



# Catalogue

**RESIDENTIAL TECHNOLOGY**

## JUNG PUMPEN, GERMANY



### CERTIFIED IN ACCORDANCE

DIN EN ISO 9001: 2015 (Quality) • DIN EN ISO 14001: 2015 (Environment) • RL 2014/34/EU (Atex)



### THE FORUM

Straightforwardness and classical stylistic idiom with openness and transparency reflect the center for communication and information.

On an area of 900 m<sup>2</sup> inside the FORUM, we have created seminar rooms that are designed to host a wide range of seminars:

- Residential technology
- Wastewater systems
- Pressure drainage systems
- Practice-related themes

We reserve the right to changes without notice on all illustrations, specified in the catalogue as well as changes on constructions and measurements, and the necessary choice from materials, if they are due to technical progress or serve the improvement. The images partly contain accessories.

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## CONTENT

<b>DRAINAGE PUMPS</b>	U3 - U5 - U6 - FLUTBOX - DRAINAGE SET - SIMER
<b>SUBMERSIBLE DRAINAGE PUMPS</b>	US - UB - MULTIDRAIN UV
<b>CONDENSATE PUMP FLOOR DRAINAGE PUMPS ABOVE FLOOR TANKS UNDERFLOOR SUMPS</b>	K2 PLUS PLANCOFIX HEBEFIX BAUFIX - SKS
<b>SEWAGE LIFTING STATIONS</b>	WCFIX - COMPLI
<b>SUBMERSIBLE PUMPS</b>	MULTICUT - MULTISTREAM - MULTIFREE
<b>SUMPS AND INSTALLATIONS SETS</b>	PKS - REPLACEMENT SET - INSTALLATION SETS
<b>PRESSURE PIPE CLEANING SYSTEM</b>	BREEZE
<b>CONTROL UNITS</b>	BASICLOGO - HIGHLOGO LEVEL CONTACT SENSOR - ALARM DEVICE



## OVERVIEW

### SUBMERSIBLE DRAINAGE PUMPS

SUBMERSIBLE DRAINAGE PUMPS	Free passage	Type	Page
Drainage pumps	10 mm	<b>U3K</b>	<b>5</b>
	10 mm	<b>U3K spezial</b>	<b>11</b>
	10/20 mm	<b>U5K</b>	<b>17</b>
First-Aid Set	10/20 mm	<b>Flutbox</b>	<b>23</b>
Drainage pumps	10/20 mm	<b>U6K</b>	<b>25</b>
Installation sets guide rail system		<b>Easyfix 32</b>	<b>31</b>
	10 mm	<b>Drainageset</b>	<b>37</b>
Submersible utility pump	2 mm	<b>SIMER 5</b>	<b>41</b>

# OVERVIEW

## SUBMERSIBLE DRAINAGE PUMPS - ACCESSORY

### ACCESSORY

Type	Code no.	U3K U3K spez.	U3KS U3KS spez.	U5K	U5KS	U6K E	U6K D	U6K ES	U6K DS	Drainage- geset	Simer
SWING-TYPE CHECK VALVE R 32	JP09739	•	•	•	•	•	•	•	•		
SWING-TYPE CHECK 1 1/4", MOBILE USE	JP48845	•	•								•
DUPLEX SWING-TYPE CHECK DN 40	JP09155	•		•		•	•				
STOP VALVE DN 32 PN 16	JP44785	•	•	•	•	•	•	•	•		
STOP VALVE DN 40 PN 16	JP44786	•	•	•	•	•	•	•	•		
BALL VALVE DN 32 PVC	JP46111	•	•			•	•	•	•		
ELAST. CONNECTION 1 1/4"	JP44773	•	•	•	•	•	•	•	•		
HOSE BAND CLAMP 1 1/4"	JP44785	•	•	•	•	•	•	•	•		
HOSE COUPLING 1 1/4"	JP00327	•	•	•	•	•	•	•	•		•
SOLID FIRE HOSE COUPLING C, 1 1/4 "	JP44780			•	•	•	•	•	•		
HOSE CONNECTION 38/32/25	JP44209	•	•	•	•	•	•	•	•		
HOSE SET 15 M	JP43550	•	•	•	•	•	•	•	•		
SPECIAL FLOAT LOW SWITCH. POINTS	JP44795		•								
SPECIAL FLOAT LOW SWITCH. POINTS U5/U6	JP44207				•			•	•		
SPECIAL FLOAT NARROW CHAMBERS	JP40856		•		•			•	•		
FLOAT FIXATION	JP42175		•		•			•	•		
GUIDE RAIL SYSTEM GR 32	JP44000	•	•	•	•	•	•	•	•		
SUPPORT FOR GUIDE RAIL EXTENSION GR 32	JP28314	•	•	•	•	•	•	•	•		
EASYFIX 32 SINGLE	JP50308		•		•			•			
EASYFIX 32 DUO	JP50307		•		•			•			
CONNECTION KIT DN 32	JP44609	•	•	•	•	•	•	•	•		
ALARM UNIT AG3	JP44891	•	•	•	•	•	•	•	•		
ALARM UNIT AG10	JP44892	•	•	•	•	•	•	•	•		
ALARM UNIT AG20	JP48851									•	
ALARM UNIT WASHING MACHINE STOP AW3	JP44895	•	•	•	•	•	•	•	•		
SIMER LEVEL CONTROL	JP46884										•
COUNTERWEIGHT	JP44803	•		•		•	•				
BASICLOGO BD 00 E	JP45735	•		•		•					
BASICLOGO BD 00	JP45993						•				
HIGHLOGO 2-00 E	JP47996	•		•		•					
HIGHLOGO 2-00	JP47997						•				
SMART HOME FTJP	JP47209	•		•		•	•				
SUBM. SWITCH PACK B	JP16725	•		•		•	•				
SUBM. SWITCH PACK BMG	JP16726	•		•		•	•				
RECHARGEABLE BATTERY 9 V	JP44850	•	•	•	•	•	•	•	•		

## U3

### DRAINAGE PUMPS

- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- Moisture sealed cable inlet
- Fluid temperature 35 °C, temporarily 60 °C (10 min.)



#### DESCRIPTION

The U3 K(S) are versatile submersible pumps for stationary and portable use. GID technology for more operational safety, an integrated flushing device to reduce deposits and the integrated low level pumping to remove flooding ensure many years of trouble-free operation.

The U3 K(S) pump rainwater, slightly polluted water or domestic wastewater (grey water), also from household dishwashers and washing machines (also high temperature).

In stationary use they remove the water from drains in cellars, laundries or storerooms and serve as a flood protection. Sliding guide rail systems offer the advantages of quick and easy maintenance. The Easyfix installation sets are particularly convenient. They are pre-assembled ready to plug in and can be installed as single or double systems.

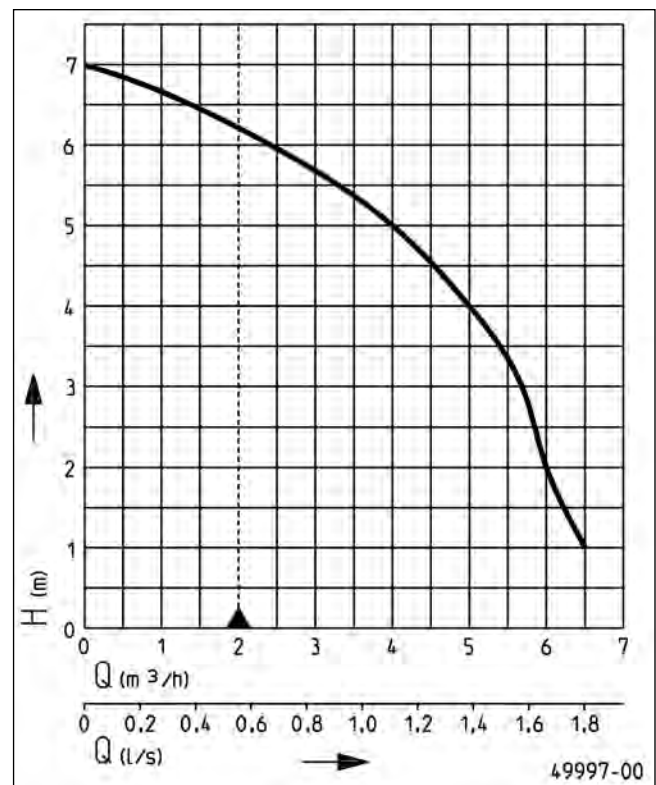
The U3 K(S) can be combined with the above- and underfloor tanks of the Hebefix and Baufix series.

Should the sump or tank temporarily run dry, the pump is automatically vented via an opening in the discharge elbow.

The U3 K(S) must not be used for pumping wastewater containing faeces or wastewater from urinal systems

If submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100. For construction sites and garden ponds, a H07-type cable must be used.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
U3 K/KS	Flow rate Q [m³/h]	6.5	6.0	5.7	5.0	4.0	2.4

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# U3

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump ready for connection acc. to EN 12050 with 90°, 1/4" female connection elbow with integrated self-ventilation, cable and plug, S model with automatic level float switch.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	10 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Rotary shaft seal	Motor housing	Stainless steel
Oil chamber	Yes	Pump housing	GRP
Seal on medium side	2-fold rotary shaft seals	Submersible	Yes
		Pressure outlet	1 1/4"

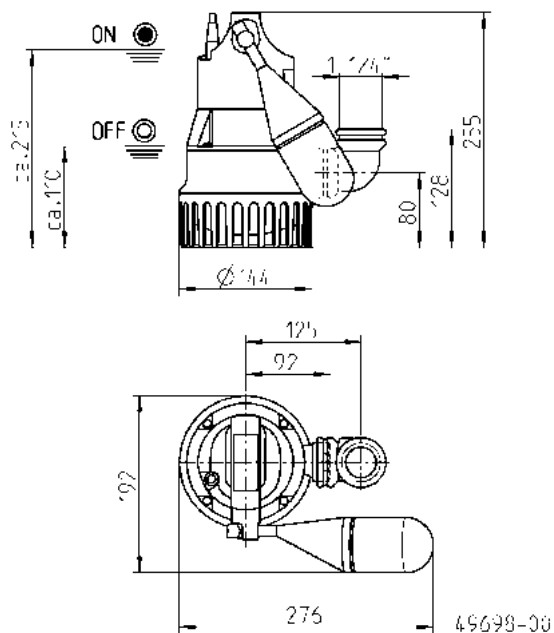
### ELECTRICAL DATA

Voltage	1/N/PE-230 V	Insulation class	F
Motor rating P1	0.32 kW	Winding thermostat	Yes
Motor rating P2	0.2 kW	Motor protection	Integrated
Current	1.4 A	Plug	Safety
Type of enclosure	IP 68		

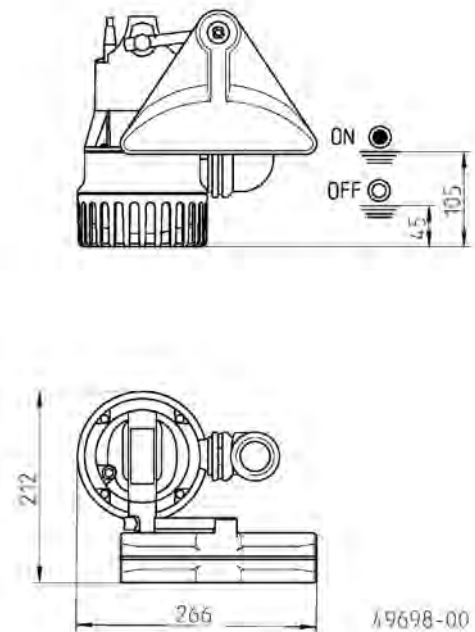
### U3

Type	Code No.	Power line	Wires	Weight
<b>Without level control</b>				
U3 K, 10 m cable	JP50002	10m H05RN-F	3G0,75	3.7 kg
<b>With built-in level control</b>				
U3 KS, 4 m cable	JP50000	4m H05RN-F	3G0,75	3.4 kg
U3 KS, 10 m cable	JP50001	10m H07RN-F	3G1,0	4.3 kg

### Dimensions and switching points U3 KS (mm)



### Dimensions and switching points special float (mm)

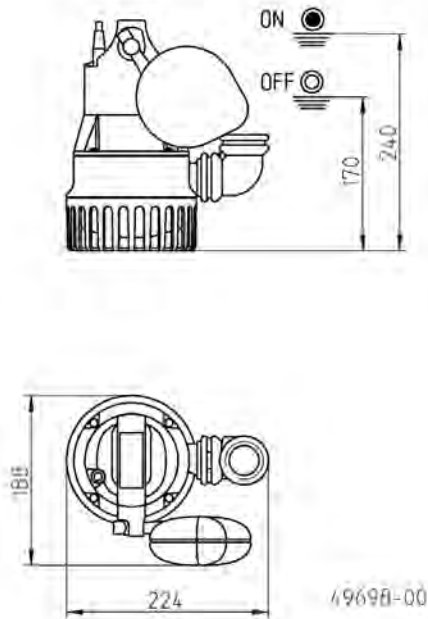




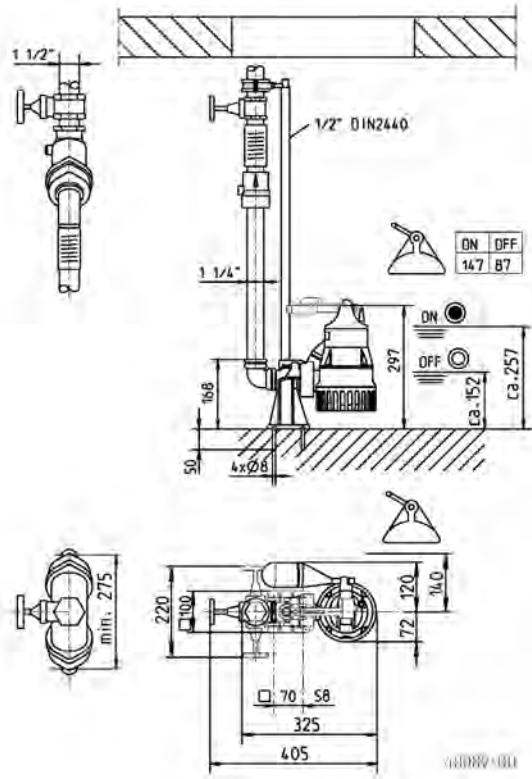
# U3

## DRAINAGE PUMPS

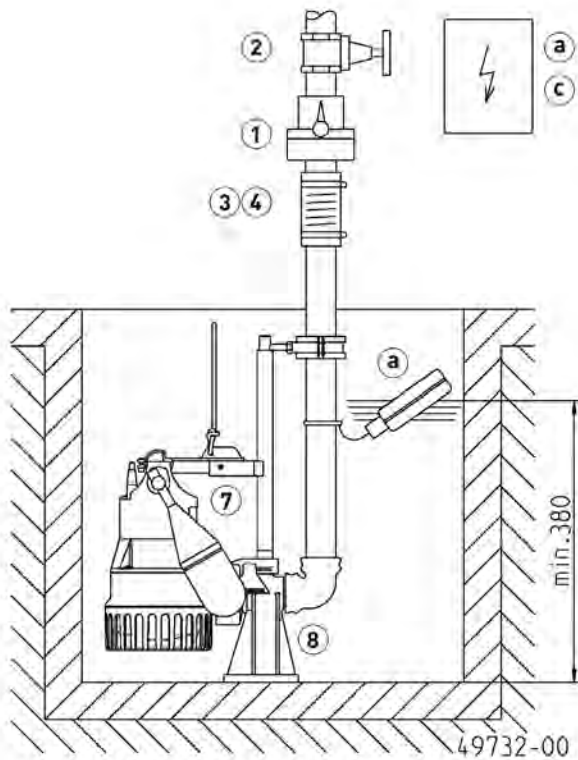
### Dimensions and switching points special float (mm)



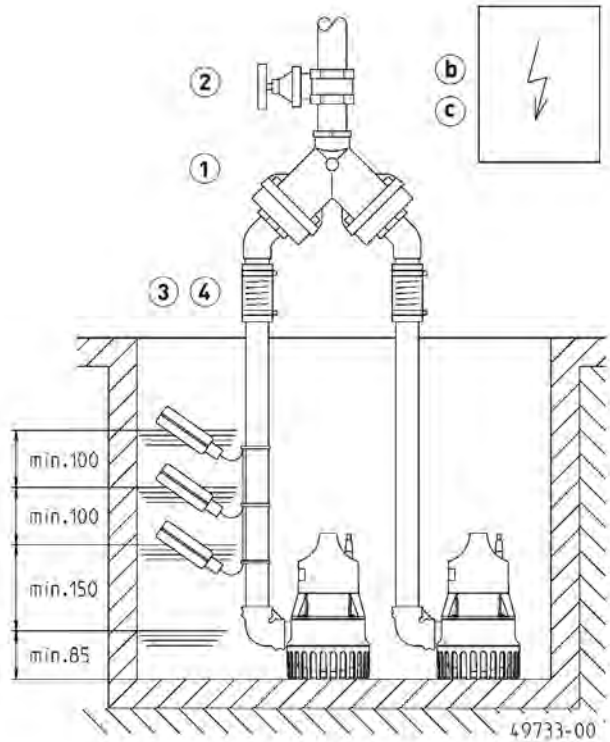
### Dimensions GR 32 (mm)



### Example of single pump installation with GR



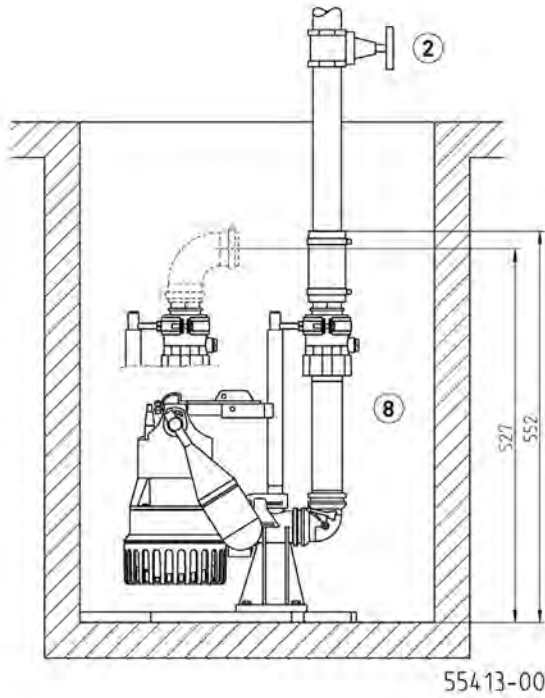
### Example of duplex installation



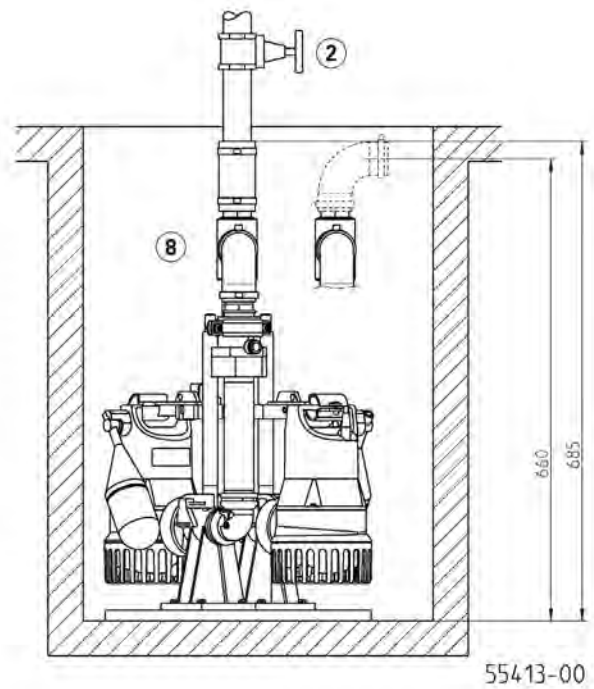
# U3

## DRAINAGE PUMPS

**Example of installation and dimensions Easyfix 32 Single (mm)**



**Example of installation and dimensions Easyfix 32 Duo (mm)**



Single unit with GR: sump area min. 40x50 cm or Ø 50 cm  
 Single unit without GR: sump area min. 40x40 cm or Ø 40 cm  
 Duplex unit with GR: sump area min. 50x50 cm, Ø 60 cm  
 Duplex unit without GR: sump area min. 50x50, Ø 55 cm  
 Single unit Easyfix 32 Single: sump min. 30x40 cm, Ø40 cm  
 Duplex unit Easyfix 32 Duo: sump min. 45x40 cm, Ø55 cm  
 Duplex unit Easyfix 32 Duo with special float: sump min. 50x50 cm Ø70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.  
 In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.  
 Suspend control unit in a dry room


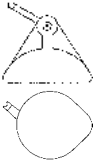





### MECHANICAL ACCESSORY

				Code No.
	<b>1 Swing-type check valve</b>			
	R32 EN 12050-4	1/4" (DN 32), PN 4	90x90 (HxB)	JP09739
	1/4" (DN 32)	for transportable use	90x90 (HxB)	JP48845
	DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	JP09155
	<b>2 Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
	<b>3 Elastic connection</b>	1/4" (DN 32), PN 3	100x42 (HxD)	JP44773
	<b>4 Hose band clamp</b>	1/4"		JP44765
	<b>5 Hose coupling</b>			
	Hose coupling	1/4" (DN 32) brass, for transportable use		JP00327
	House connection	1/4" - 38/32/25		JP44209


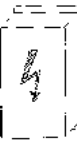



# U3

## DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.
	<b>6</b> Hose set	1 1/4" (DN32), 15 m PVC hose c/w elbow	JP43550
	<b>7</b> Special float	for lower switching points	JP44795
		for narrow chambers (mind. 30x30 od Ø30 cm)	JP40856
	Float fixation	for continuous pump operation	JP42175
	<b>8</b> Guide rail system	GR 32	JP44000
	Support for guide rail extension	ex 2 m sump depth, per m 1 piece	JP28314
	Easyfix 32 Single	ready-to-connect installation set	JP50308
	Easyfix 32 Duo	ready-to-connect installation set with control unit for duplex units	JP50307
	<b>9</b> Connection kit	DN 32, with telescopable pressure pipe 30-90 cm	JP44609

### ELECTRICAL ACCESSORY

			Code No.
	<b>a</b> Alarm unit		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	<b>b</b> Control for duplex units		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>c</b> Rechargeable battery	for mains independent alarm	JP44850
	<b>d</b> Smart Home	FTJP radio transmitter	JP47209

# U3

## DRAINAGE PUMPS

## U3 SPEZIAL DRAINAGE PUMPS

- For saline solutions up to 15 % salinity
- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- SiC mechanical seal
- Moisture sealed cable inlet



### DESCRIPTION

The U3 K(S) special is a variant of the U3 K(S) designed to pump aggressive media such as brine from water softeners, brackish water, condensate from gas condensing boilers, silage liquid, whey or liquid fertilizer.

Residential grey water from dish washers or washing machines (even boil wash program) or outdoor applications like drainage or rainwater can easily be handled by this pump.

Depending on the application it can be used either in a fix installation or as a mobile pump. For fix installations the pump can be combined with existing sumps but also with a variety of our chemically resistant tanks.

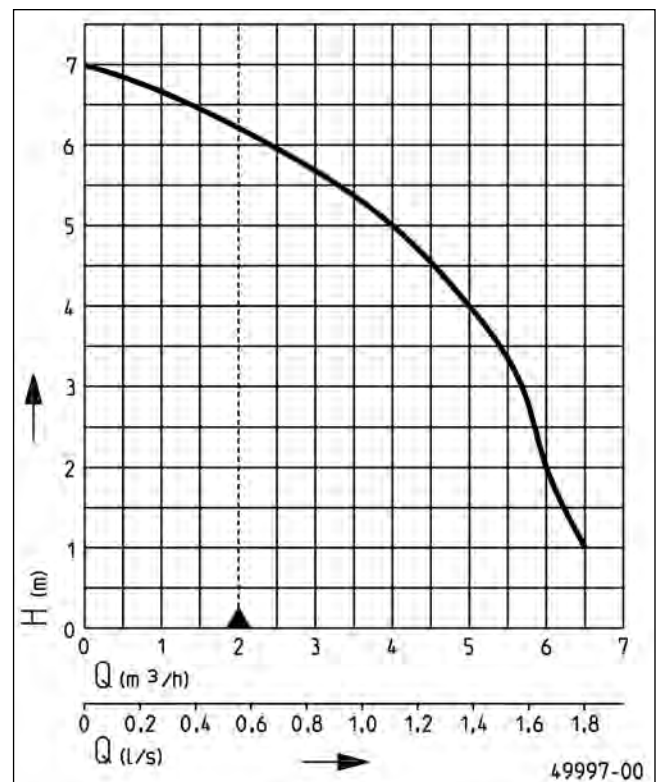
Aggressive media are not precisely specified and occur in countless different compositions. In order to provide reliability and warranty, please contact our technical support for consultancy.

The U3 K(S) special provides the same technical features like the standard model U3 K(S). Guide rail systems offer the advantages of quick and easy maintenance. The Easyfix installation sets are particularly convenient. They are pre-assembled ready to plug in and can be installed as single or duplex systems.

Despite its high range of possible applications, the U3 K(S) special must not be used to pump effluent containing faeces or wastewater from urinal systems.

If submersible pumps are being used outdoors, the mandatory minimum length of the power cord is 10m. This is a directive from the VDE regulation 0100.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
U3K/U3KS special	Flow rate Q [m³/h]	6.5	6.0	5.7	5.0	4.0	2.4

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# U3 SPEZIAL

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump ready for connection acc. to EN 12050 with 90°, 1/4" female connection elbow, cable and plug, S model with automatic level float switch.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	10 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Rotary shaft seal	Motor housing	Stainless steel
Oil chamber	Yes	Pump housing	GRP
Seal on medium side	SiC mechanical seal	Submersible	Yes
		Pressure outlet	1 1/4"

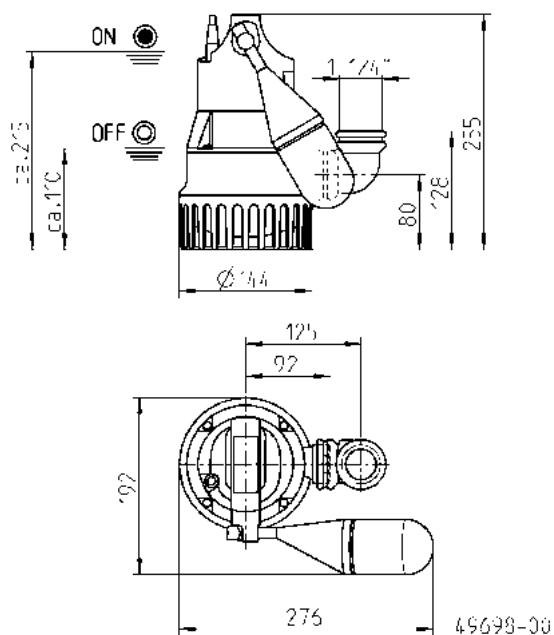
### ELECTRICAL DATA

Voltage	1/N/PE-230 V	Type of enclosure	IP 68
Motor rating P1	0.32 kW	Insulation class	B
Motor rating P2	0.22 kW	Winding thermostat	Yes
Current	1.4 A	Motor protection	Integrated
Wires	3G1,0	Plug	Safety

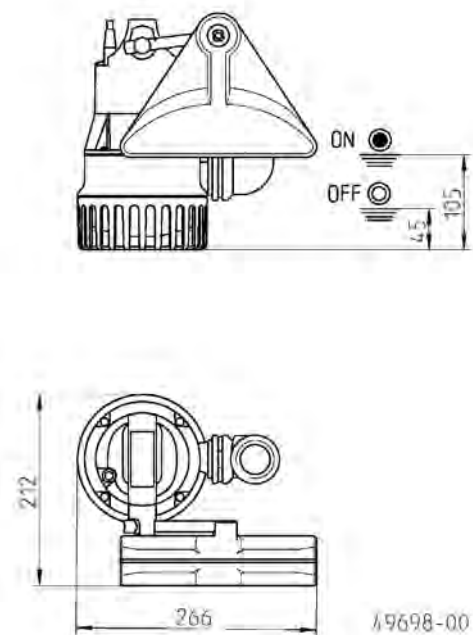
### U3 SPEZIAL

Type	Code No.	Power line	Weight
<b>Without level control</b>			
U3K spezial, 10 m cable	<b>JP50007</b>	10m H07RN-F	4.1 kg
<b>With built-in level control</b>			
U3KS spezial, 4 m cable	<b>JP50005</b>	4m H07RN-F	3.7 kg
U3KS spezial, 10 m cable	<b>JP50006</b>	10m H07RN-F	4.4 kg

### Dimensions and switching points U3KS spec. (mm)



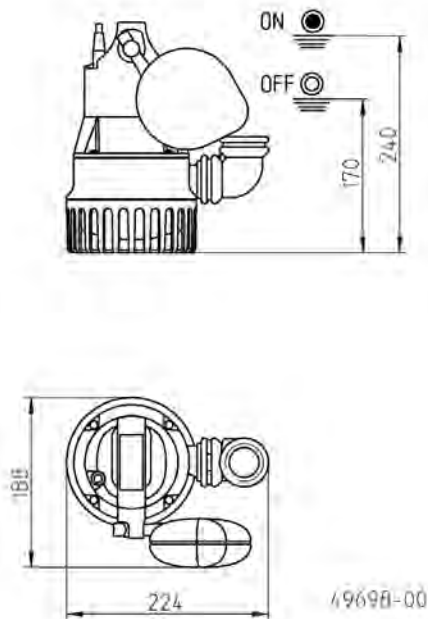
### Dimensions and switching points special float (mm)



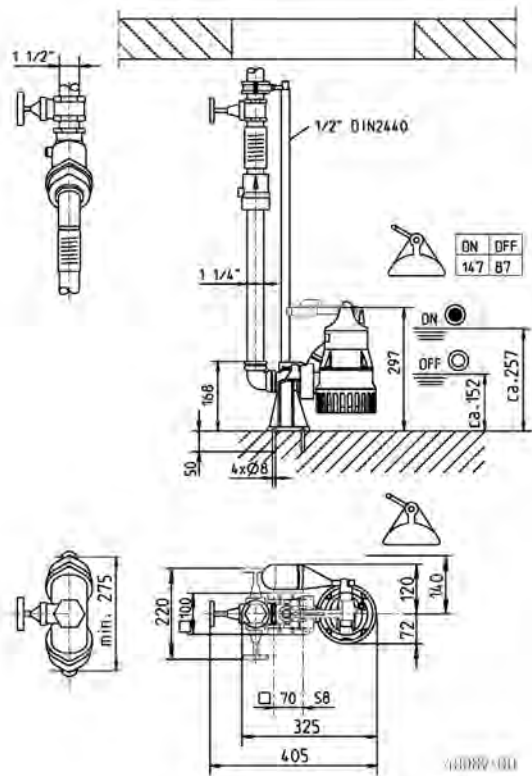
# U3 SPEZIAL

## DRAINAGE PUMPS

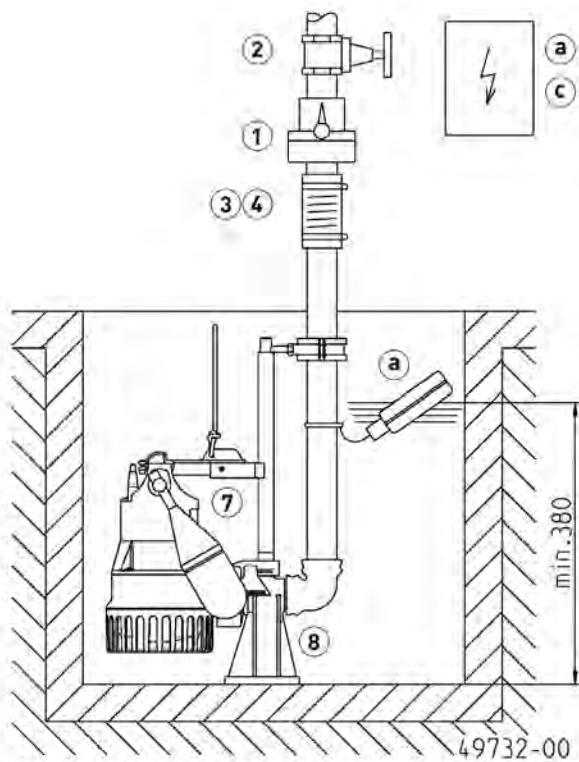
### Dimensions and switching points special float (mm)



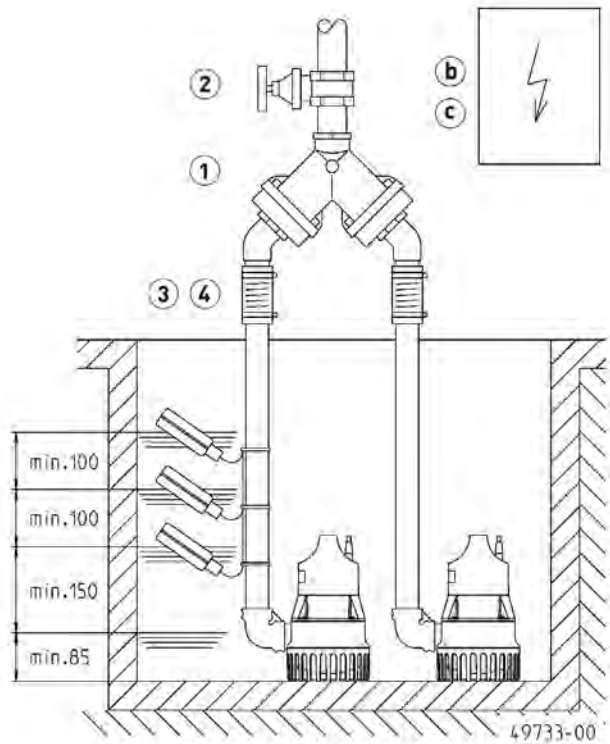
### Dimensions GR (mm)



### Example of single pump installation with GR



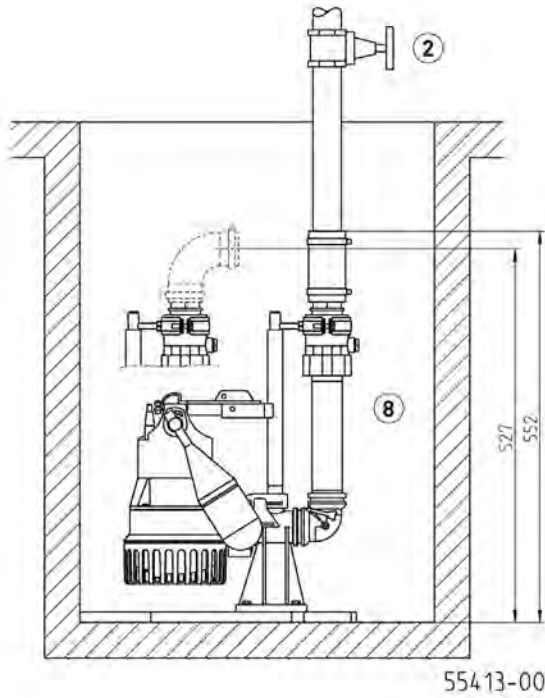
### Example of duplex installation



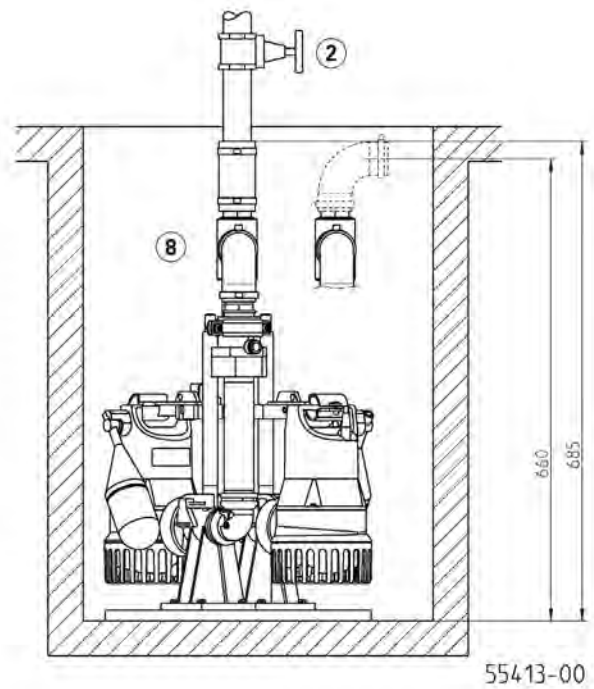
# U3 SPEZIAL

## DRAINAGE PUMPS

**Example of installation and dimensions Easyfix 32 Single (mm)**










**Example of installation and dimensions Easyfix 32 Duo (mm)**



Single unit with GR: sump area min. 40x50 cm or Ø 50 cm  
 Single unit without GR: sump area min. 40x40 cm or Ø 40 cm  
 Duplex unit with GR: sump area min. 50x50 cm, Ø 60 cm  
 Duplex unit without GR: sump area min. 50x50, Ø 55 cm  
 Single unit Easyfix 32 Single: sump min. 30x40 cm, Ø40 cm  
 Duplex unit Easyfix 32 Duo: sump min. 45x40 cm, Ø55 cm  
 Duplex unit Easyfix 32 Duo with special float: sump min. 50x50 cm Ø70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.  
 In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.  
 Suspend control unit in a dry room

### MECHANICAL ACCESSORY


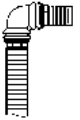
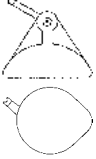



				Code No.
	<b>① Swing-type check valve</b>			
	R32 EN 12050-4	1/4" (DN 32), PN 4	90x90 (HxB)	<b>JP09739</b>
	1/4" (DN 32)	for transportable use	90x90 (HxB)	<b>JP48845</b>
	DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	<b>JP09155</b>
	<b>② Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	<b>JP44785</b>
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	<b>JP46111</b>
	<b>③ Elastic connection</b>	1/4" (DN 32), PN 3	100x42 (HxD)	<b>JP44773</b>
	<b>④ Hose band clamp</b>	1/4"		<b>JP44765</b>



# U3 SPEZIAL

## DRAINAGE PUMPS






### MECHANICAL ACCESSORY

			Code No.
	<b>5 Hose coupling</b>	1 1/4" (DN 32) brass, for transportable use	JP00327
		Hose connection	JP44209
	<b>6 Hose set</b>	1 1/4" (DN32), 15 m PVC hose c/w elbow	JP43550
	<b>7 Special float</b>	for lower switching points	JP44795
		for narrow chambers (mind. 30x30 od Ø30 cm)	JP40856
	Float fixation	for continuous pump operation	JP42175
	<b>8 Guide rail system</b>	GR 32	JP44000
		Support for guide rail extension	ex 2 m sump depth, per m 1 piece JP28314
		Easyfix 32 Single	ready-to-connect installation set JP50308
		Easyfix 32 Duo	ready-to-connect installation set with control unit for duplex units JP50307
	<b>9 Connection kit</b>	DN 32, with telescopable pressure pipe 30-90 cm	JP44609

# U3 SPEZIAL

## DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	<b>b Control for duplex units</b>		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Smart Home</b>	FTJP radio transmitter	JP47209

## U5

### DRAINAGE PUMPS

- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device
- Variable discharge branch with closable ventilation
- Run dry protection
- 10/20 mm free passage with EIP technology
- Moisture sealed cable inlet



#### DESCRIPTION

The U5K(S) is an extremely powerful and versatile centrifugal submersible pump for both stationary and portable use. The pump is suitable for faecal-free wastewater with solids up to 10 mm particle size. Thanks to the removable strainer base, it is possible to increase the free passage to 20 mm.

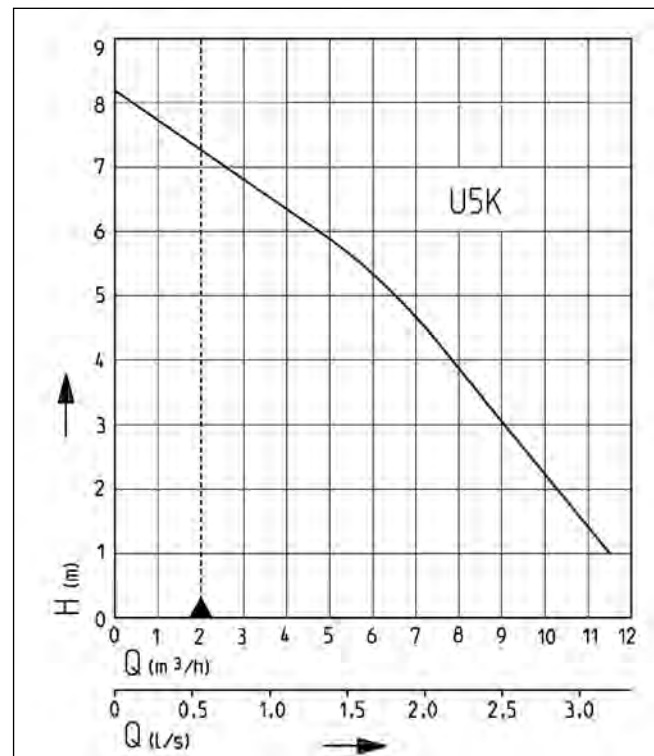
Stationary in a basement chamber or a collecting tank, with an automatic switch attached, the U5KS handles all dirty water arising from domestic drainage sources such as washing machines, dishwashers, washstands, etc. Deposit accumulation in the reservoirs and chambers is reduced to a minimum by means of a flushing device.

Guide rail systems offer the advantages of quick and easy maintenance. The Easyfix installation sets are particularly convenient. They are pre-assembled ready to plug in and can be installed as single or duplex systems. If the sump or tank runs dry temporarily, the pump can be vented by providing a drill-hole in the spiral housing.

The U5K can be used as a portable unit for dealing with dirty water from garden ponds, flooded cellars or discharge chambers in laundry rooms or storage rooms. Thanks to its shallow, built-in suction system, it can reduce residual water level to no more than a few millimeters.

If submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100. For construction sites and garden ponds, a H07-type cable must be used.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7
U5K/U5KS	Flow rate Q [m³/h]	11.5	10.5	9.0	7.5	6.5	4.5	2.5

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# U5

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump ready for connection acc. to EN 12050 with 90°, 1/4" female connection elbow, cable and safety plug, swing-type check valve for mobile use, S model with automatic level float switch.

The pump is delivered fitted with a strainer base which can be swapped for any of the accompanying pedestals in cases where a 20 mm clear passage is required.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	20 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Rotary shaft seal	Motor housing	Stainless steel
Oil chamber	Yes	Pump housing	GRP
Seal on medium side	2-fold rotary shaft seals	Submersible	Yes
		Pressure outlet	1 1/4"

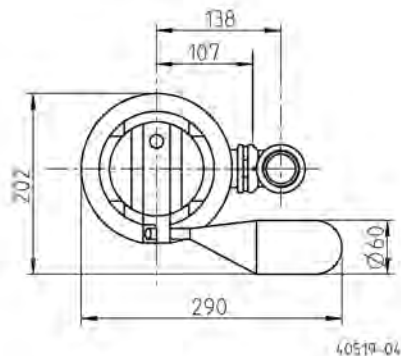
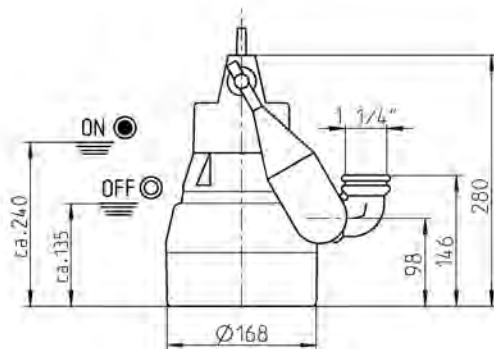
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Insulation class	B
Motor rating P1	0.52 kW	Winding thermostat	Yes
Motor rating P2	0.38 kW	Motor protection	Integrated
Current	2.3 A	Plug	Safety
Type of enclosure	IP 68		

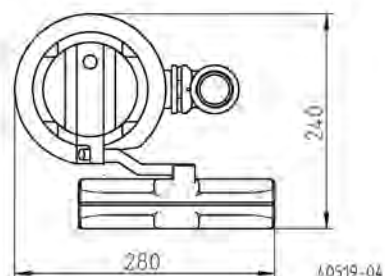
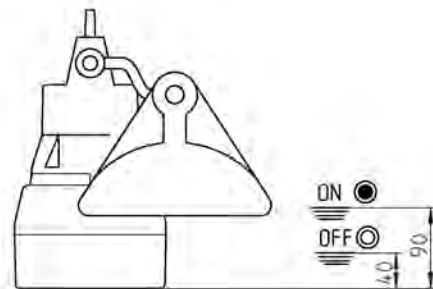
### U5

Type	Code No.	Power line	Wires	Weight
<b>Without level control</b>				
U5K, 10 m cable	<b>JP09386</b>	10m H05RN-F	3G0,75	4.7 kg
<b>With built-in level control</b>				
U5KS, 4 m cable	<b>JP09387</b>	4m H05RN-F	3G0,75	4.5 kg
U5KS, 10 m cable	<b>JP09417</b>	10m H07RN-F	3G1,0	5.4 kg

### Dimensions and switching points U5KS (mm)



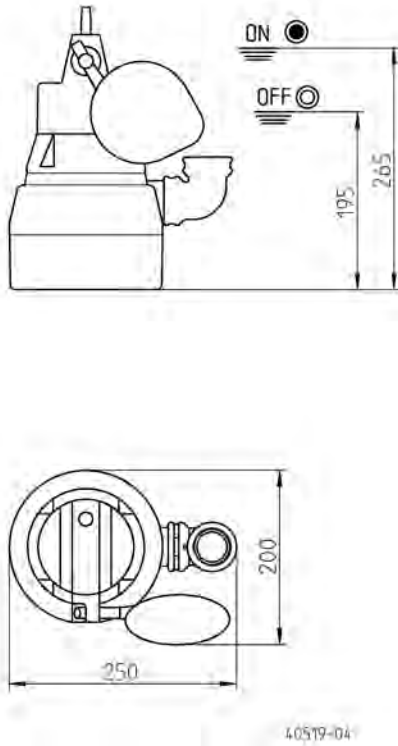
### Dimensions and switching points special float switch (mm)



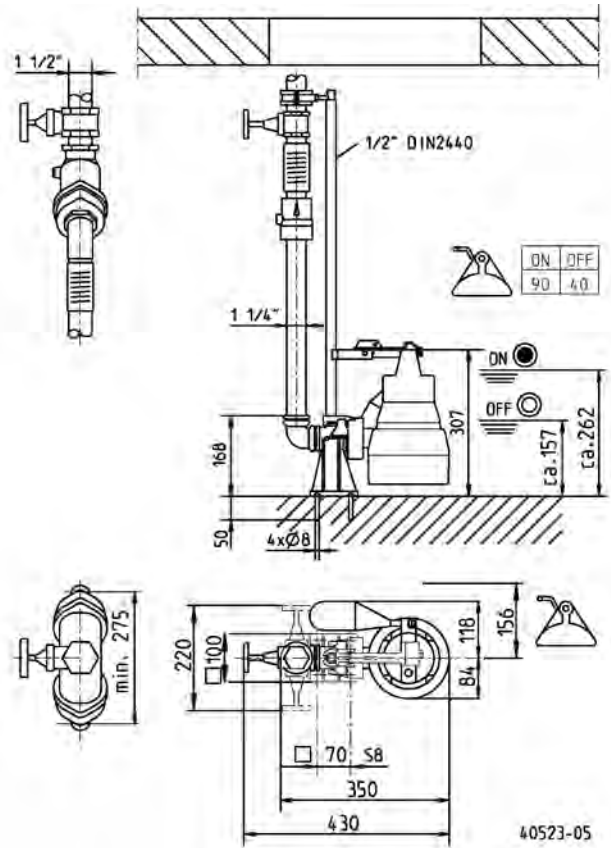
# U5

## DRAINAGE PUMPS

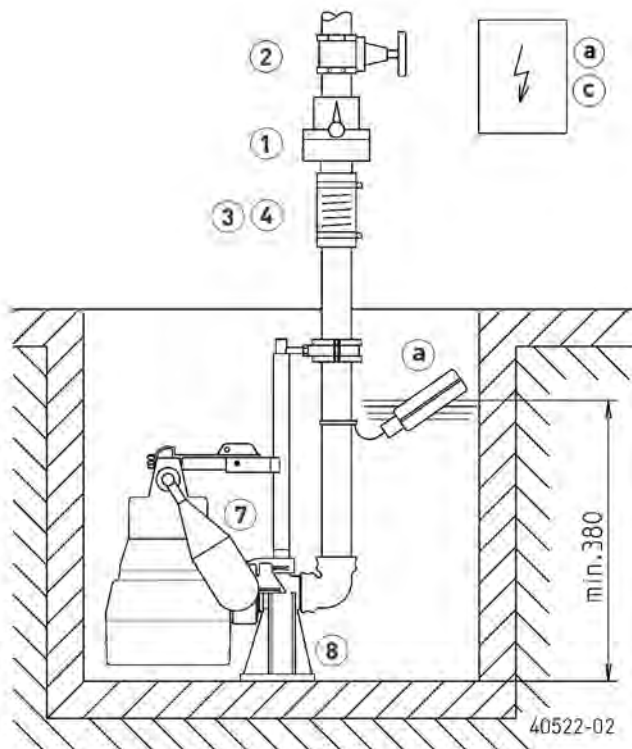
Dimensions and switching points float switch (mm)



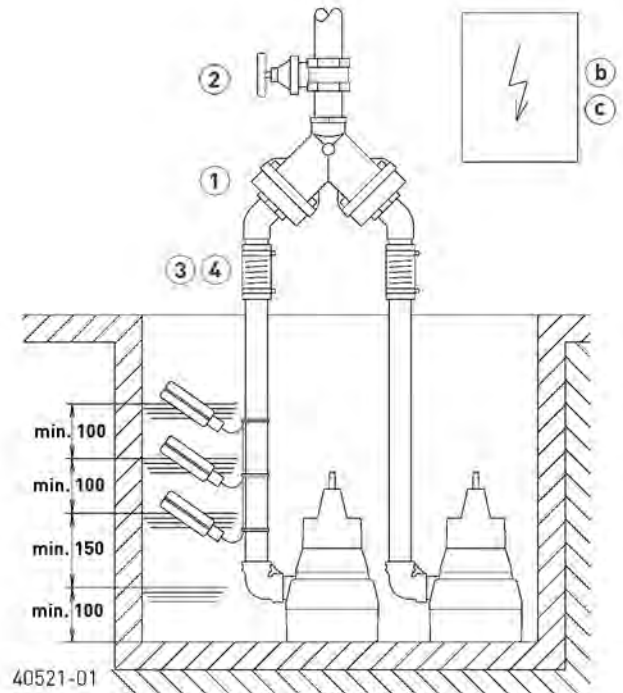
Dimensions and switching points GR 32 (mm)



Example of single pump installation with GR



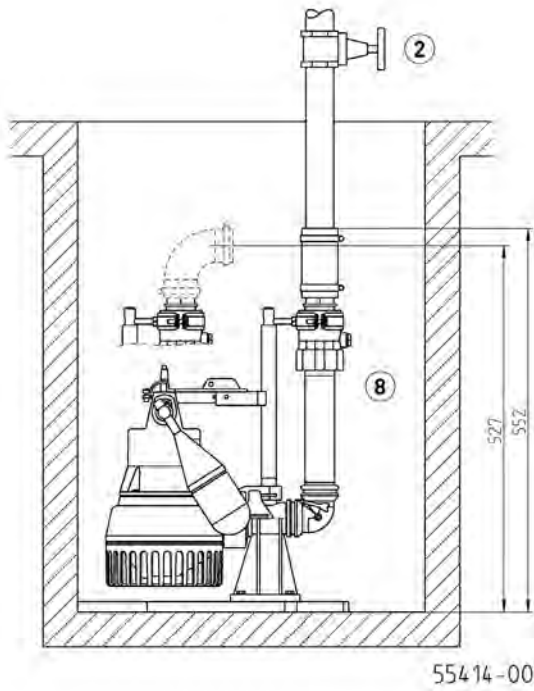
Example of duplex installation



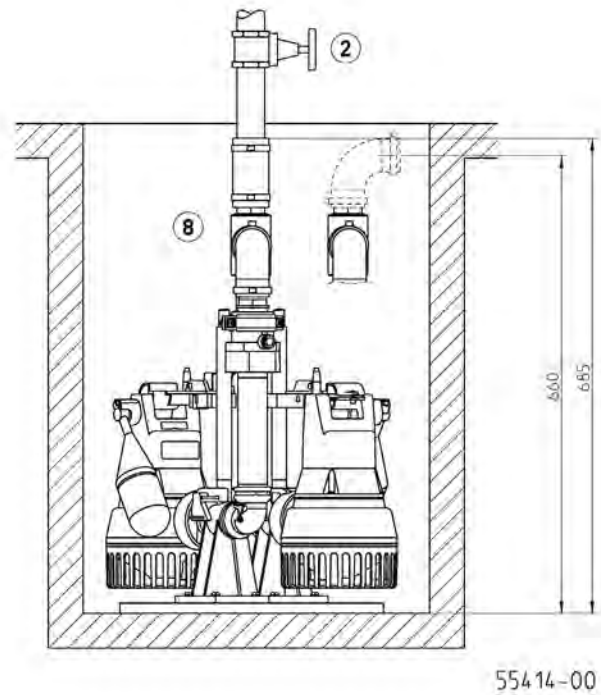
# U5

## DRAINAGE PUMPS

Example of installation and dimensions Easyfix 32 Single (mm)



Example of installation and dimensions Easyfix 32 Duo (mm)



Single unit with GR: sump area min. 40x50 cm or Ø 50 cm  
 Single unit without GR: sump area min. 40x40 cm or Ø 40 cm  
 Duplex unit with GR: sump area min. 50x50 cm, Ø 60 cm  
 Duplex unit without GR: sump area min. 50x50, Ø 55 cm  
 Single unit Easyfix 32 Single: sump min. 30x40 cm, Ø40 cm  
 Duplex unit Easyfix 32 Duo: sump min. 50x40 cm, Ø55 cm  
 Duplex unit Easyfix 32 Duo with special float: sump min. 50x50 cm Ø70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.  
 In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.  
 Suspend control unit in a dry room

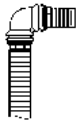






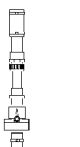

### MECHANICAL ACCESSORY

				Code No.
	<b>1</b> Swing-type check valve			
	R32 EN 12050-4	1¼" (DN 32), PN 4	90x90 (HxB)	JP09739
	DR 40 EN 12050-4	1½" (DN 40), PN 4	200x280 (HxB)	JP09155
	<b>2</b> Stop valve			
		1¼" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
	<b>3</b> Elastic connection			
		1¼" (DN 32), PN 3	100x42 (HxD)	JP44773
	<b>4</b> Hose band clamp			
		1¼"		JP44765
	<b>5</b> Hose coupling			
	Hose coupling	1¼" (DN 32) brass, for transportable use		JP00327
	Coupling Storz C	1 1/4" male thread		JP44780
	Coupling wrench			JP25708
	House connection	1¼" - 38/32/25		JP44209






# U5

## DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.
	<b>6</b> Hose set	1 1/4" (DN32), 15 m PVC hose c/w elbow	JP43550
	<b>7</b> Special float	for lower switching points (U5 and U6)	JP44207
		for narrow chambers (mind. 30x30 od Ø30 cm)	JP40856
	Float fixation	for continuous pump operation	JP42175
	<b>8</b> Guide rail system	GR 32	JP44000
	Support for guide rail extension	ex 2 m sump depth, per m 1 piece	JP28314
	Easyfix 32 Single	ready-to-connect installation set	JP50308
	Easyfix 32 Duo	ready-to-connect installation set with control unit for duplex units	JP50307
	<b>9</b> Connection kit	DN 32, with telescopable pressure pipe 30-90 cm	JP44609

### ELECTRICAL ACCESSORY

			Code No.
	<b>a</b> Alarm unit		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	<b>b</b> Control for duplex units		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>c</b> Rechargeable battery	for mains independent alarm	JP44850
	<b>d</b> Smart Home	FTJP radio transmitter	JP47209

# U5

## DRAINAGE PUMPS



**FLUTBOX**  
DRAINAGE PUMPS



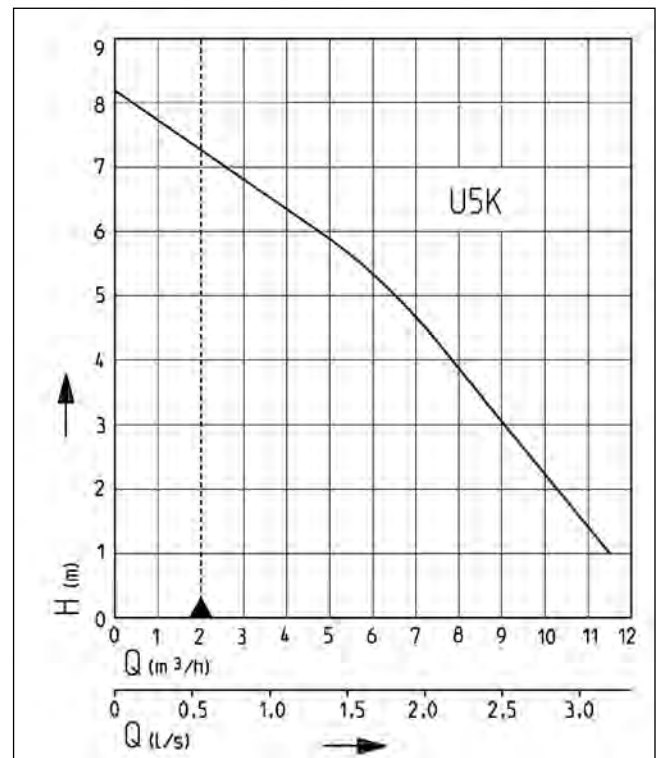
- With powerful submersible drainage pump U5KS
- Pump with cooling jacket for motor housing
- Quick and easy hose connection with C-coupling
- Float fixation for continuous operation
- Wall mounting for storage

**DESCRIPTION**

The "Flutbox" is a first aid kit for draining basements in an emergency. Just place the pump with its carrying cage on the floor and pump out the water quickly and reliably via the 12.5 m pressure hose (Ø 52 mm). When the float is locked, the pump will continue to operate until the remaining water is 35 mm deep.

The U5KS can be used as a fixed or mobile system, with or without its carrying cage, in the house and garden. If the foot strainer is removed, the free passage of 20 mm can be fully utilised.

**PERFORMANCE**



Type	Delivery head H [m]	1	2	3	4	5	6	7
Flutbox	Flow rate Q [m³/h]	11.5	10.5	9.0	7.5	6.5	4.5	2.5

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# FLUTBOX

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

1 U5KS cellar drainage pump; 1 pressure hose, 12.5 m long, with C coupling (C52); 1 carrying cage with integrated pump fixing; 1 float fixation.

### MECHANICAL DATA

Pump	Vertical single-stage	Shaft	Stainless steel
Free passage	20 mm	Impeller	Vortex impeller, GFK
Bearing	Ball bearings, grease-lubricated	Motor housing	Stainless steel
Seal on motor side	Rotary shaft seal	Pump housing	GRP
Oil chamber	Yes	Submersible	Yes
Seal on medium side	2-fold rotary shaft seals	Pressure outlet	C-coupling
Run dry protection	Yes	Weight	11 kg

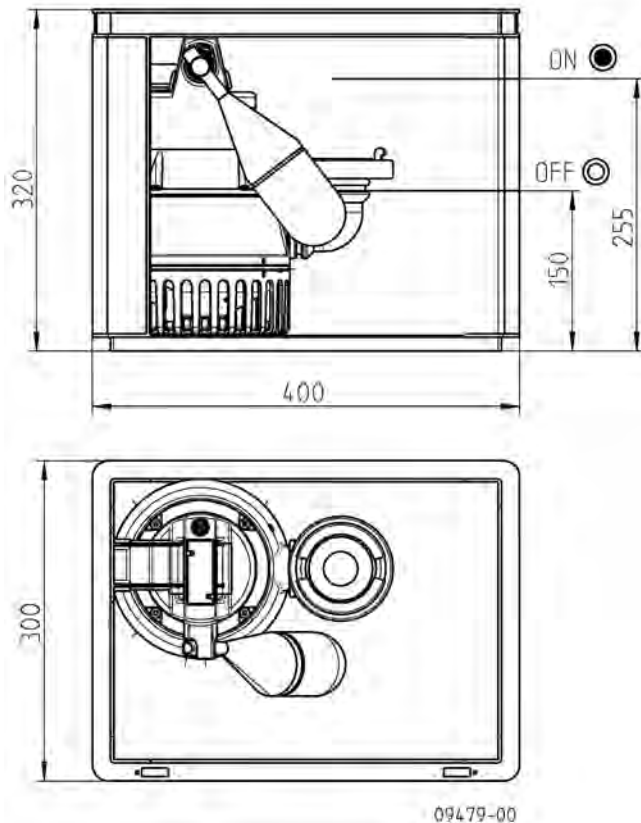
### ELECTRICAL DATA

Circuit	With built-in level control	Wires	3G1,0
Voltage	1/N/PE~230 V	Type of enclosure	IP 68
Motor rating P1	0.52 kW	Insulation class	B
Motor rating P2	0.38 kW	Winding thermostat	Yes
Current	2.3 A	Motor protection	Integrated
Power line	10m H07RN-F	Plug	Safety

### FLUTBOX

Type	Code No.
Flutbox	JP09479

### Dimensions Flutbox mm



## U6 DRAINAGE PUMPS



- Cooling jacket for motor housing
- Flushing device
- Low level pumping by detachable strainer base
- SiC mechanical seal independent of sense of rotation
- Run dry protection
- 10/20 mm free passage with EIP technology
- Replaceable moisture sealed cable inlet

### DESCRIPTION

The U6K range of pumps is suitable for stationary and portable use.

