

WQ 系列潜污泵

Series WQ Submersible Sewage Pump



• 公司简介 Enterprise Profile

石家庄翔浩机械有限公司，是以矿山、电力用渣浆泵、脱硫泵、疏浚泵、清水泵为主的工业水泵专业生产企业，集研发、设计、制造、营销、服务为一体，具有严格的质量保证及科学完善的服务体系。

公司技术力量雄厚，拥有资深的水泵设计、制造、应用工程师团队，立足持续为用户带来更大价值，不断提高服务水平与质量。我们不单单向用户提供产品，还可依据客户的工矿需求，采用系统一体化的设计方法，为客户提供渣浆输送的一整套解决方案，使得用户在环保、节能、运营持久、降低产品使用成本等方面取得了显著效果。

公司坚持“技术创新化、管理严格化、生产定制化、服务专业化”的经营理念，全力提升企业现代化管理水平，使企业实现了持续快速发展。

公司的主要产品为ZGB、ZJ、AH、HH、M型渣浆泵、WN型挖泥泵、TL型脱硫泵、G型砂砾泵、SP型液下泵、HDSN型双吸泵、WQ型潜污泵、IS型清水泵等，广泛应用于环境保护工程、污水处理、城市工厂给排水、各种水利工程、冶金、矿山、电力、煤炭、疏浚、采砂、石油化工、建材、火电烟气脱硫等等诸多领域。国内市场占有率逐年递增，国际市场的占

有份额不断提升，产品出口至东南亚、北美、欧洲、中亚、东亚等多个国家和地区。

长期以来，本公司坚持“诚信为本、客户至上”的原则，与众多厂家建立了长期合作关系，并赢得了广大客户的一致好评！

坚信凭借我们更优的产品，完善的服务，良好的信誉，必将赢得更多用户！

Shijiazhuang Soarho Machinery CO.,LTD, is a professional manufacture base of slurry pump, mine pump, FGD pump, dredge pump and clean water pump, combining scientific research, design, manufacture, marketing and service in one, with strict quality control system and science complete service system.

Having strong technical force, the company which has a senior pump design, manufacturing and application engineer team, continues to improves level and quality of service in order to bring greater value to the users. We not only provide products to users, but also provide a complete solution for slurry transportation for user to achieve a significant effect in environmental protection , energy saving , lasting trouble-free operation and cost reduction and so on, adopting a systematic and integrated design method and according to the working condition and the needing of user.

Adhering to the concept of 'technical innovation', 'strict management', 'customized production' and 'professional service', we strive to improve the modern management level and make the enterprises achieve sustained and rapid development.

The main products of the company are ZGB,ZJ,AH,HH,M slurry pumps ,WN dredge pumps , TL FGD pumps, G gravel pumps, SP sump pumps, HDSN double suction pumps. WQ submersible sewage pumps, IS clean water pumps and so on. They are widely used in many fields, such as environmental protection engineering, sewage treatment, municipal factory and water supply and drainage, various water conservancy projects, metallurgy, mine, electric power, coal, dredging, sand mining, petrochemical, building materials, thermal power flue gas desulfurization etc. The share of domestic market is increasing year by year, and the share of the international market is increasing. Products exported to Southeast Asia, North America, Europe, Central Asia, East Asia and many other countries and regions.

For a long time, adhering to the principle of "honesty and customer first", our company has established a long-term cooperative relationship with many manufacturers, and has won the praise of the customers.

Firmly believe that we will win more users by virtue of our better products, perfect service and good reputation.

- **产品介绍 Product Introduction**

WQ 系列潜污泵为单级、单吸、离心式潜水污水泵。泵与电机连成一体潜入水中工作，适用于输送 80℃ 以下，液体中含有固体颗粒及长纤维的各种污水，如城市污水、工业废水、建筑污水、煤水、雨水、粪便、淤泥等。被输送介质的混合物比重一般不超过 1.1，PH 值在 5~10 之间。有特殊要求时，可特殊定做。

电机绝缘等级为 F 级，防护等级为 IP68，具有可靠的转换电流，允许泵在短时间内接通、切断、调整电流等优点。电机采用夹套式结构，输送介质通过夹套式来冷却电机。潜水电机设有渗漏保护、过热保护、及湿度保护等保护措施，确保电机安全运行。

WQ 系列潜污泵的潜水电机配套专用启动控制柜，从起动到运行的转换采用电流-时间转换装置实现，在起动过程中能有效地保护电机和自耦变压器不受损坏。

WQ 系列潜污泵具有水利设计优良，节能效果显著、结构合理、防缠绕、无堵塞、安装灵活、可靠性好等特点，是市政给排水、污水处理、工业流程供水排水以及建筑行业理想的水工业设备。

WQ 系列潜污泵可提供两种安装方式——导轨式和支架式，安装操作方便，并可大大简化土建工程，与陆用泵相比，工程费用可节约 40%。

Series WQ pump is a single stage and single-suction ,vertical ,centrifugal submersible sewage pump. The pump integrated with motor is submerged into water. It is suitable for delivering various sewage and effluent contained solids and longer fiber under the temperature 80°C such as sewage, industrial effluent, building and construction sludge, coal water, feces and etc. The specific gravity of transported mixture is not exceeded 1.1 and PH value in 5-10.It can be manufactured on the special request.

