

## Electric submersible pumps for waste water containing solids. Spherical clearance 30 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: Intermittent.

#### 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).

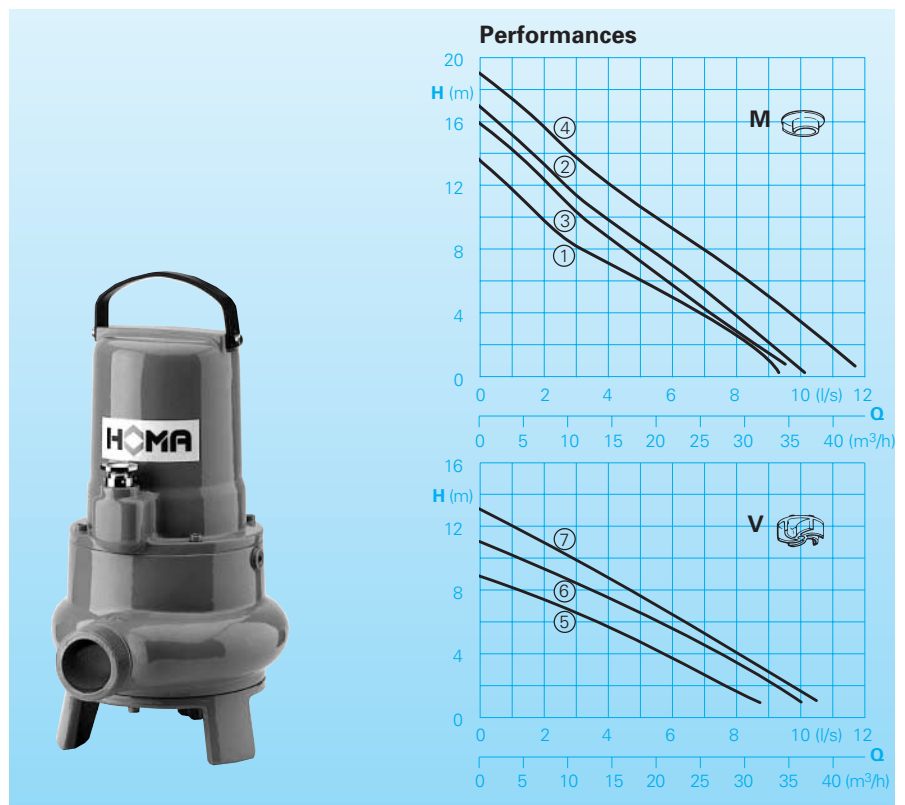
Cable: H07 RN - F4 G 1,5

Model Ex: H07 RN - F Plus6 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  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)	Weight Standard model (kg)	Weight Ex (kg)
①	TP30M11/2W(A)(Ex)	1,0	0,7	25	2900	4,3	26	31
②	TP30M17/2W(A)(Ex)	1,6	1,2	30	2900	7,5	27	32
③	TP30M13/2D(A)(Ex)	1,2	0,9		2900	2,1	26	31
④	TP30M17/2D(A)(Ex)	1,6	1,2		2900	2,9	27	32
⑤	TP30V13/2W(A)(Ex)	1,2	0,9	25	2900	5,1	26	31
⑥	TP30V17/2W(A)(Ex)	1,6	1,2	30	2900	7,5	27	32
⑦	TP30V13/2D(A)(Ex)	1,2	0,9		2900	2,1	26	31
⑦	TP30V17/2D(A)(Ex)	1,6	1,2		2900	2,9	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):

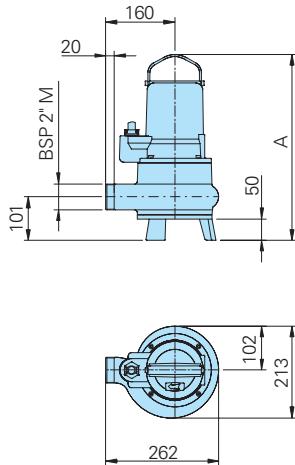
Model W (230-240V/1 Ph): Control box W19; WT19 fitted with overload protection, capacitor and plug. On-off switch, 10 m of cable.

