

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, certificate No. 0220119.

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

Pumped medium: Clear water and drainage water, sewage containing soft solids. Max. medium temperature: 35°C short term up to 60°C.

Operation: Intermittent.

Design

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

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


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

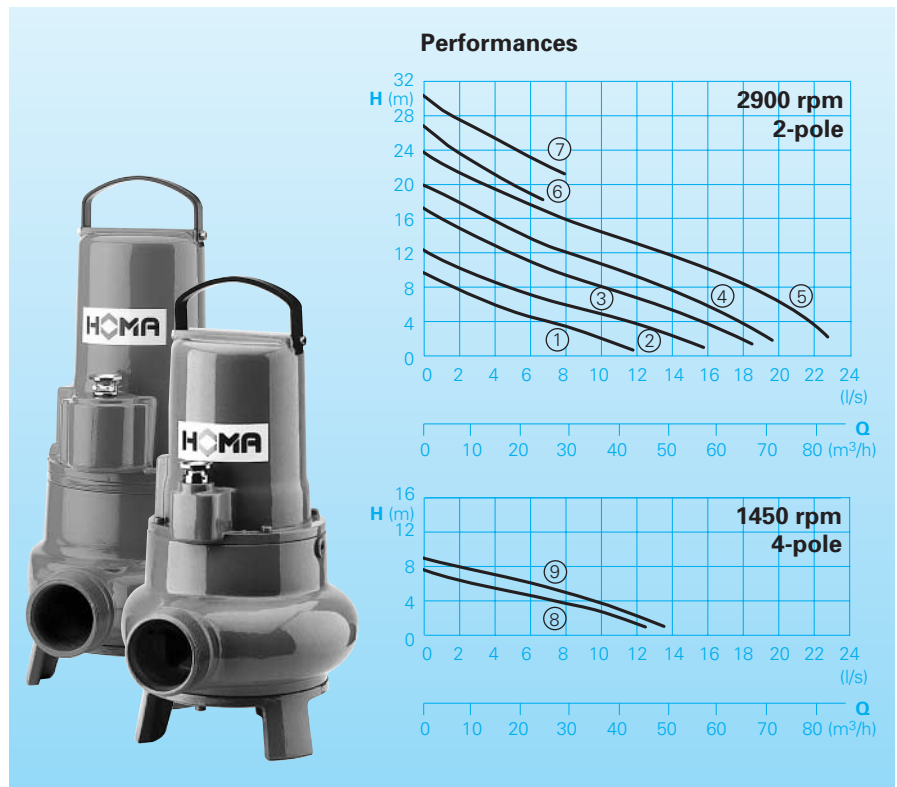
Motor: Fully submersible, pressure tight electric motor. Insulation class F. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with model Ex).

Cable: H07 RN - F4 G 1,5
Model Ex.: H07 RN - F(Plus) 7 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 EEx d (ib) IIBT4.



Technical Data

Curve No.	Pump type	Motor- input P ₁ (kW)	Motor- output P ₂ (kW)	Voltage 50 Hz (V)	Speed (rpm)	Nominal current (A)	Spherical clearance (mm)	Weight (kg) Standard model	Weight (kg) Model Ex
①	TP50 M12/2W(A)(Ex)	1,1	0,8	230-240/1Ph	2900	4,8	50	26	31
②	TP50 M17/2W(A)(Ex)	1,6	1,2	230-240/1Ph	2900	7,6	50	27	32
①	TP50 M11/2D (A)(Ex)	1,0	0,8	400-415/3Ph	2900	1,9	50	26	31
②	TP50 M14/2D (A)(Ex)	1,3	1,0	400-415/3Ph	2900	2,5	50	27	32
③	TP50 M23/2D (A)(Ex)	2,3	1,8	400-415/3Ph	2900	3,8	50	40	40
④	TP50 M26/2D (A)(Ex)	2,6	2,1	400-415/3Ph	2900	4,5	50	40	40
⑤	TP50 M37/2D (A)(Ex)	3,7	3,2	400-415/3Ph	2900	6,5	50	45	45
⑥	TP50 M26/2HD (A)(Ex)	2,6	2,1	400-415/3Ph	2900	4,5	50	40	40
⑦	TP50 M37/2HD (A)(Ex)	3,7	3,2	400-415/3Ph	2900	6,5	50	45	45
⑧	TP50 M12/4W (A)	1,2	0,9	230-240/1Ph	1450	5,8	50	40	40
⑨	TP50 M13/4D (A) (Ex)	1,3	1,0	400-415/3Ph	1450	2,6	50	40	40

Discharge: BSP2 1/2" M

Model A: With automatic level control

HOMA-Nivomatik

Model Ex: Explosion proof

Materials:

Motor housing, pump housing	Cast iron GG 25
Impeller- up to 1,6 kW - other types	Polypropylene GFK Cast iron GG 25
Wear ring	Bronze
Mechanical seal	Silicon-carbide
Rotor shaft, screws	Stainless steel
Seal kit	Perbonane

Model W: (230-240 V/1 Ph): 10 m of cable. Attention: The pump requires a capacitor for operation, which is integrated in the control box (see accessories).

