

**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.

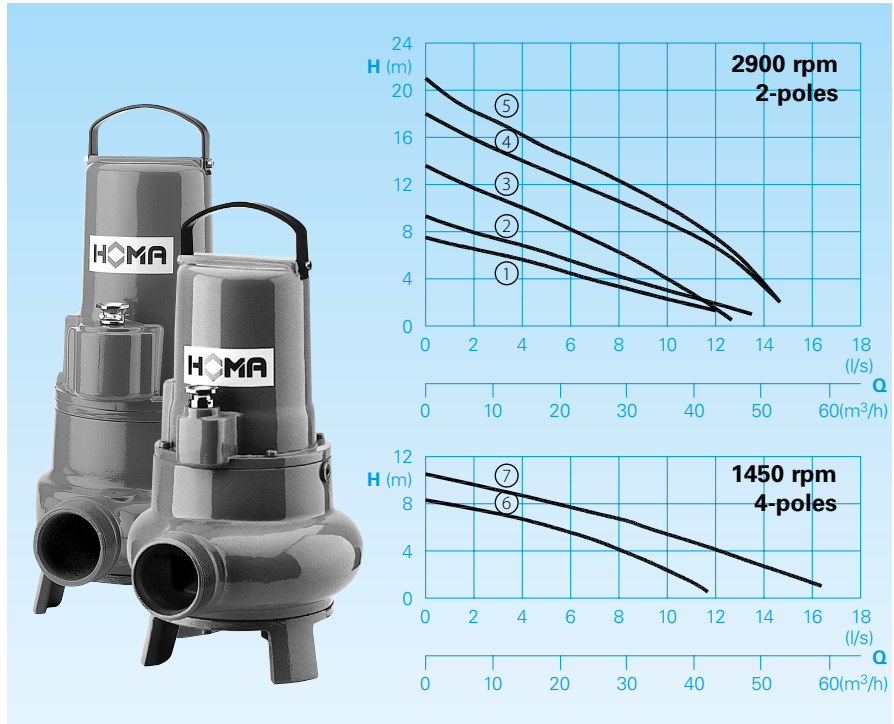
**Installation:** Stationary or mobile. Version with float switch for use as automatic water level controlled drainage pump.

**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 <sub>1</sub> (kW)	P <sub>2</sub> (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.

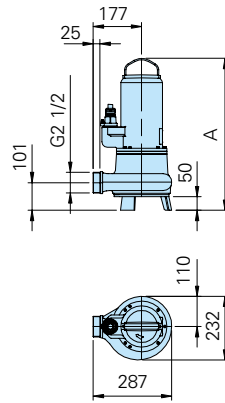
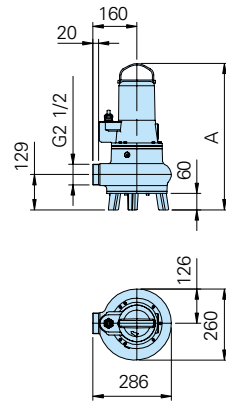
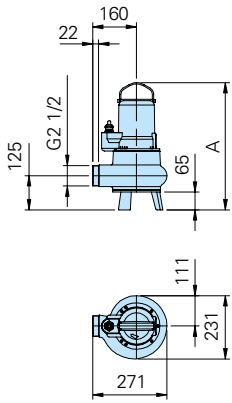
**Dimensions and installation example** (all dimensions in mm)

**Floorstanding installation with base stand**

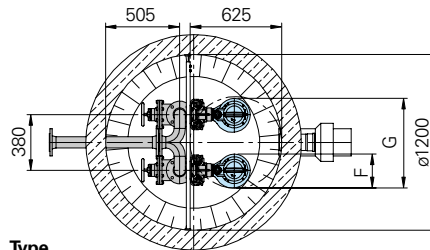
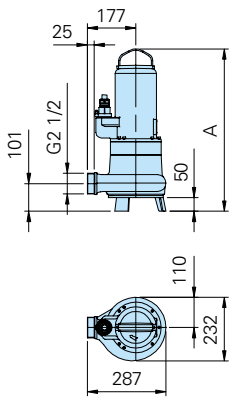
TP50V17/2W+D(Ex)

TP50V23/4D(Ex)

