

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

Pumped medium: Cleanwater 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 (S330%)

#### Design

Fully submersible pump, consisting of: Pump: Single-stage with horizontal discharge.

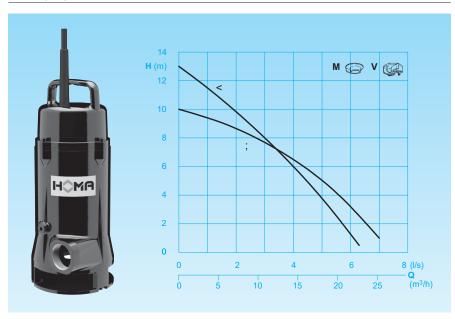
Impellers: M= open single-channel impeller for sludgy media with solids or fibrous content.

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	Pump type	Motor	input	Voltage	Nominal	Weight
No.		$P_1$	$P_2$	50 Hz	current	(kg)
		(kW)	(kW)	(V)	(A)	
а	TP28M 10/2W (A)	1,0	0,7	230/1Ph	4,7	22,0
а	TP28M 10/2 D (A)	1,0	0,7	400/3Ph	1,8	22,0
а	TP28M 10/2 DL	1,0	0,7	400/3Ph	1,8	22,0
b	TP28VW(A)	1,1	0,9	230/1Ph	5,6	22,0
b	TP28V 11/2 W (A)	1,1	0,9	230/1Ph	5,6	22,0
b	TP28V 11/2 D (A)	1,1	0,9	400/3Ph	2,2	22,0
b	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-GJL-250
Motor shaft	Stainless steel
Mechanical seal	SiC/SiC
Elastomers	NBR
Mechanical connection parts	Stainless steel

Model A: with automaticfloat 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.

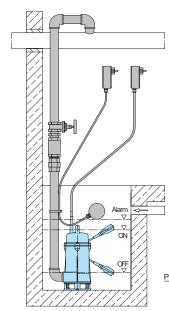
Model A: Additionally with automatic float switch on pump lid, switchgear WA1/DA32 with Manual/Auto switch.

Model DL: Without switchgear, with loose cable end.

Model TP28VW: Without switch gear, with mains plug. Capacitorinside the motor housing cover.

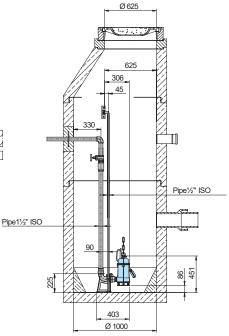
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# Shaft installation with base stand



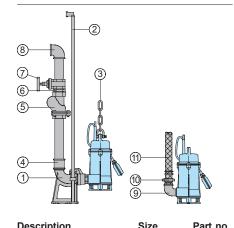
# Shaft installation with automatic coupling system

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**

25



155

Description	Size	rait iio.
a Automatic coupling system GG with mating flange, base elbow with threa and slide rail bracket KK50/BSP1½"	ad BSP2"/BSP1½"	8604000
u Couplingsystem completely or partly in stainless steel	all	on
σιασσσ σισσι	all	request
u Screw-Kits for fastening coupling systems		on request
u Intermediate brack slide rail bracket exter	6 /1//=0	7320271

Description	Size	Part no.
b Guiderails,		
in pairs, per m		
Galvanized steel	Ø 1/2"	2190085
Stainless steel	Ø 1⁄2"	2190250
c Pump chain sets, test With shackle, single or crow, different lengths	lual	
and load bearing capacit		on request
d Doublesocket,	BSP 2"F	2109102
galvanized	BSP 2"F x BSP1½"F	2102210
e Non-return	BSP 11/2"F	2212902
ball valve	BSP 2"F	2212903
f Double nipple,	BSP 11/2"M	2009020
galvanized	BSP 2"M	2009018
g Shut-off		
gate valve MS	BSP 11/2"F	2216015
	BSP 2"F	2216020
h 90° bend, galvanized	BSP 11/2"F	2113605
-	BSP 2"F	2113606
T-piece for merging		
the pressure pipe in	BSP 11/2"F	2114302
double pump stations	BSP 2"F	2114306
i 90° bend,		
galvanized	BSP 11/2" F/M	2111505
	BSP 2" F/M	2111506
j STA-hose-		
screw connection,	BSP 11/2" M	2001513
STORZ-fixed coupling	C-G 1½" M	2010003

Description	Size	Part no.
k 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 C-52 mm Ø	2013002 2013003
Hose clamp	1 ½" 2"	2304854 2306009
Synthetic pressure		
hose, with rubber lining, complete	10 m long 15 m long	2611310 2611315
with couplings C-52 mm Ø	20 m long 30 m long	2611320 2611330
U. Farmana and trailing	d	

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



Submersible motor pumps for domestic drainage water containing solids. Free passage 30 and 42 mm.

# **TP30**

## **Application**

Submersible motor pumps in the TP30 series are used for conveying domestic drainage-and waste water as well as sludge. With their large free passage of 30 or 40 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: Stationaryor mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Cleanwater and waste water with solid and fibrous content.

