

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

## TP50 M

### 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).

### Design

Fully submersible pump, consisting of:

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

**Impeller:** Closed single-channel impeller for sludgy media containing solids or fibrous content. 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: TP50M13-37: direct-on-line TP50M50: direct-on-line or star delta-start  
Connecting cable:

Model W: H07RN8-F 4G1,5

Model D and Ex: H07RN8-F 6G1,5  
TP50M50(Ex): H07RN8-F 10G1,5

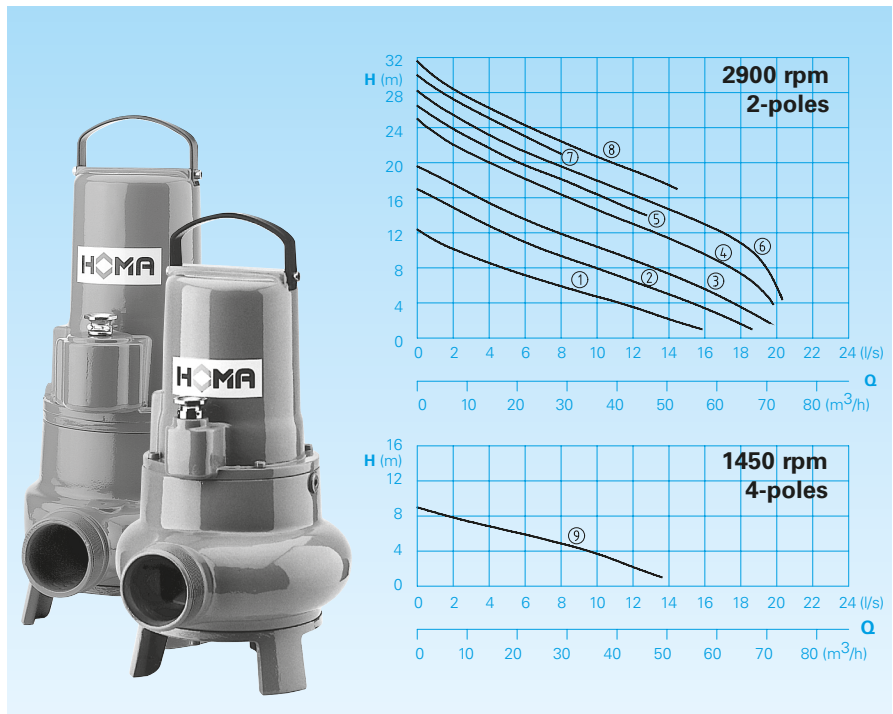
**Shaft/bearing:** strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

**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.

**Explosion protection:** All pump types are also available in explosion-proof design according to ATEX Directive 2014/34/EU.

### Conveying capacities



### 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)	Weight (kg)
①	TP50M 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	27,0**
①	TP50M 14/2 D (A) (Ex)	1,3	1,0		2900	2,5	27,0**
②	TP50M 23/2 D (A) (Ex)	2,3	1,8		2900	3,8	40,0
③	TP50M 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	40,0
④	TP50M 37/2 D (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑤	TP50M 37/2 MD (A) (Ex)	4,0	3,4		2900	6,6	45,0
⑥	TP50M 50/2 MD (Ex)	5,2	4,4		2840	8,7	56,0
⑦	TP50M 37/2 HD (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑧	TP50M 50/2 D (Ex)	5,2	4,4		2840	8,7	56,0
⑨	TP50M 13/4 D (A) (Ex)	1,3	1,0	40	1450	2,6	40,0

**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

### Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Motor shaft, screws	Stainless steel
Mechanical seals	Silicon carbide
Wear ring	Bronze
Elastomers	NBR

### Scope of supply

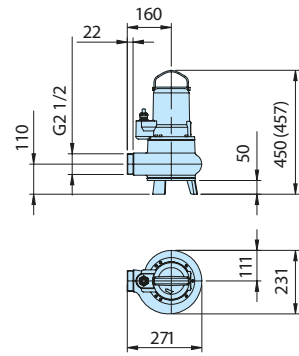
All pumps with base stand, without auto coupling (see accessories). With 10 m of loose cable end, switchgear (see accessories)

**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 BSP 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

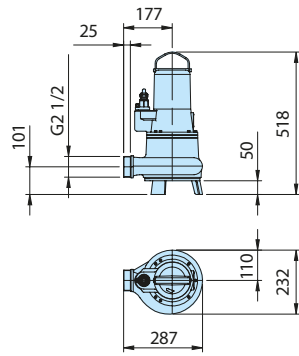
**Dimensions and installation example** (all dimensions in mm)

**Floorstanding installation with base stand**

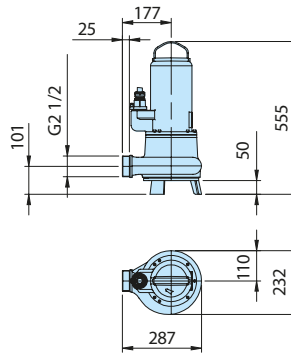
TP50M17/2W(Ex)  
TP50M14/2D(Ex)



