

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

TP50 V

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: Vortex impeller for media containing gas or air, with coarse or long stringy components that are prone to clogging. 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: TP50V13-40: direct-on-line TP50V50: direct-on-line or star-delta-start. Connecting cable:

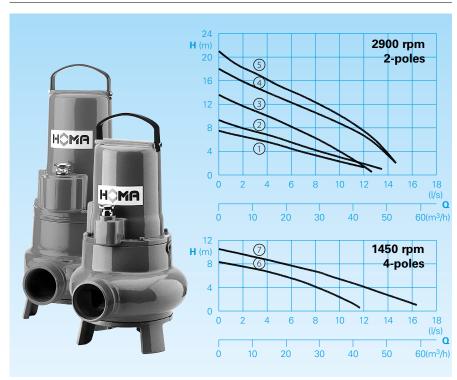
Model W: H07RN8-F 4G1,5 Model D and Ex: H07RN8-F 6G1,5 TP50V(Ex): H07RN8-F 10G1,5

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.

Conveying capacities



Technical data

Pump type	Motor	input	Capacitor*	Rotational	Nominal	Free	Weight
	P ₁	P ₂	(μF)	speed	current	passage	(kg)
	(KVV)	(KVV)		(rpm)	(A)	(mm)	
TP50V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
TP50V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
TP50V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
TP50V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
TP50V 50/2 D (Ex)	5,2	4,4		2840	8,7	50	56,0
TP50V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
TP50V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0
	TP50V 17/2 W (A) (Ex) TP50V 17/2 D (A) (Ex) TP50V 26/2 D (A) (Ex) TP50V 40/2 D (A) (Ex) TP50V 50/2 D (Ex) TP50V 13/4 D (A) (Ex)	P1 (kW) TP50V 17/2 W (A) (Ex) 1,6 TP50V 17/2 D (A) (Ex) 1,6 TP50V 26/2 D (A) (Ex) 2,6 TP50V 40/2 D (A) (Ex) 4,0 TP50V 50/2 D (Ex) 5,2 TP50V 13/4 D (A) (Ex) 1,3	P1 (kW) P2 (kW) (kW) (kW) TP50V 17/2 W (A) (Ex) 1,6 1,2 TP50V 17/2 D (A) (Ex) 1,6 1,2 TP50V 26/2 D (A) (Ex) 2,6 2,1 TP50V 40/2 D (A) (Ex) 4,0 3,4 TP50V 50/2 D (Ex) 5,2 4,4 TP50V 13/4 D (A) (Ex) 1,3 1,0	P1 (kW) P2 (kW) TP50V 17/2 W (A) (Ex) 1,6 1,2 30 TP50V 17/2 D (A) (Ex) 1,6 1,2	P1 (kW) P2 (kW) (kW) (kW) speed (rpm) TP50V 17/2 W (A) (Ex) 1,6 1,2 30 2900 TP50V 17/2 D (A) (Ex) 1,6 1,2 2900 TP50V 26/2 D (A) (Ex) 2,6 2,1 2900 TP50V 40/2 D (A) (Ex) 4,0 3,4 2900 TP50V 50/2 D (Ex) 5,2 4,4 2840 TP50V 13/4 D (A) (Ex) 1,3 1,0 1450	P1 (kW) P2 (kW) (µF) speed (rpm) current (A) TP50V 17/2 W (A) (Ex) 1,6 1,2 30 2900 7,6 TP50V 17/2 D (A) (Ex) 1,6 1,2 2900 2,9 TP50V 26/2 D (A) (Ex) 2,6 2,1 2900 4,5 TP50V 40/2 D (A) (Ex) 4,0 3,4 2900 6,6 TP50V 50/2 D (Ex) 5,2 4,4 2840 8,7 TP50V 13/4 D (A) (Ex) 1,3 1,0 1450 2,6	P1 (kW) P2 (kW) (µF) speed (rpm) current (A) passage (mm) TP50V 17/2 W (A) (Ex) 1,6 1,2 30 2900 7,6 65 TP50V 17/2 D (A) (Ex) 1,6 1,2 2900 2,9 65 TP50V 26/2 D (A) (Ex) 2,6 2,1 2900 4,5 50 TP50V 40/2 D (A) (Ex) 4,0 3,4 2900 6,6 50 TP50V 50/2 D (Ex) 5,2 4,4 2840 8,7 50 TP50V 13/4 D (A) (Ex) 1,3 1,0 1450 2,6 50

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

Explosion protection: All pump models are also available in EX version according to

Il 2 G Ex c d II B T4(T3).