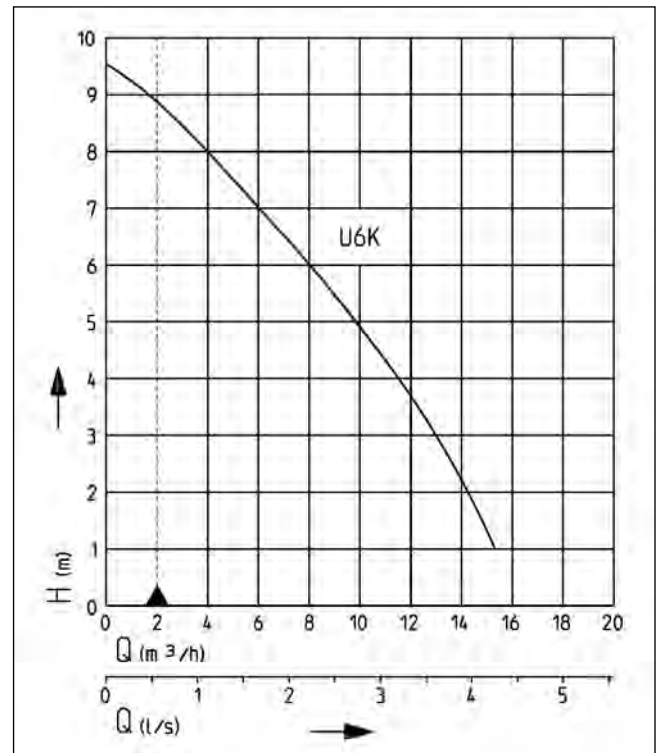
It can be used as a drainage pump for mildly contaminated waste and ground water, in sumps with rain water, drainage or seepage water, silage liquor and also liquid manure. The high quality mechanical seal also makes the pump suitable for extracting abrasive media.

In stationary use the U6K ES/DS removes the waste water from domestic appliances such as dishwashers and washing machines (also high temperature). Guide rail systems offer the advantages of quick and easy maintenance. The Easyfix installation sets are particularly convenient. They are pre-assembled ready to plug in and can be installed as single or duplex systems. Our ready-to-install collecting tanks extend the options for installation and use.

For supporting sewage water with heavy pollution we recommend our US series. Especially for the transportable use, in building site areas for example, our building pumps UB should be used.

If centrifugal submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9
U6K E/D/ES/DS	Flow rate Q [m³/h]	15.5	14.5	13.0	11.5	9.5	8.0	6.0	4.0	1.5

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# U6

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump ready for connection acc. to EN 12050 with 90°, 1/4" female connection elbow, cable and plug, S model with automatic level float switch.

The pump is delivered with attached strainer base, which can be exchanged for the enclosed feet if 20 mm free passage is required.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	20 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Rotary shaft seal	Motor housing	Stainless steel
Oil chamber	Yes	Submersible	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	1 1/4"

### ELECTRICAL DATA

Motor rating P1	0.75 kW	Winding thermostat	Yes
Type of enclosure	IP 68	Motor protection	Integrated
Insulation class	B		

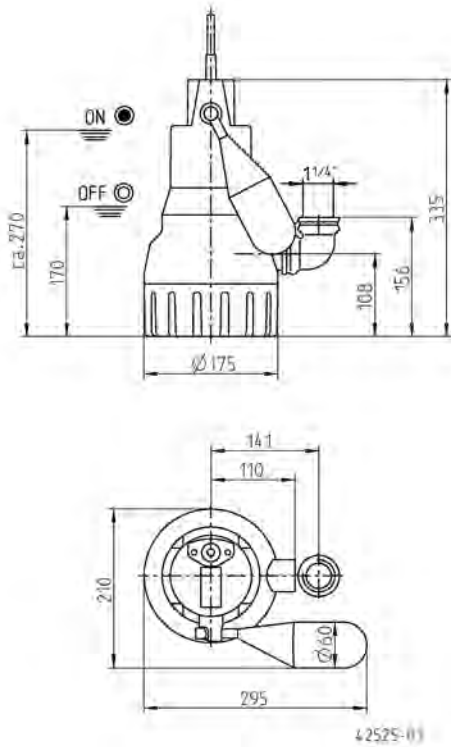
### U6

Type	Code No.	Voltage	Motor rating P2	Current	Power line	Wires	Plug	Weight
<b>Without level control</b>								
U6K E, 10 m cable	<b>JP00226</b>	1/N/PE~230 V	0.50 kW	3.3 A	10m H07RN-F	3G1,0	Safety	6.0 kg
U6K D, 10 m cable	<b>JP00228</b>	3/PE~400 V	0.55 kW	1.3 A	10m H07RN-F	4G1,0	CEE	6.5 kg
<b>With built-in level control</b>								
U6K ES, 4 m cable	<b>JP00227</b>	1/N/PE~230 V	0.50 kW	3.3 A	4m H07RN-F	3G1,0	Safety	5.5 kg
U6K DS, 4 m cable	<b>JP00229</b>	3/PE~400 V	0.55 kW	1.3 A	4m H07RN-F	4G1,0	CEE	5.9 kg
U6K ES, 10 m cable	<b>JP09260</b>	1/N/PE~230 V	0.50 kW	3.3 A	10m H07RN-F	3G1,0	Safety	6.2 kg
U6K DS, 10 m cable	<b>JP09261</b>	3/PE~400 V	0.55 kW	1.3 A	10m H07RN-F	4G1,0	CEE	6.8 kg

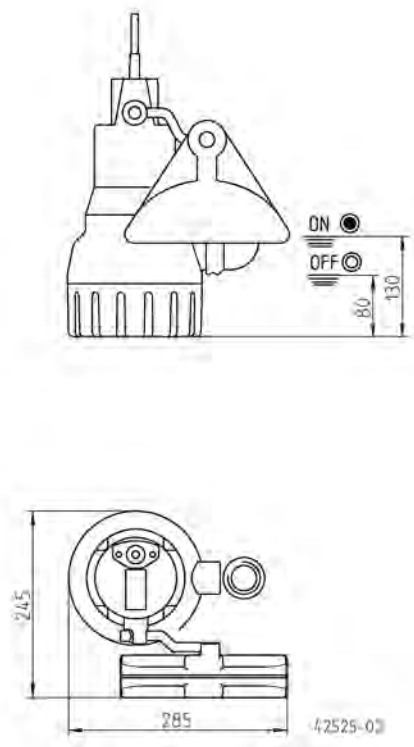
# U6

## DRAINAGE PUMPS

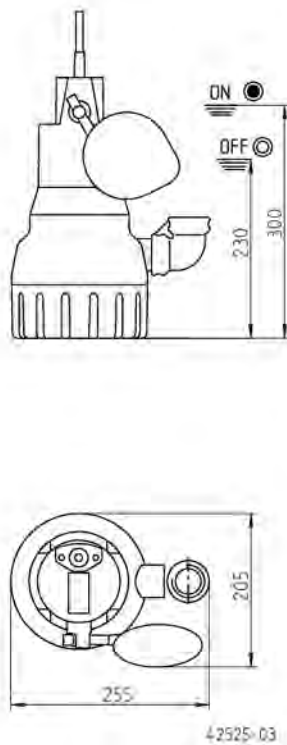
**Dimensions and switching points U6KS (mm)**



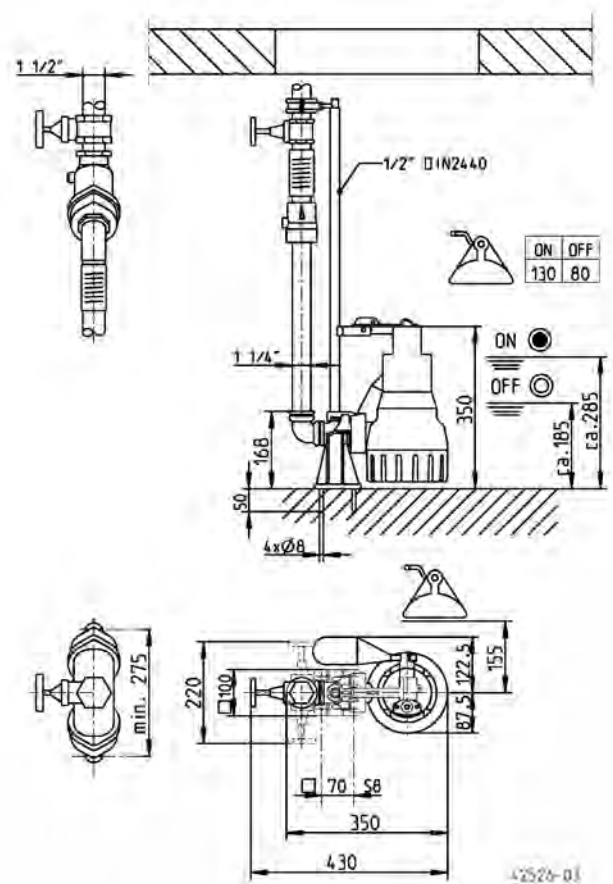
**Dimensions and switching points special float (mm)**



**Dimensions and switching points special float (mm)**



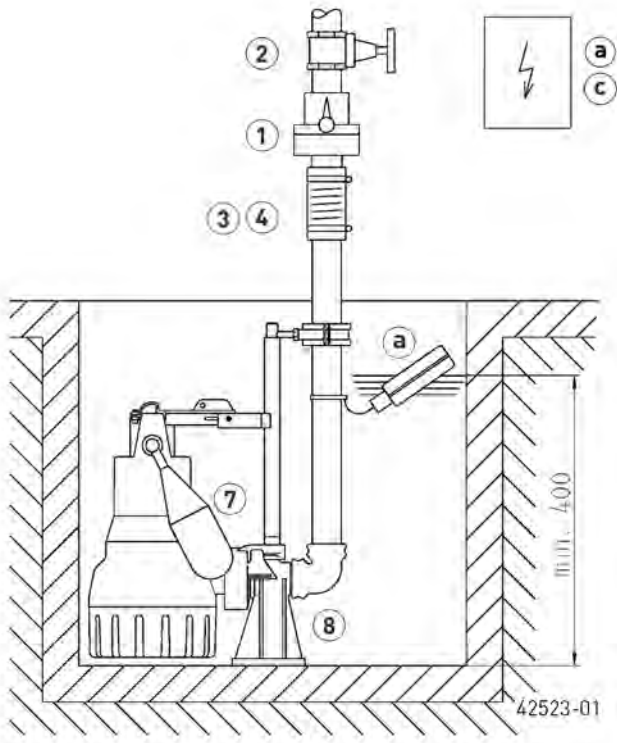
**Dimensions and switching points GR 32 (mm)**



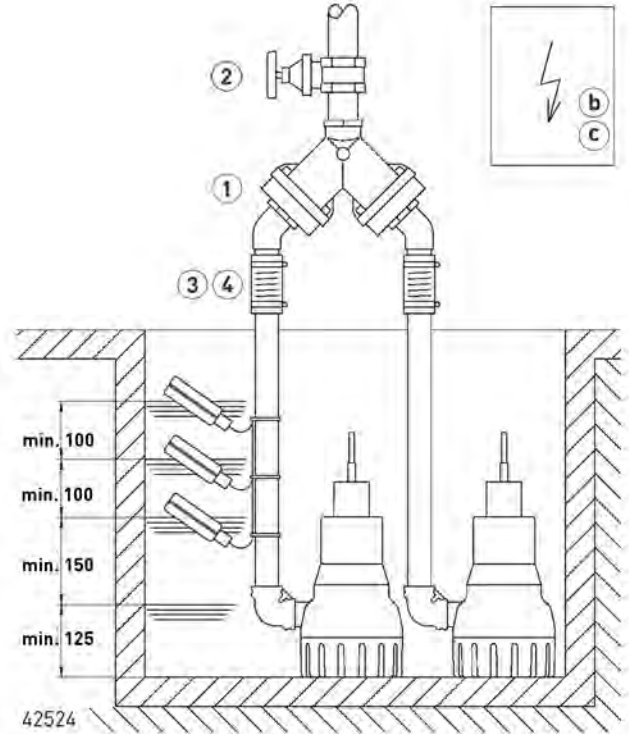
# U6

## DRAINAGE PUMPS

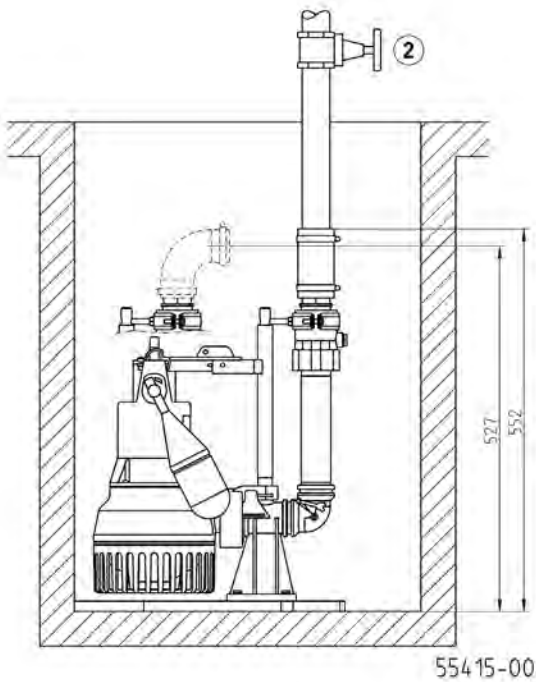
Example of single pump installation with GR



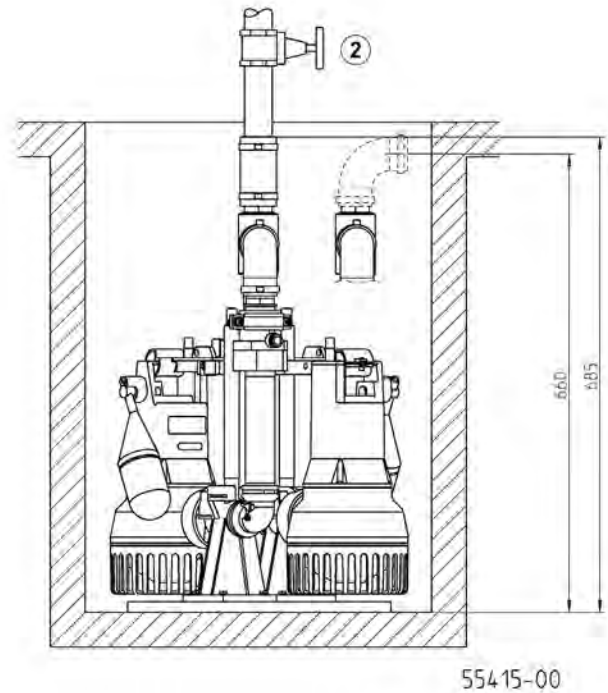
Example of duplex pump installation



Example of installation and dimensions Easyfix 32 Single



Example of installation and dimensions Easyfix 32 Duo





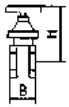


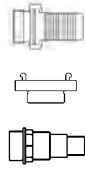

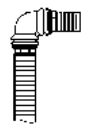




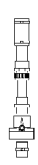
Single unit with GR: sump area min. 40x50 cm or Ø 50 cm  
 Single unit without GR: sump area min. 40x40 cm or Ø 40 cm  
 Duplex unit with GR: sump area min. 50x55 cm, Ø 65 cm  
 Duplex unit without GR: sump area min. 50x50, Ø 55 cm  
 Single unit Easyfix 32 Single: sump min. 30x45 cm, Ø 45 cm  
 Duplex unit Easyfix 32 Duo: sump min. 50x40 cm, Ø 60 cm  
 Duplex unit Easyfix 32 Duo with special float: sump min. 50x50 cm Ø 70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.  
 In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.  
 Suspend control unit in a dry room

# U6

## DRAINAGE PUMPS





### MECHANICAL ACCESSORY

				Code No.
	<b>① Swing-type check valve</b>			
	R32 EN 12050-4	1/4" (DN 32), PN 4	90x90 (HxB)	JP09739
				
	DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	JP09155
	<b>② Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
	<b>③ Elastic connection</b>	1/4" (DN 32), PN 3	100x42 (HxD)	JP44773
	<b>④ Hose band clamp</b>	1/4"		JP44765
	<b>⑤ Hose coupling</b>			
	Hose coupling	1/4" (DN 32) brass, for transportable use		JP00327
	Coupling Storz C	1 1/4" male thread		JP44780
	Coupling wrench			JP25708
	House connection	1/4" - 38/32/25		JP44209
	<b>⑥ Hose set</b>	1 1/4" (DN32), 15 m PVC hose c/w elbow		JP43550
	<b>⑦ Special float</b>	for lower switching points (U5 and U6)		JP44207
		for narrow chambers (mind. 30x30 od Ø30 cm)		JP40856
	Float fixation	for continuous pump operation		JP42175
	<b>⑧ Guide rail system</b>	GR 32		JP44000
	Support for guide rail extension	ex 2 m sump depth, per m 1 piece		JP28314
	Easyfix 32 Single	ready-to-connect installation set		JP50308
	Easyfix 32 Duo	ready-to-connect installation set with control unit for duplex units		JP50307
	<b>⑨ Connection kit</b>	DN 32, with telescopable pressure pipe 30-90 cm		JP44609

# U6

## DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	<b>b Control for duplex units</b>		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
	Control unit HIGHLOGO 2-00	400 V	JP47997
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Smart Home</b>	FTJP radio transmitter	JP47209



## EASYFIX DRAINAGE PUMPS

- Quick and easy installation
- Easyfix 32 Duo incl. control unit
- Ready to connect
- Guide rail system
- pre-assembled on base plate
- Compact design allows use in small chamber: 300x400 mm for single units / 500x500 mm for duplex units



### DESCRIPTION

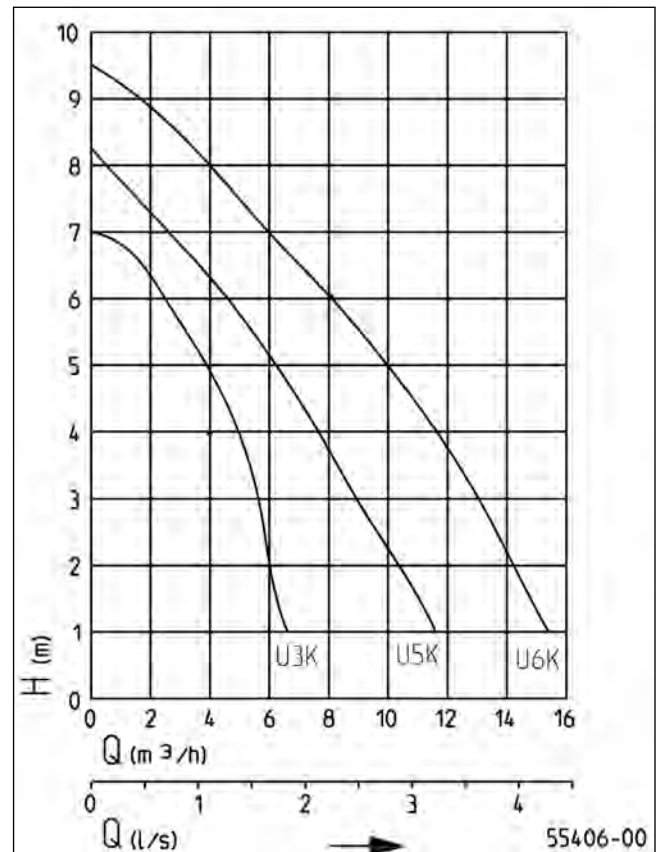
With the Easyfix 32 Single or Easyfix 32 Duo installation sets, drainage pumps can be installed as single or duplex pump stations in existing sumps inside or outside buildings with minimum (time) effort.

The sets are ready to use in and all necessary components are already pre-assembled on a base plate (H=15 mm) up to the connection to the pressure pipe.

In addition to the mechanical components, the Easyfix 32 Duo also includes a control unit. This control unit regulates the alternating operation of the two pumps and also ensures alarm messages and peak load operation. The pumps are operated by their regular attached float switches, so no external level control such as submersible ball float switches are required.

The U3 KS, U3 KS spezial, U5 KS and U6 K ES can be connected to both Easyfix sets. The pumps are not included in the scope of supply. The use of the special float for low switching points (pump accessory) is possible.

### PERFORMANCE



Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

# EASYFIX

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Easyfix 32 Single: Guide rail system on base plate, pressure pipe with check valve (completely pre-assembled), guide rail claw, flexible connection and clamps.

Easyfix 32 Duo: 2x guide rail system system on base plate, pressure pipes with check valves (completely pre-assembled), guide rail claws, flexible connection, clamps and control unit (1.5 m cable).

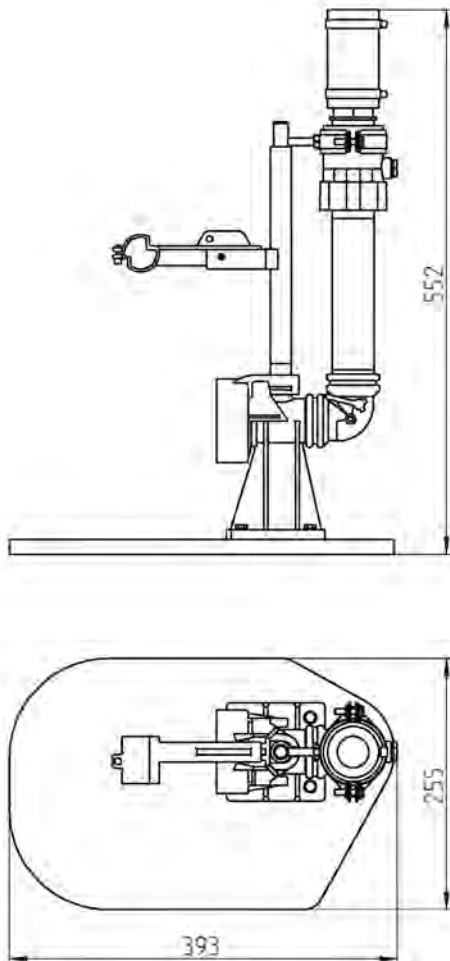
### EASYFIX

Type	Code No.	Weight
Easyfix 32 Duo	JP50307	6.9 kg
Easyfix 32 Single	JP50308	1.8 kg

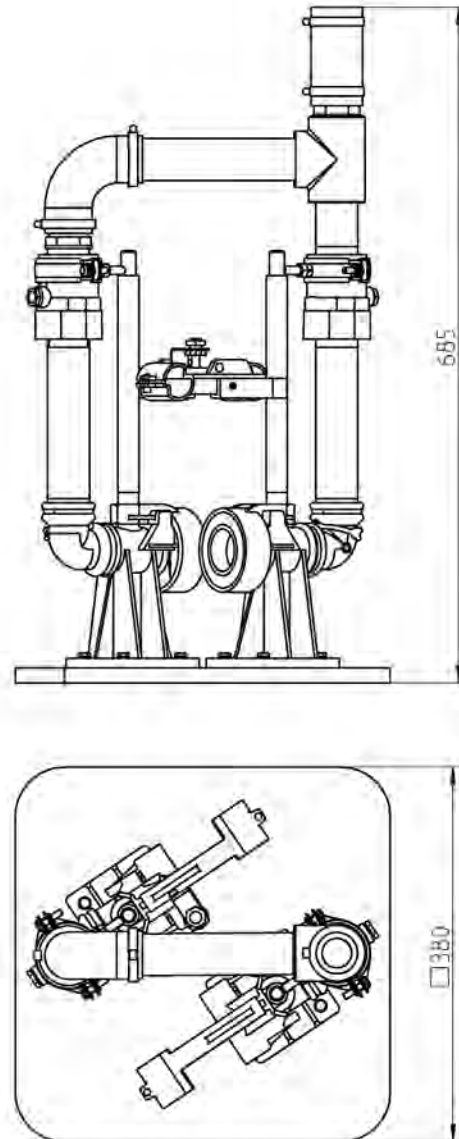
### POSSIBLE PUMPS

Easyfix	U5KS
U3KS/U3KS spezial	U6K ES

#### Dimensions Easyfix 32 Single (mm)



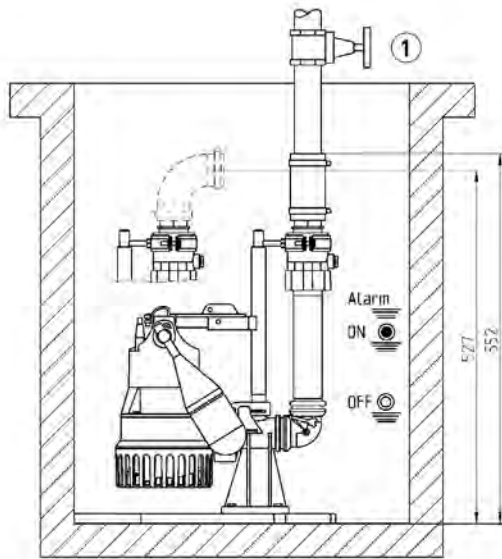
#### Dimensions Easyfix 32 Duo (mm)



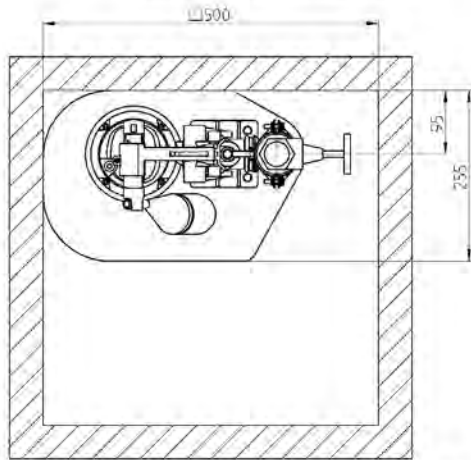
# EASYFIX

## DRAINAGE PUMPS

**Dimensions and switching points Easyfix 32 Single (mm)**

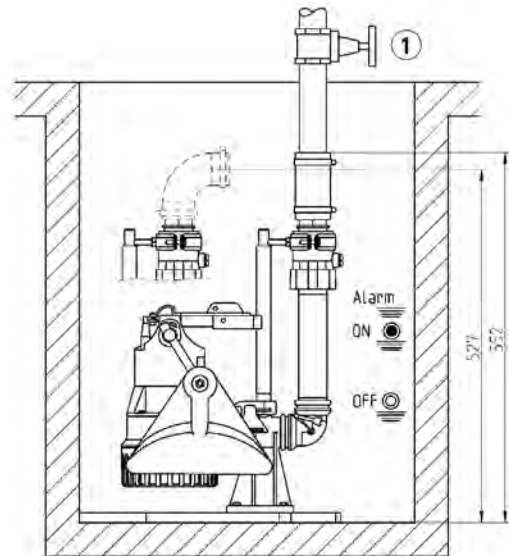


	U3 KS	U5 KS	U6K ES
ON	270	275	295
OFF	165	170	195
Alarm	320	345	400

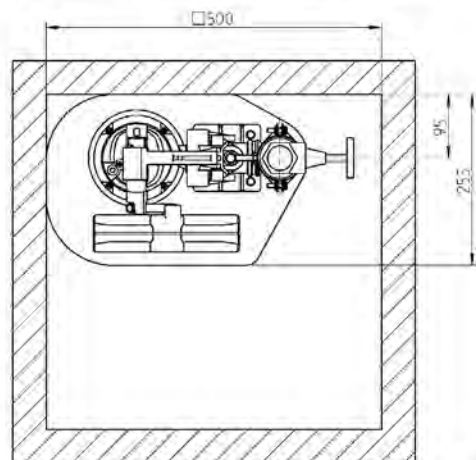


55351-00

**Dimensions and switching points special float (mm)**



	U3 KS	U5 KS	U6K ES
ON	160	125	155
OFF	100	75	105
Alarm	320	345	400

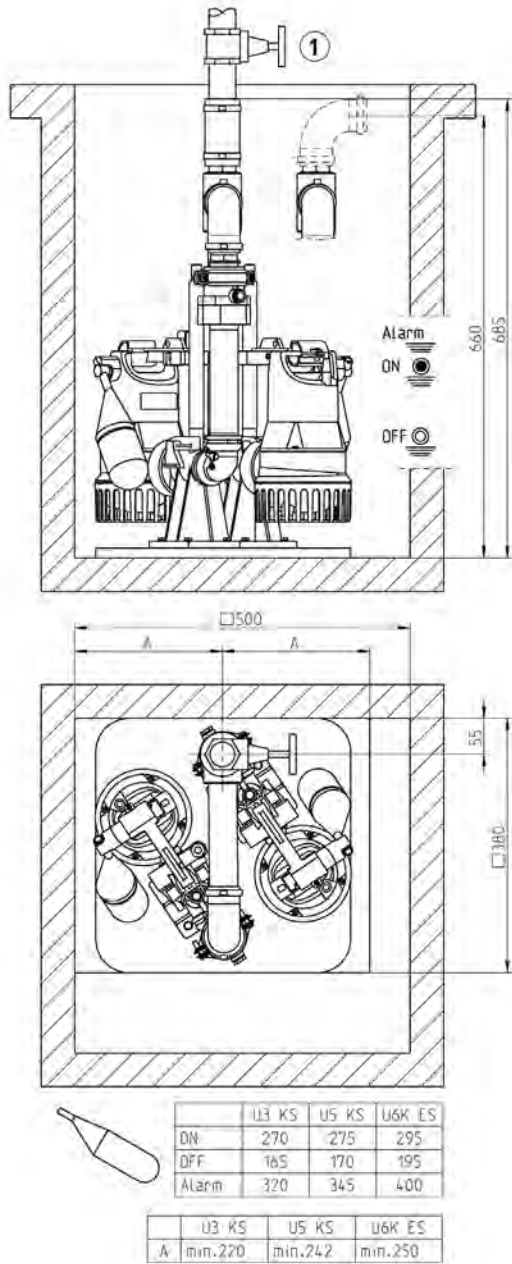


55352-00

# EASYFIX

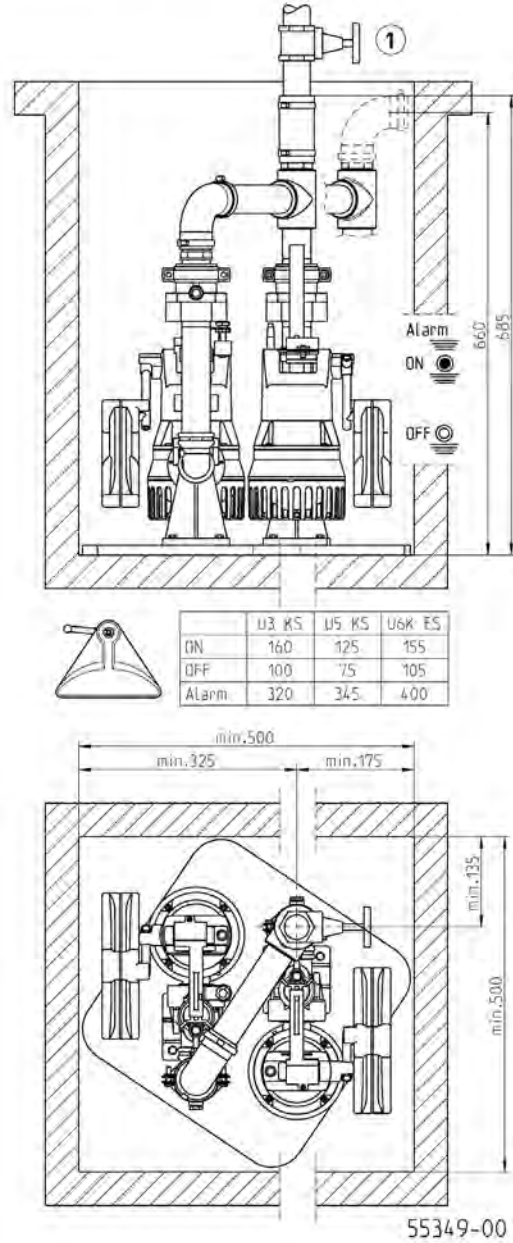
## DRAINAGE PUMPS

Example of installation Easyfix 32 Duo



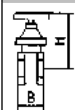
55348-00

Example of installation Easyfix 32 Duo with special float



55349-00

### MECHANICAL ACCESSORY



① Stop valve

1/4" (DN 32), PN 16

110x60 (HxB)


Code No.

JP44785

# EASYFIX

DRAINAGE PUMPS

## ELECTRICAL ACCESSORY

			Code No.
	<b>a</b> Rechargeable battery	for mains independent alarm	JP44850

# EASYFIX

DRAINAGE PUMPS

# DRAINAGESSET

## DRAINAGE PUMPS

- Ready to connect
- Powerful drainage pump
- Large scope of supply
- For abrasive media
- Cooling jacket for motor housing
- SiC mechanical seal independent of rotation direction

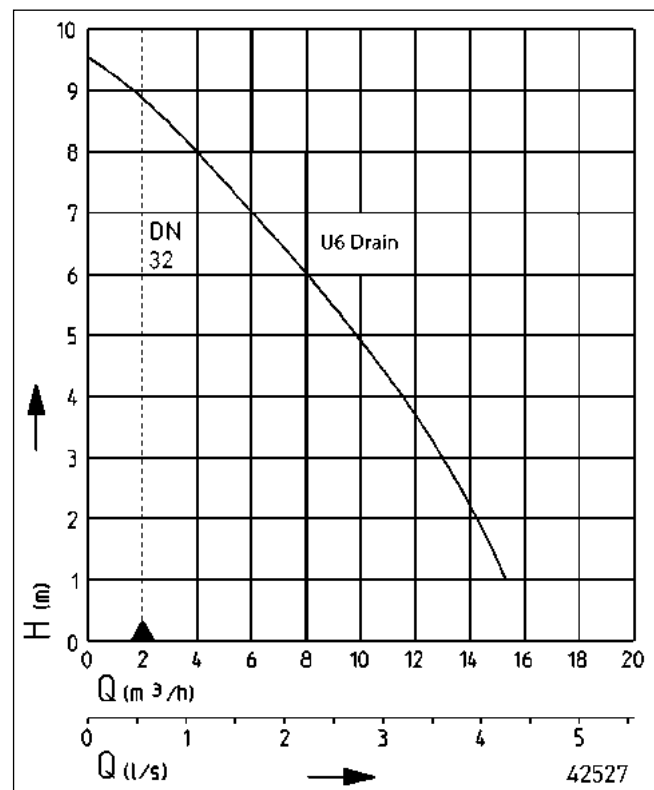


### DESCRIPTION

The Drainage Set reliably protects your building from mildly contaminated ground water. The set comes with the U6Drain ES drainage pump and is ready to plug in and use. The useful components contained in this set make it child's play to install and operate.

The powerful pump also handles drainage water with an abrasive sand content. Thanks to its slimline design, the drainage set fits in all standard drainage sumps with a sand trap from 280 mm internal diameter upwards. The mounting bracket stabilises the pump even in large sumps and ensures safe operation.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9
Drainageset	Flow rate Q [m³/h]	15.5	14.0	12.5	11.0	9.0	7.5	5.5	3.5	1.5

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

# DRAINAGESET

## DRAINAGE PUMPS

### SCOPE OF SUPPLY

Drainage Set: Drainage pump U6 Drain ES, special float, swing-type check valve, hose nozzle with clamp, mounting bracket, 5 m lifting rope, 20 m cable, manual- 0- automatic

control switch.

Hose set: Elbow, 2 x hose nozzle, hose clamp, 15 m PVC spiral hose  $\varnothing$  40 mm, hose clamp with wing bolt.

### MECHANICAL DATA

Pump	Vertical single-stage	Shaft	Stainless steel
Free passage	10 mm	Impeller	Vortex impeller, GFK
Bearing	Ball bearings, grease-lubricated	Motor housing	Stainless steel
Seal on motor side	Rotary shaft seal	Submersible	Yes
Oil chamber	Yes	Mounted circuit	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	1 1/4"
Run dry protection	Yes	Weight	9 kg

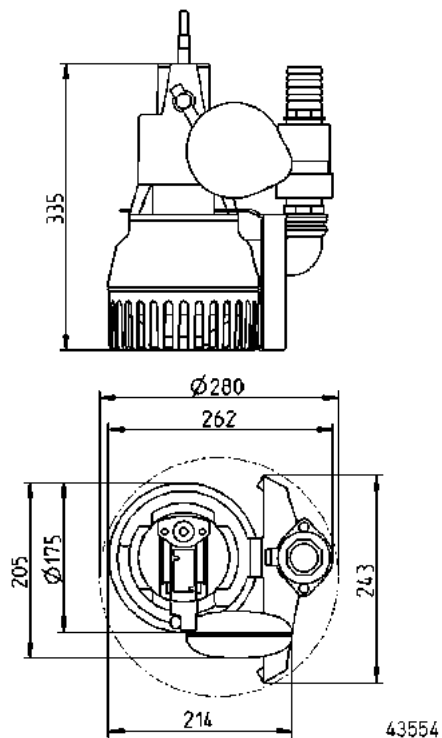
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Type of enclosure	IP 68
Motor rating P1	0.75 kW	Insulation class	B
Motor rating P2	0.49 kW	Winding thermostat	Yes
Current	3.3 A	Motor protection	Integrated
Power line	20m S07RN-F	Plug	Safety
Wires	4G0,75		

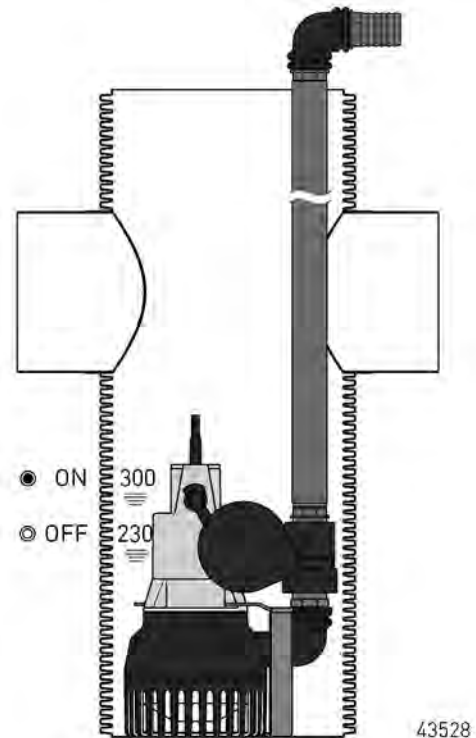
### DRAINAGESET

Type	Code No.
Drainageset	JP43388

### Dimensions and switching points Drainage Set (mm)



### Example of installation with hose set








# DRAINAGESET

## DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.
	① <b>Hose set</b>	1 1/4" (DN32), 15 m PVC hose c/w elbow	<b>JP43550</b>

### ELECTRICAL ACCESSORY

			Code No.
	① <b>Alarm unit</b>		
	AG20	Subm. ball contact switch, mains dependent, potential-free contact, 20 m cable	<b>JP48851</b>
	② <b>Rechargeable battery</b>	for mains independent alarm	<b>JP44850</b>

# DRAINAGESET

DRAINAGE PUMPS

## SIMER UTILITY PUMP



- Removes water down to a level of 2 mm
- Robust cast aluminium housing
- Self-venting starts at a water level of just 5 mm
- Cooling jacket for motor housing
- Replaceable cable inlet
- Accessory: Electronical switch Simer Level Control for automatic pump operation

### DESCRIPTION

The Simer 5 is a robust utility pump for draining cellars, flat roofs, tennis courts or swimming pools. It can also be used to remove wastewater from building works such as core-hole drilling and concrete cutting. The Simer pump removes unwanted water quickly and efficiently, leaving a residual water level of just 2 mm, while starting to pump at a water level of just 5 mm!

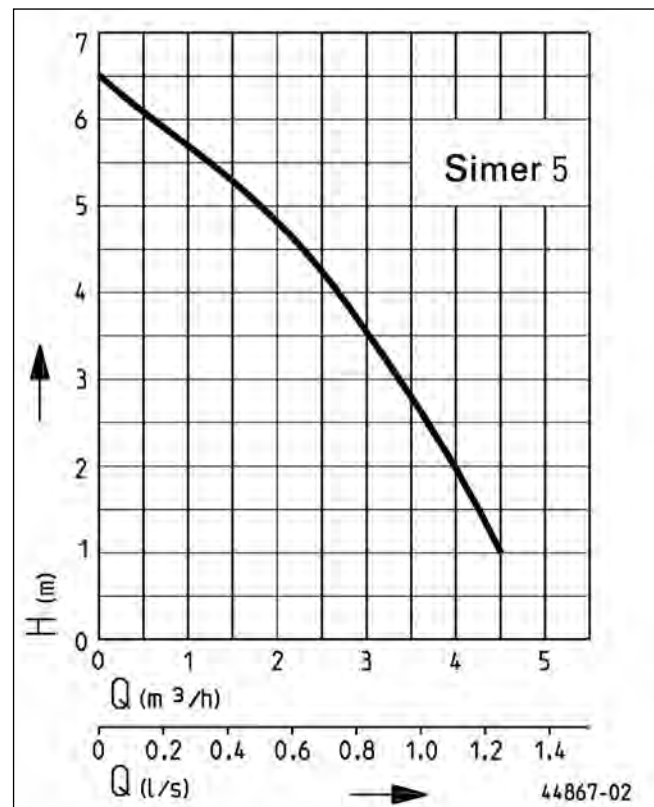
The removable strainer, with a mesh size of 2 mm, reliably protects the hydraulic system from coarse solids. The variable hose connector allows connections to be made quickly and easily.

Connecting the pump permanently to the building's drainage system or using it to protect against back-flow is not permitted, however. Please refer to our UK3 to U6K range of pumps for these types of application.

The electronical switch Simer Level Control can be integrated into the cable inlet and switch the pump on automatically at approx. 7 mm water level. Puddles or floods can be removed immediately. The Simer Level Control operates either in automatic or manual mode.

The dry running of the pump (operation without media) over a period of more than 20 minutes must be avoided!

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
Simer 5	Flow rate Q [m³/h]	4.3	3.8	3.3	2.6	1.7	0.6

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

# SIMER

## UTILITY PUMP

### SCOPE OF SUPPLY

Pump, ready to connect, with 1/2"/3/4"/1" (13/19/25 mm) hose

connector, and connecting cable with plug.

### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Vortex impeller, zinc die-cast
Bearing	Ball bearings, grease-lubricated	Motor housing	Aluminum
Oil chamber	Yes	Submersible	Yes
Seal on medium side	Mechanical seal	Pressure outlet	1 1/4"
Run dry protection	Yes	Weight	5.2 kg

### ELECTRICAL DATA

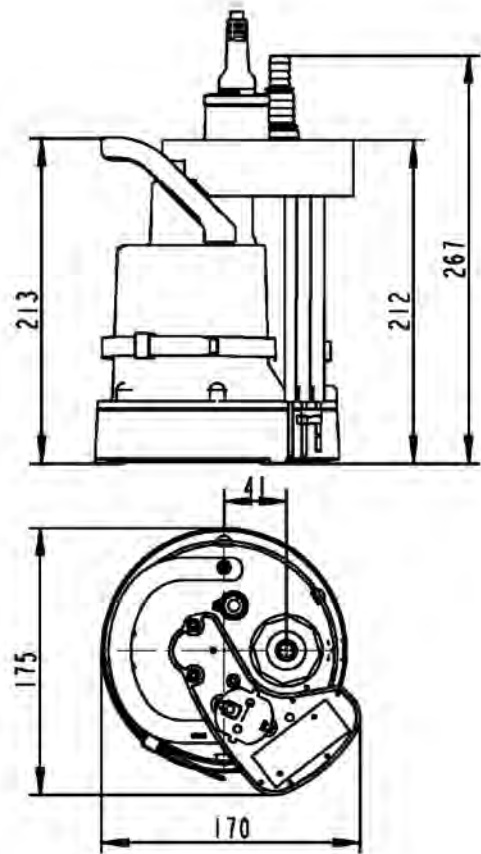
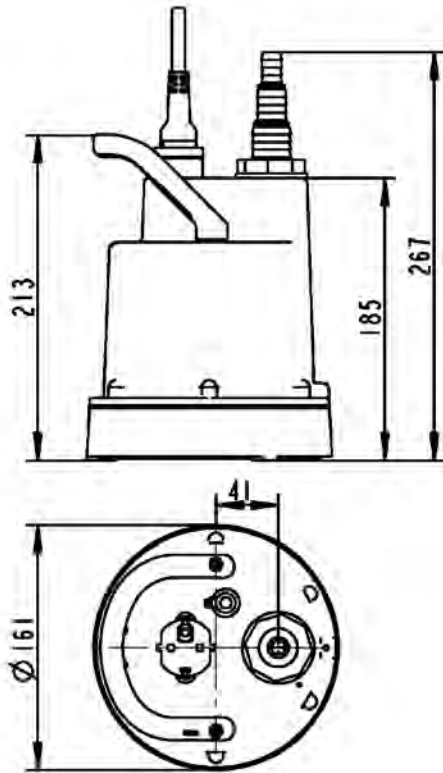
Voltage	1/N/PE-230 V	Type of enclosure	IP 68
Motor rating P1	190 W	Insulation class	B
Current	0.8 A	Winding thermostat	Yes
Power line	10m H07RN8-F	Motor protection	Integrated
Wires	3G1,0	Plug	Safety

### SIMER



Type	Code No.
Simer 5	OD6601G-05

### Dimensions


### Dimensions with Simer Level Control



## MECHANICAL ACCESSORY

				Code No.
	① <b>Swing-type check valve</b> 1¼" (DN 32)	for transportable use	90x90 (HxB)	<b>JP48845</b>
	② <b>Hose coupling</b> Hose coupling	1¼" (DN 32) brass, for transportable use		<b>JP00327</b>

## ELECTRICAL ACCESSORY

			Code No.
	ⓐ <b>Level control</b>	Simer Level Control (ON 7 mm / OFF 2 mm)	<b>JP46884</b>

# SIMER

UTILITY PUMP

## OVERVIEW

### SUBMERSIBLE DRAINAGE PUMPS

Submersible drainage pumps	Free passage	Type	Page
Submersible drainage pumps	10 mm	<b>US 62-251</b>	<b>51</b>
	30/40 mm	<b>US 73-253</b>	<b>57</b>
	50 mm	<b>US 75-155</b>	<b>63</b>
Submersible drainage pumps for hot water operation	30 mm	<b>US 73+103 HE (90°C)</b>	<b>69</b>
Submersible drainage pumps with explosion proof	30 mm	<b>US 73+103 EX</b>	<b>75</b>
Submersible drainage pumps for building sites	10 mm	<b>UB 62-251</b>	<b>79</b>
Submersible drainage pumps stainless steel	10 mm	<b>Multidrain UV3</b>	<b>83</b>
Submersible drainage pumps stainless steel with large delivery heads	10 mm	<b>Multidrain UV 300</b>	<b>89</b>
		<b>Multidrain UV 600</b>	<b>93</b>

# OVERVIEW

## SUBMERSIBLE DRAINAGE PUMPS - ACCESSORY

### ACCESSORY US-PUMPS

Type	Code no.	US 62 102 73 103 E	US 62 102 73 103 D	US 151 E	US 151 D	US 251 253 D	US 62 102 73 103 ES/DS	US 151 ES/DS	US 73 103 HE/HES	UB 62 102 152 251 ES/DS	US 73 Ex W	US 73 Ex D	US 103 Ex W	US 103 Ex D	US 152 153 E	US 152 153 D	US 152 153 ES/DS	US 75 105 E	US 75 105 D	US 75 105 ES/DS	US 155 E	US 155 D	US 155 ES/DS
SWING-TYPE CHECK VALVE R 40	JP00317	•	•				•				•	•	•	•	•	•	•						
SWING-TYPE CHECK VALVE 1 1/2" H	JP44784							•															
SWING-TYPE CHECK VALVE R 50	JP00326			•	•	•		•										•	•	•	•	•	•
ELBOW BALL CHECK VALVE KE 40 P	JP47974	•	•				•		•		•	•	•	•	•	•	•						
BALL CHECK VALVE K 50	JP44782			•	•	•		•										•	•	•	•	•	•
DUPLEX SWING-TYPE CHECK DR40	JP09155	•	•								•	•	•	•	•	•							
STOP VALVE DN 40 PN 16	JP44786	•	•				•		•		•	•	•	•	•	•	•						
STOP VALVE DN 50 PN 16	JP44787			•	•	•		•										•	•	•	•	•	•
ELASTIC CONNECTION 1 1/2"	JP44777	•	•				•				•	•	•	•	•	•	•						
ELASTIC CONNECTION 2"	JP44775			•	•			•										•	•	•	•	•	•
HOSE BAND CLAMP 1 1/2"	JP44763	•	•				•				•	•	•	•	•	•	•						
HOSE BAND CLAMP 2"	JP44764			•	•			•										•	•	•	•	•	•
ELBOW 1 1/2"	JP45953	•	•				•		•		•	•	•	•	•	•	•						
ELBOW A4- 2"	JP44771			•	•			•										•	•	•	•	•	•
SOLID FIRE HOSE COUPLING C, 1 1/2"	JP44770	•	•				•								•	•	•						
SOLID FIRE HOSE COUPLING C, 2"	JP50217			•	•	•		•															
COULPING WRENCH	JP25708	•	•	•	•	•	•	•		•													
SYNTHETIC-HOSE 12.5 M	JP50298	•	•	•	•	•	•	•															
SYNTHETIC-HOSE 15 M	JP00336	•	•	•	•	•	•	•		•													
SPECIAL FLOAT LOW SWITCH POINTS	JP44795						•		○								•			•			•
CHAIN, CERTIFIED 2.5M 320KG	JP45901	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 5M 320 KG	JP45902	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 7.5M 320 KG	JP47365	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WEBBING WITH SHACKLE	JP45168	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PUMP BASE US 75-155	JP40632																	•	•	•	•	•	•
STRAINER BASE US 75-155	JP45957																	•	•	•	•	•	•
GUIDE RAIL SYSTEM GR 40	JP25592	•	•				•		•		•	•	•	•	•	•	•						
GUIDE RAIL SYSTEM GR 50	JP25593			•	•	•		•															
GUIDE RAIL 1", 1500MM	JP48937	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 2000MM	JP48938	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 2500MM	JP48939	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 3000MM	JP48940	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
SECURING LEVER US 75-155	JP41024																	•	•	•	•	•	•
ALARM UNIT AG3	JP44891						•	•	•								•			•			•
ALARM UNIT AG10	JP44892						•	•	•								•			•			•
WASHING MACHINE STOP AW3	JP44895	•	•	•	•	•	•	•	•						•	•	•	•	•	•	•	•	•
BASICLOGO BD 00 E	JP45735	•							□									•					
BASICLOGO BD 610 EC	JP45743			•																			
BASICLOGO BD 00	JP45993		•																•				
BASICLOGO BD 25	JP45737				•										•								•
BASICLOGO BD 46	JP45739					•																	
HIGHLOGO 2-00 E	JP47996	•							□									•					

□ only 73 HE/103 HE ○ only 73 HES/103 HES ■ only in connection with motor protection plug



# OVERVIEW

## SUBMERSIBLE DRAINAGE PUMPS - ACCESSORY

### ACCESSORY US-PUMPS

Type	Code no.	US 62 102 73 103 E	US 62 102 73 103 D	US 151 E	US 151 D	US 251 253 D	US 62 102 73 103 ES/ DS	US 151 ES/ DS	US 73 103 HE/ HES	UB 62 102 152 251 ES/ DS	US 73 Ex W	US 73 Ex D	US 103 Ex W	US 103 Ex D	US 152 153 E	US 152 153 D	US 152 153 ES/ DS	US 75 105 E	US 75 105 D	US 75 105 ES/ DS	US 155 E	US 155 D	US 155 ES/ DS
HIGHLOGO 2-00	JP47997		•																	•			
HIGHLOGO 2-25	JP47998				•											•							•
HIGHLOGO 2-46	JP47999					•																	
SUBM. SWITCH PACK B	JP16725	•	•	•	•	•										•	•		•	•		•	•
SUBM. SWITCH PACK BMG	JP16726	•	•	•	•	•						•		•		•	•		•	•		•	•
SUBM. SWITCH PACK BH	JP24768								□														
SUBM. SWITCH PACK BHMG	JP24769								□														
SEAL LEAK DETECTOR DKG	JP44900	•	•	•	•	•	•	•								•	•	•	•	•	•	•	•
SEAL LEAK DETECTOR DKG EX	JP00249										•	•	•	•									
BASICLOGO AD 4 XE	JP25901										•												
BASICLOGO AD 8 XE	JP25902											•											
BASICLOGO AD 23 X	JP09754											•											
BASICLOGO AD 25 X	JP09683															•							
AUXILIARY SWITCHING UNIT EXH-A	JP16720										•	•	•	•									
SUBM. SWITCH PACK AMG	JP16719										•	•	•	•									
BASIC LOGO BD 23 X	JP09755											•											
BASIC LOGO BD 25 X	JP09681															•							
AUXILIARY SWITCHING UNIT EXH-B	JP00295											•		•									
SEAL LEAK PROTECTION FOR US EX	JP44603										•	•	•	•									
SCHUKO-MOTOR PROTECTION PLUG	JP44753															•						•	
CEE-MOTOR PROTECTION 2.5 - 4.0 A	JP44754																•						•
SCHUKO-MOTOR PROTECTION PLUG	JP40264			•																			
CEE-MOTOR PROTECTION 2.8 - 4.0 A	JP44750				•																		
CEE-MOTOR PROTECTION, 0 - 6.0 A	JP44751					•																	
SMART HOME FTJP	JP47209	•	•	•	•	•										•		•	•			•	
RECHARGEABLE BATTERY 9 V	JP44850	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•

□ only 73 HE/103 HE   ○ only 73 HES/103 HES   ■ only in connection with motor protection plug

# OVERVIEW

## SUBMERSIBLE DRAINAGE PUMPS - ACCESSORY

### ACCESSORY

Type	Code no.	UV3	UV3 S	UV3 SF
SWING-TYPE CHECK VALVE R 32	JP09739	•	•	•
DUPLEX SWING-TYPE CHECK DN 40	JP09155	•		
STOP VALVE DN 32 PN 16	JP44785	•	•	•
STOP VALVE DN 40 PN 16	JP44786	•	•	•
BALL VALVE DN 32 PVC	JP46111	•	•	•
ELAST. CONNECTION 1 1/4"	JP44773	•	•	•
HOSE BAND CLAMP 1 1/4"	JP44765	•	•	•
HOSE COUPLING 1 1/4"	JP00327	•	•	•
HOSE SET 15 M	JP43550	•	•	•
SPECIAL FLOAT NARROW CHAMBERS	JP40856		•	
FLOAT FIXATION	JP42175		•	
CONNECTION KIT DN 32	JP44609	•	•	•
ALARM UNIT AG3	JP44891	•	•	•
ALARM UNIT AG10	JP44892	•	•	•
ALARM UNIT WASHING MACHINE STOP AW3	JP44895	•	•	•
COUNTERWEIGHT	JP44803	•		
BASICLOGO BD 00 E	JP45735	•		
HIGHLOGO 2-00 E	JP47996	•		
SUBM. SWITCH PACK B	JP16725	•		
SUBM. SWITCH PACK BMG	JP16726	•		
SMART HOME FTJP	JP47209	•		
RECHARGEABLE BATTERY 9 V	JP44850	•	•	•

### ACCESSORY MULTIDRAIN 300

Type	Code no.	UV 305-1	UV 305-1S	UV 305-3	UV 305-3S	UV 310-1	UV 310-1S	UV 310-3	UV 310-3S	UV 315-1	UV 315-1S	UV 315-3	UV 315-3S
SWING-TYPE CHECK VALVE R 40	JP00317	•	•	•	•	•	•	•	•	•	•	•	•
STOP VALVE DN 40	JP44786	•	•	•	•	•	•	•	•	•	•	•	•
ELASTIC CONNECTION 1 1/2"	JP44777	•	•	•	•	•	•	•	•	•	•	•	•
HOSE BAND 1 1/2"	JP44763	•	•	•	•	•	•	•	•	•	•	•	•
STORZ C COUPLING 1 1/2", GALVANISED	JP44770	•	•	•	•	•	•	•	•	•	•	•	•
COUPLING WRENCH	JP25708	•	•	•	•	•	•	•	•	•	•	•	•
SYNTHETIC-HOSE 15 M, Ø 52 MM	JP00336	•	•	•	•	•	•	•	•	•	•	•	•
SYNTHETIC-HOSE 12,5 M, Ø 38 MM	JP50298	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 2,5M 320 KG	JP45901	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 5M 320 KG	JP45902	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 7,5M 320 KG	JP47365	•	•	•	•	•	•	•	•	•	•	•	•
SHACKLE, CERTIFIED 630 KG	JP45904	•	•	•	•	•	•	•	•	•	•	•	•
ALARM UNIT AG10	JP44892	•	•	•	•	•	•	•	•	•	•	•	•
BASICLOGO AD 00 E	JP00289	•				•				•			
BASICLOGO AD 00	JP00311			•				•				•	
HIGHLOGO 1-00 E	JP47987	•				•				•			
HIGHLOGO 1-00	JP47988			•				•				•	
BASICLOGO BD 00 E	JP45735	•				•				•			
BASICLOGO BD 00	JP45993			•				•				•	
HIGHLOGO 2-00 E	JP47996	•				•				•			

# OVERVIEW

## SUBMERSIBLE DRAINAGE PUMPS - ACCESSORY

Type	Code no.	UV 305-1	UV 305-1S	UV 305-3	UV 305-3S	UV 310-1	UV 310-1S	UV 310-3	UV 310-3S	UV 315-1	UV 315-1S	UV 315-3	UV 315-3S
HIGHLOGO 2-00	JP47997			•				•				•	
SUBM. SWITCH PACK A	JP16718	•		•		•		•		•		•	
SUBM. SWITCH PACK AMG	JP16719	•		•		•		•		•		•	
SUBM. SWITCH PACK B	JP16725	•		•		•		•		•		•	
SUBM. SWITCH PACK BMG	JP16726	•		•		•		•		•		•	
COUNTERWEIGHT	JP44803	•	•	•	•	•	•	•	•	•	•	•	•
RECHARGEABLE BATTERY 9 V	JP44850	•	•	•	•	•	•	•	•	•	•	•	•

### ACCESSORY MULTIDRAIN 600

Typ	Code no.	UV 620-1	UV 620-1S	UV 620-3	UV 620-3S	UV 625-3	UV 625-3S	UV 635-3	UV 635-3S
SWING-TYPE CHECK VALVE R 50	JP00326	•	•	•	•	•	•	•	•
BALL CHECK VALVE K 50	JP44782	•	•	•	•	•	•	•	•
STOP VALVE DN 50	JP44787	•	•	•	•	•	•	•	•
ELASTIC CONNECTION 2"	JP44775	•	•	•	•	•	•	•	•
HOSE BAND CLAMP 2"	JP44764	•	•	•	•	•	•	•	•
SOLID FIRE HOSE COUPLING C, 2"	JP50217	•	•	•	•	•	•	•	•
COUPLING WRENCH	JP25708	•	•	•	•	•	•	•	•
SYNTHETIC-HOSE 15 M, Ø 52 MM	JP00336	•	•	•	•	•	•	•	•
SYNTHETIC-HOSE 12,5 M, Ø 38 MM	JP50298	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 2,5M 320 KG	JP45901	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 5M 320 KG	JP45902	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 7,5M 320 KG	JP47365	•	•	•	•	•	•	•	•
SHACKLE, CERTIFIED 630 KG	JP45904	•	•	•	•	•	•	•	•
GUIDE RAIL SYSTEM GR 50	JP25593	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 1500MM	JP48937	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 2000MM	JP48938	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 2500MM	JP48939	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 3000MM	JP48940	•	•	•	•	•	•	•	•
SECURING LEVER UV 600	JP49171	•	•	•	•	•	•	•	•
ALARM UNIT AG10	JP44892	•	•	•	•	•	•	•	•
BASICLOGO AD 46	JP14353			•		•			
BASICLOGO AD 610	JP14354							•	•
HIGHLOGO 1-46	JP47990			•		•			
HIGHLOGO 1-610	JP47991							•	•
BASICLOGO BD 46	JP45739			•		•			
BASICLOGO BD 610	JP45741							•	
HIGHLOGO 2-46	JP47999			•		•			
HIGHLOGO 2-610	JP48000							•	
SUBM. SWITCH PACK AMG	JP16719			•		•			
SUBM. SWITCH PACK BMG	JP16726			•		•		•	
COUNTERWEIGHT	JP44803	•	•	•	•	•	•	•	•
CEE-MOTORPROTECTION 4,0 - 6,0 A	JP44751			•	•	•	•		
CEE-MOTORPROTECTION 6,0 - 9,0 A	JP44752							•	•
RECHARGEABLE BATTERY 9 V	JP44850	•		•		•		•	



## US 62-US 251

### SUBMERSIBLE DRAINAGE PUMPS

- 10 mm free passage
- Run dry protection
- Controllable oil chamber
- SiC mechanical seal
- independent of sense of rotation
- Replaceable moisture sealed cable inlet



#### DESCRIPTION

The centrifugal submersible drainage pumps US 62-251 can be used wherever sewage water with solids up to 10 mm particle size occurs, e.g. in collecting sumps for ground water, or in permanent draining systems for clean water, or handling solids in suspension. They are also ideal for pumping the sewage water from collecting sumps into which dishwashers or washing machines are discharging. For high temperature hot water in the industrial and commercial field we recommend the use of our US 73 and US 103 HE/HES.

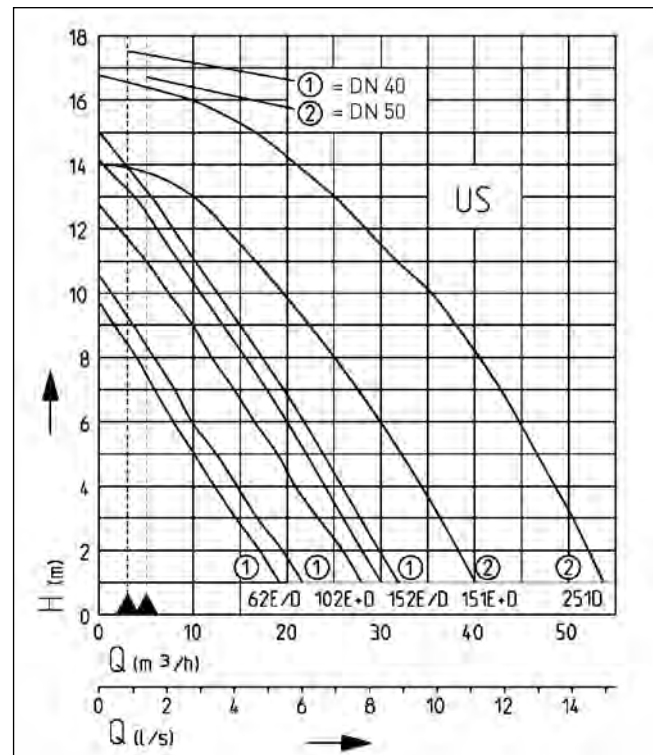
This range of pumps is suitable for stationary and portable use. For easy removal of the pumps from deep sumps we recommend the use of our guide rail systems which provide ease of maintenance and inspection.

For automatic monitoring of the oil chamber a seal leak control can be connected.

Maximum cable length of the pumps is 10 m. 3-phase pumps with level control (US 151 DS, US 152 DS and US 251 DS) have a CEE-Plug with phase inverter.

