

Type SPS

WQ(P) Series Non-Clogging Submersible Sewage Pumps



Applications

WQ(P) series non-clogging submersible sewage pump is specially designed to meet the demand of delivering waste water and sewage in municipal engineering, industry, hospitals, hotels and commercial building applications, it is also used for flood control and drain flooded fields in water conservancy and farmland irrigation.

Specifications

- Flow Rate	: 10 - 6000 m ³ /h
- Head	: 6 - 62 m
- Fluid Temperature	: up to 60° C
- Ph Value	: 5 ~ 9
- Solids Handling Capabilities	: 6 - 125 mm diameter
- Max. Working Pressure	: 16 Bar

Materials of Construction

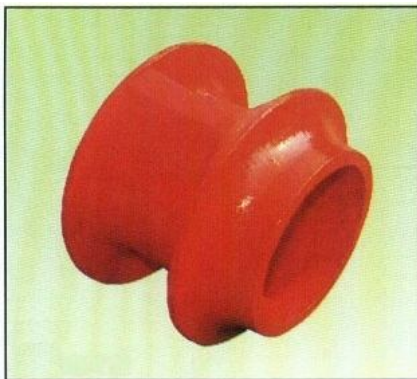
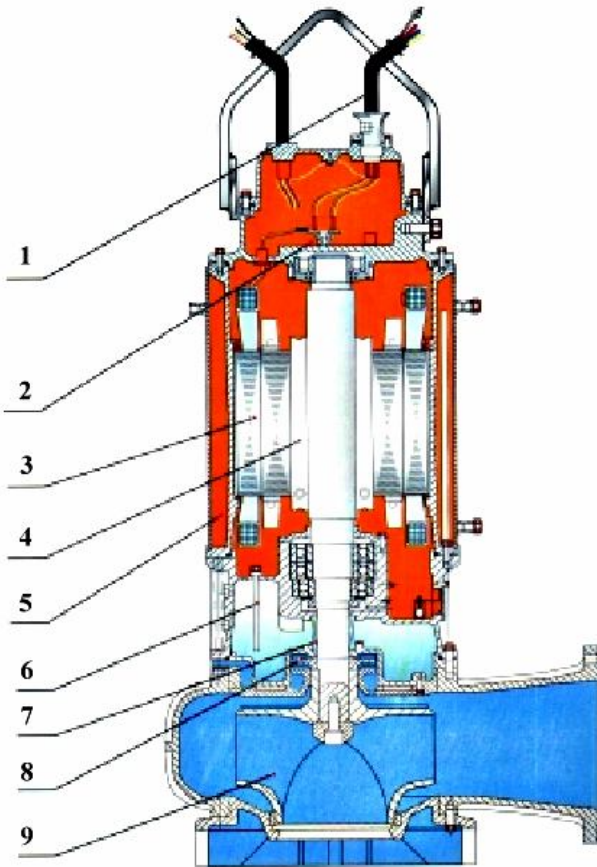
- Pump Casing	: Cast Iron /(P): SS304
- Impeller	: Cast Iron /(P): SS304
- Shaft	: Stainless Steel
- Bolts and Nuts	: Stainless Steel
- Mechanical Seal - Upper	: Graphite vs Silicon Carbide
- Lower	: Tungsten Carbide vs Tungsten Carbide

Features

- 1) Unique hydraulic design provides excellent hydraulic abilities, non-loading characteristic, allowing the pump to run with high efficiency and safely in higher capacity.
- 2) Excellent hydraulic abilities. The pump's high capacity and non-clogging impeller is capable of handling 6 to 125mm spherical solids and lint-providing long life in demanding applications.
- 3) The pump's water circulation cooling system provides superior cooling characteristics, allowing the pump to run safely above water level or for dry installation.
- 4) The pump's unique seal design composed of mechanical seal and hydrodynamic seal against the pumped liquid by auxiliary impeller provides the reliability for a long leak proof life.
- 5) The pump is equipped with fully automatic alarm protection system and liquid level control system to protect the pump against water, oil or electricity leakage, overloading, overheating and lack of phase, etc. In addition, the pump is controlled in various statuses and to ensure it is operating properly.
- 6) The automatic installation system provides an easy way of being installed and maintained, especially no pumping station is needed.
- 7) Imported SKI bearing and high temperature resisting grease allow the service life of vulnerable parts for more than 10000 hours.



