



CORROSION RESISTANT "SEAL-LESS" IMMERSIBLE PUMPS MODEL HD

- ⊕ All wetted parts made massive blocks of corrosion resistant plastic PP or PVDF.
- ⊕ Close coupled – compact design
- ⊕ No seal or bearing in the pump housing;
 - pump can be run dry
 - pump can handle any abrasive or crystallizing liquid
 - pump allows particles till \varnothing 5 mm in suspension.
- ⊕ Immersible length of max. 2.5 meter by extended suction pipe
- ⊕ Floating types for emptying deep tanks at any level.
- ⊕ Low operational costs and maintenance friendly.
- ⊕ Flow rates 10 – 150 m³/h.





Design

The HD immersible pumps cover a wide range of duties and are designed to operate with a **liquid seal**. These pumps, like the small DO series, have no mechanical seal or bearing in the liquid and can therefore run dry without damage. Besides this, the clearances in the pump housing are large enough to allow solids up to \varnothing 5 mm in suspension without wear.

The pumps is **close-coupled**, with the pump shaft connected directly to the motor shaft without a flexible coupling. This reduces the number of wear parts to a minimum. For easy servicing a lifting bar is standard.

The minimum starting level is 310 mm below the mounting plate.

By extending the suction pipe (max. total immersible length of 3 mtr.) the pump is capable of emptying sumps as shown in the figures.

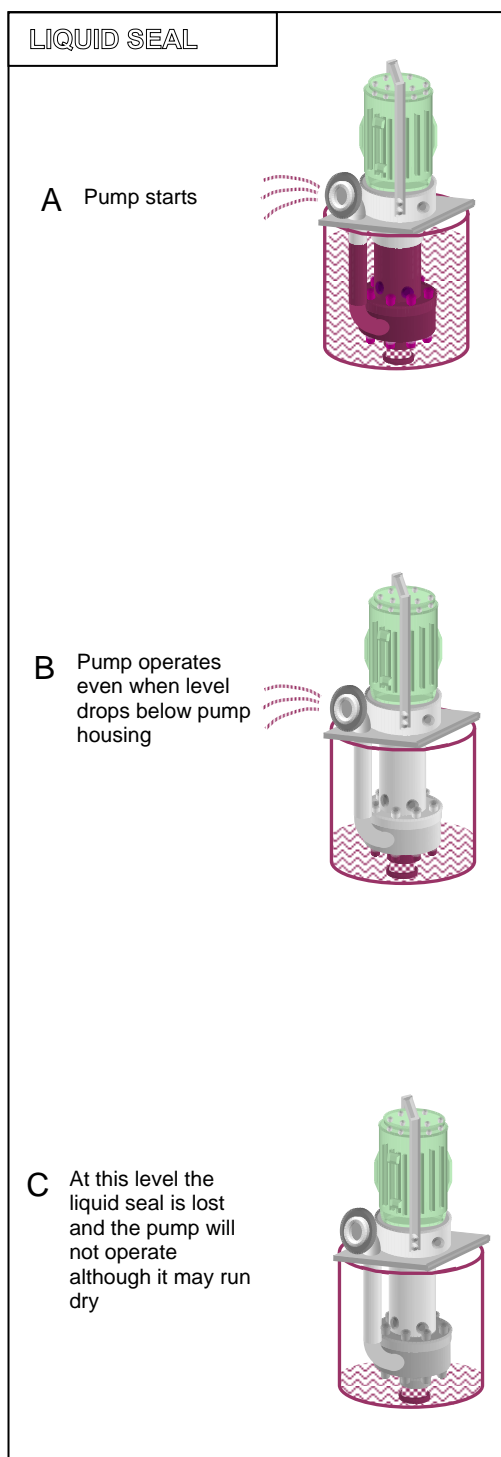
The discharge connection is a PN 10 flange according to DIN/ISO. Other drillings are available.

Materials

All wetted parts are made of **PP or PVDF from solid blocks**. Therefore there is no possibility of stress cracking as so often occurs with molded pumps.

Maximum operating temperatures:

- PP : 80 °C
- PVDF : 120 °C



The SS-316 pump shaft is fully sleeved with plastic ensuring **no metal to liquid contact**. The shaft sleeve is welded to the impeller so that the amount of gaskets is minimized. Gaskets are available in Viton (standard), EPDM, or Viton/PTFE.

Motors

Standard IEC, 2 or 4-pole motors with voltage 400/690 V/ 3 Ph/ 50 or 60 Cy with protection class IP55, insulation class F and rain cover. The motors are protected against bad fumes by a labyrinth seal and are epoxy resin paint coated.

Impellers

Because ARBO submersible pumps are particularly suited for very dirty liquids, they are provided with semi-open impellers which are fixed independently from the direction of rotation. The special TS-impeller shape creates, when running, a "liquid seal" around the impeller and the shaft (see operation A-B-C)

Options

- Level controllers for automatic operation.
- Motors with special voltages, insulation classes or explosion proof
- Model BB for installation "out-of-tank"



PRODUCT IDENTIFICATION CODE

PRODUCT GROUP

3.5

ARBO immersible centrifugal pumps HD											
DO											
Discharge flange size (D)											
32 min.											
125 max.											
Pump housing size											
160											
200											
250											
Material wetted parts											
PP											
PVDF											
Material impeller if different from wetted parts											
PP											
PVDF											
HMPE											
Material Gaskets											
E EPDM											
V Viton											
T V/PTFE-covered											
Connection D											
F Flange											
U Union cplt.											
Motor speed											
2 pole											
4 pole											
Motor power											
1.5 kW min.											
22 kW max.											
Voltage											
4 400 V											
6 690 V											
Phase											
3 Ph											
Frequency											
5 50 Hz											
6 60 Hz											
DO	125	250	PP	HMPE	V	F	2	18.5	6	3	5





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