The sewage pumps are tested by the German Institute for Construction Engineering and correspond to the valid construction and test principles.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16
US 62 E/ES	Flow rate Q [m³/h]	19	17	15	12	10	8	6	4	2						
US 62 D/DS		22	20	17	15	12	10	8	6	4						
US 102 E/D/ES/DS		28	26	23	21	19	17	15	12	10	8	5	2			
US 152 E/ES		30	29	27	24	22	20	18	15	13	11	8	6	3	1	
US 152 D/DS		31	30	28	26	23	21	19	17	14	12	10	8	5	3	
US 151 E/D/ES/DS		40	39	37	35	33	31	29	26	23	20	17	14			
US 251 D/DS		54	52	51	49	47	45	43	40	38	35	32	29	25	21	10

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

VDE/GS-Certification for US 62 E/ES, US 102 E/ES



# US 62–US 251

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump according to DIN EN 12050 ready for connection with 10 m cable. US 62 and US 102 with safety plug (1-phase) or CEE-Plug (3-phase).

US 151, US 152 and 251: Pumps without level control with free lead end. Pump with built-in level control with CEE-Plug and phase inverter (3-phase) or safety-plug (1-phase).

### MECHANICAL DATA

Pump	Vertical single-stage	Oil chamber	Yes
Free passage	10 mm	Seal on medium side	SiC mechanical seal
Bearing	Ball bearings, grease-lubricated	Run dry protection	Yes
Seal on motor side	Duplex rotary shaft seals	Submersible	Yes
		Pressure outlet	IG 1 1/2" (US151,251: 2")

### ELECTRICAL DATA

Power line	10m H07RN-F	Insulation class	B (151,251:F)
Type of enclosure	IP 68	Winding thermostat	Yes

### US 62–US 251

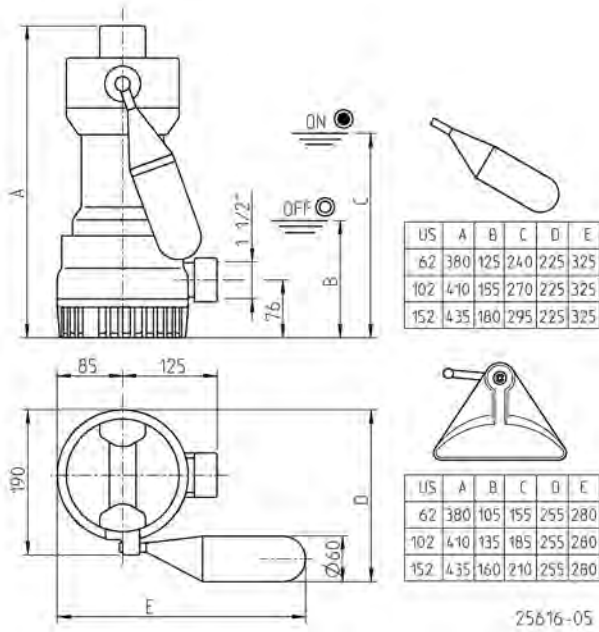
Type	Code No.	Voltage	Motor rating P1	P2	Current	Wires	Motor protection	Plug	Weight
<b>Without level control</b>									
US 62 E	<b>JP09812</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	12.6 kg
US 62 D	<b>JP09813</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	12.8 kg
US 102 E	<b>JP09278</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	14.5 kg
US 102 D	<b>JP00214</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	15.0 kg
US 152 E	<b>JP09435</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	on request <sup>1</sup>	Without	16.0 kg
US 152 D	<b>JP09437</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	on request <sup>1</sup>	Without	17.0 kg
<b>With built-in level control</b>									
US 62 ES	<b>JP09814</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	12.7 kg
US 62 DS	<b>JP09815</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	12.9 kg
US 102 ES	<b>JP09279</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	14.5 kg
US 102 DS	<b>JP00218</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	15.0 kg
US 152 ES	<b>JP09436</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	Integrated	Safety	16.0 kg
US 152 DS	<b>JP09438</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	Integrated	CEE	17.0 kg
<b>Without level control</b>									
US 151 E	<b>JP09310</b>	1/N/PE~230 V	1.68 kW	1.19 kW	7.6 A	4G1,0	on request <sup>1</sup>	Without	27.0 kg
US 151 D	<b>JP09300</b>	3/N/PE~400 V	1.60 kW	1.30 kW	3.0 A	6G1,5	on request <sup>1</sup>	Without	27.5 kg
US 251 D	<b>JP09301</b>	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	on request <sup>1</sup>	Without	27.5 kg
<b>With built-in level control</b>									
US 151 ES	<b>JP09241</b>	1/N/PE~230 V	1.68 kW	1.19 kW	7.6 A	4G1,0	Integrated	Safety	29.0 kg
US 151 DS	<b>JP09243</b>	3/N/PE~400 V	1.60 kW	1.30 kW	3.0 A	6G1,5	Integrated	CEE	29.5 kg
US 251 DS	<b>JP09245</b>	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	Integrated	CEE	29.5 kg

<sup>1</sup>Protective motor plug necessary see accessory

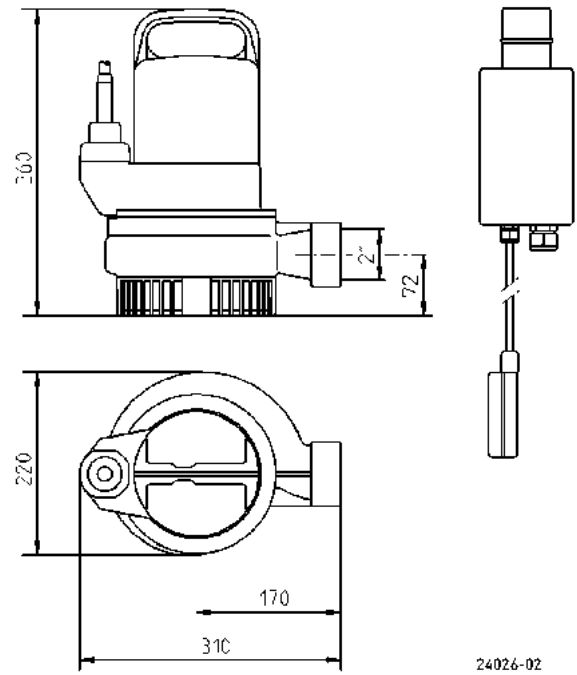
# US 62-US 251

## SUBMERSIBLE DRAINAGE PUMPS

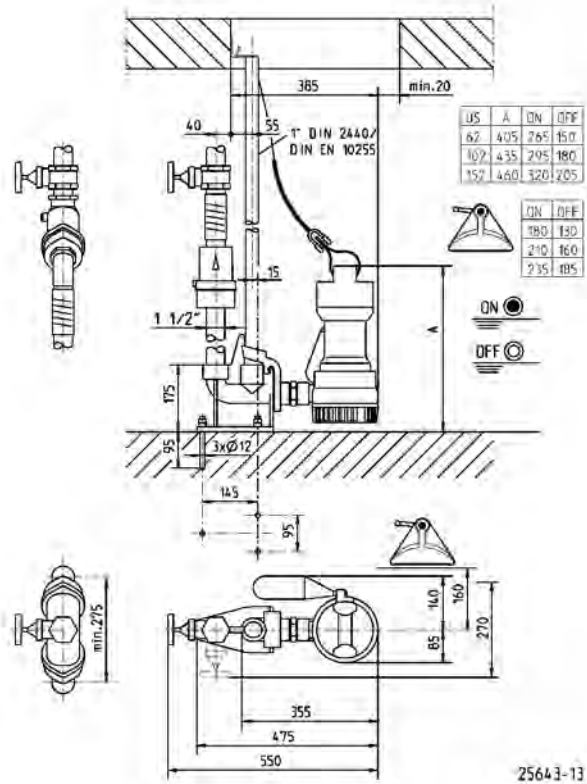
Dimensions and switching points US 62, US 102, US 152 (mm)



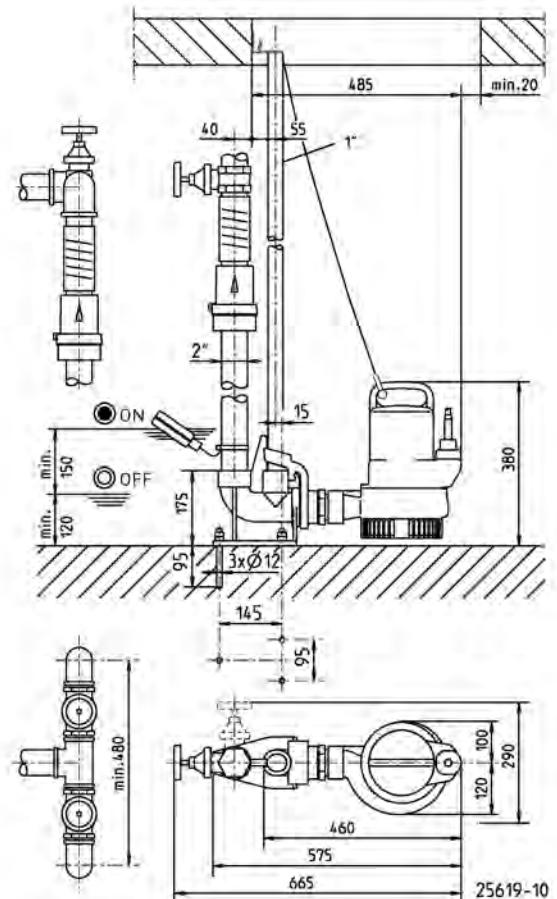
Dimensions US 151 and US 251 (mm)



Dimensions and switching points GR 40 (mm)



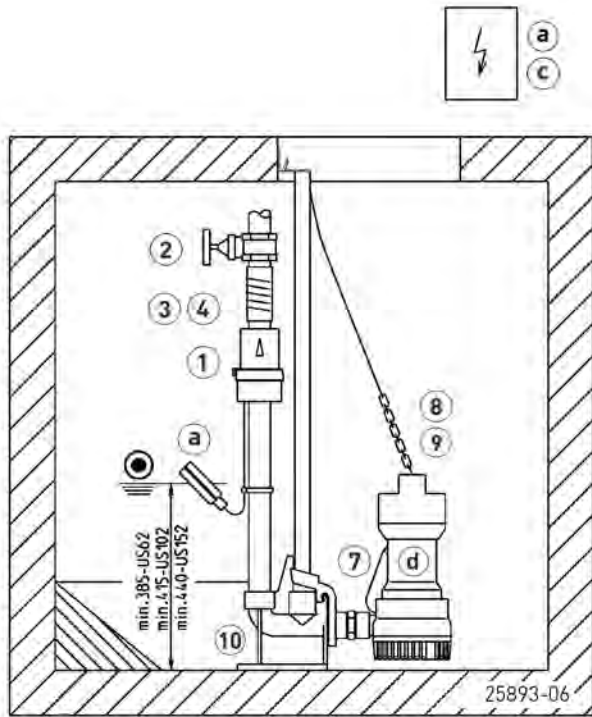
Dimensions GR 50 (mm)



# US 62-US 251

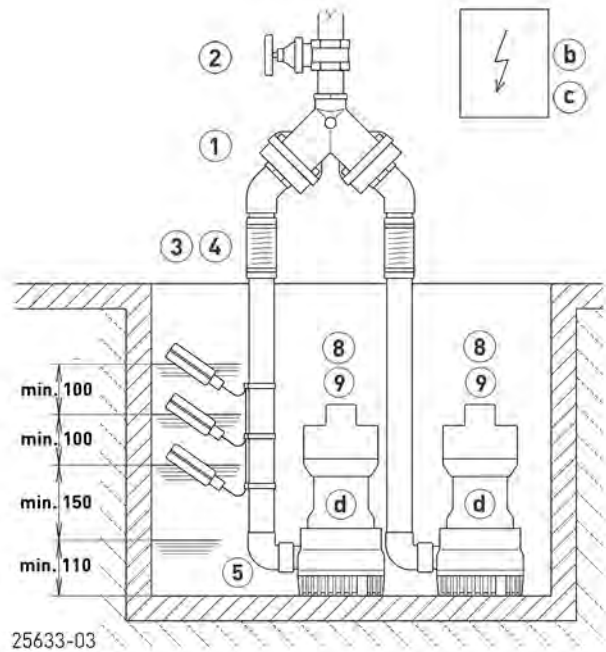
## SUBMERSIBLE DRAINAGE PUMPS

Example of single pump installation with GR



Single unit 1½" with GR 40: sump area min. 40x60 cm  
 Single unit 1½" without GR: sump area min. 40x40 cm  
 Single unit 2" with GR 50: sump area min. 40x70 cm  
 Single unit 2" without GR: sump area min. 40x50 cm  
 Duplex unit 1½" with GR 40: sump area min. 60x60 cm  
 Duplex unit 1½" without GR: sump area min. 40x60 cm  
 Duplex unit 2" with GR 50: sump area min. 70x70 cm

Example of duplex pump installation



Duplex unit 2" without GR: sump area min. 50x70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room

### MECHANICAL ACCESSORY






				Code No.
	<b>① Swing-type check valve</b>			
	R40 EN 12050-4	1½" (DN 40), PN 4	150x120 (HxB)	JP00317
	DR 40 EN 12050-4	1½" (DN 40), PN 4	200x280 (HxB)	JP09155
	R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>			
	KE40 EN 12050-4	1½" (DN 40), PN 6	170x125 (HxB)	JP47974
	K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
	<b>② Stop valve</b>			
		brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
		<b>③ Elastic connection</b>		
		1½" (DN 40), PN 4	120x50 (HxD)	JP44777
		2" (DN 50), PN 4	150x63 (HxD)	JP44775
		<b>④ Hose band clamp</b>		
		1½"		JP44763
		2"		JP44764




# US 62-US 251

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.	
	⑤ <b>Elbow</b>	1½"	JP45953	
		2"	JP44771	
	⑥ <b>Hose coupling</b>	Coupling Storz C	JP44770	
		Coupling Storz C	JP50217	
		Coupling wrench	JP25708	
		<b>Pressure hose</b>	12,5 m, synthetic, with coupling Storz C, Ø 38 mm	JP50298
		15 m, synthetic, with coupling Storz C, Ø 52 mm	JP00336	
	⑦ <b>Special float</b>	for lower switching points	JP44795	
	⑧ <b>Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901	
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902	
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP47365	
	⑨ <b>Webbing</b>	with shackle	JP45168	
	⑩ <b>Guide rail system</b>	GR 40	JP25592	
		GR 50	JP25593	
		Guide rail 1"	1500 mm	JP48937
		Guide rail 1"	2000 mm	JP48938
		Guide rail 1"	2500 mm	JP48939
		Guide rail 1"	3000 mm	JP48940






### ELECTRICAL ACCESSORY

			Code No.	
	a <b>Alarm unit</b>	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
		AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
		<b>Washing machine stop</b>		
		AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
		AW0	for alarm forwarding in case of several washing machines	JP44899

# US 62-US 251

## SUBMERSIBLE DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>b Control for duplex units</b>		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
	Control unit HIGHLOGO 2-00	400 V	JP47997
	Control unit BD 25	400 V, for pumps US 151-155	JP45737
	Control unit HIGHLOGO 2-25	400 V	JP47998
	Control unit BD 610 EC	230 V, with operating capacitor	JP45743
	Control unit BD 46	400 V, for pumps US 251-253, UV 620-3, UV 625-3	JP45739
	Control unit HIGHLOGO 2-46	400 V	JP47999
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>Protective motor plug</b>		
	Safety protective motor plug	230 V (without level control)	JP40264
	Protective motor plug, 8 A	230 V, for pumps without integrated motor protection	JP44753
	CEE motor protection 2,5-4,0 A	400 V, mandatory for pumps without integrated motor protection	JP44754
	CEE motor protection 2,8-4,0 A	400 V, mandatory for pumps without integrated motor protection	JP44750
	CEE motor protection 4,0-6,0 A	400 V, mandatory for pumps without integrated motor protection	JP44751
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Seal leak detector</b>	DKG	JP44900
	<b>e Smart Home</b>	FTJP radio transmitter	JP47209

## US 73-US 253

### SUBMERSIBLE DRAINAGE PUMPS

- 30 mm free passage (US 73-153)
- 40 mm free passage (US 253)
- Run dry protection
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet



#### DESCRIPTION

The centrifugal submersible drainage pumps US 73-253 are suitable for dealing with contaminated water and capable of handling solids up to 30 and 40 mm particle size without stones. Fibrous waste water, as found in laundries or automatic laundrettes and waste water from domestic dishwashers and washing machines can be handled by this pump range. For hot water in the industrial and commercial market we recommend the US 73 and US 103 HE/HES.

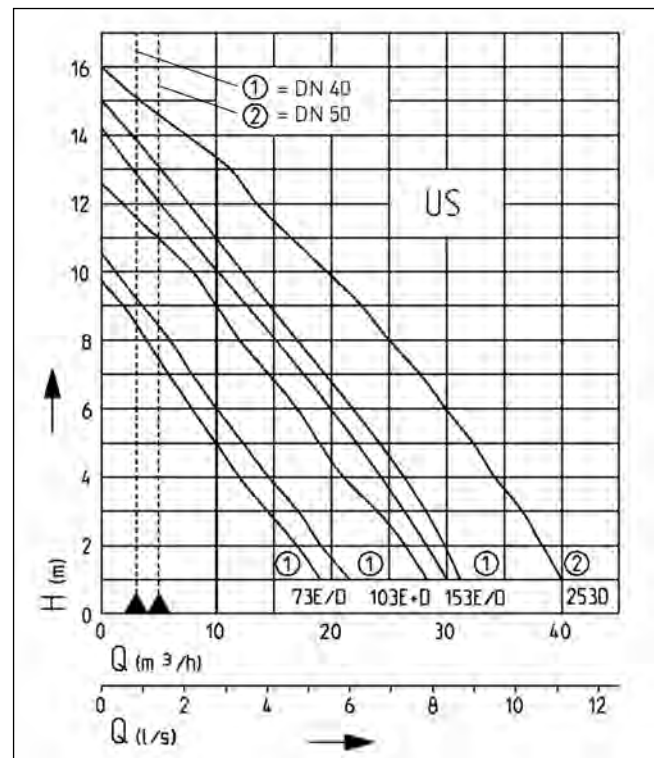
This range of pumps is suitable for stationary use. For easy removal of the pumps from deep sumps we recommend the use of our guide rail systems which provide ease of maintenance and inspection.

For automatic monitoring of the oil chamber a seal leak control can be connected.

The cable length is 10 m. The 3-phase pumps with built-in level control (US 153 DS and US 253 DS) have a CEE-plug with phase inverter.

The sewage pumps are tested by the German Institute for Construction Engineering and correspond to the valid construction and test principles.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	12	13	14
US 73 E/ES	Flow rate Q [m³/h]	19	17	15	12	10	8	6	4	2					
US 73 D/DS		22	20	17	15	12	10	8	6	4					
US 103 E/D/ES/DS		28	26	23	21	19	17	15	12	10	8	5	2		
US 153 E/ES		30	29	27	24	22	20	18	15	13	11	8	6	3	1
US 153 D/DS		31	30	28	26	23	21	19	17	14	12	10	8	5	3
US 253 D/DS		40	38	36	34	32	30	28	25	23	20	17	14	10	7

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

VDE-Certification for US 73 E/ES, US 103 E/ES



# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump according to DIN EN 12050 ready for connection with 10 m cable. US 73 and US 103 with safety plug (1-phase) or CEE-Plug (3-phase).

US 153 and 253: Pumps without level control with free lead end. Pump with level control with CEE-motor protective plug and phase inverter (3-phase) or safety-plug (1-phase).

### MECHANICAL DATA

Pump	Vertical single-stage	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Motor housing	Edelstahl (253: Grauguss)
Oil chamber	Yes	Pump housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Submersible	Yes
Run dry protection	Yes	Pressure outlet	IG 1 1/2" (US253: 2")

### ELECTRICAL DATA

Power line	10m H07RN-F	Insulation class	B (253:F)
Type of enclosure	IP 68	Winding thermostat	Yes

### US 73-US 253

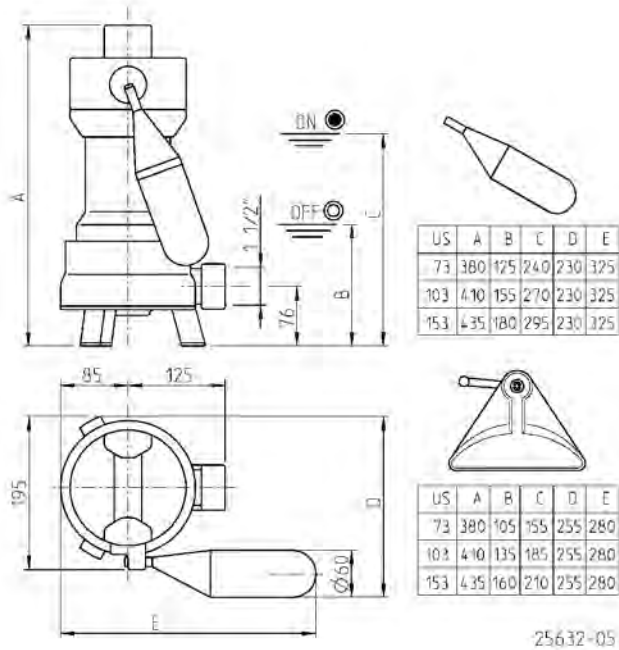
Type	Code No.	Voltage	Motor rating		Current	Wires	Motor protection	Plug	Free passage	Weight
			P1	P2						
<b>Without level control</b>										
US 73 E	JP00676	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	30 mm	12.5 kg
US 73 D	JP00677	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	30 mm	12.5 kg
US 103 E	JP09280	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	30 mm	14.0 kg
US 103 D	JP09258	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	30 mm	14.5 kg
US 153 E	JP09311	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	on request <sup>1</sup>	Without	30 mm	14.5 kg
US 153 D	JP09302	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	on request <sup>1</sup>	Without	30 mm	15.0 kg
<b>With built-in level control</b>										
US 73 ES	JP00678	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	30 mm	12.5 kg
US 73 DS	JP00679	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	30 mm	13.0 kg
US 103 ES	JP09281	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	30 mm	14.0 kg
US 103 DS	JP09259	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	30 mm	15.0 kg
US 153 ES	JP09247	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	Integrated	Safety	30 mm	16.0 kg
US 153 DS	JP09249	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	Integrated	CEE	30 mm	17.0 kg
<b>Without level control</b>										
US 253 D	JP09303	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	on request <sup>1</sup>	Without	40 mm	26.5 kg
<b>With built-in level control</b>										
US 253 DS	JP09251	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	Integrated	CEE	40 mm	28.0 kg

<sup>1</sup>Protective motor plug necessary see accessory

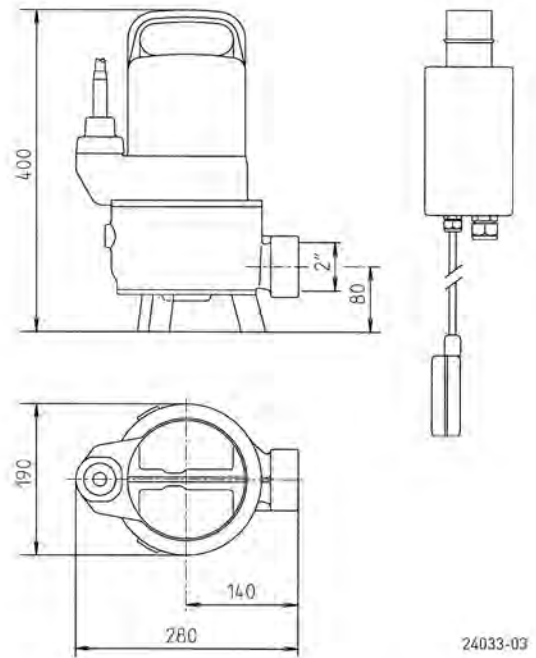
# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

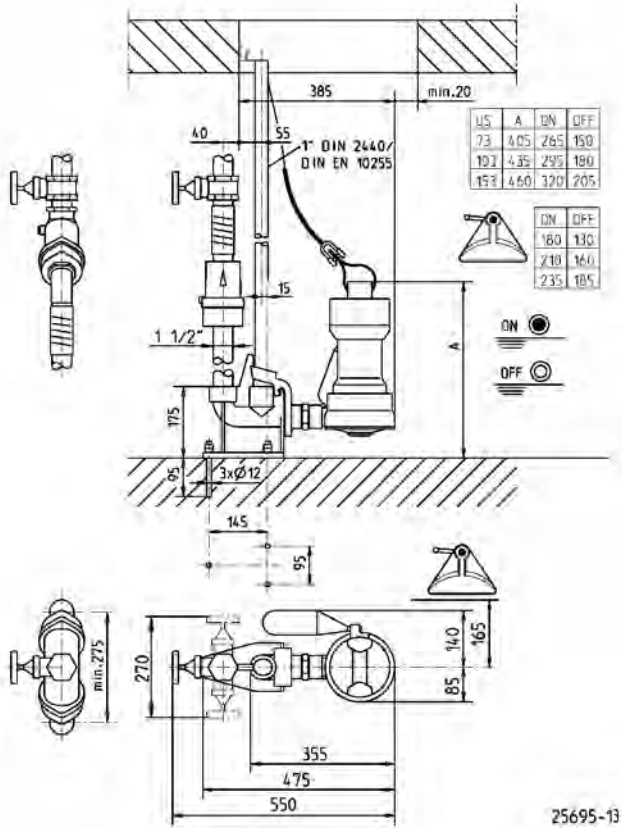
### Dimensions and switching points US 73, US 103, US 153 (mm)



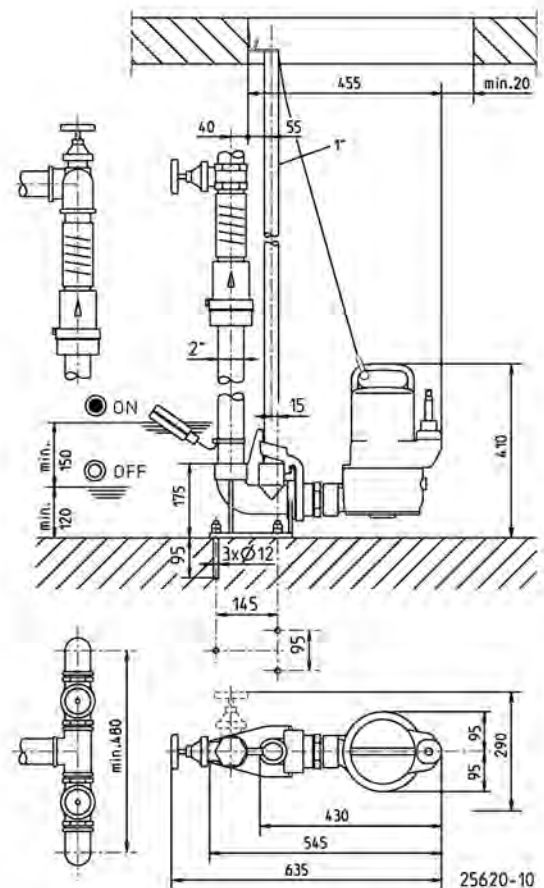
### Dimensions US 253 (mm)



### Dimensions and switching points with GR 40 (mm)



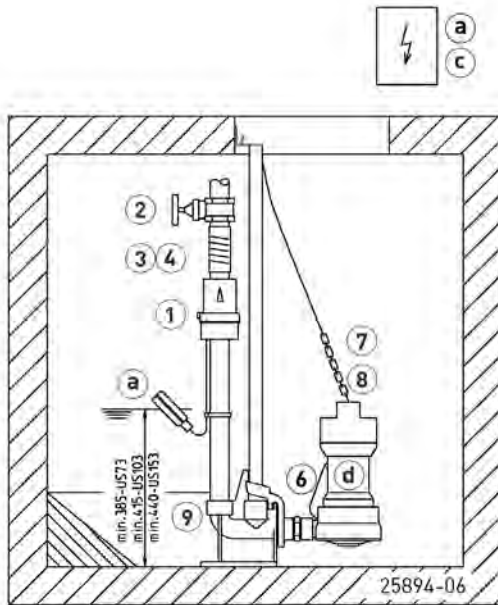
### Dimensions with GR 50 (mm)



# US 73-US 253

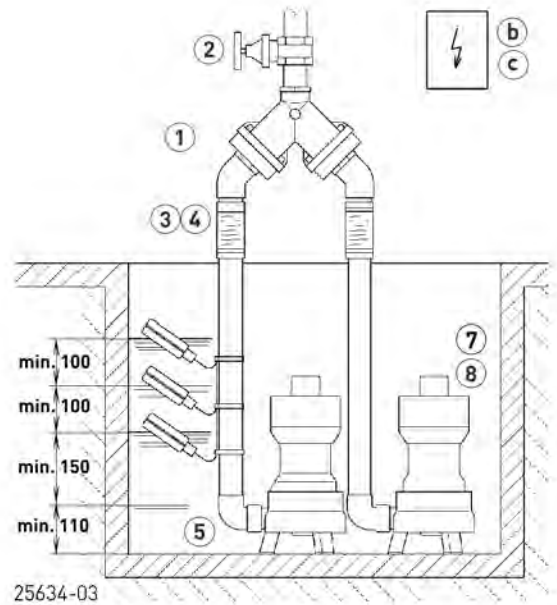
## SUBMERSIBLE DRAINAGE PUMPS

Example of single pump station with GR



Single unit 1½" with GR 40: sump area min. 40x60 cm  
 Single unit 1½" without GR: sump area min. 40x40 cm  
 Single unit 2" with GR 50 S: sump area min. 40x65 cm  
 Single unit 2" without GR: sump area min. 40x50 cm  
 Duplex unit 1½" with GR 40: sump area min. 60x60 cm  
 Duplex unit 1½" without GR: sump area min. 40x60 cm  
 Duplex unit 2" with GR 50: sump area min. 70x70 cm

Example of duplex pump station




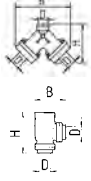




Duplex unit 2" without GR: sump area min. 50x70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room




### MECHANICAL ACCESSORY

				Code No.	
	<b>① Swing-type check valve</b>	R40 EN 12050-4	1½" (DN 40), PN 4	150x120 (HxB)	JP00317
		DR 40 EN 12050-4	1½" (DN 40), PN 4	200x280 (HxB)	JP09155
		R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>	KE40 EN 12050-4	1½" (DN 40), PN 6	170x125 (HxB)	JP47974
		K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
			<b>② Stop valve</b>	brass, 1½" (DN 40), PN 16	
brass, 2" (DN 50), PN 16				140x70 (HxB)	JP44787
	<b>③ Elastic connection</b>	1½" (DN 40), PN 4		120x50 (HxD)	JP44777
		2" (DN 50), PN 4		150x63 (HxD)	JP44775
	<b>④ Hose band clamp</b>	1½"			JP44763
		2"			JP44764
	<b>⑤ Elbow</b>	1½"			JP45953
		2"			JP44771







# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.
	<b>6 Special float</b>	for lower switching points	JP44795
	<b>7 Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.) certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.) certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP45901 JP45902 JP47365
	<b>8 Webbing</b>	with shackle	JP45168
	<b>9 Guide rail system</b>	GR 40 GR 50 Guide rail 1" Guide rail 1" Guide rail 1" Guide rail 1"	JP25592 JP25593 JP48937 JP48938 JP48939 JP48940

### ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	AW0	for alarm forwarding in case of several washing machines	JP44899
	<b>b Control for duplex units</b>		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
	Control unit HIGHLOGO 2-00	400 V	JP47997
	Control unit BD 25	400 V, for pumps US 151-155	JP45737
	Control unit HIGHLOGO 2-25	400 V	JP47998
	Control unit BD 46	400 V, for pumps US 251-253, UV 620-3, UV 625-3	JP45739
	Control unit HIGHLOGO 2-46	400 V	JP47999
	<b>Level control</b>		
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	<b>Protective motor plug</b>		
	Protective motor plug, 8 A	230 V, for pumps without integrated motor protection	JP44753
	CEE motor protection 2,5-4,0 A	400 V, mandatory for pumps without integrated motor protection	JP44754
	CEE motor protection 4,0-6,0 A	400 V, mandatory for pumps without integrated motor protection	JP44751
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Seal leak detector</b>	DKG	JP44900
	<b>e Smart Home</b>	FTJP radio transmitter	JP47209

# US 73-US 253

SUBMERSIBLE DRAINAGE PUMPS



## US 75-US 155

### SUBMERSIBLE DRAINAGE PUMPS

- 50 mm free passage
- Run dry protection
- Controllable oil chamber
- SiC mechanical seal
- independent of sense of rotation
- Replaceable moisture sealed cable inlet



#### DESCRIPTION

The centrifugal submersible drainage pumps US 75-155 are suitable for dealing with notably contaminated water and capable of handling solids up to 50 mm particle size. With their free passage of 50 mm, these pumps are able to pump solids and fibers quickly, reliably and above all without blockage!

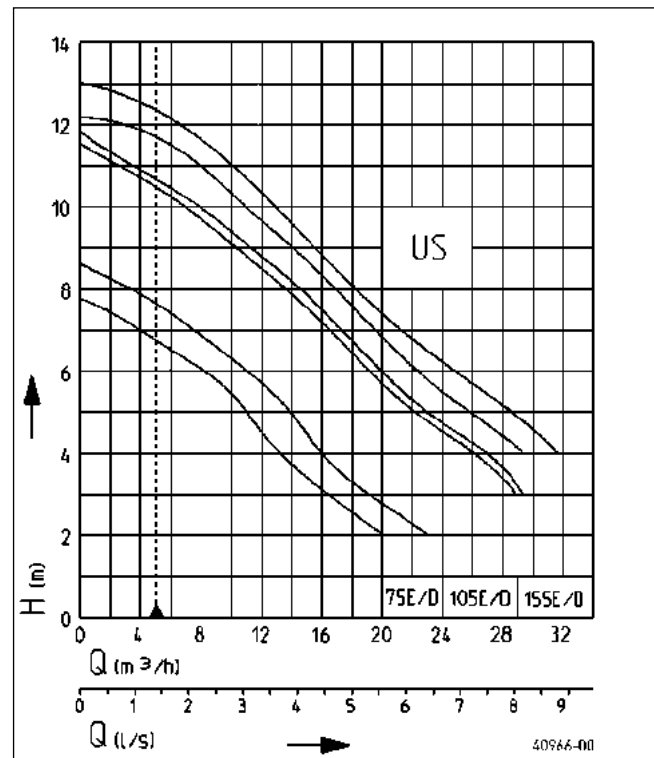
For easy removal of the pumps from deep sumps we recommend the use of our guide rail systems which provide ease of maintenance and inspection. A controllable oil chamber and wear-resistant special mechanical seal ensure a long service life. The integrated winding thermostats protect the motor from overload.

For automatic monitoring of the oil chamber a seal leak control can be connected.

Maximum cable length is 10 m. The US 155 DS 3-phase pump with level control has a CEE-Plug with phase inverter.

The sewage pumps are tested by the German Institute for Construction Engineering and correspond to the valid construction and test principles.

#### PERFORMANCE



Type	Delivery head H [m]	2	3	4	5	6	7	8	9	10	11	12
US 75 E/ES	Flow rate Q [m³/h]	20	16	13	10	7	4					
US 75 D/DS		23	19	16	12	10	7	3				
US 105 E/ES			28	25	22	19	16	13	10	7	3	
US 105 D/DS			29	26	23	20	17	14	11	8	4	
US 155 E/ES				29	26	22	20	16	14	11	8	2
US 155 D/DS				31	28	25	21	19	16	13	10	6

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

VDE/GS-Certification for US 75 E/ES, US 105 E/ES



# US 75-US 155

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump according to EN 12050 ready for connection with 10 m cable. Foot strainer made of GRP enclosed.

US 155: Pumps without level control with free lead end. Pump with level control with CEE-Plug and phase inverter (3-phase) or safety-plug (1-phase).

### MECHANICAL DATA

Pump	Vertical single-stage	Seal on medium side	SiC mechanical seal
Free passage	50 mm	Run dry protection	Yes
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Submersible	Yes
Oil chamber	Yes	Pressure outlet	IG 2"

### ELECTRICAL DATA

Power line	10m H07RN-F	Insulation class	B
Type of enclosure	IP 68	Winding thermostat	Yes

### US 75-US 155

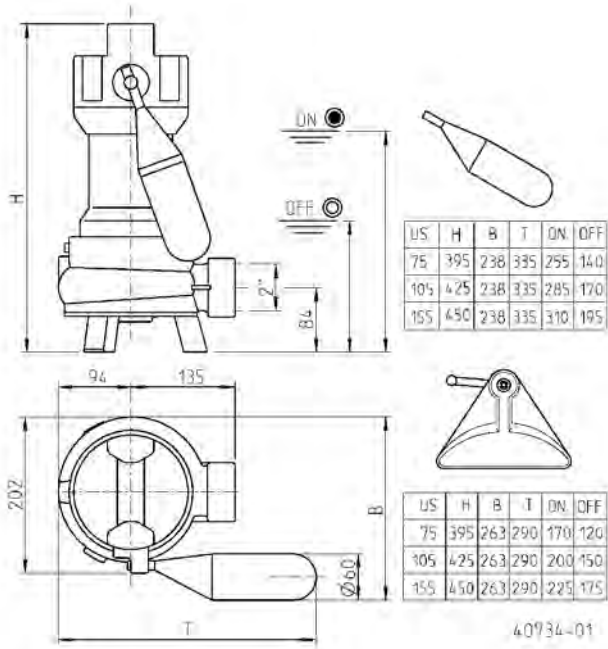
Type	Code No.	Voltage	Motor rating		Current	Wires	Motor protection	Plug	Weight
			P1	P2					
<b>Without level control</b>									
US 75 E	<b>JP09406</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	13.0 kg
US 75 D	<b>JP09404</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	13.1 kg
US 105 E	<b>JP09410</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	14.5 kg
US 105 D	<b>JP09408</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	15.1 kg
US 155 E	<b>JP09388</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	on request <sup>1</sup>	Without	16.0 kg
US 155 D	<b>JP09390</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	on request <sup>1</sup>	Without	16.5 kg
<b>With built-in level control</b>									
US 75 ES	<b>JP09407</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	13.0 kg
US 75 DS	<b>JP09405</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	13.2 kg
US 105 ES	<b>JP09411</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	14.6 kg
US 105 DS	<b>JP09409</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	15.2 kg
US 155 ES	<b>JP09389</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	Integrated	Safety	16.3 kg
US 155 DS	<b>JP09391</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	Integrated	CEE	17.2 kg

<sup>1</sup>Protective motor plug necessary see accessory

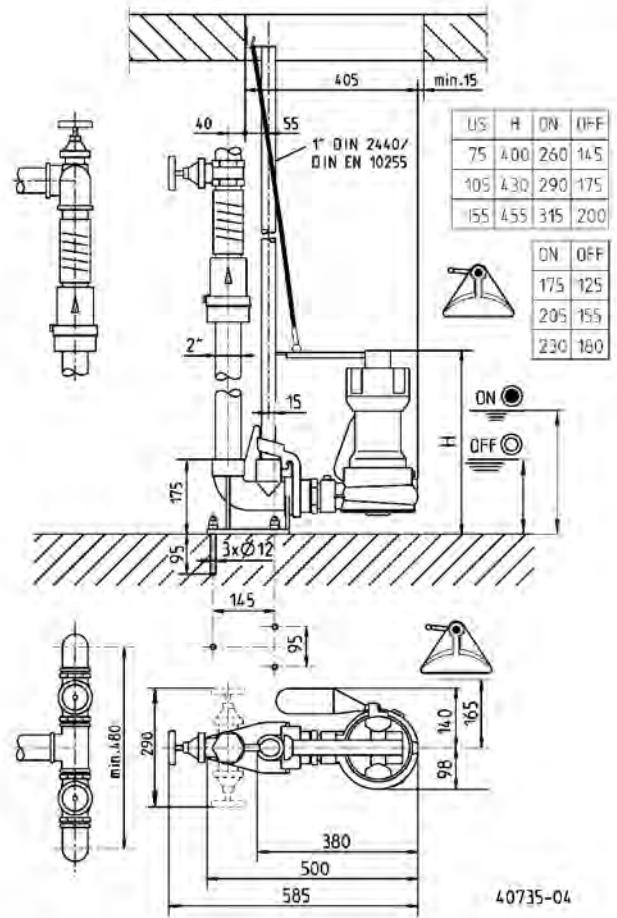
# US 75-US 155

## SUBMERSIBLE DRAINAGE PUMPS

Dimensions and switching points US 75 up to US 155 (mm)



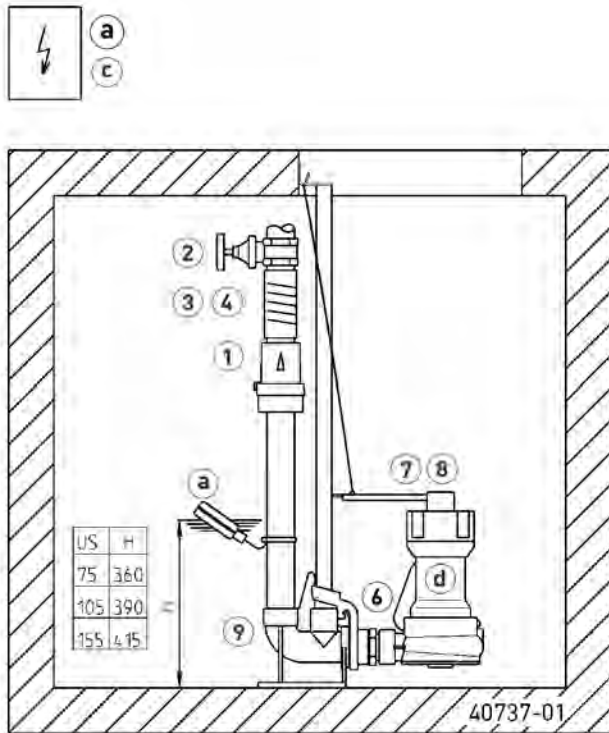
Dimensions and switching points with GR 50 S (mm)



# US 75-US 155

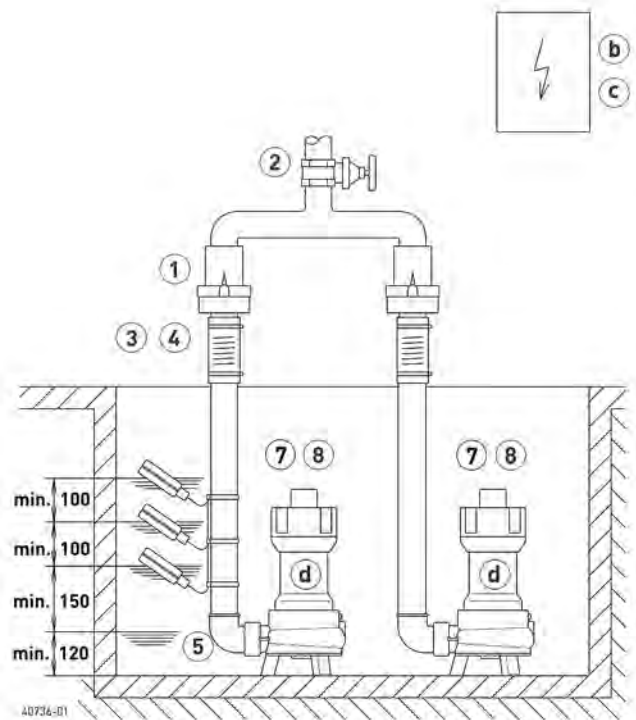
## SUBMERSIBLE DRAINAGE PUMPS

Example of single installation with GR



Single unit 2" with GR 50 S: sump area min. 40x65 cm  
 Single unit 2" without GR: sump area min. 40x50 cm  
 Duplex unit 2" with GR 50 S: sump area min. 65x70 cm  
 Duplex unit 2" without GR: sump area min. 50x70 cm  
 In case of installation beneath the backpressure level the pressure tube must be taken in a

Example of duplex installation



loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.  
 In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.  
 Suspend control unit in a dry room


### MECHANICAL ACCESSORY

					Code No.
	<b>① Swing-type check valve</b>	R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>	K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
	<b>② Stop valve</b>		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
	<b>③ Elastic connection</b>		2" (DN 50), PN 4	150x63 (HxD)	JP44775
	<b>④ Hose band clamp</b>		2"		JP44764
	<b>⑤ Elbow</b>		2"		JP44771
	<b>⑥ Special float</b>		for lower switching points		JP44795







# US 75-US 155

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.	
	<b>7 Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901	
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902	
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP47365	
	<b>8 Webbing</b>	with shackle	JP45168	
	<b>9 Guide rail system</b>	GR 50	JP25593	
		Securing lever	US 75-155	JP41024
		Guide rail 1"	1500 mm	JP48937
		Guide rail 1"	2000 mm	JP48938
		Guide rail 1"	2500 mm	JP48939
	<b>10 Strainer base</b>	10 mm free passage	JP45957	
<b>Bases</b>	stainless steel, 50 mm free passage	JP40632		

### ELECTRICAL ACCESSORY

			Code No.	
	<b>a Alarm unit</b>	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
		AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>			
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895	
	AW0	for alarm forwarding in case of several washing machines	JP44899	
	<b>b Control for duplex units</b>	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
		Control unit HIGHLOGO 2-00 E	230 V	JP47996
		Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
		Control unit HIGHLOGO 2-00	400 V	JP47997
		Control unit BD 25	400 V, for pumps US 151-155	JP45737
		Control unit HIGHLOGO 2-25	400 V	JP47998
<b>Level control</b>				
	Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725	
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726	
	Weight	to stabilize the subm. ball contact switch	JP44803	
	<b>Protective motor plug</b>	Protective motor plug, 8 A	230 V, for pumps without integrated motor protection	JP44753
		CEE motor protection 2,5-4,0 A	400 V, mandatory for pumps without integrated motor protection	JP44754
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850	
	<b>d Seal leak detector</b>	DKG	JP44900	
	<b>e Smart Home</b>	FTJP radio transmitter	JP47209	

# US 75-US 155

SUBMERSIBLE DRAINAGE PUMPS

# US 73 HE-US 103 HE

SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION



- Safe to run dry
- 30 mm free passage
- Hot water up to 194 °F (90 °C)
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet

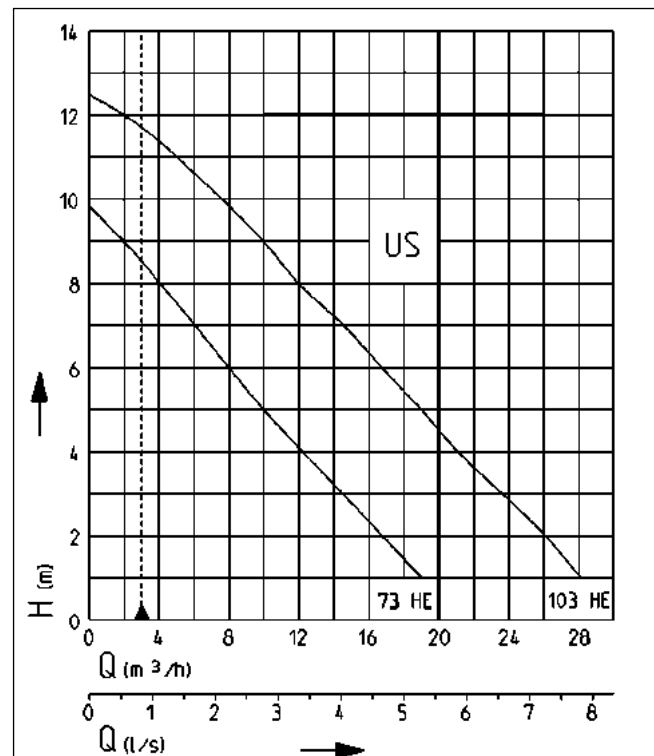
## DESCRIPTION

The heavy duty centrifugal submersible drainage pumps US 73 and 103 HE/HES are suitable for dealing with very contaminated water and capable of handling solids up to 30 mm particle size without stones. These pumps can be used wherever wastewater up to 194°F (90°C) is involved, such as in laundries or automatic laundrettes, or in industrial dishwashers and washing machines or for the emergency overflow of heating systems.

This range of pumps is suitable for stationary use. For easy removal of the pumps from deep sumps we recommend the use of our guide rail systems which provide ease of maintenance and inspection. A controllable oil chamber and wear-resistant special mechanical seal ensure a long service life. The integrated winding thermostats protect the motor from overload.

In conjunction with the drain master Hebefix 100 H, it provides a ready to install solution for conveying wastewater up to 176°F (80°C).

## PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12
US 73 HE/HES	Flow rate Q [m³/h]	19	17	15	12	10	8	6	4	2		
US 103 HE/HES		28	26	23	21	19	17	15	12	10	8	2

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# US 73 HE-US 103 HE

SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION

## SCOPE OF SUPPLY

Pump acc. to EN 12050 ready for connection with cable and safety plug

## MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	30 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Motor housing	Stainless steel
Oil chamber	Yes	Pump housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Submersible	Yes
		Pressure outlet	IG 1 1/2"

## ELECTRICAL DATA

Voltage	1/N/PE~230 V	Insulation class	F
Power line	10m H07RN-F	Winding thermostat	Yes
Wires	3G1,0	Motor protection	Integrated
Type of enclosure	IP 68	Plug	Safety

## US 73 HE-US 103 HE

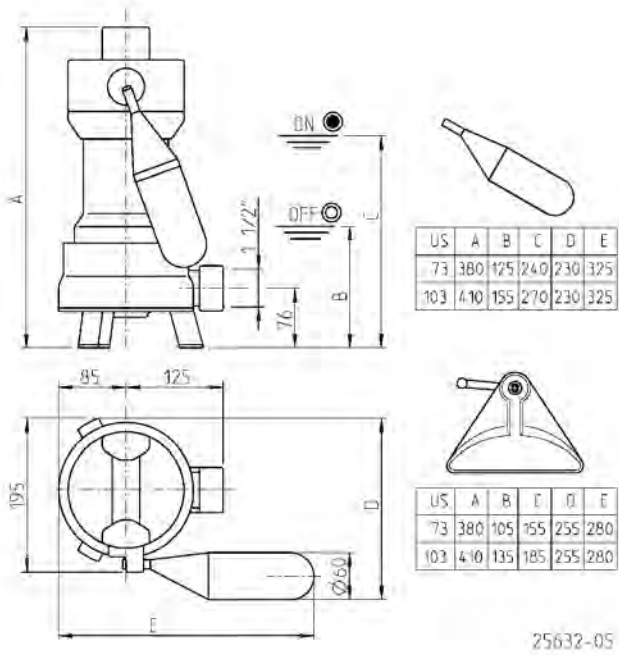
Type	Code No.	Motor rating		Current	Weight
		P1	P2		
<b>Without level control</b>					
US 73 HE	<b>JP09267</b>	0.83 kW	0.50 kW	3.9 A	12.4 kg
US 103 HE	<b>JP09307</b>	1.37 kW	0.98 kW	6.0 A	14.0 kg
<b>With built-in level control</b>					
US 73 HES	<b>JP09264</b>	0.83 kW	0.50 kW	3.9 A	12.5 kg
US 103 HES	<b>JP09308</b>	1.37 kW	0.98 kW	6.0 A	14.1 kg



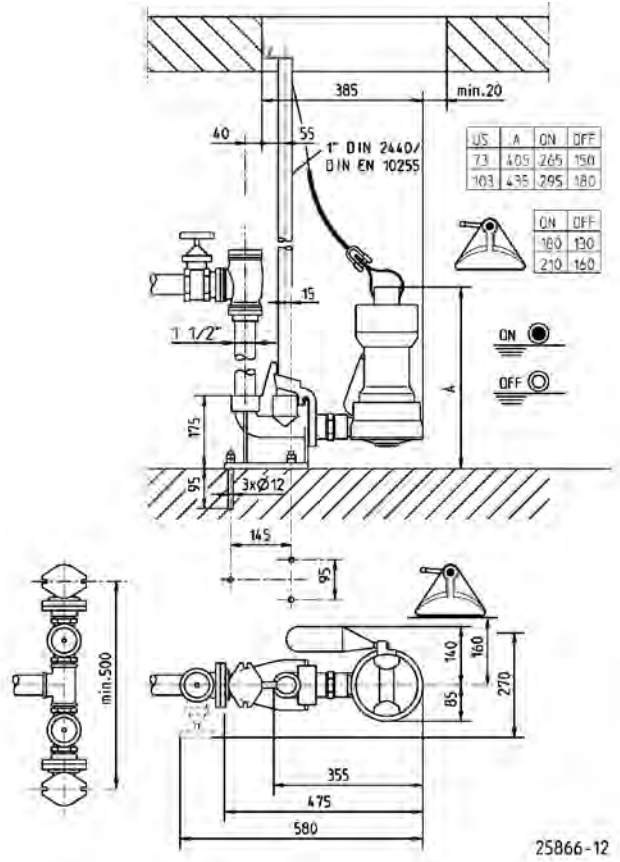
# US 73 HE-US 103 HE

SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION

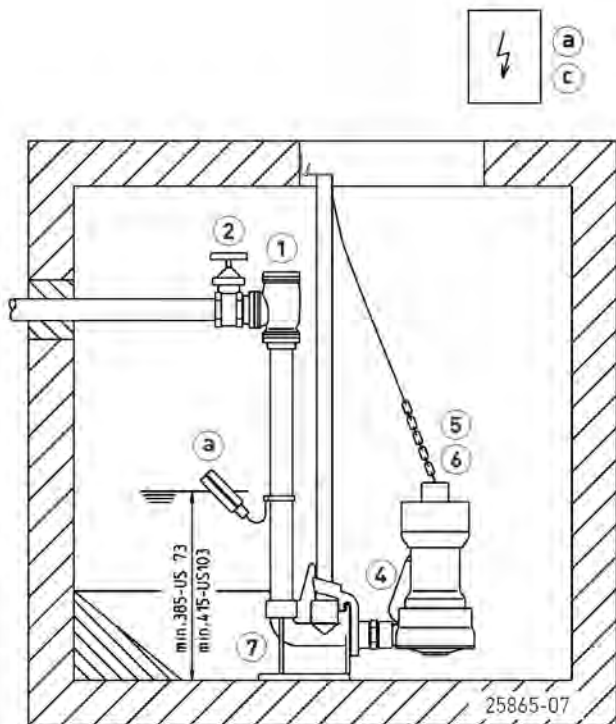
Dimensions/switching points US 73 + 103 HES (mm)



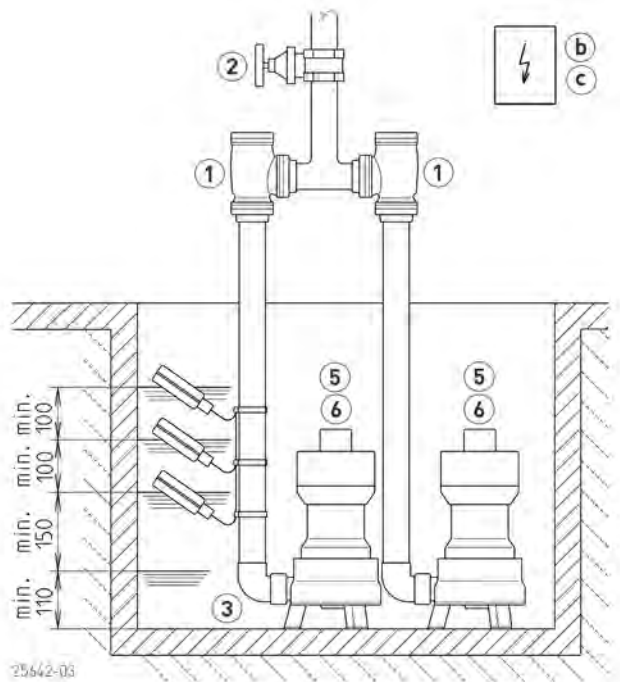
Dimensions/switching points US 73+103 HES with GR 40 (mm)



Example of single pump installation with GR



Example of duplex pump installation



# US 73 HE-US 103 HE

## SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION

Single unit US-H with GR 40: sump area min. 40x65 cm

Single unit US-H without GR: sump area min. 40x40 cm

Duplex unit US-H with GR 40: sump area min. 65x80 cm

Duplex unit US-H without GR: sump area min. 40x80 cm



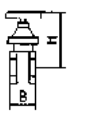



In case of installation beneath the backpressure level the pressure tube must be taken in a

loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room






### MECHANICAL ACCESSORY

				Code No.
	<b>① Swing-type check valve</b>			
	for hot water	1½" (DN 40)	80x85 (HxB)	<b>JP44784</b>
	<b>Ball-type check valve</b>			
	KE40 EN 12050-4	1½" (DN 40), PN 6	170x125 (HxB)	<b>JP47974</b>
	<b>② Stop valve</b>	brass, 1½" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	<b>③ Elbow</b>	1½"		<b>JP45953</b>
	<b>④ Special float</b>	for lower switching points		<b>JP44795</b>
	<b>⑤ Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)		<b>JP45901</b>
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)		<b>JP45902</b>
	<b>⑥ Webbing</b>	with shackle		<b>JP45168</b>
	<b>⑦ Guide rail system</b>	GR 40		<b>JP25592</b>
	Guide rail 1"	1500 mm		<b>JP48937</b>
	Guide rail 1"	2000 mm		<b>JP48938</b>
	Guide rail 1"	2500 mm		<b>JP48939</b>
	Guide rail 1"	3000 mm		<b>JP48940</b>

# US 73 HE-US 103 HE

SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION

## ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>Washing machine stop</b>		
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
	AW0	for alarm forwarding in case of several washing machines	JP44899
	<b>b Control for duplex units</b>		
	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
	Control unit HIGHLOGO 2-00 E	230 V	JP47996
	<b>Level control</b>		
	Submersible switch pack BH	Submersible ball contact switch 9.5 m and fixing device	JP24768
	Submersible switch pack BHMg	Submersible ball contact switch 9.5 m with counterweight	JP24769
	Weight	to stabilize the subm. ball contact switch	JP44803
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Smart Home</b>	FTJP radio transmitter	JP47209

# US 73 HE-US 103 HE

SUBMERSIBLE DRAINAGE PUMPS FOR HOT WATER OPERATION

## US 73 EX- US 103 EX

SUBMERSIBLE DRAINAGE PUMPS WITH EXPLOSION-PROOF

- Stationary use
- 30 mm free passage
- Controllable oil chamber
- SiC mechanical seal
- independent of sense of rotation
- Replaceable moisture sealed cable inlet



### DESCRIPTION

These robust centrifugal submersible drainage pumps US 73 Ex and US 103 Ex can be used for the handling of contaminated water containing fibres and particles up to 30 mm size (no stones). The pumps are suitable for mounting in collection chambers and pits located in hazardous areas. Hazardous areas are usually designated where the drainage system is fed from areas with vehicles, car parks, garages, tank farms or laboratories, etc.

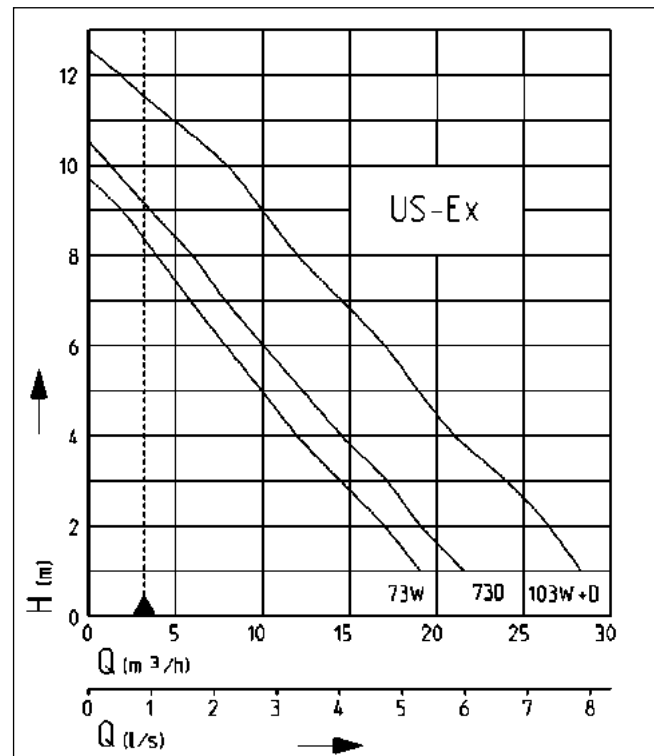
Type of protection Ex II 2 G Ex db IIB T4 Gb

The light weight of the pumps and low power consumption make the unit ideal for dealing with contaminated liquids in an economic manner.

This range of pumps is suitable for stationary use. For easy removal of the pumps from deep sumps we recommend the use of our guide rail systems GR 40 which provide ease of maintenance and inspection. A controllable oil chamber and wear-resistant special mechanical seal ensure a long service life. For automatic monitoring of the oil chamber a seal leak control can be connected.

According to Ex-proof testing regulations, these pumps are provided with winding thermostats and can only be used with the equivalent control unit (see accessories).

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12
US 73 E Ex	Flow rate Q [m³/h]	19	17	15	12	10	8	6	4	2		
US 73 D Ex		22	20	17	15	12	10	8	6	4		
US 103 E/D Ex		28	26	23	21	19	17	15	12	10	8	2

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# US 73 EX- US 103 EX

SUBMERSIBLE DRAINAGE PUMPS WITH EXPLOSION-PROOF

## SCOPE OF SUPPLY

Pump according to EN 12050 ready for connection with 10 m cable.

