

**Submersible motor pumps
for domestic drainage- and waste water.
Vortex impellers, free passage 50-65 mm.**

TP50 V

Application

Submersible motor pumps in the TP50 series are used for conveying domestic drainage- and waste water as well as sludge. With their large free passage of 50-65 mm, they are particularly well suited for use with media containing coarse solids and fibers. Ideal for economical disposal in municipal, private, trade and industry applications.

DIN EN 12050-2: Design tested and monitored.

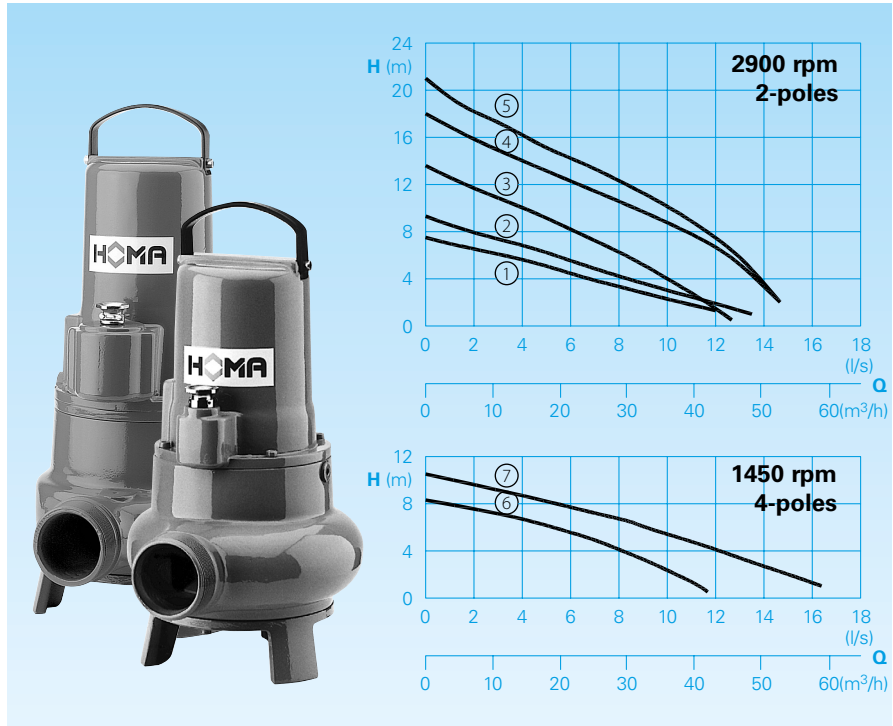
Installation: Stationary or mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Clean water and waste water with solid and fibrous content.

Max. temperature of pumped medium: 40°C, for non-ex pumps brief periods up to 60° C.

Operating mode: Continuous operation (S1).

Conveying capacities



Design

Fully submersible pump, consisting of:

Pump: Single-stage with horizontal discharge G2 1/2.

Impeller: Vortex impeller for media containing gas or air, with coarse or long stringy components that are prone to clogging. Free passage 50-65 mm.

Motor: Fully submersible motor, sealed against pressurized water. Insulation class H. Protection rating IP 68. Thermal sensor for temperature monitoring in the winding.

Type of start: TP50V13-40: direct-on-line
TP50V50: direct-on-line or star-delta-start.

Connecting cable:

Model W: H07RN8-F 4G1,5

Model D and Ex: H07RN8-F 6G1,5

TP50V(Ex): H07RN8-F 10G1,5

Shaft/bearing: strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

Seal: Combination of 2 mechanical seals (silicon carbide/silicon carbide) inside the oil chamber that is independent of the direction of rotation (models above 1,8 kW).

Models up to 1,6 kW combinations of mechanical seal and radial seal. Oil control possible from the outside.

Technical data

Curve No.	Pump type	Motor input P ₁ (kW)	P ₂ (kW)	Capacitor* (µF)	Rotational speed (rpm)	Nominal current (A)	Free passage (mm)	Weight (kg)
①	TP50V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
②	TP50V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
③	TP50V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
④	TP50V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
⑤	TP50V 50/2 D (Ex)	5,2	4,4		2840	8,7	50	56,0
⑥	TP50V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
⑦	TP50V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0

Model W: 230V/1Ph 50Hz


Model D: 400V/3Ph 50Hz

Model A: with automatic float switch
HOMA-Nivomatik

* **Capacitor:** for the operation it is necessary to install a capacitor into the switchgear.

Model Ex: explosion-proof

** **Weight Ex Model:** + 5 kg

Explosion protection: All pump models are also available in EX version according to  II 2 G Ex c d II B T4(T3).

Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL250
Motor shaft, screws	Stainless steel
Mechanical seals	Silicon carbide
Elastomers	NBR

Scope of supply

Pump with integrated base stand, without auto-coupling (see accessories). With 10 m of loose cable end. (Switchgear see accessories)

Model A: With automatic float switch and switchgear WA10/19; DA10/32; DA10/12 with motor protection, manual-auto-switch. Built in operating capacitor (just 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

