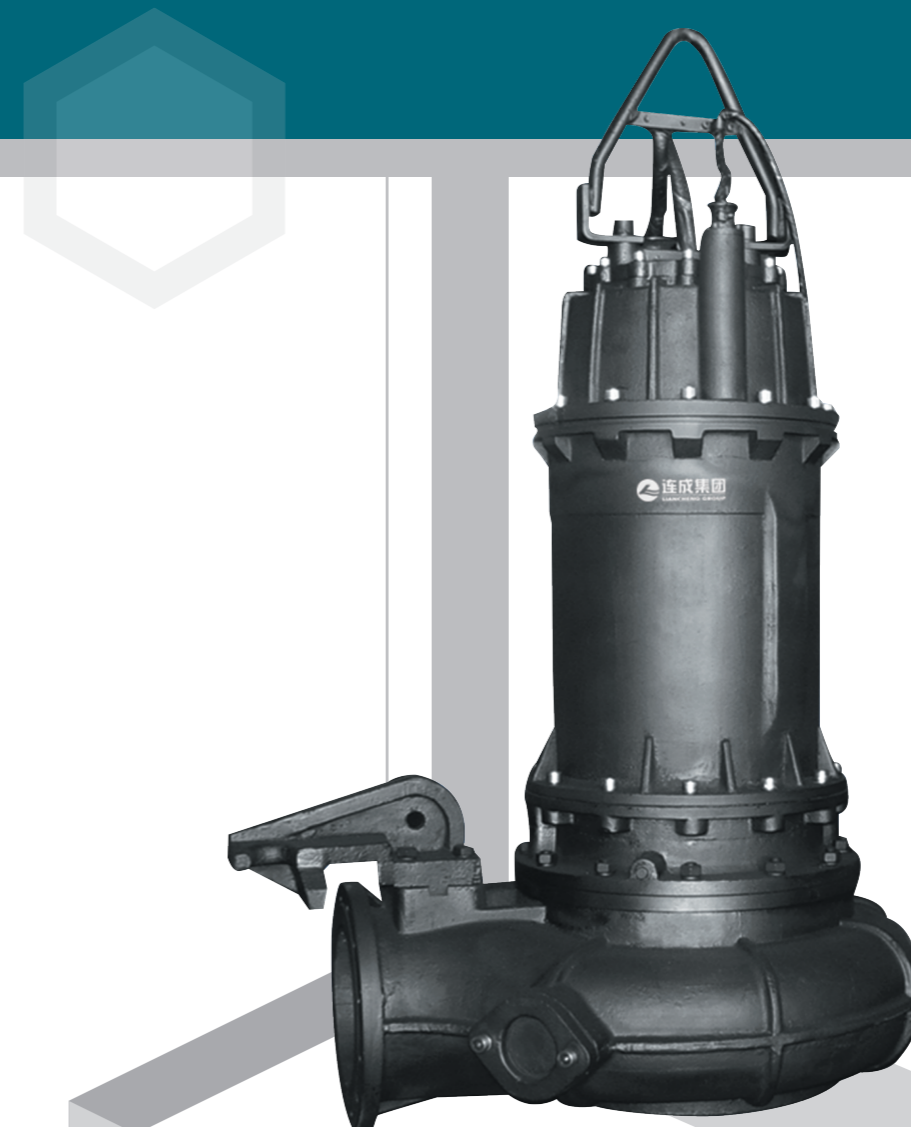




WQ系列潜水排污泵

WQ SERIES SUBMERSIBLE SEWAGE PUMP



上海连成（集团）有限公司
SHANGHAI LIANCHENG (GROUP) CO., LTD.

地址：上海市江桥镇曹安公路3616-3618号
邮编：201812
总机：(021) 59138888
传真：(021) 59136782
800免费咨询电话：800-820-5009
400免费咨询电话：400-188-3339

Address: 3616-3618 Can'an Road, Jiangqiao Shanghai
P.C.: 201812
Switchboard: (021) 59138888
Fax: (021) 59136782
800 Free consultation Tel: 800-820-5009
400 Free consultation Tel: 400-188-3339



连成集团微信订阅号

目 录

CONTENTS

产品概述 Outline of the product	1
主要用途 Main purpose	1
使用条件 Conditions of use	1
WQ系列泵的特点和使用优点 Characteristic and advantages of use of WQ series pump	1
WQ型结构图 Model WQ structure drawing	3
WQ型结构说明 About the structure of model WQ	4
各种保护装置说明 Various protectors	6
WQ型泵主要零件的材料 Materials of the main parts with model WQ pump	7
WQ型泵安装方式 Installation mode of model WQ pump	7
WQ型泵型号说明 About the model of model WQ pump	10
安装尺寸图的说明 About the installation dimension chart	11
潜污泵专用电控柜 Submersible pump specially used electric control cabinet	14
订货说明 Notices at order	19
供货一览表 List of supply	20
WQ型泵型谱图 WQ type atlas of style	21
WQ型泵性能参数 WQ type pump performance	22
WQ型泵安装方式 WQ type pump installation	28
WQ型泵自动耦合安装尺寸表 WQ type pump auto-coupled installation dimensions table	29
WQ型泵固定式安装尺寸表 WQ type pump fixed installation dimensions table	37
使用、检查与维修 Use, check and service	45
故障原因及排除方法 Failures causes and troubleshooting	47

产品概述 Outline of the product

上海连成研制开发的WQ系列潜水排污泵，吸收了国内外同类产品的优点，在水力模型，机械结构、密封、冷却、保护、控制等方面进行了综合性优化设计，排送固形物和防纤维缠绕的性能好，高效节能，可靠性强；配以专业开发的专用电控柜，不但可实现自动控制，更能确保电机的安全可靠运行；安装方式多样，简化泵站、节省投资。

主要用途 Main purpose

WQ系列潜水排污泵主要用于市政工程、楼宇建筑、工业排污和污水处理场合，排送含固形物和长纤维的污水、废水、雨水。

使用条件 Conditions of use

- 1、介质温度不超过40℃，介质密度 $\leq 1050\text{kg/m}^3$ ，PH值在4-10范围内。
- 2、最低运行液位：见安装尺寸图中的▼（有电机冷却系统）或▽（无电机冷却系统）。
- 3、泵的主要零件材料为铸铁或球墨铸铁，所以不能应用于抽送强腐蚀性或含有强磨蚀性固体颗粒的介质。
- 4、介质中固形物的直径不应大于流道的最小尺寸，推荐为流道最小尺寸的80%以下。流道尺寸见后面各规格泵的“主要参数”\$ 介质中纤维的长度不应大于泵的排出口径。

WQ系列泵的特点和使用优点 Characteristic and advantages of use of WQ series pump

1、400口径以下泵的叶轮大部分为双流道叶轮，极少数为多叶片离心式叶轮。400口径及以上多为混流式叶轮，极少数双流道叶轮。泵体流道宽敞，固形物容易通过，纤维不易缠绕，最适合排送污水污物。

WQ series submersible sewage pump developed in Shanghai Liancheng absorbs the advantages with the same products made abroad and at home, holds a comprehensive optimized design on its hydraulic model, mechanical structure, sealing, cooling, protection, control etc. points, features a good performance in discharging solids and in the prevention of fiber wrapping, high efficiency and energy-saving, strong reliability and, equipped with a specially developed electric control cabinet, not only the auto-control can be realized but also the motor can be made sure to work safely and reliably. Available with various types of installation to simplify the pump station and save the investment.

WQ series submersible sewage pump is mainly used for the municipal works, buildings, industrial sewage and sewage treatment to discharge the sewage, waste water and rainwater containing solids and long fibers.

1. The medium temperature is not over 40℃, the medium density is $\leq 1050\text{kg/m}^3$ and the PH value is within 4-10.
2. For the lowest running liquid level, see ▼ in the installation dimension chart (with the motor cooling system) or ▽ (without the motor cooling system).
3. The materials of the main parts of the pump are cast iron or ductile iron, so it can not be used to pump strong corrosive medium or that containing strong abrasive solid grains.
4. The diameter of the solids in the medium shall not be bigger than the minimum size of the runner, recommended to be below 80 of the said size. See the "Main parameters" of the pumps in various specifications thereafter for the runner size and the length of the fibers in the medium shall not be over the discharge aperture of the pump.

1. Most of the impellers with the pump of an aperture below 400 come as a bi-runner impeller and few of them is a multi-blade centrifugal impeller. While most of the impellers with the pump of an aperture 400 and above come as a mixed-flow impeller and few of them is a bi-runner impeller. The spacious pump casing runner lets the solids easily passing and the fibers uneasily wrapping so that it is most suitable for discharging sewage and dirt.

2、两个独立的单端面机械密封串联安装，其安装方式均为内装式，与外装式相比，介质更不容易泄漏，同时其密封摩擦副更容易被油室中的油所润滑。采用特殊螺旋槽或小缝隙阻止固体颗粒向泵侧机械密封沉积，保证其稳定工作。别具特色的机械密封布置方式和轴承组合。使轴的悬臂短，刚度大，跳动小，更有利于减少机械密封的泄漏，延长机械密封的寿命。

3、防护等级IPX8的电机潜水工作，冷却效果最佳，F级绝缘使绕组能承受更高的温度，比起普通电机，更加经久耐用。

4、专用电控柜与液位浮球开关和泵保护元件的完美结合，实现漏水和绕组过热的自动监测和报警，短路、过载、缺相、失压时的断电保护，泵的启动、停止、交替和最小淹没深度的精确的自动控制，无须专人看管，自耦降压启动和电子软启动任你选择，所有这些，全方位地确保您安全、可靠、无忧用泵。

5、电机和水力部件直联成一体，无须转轴对中，拆装方便省时间，有利于现场维护，减少停机时间，节省维修费用；结构简单紧凑，体积小，泵上有专门的起吊提手，只须用简单的起重设备；占地少，泵可以直接放到污水池中，不需要建造专门的泵房，可节约基建投资40%以上。

6、有自动耦合式安装、移动式硬管安装、移动式软管安装、固定式湿式安装、固定式干式安装五种安装方式供您灵活选择。

自动耦合式安装，泵与出水管路之间通过耦合装置的出水管座连接，不用常规紧固件，泵与出水管座连接，脱开时只须简单地将泵沿导杆放下、吊起，十分省心、省事、省时间。

固定式干式安装的潜污泵不仅可代替老式的立式排污泵，而且不怕洪水淹没，因此不需要额外的防洪设施，有利于降低基建成本。

2. Two independent single end-face mechanical seals are in-series mounted, with the installation mode as the internal installation mode, and, compared with the external installation mode, the medium is more uneasy to leak and also its sealing friction pair are easier lubricated by the oil in the oil chamber. A special spiral slot or a small seam is used to resist the solid grains to be deposited on the mechanical seal by the pump to make sure of its stable work. The unique mechanical seal layout mode and bearing combination makes the suspension arm of the shaft short, a heavy rigidity and a small jump, more benefit for reducing the leak from the mechanical seal and extending the life of it.

3. The motor of a protective grade IPX8 works in submerged mode and holds the best cooling effect. The grade F insulation makes the winding bearable to a higher temperature and, compared with common motors, more durable.

4. The perfect combination of the special electric control cabinet, the liquid level floating-ball switch and the protective components carries out the automatic monitor and alarm for water leak and winding overheat, the protections at short-circuit, overload, lack-of-phase and voltage-lost cut-off, the accurately auto-controls of start, stop, alternation and minimum submerged depth of the pump, without need of special persons for looking-after, option at will is available between the self-coupled reducing start and electronic soft start. All of these makes sure of safe and reliable use of the pump without any worry.

5. Both motor and hydraulic parts are directly linked together, without need of turning the shaft for centering, easily disassembled and assembled to save the time, benefit for the site maintenance, reducing the stopped time, saving the cost of repair; simple and compact structure leaves a small volume, only simple lifting equipment is needed, as a special lifting handler is set on the pump; less land area and the pump can be placed directly in the sewage pond, without need of a special pump house, and the therefore the construction investment can be saved by over 40%.

6. Available with five installation modes for you to choose: auto-coupled, movable hard-pipe, movable soft-pipe, fixed wet type and fixed dry type installation modes.

The auto-coupled installation means the connection between the pump and the water-out pipeline is made with the water outlet pipe seat of the auto-coupling, without use of the common fasteners, and, when to separate the pump from the water outlet pipe seat, just place it down along with the guide rod and then lift it, simply enough to get free from worry and trouble and save time.

The submersible sewage pump in the fixed dry type installation not only can replace the old vertical sewage pump but also does not fear of flood submersion, so there is no need of a separate flood-proof facility, benefit for lowering the cost of construction.

移动式硬管安装、移动式软管安装、固定式湿式安装都是非常简便的安装方式。

7、泵可装置电机冷却系统，不仅可充分冷却电机，还有利于降低污水池的液位，最大限度地排除池中的污水。

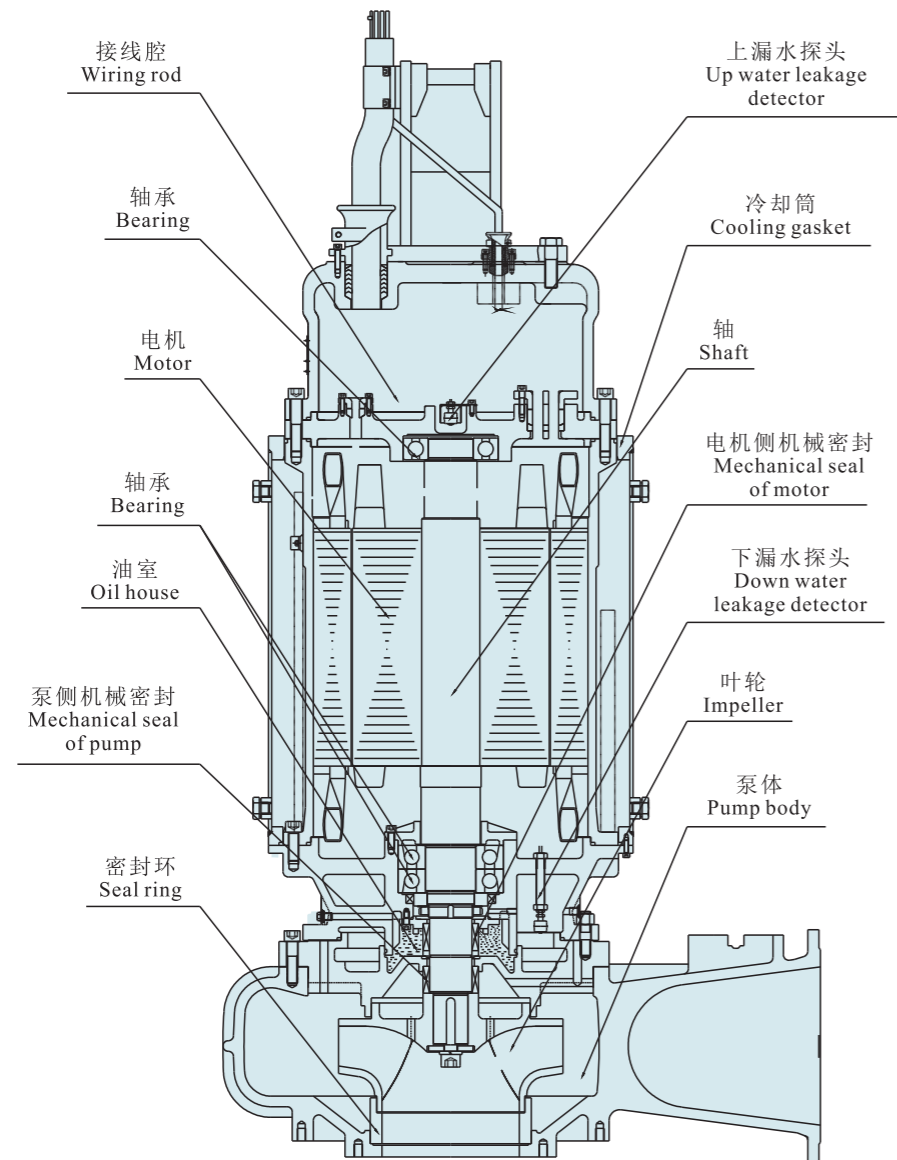
8、泵潜水工作，基本不存在噪声问题，有利于保护环境。

Both movable hard-pipe and soft-pipe installations, as well as the fixed wet type one, are all the very simple modes of installation.

7. A motor cooling system can be set with the pump, which can not only sufficiently cool the motor but also be helpful for lowering the level of the sewage pond so as to discharge the sewage therein to the utmost degree.

8. The pump works in the submerged mode, so there is no noise problem and benefit for environmental protection.

WQ型结构图 Model WQ structure drawing



WQ型结构说明 About the structure of model WQ

泵体、叶轮

采用CAD技术进行反复修改设计，使泵体和叶轮得到最佳匹配，流道最宽阔，污物通过性最好。叶轮经严格平衡，从而使振动减至最低，并最大限度地延长轴承和机械密封的寿命。

电机

专门设计制造的潜水电机，防护等级为IPX8，定子绕组为F级绝缘，绝缘材料的极限工件温度155℃。绕组内嵌有过热保护元件，通过电控拒对电机进行保护。

电机的冷却

功率11kW及以上的泵可装置电机冷却系统对电机进行冷却。冷却介质在定子外壳和冷却套筒之间流动。冷却介质可以是被泵送介质，也可以是外接冷却水

（功率11kW~30kW-4P的泵只能用外接冷却水）。用被泵送介质冷却与用外接冷却水冷却，冷却通道有所不同，所以，用户要装置冷却系统时，应在订单中说明是用被泵送介质冷却还是用外接冷却水冷却。当冷却介质是被泵送介质时，泵的结构可以防止大颗粒进入冷却通道。长时期运行后，套筒中可能形成小颗粒的淤积，可以通过冷却套筒上的管接头外接冲洗液进行冲洗。采用电机冷却系统的好处是可以降低最低液位，有利于最大限度地排除集水井中的污水。

功率11kW及以上的泵也可以不装置电机冷却系统，由被泵送介质直接冷却电机，但这种情况下的液位比有冷却系统时的液位要高许多。

机械密封

机械密封选用摩擦系数很低而且耐磨的摩擦副材料，橡胶件为耐油的丁腈橡胶，金属件为不锈钢。

油室

油室内的油，除了润滑机械密封外，还可将轴承的热量带走，还具有阻止液体渗透的附加安全功能。

油室内装有漏水探头，当泵侧机械密封渗漏到油室的水达到一定浓度时，漏水探头通过电控柜报警，提醒操作人员换油或维修机械密封。

Pump casing, impeller

The design for both pump casing and impeller has been repeatedly modified by means of CAD technique to make both best matched, the runner most wide and the passing ability of dirt most optimized. The impeller has been made strictly balanced so as to let the vibration reduced to minimum and the life of both bearing and mechanical seal to the utmost degree.

Motor

The specially designed and made submersible motor holds a protective grade IPX8, the stator winding is in grade F insulation and the limit working temperature of the insulation material is 155℃. An overheat protective element is inlaid inside of the winding and performs protection of the motor through the electric control cabinet.

Cooling of the motor

The pump of a power 11kW and above can be set with a motor cooling system to cool the motor. The cooling medium, either the pumped medium or the externally led-in cooling water (for the pump of a power 11kW-30kW-4P, only the externally led-in cooling water can be used), flows in between the stator casing and the cooling sleeve. For the two cooling modes, the cooling channels are a little bit different, so it shall be noted at order when the cooling system is required. In case the pumped medium is used as the cooling medium, the pump structure can prevent large grains from getting into the cooling channel. After a long time work, deposit of small grains may be formed inside of the sleeve and, to eliminate it, flushing with flushing liquid connected onto the pipe joint of the cooling sleeve can be performed. Use of the motor cooling system is good at lowering the minimum liquid level and helpful for discharging the sewage in the water collecting well to the most degree.

It is also ok for the pump of a power 11kW and above not to be set with a motor cooling system and let the motor cooled directly by the pumped medium, however, in this condition, the liquid level will be much higher than that with the cooling system.

Mechanical seal

The mechanical seal is made of the frictional pair material which is wearable and of a very low frictional coefficient, the rubber part is made of the oil-resisting acrylonitrile-butadiene rubber and the metal part is made of stainless steel.

Oil chamber

In addition to lubricating the mechanical seal, the oil in the oil chamber also offers the additional safety functions to bring the heat away from the bearing and resist the liquid penetration.

A water-leak probe is set inside of the oil chamber and, when the water penetrated in from the mechanical seal by the pump reaches a certain concentration, it will alarm via the electric control cabinet to prompt the operator to replace the oil or repair the mechanical seal.

油室注油孔的结构能加快注油速度，而且能保证油室内留有一定体积的空气，使得油温度升高后油室内压力不致大幅度上升，从而避免机械密封过度磨损或泄漏。

轴承

上部的轴承是深沟球轴承，用于承受径向作用力。下部的轴承，用于承受径向力和轴向力，各型泵依径向力和轴向力的大小不同，有的设计成一个双列角接触球轴承，有的是一对角接触球轴承，都有充分的负荷裕度，而且采购名牌优质轴承，使得轴承在泵的可用期内不会损坏。

电缆、电机的密封

≤55KW-6P的泵，电缆采用YVC（橡塑铸头电缆），其余均为YCW（重型橡胶套软电缆），其机械强度和耐油污性优越。电缆导线截面积和载流能力是按环境温度40℃（而不是通常按25℃）长期连续工作的条件选定的，因而在通常的使用条件下，电缆的载流能力有足够的裕度，寿命更长。

电缆压盖压紧电缆密封圈，使电缆与接线腔之间实现可靠的密封。对电缆进行固定，防止拉脱。电缆采用颜色标志加数码标志，使电缆的识别和连接更加容易。电机接线腔内和电控柜设有接地标志和接地紧固件，电缆严格接地，安全可靠。

装配过程中，对每台泵的O形圈、电缆密封和机械密封，都要进行严格的密封检测试验，保证电机腔包括接线腔实现可靠的密封。

保护装置

30kW-4P及以下的泵设有电机绕组过热保护元件和漏水探头；30kW-4P以上的泵设有电机绕组过热保护元件、下浮子开关，在电机上端盖内还增设了一个上浮子开关。保护装置必须与潜污泵专用电控柜相连才能起作用。虽然我公司的潜污泵专用电控柜是作为选购件供应的，但为了您的泵能安全可靠运行，特别是为了防止烧毁电机，采用我公司的潜污泵专用电控柜是您明智的选择。用户自备电控柜时，有关电气技术问题特别是保护装置的电气技术问题，请务必与本公司电控柜专业组联系。

The structure of the injection hole in the oil chamber can make the oil injection speed quickened and also ensure a certain volume of air therein so as to have the pressure therein not greatly rise after the oil temperature gets raised to prevent the mechanical seal from getting over-wearing or leaking.

