

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.

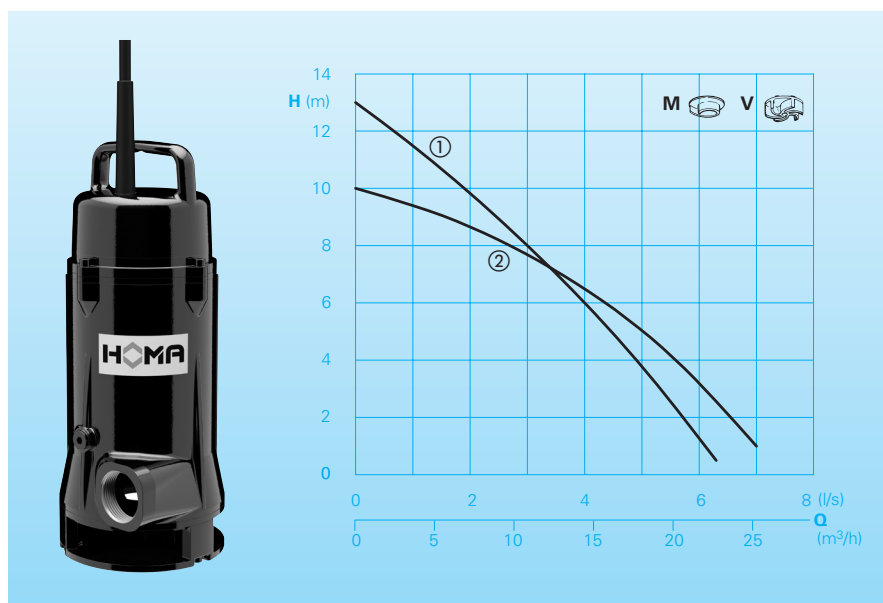
V = Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas.

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 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

Speed: 2900 rpm

Pressure connection: BSP 1 ½ 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.

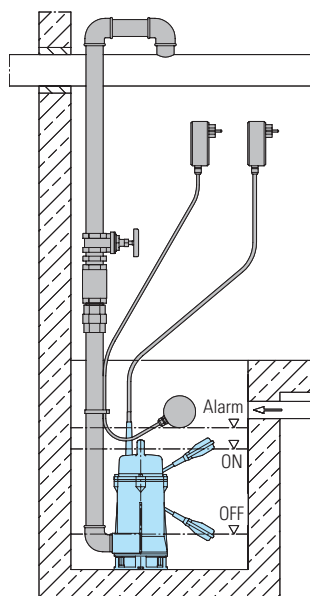
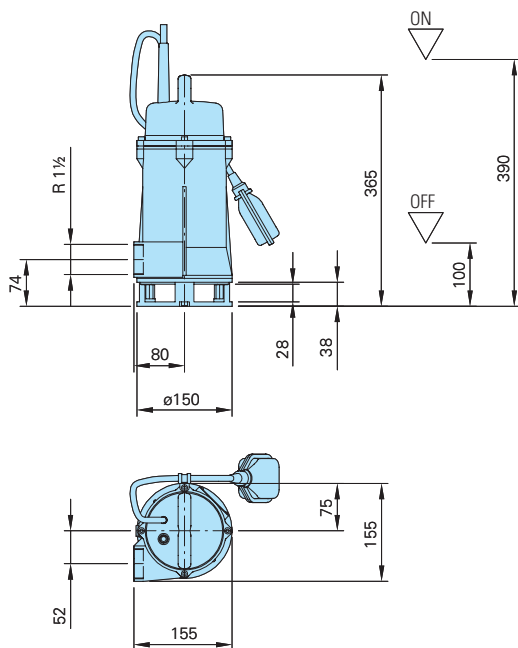
Type D (400 V / 3Ph): Control unit D32 with motor protection, ON/OFF switch and direction reversal plug.

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.

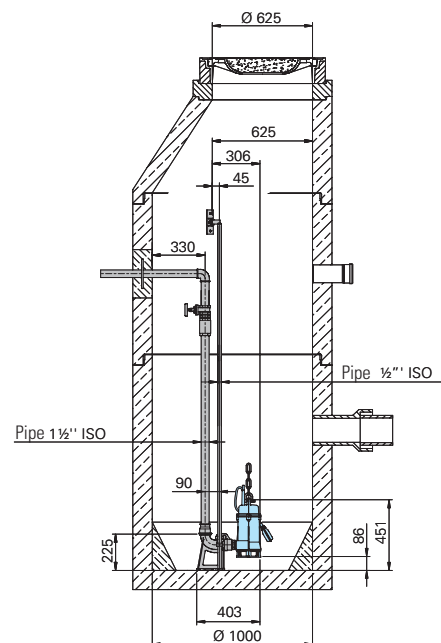
Type TP28V W(A): Without control unit, with mains plug. Capacitor in motor housing cover.

Sump installation with floor support base

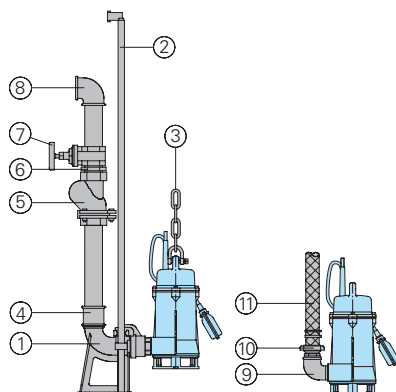


Sump installation with auto-coupling system.

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/BSP1½"	BSP2"/BSP1½"	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 ½" for KK50	7320271

Description	Size	Part No.
② Slide rails, in pairs, per m steel galvanised	Ø ½"	2190085
Stainless steel	Ø ½"	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 ½" F	
⑤ Non-return ball valve cast iron	BSP 1½" F	2212902
	BSP 2" F	2212903
⑥ Double nipple, galvanised	BSP 1 ½" M	2009020
	BSP 2" M	2009018
⑦ Shut-off gate valve MS	BSP 1 ½" F	2216015
	BSP 2" F	2216020
⑧ 90° angle, galvanised	BSP 1½" F	2113605
	BSP 2" F	2113606
T-piece for merging the pressure pipe in dual pump stations	BSP 1½" F	2114302
	BSP 2" F	2114306
⑨ 90° angle, galvanised	BSP 1½" F/M	2111505
	BSP 2" F/M	2111506
⑩ STA-hose screw connection, brass	BSP 1½" M	2001513
STORZ-fixed coupling	C-BSP ½" M	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 clip	1 ½"	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
P U M P T E C H N O L O G Y

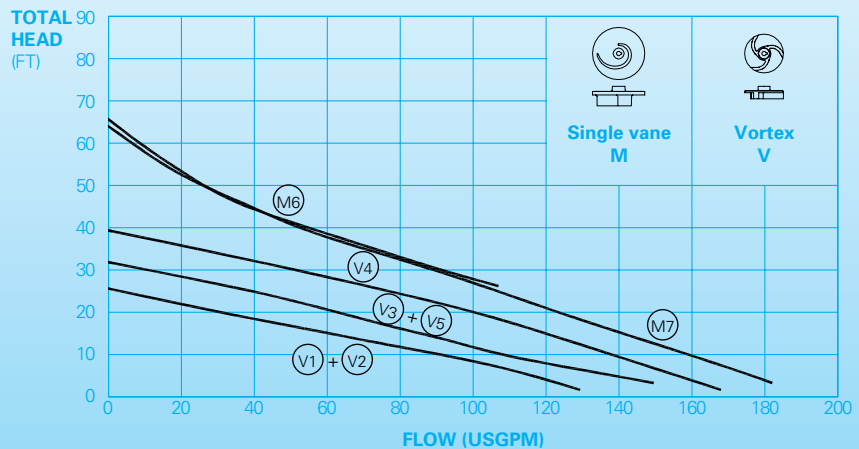
HOMA Pumpenfabrik GmbH
P.O.Box 22 63, D-53814 Neunk.-Seelscheid
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www.homapumps.com

Submersible Wastewater Pumps 2" Discharge – 1¹/₄" and 2" Solids

TP 30/TP 49



Performance



Application

The HOMA TP 30/TP 49 Series of submersible pumps are ideal for wastewater and effluent applications in residential, commercial and industrial applications.

These pumps are also excellent for drainage applications where solids are present.