Max. temperature of pumped medium: 40°C, for brief periods up to 60°C. Operating mode: Continuous operation (S1).

#### Design

Fully submersible pump, consisting of: Pump: Single-stage with horizontal discharge G2.

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, Insulation class H. Protection rating IP 68. Thermal sensor for temperature monitoring in the winding.

Connecting cable:

Model W: H07RN8-F4G1,5 Model D and Ex: H07RN8-F6G1,5 Shaft/bearing: strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings

Seal: Combination of mechanical seal (silicon carbide/silicon carbide) and radial seal inside the oil chamber that is independent of the direction of rotation. Explosion protection: All pump models are also available in EX version according to 🗟 II 2 G Ex c d II B T4(T3).

## **Conveying capacities**



#### **Technical data**

Curve	Pump type	Motor	input	Capacitor*	Rota-	Nominal	Free	Weight (k	g)
No.		P <sub>1</sub> (kW)	P <sub>2</sub> (kW)	(µF)	tional speed (rpm)		passa- ge (mm)	Standard model	Ex model
а	TP30M 17/2 W(A)(Ex)	1,6	1,2	30	2900	7,5	30	27,0	32,0
b	TP30M 13/2 D(A)(Ex)	1,2	0,9		2900	2,1	30	26,0	31,0
С	TP30M 17/2 D(A)(Ex)	1,6	1,2		2900	2,9	30	27,0	32,0
d	TP30V 17/2 W(A)(Ex)	1,6	1,2	30	2900	7,5	30	27,0	32,0
e	TP30V 13/2 D(A)(Ex)	1,2	0,9		2900	2,1	30	26,0	31,0
f	TP30V 17/2 D(A)(Ex)	1,6	1,2		2900	2,9	30	27,0	32,0
g	TP30V 10/4 D(A)	1,0	0,7		1450	2,3	42	27,0	-

Model W: 230V/1Ph50Hz Model D: 400V/3Ph50Hz

Model A: with automaticfloat switch HOMA-Nivomatik

 Capacitor: for the operation it is necessary to install a capacitor in the switchgear.
 Model Ex: explosion-proof

# Materials

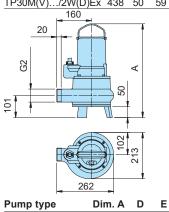
Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Motor shaft, screws	Stainless steel
Mechanical seals	Silicon carbide
Elastomers	NBR

## 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: Additionally with automatic float switch, switchgear WA10/19; DA10/32; DA10/12 with AS-floatswitch, with 10 m of cable,
Manual/Auto-switch. Ex-Model with intrinsically safe control circuit relay.

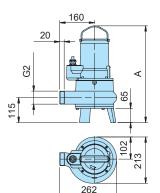
# Floorstanding installation with base stand

Dim. A	D	Е
431	50	59
x 438	50	59
	431	Dim. A     D       431     50       x     438     50

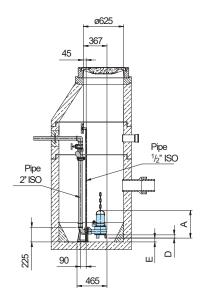


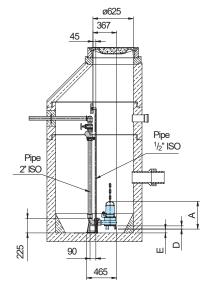
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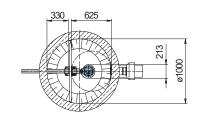
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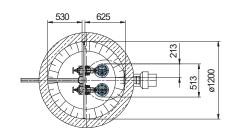


#### Shaft installation with automatic coupling system. Single unit Twin unit



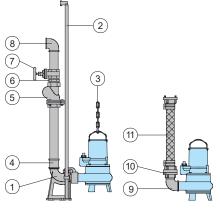






## Accessories

TP30V10/4W(D)



Description	Size	Part no.
a Automatic		
coupling system with		
mating flange,		
base elbow		
<ul> <li>Slide rail bracket GG</li> </ul>		
KK50/BSP2"		8604005
<ul> <li>Slide rail bracket VA</li> </ul>		
KKR50-1/BSP2"		8604019
u Couplingsystem		
completely or partly		on
in stainless steel	all	request

Description	Size	Part no.
u Screw-Kits		
for fastening		on
coupling systems		request
u Intermediate bracket	Ø 1"	
for slide rail bracket	für KKR50-1	7323714
extension	Ø 1/2"	
	für KK50	7320271
b Guiderails,		
in pairs, per m		
galvanized steel	Ø 1/2"	2190085
	Ø 1"	2190135
Stainless steel	Ø 1/2"	2190250
	Ø 1"	2190252

row, different lengths and load bearing capac		on request
d Doublesocket, galvanized	BSP 2"F BSP 2"F/ BSP 1½"F	2109102 2102210
e Non-return ball valve cast iron	BSP 1½"F BSP 2"F	2212902 2212903
f Double nipple, galvanized	BSP 1½"M BSP 2"M	2009020 2009018
g Shut-off gate valve MS	BSP 1½"F BSP 2"F	2216015 2216020