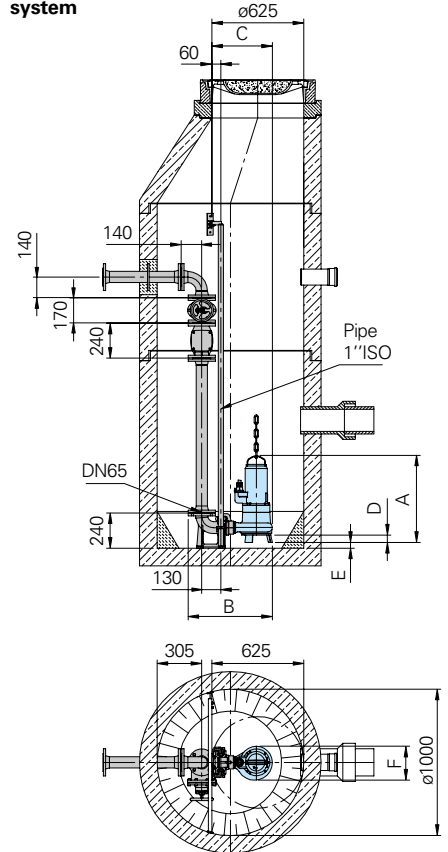
TP50V40/2D(Ex),  
TP50V26/2D(Ex), TP50V13/4D(Ex)



TP50V50/2DT(DEx)

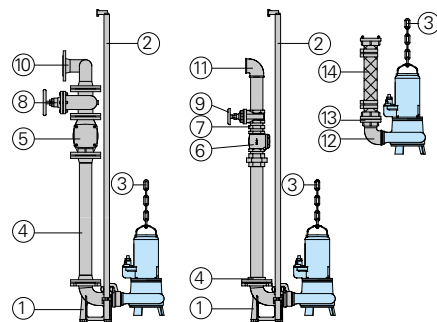


**Shaft installation with automatic coupling system**



Type	A	B	C	D	E	F	G
TP50V50/2DT(Ex)	593	575	412	50	39	232	612
TP50V40/2D(Ex)	555	575	412	50	39	232	612
TP50V13/4D(Ex), TP50V26/2D(Ex)	518	575	412	50	39	232	612
TP50V17/2W+D(Ex)	465 (472)	559	396	65	16	231	611
TP50V23/4D(Ex)	572	573	411	60	11	260	640

**Accessories**



Description	Size	Part no.
① Automatic coupling system GG with mating flange, base elbow with flange and slide rail bracket KK65/BSP2 1/2"	DN65/BSP2 1/2"	8604015
○ Coupling system completely or partly in stainless steel	all	on request

Description	Size	Part no.
○ Screw-Kits for fastening coupling systems		on request
○ Intermediate bracket for slide rail bracket extension for KK65	Ø 1"	7323714
② Guide rails for coupling kits (steel galvanized and stainless steel A2/A4)		on request
③ Pump chain sets, tested. With shackle, single or dual row, different lengths and load bearing capacities		on request
④ Threaded flange	DN 65/ BSP 2 1/2" F	2215060
Pipe with flanges	DN 65	on request
⑤ Non-return valve GG	DN 65	2212805
⑥ Non-return valve GG	BSP 2 1/2" F	2212513
⑦ Double nipple, galvanized	BSP 2 1/2" M	2009025
⑧ Shut-off gate valve GG	DN 65	2216065

Description	Size	Part no.
⑨ Shut-off gate valve MS	BSP 2 1/2" F	2216025
⑩ 90° bend with flanges	DN 65	2153301
Connection piece for pressure pipe with 3 flanges	3 x DN 65 DN 65/65/80	2160002 2160004
⑪ 90° bend, galvanized	BSP 2 1/2" F	2113610
T-piece for merging the pressure pipe in double pump stations	BSP 2 1/2" F	2114308
⑫ 90° bend, galvanized	BSP 2 1/2" F/M	2111705
⑬ STORZ-fixed coupling	B-G2 1/2" F	2010502
STORZ-hose coupling	B-75 mm Ø	2013502
⑭ Synthetic pressure hose with rubber lining, with couplings	10 m long 15 m long 20 m long 30 m long	2611210 2611215 2611220 2611230
B-75 mm Ø		
Plastic spiral hose, per m	Ø 75 mm	2632075
Hose clamp	85/20	2308520
○ For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices,		see HOMA accessories



We reserve the right to alter our specifications without notice!