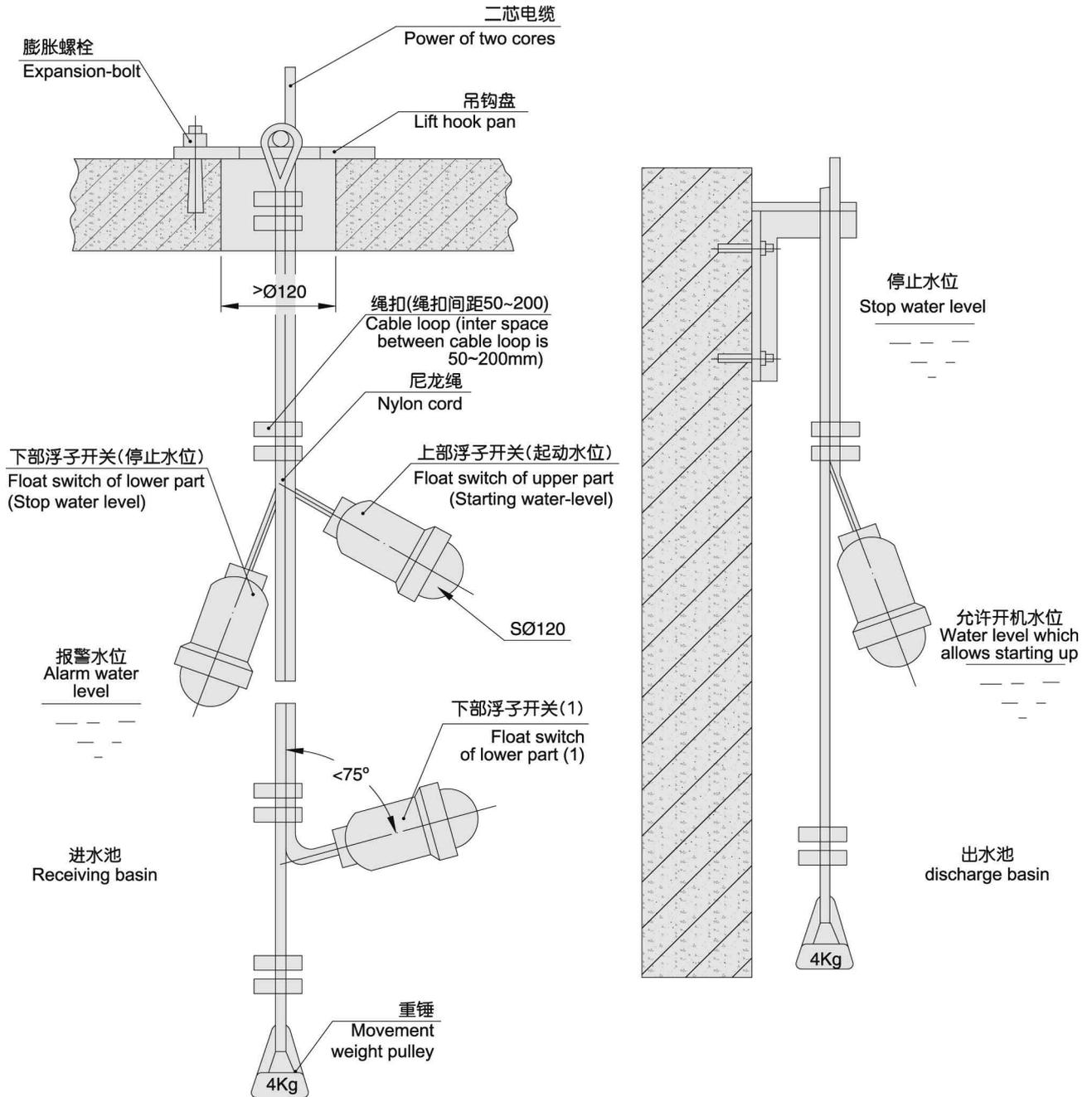
泵出水口径 Diameter of pump outlet	拍门外形尺寸 (mm) External dimension of beat gate (mm)					
	规格 Dimension	D	D1	D2	b	n-φ d
350/400	400	400	495	540	22	8-φ 22
500	600	500	705	755	25	10-φ 25
600	800	800	920	980	28	12-φ 25
700						