Motor insulation is class F and protection Class is IP 68.The submersible motor has the advantage of reliable exchange current, allowable connection, shut-off and adjustment current in short time. The motor is designed in jacket-type construction. The submersible motor is fitted with leakage, over-heat and moisture protection in order to ensure the operation without default.

For the submersible motor is matching special start control cabinet, the transfer from starting to operation can be realized by current-time transfer device so that it can effectively

protect motor and autotransformer from damage.

Series WQ submersible sewage pump is featured with the super hydraulic design, remarkable energy saving effect, reasonable structure, anti-winding, non-clogging, is easy installation, higher reliability and longer MTBF. It is the ideal water supply and drainage equipment for city, sewage treatment, industrial processes, building construction industry.

Series WQ submersible sewage pump has two kinds of installation-guide way and bracket types. The pump is installed and operated easily. The construction cost will be decreased in 40% compared with the pump used on land.

- **产品特点 Product Feature**

- 1、独特设计的叶轮、流道宽畅、具有抗缠绕、无堵塞性能。
- 2、叶轮和电机转子进行充分平衡，几乎没有振动，具有稳定的理想运行特性。
- 3、机械密封采用双道串联密封，材质为硬质耐腐碳化硅，具有耐用、耐磨等特点。
- 4、泵油室内设有油水探头，当水泵侧机械密封损坏后，水进入油室，探头发出信号，对泵实施保护。
- 5、潜水电机为干式结构，定子采用F级绝缘（耐热温度145℃），内装过热载保护器。当温度超过140℃时发出信号，控制系统对泵实施停机保护。
- 6、泵结构紧凑，体积小，移动方便，安装方便，无需建泵房，潜入水中即可工作，大大减少工程造价。
- 7、浮球开关可根据所需确定水位，自动控制泵的启停，无需专人看管。
- 8、设有导轨式安装(固定式自动耦合安装)和支架式安装（移动式自由安装）两种形式，可满足不同的使用场合。

- 1.Unique designed impeller, wide passage , anti-winding and non-clogging.
- 2.Impeller and rotor will be fully balanced almost without vibration so that they have a stable operation characteristic.
3. The mechanical seal is duplex seals in series , which is made of hard corrosion-resistant silicon carbide and is durable and wear-resistant.
4. The oil and water probe is set in the pump oil chamber. When the mechanical seal on the side of the pump is damaged, water enters the oil chamber and the probe sends a signal to protect the pump.

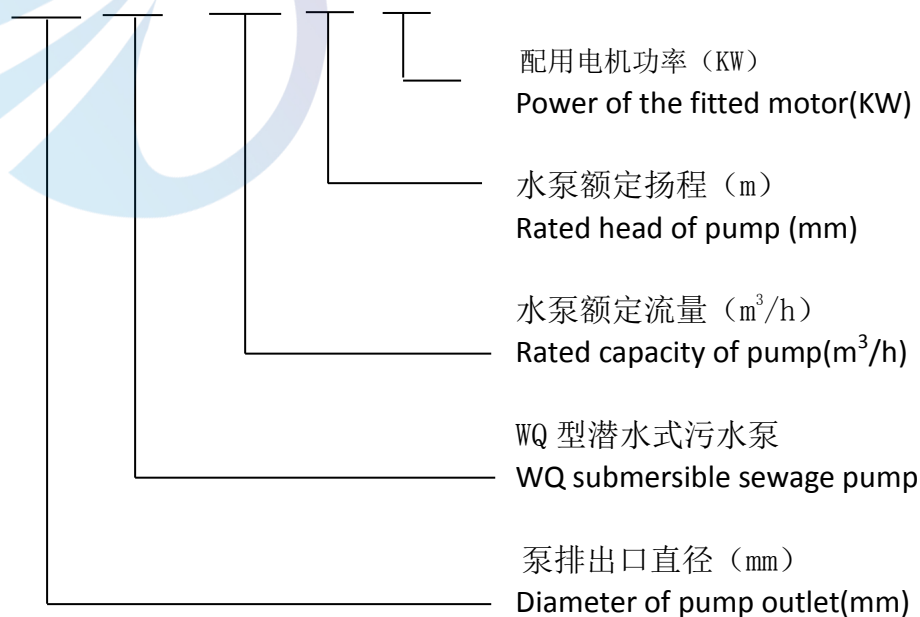
5. Submersible motor is dry-type construction, stator adopts class F insulation (temperature-resistance 145 °C) and over-load & over-heat protection is built in it. When temperature exceeds 140°C, the pump will be protected by control system.
6. The pump is compact in structure, small in volume, easy to move and easy to install. No pump room is needed to be built, diving into the water can work, greatly reducing the project cost.
7. The float switch can determine the water level according to the need, automatically control the start and stop of the pump, no need to be watched.
8. Two kinds of installation modes: guide rail installation (fixed automatic coupling installation) and support frame installation (mobile free installation), meeting with the different places for use.