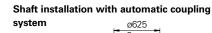
Materials

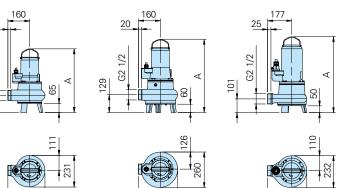
Cast iron EN-GJL-250
Stainless steel
Silicon carbide
NBR

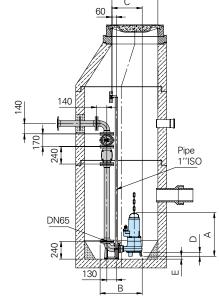
Scope of supply

Pump with integrated 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 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

TP50V40/2D(Ex), TP50V26/2D(Ex), TP50V13/4D(Ex)



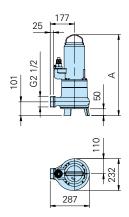


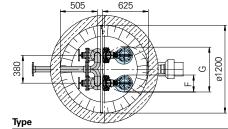


625

TP50V50/2DT(DEx)

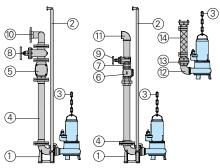
G2





Α	В	С	D	E	F	G
593	575	412	50	39	232	612
555	575	412	50	39	232	612
518	575	412	50	39	232	612
465 (472)	559	396	65	16	231	611
572	573	411	60	11	260	640
	593 555 518 465 (472)	593 575 555 575 518 575 465 (472) 559	593 575 412 555 575 412 518 575 412 465 (472) 559 396	593 575 412 50 555 575 412 50 518 575 412 50 465 (472) 559 396 65	593 575 412 50 39 555 575 412 50 39 518 575 412 50 39 465 (472) 559 396 65 16	593 575 412 50 39 232 555 575 412 50 39 232 518 575 412 50 39 232 465 (472) 559 396 65 16 231

Accessories



	1-1-1-1	
Description	Size	Part no.
① Automatic		
coupling system GG	with	
mating flange, base e	elbow	
with flange and		
slide rail bracket		

slide rail bracket KK65/BSP2 ½"	DN65/BSP2 1/2 "	8604015
O Coupling system completely or partly in stainless steel	all	on request
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Description	Size	Part no.
OScrew-Kits for fastening coupling systems		on request
OIntermediate bracket for slide rail bracket extension		7323714
② Guide rails for coupling kits (steel galvanized and stainless steel A2/A4)		on request
③ Pump chain sets, tested With shackle, single or due row, different legths and load bearing capacities	al	on request
4 Threaded flange	DN 65/ BSP 2 ½"	F 2215060
Pipe with flanges	DN 65	on request
Non-return valve GG	DN 65	2212805
6 Non-return valve GG	BSP 2 1/2"	F 2212513
⑦ Double nipple, galvanized	BSP 2 ½ N	Л 2009025
8 Shut-off gate valve GG	DN 65	2216065

Description	Size	Part no.
Shut-off gate valve MS	BSP 2 1/2" F	2216025
10 90° bend with flanges	DN 65	2153301
Connection piece for pressure pipe with 3 flanges	3 x DN 65 DN 65/65/80	2160002 2160004
10 90° bend, galvanized	BSP 2 1/2" F	2113610
T-piece for merging the pressure pipe in double pump stations	BSP 2 ½" F	2114308
12 90° bend, galvanized	BSP 2 1/2" F/N	1 2111705
③ STORZ-fixed coupling	B-G2 1/2" F	2010502
STORZ-hose coupling	B-75 mm Ø	2013502
(4) Synthetic pressure hose with rubber lining, with couplings B-75 mm Ø	10 m long 15 m long 20 m long 30 m long	2611210 2611215 2611220 2611230
Plastic spiral hose, per m	Ø 75 mm	2632075
Hose clamp	85/20	2308520
OF	and the second	

O For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices, see HOMA accessories

