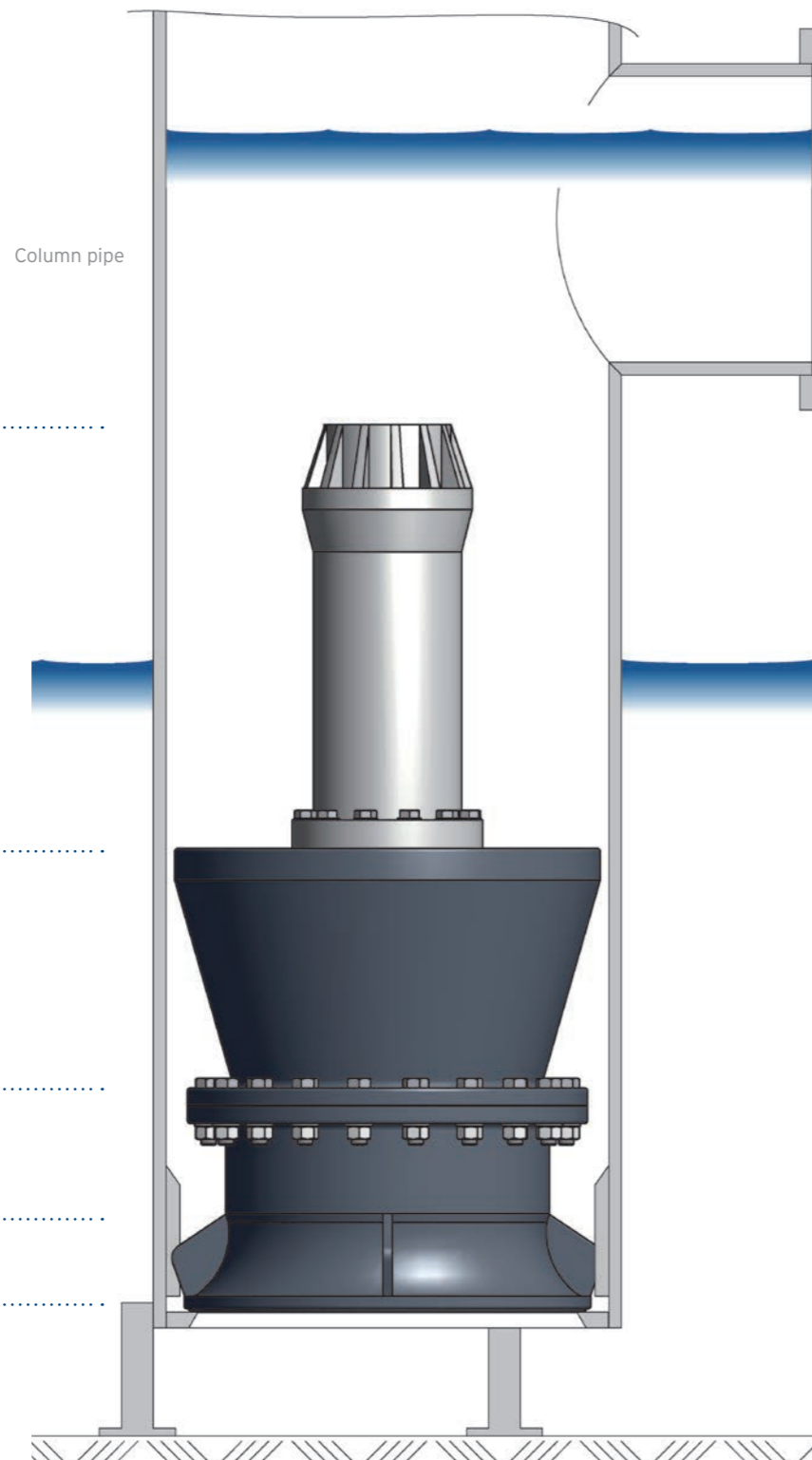


## 2.04 VTP Vertical submersible motor propeller pump



Vertical submersible motor propeller pump - VTP 550

### Fast installation - barely audible operation

This single-stage underwater pump operates in a steel column pipe. For this purpose the very compact block unit is set into the column pipe and arrests itself without the need of screws. As its motor is submerged, this type of pump needs no overground building. A control cabinet in the open air is sufficient. The arrangement of the motor under water dampens the noise generation.

The propeller diameters of the different pump sizes require shaft pipes with diameters of between 600 and 1,800 mm.

This type of pump is suitable for the conveyance of pure or pre-treated, predominantly chemically-neutral fluids at temperatures of up to 60°C. So the pumping medium should as far as possible be free of any coarse, fibrous contents, because reverse movement is structurally not possible. This type of pump is used typically in pumping stations for irrigation and drainage, for precipitation and combined sewer overflow, for recirculation, in flood protection systems and inland drainage as well as in industrial water supply systems.

### Characteristics

- > The pump is driven by a submerged three-phase asynchronous motor (Protection Class IP68)
- > The propeller is arranged on the shaft of the motor and overhung
- > The angles of the blades are pre-set, but can be changed manually
- > The desired delivery head is determined by the number of propeller blades (3-6)
- > The blade geometry is fibre-repellent and self-cleaning
- > The active components of the motor are seated in permanently-lubricated, generously dimensioned roller bearings that have a long service life
- > There are two mechanical sealings arranged in tandem and assembled between the motor housing and the shaft that prevent any water from penetrating the motor
- > KÖSTER produces the column pipe for this pump in different designs and materials

### Technical data

**VTP**  
Vertical  
submersible motor  
propeller pump

**Hydraulic type**  
axial

**Size DN (mm)**  
350 - 1,350

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

**Capacity (l/s)**  
200 - 6,000

**Motor power (kW)**  
7.5 - 600

**Pump extractable**  
yes

**Reverse running mode**  
optional  
no

**Orientation of the pump shaft**  
vertical

**Driving motor**  
submersible motor

**Installation of the motor**  
submerged

**Shaft guide bearing**  
none

**Particularly suitable applications**