Description	Size	Part no.
h 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
i 90° Bend, galvanized	BSP 2"F/M BSP 11/2"F/M	2111506 2111505
Double socket, galvanized	BSP2"F/BSP1½"F	2102210
j STORZ-fixed coupling	C-G2"F	2010204
STORZ-hose- coupling	C-52 mm Ø	2013003
STA-threaded- hose fitting, brass	BSP 11/2"F	2001513
k Synthetic pressure hose with rubber lining, with couplings C-52 mm Ø	10 m long 15 m long 20 m long 30 m long	2611310 2611315 2611320 2611330
Plastic spiral hose, per m	Ø 50 mm	2632050
PVC-hose, per m	1½" Ø 38 mm	2621500
Hose clamp	1½" 2"	2304854 2306009

u For pump controllers and switchgears for mobile and stationary applications, measuring systems and

monitoring devices, see HOMA accessories



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

Pumped medium: Cleanwater and waste water with solid and fibrous content.

Max. temperature of pumped medium: 40°C, for 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.

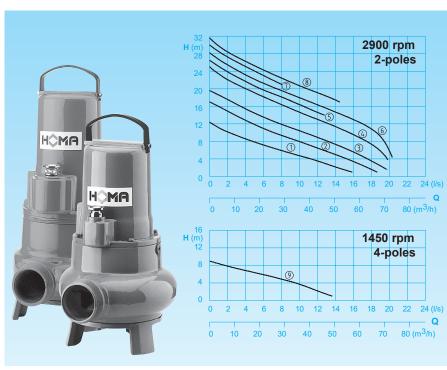
Type of start: TP50M13-37: direct-on-line TP50M50: direct-on-line or star delta-start Connecting cable:

Model W: H07RN8-F4G1,5 Model D and Ex: H07RN8-F6G1,5 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 models are also available in EX version according to 🗟 II 2 G Ex c d II B T4(T3).

#### Conveying capacities



# Technical data

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

Model W: 230V/1Ph50Hz Model D: 400V/3Ph50Hz

Model A: with automaticfloat 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

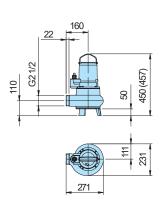
All pumps with base stand, without auto coupling (see accessories). With 10 m of loose cable end. (switchgear see accessories)

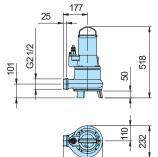
Model A: With automatic float switch and switchgear WA10/19; DA10/32; DA10/12 with motor protection, manual-auto-switch. Built in operating capacitor (just BSP 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

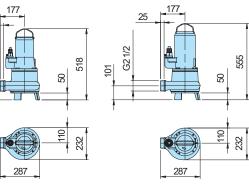
# TP50M12/ 4W,TP50M13/4D(Ex) TP50M23/2D(Ex), TP50M26/2D(Ex)

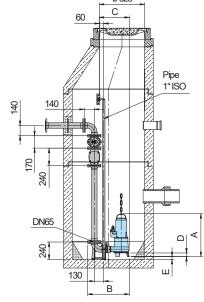
TP50M37/ 2MD(Ex), TP50M37/2(H)D(Ex)

#### Shaft installation with auto-coupling system

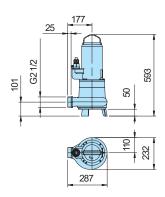




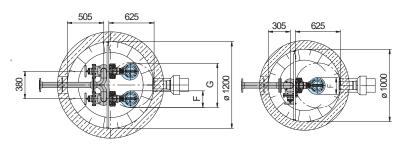




### TP50M50/2(DT(DEx)

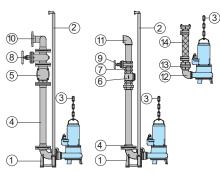


Туре	Α	В	С	D	Е	F	G
TP50M50/2D(Ex)	593	575	412	50	39	232	612
TP50M37/2MD/(Ex)+HD(Ex)	555	575	412	50	39	232	612
TP50M13/4D(Ex), TP50M23-26/2D(Ex)	518	575	412	50	39	232	612
TP50M17/2W(Ex), TP50M14/2D(Ex)	450(457)	559	396	50	31	231	611



Description

# **Accessories**



(1) (2) (3) (4) (4) (1) (4) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	11 (4) (3) (2) (4) (4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	3
Description	Size	Part no.
a Automatic		

