

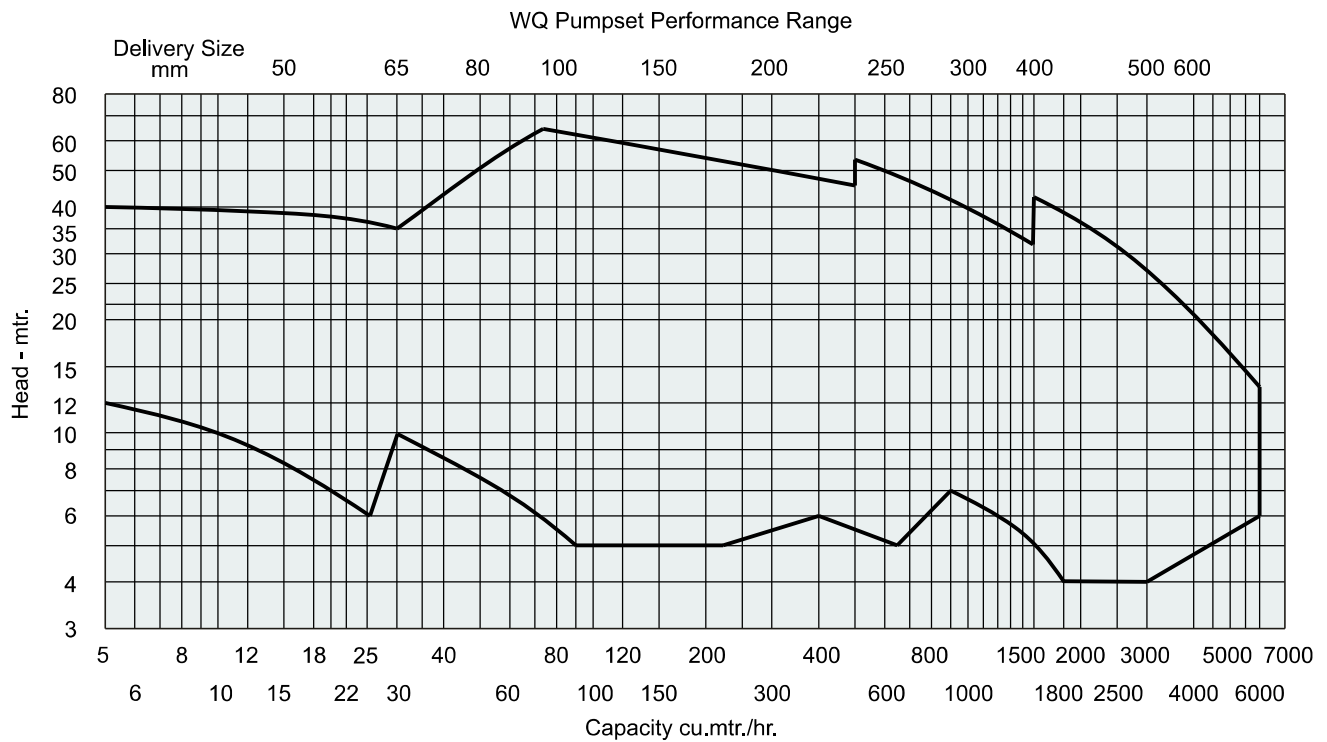


WQ SERIES SUBMERSIBLE SEWAGE PUMPSETS

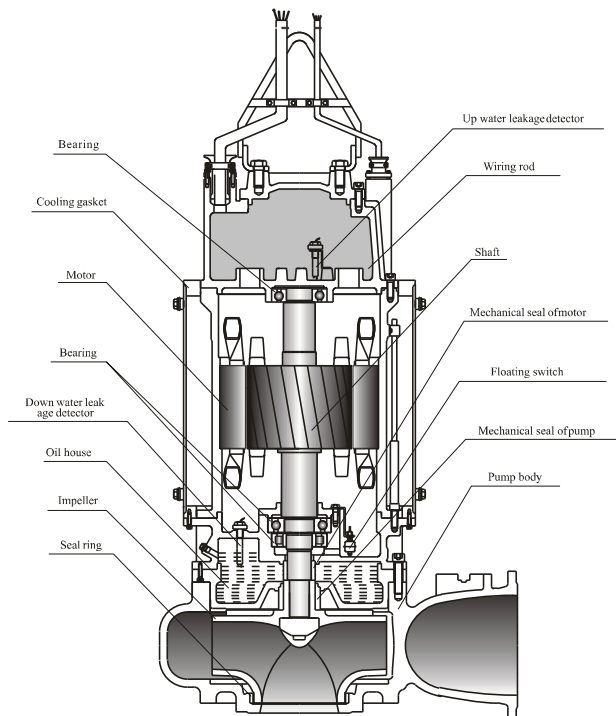
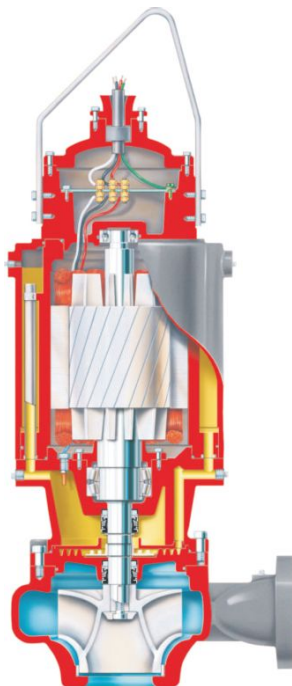


WPIL Limited

Visit: www.wpil.co.in



CROSS-SECTIONS



Range

- Delivery Size upto 600mm
- Capacity upto 6000m³/hr (Max.)
- Head upto 70m (Max.)
- Max. Permissible solid. Size upto 80mm.

Application

- Screened Sewage.
- Raw Sewage.
- Contaminated Effluents.
- Industrial Waste Water.
- Storm Water.
- Trench & Tunnel Water.
- Drain Water, Mine Water
- Raw Water Intake
- Dry and wt Pit
- Waste water with solids

Constructional Details

These are single stage, single suction pumps with overhung non-clogging impeller. Pumps can be offered in stationary as well as portable arrangements i.e.

1. Pump mounted on bottom pedestal.
2. Pump with duck foot bend with rubber ring joint for water proofing.

Casing

The radially split casing is provided with delivery nozzle cast integral with it. Suction is axial and delivery nozzle is central and horizontal. Specially designed semi-concentric casing results in reduced radial thrust and ensures vibration-free performance. Wide volute passage ensures non-clogging operation of the pump.

Impeller

Impellers are of non-clog type which allows smooth passage of solids. Impellers are with single or multi vanes in semi-open, enclosed, or free flow designs to cater to wide applications.

Shaft