Typical Fluids Handled Are:

- Clear water and drainage water
- Effluent and Sewage with soft solids
- Liquids to 140° F can be handled intermittently.
- PH range 5 – 9 with specific Gravity to 1.1

TP 30 or TP 49 Series pumps are typically used in:

- Industrial Wastewater
- Effluent Distribution Systems
- Containment Area Sumps
- Pond or Lake Water
- Pools
- Laundries and Wash Stations
- Processing Plants
- Commercial Buildings
- Optional Factory Mutual (FM) label for Class I, Div 1 EX construction.

Features

Integral Lift Handle is arched to permit self centering of lifting device

Cast Iron Construction with PUR coating (Epoxy coating on request)

Extra Long Replaceable power cable of 33' length is retained and sealed with a strain relief gland

Standard Lower Seal material is Silicon Carbide

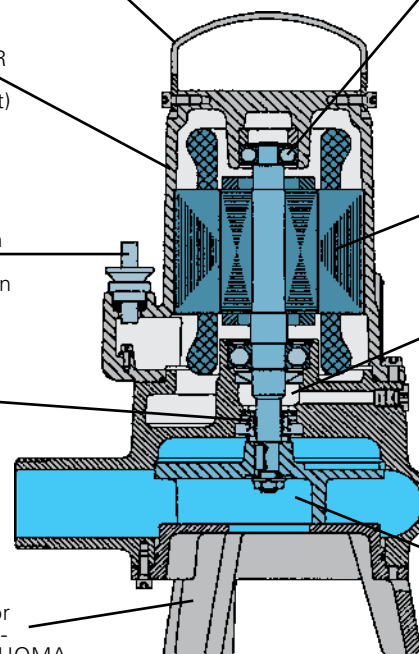
Shown: Integral Mounting Stand for transportable applications. Optional: HOMA AutoCoupling System for permanent installations

Upper and Lower High Capacity Ball Bearings assure long life and reliability

Motor Windings provided with Class F insulation and fully protected by embedded auto reset thermal switches

Oil Filled Seal Chamber positively lubricates seals and permits a seal leakage probe to be installed

Impellers are provided in Single Vane configuration for large solids handling, and in Vortex configuration for smooth vibration free operation and for handling fibrous or air entrained materials



Motor Construction

Motor Type:

enclosed submersible

NEMA insulation code:

class F

Service Factor:

1.15

NEMA Design Type:

B

Standard Cable Length:

33 ft

Available Motor Voltages:

1 Phase: 115 V, 200V, 230 V

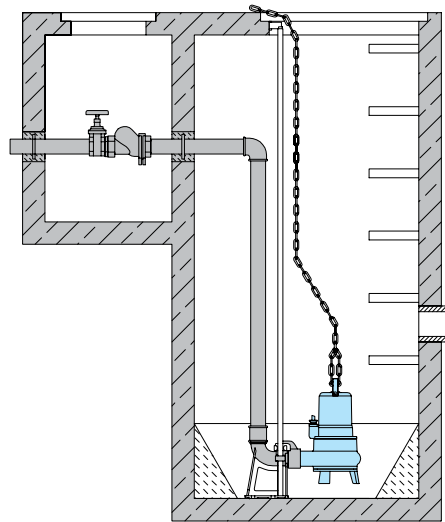
3 Phase: 200 V, 230 V, 380 V,
460 V, 575 V

Optional Explosion Proof construction:

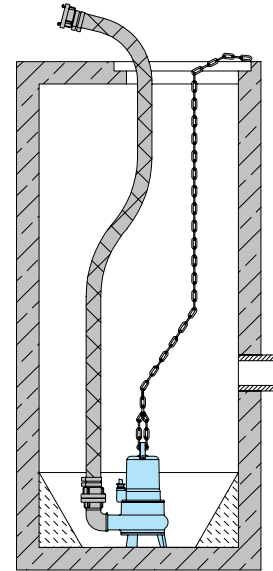
Factory Mutual approved for Class I,
Div. 1, Group C & D.

Installations

Wet pit with autocoupling



Basestand



Materials

Motor housing, Volute and Impeller:

Cast Iron ASTM A 48, class 40B

Mechanical seal – Impeller side:

Silicon Carbide vs Silicon Carbide

Shaft seal – Motor side:

Lip seal

O-Rings:

Nitrile rubber

Bearings:

Deep groove Ball Bearings

Power cable sheathing:

Nitrile rubber

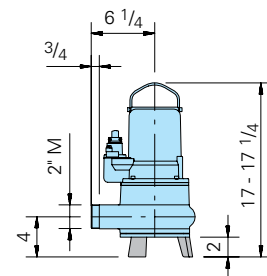
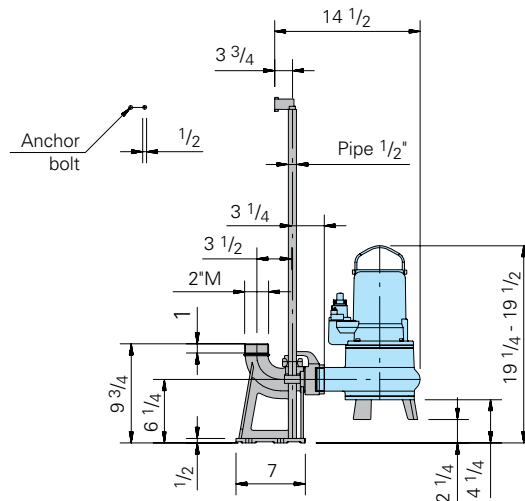
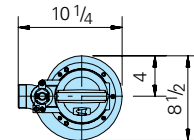
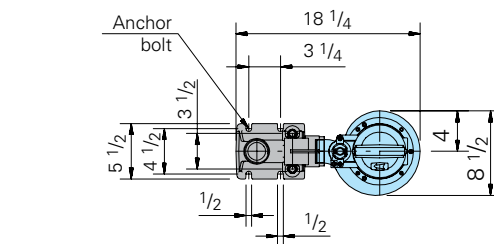
Shaft:

AISI 430 F

Fasteners:

AISI 304 SS

Dimensions (inches) (Tolerance +/- 1/4")



Technical Data

Curve No.	Pump Type	Solid size	Rated B.H.P.	Phase	Voltage (V)	Full Load Amps	Speed (rpm)	Weight (LBS)	NEMA code
V 1	TP30V16/2/1	1 1/4"	1.2	1	230	5.4	3450	53	F
V 2	TP30V16/2/3	1 1/4"	1.2	3	230/380/460	3.8/2.3/1.9	3450	53	G
V 3	TP30V24/2/1	1 1/4"	1.7	1	230	7.8	3450	55	F
V 4	TP30V24/2/3	1 1/4"	1.9	3	230/380/460	5.4/3.2/2.7	3450	55	G
V 5	TP49V24/2/1	2"	1.7	1	230	7.9	3450	53	F
V 5	TP49V24/2/3	2"	1.9	3	230/380/460	5.4/3.2/2.7	3450	53	G
M 6	TP30M24/2/1	1 1/4"	1.8	1	230	7.9	3450	55	F
M 7	TP30M24/2/3	1 1/4"	1.8	3	230/380/460	5.4/3.5/2.9	3450	55	G

Electric submersible pumps for waste water containing solids. Single channel impeller, spherical clearance 50 mm.

TP 50 M

Application

Homa TP 50 series pumps are suitable for pumping drainage water or waste water. With 50 mm spherical clearance they are able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry.

DIN EN 12050-2: Conformity and design approved and controlled by LGA.

Installation: Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

Pumped liquid: Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 40°C short term up to 60°C.

Operation: Permanent (S1).

Design

Fully submersible, compact integrated motor-pump unit consisting of:

Pump: Single stage centrifugal pump with horizontal discharge BSP 2 1/2" M.

Impeller: Closed single channel impeller for liquids containing impurities and sludge with solid particles. Spherical clearance 50 mm.

Motor: Fully submersible, pressure tight electric motor. Insulation class H. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with TP50M50, TP50M12/2W, TP50M17W and model Ex).