DN65/BSP2 1/2"	8604015
all	on request
	DN65/BSP2 ½" all

Description	Size	Part no.
u Screw-Kits for fastening coupling systems		on request
UIntermediate bracketfor slide rail bracket extension	Ø 1" for KK65	7323714
bGuide rails, in pairs, per m Galvanized steel	Ø 1"	2190135
Stainless steel	Ø 1"	2190252
C Pump chain sets, tested. With shackle, single or dua row, different lengths and load bearing capacities	ıl	on request
dThreaded flange	DN 65/ BSP 2 ½" F	2215060
Pipe with flanges	DN 65 o	n request
eNon-return valve GG	DN 65	2212805
f Non-return valve GG	BSP 2 1/2" F	2212513
g Double nipple, galvanized 2009025	BSP 2 ½" M	

hShut-off gate valve GG DN 65

Shut-off gate valve MS BSP 2 1/2" F 2216025

2216065

j 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
k 90° bend, galvanized	BSP 2 1/2" F	2113610
T-piece for merging the pressure pipe in	DOD 0.1/n 5	0.1.1.1000
double pump stations	BSP 2 ½" F	2114308
l 90° bend, galvanized	BSP 2 1/2" F/M	2111705
m STORZ-fixed coupling	B-G2 ½" F	2010502
STORZ-hose coupling	B-75 mm Ø	2013502
nSynthetic 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
u For pump controllers a switchgears for mobile a stationary applications, measuring systems and monitoring devices,		cessories

Size

Part no.



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

Pumped medium: Cleanwater and waste water with solid and fibrous content.

Max. temperature of pumped medium: 40°C, for 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 on request (standard with TP50V50, TP50V17/2W and model Ex).

Type of start: TP50V13-40: direct-on-line TP50V50: direct-on-line or star-delta-start. Connecting cable:

Model W: H07RN8-F4G1,5 Model D and Ex: H07RN8-F6G1,5 TP50V(Ex): H07RN8-F 10G1,5

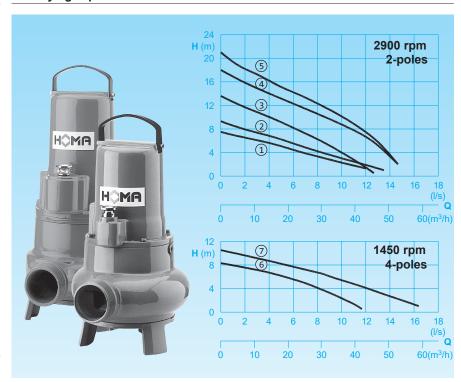
Shaft/bearing: strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

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.

Explosion protection: All pump models are also available in EX version according to B II 2 G Ex c d II B T4(T3).

#### Conveying capacities



## **Technical data**

Curve No.	Pump type	Motor P <sub>1</sub> (kW)	input P <sub>2</sub> (kW)	Capacitor* (µF)	Rotational speed (rpm)	Nominal current (A)	Free passage (mm)	Weight (kg)
a	TP50V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
b	TP50V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
С	TP50V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
d	TP50V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
e	TP50V 50/2 D (Ex)	5,2	4,4		2840	8,7	50	56,0
f	TP50V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
g	TP50V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0

Model W: 230V/1Ph50Hz Model D: 400V/3Ph50Hz

Model A: with automaticfloat 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
Elastomers	NBR

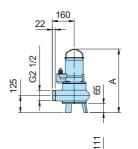
# Scope of supply

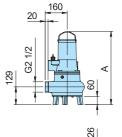
Pump with integrated base stand, without auto-coupling (see accessories). With 10 m of loose cable end. (Switchgear see accessories) Model A: With automatic float switch and switchgear WA10/19; DA10/32; DA10/12 with motor protection, manual-auto-switch. Built in operating capacitor (just 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

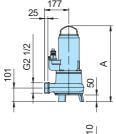
# TP50V23/4D(Ex)

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

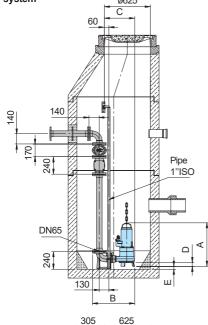
#### Shaft installation with automatic coupling system



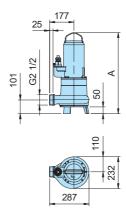


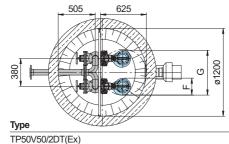






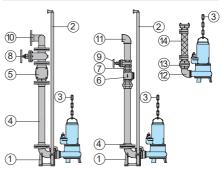
# TP50V50/2DT(DEx)





		~		1			
Туре	Α	В	C	D	E	F	G
TP50V50/2DT(Ex)	593	575	412	50	39	232	612
TP50V40/2D(Ex)	555	575	412	50	39	232	612
TP50V13/4D(Ex), TP50V26/2D(Ex)	518	575	412	50	39	232	612
TP50V17/2W+D(Ex)	465 (472)	559	396	65	16	231	611
TP50V23/4D(Ex)	572	573	411	60	11	260	640

## **Accessories**



10————————————————————————————————————	11————————————————————————————————————	3
4	3	
1	1	
Description	Size	Part no.