- **性能范围 Range of Performance**

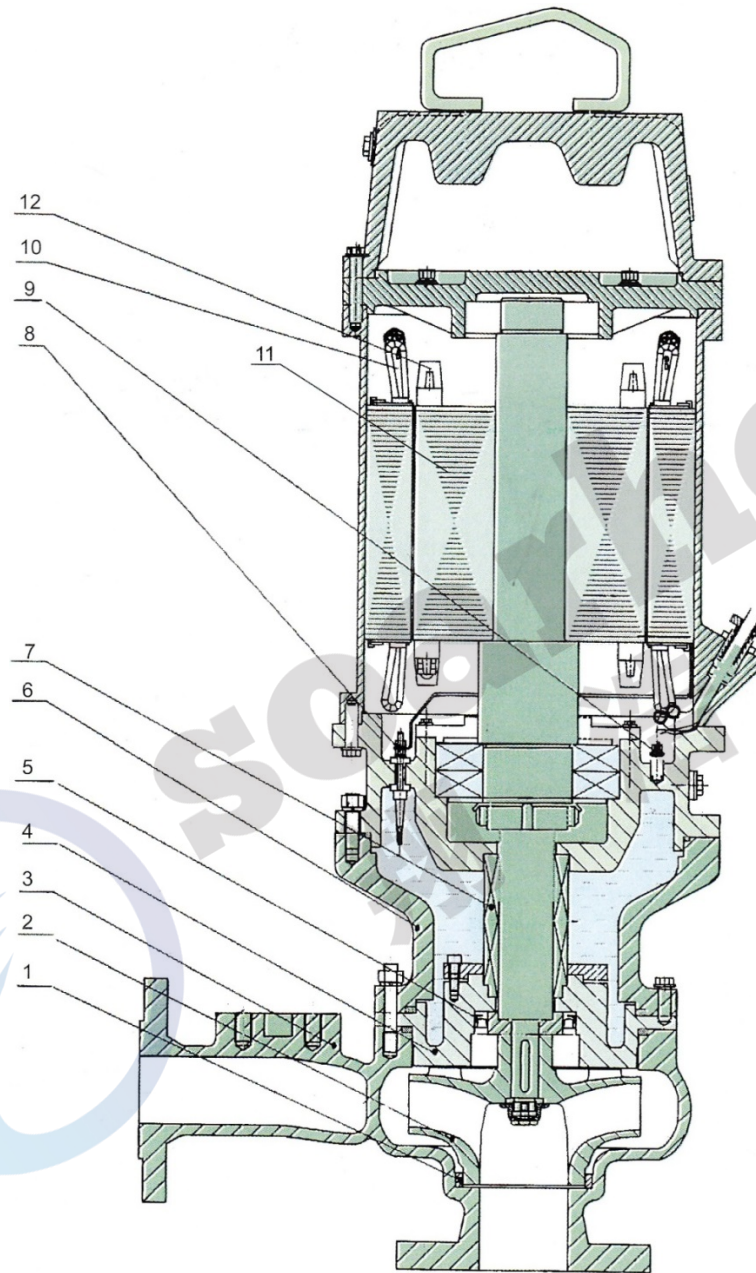
流量 Capacity Q: 6-10000m³/h
 扬程 Head H: 4-62m
 排出口直径 Outlet diameter: 25-700mm

