

Electric submersible pumps for waste water containing solids. Spherical clearance 28 mm.

TP 28

Application

HOMA TP 28 series pumps are suitable for pumping drainage water or waste water. By their 28 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 floatswitch control for automatic pump operation, depending on medium level in the sump.

Pumped medium: Clear water and drainage water, sewage containing soft solids. Max. medium 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 1 1/2" F.

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

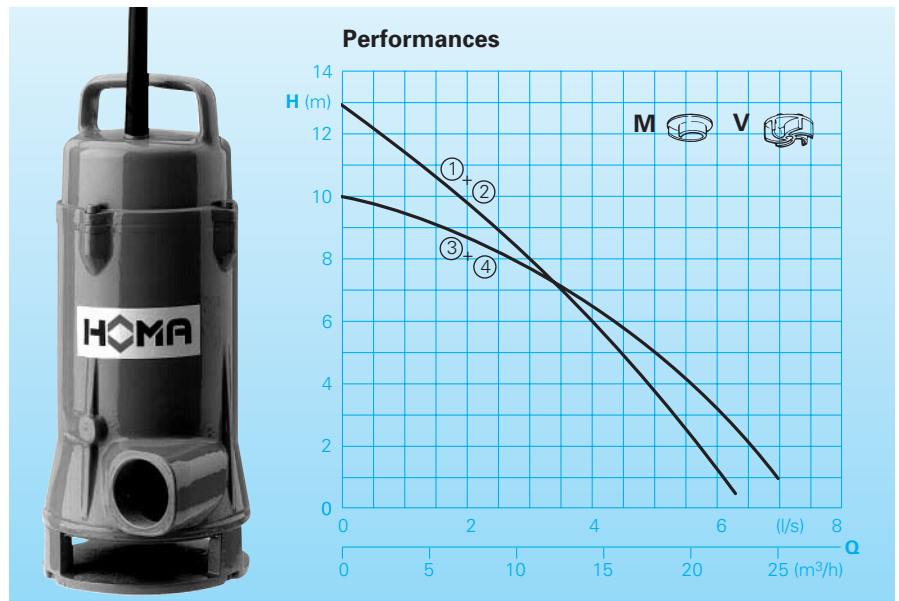
V = Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas.

Motor: Fully submersible, pressure tight electric motor, oil filled. Insulation class F. Degree of protection IP 68. Cable connection chamber totally isolated from motor housing.

Cable: H07 RN - F4 G 1,5
Model WA: H07 RN - F5 G 1,5

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

Seals: Combination of mechanical seals (silicon-carbide/silicon-carbide) and lip seals.



Technical Data

Curve No.	Pump type	Motor input P ₁ (kW)	Motor output P ₂ (kW)	Voltage 50 Hz (V)	Speed (rpm)	Nominal current (A)	Weight (kg)
①	TP 28M10/2 W (A)	1,0	0,7	230-240/1Ph	2900	4,7	22
②	TP 28M10/2 D (A)	1,0	0,7	400-415/3Ph	2900	1,8	22
③	TP 28V 11/2 W (A)	1,1	0,9	230-240/1Ph	2900	5,6	22
④	TP 28V 11/2 D (A)	1,1	0,9	400-415/3Ph	2900	2,2	22

Impeller: TP 28 M = Open single channel impeller

TP 28 V = Vortex impeller

Other voltages are available upon request.

Discharge: BSP 1 1/2" F

Model A: With automatic level control HOMA-Nivomatik

Materials:

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

Equipment supplied

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

Model W (230-240 V/1 Ph):

Control box fitted with overload protection, capacitor, on-off switch and 10 m of cable.

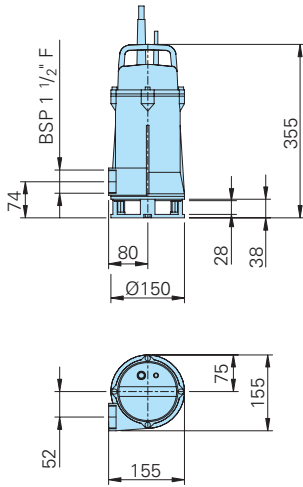
Model D (400-415 V/3 Ph):

Control box fitted with overload protection, on-off switch and 10 m of cable.

