



Submersible Sewage Pumps

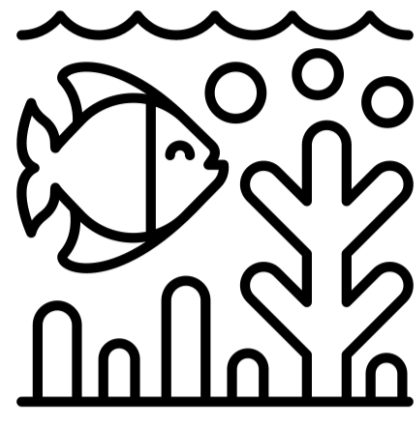
New-generation mechanical/electrical submersible pumps from **Wings Pumps** provides high reliability, reduced installation and maintenance costs, with a longer lifetime.

APPLICATIONS



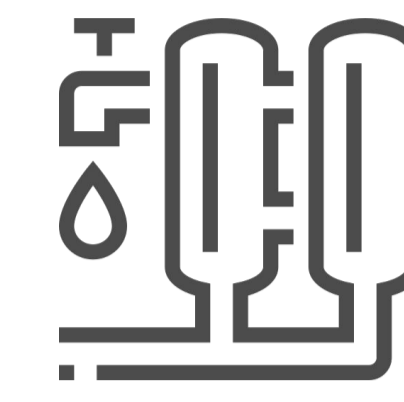
Storm Water Drainage

Supports structures, channels and pipes that carry stormwater (rain water) to ponds, lakes, streams and rivers.



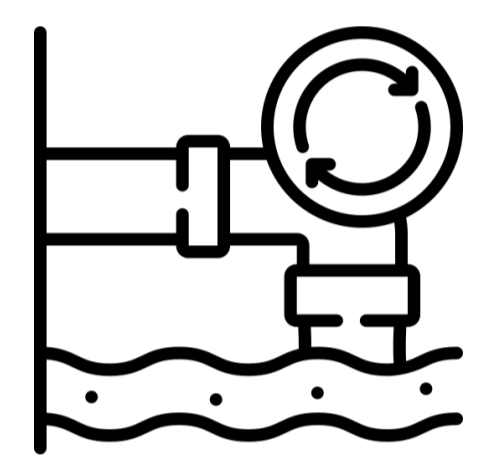
Irrigation and Aquaculture

Used for irrigation and aquaculture ecosystems. Environmentally-friendly.



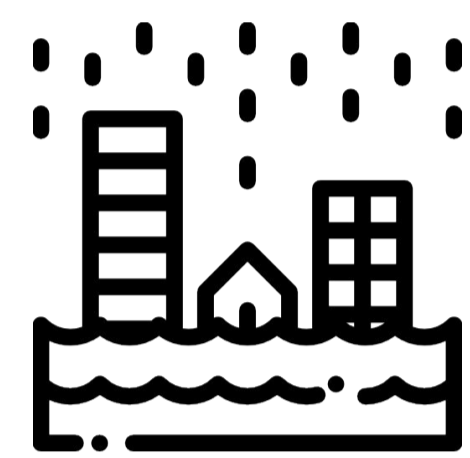
Raw Water and Processed Water

Supports raw water intakes and applicable intakes for water treatment plants.



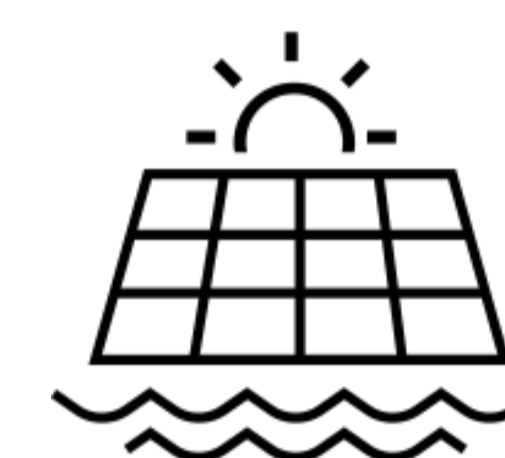
Sewage and Recirculation Sludge

Designed to move the thickest mixtures and pass large pieces of debris without damage or wear on the pump.



Municipality

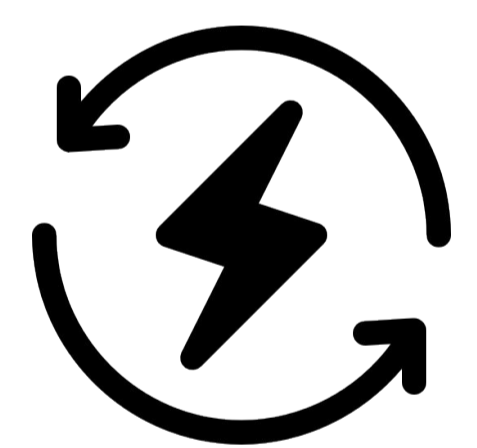
Well-Integrated with municipality work and projects with high requirements.



Renewable Energy

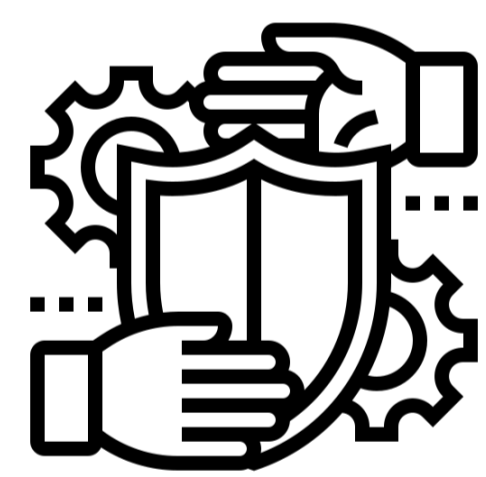
can be used with solar cells for sustainable energy with smart device that properly manage the process and prevent pump damage.

KEY BENEFITS



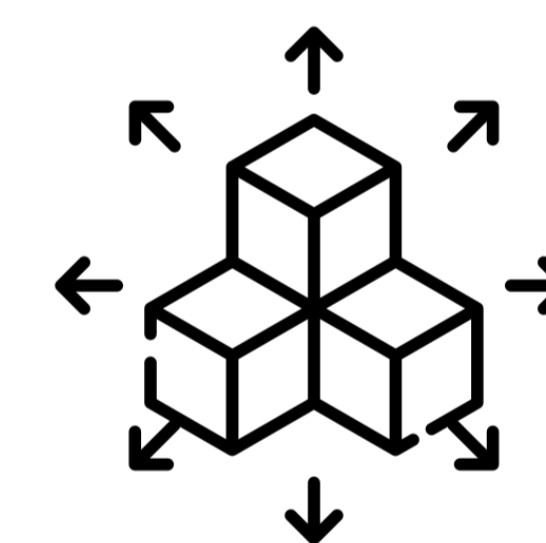
Better Power Consumption

Save more power with Premium Efficiency Motors.