Motor start: TP50M12-37: Direct-on-line
TP50M50: Direct-on-line or Star-delta-start
Cable:

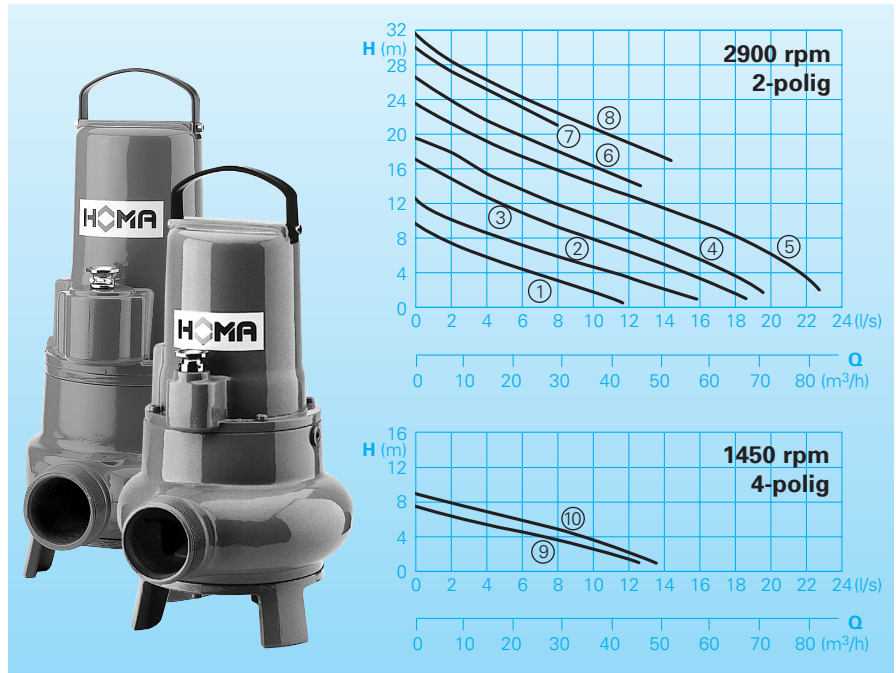
TP50M12-37: H07RN-F 4 G 1,5
TP50M12-37Ex: H07PLUS 6 G 1,5
TP50M50(Ex): H07RN-F(PLUS) 10 G 1,5

Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seals (silicon-carbide/silicon-carbide) in a separate oil chamber (models above 1,8 kW). Models up to 1,6 kW with mechanical seal and lip seal. Oil inspection from outside.

Explosion protection: All models available with explosion proof motors according to  II 2 G Ex c d II B T4(T3).

Performance



Technical Data

Curve No.	Pump type	Motor P ₁ (kW)	P ₂ (kW)	Capacitor* (μF)	Speed (rpm)	Nominal current (A)	Weight (kg)
①	TP 50M 12/2 W (A) (Ex)	1,1	0,8	25	2900	4,8	26,0**
②	TP 50M 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	27,0**
③	TP 50M 11/2 D (A) (Ex)	1,0	0,8		2900	1,9	26,0**
④	TP 50M 14/2 D (A) (Ex)	1,3	1,0		2900	2,5	27,0**
⑤	TP 50M 23/2 D (A) (Ex)	2,3	1,8		2900	3,8	40,0
⑥	TP 50M 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	40,0
⑦	TP 50M 37/2 D (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑧	TP 50M 37/2 MD (A) (Ex)	4,0	3,4		2900	6,6	45,0
⑨	TP 50M 37/2 HD (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑩	TP 50M 50/2 DT (Ex)	5,2	4,4		2840	8,7	56,0
⑪	TP 50M 12/4 W (A)	1,2	0,9	40	1450	5,8	40,0
⑫	TP 50M 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	40,0

Model W: 230-240V/1Ph 50Hz

Model D: 400-415V/3Ph 50Hz

Model A: with automatic level control
HOMA-Nivomatik

* **Capacitor:** For the operation it is necessary to install a capacitor in the control box.

Model Ex: Explosions proof

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

Materials

Pump housing, impeller, motor housing	Cast iron EN-GJL-250
Rotor shaft, screws	stainless steel
Mechanical seal	Silicon-carbide
Wear ring	Bronze
Elastomere	NBR

Equipment supplied

Pumps with base stand, without auto-coupling (see accessories)

Model W (230-240 V / 1 Ph):

10 m of cable. Control box W19 (Standard-pump)

WT19 (Ex-Model.) available as accessories.

Model D (400-415 V / 3Ph): 10 m of cable.

Control box D32; DT32 available as accessories.

Model A: With additional automatic level control, control box DA10/32; DA10/12; WA10/19 with overload protection, manual-auto switch. Model WA with integrated capacitor. Model Ex with intrinsically safe relay.

Electric submersible pumps for waste water containing solids. Vortex impeller, spherical clearance 50 – 65 mm.

TP 50 V

Application

Homa TP 50 series pumps are suitable for pumping drainage water or waste water. With 50 and 65 mm spherical clearance they are able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry.

DIN EN 12050-2: Conformity and design approved and controlled by LGA.

Installation: Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

Pumped liquid: Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 40°C short term up to 60°C.

Operation: Permanent (S1).

Design

Fully submersible, compact integrated motor-pump unit consisting of:

Pump: Single stage centrifugal pump with horizontal discharge BSP 2 1/2" M.

Impeller: Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas. Spherical clearance 50 up to 65 mm.

Motor: Fully submersible, pressure tight electric motor. Insulation class H. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with TP50V50, TP50V17/2W and model Ex). Motor start: TP50V13-40: Direct-on-line TP50V50: Direct-on-line or Star-delta-start

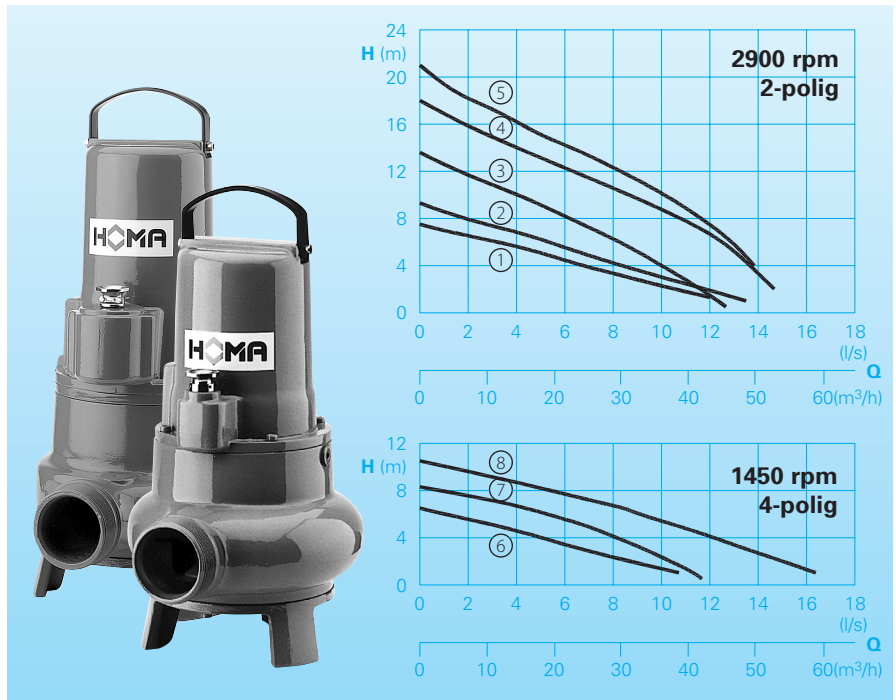
Cable:
TP50V13-40: H07RN-F 4 G 1,5
TP50V13-40Ex: H07PLUS 6 G 1,5
TP50V50(Ex): H07RN-F(PLUS) 10 G 1,5

Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seals (silicon-carbide/silicon-carbide) in a separate oil chamber (models above 1,8 kW). Models up to 1,6 kW with mechanical seal and lip seal. Oil inspection from outside.

Explosion protection: All models available with explosion proof motors according to II 2 G Ex c d II B T4(T3)

Performance



Technical Data

Curve No.	Pump type	Motor P ₁ (kW)	P ₂ (kW)	Capacitor* (μF)	Speed (rpm)	Nominal current (A)	Spherical clearance (mm)	Weight (kg)
①	TP 50V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
②	TP 50V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
③	TP 50V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
④	TP 50V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
⑤	TP 50V 50/2 DT (Ex)	5,2	4,4		2840	8,7	50	56,0
⑥	TP 50V 11/4 W (A)	1,2	0,9	40	1450	5,8	62	40,0
⑦	TP 50V 11/4 D (A) (Ex)	1,1	0,8		1450	2,4	62	40,0
⑦	TP 50V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
⑧	TP 50V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0

Model W: 230-240V/1Ph 50Hz

Model D: 400-415V/3Ph 50Hz

Model A: With automatic level control HOMA-Nivomatik

* **Capacitor:** For the operation it is necessary to install a capacitor in the control box.

