

Submersible pumps for domestic waste water containing solids. Spherical clearance 28 mm.

TP28

Application

Series TP28 submersible pumps are used for pumping soiled and waste water as well as sludge. With their large free passage of 28 mm, they are particularly well suited for use with media containing coarse solids and fibres. Ideal for economical disposal in municipal, private, trade and industry applications.

DIN EN 12050-2: Conformity and type-tested and monitored by the LGA.

Installation: Stationary or mobile.

Version with float switch for use as automatic water level controlled drainage pump.

Conveying medium: Clear water and domestic waste water with solid and fibrous content. Max. temperature of conveying medium: 40°C, briefly up to 60°C.

Operating mode: Motor submerged: continuous operation (S1). Motor not submerged or medium temperature 41- 60 °C: intermittent operation (S3 30%)

Construction

Fully submersible pump, consisting of:

Pump: Single stage centrifugal pump with horizontal pressure connection.

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

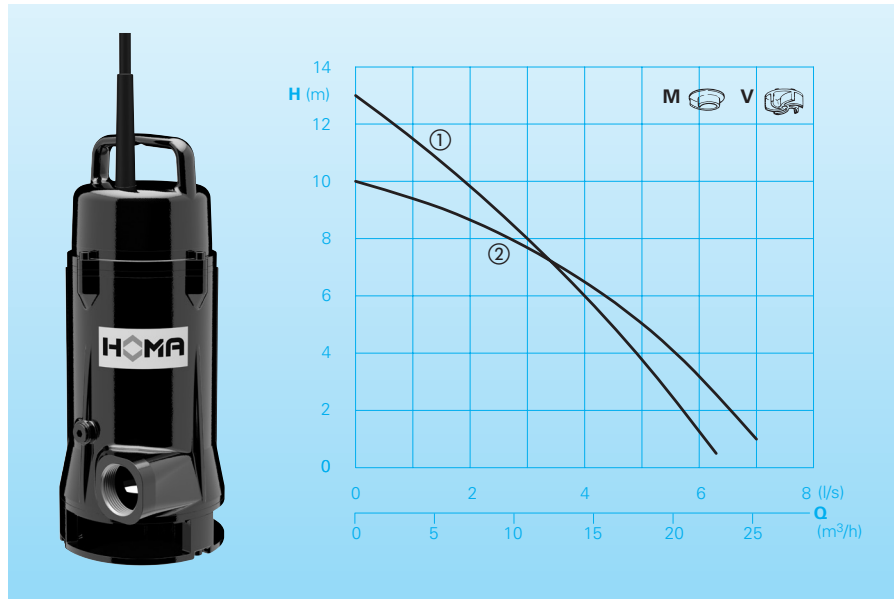
V = Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas.

Motor: Fully immersible motor, sealed against pressurised water, oil-filled. Insulation class H, protection rating IP 68. W(A)-Models with thermal sensor embedded in the winding. Electrical compartment is separate from motor. Connection cable: H07RN-F 4G1,5 TP28V W(A): H07RN-F 3G1,0

Shaft/Bearing: Generously-proportioned chromium steel motor shaft, permanently-lubricated roller bearing.

Seal: Combination of mechanical seal (silicon carbide/silicon carbide) and radial seal that is independent of the direction of rotation.

Conveying capacities



Technical Data

Curve no.	Pump type	Motor power		Voltage 50 Hz (V)	Nominal current (A)	Weight (kg)
		P ₁ (kW)	P ₂ (kW)			
①	TP28M 10/2 W (A)	1,0	0,7	230/1Ph	4,7	22,0
①	TP28M 10/2 D (A)	1,0	0,7	400/3Ph	1,8	22,0
①	TP28M 10/2 DL	1,0	0,7	400/3Ph	1,8	22,0
②	TP28V W(A)	1,1	0,9	230/1Ph	5,6	22,0
②	TP28V 11/2 W (A)	1,1	0,9	230/1Ph	5,6	22,0
②	TP28V 11/2 D (A)	1,1	0,9	400/3Ph	2,2	22,0
②	TP28V 11/2 DL	1,1	0,9	400/3Ph	2,2	22,0

Speed: 2900 rpm

Pressure connection: BSP 1 1/2 F

Type A: with automatic float switch HOMA Nivomatik

Type L: without control unit, with loose cable end.

Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Motor shaft	Stainless steel
Mechanical seal	SiC/SiC
Elastomers	NBR
Mechanical connection parts	Stainless steel

Scope of Supply

Pump with base support, without drainage facility (see accessories), with 10 m connecting cable.

Type W (230 V / 1 Ph): Control unit W1 with motor protection, ON/OFF switch and mains plug.

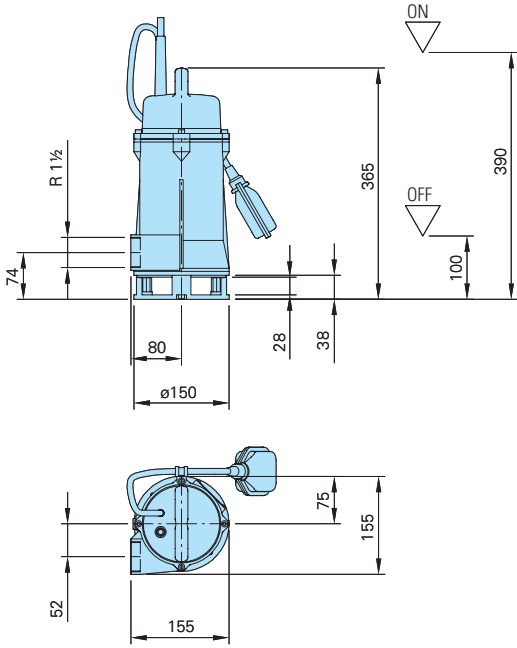
Type D (400 V / 3Ph): Control unit D32 with motor protection, ON/OFF switch and direction reversal plug.