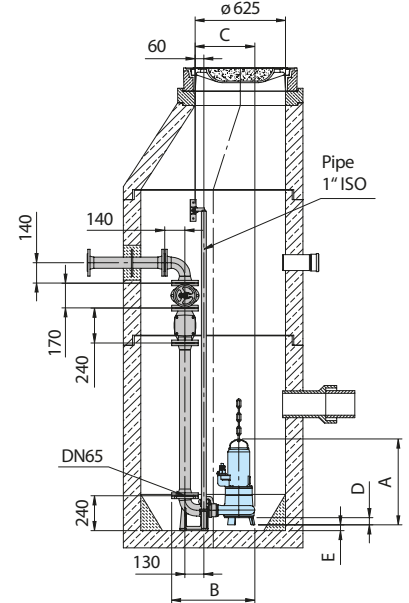
TP50M13/4D(Ex)  
TP50M23/2D(Ex)  
TP50M26/2D(Ex)



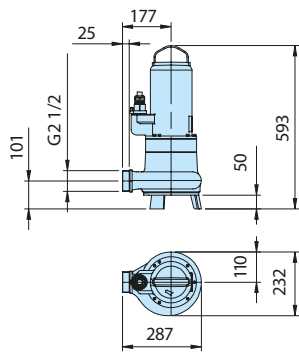
TP50M37/2MD(Ex)  
TP50M37/2(H)D(Ex)



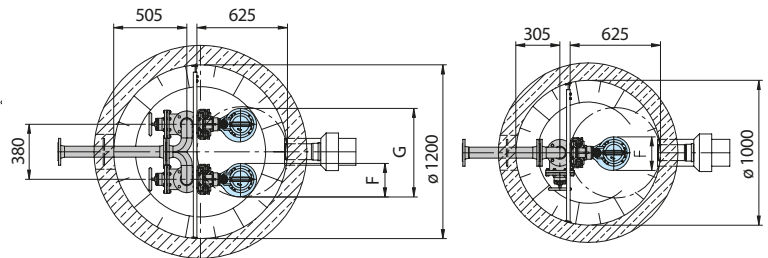
**Shaft installation with auto-coupling system**



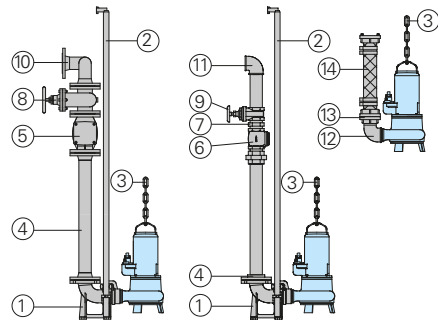
TP50M50/2(DT)(DEx)



Type	A	B	C	D	E	F	G
TP50M50/2D(Ex)	593	575	412	50	39	232	612
TP50M37/2MD(Ex)+HD(Ex)	555	575	412	50	39	232	612
TP50M13/4D(Ex), TP50M23-26/2D(Ex)	518	575	412	50	39	232	612
TP50M17/2W(Ex), TP50M14/2D(Ex)	450(457)	559	396	50	31	231	611



**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.	Description	Size	Part no.
○ Screw-Kits for fastening coupling systems		on request	⑩ 90° bend with flanges	DN 65	2153301
○ Intermediate bracket for Ø 1" slide rail bracket extension for KK65		7323714	Connection piece for pressure pipe with 3 flanges	3 x DN 65 DN 65/65/80	2160002 2160004
② Guide rails for coupling kits (steel galvanized and stainless steel A2/A4)		on request	⑪ 90° bend, galvanized	BSP 2 1/2" F	2113610
③ Pump chain sets, tested. With shackle, single or dual row, different lengths and load bearing capacities		on request	T-piece for merging the pressure pipe in double pump stations	BSP 2 1/2" F	2114308
④ Threaded flange	DN 65/ BSP 2 1/2" F	2215060	⑫ 90° bend, galvanized	BSP 2 1/2" F/M	2111705
Pipe with flanges	DN 65	on request	⑬ STORZ-fixed coupling	B-G2 1/2" F	2010502
⑤ Non-return valve GG	DN 65	2212805	STORZ-hose coupling	B-75 mm Ø	2013502
⑥ Non-return valve GG	BSP 2 1/2" F	2212513	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
⑦ Double nipple, galvanized	BSP 2 1/2" M	2009025	○ Plastic spiral hose, per m	Ø 75 mm	2632075
⑧ Shut-off gate valve GG	DN 65	2216065	Hose clamp	85/20	2308520
⑨ Shut-off gate valve MS	BSP 2 1/2" F	2216025	○ 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!