

## 2.02 VPH Vertical propeller pump, suspended

**Motor carrier**  
The pump and motor shaft are coupled here

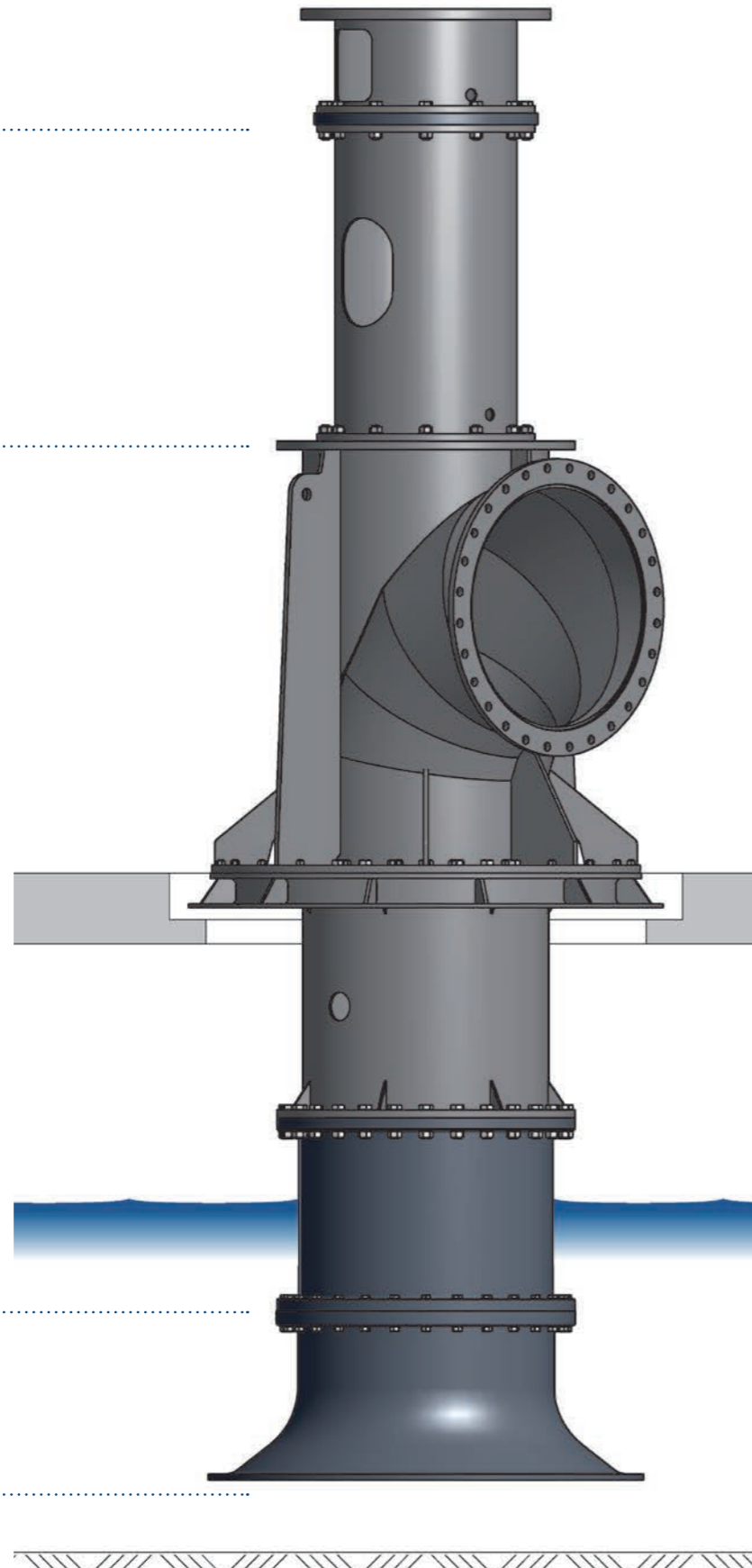
**Support pipe**  
Length varies depending on structure

**Discharge housing**

Support frame - connection element between the structure and the pump

**Riser pipe**  
Adapts to structure below the floor

**Suction bell**  
hydraulically optimised



Vertical propeller pump, suspended - VPH 1400 (shown without motor)

### For the highest delivery rates

This vertical tubular casing pump has supports or is installed on a reinforced concrete floor with a supporting frame. Its use is recommended in cases where there is no solid pumping station bed to accommodate the vertical version (VP) or the bed is too deep down.

This propeller pump achieves the highest delivery rate of all KÖSTER pumps. It is suitable for the conveyance of pure or pre-treated, predominantly chemically-neutral fluids at temperatures of up to 60°C.

This type of pump is used primarily in pumping stations for irrigation and drainage, for precipitation and combined sewer overflow, in waterworks and in industrial water supply systems.

### Characteristics

- > The propeller blades fixed to the hub of the propeller can be adjusted individually allowing subsequent adjustment of the duty point of the pump
- > The discharge housing can be arranged both above or below the floor
- > The pump can operate in the reverse direction for a short time (approx. 20 seconds). This frees the impeller of any foreign matter. This in turn means approx. 80% of all failures arising from clogged impellers are remedied without having to dismount the pump
- > We offer the shaft guide bearings with pumping medium lubrication and supply them in three different material pairs. Grease lubrication is also possible
- > Depending on requirements we produce the propeller blades and shaft in different materials, from grey cast iron to super duplex stainless steel
- > A multiple segmented discharge housing is used for streamlined deflection of the pumping medium
- > An hydraulically optimised suction bell accelerates the pumping medium with minimum turbulence
- > A large shaft diameter and sufficient intermediate bearing ensure extremely smooth running
- > The coating system differs according to customer demand and is always applied in several layers by hand

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

### Technical data

**VPH**  
Vertical propeller pump, suspended

**Hydraulic type**  
axial

**Size DN (mm)**  
250 - 1,400

**Delivery head (m)**  
1 - 10

**Capacity (l/s)**  
100 - 8,000

**Motor power (kW)**  
5.5 - 800

**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**