The high tensile steel shaft accurately machined and ground is supported by two ball bearings in the motor above the impeller. Shaft is designed to transmit the power without undue vibrations and deflections. The shaft is common for pump and motor of mono block design.

Mechanical Seals

Two mechanical seals in tandem arrangement are provided to ensure no ingress of water or sewage in motor.

Optional Features

- a. Pumps can be supplied with "Cutter / agitator" arrangement at suction to agitate the liquid
- b. Semi-open impellers can be provided with specially designed wear plate for cutting and tearing of soft, long fibrous material.

Bearings

Bearings are grease lubricated as per design.

Direction of Rotation

Clockwise when viewed from motor top.

Drive

Motor is dry type submersible and cooled by liquid being handled. Degree of protection for motor is IP68 as per IS: 2147

Class of insulation: F Class Voltage: 415V \pm 10%
 Frequency: 50 Hz \pm 5%

Type of starting: As per requirement (DOL/Star Delta/ATS/Soft Starter/ VFD)

Cable

Double sheeted PVC cable is provided as standard however chemical and abrasion resistant elastomeric insulated and sheathed copper cable can also be provided as per IS:9968.

Control Panel - Optional

Control panel consists of starter, switch, fuse and safety features. Safety features are:

- Single phasing prevention.
- Overload relays.
- Moisture sensing unit for detecting ingress of moisture or water into oil chamber.
- Liquid level controllers to avoid dry running.
- Under voltage / Reverse phasing.