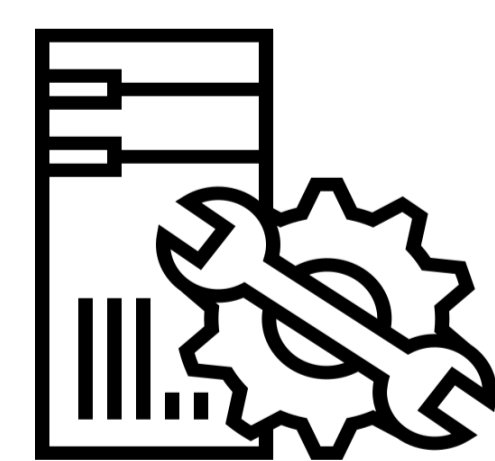
Stability and Reliability

Wings Pumps' advanced engineering provides better stability and reliability.



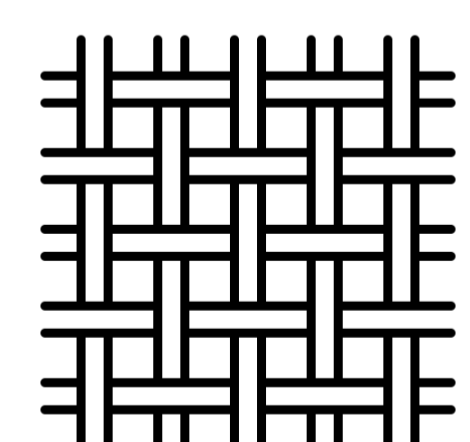
Wide Range of Operations

Wings Pumps are more versatile and can be used in a wide variety of operations.



High Flexibility in Installations

Wings Pumps can be installed perfectly in various situations and setups.



Flexibility in Material

Customize pumps with various material and composites to better suit your operations.



Internet of things

Through the cloud network system, the system organizes data and keeps tabs on the pump's operational state. User can be real-time observation possible.

FEATURES AND BENEFITS

Our new-generation mechanical/electrical sewage electric *submersible pumps* from *Wings Pumps* provides high reliability, reduced installation and maintenance costs, with a longer lifetime.

series submersible sewage pumps feature compact structure, high efficiency, anti-winding, non-clogging, auto coupling, high reliability, auto protection control. The pumps offer unique functions in the pumping of solid particles and long-fiber waste.

Our *Premium Efficiency Motors* are manufactured according to IEC 60034-30 IE3 standards, providing improved efficiency, reduced energy consumption with less impact on the environment.

Wings Pumps are engineered and designed with *Computational Fluid Dynamics* (CFD) combined with predictive AI and powerful graphics for visualizations and simulations to foresee any multi-dimensional problems.

Our *non-clogging impeller* blade design decreases clogging and minimizes risks caused by liquids containing fibrous material or sludge.

A slim design offers easy installation, low vibration and low Net Positive Suction Head (NPSH)

Smart technology, highly intelligent controls with 8 points of sensor monitoring devices with optional AI and IoT expansions.

Our special Coating offers higher resistance to abrasive and corrosive effects

ISO 9001 & ISO14001 & ISO45001 certified.

With ISO certification, Wings Pumps provides reliability with a high standard giving you assurance and peace of mind.

able to operate at a high performance for longer than 12 hours.



SUBMERSIBLE SEWAGE PUMP

1. Insulated Motor - for better reliability

All motors are fully submersible to a depth of at least 20 meters.

2. Unique seals provide extra safety

Our mechanical seal systems minimize shaft overhang while maximizing cooling and lubrication.

3. Sensors

Thermal sensors help prevent overheating. Leakage sensors alarms you of liquid intrusion through cables or seals.

4. Reliable and Efficient Hydraulics

Wings Pumps technology ensures maximum reliability and high efficiency.

5. Flexible Installation

Wings are designed according to the requirements of customer and suitability according to the actual situation

6. Spare Parts

All models will have stock spare parts for at least five years,
and WINGS skilled staff will help you find the right part and give you advice on spare parts.

PREMIUM EFFICIENCY MOTORS (IE3) IN ACCORDANCE WITH IEC60034-30, IEC60529

- **Class F Insulation (Up to 155°C/311°F)**

Temperature rise according to IEC / NEMA Class A

- **Class H Insulation (Up to 180°C/356°F)**

Temperature rise according to IEC / NEMA Class A

- **International Protection Standard IP68**

International Protection Standard according to IEC 60529/DIN 40050

- **Better Savings on Power Consumption**

Our highly efficient motors provide more savings with lower power consumption.

- **Better for the Environment**

Our pumps are designed to be more more environmentally-friendly and have minimal impact on any ecosystem.

DOUBLE MECHANICAL SEAL

Double mechanical seals are designed to ensure maximum sealing safety. These seals virtually eliminate leakage of the fluid being handled in pumps. Made by SiC, Carbon, Cement Carbide and special requires.



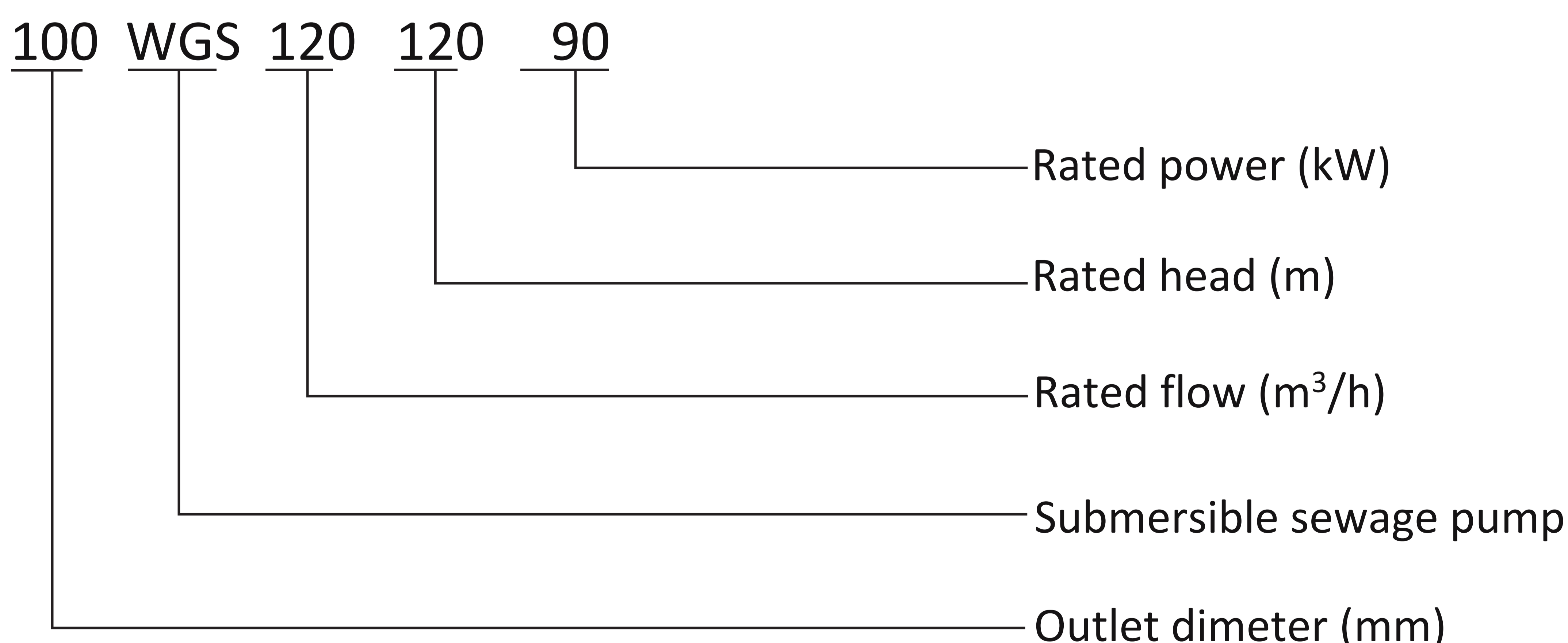
Application

The pumps are widely applied in the pumping of sewage and solid waste containing particles and fiber for chemical, petroleum, pharmaceutical, mining, paper-making, cement, steel-making, power generation and coal processing industries as well as water supply and sewage system of municipal sewage treatment plants, municipal engineering and construction sites. They can also be used to pump clear water or corrosive medium. Depending on water quality, materials of the pumps include: plain cast iron, cast steel, high chromium steel, wear-resistant steel and stainless steel.