- **型号说明 Model Code**

300 WQ 800 - 15 - 55



• 结构图 Construction description



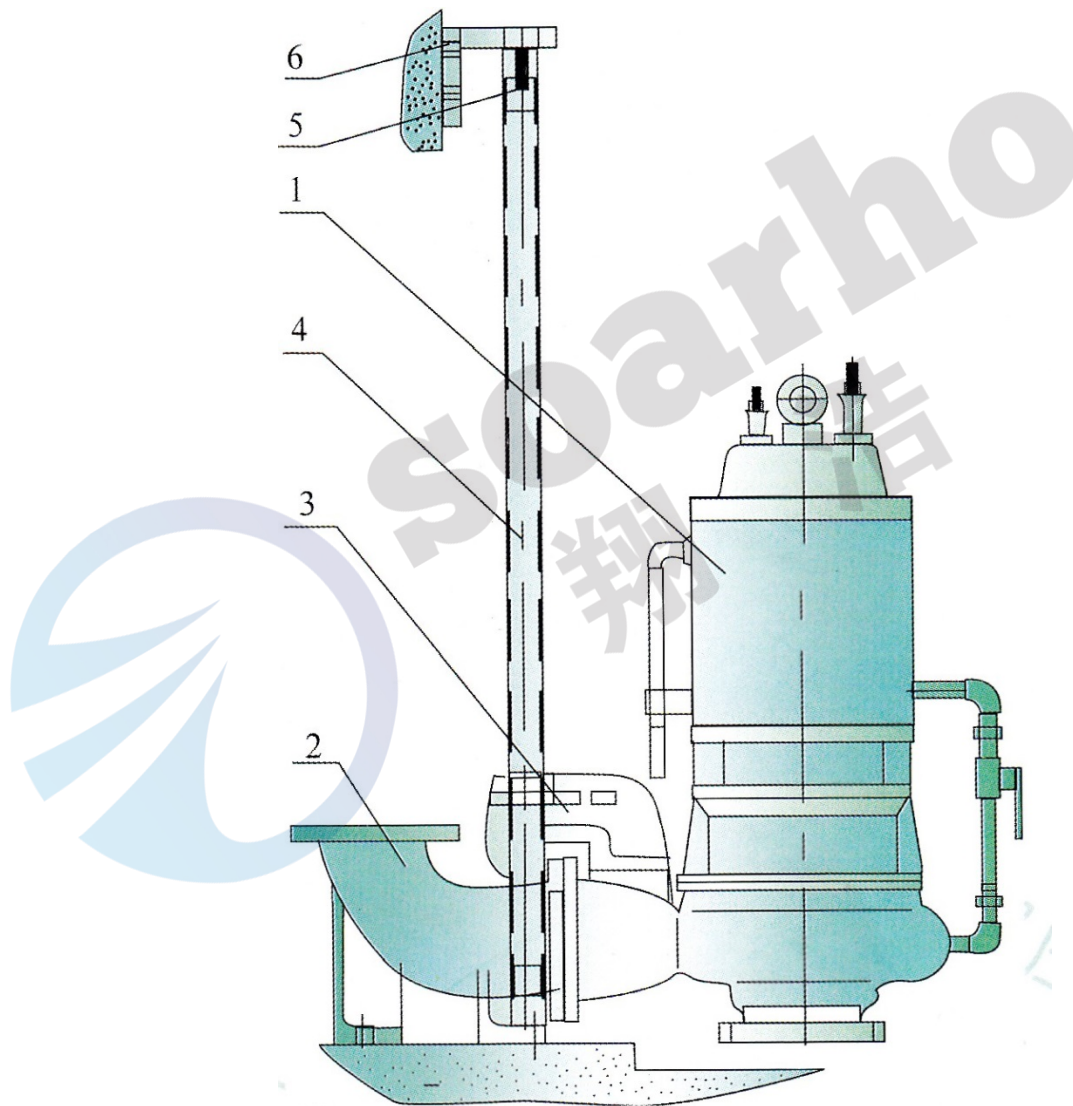
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|-----------------------------|-------------------------------|-------------------------|------------------|
| 1. 泵体口环 Wearing ring | 2. 叶轮 Impeller | 3. 泵体 Pump casing | 4. 泵盖 Pump cover |
| 5. 骨架油封 Skeleton oil seal | 6. 连接体 Joint body | 7. 机械密封 Mechanical seal | |
| 8. 湿度保护器 Moisture protector | 9. 渗透保护器 Leakage protector | 10. 定子 Stator | |
| 11. 转子 Rotator | 12. 过热保护器 Over-heat protector | | |

- **安装方式 Installation Modes**

- 1、导轨式安装方式 Guide Rail Installation Mode**

吐出弯管固定于泵坑底部，当泵下落时，沿导杆自动地与吐出弯管耦合，而泵提升时自动脱落。

Discharge elbow is fixed on the bottom of pump pit. When the pump falls down or lifting, the discharge of the pump is automatically coupled with or released from the discharge elbow along the guide rail.