Model Ex: Explosion proof

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

Materials

Motor housing, Impeller, pump housing	Cast iron EN-GJL-250
Rotor shaft, screws	Stainless steel
Mechanical seal	Silicon-carbide
Seal kit	Perbonane

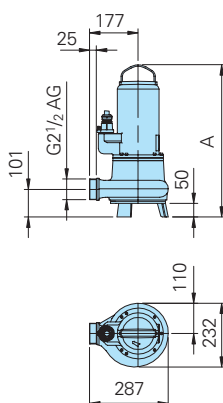
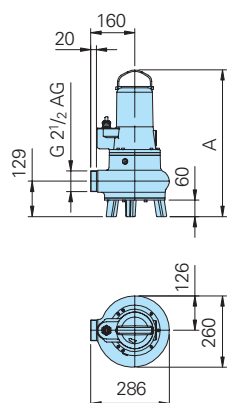
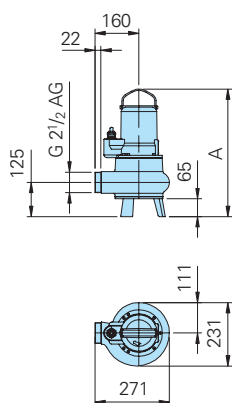
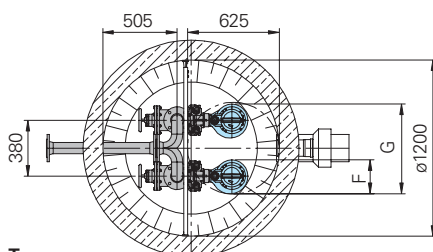
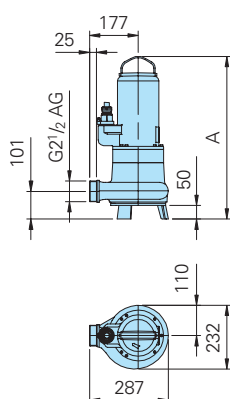
Equipment supplied

Pumps with base stand, without auto-coupling (see accessories): **Model W (230 V / 1 Ph):** 10 m of cable. Control box W19; (Standart pump); WT19 (Ex-Ausf.) available as accessories. **Model D (400 V / 3Ph):** 10 m of cable. Control box D32; DT32 available as accessories. **Model A:** With additional automatic level control and control box DA10/32; DA10/12, WA10/19 with overload protection, manual-auto switch. Model WA with integrated capacitor. Model Ex with intrinsically safe relay.

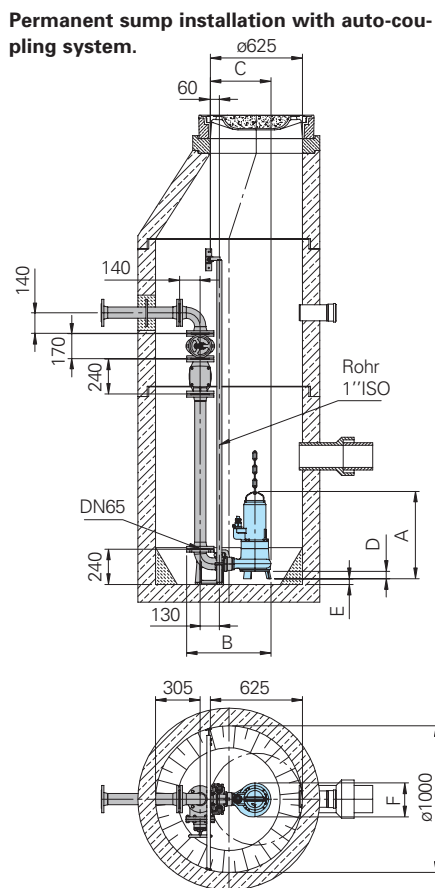
Free standing pump with base stand

TP50V11/4W(D)(Ex)
TP50V23/4D(Ex)

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

TP50V50/2DT(DE_x)

Type	A	B	C	D	E	F	G
TP50V50/2DT(DeX)	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
TP50V11/4W+D(Ex)	535	573	411	60	11	260	640
TP50V23/4D(Ex)	572	573	411	60	11	260	640



Part Description	Dimension	Part No.
① Auto-coupling system with Cast iron auto-coupling with flange Cast iron flanged pump coupling Cast iron upper slide rail bracket KK65/R2 ½"	DN65/R2 ½"	8604015
○ Auto-coupling system complete or partial in stainless steel	all types	on request

Part Description	Dimension	Part No.
○ Screw-kits for installation of coupling system		on request
○ Inter. upper slide rail bracket	Ø 1" for KK65	7323714
② Guide rails, pair, per m steel galvanized	1" dia.	2190135
stainless steel	1" dia.	2190252
③ Pump chain sets, testet. With shackle, One- or Two-strand, different lengths and load capacities		on request
④ Threaded flange	DN 65/ BSP 2 1/2" F	2215060
Flanged pipe	DN 65	On request
⑤ Cast iron swing check	DN 65	2212805
⑥ Cast iron swing check	BSP 2 1/2" F	2212513
⑦ Galvanized double nipple	BSP 2 1/2" M	2009025
⑧ Cast iron gate valve	DN 65	2216065

Part Description	Dimension	Part No.
⑨ Bronze gate valve	BSP 2 1/2" F	2216025
⑩ 90° flanged elbow	DN 65	2153301
Flanged Y-piece for twin-pump arrangement	3 x DN 65 DN 65/65/80	2160002 2160004
⑪ 90° galvanized elbow	BSP2 1/2" F	2113610
T-piece for twin-pump arrangement	BSP2 1/2" F	2114308
⑫ 90° galvanized elbow 2111705	BSP 2 1/2" F/M	
⑬ STORZ-fixed coupling	B- 2 1/2" F	2010502
STORZ-hose coupling	B-75 mm dia.	2013502
⑭ Synthetic pressure hose with rubber lining and couplings, B-75 mm dia.	length 10 m length 15 m length 20 m length 30 m	2611210 2611215 2611220 2611230
Reinforced hose, per m	75 mm dia.	2632075
Hose bands	85/20	2308520
○ Control panel for single or twin pump stations for automatic operation		On request



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Submersible waste water pumps

Discharge BSP 3" / DN 80.

Single channel impeller, spherical clearance 50 mm.

TP 53 M

Application

HOMA TP 53 series pumps are suitable for pumping drainage water or waste water. With 50 mm spherical clearance they are able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry.

DIN EN 12050-2: Conformity and design approved and controlled by LGA.

Installation: Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

Pumped liquid: Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 40°C, short term up to 60°C.

Betriebsart: Permanent (S1).

Design

Fully submersible, compact integrated motor-pump unit consisting of:

Pump: Single stage centrifugal pump with horizontal discharge BSP3"M.

Impeller: Closed single channel impeller for liquids containing impurities and sludge with solid particles. Spherical clearance 50 mm.

Motor: Fully submersible, pressure tight electric motor. Insulation class H. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with TP53M50, TP53M12/2W, TP53M17/2W and model Ex).

Motor Start:

TP53M12-37: Direct-on-line

TP53M50: Direct-on-line or

Start-delta-start

Cable:

TP53M12-37: H07RN-F 4 G 1,5

TP53M12-37Ex: H07PLUS 6 G 1,5

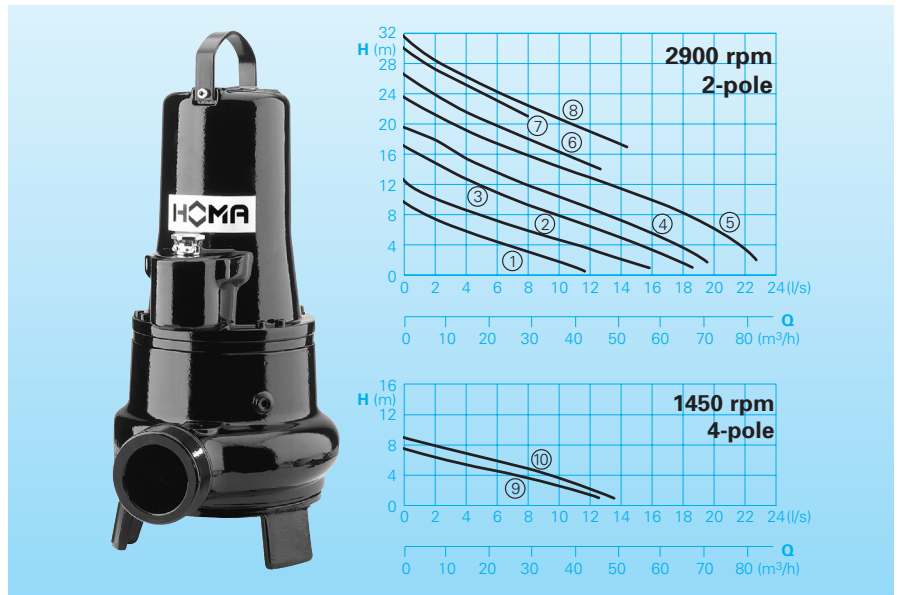
TP53M 50(Ex): H07RN-F(PLUS) 10 G 1,5

Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seals (silicon-carbide/silicon-carbide) in a separate oil chamber. Models up to 1,6 kW/2-pole with mechanical seal and lip seal. Oil inspection from outside.