浮箱式门页在水中比重略大于水的比重，利用浮力增大其开启角度，降低水力损失，提高泵站的装置效率。

Specific gravity of float chamber type gate in water is a little greater than that of water, so use the buoyancy force to increase the open angle, reduce the loss of hydraulic power, and increase the unit Efficiency of pump station.

水位控制器

Water-Level Controller



YWK-702浮球式水位控制器, 绳扣与浮球间导线长度为0.05–0.2米, 根据要求把浮球固定在尼龙绳索上, 浮球下垂 120° 时, 电阻为 ∞ , 浮球倒置 75° 时, 电阻为0。

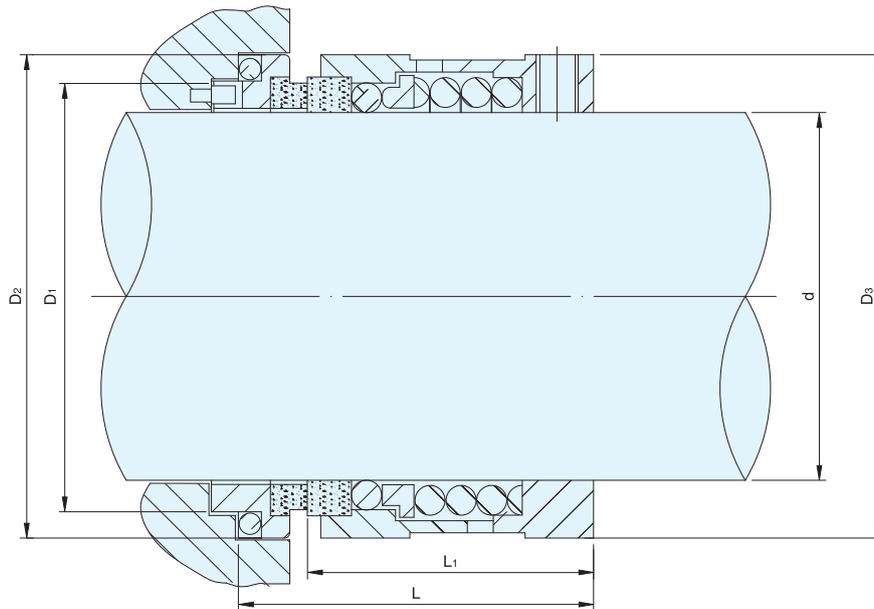
触点容量: 220VAC/0.5A

The conducting wire between the water level controller of floating ball type (YWK-702), cable loop and float ball is 0.05~0.2 meter, fix the float ball on the nylon cord according to the requirement. When the float ball sags to form an angle of 120° , the electric resistance shall be ∞ . When the float ball place upside down forming an angle of 75° , the electric resistance is zero.

Contact capacity: 220VA/0.5A

机械密封

Mechanic Seal



机封型号 TYPE	d	D ₁	D ₂	D ₃	L	L ₁
M524-30	30	40	50	50	60	48
M524-35	35	45	55	55	60	48
M524-40	40	50	60	60	63	50
M524-45	45	55	65	65	63	50
M524-50	50	60	70	70	67	54
M524-55	55	65	75	75	67	54
M524-60	60	70	80	80	67	54
M524-65	65	75	85	85	67	54
M524-70	70	82	92	92	67	54
M524-75	75	88	97	95	67	54
M524-80	80	95	105	105	68	54
M524-85	85	100	110	110	68	54
M524-90	90	105	115	115	73	58
M524-95	95	110	120	120	73	58
M524-100	100	115	125	125	81	66
M524-105	105	120	130	130	81	66
M524-110	110	126	136	136	95	79
M524-120	120	138	150	150	99	79
M524-140	140	158	170	170	101	81
M524-150	150	170	182	182	103	81