Main Application

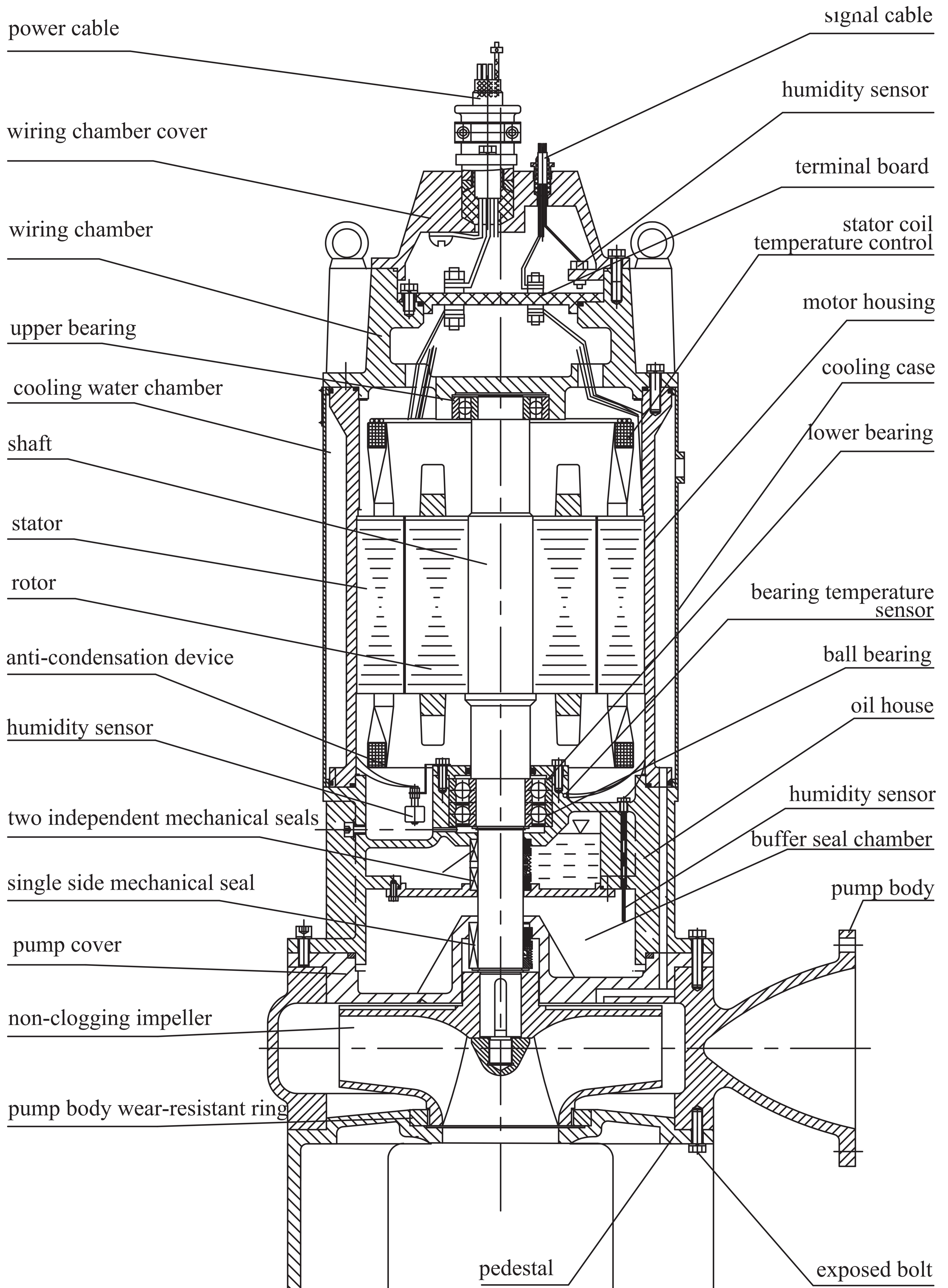
1. Motor rated voltage: 380V. In addition, three-phase AC power supply with a voltage of 200~600V, 3kV, 6kV or 10kV can also be used.
2. Temperature of pumped medium < 40C; Maximum depth: 20m ; pH : 4~10 ; Density<1150kg/m³ Solid volume ratios 5%.