	0.20	
a Automatic		
coupling system GG	with	
mating flange, base	elbow	
with flange and		
slide rail bracket		
KK65/BSP21/2"	DN65/BSP2 1/2"	8604015
u Couplingsystem		
completely or partly		on
in stainless steel	all	request

Description	Size	Part no.
u Screw-Kits for fastening coupling systems		on request
UIntermediate bracket for slide rail bracket extension		7323714
b Guiderails, in pairs, per m Galvanized steel	Ø 1"	2190135
Stainless steel	Ø 1"	2190252
<ul> <li>Pump chain sets, tested With shackle, single or dua row, different legths and load bearing capacities</li> </ul>	al	on request
d Threadedflange	DN 65/ BSP 2 ½" F	2215060
Pipe with flanges	DN 65 o	n request
e Non-return valve GG	DN 65	2212805
f Non-return valve GG	BSP 2 1/2" F	2212513
g Doublenipple, galvanized	BSP 2 ½ M	2009025
h Shut-off gate valve GG	DN 65	2216065

Description	Size	Part no.
i Shut-off gate valve MS	BSP 2 ½" F	2216025
j 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
k 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
l 90° bend, galvanized	BSP 2 1/2" F/M	2111705
m STORZ-fixed coupling	B-G2 ½" F	2010502
STORZ-hose coupling	B-75 mm Ø	2013502
nSynthetic 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

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





Submersible motor pumps for domestic drainage- and waste water. Discharge G3 / DN 80.

Single channel impellers, free passage 50-65 mm.

# **TP53 M**

#### **Application**

Submersible motor pumps in the TP53 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: Stationaryor mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Cleanwater 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 G3.

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: direct start Connecting cable:

Model W: H07RN8-F4G1,5 Model D and Ex: H07RN8-F6G1,5 Shaft/bearing: Strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

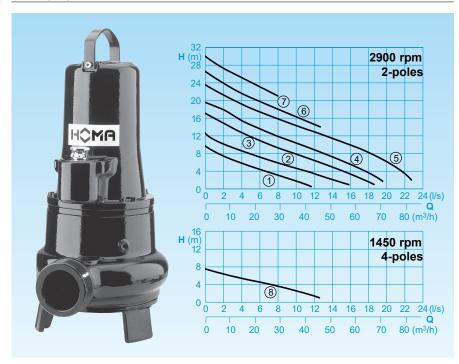
Seal: Combination of 2 mechanical seals (silicon carbide/silicon carbide) inside the oil chamber that is independent of the direction of rotation (models above 1,8 kW).

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

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

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

#### Conveying capacities



# **Technical data**

Curve	Pump type	Motor	input	Capacitor*	Rotational	Nominal	Weight
No.		P <sub>1</sub>	$P_2$	(μF)	speed	current	(kg)
		(kW)	(kW)		(rpm)	(A)	
а	TP53M 12/2 W (A) (Ex)	1,1	0,8	25	2900	4,8	26,0**
b	TP53M 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	27,0**
а	TP53M 11/2 D (A) (Ex)	1,0	0,8		2900	1,9	26,0**
С	TP53M 23/2 D (A) (Ex)	2,3	1,8		2900	3,8	40,0
d	TP53M 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	40,0
е	TP53M 37/2 D (A) (Ex)	3,7	3,1		2900	6,5	45,0
f	TP53M 37/2 MD (A) (Ex)	4,0	3,4		2900	6,6	45,0
g	TP53M 37/2 HD (A) (Ex)	3,7	3,1		2900	6,5	45,0
h	TP53M 12/4W (A)	1,2	0,9	40	1450	5,8	40,0

Model W: 230V/1Ph50Hz Model D: 400V/3Ph50Hz Model A: with automatic HOMA-Niyomatik float switch

- \* Capacitor: for the operation it is necessary to install a capacitor into the switchgear.
- \*\* Weight Ex Model: + 5 kg

Model Ex: explosion-proof

#### **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

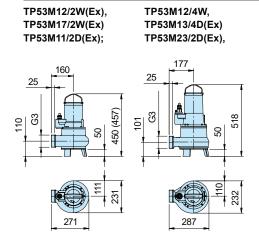
Pump with base stand, without auto coupling (see accessories). With 10 m of loose cable end, switchgear (see accessories)
Model A: With automatic float switch and switchgear WA10/19; DA10/32; DA10/12 with motor protection, manual-auto-switch. Built in operating capacitor (just 1 Ph-models), mains plug. Ex-Model with intrinsically safe control circuit relay.

# Dimensions and installation example / Floorstanding installation with base stand (all dimensions in mm)

Type

TP53M12/4W, TP53M23-26/2D(Ex)

TP53M12-17/2W(Ex), TP53M11-14/2D(Ex)



# Shaft installation with automatic coupling system ø800 С 165 Pipe 1<sup>1</sup>/<sub>2</sub>"ISO Pipe 11/2"ISO DN80 DN80 В 451 800 1500 В С G TP53M3<u>7/2MD(Ex)</u>+HD(Ex) 462 50 89 555 645 232 690

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450 (457) 629

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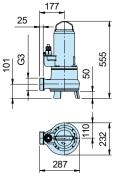
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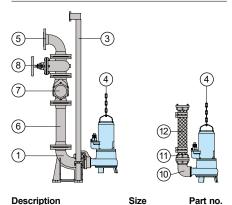
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# TP53M37/2MD(Ex), TP53M37/2(H)D(Ex)