## MECHANICAL DATA

Pump	Vertical single-stage	Seal on medium side	SiC mechanical seal
Ex-proof	With ex-proof	Run dry protection	Yes
Free passage	30 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Motor housing	Grey cast iron
Oil chamber	Yes	Submersible	Yes
		Pressure outlet	IG 1 1/2"

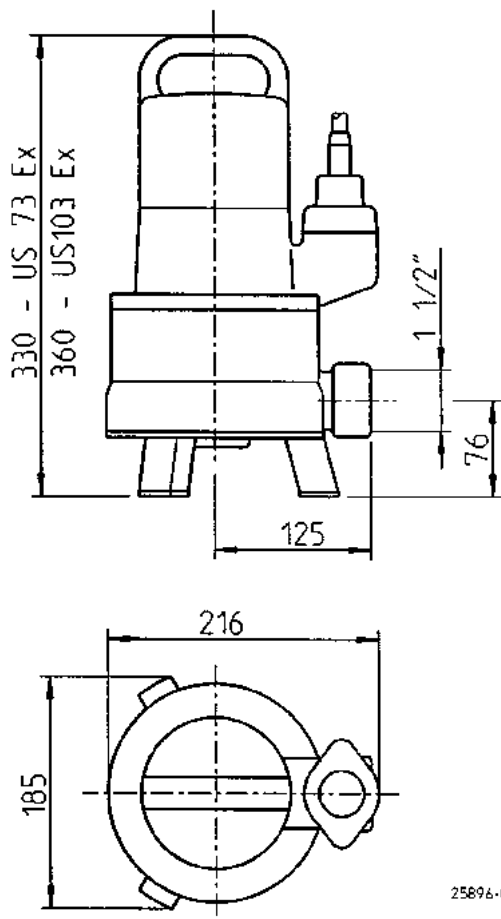
## ELECTRICAL DATA

Power line	10m H07RN-F	Insulation class	F
Wires	6G1,5	Winding thermostat	Yes
Type of enclosure	IP 68	Plug	Without

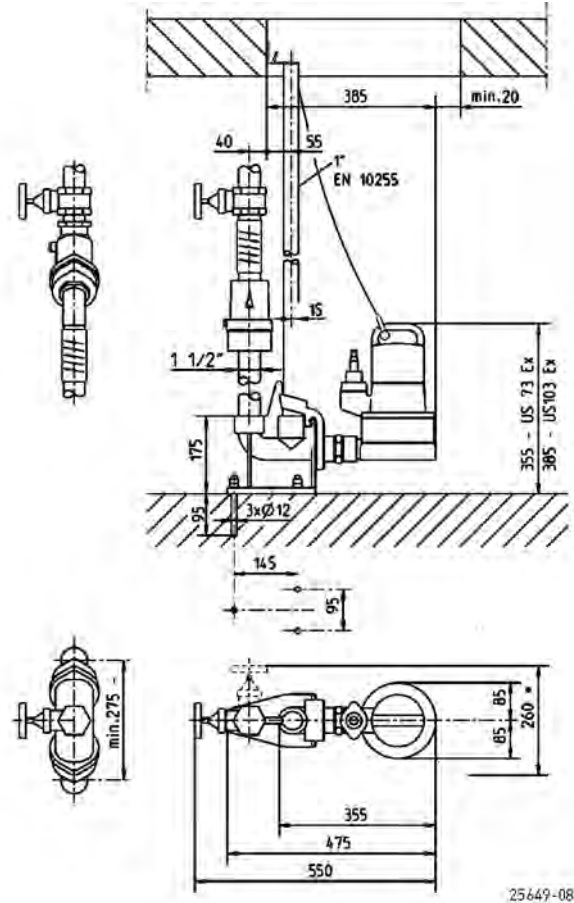
## US 73 EX- US 103 EX

Type	Code No.	Voltage	Motor rating		Current	Weight
			P1	P2		
US 73 E Ex	JP09292	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	19.0 kg
US 73 D Ex	JP00595	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	19.0 kg
US 103 E Ex	JP09294	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	21.5 kg
US 103 D Ex	JP09293	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	21.5 kg

## Dimensions US 73 Ex and US 103 Ex (mm)



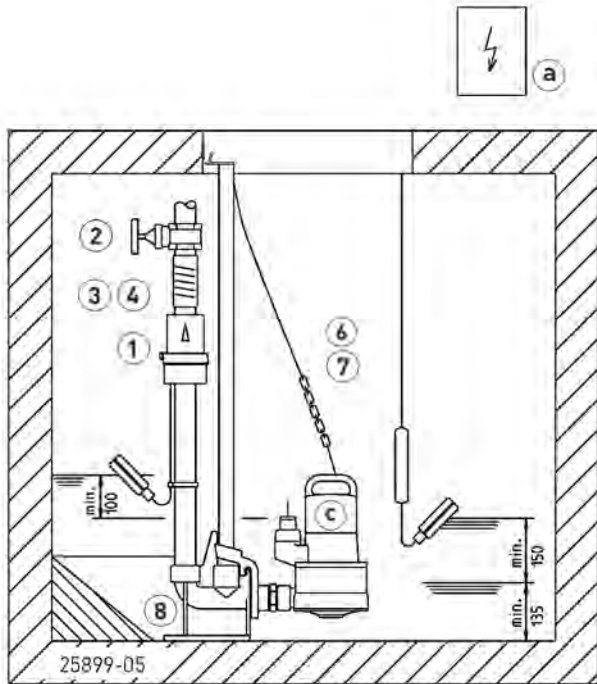
## Dimensions with GR 40 (mm)



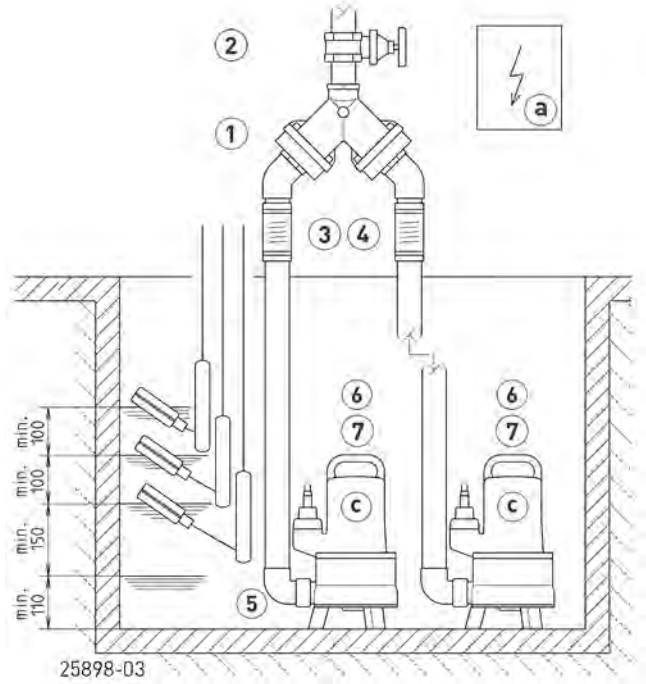
# US 73 EX- US 103 EX

SUBMERSIBLE DRAINAGE PUMPS WITH EXPLOSION-PROOF

**Example of single pump installation with GR**



**Example of duplex pump installation**



Single unit 1/2" with GR 40: sump area min. 40x60 cm  
 Single unit 1/2" without GR: sump area min. 40x40 cm

Duplex unit 1/2" with GR 40: sump area min. 60x60 cm  
 Duplex unit 1/2" without GR: sump area min. 40x60 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a

loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room


## MECHANICAL ACCESSORY

				Code No.	
	<b>① Swing-type check valve</b>	R40 EN 12050-4	1/2" (DN 40), PN 4	150x120 (HxB)	<b>JP00317</b>
		DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	<b>JP09155</b>
	<b>Ball-type check valve</b>	KE40 EN 12050-4	1/2" (DN 40), PN 6	170x125 (HxB)	<b>JP47974</b>
	<b>② Stop valve</b>		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	<b>③ Elastic connection</b>		1/2" (DN 40), PN 4	120x50 (HxD)	<b>JP44777</b>
	<b>④ Hose band clamp</b>		1/2"		<b>JP44763</b>
	<b>⑤ Elbow</b>		1/2"		<b>JP45953</b>
	<b>⑥ Chain</b>		certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)		<b>JP45901</b>
			certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)		<b>JP45902</b>
	<b>⑦ Webbing</b>		with shackle		<b>JP45168</b>




# US 73 EX- US 103 EX

SUBMERSIBLE DRAINAGE PUMPS WITH EXPLOSION-PROOF

## MECHANICAL ACCESSORY

			Code No.
	<b>8 Guide rail system</b>	GR 40	JP25592
	Guide rail 1"	1500 mm	JP48937
	Guide rail 1"	2000 mm	JP48938
	Guide rail 1"	2500 mm	JP48939
	Guide rail 1"	3000 mm	JP48940

## ELECTRICAL ACCESSORY

			Code No.
	<b>a Control for single units</b>		
	Control unit AD 4 XE	for US 73E EX	JP25901
	Control unit AD 8 XE	for US 103E E	JP25902
	Control unit AD 23 X	for US 73D EX	JP09754
	Control unit AD 25 X	for US 103D EX	JP09683
	<b>Control for duplex units</b>		
	Control unit BD 23 X	for US 73 D EX	JP09755
	Control unit BD 25 X	for US 103 D EX	JP09681
	<b>Level control</b>		
	Subm. switch pack AmG		JP16719
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
	Auxiliary switch unit ExH-A for explosion-proof pumps only		JP16720
	Auxiliary switch unit ExH-B for explosion-proof pumps only		JP00295
	<b>b Level control</b>		
	Dry run protection		JP44603
	<b>c Seal leak detector</b>	DKG Ex for explosion-proof pumps	JP00249



## UB 62-UB 251

SUBMERSIBLE PUMPS FOR BUILDING SITES

- Run dry protection
- Portable
- Integrated fix-coupling
- 10 mm free passage
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet



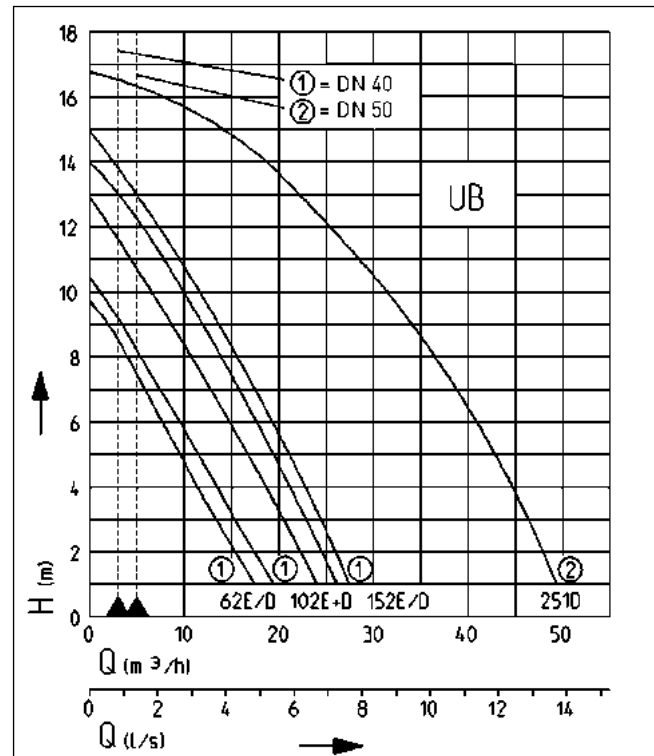
### DESCRIPTION

The centrifugal submersible pumps of this range UB 62-251 can be used wherever rainwater, groundwater, leaked water, drainage or sewage water with impurities of up to 10 mm particle size occurs. The main applications are on building sites, like structural and civil engineering, sewage-construction and building mines. They can also be used for taking water out of rivers and reservoirs as well as for filling and emptying containers. The standard fixed coupling makes a quick connection of the pressure tube possible.

This range of pumps is exclusively suitable for portable use. A controllable oil chamber and wear-resistant special mechanical seal ensure a long service life.

The pumps are delivered complete with lead and plug. The CEE-plug of the three-phase pumps has an integrated phase inverter which facilitates their use on building sites.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16
UB 62 ES	Flow rate Q [m³/h]	17	15	13	11	9	8	6	4	2						
UB 62 DS		19	18	15	13	11	9	8	6	4						
UB 102 ES/DS		24	22	21	19	17	15	13	11	9	7	5	2			
UB 152 ES		26	24	23	21	19	17	16	14	11	9	7	5	2		
UB 152 DS		27	25	24	22	20	19	17	15	13	11	9	7	5	2	
UB 251 DS		49	48	46	45	43	41	39	37	34	32	28	26	22	19	10

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

VDE/GS-Certification for UB 62 ES, US 102 ES



# UB 62-UB 251

## SUBMERSIBLE PUMPS FOR BUILDING SITES

### SCOPE OF SUPPLY

Pump acc. to EN 12050 ready for connection with cable and safety-plug (1-phase) or CEE-plug with phase inverter (3-phase),

built-in level control and fixed coupling.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	10 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Pump housing	Grey cast iron
Oil chamber	Yes	Submersible	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	Fixed coupling C

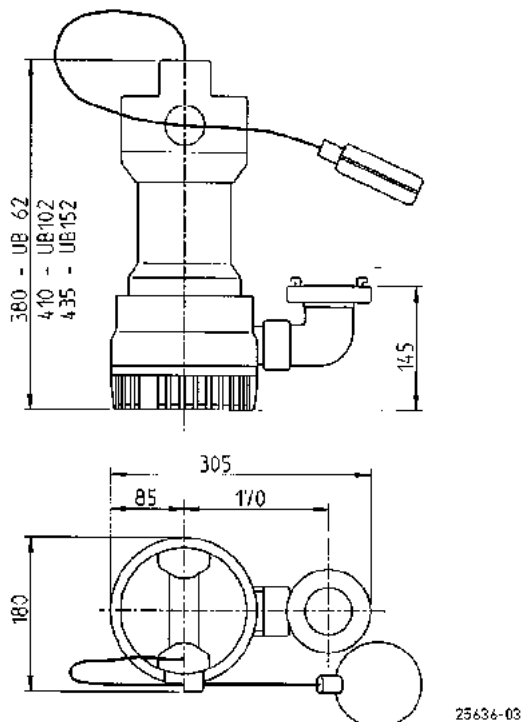
### ELECTRICAL DATA

Circuit	With built-in level control	Winding thermostat	Yes
Power line	10m H07RN-F	Motor protection	Integrated
Type of enclosure	IP 68		

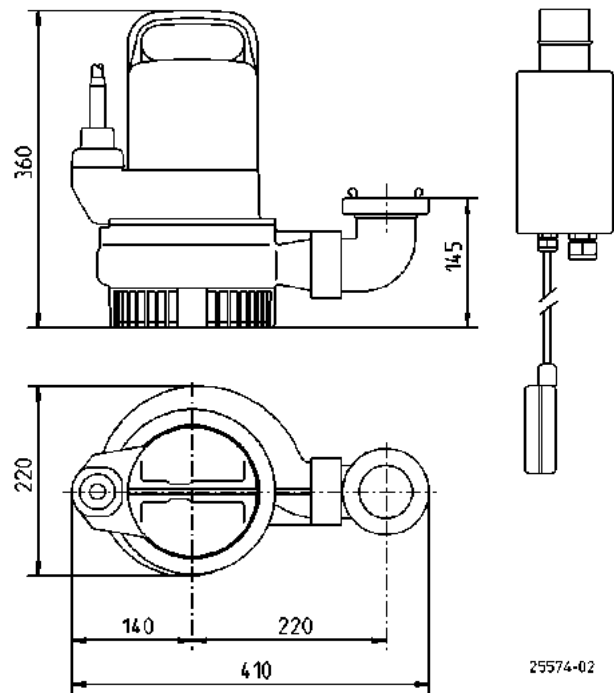
### UB 62-UB 251

Type	Code No.	Voltage	Motor rating		Current	Wires	Insulation class	Plug	Motor housing	Weight
			P1	P2						
UB 62 ES	<b>JP09818</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	B	Safety	Stainless steel	13.5 kg
UB 62 DS	<b>JP09819</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	B	CEE	Stainless steel	13.8 kg
UB 102 ES	<b>JP09283</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	F	Safety	Stainless steel	15.3 kg
UB 102 DS	<b>JP00534</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	B	CEE	Stainless steel	15.8 kg
UB 152 ES	<b>JP09439</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	B	Safety	Stainless steel	16.9 kg
UB 152 DS	<b>JP09440</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	B	CEE	Stainless steel	17.9 kg
UB 251 DS	<b>JP09298</b>	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	F	CEE	Grey cast iron	30.6 kg

### Dimensions UB 62 up to UB 152 (mm)



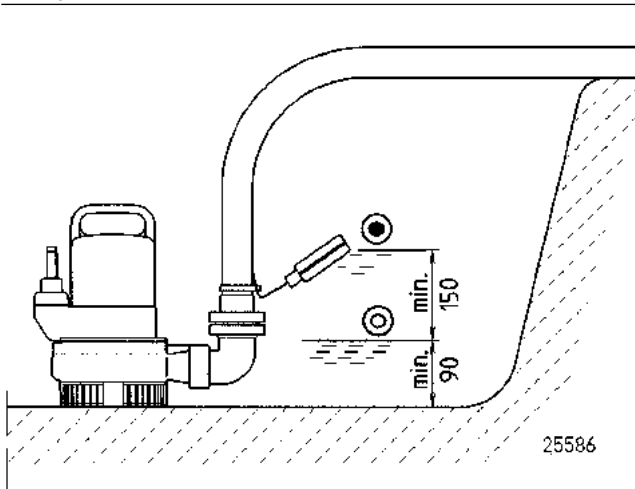
### Dimensions UB 251 (mm)



# UB 62-UB 251

SUBMERSIBLE PUMPS FOR BUILDING SITES

## Example of installation UB 251 DS



## MECHANICAL ACCESSORY

		Code No.	
①	<b>Pressure hose</b>	15 m, synthetic, with coupling Storz C, Ø 52 mm	JP00336
②	<b>Hose coupling</b>		JP25708
	Coupling wrench		
③	<b>Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902
	<b>Webbing</b>	with shackle	JP45168

# UB 62-UB 251

SUBMERSIBLE PUMPS FOR BUILDING SITES

## MULTIDRAIN UV3

### SUBMERSIBLE DRAINAGE PUMPS

- High quality stainless steel design
- Especially suitable for mobile use
- Cooling jacket for motor housing
- Free passage 10 mm
- Discharge branch vertical 1 1/4"
- Flushing device
- Self ventilation
- Moisture sealed cable inlet
- Fluid temperature 35 °C, temporarily 70 °C (10 min.)



#### DESCRIPTION

The Multidrain UV3 is a versatile submersible drainage pump made of stainless steel for portable and stationary use. It pumps rainwater, lightly submersible polluted water and domestic wastewater from e.g. household dishwashers or washing machines (also high temperature).

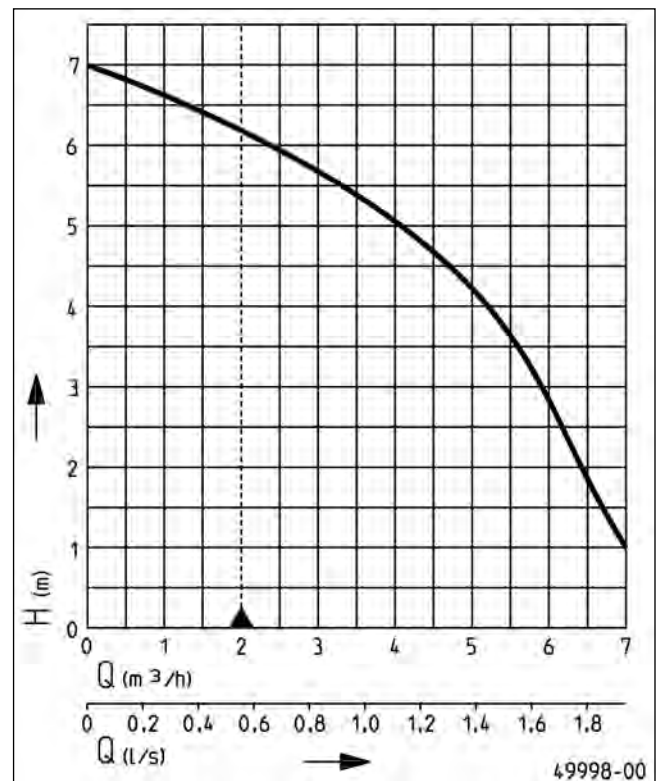
An easy-to-activate flushing device to reduce deposits in the pump sump ensures trouble-free operation and facilitates maintenance.

Motor jacket cooling ensures submerged operation without the risk of overheating. In case of dry running, the thermal motor protection switches off the pump before reaching a critical temperature. These protective measures, plus the swing-type check valve and a hose connection included in the scope of delivery, make the Multidrain UV3 a perfect pump for mobile applications.

In stationary use, the Multidrain UV3 S with automatic switch removes water from drainage shafts in cellars, washing basements or storage rooms and serves as a backflow protection. If the shaft or container should run dry temporarily, air cushions can escape through the ventilation opening. When the strainer base is removed, the pump removes the water down to a level of 5 mm.

If submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100. For construction sites and garden ponds, a H07-type cable must be used.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
Multidrain UV3	Flow rate Q [m³/h]	7.0	6.4	5.9	5.2	4.1	2.6

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# MULTIDRAIN UV3

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump ready to connect according EN 12050 with vertical discharge, 1 1/4" female connection elbow, cable and plug, swing-type check valve for mobile use, graded hose connection

1 1/4" - 38/32/25, float fixation, locking plug (UV3S/3SF) S model with automatic level float switch.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	10 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Rotary shaft seal	Motor housing	Stainless steel
Oil chamber	Yes	Pump housing	Stainless steel
Seal on medium side	2-fold rotary shaft seals	Submersible	Yes

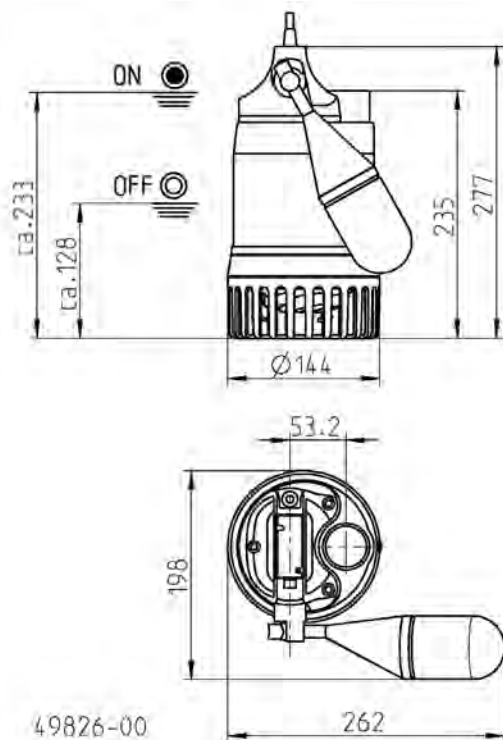
### ELECTRICAL DATA

Pump voltage	1/N/PE~230 V	Insulation class	F
Motor rating P1	0.34 kW	Winding thermostat	Yes
Motor rating P2	0.23 kW	Motor protection	Integrated
Current	1.5 A	Plug	Safety
Type of enclosure	IP 68		

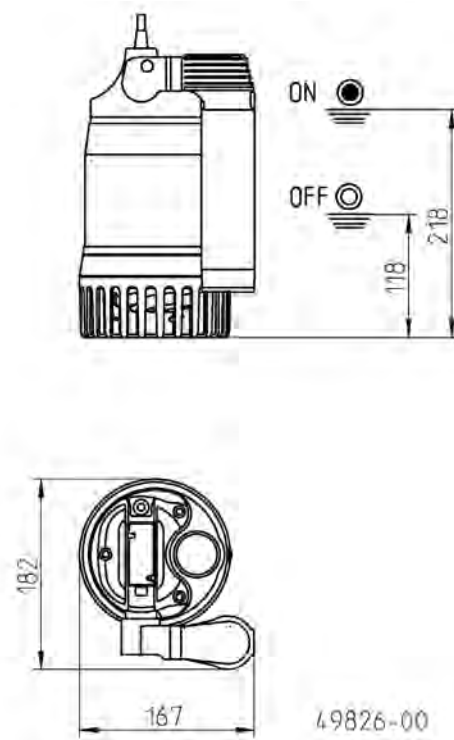
### MULTIDRAIN UV3

Type	Code No.	Power line	Wires	Weight
<b>Without level control</b>				
Multidrain UV3, 10 m cable	<b>JP50248</b>	10m H05RN-F	3G0,75	5.3 kg
<b>With built-in level control</b>				
Multidrain UV3 S, 4 m cable	<b>JP50249</b>	4m H05RN-F	3G0,75	4.6 kg
Multidrain UV3 S, 10 m cable	<b>JP50312</b>	10m H07RN-F	3G1,0	5.5 kg
Multidrain UV3 SF, 10 m cable	<b>JP50313</b>	10m H07RN-F	3G1,0	5.5 kg

Dimensions and switching points UV3 S (mm)



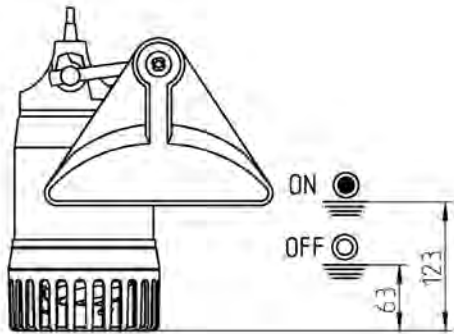
Dimensions and switching points special float UV3 SF (mm)



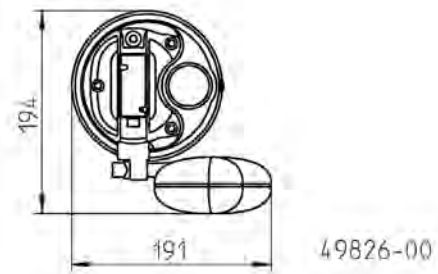
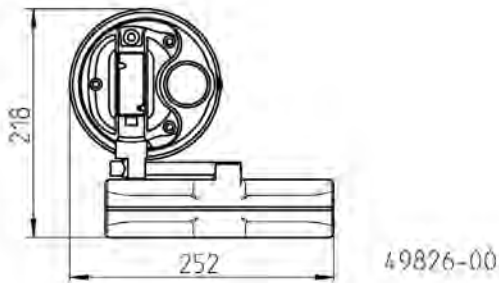
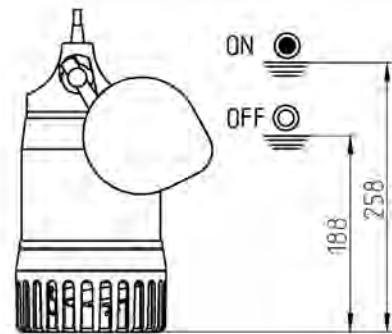
# MULTIDRAIN UV3

## SUBMERSIBLE DRAINAGE PUMPS

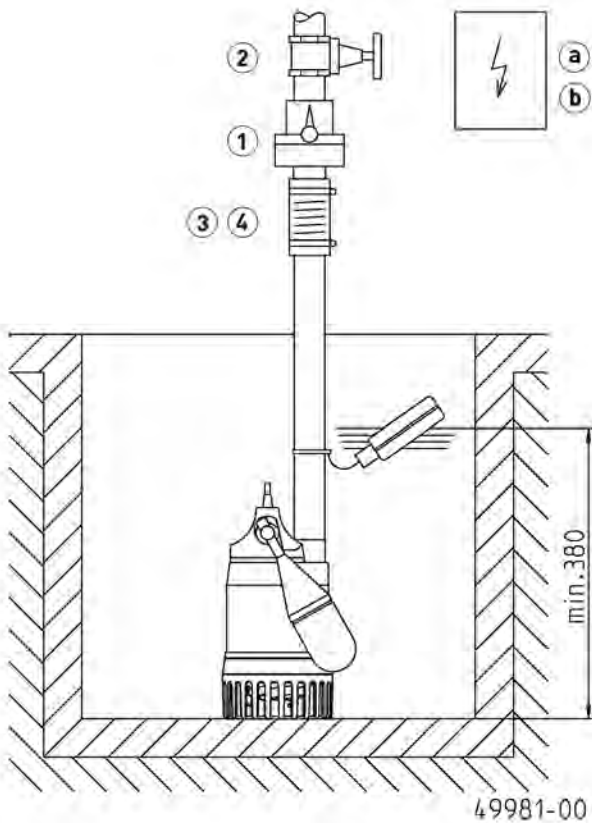
Dimensions and switching points special float UV3 S (mm)



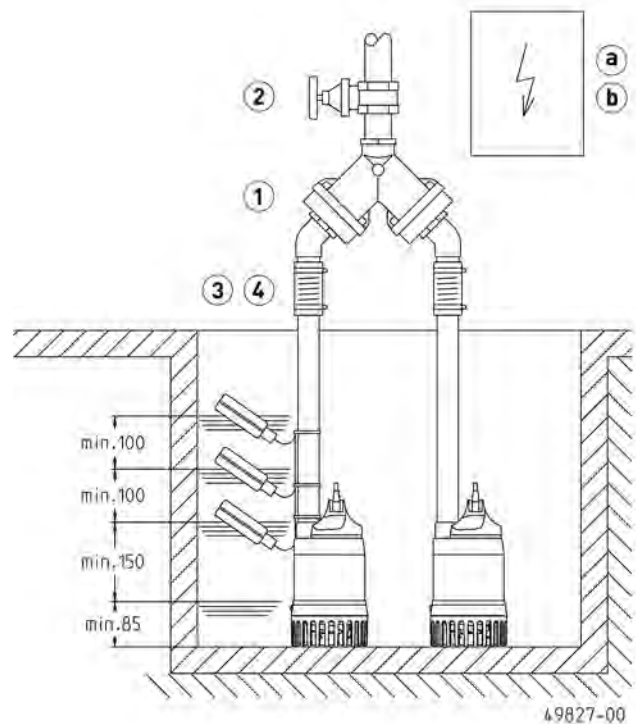
Dimensions and switching points special float UV3 S (mm)



Example of single pump installation



Example of duplex installation



# MULTIDRAIN UV3

## SUBMERSIBLE DRAINAGE PUMPS

Single unit: sump area 30x30 cm

Duplex unit: sump min. 50x50 cm








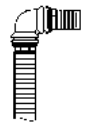


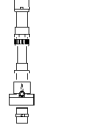
In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN

12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

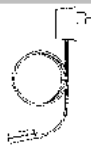
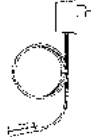
In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room

### MECHANICAL ACCESSORY

				Code No.
	<b>① Swing-type check valve</b>			
	R32 EN 12050-4	1/4" (DN 32), PN 4	90x90 (HxB)	JP09739
	DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	JP09155
	<b>② Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	JP46111
	<b>③ Elastic connection</b>	1/4" (DN 32), PN 3	100x42 (HxD)	JP44773
	<b>④ Hose band clamp</b>	1/4"		JP44765
	<b>⑤ Hose coupling</b>			
	Hose coupling	1/4" (DN 32) brass, for transportable use		JP00327
	<b>⑥ Hose set</b>	1 1/4" (DN32), 15 m PVC hose c/w elbow		JP43550
	<b>⑦ Special float</b>	for lower switching points		JP44795
		for narrow chambers (mind. 30x30 od Ø30 cm)		JP40856
	<b>⑧ Connection kit</b>	DN 32, with telescopable pressure pipe 30-90 cm		JP44609

### ELECTRICAL ACCESSORY


				Code No.
	<b>a Alarm unit</b>			
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable		JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable		JP44892
	<b>b Washing machine stop</b>			
	AW3	subm. ball contact switch, mains dependent, 3 m cable		JP44895



# MULTIDRAIN UV3

## SUBMERSIBLE DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>c Level control</b> Weight	to stabilize the subm. ball contact switch	<b>JP44803</b>
	<b>d Control for duplex units</b> Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	<b>JP45735</b>
	Control unit HIGHLOGO 2-00 E	230 V	<b>JP47996</b>
	<b>e Level control</b> Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	<b>JP16725</b>
	Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	<b>JP16726</b>
	<b>f Rechargeable battery</b> Smart Home	for mains independent alarm FTJP radio transmitter	<b>JP44850</b>  <b>JP47209</b>

# MULTIDRAIN UV3

SUBMERSIBLE DRAINAGE PUMPS

**MULTIDRAIN UV 300**  
SUBMERSIBLE DRAINAGE PUMPS



- High-quality stainless steel design
- 10 mm free passage
- Discharge vertical 1 1/2"
- Emerged operation due to motor cooling (S1)
- Thermal motor protection
- Duplex mechanical seal
- Replaceable moisture sealed cable inlet

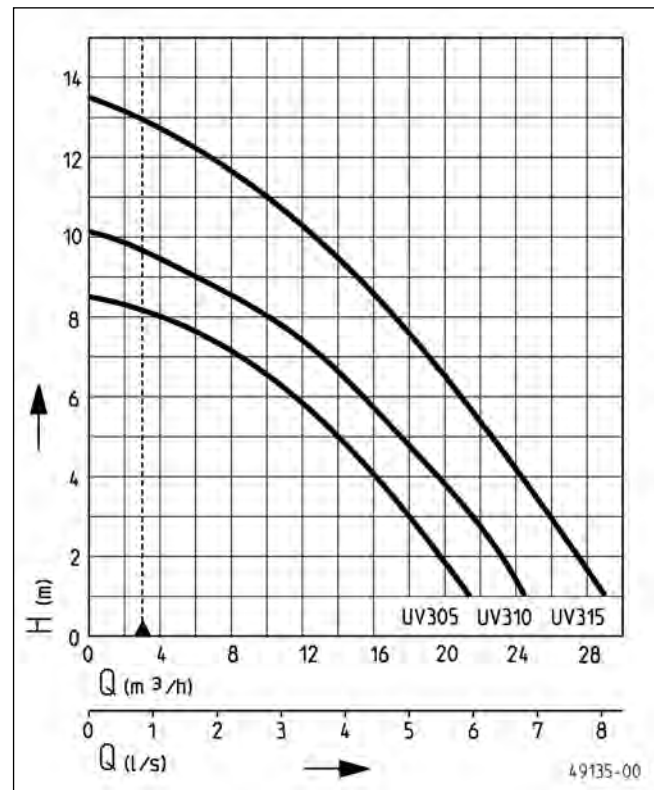
**DESCRIPTION**

The submersible drainage pumps Multidrain UV 300 can be used wherever there is dirty, rain, ground, seepage or drainage water with solids up to 10 mm. They can thus be used both in fixed installations in building drainage systems and in all transportable applications such as water extraction, emptying ponds or basins or, above all, in the removal of flooding inside and outside buildings.

The motor jacket cooling makes the pumps particularly suitable for submerged operation. A special thermal protection ensures that the pumps are not damaged even when running dry.

The pumps can be supplied either with or without a mounted submersible ball contact switch and 10 m cable.

**PERFORMANCE**



Type	Delivery head H [m]	1	3	5	7	9	11	13
UV 305-1	Flow rate Q [m³/h]	21.0	17.5	14.0	7.0			
UV 305-3		22.0	18.5	14.0	8.5			
UV 310-1		24.5	21.0	17.0	13.0	6.0		
UV 310-3		24.5	21.5	17.5	13.5	6.0		
UV 315-1		28.0	25.0	22.0	19.0	14.5	10.0	2.0
UV 315-3		29.0	25.5	23.0	19.0	15.0	10.0	3.0

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

# MULTIDRAIN UV 300

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump with 10 m cable, automatic version with integrated ball-float switch.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Free passage	10 mm	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Stainless steel
Seal on motor side	Mechanical seal	Motor housing	Stainless steel
Oil chamber	Yes	Submersible	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	IG 1 1/2"

### ELECTRICAL DATA

Power line	10m H07RN8-F	Winding thermostat	Yes
Type of enclosure	IP 68	Motor protection	Integrated
Insulation class	F		

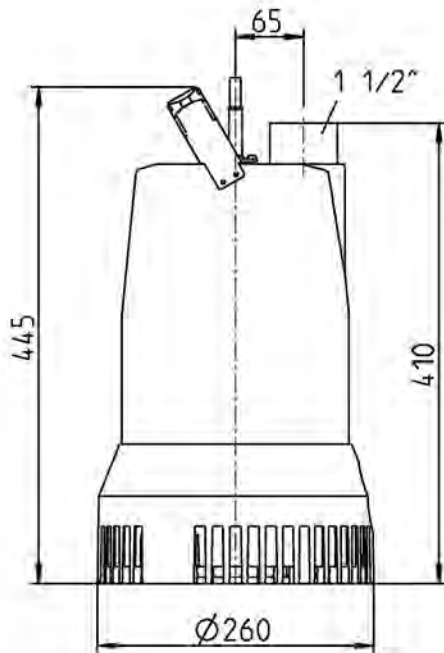
### MULTIDRAIN UV 300

Type	Code No.	Voltage	Motor rating		Current	Wires	Plug	Weight
			P1	P2				
<b>Without level control</b>								
UV 305-1	<b>JP48691</b>	1/N/PE~230 V	1.15 kW	0.88 kW	5.3 A	3G1,0	Safety	17 kg
UV 305-3	<b>JP48692</b>	3/PE~400 V	1.15 kW	0.84 kW	2.6 A	4G1,0	Without	18 kg
UV 310-1	<b>JP48695</b>	1/N/PE~230 V	1.30 kW	1.00 kW	5.8 A	3G1,0	Safety	19 kg
UV 310-3	<b>JP48696</b>	3/PE~400 V	1.35 kW	1.08 kW	3.0 A	4G1,0	Without	19 kg
UV 315-1	<b>JP48699</b>	1/N/PE~230 V	1.83 kW	1.36 kW	8.2 A	3G1,0	Safety	19 kg
UV 315-3	<b>JP48700</b>	3/PE~400 V	1.85 kW	1.45 kW	3.6 A	4G1,0	Without	19 kg
<b>With built-in level control</b>								
UV 305-1 S	<b>JP48693</b>	1/N/PE~230 V	1.15 kW	0.88 kW	5.3 A	3G1,0	Safety	18 kg
UV 305-3 S	<b>JP48694</b>	3/PE~400 V	1.15 kW	0.84 kW	2.6 A	4G1,0	CEE	18 kg
UV 310-1 S	<b>JP48697</b>	1/N/PE~230 V	1.30 kW	1.00 kW	5.8 A	3G1,0	Safety	20 kg
UV 310-3 S	<b>JP48698</b>	3/PE~400 V	1.35 kW	1.08 kW	3.0 A	4G1,0	CEE	20 kg
UV 315-1 S	<b>JP48701</b>	1/N/PE~230 V	1.83 kW	1.36 kW	8.2 A	3G1,0	Safety	20 kg
UV 315-3 S	<b>JP48702</b>	3/PE~400 V	1.85 kW	1.45 kW	3.6 A	4G1,0	CEE	20 kg

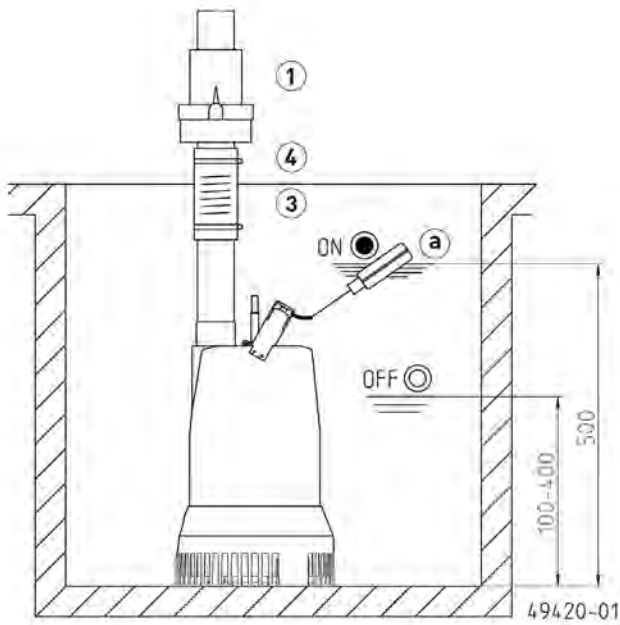
# MULTIDRAIN UV 300

## SUBMERSIBLE DRAINAGE PUMPS

### Dimensions UV 300 (mm)



### Example of single unit installation UV 300

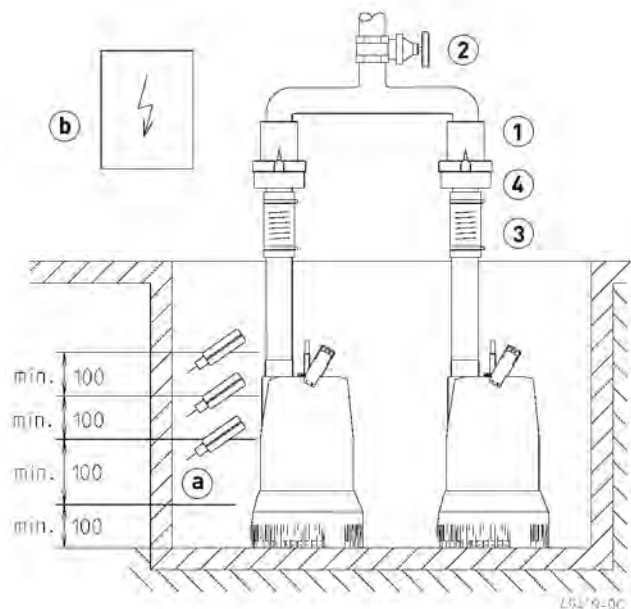


Single unit: sump area 40x50 cm

Duplex unit: sump min. 40x70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN

### Example of duplex unit installation UV 300



12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.


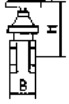




In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room




# MULTIDRAIN UV 300

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

				Code No.	
	<b>① Swing-type check valve</b>	R40 EN 12050-4	1½" (DN 40), PN 4	150x120 (HxB)	JP00317
	<b>② Stop valve</b>		brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
	<b>③ Elastic connection</b>		1½" (DN 40), PN 4	120x50 (HxD)	JP44777
	<b>④ Hose band clamp</b>		1½"		JP44763
	<b>⑤ Hose coupling</b>	Coupling Storz C	1½" male thread		JP44770
		Coupling wrench			JP25708
	<b>Pressure hose</b>		12,5 m, synthetic, with coupling Storz C, Ø 38 mm		JP50298
			15 m, synthetic, with coupling Storz C, Ø 52 mm		JP00336
	<b>⑥ Chain</b>		certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)		JP45901
			certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)		JP45902
			certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)		JP47365
			Shackle, certified, 630 kg, stainless steel		JP45904

### ELECTRICAL ACCESSORY

				Code No.
	<b>a Alarm unit</b>	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>b Control for single units</b>	Control unit AD 00	400 V	JP00311
		Control unit HIGHLOGO 1-00		JP47988
		Control unit AD 00 E	230 V	JP00289
		Control unit HIGHLOGO 1-00 E	230 V	JP47987
	<b>Control for duplex units</b>	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
		Control unit HIGHLOGO 2-00 E	230 V	JP47996
		Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
		Control unit HIGHLOGO 2-00	400 V	JP47997
	<b>Level control</b>	Subm. switch pack A		JP16718
		Subm. switch pack AmG		JP16719
		Subm. switch pack B	3 subm. ball contact switch with 9.5 m and fixing devices	JP16725
		Subm. switch pack BmG	3 subm. ball contact switch with 9.5 m and counterweight	JP16726
		Weight	to stabilize the subm. ball contact switch	JP44803
	<b>c Rechargeable battery</b>		for mains independent alarm	JP44850

# MULTIDRAIN UV 600

## SUBMERSIBLE DRAINAGE PUMPS



- High-quality stainless steel design
- 10 mm free passage
- Discharge 2" (horizontal and vertical)
- Automatic self-ventilation
- Emerged operation due to motor jacket cooling (S1)
- Thermal motor protection
- Duplex mechanical seal
- Replaceable moisture sealed cable inlet
- Easy to maintain due to guide rail system

### DESCRIPTION

The submersible drainage pumps Multidrain UV 600 have been developed for drainage applications where high delivery heads are required.

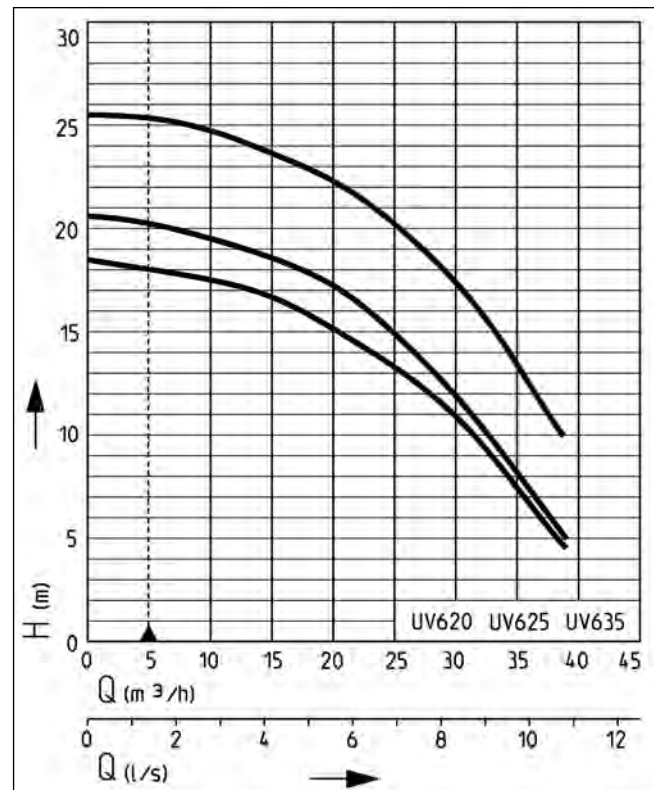
All kind of drainage / greywater with solids up to 10 mm can be disposed from large depths. Shopping centers, high-rise buildings, undergrounds stations and other buildings with deep basements are the right environment for the UV 600 pumps.

In addition to a fix sump installation these pumps can also be used for mobile applications.

The pressure pipe can be connected either to the vertical or the horizontal discharge.

The horizontal one is suitable for sump installations with a guide rail system (GR 50). For mobile applications or in narrow sumps the connection to the vertical discharge port is recommended.

### PERFORMANCE



Type	Delivery head H [m]	6	8	10	12	14	16	18	20	22	24
UV 620-1	Flow rate $Q$ [m³/h]	36	33	30	27	22	16				
UV 620-3		37	34	32	28	24	18	5			
UV 625-3		38	36	33	31	27	23	18	5		
UV 635-3				39	37	34	32	28	25	20	14

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

# MULTIDRAIN UV 600

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump with 10 m cable, automatic version with integrated ball-float switch, plug 2" with automatic ventilation for the outlet not in use.

Special technical note for UV 620-1 / UV 620-1 S:

Due to the high starting current, the approval of the responsible power supplier should be obtained before commissioning these two pump types.

### MECHANICAL DATA

Pump	Vertical single-stage	Oil chamber	Yes
Free passage	10 mm	Seal on medium side	SiC mechanical seal
Bearing	Ball bearings, grease-lubricated	Run dry protection	Yes
Seal on motor side	Mechanical seal	Submersible	Yes
		Pressure outlet	IG 2"

### ELECTRICAL DATA

Power line	10m H07RN8-F	Insulation class	F
Type of enclosure	IP 68	Winding thermostat	Yes

### MULTIDRAIN UV 600

Type	Code No.	Voltage	Motor rating		Current	Wires	Motor protection	Plug	Weight
			P1	P2					
<b>Without level control</b>									
UV 620-1	<b>JP47337</b>	1/N/PE~230 V	2.40 kW	1.65 kW	10.4 A	3G1,5	Integrated	Without	23.0 kg
UV 620-3	<b>JP47339</b>	3/PE~400 V	2.38 kW	1.95 kW	4.6 A	4G1,0	on request <sup>1</sup>	Without	23.0 kg
UV 625-3	<b>JP47341</b>	3/PE~400 V	2.80 kW	2.28 kW	5.2 A	4G1,0	on request <sup>1</sup>	Without	23.0 kg
UV 635-3	<b>JP47343</b>	3/PE~400 V	3.70 kW	3.05 kW	6.2 A	4G1,0	on request <sup>1</sup>	Without	25.5 kg
<b>With built-in level control</b>									
UV 620-1 S	<b>JP47338</b>	1/N/PE~230 V	2.40 kW	1.65 kW	10.4 A	3G1,5	Integrated	Safety	23.5 kg
UV 620-3 S	<b>JP47340</b>	3/PE~400 V	2.38 kW	1.95 kW	4.6 A	4G1,0	on request <sup>1</sup>	Without	23.5 kg
UV 625-3 S	<b>JP47342</b>	3/PE~400 V	2.80 kW	2.28 kW	5.2 A	4G1,0	on request <sup>1</sup>	Without	23.5 kg
UV 635-3 S	<b>JP47344</b>	3/PE~400 V	3.70 kW	3.05 kW	6.2 A	4G1,0	on request <sup>1</sup>	Without	26.0 kg

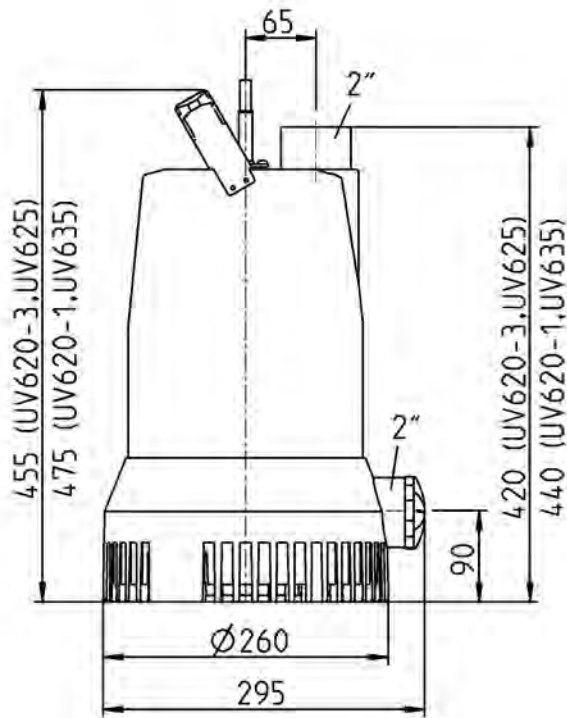
<sup>1</sup>Protective motor plug necessary see accessory



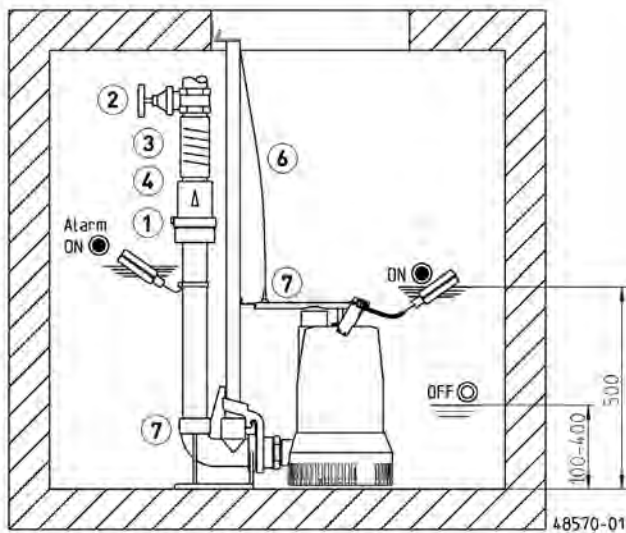
# MULTIDRAIN UV 600

## SUBMERSIBLE DRAINAGE PUMPS

### Dimensions UV 600 (mm)



### Example of single unit installation with GR

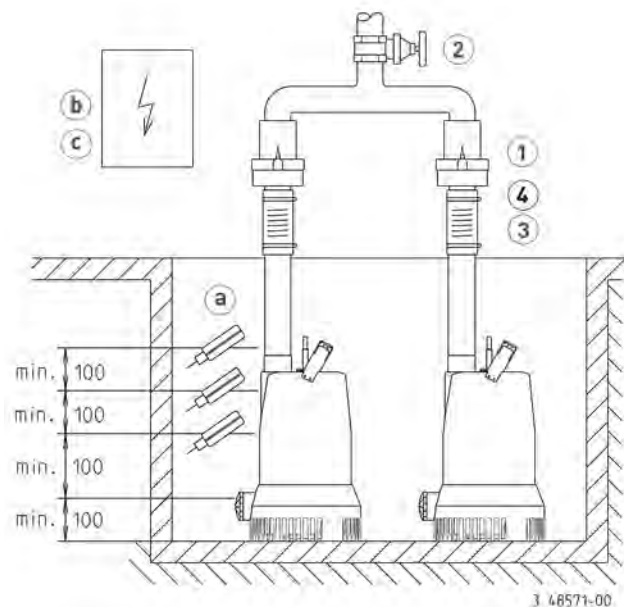


Single unit 2" with GR 50: sump area min. 40x70 cm  
 Single unit 2" without GR: sump area min. 40x50 cm

Duplex unit 2" with GR 50: sump area min. 70x70 cm  
 Duplex unit 2" without GR: sump area min. 50x70 cm

In case of installation beneath the backpressure level the pressure tube must be taken in a

### Example of duplex unit installation



loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.









In accordance with EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Suspend control unit in a dry room


# MULTIDRAIN UV 600

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

				Code No.
	<b>① Swing-type check valve</b>	R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB) <b>JP00326</b>
	<b>Ball-type check valve</b>	K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB) <b>JP44782</b>
	<b>② Stop valve</b>		brass, 2" (DN 50), PN 16	140x70 (HxB) <b>JP44787</b>
	<b>③ Elastic connection</b>		2" (DN 50), PN 4	150x63 (HxD) <b>JP44775</b>
	<b>④ Hose band clamp</b>		2"	<b>JP44764</b>
	<b>⑤ Hose coupling</b>	Coupling Storz C Coupling wrench	2" male thread	<b>JP50217</b> <b>JP25708</b>
	<b>Pressure hose</b>		12,5 m, synthetic, with coupling Storz C, Ø 38 mm 15 m, synthetic, with coupling Storz C, Ø 52 mm	<b>JP50298</b> <b>JP00336</b>
	<b>⑥ Chain</b>		certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.) certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.) certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.) Shackle, certified, 630 kg, stainless steel	<b>JP45901</b> <b>JP45902</b> <b>JP47365</b> <b>JP45904</b>
	<b>⑦ Guide rail system</b>		GR 50 Securing lever Guide rail 1" Guide rail 1" Guide rail 1" Guide rail 1"	<b>JP25593</b> <b>JP49171</b> <b>JP48937</b> <b>JP48938</b> <b>JP48939</b> <b>JP48940</b>




### ELECTRICAL ACCESSORY

				Code No.
	<b>① Alarm unit</b>	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	<b>JP44892</b>

# MULTIDRAIN UV 600

## SUBMERSIBLE DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

		Code No.
    	<b>(b) Control for single units</b> Control unit AD 46 Control unit 1-46 Control unit AD 610 Control unit HIGHLOGO 1-610	JP14353 JP47990 JP14354 JP47991
	<b>Control for duplex units</b> Control unit BD 46      400 V, for pumps US 251-253, UV 620-3, UV 625-3 Control unit HIGHLOGO 2-46      400 V Control unit BD 610      400 V, for pumps UV 635-3 Control unit HIGHLOGO 2-610      400 V	JP45739 JP47999 JP45741 JP48000
	<b>Level control</b> Subm. switch pack AmG Subm. switch pack BmG      3 subm. ball contact switch with 9.5 m and counterweight Weight      to stabilize the subm. ball contact switch	JP16719 JP16726 JP44803
	<b>Protective motor plug</b> CEE motor protection 6,0-9,0 A      400 V, mandatory for pumps with integrated motor protection CEE motor protection 4,0-6,0 A      400 V, mandatory for pumps without integrated motor protection	JP44752 JP44751
	<b>(c) Rechargeable battery</b> for mains independent alarm	JP44850

# MULTIDRAIN UV 600

SUBMERSIBLE DRAINAGE PUMPS

## OVERVIEW

### DRAINAGE LIFTING STATIONS AND TANKS

CONDENSATE PUMP	Type	Page
For condensates with a pH value of $\geq 2.7$	<b>K2 plus</b>	<b>103</b>

FLOOR DRAINAGE PUMPS	Type	Page
For showers at floor level	<b>Plancofix   Plancofix plus</b>	<b>107</b>
	<b>Plancofix Line</b>	<b>109</b>

DRAINAGE LIFTING STATIONS AND ABOVE FLOOR TANK HEBEFIX	Type	Page
For disposal of domestic sewage water (pumps scope of supply)	<b>Hebefix mini</b>	<b>111</b>
For disposal of domestic sewage water (pumps scope of supply)	<b>Hebefix plus</b>	<b>115</b>
For disposal of aggressive domestic sewage water (pumps scope of supply)	<b>Hebefix extra</b>	<b>119</b>
	<b>Hebefix</b>	<b>123</b>
	<b>Hebefix 100 (H)</b>	<b>127</b>
	<b>Hebefix 200</b>	<b>131</b>

UNDERFLOOR SUMP BAUFIX	Type	Page
For disposal of domestic sewage water	<b>Baufix 50</b>	<b>135</b>
	<b>Baufix 100</b>	<b>139</b>
	<b>Baufix 200</b>	<b>143</b>

POLY SUMPS SKS	Type	Page
For disposal of domestic sewage water outside of buildings	<b>SKS 800</b>	<b>149</b>
	<b>SKS 1000</b>	<b>153</b>

# OVERVIEW

## DRAINAGE LIFTING STATIONS AND TANKS - ACCESSORY

### ACCESSORY

Type	Code no.	K2 plus	He-befix mini	He-befix plus	He-befix extra	He-befix	He-befix 100	He-befix 200-32	He-befix 200-50	Bau-fix 50	Bau-fix 100	Bau-fix 200-32	Bau-fix 200-50	SKS-B 800-(D)32	SKS-B 800-(D)50	SKS-D 1000-(D)50
HOSE EXTENSION CONDENSATE	JP27993	•														
COVER PLATE, TO BE TILED	JP24024									•	•	•				
COVER FRAME, STAINLESS STEEL	JP28118									•	•	•				
SPECIAL VENTILATION	JP27484				•	•	•	•	•	•	•	•	•			
VENTILATION FOR PRE-WALL INSTALLATION	JP49096		•													
SPECIAL FLOAT LOW SWITCH. POINTS	JP44795					•	•									
SPECIAL FLOAT LOW SWITCH. POINTS	JP44207						•									
STOP VALVE DN 32 PN 16	JP44785			•		•		•		•	•					
STOP VALVE DN 40 PN 16	JP44786						•	•				•				
STOP VALVE DN 50 PN 16	JP44787								•				•			
BALL SLUICE VALVE DN 32 PVC	JP46111		•	•	•	•		•		•	•	•				
CONNECTION KIT HEBEFIX 100	JP27736						•									
INSTALLATION KIT INSPECTION OPENING	JP41075		•	•												
GR 32 FOR BAUFIX 100	JP46706										•					
GR 32 FOR SUMP 200	JP48279							•				•				
GR 50 FOR SUMP 200	JP48280								•				•			
GROUNDWATER SEAL Ø315	JP47216										•	•				
GROUNDWATER SEAL Ø500	JP48215												•			
GROUNDWATER SEALING SET 32 DN 100	JP50206										•	•				
GROUNDWATER SEALING SET 32 DN 150	JP50205											•				
GROUNDWATER SEALING SET 50 DN 100	JP50204												•			
GROUNDWATER SEALING SET 50 DN 150	JP50203												•			
SUMP EXTENSION 165-265 MM	JP48282												•			
COVER, CL. A	JP46437													•	•	
LIFTING DEVICE FOR CL. A	JP44969													•	•	
COVER, CL. B	JP44972													•	•	•
COVER, CL. D	JP29175															•
ACCESS AID, GRAB HANDLE	JP44610															•
ACCESS AID, SLEEVE	JP44611															•
CONCRETE RING	JP44975													•	•	
SCREWED JOINED D40 - 1 1/4"	JP44796													•		
SCREWED JOINED D50 - 1 1/4"	JP44797													•		
SCREWED JOINED D63 - 1 1/4"	JP44798													•		
SCREWED JOINED D63 - 2"	JP45950														•	•
SUMP EXTENSION PSV-A/B 375	JP46429													•	•	
SUMP EXTENSION PSV-A 855	JP46430													•	•	
SUMP EXTENSION PSV-A 1335	JP46431													•	•	
SUMP EXTENSION PSV-D 1000x500 SG T(10)	JP44407															•
SUMP EXTENSION PSV-D 1000x500 SG (10)	JP44403															•
GUIDE RAIL EXTENSION SKS-32	JP48067													•		
GUIDE RAIL EXTENSION SKS-50	JP48065														•	
GUIDE RAIL EXTENSION SKS-D32	JP48068													•		
GUIDE RAIL EXTENSION SKS-D50	JP48066														•	
GUIDE RAIL 1", STAINLESS STEEL, 1150 MM	JP50268															•
GUIDE RAIL 1", STAINLESS STEEL, 1650 MM	JP50269															•
GUIDE RAIL 1", STAINLESS STEEL, 2150 MM	JP50270															•

# OVERVIEW

## DRAINAGE LIFTING STATIONS AND TANKS - ACCESSORY

### ACCESSORY

Type	Code no.	K2 plus	He-befix mini	He-befix plus	He-befix extra	He-befix	He-befix 100	He-befix 200-32	He-befix 200-50	Bau-fix 50	Bau-fix 100	Bau-fix 200-32	Bau-fix 200-50	SKS-B 800-(D)32	SKS-B 800-(D)50	SKS-D 1000-(D)50
GUIDE RAIL 1", STAINLESS STEEL, 2650 MM	JP50271															•
GUIDE RAIL 1", STAINLESS STEEL, 3150 MM	JP50272															•
GUIDE RAIL 1", STAINLESS STEEL, 3650 MM	JP50273															•
PERROT FLUSHING CONNECTION	JP22353															•
STORZ C FLUSHING CONNECTION	JP44770															•
PERROT BREATHING VALVE	JP22422															•
PERROT CLAW COUPLING	JP22420															•
PERROT HOSE CONNECTION	JP19202															•
PERROT PRESSURE GAUGE	JP44854															•
SECOND OR CHANGED INLET DN 150	JP44523															•
SECOND OR CHANGED INLET DN 200	JP44524															•
SECOND OR CHANGED INLET DN 250	JP44525															•
SEAL LUBRICANT, 1 KG, TUBE	JP44605															•
SEAL LUBRICANT, 1 KG, BUCKET	JP44606															•
OPERATING HANDLE FOR T-KEY	JP46438													•	•	•
REDUCING SOCKET 1 1/2" AUF 2"	JP48069														•	•
VENTILATION PIPE	JP44858													•	•	•
CHAIN, CERTIFIED 2,5M 320KG	JP45901													•	•	•
CHAIN, CERTIFIED 5M 320 KG	JP45902													•	•	•
WEBBING WITH SHACKLE	JP45168													•	•	•
ALARM UNIT AGR	JP44893		•			•	•			•						
ALARM UNIT AG3	JP44891							•	•		•	•	•			
ALARM UNIT AG10	JP44892							•	•	•	•	•	•			
ALARM UNIT WASHING MACHINE STOP AW3	JP44895							•	•	•	•	•	•			
ALARM UNIT WASHING MACHINE STOP AWR	JP44897					•	•									
ALARM UNIT WASHING MACHINE STOP AWO ***	JP44899					•	•	•	•			•	•			
FASTENER FOR ALARM SWITCH **	JP28191					•	•									
AUXILIARY SWITCH UNIT EXH-A	JP16720							•	•			•	•			
AUXILIARY SWITCH UNIT EXH-B *	JP00295							•	•			•	•			
DRY RUN PROTECTION FOR US EX	JP44603							•				•				
SUBM. SWITCH PACK B232	JP48228							•				•				
SUBM. SWITCH PACK B250	JP48229								•				•			
SUBM. SWITCH PACK BF232	JP48298							•				•				
SUBM. SWITCH PACK BF250	JP48299								•				•			
LM-CIRCUIT (EXPLOSION PROOF PUMPS ONLY)	JP01080											•				
RECHARGEABLE BATTERY 9 V	JP44850					•	•	•		•	•	•				
SEAL LEAK DETECTOR DKG	JP44900							•				•	•			
SEAL LEAK DETECTOR DKG EX	JP00249							•				•	•			
ASSEMBLY SET FOR LM-CIRCUIT	JP22410											•				
SMART HOME FTJP	JP47209	•														

\* Duplex unit \*\* only in combination with special float for U3KS/U6K ES/DS \*\*\* in addition to AW3, AWR





## K2 PLUS

### CONDENSATE PUMP

- For condensate  $\geq$  pH 2,7
- Float switch
- Runtime monitoring with acoustic alarm and
- potential-free alarm contact
- Visual operating/error display
- Test run button
- Integrated check-valve



#### DESCRIPTION

The benefits offered by the new K2 plus condensate pump are a definite plus that make this pump a versatile helper. This pump works dependably to remove acidic condensate with a pH of  $\geq$  2.7 from

- gas and oil condensing boilers
- air conditioning systems
- air dehumidifiers
- cooling units.

