

## Electric submersible pumps for waste water containing solids. Spherical clearance 30 and 42 mm.

### TP 30

#### Application

HOMA TP 30 series pumps are suitable for pumping drainage water or waste water. With their 30 mm spherical clearance they are especially able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry.

DIN EN 12050-2: Conformity and design approved and controlled by LGA, certificate No. 0220119.

**Installation:** Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

**Pumped liquid:** Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 35°C short term up to 60°C.

**Operation:** Permanent (S1).

#### Design

Fully submersible, compact integrated motor-pump unit consisting of:

**Pump:** Single stage centrifugal pump with horizontal discharge BSP 2" M.

**Impellers:** M = Open single channel impeller for liquids containing impurities and sludge with solid particles.

V = Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas.

**Motor:** Fully submersible, pressure tight electric motor, oil filled. Insulation class F. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with model Ex).

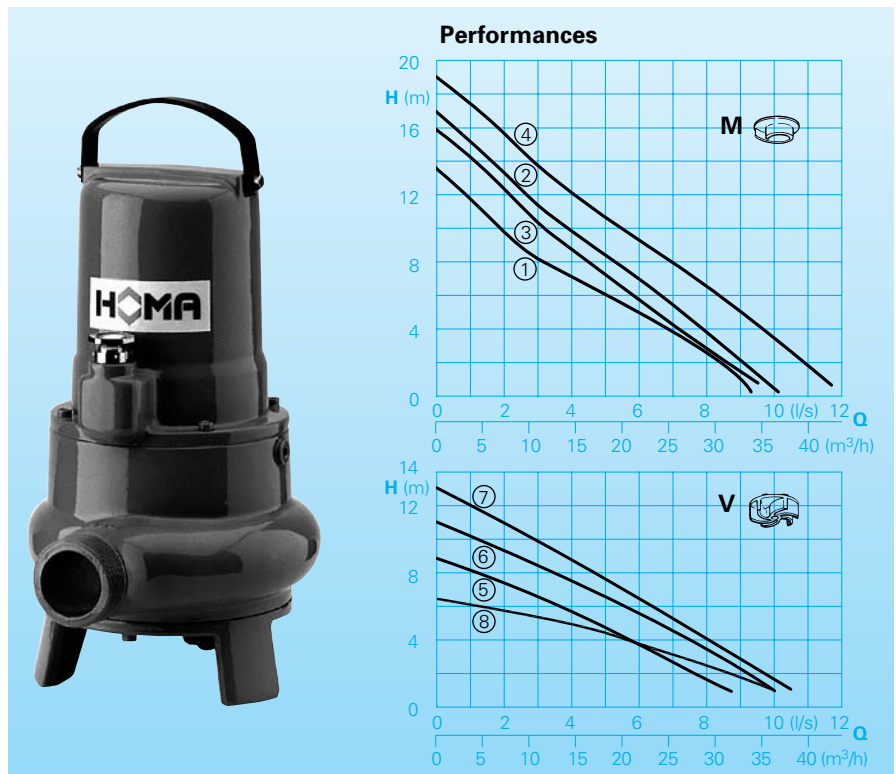
**Cable:** H07 RN - F4 G 1,5

**Model Ex:** H07 RN - FPlus6 G 1,5

**Shaft/Bearing:** Large diameter stainless rotor shaft, pre-lubricated bearings.

**Seals:** Combination of mechanical seals (silicon-carbide/silicon-carbide) and lip seals in a separate oil chamber.

**Explosion protection:** All models available with explosion proof motors according to  $\odot$  II 2 G EEx d IIBT4.



#### Technical Data

Curve No.	Pump type	Motor-input P <sub>1</sub> (kW)	Motor-output P <sub>2</sub> (kW)	Capacitor* (μF)	Speed (rpm)	Nominal current (A)	Spherical clearance (mm)	Weight Standard model (kg)	Weight model Ex (kg)