1. 泵 Pump

2. 吐出弯管 Discharge Elbow

3. 滑卡 Sliding Arm

4. 导杆 Guide Rail

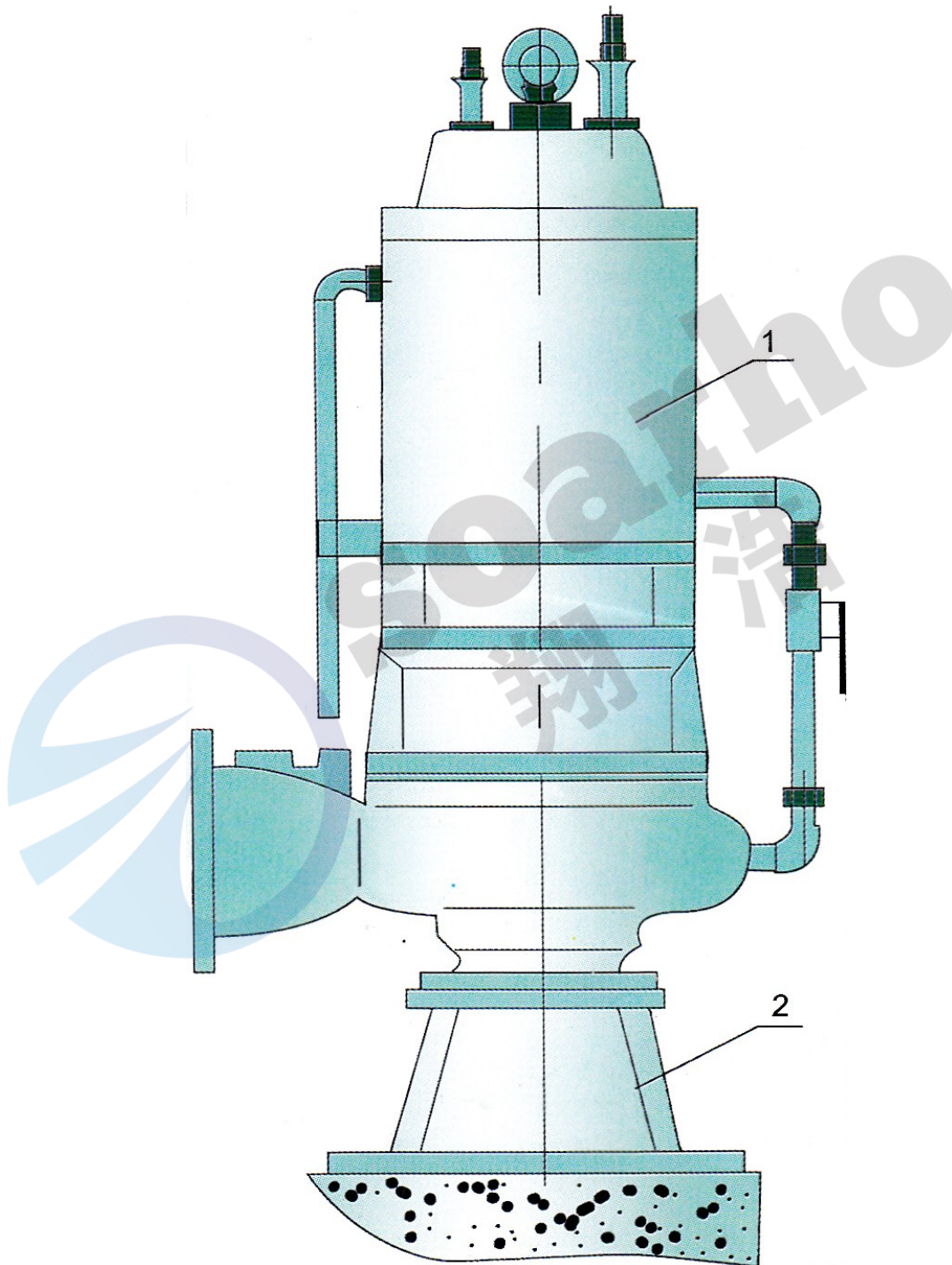
5. 安装座 Installing Socket

6. 导座 Guide Base

2、支架式安装方式 Support Frame Installation Mode

泵通过支架直接放于泵坑底部，可自由移动。

The pump is placed directly at the bottom of the pump pit through the support frame ,and can move freely.