Product Model Instruction



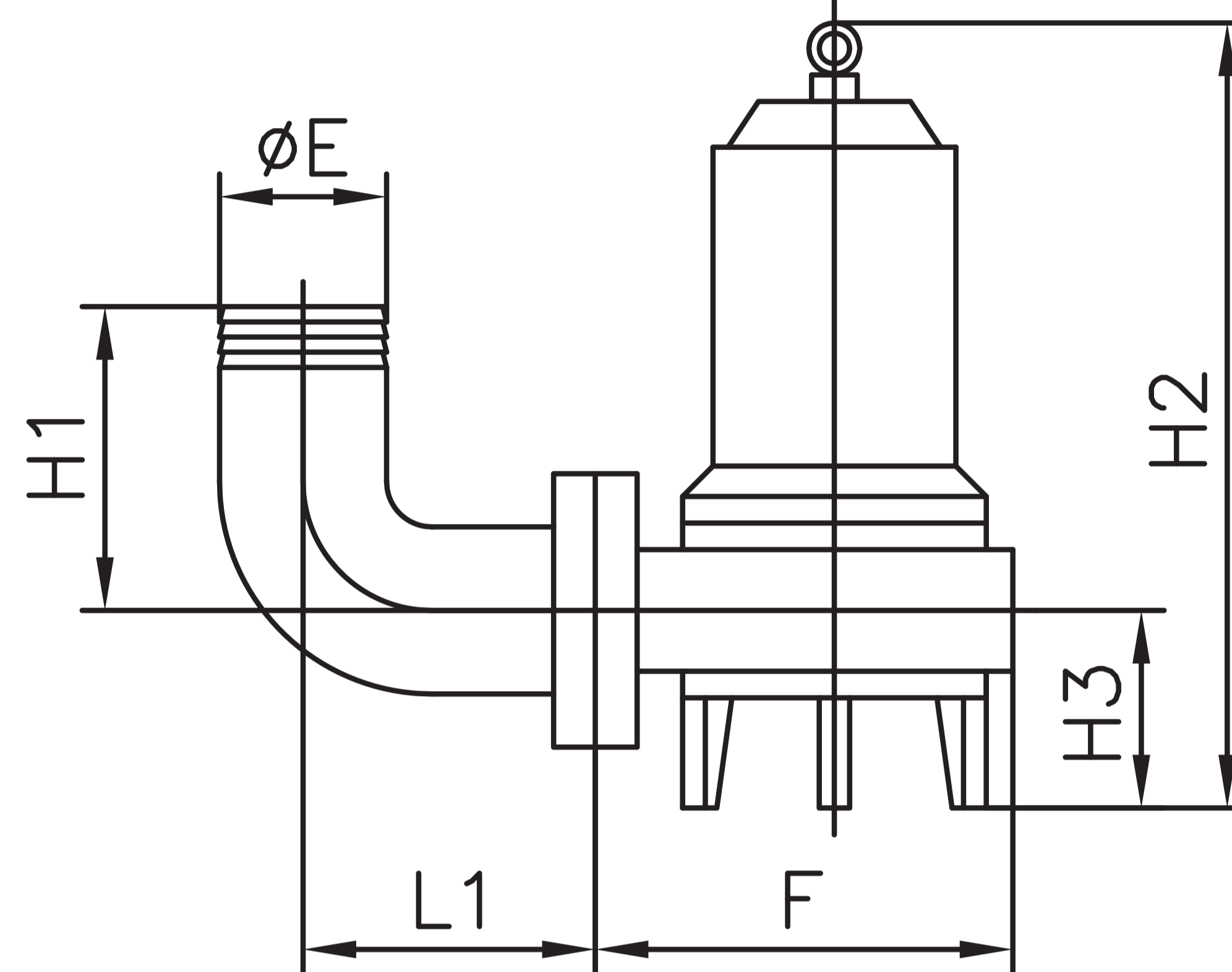
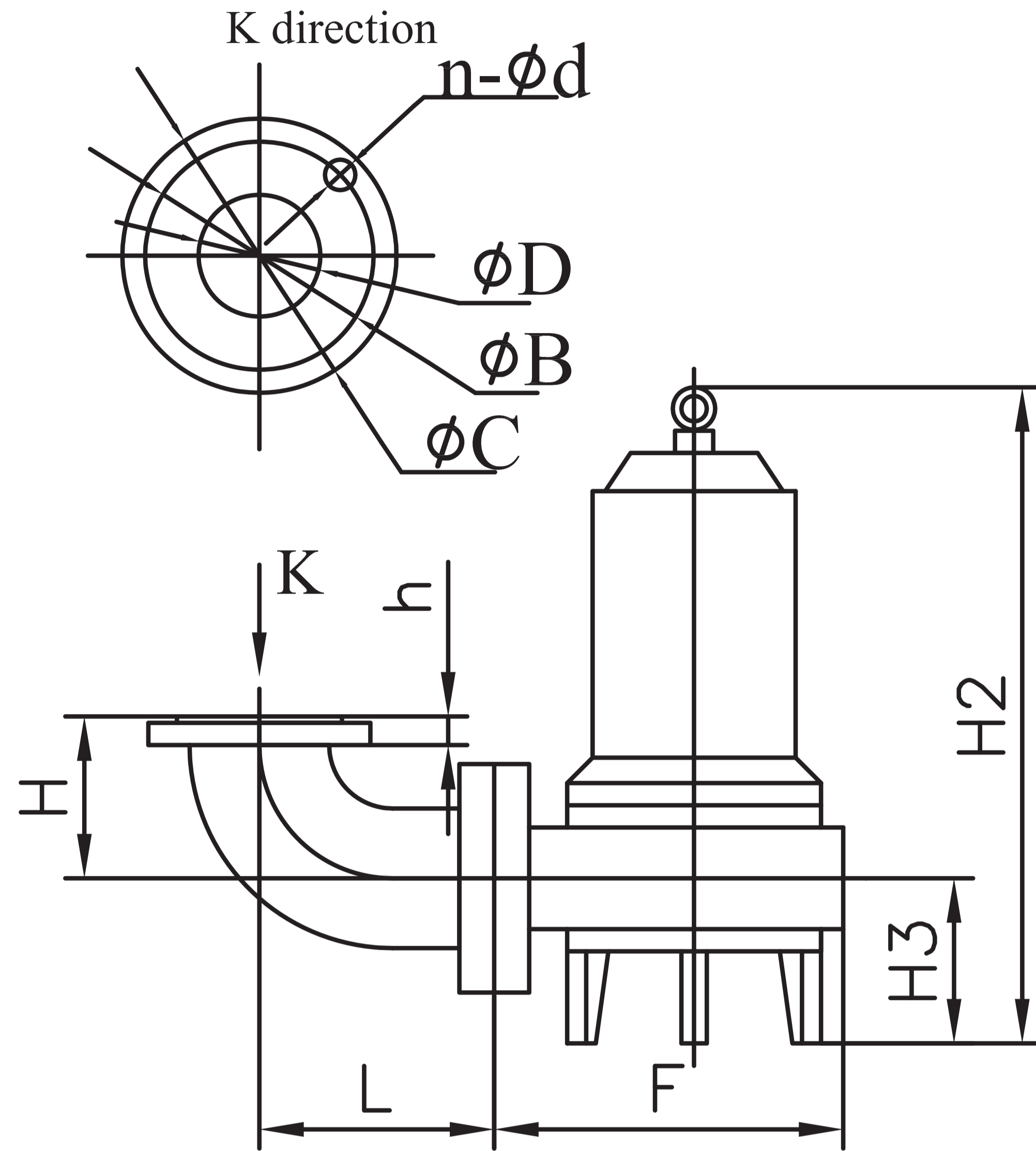
Product Structure Features

1. The international advanced Ansys-CFX software is adopted in the optimization of hydraulic parts so as to improve hydraulic performance of the pumps and raise their efficiency to a world-leading level.
2. The international advanced Ansys software is adopted in the scientific calculation and analysis of pump structure so as to extend the service life of bearings and mechanical seals and reduce vibration and noise.
3. Pumps used on medium with rich fiber content are arranged with cutting and tearing devices at the inlet to prevent clogging and jamming which may cause severe vibration when pumping medium containing fiber and solid particles.
4. The cable outlet adopts a unique structure to avoid water leakage, electric leakage, short circuit and stator coil burning caused by human pulling, cable jacket damage or cable aging, thereby effectively reducing the probability of malfunctioning caused by flooding in the upper part of pump.
5. Considering all conditions that may take place during starting and operating, a number of warning sensors are installed inside the pumps to monitor conditions such as leakage in wiring chamber, motor cavity and oil house as well as temperature rise in upper and lower bearings and motor coil.
6. Patented structure is adopted in the pumps. Three sets of mechanical seals are used inside the pumps. A buffer chamber is added. The small amounts of water caused by normal leakage in the seal of the lower shaft accumulate in the seal buffer chamber. With the protection of the three sets of high-quality mechanical seals and the large accumulating capacity of the buffer chamber, sealing is made significantly more reliable to completely ensure the reliable operation of pumps. Submersible pumps of 22kW and above adopt self-circulation cooling system to ensure continued working when motor is elevated above water.
7. Auxiliary impeller structure helps to balance with the pressure outside the mechanical seal and prevent water from entering the oil house, so as to extend the service life of pumps.

