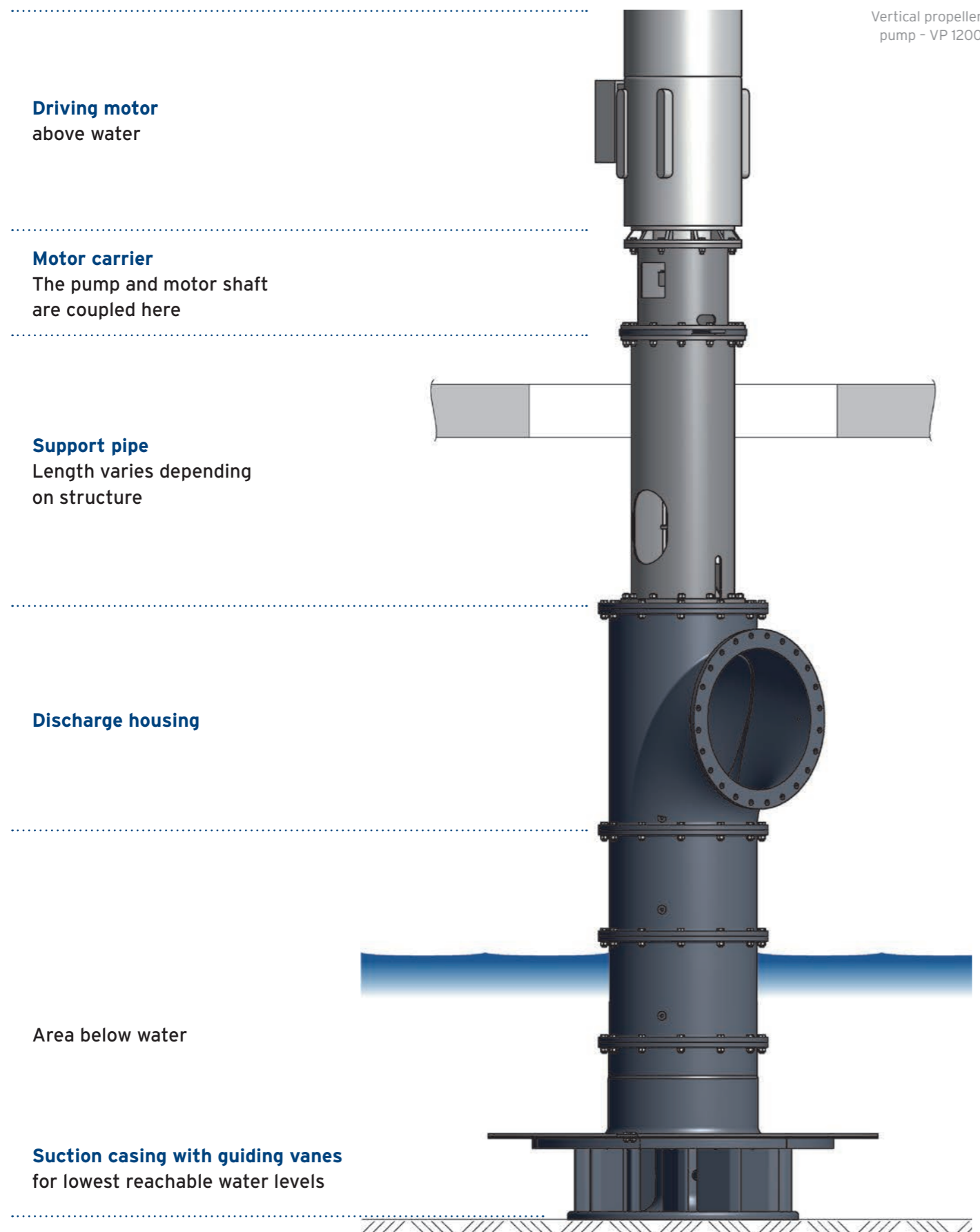


2.01 VP Vertical propeller pump



Particularly suited for pumping stations

This vertical tubular casing pump stands on the bed of the pumping chamber. It transmits its own weight, the water load on in the propeller and the weight of the motor to the bed via its housing and housing base.

This type of pump provides high capacities at low heights and is used in pumping stations for irrigation and drainage, for precipitation and combined sewer overflow, in waterworks and in industrial water supply systems.

It achieves the lowest pumpdown level of all propeller pumps and is suitable for the conveyance of pure or pre-treated, predominantly chemically-neutral fluids at temperatures of up to 60°C.

Characteristics

- > The pump base is designed as an inlet guide vane and stands on the concrete bed of the pumping chamber (deep pump-down level). This means the building construction need not be so deeply integrated into the subsurface and this in turn leads to a significant reduction of building costs
- > The pump running gear (shaft, shaft casing, impeller, bearing star) can be extracted completely from the tubular housing making repair work, for example, far simpler
- > 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 complete submerged part of the pump (pump base, tubular housing, discharge housing) is made of grey cast iron and therefore extremely resistant to corrosion
- > 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 that approx. 80% of all failures arising from clogged impellers are remedied without having to dismount the pump
- > Shaft and shaft guide bearings are separated from the rising flow of water by a sturdy tubular casing
- > 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, these range from grey cast iron to super duplex stainless steel
- > A large shaft diameter and sufficient intermediate bearing ensure extremely smooth running
- > A discharge housing segment ensures streamlined deflection of the pumping media
- > The coating system differs according to customers demand and is always applied in several layers by hand

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

Technical data

VP
Vertical propeller pump

Hydraulic type
axial

Size DN (mm)
200 - 1,200

Delivery head (m)
1 - 10

Capacity (l/s)
50 - 5,000

Motor power (kW)
5.5 - 500

Rotor assembly extractable
yes

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