①	TP30M11/2W(A)(Ex)	1,0	0,7	25	2900	4,3	30	26	31
②	TP30M17/2W(A)(Ex)	1,6	1,2	30	2900	7,5	30	27	32
③	TP30M13/2D(A)(Ex)	1,2	0,9		2900	2,1	30	26	31
④	TP30M17/2D(A)(Ex)	1,6	1,2		2900	2,9	30	27	32
⑤	TP30V13/2W(A)(Ex)	1,2	0,9	25	2900	5,1	30	26	31
⑥	TP30V17/2W(A)(Ex)	1,6	1,2	30	2900	7,5	30	27	32
⑦	TP30V13/2D(A)(Ex)	1,2	0,9		2900	2,1	30	26	31
⑧	TP30V17/2D(A)(Ex)	1,6	1,2		2900	2,9	30	27	32
⑨	TP30V10/4W(A)(Ex)	1,0	0,7	30	1450	5,0	42	27	32
⑩	TP30V10/4D(A)(Ex)	1,0	0,7		1450	2,3	42	27	32

Model W: 230-240 V / 1 Ph

Model D: 400-415 V / 3 Ph

\* Capacitor: For the operation it is necessary to install a capacitor in the control box.

Model A: With automatic level control HOMA-Nivomatik

Model Ex: Explosion proof

#### Materials:

Motor housing, pump housing, impeller	Cast iron GG 25/EN-GJL-250
Rotor shaft, screws	Stainless steel
Mechanical seal	Silicon-carbide
Seal kit	Perbonane

#### Equipment supplied

Pumps with base stand, without auto-coupling (see accessories):

Model W (230-240V/1 Ph): Control box W19; WT19 fitted with overload protection, capacitor and plug. On-off switch, 10 m of cable.

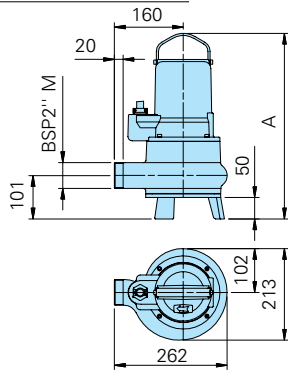
Model D (400-415V/3Ph): Control box D32; DT32 fitted with overload protection, on-off switch, 10 m of cable and phase inverter.

Model A: With additional automatic level control, AS-float switch, control box WA10/19; DA10/32; DA10/12 with manual auto switch and 10 m of cable. Model Ex with intrinsically safe control circuit relay.