Bearing

The bearing on the upper is a deep groove ball bearing and used to bear the radial force while the one on the lower bears both radial and axial forces. Upon the different radial and axial forces, one double row angular contact ball bearing and one pair of angular contact ball bearing are designed separately with some of the pumps and both are full of loading margin. All the bearings are the well-known brand products and will not get damaged within the workable period of the pump.

Cable and sealing of the motor

For the pump of ≤ 55KW-6P, the cable adopts YVC (rubber plastic casting head cable), the rest are YCW (heavy rubber sleeve flexible cable) and holds an excellent mechanical strength and oil-dirty resistance. Both sectional area and current-carrying capacity of the cable conductor are selected according to the long-term continuous work under a 40℃ ambient temperature (not the common 25℃), so, under the common condition of use, it holds a sufficient margin with the current-carrying capacity and a longer life.

The cable gland tightly presses the cable seal ring to leave a reliable sealing between the cable and the wiring cavity, to fix the cable and prevent it from pull-off. With the color mark plus the digital mark, the cable becomes easier identified and connected. Inside of the motor wiring cavity and the electric control cabinet grounding marks and grounding fasteners are set in order to make the cables strictly grounded, safe and reliable.

It is required, during the assembling, to perform a strict sealing check and test on the O-ring, the cable's seal and the mechanical seal so as to make sure of a reliable sealing of the motor cavity, and the wiring cavity as well.

Protectors

For the pump of 30kW-4P and below, both motor winding overheat protective element and water-leak probe are set; while for that over 30kW-4P, a motor winding overheat protective element and a lower float switch are set, as well as an upper float switch which is set inside of the upper end-cover of the motor. These protectors will not function until being linked to the electric control cabinet special for the submersible sewage pump. Though the said electric control cabinet made in this Co. is optional at supply, selection of it is still sensible, in order to have the pump safely and reliably workable and, in particular, to avoid burnt-out of the motor. When the electric control cabinet is prepared by the user himself, please do contact the electric control cabinet special group of this Co. for the related problems of electric technique, specially those on the protectors.

各种保护装置的说明 Various protectors

过热保护元件

过热保护元件是由温度控制动作的电器，嵌装于电机定子绕组内。在不正常运行状况下，当绕组温度达到过热保护元件的设定值时，过热保护元件通过电控柜使“过热”指示灯亮并自动停止电机，提醒操作人员进行检查，找出电机过热的原因。

绕组温度下降后，电机会恢复到可开机状态。

漏水探头

漏水探头用作漏水检测。漏水探头一端的两个电极引线通过电缆接到电控柜，当电机侧机械密封泄漏到油室内的水达到一定程度时，或者电机接线腔稍稍进水，漏水探头的两个电极即导通，通过电控柜发出报警信号（指示灯亮）提醒操作人员及时检查机械密封或更换油室内的油。电机接线腔进水时，漏水探头通过电控柜发出报警信号（指示灯亮）并保持断电停泵状态，可以防止发生短路，提醒操作人员立即采取检查维修措施。

浮子开关

浮子开关用作检测电机侧机械密封是否失效，电机腔是否进水。浮子开关安装于电机腔下侧、轴承旁边的空腔内，空腔有孔与轴承室相通。当电机侧机械密封失效，油室内的油或水通过轴承室进入空腔，或者进入电机腔的水流入空腔，都会将浮子开关的浮子浮起，通过电控柜发出报警信号（指示灯亮）并使泵自动停止运行，提醒操作人员检修泵。

起吊装置

泵的提手具有合理的结构，使起吊方便、安全。

Overheat protective element

The overheat protective element is an electric appliance with the action controlled by temperature and inlaid in the stator winding of the motor. When the winding temperature reaches the set value of it in an abnormal working state, it will make the "Overheat" indicator lit and automatically stop the motor to prompt the operator to check and find out the cause.

When the winding temperature lowers, the motor will be reset to the state able to start.

Water-leak probe

Used to check water-leak. The leads from the two electric poles on one end of it are connected to the electric control cabinet via a cable and the two electric poles will be conducted through, once the water leaked into the oil chamber from the mechanical seal by the motor reaches a certain degree or a little bit of water gets into the motor's wiring cavity, and send out an alarming signal (the indicator is lit) to prompt the operator to check the mechanical seal or replace the oil in the oil chamber on time. When water gets into the said wiring cavity, the probe will send out an alarming signal (the indicator is lit) via the electric control cabinet and keep the power-off and pump-stop status so as to prevent short-circuit and prompt the operator to use the repair measures at once.

Float switch

Used to check if the mechanical seal by the motor is out-of-work and if there is water inside of the motor cavity and mounted in the empty cavity by the bearing and on the lower side of the motor cavity, with a hole on the empty cavity through to the bearing room. When the said mechanical seal becomes unworkable, the oil or water in the oil chamber will get into the empty cavity via the bearing room or the water getting into the motor cavity will flow into the empty cavity to have the float in the float switch floating, thus to send out an alarming signal (the indicator is lit) via the electric control cabinet and have the pump automatically stopped to prompt the operator to perform pump overhaul.

Lifter

The handler on reasonable structure and safe.

the pump features a and makes lifting easy



WQ型泵主要零件的材料 Materials of the main parts with model WQ pump

零件 Part	泵体、叶轮、泵盖 Pump casing, impeller, pump cover	电机、机壳 Motor, casing	轴 Shaft	机械密封材料 Materials of mechanical seal			
				电机侧摩擦副 Frictional pair by the motor	泵侧摩擦副 Frictional pair by the pump	弹簧 Spring	橡胶件 Rubber part
材料 Material	HT200 或球墨铸铁 or ductile iron	HT200	20Cr13	石墨/碳化硅 Graphite/Silicon carbide 石墨/碳化钨 Graphite/Tungsten carbide	碳化硅/碳化钨 Silicon carbide/Tungsten carbide 碳化钨/碳化钨 Tungsten carbide/Tungsten carbide	不锈钢 Stainless steel	丁腈橡胶 Acrylonitrile- butadiene rubber

WQ型泵安装方式 Installation mode of model WQ pump

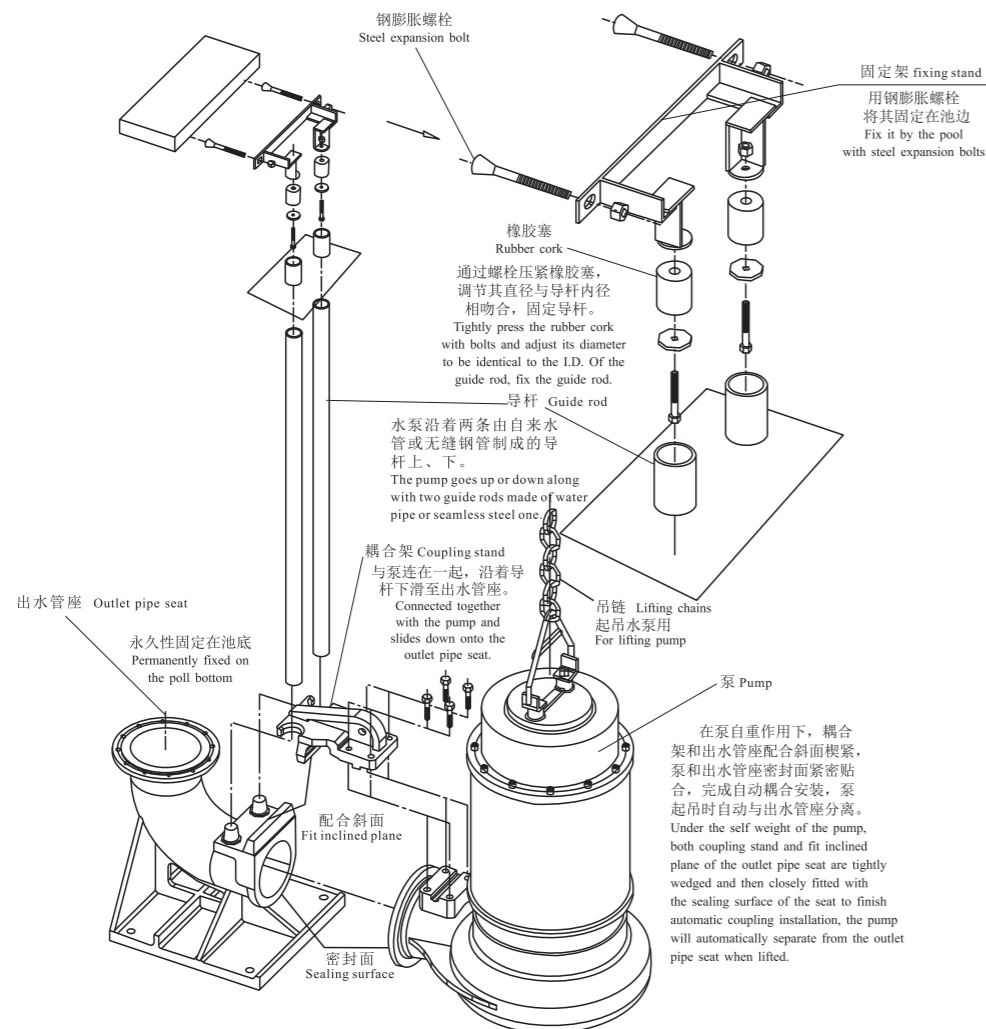
1、自动耦合式安装 Auto-coupled installation

WQ系列潜水排污泵有自动耦合式安装、固定式干式安装、固定式底座安装、软管移动式安装、硬管移动式安装、无论哪种安装方式都很简便。

下面分别加以介绍

With WQ series submersible sewage pump, there are auto-coupled, fixed dry-type, fixed foundation, soft-pipe movable and hard-pipe movable modes of installation, whichever mode is very simple.

Here comes the separate introduction.



自动耦合式安装实际上就是利用耦合装置连接泵和管道。有了耦合装置, 泵和出水管路就是相互独立的了, 无须用常规的紧固件连接, 所以泵与出水管路的连接和脱离就非常容易了。耦合装置其实很简单, 只有出水管座、导杆、固定架、耦合架等。导杆只起导向作用, 不受力, 用普通自来水管或钢管就可以了, 用户可以自备, 而且可以很方便地根据池深切割成需要的长度。安装时, 将出水管座、导杆、固定架装好, 将耦合架装到泵体上, 吊起泵, 将耦合架上的半圆孔穿入导杆, 把泵沿导杆向下滑到底, 耦合架就会把泵体和出水管座扣紧, 同时泵体出口和出水管座入口就自动对准了, 法兰端面也自动贴紧了。需要维修泵时, 只需把泵向上提, 泵体和出水管座就脱开了。这种安装方式, 省心、省力、省事。

由于耦合装置和泵是相对独立的, 所以, 如果您的泵站因情况变化需换用同口径的低扬程或高扬程的泵, 可以仍然使用原来的耦合装置。

The auto-coupled installation actually means to utilize a coupling to connect both pump and pipeline and, with the coupling, both pump and water outlet pipeline become mutually independent, without need of the common fasteners for connection, and connection and separation between both becomes very easy. The coupling is really simple and consists of water outlet pipe seat, guide rod, fixing stand, coupling stand etc. only. The guide rod functions direction guide, without bearing force, and can be made just with tap water tube or steel pipe, users can make it by themselves easily in the desired length upon the pond depth. In installation, mount the water outlet pipe seat, guide rod and fixing stand, mount the coupling stand on the pump casing, lift the pump, get the semi-circular hole on the coupling stand through into the guide rod and slide the pump downward along with the guide rod till the end, then the coupling stand will buckle both pump and outlet pipe seat tightly and, at the same time, the outlet on the pump casing will be automatically aligned with the entrance of he said seat and the flange end-face will be also fitted tightly. When the pump needs to be repaired, the pump casing will be easily separated from the said seat by just lifting it upward, free of worry and trouble and saving labor.

Because of the relative independence between the coupling and the pump, the original coupling can be still used when the low or high head pump of the same aperture needs to be alternated due to changed conditions in your pump station.

固定式干式安装

泵房与集水池是分隔的。

在基础上固定好底座, 连接好进水管与出水管, 即可运行。

由于泵是可潜水的, 所以即使泵房被淹, 也不影响泵的使用。

这种安装方式常常被用来改造老式泵站。

干式安装的泵必须有电机冷却系统。

Fixed dry type installation

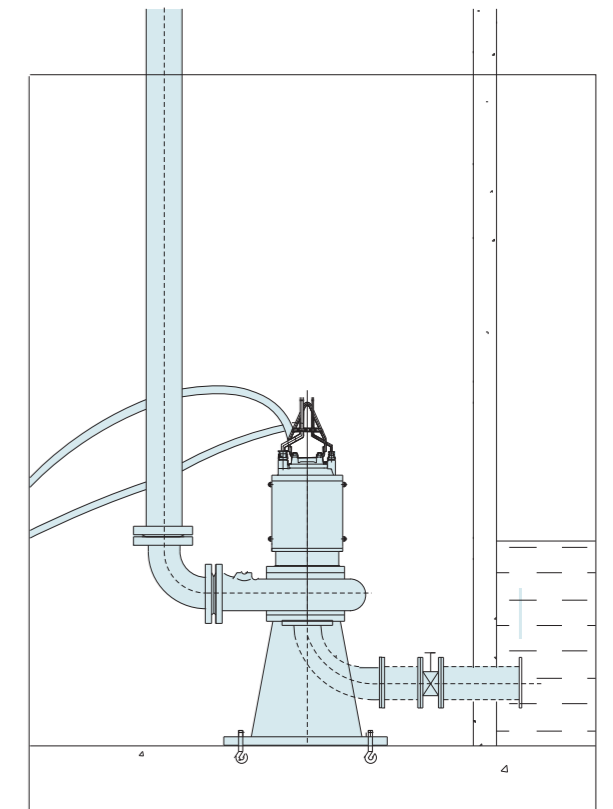
The pump house is separated from the water collection pond.

Fix the foundation on the basis and connect both water inlet and outlet pipes, then start running.

Use of the pump will not be affected, even if the pump house is submerged, as it is submersible.

This installation mode is usually used for reforming the old pump station.

The dry-type installed pump shall be set with the motor cooling system.



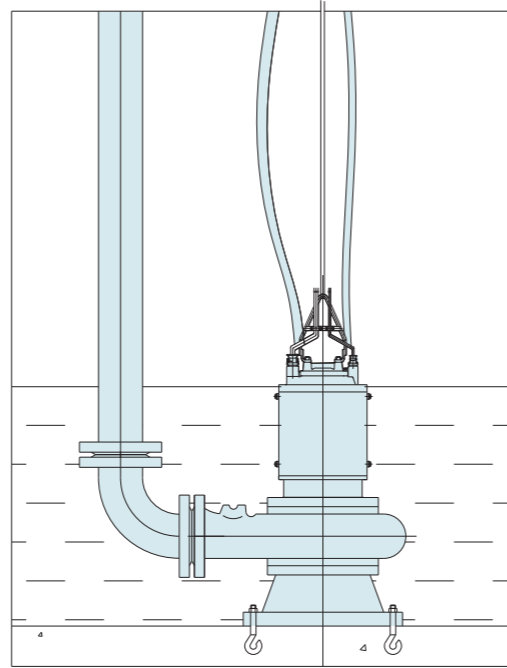
固定式湿式安装

在基础上固定好支撑底座，连接好出水管即可运行。底座可以用地脚螺栓固定。考虑到维修泵时的便利，如果管道有足够的刚性，也可以不装地脚螺栓。

Fixed wet-type installation

Fix the support foundation on the basis and connect the water outlet pipe, then start running.

The foundation may be fixed with foot bolts, however, the foot bolts may not be placed if there is sufficient rigidity with the pipe, for the sake of pump repair.

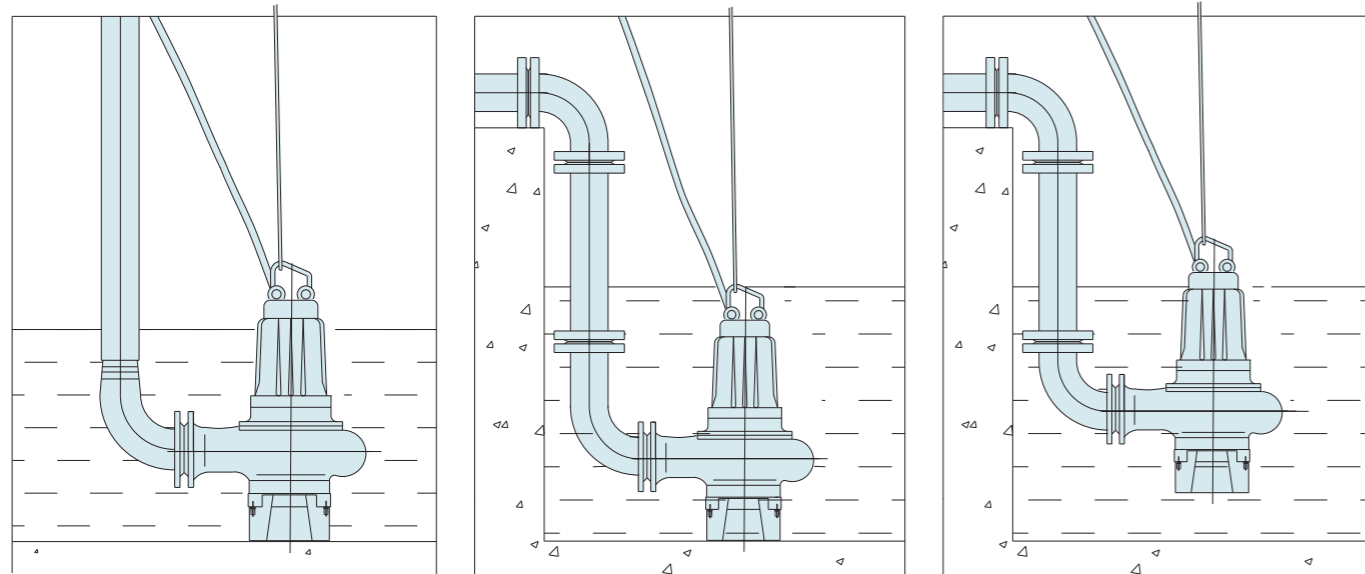


移动式安装

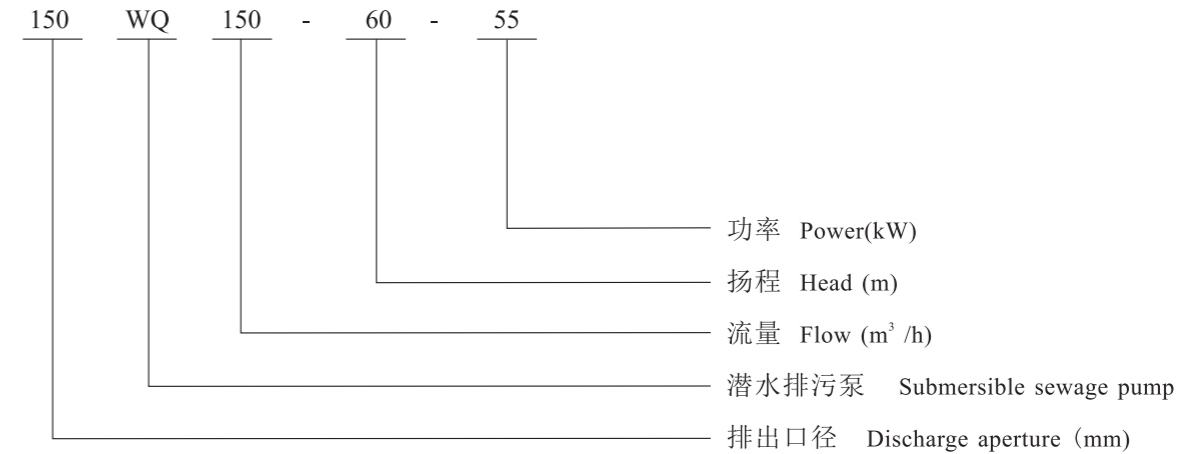
它以底座支承，接上出水软管或硬管即可工作。这种方式主要用于救急或维修、施工的需要。接硬管时，如果管道有足够的刚性，也可以用管路把泵悬挂起来使用。

Movable installation

This mode of installation is supported by the foundation and mainly for the need of first-aid, repair or construction and, when connected with a water outlet soft or hard pipe, work can be started. In case of a hard pipe, it can be used to make the pump suspended for use, if it is rigid enough.



WQ型泵型号说明 About the model of model WQ pump



额定电压、额定频率

电机的额定电压为380V，额定频率为50Hz。

Rated voltage, rated frequency

Of the motor, the rated voltage is 380V and the rated frequency is 50Hz.

WQ型潜水排污泵电机绕组引出线的接法：所有泵用三角形（△）接线法。泵出厂时，接线盒内已按此接好。所有泵适合于直启动、自耦降压启动或外接法电子软启动器启动。

The way to connect the leads of the motor winding of model WQ submersible sewage pump: the delta (△) one for all pumps. Wiring inside of the wiring case has been made accordingly at ex-works of the pump. All pumps are suitable for direct start, auto-coupled pressure reducing start or that with an external electronic soft starter.

11kW~132kW-6P的绕组接线法有两种：一、绕组的6条引接线用1根主电缆引出，适合于Y-△启动或内接法电子软启动器启动；二、在接线盒内按△接法连接绕组，适合于自耦降压启动或外接法电子软启动器启动。

Two wiring ways with the winding of 11kW~132kW-6P: 1.The six leads of the winding are led out separately by two primary cables, which is suitable for Y-△ start or that with an internal electronic soft starter; 2. Use the △ wiring way to connect the winding in the wiring case, which is suitable for the auto-coupled pressure reducing start or that with an external electronic soft starter.

