

Submersible motor pumps
for drainage water containing solids.
Free passage 28 mm.

TP28

Application

Submersible motor pumps in the TP28 series are used for conveying domestic drainage- 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 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 brief periods up to 60°C.

Operating mode: Submerged motor: Continuous operation (S1). Surfaced motor or medium temperature 41-60 °C: Intermittent operation (S3 30%)

Design

Fully submersible pump, consisting of:

Pump: Single-stage with horizontal discharge.

Impellers: M= open single-channel impeller for sludgy media with solids or fibrous content.

V = Vortex impeller for media containing gas or air, with coarse or long stringy components that are prone to clogging.

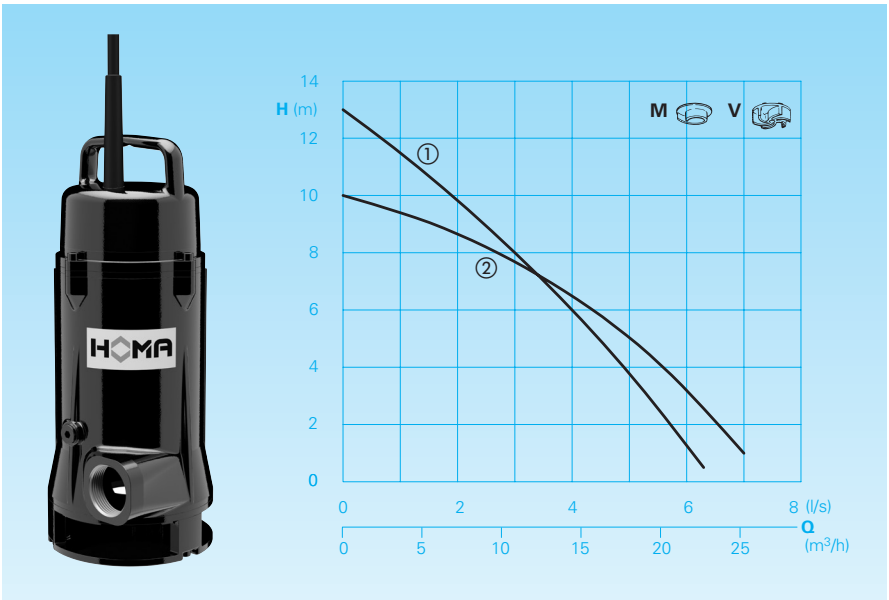
Motor: Fully submersible motor, sealed against pressurized water, oil-filled. Insulation class H, Protection rating IP68. Single phase version with thermal sensor in the winding for temperature monitoring. Electrical compartment is separate from motor.

Connecting cable: H07RN-F 4G1,5
TP28VW(A): H07RN-F 3G1,0

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

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 input P ₁ (kW) P ₂ (kW)		Voltage 50 Hz (V)	Nominal current (A)	Weight (kg)
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

Rotational speed: 2900 rpm

Discharge: BSP1 1/2

Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL250
Motor shaft	Stainless steel
Mechanical seal	SiC/SiC
Elastomers	NBR
Mechanical connection parts	Stainless steel

Model A: with automatic float switch
HOMA-Nivomatik

Model L: without switchgear, with loose cable end.

Scope of supply

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

Model W (230V / 1Ph):

With switchgear W1, motor protection, ON-OFF-switch and mains plug.

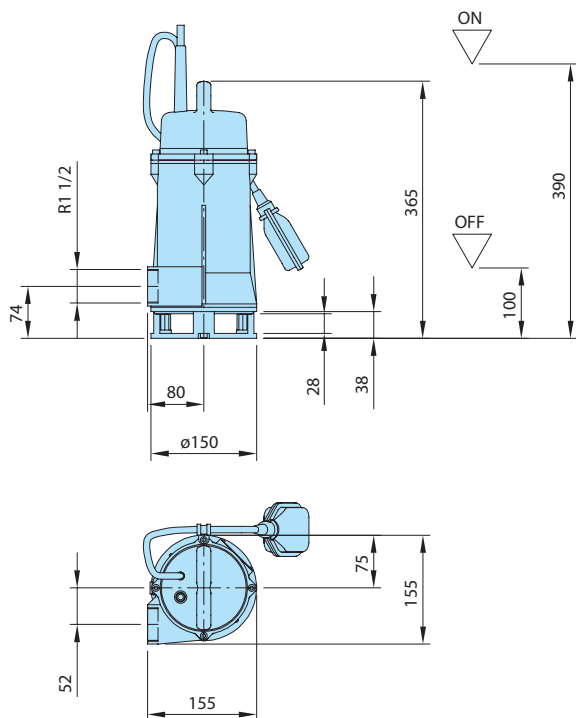
Model D (400V / 3Ph):

With switchgear D32, motor protection, ON-OFF-switch, reversing plug.