Explosion protection: All models available with explosion proof motors according to $\text{Ex II 2 G Ex c d II B T4(T3)}$.

Performances



Technical Data

Curve No.	Pump type	Motor P ₁ (kW)	P ₂ (kW)	Capacitor* (μF)	Speed (rpm)	Nominal current (A)	Weight (kg)
①	TP 53M 12/2 W (A) (Ex)	1,1	0,8	25	2900	4,8	26,0**
②	TP 53M 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	27,0**
①	TP 53M 11/2 D (A) (Ex)	1,0	0,8		2900	1,9	26,0**
②	TP 53M 14/2 D (A) (Ex)	1,3	1,0		2900	2,5	27,0**
③	TP 53M 23/2 D (A) (Ex)	2,3	1,8		2900	3,8	40,0
④	TP 53M 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	40,0
⑤	TP 53M 37/2 D (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑥	TP 53M 37/2 MD (A) (Ex)	4,0	3,4		2900	6,6	45,0
⑦	TP 53M 37/2 HD (A) (Ex)	3,7	3,1		2900	6,5	45,0
⑧	TP 53M 50/2 DT (Ex)	5,2	4,4		2840	8,7	56,0
⑨	TP 53M 12/4 W (A)	1,2	0,9	40	1450	5,8	40,0
⑩	TP 53M 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	40,0

Model W: 230-240V/1Ph 50Hz

Model D: 400-415V/3Ph 50Hz

Model A: With automatic level control

HOMA-Nivomatik

* **Kondensator:** For the operation it is necessary to install a capacitor in the control box.

Model Ex: Explosion proof

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

Materials

Motor housing,	
Impeller,	Cast iron
Pump housing	EN-GJL-250
Rotor shaft,	stainless
screws	steel
Mechanical seal	Siliziumkarbid
Seal kit	NBR

Equipment supplied

Pumps with base stand, without auto-coupling (see accessories):

Model W (230 V / 1 Ph):

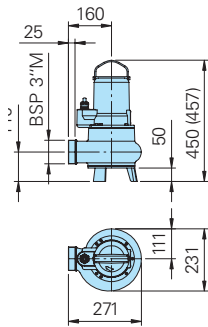
10 m of cable. Control box W19; WT19 (Standard pump); WT19 (Ex-Pump) available as accessories.

Model D (400 V / 3Ph):

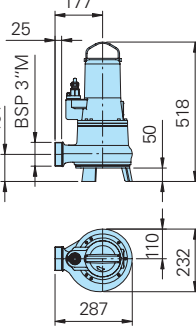
10 m of cable. Control box D32; DT32 available as accessories.

Model A: With additional automatic level control and control box DA10/32; DA10/12 with overload protection, manual-auto switch and 10-m of cable. 1Ph- model with integrated capacitor. Model Ex with intrinsically safe relay.

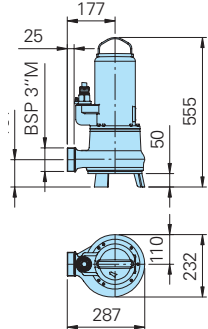
TP53M12/2W(Ex),
TP53M17/2W(Ex)
TP53M11/2D(Ex);
TP53M14/2D(Ex)



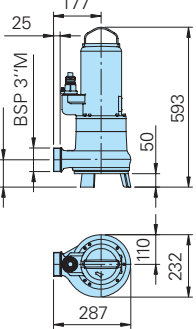
TP53M12/4W,
TP53M13/4D(Ex)
TP53M23/2D(Ex),
TP53M26/2D(Ex)



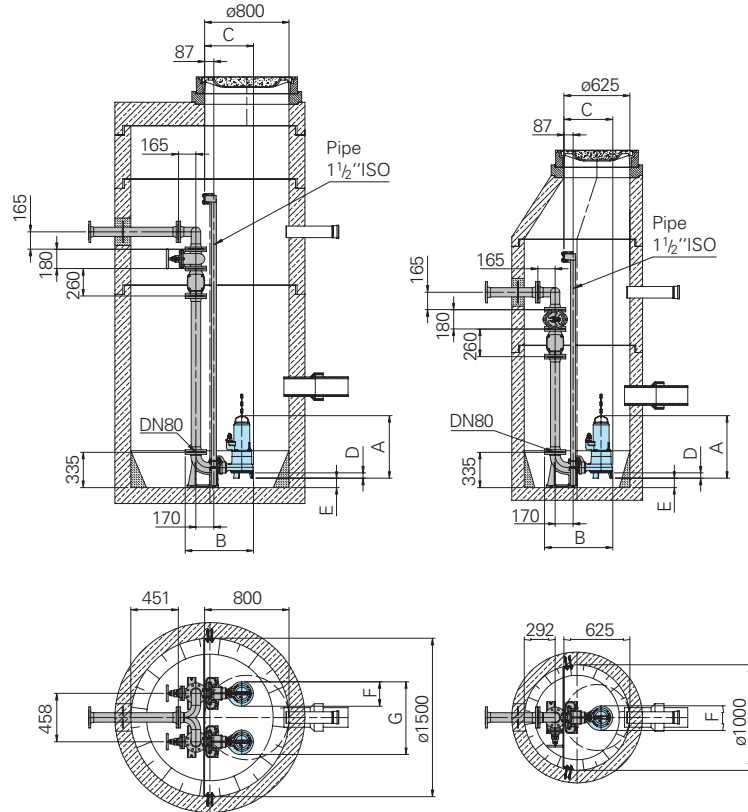
TP53M37/2MD(Ex),
TP53M37/2(H)D(Ex)



TP53M50/2DT(DEx)

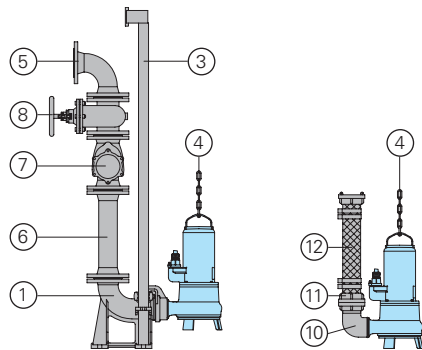


Permanent sump installation with auto-coupling system.



Typ	A	B	C	D	E	F	G
TP53M50/2DT(DEx)	593	645	462	50	89	232	690
TP53M37/2MD(Ex)+(H)D(Ex)	555	645	462	50	89	232	690
TP53M12/4W, TP53M13/4D(Ex), TP53M23-26/2D(Ex)	518	645	462	50	89	232	690
TP53M12-17/2W(Ex), TP53M11-14/2D(Ex)	450 (457)	629	446	50	81	231	689

Accessories



Part Description	Dimension	Part No.
① Cast iron autocoupling system with auto-coupling with flange DN 80 and upper slide rail bracket BSP 1 1/2"		
– Type KK80/R3" with flanged pump coupling	BSP 3" F	8604035
– Type KK80/80 with flanged pump coupling	DN 80	8604025
○ Auto-coupling system complete or partial in stainless steel	all types	on request

Part Description	Dimension	Part No.
○ Screw-kits for installation of coupling system		on request
Threaded flange	DN 80/BSP3"F	2215080
③ Guide rails, pair, per m steel galvanized	BSP 1 1/2"	2190155
stainless steel	BSP 1 1/2"	2190254
④ Pump chain sets, testet. With shackle, One- or Two-strand, different lengths and load capacities		on request
⑤ 90° flanged elbow	DN 80 DN 100	2153302 2153303
Flanged Y-piece for twin pump arrangement, horizontal discharge (vertical discharge on request)	3x DN 80 DN 80/80/100 3x DN 100	2160006 2160008 2160010
⑥ Flanged discharge pipe with gasket and fixing bolts, per m	DN 80 DN 100	2152081 2152201
Discharge pipe, per additional m	DN 80 DN 100	2150080 2150100
Flanged reducer		on request
⑦ Flanged swing check valve with gasket and fixing bolts	DN 80 DN 100	2212807 2212809

Part Description	Dimension	Part No.
⑧ Flanged gate valve with gasket and fixing bolts	DN 80 DN 100	2216080 2216100
⑩ 90° elbow	BSP 3"F/M	2111805
Flanged 90° elbow	DN 80	2153302
Threaded flange	DN 80/BSP 3"F	2215080
⑪ STORZ-fixed coupling	B-3"F	2010602
STORZ-hose coupling	B-75 mm dia.	2013502
⑫ Reinforced hose with 2 B-size half couplings, 75 mm dia.	length 2 m length 3 m length 5 m	2161042 2161043 2161045
Flanged reinforced hose 90 mm dia., DN 80	length 2 m length 3 m length 5 m	2161032 2161033 2161035
Reinforced hose per m	75 mm dia. 90 mm dia.	2632075 2632090
Flanged spigot DN 80	90 mm dia.	2171014
Hose band	85/20 92/20	2308520 2309221
○ Control panel for single or twin pump stations for automatic operation		on request



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Submersible waste water pumps

Discharge BSP 3" / DN 80.