## **Accessories**



a Automatic coupling		
system GG, with		
coupling base elbow DN	80,	
Coupling mating flange		
and slide rail bracket BSP	211/2"	
<ul><li>Type KK80/R3"</li></ul>	R3" F	8604035
<ul> <li>Type KK80/80</li> </ul>	DN 80	8604025
u Couplingsystem		
completely or partly		
in stainless steel	all	on request
u Screw-Kits		
for fastening		
coupling systems		on request

Description	Size	Part no.
u Intermediate bracket for slide rail bracket extension	Ø 1½" for KK80	7322901
u Threaded flange	DN 80/R3"F	2215080
c Guide rails for coupling kits (steel galvanized and		
stainless steel A2/A4)		on request
d Pump chain sets, tested. With shackle, single or dual row, different legths and load bearing capacities		on request
	DN 00	<u>-</u>
e 90° bend with 2 flanges	DN 80 DN 100	2153302 2153303
Connection piece for merging the pressure pipe in double pump stations	3x DN 80 DN 80/80/1 3x DN 100	2160006 00 2160008 2160010
3 flanges, discharge horizontal (vertical discharge of the control		2100010
f Pressure pipe with	DN 80	2152081
2 flanges (FF-piece) 1 m long, 1 set of screws and seal	DN 100	2152201
Pressure pipe	DN 80	2150080
extension, per m	DN 100	2150100
Flanged reducer (FFR-piece)with 2 flanges		on request

Description	Size	Part no.
g Non-returnvalvewith	DN 80	2212807
flanges	DN 100	2212809
h Flangedgate valvewith	DN 80	2216080
flanges	DN 100	2216100
j 90° connection bend		
90° Pipe bend	R3"F/M	2111805
with 2 flanges	DN 80	2153302
Threaded flange	DN 80/R3"F	2215080
k STORZ-fixedcoupling	B-G3"F	2010602
STORZ-hose coupling	B-75 mm Ø	2013502
l Plastic spiral hose,	2 m long	2161042
75 mm Ø, with 2-B-quick-	3 m long	2161043
couplings	5 m long	2161045
<ul> <li>U Plastic spiral hose,</li> </ul>	2 m long	2161032
90 mm Ø, with 2 flange	3 m long	2161033
connectors, DN 80	5 m long	2161035
Plastic spiral hose,	Ø 75 mm	2632075
per m	Ø 90 mm	2632090
Flange connector DN 80	90 mm Ø	2171014
Hose clamps	85/20	2308520
	92/20	2309221
u For pump controllers and	b	

switchgears for mobile and stationary applications, measuring systems and see HOMA accessories monitoring devices,



Submersible motor pumps for domestic drainage- and waste water. Discharge G3  $\,/\,$  DN 80.

Vortex impellers, free passage 50-65 mm.

# **TP53 V**

## **Application**

Submersible motor pumps in the TP53 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: Stationaryor mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Cleanwater 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 G3.

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: TP53V13-40: direct-on-line

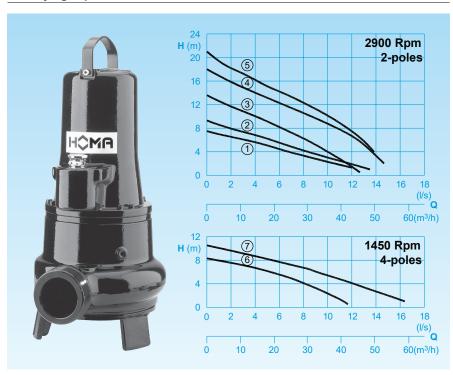
TP53V50: direct- or star-delta-start

Connecting cable:
Model W: H07RN8-F4G1,5
Model D and Ex: H07RN8-F6G1,5
TP53V50(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 up to 1,6 kW/2-poles combinations of mechanical seal and radial seal. Oil control possible from the outside. Explosion protection: All pump models are also available in EX version according to 🗟 II 2 G Ex c d II B T4(T3).

#### **Conveying capacities**



#### **Technical data**

Curve No.	Pump type	Motor P <sub>1</sub> (kW)	input P <sub>2</sub> (kW)	Capaci- tor* (µF)	Rotational speed (rpm)	Nominal current (A)	Free passage (mm)	Weight (kg)
а	TP53V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
b	TP53V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
С	TP53V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
d	TP53V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
е	TP53V 50/2 D (Ex)	5,2	4,4		2840	8,7	50	56,0
f	TP53V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
g	TP53V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0

Model W: 230V/1Ph50Hz Model D: 400V/3Ph50Hz Model A: with automatic HOMA-Nivomatik float switch

- \* Capacitor: for the operation it is necessary to install a capacitor into the switchgear.
- Model Ex: explosion-proof