The K2 plus satisfies the highest requirements. It is distinguished not only by its modern design but above all by its consistently quiet operation, its compact tank dimensions and its reliability. The pump is ready to connect and operates fully automatically.

A float switch monitors the level inside the tank, while the electronic unit oversees the pump's operating time. The user is therefore alerted early to potential problems. The integrated runtime monitoring with acoustic alarm can be relayed to other places using the potential-free alarm contact.

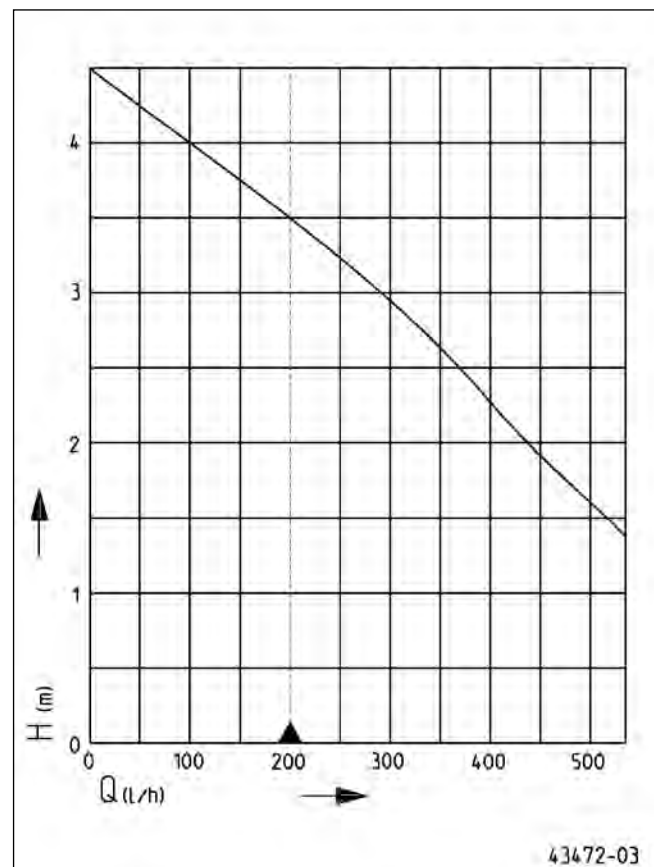
The indicator light displays whether the system is operating or whether there is a fault. The good working order of the system can be checked at any time with the test run button.

A sand trap keeps solids out of the hydraulic system. The two-part design of the motor and collecting chamber and the rotary knobs at the side make for easy cleaning without tools.

The K2 plus is resistant to acid condensate with a pH-value of  $\geq$  2.7. The maximum inlet temperature of the pumped media is 104 °F (40 °C).

In the case of larger volumes of condensate or additional waste water, we recommend using the Hebefix extra.

#### PERFORMANCE



Type	Delivery head H [m]	1.5	2	2.5	3	3.5
K2 PLUS	Flow rate Q [l/h]	520	440	365	290	200

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# K2 PLUS

## CONDENSATE PUMP

### SCOPE OF SUPPLY

Ready to connect with 2 m power cable and safety plug, 6 m 90 mm  
PVC-pressure tube (ID 10 mm) with connector DN 50, inlet height

### MECHANICAL DATA

Shaft	Stainless steel	Usable capacity	0.9 l
Impeller	Vortex impeller, plastic	Weight	3.1 kg

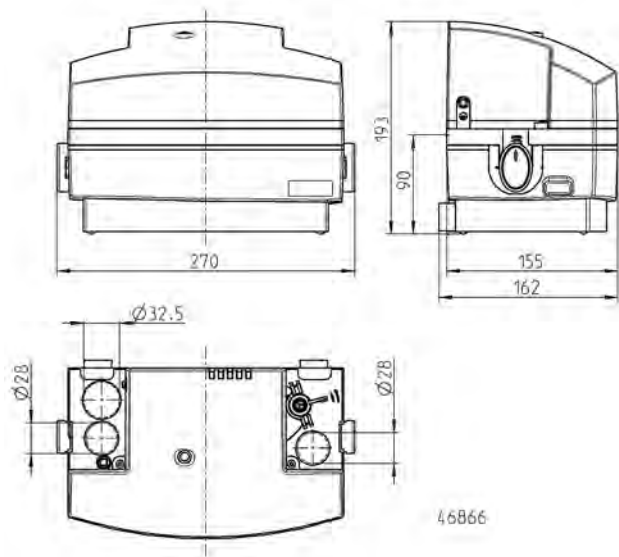
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Wires	3G0,75
Motor rating P1	65 W	Type of enclosure	IP 24
Current	0.58 A	Motor protection	Thermostat
Power line	2m H05VV-F	Plug	Safety

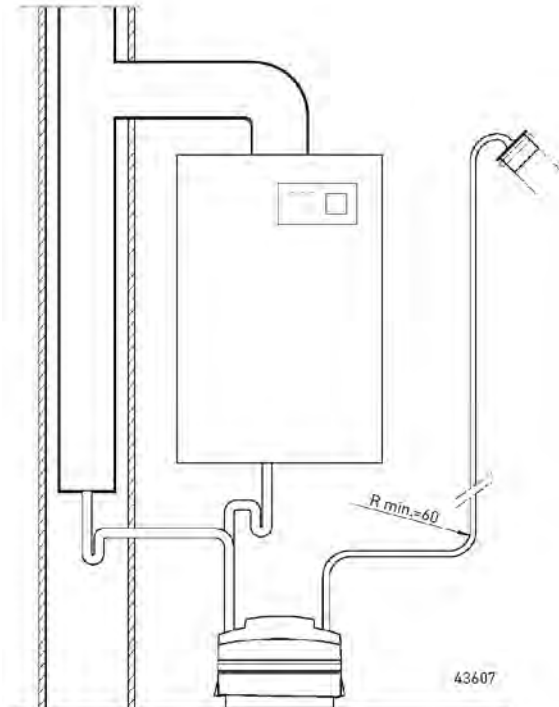
### K2 PLUS

Type	Code No.
K2 PLUS	JP46589

### Dimensions K2 plus (mm)



### Example of installation




# K2 PLUS

## CONDENSATE PUMP


Condensates taken from condensing boiler technology are very aggressive. You will find corresponding information in the ATV working paper „Condensates from condensing boilers“, ATV-DVWL-A 251 (2011). The K2 plus is designed for use at room temperatures, a pH value of  $\geq 2.7$  and a maximum inlet temperature of 104 °F (40 °C). Should the condensate values fall below the above-mentioned pH value even for a short time, a neutralisation has to be installed between therm and pump. The local requirements (local discharge

regulation) as well as the neutralisation obligations of the ATV working paper are to be considered as well. Guiding values for untreated condensate can be found in the mentioned ATV working paper, table B.1. For condensate lines only approved materials in accordance with ATV working paper table 4 are to be used. If not already integrated in the unit all inlets must be provided with a siphon trap (emission trap). It is generally not permitted to install the unit outdoors.

### MECHANICAL ACCESSORY

			Code No.
 <b>1</b> Hose extension	6 m, with hose connector		JP27993

### ELECTRICAL ACCESSORY

			Code No.
 <b>a</b> Smart Home	FTJP radio transmitter		JP47209

# K2 PLUS

CONDENSATE PUMP

# PLANCOFIX

## FLOOR DRAINAGE PUMPS

- Installation depth 10.5 cm / 9 cm
- Inlet from above through the floor drain or from the side
- Drain can be tiled or in stainless steel
- Seal collar for attaching to the customer's thin-bed waterproofing system
- Easy cleaning and maintenance
- Optional secondary drain
- Plancofix plus < 30 dB(A)



### DESCRIPTION

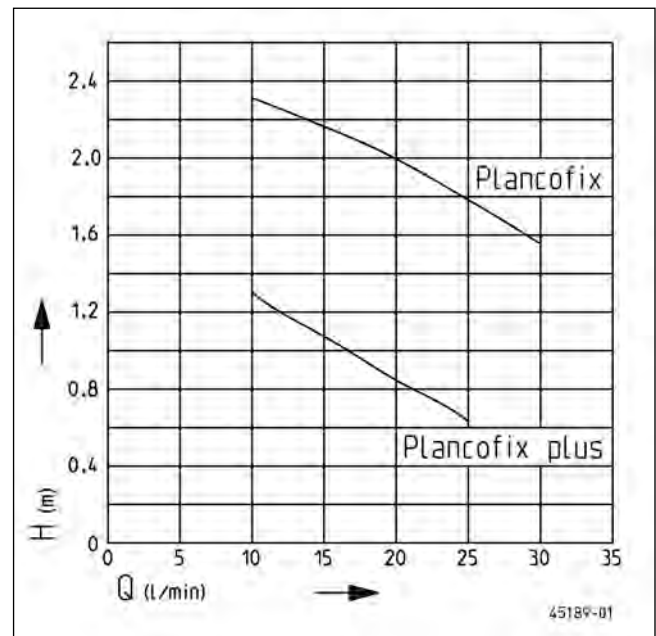
Plancofix is a floor drainage pump that allows barrier-free or low entry showers to be fitted even where the lack of a gravity drain ruled out this option in the past. It must not be used for back flow protection.

Set into the screed, the Plancofix forms the floor drain in tiled showers. The incoming water is pumped to the nearest downpipe through a 1 inch pressure pipe. The transfer point into the downpipe must be at least 25 cm above the Plancofix.

The inflow from the shower can enter either directly from above through the floor drain, or from the side through a connecting branch.

The Plancofix plus has a smaller motor, which allows the a lower installation depth of 9 cm including the insulation tray. It is recommended for installation situations where only very low heights must be overcome.

### PERFORMANCE



Type	Delivery head H [m]	0.5	1	1.3	1.5	2	2.3
Plancofix	Flow rate Q [l/min]				31	20	10
Plancofix plus		26	16	10			

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances



# PLANCOFIX

## FLOOR DRAINAGE PUMPS

### SCOPE OF SUPPLY

Ready to connect unit with tileable floor drain, synchronous motor with non-chlogging hydraulics, insulating tray for sound

compensation, height adjustment feet and ready-prepared for connection to a sealing membrane.

### MECHANICAL DATA

Pump	Horizontal, single-stage	Pressure outlet	1" IG
Mounted circuit	Yes		

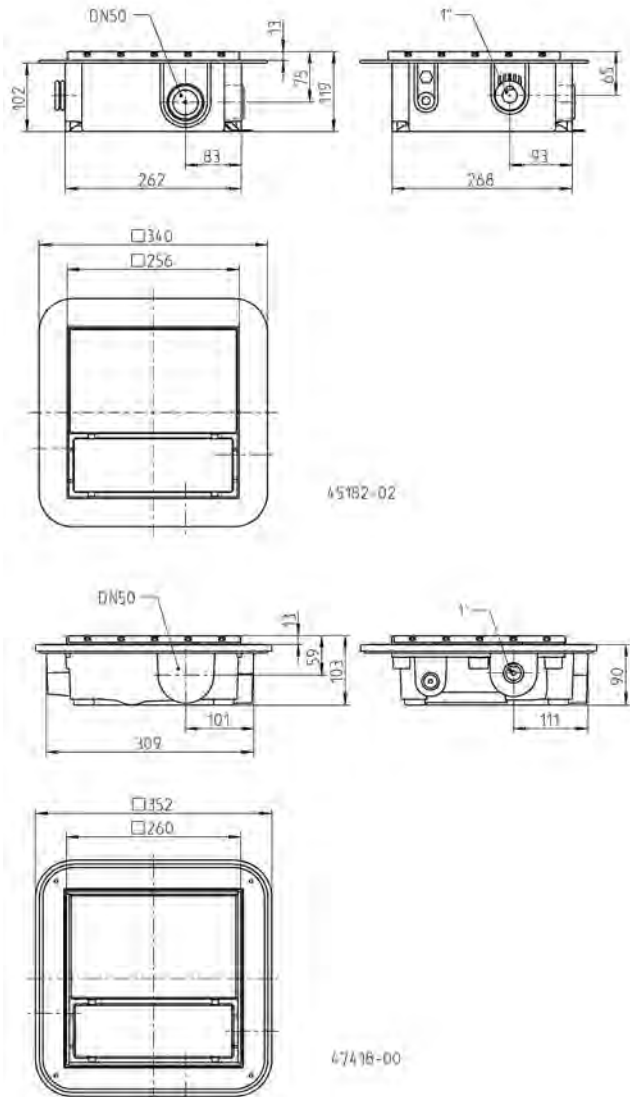
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Winding thermostat	Yes
Power line	5m H05VV-F	Motor protection	Installed in the winding
Wires	3G0,75 GR	Plug	Without

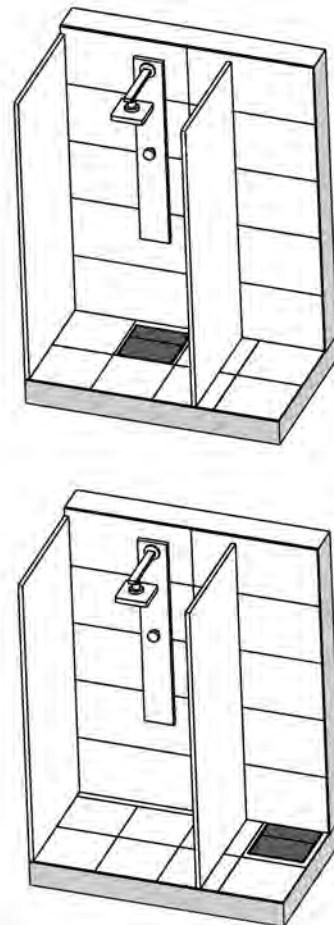
### PLANCOFIX

Type	Code No.	Motor rating P1	Current	Weight
Plancofix	<b>JP44685</b>	65 W	0.44 A	3.7 kg
Plancofix plus	<b>JP47014</b>	30 W	0.20 A	4.0 kg

### Dimensions Plancofix / Plancofix plus (mm)



### Example of installation



# PLANCOFIX LINE

## FLOOR DRAINAGE PUMPS

- Modern bathroom design with line drainage
- Installation depth 9 cm
- Shower channel can be shortened individually
- Very quiet: < 30 dB(A)
- Sealing fleece according DIN 18534:  
Leak tightness class W3-I  
Tear strength class R3-I
- Easy cleaning/maintenance
- Optional secondary drain



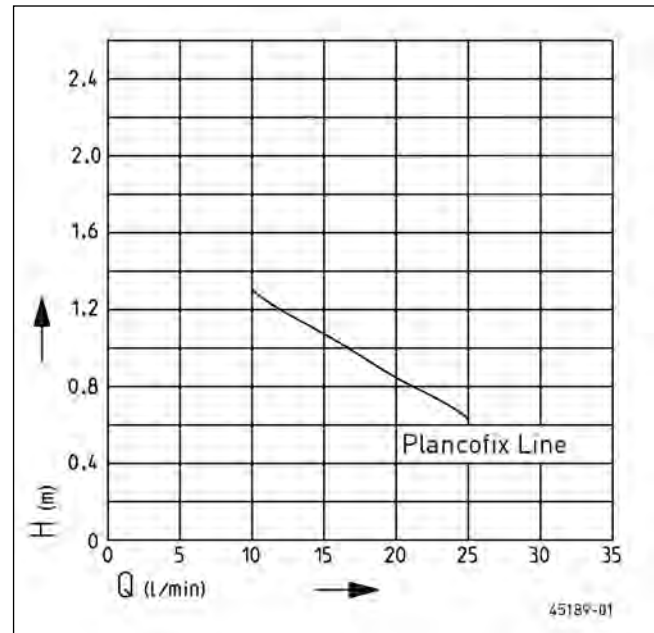
### DESCRIPTION

Plancofix is a floor drain pump that enables barrier-free or low entry showers even where the missing gravity drain ruled out this option in the past. Plancofix is a device for dewatering showers and must not be used for backwater protection.

Placed into the screed, the Plancofix replaces the ordinary floor drain in tiled showers. The shower water is being pumped to the nearest gravity pipe through a 1 inch pressure pipe. The hand-over point to the gravity pipe should be 25 cm higher than the Plancofix.

The body of Plancofix line requires an installation depth of 9 cm incl. insulation tray. The shower channel requires a slight gradient to the center.

### PERFORMANCE



Type	Delivery head H [m]	0.5	1	1.3
Plancofix Line	Flow rate Q [l/min]	26	16	10

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.



# PLANCOFIX LINE

## FLOOR DRAINAGE PUMPS

### SCOPE OF SUPPLY

Ready to connect unit with synchronous motor and non-blocking hydraulic. Built-in swing-type check valve, tileable floor drain, insulating tray for sound compensation, cover and screws in

stainless steel, height adjustment feet and pre-assembled sealing fleece.

### MECHANICAL DATA

Pump	Horizontal, single-stage	Pressure outlet	1" IG
Mounted circuit	Yes	Weight	4.5 kg

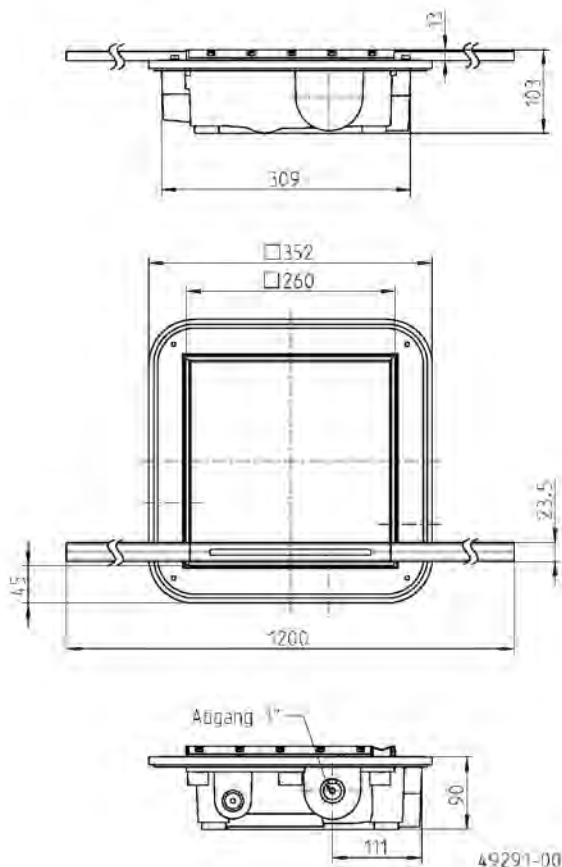
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Wires	3G0,75 GR
Motor rating P1	30 W	Winding thermostat	Yes
Current	0.2 A	Motor protection	Installed in the winding
Power line	5m H05VV-F	Plug	Without

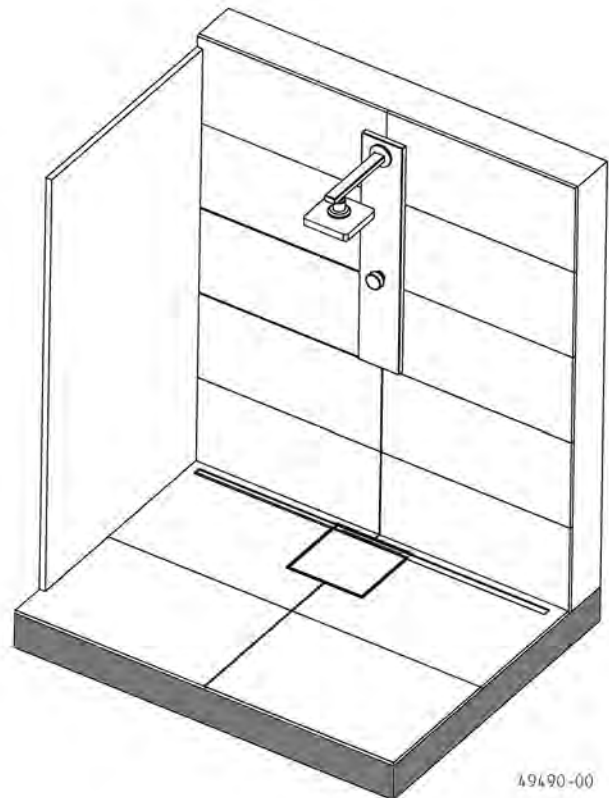
### PLANCOFIX LINE

Type	Code No.
Plancofix Line	JP50177

### Dimensions Plancofix Line (mm)



### Example of installation Plancofix Line





## HEBEFIX MINI DRAINAGE LIFTING STATION

- Plug-in device
- Quiet operation
- Pressure-tight tank
- Hot water up to 55 °C (short-term 70 °C)
- Wall or floor installation



### DESCRIPTION

The drainage lifting station Hebefix mini is the smallest member of our Hebefix series and can be installed quickly and easily. Thanks to its very compact design, it not only fits into all commercially available pre-wall systems, but also finds its place in a vanity unit or next to a shower. The three inlet options (2 x DN 50, 1 x DN 40) and a flexible pressure outlet in DN32 make it a small all-rounder when only limited space is available.

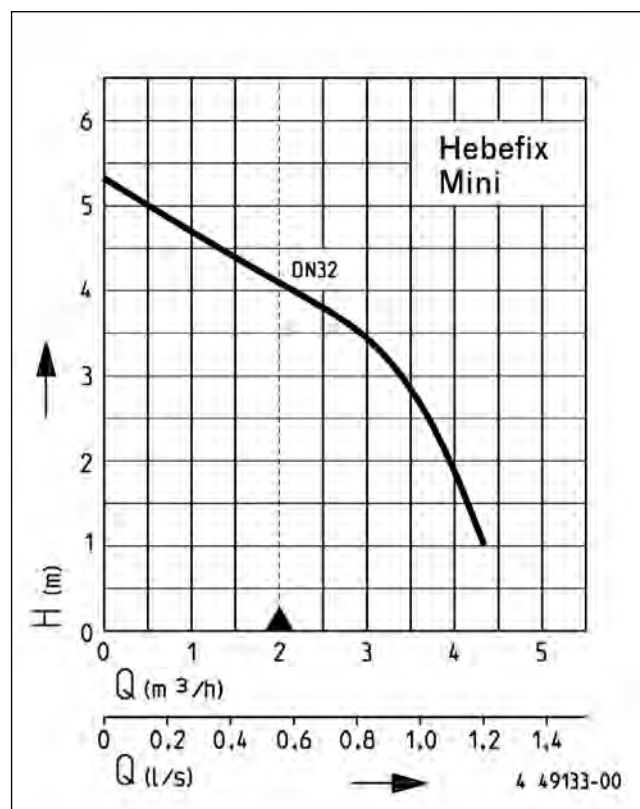
The Hebefix mini can be used wherever faecal-free waste water above or below the backpressure level cannot be disposed of in gravity. Hand washbasins, showers, bidets and water softeners for detached and semi-detached houses can be connected. Condensation water from refrigerated counters and air-conditioners, condensate from gas condensing boilers as well as wastewater from dishwashers in tea kitchens and hot water up to 55 °C (temporarily 70 °C) can also be disposed with the Hebefix mini.

It has a pressure-tight tank, a swing-type check valve and all the necessary devices for floor or wall mounting.

The unit is ready for plug in into to a shock-proof Schuko socket. For installation in bathrooms and showers, the relevant VDE regulations must be observed.

In case of pre-wall installation, a suitable inspection opening, a tank ventilation into the operating room and an alarm system (accessory) must be provided for installation and maintenance work on the system.

### PERFORMANCE



Type	Delivery head $H$ [m]	1	2	3	4	5
Hebefix mini	Flow rate $Q$ [ $m^3/h$ ]	4.3	3.9	3.4	2.2	0.5

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# HEBEFIX MINI

## DRAINAGE LIFTING STATION

### SCOPE OF SUPPLY

Unit (ABS) incl. pump and swing-type check valve according to EN 12050, ready for plug-in with 2 m cable and safety-plug, PVC fitting, flexible discharge, connecting sleeves, plug-in seals,

ventilation insert with activated carbon filter, clamps and fastening material.

### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Vortex impeller, plastic
Free passage	10 mm	Motor housing	Stainless steel
Bearing	Ball bearings, grease-lubricated	Pump housing	Plastic
Seal on medium side	Mechanical seal	Submersible	No
Shaft	Stainless steel	Weight	3.9 kg

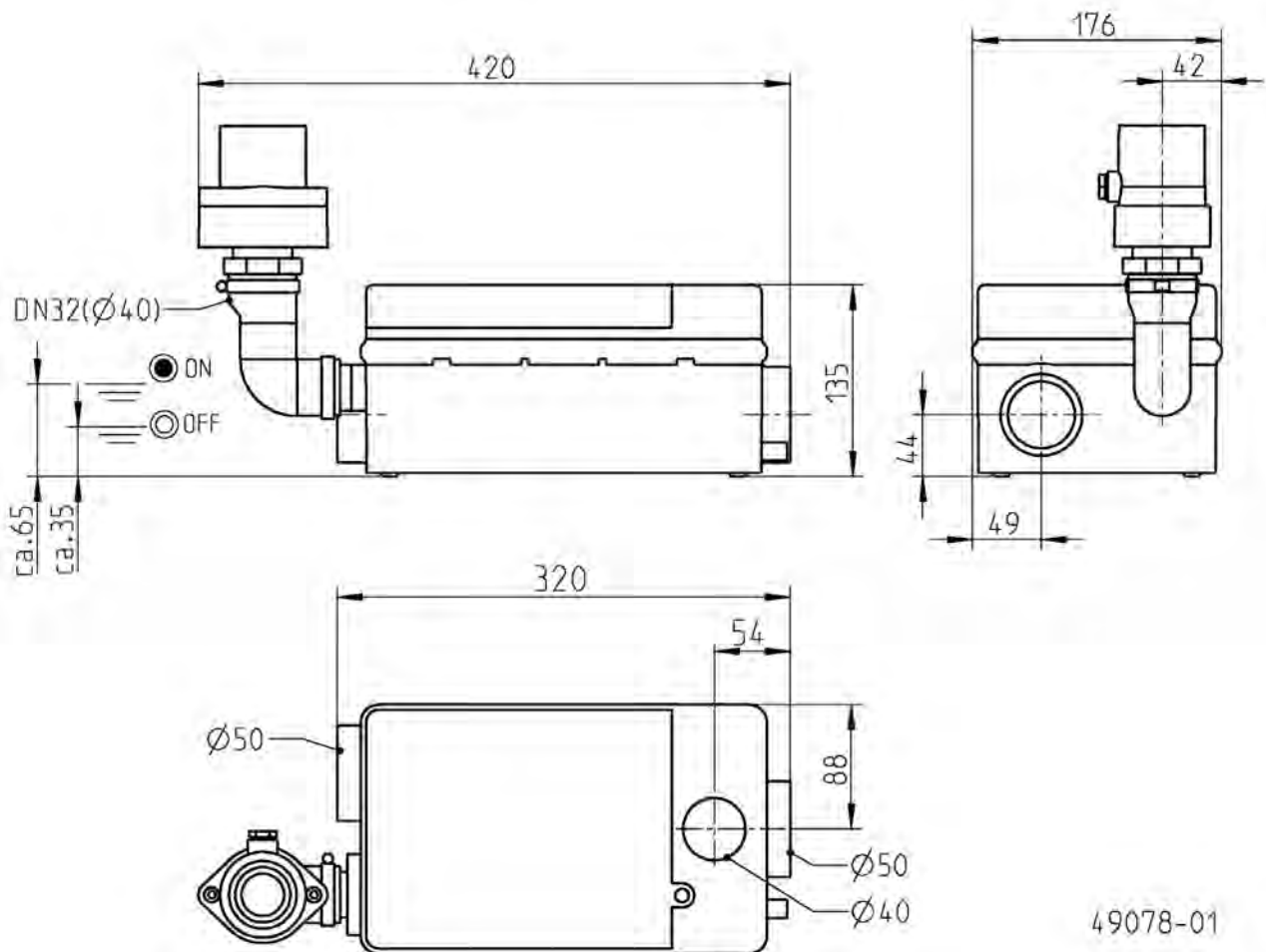
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Insulation class	B
Motor rating P1	0.22 kW	Motor protection	Installed in the winding
Motor rating P2	0.11 kW	Plug	Safety
Type of enclosure	IP 44		

### HEBEFIX MINI

Type	Code No.
Hebefix mini	JP48727

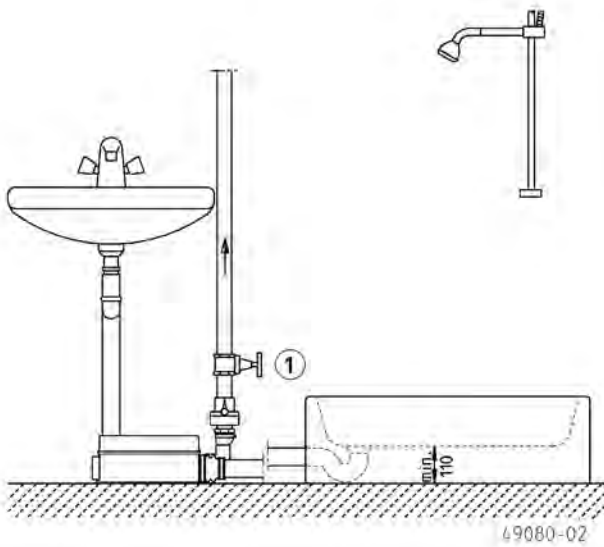
### Dimensions Hebefix mini (mm)



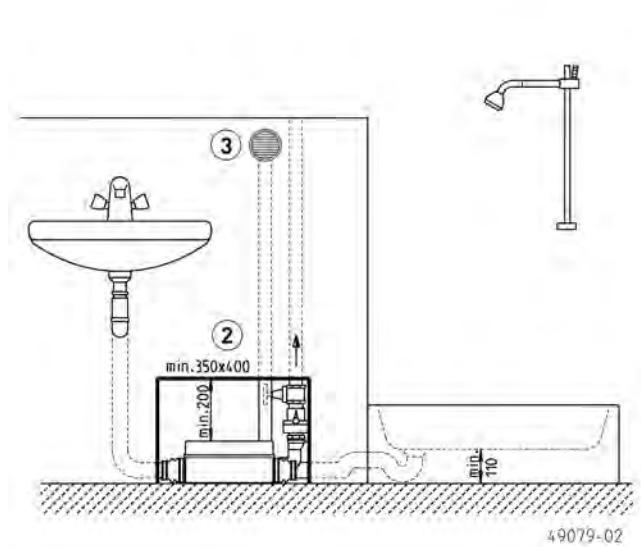
# HEBEFIX MINI

DRAINAGE LIFTING STATION

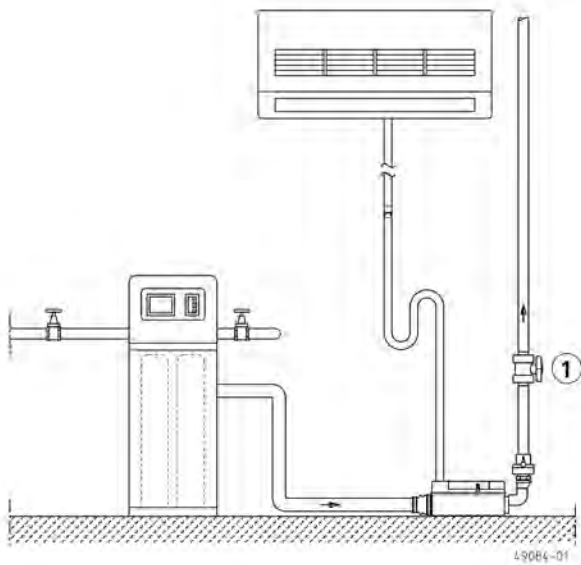
Example of installation



Example of pre-wall installation




Example of water softener installation




# HEBEFIX MINI

## DRAINAGE LIFTING STATION

### MECHANICAL ACCESSORY

			Code No.
	<b>① Stop valve</b> Ball valve	1/4", PVC, for aggressive media      105x155 (HxB)	<b>JP46111</b>
	<b>② Installation kit</b>	selectable size according to the tiles	<b>JP41075</b>
	<b>③ Ventilation</b>	for pre-wall installation	<b>JP49096</b>

### ELECTRICAL ACCESSORY

			Code No.
	<b>ⓐ Alarm unit</b> AGR	reed switch, mains dependent, potential-free contact, 4 m cable	<b>JP44893</b>

## HEBEFIX PLUS

### DRAINAGE LIFTING STATION

- Unit for pre-wall installation or direct connection
- Ready to connect
- Integrated ventilation for reliable pump operation
- Flushing device against deposits in the tank
- Quiet
- Runtime monitoring with acoustic alarm and potential free contact
- Easy to maintain
- High-quality plastic tank (ABS)



#### DESCRIPTION

The Hebefix plus lifting station is an easily installed appliance for disposing of faeces-free wastewater above and below the local back pressure level. Thanks to the small depth of its tank, it can be used in all commercial pre-wall systems. Its attractive design and intelligent technology also allow it to be fitted directly under a washbasin or in any other location. All grey water producers such as washbasins, showers, bathtubs, sinks, washing machines, etc. can be connected (max three applications at the same time).

The grey water is pumped to the nearest downpipe through a small-dimensioned pressure pipe (left or right side).

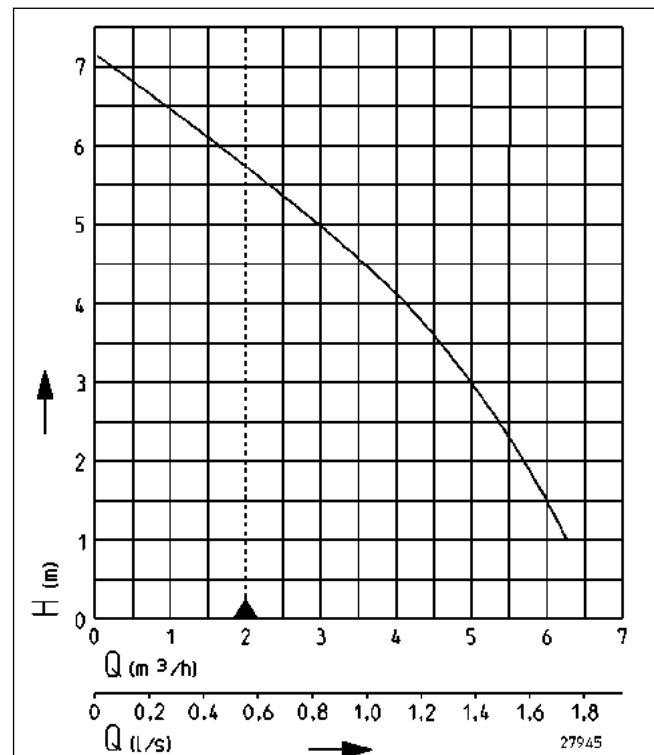
Hebefix plus can be used wherever an additional bathroom or kitchen is required as part of renovation or conversion work.

For acoustic failure message, the Hebefix plus contains a runtime monitoring with alarm and a potential-free alarm contact.

The unit is supplied with a submersible pump mounted (U3 variant) which is ready to be plugged to a safety socket and operates fully automatically as soon as wastewater starts to flow in. When installed in bathrooms and shower rooms, the corresponding German VDE regulations must be observed.

A sufficiently large inspection opening has to be provided for installation and servicing work (accessory). The unit is in conformity with the specifications of the German European standard EN 12050.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
Hebefix plus	Flow rate Q [m³/h]	6.5	5.5	5.0	4.0	3.0	1.5

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# HEBEFIX PLUS

## DRAINAGE LIFTING STATION

### SCOPE OF SUPPLY

Unit including pump according to the German European standard EN 12050, ready-to-connect with cable and plug, complete with collars, outlet elbow, swing-type checkvalve 1¼",

transition nipple, ventilation insert, activated carbon filter, clamps and fastening material.

### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Vortex impeller, plastic
Free passage	10 mm	Motor housing	Stainless steel
Bearing	Ball bearings, grease-lubricated	Pump housing	Plastic
Seal on motor side	Rotary shaft seal	Submersible	Yes
Oil chamber	Yes	Pressure outlet	DN 32
Seal on medium side	Rotary shaft seal	Tank capacity	19 l
Shaft	Stainless steel	Weight	7 kg

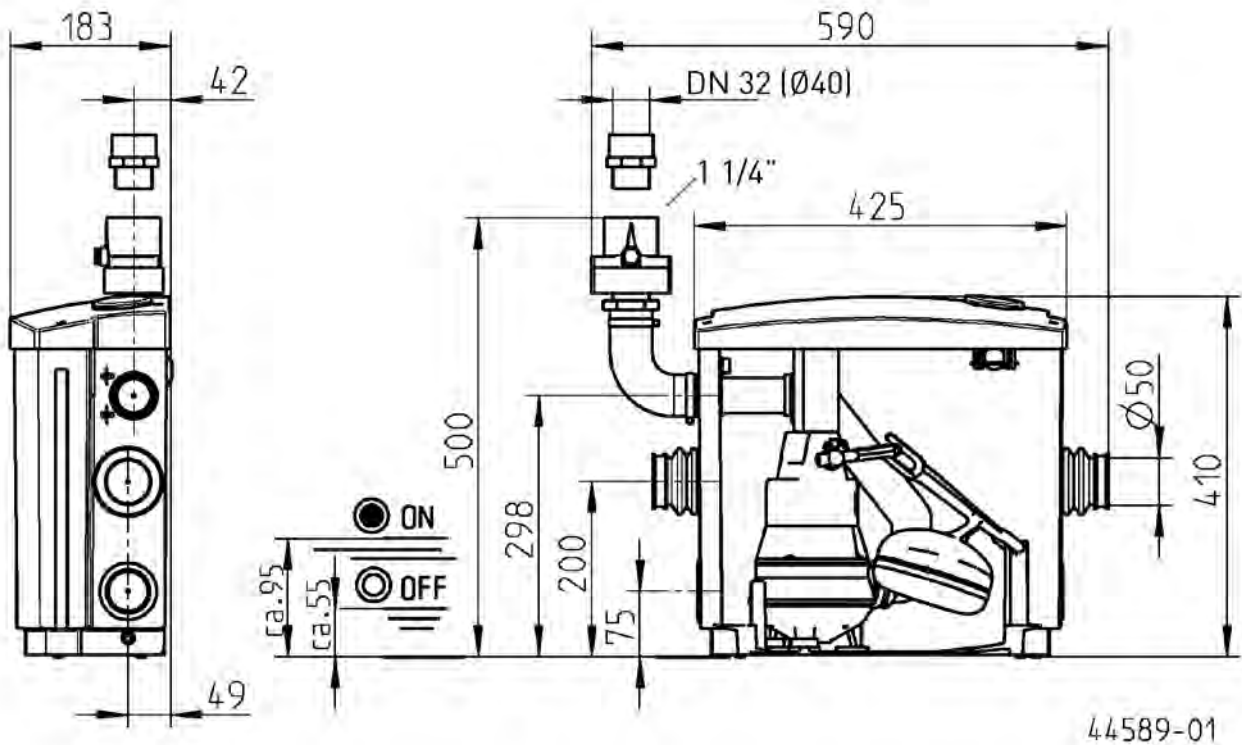
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Wires	4G0,75
Motor rating P1	0.32 kW	Type of enclosure	IP 68
Motor rating P2	0.2 kW	Insulation class	B
Current	1.4 A	Motor protection	Installed in the winding
Power line	1,5m H07RN-F	Plug	Safety

### HEBEFIX PLUS

Type	Code No.
Hebefix plus	JP44544

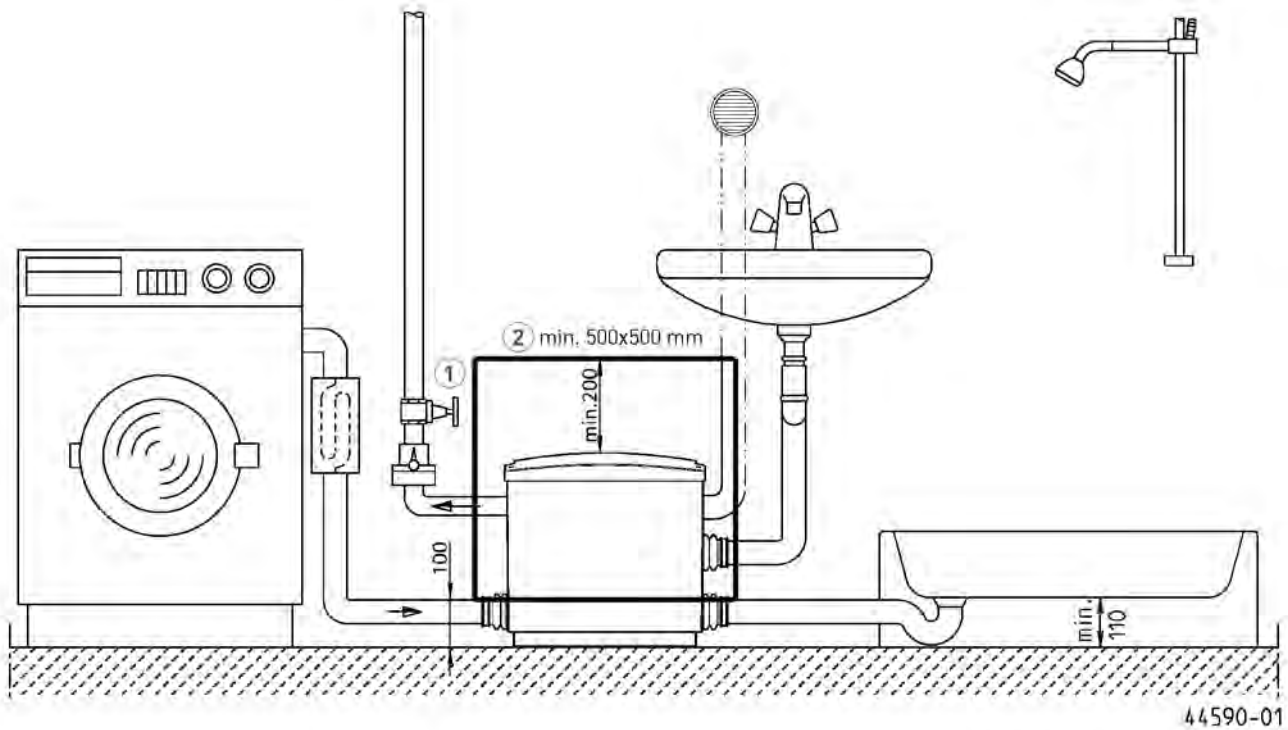
### Dimensions Hebefix plus (mm)



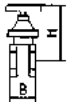
# HEBEFIX PLUS

## DRAINAGE LIFTING STATION

### Example of installation



### MECHANICAL ACCESSORY

				Code No.
	① Stop valve	1/4" (DN 32), PN 16	110x60 (HxB)	JP44785
	② Installation kit	selectable size according to the tiles		JP41075

# HEBEFIX PLUS

DRAINAGE LIFTING STATION



## HEBEFIX EXTRA DRAINAGE LIFTING STATION

- Ready to connect
- Quiet
- Integrated ventilation for reliable pump operation
- Flushing device prevents built-up of deposits in the tank
- Runtime monitoring with acoustic alarm and potential-free alarm contact
- Easy to maintain
- High-quality plastic tank (ABS)
- For saline solutions up to 15% salinity



### DESCRIPTION

The Hebefix extra lifting station is an easily installed appliance designed for the disposal of aggressive wastewater. The numerous connection options allow the appliance to be connected directly to a water softening plant or gas condensing boiler in order to dispose of the aggressive waste water produced in such systems.

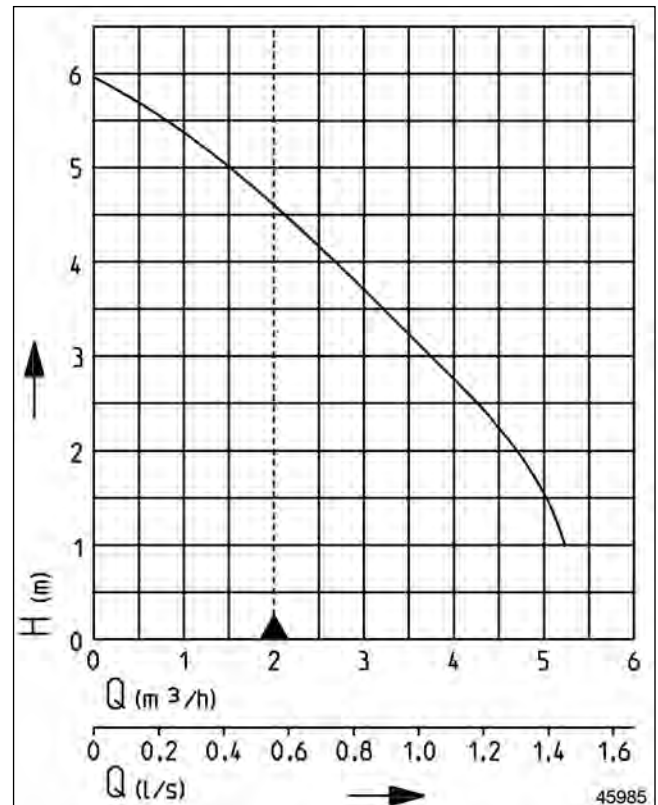
The grey water is pumped to the nearest downpipe through a small-dimensioned pressure pipe (left or right side).

For acoustic failure message, the Hebefix plus contains a runtime monitoring with alarm and a potential-free alarm contact.

The unit is supplied with a submersible pump mounted (U3K extra) which is ready to be plugged to a safety socket and operates fully automatically as soon as wastewater starts to flow in. When installed in bathrooms and shower rooms, the corresponding German VDE regulations must be observed.

The unit is in conformity with the specifications of the EN 12050 standard.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5
Hebefix extra	Flow rate Q [m³/h]	5.0	4.5	3.5	2.5	1.5

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# HEBEFIX EXTRA

## DRAINAGE LIFTING STATION

### SCOPE OF SUPPLY

Unit including pump, according to EN 12050, ready to connect with cable and plug, complete with collars, outlet elbow,

swing-type check valve 1/4", transition nipple, activated carbon filter, clamps and fastening materials.

### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Vortex impeller, plastic
Free passage	10 mm	Motor housing	Stainless steel
Bearing	Ball bearings, grease-lubricated	Pump housing	Plastic
Seal on motor side	Rotary shaft seal	Submersible	Yes
Oil chamber	Yes	Pressure outlet	DN 32
Seal on medium side	SiC mechanical seal	Tank capacity	19 l
Shaft	Stainless steel	Weight	7 kg

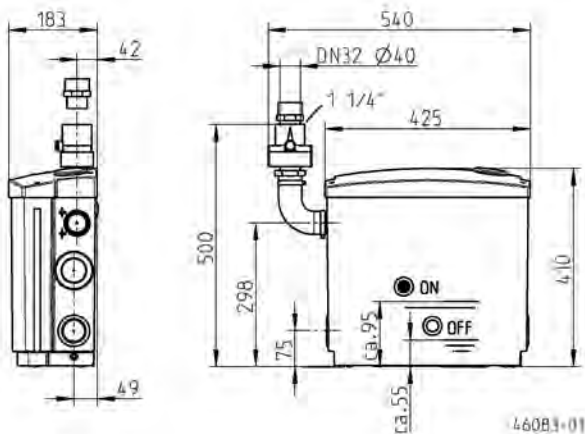
### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Type of enclosure	IP 68
Motor rating P1	0.3 kW	Insulation class	B
Motor rating P2	0.2 kW	Winding thermostat	Yes
Current	1.2 A	Motor protection	Installed in the winding
Power line	1,5m H07RN-F	Plug	Safety
Wires	4G0,75		

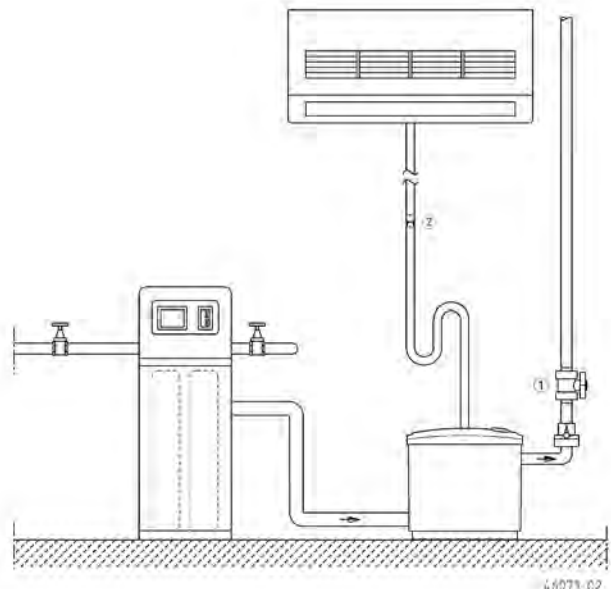
### HEBEFIX EXTRA

Type	Code No.
Hebefix extra	JP45757

### Dimensions Hebefix extra (mm)





### Example of installation



# HEBEFIX EXTRA

DRAINAGE LIFTING STATION

## MECHANICAL ACCESSORY

				Code No.
	<b>① Stop valve</b> Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	<b>JP46111</b>
	<b>② Special ventilation</b>	special filter with housing, not for hot water		<b>JP27484</b>

# HEBEFIX EXTRA

DRAINAGE LIFTING STATION

# HEBEFIX

## ABOVE FLOOR TANK



- Disposal of dirty water from hand basin, shower, bathtub, washing machine
- Condensate from condensing boilers
- Backwash water from softeners
- Easy opening of the cover without dismantling a siphon or an inlet pipe
- Swing-type check valve and activated carbon filter are scope of supply
- Wall or floor installation
- Pressure pipe on the right or left side
- Alarm system possible

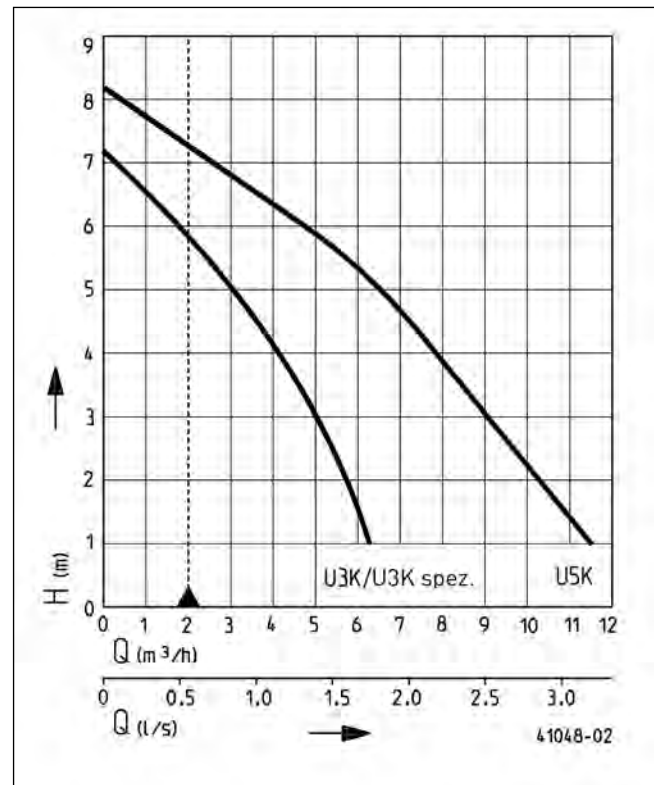
### DESCRIPTION

The Hebefix above-floor tank is the ideal solution if a washbasin or sink is to be installed and there is no waste water pipe nearby. It is quick to install and offers ideal solutions in combination with the U3KS, U3KS special or U5KS drainage pumps.

The drainage pump intended for the Hebefix is connected to the prepared pipe connection and automatically pumps the incoming grey water to the next disposal pipe. The tank has four inlet sleeves. This means that a drain can be created at any desired location, even below the backwater level, without costly bricklaying work. By means of the lower additional inlets on both sides (H=100 mm) and a special float for lower switching heights (U3 only), a backflow-proof shower can be connected.

The supplied activated carbon filter reduces odours. The installation of an alarm unit is recommended. The automatic alarm AGR or AWR (alarm device with washing machine cutoff) signalizes an unacceptably high water level and the AWR switches off the connected machine. If the special float is installed at the same time, the special fastener for alarm is required.

### PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# HEBEFIX

## ABOVE FLOOR TANK

### SCOPE OF SUPPLY

Plastic tank (ABS) without pump with integrated connection hose, clamps, swing-type check valve R32, activated carbon

filter, rubber feet and wall attachment parts. The unit is in conformity with the specification of EN 12050.

### MECHANICAL DATA

Tank capacity	26 l	Weight	3.2 kg
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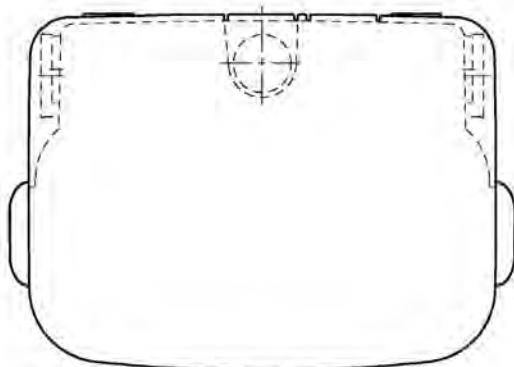
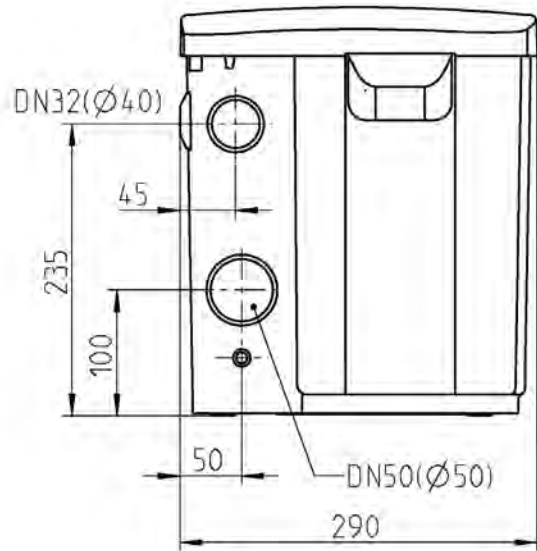
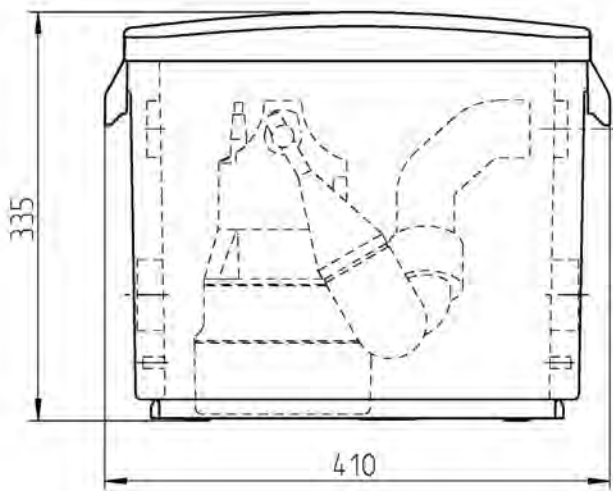
### HEBEFIX

Type	Code No.
Hebefix	JP50210

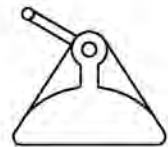
### POSSIBLE PUMPS

Hebefix	U5KS
U3KS/U3KS spezial	

### Dimensions (mm)



	ON	OFF
U3	220	110
U5	245	140



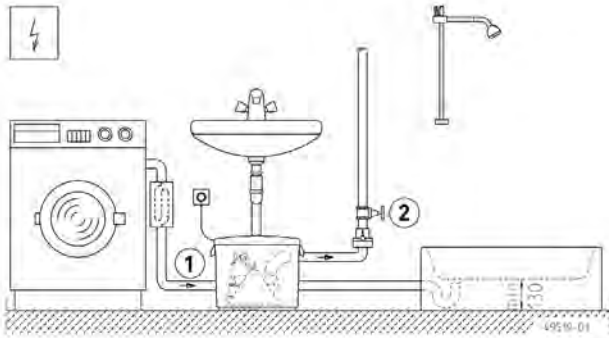
	ON	OFF
U3	110	50

49518-01

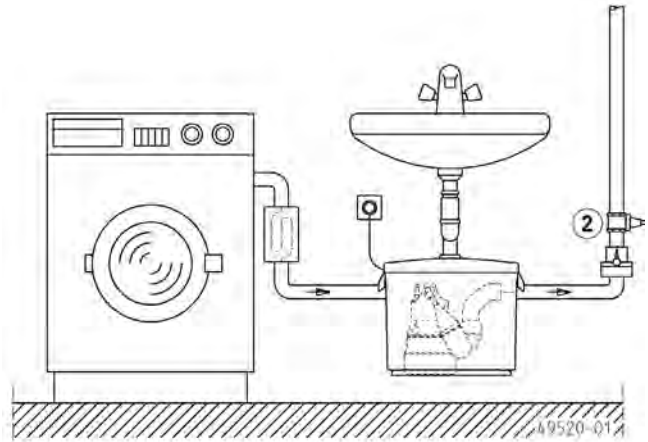
# HEBEFIX

## ABOVE FLOOR TANK


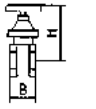

Example of installation Hebefix (floor mounted)



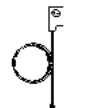


Hebefix (wall mounted)



### MECHANICAL ACCESSORY

			Code No.
	<b>1</b> Special float	for lower switching points	JP44795
	<b>2</b> Stop valve	1/4" (DN 32), PN 16	110x60 (HxB)
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)

### ELECTRICAL ACCESSORY

			Code No.
	<b>a</b> Alarm unit AGR	reed switch, mains dependent, potential-free contact, 4 m cable	JP44893
	<b>Washing machine stop</b> AWR	reed switch, mains dependent, 3 m cable	JP44897
	<b>Fastener for alarm switch</b>	(only U3KS, U5KS and U6KS with special float switch)	JP28191
	<b>b</b> Rechargeable battery	for mains independent alarm	JP44850

# HEBEFIX

ABOVE FLOOR TANK



# HEBEFIX 100 / 100 H

ABOVE FLOOR TANK

- Direction of pressure drain variable
- Alarm system possible
- Swing-type check valve
- Hot water version resistant up to 176 °F (80 °C)
- Activated carbon filter



## DESCRIPTION

The above floor sump Hebefix 100 is a drainage pump station for lifting faeces-free domestic and commercial wastewater up to 104° F (40° C). The tank of Hebefix 100 H version is resistant to wastewater temperatures of up to 176 °F (80° C). It is a free-standing plastic tank (approx. 75 l) with four combination inlets for pipes with an external diameter of 50 or 110 mm. The pressure pipe enclosed can be passed out of the tank on the left or right side as required (connection R 1½").

The pump to be used can be selected according to the volume of wastewater or as individually required: In case of slightly dirty water (grain size max. 10 mm), pumps U3KS, U5KS as well as

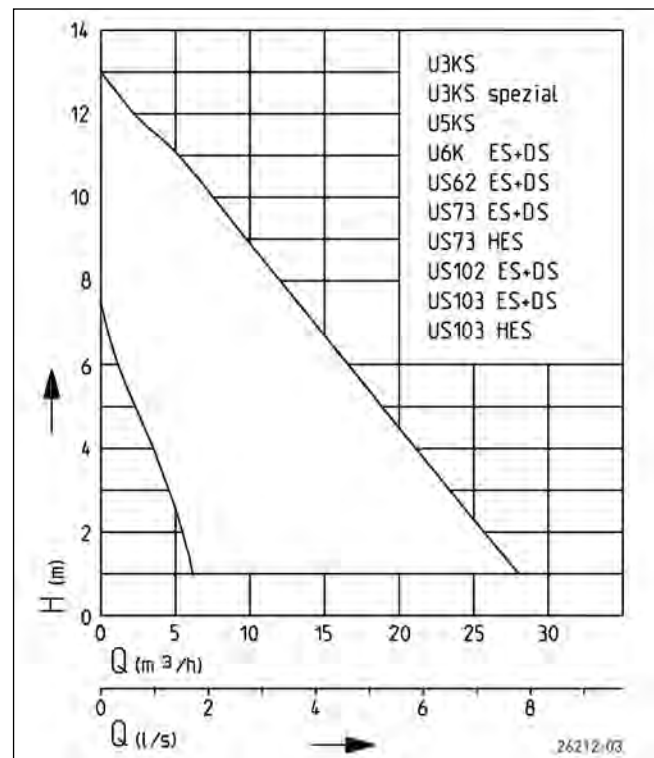
U6K ES+DS can be used. If the admixtures are larger or the volume of wastewater is bigger, the use of a pump of the US series is recommendable. In case of higher wastewater temperatures (commercial use or block of flats), US hot water pumps are used in Hebefix 100 H. Optionally, a special float (see accessories) can be fitted to reduce the on and off switching height as well as the residual volume. In case of commercial applications, the resistance of the materials have to be tested in advance.

Hebefix is ideal for subsequent ground level installation. Without a lot of masonry work or without excavating a pit, Hebefix can be installed at any requested location - even downstream of the backpressure level. Wash basins, washing machines or dish washers as well as a shower tray (only in combination with a U3KS or U6KS with special float) can be connected without any problems.

The connection of a ventilation pipe passed to the roof prevents odours. If the sump is ventilated at the erection site, an activated carbon filter prevents unpleasant smell of Hebefix 100. The installation of an alarm system is recommended. It warns against impermissibly high water levels in the tank.

