



## 回流潜水泵

## Return submersible pump



## 概述 Summary

回流潜水泵是在潜水搅拌机生产技术基础上开发出的产品，该泵为二级污水处理厂混合液回流、反硝化脱氮除磷的专用设备，亦适用于污水、排污、水处理过程中微扬程、大流量场所。

The return submersible pump series is a product developed on the basis of the production technique of submersible mixers, it is a special equipment used for the reclamation of the mixed liquids, denitrification, denitridation and nitrogen removal in Class II sewage treatment plant and also used in the locations which require low lift and large discharge in the ground surface water supply or drainage projects and water treatment projects.

## 特点 Features

按照微扬程、大流量的工作模式特别设计。

主机采用不锈钢冲压成型结构，水力性能好，效率高。

一体化吊装设计，可实现在水下快速安装。

采用双重机械密封和多重电机保护功能，提高运行可靠性。

Special design is made to the operating mode of short lift and large discharge.

The main equipment employs the stainless structure of the punched components, resulting in very good hydraulic performance and high efficiency.

The integrated installation design can realize the quick underwater installation.

The dual mechanical sealing arrangement and the multiple motor protection will improve operating reliability.

抗堵塞、缠绕，使用可靠；

采用最新的密封材料，可以安全连续运行1000小时以上；

结构紧凑，安装维修方便；

主机采用冲压成形结构，体积小，精度高，耐腐蚀无噪音；

内设漏电漏水及电机过载保护（报警）装置，确保产品安全与可靠

Anti-clogging, winding, reliable use;

Using the latest sealing materials, it can operate safely and continuously for more than 1000 hours;

Compact structure, easy installation and maintenance;

The main machine adopts stamping forming structure, small size, high precision, corrosion resistance and no noise;

Built-in leakage and water leakage and motor overload protection (alarm) devices to ensure product safety and reliability.

## 适用条件 Conditions of usage

介质温度:≤40°C

The highest temperature of the media shall not exceed 40°C

介质pH值:5~9 .

The pH value of the media:5~9

介质密度:<1150kg/m<sup>3</sup>

The density of the media shall not exceed 1150kg/m<sup>3</sup>

潜水深度:<20m

The depth of submersion shall not exceed 20m.

电源:380V, 50Hz

The electric power supply: 380V50Hz

电机:F/H级绝缘并符合IP68, 24小时连续运行

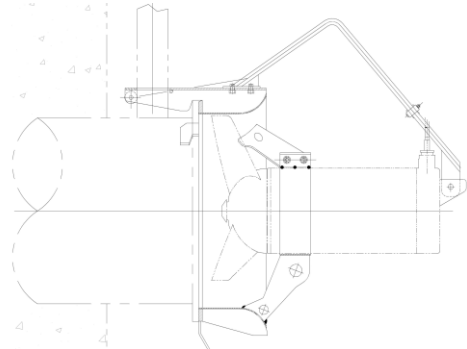
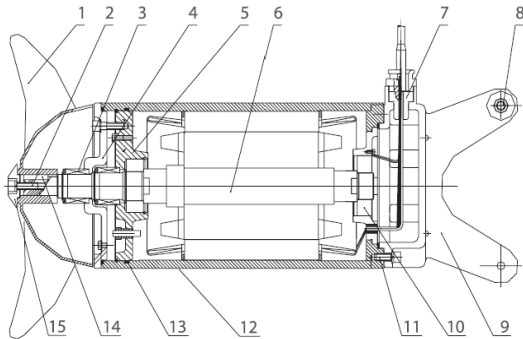
The motor: F/H class insulation and in accordance withIP68, continuous operating in 24hr.

潜水泵必须完全潜入水中工作

The submersible mixer must operate in the complete submersioninto water.



## 结构简图 Construction



不同型号结构略有差异 The structure will be different according to the model.

NO.	名称 Name	材质 Material	
		GB	JIS
1	叶浆 Propeller	0Cr19Ni10	SUS304
2	锁紧螺钉 Lock nut	0Cr19Ni10	SUS304
3	机械密封 Mechanical seal	SiC-SiC	SiC-SiC
4	机封座 Mechanical seal stand	0Cr19Ni10	SUS304
5	前轴承座 Front bearing support	HT200	FC200
6	主轴 Main shaft	2Cr13	SUS420J1
7	水密头 Watertight head	硫化橡胶	VR
8	滚轮 Roller	0Cr19Ni10	SUS304
9	接线盒 Junction box	0Cr19Ni10	SUS304
10	轴承 Bearing	-	-
11	内六角螺钉 Inner hexagonal screw	0Cr19Ni10	SUS304
12	机壳 Sheath	0Cr19Ni10	SUS304
13	O型橡胶密封圈 O-type sealant ring	丁腈-70/NBR-70	NBR-70
14	平键 Flat key	45	S45C
15	叶轮压紧圈 Wheel clamp ring	0Cr19Ni10	SUS304