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

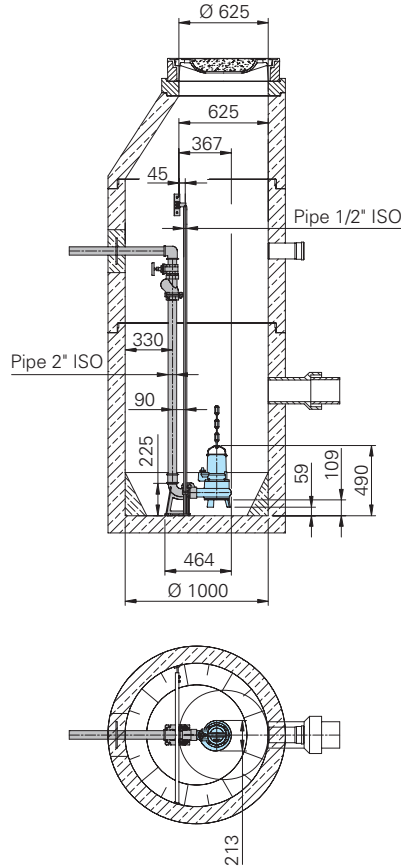
## Free standing pump with base stand



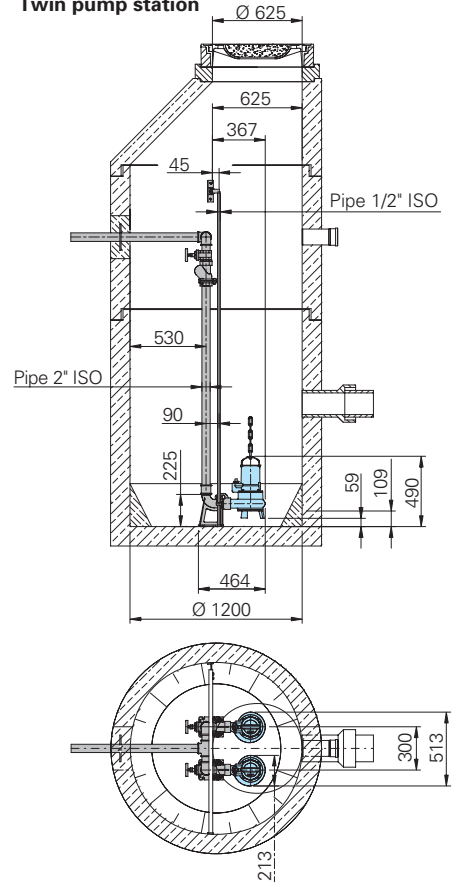
Pump type	Dim. A
TP 30	431
TP 30 ... Ex	438

all dimensions in mm

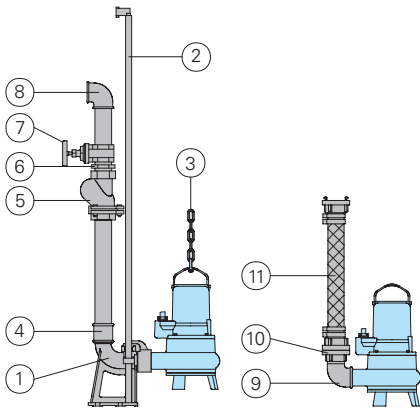
## Permanent sump installation Single pump station



## Twin pump station



## Accessories



Part Description	Dimension	Part No.
① Auto-coupling system type KK50/R 2" with:		8604005
- Cast iron auto-coupling with flange and thread	BSP 2" BSP 2" F	
- Cast iron flanged pump coupling	BSP 2" F	
- Cast iron upper slide bracket	BSP 1/2"	
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 BSP 2" F/ BSP 1 1/2" F	2109102 2102210
⑤ Cast iron swing check valve	BSP 1 1/2" F BSP 2" F	2212902 2212903
⑥ Galvanized double nipple	BSP 1 1/2" M BSP 2" M	2009020 2009018
⑦ Bronze gate valve	BSP 1 1/2" F BSP 2" F	2216015 2216020
⑧ 90° galvanized elbow	BSP 1 1/2" F BSP 2" F	2113605 2113606
T-piece for twin-pump arrangement	BSP 1 1/2" F BSP 2" F	2114302 2114306

Part Description	Dimension	Part No.
⑨ 90° galvanized elbow	BSP 1 1/2" F/M BSP 2" F/M	2111505 2111506
Galvanized double socket	BSP 2" F/ BSP 1 1/2" F	2102210
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 length 15 m length 20 m length 30 m	2611310 2611315 2611320 2611330
Reinforced hose, per m	50 mm dia.	2632050
PVC-hose, per m	1 1/2"	2621500
Hose bands	1 1/2" 2"	2304854 2306009
○ Control panel for single or twin pump stations for automatic operation		On request



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