

**Submersible motor pumps
for domestic drainage- and waste water.
Single channel impellers, free passage 50-65 mm.**

TP50 M

Application

Submersible motor pumps in the TP50 series are used for conveying domestic drainage- and waste water as well as sludge. With their large free passage of 50-65 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 non-ex pumps brief periods up to 60°C.

Operating mode: Continuous operation (S1).

Design

Fully submersible pump, consisting of:

Pump: Single-stage with horizontal discharge G2 1/2.

Impeller: Closed single-channel impeller for sludgy media containing solids or fibrous content. Free passage 50-65 mm.

Motor: Fully submersible motor, sealed against pressurized water. Insulation class H. Protection rating IP 68. Thermal sensor for temperature monitoring in the winding.

Type of start: TP50M13-37: direct-on-line TP50M50: direct-on-line or star delta-start
Connecting cable:

Model W: H07RN8-F 4G1,5

Model D and Ex: H07RN8-F 6G1,5

TP50M50(Ex): H07RN8-F 10G1,5

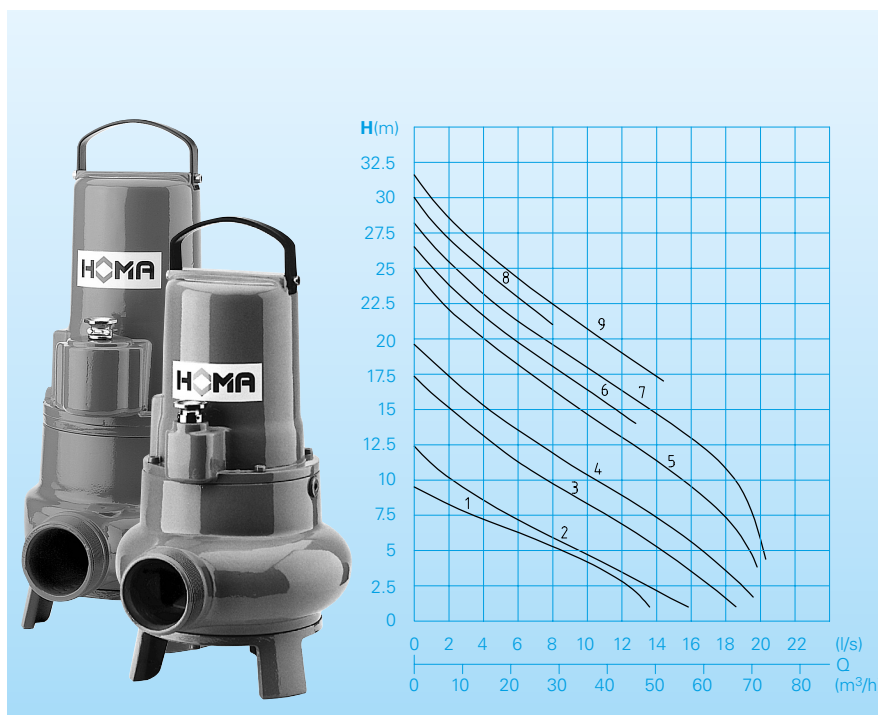
Shaft/bearing: strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

Seal: Combination of 2 mechanical seals (silicon carbide/silicon carbide) inside the oil chamber that is independent of the direction of rotation (models above 1,8 kW).

Models up to 1,6 kW combinations of mechanical seal and radial seal. Oil control possible from the outside.

Explosion protection: All pump types are also available in explosion-proof design according to ATEX Directive 2014/34/EU.

Conveying capacities



Technical Data

Curve No.	Pump type	Motor input P ₁ (kW)	P ₂ (kW)	Capacitor (μF)	Rotational speed (rpm)	Nominal current (A)	Weight (kg)
①	TP50M 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	40,0
②	TP50M 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	27,0**
②	TP50M 14/2 D (A) (Ex)	1,3	1,0		2900	2,5	27,0**
③	TP50M 23/2 D (A) (Ex)	2,3	1,8		2900	3,8	40,0
④	TP50M 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	40,0
⑤	TP50M 37/2 D (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑥	TP50M 37/2 MD (A) (Ex)	4,0	3,4		2900	6,6	45,0
⑦	TP50M 50/2 MD (Ex)	5,2	4,4		2840	8,7	56,0
⑧	TP50M 37/2 HD (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑨	TP50M 50/2 D (Ex)	5,2	4,4		2840	8,7	56,0

Model W: 230V/1Ph 50Hz

Model D: 400V/3Ph 50Hz

Model A: with automatic float switch
HOMA-Nivomatik

* **Capacitor:** for the operation it is necessary to install a capacitor into the switchgear.

Model Ex: explosion-proof

** **Weight Ex Model:** + 5 kg

Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Motor shaft, screws	Stainless steel
Mechanical seals	Silicon carbide
Wear ring	Bronze
Elastomers	NBR

Scope of supply

All pumps with base stand, without auto coupling (see accessories). With 10 m of loose cable end, switchgear (see accessories)

Model A: With automatic float switch and switchgear WA10/19; DA10/32; DA10/12 with motor protection, manual-auto-switch. Built in operating capacitor (just BSP 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