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

Model A: With additional automatic level control, control box with overload protection, manual-auto switch and 10 m of cable. integrated capacitor. Model Ex with intrinsically safe relay.

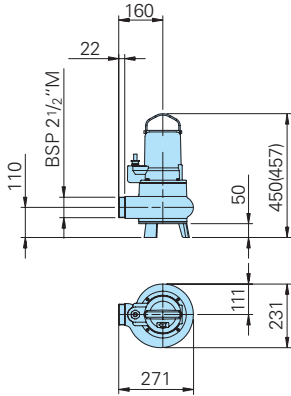
Equipment supplied

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

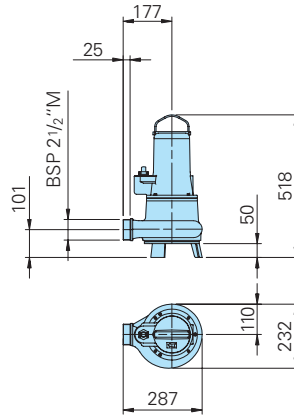
Installations and Dimensions

Free standing pump with base stand

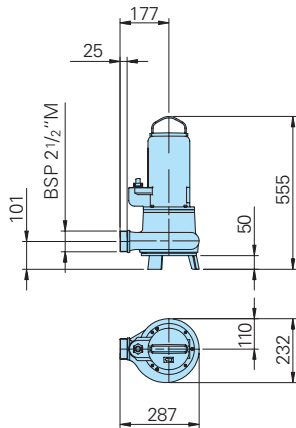
TP 50 M 12/2W(Ex), TP 50 M 17/2W(Ex)
TP 50 M 11/2D(Ex), TP 50 M 14/2D(Ex)



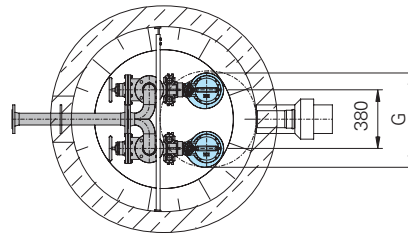
TP 50 M 12/4W, TP 50 M 13/4D(Ex)
TP 50 M 23/2D(Ex), TP 50 M 26/2(H)D(Ex)



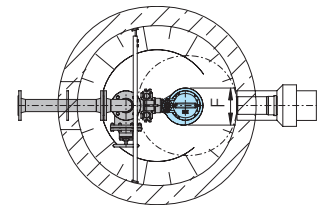
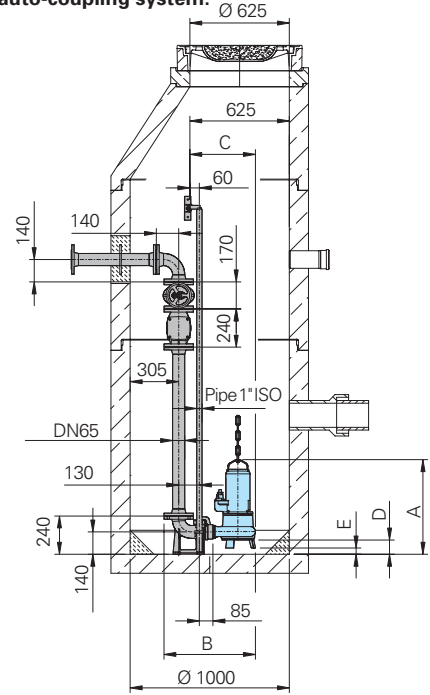
TP 50 M 37/2(H)D(Ex)



Typ	A	B	C	D	E	F	G
TP 50 M 12/2W(Ex)	481	559	396	81	16	231	611
TP 50 M 17...(Ex)	(487)						
TP 50 M 11...(Ex)							
TP 50 M 14...(Ex)							
TP 50 M 12/4W	557	575	412	39	39	232	612
TP 50 M 13							
TP 50 M 23							
TP 50 M 26							
TP 50 M 37	594	575	412	89	39	232	612