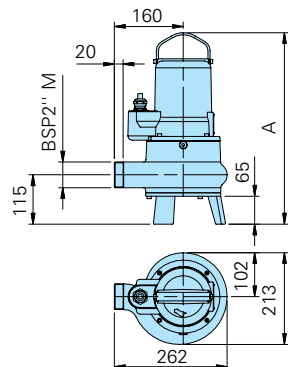
## Installations and Dimensions

### Free standing pump with base stand

Pump type	Dim. A	D	E
TP30M(V).../2W(D)	431	50	59
TP30M(V).../2W(D)Ex	438	50	59

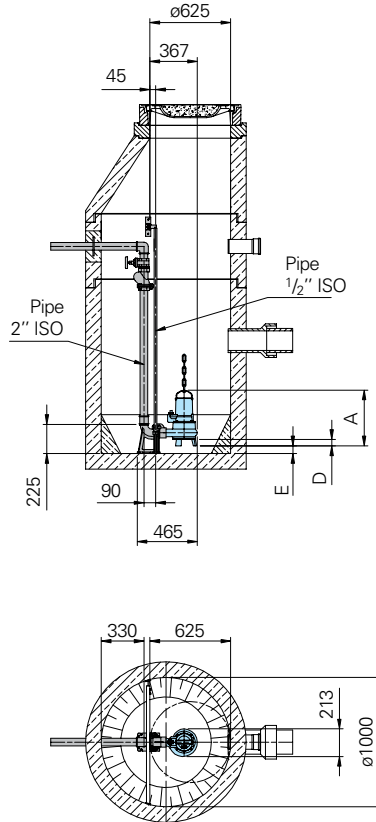


Pump type	Dim. A	D	E
TP30V10/4W(D)	445	65	46
TP30V10/4W(D)Ex	452	65	46

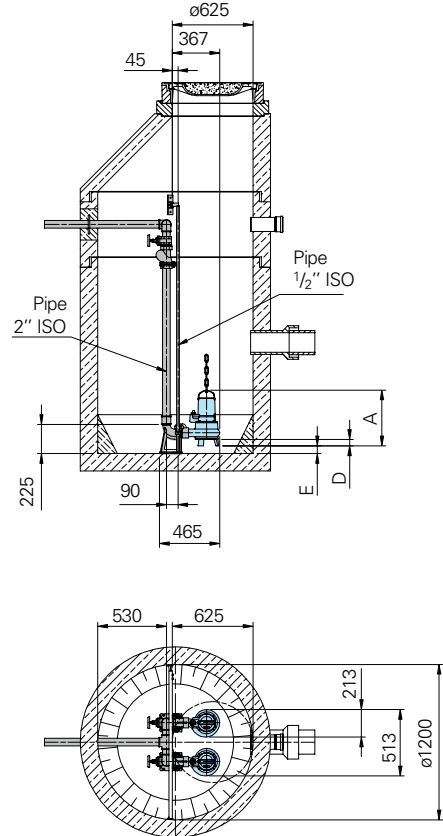


all dimensions in mm

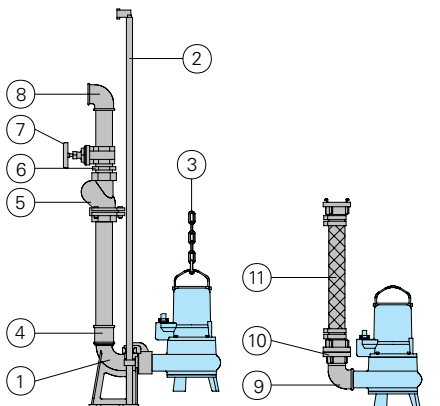
### Permanent sump installation Single pump station



### Twin pump station



## Accessories



Part Description	Dimension	Part No.
① Auto-coupling system type KK50/R 2" with:		8604005
- Cast iron auto-coupling with thread	BSP 2" M	
- Cast iron flanged pump coupling	BSP 2" F	
- Cast iron upper slide bracket	BSP 1/2"	

Part Description	Dimension	Part No.
② Guide rails, pair, per m		
steel galvanized	1/2" dia.	2190085
stainless steel	1/2" dia.	2190250
③ Lifting chain, per m		
steel galvanized	5 mm dia.	2800350
stainless steel	5 mm dia.	2800353
Shackle		
steel galvanized for chain 5 mm dia.		2801450
stainless steel for chain 5 mm dia.		2801390
④ Galvanized double nipple	BSP 2" F	2109102
	BSP 2" F /	2102210
	BSP 1 1/2" F	
⑤ Cast iron swing check valve	BSP 1 1/2" F	2212902
	BSP 2" F	2212903
⑥ Galvanized double nipple	BSP 1 1/2" M	2009020
	BSP 2" M	2009018
⑦ Bronze gate valve	BSP 1 1/2" F	2216015
	BSP 2" F	2216020
⑧ 90° galvanized elbow	BSP 1 1/2" F	2113605
	BSP 2" F	2113606
T-piece for twin-pump arrangement	BSP 1 1/2" F	2114302
	BSP 2" F	2114306

Part Description	Dimension	Part No.
⑨ 90° galvanized elbow	BSP 1 1/2" F/M	2111505
	BSP 2" F/M	2111506
Galvanized double socket	BSP 2" F /	2102210
	BSP 1 1/2" F	
⑩ STORZ-fixed coupling	C-BSP2" F	2010204
STORZ-hose coupling	C-52 mm dia.	2013003
Brass STA-hose coupling	BSP 1 1/2" F	2001513
⑪ Synthetic pressure hose with rubber lining and couplings, C-52 mm dia.	length 10 m	2611310
	length 15 m	2611315
	length 20 m	2611320
	length 30 m	2611330
Reinforced hose, per m	50 mm dia.	2632050
PVC-hose, per m		2621500
Hose bands	1 1/2"	2304854
	2"	2306009

○ Control panel for single or twin pump stations for automatic operation On request



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