

Mass centrifugal forces may lead to a **non-admissible excursion of coupling rod** with pumps of group E at high operation speeds and large submersible depths. Moreover, **inadmissibly high vibrations of the pump body** may occur due to the mass centrifugal forces.

Both the nature and impact of the vibrations considerably depend on the pump installation. A solid installation on a concrete socle and an additional foot attachment minimizes the impacts whereas an installation on a steel framing has always to be considered "with caution". In individual cases, you should always confer with **seepex Bottrop** (division TE).

Design of a semi-submersible pump based on operating speed and submersible depth

Explanation: The diagram (sheet 2) is a design aid; if the intersecting point of operating speed and submersible depth „ t “ is below the belonging limiting line there is no hesitation regarding the use of this pump (picture 1).

If the intersection is above the relevant boundary line, please either consult the Engineering or provide a suction pipe with length "s" in order not to exceed the max. admissible coupling rod length (picture 2). To determine the suction pipe length "s" the pump's priming capability and the spec. gravity of the pumping liquid have to be considered!

The submersible depth „ t “ of semi-submersible pumps in design „ U “ (picture 3) can be increased by the size „ f “ (see table).

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Guiding unit

Engineering (TE) recommends to use a guiding unit above the "boundary line of the guiding unit" in order to minimize pulsations / vibrations.

Semi-submersible variants:

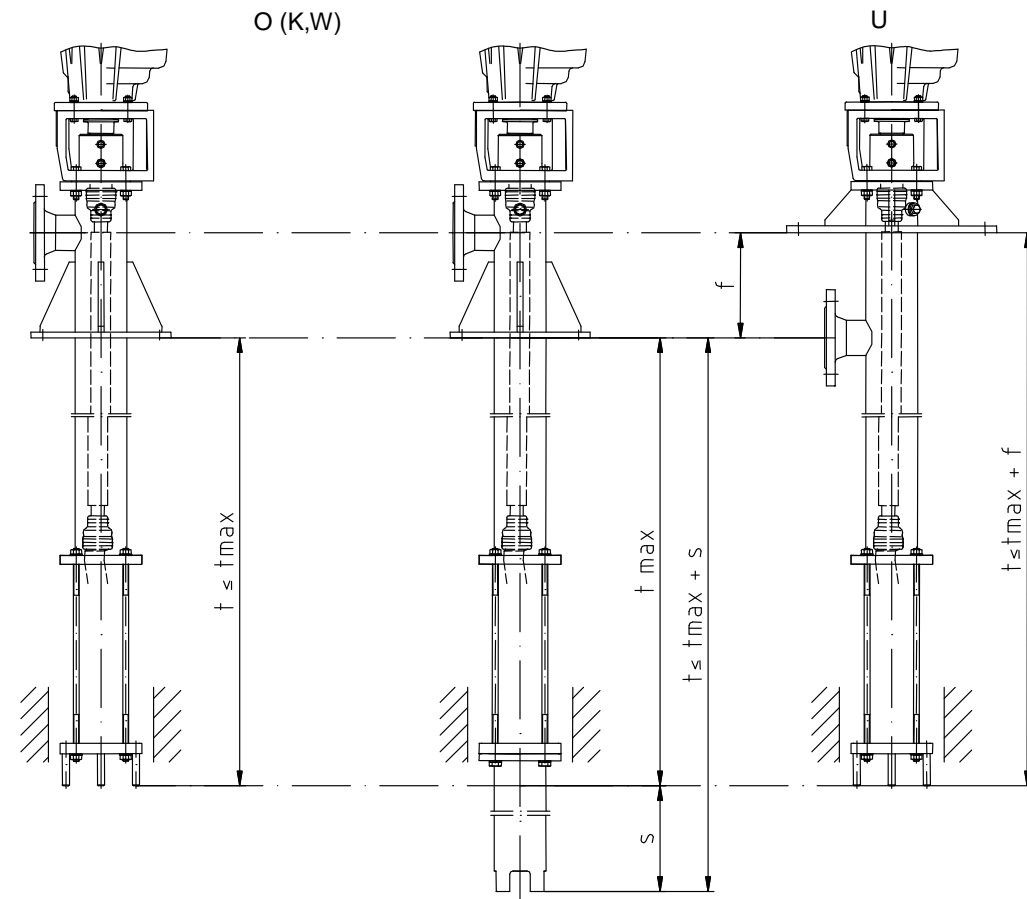


Bild 1

Bild 2

Bild 3

- t = submersible depth
- t_{max} = max. submersible depth on the relevant boundary line in the diagram
- s = suction pipe

Size	f
025-12 05-12, 1-6L, 1-12, 2-6L	175
2-12, 5-6L	180
5-12, 10-6L, 15-6LT	190
10-12, 17-6L, 15-12T, 30-6LT	200
14-12, 26-6L, 40-6LT, 17-12, 35-6L, 30-12T, 55-6LT	210
35-12, 70-6L, 55-12T, 110-6LT, 26-12, 52-6L, 75-6LT,	225
52-12, 100-6L, 70-12, 130-6L, 110-12T	240
130-12, 200-6L, 202-6L, 300-6L, 200-12T,	270

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