旋转方向

从泵吸入口看，叶轮为逆时针方向旋转。

Rotation direction

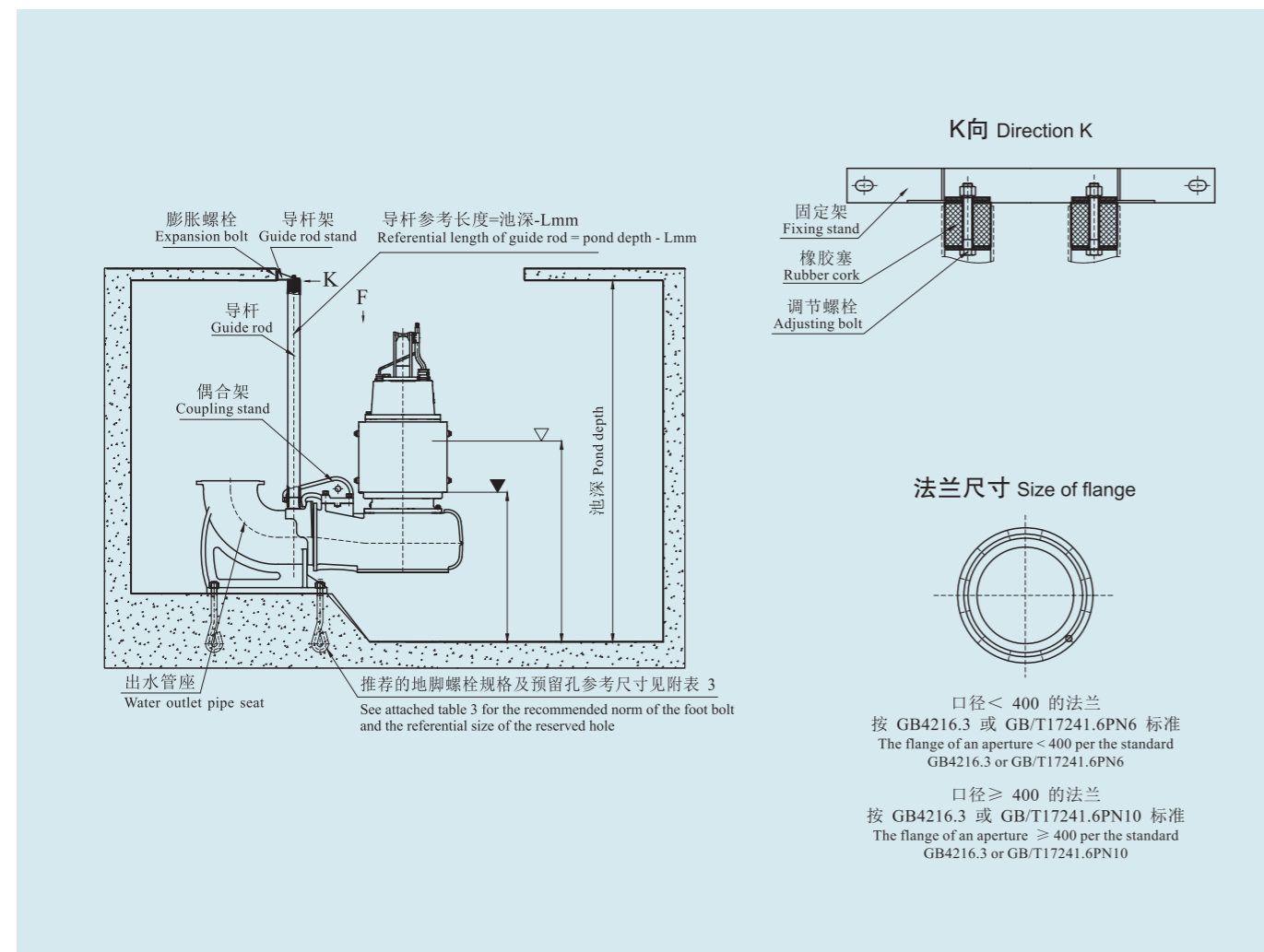
The impeller moves CCW, viewing from the suck-in port of the pump.

安装尺寸图的说明 About the installation dimension chart

有自动耦合式安装、固定式干式安装、固定式湿式安装的安装尺寸图的说明

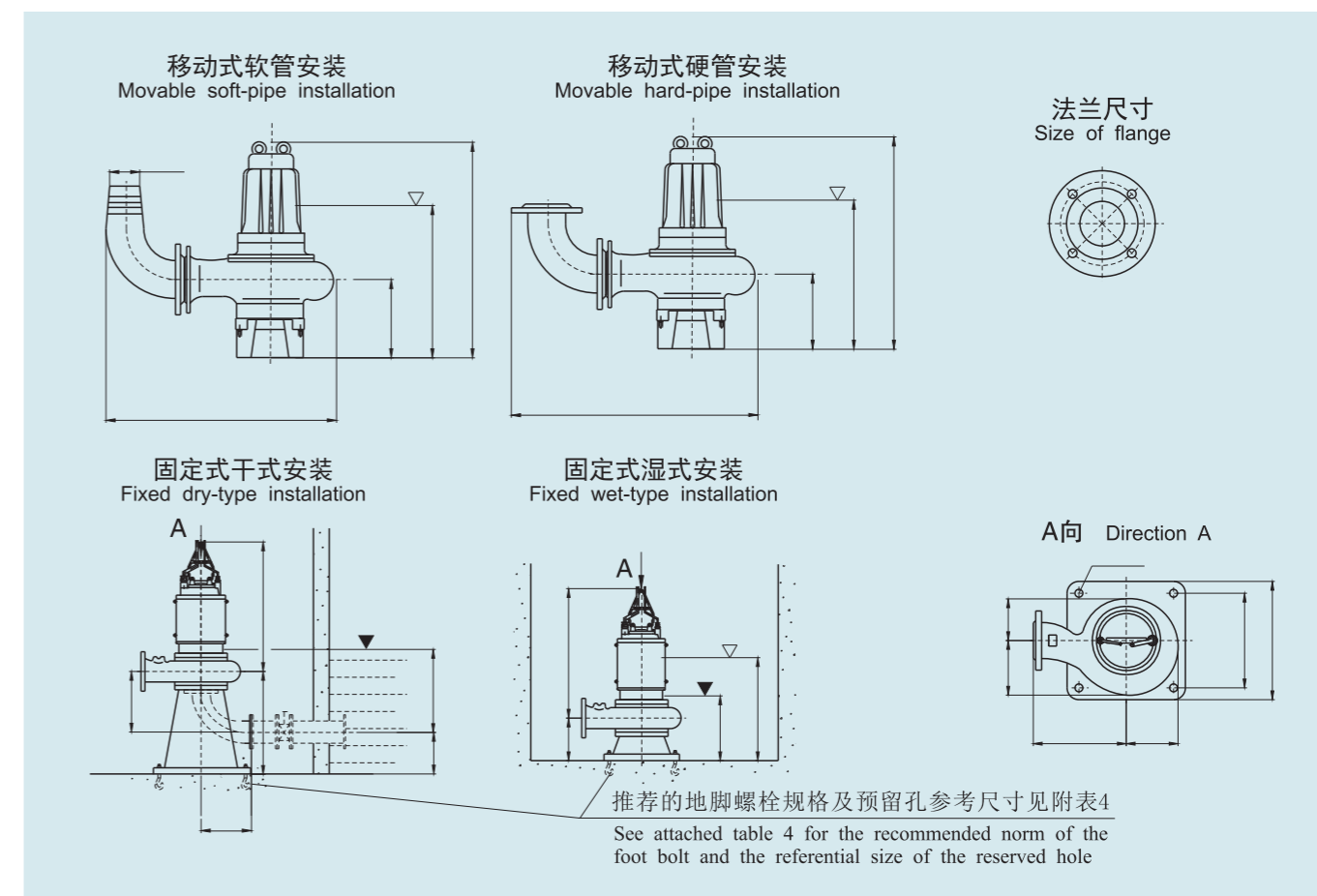
Description to the installation dimension chart of the auto-coupled, fixed dry-type and fixed foundation installations

自动耦合式安装 Auto-coupled installation



1. 所有固定架都可以用M16×150 I型膨胀螺栓固定。膨胀螺栓很容易购得，可以自备，也可以向我司订购。
2. 应按“池深”计算导杆的长度。有关导杆的资料见附表1。

1. All the fixing stands can be fixed with M16×150I type expansion bolt, which can be easily purchased or made by users, or ordered from this Co.
2. The length of the guide rod shall be calculated per the "Pond depth" see the attached table 1 for the information about the guide rod.



3. ▽表示的是泵没有电机冷却系统时的最低液位。液位应高于最低液位，可能情况下最好把泵全部淹没，使电机得到充分的冷却。最低液位可用浮球开关来控制。我司的潜污泵专用电控柜都是液位控制型的，都配带一定数量的浮球开关。
4. 同型号泵，固定式干式安装和固定式湿式安装的底座安装尺寸相同，底座的形状和尺寸如A向视图所示。
5. 移动式安装的泵（≤150WQ 22KW），软管接头或硬管接头由我司提供。移动式软管安装时各种口径的泵适用胶管的内径见附表2。
6. 对于固定式干式安装，不需预制水泥凸台，底座含有吸入弯管，由我司提供，用地脚螺栓固定底座。对于固定式湿式安装，可以装地脚螺栓固定底座。如果管路有足够的刚度，也可以不装地脚螺栓，以便于维修。

3. ▽ means the lowest liquid level at the time without the motor cooling system. The liquid level shall be higher than the lowest one and, if possible, better to get the whole pump submerged so as to make the motor cooled sufficiently. The lowest liquid level can be controlled by the float switch. The submersible sewage pump specially used electric control cabinets made in this Co. are all the liquid level controlled and equipped with a certain number of float switches.
4. For the pumps of the same model, the installation dimensions of the foundation for the fixed dry-type and wet-type installations are the same and both shape and dimension of the foundation is as shown in Direction A view.
5. For the pump (≤150WQ 22KW) in the movable installation, the soft pipe or hard-pipe joint will be supplied by this Co.. Please see the attached table 2 for the inner diameters of the rubber tubes suitable for the pumps of various apertures in the movable soft-pipe installation.
6. For the fixed dry-type installation, there is no need of a pre-made cement boss and the foundation contains a suck-in elbow, supplied by this Co., and is fixed with foot bolts. For the fixed wet-type installation, foot bolts can be set for fixing the foundation or may not be used, if the pipeline holds a sufficient rigidity, for the sake of repair.

7. ▼表示的是泵装有电机冷却系统时的最低液位。显然，装有电机冷却系统时，最低液位可以降低很多，也就是说，可以排走更多的污水。
8. 法兰尺寸表示的是泵的吐出法兰、出水管座法兰、弯管底座的吸入端法兰、硬管接头与管路连接端的法兰安装尺寸图中，凡口径 <400 的法兰都按GB4216.3或GB/T17241.6 Pn6标准，凡口径 ≥ 400 的都按GB4216.3或GB/T17241.6 PN10标准。

7. ▼ means the lowest liquid level at the time with the motor cooling system. The lowest liquid level can be then lowered a lot, obviously, that means much more sewage can be discharged.
8. The size of flange means the installation size of the vomiting flange of the pump, the flange of the water outlet pipe seat, the flange on the suck-in end of the elbow foundation and the flange on the connection between the hard-pipe joint and the pipeline. In the flange installation size chart, all the flange of an aperture < 400 are per the standard GB4216.3 or GB/T17241.6PN6 and all the flange of an aperture ≥ 400 are per the standard GB4216.3 or GB/T17241.6PN10.

附表1 导杆的规格及尺寸 Attached table 1 Norm and size of guide rod

泵排出口径 Discharge diameter of pump	导杆类型 Guide rod type	碳钢焊管 Carbon steel welded pipe	镀锌焊管 Galvanized welded pipe	304焊管 304 welded pipe	导杆参考长度=(池深-L) ± 15 mm 以下为L尺寸 The reference length of guide rod = (pool depth-l) ± 15 mm is l dimension
80	DN50 \times 3			$\phi 60 \times 3.5$	270
100					325
150					480
200					600
250					700
300	DN80 \times 3			$\phi 89 \times 4$	850
350					970
400					1130
500					1340
600					1570
导杆厚度偏差 Guide rod thickness deviation		± 0.03	± 0.03	3=2.7-2.9 3.5=3.3-3.5 4=3.7-3.9	

注1: 导杆均采用焊接钢管, 简称焊管。碳钢焊管、镀锌焊管执行标准: GB/T 3091-2015, 304焊管执行标准: GB/T 12771-2008。
Note 1: all guide rods are welded steel pipes, referred to as welded pipes. Standard for carbon steel welded pipe and galvanized welded pipe: GB / T 3091-2015, 304 standard for welded pipe: GB / T 12771-2008.

附表2 胶管 Attached table 2 Rubber tube

泵排出口径 Discharge aperture of pump (mm)	配用的软管弯接头的规格 With the hose elbow joint specifications	配用胶管的内径 Matched with the inner diameter of the rubber hose (mm)
80	80	89
100	100	102
150	150	152

附表3 耦合装置出水管座的地脚螺栓 Attached table 3 Foot bolts on the water outlet pipe seat of the coupling

泵排出口径 Discharge aperture of pump (mm)	地脚螺栓 Foot bolt (GB799-88)		
	规格 Norm	数量 Quantity	预留孔参考尺寸长 \times 宽 \times 深 (mm) Referential size of reserved hole L \times W \times D (mm)
80	M16 \times 300	4	80 \times 80 \times 350
100			
150			
200			100 \times 100 \times 550
250			
300	M24 \times 500	6	130 \times 130 \times 700
350			
400			M30 \times 630
500			
600			

附表4 固定湿式安装和固定干式安装的地脚螺栓 Attached table 4 Foot bolts for fixed wet-type and dry-type installations

底座系列号 Serial No. of foundation	配用泵 (以吸入口径分类) Fitted pump (classified with the suck-in aperture)	地脚螺栓 Foot bolt (GB799-88)		
		规格 Norm	数量 Quantity	预留孔参考尺寸长 \times 宽 \times 深 (mm) Referential size of reserved hole L \times W \times D (mm)
01	300 (75kW及以下 and below)	M30 \times 630	4	130 \times 130 \times 700
03	200 (22 kW及以下 and below)	M20 \times 400		100 \times 100 \times 450
	250 (22 kW及以下 and below)			
	300 (22kW及以下 and below)			
10	80、100、150 (30 kW及以下 and below)	M30 \times 630		130 \times 130 \times 700
11	150 (37 kW及以上 and above) 250 (30 kW及以上 and above) 200 (30kW及以上 and above) 300 (30~55kW)			
12	350 (90 kW及以下 and below)	M36 \times 630		150 \times 150 \times 700
13	400 (110 kW及以下 and below)			
14	350 (110~185kW)			
15	350(2000 kW及以上 and above) 400 (200 kW及以上 and above)			
16	400 (132~185kW)			
17	500 (132kW及以上 and above)、600			

潜污泵专用电控柜 Submersible sewage pump specially used electric control cabinet

潜污泵内装有保护电机的各种保护装置, 潜污泵的电控柜必须与这些保护装置配套, 而且, 潜污泵的电控柜还应配有进行液位控制的浮球开关。所以, 潜

Inside of the submersible sewage pump various motor protectors are set, the electric control cabinet special for the said pump shall be matched with these protectors and also equipped with the float switch used for the level control, hence

污泵的电控柜是比较特殊的，专用性很强。我司的潜污泵专用电控柜与泵的保护装置是配套的，而且配有进行液位控制的浮球开关，还具有主回路短路、过载、缺相保护功能。15kW以上的电控柜还有自耦降压启动或电子软启动功能。主、备控制电控柜正常工作时，主备泵交替方式有：手动交替、定时自动交替（连续运行场合）&自动交替（断续运行场合）故障时，凡主、备控制电控柜都具备故障泵自动关闭，备用泵自动投入运行（备泵自投）的功能。如果用户使用我司的电控柜却断开了与泵保护装置连接，或者用户自备的电控柜与泵的保护装置不配套，未设置主回路短路，过载、缺相保护功能甚至连熔断器也不装，则必然是出故障时不报警、不停泵，从而用户也不检修，最终的结果是烧毁电机。所以，购置泵时，应尽可能同时购置潜污泵专用电控柜。

以上只对潜污泵专用电控柜作了简略介绍，详细情况请阅读我司电控柜样本或说明书。

the said cabinet is more special and powerful in the specificity. The said electric control cabinet made in this Co. can be completed with the protectors and are equipped with the float switches used for the level control, as well as the protective functions for the short-circuit, overload and lack-of-phase of the main loop. The electric control cabinet over 15kW also holds the function of auto-coupled pressure reducing start or electronic soft start. When the electric control cabinet with the main and spare control works, the alternative ways between the main and spare pumps include: handmade, timing automatic (for the continuous work) and automatic (for the intermittent work) and all the said electric control cabinets are set with such a function as that for the pump to stop automatically, in case of a failure, and for the spare one to be automatically put into work. It is necessary to order the submersible sewage specially used electric control cabinet at the same time to order the pump, this is because, if the user uses the electric control cabinet made in this Co. while does not connect the protectors or the electric control cabinet prepared by the user is not matched with the protectors and the short-circuit, overload and lack-of-phase protective functions, even a fuse, are not set with the main loop, such a result will occur without doubt as there are no alarm, no stop of the pump and no overhaul by the user and, at final, the motor will be made burnt out.

The abovementioned comes as the brief account of the submersible sewage pump specially used electric control cabinet only and, for the details, please refer to the catalog or the manual of it issued by this Co.

液位开关 Liquid level switch

下面提供三种液位开关的原理图 The principle diagrams of three kinds of the liquid level switch are provided below

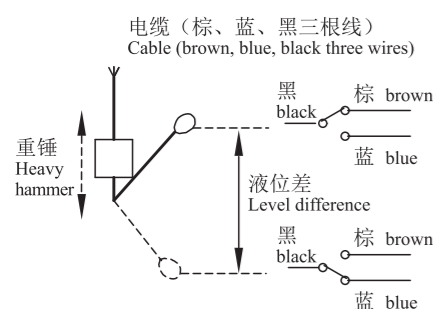


图 Fig. 1

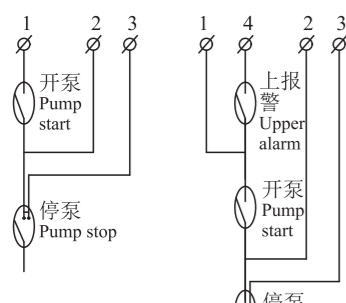


图 Fig. 2

安装：将电缆线固定在顶盖或水池壁上；
接线：黑色线、棕色线；
浮球浮起时，黑线和棕色线接通，启泵；
浮球下垂时，黑线和棕色线断开，停泵；
调整方法：
调整重锤在电缆上固定位置，即改变开泵和关泵的液位差。

Installation: fix the cable on the top cover or the water pond wall.

Wiring: black wire, brown wire

When the floating ball floats, both black and brown wires get connected, start the pump; When the floating ball becomes pendent, both black and brown wires are cut off, stop the pump;

Adjusting method:

Adjust the fixed position of the heavy hammer on the cable, e.g. change the level difference between pump start and stop.

安装：通过法兰悬装在水池顶盖上或支撑在水池底座上。这种液位器出厂前，已按客户要求将起泵、停泵的位置设定好，现场不能调整。根据电气原理图和连线图（如图）接线。

Installation: In suspended installation on the top cover of the water pond, via the flange, or held onto the support on the bottom of the pond. Before ex-works, this level switch has been set with the pump start and stop positions as required by the user and so site adjustment can not be performed. Do wiring according to both electric principle diagram and connection drawing (as shown in the figure).

WQ SERIES SUBMERSIBLE SEWAGE PUMP

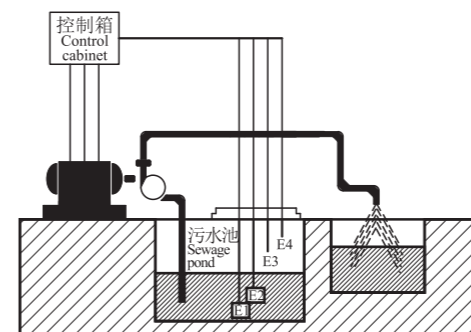


图 Fig. 3

在潜污泵样本和说明书上标出了最低液位。样本中的泵标出了两种最低液位，即装电机冷却系统和未装电机冷却系统时的最低液位。未装电机冷却系统的最低液位是要保证电机的冷却：装电机冷却系统的最低液位则是为了保证启动前能排出泵内气体，并且对吸入口保持最小淹没深度，使得在运行时不吸入空气。

液位浮球开关是当电控柜置于自动档时使用的。

液位浮球开关的接线和设置：液位浮球开关的电缆中有黑、棕、蓝三根线芯。浮球浮起时，浮球内部接点将黑、棕两线芯接通，而将黑、蓝两线芯断开；浮球下垂时则相反，内部接点将黑、蓝两线芯接通，而将黑、棕两线芯断开。浮球在中间位置时内部开关为原始状态保持位置，只有到图示浮起和下垂的位置时内部开关才转换动作。排水场合，将黑、棕两线芯接入电控柜，蓝色线芯必须包扎绝缘；供水场合，将黑、蓝两线芯接入电控柜，棕色线芯必须包扎绝缘。若用一个浮球开关控制开泵、停泵两个液位，可调整重锤在电缆上的位置，也就确定了水泵开启和关闭的液位差，所以从原理上讲，一只浮球开关可实现一组上下液位启、停泵控制。但是，如果液位差较大，浮球摆臂长度随之增大，从重锤到浮球这段电缆的自重会影响液位控制的精度，所以，我司的潜污泵专用电控柜是这样设置浮球开关的：对主泵或大泵，用两只浮球开关分别控制启、停液位；对于小泵或超高水位增开的备泵，则用一个浮球开关来控制开泵、停泵两个液位。用户需要超出规定数量的浮球开关或不订购

这种液位器当有超高水位报警时采用四根电极。当水位达 E3 时，给出信号开启排水泵；当水位低于 E2 时，关闭排水泵。不论水位因何原因达到 E4 时，超高水位报警铃响，同时启动备用泵投入运行。

This level switch will use four electric poles at the extra-high water level alarming.

