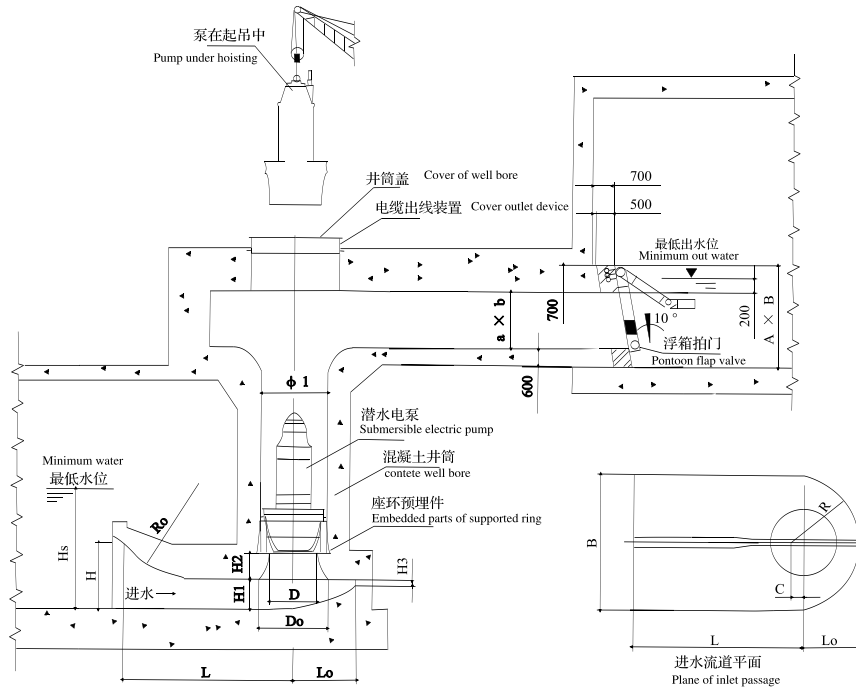


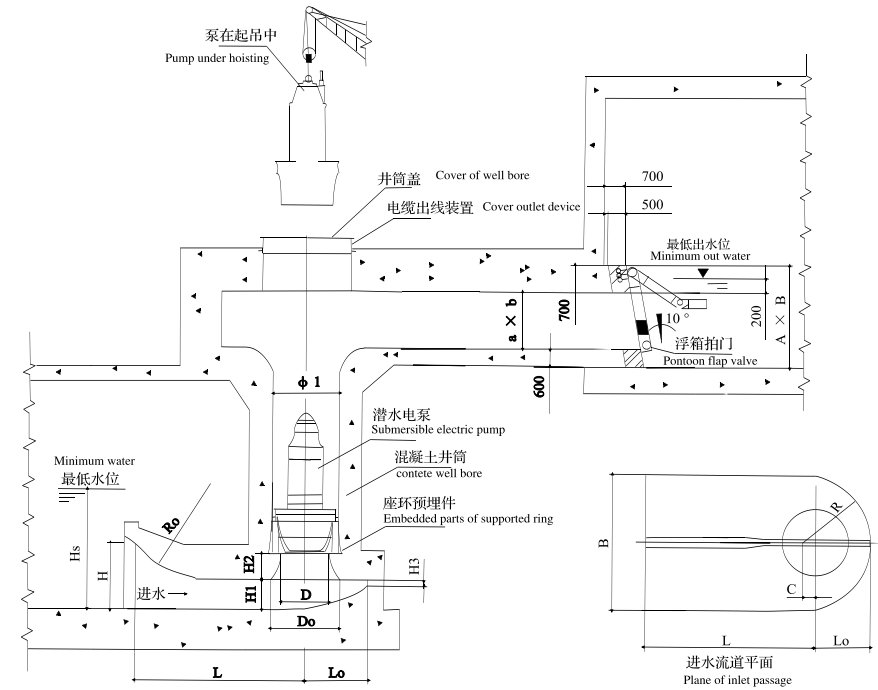
混凝土井筒安装示意图

Installation drawing of concrete well bore



混凝土井筒安装示意图

Installation drawing of concrete well bore



1200-1600ZQB型潜水轴流泵簸箕型进水流道尺寸表 (mm)

1200-1600ZQB type submersible axial-flow pump dustpan inlet passage size table (mm)