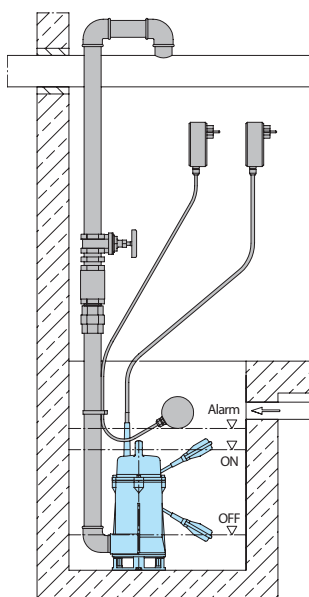
Model A: Additionally with automatic float switch on pump lid, switchgear WA1/DA32 with Manual/Auto switch.

Model DL: Without switchgear, with loose cable end.

Model TP28V W: Without switch gear, with mains plug. Capacitor inside the motor housing cover.

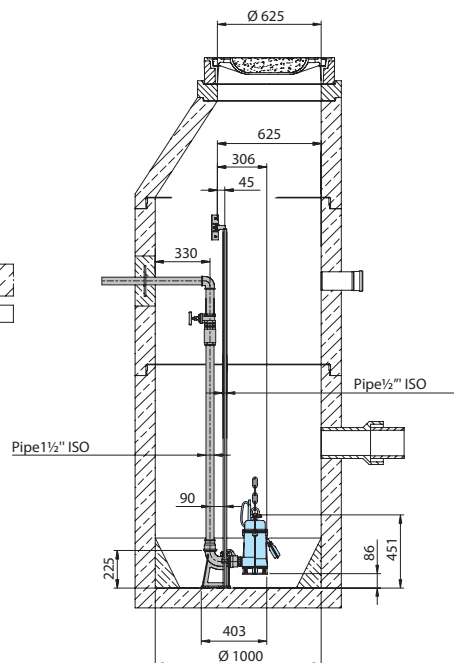


Shaft installation with base stand

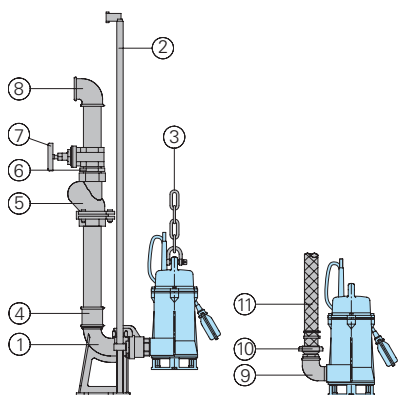


Shaft installation with automatic coupling system

The pump is simply pulled up the solid two-pipe guide for maintenance or replacement without having to walk into the shaft. When it is lowered again, it automatically couples to the discharge line. This installation is possible for single and multiple pumping stations. Advantages: small space requirement, particularly service-friendly and economical.



Accessories



Description	Size	Part no.
① Automatic coupling system GG with mating flange, base elbow with thread and slide rail bracket KK50/BSP1½"	BSP2"/BSP1½"	8604000
○ Coupling system completely or partly in stainless steel	all	on request
○ Screw-Kits for fastening coupling systems		on request
○ Intermediate bracket for slide rail bracket extension	Ø ½" for KK50	7320271

Description	Size	Part no.
② Guide rails, in pairs, per m Galvanized steel	Ø ½"	2190085
Stainless steel	Ø ½"	2190250
③ Pump chain sets, tested. With shackle, single or dual row, different lengths and load bearing capacities		on request
④ Double socket, galvanized	BSP 2"F BSP 2"F x BSP1½"F	2109102 2102210
⑤ Non-return ball valve	BSP 1½"F BSP 2"F	2212902 2212903
⑥ Double nipple, galvanized	BSP 1½"M BSP 2"M	2009020 2009018
⑦ Shut-off gate valve MS	BSP 1½"F BSP 2"F	2216015 2216020
⑧ 90° bend, galvanized	BSP 1½"F BSP 2"F	2113605 2113606
T-piece for merging the pressure pipe in double pump stations	BSP 1½"F BSP 2"F	2114302 2114306
⑨ 90° bend, galvanized	BSP 1½" F/M BSP 2" F/M	2111505 2111506
⑩ STA-hose- screw connection, STORZ-fixed coupling	BSP 1½" M C-G 1½" M	2001513 2010003

Description	Size	Part no.
⑪ PVC-hose, per m	1½" 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 clamp	1 ½"	2304854
	2"	2306009
Synthetic pressure hose, with rubber lining, complete	10 m long	2611310
	15 m long	2611315
with couplings	20 m long	2611320
C-52 mm Ø	30 m long	2611330
○ For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices,	see HOMA accessories	



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