Vortex impeller, spherical clearance 50 – 65 mm.

TP 53 V

Application

HOMA TP 53 series pumps are suitable for pumping drainage water or waste water. With 50 and 65 mm spherical clearance they are able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry. **DIN EN 12050-2:** Conformity and design approved and controlled by LGA.

Installation: Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

Pumped liquid: Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 40°C short term up to 60°C.

Operation: Permanent (S1).

Design

Fully submersible, compact integrated motor-pump unit consisting of:

Pump: Single stage centrifugal pump with horizontal discharge BSP 3" M

Impeller: V = Vortex impeller for liquids containing a high level of impurities or fibrous matter and containing gas. Spherical: clearance 50 up to 65 mm.

Motor: Fully submersible, pressure tight electric motor. Insulation class H. Degree of protection IP 68. Thermal sensors embedded in the winding

on request (standard with TP53V50, TP53V17/2W and model Ex).

Motor Start:

TP53V13-14: Direct-on-line

TP53V50: Direct-on-line or Star-delta-start

Cable:

TP53V13-40: H07RN-F 4 G 1,5

TP53V13-40Ex: H07PLUS 6 G 1,5

TP53V50(Ex): H07RN-F(PLUS) 10 G 1,5

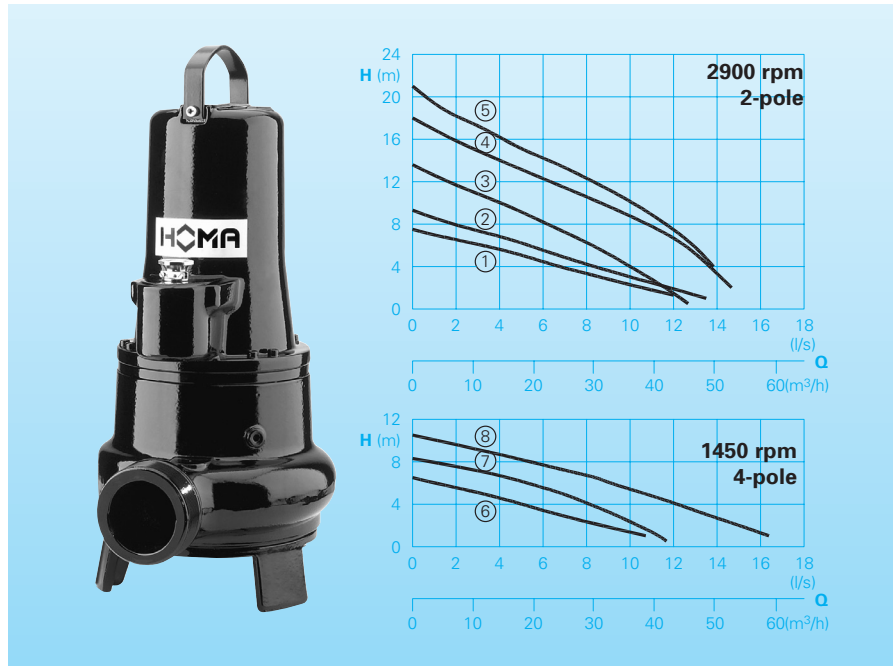
Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seals (silicon-carbide/silicon-carbide) in a separate oil chamber. Models up to 1,6 kW/2-pole with mechanical seal and lip seal. Oil inspection from outside.

Explosion protection: All models available with explosion proof motors according to

Ⓔ II 2 G Ex c d II B T4(T3).

Performance



Technical Data

Curve No.	Pump typ	Motor P ₁ (kW)	P ₂ (kW)	Capacitor* (μF)	Speed (rpm)	Nom. current (A)	Spherical clearance (mm)	Weight (kg)
①	TP 53V 17/2 W (A) (Ex)	1,6	1,2	30	2900	7,6	65	27,0**
②	TP 53V 17/2 D (A) (Ex)	1,6	1,2		2900	2,9	65	27,0**
③	TP 53V 26/2 D (A) (Ex)	2,6	2,1		2900	4,5	50	40,0
④	TP 53V 40/2 D (A) (Ex)	4,0	3,4		2900	6,6	50	45,0
⑤	TP 53V 50/2 DT (Ex)	5,2	4,4		2840	8,7	50	56,0
⑥	TP 53V 11/4 W (A)	1,2	0,9	40	1450	5,8	62	40,0
⑥	TP 53V 11/4 D (A) (Ex)	1,1	0,8		1450	2,4	62	40,0
⑦	TP 53V 13/4 D (A) (Ex)	1,3	1,0		1450	2,6	50	40,0
⑧	TP 53V 23/4 D (A) (Ex)	2,3	1,8		1450	5,0	62	45,0

Model W: 230-240V/1Ph 50Hz

Model D: 400-415V/3Ph 50Hz

Model A: With automatic level control HOMA-Nivomatik

* **Kondensator:** For the operation it is necessary to install a capacitor in the control box.

Model Ex: Explosion proof

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

Materials

Motor housing, Impeller, Pump housing	Cast iron EN-GJL-250
Rotor shaft, screws	stainless steel
Mechanical seal	Siliziumkarbid
Seal kit	NBR

Equipment supplied

Pumps with base stand, without auto-coupling (see accessories):

Model W (230 V / 1 Ph):

10 m of cable. Control box W19; WT19 (Standardpump); WT19 (Ex-Pump) available as accessories.

Model D (400 V / 3Ph):

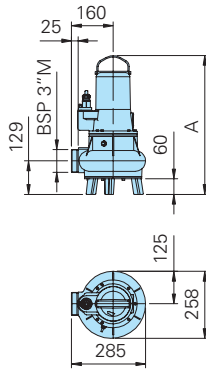
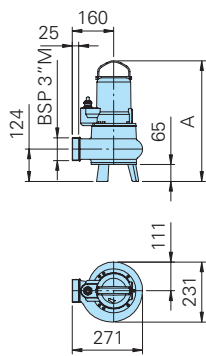
10 m of cable. Control box D32; DT32 available as accessories.

Model A: With additional automatic level control and control box DA10/32; DA10/12 with overload protection, manual-auto switch and 10-m of cable. 1Ph- model with integrated capacitor. Model Ex with intrinsically safe relay.