潜水电泵内部传感器及功能表

Sensor inside submersible electric pump and its functional table

控制电缆芯线 编号 Control cable No. of component wire	1-8	2-8	3-8	5-8	6-7
传感器名称 Name of sensor	绕组温度测温元件 JW6A(135℃) Winding temperature Temperature element JW6A (135℃)	接线盒内漏水电极 Electrode of water leakage in terminal box	电机内漏水电极 Electrode of water leakage in electrical machinery	油室内漏水电极 Electrode of water leakage in oil container	轴承温度传感器 ADM590 Bearing temperature sensor ADM590
正常状态电阻值 Value of electric resistance in normal state	0	断开 ∞ Cut-out ∞	断开 ∞ Cut-out ∞	≥33KΩ	正向<80KΩ 反向≈∞ Positive direction<80KΩ, reverse direction ≈ ∞
功 能 Function	定子线圈超温保护 温度高于 135℃动 作后 ≥4KΩ After the temperature of stator coil's over temperature protection is higher than135℃≥4	接线盒发生泄漏电阻 R≈0 Terminal box occurs leakage,electric resistance ≈0	电机内腔发生泄漏 电阻R≈0 The inside of electrical machinery occurs leakage,electric resistance ≈0	水进入油中达10%, 油水混合液阻值 <33KΩ Water in oil reaches 10%, resistance of oil-water mixture <33KΩ	集成块测温元件 ADM-590 传出成正比 的毫安级电量信号 Integrated package temperature element(ADM-590) deliver directly proportional electric quantity signal of milliampere grading

说明 Note

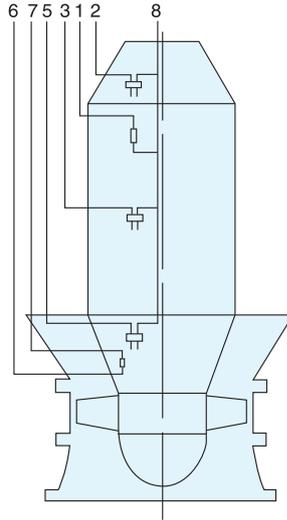
1. 上表中绕组温度测温元件JW6A、轴承温度传感器ADM590 是传感器基本布置，亦可按用户要求，绕组温度测温元件选用P.T.C 或PT100(RTD)，轴承温度传感器选用 PT100(RTD)，但应在合同中注明。
2. 500ZDB、500HDB 及以下规格电机内漏水传感器采用电极。
3. 350ZDB、400HDB 只有绕组过热（传感器 JW6A）、接线盒进水（传感器电极）、电机进水（传感器电极）三种保护。
4. 传感器在潜水电泵内的布置。

1. The winding temperature element JW6A, bearing temperature sensor ADM590 in the above table is the basic arrangement of sensor. Also according to the user's requirement, P.T.S or PT100 (RTD) is selected as winding temperature element; PT100 (RTD) is selected for use of bearing temperature sensor, which should be written in the contract.
2. When there is water leakage in 500ZDB, 500HDB and electrical machinery of following specification, electrode should be adopted for sensor.
3. 350ZDB and 400HDB only protects three type of occasion, which is overheating winding (sensor JW6A), water into terminal box (electrode of sensor), water into electrical machinery (electrode of sensor).
4. The arrangement of sensors in the submersible electric pump.