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Double Channel Impeller



Single Channel Impeller

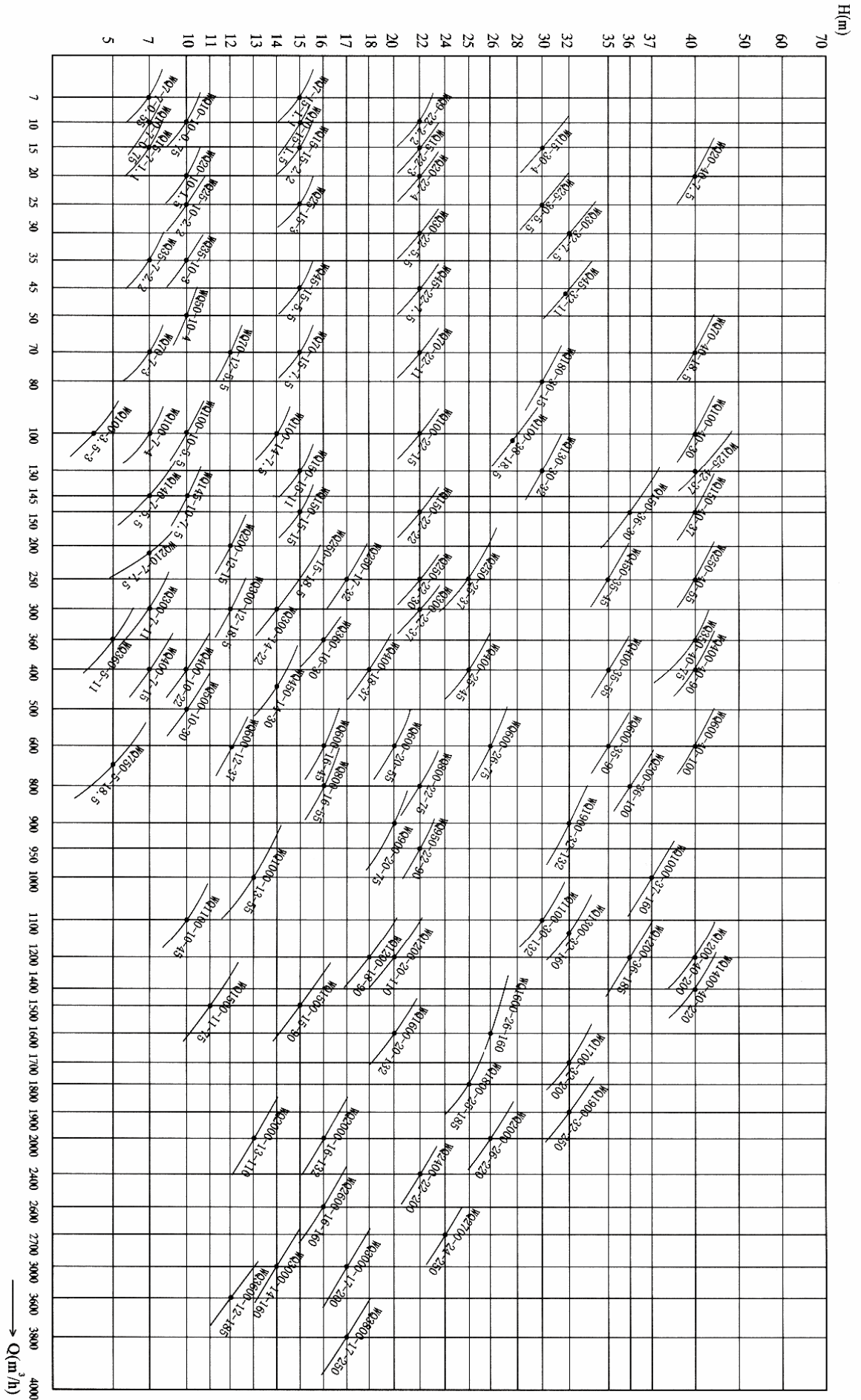
Structures

- 1) Unique water resistant power cable design provides secondary moisture barrier in case of outer jacket damage and prevents oil from leaking.
- 2) A probe sends out alarm signal in case of motor water leakage and the control system offers pump an automatic protection.
- 3) Motor windings with Class F insulation contain an automatic thermal overload reset.
- 4) Motor shaft made of stainless steel and rotor inspected and tested by dynamic balancing makes pump run more properly.
- 5) An internal water circulation cooling system provides superior cooling characteristics, allowing the pump to run safely above liquid level or for dry installation. (This cooling system is not applicable for pump below 15kw)
- 6) With two seals monitored system control, the probe sends out a signal whenever water enters the motor chamber or oil chamber or in case of mechanical seals damage.
- 7) A double mechanical seal installation - graphite vs. silicon carbide for upper seal; tungsten carbide vs. tungsten carbide for lower seal, this will provide the pump with long and reliable service life.
- 8) New auxiliary impeller design provides hydrodynamic seal support motor shaft, minimizing the effects of mechanical seal load and extending its service life. This design also results in minimizing impeller thrust load and perfect alignment of rotor. Also, for longer bearing service life of bearing.
- 9) Channel impeller design provides large solids passage, reasonably safe against clogging, low wear and high efficiency, etc.
- 10) The impeller rotates Anti-clock wise as viewed from the suction.