When the water level reaches E3, it will send out a signal to start the drainage pump and then stop it, when the water level is below E2. When the water level reaches E4 because of whatever causes, the extra-level alarming bell will sound and, at the same time, the spare pump is started working.

The lowest liquid level is marked in the catalog and manual of the submersible sewage pump and, two lowest levels are marked with sample, that is the lowest levels with and without the motor cooling system. The lowest level without the motor cooling system aims at the guaranteed cooling of the motor while that with the motor cooling system is to guarantee the air inside of the pump to be exhausted before start and keep the suck-in port in the minimum submerged depth so as not to suck air in during work.

The level floating ball switch is used when the electric control cabinet is set at the automatic shift.

Wiring and setting of the level floating ball switch: in the switch cable there are black, brown and blue three cores and, when the floating ball floats, the connection inside of the floating ball makes black and brown cores connected and black and blue ones cut off; which will be done reversely when the floating ball stays pendent, e.g. both black and blue cores connected and both black and brown ones cut off. The internal switch stays at the original state kept position when the floating ball stands on the center and will not change the motion unless at the floating and pendent positions shown in the figure. For water removal, get both black and brown cores connected into the electric control cabinet, with the blue one wrapped and insulated; for water supply, get both black and blue ones into the said cabinet, with the brown one wrapped and insulated. When to use one floating ball switch to control pump start and pump stop two levels, adjust the position of the heavy hammer on the cable so as to set up the level difference between the pump start and stop, hence in principle, one floating ball switch can carry it out for one group of upper and lower levels to control the pump start and stop. However, in case of a bigger level difference, the length of the swing-arm on the floating ball will be enlarged accordingly and the self weight of the cable in the section from the heavy hammer to the floating ball will affect the precision of the level control. Based on this, the floating ball switch with the submersible sewage pump specially used electric control cabinet made in this Co. is so designed as: for the primary or large pump, two floating ball switches are used to separately control the start and stop levels and, for the small pump or the spare one additionally started at the extra-high level, then one floating ball switch is used to control pump start and stop two levels. When the required quantity of

我司的潜污泵专用电控柜时，也可以向我们订购浮球开关。

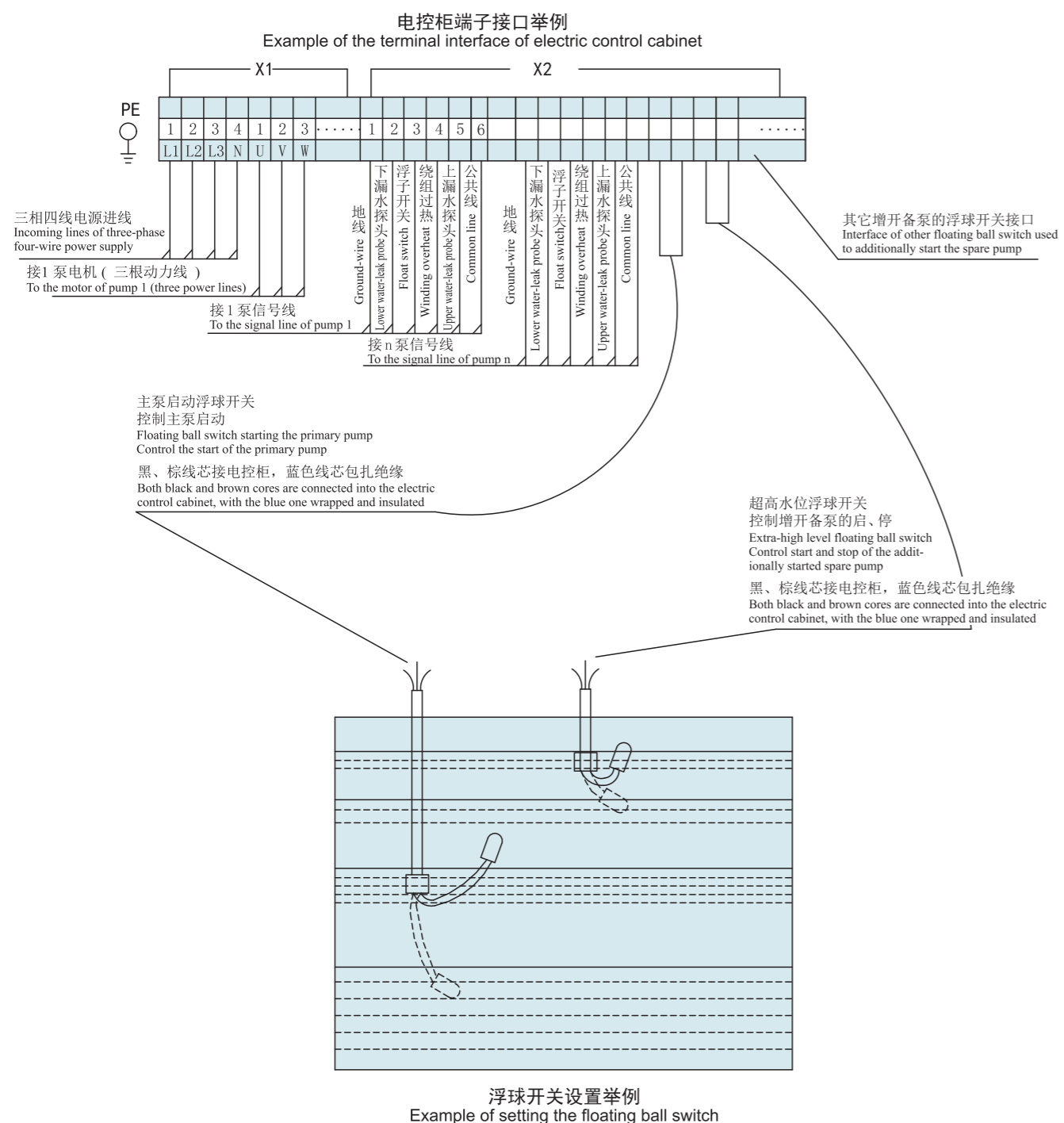
the said switch is over the stipulated or not to order the submersible sewage pump specially used electric control cabinet made in this Co. , users can still order the floating ball switch.

潜污泵专用电控柜原理图

Schematic diagram of the submersible sewage pump specially used electric control cabinet

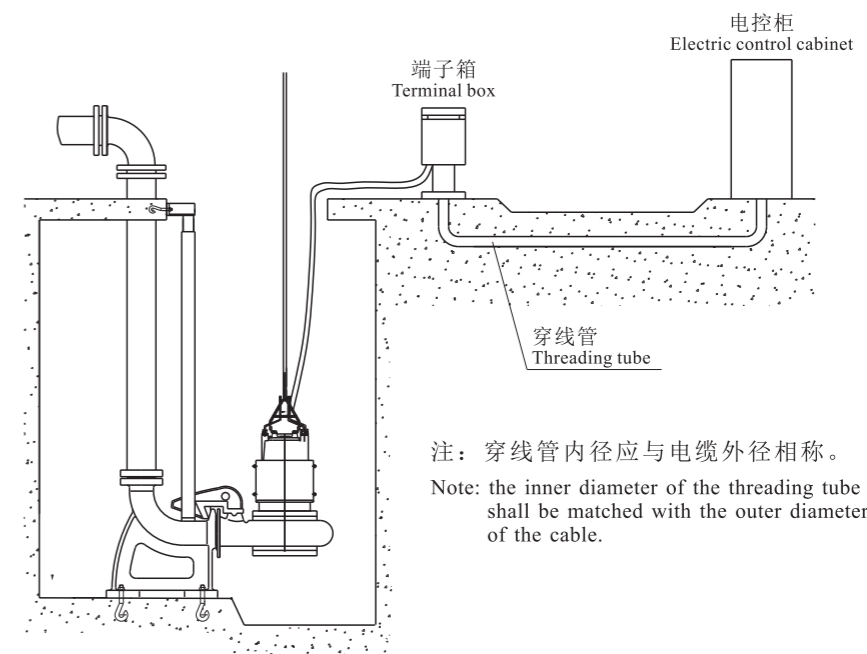
浮球开关的设置（排水场合）和电控柜端子接口的例子如下图：

Example of setting the floating ball switch (for water removal) and the terminal interface of electric control cabinet



潜污泵专用电控柜（液位）浮球开关=端子箱和穿线管

Floating ball switch of the submersible sewage pump specially used electric control cabinet (liquid level) = terminal box and threading tube



电控柜距泵房较远时，可设置端子箱。端子箱是选购件。

A terminal box, as an option, can be set, if the electric control cabinet is far away from the pump house.

此图仅是示意性的，并不表示设计规范。泵站设计和安全等方面的事项应根据有关标准和规范处理。

The above figure is schematic only and does not express the standard of design. The pump station design and the safety etc. affairs shall be processed according to the related standards.

需设置穿线管时（穿线管由用户自备）（应按电缆外径确定穿线管内径。如果从端子箱到电控柜使用我司的潜污泵专用电缆，可以从下表查出电缆外径尺寸。

The inner diameter of the threading tube, when necessary to set it (prepared by the users), shall be set upon the outer diameter of the cable, which can be found out from the table below, provided that the cable used from the terminal box to the electric control cabinet is the one special for the submersible sewage pump made in this Co..

电缆外径尺寸见下表 Outer diameter of cable

泵功率 Power of pump (kW)	动力电缆外径 O.D. of power cable (mm)	控制电缆外径 O.D. of control cable (mm)	泵功率 Power of pump (kW)	动力电缆外径 O.D. of power cable (mm)	控制电缆外径 O.D. of control cable (mm)
11、15(2P、4P)	16.5	13.5	110 132(4P、6P)	54	13.5
18.5、22(2P、4P)	25	13.5	132(8P、10P)	43(两根 two)	13.5
30(4P、6P、8P) 37(4P、6P)	28	13.5	160、200(8P) 185(4P、6P、8P)	48(两根 two)	13.5
37(8P) 45(4P、6P、8P) 55(4P、6P)	32	13.5	185(10P)200(10P) 220	54(两根 two)	13.5
55(8P) 75	43	13.5	250(8P)280(8P)	57(两根 two)	13.5
90	48	13.5	315 355	63(两根 two)	13.5

订货说明 Notices at order

为了使您选购的泵更加适用，热忱欢迎用户向本公司技术部门咨询技术问题。

订货时请注明：泵型号、过流件材质、安装方式、排出口径。

排出口径不大于150且电机功率不大于22kW的泵，可以移动式安装。

排出口径不大于600的泵都可以自动耦合式安装。

由于耦合装置中固定架的优良设计，导杆只须一般的自来水管或钢管。我们在样本中已经提供了用作导杆的自来水管或钢管的规格及长度计算方法，用户只需自行购置自来水管或钢管，切成需要和长度就可以使用了。所以耦合装置中不包括导杆。

所有的泵都可以配置电机冷却系统。

所有的泵，必须注明是否需要配置电机冷却系统。需要配置电机冷却系统的，必须说明是用被泵送介质冷却还是外接冷却水冷却。

选择固定式干式安装方式时，必须注明配置电机冷却系统，并说明是用被泵送介质冷却还是外接冷却水冷却。

电缆按10米提供，用户需要其他长度时，应在订货时说明。

成套供应件是按用户选定的安装方式配套供应。

选购件和备件是由用户另外订购的。

移动式硬管安装，每台泵成套供应一个硬管接头；移动式软管安装，每台泵成套供应一个软管接头。需要一个以上硬管接头或软管接头时，须另外订购。

In order to have your selected pump more applicable, warmly welcome you to inquiring any technical problems to the technical dept of this company.

Please note at order: the pump model, the material of the flow-passing parts, the installation mode and the discharge aperture.

The pumps of a discharge aperture not bigger than 150 can all be installed with the auto-coupled mode.

Because of the excellent design of the fixing stand in the coupling, the guide rod can just be made of tap water tube or steel pipe and is therefore not included in the coupling. Users are only required to cut the purchased tap water tube or steel pipe into the desired length, calculated according to the way of calculation provided in the catalog.

All pumps can all be equipped with the motor cooling system.

For all pumps, it shall be noted whether the said system is needed or not and, if needed, it is cooled by the pumped medium or the external cooling water.

It shall be noted to equip the motor cooling system, when the fixed dry-type installation mode is selected, and whether it is cooled by the pumped medium or the external cooling water.

The cable is provided by 10m. If the user needs other length, it should be stated when ordering.

The completed supplied parts are supplied in completion with the installation mode users have selected.

Both options and spare parts are ordered separately.

For the movable hard-pipe installation, one hard pipe joint is supplied in completion with each pump.

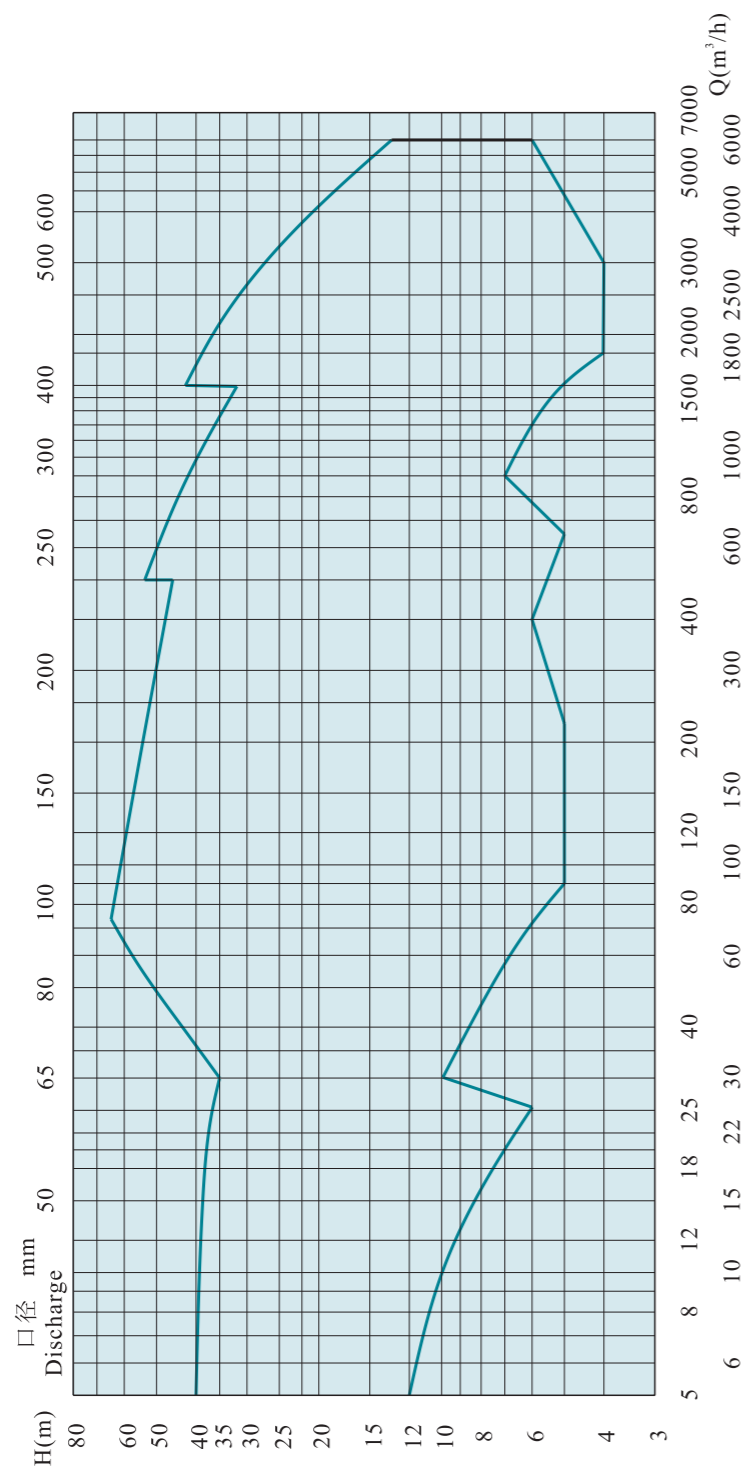
For the movable soft-pipe installation, one soft pipe joint is supplied in completion with each pump.

Separate order is necessary once more than one hard-pipe or soft-pipe joints are required.

供货一览表 List of supply

供货范围 Range of supply	安装方式 Installation mode					备注 Remark	
	固定式湿式 Fixed wet type		移动式安装 Movable installation		固定干式安装 Fixed dry type		
	自动耦合式安装 Auto-coupled installation	底座式安装 Foundation installation	排出口径不大于150且电机功率不大于22 Discharge aperture not bigger than 150 and the power of motor not larger than 22				
		软管安装 Soft pipe installation	硬管安装 Hard pipe installation				
Parts in completed supply 成套供应件	主泵 Primary pump	○	○	○	○	○	
	硬管接头 (1个/台) Hard pipe joint (one/each pump)				○		80-100口径 Caliber 材质: 铸铁/塑料 Material: cast iron/ plastic
	软管接头 (1个/台) Soft pipe joint (one/each pump)			○			
	自动耦合装置 Auto-coupling	○					
Options 选购件	底座 (1个/台) Foundation (one/each pump)		○	○	○	○	
	电控柜 Electric control cabinet	○	○	○	○	○	
	反法兰 Reversed flange	○	○	○	○	○	
	拦污栅 Trash rack	○	○	○	○	○	定制 Made to order
	启闭机 Hoist	○	○	○	○	○	定制 Made to order
	矩形闸门 Rectangle gate	○	○	○	○	○	定制 Made to order
	端子箱 Terminal box	○	○	○	○	○	
	E液位F浮球开关 E level F floating ball switch	○	○	○	○	○	
	闸E蝶F阀 Butterfly valve of gate	○	○	○	○	○	
	止回阀 Check valve	○	○	○	○	○	
	地脚螺栓 Foot bolt	○	○			○	
	软管 Soft pipe			○			
	吊泵用吊链 Lifting chains for lifting pump	○	○	○	○	○	
Spare parts 备件	叶轮 Impeller	○	○	○	○	○	
	密封环 Seal ring	○	○	○	○	○	
	轴承 Bearing	○	○	○	○	○	
	机械密封 Mechanical seal	○	○	○	○	○	
	O形密封圈 O-seal ring	○	○	○	○	○	

WQ型泵型谱图 WQ TYPE ATLAS OF STYLE



WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
1	80WQ50-35-11	80	40 50 75	11.1 13.9 20.8	40 35 27	2900	11	48 55 63	246
2	80WQ50-40-15	80	40 50 75	11.1 13.9 20.8	42 40 37	2900	15	46 52 60	248
3	80WQ50-64-18.5	80	40 50 65	11.1 13.9 18.1	65 64 60	2900	18.5	48 56 62	288
4	100WQ80-24-11	100	65 80 120	18.1 22.2 33.3	28 24 20	2900	11	58 64 67	248
5	100WQ80-32-15	100	65 80 120	18.1 22.2 33.3	35 32 25	2900	15	54 58 62	266
6	100WQ80-36-18.5	100	65 80 120	18.1 22.2 33.3	40 36 30	2900	18.5	50 55 60	275
7	100WQ80-40-22	100	65 80 120	18.1 22.2 33.3	45 40 35	2900	22	50 55 60	325
8	150WQ150-15-11	150	100 150 220	27.8 41.7 61.1	18 15 11	1460	11	67 72 68	278
9	150WQ150-20-15	150	100 150 220	27.8 41.7 61.1	23 20 17	1460	15	60 68 64	313
10	150WQ150-25-18.5	150	100 150 220	27.8 41.7 61.1	28 25 19	1470	18.5	60 68 64	415
11	150WQ150-30-22	150	100 150 200	27.8 41.7 55.6	33 30 25	1470	22	60 65 68	425
12	150WQ150-40-30	150	100 150 200	27.8 41.7 55.6	42 40 33	1470	30	60 65 68	555
13	150WQ150-45-37	150	100 150 200	27.8 41.7 55.6	47 45 38	1470	37	55 62 65	870
14	150WQ150-50-45	150	100 150 200	27.8 41.7 55.6	52 50 47	1470	45	55 62 65	886
15	150WQ150-60-55	150	80 150 200	22.2 41.7 55.6	62 60 56	1470	55	53 60 63	915
16	200WQ300-7-11	200	250 300 400	69.4 83.3 111.1	8 7 6	1460	11	72 74 69	365
17	200WQ300-10-15	200	250 300 400	69.4 83.3 111.1	11 10 8	1460	15	72 74 69	385
18	200WQ300-13-18.5	200	250 300 400	69.4 83.3 111.1	15 13 10	1470	18.5	66 68 65	440
19	200WQ300-15-22	200	250 300 400	69.4 83.3 111.1	17 15 13	1470	22	66 68 65	445
20	200WQ300-20-30	200	250 300 400	69.4 83.3 111.1	22 20 17	980	30	66 67 67	905

WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
21	200WQ300-25-37	200	250	69.4	27	980	37	66	960
			300	83.3	25				
			400	111.1	23				
22	200WQ400-27-45	200	250	69.4	35	1480	45	65	890
			400	111.1	27				
			500	138.9	24				
23	200WQ400-34-55	200	250	69.4	39	1480	55	65	927
			400	111.1	34				
			500	138.9	30				
24	200WQ400-40-75	200	250	69.4	44	1480	75	62	1215
			400	111.1	40				
			500	138.9	35				
25	200WQ400-48-90	200	250	69.4	50	1480	90	62	1250
			400	111.1	48				
			500	138.9	44				
26	200WQ300-53-132	200	250	69.4	55	1480	132	52	1835
			300	83.3	53				
			400	111.1	48				
27	200WQ300-25-30(G)	200	220	61.1	27	1470	30	70	585
			300	83.3	25				
			400	111.1	20.5				
28	200WQ300-30-37(G)	200	220	61.1	30.5	1475	37	66	610
			300	83.3	30				
			430	119.4	24				
29	250WQ400-7-15	250	300	83.3	9	1460	15	75	410
			400	111.1	7				
			600	166.7	5				
30	250WQ400-10-18.5	250	300	83.3	12	1470	18.5	68	460
			400	111.1	10				
			600	166.7	7				
31	250WQ400-13-22	250	300	83.3	16	1470	22	68	470
			400	111.1	13				
			600	166.7	9				
32	250WQ500-12-30	250	400	111.1	15	980	30	70	960
			500	138.9	12				
			700	194.4	8				
33	250WQ500-16-37	250	400	111.1	18	980	37	70	995
			500	138.9	16				
			700	194.4	14				
34	250WQ500-20-45	250	400	111.1	22	980	45	70	1100
			500	138.9	20				
			700	194.4	16				
35	250WQ500-25-55	250	400	111.1	28	980	55	72	1225
			500	138.9	25				
			700	194.4	19				
36	250WQ600-28-75	250	500	138.9	31	1480	75	70	1120
			600	166.7	28				
			800	222.2	23				
37	250WQ600-34-90	250	500	138.9	37	1480	90	70	1315
			600	166.7	34				
			800	222.2	27				
38	250WQ600-40-110	250	500	138.9	43	1480	110	68	1605
			600	166.7	40				
			800	222.2	33				
39	250WQ600-50-132	250	500	138.9	53	1480	132	68	1900
			600	166.7	50				
			800	222.2	40				
40	250WQ500-10-30(G)	250	300	83.3	11.5	1470	30	62	625
			500	138.9	10				
			600	166.7	5.5				

WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
41	250WQ500-16-37(G)	250	310	86.1	21	1475	37	70	670
			500	138.9	16				
			650	180.6	10				
42	250WQ500-19-37(G)	250	310	86.1	22	1475	37	64	685
			500	138.9	19				
			700	194.4	11.5				
43	250WQ500-25-45(G)	250	310	86.1	29.5	1475	45	64	725
			500	138.9	25				
			700	194.4	16				
44	300WQ600-6-18.5	300	500	138.9	7	1470	18.5	69	505
			600	166.7	6				
			750	208.3	5				
45	300WQ600-7-22	300	500	138.9	8	1470	22	69	510
			600	166.7	7				
			750	208.3	6				
46	300WQ700-11-30	300	550	152.8	13	980	30	72	980
			700	194.4	11				
			1000	277.8	8				
47	300WQ700-14-37	300	550	152.8	16	980	37	72	1075
			700	194.4	14				
			1000	277.8	10				
48	300WQ700-16-45	300	550	152.8	18	980	45	72	1130
			700	194.4	16				
			1000	277.8	12				
49	300WQ700-19-55	300	550	152.8	21	980	55	70	1180
			700	194.4	19				
			1000	277.8	14				
50	300WQ1000-20-75	300	800	222.2	23	990	75	75	1550
			1000	277.8	20				
			1400	388.9	15				
51	300WQ1000-24-90	300	800	222.2	27	990	90	75	1700
			1000	277.8	24				
			1400	388.9	18				
52	300WQ1000-28-110	300	800	222.2	31	980	110	75	1800
			1000	277.8	28				
			1400	388.9	20				
53	300WQ1000-35-132	300	800	222.2	38	1480	132	75	1900
			1000	277.8	35				
			1400	388.9	27				
54	300WQ600-60-185	300	500	138.9	63	1480	185	66	2200
			600	166.7	60				
			750	208.3	57				
55	300WQ700-11-30(G)	300	300	83.3	18	1470	30	55	685
			700	194.4	11				
			820	227.8	8				
56	300WQ700-14-37(G)	300	500	138.9	17	1475	37	64	710
			700	194.4	14				
			940	261.1	8				
57	300WQ700-18-45(G)	300	380	105.6	24	1475	45	64	775
			700	194.4	18				
			940	261.1	10				
58	300WQ700-22-55(G)	300	450	125.0	26.5	1480	55	70	815
			700	194.4	22				
			950	163.9	12.5				
59	300WQ1000-20-75(G)	300	800	222.2	24	1480	75	80	1220
			1000	277.8	20				
			1200	333.3	15.5				
60	300WQ1000-24-90(G)	300	800	222.2	27.5	1480	90	82	1290
			1000	277.8	24				
			1350	375.0	15				

WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
61	350WQ1200-6-30	350	1000	277.8	7	730	30	75	1210
			1200	333.3	6				
			1500	416.7	5				
62	350WQ1200-8-37	350	1000	277.8	9	740	37	76	1305
			1200	333.3	8				
			1500	416.7	6				
63	350WQ1100-10-45	350	900	250	11	740	45	67	1380
			1100	305.6	10				
			1500	416.7	7				
64	350WQ1100-12-55	350	900	250	14	740	55	69	1785
			1100	305.6	12				
			1500	416.7	8				
65	350WQ1100-16-75	350	900	250	19	980	75	70	1600
			1100	305.6	16				
			1500	416.7	12				
66	350WQ1100-20-90	350	900	250	24	980	90	70	1800
			1100	305.6	20				
			1500	416.7	15				
67	350WQ1100-25-110	350	900	250	30	980	110	72	1900
			1100	305.6	25				
			1500	416.7	18				
68	350WQ1100-30-132	350	900	250	35	980	132	72	2100
			1100	305.6	30				
			1500	416.7	24				
69	350WQ1100-36-160	350	900	250	40	980	160	70	2200
			1100	305.6	36				
			1500	416.7	28				
70	350WQ1500-30-185	350	1200	333.3	35	980	185	75	2600
			1500	416.7	30				
			2000	555.6	24				
71	350WQ1500-32-200	350	1200	333.3	38	740	200	75	2850
			1500	416.7	32				
			2000	555.6	25				
72	350WQ1500-35-220	350	1200	333.3	40	740	220	75	3050
			1500	416.7	35				
			2000	555.6	27				
73	350WQ1500-40-250	350	1200	333.3	42	740	250	78	3250
			1500	416.7	40				
			2000	555.6	33				
74	350WQ1800-40-280	350	1400	388.9	42	740	280	78	3450
			1800	500.0	40				
			2600	722.2	33				
75	350WQ1800-43-315	350	1400	388.9	48	740	315	78	3650
			1800	500.0	43				
			2600	722.2	35				
76	350WQ1800-46-355	350	1400	388.9	50	740	355	78	3950
			1800	500.0	46				
			2600	722.2	38				
77	400WQ1500-5-30	400	1200	333.3	6	730	30	75	1380
			1500	416.7	5				
			2000	555.6	3				
78	400WQ1500-6-37	400	1200	333.3	7	740	37	75	1400
			1500	416.7	6				
			2000	555.6	4.5				
79	400WQ1500-8-45	400	1200	333.3	10	740	45	78	1450
			1500	416.7	8				
			2000	555.6	6				
80	400WQ1500-10-55	400	1200	333.3	12	740	55	78	1850
			1500	416.7	10				
			2000	555.6	7				

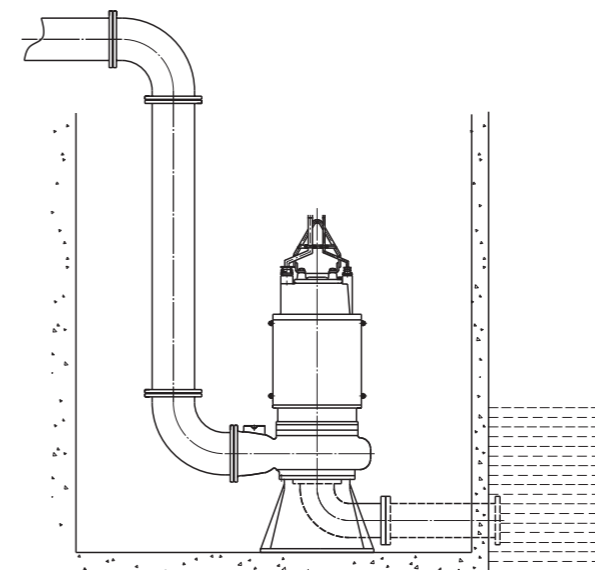
WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
81	400WQ1500-12-75	400	1200	333.3	14	990	75	75	1800
			1500	416.7	12				
			2000	555.6	9				
82	400WQ1500-15-90	400	1200	333.3	18	990	90	75	1850
			1500	416.7	15				
			2000	555.6	12				
83	400WQ1500-18-110	400	1200	333.3	21	990	110	70	1920
			1500	416.7	18				
			2000	555.6	14				
84	400WQ1500-22-132	400	1200	333.3	25	990	132	70	2200
			1500	416.7	22				
			2000	555.6	17				
85	400WQ2000-20-160	400	1500	416.7	23	990	160	75	2300
			2000	555.6	20				
			2800	777.8	15				
86	400WQ2000-23-185	400	1500	416.7	25	990	185	75	2500
			2000	555.6	23				
			2800	777.8	17				
87	400WQ2000-25-200	400	1500	416.7	30	745	200	75	2850
			2000	555.6	25				
			2800	777.8	19				
88	400WQ2000-28-220	400	1500	416.7	35	745	220	75	3050
			2000	555.6	28				
			2800	777.8	21				
89	400WQ2000-32-250	400	1500	416.7	38	745	250	78	4200
			2000	555.6	32				
			2800	777.8	25				
90	400WQ2000-36-280	400	1500	416.7	43	745	280	78	4300
			2000	555.6	36				
			2800	777.8	27				
91	400WQ2000-40-315	400	1500	416.7	44	740	315	78	4400
			2000	555.6	40				
			2800	777.8	35				
92	400WQ2000-45-355	400	1400	388.9	47	740	355	78	4470
			1800	500.0	45				
			2600	722.2	38				
93	500WQ2000-7-55	500	1500	416.7	10	740	55	80	1980
			2000	555.6	7				
			3000	833.3	4				
94	500WQ2200-8-75	500	1800	500	10	980	75	75	2150
			2200	611.1	8				
			3000	833.3	5				
95	500WQ2200-10-90	500	1800	500	13	990	90	78	2250
			2200	611.1	10				
			3000	833.3	7				
96	500WQ2200-12-110	500	1800	500	15	990	110	75	2350
			2200	611.1	12				
			3000	833.3	8				
97	500WQ2200-15-132	500	1800	500	17	990	132	70	2450
			2200	611.1	15				
			3000	833.3	10				
98	500WQ3000-11-132	500	2000	555.6	14	745	132	78	3840
			3000	833.3	11				
			4000	1111.1	8				
99	500WQ3000-13-160	500	2000	555.6	21	745	160	78	3940
			3000	833.3	13				
			4000	1111.1	9				
100	500WQ3000-15-185	500	2000	555.6	22	745	185	75	4040
			3000	833.3	15				
			4000	1111.1	11				

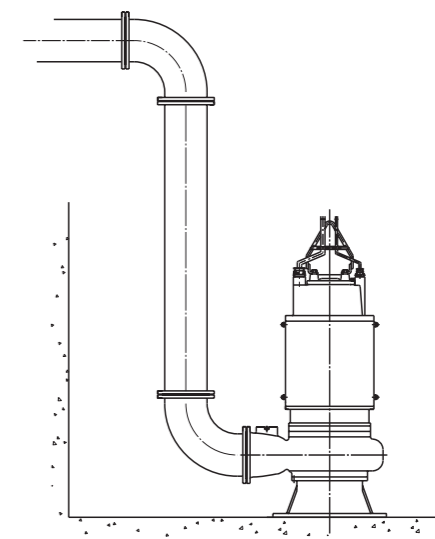
WQ型泵性能参数 WQ TYPE PUMP PERFORMANCE

序号 No.	型号 Type	排出口径 Outlet diameter (mm)	流量 Capacity		扬程 Head (m)	转速 Speed (r/min)	功率 Power (kW)	效率 Efficiency (%)	重量 Weight (Kg)
			(m³/h)	(L/s)					
101	500WQ3000-16-200	500	2000	555.6	23	745	200	75	4040
			3000	833.3	16				
			4000	1111.1	12				
102	500WQ3000-18-220	500	2000	555.6	26	745	220	70	3700
			3000	833.3	18				
			4000	1111.1	14				
103	500WQ3000-21-250	500	2000	555.6	29	745	250	70	3910
			3000	833.3	21				
			4000	1111.1	16				
104	500WQ3000-24-280	500	2000	555.6	32	745	280	70	4200
			3000	833.3	24				
			4000	1111.1	18				
105	600WQ3000-8-110	600	2500	694.4	10	590	110	70	3700
			3000	833.3	8				
			4000	1111.1	6				
106	600WQ3000-10-132	600	2500	694.4	12	590	132	70	3800
			3000	833.3	10				
			4000	1111.1	8				
107	600WQ4000-10-160	600	3000	833.3	13	745	160	78	3900
			4000	1111.1	10				
			5000	1388.9	8				
108	600WQ4000-11-185	600	3000	833.3	15	745	185	78	4000
			4000	1111.1	11				
			6000	1666.7	6				
109	600WQ4000-12-200	600	3000	833.3	16	745	200	75	4100
			4000	1111.1	12				
			6000	1666.7	7				
110	600WQ4000-14-220	600	3000	833.3	18	745	220	77	4200
			4000	1111.1	14				
			6000	1666.7	9				
111	600WQ4000-16-250	600	3000	833.3	21	745	250	75	4300
			4000	1111.1	16				
			6000	1666.7	10				
112	600WQ4000-18-280	600	3000	833.3	23	745	280	77	4400
			4000	1111.1	18				
			6000	1666.7	11				
113	600WQ4000-20-315	600	3000	833.3	25	745	315	75	4500
			4000	1111.1	20				
			6000	1666.7	13				

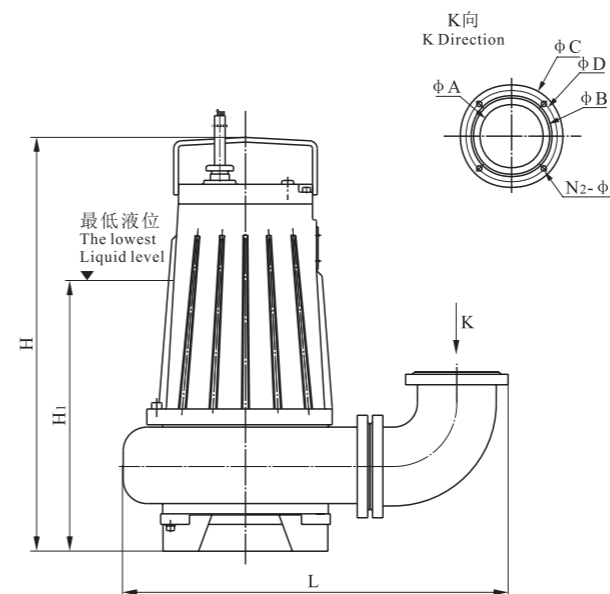
WQ型泵安装方式 WQ TYPE PUMP INSTALLATION METHOD



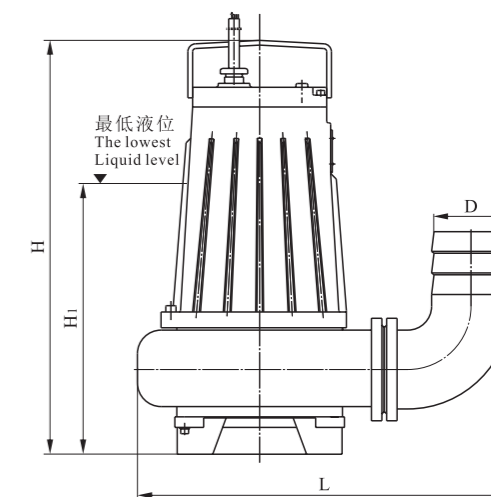
固定式干式安装
Fixed Dry Installation



固定式湿式安装
Fixed Wet Installation



硬管联接尺寸
Hard pipe connection dimension



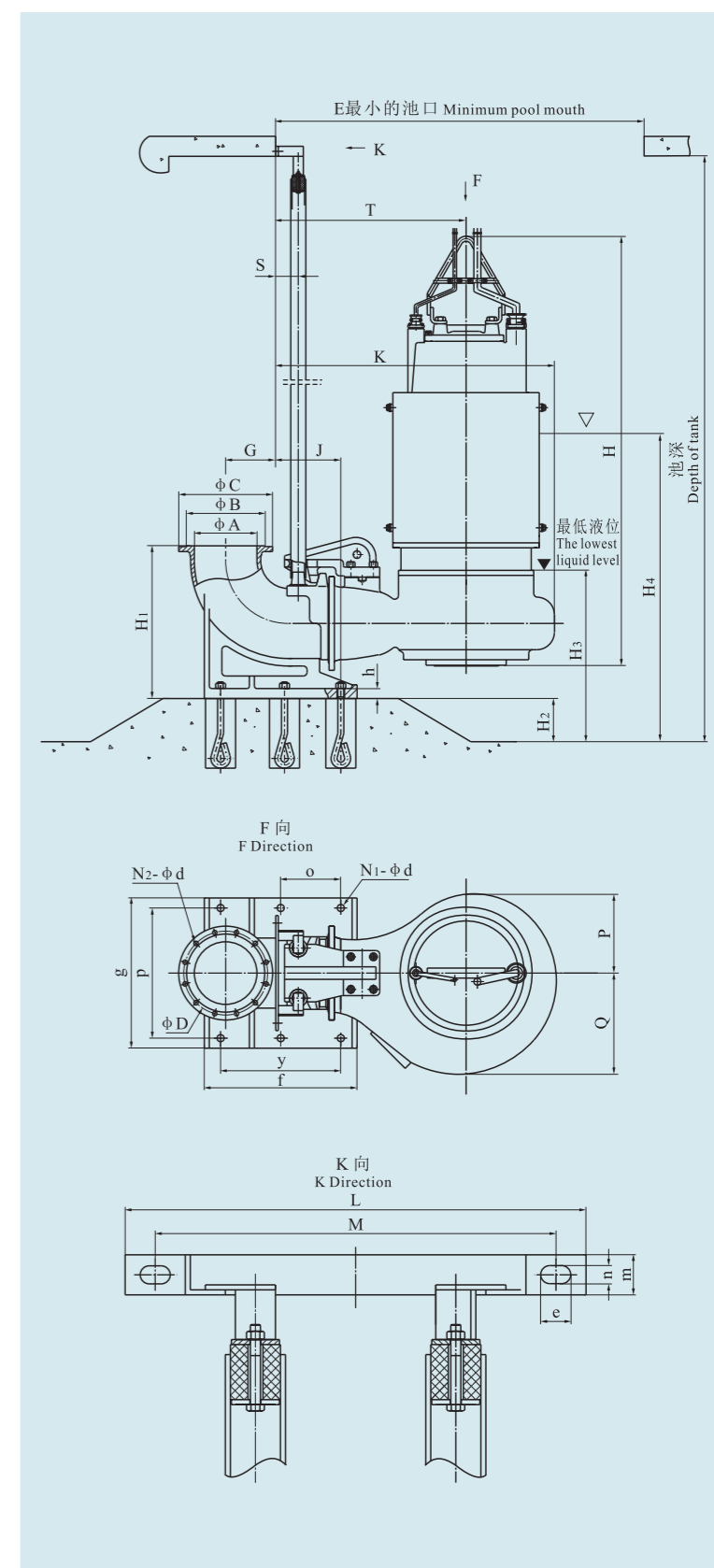
软管联接尺寸
Soft pipe connection dimension

WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	φA	φB	φC	φD	N2-φd	H	H1	H2	H3	H4	h	G	J	S	T	g	f	p	y	o	N1-φd
1	80WQ50-35-11	80	128	190	150	4-φ17.5	915	275	80	—	790	25	70	175	90	455	290	340	255	260	—	4-φ20
2	80WQ50-40-15	80	128	190	150	4-φ17.5	915	275	80	—	790	25	70	175	90	455	290	340	255	260	—	4-φ20
3	80WQ50-64-18.5	80	128	190	150	4-φ17.5	960	275	80	—	825	25	70	175	90	455	290	340	255	260	—	4-φ20
4	100WQ80-24-11	100	148	210	170	4-φ17.5	915	330	100	—	825	25	90	215	90	485	340	410	305	310	—	4-φ20
5	100WQ80-32-15	100	148	210	170	4-φ17.5	915	330	100	—	825	25	90	215	90	485	340	410	305	310	—	4-φ20
6	100WQ80-36-18.5	100	148	210	170	4-φ17.5	915	330	100	—	825	25	90	215	90	485	340	410	305	310	—	4-φ20
7	100WQ80-40-22	100	148	210	170	4-φ17.5	960	330	100	—	825	25	90	215	90	485	340	410	305	310	—	4-φ20
8	150WQ150-15-11	150	202	265	225	8-φ17.5	1005	485	150	—	985	35	125	260	90	545	480	500	440	400	—	4-φ20
9	150WQ150-20-15	150	202	265	225	8-φ17.5	1005	485	150	—	985	35	125	260	90	545	480	500	440	400	—	4-φ20
10	150WQ150-25-18.5	150	202	265	225	8-φ17.5	1085	485	150	—	1035	35	125	260	90	595	480	500	440	400	—	4-φ20
11	150WQ150-30-22	150	202	265	225	8-φ17.5	1085	485	150	—	1035	35	125	260	90	595	480	500	440	400	—	4-φ20
12	150WQ150-40-30	150	202	265	225	8-φ17.5	1495	485	150	530	1155	35	125	260	90	595	480	500	440	400	—	4-φ20
13	150WQ150-45-37	150	202	265	225	8-φ17.5	1605	485	150	530	1175	35	125	260	90	645	480	500	440	400	—	4-φ20
14	150WQ150-50-45	150	202	265	225	8-φ17.5	1605	485	150	530	1175	35	125	260	90	645	480	500	440	400	—	4-φ20
15	150WQ150-60-55	150	202	265	225	8-φ17.5	1605	485	150	530	1175	35	125	260	90	645	480	500	440	400	—	4-φ20
16	200WQ300-7-11	200	260	320	280	8-φ17.5	1020	570	200	—	1050	30	200	260	90	600	550	610	500	470	—	4-φ30
17	200WQ300-10-15	200	260	320	280	8-φ17.5	1020	570	200	—	1050	30	200	260	90	600	550	610	500	470	—	4-φ30
18	200WQ300-13-18.5	200	260	320	280	8-φ17.5	1085	570	200	—	1120	30	200	260	90	600	550	610	500	470	—	4-φ30
19	200WQ300-15-22	200	260	320	280	8-φ17.5	1085	570	200	—	1120	30	200	260	90	600	550	610	500	470	—	4-φ30
20	200WQ300-20-30	200	260	320	280	8-φ17.5	1650	570	200	670	1300	30	200	260	90	700	550	610	500	470	—	4-φ30
21	200WQ300-25-37	200	260	320	280	8-φ17.5	1650	570	200	670	1300	30	200	260	90	700	550	610	500	470	—	4-φ30
22	200WQ400-27-45	200	260	320	280	8-φ17.5	1685	570	200	670	1300	30	200	260	90	700	550	610	500	470	—	4-φ30
23	200WQ400-34-55	200	260	320	280	8-φ17.5	1685	570	200	670	1300	30	200	260	90	700	550	610	500	470	—	4-φ30
24	200WQ400-40-75	200	260	320	280	8-φ17.5	1805	570	250	670	1420	30	200	260	90	700	550	610	500	470	—	4-φ30
25	200WQ400-48-90	200	260	320	280	8-φ17.5	1805	570	250	670	1420	30	200	260	90	700	550	610	500	470	—	4-φ30
26	200WQ300-53-132	200	260	320	280	8-φ17.5	2020	570	200	670	1420	30	200	260	90	700	550	610	500	470	—	4-φ30

WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

P	Q	K	L	M	e	n	m	E
163	180	625	380	320	30	18	40	900×750
163	180	625	380	320	30	18	40	900×750
163	180	625	380	320	30	18	40	900×750
163	186	655	380	320	30	18	40	950×750
163	186	655	380	320	30	18	40	950×750
163	186	655	380	320	30	18	40	1000×700
163	186	655	380	320	30	18	40	1000×700
203	250	772	380	320	30	18	40	950×750
203	250	772	380	320	30	18	40	950×750
233	262	840	380	320	30	18	40	1100×800
233	262	840	380	320	30	18	40	1100×800
233	262	840	380	320	30	18	40	1300×1000
288	316	945	380	320	30	18	40	1300×1000
288	316	945	380	320	30	18	40	1400×1100
288	316	945	380	320	30	18	40	1400×1100
239	318	878	460	400	30	18	40	1000×700
239	318	878	460	400	30	18	40	1000×700
239	318	878	460	400	30	18	40	1150×900
239	318	878	460	400	30	18	40	1150×900
309	376	1042	460	400	30	18	40	1300×1000
309	376	1042	460	400	30	18	40	1300×1000
309	376	1042	460	400	30	18	40	1300×1000
309	376	1042	460	400	30	18	40	1400×1100
309	376	1042	460	400	30	18	40	1400×1100
240	319	1045	460	400	30	18	40	1400×1100

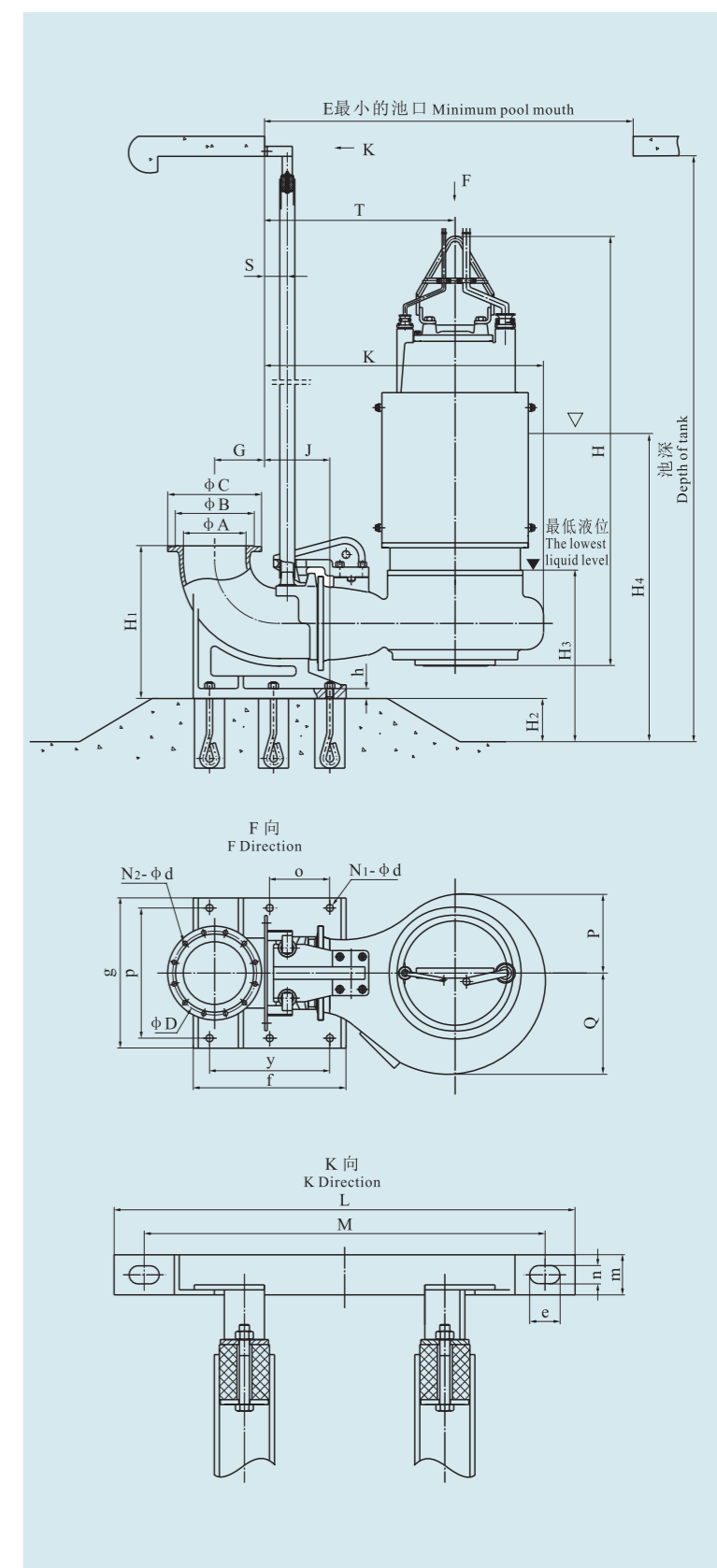


WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	φA	φB	φC	φD	N2-φd	H	H1	H2	H3	H4	h	G	J	S	T	g	f	p	y	o	N1-φd
27	200WQ300-25-30(G)	200	260	320	280	8-φ17.5	1487	570	200	660	1200	30	200	260	90	645	550	610	500	470	—	4-φ28
28	200WQ300-30-37(G)	200	260	320	280	8-φ17.5	1487	570	200	660	1200	30	200	260	90	645	550	610	500	470	—	4-φ28
29	250WQ400-7-15	250	312	375	335	12-φ17.5	1045	610	250	—	1150	40	200	260	90	630	600	610	520	480	—	4-φ30
30	250WQ400-10-18.5	250	312	375	335	12-φ17.5	1085	610	250	—	1200	40	200	260	90	630	600	610	520	480	—	4-φ30
31	250WQ400-13-22	250	312	375	335	12-φ17.5	1085	610	250	—	1200	40	200	260	90	630	600	610	520	480	—	4-φ30
32	250WQ500-10-30	250	312	375	335	12-φ17.5	1650	610	250	740	1380	40	200	260	90	760	600	610	520	480	—	4-φ30
33	250WQ500-16-37	250	312	375	335	12-φ17.5	1650	610	250	740	1380	40	200	260	90	760	600	610	520	480	—	4-φ30
34	250WQ500-20-45	250	312	375	335	12-φ17.5	1735	610	250	740	1430	40	200	260	90	760	600	610	520	480	—	4-φ30
35	250WQ500-25-55	250	312	375	335	12-φ17.5	1735	610	250	740	1430	40	200	260	90	760	600	610	520	480	—	4-φ30
36	250WQ600-28-75	250	312	375	335	12-φ17.5	1805	610	250	740	1430	40	200	260	90	760	600	610	520	480	—	4-φ30
37	250WQ600-34-90	250	312	375	335	12-φ17.5	1805	610	250	740	1430	40	200	260	90	760	600	610	520	480	—	4-φ30
38	250WQ600-40-110	250	312	375	335	12-φ17.5	2020	610	250	740	1650	40	200	260	90	760	600	610	520	480	—	4-φ30
39	250WQ600-50-132	250	312	375	335	12-φ17.5	2020	610	250	740	1650	40	200	260	90	760	600	610	520	480	—	4-φ30
40	250WQ500-10-30(G)	250	312	375	335	12-φ17.5	1503	610	250	750	1427	40	200	260	90	680	600	610	520	480	—	4-φ28
41	250WQ500-16-37(G)	250	312	375	335	12-φ17.5	1526	610	250	770	1274	40	200	260	90	680	600	610	520	480	—	4-φ28
42	250WQ500-19-37(G)	250	312	375	335	12-φ17.5	1526	610	250	770	1274	40	200	260	90	680	600	610	520	480	—	4-φ28
43	250WQ500-25-45(G)	250	312	375	335	12-φ17.5	1656	610	250	770	1404	40	200	260	90	680	600	610	520	480	—	4-φ28
44	300WQ600-6-18.5	300	365	440	395	12-φ22	1115	720	250	—	1320	45	250	330	90	700	880	870	780	770	—	4-φ30
45	300WQ600-7-22	300	365	440	395	12-φ22	1115	720	250	—	1320	45	250	330	90	700	880	870	780	770	—	4-φ30
46	300WQ700-11-30	300	365	440	395	12-φ22	1680	720	300	840	1500	45	250	330	90	770	880	870	780	770	—	4-φ30
47	300WQ700-14-37	300	365	440	395	12-φ22	1680	720	300	840	1500	45	250	330	90	770	880	870	780	770	—	4-φ30
48	300WQ700-16-45	300	365	440	395	12-φ22	1765	720	300	840	1550	45	250	330	90	770	880	870	780	770	—	4-φ30
49	300WQ700-19-55	300	365	440	395	12-φ22	1765	720	300	840	1550	45	250	330	90	770	880	870	780	770	—	4-φ30
50	300WQ1000-20-75	300	365	440	395	12-φ22	2045	720	300	840	1760	45	250	330	90	920	880	870	780	770	—	4-φ30
51	300WQ1000-24-90	300	365	440	395	12-φ22	2045	720	300	840	1760	45	250	330	90	920	880	870	780	770	—	4-φ30
52	300WQ1000-28-110	300	365	440	395	12-φ22	2050	720	300	840	1790	45	250	330	90	770	880	870	780	770	—	4-φ30
53	300WQ1000-35-132	300	365	440	395	12-φ22	2050	720	300	840	1790	45	250	330	90	770	880	870	780	770	—	4-φ30

WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

P	Q	K	L	M	e	n	m	E
255	311	928	460	400	30	18	40	1300×1000
255	311	928	460	400	30	18	40	1300×1000
253	333	923	460	400	30	18	40	1150×900
253	333	923	460	400	30	18	40	1150×900
253	333	923	460	400	30	18	40	1150×900
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
319	404	1098	460	400	30	18	40	1300×1000
276	343	991	460	400	30	18	40	1300×1100
274	346	990	460	400	30	18	40	1300×1000
274	346	990	460	400	30	18	40	1300×1000
274	346	990	460	400	30	18	40	1300×1100
300	400	1050	460	400	30	18	40	1150×950
300	400	1050	460	400	30	18	40	1150×950
349	473	1178	460	400	30	18	40	1400×1100
349	473	1178	460	400	30	18	40	1400×1100
349	473	1178	460	400	30	18	40	1400×1100
349	473	1178	460	400	30	18	40	1400×1100
375	488	1351	460	400	30	18	40	1600×1300
375	488	1351	460	400	30	18	40	1600×1300
349	473	1178	460	400	30	18	40	1600×1300
349	473	1178	460	400	30	18	40	1600×1300

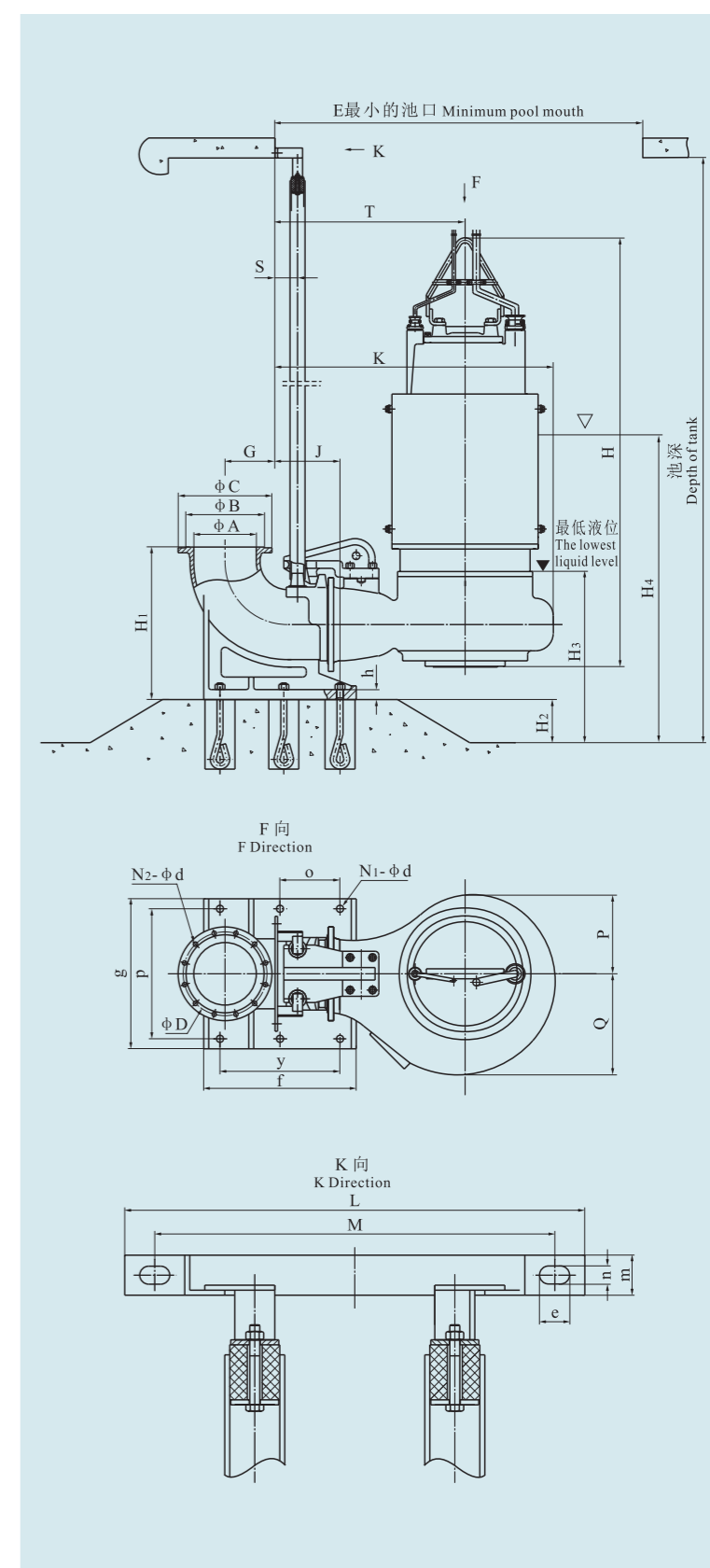


WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	φA	φB	φC	φD	N2-φd	H	H1	H2	H3	H4	h	G	J	S	T	g	f	p	y	o	N1-φd
54	300WQ600-60-185	300	365	440	395	12-φ22	2140	720	300	840	1790	45	250	330	90	870	880	870	780	770	—	4-φ30
55	300WQ700-11-30(G)	300	365	440	395	12-φ22	1515	720	300	875	1370	45	250	330	90	740	880	870	780	770	—	4-φ30
56	300WQ700-14-37(G)	300	365	440	395	12-φ22	1550	720	300	905	1404	45	250	330	90	740	880	870	780	770	—	4-φ30
57	300WQ700-18-45(G)	300	365	440	395	12-φ22	1680	720	300	905	1534	45	250	330	90	740	880	870	780	770	—	4-φ30
58	300WQ700-22-55(G)	300	365	440	395	12-φ22	1680	720	300	905	1534	45	250	330	90	740	880	870	780	770	—	4-φ30
59	300WQ1000-20-75(G)	300	365	440	395	12-φ22	1810	720	300	933	1564	45	250	330	90	805	880	870	780	770	—	4-φ30
60	300WQ1000-24-90(G)	300	365	440	395	12-φ22	1860	720	300	933	1614	45	250	330	90	805	880	870	780	770	—	4-φ30
61	350WQ1200-6-30	350	415	490	445	12-φ22	1745	820	350	1000	1610	45	335	315	125	915	880	870	780	770	—	4-φ40
62	350WQ1200-8-37	350	415	490	445	12-φ22	1830	820	350	1000	1670	45	335	315	125	915	880	870	780	770	—	4-φ40
63	350WQ1100-10-45	350	415	490	445	12-φ22	1830	820	350		1670	45	335	315	125	915	880	870	780	770	—	4-φ40
64	350WQ1100-12-55	350	415	490	445	12-φ22	2115	820	350	1000	1900	45	335	315	125	915	880	870	780	770	—	4-φ40
65	350WQ1100-16-75	350	415	490	445	12-φ22	2045	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
66	350WQ1100-20-90	350	415	490	445	12-φ22	2045	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
67	350WQ1100-25-110	350	415	490	445	12-φ22	2350	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
68	350WQ1100-30-132	350	415	490	445	12-φ22	2350	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
69	350WQ1100-36-160	350	415	490	445	12-φ22	2350	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
70	350WQ1500-30-185	350	415	490	445	12-φ22	2350	820	350	1000	1900	45	335	315	125	965	880	870	780	770	—	4-φ40
71	350WQ1500-32-200	350	415	490	445	12-φ22	2660	820	350	1000	1990	45	335	315	125	1115	880	870	780	770	—	4-φ40
72	350WQ1500-35-220	350	415	490	445	12-φ22	2660	820	350	1000	1990	45	335	315	125	1115	880	870	780	770	—	4-φ40
73	350WQ1500-40-250	350	415	490	445	12-φ22	2885	820	350	1000	2215	45	335	315	125	1115	880	870	780	770	—	4-φ40
74	350WQ1800-40-280	350	415	490	445	12-φ22	2885	820	350	1000	2215	45	335	315	125	1115	880	870	780	770	—	4-φ40
75	350WQ1800-43-315	350	415	490	445	12-φ22	2885	820	350	900	2215	45	335	315	125	1115	880	870	780	770	—	4-φ40
76	350WQ1800-46-355	350	415	490	445	12-φ22	2885	820	350	900	2215	45	335	315	125	1115	880	870	780	770	—	4-φ40
77	400WQ1500-5-30	400	482	565	515	16-φ26	1745	940	400	1100	1730	50	480	370	125	965	880	950	780	850	425	6-φ40
78	400WQ1500-6-37	400	482	565	515	16-φ26	1830	940	400	1100	1730	50	480	370	125	965	880	950	780	850	425	6-φ40
79	400WQ1500-8-45	400	482	565	515	16-φ26	1830	940	400	1100	1730	50	480	370	125	965	880	950	780	850	425	6-φ40
80	400WQ1500-10-55	400	482	565	515	16-φ26	2115	940	400	1100	1880	50	480	370	125	965	880	950	780	850	425	6-φ40

WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

P	Q	K	L	M	e	n	m	E
355	443	1268	460	400	30	18	40	1700×1400
324	406	1106	460	400	30	18	40	1300×1100
287	377	1071	460	400	30	18	40	1300×1100
287	377	1071	460	400	30	18	40	1300×1100
287	377	1071	460	400	30	18	40	1300×1100
319	420	1174	460	400	30	18	40	1400×1100
319	420	1174	460	400	30	18	40	1400×1100
363	499	1346	640	580	30	18	60	1600×1300
363	499	1346	640	580	30	18	60	1600×1300
363	499	1346	640	580	30	18	60	1600×1300
363	499	1346	640	580	30	18	60	1600×1300
375	488	1396	640	580	30	18	60	1700×1400
375	488	1396	640	580	30	18	60	1700×1400
388	523	1422	640	580	30	18	60	1700×1400
388	523	1422	640	580	30	18	60	1700×1400
388	523	1422	640	580	30	18	60	1900×1500
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
547	645	1715	640	580	30	18	60	1600×1300
377	533	1375	640	580	30	18	60	1600×1300
377	533	1375	640	580	30	18	60	1600×1300
377	533	1375	640	580	30	18	60	1600×1300
377	533	1375	640	580	30	18	60	1600×1300

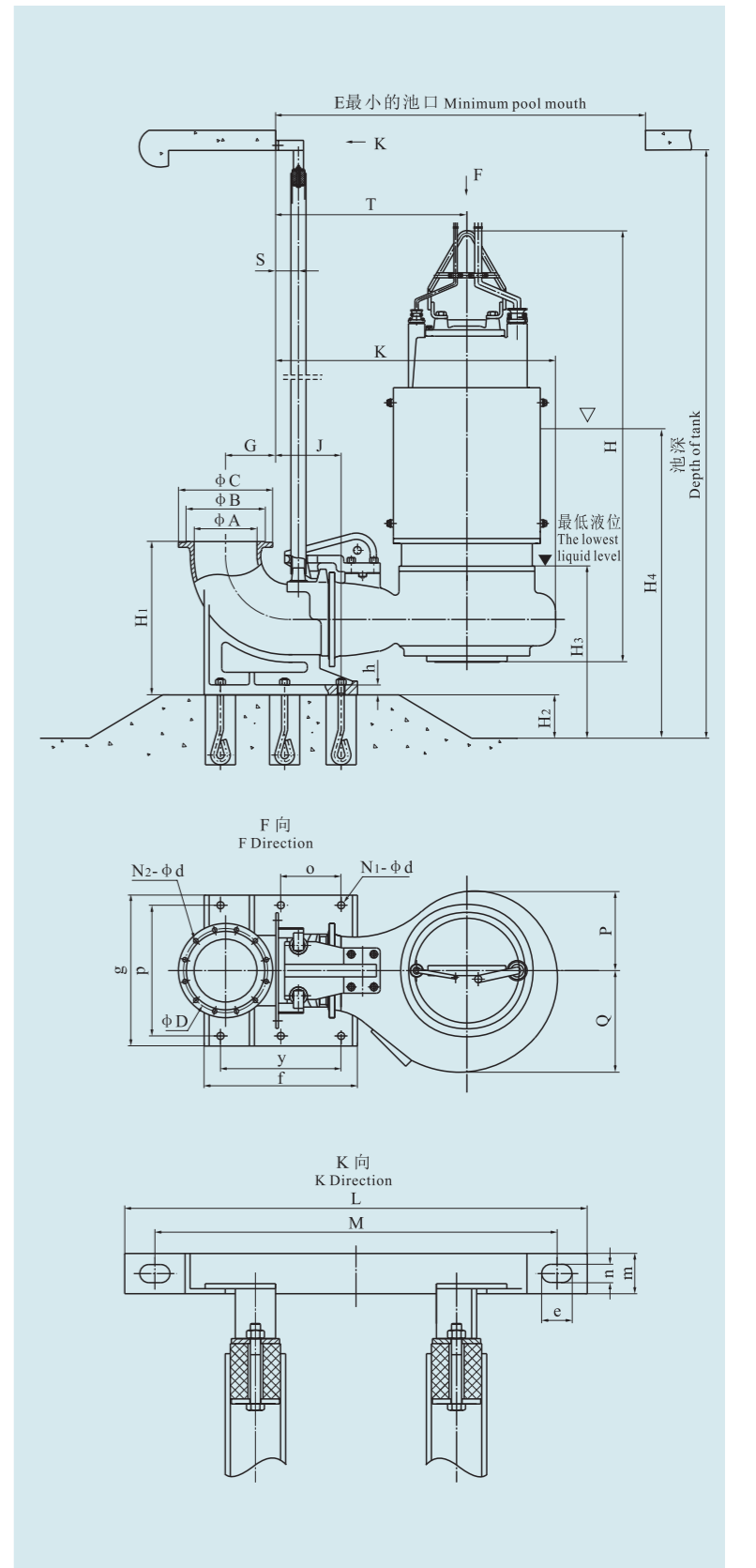


WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

Table with 21 columns (No., Type, dimensions) and 21 rows (81-113) listing pump specifications and dimensions.