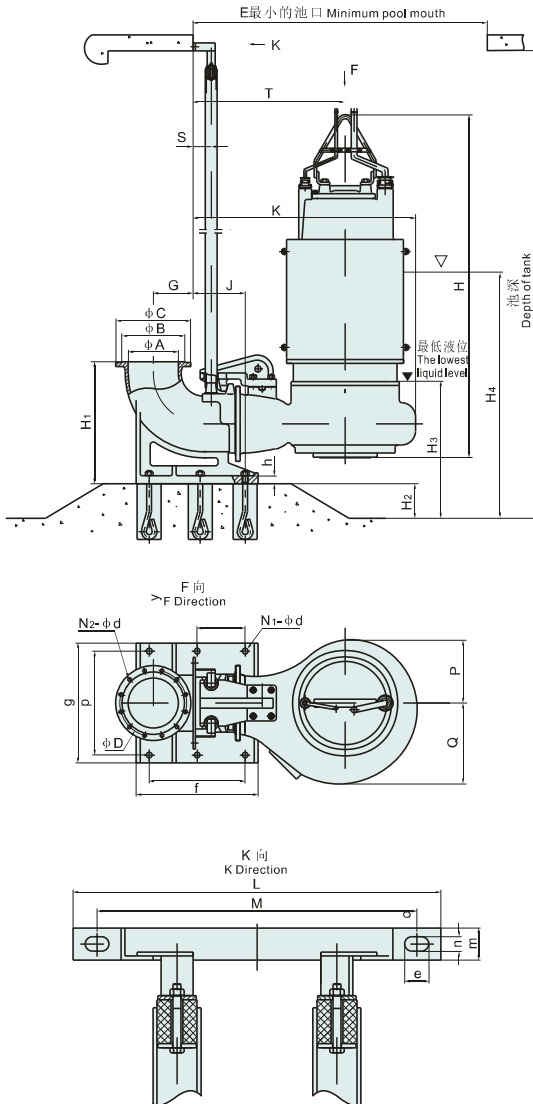
Other safety features also provided on request.

Flanges

Standard drilling to IS 6392: other standard on request
 ANSI CLASS 150B-A 16.5.

Note: 1. Designs subject to change and continual improvement.
 2. Other sizes and options available as per requirement.

Fig .General Arrangement

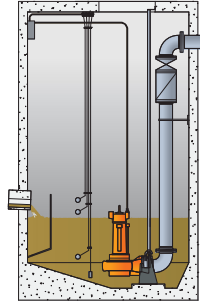


Types of installation

Wet sump installation

Advantages

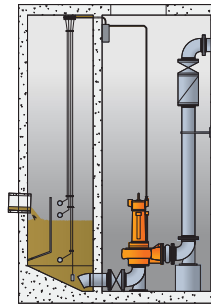
- low costs for lift station and assembly
- low space requirement for the pumps
- service-friendly installation and removal thanks to suspension device
- motor is cooled by the pumped medium



Dry sump installation

Advantages

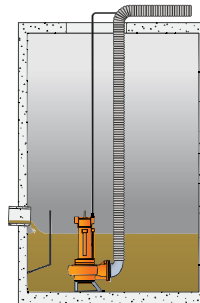
- accessible pump chamber
- pump can be monitored during operation
- quick repairs under hygienic conditions
- pump remains in operation in case of pipe burst
- internal cooling system, external cooling not required



Transportable installation

Application fields

- deep, narrow shafts
- shallow basins
- dewatering on construction sites
- industrial and municipal sewage disposal
- sewer renewal



WPIL Limited
(Formerly Worthington Pump India Ltd.)

Visit: www.wpil.co.in



Head Office: "Trinity Plaza" 3rd Floor
84/1A, Topsia Road (South)
Kolkata-700 046 INDIA
Phone: +91 33 3021 6800, Fax: +91 33 3021 6835

Regional Offices: Kolkata, Delhi (Ghaziabad)
Mumbai, Chennai, Hyderabad, Bangalore, Bhubaneswar

Authorised Distributor