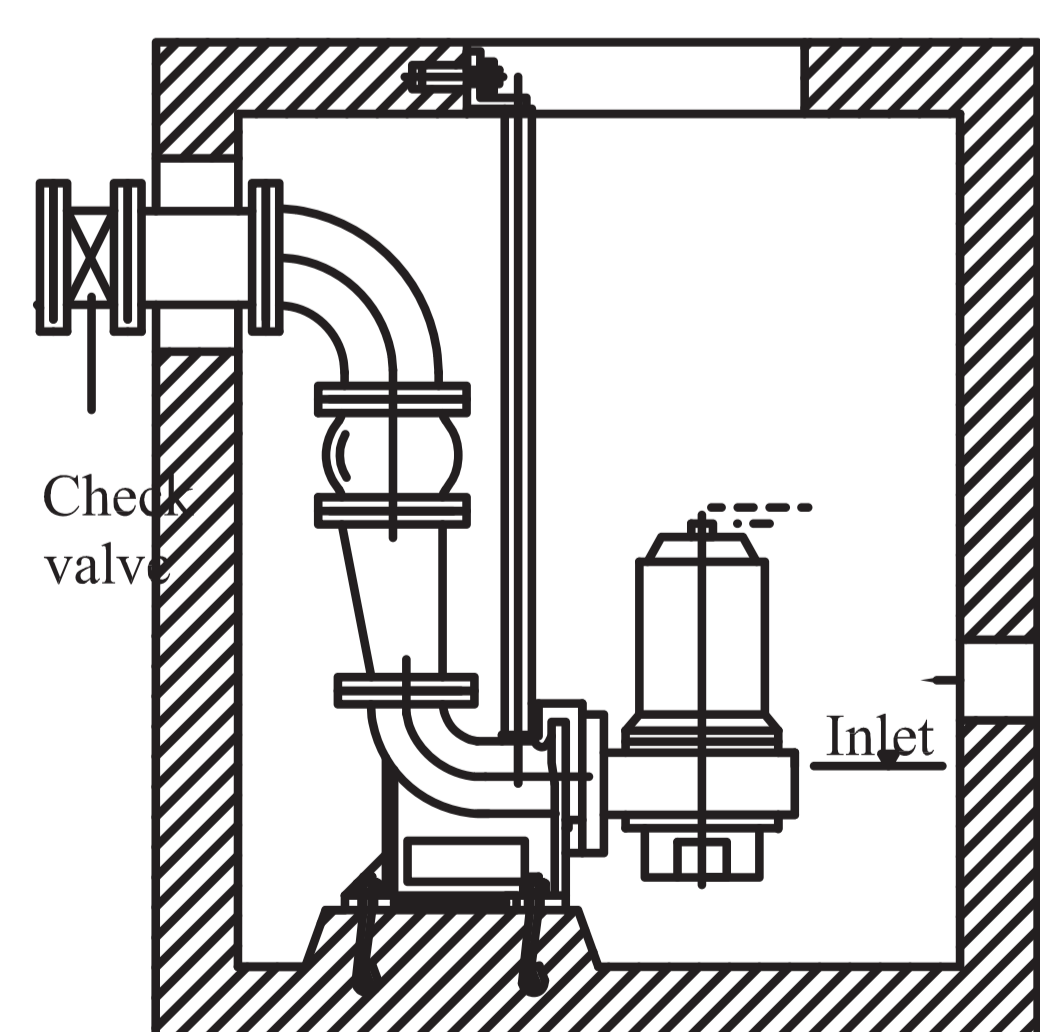
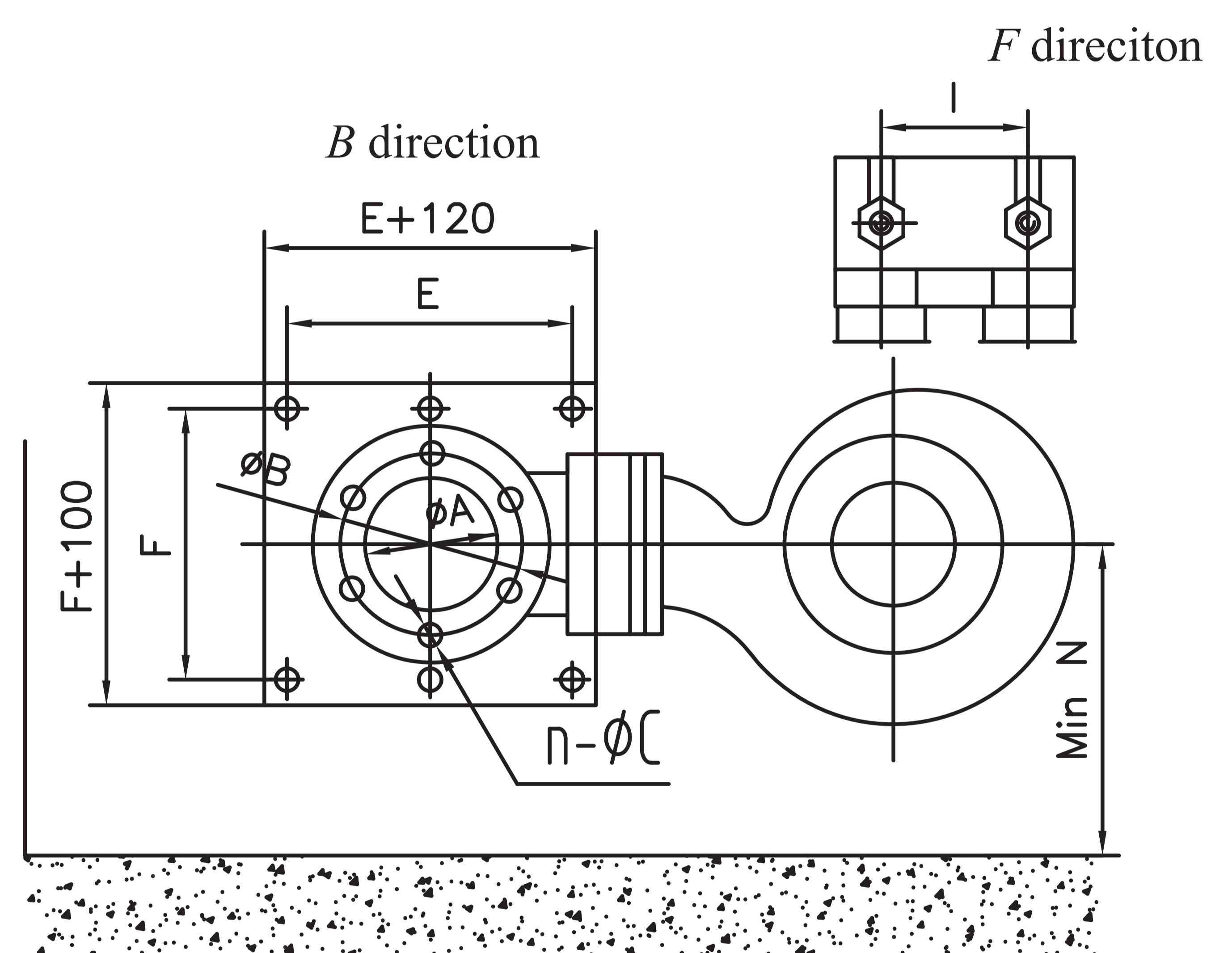
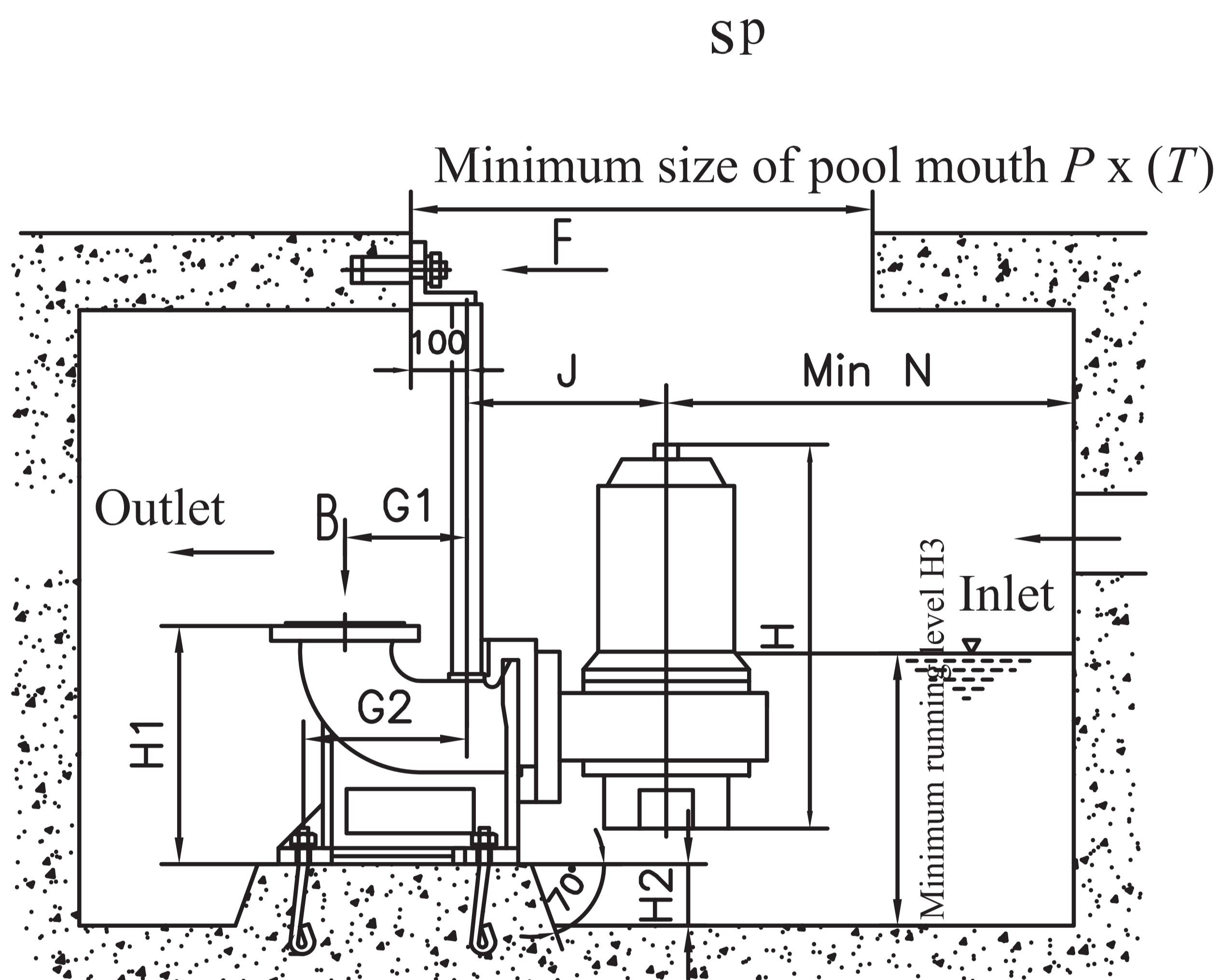