WQ型泵自动耦合安装尺寸表 WQ TYPE PUMP AUTO-COUPLED INSTALLATION DIMENSIONS TABLE

Table with 11 columns (P, Q, K, L, M, e, n, m, E) and 21 rows (367-552) listing pump specifications and dimensions.

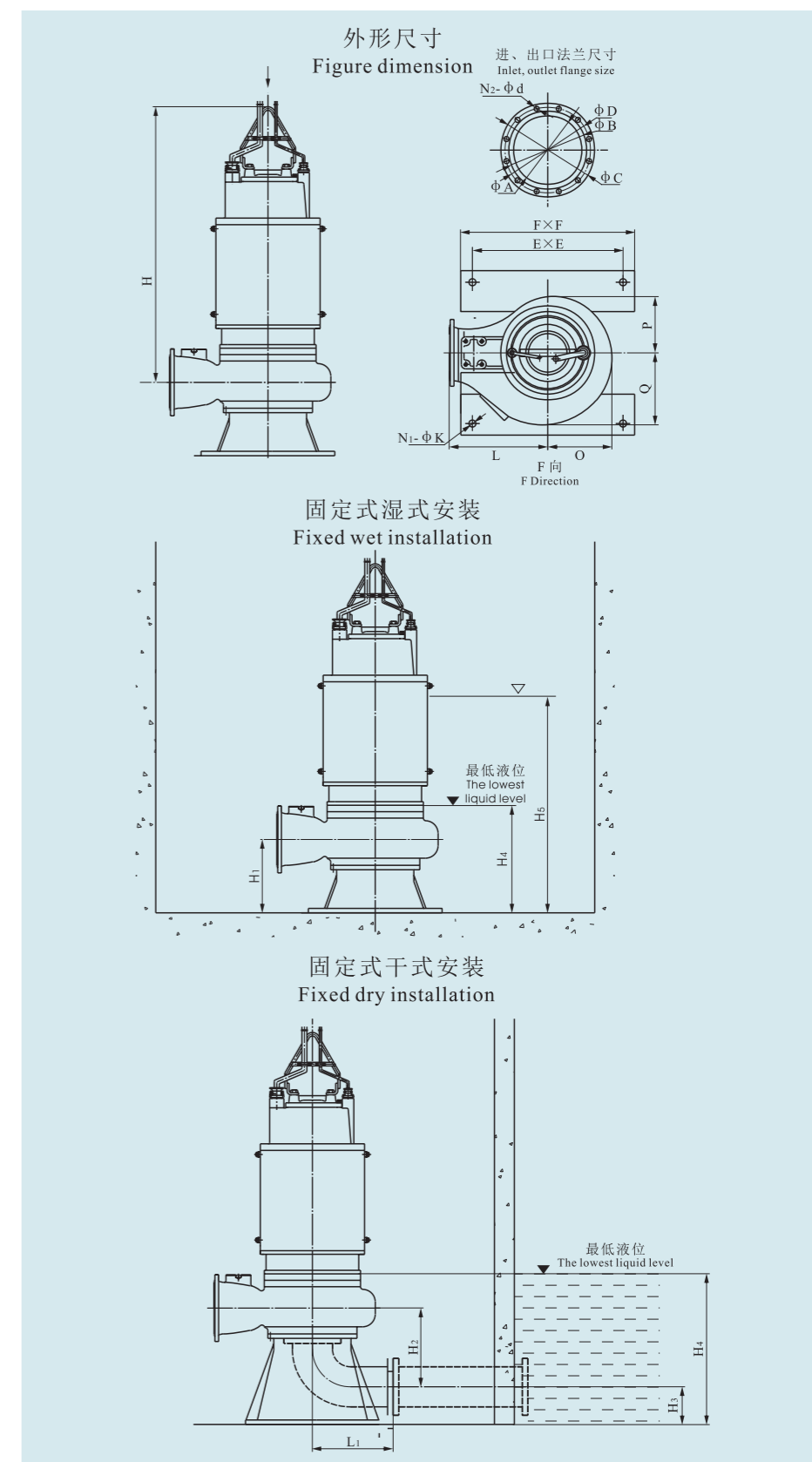


WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	外型尺寸 (Figure dimension)												
		φA	φB	φC	φD	N ₂ -φd	H	O	P	Q	L	E×E	F×F	N ₁ -φk
1	80WQ50-35-11	80	128	190	150	4-φ17.5	830	212	163	180	280	520×520	600×600	4-φ25
2	80WQ50-40-15	80	128	190	150	4-φ17.5	830	212	163	180	280	520×520	600×600	4-φ25
3	80WQ50-64-18.5	80	128	190	150	4-φ17.5	875	212	163	180	280	520×520	600×600	4-φ25
4	100WQ80-24-11	100	148	210	170	4-φ17.5	830	205	163	180	280	520×520	600×600	4-φ25
5	100WQ80-32-15	100	148	210	170	4-φ17.5	830	205	163	180	280	520×520	600×600	4-φ25
6	100WQ80-36-18.5	100	148	210	170	4-φ17.5	830	256	163	180	280	520×520	600×600	4-φ25
7	100WQ80-40-22	100	148	210	170	4-φ17.5	875	256	163	180	280	520×520	600×600	4-φ25
8	150WQ150-15-11	150	202	265	225	8-φ17.5	870	228	203	250	350	520×520	600×600	4-φ25
9	150WQ150-20-15	150	202	265	225	8-φ17.5	870	228	203	250	350	520×520	600×600	4-φ25
10	150WQ150-25-18.5	150	202	265	225	8-φ17.5	935	247	233	262	400	565×565	640×640	4-φ25
11	150WQ150-30-22	150	202	265	225	8-φ17.5	935	247	233	262	400	565×565	640×640	4-φ25
12	150WQ150-40-30	150	202	265	225	8-φ17.5	1345	367	233	262	400	800×800	900×900	4-φ40
13	150WQ150-45-37	150	202	265	225	8-φ17.5	1450	367	288	316	450	800×800	900×900	4-φ40
14	150WQ150-50-45	150	202	265	225	8-φ17.5	1450	367	288	316	450	800×800	900×900	4-φ40
15	150WQ150-60-55	150	202	265	225	8-φ17.5	1450	367	288	316	450	800×800	900×900	4-φ40
16	200WQ300-7-11	200	260	320	280	8-φ17.5	870	254	212	295	400	520×520	600×600	4-φ25
17	200WQ300-10-15	200	260	320	280	8-φ17.5	870	254	212	295	400	520×520	600×600	4-φ25
18	200WQ300-13-18.5	200	260	320	280	8-φ17.5	930	267	230	300	400	520×520	600×600	4-φ25
19	200WQ300-15-22	200	260	320	280	8-φ17.5	930	267	230	300	400	520×520	600×600	4-φ25
20	200WQ300-20-30	200	260	320	280	8-φ17.5	1480	342	309	376	500	700×700	800×800	4-φ40
21	200WQ300-25-37	200	260	320	280	8-φ17.5	1480	342	309	376	500	700×700	800×800	4-φ40
22	200WQ400-27-45	200	260	320	280	8-φ17.5	1515	349	332	368	500	700×700	800×800	4-φ40
23	200WQ400-34-55	200	260	320	280	8-φ17.5	1515	349	332	368	500	700×700	800×800	4-φ40
24	200WQ400-40-75	200	260	320	280	8-φ17.5	1635	379	362	398	500	700×700	800×800	4-φ40
25	200WQ400-48-90	200	260	320	280	8-φ17.5	1635	379	362	398	500	800×800	900×900	4-φ40
26	200WQ300-53-132	200	260	320	280	8-φ17.5	1850	342	309	376	500	700×700	800×800	4-φ40
27	200WQ300-25-30(G)	200	260	320	280	8-φ17.5	1293	283	255	311	445	520×520	600×600	4-φ25

WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

湿式安装 Wet installation			干式安装 Dry installation			
H ₁	H ₄	H ₅	L ₁	H ₂	H ₃	H ₄
300	—	860	—	—	—	—
300	—	860	—	—	—	—
300	—	875	—	—	—	—
300	—	860	—	—	—	—
300	—	860	—	—	—	—
300	—	875	—	—	—	—
300	—	875	—	—	—	—
320	—	905	—	—	—	—
320	—	905	—	—	—	—
320	—	955	—	—	—	—
320	—	955	—	—	—	—
480	620	1175	500	410	200	750
480	620	1175	500	410	200	750
480	620	1175	500	410	200	750
480	620	1175	500	410	200	750
330	—	850	—	—	—	—
330	—	850	—	—	—	—
330	—	850	—	—	—	—
445	640	1130	450	420	250	870
445	640	1130	450	420	250	870
495	660	1180	500	475	250	890
495	660	1180	500	475	250	890
495	660	1230	500	475	250	890
495	660	1230	500	475	250	890
445	660	1230	350	395	225	890
324	504	1044	350	304	200	684

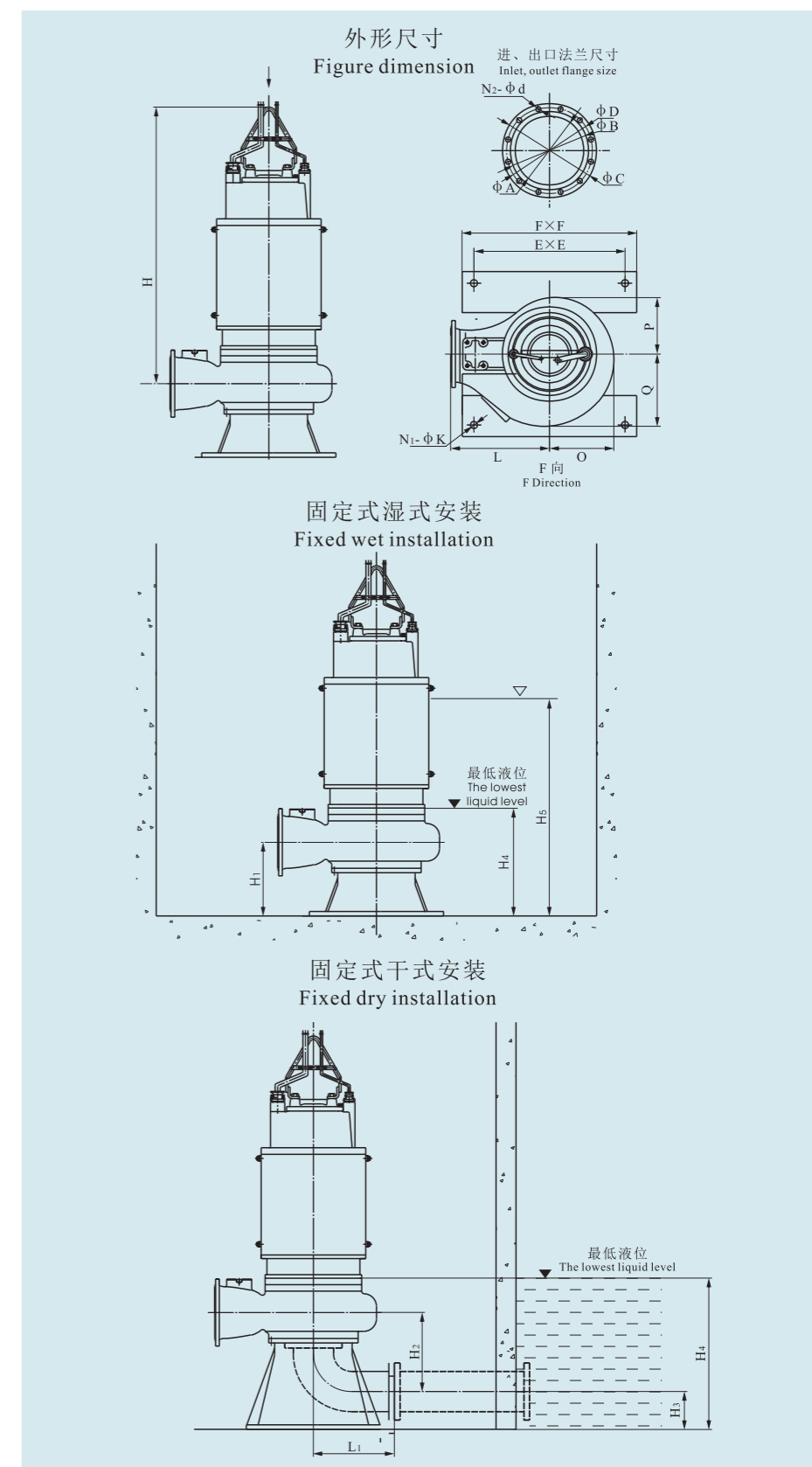


WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	外型尺寸 (Figure dimension)												
		φA	φB	φC	φD	N ₂ -φd	H	O	P	Q	L	E×E	F×F	N ₁ -φk
28	200WQ300-30-37(G)	200	260	320	280	8-φ17.5	1293	283	255	311	445	520×520	600×600	4-φ25
29	250WQ400-7-15	250	312	375	335	12-φ17.5	910	254	212	295	420	520×520	600×600	4-φ25
30	250WQ400-10-18.5	250	312	375	335	12-φ17.5	950	267	230	300	420	520×520	600×600	4-φ25
31	250WQ400-13-22	250	312	375	335	12-φ17.5	950	267	230	300	420	520×520	600×600	4-φ25
32	250WQ500-10-30	250	312	375	335	12-φ17.5	1480	360	319	404	550	700×700	800×800	4-φ40
33	250WQ500-16-37	250	312	375	335	12-φ17.5	1480	360	319	404	550	700×700	800×800	4-φ40
34	250WQ500-20-44.5	250	312	375	335	12-φ17.5	1565	360	319	404	550	700×700	800×800	4-φ40
35	250WQ500-25-55	250	312	375	335	12-φ17.5	1565	360	319	404	550	700×700	800×800	4-φ40
36	250WQ600-28-75	250	312	375	335	12-φ17.5	1635	379	362	398	550	800×800	900×900	4-φ40
37	250WQ600-34-90	250	312	375	335	12-φ17.5	1635	379	362	398	550	800×800	900×900	4-φ40
38	250WQ600-40-110	250	312	375	335	12-φ17.5	1850	379	362	398	550	800×800	900×900	4-φ40
39	250WQ600-50-132	250	312	375	335	12-φ17.5	1850	379	362	398	550	800×800	900×900	4-φ40
40	250WQ500-10-30(G)	250	312	375	335	12-φ17.5	1270	312	276	343	470	520×520	600×600	4-φ25
41	250WQ500-16-37(G)	250	312	375	335	12-φ17.5	1297	311	274	346	470	520×520	600×600	4-φ25
42	250WQ500-19-37(G)	250	312	375	335	12-φ17.5	1297	311	274	346	470	520×520	600×600	4-φ25
43	250WQ500-25-45(G)	250	312	375	335	12-φ17.5	1427	311	274	346	470	520×520	600×600	4-φ25
44	300WQ600-6-18.5	300	365	440	395	12-φ22	970	267	230	300	400	520×520	600×600	4-φ25
45	300WQ600-7-22	300	365	440	395	12-φ22	970	267	230	300	400	520×520	600×600	4-φ25
46	300WQ700-11-30	300	365	440	395	12-φ22	1485	378	327	430	550	700×700	800×800	4-φ40
47	300WQ700-14-37	300	365	440	395	12-φ22	1485	378	327	430	550	700×700	800×800	4-φ40
48	300WQ700-16-45	300	365	440	395	12-φ22	1570	397	344	454	550	700×700	800×800	4-φ40
49	300WQ700-19-55	300	365	440	395	12-φ22	1570	397	344	454	550	700×700	800×800	4-φ40
50	300WQ1000-20-75	300	365	440	395	12-φ22	1835	424	384	464	700	1000×1000	1100×1100	4-φ50
51	300WQ1000-24-90	300	365	440	395	12-φ22	1835	424	384	464	700	1000×1000	1100×1100	4-φ50
52	300WQ1000-28-110	300	365	440	395	12-φ22	1835	424	384	464	550	1000×1000	1100×1100	4-φ50
53	300WQ1000-35-132	300	365	440	395	12-φ22	1855	424	384	464	550	1000×1000	1100×1100	4-φ50
54	300WQ600-60-185	300	365	440	395	12-φ22	1858	399	354	443	650	700×700	800×800	4-φ40
55	300WQ700-11-30(G)	300	365	440	395	12-φ22	1270	367	324	406	520	620×620	720×720	4-φ30
56	300WQ700-14-37(G)	300	365	440	395	12-φ22	1307	333	287	377	520	620×620	720×720	4-φ30

WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

湿式安装 Wet installation			干式安装 Dry installation			
H ₁	H ₄	H ₅	L ₁	H ₂	H ₃	H ₄
324	504	1044	350	304	200	684
330	—	950	—	—	—	—
330	—	950	—	—	—	—
330	—	950	—	—	—	—
445	640	1280	450	445	300	945
445	640	1280	450	445	300	945
445	640	1280	450	445	300	945
445	640	1330	450	445	300	945
495	660	1330	500	500	300	965
495	660	1330	500	500	300	965
495	660	1330	500	500	300	965
368	568	1065	350	393	225	818
364	584	1088	350	389	225	834
364	584	1088	350	389	225	834
364	584	1218	350	389	225	834
330	—	1020	—	—	—	—
330	—	1020	—	—	—	—
460	650	1350	450	510	400	1100
460	650	1350	450	510	400	1100
460	650	1350	450	510	400	1100
460	650	1350	450	510	400	1100
580	700	1500	600	510	400	1100
580	700	1500	600	510	400	1100
580	700	1500	600	510	400	1100
580	700	1500	600	510	400	1100
430	395	1400	450	475	270	1100
435	640	1132	450	405	270	880
433	668	1167	450	403	270	908