序号 No.	电泵型号 Model description	φ1	D	Do	Hs	H	H1	H2	H3	B	L	Lo	R	C	Ro	a × b	A × B	电泵重量 Model weight (kg)
1	1200ZQB-70																	
2	1200ZQB-85																	
3	1200ZQB-100	1650	1080	1620	3200	1750	880		180	2940	3300	1100	1490	370	3120	1200 × 1200 1400 × 1400	2500 × 2200 2700 × 2400	6000
4	1200ZQB-125							780										
5	1400ZQB-70																	
6	1400ZQB-85	1800	1200	1760	3400	1790	980	780	200	3200	3600	1200	1600	400	3400	1600 × 1600 1800 × 1800	2900 × 2600 2700 × 2600	13000
7	1400ZQB-100																	
8	1400ZQB-125																	
9	1600ZQB-70																	
10	1600ZQB-85	2100	1520	2260	3800	2290	1230	980	260	4100	4620	1540	2050	510	4360	2000 × 2000 2200 × 2200	3300 × 3000 3500 × 3200	15000
11	1600ZQB-100																	
12	1600ZQB-125																	

注：根据合同提供进水流道型线图、潜水泵、井筒盖和浮箱拍门及其相应的预埋件图。

Note: Provides the water flow channel lines drawing according to the contract, dives the water pump, well chamber Ge Hefu the box knocks at the door and its is corresponding buries a chart in a dvance.

1200-1400HQB型潜水混流泵簸箕型进水流道尺寸表 (mm)

1200-1400HQB type submersible axial-flow pump dustpan inlet passage size table (mm)

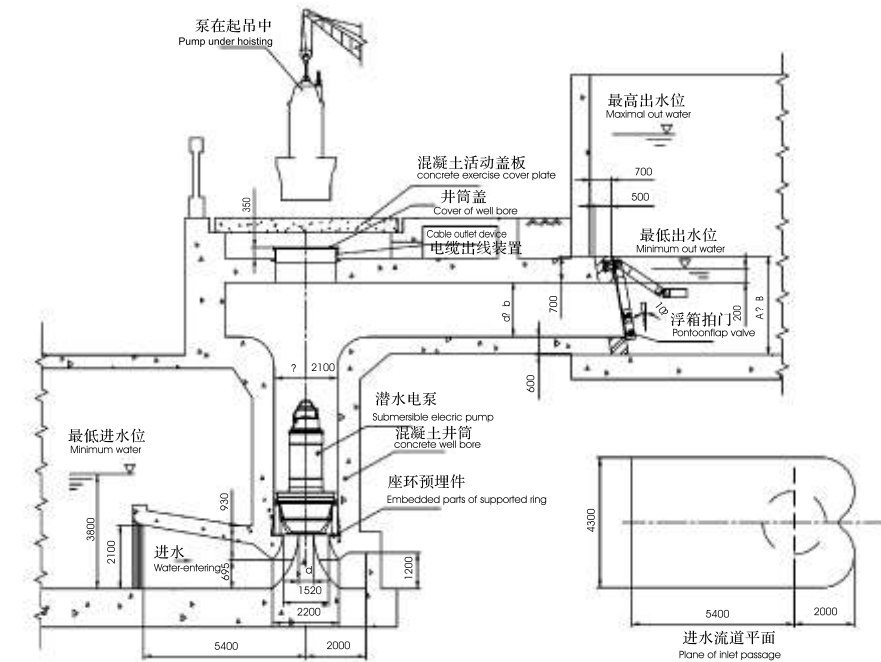
序号 No.	电泵型号 Model description	φ1	D	Do	Hs	H	H1	H2	H3	B	L	Lo	R	C	Ro	a × b	A × B	电泵重量 Model weight (kg)
1	1200HQB-50																	
2	1200HQB-50A	1750	900	1600	2600	1750	880	700	180	2900	3300	1100	1480	370	3120	1200 × 1200 1400 × 1400	2500 × 2200 2700 × 2400	10000
3	1400HQB-40																	
4	1400HQB-50	1800	1060	1760	3000	1790	960	760	200	3200	3600	1200	1600	400	3400	1400 × 1600 1600 × 1600	2700 × 2800 2900 × 2600	14000
5	1400HQB-50A																	

注：根据合同提供进水流道型线图、潜水泵、井筒盖和浮箱拍门及其相应的预埋件图。

Note: Provides the water flow channel lines drawing according to the contract, dives the water pump, well chamber Ge Hefu the box knocks at the door and its is corresponding buries a chart in a dvance.