  \*\* Weight Ex Model: + 5 kg

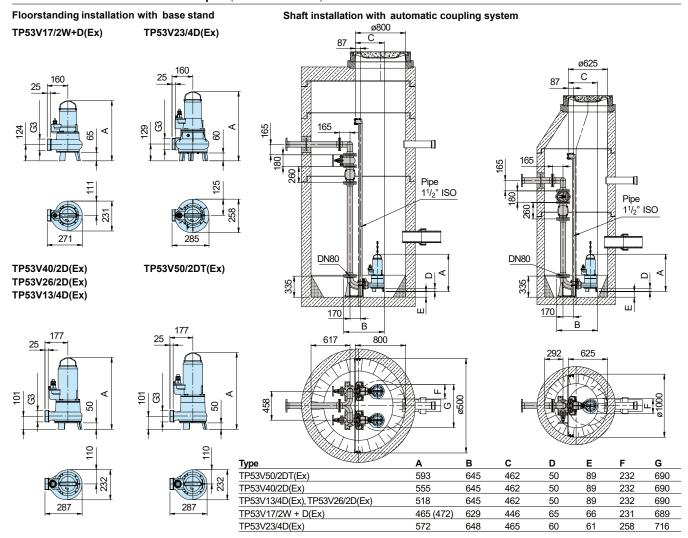
#### **Materials**

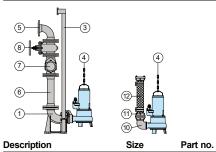
Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Motor shaft, screws	Stainless steel
Mechanical seals	Silicon carbide
Elastomers	NBR

# Scope of supply

circuit relay.

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





a Automatic coupling system GG, with coupling base elbow DN 80, coupling mating flange and slide rail bracket BSP1½"

and	slide rail bracket BSP17	<u>/</u> "	
- T	Type KK80/R3"	R3" F	8604035
- T	Type KK80/80	DN 80	8604025
com	Couplingsystem  pletely or partly tainless steel	all	on request
for f	Screw-kits astening pling systems		on request
u Ţ	hreadedflange	DN 80/R3"F	2215080

Description	Size	Part no.
C Guide rails for coupling kits (steel galvanized and stainless steel A2/A4)		on request
d Pump chain sets, tested With shackle, single or dua row, different lengths and load bearing capacities	al	on request
e 90° pipe bend	DN 80	2153302
with 2 flanges	DN 100	2153303
Connection piece for merging the pressure pipe	3x DN 80 DN 80/80/100	
in double pump stations 3 flanges, discharge horizontal (vertical discharge	3x DN 100 e on request)	2160010
f Pressure pipe with 2 flanges (FF-piece)		
1 m long, 1 set of	DN 80	2152081
screws and seal	DN 100	2152201
Pressure pipe extension	DN 80	2150080
per m	DN 100	2150100
Flanged reducer (FFR-piece)with 2 flanges		on request
g Non-returnvalve	DN 80	2212807
with flanges	DN 100	2212809

Description	Size	Part no.
h Flangedgate valve with flanges	DN 80 DN 100	2216080 2216100
90° Connection bend 90° Pipe bend with 2 flanges	R3"F/M DN 80	2111805 2153302
Threaded flange	DN 80/R3"F	2215080
k STORZ-fixedcoupling STORZ-hose-coupling	B-G3"F B-75 mm Ø	2010602 2013502
l Plastic spiral- hose, 75 mm Ø, with 2-B-quick- couplings	2 m long 3 m long 5 m long	2161042 2161043 2161045
u Plastic spiral hose, 90 mm Ø, with 2 flange connectors, DN 80	2 m long 3 m long 5 m long	2161032 2161033 2161035
Plastic spiral- hose, per m	Ø 75 mm Ø 90 mm	2632075 2632090
Flange connector DN 80	90 mm Ø	2171014
Hose clamps	85/20 92/20	2308520 2309221

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





Submersible motor pumps for waste water and feces. Free passage 70 mm.

# **TP70**

#### **Application**

Submersible motor pumps in the TP70 series are used for conveying domestic drainage-, waste water and feces. With their large free passage of 70 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 12050-1: Design tested and monitored.

Installation: Stationaryor mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Cleanwater and waste water with solid and fibrous content and feces. 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.

Impellers: M = Closed 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.

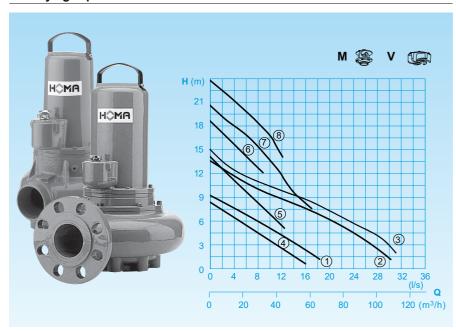
Motor: Fully submersible motor, sealed against pressurized water. Insulation class H, Protection rating IP 68. Thermal sensor for temperature monitoring in the winding.

Type of start: TP70...15-36: direct-on-line TP70V50: direct- or star-delta-start Connecting cable:

Model D: H07RN8-F Plus 6G1,5
Model D/C: H07RN8-F Plus10G1,5
Model D/C Ex: H07...6G1,5+2x1,5
TP70V50 (H)D: H07RN8-F Plus 10G1,5
TP70V50 (H)D Ex: H07RN8-F Plus 12G1,5
TP70V50 (H)D/C Ex: H07RN8-F Plus 10G1,5
TP70V50 (H)D/C Ex: H07...10G1,5+2x1,5
Shaft/bearing: strongly dimensioned chrome steel shaft, lifetime-lubricated roller bearings.