Free standing pump with base stand

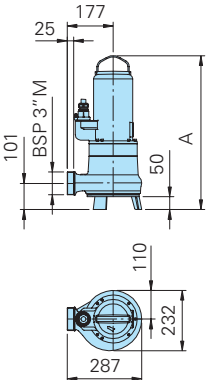
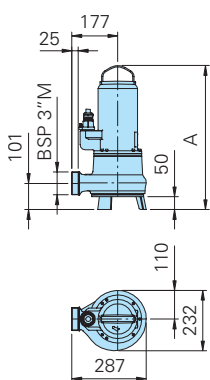
TP53V17/2W+D(Ex)

TP53V11/4W(D)(Ex)
TP53V23/4D(Ex)

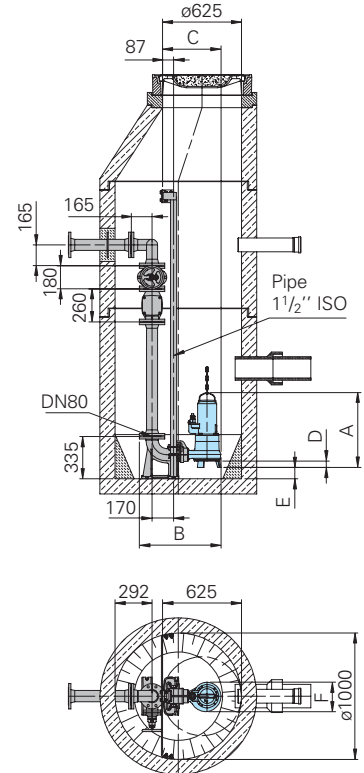
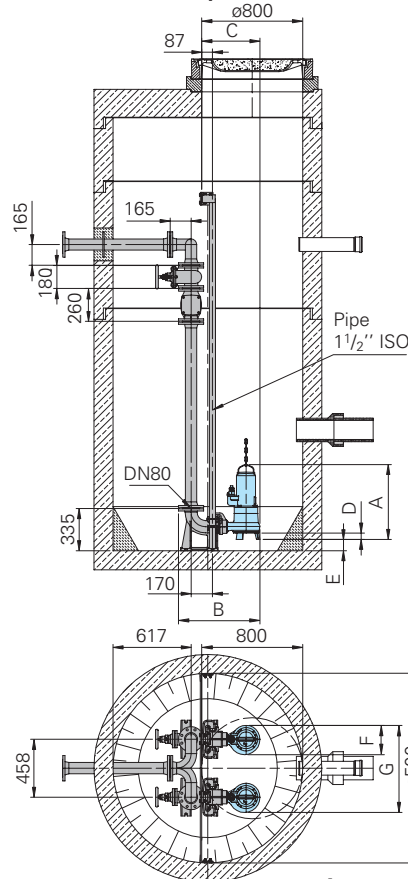


TP53V40/2D(Ex)
TP53V26/2D(Ex)
TP53V13/4D(Ex)

TP53V50/2DT(DEx)

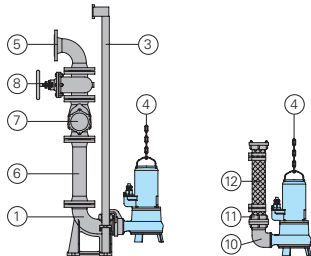


Permanent sump installation with auto-coupling system.



Type	A	B	C	D	E	F	G
TP53V50/2DT(DEx)	593	645	462	50	89	232	690
TP53V40/2D(Ex)	555	645	462	50	89	232	690
TP53V13/4D(Ex), TP53V26/2D(Ex)	518	645	462	50	89	232	690
TP53V17/2W + D(Ex)	465 (472)	629	446	65	66	231	689
TP53V11/4W+D(Ex)	535	648	465	60	61	258	716
TP53V23/4D(Ex)	572	648	465	60	61	258	716

Accessories



Description	Dimension	Part No.
① Cast iron autocoupling system with auto-coupling with flange DN 80 and upper slide rail bracket BSP 1 1/2"		
- Typ KK80/R3"	BSP 3" F	8604035
- Typ KK80/80	DN 80	8604025
○ Auto-coupling system complete or partial in stainless steel	all types	on request
○ Screw-kits for installation of coupling system		on request
Threaded flange	DN 80/BSP3"F	2215080

Description	Dimension	Part No.
③ Guide rails, pair, per m steel galvanized	1 1/2" dia.	2190155
stainless steel	1 1/2" dia.	2190254
④ Pump chain sets, testet. With shackle, One- or Two-strand, different lengths and load capacities		on request
⑤ 90° flanged elbow	DN 80	2153302
	DN 100	2153303
Flanged Y-piece for twin pump arrangement, horizontal discharge	3x DN 80	2160006
	DN 80/80/100	2160008
(vertical discharge on request)	3x DN 100	2160010
⑥ Flanged discharge pipe with gasket and fixing bolts, 1 m long	DN 80	2152081
	DN 100	2152201
Discharge pipe, per additional m	DN 80	2150080
Flanged reducer	DN 100	2150100
		on request
⑦ Check valve with flanges	DN 80	2212807
	DN 100	2212809

Description	Dimension	Part No.
⑧ Wedge gate valves with flanges	DN 80	2216080
	DN 100	2216100
⑩ 90° elbow	BSP3"F/M	2111805
Flanged 90° elbow	DN 80	2153302
Threaded flange	DN 80/BSP3"F	2215080
⑪ STORZ-fixed coupling	B-3"F	2010602
STORZ-hose coupling	B-75 mm Ø	2013502
⑫ Reinforced hose with 2 B-size half couplings, 75 mm dia.	2 m lang	2161042
	3 m lang	2161043
	5 m lang	2161045
Flanged reinforced hose 90 mm dia., DN 80	2 m lang	2161032
	3 m lang	2161033
	5 m lang	2161035
Reinforced hose per m	Ø 75 mm	2632075
	Ø 90 mm	2632090
Flanged spigot DN 80	90 mm Ø	2171014
Hose band	85/20	2308520
	92/20	2309221
○ Control panel for single or twin pump stations for automatic operation		on request

HOMA
P U M P T E C H N O L O G Y

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Electric submersible pumps for sewage and effluent. Spherical clearance 70 mm

TP 70

Application

HOMA TP 70 series pumps are suitable for pumping waste water, sewage or effluent. With their 70 mm spherical clearance they are especially able to pump liquids with larger suspended solids like fibres, textiles etc. They are used for various applications in public and private sector, trade and industry.

DIN EN 12050-1: Conformity and design approved and controlled by LGA.

Installation: Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

Pumped liquid: Clear water and drainage water, sewage containing soft solids. Max. liquid temperature: 40°C, short term up to 60°C.

Operation: permanent (S1).

Design

Fully submersible, compact integrated motor-pump unit consisting of:

Pump: Single stage centrifugal pump with horizontal discharge.

Impeller: M = Closed 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 submersible, pressure tight electric motor. Insulation class H. Degree of protection IP 68. Thermal sensors embedded in the winding.

Motorstart: TP70...13-36: direct-on-line
TP70V50: Direct- or Star-delta-start

Cable:

TP70...13-36: H07RN-F 7 G 1,5

Model C: H 07RN-F 10 G 1,5

TP70...13-36(Ex): H07(PLUS) 6 G 1,5

Model C: H07(PLUS) 2 x 1,5

TP70V50...: H07RN-F 10 G 1,5

Model C: H07RN-F 12 G 1,5

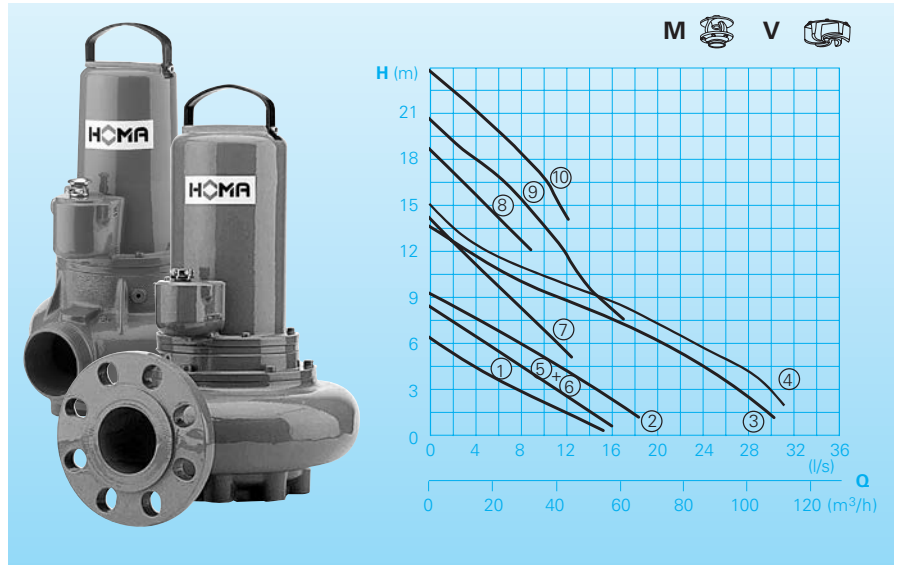
TP70V50...(Ex): H07(PLUS) 10 G 1,5

Model C: H07(PLUS) 2 x 1,5

Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seals (silicon-carbide) in a separate oil chamber. Oil inspection from outside. Electronic seal probe fitted into the oil chamber optional, Model C.