Type A: Additionally with automatic float switch on pump lid, control unit WA1/DA32 with Manual/Auto switch.

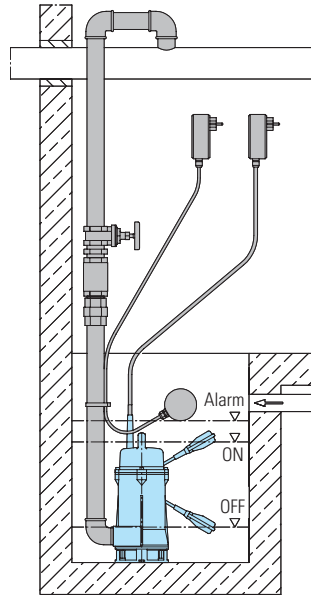
Type DL: Without control unit, with loose cable end.

Type TP28V W(A): Without control unit, with mains plug. Capacitor in motor housing cover.

Dimensions and Installation Example (all dimensions in mm)

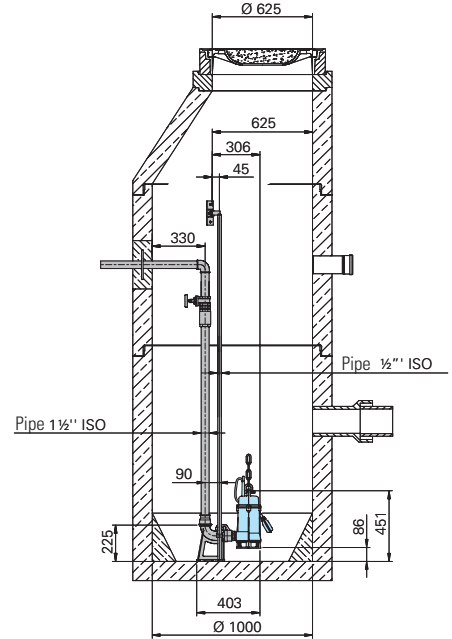


Sump installation with floor support base

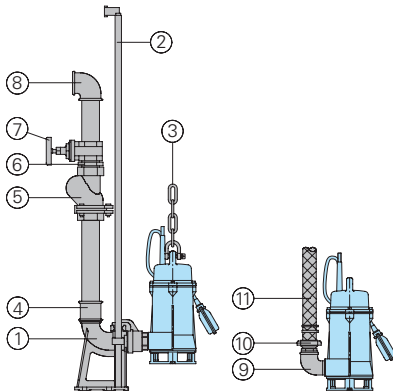


Sump installation with auto-coupling system.

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



Accessories



Description	Size	Part No.
① Automatic coupling system cast iron with mating flange, base elbow with thread and slide rail bracket KK50/BSP1 1/2"	BSP2"/BSP1 1/2"	8604000
○ Coupling system, fully or partly stainless steel	all	on demand
○ Sets of screws/bolts for fastening coupling systems		on demand
Intermediate bracket for slide rail extension	Ø 1/2" for KK50	7320271

Description	Size	Part No.
② Slide rails, in pairs, per m steel galvanised	Ø 1/2"	2190085
Stainless steel	Ø 1/2"	2190250
③ Pump chain sets, tested. With shackles single or dual row various lengths and load bearing capacities		on demand
④ Double socket, galvanised	BSP 2" F	2109102
	BSP 2" F	2102210
	x BSP 1 1/2" F	
⑤ Non-return ball valve cast iron	BSP 1 1/2" F	2212902
	BSP 2" F	2212903
⑥ Double nipple, galvanised	BSP 1 1/2" M	2009020
	BSP 2" M	2009018
⑦ Shut-off gate valve MS	BSP 1 1/2" F	2216015
	BSP 2" F	2216020
⑧ 90° angle, galvanised	BSP 1 1/2" F	2113605
	BSP 2" F	2113606
T-piece for merging the pressure pipe in dual pump stations	BSP 1 1/2" F	2114302
	BSP 2" F	2114306
⑨ 90° angle, galvanised	BSP 1 1/2" F/M	2111505
	BSP 2" F/M	2111506
⑩ STA-hose screw connection, brass	BSP 1 1/2" M	2001513
STORZ-fixed coupling	C-BSP 1/2" M	2010003

Description	Size	Part No.
① PVC hose, per m	1 1/2" Ø 38 mm	2621500
Plastic spiral hose, per m,	Ø 50 mm	2632050
STORZ-hose-coupling	C-38 mm Ø	2013002
	C-52 mm Ø	2013003
Hose clip	1 1/2"	2304854
	2"	2306009
Synthetic pressure hose rubber-coated inner with couplings	10 m long	2611310
	15 m long	2611315
	20 m long	2611320
	30 m long	2611330
○ Pump control systems and switching gear for mobile and permanent usage, level recording and monitoring devices		See HOMA accessories



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