Seal: Combination of 2 mechanical seals (Silicon carbide) inside oil chamber that is independent of the direction of rotation. Oil control possible from the outside. On request with electronic seal control, model C.

#### Conveying capacities



# **Technical data**

Curve No.	e Pump type	Motor P <sub>1</sub> (kW)	input P <sub>2</sub> (kW)	Rotational speed (rpm)	Nominal current (A)	Discharge	Weight (kg)
а	TP70 M16/4D (/C)(A)(Ex)	1,7	1,3	1450	3,4	G3	40
b	TP70 M26/4D (/C)(A)(Ex)	2,5	1,9	1450	5,5	DN80	66
С	TP70 M31/4D (/C)(A)(Ex)	3,3	2,6	1450	6,0	DN80	66
d	TP70 V15/4D (/C)(A)(Ex)	1,4	1,1	1450	3,1	G3	40
е	TP70 V31/2D (/C)(A)(Ex)	3,0	2,5	2900	5,7	G3	56
f	TP70 V36/2D (/C)(A)(Ex)	3,5	2,9	2900	6,3	G3	56
g	TP70 V50/2D (/C)(Ex)	5,2	4,4	2840	8,4	G3	56
h	TP70 V50/2HD (/C)(Ex)	5,2	4,4	2840	8,4	G3	56

Model D: 400V/3Ph50Hz

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

Model A: with automatic HOMA-Nivomatik float switch Model Ex: Explosion-proof

Explosion protection: All single phase models also available with explosion protection according to 
Il 2 G Ex c d Il B T4(T3).

#### **Materials**

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

### Scope of supply

All pumps without base stand or auto coupling (see accessories). With 10 m of loose cable end. Switchgear DT32 available as accessory. Model A: With automaticfloat switch, switchgear 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.

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Accessories			
i.	h		
5	3 3		
8- <b>6</b>	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c		
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586 596 643 460 100 258

626 633 764 581

623 633 643 460 100 258

661 671

643 460 100 258

TP70M16/4(C)D(Ex)

TP70M(26-31)/4(C)D(Ex)

TP70V(31-36)/2(C)D(Ex)

TP70V50/2(C)D(H)(Ex)

1		
Description	Size	Part no.
a Automatic coupling sy GG, with clutch foot ben DN 80, mating flange an slide rail bracket BSP11/2	d d	
<ul><li>Type KK80/R3"</li></ul>	R3" F	8604035
<ul> <li>Type KK80/80</li> </ul>	DN 80	8604025
b Automatic coupling sy GG, with clutch foot ben (horizontal discharge) DN mating flange and slide r bracket BSP11/2" – Type KS80/R3"	d I 80,	8604050
u Couplingsystem completely or partly in stainless steel	all	on request
u Screw-Kits for fastening coupling systems		on request
u Intermediate bracket for slide rail bracket extension	Ø 1 <sup>1/</sup> 2" for KK80 and KS80	7322901
CALCITOTOTT	una 11000	1022301

Description	Size	Part no.
c Guide rails for coupling kits (steel galvanized and stainless steel A2/A4)		on request
d Pump chain sets, tes With shackle, single or row, different lengths and load bearing capac	dual	on request
e 90° Pipe bend with 2 flanges	DN 80 DN 100	2153302 2153303
Connection piece for pressure pipe in double pump stations 3 flanges, discharge horizontal (vertical discharge on request)	3x DN 80 DN 80/80/1 3x DN 100	2160006 00 2160008 2160010
f Pressure pipe with 2 flanges (FF-piece) 1 m long, 1 set of screws and seal	DN 80 DN 100	2152081 2152201
Pressure pipe extension, per m	DN 80 DN 100	2150080 2150100
Reduction piece (FFR-piece) with 2 flanges		on request
g Non-returnvalve with flanges	DN 80 DN 100	2212807 2212809

Description	Size	Part no.
h Flangedgate valve	DN 80	2216080
with flanges	DN 100	2216100
i Ring base stand		7321345
j 90° Connection ben	dR3"F/M	2111805
90° Pipe bend		
with 2 flanges	DN 80	2153302
Threaded flange	DN 80/R3"F	2215080
k STORZ-fixed-		
coupling	B-G3"F	2010602
STORZ-hose-		
coupling	B-75 mm Ø	2013502
I Plastic spiral-		
hose, 75 mm Ø,	2 m long	2161042
with 2-B-quick-	3 m long	2161043
couplings	5 m long	2161045
Plastic spiral-		
hose, 90 mm Ø,	2 m long	2161032
with 2 flange sockets,	3 m long	2161033
DN 80	5 m long	2161035
Plastic spiral-	Ø 75 mm	2632075
hose, per m	Ø 90 mm	2632090
Flange sockets DN 80	90 mm Ø	2171014
Hose clamps	85/20	2308520
	92/20	2309221

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