电泵型号 Type of electric pump	绕组 测温元件 Winding temperature element	接线盒内 漏水传感器 Water leakage sensor in terminal box	电机内 漏水传感器 Water leakage sensor in motor	油室内 漏水传感器 Water leakage sensor in oil chamber	轴承温度 传感器 Bearing temperature sensor
350ZDB、400HDB	JW6A	电极 Electrode	电极 Electrode	—	—
500ZDB、500HDB	JW6A	电极 Electrode	电极 Electrode	电极 Electrode	ADM590
600ZDB、600HDB	JW6A	电极 Electrode	电极 Electrode	电极 Electrode	ADM590
700ZDB、700HDB	JW6A	电极 Electrode	电极 Electrode	电极 Electrode	ADM590

内部传感器布置示意图

Drawing of arrangement of inside sensor



动力电缆

Power cable

本系列潜水电泵选用的动力电缆， $3 \times 70+1 \times 16$ 及以下的规格为矿用橡套软电缆，可供交流 660V 及以下场所使用，产品标准代号为 GB1170-74，型号为U或 UP 型，U 型橡套软电缆外层护套材料为氯丁橡胶，线芯绝缘层为天然橡胶，UP 型为矿用屏蔽橡套软电缆，线芯绝缘为天然橡胶时，电缆导电线芯长期允许工作温度为 $+65^{\circ}\text{C}$ ，当电缆在空气中敷设，环境温度为 25°C 时电缆载流量见表1。

$3 \times 70+1 \times 16$ 以上的规格选用重型橡套电缆，产品标准代号为 GB1169-74，型号为 YCW 型，当电缆在空气中敷设，环境温度为 25°C 时电缆载流量见表2。

Power cable adopted by this series of submersible electric pump is $3 \times 70+1 \times 16$, and the following specification is flexible cable of rubber casing used in mine which can be used in 660V alternating current and in the following occasion. Product standard number is GB1170-74, with U-type and UP-type, the outer retainer of U-type rubber casing flexible cable is neoprene rubber, the insulation of wire core is natural rubber. When UP-type is shield rubber casing flexible cable used in mine and wire core insulation is natural rubber, the wire core of the cable which conducts electricity permits $+65^{\circ}\text{C}$ for long-term use. When the cable is laid in the air and environmental temperature is 25°C , please see current capacity in table 1. For all the specification over $3 \times 70+1 \times 16$, the heavy-duty rubber casing cable is adopted, whose product standard number is GB1169-74 and type is YCW. When the cable is laid in the air and environmental temperature is 25°C , please see current capacity in table 2.

表1 U 型、UP型动力电缆载流量
Table 1 Current capacity of U-type and UP-type power cable

芯线×截面 (mm) ² Wire core × cross section (mm) ²	导电线芯结构 根数/单线直径(mm) Core structure of wireNumber/ single diameter (mm)	电缆最大外径 (mm) Maximum outer diameter of cable(mm)	电缆载流量 ($+25^{\circ}\text{C}$)(A) Current capacity of cable ($+25^{\circ}\text{C}$)(A)
$3 \times 6+1 \times 6$	49/0.39+49/0.39	24.4	46
$3 \times 10+1 \times 6$	84/0.39+49/0.39	29.2	64
$3 \times 16+1 \times 6$	84/0.49+49/0.39	32.5	85
$3 \times 25+1 \times 10$	133/0.49+84/0.39	38.8	113
$3 \times 35+1 \times 10$	133/0.58+84/0.39	40.3	138
$3 \times 50+1 \times 10$	133/0.68+84/0.39	45.3	173
$3 \times 70+1 \times 16$	189/0.68+84/0.49	51.9	215

动力电缆

Power cable

表2 YCW 型动力电缆载流量

芯线×截面 (mm) ² Wire core × cross section (mm) ²	导电线芯结构 根数/单线直径(mm) Core structure of wire/Number/ single diameter (mm)	电缆最大外径 (mm) Maximum outer diameter of cable(mm)	电缆载流量 (+25℃)(A) Current capacity of cable (+25℃)(A)
3×16+1×6	84/0.49+49/0.39	28.2	84
3×25+1×10	133/0.49+84/0.39	36.0	116
3×35+1×10	133/0.58+84/0.39	38.6	143
3×50+1×16	133/0.68+84/0.49	45.8	177
3×70+1×25	189/0.68+133/0.49	51.5	224
3×90+1×35	259/0.68+133/0.58	56.8	273
3×120+1×35	259/0.76+133/0.58	60.0	316