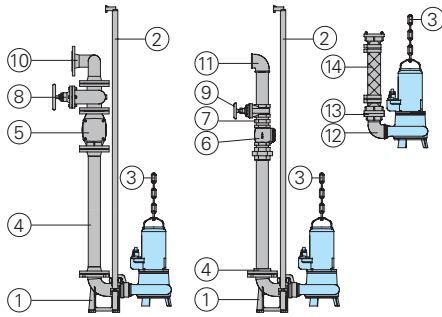


Wet well installation with auto-coupling system.



all dimensions in mm

Accessories



Part Description	Dimension	Part No.
① Auto-coupling system type KK65/R 2 1/2" with:		8604015
- Cast iron auto-coupling with flange	DN 65	
- Cast iron flanged pump coupling	BSP 2 1/2" F	
- Cast iron upper slide rail bracket	BSP 1"	

Part Description	Dimension	Part No.
② Steel galvanized guide rails, pair, per m	BSP 1"	2190135
③ Steel galvanized lifting chain	5 mm dia.	2800350
Steel galvanized shackle	Size 5/16"	2801450
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
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	BSP 2 1/2" F	2113610
T-piece for twin-pump arrangement	BSP 2 1/2" F	2114308
⑫ 90° galvanized elbow	BSP 2 1/2" F/M	2111705
⑬ STORZ-fixed coupling	BSP 2 1/2" F	2010502
STORZ-hose coupling	B-75 mm dia.	2013502

Part Description	Dimension	Part No.
○ 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 box for pumps without level control, with overload protection, on-off switch		
- for 1 Ph-pumps (incl. capacitor) stand. model		
TP50M12/4W		1923111
TP50M12/2W		1918108
TP50M17/2W		1918113
- for 1 Ph-pumps (incl. capacitor) Model Ex		
TP50M12/4WEx		1912425
TP50M12/2WEx		1945020
TP50M17/2WEx		1945030
- for 3 Ph-pumps standard		
Nominal current	1,7 up to 2,4 A 2,5 up to 4,0 A 4,1 up to 6,3 A 6,4 up to 10,0 A	1926085 1926090 1926095 1926100
- for 3 Ph-pumps Model Ex		
Nominal current	1,7 up to 2,4 A 2,5 up to 4,0 A 4,1 up to 6,0 A 6,1 up to 9,0 A	1926215 1926220 1926225 1926230
○ Control panel for single or twin pump stations for automatic operation		On request



HOMA Pumpenfabrik GmbH
P.O.Box 22 63, D-53814 Neunk.-Seelscheid
Tel. ++49(0)22 47/702-0, Fax ++49(0)22 47/702-44
e-mail: info@homa-pumpen.de
www.homapumps.com

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, certificate No. 0220119.

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

Pumped medium: Clear water and drainage water, sewage containing soft solids. Max. medium temperature: 35°C short term up to 60°C.

Operation: Intermittent.

Design

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

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

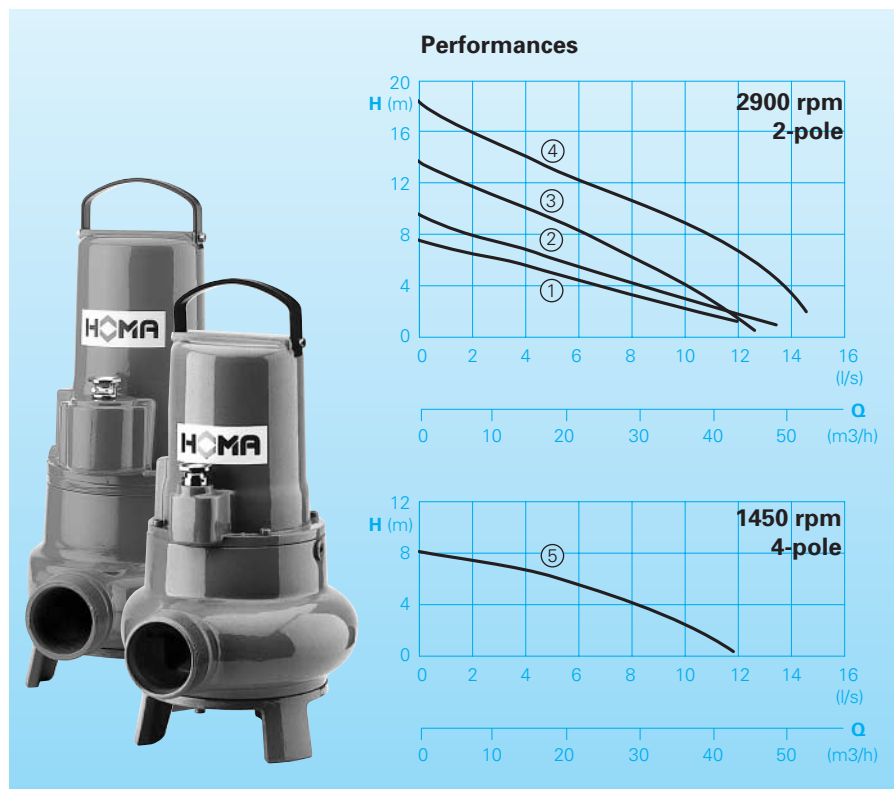
Motor: Fully submersible, pressure tight electric motor. Insulation class F. Degree of protection IP 68. Thermal sensors embedded in the winding on request (standard with model Ex).