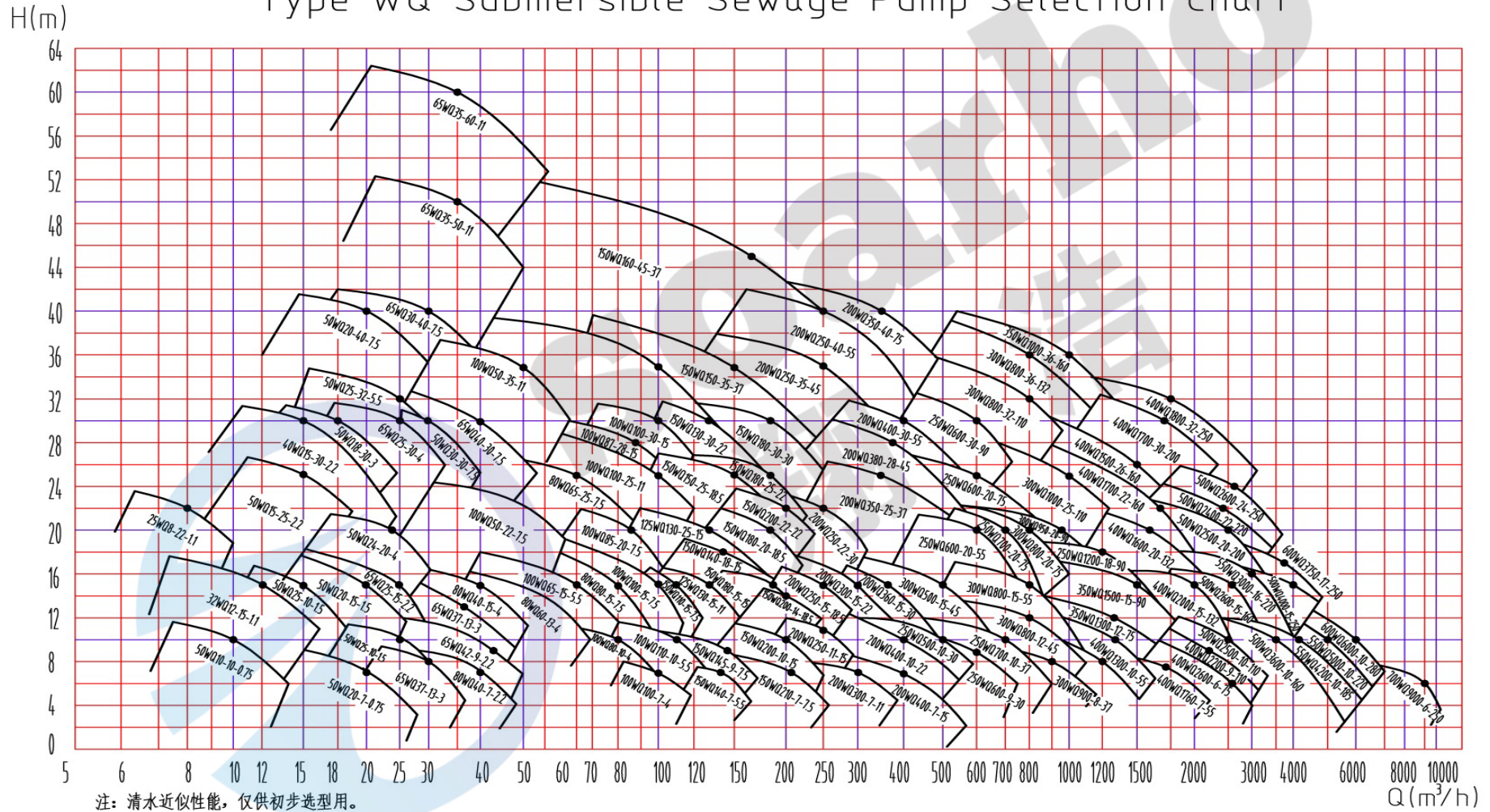
1、泵 Pump

2、支架 Support frame

- 型谱 Selection Chart

WQ 型潜污泵型谱

Type WQ Submersible Sewage Pump Selection Chart



注：清水近似性能，仅供初步选型用。

NOTE: Apprximate performance for clear water, to be used for primary selection only.