当环境温度超过或低于 25℃,电缆载流量应作相应调整,即以表 1 或表 2 的载流量乘以修正

When the environmental temperature is over or lower than 25℃, current capacity of cable should be adjusted accordingly, i.e., the current capacity in table 1 and table 2 multiplied by the correction

系数如下表 factor as follows

环境温度(℃) Environmental temperature (℃)	15	20	25	30	35
校正系数 Correction factor	1.12	1.06	1.0	0.94	0.87

多根电缆并列敷设时流量的校正系数如下表:

When multiple cable is laid parallel, the correction factor of flow-rate is shown as following

根数 Number	载流量校正系数 Correction factor of current capacity		
	1	2	3
配列方式 Method of array	单根 Single	双根并列 中心距 S Couplet parallel Center distance S	三根并列 中心距 S Three cable is paralleled Center distance S
电缆中心距离 Center distance of cable	S=d	S=2d	S=3d
	1.0	0.9	0.85
	1.0	1.0	0.98
	1.0	1.0	1.0



控制电缆

Control cable

本系列潜水电泵选用KJVDR 31 型 $8 \times 1.5\text{mm}^2$ 橡套软电缆作为控制电缆，电缆最大外径 18mm，适合于 500V 以下场合使用。

This series of submersible electric pump adopts KJVDR31 and $8 \times 1.5 \text{ mm}^2$ rubber casing flexible cable as control cable. Maximum outer diameter of cable is 18mm, which is suitable for usage in the following occasion under 500V.

订货须知

Ordering instructions

1. 订货时应注明潜水电泵的名称、型号规格、台数、安装方式、成套范围、起动方式、扬程、流量、功率、电压、水质条件、主要零部件材质，应注意选择的扬程是否包含泵装置全部水头损失的全扬程，如对全扬程估计不准，可注明扬程及安装方式向我公司咨询计算较准确的扬程，并确定潜水电泵的型号规格。
2. 泵的最高扬程和最低扬程应参考样本的性能曲线和性能表。如有超过范围情况发生向我公司咨询。
3. 在选择安装方式时，对钢制井筒安装方式推荐优先选用样本推荐的尺寸。如需改变表中的尺寸或选用其它安装方式的安装尺寸，请向我公司咨询。
4. 订货时请注意样本成套范围。建议必购件应优先选用，选购件为推荐使用。
5. 起动方式的选择可选择直接启动、Y- Δ 降低启动、自耦降压启动和软启动。本公司可提供各类起动柜、自动液位控制装置及泵站多泵逻辑顺序控制装置。
6. 未注明特殊要求时电泵电源的频率 50HZ，380V。对频率 60HZ 和特殊电压的产品可在订货时商洽。

1. When placing an order, please give clear indication of name, type model, number, installation method, range in kit form, starting method, lift head, flow-rate, power, voltage, water quality condition, and material of main parts of the submersible electric pump. Attention should be paid if the chosen lifting head is the total head including all water head loss of pump equipment. If you can't estimate the total head correctly, please give clear indication of your lift head and installation direction to our company or consult our company for calculating more precise lift head so as to define specification and model of the submersible electric pump.
2. Refer to the performance curve and performance table of catalogue for the highest and lowest lift head of pump. If the lift head is over the range, please consult our company.
3. When you are selecting the installation mode, we recommend the dimensions in the catalogue for installation mode of steel pit shaft. If you want to change dimensions of sheet or select other dimensions of installation mode, please consult us.
4. When placing an order, please notice complete set range of catalogue. We suggest giving priority to the necessary parts, and the optional parts are recommended to use.
5. Starting mode should be direct starting, Y- Δ reducing starting, auto reduced-voltage starting and soft start. Our company provides various starting tank, automatic level control equipment and logic sequence controlling device of multiple pump in pump station.
6. If there is no special requirement indicated, power frequency and voltage of electric pump is 50HZ, 380V. Please arrange with us for the product of 60HZ and special voltage when placing order.