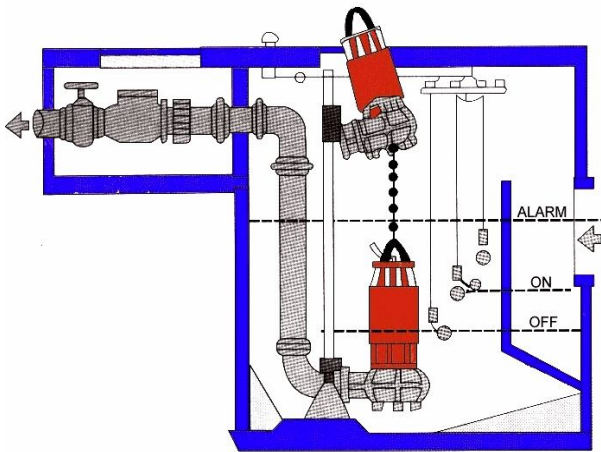
Optional Accessories

- 1) Stator Winding Temperature
- 2) Bearing Temperature
- 3) Seal Leakage
- 4) Moisture in Motor Chamber

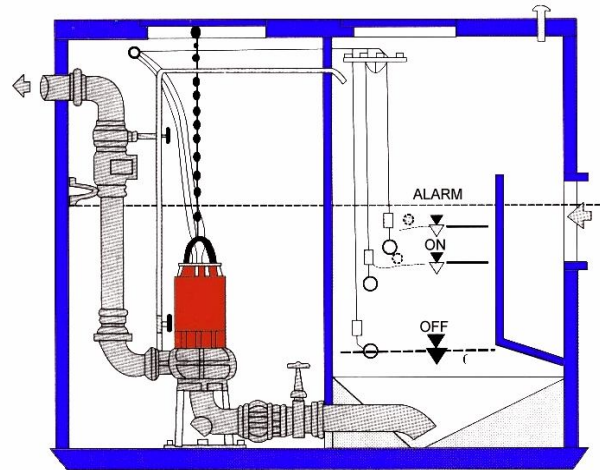
WQ(P) Series Submersible Sewage Pump Selection Chart



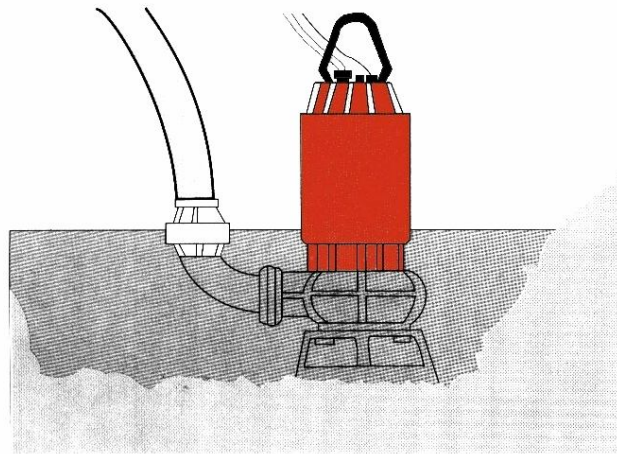
Types of Installation



1) Stationary Wet Installation



2) Stationary Dry Installation



3) Removable Installation

The pump should be installed in the liquid (submersed in the liquid), in a dry place (in separate pump chamber) or in a removable way.

1) Stationary Wet Installation

For Wet installation way, the pump is equipped with a suspension device placed directly on the floor of a solid chamber (sump), this permits easy withdrawal of the pump from the sump without loosening screwed connections, and the pump can be reinstalled. The special coupling flange engages automatically with the support elbow at the foot of the rigid riser pipe.

2) Stationary Dry Installation

For dry installation way, the pump is equipped with a duck foot elbow placed directly on the floor of a solid chamber (sump), and provides an internal water circulation cooling system, as well as assisting in dissipating heat from the motor. They continue to work when submerged in case of floods, leakage or rupture of hydraulic accessories or pipelines.

3) Removable Installation

For removable installation, the pump is directly connected with discharge pipeline. It is only suitable for pumps with less than 11kw. If necessary, other ways of installation can also be used.