

2.03 VKP Vertical mixed flow pump

Motor carrier
The pump and motor shaft are coupled here

Discharged housing
with reinforcing ribs

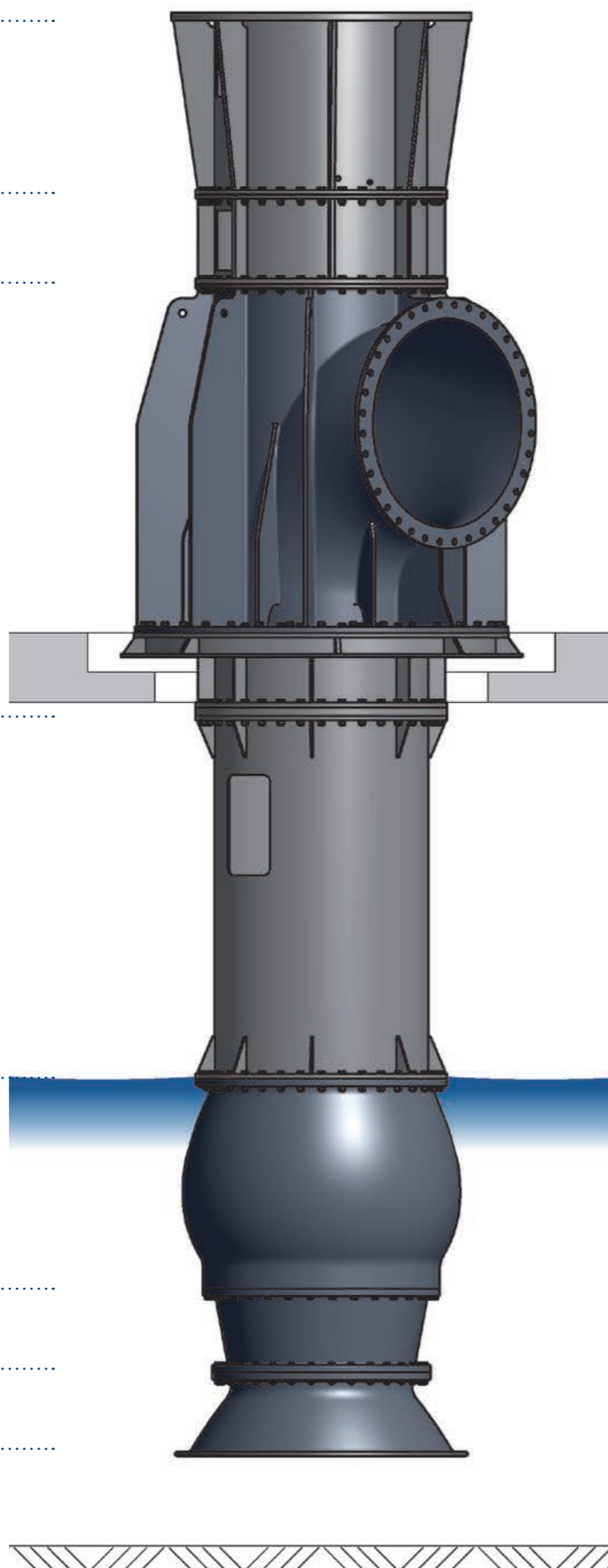
Support frame -
connection element
between the structure
and the pump

Riser pipe
adapts to structure below the floor

Guide vanes housing

Impeller housing

Suction bell



Vertical mixed flow pump - VKP 1400
(shown without motor)

For docks, locks and cooling towers

The construction of vertical, single-stage mixed flow pumps is very similar to that of propeller pumps. However, due to the different shape of their impellers, mixed flow pumps can lift very large volumes of water to delivery heads of up to 30 m.

Impeller and diffuser are submerged in the pumping medium. The open impeller has a fixed, cast-on blading.

Mixed flow pumps convey pure or lightly contaminated fluids, typically in pumping stations for precipitation and combined sewer overflow, hydroelectric power plants and other power plants, in docks and locks as well as in industrial water supply systems.

Characteristics

- > The open, mixed-flow impeller with fixed blades is made of corrosion- and cavitation-resistant materials
- > The discharge housing can be arranged both above or below the floor
- > Impeller and guide vanes are designed using the latest CFD (Computational Fluid Dynamics) software
- > A large shaft diameter and sufficient intermediate bearing ensure extremely smooth running
- > We offer the shaft guide bearing with pumping medium lubrication and supply it in three different material pairs. Grease lubrication is also possible
- > The coating system differs according to customers demand and is always applied in several layers by hand

Technical data

VKP
Vertical mixed flow pump

Hydraulic type
mixed flow

Size DN (mm)
350 - 1,400

Delivery head (m)
10 - 30

Capacity (l/s)
200 - 7,000

Motor power (kW)
30 - 2,000

Rotor assembly extractable
no

Reverse running mode optional
yes

Orientation of the pump shaft
vertical

Driving motor
electric or diesel

Installation of the motor
dry

Shaft guide bearing*
F/G/K/E

Particularly suitable applications



* F = grease lubricated slide bearing, G = rubber shaft bearing, K = ceramic bearing, E = elastomer-polymer composite