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

## PERFORMANCE



# HEBEFIX 100 / 100 H

## ABOVE FLOOR TANK

### SCOPE OF SUPPLY

Plastic tank to house a pump tested in keeping with German / European standard EN 12050, with seal and cover mounted, four combination inlets, connection sleeve DN 100 with clamps, plug-in seals and elastic connection, tank ventilation, activated

carbon filter (Hebefix 100 only), cable inlet, tank pressure pipe enclosed (made of stainless steel in case of Hebefix 100 H) and swing-type check valve 1/2", (without pump).

### MECHANICAL DATA

Tank capacity	75 l
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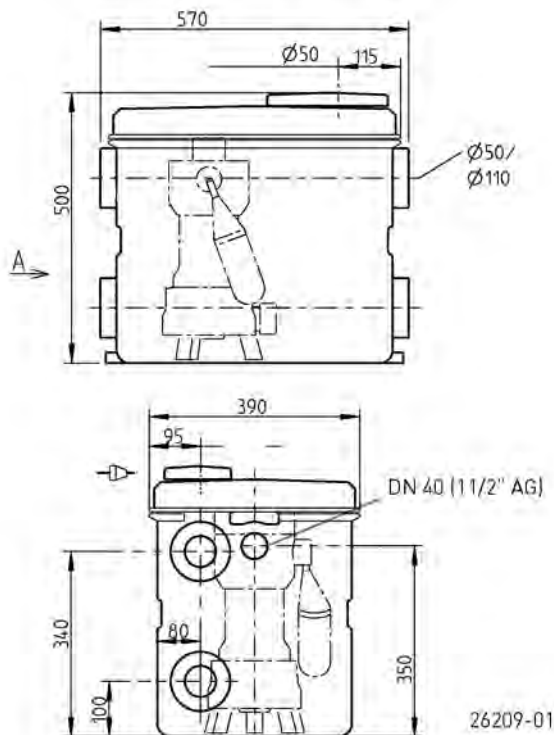
### HEBEFIX 100 / 100 H

Type	Code No.	Weight
Hebefix 100	JP09319	8.6 kg
Hebefix 100 H	JP09348	12.3 kg

### POSSIBLE PUMPS

Hebefix 100	US 62 ES/DS	Hebefix 100 H
U3KS/U3KS spezial	US 73 ES/DS	US 73 HES
U5KS	US 102 ES/DS	US 103 HES
U6K ES/DS	US 103 ES/DS	



### Dimensions Hebefix 100/100 H (mm)



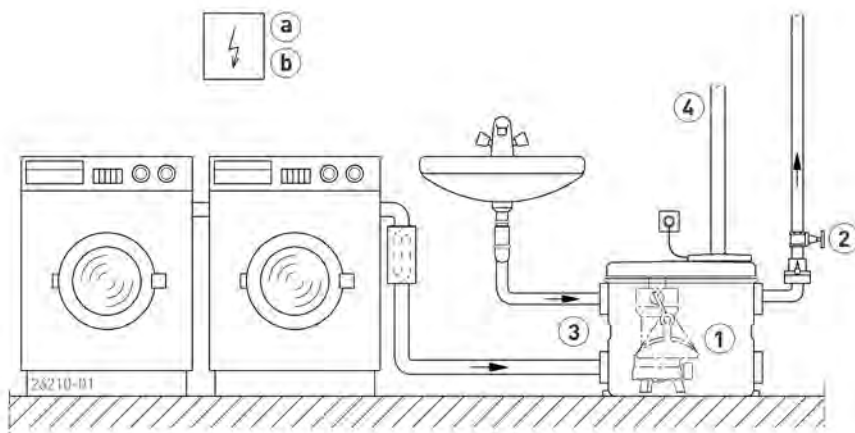
# HEBEFIX 100 / 100 H

ABOVE FLOOR TANK



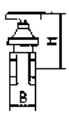


## Switching heights

	ON 	OFF	ON 	OFF
U3KS	ca. 220 mm	ca. 115 mm	ca. 110 mm	ca. 50 mm
U5KS	ca. 245 mm	ca. 140 mm	ca. 95 mm	ca. 45 mm
U6KS	ca. 275 mm	ca. 175 mm	ca. 135 mm	ca. 85 mm
US 62 ES/DS	ca. 245 mm	ca. 130 mm	ca. 160 mm	ca. 110 mm
US 73 ES/DS	ca. 245 mm	ca. 130 mm	ca. 160 mm	ca. 110 mm
US 102 ES/DS	ca. 275 mm	ca. 160 mm	ca. 190 mm	ca. 140 mm
US 103 ES/DS	ca. 275 mm	ca. 160 mm	ca. 190 mm	ca. 140 mm

## Einbaubeispiel Hebefix 100 / Hebefix 100 H




## MECHANICAL ACCESSORY

				Code No.
	<b>① Special float</b>	for lower switching points		<b>JP44795</b>
		for lower switching points (U5 and U6)		<b>JP44207</b>
	<b>② Stop valve</b>	brass, 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	<b>③ Connection kit</b>	DN 150, elastic sleeve with clamps		<b>JP27736</b>
	<b>④ Special ventilation</b>	special filter with housing, not for hot water		<b>JP27484</b>

# HEBEFIX 100 / 100 H

ABOVE FLOOR TANK

## ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AGR	reed switch, mains dependent, potential-free contact, 4 m cable	<b>JP44893</b>
	<b>Washing machine stop</b>		
	AWR	reed switch, mains dependent, 3 m cable	<b>JP44897</b>
	AWO	for alarm forwarding in case of several washing machines	<b>JP44899</b>
	<b>Fastener for alarm switch</b>	(only U3KS, U5KS and U6KS with special float switch)	<b>JP28191</b>
	<b>b Rechargeable battery</b>	for mains independent alarm	<b>JP44850</b>

# HEBEFIX 200

ABOVE FLOOR TANK

- Single- or duplex unit
- Odour-tight cover
- Guide rail system GR 32 or GR 50 possible



## DESCRIPTION

The Hebefix 200 is available for bigger domestic wastewater volume and larger storage capacity. Without requiring a great deal of construction work, it disposes of domestic wastewater from laundries, storage or cellar areas.

The Hebefix 200 can be installed as a single as well as duplex system. The required components for the installation of the pump are part of the scope of supply. The duplex system provides bigger security in the disposal of wastewater. In normal operation the two pumps operate alternately or at the same time to cope with peak load. The control unit operates the duplex system depending on the type of pump (see accessories).

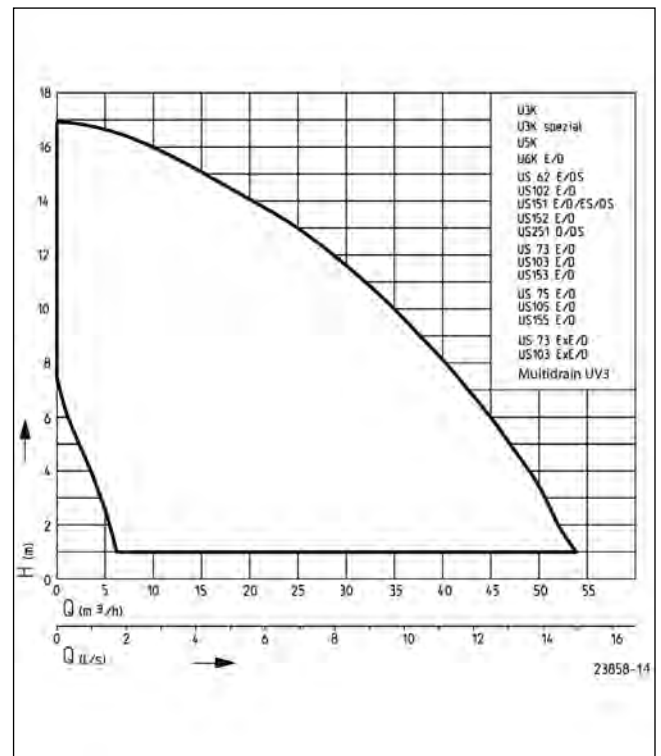
If the system is to be operated as a single system, a pump with a built-in level control must be selected.

The pump to be placed can be selected according to the amount of wastewater. The dirty water to be transported and the pumping power required have to be taken into consideration in particular. In case of slightly dirty water, pumps U3K, U5K as well as U6K E+D can be used. If the admixtures are larger or the volume of wastewater is bigger, the use of a pump of the US series is recommendable. Pumps US 73+103 Ex are used in hazardous areas. In case of commercial applications, the resistance of the materials have to be tested in advance. Depending on the type of pump used, the Hebefix 200-32 with 1/4" or the Hebefix 200-50 with 2" discharge branch has to be chosen.

The unit is in conformity with the specification of German / European standard EN 12050.

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

## PERFORMANCE



# HEBEFIX 200

## ABOVE FLOOR TANK

### SCOPE OF SUPPLY

Plastic tank to house a pump tested in keeping with German / European standard EN 12050, shaped connecting piece, cover

and seal, hose connection and pressure pipe, two swing-type check valves, plug for cable conduit, without pumps.

### MECHANICAL DATA

Tank capacity	240 l
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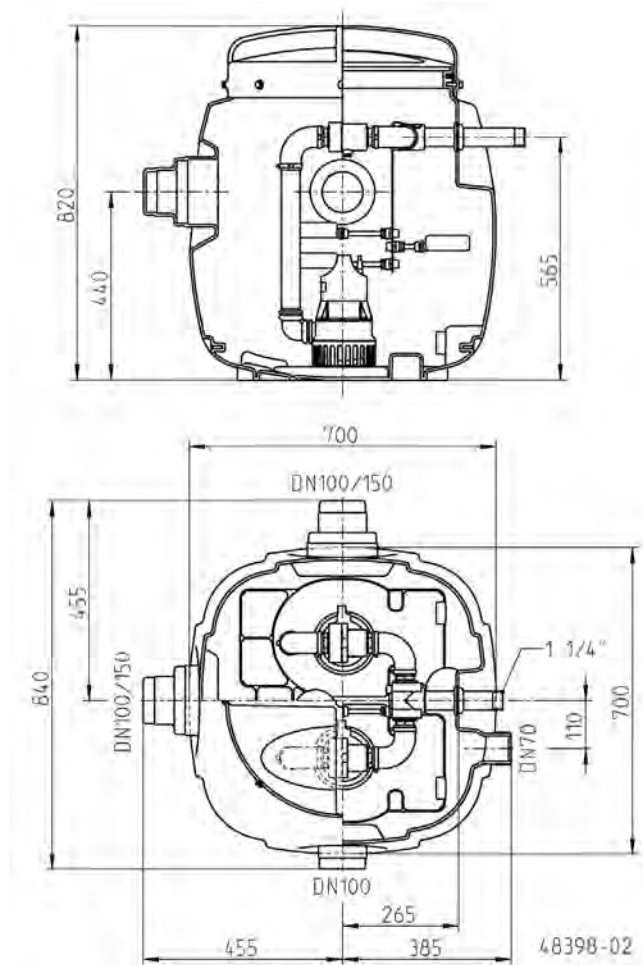
### HEBEFIX 200

Type	Code No.	Weight
Hebefix 200-32	<b>JP48188</b>	26 kg
Hebefix 200-50	<b>JP48189</b>	29 kg

### POSSIBLE PUMPS

Hebefix 200-32	US 103 E/D Ex	US 103 E/D
U3K/U3K spezial	Multidrain UV3	US 153 E/D
U5K	Hebefix 200-50	US 75 E/D
U6K E/D	US 62 E/D	US 105 E/D
US 62 E/D	US 102 E/D	US 155 E/D
US 102 E/D	US 151 E/D	US 73 E/D Ex
US 73 E/D	US 152 E/D	US 103 E/D Ex
US 103 E/D	US 251 D	
US 73 E/D Ex	US 73 E/D	

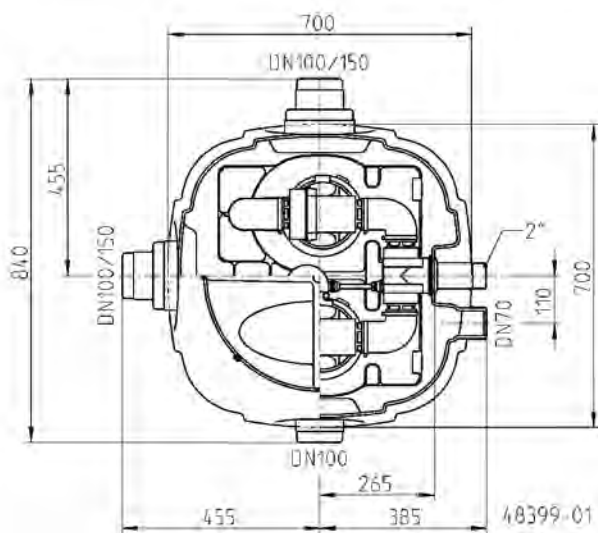
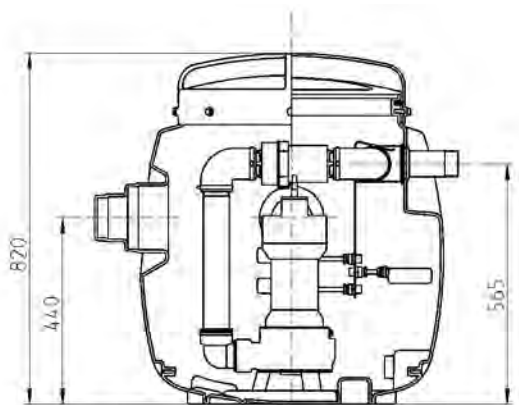
### Dimensions Hebefix 200-32 (mm)



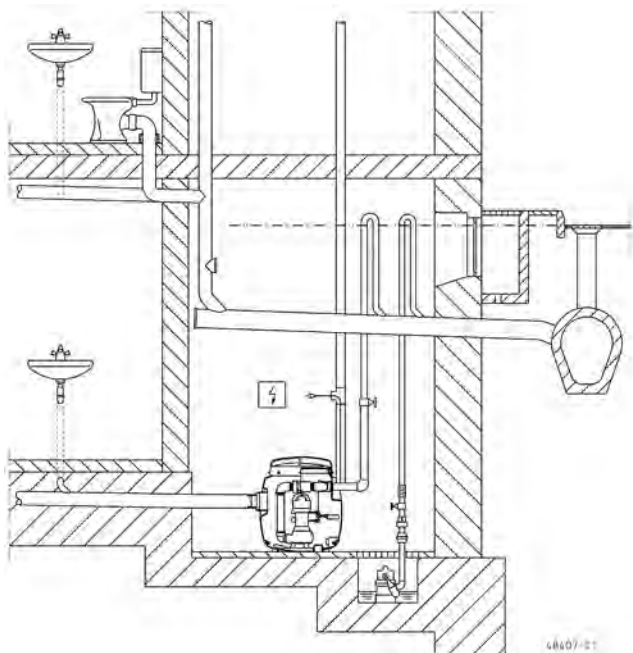
# HEBEFIX 200

ABOVE FLOOR TANK

## Dimensions Hebefix 200-32 (mm)



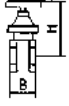



## Example of installation Hebefix 200






# HEBEFIX 200

ABOVE FLOOR TANK

## MECHANICAL ACCESSORY

				Code No.
	<b>① Stop valve</b>	1¼" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
	Ball valve	1¼", PVC, for aggressive media	105x155 (HxB)	JP46111
	<b>② Special ventilation</b>	special filter with housing, not for hot water		JP27484
	<b>③ Guide rail system</b>	Guide rail system GR32 for Hebefix 200/Baufix 200 (U3/U5/U5)		JP48279
		Guide rail system GR50 for Hebefix 200/Baufix 200 (US75/US105/US155)		JP48280

## ELECTRICAL ACCESSORY

				Code No.	
	<b>a Control for duplex units</b>	Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735	
		Control unit HIGHLOGO 2-00 E	230 V	JP47996	
		Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993	
		Control unit HIGHLOGO 2-00	400 V	JP47997	
		Control unit BD 25	400 V, for pumps US 151-155	JP45737	
		Control unit HIGHLOGO 2-25	400 V	JP47998	
		Control unit BD 610 EC	230 V, with operating capacitor	JP45743	
		Control unit BD 46	400 V, for pumps US 251-253, UV 620-3, UV 625-3	JP45739	
		Control unit BD 23 X	for US 73 D EX	JP09755	
		Control unit BD 25 X	for US 103 D EX	JP09681	
		<b>Level control</b>			
		Dry run protection			JP44603
		Submersible switch pack B232 for Hebefix 200-32 / Baufix 200-32			JP48228
		Submersible switch pack B250 for Hebefix 200-50 / Baufix 200-50 / Vacubox 200			JP48229
Submersible switch pack BF232 for grease-containing wastewater			JP48298		
Submersible switch pack BF250 for grease-containing wastewater			JP48299		
Auxiliary switch unit ExH-B for explosion-proof pumps only			JP00295		
<b>Alarm unit</b>					
AG3 subm. ball contact switch, mains dependent, potential-free contact, 3 m cable			JP44891		
AG10 subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable			JP44892		
<b>Washing machine stop</b>					
AW3 subm. ball contact switch, mains dependent, 3 m cable			JP44895		
AW0 for alarm forwarding in case of several washing machines			JP44899		
	<b>b Rechargeable battery</b>	for mains independent alarm		JP44850	
	<b>c Seal leak detector</b>	DKG		JP44900	
		DKG Ex for explosion-proof pumps		JP00249	



**BAUFIX 50**  
UNDERFLOOR SUMP

- Odour-tight cover
- Floor drain
- Seal collar for attaching to the customer's thin-bed waterproofing system
- Integrated sump ventilation
- Mounted swing-type check valve
- valve
- Complete pressure pipe in the sump
- Level-compensating frame
- Quick-lock of the pump
- Two combination inlets DN 50/100



**DESCRIPTION**

Baufix 50 is a compact sump designed for the installation in foundation rafts or cellar floors. Together with the submersible motorised pump U3KS, it is suitable for the drainage of domestic wastewater from washbasins, sinks, showers and washing machines in cellars or lavatories. The floor drain in the cover of the sump protects the location against bigger floods. The introduction of wastewater from toilets and urinals is not permitted.

The pressure-resistant sump is placed into the pit without formwork; the pipes are connected and the sump embedded flush in concrete. The installation in areas subject to the groundwater flooding is permitted only along with additional measures (water-tight concrete shell) as the connection between PE and concrete does not withstand pressing water.

In combination with the height-adjustable and rotatable cover made of plastic, the shaped sump neck permits a perfect level compensation at the installation site. Thus, the installation depth of the sump may vary between 45 and 71 cm. The arrangement of the combined inlets in the lower part of the sump permits installation in flat pits as well.

The swing-type check valve fitted in the works of the manufacturer prevents the reflux of the waste-water from the pressure pipe into the sump. The standard odour trap stops annoyance caused by offensive odour. The screw clamp with wing bolt in the container ensures ease of installation and maintenance of the pump.

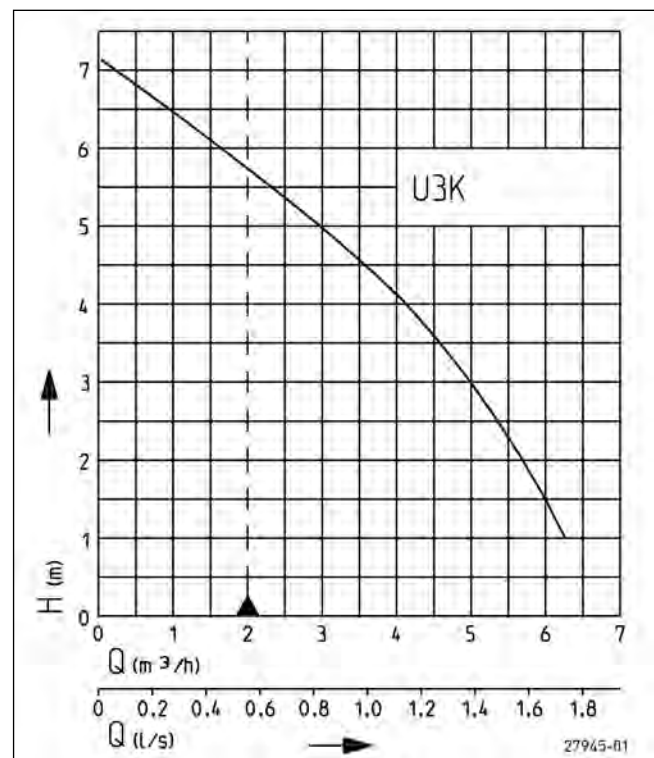
For deeper installation depths or more powerful pumps, we recommend the use of Baufix 100 and Baufix 200.

The unit is in conformity with the specification of German / European standard EN 12050.

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

**PERFORMANCE**



# BAUFIX 50

## UNDERFLOOR SUMP

### SCOPE OF SUPPLY

Plastic sump to house a pump tested in keeping with German/ European standard EN 12050 with shaped connecting piece, shaped sump extension, level-compensating plastic cover frame with cover plate, odour trap for the floor drain, discharge branch

with swing type-check valve and pressure pipe premounted in the tank, special float for lower switching heights, plug-in seal DN 50, closing plug for cable conduit, without pump.

### MECHANICAL DATA

Tank capacity	40-55 l	Weight	8 kg
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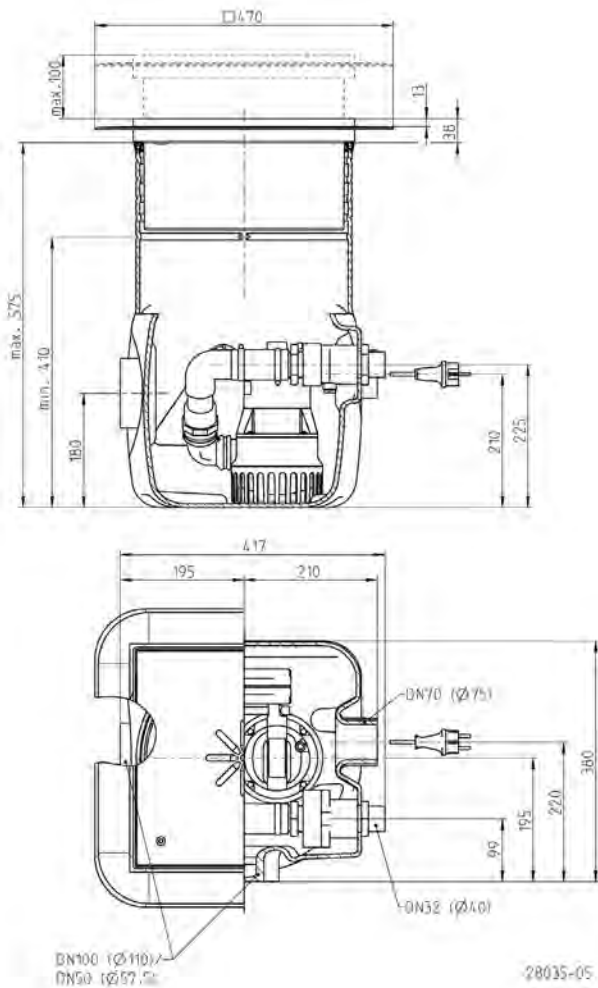
### BAUFIX 50

Type	Code No.
Baufix 50-sump	JP09335

### POSSIBLE PUMPS

Baufix 50
U3KS/U3KS spezial

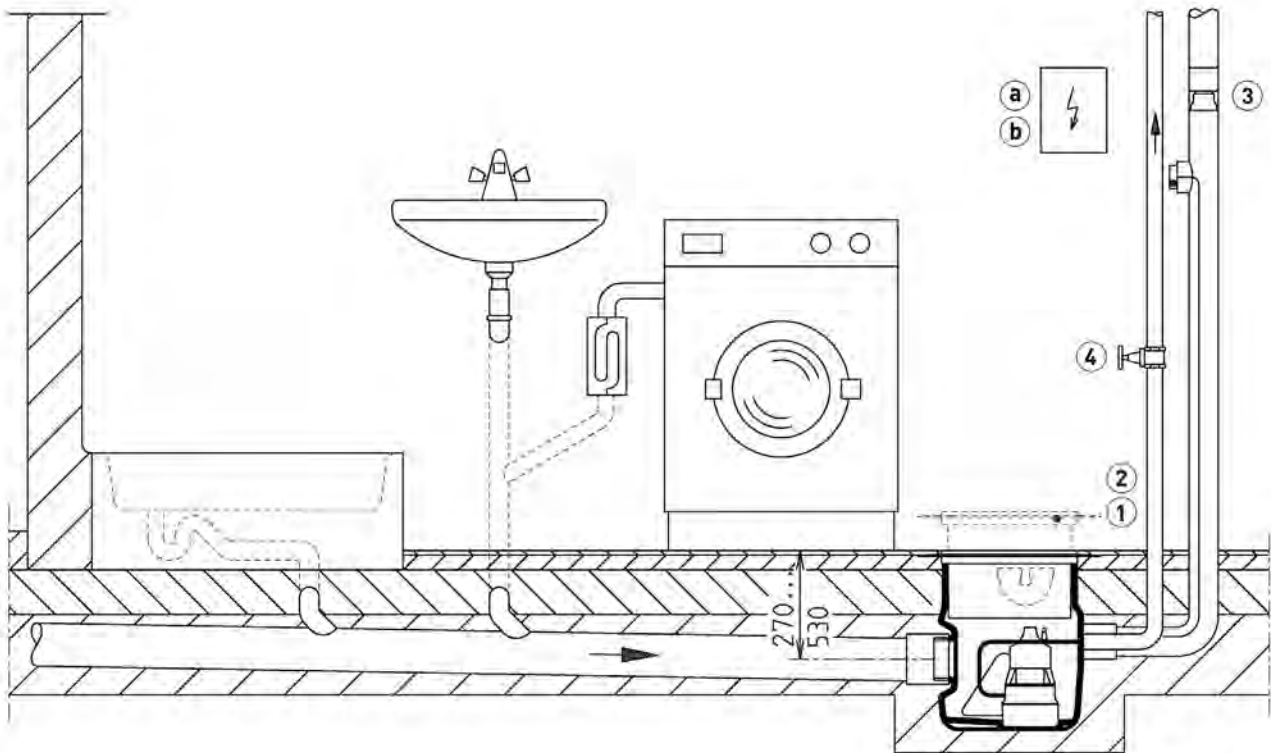
### Dimensions Baufix 50 (mm)



# BAUFIX 50



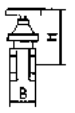

## UNDERFLOOR SUMP

### Example of installation Baufix 50



28041-02


### MECHANICAL ACCESSORY

				Code No.
	<b>① Cover plate</b>	stainless steel, to be tiled, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP24024</b>
	<b>② Cover frame</b>	stainless steel, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP28118</b>
	<b>③ Special ventilation</b>	special filter with housing, not for hot water		<b>JP27484</b>
	<b>④ Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	<b>JP44785</b>
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	<b>JP46111</b>

# BAUFIX 50

## UNDERFLOOR SUMP

### ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b> AGR	reed switch, mains dependent, potential-free contact, 4 m cable	<b>JP44893</b>
	<b>Washing machine stop</b>		
	AWR	reed switch, mains dependent, 3 m cable	<b>JP44897</b>
	AW0	for alarm forwarding in case of several washing machines	<b>JP44899</b>
	<b>Fastener for alarm switch</b>	(only U3KS, U5KS and U6KS with special float switch)	<b>JP28191</b>
<b>b Rechargeable battery</b>	for mains independent alarm	<b>JP44850</b>	

**BAUFIX 100**  
UNDERFLOOR SUMP

- Use in groundwater areas possible
- Floor drain
- Includes complete internal pipework
- Level-compensating frame
- Odour-tight cover
- Seal collar for attaching to the customer's thin-bed waterproofing system
- Guide rail system for U3KS, U5KS, U6K ES/DS



**DESCRIPTION**

Without a great deal of construction work, underfloor sump Baufix 100 can be used to remove effluent from laundries, storage or cellar areas below the backpressure level. The use as a collecting tank for faeces is not permitted.

Without formwork, the pressure-resistant plastic container is placed into the concrete bed and forms a collecting tank for underfloor pipework. The installation in areas subject to the groundwater flooding is permitted only along with additional measures (water-tight concrete shell) as the connection between PE and concrete does not withstand pressing water. The pump to be placed can be selected according to the amount of wastewater. The dirty water to be transported and the pumping power required have to be taken into consideration in particular. In case of slightly dirty water (grain size max. 10 mm), pumps U3KS, U5KS as well as U6K ES+DS can be used. If the admixtures are larger or the volume of wastewater is bigger, the use of a pump of the US series is recommendable. Pumps US 73+103 Ex are used in hazardous areas. For the disposal of condensate from condensing boilers, the special variant U3KS spezial has to be used.

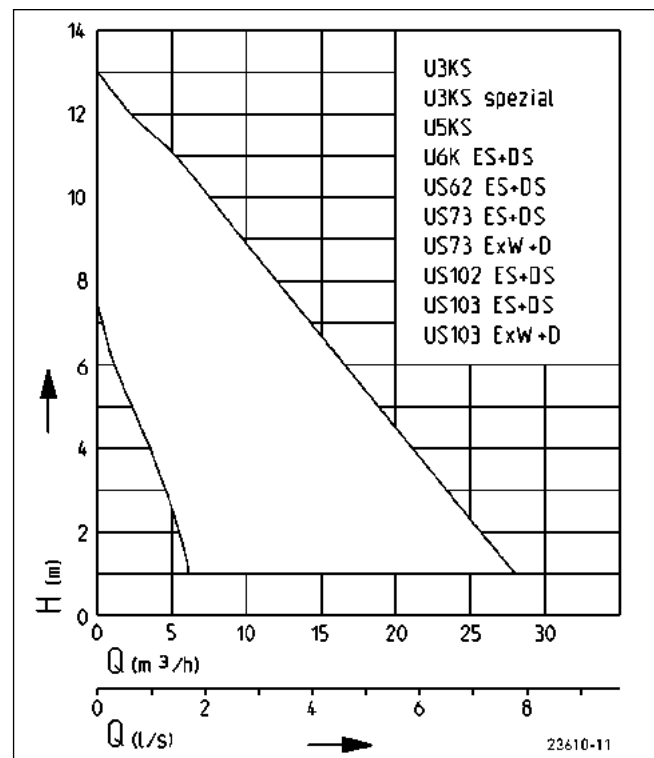
The swing type-check valve fitted in the works of the manufacturer prevents the reflux of the wastewater from the pressure pipe into the sump. The standard odour trap stops annoyance caused by offensive odour.

By subsequently adjusting the plastic cover frame, the sump cover can be adapted easily and variably to the floor and tile conditions.

The unit is in conformity with the specification of German / European standard EN 12050.

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

**PERFORMANCE**



# BAUFIX 100

## UNDERFLOOR SUMP

### SCOPE OF SUPPLY

Plastic tank to house a pump tested in keeping with German / European standard EN 12050 with shaped connecting piece and level-compensating plastic cover frame with cover plate, odour

trap for floor drain, hose connection, premounted discharge branch with swing-type check valve, parts required for pump installation, plug for cable conduit, without pump.

### MECHANICAL DATA

Tank capacity	70 l	Weight	14 kg
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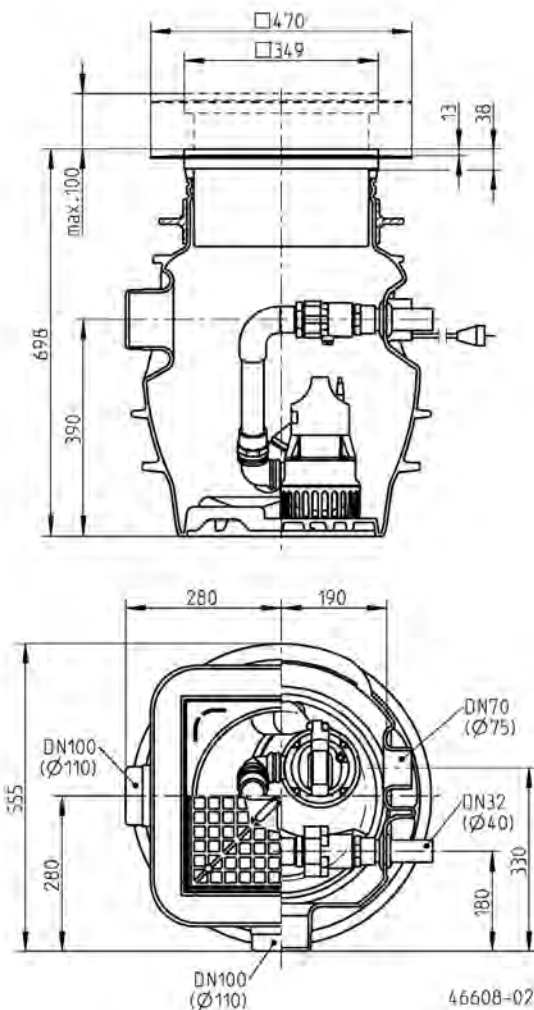
### BAUFIX 100

Type	Code No.
Baufix 100-tank	JP47214

### POSSIBLE PUMPS

Baufix 100	US 62 ES/DS	US 73 E/D Ex
U3KS/U3KS spezial	US 73 ES/DS	US 103 E/D Ex
U5KS	US 102 ES/DS	
U6K ES/DS	US 103 ES/DS	

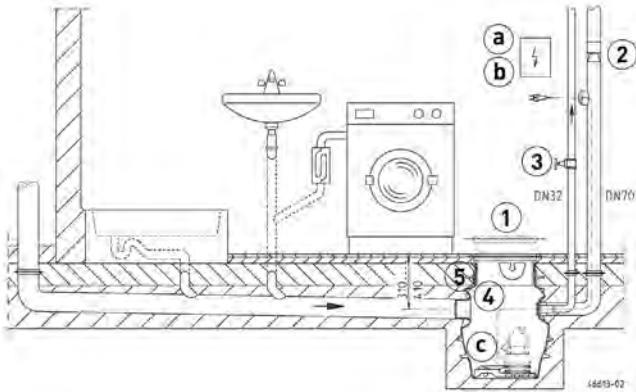
### Dimensions Baufix 100 (mm)





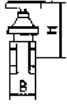



# BAUFIX 100

## UNDERFLOOR SUMP

### Example of installation Baufix 100






### MECHANICAL ACCESSORY

				Code No.
	<b>① Cover plate</b>	stainless steel, to be tiled, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP24024</b>
	<b>② Cover frame</b>	stainless steel, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP28118</b>
	<b>③ Special ventilation</b>	special filter with housing, not for hot water		<b>JP27484</b>
	<b>④ Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	<b>JP44785</b>
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	<b>JP46111</b>
	<b>⑤ Guide rail system</b>	GR 32 for Baufix 100		<b>JP46706</b>
	<b>⑥ Ground water seal sump</b>	Ø315 for Baufix 100/Baufix 200-32		<b>JP47216</b>
	<b>⑦ Ground water seal set</b>	for Baufix 100/Baufix 200-32 with inlet DN 100		<b>JP50206</b>

# BAUFIX 100

## UNDERFLOOR SUMP

### ELECTRICAL ACCESSORY

			Code No.	
	<b>a</b>	<b>Control for single units</b>		
		Control unit AD 4 XE	for US 73E EX	JP25901
		Control unit AD 8 XE	for US 103E E	JP25902
		Control unit AD 23 X	for US 73D EX	JP09754
		Control unit AD 25 X	for US 103D EX	JP09683
		<b>Level control</b>	LM-circuit (for explosion-proof pumps only)	JP01080
			Assembly set for LM circuit	JP22410
		Dry run protection		JP44603
		<b>Alarm unit</b>		
		AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
		AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
		<b>Washing machine stop</b>		
		AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
		AW0	for alarm forwarding in case of several washing machines	JP44899
	<b>b</b>	<b>Rechargeable battery</b>	for mains independent alarm	JP44850
		<b>c</b>	<b>Seal leak detector</b>	
			DKG	JP44900
			DKG Ex for explosion-proof pumps	JP00249



**BAUFIX 200**  
UNDERFLOOR SUMP



- Pressure stabilizer sump
- Single- or duplex system
- Floor drain with odour trap
- Level-compensating frame
- Seal collar for attaching to the customer's thin-bed waterproofing system
- Use in groundwater areas possible
- Guide rail system GR 32 or GR 50 possible

**DESCRIPTION**

Baufix 200 is for bigger domestic wastewater volume and larger storage capacity. Without requiring a great deal of construction work, it disposes of domestic wastewater from laundries, storage or cellar areas.

Baufix 200 can be installed as a single as well as duplex system. The required components for the installation of the pump are part of the scope of supply. The duplex system provides bigger security in the disposal in wastewater. In normal operation the two pumps operate alternately or at the same time to cope with peak load.

If the system is to be operated as a single system, a pump with a built-in level control must be selected.

The pump to be placed can be selected according to the amount of wastewater. The dirty water to be transported and the pumping power required have to be taken into consideration in particular. In case of slightly dirty water, pumps U3K, U5K or U6K E+D can be used. If the admixtures are larger or the volume of wastewater is bigger, the use of a pump of the US series is recommendable. Pumps US 73+103 Ex are used in hazardous areas. In case of commercial applications, the resistance of the materials have to be tested in advance. Depending on the type of pump used, the Hebefix 200-32 with 1¼" or the Hebefix 200-50 with 2" discharge branch has to be chosen.

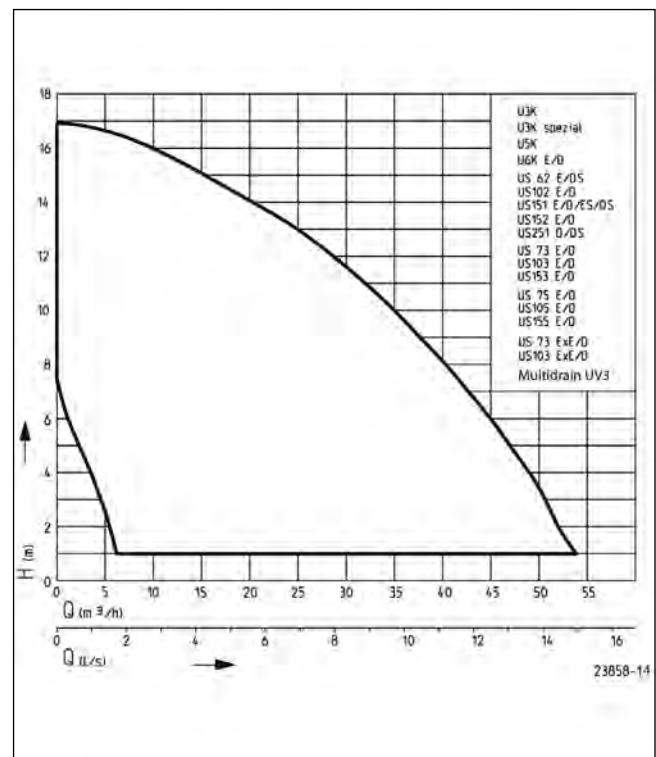
Without formwork, the pressure-resistant plastic PE sump is placed into the concrete bed and forms a collecting tank for underfloor pipework. The installation in areas with high ground water levels is possible without extension and under the use of the groundwater seal.

By subsequently adjusting the plastic cover frame, the sump cover can be adapted easily and variably to the floor and tile conditions.

The unit is in conformity with the specification of German / European standard DIN EN 12050.

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

**PERFORMANCE**



# BAUFIX 200

## UNDERFLOOR SUMP

### SCOPE OF SUPPLY

Plastic sump to house a pump tested in keeping with German/  
European standard EN 12050 with shaped connecting piece,  
level-compensating plastic cover frame, cover plate and odour

trap for floor drain, hose connection and pressure pipe, two  
swing-type check valves, plug for cable conduit, without pumps.

### MECHANICAL DATA

Tank capacity	240 l
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### BAUFIX 200

Type	Code No.	Weight
Baufix 200-32	<b>JP48186</b>	30 kg
Baufix 200-50	<b>JP48187</b>	37 kg

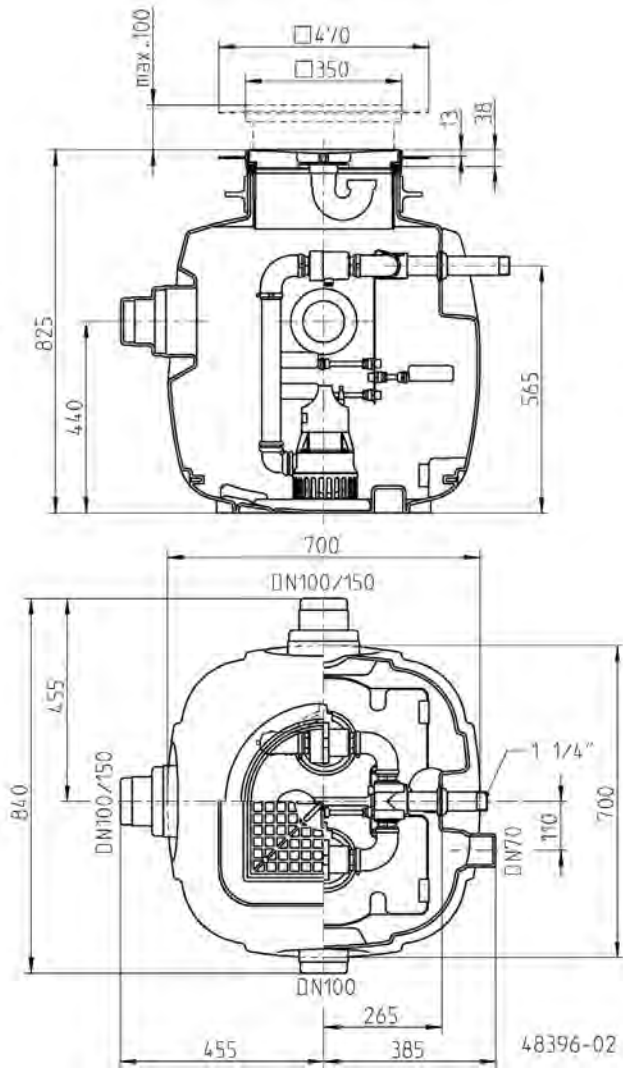
### POSSIBLE PUMPS

Baufix 200-32	US 103 E/D Ex	US 103 E/D
U3K/U3K spezial	Multidrain UV3	US 153 E/D
U5K	<b>Baufix 200-50</b>	US 75 E/D
U6K E/D	US 62 E/D	US 105 E/D
US 62 D/E	US 102 E/D	US 155 E/D
US 102 E/D	US 151 E/D	US 73 E/D Ex
US 73 E/D	US 152 E/D	US 103 E/D Ex
US 103 E/D	US 251 D	
US 73 E/D Ex	US 73 E/D	

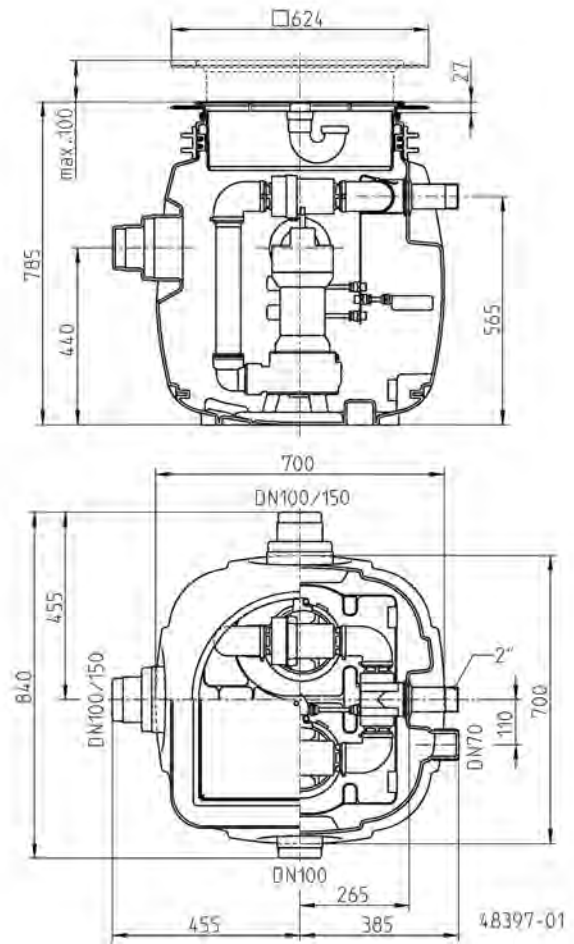
# BAUFIX 200

## UNDERFLOOR SUMP

Dimensions Baufix 200-32 (mm)



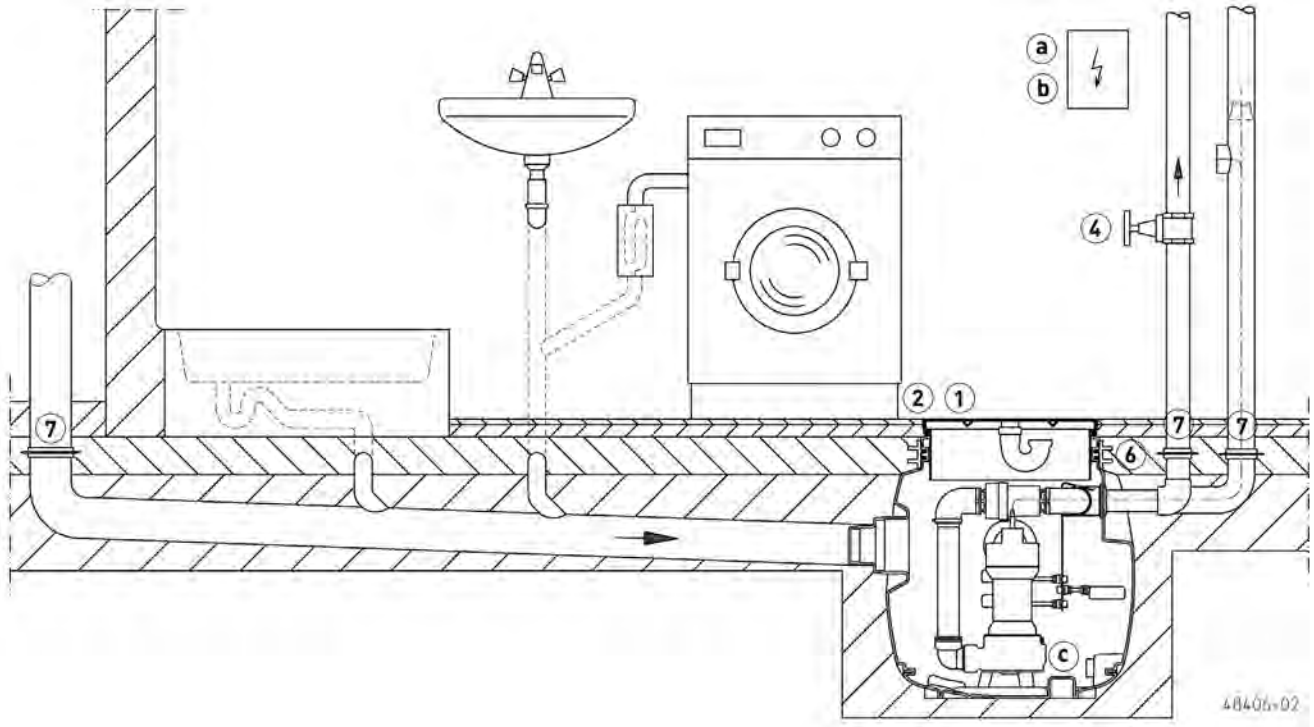
Dimensions Baufix 200-50 (mm)





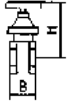



# BAUFIX 200

## UNDERFLOOR SUMP

### Example of installation Baufix 200






### MECHANICAL ACCESSORY

				Code No.
	<b>1 Cover plate</b>	stainless steel, to be tiled, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP24024</b>
	<b>2 Cover frame</b>	stainless steel, for Baufix 50, Baufix 100, Baufix 200-32		<b>JP28118</b>
	<b>3 Special ventilation</b>	special filter with housing, not for hot water		<b>JP27484</b>
	<b>4 Stop valve</b>	1/4" (DN 32), PN 16	110x60 (HxB)	<b>JP44785</b>
		brass, 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
		brass, 2" (DN 50), PN 16	140x70 (HxB)	<b>JP44787</b>
	Ball valve	1/4", PVC, for aggressive media	105x155 (HxB)	<b>JP46111</b>
	<b>5 Guide rail system</b>	Guide rail system GR32 for Hebefix 200/Baufix 200 (U3/U5/U5)		<b>JP48279</b>
		Guide rail system GR50 for Hebefix 200/Baufix 200 (US75/US105/US155)		<b>JP48280</b>
	<b>6 Ground water seal sump</b>	Ø315 for Baufix 100/Baufix 200-32		<b>JP47216</b>
		Ø500 for Baufix 200-50/Vacubox 200		<b>JP48215</b>
	<b>7 Ground water seal set pipe</b>	for Baufix 100/Baufix 200-32 with inlet DN 100		<b>JP50206</b>
		for Baufix 200-32 with inlet DN 150		<b>JP50205</b>
		for Baufix 200-50/Vacubox 200 with inlet DN 100		<b>JP50204</b>
		for Baufix 200-50/Vacubox 200 with inlet DN 150		<b>JP50203</b>
	<b>8 Sump extension</b>	165-265 mm for Baufix 200-50 / Vacubox 200		<b>JP48282</b>

# BAUFIX 200

## UNDERFLOOR SUMP

### ELECTRICAL ACCESSORY

			Code No.	
	<b>a</b>	<b>Control for duplex units</b>		
		Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735
		Control unit HIGHLOGO 2-00 E	230 V	JP47996
		Control unit BD 00	400 V, for pumps U6, US 62-105, UV 300	JP45993
		Control unit HIGHLOGO 2-00	400 V	JP47997
		Control unit BD 25	400 V, for pumps US 151-155	JP45737
		Control unit HIGHLOGO 2-25	400 V	JP47998
		Control unit BD 610 EC	230 V, with operating capacitor	JP45743
		Control unit BD 46	400 V, for pumps US 251-253, UV 620-3, UV 625-3	JP45739
		Control unit BD 23 X	for US 73 D EX	JP09755
		Control unit BD 25 X	for US 103 D EX	JP09681
		<b>Level control</b>		
	Dry run protection		JP44603	
	Submersible switch pack B232	for Hebefix 200-32 / Baufix 200-32	JP48228	
	Submersible switch pack B250	for Hebefix 200-50 / Baufix 200-50 / Vacubox 200	JP48229	
	Submersible switch pack BF232	for grease-containing wastewater	JP48298	
	Submersible switch pack BF250	for grease-containing wastewater	JP48299	
	Auxiliary switch unit ExH-B	for explosion-proof pumps only	JP00295	
	<b>Alarm unit</b>			
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891	
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892	
	<b>Washing machine stop</b>			
	AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895	
	AW0	for alarm forwarding in case of several washing machines	JP44899	
	<b>b</b>	<b>Rechargeable battery</b>	for mains independent alarm	JP44850
		<b>c</b>	<b>Seal leak detector</b>	DKG
			DKG Ex for explosion-proof pumps	JP00249

# BAUFIX 200

UNDERFLOOR SUMP

## SKS 800

POLY-SUMPS FOR DRAINAGE WATER

- Mark of conformity
- Single- and double units suitable for traffic to class B 125
- Smooth benched deposit free collection chamber
- Valves can be operated from above
- Easy to install
- Single unit retrofittable as duplex unit



### DESCRIPTION

The buoyancy proof sumps are supplied for the house and estate drainage. They can be equipped with one or two pumps.

The sumps are suitable for accessible areas (class A 15) or for traffic areas (class B 125).

Preformed transport handles provide easy transport and placing into its final position.

Wastewater and drainage water can vary widely. Therefore we have a range of different pumps to suit the various grades of impurities.

Buoyancy-proof plastic sump of high grade polyethylene approved by the German Institute for Construction Engineering (DIBt), with socket for inlet and venting, prefabricated discharge connection DN 32 (1¼") or DN 50 (2") and ball valve.

For a comfortable installation of the pumps and for an easy pump removal the sump is equipped with an guide rail system. Depending on the sump version the proven guide rail system GR 32 or GR 50 can be used.

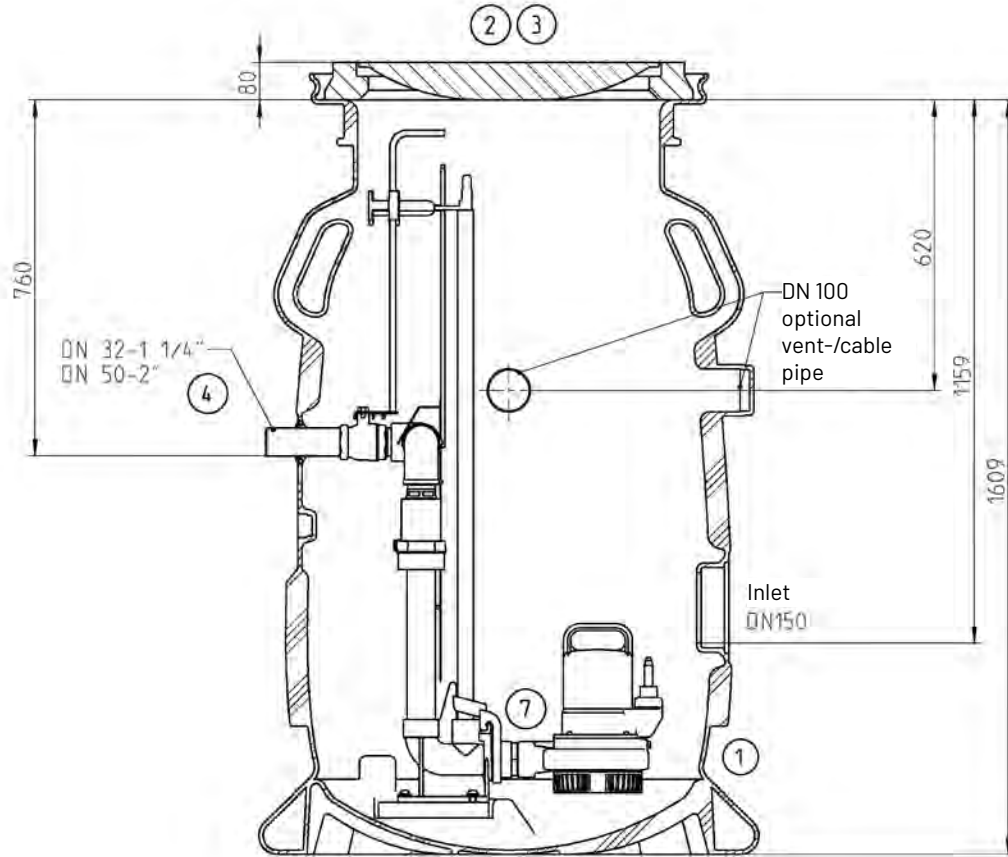
Depending on the used extension it is possible to extend the sump to a total height of 2.75 metres. The required type of loading class depends on the site.

The installation depth with a concrete ring cl. A 15 is 1.70 m. The total volume is 740 litres. The storage volume up to the lower edge of the inlet is 190 litres and the residual volume is 90 litres.

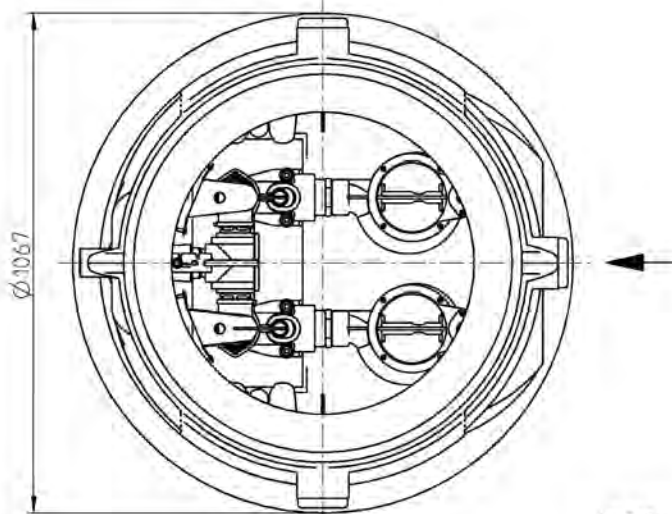
# SKS 800

POLY-SUMPS FOR DRAINAGE WATER

SKS-B 800-32 / 800-D32 / 800-50 / 800-D50



vent-/cable pipe



49612-01

vent-/cable pipe

We reserve the right to change specifications without notice.



# SKS 800

## POLY-SUMPS FOR DRAINAGE WATER

### SCOPE OF SUPPLY

#### SKS 800 (Single unit)

Plastic sump, assembled with guide rail system DN 32 or DN 50, PP-pipe, vertically closing swing-type check valve, ball valve, stainless steel delivery piping with 1/4 or 2" external thread, 1 sleeve DN 150 (KG-pipe) for the inlet, 3 ports for connecting DN 70/ DN 100 for cable and venting (KG-pipe).

#### SKS 800 (Duplex unit)

Plastic sump, assembled with 2 guide rail systems DN 32 or DN 50, PP-pipe, 2 vertically closing swing-type check valves, ball valve, stainless steel delivery piping with 1/4 or 2" external thread, 1 sleeve DN 150 (KG-pipe) for the inlet, 3 ports for connecting DN 70/ DN 100 for cable and venting (KG-pipe)

### ACCESSORIES

Type		Gewicht kg	Art.-Nr.
① <b>Poly-sump</b>	SKS-B 800-32	84	<b>JP47346</b>
	SKS-B 800-50	95	<b>JP47348</b>
	SKS-B 800-D32	85	<b>JP47347</b>
	SKS-B 800-D50	109	<b>JP47349</b>
② <b>Cover</b> cl. A	Ø 600 cl. A 15, h= 80, D 785	90	<b>JP46437</b>
	<b>Lifting device</b> for cl. A		<b>JP44969</b>
<b>Cover</b> Kl.B	Ø 610 cl. B 125, h= 125, D 750	100	<b>JP44972</b>
③ <b>Concrete ring</b>	625 x 100 mm, Ø 785		<b>JP44975</b>
④ <b>Screwed joint with</b> female thread and clamp	1/4" auf Ø 40 mm (DN 32)		<b>JP44796</b>
	1/4" auf Ø 50 mm (DN 40)		<b>JP44797</b>
	1/4" auf Ø 63 mm (DN 50)		<b>JP44798</b>
	2" auf Ø 63 mm (DN 50)		<b>JP45950</b>
⑤ <b>Sump extension</b>	PSV-A/B 375	25	<b>JP46429</b>
	PSV-A 855	40	<b>JP46430</b>
	PSV-A 1335	54	<b>JP46431</b>
<b>Guide rail extension SKS-32</b>	for single units		<b>JP48067</b>
<b>Guide rail extension SKS-50</b>	for single units		<b>JP48065</b>
<b>Guide rail extension SKS-D32</b>	for duplex units		<b>JP48068</b>
<b>Guide rail extension SKS-D50</b>	for duplex units		<b>JP48066</b>
⑥ <b>Operating handle T-key</b> (telescopic) for extension			<b>JP46438</b>
⑦ <b>Reduction socket</b> 1/2" to 2" for mounting pumps with 1/2" discharge			<b>JP48069</b>
⑧ <b>Ventilations pipe</b>	DN 100, stainless steel		<b>JP44858</b>
⑨ <b>Chain</b>	certified, 2,5 m, 320 kg, 5 rings (EN 818 mod.)		<b>JP45901</b>
	certified, 5 m, 320 kg, 8 rings (EN 818 mod.)		<b>JP45902</b>
	<b>Webbing</b>	with shackle for US pumps	

#### For single units

Pump types with built-in level control

SKS-B 800-32: U3KS, U5KS, U6K ES/DS

SKS-B 800-50: US 62-251 ES/DS, US 73-253 ES/DS, US 75-155 ES/DS

#### For duplex units

Pump types without level control

SKS-B 800-D32: U3K, U5K, U6K E/D

SKS-B 800-D50: US 62-251 E/D, US 73-253 E/D, US 75-155 E/D, US 73 E Ex + US 103 E Ex, US 73 D Ex + 103 D Ex (separate control unit with level control necessary)

Additional accessories see data sheet pumps

# SKS 800

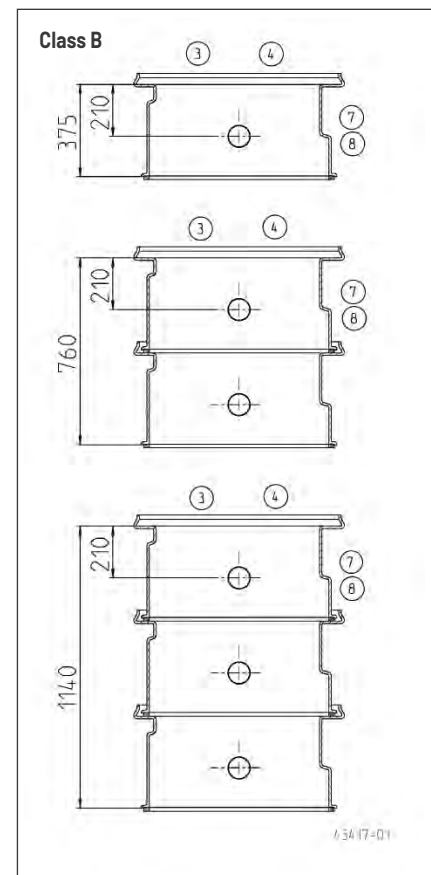
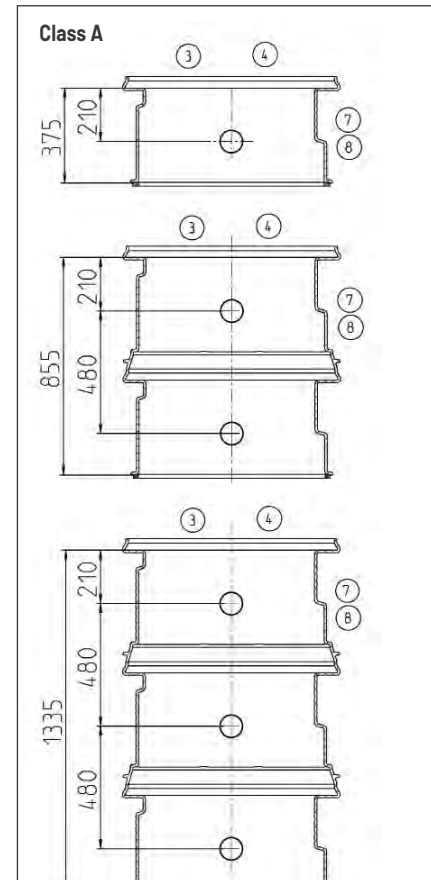
POLY-SUMPS FOR DRAINAGE WATER

## Dimensions sump extensions

Single- and duplex units SKS 800

Dimensions (without cover) mm	Height	Inlet	Pressure outlet	Buoyancy proof depth
Sump	1609	1159	761	1609
<b>Class A</b>				
Sump + 1 x PSV-A/B 375	1984	1534	1136	1984
Sump + 1 x PSV-A 855	2464	2014	1616	2464
Sump + 1 x PSV-A 1335	2944	2494	2096	2944
<b>Class B</b>				
Sump + 1 x PSV-A/B 375	1984	1534	1136	1984
Sump + 2 x PSV-A/B 375	2369	1919	1531	2369
Sump + 3 x PSV-A/B 375	2749	2299	1901	2749

Volume	Sump	Extension	Switching point			
			Off	On	Alarm / peak load	UK-Inlet
SKS-B 800	740 l	159 l	90 l	135 l	170 l / 190 l	190 l



## SKS 1000

POLY-SUMPS FOR DRAINAGE WATER

- According EN 13598-2
- Suitable for traffic up to class D 400
- Corrosion-proof
- Buoyancy-proof and ground water proof
- Max. installation depth 4.90 m

### APPLICATION

The buoyancy proof and practicable plastic sump in high-grade polypropylene (PP) corresponds to EN 13598-2. **It is suitable for use in areas with traffic load** up to 40 tons. (DIN EN 124, group 4). The SKS 1000 can be placed on natural ground without concrete works. The modular design offers easy transport and installation.