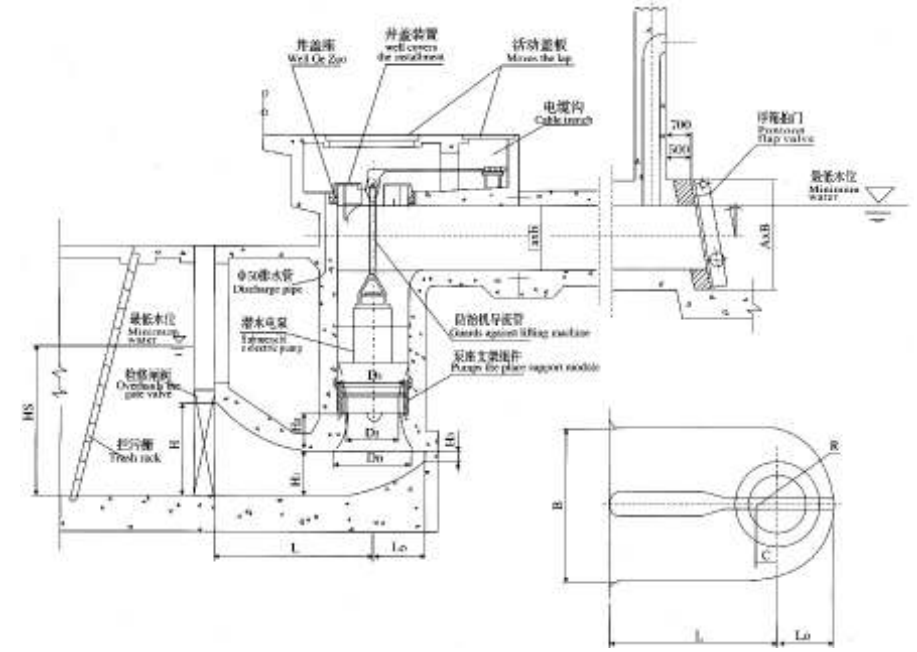
混凝土井筒安装示意图

Installation drawing of concrete well bore



混凝土井筒安装示意图

Installation drawing of concrete well bore



1600ZQB型潜水轴流泵钟型进水流道尺寸表 (mm)

1600ZQB submersible axial-flow pump bell inlet passage size table(mm)

序号 No.	电泵型号 Model description	d	a × b	A × B	电泵重量 Model weight (kg)
1	1600ZQB-70	740	2000x2000	3300x3000	15000
2	1600ZQB-85	648			
3	1600ZQB-100	616	2200x2200	3500x3200	
4	1600ZQB-125	487			

注: 根据合同提供进水流道型线图、潜水泵、井筒盖和浮箱拍门及其相应的预埋件图。

Note: Provides the water flow channel lines drawing according to the contract, dives the water pump, well chamber Ge Hefu the box knocks at the door and its is corresponding buries a chart in a dvance.

1600-2400ZQB行星齿轮减速电泵簸箕形进水流道水泥井筒安装尺寸图表

1600-2400ZQB planet gear decelerates the electric pump dust pan shape to enter the water flow channel cement well chamber to install the size graph

电泵型号 Model description	n (r/min)	H ₃	D ₃	D ₂	D ₀	H	H ₁	H ₂	H ₃	B	L	Lo	R	C	a × b	A × B
1600ZQB	245	3560	2150	1540	2259	2594	1232	1063	262	4096	4620	1540	2048	513	1800x2400	3200x3800
1800ZQB	256.8	5000	2400	1740	2553	2930	1392	1201	236	4628	5222	1740	2314	579	2200x2800	3600x5200
2000ZQB	215	5800	2750	2000	2934	3363	1500	1380	340	5320	6600	2000	2660	666	2400x3000	3800x4400
2400ZQB	176.5	6500	3200	2350	3447	3957	1880	1621	400	6251	7050	2400	3125.5	783	2800x3400	4200x4800

说明: 1、过栅流速≤0.3m/s

Explained: 1. grid speed of flow ≤0.3m/s

2、两泵中心距为B+池壁厚

2. Tow has pumped the center distance is B+pond wall thickness



潜水轴流泵和潜水混流泵 Submersible axial-flow pump and Submersible mixed-flow pump

进水池综合尺寸 (推荐值)

Comprehensive size of suction sump (recommended value)