WGS Submersible Sewage Pump Installation Type

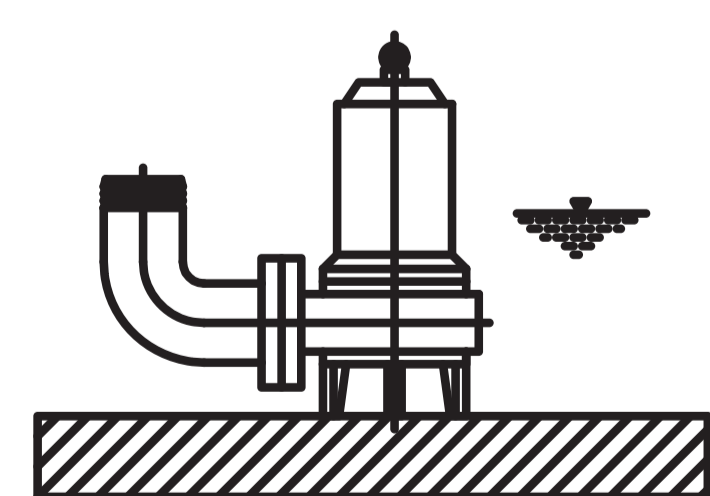
Movable installation includes two connection modes, namely head tube connection and hose connection