In order to adjust the pumping stations to the required pumping conditions a wide range of drainage pumps is available.

Both versions (single- and duplex units) have a spigot for inlet, two sockets with seal for ventilation/cable pipe, a facility for installing a flushing connection and a pressure outlet DN 50.

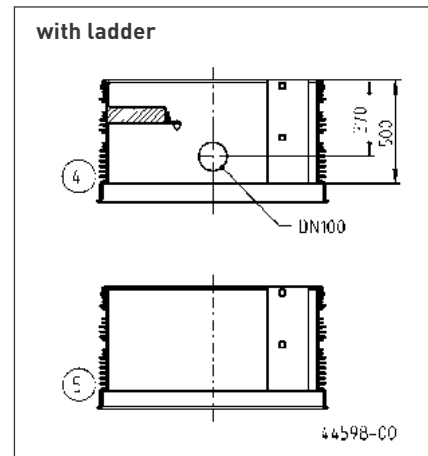
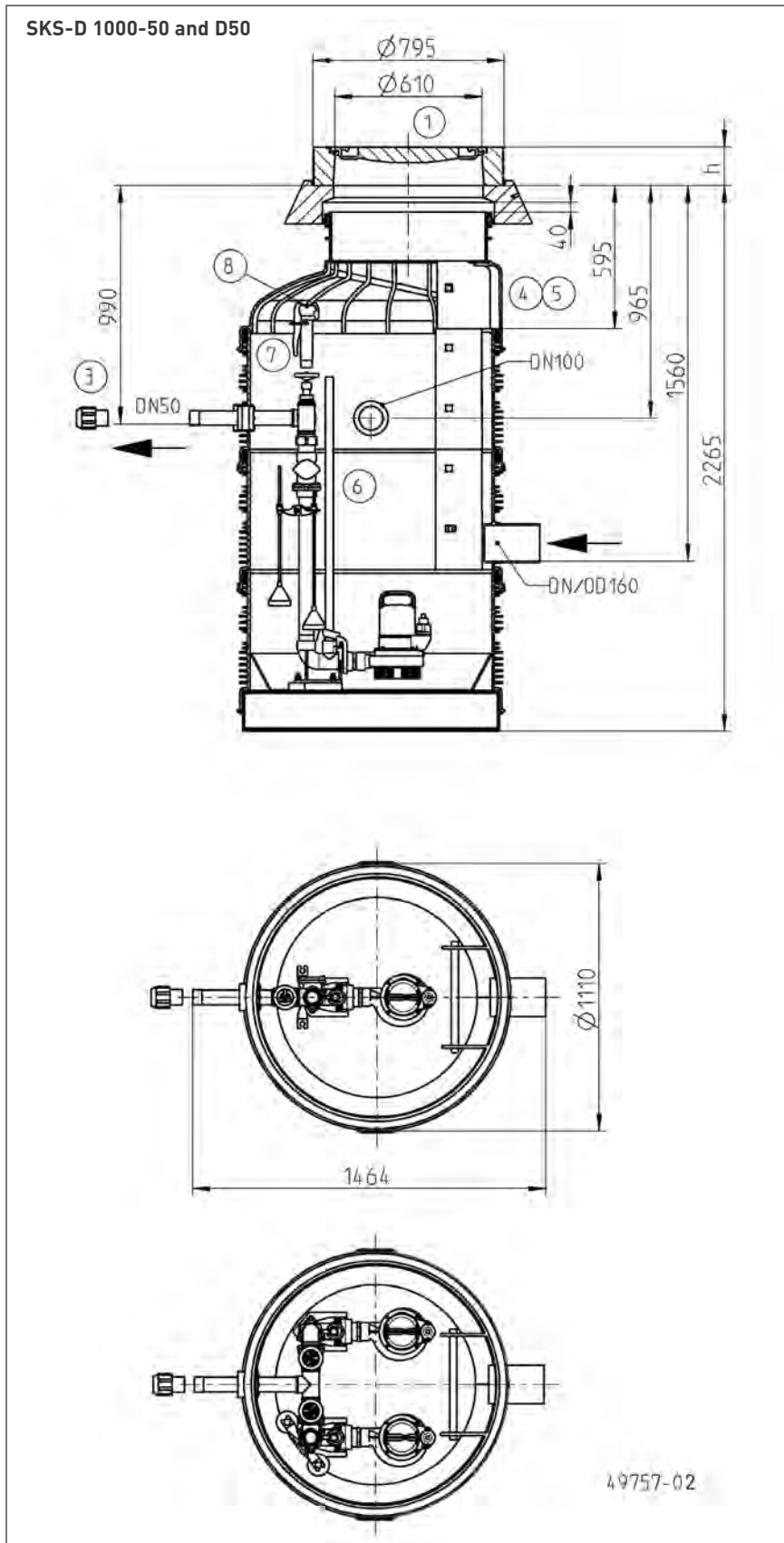
The standard installation depth without a cover is 2.27 m. The installation depth can be extended to 4.90 m by the use of sump extensions (installation depth in ground water not more than 5 m). The total volume is 1372 litres. The volume storage below the inlet is 396 litres.

If extensions are used, one of the extensions must be ordered with a tie-bar.



# SKS 1000

POLY-SUMPS FOR DRAINAGE WATER



## AVAILABLE PUMP TYPES

US 62-251, US 73-253, US 75-155, US 73-103 Ex, UV 620-635

We reserve the right to change specifications without notice. Illustration without ladder.

# SKS 1000

## POLY-SUMPS FOR DRAINAGE WATER

### SCOPE OF SUPPLY

#### SKS-D 1000-50 (Single unit)

The poly-sump consist of an underpart with an inlet and a discharge branch, an extension element, a cone 1000/625 and a concrete support ring for the manhole cover (accessory). The segments are sealed with sealing rings.

Inlet socket DN/OD 160 (DN 150) for PVC collar (KGU), 2 sockets DN 100 for ventilation/cable duct, 1 socket plug DN 100.

Guide rail system, pipework DN 50, elbow ball check valve DN 50, stop valve in DN 50 in stainless steel.

#### SKS-D 1000-D50 (Duplex unit)

The poly-sump consist of an underpart with an inlet and a discharge branch, an extension element, a cone 1000/625 and a concrete support ring for the manhole cover (accessory). The segments are sealed with sealing rings.

Inlet socket DN/OD 160 (DN 150) for PVC collar (KGU), 2 sockets DN 100 for ventilation/cable duct, 1 socket plug DN 100, coupling feets, pressure outlet DN 50, ball check valve DN 50, maintenance stop valve DN 50.

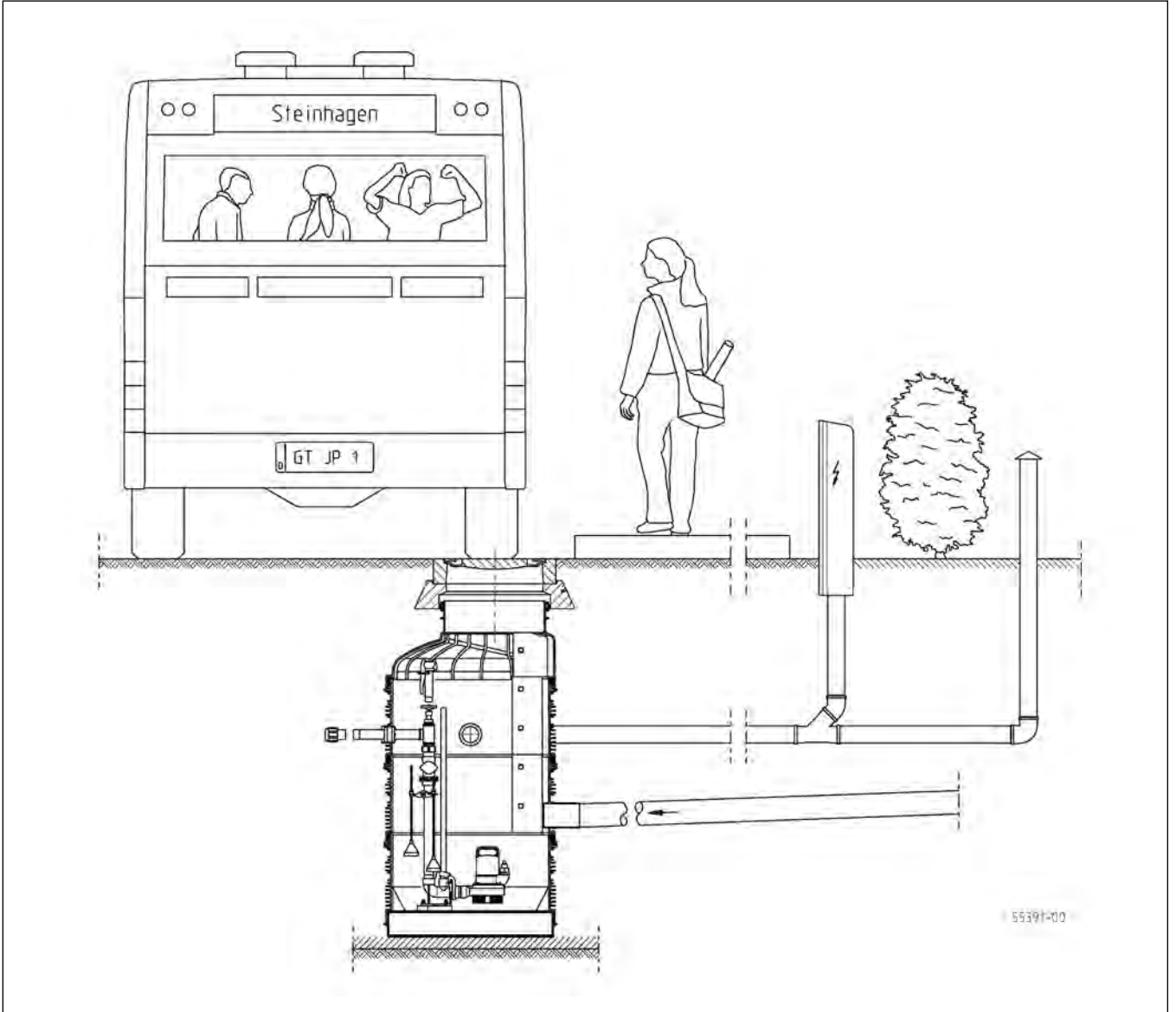
### SUMPS AND ACCESSORY

Type		Code No.	Weight	
Poly-sump SKS-D 1000-50		<b>JP50303</b>	285.0 kg	
Poly-sump SKS-D 1000-D50		<b>JP50304</b>	305.0 kg	
① Cover without ventilation cl. B d610	h=125	<b>JP44972</b>	110.0 kg	
Cover without ventilation cl. D d610	h=160	<b>JP29175</b>	190.0 kg	
② Access aid, grab handle		<b>JP44610</b>	4.0 kg	
Access aid, sleeve		<b>JP44611</b>	1.5 kg	
③ Screw joint 2" - 63mm	with threaded socket and clamp connection	<b>JP45950</b>	0.5 kg	
④ PSV-D 1000x500 SG T (10)	Traverse, Steiggang	<b>JP44407</b>	34.0 kg	
⑤ PSV-D 1000x500 SG (10)	Steiggang	<b>JP44403</b>	16.6 kg	
⑥ Guide tube 1" stainless steel	1150 mm	2,27 m sump depth	<b>JP50268</b>	2.8 kg
Guide tube 1" stainless steel	1650 mm	2,77 m sump depth	<b>JP50269</b>	4.0 kg
Guide tube 1" stainless steel	2150 mm	3,27 m sump depth	<b>JP50270</b>	5.2 kg
Guide tube 1" stainless steel	2650 mm	3,77 m sump depth	<b>JP50271</b>	6.5 kg
Guide tube 1" stainless steel	3150 mm	4,27 m sump depth	<b>JP50272</b>	7.5 kg
Guide tube 1" stainless steel	3650 mm	4,77 m sump depth	<b>JP50273</b>	9.0 kg
Attention! For duplex units two guide tubes are necessary.				
⑦ Perrot flushing connection -65/80		<b>JP22353</b>	3.2 kg	
Storz C coupling 1 1/2"		<b>JP44770</b>	1.4 kg	
⑧ Perrot breath valve		<b>JP22422</b>	0.6 kg	
Perrot claw coupling		<b>JP22420</b>	0.5 kg	
Perrot hose connection	Ø 50 mm	<b>JP19202</b>	0.4 kg	
Perrot pressure gauge		<b>JP44854</b>	1.4 kg	
⑨ Ventilation pipe DN 100	Edelstahl	<b>JP44858</b>	4.3 kg	
⑩ Second or changed inlet DN 150		<b>JP44523</b>		
Second or changed inlet DN 200		<b>JP44524</b>		
Second or changed inlet DN 250		<b>JP44525</b>		
⑪ Seal lubricant 1 kg tube		<b>JP44605</b>	1.0 kg	
Seal lubricant 3 kg bucket		<b>JP44606</b>	3.0 kg	
⑫ Reducing sleeve 1 1/2" up to 2" IG		<b>JP48069</b>	0.4 kg	

# SKS 1000

POLY-SUMPS FOR DRAINAGE WATER

## MOUNTING ARRANGEMENT



**Attention:** Concerning space capacity the installation of submersible switches is not possible.

## OVERVIEW

### SEWAGE LIFTING STATIONS

WCFIX	Type	Page
Small sewage lifting systems. For use in the private domain, where the number of users is small	<b>WCFIX PLUS</b>	<b>159</b>
	<b>WCFIX 260</b>	<b>163</b>
COMPLI - SINGLE UNITS	Type	Page
For small residential units, can also be installed subsequently without a floor pit	<b>compli 300 E</b>	<b>167</b>
For detached houses	<b>compli 400</b>	<b>171</b>
For detached houses with larger storage volumes and higher wastewater inlet volume	<b>compli 500</b>	<b>175</b>
COMPLI - DUPLEX UNITS	Type	Page
For apartment buildings and commercial use	<b>compli 1000</b>	<b>179</b>
	<b>compli 1000 HL</b>	<b>179</b>
For apartment buildings and commercial use with uncontrolled wastewater inlet volume	<b>compli 1200 HL</b>	<b>183</b>
For municipal and industrial applications with large uncontrolled wastewater inlet volume and higher delivery heads	<b>compli 1500 HL</b>	<b>189</b>
	<b>compli 2500 HL</b>	<b>189</b>
COMPLI WITH CUTTING SYSTEM MULITCUT	Type	Page
For the disposal of wastewater from special objects (e.g. mobile sanitary facilities, accommodation containers, tent cities) with long, small dimensioned pressure pipes to the sewage channel	<b>compli 100 MC</b>	<b>197</b>
	<b>compli 500 MC</b>	<b>197</b>
	<b>compli 1000 MC</b>	<b>197</b>

# OVERVIEW

## SEWAGE LIFTING STATIONS - ACCESSORY

### ACCESSORY

Type	Code no.	WCfix plus	WCfix 260	c 300	c 400	c 500	c 1000/100HL	c 1200 HL	c 1500 HL/2500 HL	c 100 MC	c 500 MC	c 1000 MC
INSTALLATION KIT FOR MAINTENANCE	JP41075	•										
SPECIAL VENTILATION	JP27484		•									
INLET GATE VALVE DN 100	JP28297			•	•	•	•			•	•	•
INLET GATE VALVE DN 150	JP28591					•	•	•	•		•	•
SLUICE VALVE DN 80	JP00639			•	•	•	•	•				
SLUICE VALVE DN100	JP00329								•			
MAINTENANCE VALVE DN 100	JP45173								•			
SWING-TYPE CHECK VALVE R 40	JP00317									•		
SWING-TYPE CHECK VALVE R 50	JP00326									•		
SWING-TYPE CHECK VALVE R 80	JP00706				•							
SWING-TYPE CHECK VALVE R 80 G	JP00707				•							
SWING-TYPE CHECK VALVE R 101	JP00325								•			
SWING-TYPE CHECK VALVE R100 G	JP00324								•			
BALL CHECK VALVE K 50	JP44782									•		
BALL CHECK VALVE K 80	JP49205				•							
CONNECTION FOR EMERGENCY DEWATERING	JP49138			•	•							
HAND DIAPHRAGM PUMP 1 1/2"	JP00255			•	•	•	•	•	•	•	•	•
STOP VALVE DN 32 PN 16	JP44785	•	•									
STOP VALVE DN 40 PN 16	JP44786			•	•	•	•	•	•	•	•	•
STOP VALVE DN 50 PN 16	JP44787									•		
ELASTIC CONNECTION 1 1/2"	JP44777			•	•	•	•	•	•	•	•	•
ELASTIC CONNECTION 2"	JP44775									•		
ELASTIC CONNECTION 4" (110)	JP44778								•			
ELASTIC CONNECTION 4" (114)	JP44774								•			
HOSE BAND CLAMP 1 1/2"	JP44763			•	•	•	•	•	•	•	•	•
HOSE BAND CLAMP 2"	JP44764									•		
HOSE BAND CLAMP 4"	JP44767								•			
ADAPTER RING DN80-DN80SML	JP50174			•								
ADAPTER RING DN80-DN80SML	JP50173				•							
PIPE WORK CONNECTION SET DN 100	JP42910			•								
SOCKET CLOSING SET DN 100	JP50172				•							
OPENING-SET DN 150	JP43156					•	•				•	•
FLANGED CONNECTION C 100	JP00579								•			
FLANGED CONNECTION B 80	JP00578								•			
Y-DUCTING 100/100/100 A480	JP00203								•			
FLANGED SPIGOT DN 100 Ø110	JP08673								•			
FLANGED SPIGOT DN 100 Ø114	JP00688								•			
REDUCING SOCKET 2 X 1 1/4"	JP44772									•		
REDUCING ADAPTER DN 80/100	JP00498								•			
TANK, 500 LITRE	JP45945								•			
ALARM UNIT AGR	JP44893			•								
ALARM UNIT COMPLI	JP50171				•							
SEAL LEAK DETECTOR DKG	JP44900					•	•	•	•	•	•	•
RECHARGEABLE BATTERY 9 V	JP44850			•	•	•	•	•	•	•	•	•
SMART HOME FTJP	JP47209			•	•	•	•	•	•	•	•	•



## WCFIX PLUS

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES



- For pre-wall installation or fitting directly behind a floor-standing WC
- Powerful motor
- 19 mm free passage
- Runtime monitoring with acoustic alarm and potential-free alarm contact
- Vent valve and active carbon filter
- Maintenance friendly
- Integrated swing-type check valve

### DESCRIPTION

The WCfix plus can be fitted in a pre-wall system or connected directly to a floor-standing toilet with a minimum flush volume of 6 litres. This allows an additional WC or an additional bathroom to be installed almost anywhere during renovation or alteration work. When installed below the backup level, the device also provides anti-flooding protection.

Pumping is particularly quiet due to its flow-optimized open centrifugal impeller. Due to this design, regular cleaning is not necessary and servicing works are significantly reduced.

Due to the restricted use, the installation is only permitted if the number of users is small and an additional WC above the backup level is available to them. According to EN 12050 Part 3, the following sanitary products can be connected:

- 1 WC
- 1 washbasin
- 1 shower
- 1 bidet

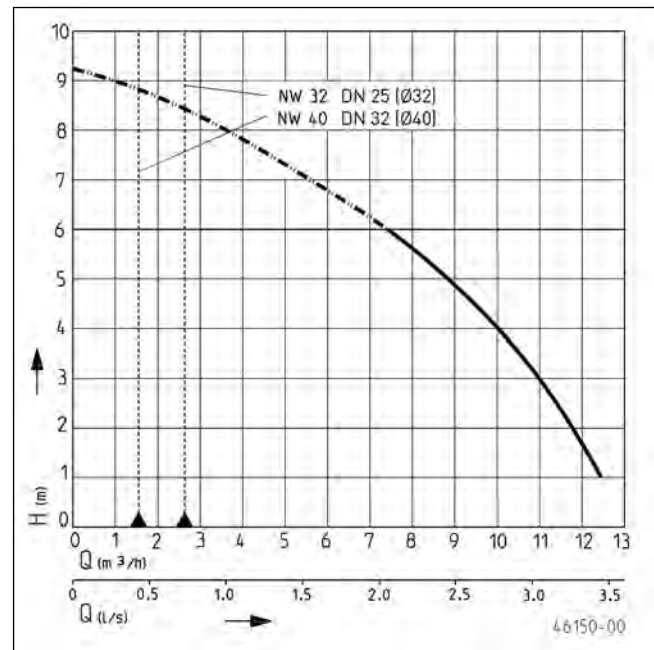
These are required to be located in the same room. According to EN 12050 Part 3, washing machines or bathtubs must not be connected.

The WCfix plus is equipped with a runtime monitoring for early acoustic fault signalling. It is also possible to pass on the fault signal to other places via a volt free contact fitted as standard. The appliance is fully pre-assembled, ready for connection to a power socket, and operates fully automatically as soon as the flush is actuated. When installed in bathrooms or shower rooms, the corresponding German VDE regulations must be observed.

Attention: Do not flush any hygienic products down the toilet, because they can cause malfunctions!

For the installation and and for maintenance work a sufficiently large inspection opening has to be planned (accessory).

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
WCFIX PLUS	Flow rate Q [l/min]	208	196	183	163	146	125

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# WCFIX PLUS

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

## SCOPE OF SUPPLY

Appliance including pump complied with EN 12050, ready to connect with cable and plug, complete with collars, outlet elbow, swing-type check valve 1/4", ventilation insert, active carbon filter, clamps and fixing materials for buoyancy control.

swing-type check valve 1/4", ventilation insert, active carbon filter, clamps and fixing materials for buoyancy control.

## MECHANICAL DATA

Seal on motor side	Rotary shaft seal	Impeller	Vortex impeller, GFK
Oil chamber	Yes	Motor housing	Stainless steel
Seal on medium side	Rotary shaft seal	Pump housing	GRP
Shaft	Stainless steel	Weight	6.2 kg

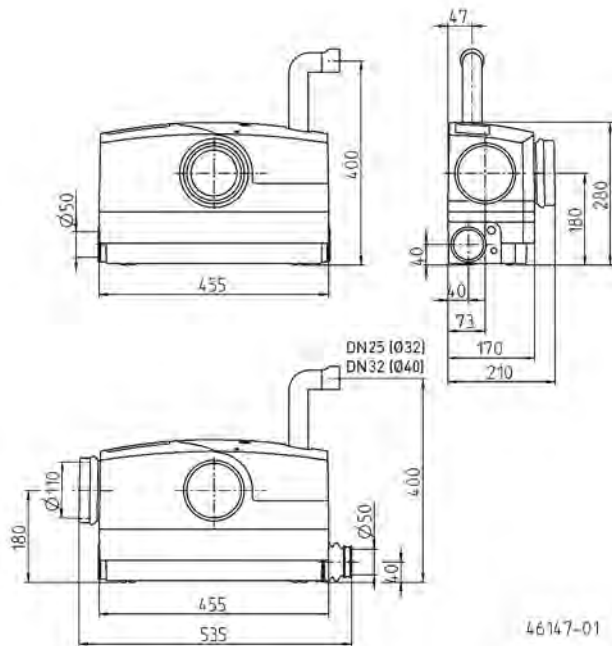
## ELECTRICAL DATA

Voltage	1/N/PE~230 V	Type of enclosure	IP 44
Motor rating P1	0.73 kW	Motor protection	Installed in the winding
Motor rating P2	0.47 kW	Plug	Safety
Current	3.2 A	S3	30 %

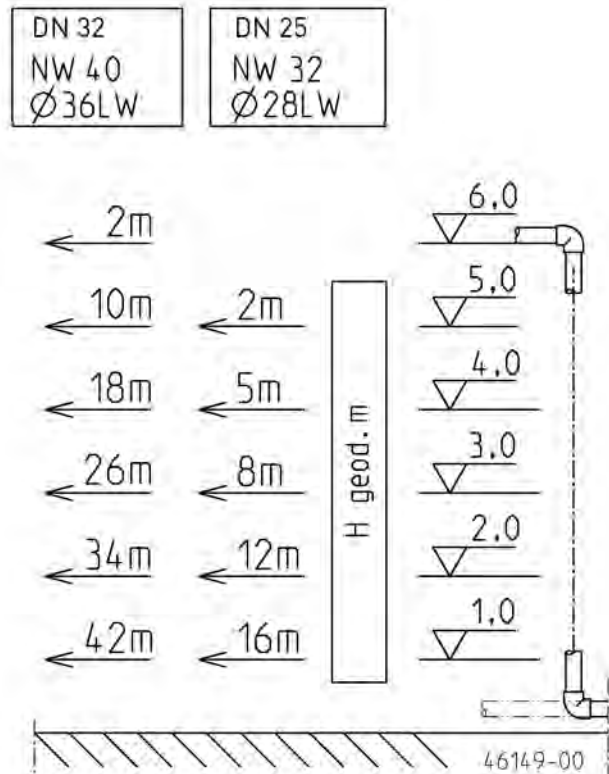
## WCFIX PLUS

Type	Code No.
WCFIX PLUS	JP45367

## Dimensions (mm)



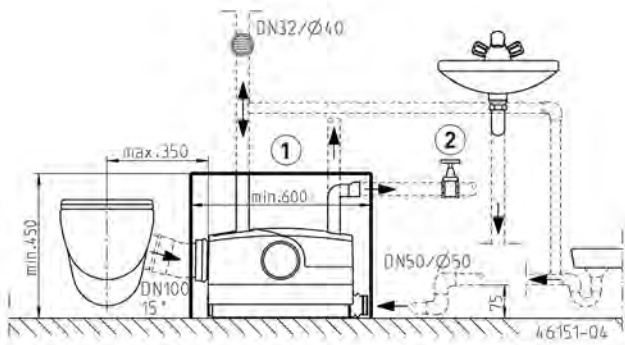
## Performance



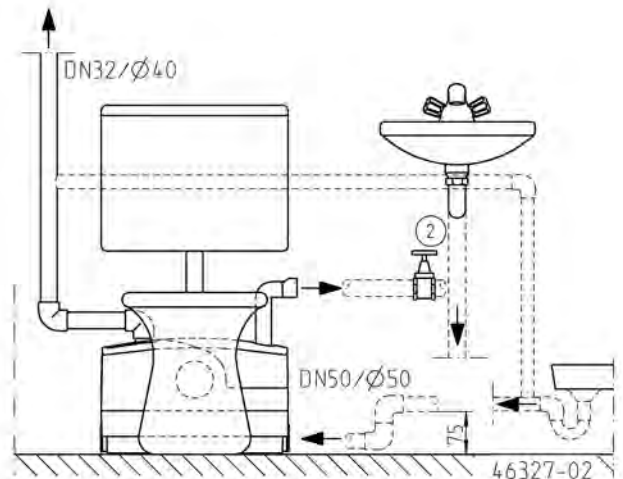
# WCFIX PLUS

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

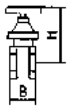
Example of installation



Example of installation



## MECHANICAL ACCESSORY

			Code No.
	<b>1</b> Installation kit	selectable size according to the tiles	<b>JP41075</b>
	<b>2</b> Stop valve	1/4" (DN 32), PN 16	110x60 (HxB)

# WCFIX PLUS

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

## WCFIX 260

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

- Quiet
- Ready to connect
- Maintenance friendly
- Protection against overflow
- Active carbon filter
- Vortex impeller



### DESCRIPTION

With the WCfix 260 it is possible to install an additional WC or an additional bathroom almost anywhere within the context of renovation or conversion works. When installed below the backup level, the device also provides anti-flooding protection.

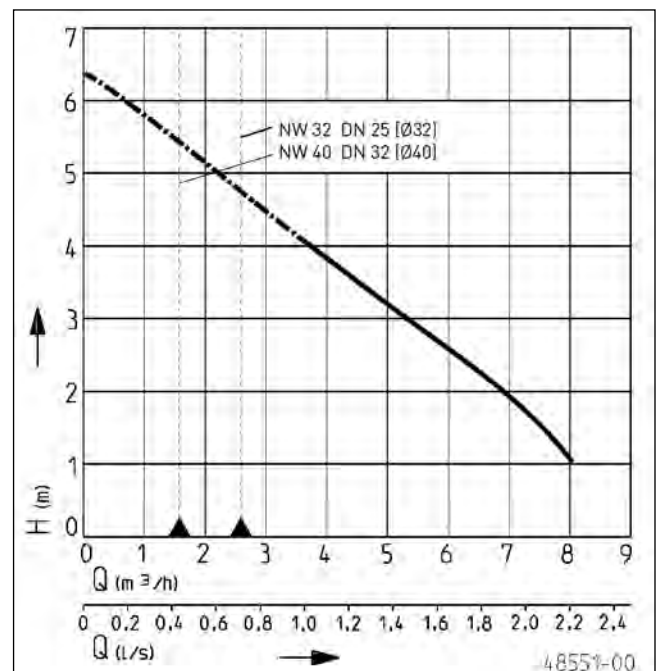
The compact design of this pumping system for restricted use allows the direct connection of a standing toilet with a minimum flush volume of 6 l.

The pumping is carried out particularly quietly by the flow-optimized open centrifugal impeller. Due to this design, regular cleaning is not necessary and servicing works are significantly reduced.

Due to the restricted use, the installation is only permitted if the number of users is small and an additional WC above the backup level is available to them. A washbasin, a shower and a bidet can also be connected in the same room. According to EN 12050 part 3, further drainage facilities such as washing machines or bath-tubs may not be connected. We recommend the additional connection of a Hebefix sump. For entire apartments a compli pumping system should be used.

The appliance is fully pre-assembled, ready for connection and operate fully automatically as soon as the flush is actuated. When installed in bath and shower rooms, the applicable electrical regulations must be observed.

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	3.5	4
WCfix 260	Flow rate Q [l/min]	133	111	87	75	61



# WCFIX 260

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

## SCOPE OF SUPPLY

Device complies with EN 12050, ready to connect with cable and plug, built-in vent valve, complete with inlet plug-in seal,

discharge elbow, swing-type check valve 1¼", active carbon filter, clips and fixing material.

## MECHANICAL DATA

Shaft	Stainless steel	Pump housing	GRP
Impeller	Vortex impeller, GFK	Submersible	Yes
Motor housing	Stainless steel	Weight	6 kg

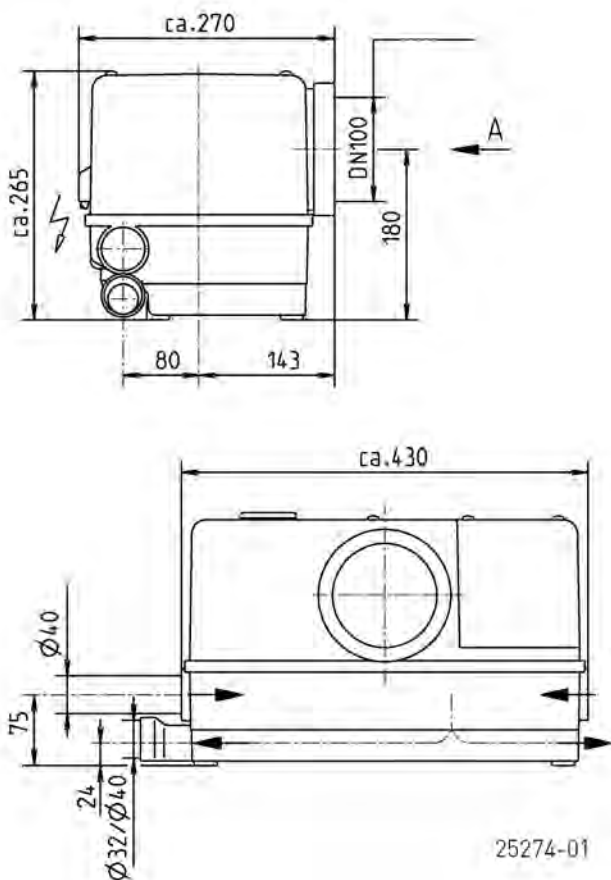
## ELECTRICAL DATA

Voltage	1/N/PE~230 V	Power line	1,5m H05VV-F
Motor rating P1	0.4 kW	Wires	3G1,5
Motor rating P2	0.25 kW	Type of enclosure	IP 24
Current	1.75 A	Plug	Safety

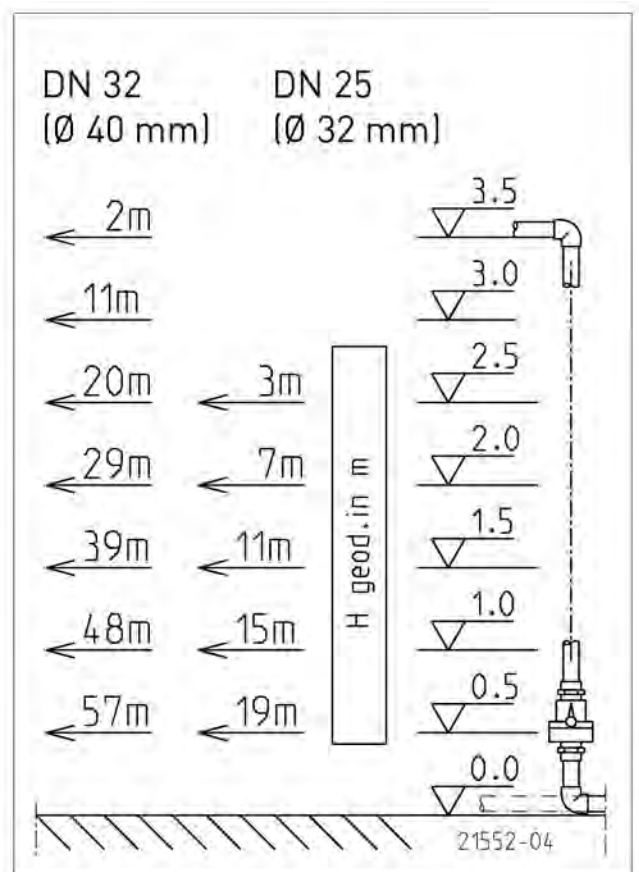
## WCFIX 260

Type	Code No.
WCfix 260	JP09268

## Dimensions WCfix 260 (mm)



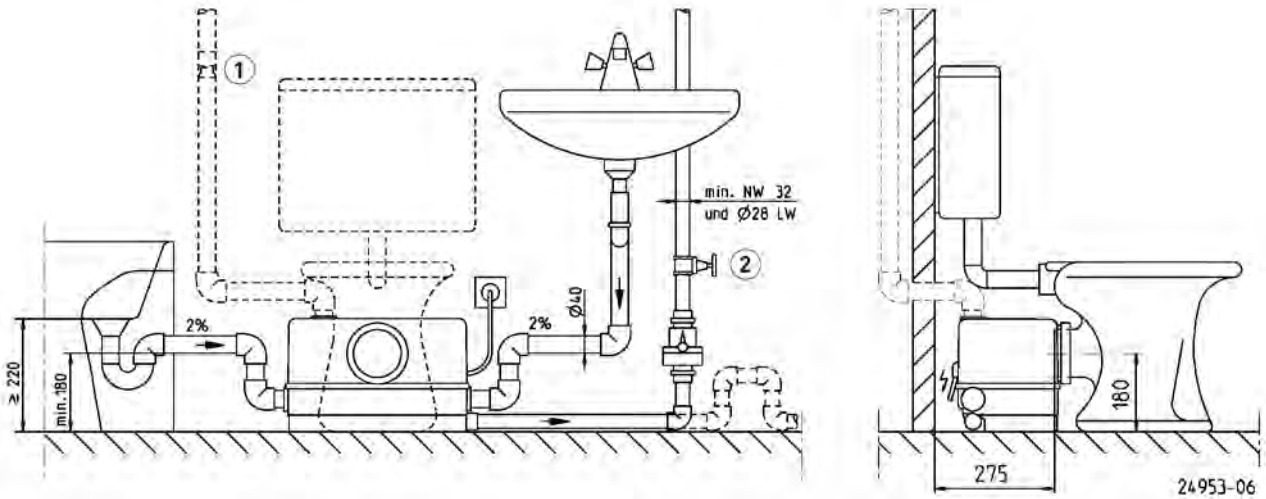
## Performance




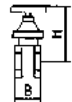
# WCFIX 260

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES

## Example of installation



## MECHANICAL ACCESSORY

			Code No.
	① <b>Special ventilation</b>	special filter with housing, not for hot water	<b>JP27484</b>
	② <b>Stop valve</b>	1/4" (DN 32), PN 16 110x60 (HxB)	<b>JP44785</b>

# WCFIX 260

SEWAGE LIFTING STATION FOR WASTEWATER CONTAINING FAECES



# COMPLI 300 E

## SEWAGE LIFTING STATIONS

- Ready to connect
- Submersible
- Auxiliary inlets vertical/ horizontal
- With mounted swing-type check valve
- Light weight
- Less place requirement
- PE-tank
- Vortex impeller
- Smart Home capable



### DESCRIPTION

The compli 300 E is the smallest sewage lifting station of our compli series. It has been designed for the disposal of sewage from housing units like basement dwellings. The compli 300 E is all-purposed, due to compact dimensions of its tank and numerous connection facilities.

The low weight and the plug with integrated control board ensures a facile installation, so that an electrician is not needed to start running the unit.

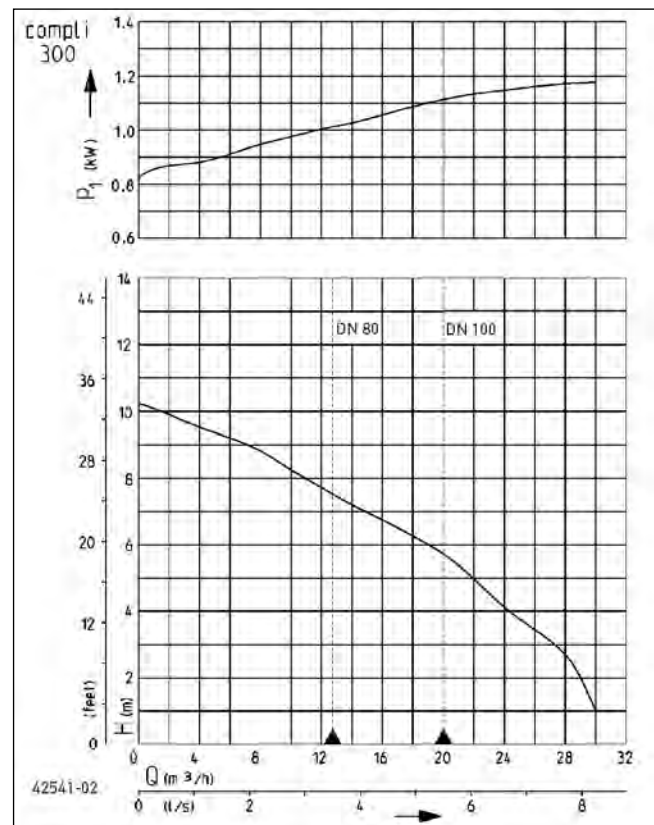
The submersible unit permits a general application in rooms which could be flooded.

The connector housing with integrated control unit must be installed in rooms which are well ventilated and cannot be flooded.

The powerful alternating current motor of the compli 300 is based on a rugged grey cast iron volute housing vat which grant a special stability and quiet running.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e.g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7
compli 300 E	Flow rate Q [m <sup>3</sup> /h]	30	29	28	24	22	19	15

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI 300 E

## SEWAGE LIFTING STATIONS

### SCOPE OF SUPPLY

Ready to connect sewage disposal unit acc. to EN 12050-1 with clamp flange DN 100 for inlet height 180 mm, additional inlets DN 100/50 horizontal and vertical, submersible pump and flange DN 80 with piece of pipe  $\varnothing$  90 mm, with integrated swing-type check valve DN 80, one elastic connection hose band clamps for plastic

pipe DN 80 and for pressure pipe DN 70, autom. level control, control unit (type of enclosure IP 44) with mains-dependent alarm buzzer, stand-by LED, hand-0-automatic selector switch and potential free NO contact for an additional alarm. Cable 4 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Pump housing	Grey cast iron
Free passage	50 mm	Submersible	Yes
Pressure pipe	DN 80	Pressure outlet	DN 80
Shaft	Stainless steel	Tank capacity	50 l
Impeller	Vortex impeller, GFK	Weight	31 kg
Motor housing	Stainless steel		

### ELECTRICAL DATA

Voltage	1/N/PE~230 V	Wires	4G0,75
Motor rating P1	1.37 kW	Type of enclosure	IP 68
Motor rating P2	0.98 kW	Insulation class	B
Current	6 A	Winding thermostat	Yes
Power line	4m H07RN-F	Plug	Safety

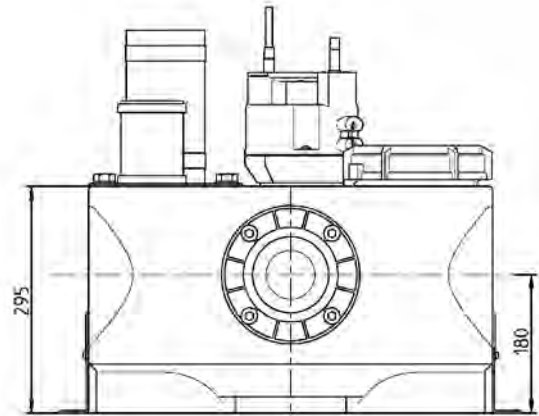
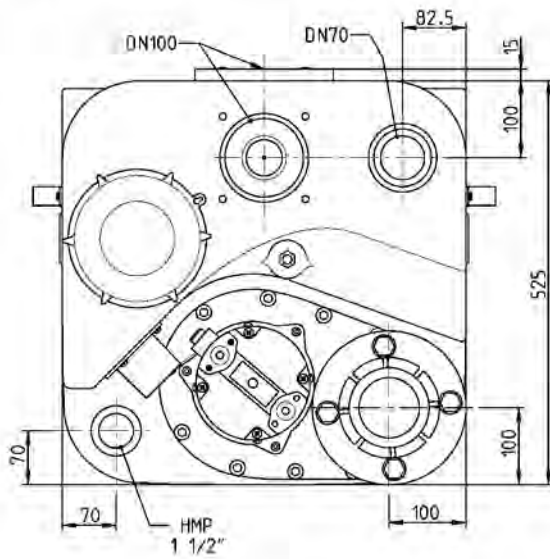
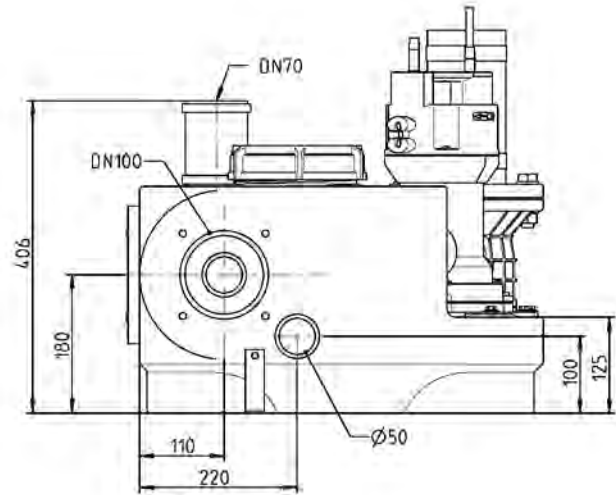
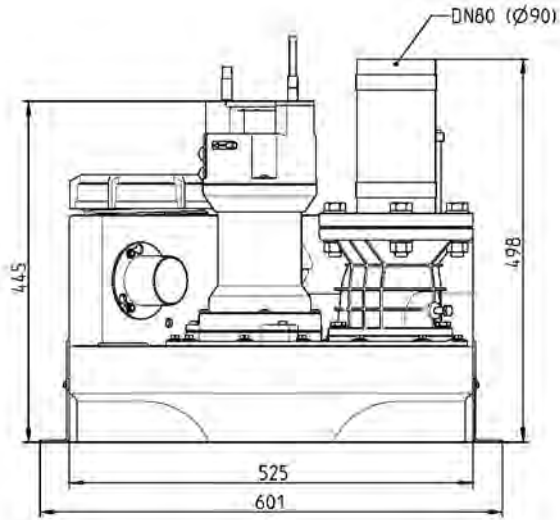
### COMPLI 300 E

Type	Code No.
complli 300 E	JP50076

# COMPLI 300 E

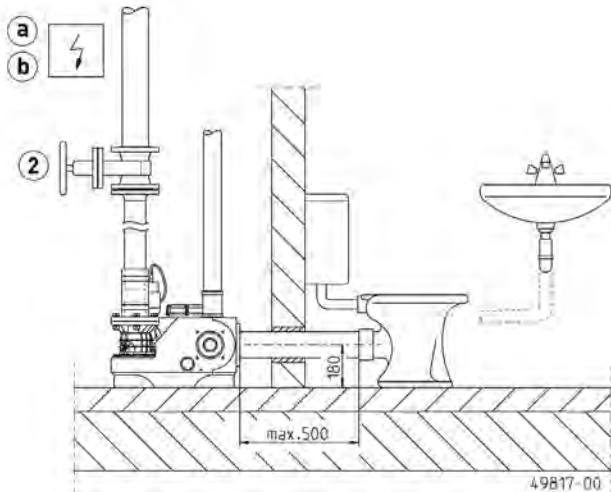
## SEWAGE LIFTING STATIONS

Dimensions with swing-type check valve (mm)

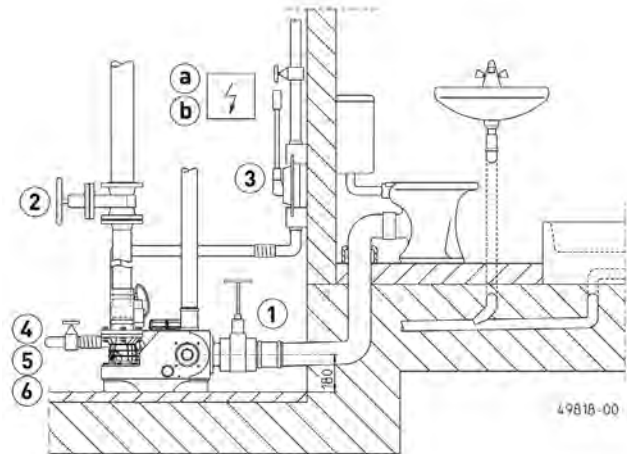


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### Example of installation



### Example of installaton



# COMPLI 300 E

## SEWAGE LIFTING STATIONS


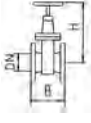


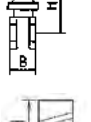

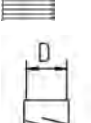
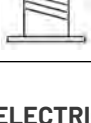
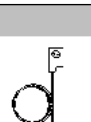
The Compli has a DN 80/PN 4 outlet flange. The following stop valve and pipework are installed in DN 80.

In keeping with the construction and testing principles of European standard EN 12050, sewage lifting stations are to be used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1986 T3. In keeping with the stipulations of European standard EN 12056-4 they have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and

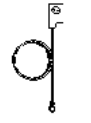

repair. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with European standard 12050-4 has to be mounted. In keeping with European standard 12056 the ventilation pipe has to be passed up to the roof.

Attention! The inlet pipes of the lowlateral inlets must be equipped with a dam loop. This loop must have at least a height of 180 mm between ground and invert. The feed line must be ventilated on its highest elevation.

### MECHANICAL ACCESSORY

				Code No.
	① Inlet gate valve PVC	with two pipe sockets, DN 100, PN1	360x295 (HxW)	JP28297
	② Sluice valve	DN 80, PN 10, EN 1171	315x180 (HxB)	JP00639
	③ Connection for emergency de-watering	with stop valve and hose connection 1", 1¼" and 1½"		JP49138
	Hand diaphragm pump	for emergency purposes (up to H geod 15 m)	640x1½" (HxD)	JP00255
	④ Stop valve	brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
	⑤ Elastic connection	1½" (DN 40), PN 4	120x50 (HxD)	JP44777
	⑥ Hose band clamp	1½"		JP44763
	⑦ Adapter ring	DN 80-DN 80 SML		JP50173
	⑧ Connection kit	DN 100	D=110	JP42910

### ELECTRICAL ACCESSORY

			Code No.
	① Alarm unit		
	AGR	reed switch, mains dependent, potential-free contact, 4 m cable	JP44893
	② Rechargeable battery	for mains independent alarm	JP44850

## COMPLI 400

### SEWAGE LIFTING STATIONS

- Ready-to-connect
- Submersible
- Vertical/horizontal additional inlets
- Revolver clamping flange
- PE-tank approx. 70 L
- Vortex impeller
- Smart Home capable



#### DESCRIPTION

This sewage lifting station for detached houses is fitted for versatile fields of application. During the design work, special attention was given to easy handling (recessed grips), space-saving erection and uncomplicated installation.

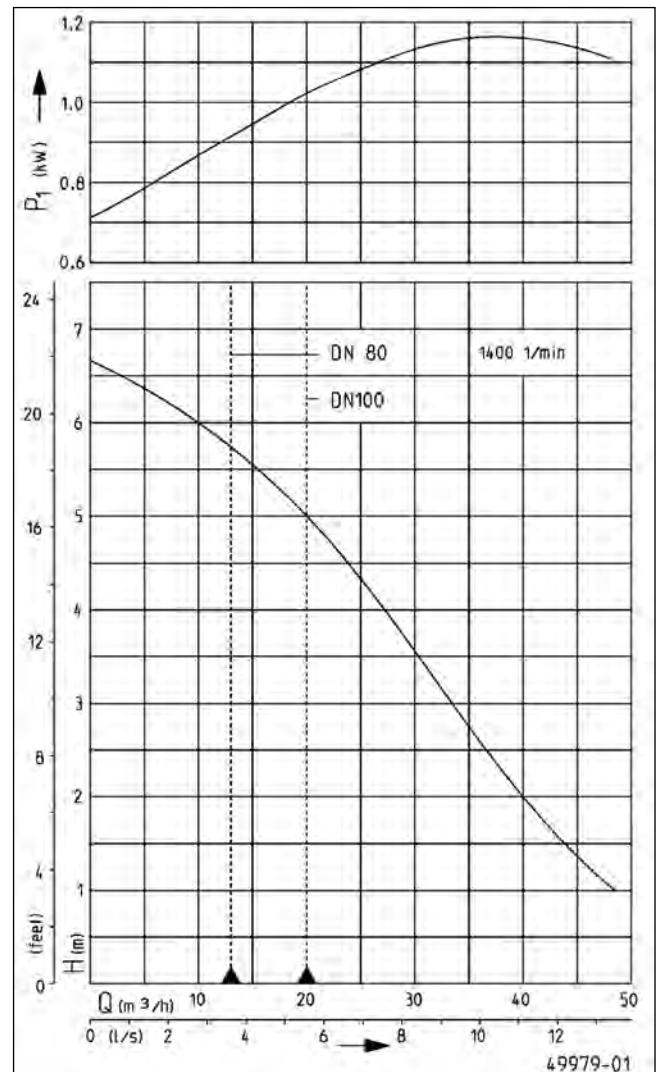
The submersible unit is permitted for general use in areas subject to flooding. The control unit has to be fitted in a well ventilated flood-proof room.

The PE tank has freely accessible connections, a top-mounted cleaning opening and a height-adjustable inlet socket which can be infinitely adjusted on site to an inlet height of between 180 and 250 mm depending on the drainage situation.

Other horizontally and vertically arranged additional inlets increase the connection and drainage options. The vortex impeller of the pump offers the safety you can rely on.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e.g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6
complli 400	Flow rate Q [m <sup>3</sup> /h]	48	40	33	27	20	10

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI 400

## SEWAGE LIFTING STATIONS

### SCOPE OF SUPPLY

Ready-to-connect disposal system according to German / European standard 12050 with height-adjustable DN 100 inlet socket for inlet heights 180 to 250 mm, horizontal and vertical additional inlets Ø DN 100/DN 50, mounted submersible pump and DN 80 connection flange with pipe unit Ø 110, reducer ring Ø 110 to Ø 90, optionally with pre-mounted DN 80 non-return valve, one elastic connection each with clamps for plastic pressure pipes and a sleeved pipe for DN 70 ventilation pipe, automatic

level control, control unit (IP 44 type of protection) with motor protection, contactors, transformer, mains-dependent, optionally acknowledgeable alarm system and potential noc-contact for collective failure messages, optical display of sense of rotation (three-phase current), manual-0-automatic switch as well as an adjustable maintenance interval display.

Cable between tank and control 4 m. Cable between control and plug 1,5 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Vortex impeller, GFK
Free passage	70 mm	Motor housing	Grey cast iron
Pressure pipe	DN 80/100	Pump housing	Plastic, grey cast iron
Bearing	Ball bearings, grease-lubricated	Submersible	Yes
Shaft	Stainless steel	Pressure outlet	DN 80
		Tank capacity	70 l

### ELECTRICAL DATA

Power line	4m H07RN-F	Insulation class	F
Type of enclosure	IP 68	Winding thermostat	Yes

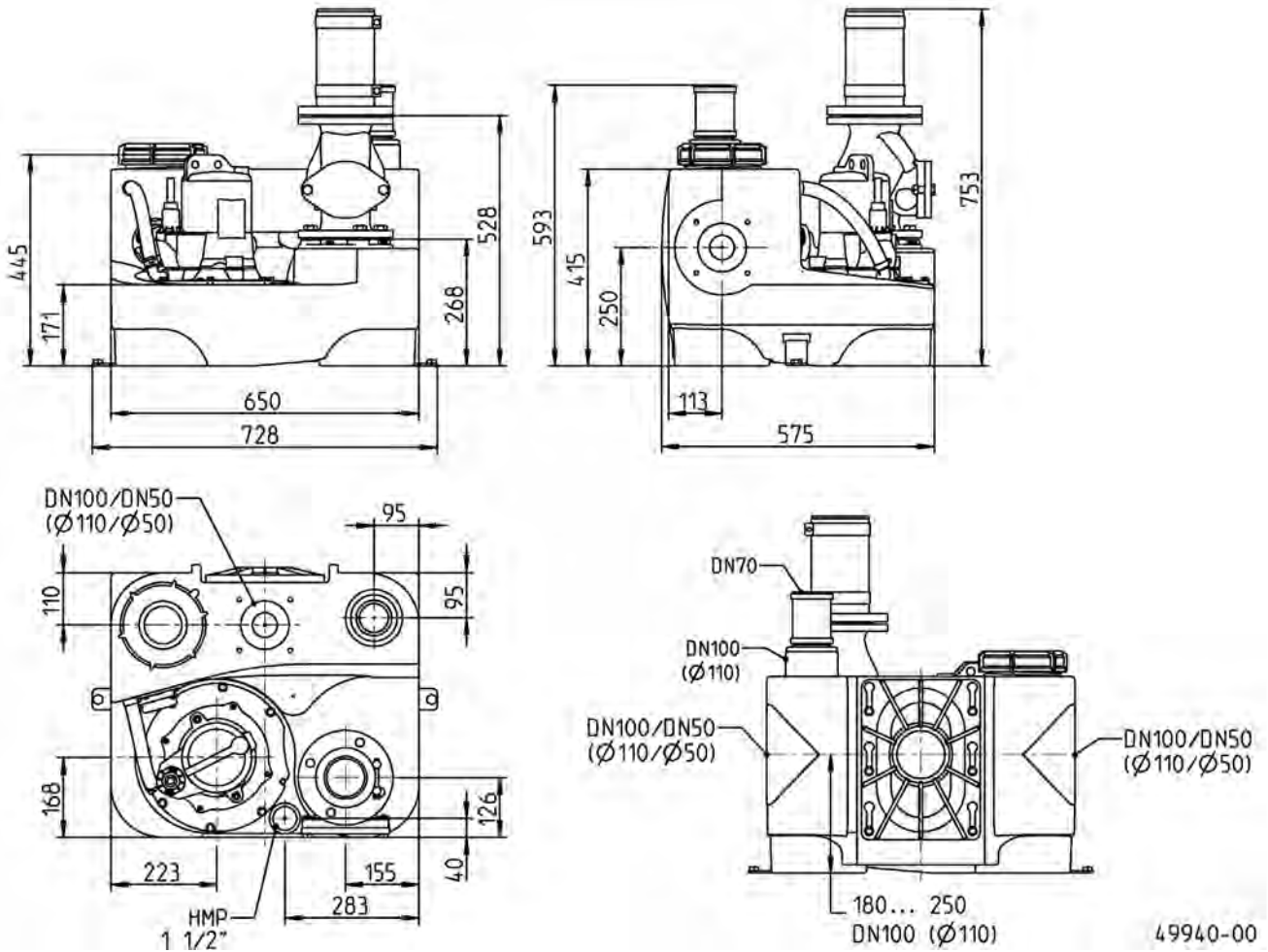
### COMPLI 400

Type	Code No.	Voltage	Motor rating		Current	Wires	Plug	Weight
			P1	P2				
compli 400	<b>JP50079</b>	3/N/PE~400 V	1.25 kW	0.87 kW	2.2 A	6G1,5	CEE	52 kg
compli 400 E	<b>JP50081</b>	1/N/PE~230 V	1.55 kW	1.10 kW	7.1 A	4G1,5	Safety	53 kg
compli 400 with non-return valve mounted	<b>JP50080</b>	3/N/PE~400 V	1.25 kW	0.87 kW	2.2 A	6G1,5	CEE	67 kg
compli 400 E with non-return valve mounted	<b>JP50082</b>	1/N/PE~230 V	1.55 kW	1.10 kW	7.1 A	4G1,5	Safety	68 kg

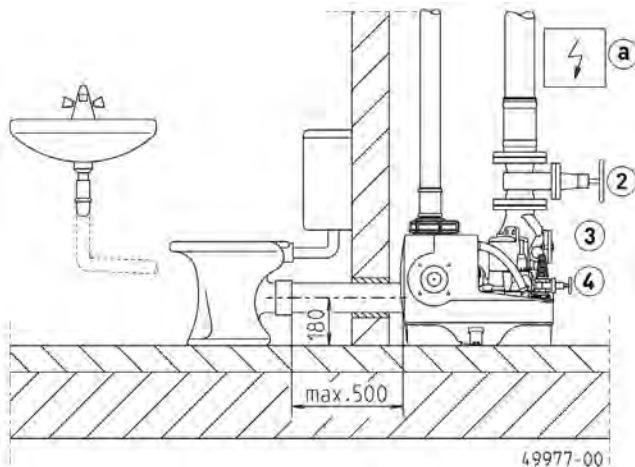
# COMPLI 400

## SEWAGE LIFTING STATIONS

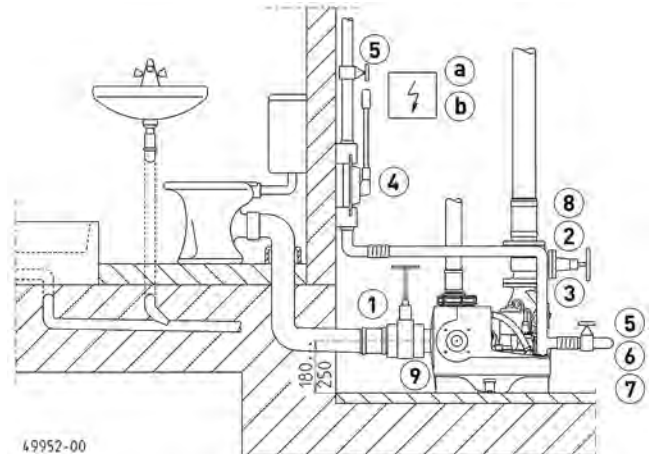
### Dimensions with swing-type check valve



### Example of installation



### Example of installation



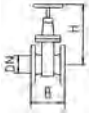






All types have DN 80 / PN 10 connecting flange, however with pipe socket DN 100. For this reason, a non-return valve for the pressure pipe need to be chosen for DN 80 only in case of direct erection. The ownstream pressure pipe is connected to DN 100 by an elastic connection. Sewage lifting stations are to be used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1986 T3. In keeping with the stipulations of German / European standard EN 12056-4 they

have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and repair. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with German / European standard 12050-4 has to be mounted. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof. EN 12056 paragraph 5.1 In applications where the waste-water inlet must not be interrupted a double system has to be installed.




# COMPLI 400

## SEWAGE LIFTING STATIONS

### MECHANICAL ACCESSORY

				Code No.
	① <b>Inlet gate valve PVC</b>	with two pipe sockets, DN 100, PN1	360x295 (HxW)	JP28297
	② <b>Sluice valve</b>	DN 80, PN 10, EN 1171	315x180 (HxB)	JP00639
	③ <b>Swing-type check valve</b>	R 80 EN 12050-4	DN 80, PN 4, flange PN 10, EN 558, 260 (H)	JP00706
		R 80 G EN 12050-4	DN 80, PN 4, flange PN 10, EN 558, with counter weight, 260 (H)	JP00707
	<b>Ball-type check valve</b>	K 80 EN 12050-4	DN 80, PN 4, flange PN 10, EN 558, 260 (H)	JP49205
	④ <b>Connection for emergency de-watering</b>	with stop valve and hose connection 1", 1/4" and 1/2"		JP49138
	<b>Hand diaphragm pump</b>	for emergency purposes (up to H geod 15 m)	640x1 1/2" (HxD)	JP00255
	⑤ <b>Stop valve</b>	brass, 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
	⑥ <b>Elastic connection</b>	1/2" (DN 40), PN 4	120x50 (HxD)	JP44777
	⑦ <b>Hose band clamp</b>	1/2"		JP44763
	⑧ <b>Adapter ring</b>	DN 100-DN 80 SML		JP50174
	⑨ <b>Opening set</b>	DN 100, required for lateral connection		JP50172

### ELECTRICAL ACCESSORY

				Code No.
	① <b>Rechargeable battery</b>	for mains independent alarm		JP44850
	② <b>Smart Home</b>	FTJP radio transmitter		JP47209
	③ <b>Alarm unit</b>	Alarm unit compli	contact switch, 4 m cable	JP50171



## COMPLI 500

### SEWAGE LIFTING STATIONS

- Ready to connect
- Submersible
- Clamp-type inlet flange
- Versatile connection facilities
- PE-tank 117 l
- Vortex impeller
- With mounted swing-type check valve
- Smart Home capable



#### DESCRIPTION

With its performance graduations, the compli 500 lifting station has been designed for use in detached houses with increased domestic waste-water inlet and for a larger storage capacity. During the design work, special attention was given to easy handling (weight !), space-saving erection and uncomplicated installation.