• 性能参数表 Performance List

型号 Pump type	排出口直径 Outlet Diameter. (mm)	流量 Capacity (m ³ /h)	扬程 Head H(m)	转速 Speed (r/min)	电机功率 Motor power (kw)	效率 Efficiency η (%)	泵重 Pump weight (kg)
25WQ8-22-1.1	25	8	22	2900	1.1	38	42
32WQ12-15-1.1	32	12	15	2900	1.1	40	42
40WQ15-15-1.5	40	15	15	2900	1.5	45	52
40WQ15-30-2.2	40	15	30	2900	2.2	48	55
50WQ20-7-0.75	50	20	7	2900	0.75	54	50
50WQ10-10-0.75	50	10	10	2900	0.75	56	50
50WQ25-10-1.5	50	25	10	2900	1.5	56	60
50WQ25-15-1.5	50	25	15	2900	1.5	55	55
50WQ27-15-2.2	50	27	15	2900	2.2	56	60
50WQ15-25-2.2	50	15	25	2900	2.2	56	60
50WQ18-30-3.0	50	18	30	2900	3.0	58	70
50WQ24-20-4.0	50	24	20	2900	4.0	60	85
50WQ40-15-4.0	50	40	15	2900	4.0	60	85
50WQ25-32-5.5	50	25	32	2900	5.5	53	100
50WQ30-30-7.5	50	30	30	2900	7.5	56	110
50WQ20-40-7.5	50	40	40	2900	7.5	55	110
65WQ42-9-2.2	65	42	9	2900	2.2	56	60
65WQ25-15-2.2	65	25	15	2900	2.2	52	60
65WQ37-13-3.0	65	37	13	2900	3.0	55	70
65WQ25-30-4.0	65	25	30	2900	4.0	58	85
65WQ40-30-7.5	65	40	30	2900	7.5	58	110
65WQ30-40-7.5	65	30	40	2900	7.5	56	110
65WQ35-50-11	65	35	50	2900	11	60	200
65WQ35-60-15	65	35	60	2900	15	63	230
80WQ40-7-2.2	80	40	7	1450	2.2	52	75
80WQ30-8-2.2	80	30	8	1450	2.2	45	75
80WQ50-10-3	80	50	10	2900	3.0	58	85
80WQ43-13-3	80	43	13	2900	3.0	50	85
80WQ60-13-4	80	60	13	2900	4.0	65	90
80WQ40-15-4	80	40	15	2900	4.0	57	90
80WQ80-15-7.5	80	80	15	2900	7.5	71	135
80WQ65-25-7.5	80	65	25	2900	7.5	56	135
100WQ100-7-4	100	100	7	1450	4.0	72.5	130
100WQ80-10-4	100	80	10	1450	4.0	62	130
100WQ110-10-5.5	100	110	10	1450	5.5	66	155
100WQ65-15-5.5	100	65	15	1450	5.5	59	150

型号 Pump type	排出口直径 Outlet Diameter. (mm)	流量 Capacity (m ³ /h)	扬程 Head H(m)	转速 Speed (r/min)	电机功率 Motor power (kw)	效率 Efficiency η (%)	泵重 Pump weight (kg)
100WQ100-15-7.5	100	100	15	1450	7.5	67	170
100WQ85-20-7.5	100	85	20	1450	7.5	68	170
100WQ50-22-7.5	100	50	22	1450	7.5	63	170
100WQ100-25-11	100	100	25	1450	11	66	270
100WQ70-22-11	100	70	22	1450	11	59	270
100WQ50-35-11	100	50	35	1450	11	67	270
100WQ87-28-15	100	87	28	1450	15	68	300
100WQ100-30-15	100	100	30	1450	15	63	300
100WQ100-35-18.5	100	100	35	1450	18.5	65	380
125WQ130-15-11	125	130	15	1450	15	62	320
125WQ130-20-15	125	130	20	1450	15	63	320
150WQ140-7-5.5	150	140	7	1450	5.5	72	180
150WQ120-10-5.5	150	120	10	1450	5.5	70	180
150WQ210-7-7.5	150	210	7	1450	7.5	75	190
150WQ145-9-7.5	150	145	9	1450	7.5	63	190
150WQ110-15-7.5	150	110	15	1450	7.5	72	190
150WQ200-10-15	150	200	10	1450	15	64	300
150WQ180-15-15	150	180	15	1450	15	65	300
150WQ140-18-15	150	140	18	1450	15	65	300
150WQ200-14-18.5	150	200	14	1450	18.5	68	400
150WQ180-20-18.5	150	180	20	1450	18.5	68	400
150WQ200-22-22	150	200	22	1450	22	73	430
150WQ180-25-22	150	180	25	1450	22	76	430
150WQ130-30-22	150	130	30	1450	22	75	430
150WQ250-22-30	150	250	22	1450	30	73	500
150WQ180-30-30	150	180	30	1450	30	73	500
150WQ200-30-37	150	200	30	1450	37	70	600
150WQ150-35-37	150	150	35	1450	37	63	600
150WQ160-45-37	150	160	45	1450	37	65	650
200WQ360-6-11	200	360	6	1450	11	72	450
200WQ300-7-11	200	300	7	1450	11	73	450
200WQ400-7-15	200	400	7	1450	15	78	480
200WQ250-11-15	200	250	11	1450	15	74	480
200WQ300-10-18.5	200	300	10	1450	18.5	72	480
200WQ250-15-18.5	200	250	15	1450	18.5	72	480
200WQ400-10-22	200	400	10	1450	22	76	500
200WQ310-13-22	200	310	13	1450	22	62	500
200WQ300-15-22	200	300	15	1450	22	73	500