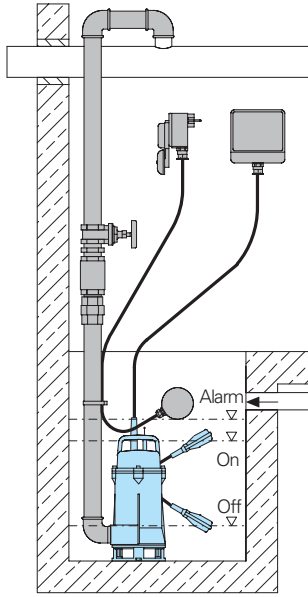
Model A: With additional automatic level control, AS-float switch, control box with manual-auto switch and 10 m of cable.

Installations and Dimensions

Free standing pump with base stand



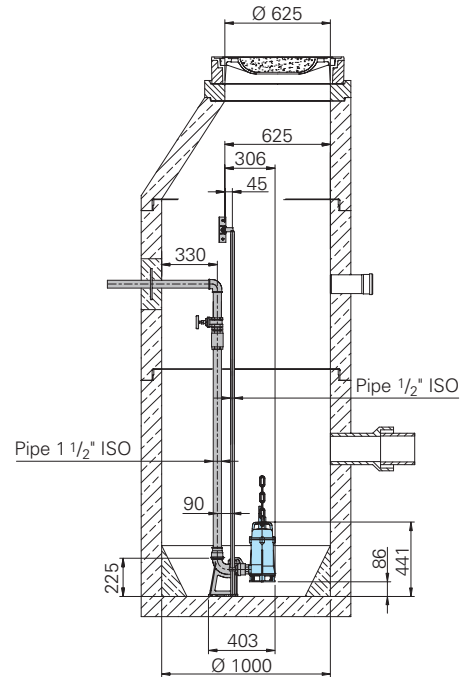
Wet well installation with base stand



Wet well installation with auto-coupling system.

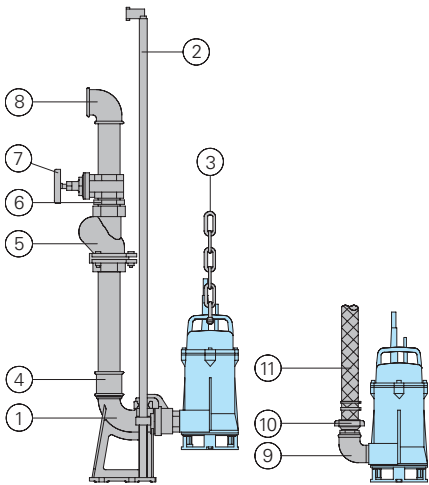
Permanent installation utilising a submerged auto-coupling guide rail system for automatic connection and disconnection of the pump from the pipework from outside the sump. Applicable for single or multi pump stations.

Advantages: Little space requirement, comfortable and economical service and maintenance.



all dimensions in mm

Accessories



Part Description	Dimension	Part No.
① Auto-coupling system type KK 50/R1 1/2", with:		8604000
- Cast iron auto-coupling with flange and thread	DN 50	
- Cast iron flanged pump coupling	BSP1 1/2" F	
- Cast iron upper slide rail bracket	BSP1 1/2" M	

Part Description	Dimension	Part No.
② Steel, galvanized guide rails, pair, per m	1/2"	2190085
③ Steel galvanized lifting chain	8 mm dia.	2800380
Steel galvanized shackle	Size. 1	2801380
④ Galvanized double socket	BSP 2" F	2109102
	BSP 2" F / BSP 1 1/2" F	2102210
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
⑨ 90° galvanized elbow	BSP 1 1/2" F/M	2111505
	BSP 2" F/M	2111506
⑩ Brass STA-hose coupling	BSP 1 1/2" M	2001513
STORZ-hose coupling	C-BSP 1 1/2" M	2010003

Part Description	Dimension	Part No.
⑪ PVC hose, per m	1 1/2"	2621500
Reinforced hose, per m	50 mm dia.	2632050
STORZ-hose coupling with spigot	C-38 dia.	2013002
	C-52 dia.	2013003
Hose bands	1 1/2"	2304854
	2"	2306009
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
○ Alarm device AL 1 Mains-operated with connector for battery 9 V (see below) for mains-independent operation with integrated buzzer. Mains connection 220-240/1Ph		1586010
Battery 9 V for mains-independent operation		1952209
Floatswitch MB, mercury free, on or off, with integrated counter weight		
Cable length	6 m	1465706
	10 m	1465710
○ Control panel for single or twin pump stations for automatic operation		On request

HOMA
P U M P T E C H N O L O G Y

HOMA Pumpenfabrik GmbH
P.O. Box 22 63, D-53814 Neunk.-Seelscheid
Tel. ++49(0)22 47/702-0, Fax ++49(0)22 47/702-44
e-mail: info@homa-pumpen.de
www.homapumps.com