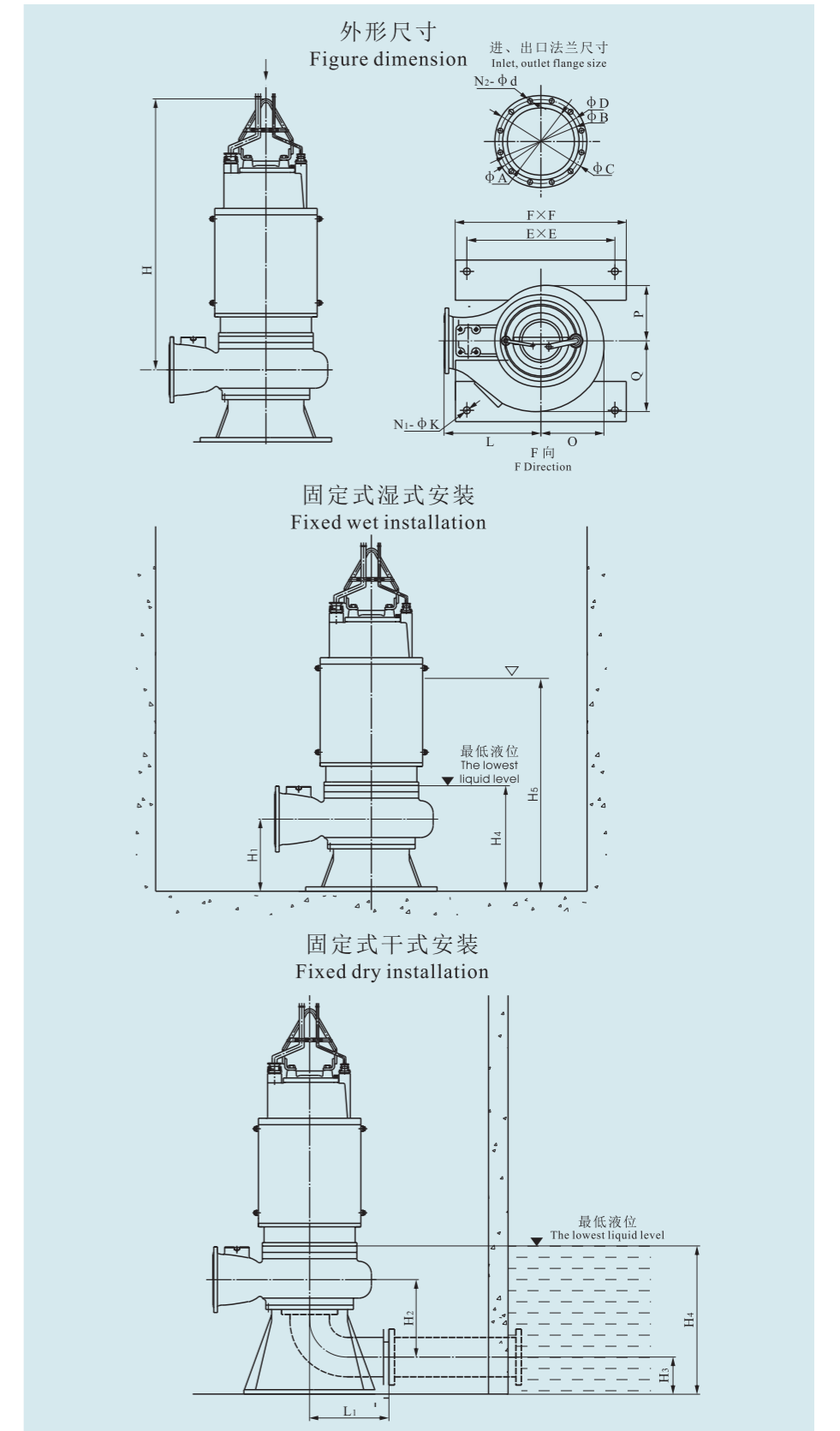


WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	外型尺寸 (Figure dimension)												
		φA	φB	φC	φD	N ₂ -φd	H	O	P	Q	L	E×E	F×F	N ₁ -φk
57	300WQ700-18-45(G)	300	365	440	395	12-φ22	1437	333	287	377	520	620×620	720×720	4-φ30
58	300WQ700-22-55(G)	300	365	440	395	12-φ22	1437	333	287	377	520	620×620	720×720	4-φ30
59	300WQ1000-20-75(G)	300	365	440	395	12-φ22	1552	371	319	420	585	800×800	900×900	4-φ40
60	300WQ1000-24-90(G)	300	365	440	395	12-φ22	1602	371	319	420	585	800×800	900×900	4-φ40
61	350WQ1200-6-30	350	415	490	445	12-φ22	1470	434	363	499	650	1000×1000	1100×1100	4-φ50
62	350WQ1200-8-37	350	415	490	445	12-φ22	1555	434	363	499	650	1000×1000	1100×1100	4-φ50
63	350WQ1100-10-45	350	415	490	445	12-φ22	1555	434	363	499	650	1000×1000	1100×1100	4-φ50
64	350WQ1100-12-55	350	415	490	445	12-φ22	1840	434	363	499	650	1000×1000	1100×1100	4-φ50
65	350WQ1100-16-75	350	415	490	445	12-φ22	1840	424	384	464	700	1000×1000	1100×1100	4-φ50
66	350WQ1100-20-90	350	415	490	445	12-φ22	1840	424	384	464	700	1000×1000	1100×1100	4-φ50
67	350WQ1100-25-110	350	415	490	445	12-φ22	1840	424	384	464	700	1000×1000	1100×1100	4-φ50
68	350WQ1100-30-132	350	415	490	445	12-φ22	1890	424	384	464	700	1000×1000	1100×1100	4-φ50
69	350WQ1100-36-160	350	415	490	445	12-φ22	1890	515	475	555	700	1000×1000	1100×1100	4-φ50
70	350WQ1500-30-185	350	415	490	445	12-φ22	1890	434	363	499	700	1000×1000	1100×1100	4-φ50
71	350WQ1500-32-200	350	415	490	445	12-φ22	2260	600	645	548	850	1000×1000	1100×1100	4-φ50
72	350WQ1500-35-220	350	415	490	445	12-φ22	2260	600	645	548	850	1000×1000	1100×1100	4-φ50
73	350WQ1500-40-250	350	415	490	445	12-φ22	2485	600	645	548	850	1000×1000	1100×1100	4-φ50
74	350WQ1800-40-280	350	415	490	445	12-φ22	2485	600	645	548	850	1000×1000	1100×1100	4-φ50
75	350WQ1800-43-315	350	415	490	445	12-φ22	2485	600	645	548	850	1000×1000	1100×1100	4-φ50
76	350WQ1800-46-355	350	415	490	445	12-φ22	2485	600	645	548	850	1000×1000	1100×1100	4-φ50
77	400WQ1500-5-30	400	482	565	515	16-φ26	1435	459	377	533	700	1000×1000	1100×1100	4-φ50
78	400WQ1500-6-37	400	482	565	515	16-φ26	1530	459	377	533	700	1000×1000	1100×1100	4-φ50
79	400WQ1500-8-45	400	482	565	515	16-φ26	1530	459	377	533	700	1000×1000	1100×1100	4-φ50
80	400WQ1500-10-55	400	482	565	515	16-φ26	1805	459	377	533	700	1000×1000	1100×1100	4-φ50
81	400WQ1500-12-75	400	482	565	515	16-φ26	1805	424	384	464	700	1000×1000	1100×1100	4-φ50
82	400WQ1500-15-90	400	482	565	515	16-φ26	1805	424	384	464	700	1000×1000	1100×1100	4-φ50
83	400WQ1500-18-110	400	482	565	515	16-φ26	1805	424	384	464	700	1000×1000	1100×1100	4-φ50
84	400WQ1500-22-132	400	482	565	515	16-φ26	1890	424	384	464	700	1000×1000	1100×1100	4-φ50
85	400WQ2000-20-160	400	482	565	515	16-φ26	1890	545	475	615	700	1000×1000	1100×1100	4-φ50
86	400WQ2000-23-185	400	482	565	515	16-φ26	1890	545	475	615	700	1000×1000	1100×1100	4-φ50

WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

湿式安装 Wet installation			干式安装 Dry installation			
H ₁	H ₄	H ₅	L ₁	H ₂	H ₃	H ₄
433	668	1297	450	403	270	908
433	668	1297	450	403	270	908
483	746	1377	350	518	270	1051
483	746	1427	350	518	270	1051
655	800	1510	600	625	450	1200
655	800	1510	600	625	450	1200
655	800	1510	600	625	450	1200
655	800	1740	600	625	450	1200
600	820	1740	600	580	450	1200
600	820	1740	600	580	450	1220
600	820	1740	600	580	450	1220
600	820	1740	600	580	450	1220
655	800	1540	600	625	450	1200
655	800	1800	600	625	450	1200
655	800	1800	600	625	450	1200
655	800	2040	600	625	450	1200
655	800	2040	600	625	450	1200
655	800	2040	600	625	450	1200
655	800	2040	600	625	450	1200
690	800	1690	600	630	500	1300
690	800	1690	600	630	500	1330
690	800	1690	600	630	500	1330
690	800	1690	600	630	500	1330
690	820	1690	600	630	500	1330
690	820	1690	600	630	500	1330
690	820	1690	600	630	500	1330
690	820	1690	600	630	500	1330
690	850	1690	600	620	500	1400
690	850	1690	600	620	500	1400

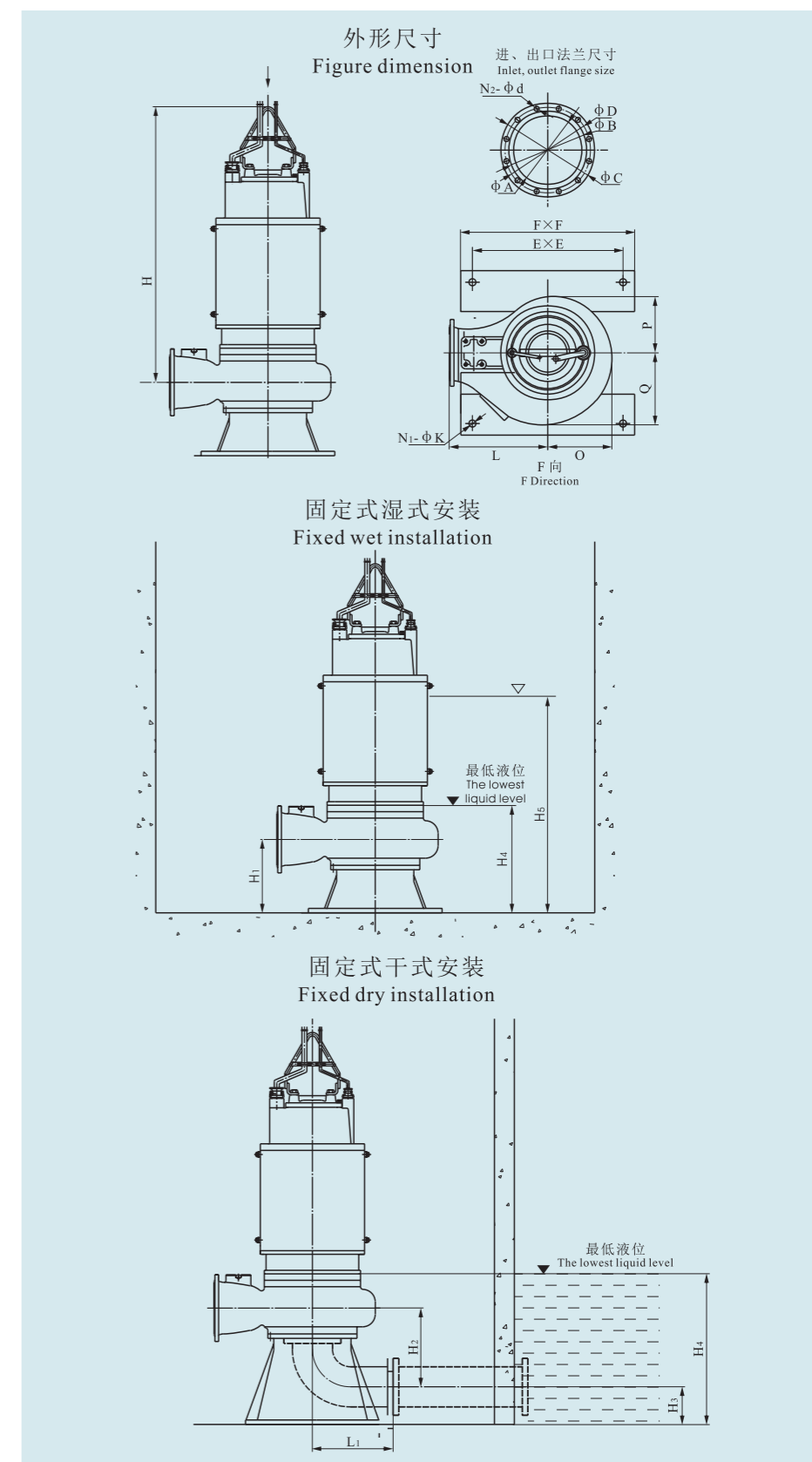


WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

序号 No.	型号 Type	外型尺寸 (Figure dimension)												
		φA	φB	φC	φD	N ₂ -φd	H	O	P	Q	L	E×E	F×F	N ₁ -φk
87	400WQ2000-25-200	400	482	565	515	16-φ26	2260	545	475	615	850	1000×1000	1100×1100	4-φ50
88	400WQ2000-28-220	400	482	565	515	16-φ26	2260	620	535	690	850	1000×1000	1100×1100	4-φ50
89	400WQ2000-32-250	400	482	565	515	16-φ26	2485	620	535	690	850	1000×1000	1100×1100	4-φ50
90	400WQ2000-36-280	400	482	565	515	16-φ26	2485	620	535	690	850	1000×1000	1100×1100	4-φ50
91	400WQ2000-40-315	400	482	565	515	16-φ26	2485	600	645	548	850	1100×1100	1200×1200	4-φ50
92	400WQ2000-45-355	400	482	565	515	16-φ26	2485	600	645	548	850	1100×1100	1200×1200	4-φ50
93	500WQ2000-7-55	500	585	670	620	20-φ26	1815	705	575	815	1000	1100×1100	1200×1200	4-φ50
94	500WQ2200-8-75	500	585	670	620	20-φ26	1815	705	575	815	1000	1100×1100	1200×1200	4-φ50
95	500WQ2200-10-90	500	585	670	620	20-φ26	2005	491	399	574	1000	1100×1100	1200×1200	4-φ50
96	500WQ2200-12-110	500	585	670	620	20-φ26	2005	491	399	574	1000	1100×1100	1200×1200	4-φ50
97	500WQ2200-15-132	500	585	670	620	20-φ26	2005	491	399	574	1000	1100×1100	1200×1200	4-φ50
98	500WQ3000-11-132	500	585	670	620	20-φ26	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
99	500WQ3000-13-160	500	585	670	620	20-φ26	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
100	500WQ3000-15-185	500	585	670	620	20-φ26	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
101	500WQ3000-16-200	500	585	670	620	20-φ26	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
102	500WQ3000-18-220	500	585	670	620	20-φ26	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50
103	500WQ3000-21-250	500	585	670	620	20-φ26	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50
104	500WQ3000-24-280	500	585	670	620	20-φ26	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50
105	600WQ3000-8-110	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
106	600WQ3000-10-132	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
107	600WQ4000-10-160	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
108	600WQ4000-11-185	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
109	600WQ4000-12-200	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
110	600WQ4000-14-220	600	685	780	725	20-φ30	2305	705	575	815	1000	1100×1100	1200×1200	4-φ50
111	600WQ4000-16-250	600	685	780	725	20-φ30	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50
112	600WQ4000-18-280	600	685	780	725	20-φ30	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50
113	600WQ4000-20-315	600	685	780	725	20-φ30	2530	705	575	815	1000	1100×1100	1200×1200	4-φ50

WQ型泵固定式安装尺寸表 WQ TYPE PUMP FIXED INSTALLATION DIMENSIONS TABLE

湿式安装 Wet installation			干式安装 Dry installation			
H ₁	H ₄	H ₅	L ₁	H ₂	H ₃	H ₄
710	850	1800	600	750	600	1750
710	950	1800	650	750	600	1750
710	950	2040	650	750	600	1750
710	950	2040	650	750	600	1750
710	800	2040	600	625	450	1200
710	800	2040	600	625	450	1200
780	1100	1790	650	850	750	1750
780	1100	1790	650	850	750	1750
780	950	1790	600	620	550	1750
780	950	1790	600	620	550	1750
780	1100	1930	650	750	600	1750
780	1100	1930	650	750	600	1750
780	1100	1930	650	750	600	1750
780	1100	1930	650	750	600	1750
780	1100	1930	650	750	600	1750
780	1100	1930	650	750	600	1750
830	1200	1830	650	850	750	1900
830	1200	1830	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900
830	1200	1905	650	850	750	1900



使用、检查与维修 Use, check and service

1、使用注意事项

泵不宜在易燃、易爆的介质环境中使用，也不宜抽送可燃性液体。

严禁撞击、压延电缆，严禁将电缆线当起吊绳使用。泵运行时不得随意拉扯电缆，以免损坏电缆发生触电事故或降低电缆密封性、降低电机接线腔绝缘性能。

当采用固定式自动耦合安装时，用吊链拴住两个吊环螺钉，上下起吊泵，注意轻起轻放。

泵放入水中时应垂直起吊，不允许横放着地，更不能陷入污泥中。

吐出管路上应装流量调节阀，避免流量过大导致电机过载。

2、使用前的检查

仔细检查泵在运输、存放、安装过程中有无变形或损坏，紧固件是否松动或脱落。

检查电缆线有无破损、折断，电缆线的引出口密封是否完好，发现有可能漏电及密封不良之处应及时妥善处理。

用500V兆欧表测量电机相间和相对地间的绝缘电阻，其值不应低于2兆欧，否则应对电机定子绕组进行干燥处理，干燥处理的温度不得超过120℃。

检查油室上的螺塞和密封垫片是否齐全。检查螺塞是否已将密封垫片压紧。

检查叶轮转动是否灵活。

检查电源装置是否安全可靠、正常、检查电缆中的接地线是否已可靠接地。

泵放入池中之前须先进行点动检查转向是否正确，如转向不对，应立即切断电源，调换电控柜中接U、V、W的三相电缆中的任意两相。

1.Precautions at use

It is not proper to use the pump in a medium environment easy to explode and burn and to extract any combustible liquid.

It is strictly prohibited to impact or press the cable and use it as a lifting rope, and pull it at will when the pump is running so as not to damage it, which may result in an electric shock, or lowering the cable sealness, or the insulation performance of the wiring box of the motor.

When to use the way of fixed automatic coupling installation, lift or lower down the pump with the screw of the two hand ring and take care to handle it.

The pump has to be vertically lifted when it is placed in water and not horizontally landed, further more, not sunk into sludge.

A flow regulating valve must be equipped with the spitting pipeline to avoid overload of the motor due to a too heavy flow.

2.Check before use

Carefully check if there is any deformation or damage with the pump and any looseness or fall-off with the fasteners during transport, storage and installation.

Check if any damage or fracture with the cable, if the seal on its outlet intact and make a proper treatment in time if any possible leakage or bad seal is found.

Measure the dielectric resistance between the phases and between the phase and ground with a 500V megohm 2 meter, the value of which has not to be lower than megohm, otherwise a drying treatment must be taken for the stator winding of the motor with a temperature not over 120℃.

Check if there is oil in the oil chamber and do not stop filling it until it overflows on the filler.

Check if the screw cork and sealing pad on the oil chamber are full and if the screw cork presses the sealing pad tightly.

Check if the impeller rotates flexibly.

Check if the power device safe, reliable or normal and if the grounding wire inside of the cable reliably grounded.

Before placing the pump in the pool, check if it is in a correct. Direction of rotation by way of dot moving and cut off the power and change the U, V, W three wires with any two of which in the electric control cabinet if not correct.

使用、检查与维修 Use, check and service

3、启动

启动时应关闭吐出管路上的流量调节阀，当泵全速运转后再逐渐打开该阀门。注意不能长时间在该阀门关闭的情况下运转。

4、停车

当泵停用预计达半月以上时，应将泵吊起清洗并置于干燥处。当气温较低时，应将泵提出水面并排尽泵内液体，防止冰冻。

5、定期检查

电机相间和相对地间的绝缘电阻，其值不低于2兆欧，否则应拆机检修，同时应检查接地是否牢固可靠。

泵在规定的工作介质条件下正常运行半年后，应检查油室状况，如油室中的油呈乳化状态，应及时更换N10机械油。如果换油运行很短时间漏水检测探头立即报警，可能泵侧机械密封已经损坏，应更换机械密封。对于在恶劣工作条件下使用的泵，更应该经常检修。

在正常工作条件下泵工作一年后，应进行一次大修，更换已磨损的易损件并检查紧固件，同时应补充或更换轴承润滑脂，保证泵在运行过程中的良好润滑。

需拆卸时不得猛敲猛打以免损坏密封件。非熟练技工不要随便拆卸泵以免造成泵泄露或电机损坏。

3.Starting

Close the flow regulating valve on the spitting pipeline at starting and gradually open it when the pump gets in the full speed running. Note the pump can not run for a long time with the valve closed.

4.Stopping

Lift the pump, clean it and place it in a dry place when intended not to use it up to half a month and lift it out of the water and let the liquid inside of it drain out to prevent it from being frozen when the temperature is very low.

5.Check

Periodically check the dielectric resistance between phases and between phase and ground, the value of which should not be lower than 2 megohm, otherwise it has to be removed to overhaul, and, at the same time, check if the grounding is secured and reliable.

After half a year running of the pump under the provided working medium condition, check the state of the oil chamber and replace it with N10 mechanical oil if it shows emulsified state. It is possible that the mechanical seal on the pump. Side is made damaged when the leakage probe gives a warning with the pump running for a short time after the oil replacement and replace it at once. More often check the pump when it is used under a very adverse working condition.

After one year work of the pump under the normal working condition, a big overhaul must be taken for replacing the worn-out parts, checking the fasteners and supplementing or replacing the grease on the bearing so as to ensure a good lubrication of the pump during its running.

To disassemble, do not knock at it at will in order to avoid damaging the seal and do not allow non-skilled persons to do that in order not cause it leaking or the motor damaged.

故障原因及排除方法 Failures causes and troubleshooting

故障现象 Failure	可能产生的原因 Possible causes	排除方法 Troubleshooting
1、流量不足或不出水 Flow not enough or not water out	<ul style="list-style-type: none"> a)叶轮反转 Impeller reversedly rotates b)流道堵塞 Geat blocked up c)被抽介质浓度过大 Too high concentration of the medium to be extracted d)装置扬程太高 Too high head e)叶轮严重磨损 Impeller seriously worn out 	<ul style="list-style-type: none"> a)纠正电机转向 Correct its direction b)清除杂物 Get rid of foreign matters c)用水冲稀降低浓度 Get it thinned with water d)改泵或降低装置扬程 Change the pump or lower the head e)更换叶轮 Replace it
2、不能起动 Unable to start	<ul style="list-style-type: none"> a)缺相 Lack of phase b)叶轮卡住 Impeller blocked c)绕组接头或电缆断路 Circuit breaking of winding joint or cable d)定子绕组烧坏 Stator winding burnt e)电器控制故障 Electric control fault 	<ul style="list-style-type: none"> a)检查线路 Check the circuit b)清除杂物 Get rid of foreign matters c)用欧姆表检查修复 Check and repair with an ohmmeter d)进行修理，更换绕组 Repair or replace it e)检查控制柜，修理后调换电器零件 Check electric control cabinet and replace faulty components
3、定子烧坏 Stator burnt	<ul style="list-style-type: none"> a)缺相运行 Running with phase lack b)被抽介质浓度过大 Too high concentration of the medium extracted c)叶轮卡死或松动 Impeller blocked or loose d)密封损坏电机进水 Seal damaged and water going in the motor e)紧固件松动造成电机进水 Fasteners loose to make water in the motor 	<p>修理好电机后，使用前必须： After repair, it is required before use:</p> <ul style="list-style-type: none"> a)查清线路，清除故障 To check the circuit and clear off the failures b)用水稀释 Get it thinned with water c)清除脏物，拧紧叶轮紧固螺钉 Get rid of dirt, tighten the screws on impeller d)更换机械密封或“O”型密封圈 Replace mechanical seal or "O"-ring seal e)拧紧各部紧固件 Tighten fasteners on every part
4、电流过大 Too heavy current	<ul style="list-style-type: none"> a)管道、叶轮被堵 Pipeline, impeller blocked up b)抽送液体的密度或粘度较高 Too high density or viscosity of the liquid extracted c)流量过大 Too heavy flow 	<ul style="list-style-type: none"> a)清理管道和叶轮中的堵塞物 Clear up both b)改变抽送液体的密度或粘度 Change either of both c)关小出口阀，减小流量 Close the outlet valve a little to reduce the flow