# VERTICAL IMMERSED PUMPS

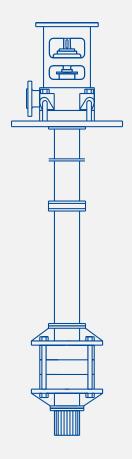
# NMVN/GVN/SVN/SKVN

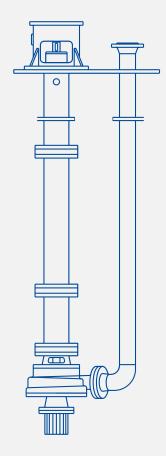
## Vertical immersed pumps for installation into a tank

Wherever a conventional submerged pump is not desired or may not be used due to design reasons (e.g. high temperature of the medium).

The hydraulic elements originate from our programme of horizontal centrifugal pumps. The pumps will be mounted on a tank using a supporting plate, constructed as tank cover. The supporting plate can also be constructed as gas-tight round flange according to DIN, ANSI or other standards. Driver and shaft seal of the pump are located above the tank. The pump part is immersed into the tank and thereby into the medium. A line shaft pipe connects the pump to the cover plate.

This line shaft pipe can consist of either one or several segments, being constructed with intermediate pipes and shafts, bearings and shaft couplings. When using the hydraulic part of an end suction pump, discharge pipe and line shaft pipe are separate components. In multistage pumps, the line shaft pipe also serves as discharge pipe.





Multistage high pressure pump for clean water: Q max.  $500 \text{ m}^3/\text{h}$ , H max. 400 m

Low pressure pump for clean or waste water: Q max. 600 m³/h, H max. 90 m



Multistage high pressure pump constructed as barrel-type pump: Q max.  $400 \text{ m}^3$ /h, H max. 400 m

### NMVN/GVN/SVN/SKVN

#### **LIQUIDS**

Clean water, boiler feeding water, condensate and cooling water (NMVN & GVN); Clean water or waste water in a low pressure range (SVN & SKVN)

#### **MATERIALS**

As required according to the pumping medium, such as cast iron, cast steel or cast stainless steel. Special materials on request.

#### **TECHNICAL DATA**

#### Performance data

The maximum pumping parameters such as flow capacity and head depend on the pump construction, operating speed, immersion depth, etc. Please send us your request in case you wish to know more. You will receive our quotation of an appropriately selected pump.

#### Shaft Sealing

As required by the customer or according to the pumping medium with gland packing or mechanical seal. The pumping medium allowing, a shaft seal may be omitted completely if line shaft and discharge pipe are separated.

#### Lubrication

Friction bearings with pumping medium, with grease from automatic grease pump or with fresh water. The antifriction bearing is lubricated with grease or oil.

#### Special constructions

Many of the pumps already delivered have been realized following our customers' requests and requirements concerning material and special constructions.