型号 Pump type	排出口直径 Outlet Diameter. (mm)	流量 Capacity (m ³ /h)	扬程 Head H(m)	转速 Speed (r/min)	电机功率 Motor power (kw)	效率 Efficiency η(%)	泵重 Pump weight (kg)
200WQ400-13-30	200	400	13	1450	30	73	650
200WQ360-15-30	200	360	15	1450	30	75	650
200WQ250-22-30	200	250	22	1450	30	71	680
200WQ350-25-37	200	350	25	1450	37	75	800
200WQ400-25-45	200	400	25	1450	45	75	920
200WQ380-28-45	200	380	28	1450	45	70	920
200WQ250-35-45	200	250	35	1450	45	69	920
200WQ400-30-55	200	400	30	1450	55	70	1000
200WQ250-40-55	200	250	40	1450	55	69	1000
200WQ350-40-75	200	350	40	1450	75	68	1050
250WQ600-9-30	250	600	9	980	30	74	850
250WQ500-10-30	250	500	10	980	30	71	850
250WQ700-10-37	250	700	10	1450	37	81	850
250WQ600-12-37	250	600	12	1450	37	78	850
250WQ600-15-45	250	600	15	1450	45	75	950
250WQ600-20-55	250	600	20	1450	55	73	1300
250WQ700-20-75	250	700	20	1450	75	78	1500
250WQ600-25-75	250	600	25	1450	75	73	1500
250WQ600-30-90	250	600	30	1450	90	72	1600
300WQ900-8-37	300	900	8	980	37	81	1380
300WQ800-12-45	300	800	12	980	45	76	1500
300WQ500-15-45	300	500	15	980	45	70	1500
300WQ800-15-55	300	800	15	980	55	73	1550
300WQ600-20-55	300	600	20	980	55	75	1550
300WQ800-20-75	300	800	20	980	75	78	1600
300WQ950-20-90	300	950	20	980	90	80	1700
300WQ1000-25-110	300	1000	25	1450	110	82	2000
300WQ800-32-110	300	800	32	1450	110	76	2000
300WQ800-36-132	300	800	36	1450	132	76	2000
350WQ1200-8-45	350	1200	8	980	45	84	1350
350WQ1100-10-55	350	1100	10	980	55	84	1380
350WQ1300-12-75	350	1300	12	980	75	83	1450
350WQ1500-15-90	350	1500	15	980	90	82	2000
350WQ1200-18-90	350	1200	18	980	90	83	2000
350WQ1100-28-132	350	1100	28	980	132	82	2520
350WQ1000-36-160	350	1000	36	980	160	78.5	2880
400WQ1760-7.5-55	400	1760	7.5	580	55	82.3	2000
400WQ1300-10-55	400	1300	10	580	55	82	2000

型号 Pump type	排出口直径 Outlet Diameter. (mm)	流量 Capacity (m ³ /h)	扬程 Head H(m)	转速 Speed (r/min)	电机功率 Motor power (kw)	效率 Efficiency η (%)	泵重 Pump weight (kg)
400WQ2600-6-75	400	2600	6	740	75	78	1750
400WQ1500-10-75	400	1500	10	980	75	82.1	1750
400WQ2200-9-110	400	2200	9	980	110	80	2100
400WQ2000-15-132	400	2000	15	740	132	85.5	2520
400WQ1600-20-132	400	1600	20	740	132	82	2520
400WQ1700-22-160	400	1700	22	980	160	82	2880
400WQ1500-26-160	400	1500	26	980	160	83.5	2880
400WQ2000-22-200	400	2000	22	980	200	82	3150
400WQ1700-30-200	400	1700	30	980	200	83.5	3150
400WQ1800-32-250	400	1800	32	740	250	82	3250
400WQ2000-30-280	400	2000	30	740	280	82.5	3250
500WQ2500-10-110	500	2500	10	740	110	82	2100
500WQ2000-15-110	500	2000	15	740	110	83	2100
500WQ2800-10-132	500	2800	10	740	132	82	2250
500WQ3600-10-160	500	3600	10	740	160	83	2280
500WQ2600-15-160	500	2600	15	740	160	83	2280
500WQ2000-20-160	500	2000	20	740	160	82	2280
500WQ3000-15-200	500	3000	15	740	200	82	2280
500WQ2500-20-200	500	2500	20	740	200	78	2280
500WQ2800-18-220	500	2800	18	740	220	83	2350
500WQ2400-22-220	500	2400	22	740	220	84	2350
500WQ4000-15-250	500	4000	15	980	250	84	2650
500WQ2600-24-250	500	2600	24	980	250	82	2650
550WQ3000-12-160	550	3000	12	740	160	85	2380
550WQ4200-10-185	550	4200	10	740	185	82	2380
550WQ3000-16-220	550	3000	16	740	220	85	2500
550WQ5000-10-220	550	5000	10	740	220	84	2500
600WQ3500-12-185	600	3500	12	740	185	85	2580
600WQ5500-10-250	600	5500	10	740	250	83	2580
600WQ3750-17-250	600	3750	17	740	250	85	2580
600WQ6000-10-280	600	6000	10	740	280	84	2600
700WQ9000-6-250	700	9000	6	740	250	82	2800
700WQ10000-6-280	700	10000	6	740	280	83	2800