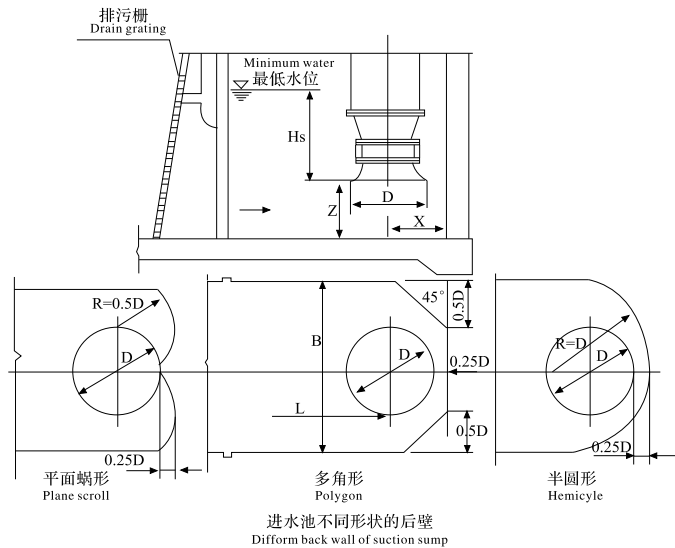
正面进水直线型进水池最佳几何尺寸 (推荐)

The best geometrical size (recommended) of front inflow linear suction pump

进水池几何尺寸 Geometrical size of suction sump	日本机械学会 Japan Society of Mechanical engineers	英国流体力学工程学会 British Hydromechanics Engineering Association	美国水力研究所 American Hydraulic Research Institute	建议取值 Recommended value	使用条件 Applicable conditions
池宽B/D Sump width B/D	2.0~2.5	2~3	2.6~2.8	2.0~2.5	离心泵, 小泵取大值 轴流泵, 大泵取大值 For centrifugal pump, the small pump takes the small value. For axial-flow pump, the large pump takes the large value.
悬空高Z/D Floor clearance to the inlet pipe Z/D	0.5~7.5	0.5~0.75	0.52~0.59	0.5~0.7	小泵取小值 大泵取大值 The small pump takes the small value. The large pump takes the large pump.
后壁距X/D Back wall distance X/D	0.8~1.0	0.75	1.2~1.4	0.5~0.75	平面蜗形后壁取0.5D 其它形式取+0.75D The plane scroll back wall takes 0.5D Other types take+0.75D
池长L/D Sump length L/D		4.0		5~8	

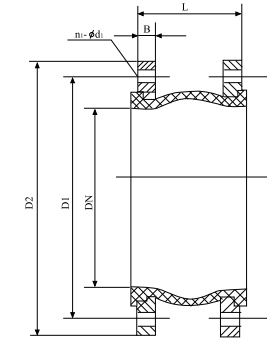
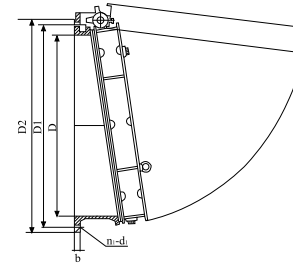
淹没水深HS查阅电泵安装尺寸表

Please refer to electric pump mounting size table for depth of submergence



附件

Accessories



井筒出水口径 Outlet caliber of well bore	浮箱出水拍门外形尺寸 (mm) Outline size of outlet flap valve of pontoon				
	D	D1	D2	b	n1-d1
350	350	445	495	20	8-φ22
400	400	495	540	20	8-φ22
500	500	600	640	20	12-φ22
600	600	705	755	20	12-φ27
700	700	810	860	20	12-φ27
800	800	920	980	20	12-φ27
900	900	1020	1075	25	12-φ27
1000	1000	1120	1175	25	12-φ27
1200	1200	1320	1380	25	12-φ30
1400	1400	1520	1575	32	12-φ30
1600	1600	1760	1830	32	12-φ36

拍门页比重1.2~1.5, 密封空腔结构, 经其在水中的浮力代替挂平衡, 比传统方法增加门页开放角度。

Specific gravity of flap valve is 1.2~1.5, airtight cavity structured, making use of buoyant force in the water to replace the hanging balance, it has larger valve opening angle compared with traditional modes.

公称直径DN Nominal diameter	伸缩节外形尺寸(mm) Expansion joint outline size				
	D1	D2	n1-φd1	B	L
350	460	500	16-φ22	38	265
400	515	565	16-φ26	40	265
500	620	670	20-φ26	42	265
600	725	780	20-φ30	42	260
700	840	895	24-φ30	42	260
800	950	1015	24-φ33	42	260
900	1050	1115	28-φ33	44	260
1000	1160	1230	28-φ36	44	260
1200	1380	1455	32-φ39	44	260
1400	1590	1675	36-φ42	44	350
1600	1820	1915	40-φ48	48	350

潜水轴流泵、混流泵成套供应范围

Submersible axial-flow pump, submersible mixed-flow pump range of complete supply