Cable: H07 RN - F4 G 1,5
Model Ex.: H07 RN - F(Plus)7 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 $\text{Ex II 2 G EEx d [ib] IIBT4}$.



Technical Data

Curve No.	Pump type	Motor- input P ₁ (kW)	Motor- output P ₂ (kW)	Voltage 50 Hz (V)	Speed (rpm)	Nominal current (A)	Spherical clearance (mm)	Weight (kg) Standard model	Weight (kg) Model Ex
①	TP50 V17/2W (A)(Ex)	1,6	1,2	230-240/1Ph	2900	7,6	65	27	32
②	TP50 V17/2D (A)(Ex)	1,6	1,2	400-415/3Ph	2900	2,9	65	27	32
③	TP50 V26/2D (A)(Ex)	2,6	2,1	400-415/3Ph	2900	4,5	50	40	40
④	TP50 V40/2D (A)(Ex)	4,0	3,4	400-415/3Ph	2900	6,6	50	45	45
⑤	TP50 V13/4D (A)(Ex)	1,3	1,0	400-415/3Ph	1450	2,6	50	40	40

Discharge: BSP2 1/2" M

Model A: With automatic level control HOMA-Nivomatik

Model Ex: Explosion proof

Materials:

Motor housing, pump housing	Cast iron GG 25
Impeller	Cast iron GG 25
Mechanical seal	Silicon-carbide
Rotor shaft, screws	Stainless steel
Seal kit	Perbonane

Equipment supplied

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

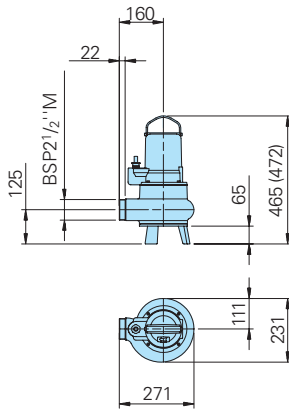
Model W: (230-240 V/1 Ph): 10 m of cable. Attention: The pump requires a capacitor for operation, which is integrated in the control box (see accessories).

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

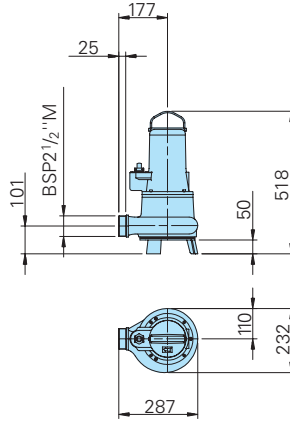
Model A: With additional automatic level control, control box with overload protection, manual-auto switch and 10 m of cable. integrated capacitor. Model Ex with intrinsically safe relay.

Installations and Dimensions

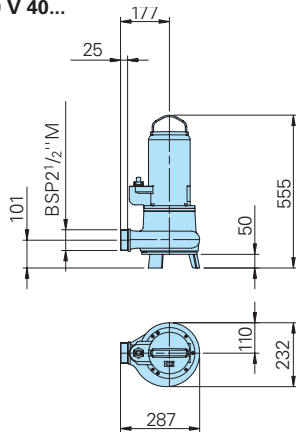
Free standing pump with base stand TP 50 V 17... (Ex)



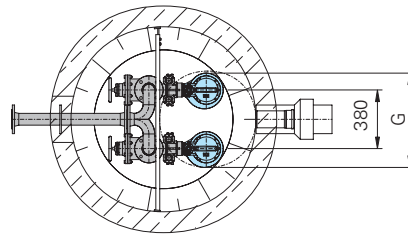
TP 50 V 26..., TP 50 V 13...