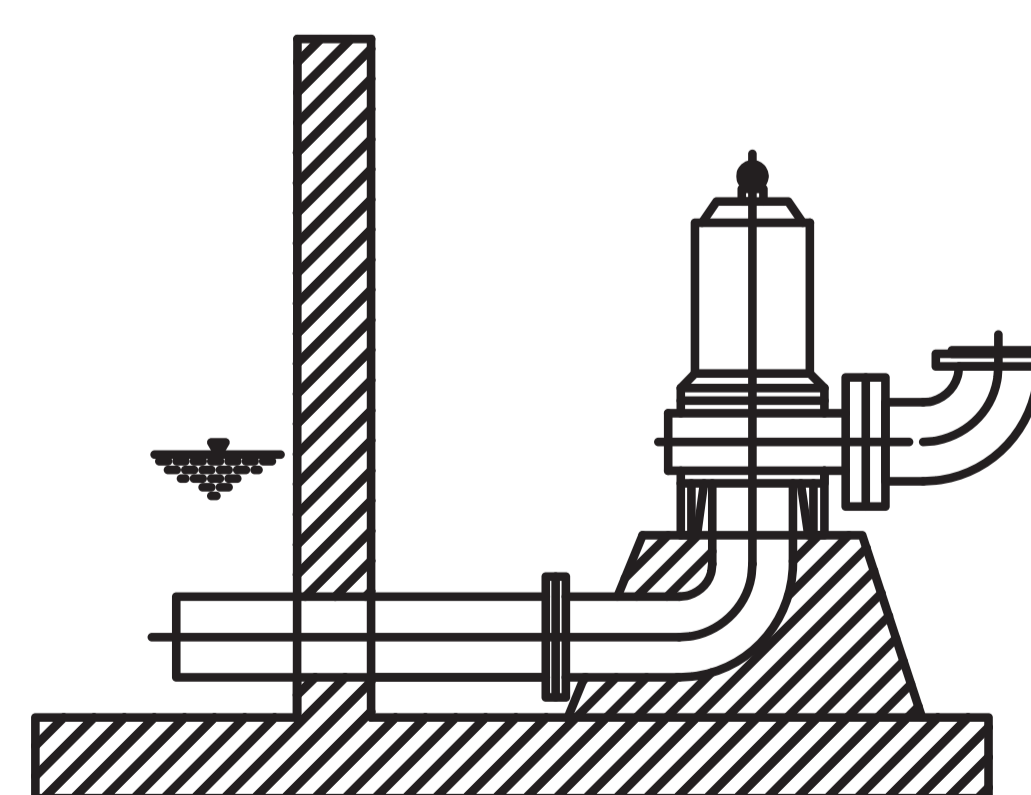
SP



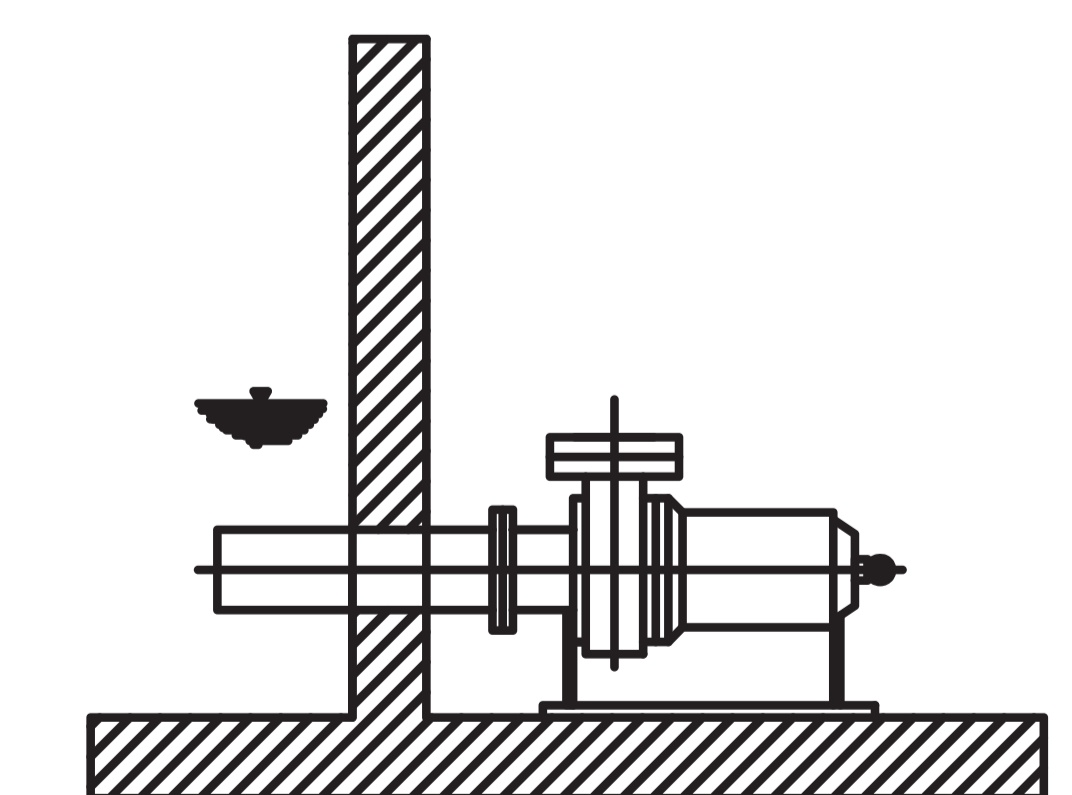
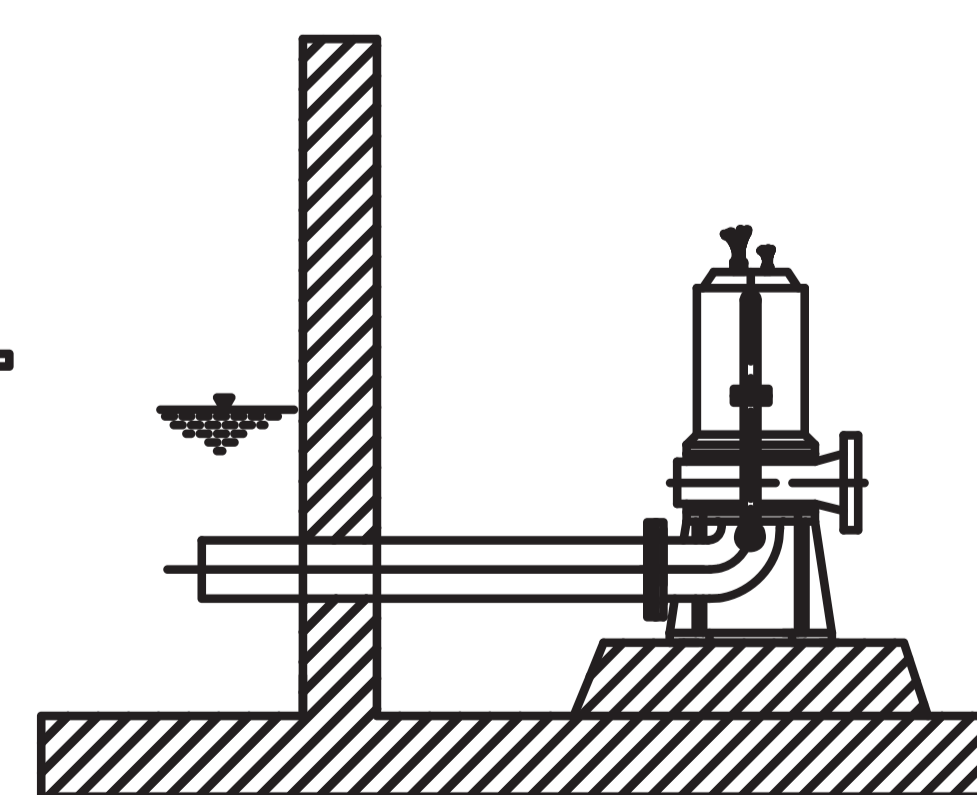
Self-coupled wet installation