	安装方式 Installation mode					备注 Remarks
	井筒悬吊安装 Shaft hanging installation	井筒弯管安装 Pipe-bent installation of well bore	井筒落地安装 Floor installation of well bore	井筒敞开安装 Opening installation of well bore	混凝土预制井筒 Concrete prefabricate of well bore	
主机 Main machine	●	●	●	●	●	
控制柜 Control panel	●	●	●	●	●	
井筒 Well bore	●	●	●	●	●	按Ho提供尺寸
盖板 Cover plate	●	●	●	●	●	
支撑座 Supporter	●	●	●	●	●	
穿墙管 Wall pipe	●	●	●	●	●	
排污栅 Drain grating	●	●	●	●	●	
端子箱 Terminal box	●	●	●	●	●	
浮球开关 Float switch	●	●	●	●	●	
浮箱拍门 Pontoon flap valve	●	●	●	●	●	
伸缩节 Flexible door	●	●	●	●	●	
O形圈 O ring	●	●	●	●	●	按合同供货
叶片 Blade	●	●	●	●	●	按合同供货
轴承 Bearing	●	●	●	●	●	按合同供货
机械密封 Mechanical seal	●	●	●	●	●	按合同供货
电缆线 Cable conductor	●	●	●	●	●	按合同供货
进线密封 wire seafing	●	●	●	●	●	按合同供货



常见故障排除

Failures causes and troubleshooting

故障现象 Failure	原因分板 Possible causes	排除方法 Troubleshooting
<p>动力设备超负荷 Dynamic device overloaded</p>	<ol style="list-style-type: none"> 1、叶片的安装角度超过规定值 2、扬程过高，出水管路有阻塞 3、叶片外缘与叶轮外壳有摩擦 4、泵的转速超过规定值 5、水泵的叶片绕有杂物 6、进水池不符合要求 7、泵未在运行范围内运行 	<ol style="list-style-type: none"> 1、重新调整(变小)叶片的安装角度 2、清理出水管路。 3、检查叶片磨损情况重新调整安装 4、调整原动机电源频率，使其符合泵的额定转速 5、清除杂物，停机用水清洗几次，并在进水池口加上拦污栅，防止杂物再进入 6、水池过小，应予放大；两泵间距过小，设法移开；改善进水条件，清除进水口涡 7、核查泵的操作数据
<p>流量减少或不出水 Reduced flow or no flow</p>	<ol style="list-style-type: none"> 1、叶轮浸入深度不够 2、叶轮外圆磨损或叶片部分击坏 3、扬程过高 4、潜水泵转向错误 5、潜水泵转速未达到规定转速 6、潜水泵轮毂体与叶片之间断裂，或叶片固定螺母松了 7、拍门打不开 	<ol style="list-style-type: none"> 1、提高运行水位 2、更换叶片或调整间隙 3、调节扬程至使用范围之内并检查出水管路有无阻塞 4、纠正水泵旋转方向 5、提高电源频率，提高转速以便达到规定值 6、重新安装叶片，紧固螺母 7、检修拍门

常见故障排除

Failures causes and troubleshooting

故障现象 Failure	原因分板 Possible causes	排除方法 Troubleshooting
<p>潜水泵运行有杂音或振动 Submersible pumps works with noise or vibration</p>	<ol style="list-style-type: none"> 1、叶轮浸入深度不够 2、潜水泵基础不够坚固或螺母松动 3、叶轮叶片外圆与叶轮外壳有摩擦 4、叶片部分被杂物打碎或脱落 5、进水流态不稳定，产生漩涡 6、几个泵安装在同一水池内排列不当，互相干扰 7、潜水泵在不稳定工况点处运行 	<ol style="list-style-type: none"> 1、提高运行水位 2、加固基础，拧紧螺母 3、检查叶轮部件和泵轴垂直度 4、更换叶片 5、改善泵的进水条件 6、重新布置或进水池内增添隔板 7、选型不当，重新选型
<p>潜水泵不能启动或 启动后断路器断开 Submersible pump not start or circuit breaker breaks after starting</p>	<ol style="list-style-type: none"> 1、绕组、接头或电缆断路 2、叶轮卡死 3、控制保护装置动作 4、电压不在正常范围内 5、接线不正确 6、控制柜电器故障 	<ol style="list-style-type: none"> 1、用万用表检查，如果证明是断路，检查绕组、接线头和电缆 2、调整叶轮 3、检查保护装置 4、将电压调至规定范围 5、检查核对控制箱的接线 6、检查并更换元器件