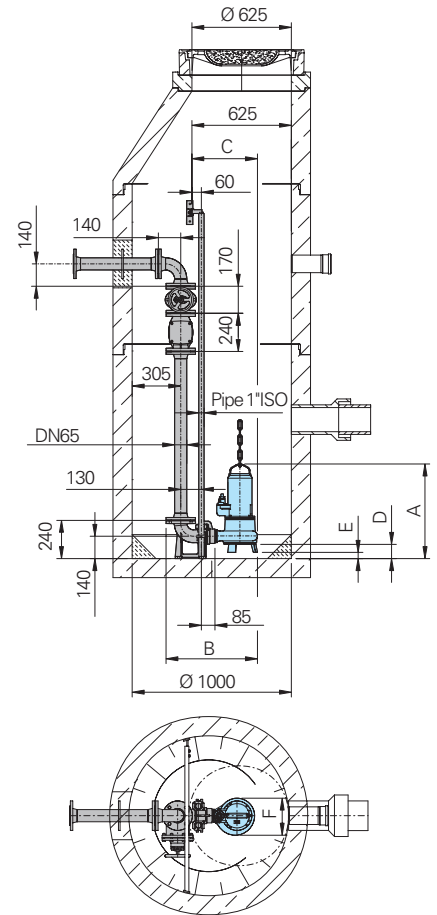
TP 50 V 40...



Typ	A	B	C	D	E	F	G
TP 50 V 17...(Ex)	481	559	396	81	16	231	611
							(487)
TP 50 V 26	557	575	412	89	39	232	612
TP 50 V 13							
TP 50 V 40	594	575	412	89	39	232	612

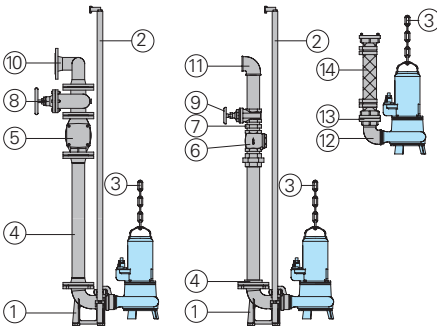


Wet well installation with auto-coupling system.



all dimensions in mm

Accessories



Part Description	Dimension	Part No.
① Auto-coupling system type KK65/R 2 1/2" with:		8604015
- Cast iron auto-coupling with flange	DN 65	
- Cast iron flanged pump coupling	BSP 2 1/2" F	
- Cast iron upper slide rail bracket	BSP 1"	

Part Description	Dimension	Part No.
② Steel galvanized guide rails, pair, per m	BSP 1"	2190135
③ Steel galvanized lifting chain	5 mm dia.	2800350
Steel galvanized shackle	Size 5/16"	2801450
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
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	2160002
	DN 65/65/80	2160004
⑪ 90° galvanized elbow	BSP 2 1/2" F	2113610
T-piece for twin-pump arrangement	BSP 2 1/2" F	2114308
⑫ 90° galvanized elbow	BSP 2 1/2" F/M	2111705
⑬ STORZ-fixed coupling	BSP 2 1/2" F	2010502
STORZ-hose coupling	B-75 mm dia.	2013502

Part Description	Dimension	Part No.
⑭ Synthetic pressure hose with rubber lining and couplings, B-75 mm dia.	length 10 m	2611210
	length 15 m	2611215
	length 20 m	2611220
	length 30 m	2611230
Reinforced hose, per m	75 mm dia.	2632075
Hose bands	85/20	2308520
○ Control box for pumps without level control, with overload protection, on-off switch		
- for 1 Ph-pumps (incl. capacitor) stand. model TP50 V17/2W		1918113
- for 1 Ph-pumps (incl. capacitor) Model Ex TP50V17/2WEx		1945030
- for 3 Ph-pumps standard		
Nominal current	2,5 up to 4,0 A	1926090
	4,1 up to 6,3 A	1926095
	6,4 up to 10,0 A	1926100
- for 3 Ph-pumps Model Ex		
Nominal current	2,5 up to 4,0 A	1926220
	4,1 up to 6,0 A	1926225
	6,1 up to 9,0 A	1926230
○ Control panel for single or twin pump stations for automatic operation		On request



HOMA Pumpenfabrik GmbH
P.O.Box 22 63, D-53814 Neunk.-Seelscheid
Tel. ++49(0)22 47/702-0, Fax ++49(0)22 47/702-44
e-mail: info@homa-pumpen.de
www.homapumps.com