Movable wet-type installation

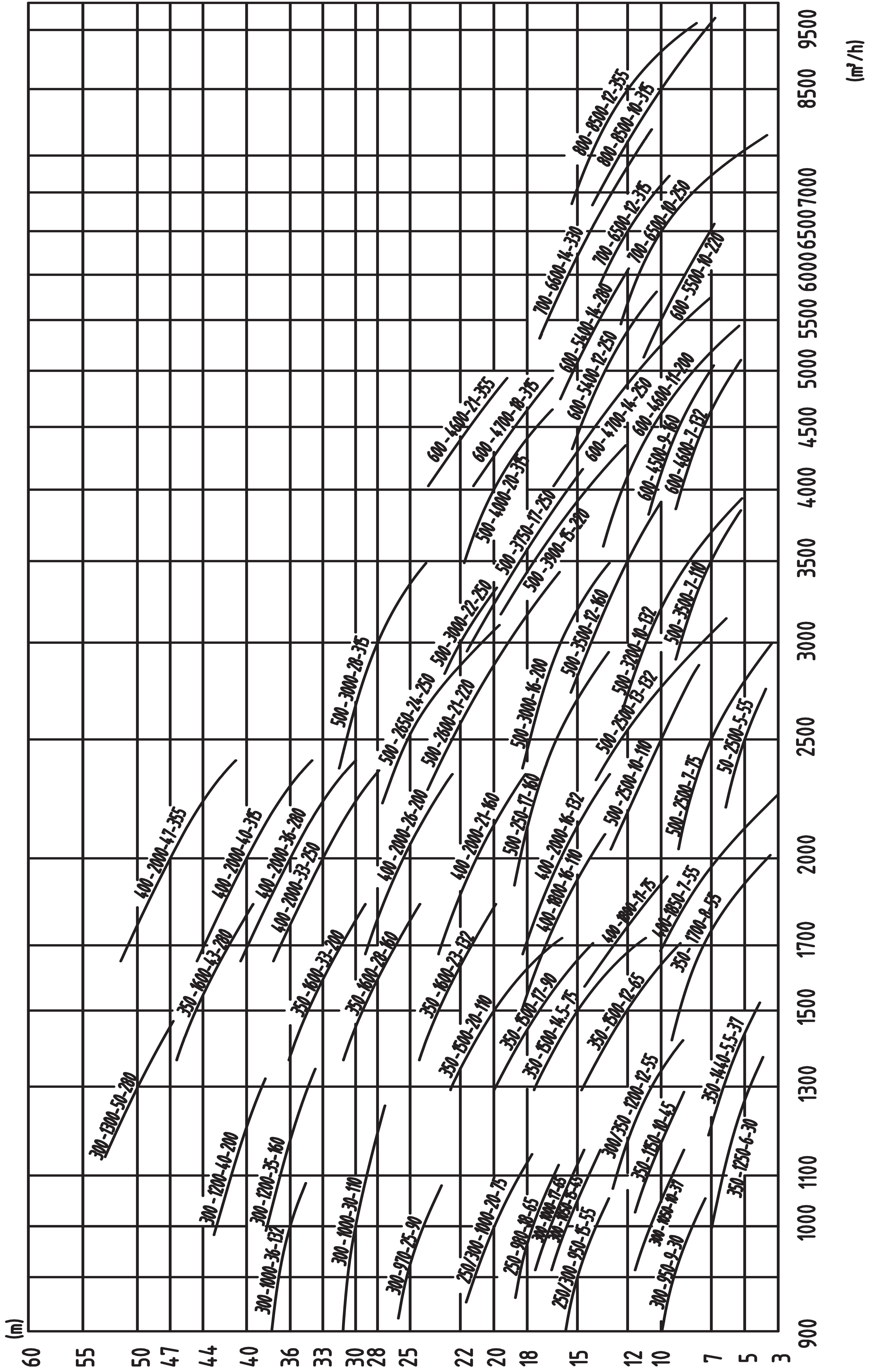


Vertical dry-type installation

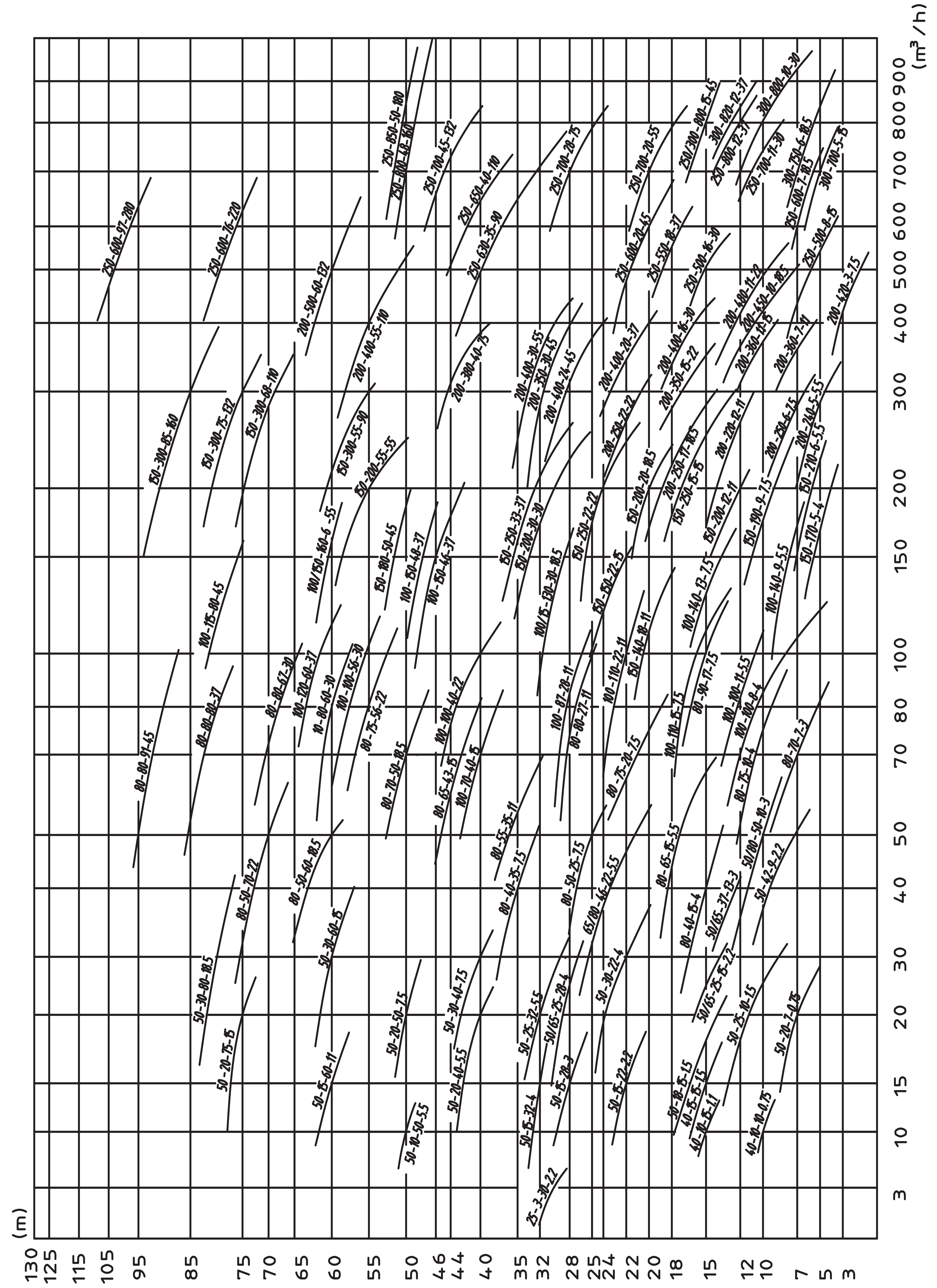


Horizontal dry-type installation

WGS Submersible Sewage Pump Selection Model



WGS Submersible Sewage Pump Selection Model



(m)

130
125
115
105
95
85
75
70
65
60
55
50
46
44
40
35
32
28
25
24
22
20
18
15
12
10
7
5
3

3 10 15 20 30 40 50 70 80 100 150 200 300 400 500 600 700 800 900 (m³/h)