- 1、电缆：电缆采用特制水密电缆；
- 2、接线盒：接线盒是全封闭的，与周围液体和定子箱是隔离的；
- 3、电机：50Hz鼠笼式3相潜水异步电动机，F级绝缘，防护等级P68，电机由周围介质冷却；
- 4、轴：电动机的轴采用不锈钢材料制作，转子作动平衡试验；
- 5、密封：静密封为O型密封圈，轴密封为机械密封，将油室与周围介质隔离；
- 6、轴承：采用进口轴承，设计使用寿命可达100,000小时以上；
- 7、油室：油用于润滑和冷却机械密封摩擦副，并隔离渗透液；
- 8、叶轮：叶轮有三枚叶片，叶片宽而薄，表面光滑呈后掠式，高效、无阻运转，且具有自清功能；
- 9、进口锥管：进口锥管的目的是为了形成最好的流动状态；
- 10、排出接头：排出接头用于将进口锥管固定在出水管上；
- 11、引导装置：引导装置由两根管子（导管）和上方导管夹具所组成。

1. Cable: The cable adopts special watertight cable;
2. Junction box: The junction box is fully enclosed and isolated from the surrounding liquid and stator box;
3. Motor: 50Hz squirrel-cage 3-phase submersible asynchronous motor, F-class insulation, protection class IP68, the motor is cooled by the surrounding medium;
4. Shaft: The shaft of the motor is made of stainless steel, and the rotor is tested for dynamic balance;
5. Seal: The static seal is an O-ring, and the shaft seal is a mechanical seal, which isolates the oil chamber from the surrounding medium;
6. Bearings: Imported bearings are used, and the designed service life can reach more than 100,000 hours;
7. Oil chamber: oil is used to lubricate and cool the friction pair of the mechanical seal, and isolate the permeate;
8. Impeller: The impeller has three blades, the blades are wide and thin, the surface is smooth and swept back, and the operation is efficient and unobstructed, and it has a self-cleaning function;
9. Inlet cone pipe: The purpose of the inlet cone pipe is to form the best flow state;
10. Discharge joint: The discharge joint is used to fix the inlet tapered pipe on the water outlet pipe;
11. Guiding device: The guiding device consists of two pipes (catheters) and the upper catheter clamp.

标配材质，其它材质另询 This is standard material, If other material needed, Plesae contact us.

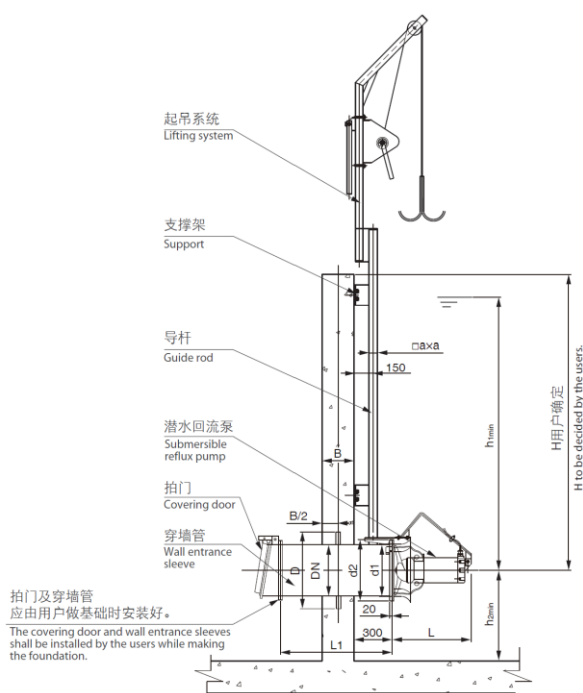
### 型号说明 Model directions



### 技术参数 Technical parameter

型号 Model	行业型号 Industry model	电机功率 Motor power (KW)	额定电流 Rated current (A)	桨叶直径 Propeller Dia.	桨叶转速 Propeller speed	穿墙管公称通径 Nominal dia. of sleeve
ERSP1.5-400-740	QJB-W1.5	1.5	4.1	400	740	400
ERSP2.5-400-740	QJB-W2.5	2.5	6.8	400	740	400
ERSP4-620-480	QJB-W4	4	15	620	480	600
ERSP5-620-480	QJB-W5	5	16	620	480	600
ERSP7.5-620-480	QJB-W7.5	7.5	23	620	480	600
ERSP10-620-480	QJB-W10	10	30	620	480	600
ERSP15-620-480	QJB-W15	15	39	620	480	600
ERSP18.5-760-480	QJB-W18.5	18.5	42	760	480	800
ERSP22-760-480	QJB-W22	22	50	760	480	800

### 安装系统 Installation System



回流潜水泵采用自动耦合安装系统，不用任何机械拆卸便可迅速提升，方便快捷。  
 本设备除穿墙管需预埋外，导杆、起吊杆用膨胀螺栓与池体连接，无需预埋件。预埋件和拍门由用户自行采购安装。

The reflux submersible pump employs the automatic coupling installation system, which facilitates quick elevation without any mechanical dismantling, hence the convenience and quickness. Apart from the wall entrance sleeves that require preembedding, the guide rod and lifting rod of the present equipment are to be connected with the pond wall with the use of expansion bolts without the need of any other pre-embedded parts. The pre-embedded parts and the covering door shall be purchased and installed by the users.



性能曲线 Performance curves