Performance



Technical Data

Curve No.	Pump type	Motor P ₁ (kW)	P ₂ (kW)	Capacitor* (μF)	Speed (rpm)	Nominal current (A)	Discharge	Weight (kg)
①	TP70 M13/4D (C)(A)(Ex)	1,2	0,9		1450	2,6	G3 AG	40
②	TP70 M16/4D (C)(A)(Ex)	1,7	1,3		1450	3,4	G3 AG	40
③	TP70 M26/4D (C)(A)(Ex)	2,5	1,9		1450	5,5	DN80	66
④	TP70 M31/4D (C)(A)(Ex)	3,3	2,6		1450	6,0	DN80	66
⑤	TP70 V16/4W (C)(A)	1,5	1,0	40	1450	7,5	G3 AG	40
⑥	TP70 V15/4D (C)(A)(Ex)	1,4	1,1		1450	3,1	G3 AG	40
⑦	TP70 V31/2D (C)(A)(Ex)	3,0	2,5		2900	5,7	G3 AG	56
⑧	TP70 V36/2D (C)(A)(Ex)	3,5	2,9		2900	6,3	G3 AG	56
⑨	TP70 V50/2D (C)(Ex)	5,2	4,4		2840	8,7	G3 AG	56
⑩	TP70 V50/2HD (C)(Ex)	5,2	4,4		2840	8,7	G3 AG	56

Model W: 230-240V/1Ph 50Hz

Model D: 400-415V/3Ph 50Hz

* **Capacitor:** For the operation it is necessary to install a capacitor in the control box

Model A: with automatic level control
HOMA-Nivomatik

Model Ex: explosion proof

Explosion protection: All models are available with explosion proof motors according to Ex II 2 G Ex c d II B T4(T3) on request.

Materials

Motor housing, pump housing, Impeller	Cast iron EN-GJL-250
Rotor shaft, screws	Stainless steel
O-Ring	Nitrile Rubber
Mechanical seal	Silicon-carbide

Equipment supplied

Pumps without ring base stand or auto-coupling unit (see accessories).

Model W (230 V / 1 Ph):

10 m of cable. Control box WT19 available as accessories.

Model D (400 V / 3 Ph):

10 m of cable. Control box DT32 available as accessories.

Model A: With additional automatic level control, control box WA10/19, DA10/32; DA10/12 with overload protection, manual-auto switch. Model WA with integrated capacitor. Model Ex with intrinsically safe relay.

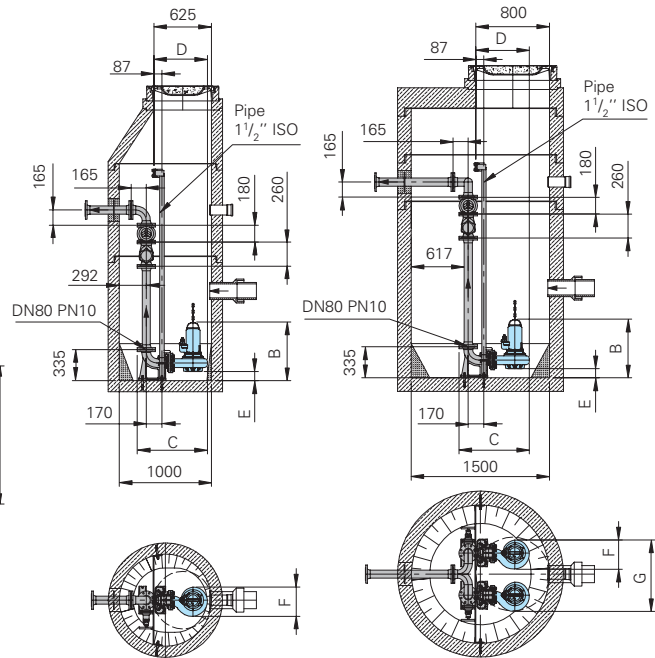
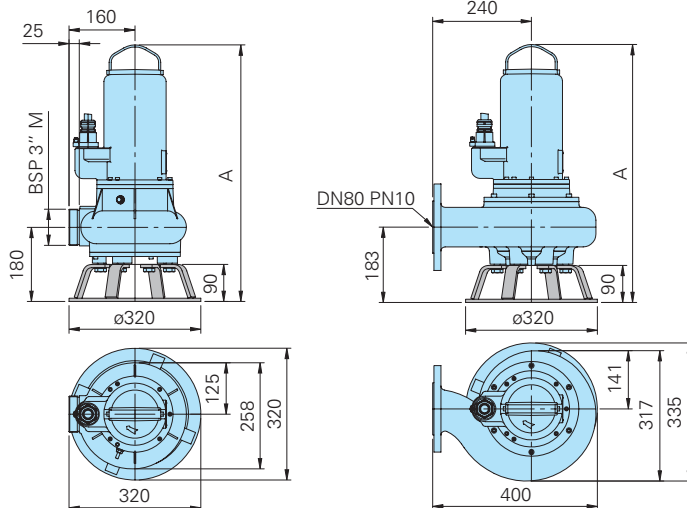
Free standing pump with ringbase stand

Models with discharge BSP3"M

Models with discharge DN80

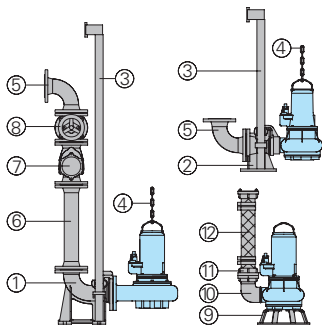
Single pump station

Twin pump station



Pump type	A	B	C	D	E	F	G
TP70V(15-16)/4(C)W(D)(Ex)	586	596	643	460	100	258	716
TP70M(13-16)/4(C)D(Ex)	586	596	643	460	100	258	716
TP70M(26-31)/4(C)D(Ex)	626	633	764	581	97	317	775
TP70V(31-36)/2(C)D(Ex)	623	633	643	460	100	258	716
TP70V50/2(C)D(H)(Ex)	661	671	643	460	100	258	716

Accessories



Description	Dimension	Part.-No.
① Cast iron autocoupling system with autocoupling with flange DN 80 and upper slide rail bracket BSP 1 1/2" – Type KK80/BSP 3" with flanged pump coupling	BSP 3" F	8604035
– Type KK 80/80 with flanged pump coupling	DN 80	8604025
② Cast iron autocoupling with through autocoupling (horizontal discharge) DN 80 and upper slide rail bracket BSP 1 1/2" – Type KS 80/BSP 3" with flanged pump coupling	BSP 3" F	8604050
○ Auto-coupling system complete or partial in stainless steel	all types	on request

Description	Dimension	Part.-No.
○ Screw-kits for installation of coupling system		on request
○ Supporting bracket for guide rail extension	Ø 1 1/2" für KK80 und KS80	7322901
③ Guide rails, pair, per m steel galvanized stainless steel	1 1/2" dia.	2190155
	1 1/2" dia.	2190254
④ Pump chain sets, tested. With shackle, One- or Two-strand, different lengths and load capacities		on request
⑤ 90° flanged elbow	DN 80	2153302
	DN 100	2153303
Flanged Y-piece for twin pump arrangement, horizontal discharge (vertical discharge on request)	3x DN 80	2160006
	DN 80/80/100	2160008
	3x DN 100	2160010
⑥ Flanged discharge pipe with gasket and fixing bolts, per m	DN 80	2152081
	DN 100	2152201
Discharge pipe, per additional m	DN 80	2150080
	DN 100	2150100
Flanged reducer		On request
⑦ Flanged swing check valve with gasket and fixing bolts	DN 80	2212807
	DN 100	2212809

Description	Dimension	Part.-No.
⑧ Flanged gate valve with gasket and fixing bolts	DN 80	2216080
	DN 100	2216100
⑨ Ring base stand		7321345
⑩ 90° elbow	BSP3"F/M	2111805
Flanged 90° elbow	DN 80	2153302
Threaded flange	DN 80/BSP3"F	2215080
⑪ STORZ-fixed coupling	B-3"F	2010602
STORZ-hose coupling	B-75 mm dia.	2013502
⑫ Reinforced hose with 2 B-size half couplings, 75 mm dia.	length 2 m	2161042
	length 3 m	2161043
	length 5 m	2161045
Flanged reinforced hose 90 mm dia., DN 80	length 2 m	2161032
	length 3 m	2161033
	length 5 m	2161035
Reinforced hose, per m	75 mm dia.	2632075
	90 mm dia.	2632090
Flanged spigot DN 80	90 mm dia.	2171014
Hose band	85/20	2308520
	92/20	2309220
○ Control panels for single and multipump stations with automatic level control		On request



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