The submersible unit is permitted for general use in areas subject to flooding. The control unit has to be fitted in a well ventilated flood-proof room. The PE tanks has freely accessible drains, a cleaning opening at the top and a clamp-type inlet flange for an easy installation.

The inlet height can be variegated according to the feeding pipe:

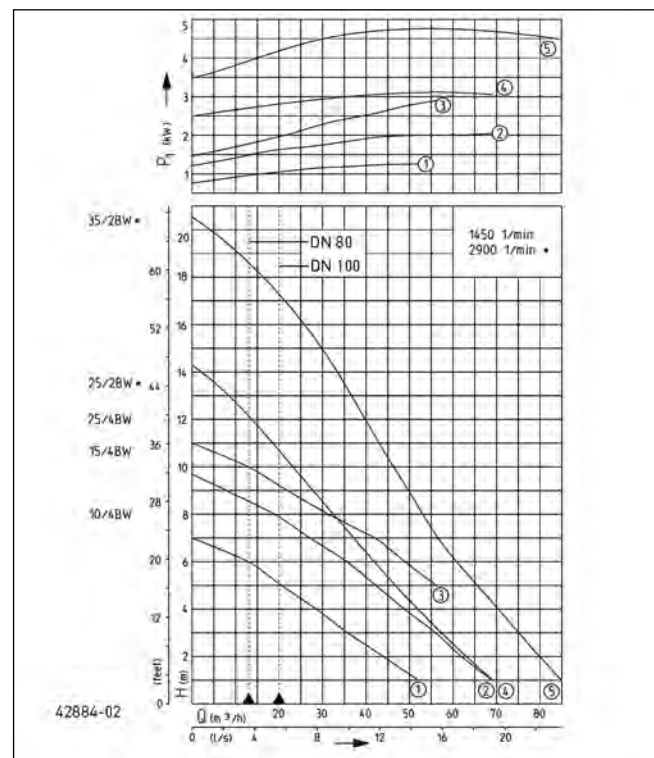
DN100: 180-205 mm (left), 250-300 mm (center) and 290-340 mm (right), each continuously adjustable; DN150/DN 50: 180 mm (left), 275 mm (center) and 315 mm (right)

For the connection of a DN 100 feeding pipe a reducer DN 150/100 is enclosed. The tank has vertical inlet in DN 150 or DN 100. If not in use, the rear inlet must be closed with the plug set DN 150 (accessory).

The vortex impeller of the pump with 70 mm free passage offers the safety you can rely on.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e.g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	13	15	17
compli 510/4 BW	Flow rate Q [m³/h]	52	44	37	29	22	13								
compli 515/4 BW		69	62	56	49	42	36	27	19						
compli 525/4 BW						56	49	42	32	22	13				
compli 525/2 BW		69	64	58	52	47	42	37	33	28	23	20	8		
compli 535/2 BW		85	80	75	71	66	62	57	54	50	47	44	36	30	21

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI 500

## SEWAGE LIFTING STATIONS

### SCOPE OF SUPPLY

Ready for plug in sewage lifting unit according to EN 12050-1 with clamp flange DN 150, reducer DN 150/100, built-on subm. sewage pump and connection flange DN 80 PN 10 with pipe socket Ø 110 mm, reducer ring Ø 110 up to Ø 90, with mounted swing-type check valve, elastic connection c/w hose clamps, PVC collar DN 70 for ventilation connection, autom. level controller, control unit (IP 44) c/w motor protection, motor

contactor, transformer, mains-dependent optional confirmable alarm unit and potential noc-contact for collective failure messages, with optical display of sense of rotation, alarm and operation, and manual-0-automatic switch as well as an adjustable maintenance interval display.

Cable between tank and control 4 m, cable between control and plug 1.5 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Motor housing	Grey cast iron
Free passage	70 mm	Pump housing	Grey cast iron
Pressure pipe	DN 100	Submersible	Yes
Bearing	Ball bearings, grease-lubricated	Pressure outlet	DN 80
Impeller	Vortex impeller, grey cast iron	Tank capacity	117 l

### ELECTRICAL DATA

Voltage	3/N/PE~400 V	Insulation class	F
Power line	4m H07RN-F	Winding thermostat	Yes
Wires	6G1,5	Plug	CEE-16A
Type of enclosure	IP 68		

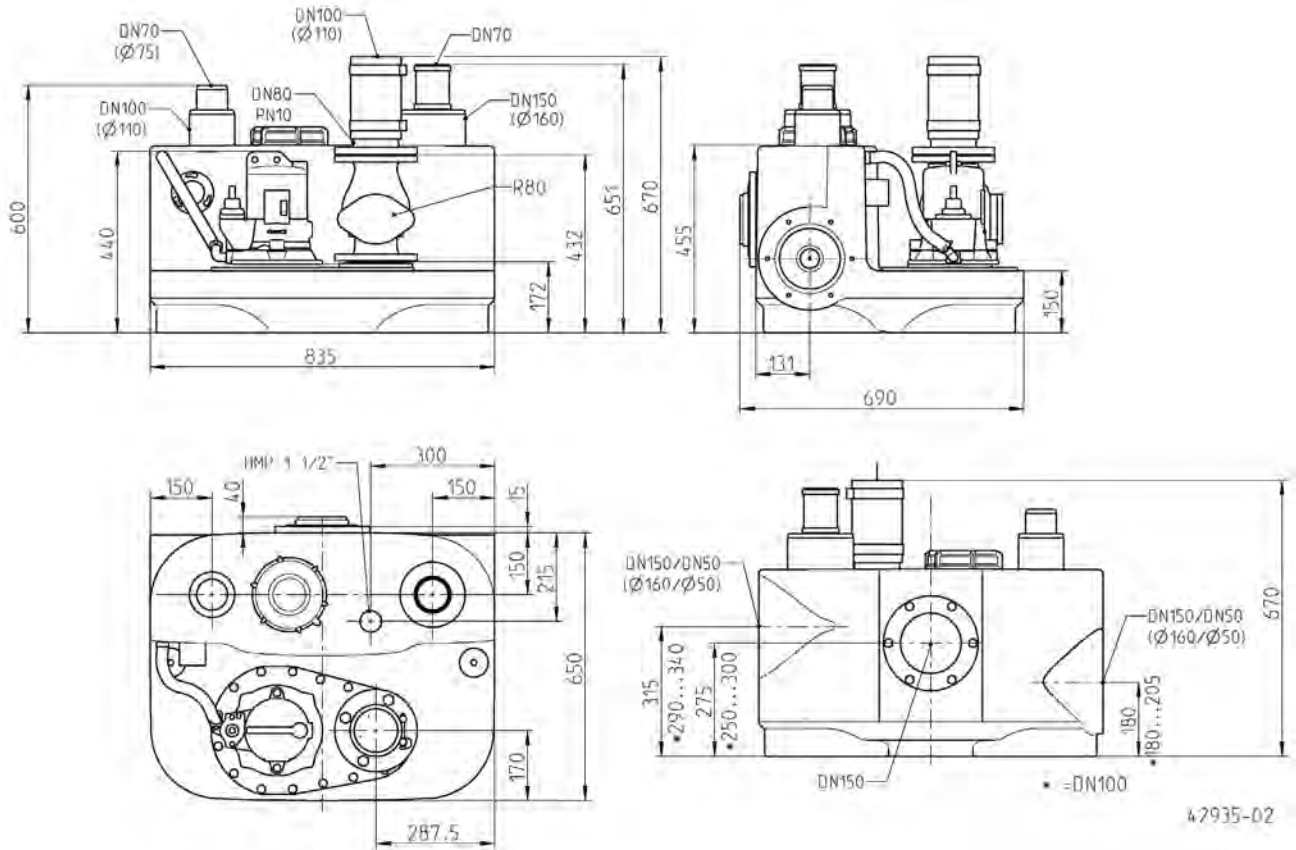
### COMPLI 500

Type	Code No.	Motor rating		Current	Oil chamber	Weight
		P1	P2			
compli 510/4 BW	<b>JP50091</b>	1.3 kW	1.0 kW	2.8 A	No	79 kg
compli 515/4 BW	<b>JP50092</b>	2.2 kW	1.7 kW	3.9 A	No	79 kg
compli 525/4 BW	<b>JP50093</b>	3.0 kW	2.2 kW	5.1 A	No	79 kg
compli 525/2 BW	<b>JP50094</b>	3.3 kW	2.6 kW	5.4 A	Yes	86 kg
compli 535/2 BW	<b>JP50095</b>	4.8 kW	4.0 kW	8.2 A	Yes	89 kg

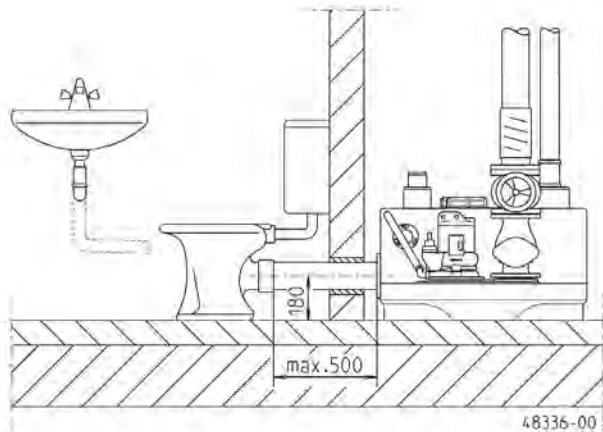
# COMPLI 500

## SEWAGE LIFTING STATIONS

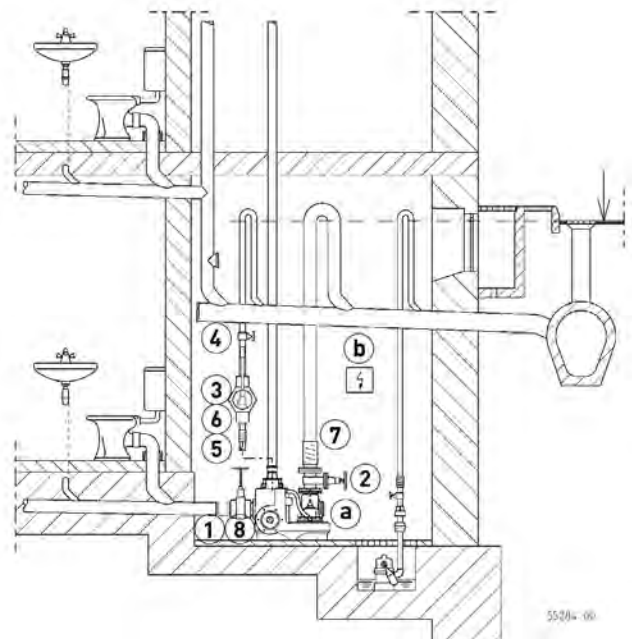
### Dimensions compli 500 (mm)



### Example of installation



### Example of installation




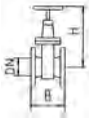

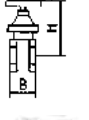
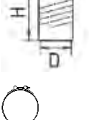



All types have DN 80 / PN 10 connecting flange, however with pipe socket DN 100. For this reason, a non-return valve for the pressure pipe need to be chosen for DN 80 only in case of direct erection. The ownstream pressure pipe is connected to DN 100 by an elastic connection. Sewage lifting stations are to be used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1986 T3. In keeping with the stipulations of German / European standard EN 12056-4 they

have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and repair. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with German / European standard 12050-4 has to be mounted. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof. EN 12056 paragraph 5.1 In applications where the waste-water inlet must not be interrupted a double system has to be installed.




# COMPLI 500

## SEWAGE LIFTING STATIONS

### MECHANICAL ACCESSORY

				Code No.
	① <b>Inlet gate valve PVC</b>	with two pipe sockets, DN 100, PN1	360x295 (HxW)	JP28297
		with two pipe sockets, DN 150, PN2.5	660x450 (HxW)	JP28591
	② <b>Sluice valve</b>	DN 80, PN 10, EN 1171	315x180 (HxB)	JP00639
	③ <b>Hand diaphragm pump</b>	for emergency purposes (up to H geod 15 m)	640x1½" (HxD)	JP00255
	④ <b>Stop valve</b>	brass, ½" (DN 40), PN 16	125x60 (HxB)	JP44786
	⑤ <b>Elastic connection</b>	½" (DN 40), PN 4	120x50 (HxD)	JP44777
	⑥ <b>Hose band clamp</b>	½"		JP44763
	⑦ <b>Adapter ring</b>	DN 100-DN 80 SML		JP50174
	⑧ <b>Opening set</b>	DN 150, required for lateral connection		JP43156

### ELECTRICAL ACCESSORY

				Code No.
	ⓐ <b>Seal leak detector</b>	DKG		JP44900
	ⓑ <b>Rechargeable battery</b>	for mains independent alarm		JP44850
	ⓒ <b>Smart Home</b>	FTJP radio transmitter		JP47209

## COMPLI 1000/1000 HL

### SEWAGE LIFTING STATIONS

- NEW: With modern HighLogo microprocessor control unit
- Ready to connect
- Submersible
- Duplex swing-type check valve
- Versatile connection facilities
- PE-tank 117 l
- Vortex impeller
- Smart Home capable



#### DESCRIPTION

With their performance graduations, the compli 1000 and compli 1000 HL disposal units have been designed for use in detached houses, in several residential units or in commercial buildings. During the design work, special attention was given to easy handling, space-saving erection and uncomplicated installation.

The submersible unit is permitted for general use in areas subject to flooding. The control unit has to be fitted in a well ventilated flood-proof room.

The PE tank has freely accessible drains, a cleaning opening at the top and a clamp-type inlet flange for an installation.

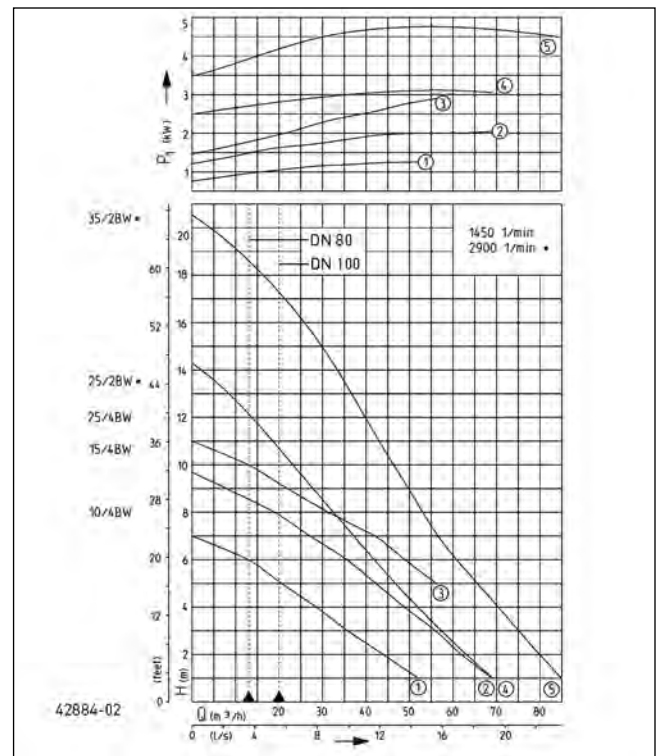
For the connection of a DN 100 feeding pipe a reducer DN 150/100 is enclosed. The tank has vertical inlet in DN 150 or DN 100. If not in use, the rear inlet must be closed with the plug set DN 150 (accessory).

The vortex impeller of the pump with a 70 mm free passage offers the safety you can rely on. Duplex systems have two pump units on one tank which are switched alternately or, if required, they are operated both in order to cope with peak load or reserve operation.

The compli lifting stations are available with modern microprocessor control unit (HighLogo). Via the large graphic display in conjunction with the multifunctional button the control system can be configured intuitively and flexibly. With optional accessories (GSM modem), SMS or e-mail transmission is also possible in the event of a malfunction.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e. g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	13	15	17
compli 1010/4 BWE/BW	Flow rate Q [m³/h]	52	44	37	29	22	13								
compli 1015/4 BW		69	62	56	49	42	36	27	19						
compli 1025/4 BW						56	49	42	32	22	13				
compli 1025/2 BW		69	64	58	52	47	42	37	33	28	23	20	8		
compli 1035/2 BW		85	80	75	71	66	62	57	54	50	47	44	36	30	21

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI 1000/1000 HL

## SEWAGE LIFTING STATIONS

### SCOPE OF SUPPLY

Ready for plug in sewage lifting unit according to EN 12050-1 with clamp flange DN 150, reducer DN 150/100, two built-on subm. sewage pumps and connection flange DN 80 with pipe socket Ø 110 mm, reducer ring Ø 110 up to Ø 90, elastic connection c/w hose clamps, PVC collar DN 70 for ventilation connection, pre-mounted duplex swing-type check valve and autom. level controller, control unit (IP 44) c/w motor protection, motor contactor, transformer, mains-dependent alarm unit and

potential noc-contact for collective failure messages, with optical display of sense of rotation (only in case of three-phase current), alarm and operation, and 2 x manual-0-automatic switch. With Highlogo version even more functionalities such as operating hours counter and maintenance interval display.

Cable between tank and control 4 m, cable between control and plug 1.5 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Motor housing	Grey cast iron
Free passage	70 mm	Pump housing	Grey cast iron
Pressure pipe	DN 100	Submersible	Yes
Bearing	Ball bearings, grease-lubricated	Pressure outlet	DN 80
Impeller	Vortex impeller, grey cast iron	Tank capacity	117 l

### ELECTRICAL DATA

Power line	4m H07RN-F	Insulation class	F
Type of enclosure	IP 68	Winding thermostat	Yes

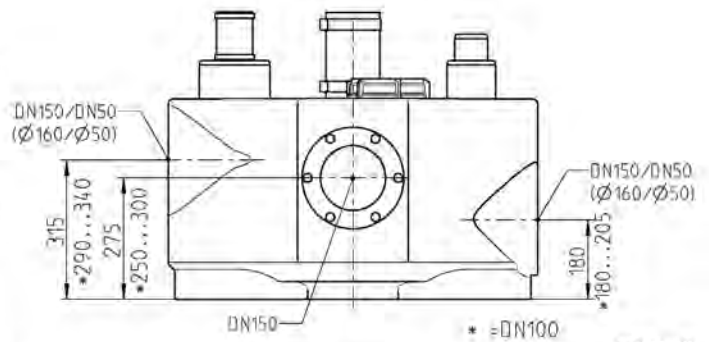
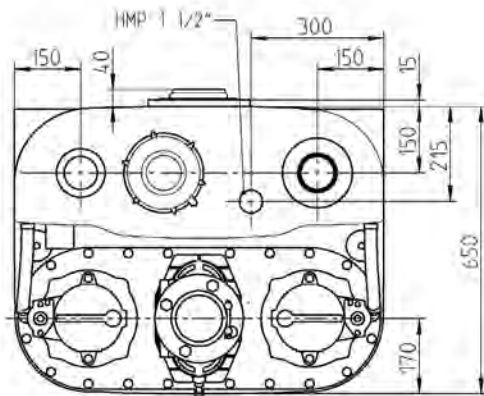
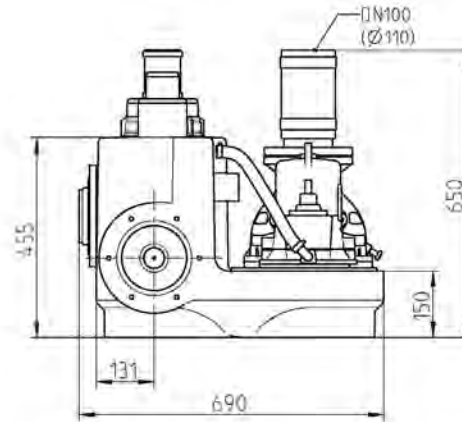
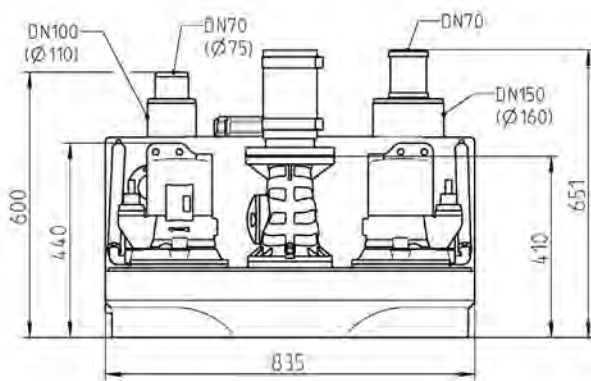
### COMPLI 1000/1000 HL

Type	Code No.	Voltage	Motor rating		Current	Wires	Plug	Oil chamber	Weight
			P1	P2					
compl 1010/4 BWE	<b>JP50099</b>	1/N/PE~230 V	1.55 kW	1.1 kW	7.1 A	4G1,5	Safety	No	103 kg
compl 1010/4 BW	<b>JP50100</b>	3/N/PE~400 V	1.30 kW	1.0 kW	2.8 A	6G1,5	CEE-16A	No	116 kg
compl 1015/4 BW	<b>JP50101</b>	3/N/PE~400 V	2.20 kW	1.7 kW	3.9 A	6G1,5	CEE-16A	No	117 kg
compl 1025/4 BW	<b>JP50102</b>	3/N/PE~400 V	3.00 kW	2.2 kW	5.1 A	6G1,5	CEE-16A	No	124 kg
compl 1025/2 BW	<b>JP50103</b>	3/N/PE~400 V	3.30 kW	2.6 kW	5.4 A	6G1,5	CEE-16A	Yes	124 kg
compl 1035/2 BW	<b>JP50104</b>	3/N/PE~400 V	4.80 kW	4.0 kW	8.2 A	6G1,5	CEE-32A	Yes	139 kg
compl 1010/4 BWE HL	<b>JP50105</b>	1/N/PE~230 V	1.55 kW	1.1 kW	7.1 A	4G1,5	Safety	No	103 kg
compl 1010/4 BW HL	<b>JP50106</b>	3/N/PE~400 V	1.30 kW	1.0 kW	2.8 A	6G1,5	CEE-16A	No	116 kg
compl 1015/4 BW HL	<b>JP50107</b>	3/N/PE~400 V	2.20 kW	1.7 kW	3.9 A	6G1,5	CEE-16A	No	117 kg
compl 1025/4 BW HL	<b>JP50108</b>	3/N/PE~400 V	3.00 kW	2.2 kW	5.1 A	6G1,5	CEE-16A	No	124 kg
compl 1025/2 BW HL	<b>JP50109</b>	3/N/PE~400 V	3.30 kW	2.6 kW	5.4 A	6G1,5	CEE-16A	Yes	124 kg
compl 1035/2 BW HL	<b>JP50110</b>	3/N/PE~400 V	4.80 kW	4.0 kW	8.2 A	6G1,5	CEE-32A	Yes	139 kg

# COMPLI 1000/1000 HL

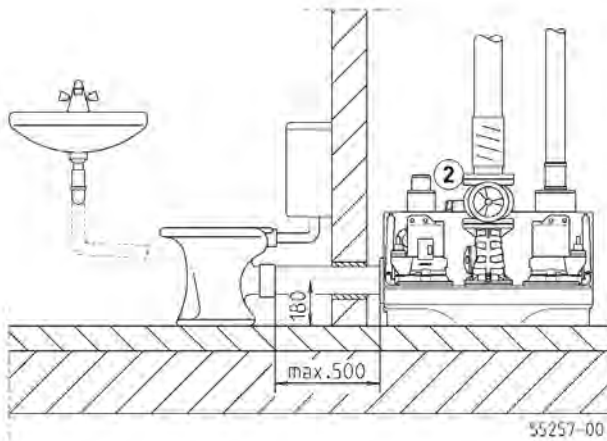
## SEWAGE LIFTING STATIONS

### Dimensions compli 1000 (mm)

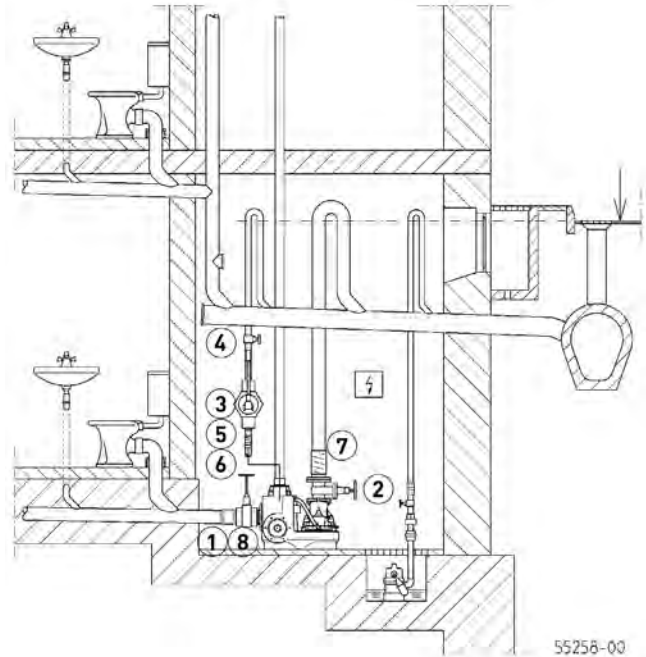


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### Example of installation



### Example of installation



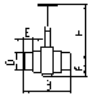
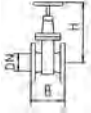


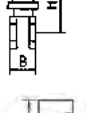
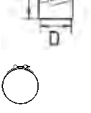
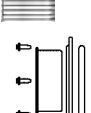


# COMPLI 1000/1000 HL

## SEWAGE LIFTING STATIONS




All types have DN 80 / PN 10 connecting flange, however with pipe socket DN 100. For this reason, a non-return valve for the pressure pipe need to be chosen for DN 80 only in case of direct erection. The ownstream pressure pipe is connected to DN 100 by an elastic connection. Sewage lifting stations are to be used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1986 T3. In keeping with the stipulations of German / European standard EN 12056-4 they

have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and repair. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with German / European standard 12050-4 has to be mounted. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof. EN 12056 paragraph 5.1 In applications where the waste-water inlet must not be interrupted a double system has to be installed.

### MECHANICAL ACCESSORY

				Code No.
	<b>1 Inlet gate valve PVC</b>	with two pipe sockets, DN 100, PN1	360x295 (HxW)	<b>JP28297</b>
		with two pipe sockets, DN 150, PN2.5	660x450 (HxW)	<b>JP28591</b>
	<b>2 Sluice valve</b>	DN 80, PN 10, EN 1171	315x180 (HxB)	<b>JP00639</b>
	<b>3 Connection for emergency de-watering</b>	with stop valve and hose connection 1", 1 1/4" and 1 1/2"		<b>JP49138</b>
	<b>Hand diaphragm pump</b>	for emergency purposes (up to H geod 15 m)	640x1 1/2" (HxD)	<b>JP00255</b>
	<b>4 Stop valve</b>	brass, 1 1/2" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	<b>5 Elastic connection</b>	1 1/2" (DN 40), PN 4	120x50 (HxD)	<b>JP44777</b>
	<b>6 Hose band clamp</b>	1 1/2"		<b>JP44763</b>
	<b>7 Adapter ring</b>	DN 100-DN 80 SML		<b>JP50174</b>
	<b>8 Opening set</b>	DN 150, required for lateral connection		<b>JP43156</b>

### ELECTRICAL ACCESSORY

				Code No.
	<b>a Rechargeable battery</b>	for mains independent alarm		<b>JP44850</b>
	<b>b Seal leak detector</b>	DKG		<b>JP44900</b>
	<b>c Smart Home</b>	FTJP radio transmitter		<b>JP47209</b>



## COMPLI 1200 HL SEWAGE LIFTING STATIONS

- NEW: With modern HighLogo microprocessor control unit
- Ready to connect
- Submersible
- Height-variable inlet
- Duplex swing-type check valve
- PE-tank 350 l
- Smart Home capable



### DESCRIPTION

With their performance graduations, the compli 1200 lifting stations has been designed for larger storage capacities, if wastewater of several residential units or wastewater from commercial enterprises, for example, have to be disposed of. During the design work, special attention was given to easy handling, space-saving erection and uncomplicated installation.

A fitting (to be provided by the customer) can be used at the rear inlet port of the stage housing to mount the unit variably in height (560 to 700 mm) as well as capable of rotating (180 °).

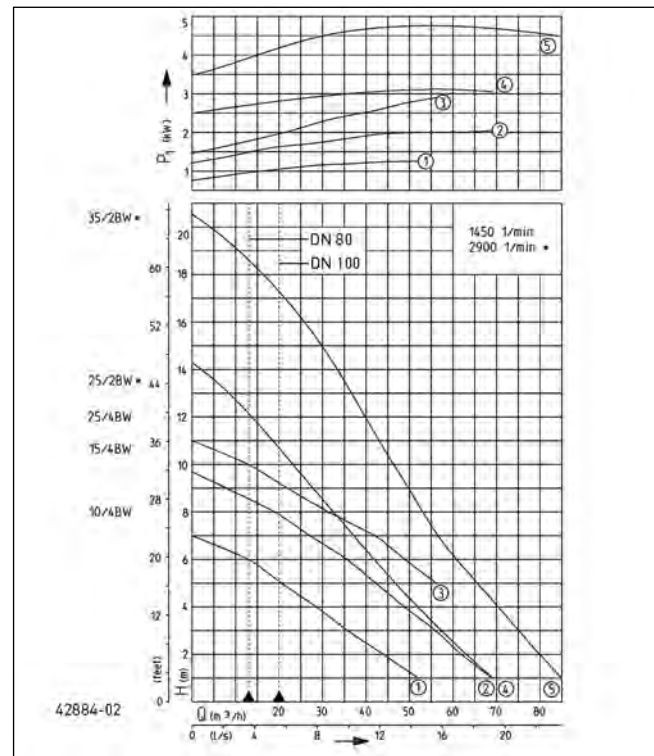
The submergible unit is permitted for general use in areas subject to flooding without requiring additional outlay. The control unit has to be fitted in a well ventilated flood-proof room.

The construction with PE tank has freely accessible drains and a clamp-type inlet flange for easy installation. The top-mounted cleaning opening and the easy replaceability of the pre-mounted pumps also ensure time-saving servicing. Duplex systems have two pump units on one tank which are switched alternately or, if required, they are operated both in order to cope with peak load or reserve operation. This automatic switching sequence increase safety in particular for use in commercial or public buildings and is always required in keeping with German/ European standard EN 12056-4, when the wastewater inflow must not be interrupted.

The sewage lifting stations are available with modern microprocessor control units (HighLogo). The control can be configured intuitively and flexibly via the large graphic display in conjunction with the multifunction button. With optional accessories (GSM modem), SMS or e-mail transmission is also possible in the case of a malfunction.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e. g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).

### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	13	15	17
compl 1210/4 BW HL	Flow rate Q [m³/h]	52	44	37	29	22	13								
compl 1215/4 BW HL		69	62	56	49	42	36	27	19						
compl 1225/4 BW HL						56	49	42	32	22	13				
compl 1225/2 BW HL		69	64	58	52	47	42	37	33	28	23	20	8		
compl 1235/2 BW HL		85	80	75	71	66	62	57	54	50	47	44	36	30	21

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI 1200 HL

## SEWAGE LIFTING STATIONS

### SCOPE OF SUPPLY

Ready-to-connect sewage disposal unit in keeping with German/European standard EN 12050 with DN 150 clamp-type inlet flange, pre-mounted submersible pump (two pumps in duplex system) and DN 80 connecting flange with pipe unit. Ø110, reducer ring Ø 110 to Ø 90, pre-mounted duplex swing-type check valve, one elastic connection each with clamps for plastic pressure pipe and ventilation pipe, automatic level control. Control unit (IP 44 type of protection) with motor protection, contactors, transformer, mains-dependent alarm

system and potential noc-contact for collective failure messages, with optical display of sense of rotation, alarm and operation as well as two manual-0-automatic switch. With automatic changeover system and peak load function and further functions such as operating hours counter and maintenance interval display.

Cable: between tank and control 4 m, between control and plug 1.5 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Motor housing	Grey cast iron
Free passage	70 mm	Pump housing	Grey cast iron
Pressure pipe	DN 100	Submersible	Yes
Bearing	Ball bearings, grease-lubricated	Pressure outlet	DN 80
Impeller	Vortex impeller, grey cast iron	Tank capacity	350 l

### ELECTRICAL DATA

Voltage	3/N/PE-400 V	Type of enclosure	IP 68
Power line	4m H07RN-F	Insulation class	F
Wires	6G1,5	Winding thermostat	Yes

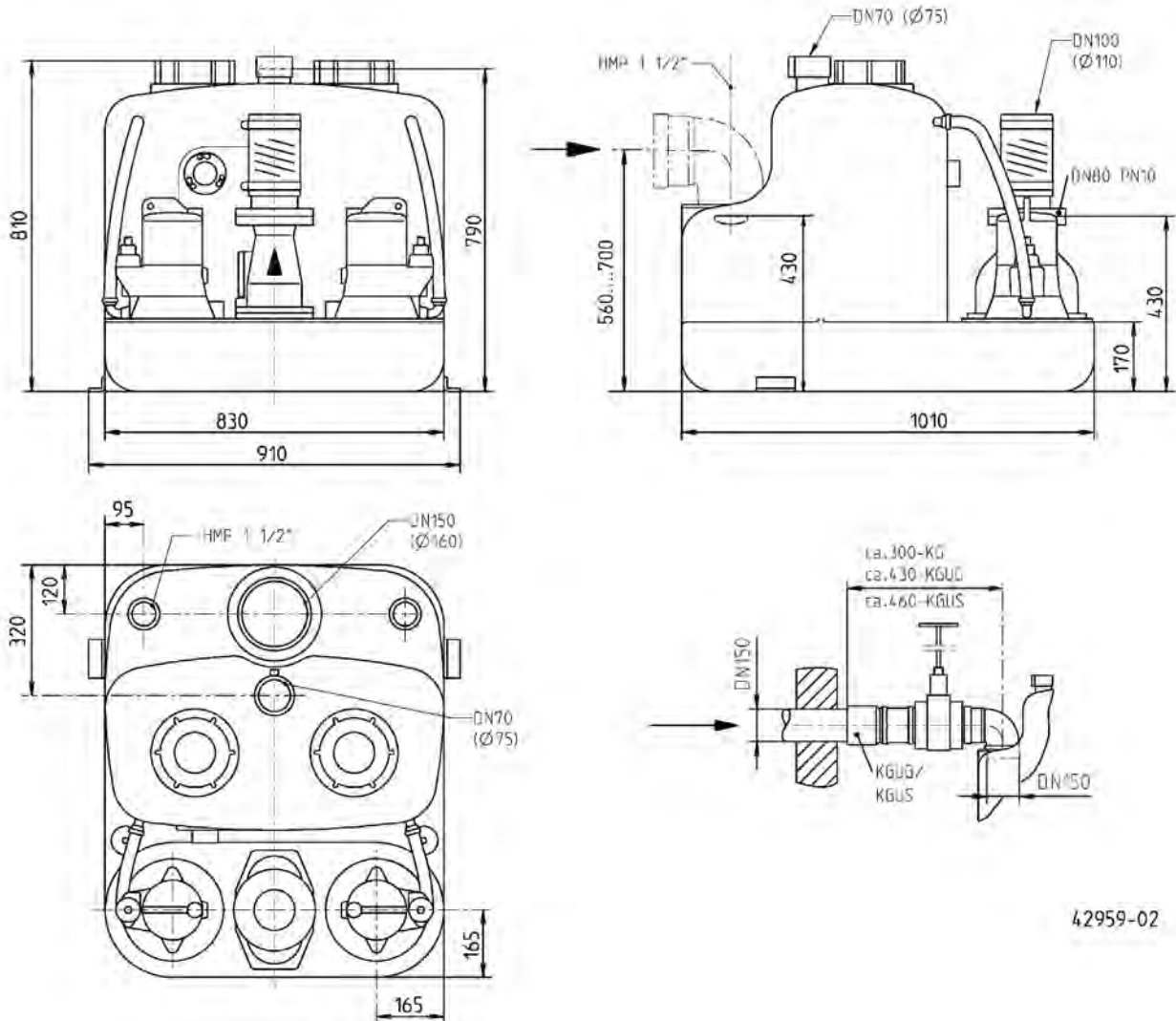
### COMPLI 1200 HL

Type	Code No.	Motor rating		Current	Plug	Oil chamber	Weight
		P1	P2				
compl 1210/4 BW HL	<b>JP50118</b>	1.3 kW	1.0 kW	2.8 A	CEE-16A	No	133 kg
compl 1215/4 BW HL	<b>JP50119</b>	2.2 kW	1.7 kW	3.9 A	CEE-16A	No	134 kg
compl 1225/4 BW HL	<b>JP50120</b>	3.0 kW	2.2 kW	5.1 A	CEE-16A	No	143 kg
compl 1225/2 BW HL	<b>JP50121</b>	3.3 kW	2.6 kW	5.4 A	CEE-16A	Yes	143 kg
compl 1235/2 BW HL	<b>JP50122</b>	4.8 kW	4.0 kW	8.2 A	CEE-32A	Yes	158 kg

# COMPLI 1200 HL

## SEWAGE LIFTING STATIONS

### Dimensions compli 1200 (mm)

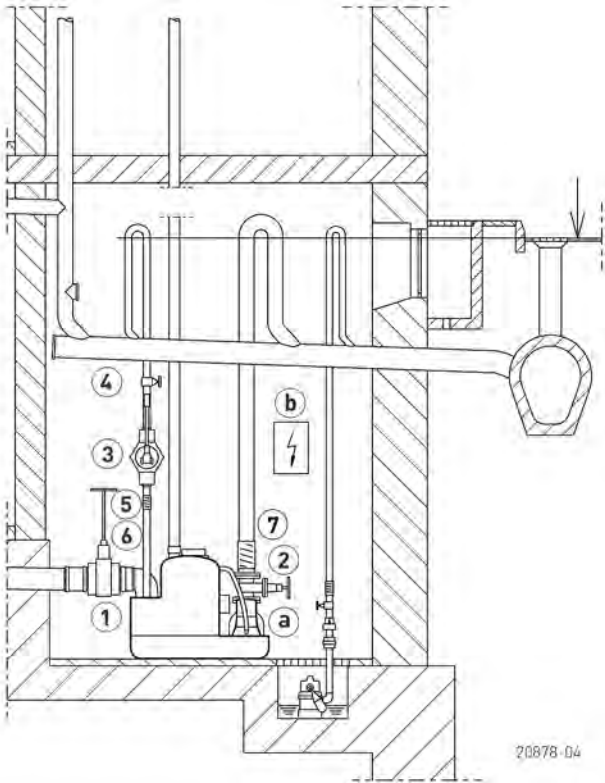


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# COMPLI 1200 HL

## SEWAGE LIFTING STATIONS

### Example of installation



All types have DN 80 / PN 10 connecting flange, however with pipe socket DN 100. For this reason, a non-return valve for the pressure pipe need to be chosen for DN 80 only in case of direct erection. The ownstream pressure pipe is connected to DN 100 by an elastic connection. Sewage lifting stations are to be used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1986 T3. In keeping with the stipulations of German / European standard EN 12056-4 they

have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and repair. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with German / European standard 12050-4 has to be mounted. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof. EN 12056 paragraph 5.1 In applications where the waste-water inlet must not be interrupted a double system has to be installed.




### MECHANICAL ACCESSORY

				Code No.
	<b>① Inlet gate valve PVC</b>	with two pipe sockets, DN 150, PN2.5	660x450 (HxW)	<b>JP28591</b>
	<b>② Sluice valve</b>	DN 80, PN 10, EN 1171	315x180 (HxB)	<b>JP00639</b>
	<b>③ Hand diaphragm pump</b>	for emergency purposes (up to H geod 15 m)	640x1½" (HxD)	<b>JP00255</b>
	<b>④ Stop valve</b>	brass, 1½" (DN 40), PN 16	125x60 (HxB)	<b>JP44786</b>
	<b>⑤ Elastic connection</b>	1½" (DN 40), PN 4	120x50 (HxD)	<b>JP44777</b>
	<b>⑥ Hose band clamp</b>	1½"		<b>JP44763</b>
	<b>⑦ Adapter ring</b>	DN 100-DN 80 SML		<b>JP50174</b>

# COMPLI 1200 HL

SEWAGE LIFTING STATIONS

## ELECTRICAL ACCESSORY

			Code No.
	<b>a Seal leak detector</b>	DKG	JP44900
	<b>b Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>c Smart Home</b>	FTJP radio transmitter	JP47209

# COMPLI 1200 HL

SEWAGE LIFTING STATIONS

# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

- NEW: With modern HighLogo microprocessor control unit
- Submersible
- Large storage capacity
- Selectable inlet position
- PE-tank 500/1000 l
- Smart Home capable



### DESCRIPTION

The compli 1500 and 2500 tank systems have been designed for large industrial and communal wastewater volumes as well as for the connection of streets or other community effluent systems. To ensure a practical arrangement, special importance was attached to easy installation.

The submersible unit is permitted for general use in areas subject to flooding without requiring additional outlay. The control unit has to be fitted in a well ventilated flood-proof room.

The construction with PE tanks has freely accessible drains and a clamp-type inlet flange for easy installation. The top-mounted cleaning opening and the easy replaceability of the pre-mounted pumps also ensure time-saving servicing.

The sewage lifting stations are available with modern microprocessor control units (HighLogo). The control can be configured intuitively and flexibly via the large graphic display in conjunction with the multifunction button. With optional accessories (GSM modem), SMS or e-mail transmission is also possible in the case of a malfunction.

The compli sewage lifting station can be integrated into a smart infrastructure. The FTJP radio transmitter is connected to the potential-free contact of the lifting station. It is now possible to transmit the switching status (e. g. an alarm message) to an EnOcean-capable smart home gateway (Wibutler, Afriso, Homee).



### MECHANICAL DATA

Pump	Vertical single-stage	Impeller	Cannel impeller, grey cast iron
Pressure pipe	DN 100	Motor housing	Grey cast iron
Bearing	Ball bearings, grease-lubricated	Pump housing	Grey cast iron
Oil chamber	Yes	Submersible	Yes
Run dry protection	Yes	Tank capacity	500/1000 l

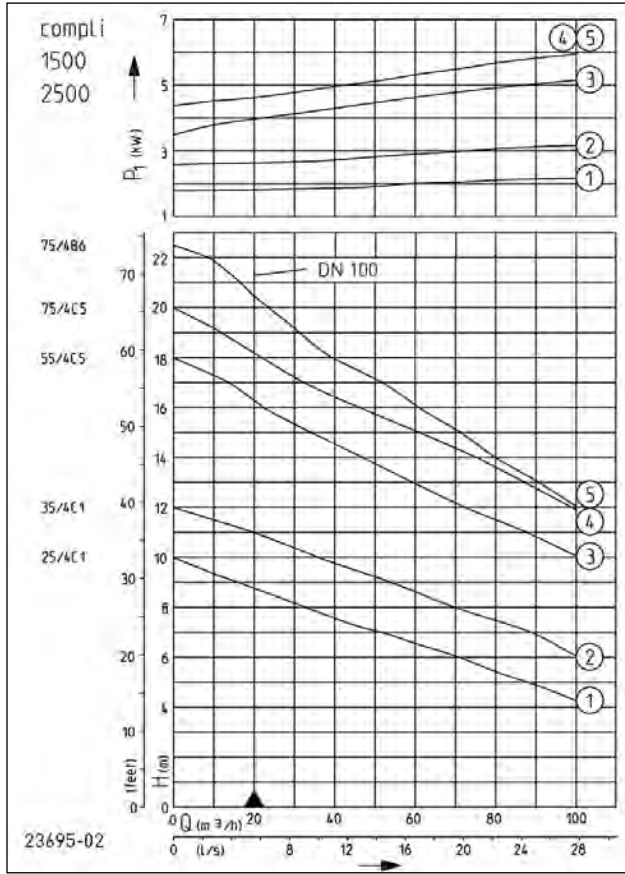
### ELECTRICAL DATA

Voltage	3/N/PE~400 V	Insulation class	F
Power line	10m H07RN-F	Winding thermostat	Yes
Type of enclosure	IP 68		

# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

### PERFORMANCE



Type	Single unit Code No.
compl 1525/4 C1 HL	JP50123
compl 1535/4 C1 HL	JP50124
compl 1555/4 C5 HL	JP50125
compl 1575/4 B6 HL	JP50127
compl 1575/4 C5 HL	JP50126
compl 2525/4 C1 HL	JP50133
compl 2535/4 C1 HL	JP50134
compl 2555/4 C5 HL	JP50135
compl 2575/4 B6 HL	JP50137
compl 2575/4 C5 HL	JP50136

Type	Delivery head H [m]	4	5	6	7	8	9	10	11	12	13	14	16	18	20
compl 1525/4+2525/4 C1 HL	Flow rate Q [m³/h]	104	87	71	51	32	16								
compl 1535/4+2535/4 C1 HL				103	89	72	54	36	21						
compl 1555/4+2555/4 C5 HL								100	87	74	59	45	22		
compl 1575/4+2575/4 B6 HL											91	82	62	41	24
compl 1575/4+2575/4 C5 HL										100	87	75	44	22	

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

### COMPLI 1500/2500 HL, N = 1450 MIN-1

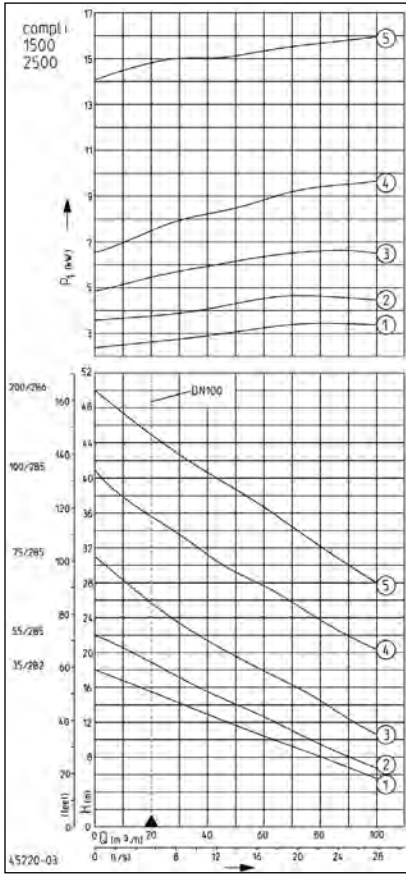
Type	Motor rating		Current	Wires	Free passage	Pressure outlet	Weight
	P1	P2					
compl 1525/4 C1 HL	2.4 kW	1.90 kW	4.2 A	6G1,5	100 mm	DN 100	254 kg
compl 1535/4 C1 HL	3.5 kW	2.65 kW	6.9 A	6G1,5	100 mm	DN 100	262 kg
compl 1555/4 C5 HL	5.8 kW	4.65 kW	10.2 A/5.9 A	10G2,5	100 mm	DN 100	364 kg
compl 1575/4 B6 HL	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	70 mm	DN 100	358 kg
compl 1575/4 C5 HL	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	100 mm	DN 100	374 kg
compl 2525/4 C1 HL	2.4 kW	1.90 kW	4.2 A	6G1,5	100 mm	DN 100	301 kg
compl 2535/4 C1 HL	3.5 kW	2.65 kW	6.9 A	6G1,5	100 mm	DN 100	309 kg
compl 2555/4 C5 HL	5.8 kW	4.65 kW	10.2 A/5.9 A	10G2,5	100 mm	DN 100	411 kg
compl 2575/4 B6 HL	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	70 mm	DN 100	405 kg
compl 2575/4 C5 HL	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	100 mm	DN 100	421 kg



# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

### PERFORMANCE



Type	Single unit Code No.
compli 1535/2 B2 HL	JP50128
compli 1555/2 B2 HL	JP50129
compli 1575/2 B5 HL	JP50130
compli 15100/2 B5 HL	JP50131
compli 15200/2 B6 HL	JP50132
compli 2535/2 B2 HL	JP50138
compli 2575/2 B5 HL	JP50140
compli 2555/2 B2 HL	JP50139
compli 25100/2 B5 HL	JP50141
compli 25200/2 B6 HL	JP50142

Type	Delivery head H [m]	5	7	10	13	16	19	22	25	28	31	34	37	40
compli 1535/2+2535/2 B2 HL	Flow rate Q [m <sup>3</sup> /h]	102	88	65	38	17								
compli 1555/2+2555/2 B2 HL			96	76	58	35	17							
compli 1575/2+2575/2 B5 HL				104	87	70	54	37	23	9				
compli 15100/2+25100/2 B5 HL								91	76	55	41	23	15	4
compli 15200/2+25200/2 B6 HL										100	86	72	58	43

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

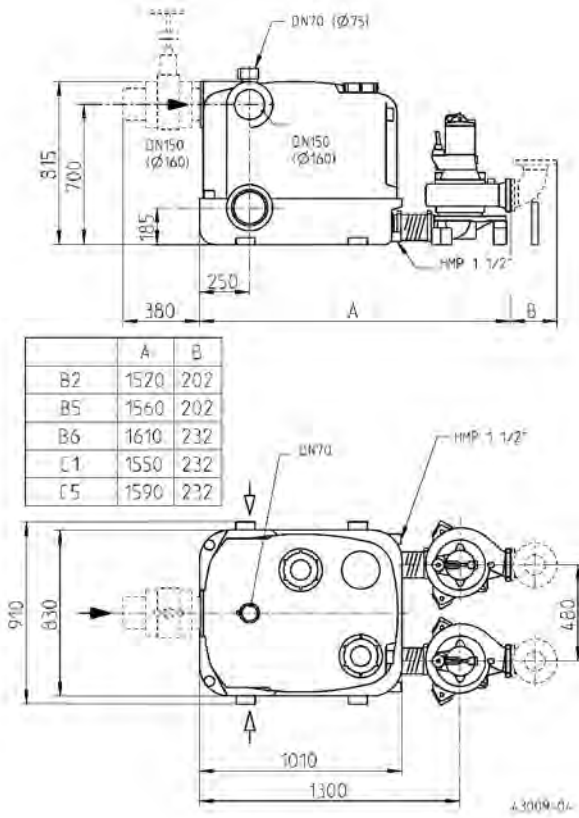
### COMPLI 1500/2500 HL, N = 2900 MIN-1

Type	Motor rating		Current	Wires	Free passage	Pressure outlet	Weight
	P1	P2					
compli 1535/2 B2 HL	3.7 kW	3.04 kW	6.6 A	6G1,5	70 mm	DN 80	236 kg
compli 1555/2 B2 HL	5.2 kW	4.45 kW	8.7 A/5.0 A	10G2,5	70 mm	DN 80	302 kg
compli 1575/2 B5 HL	7.7 kW	6.60 kW	13.2 A/7.7 A	10G2,5	70 mm	DN 80	322 kg
compli 15100/2 B5 HL	10.5 kW	9.20 kW	17.6 A/10.2 A	10G2,5	70 mm	DN 80	368 kg
compli 15200/2 B6 HL	17.3 kW	15.40 kW	28.8 A/16.7 A	10G2,5	70 mm	DN 100	550 kg
compli 2535/2 B2 HL	3.7 kW	3.04 kW	6.6 A	6G1,5	70 mm	DN 80	283 kg
compli 2575/2 B5 HL	7.7 kW	6.60 kW	13.2 A/7.7 A	10G2,5	70 mm	DN 80	369 kg
compli 2555/2 B2 HL	5.2 kW	4.45 kW	8.7 A/5.0 A	10G2,5	70 mm	DN 80	349 kg
compli 25100/2 B5 HL	10.5 kW	9.20 kW	17.6 A/10.2 A	10G2,5	70 mm	DN 80	415 kg
compli 25200/2 B6 HL	17.3 kW	15.40 kW	28.8 A/16.7 A	10G2,5	70 mm	DN 100	597 kg

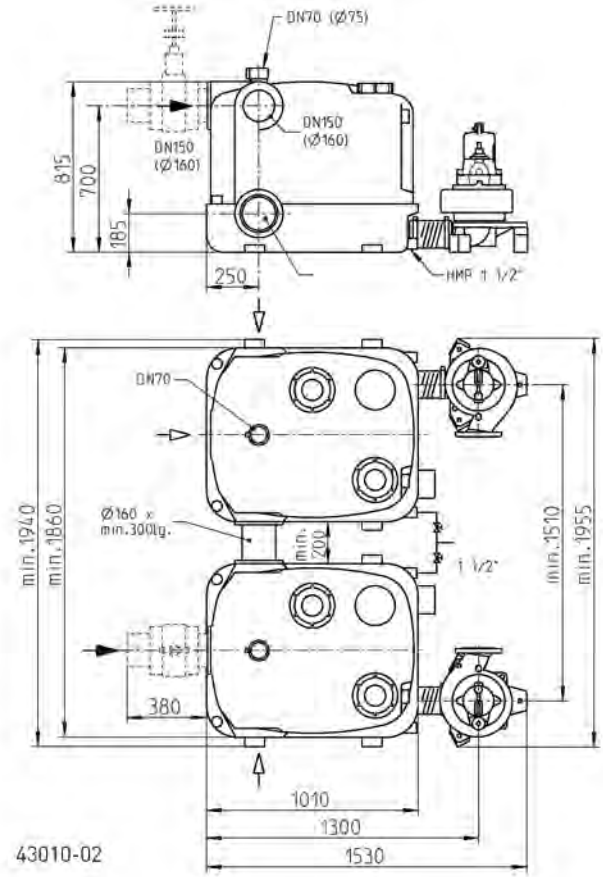
# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

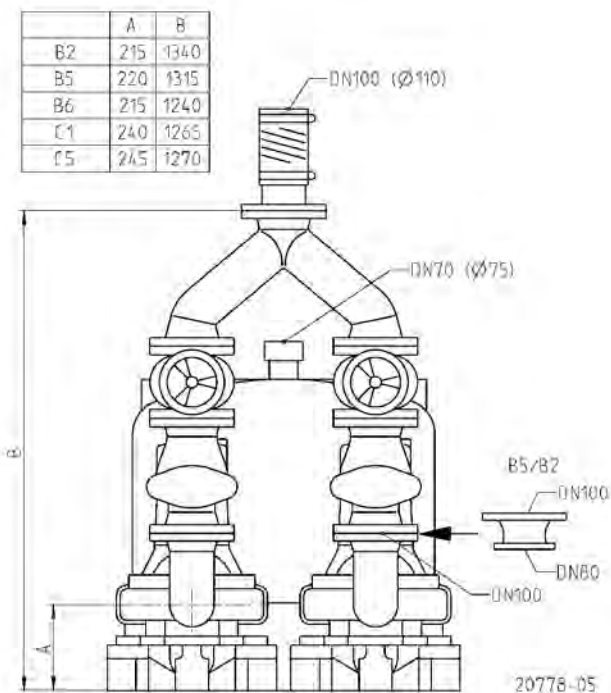
Dimensions compli 1500 (mm)



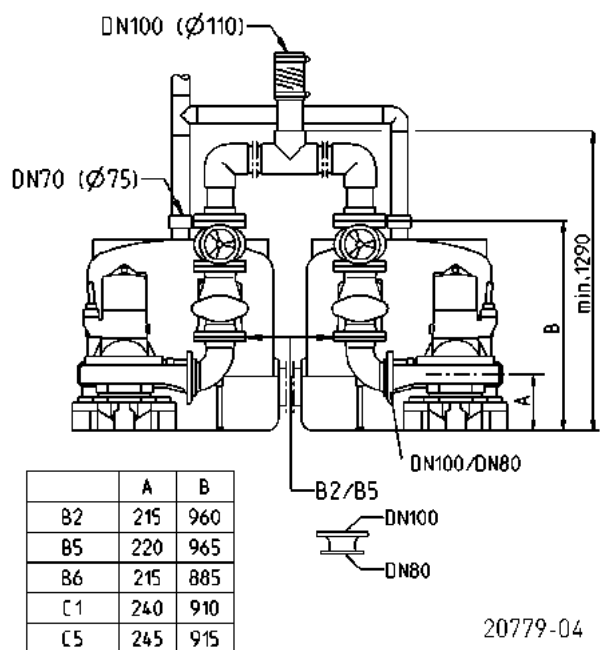
Dimensions compli 2500 (mm)



Mounting dimensions compli 1500 (mm)



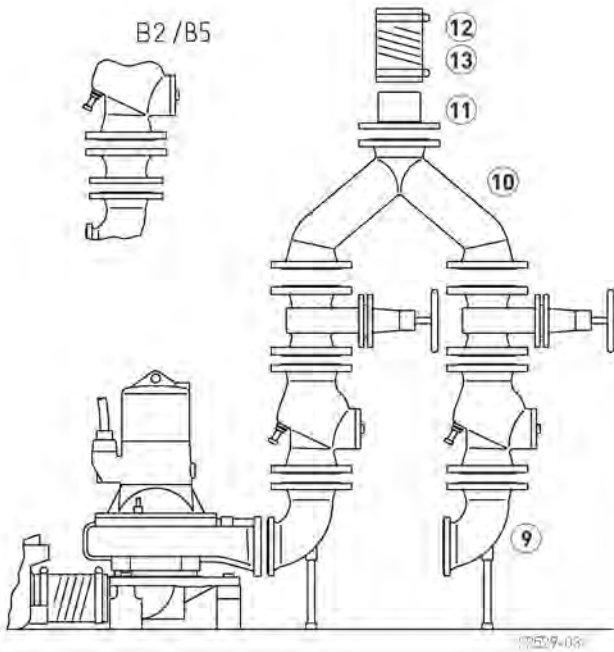
Mounting dimensions compli 2500 (mm)



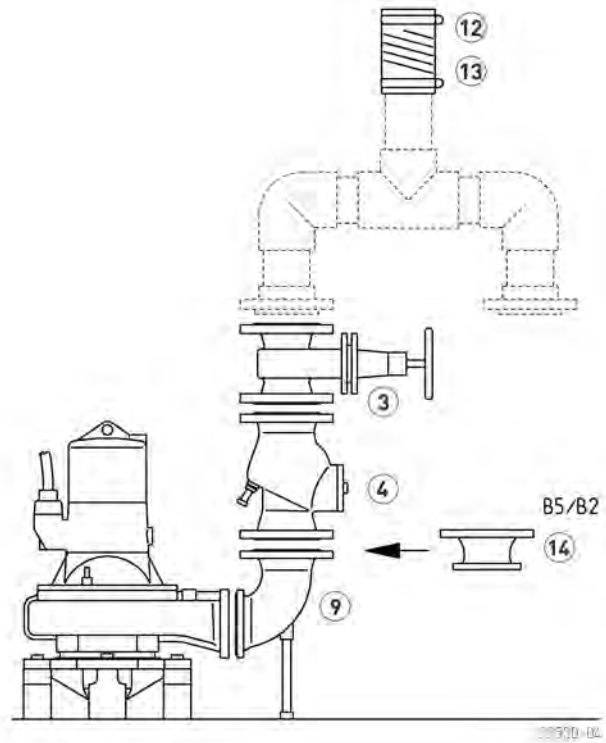
# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

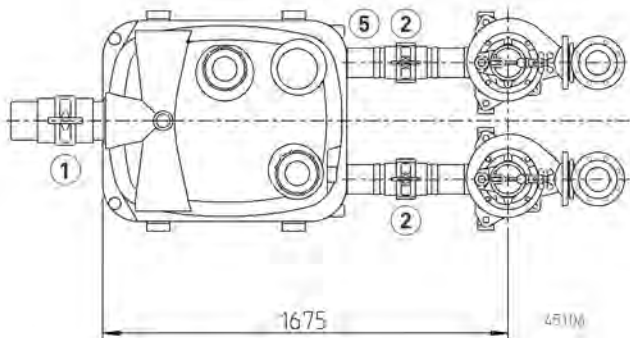
Example of installation compli 1500



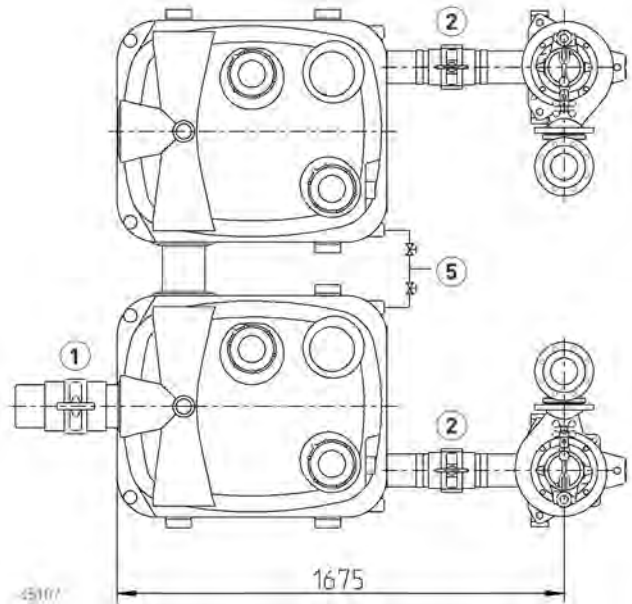
Example of installation compli 2500



Example of installation compli 1500



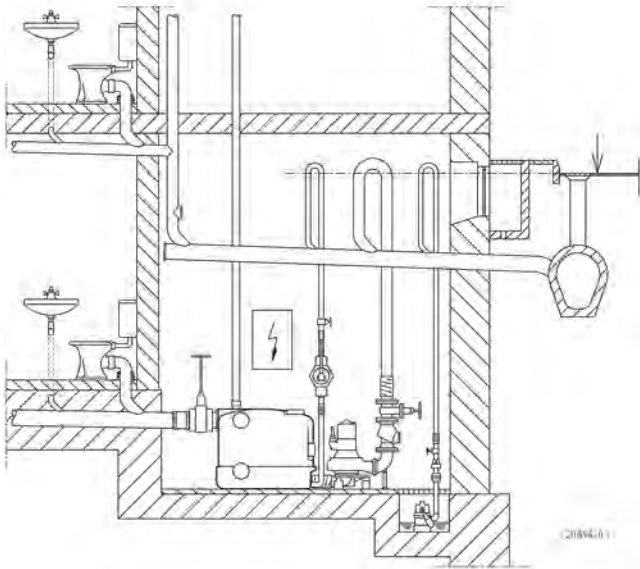
Example of installation compli 2500



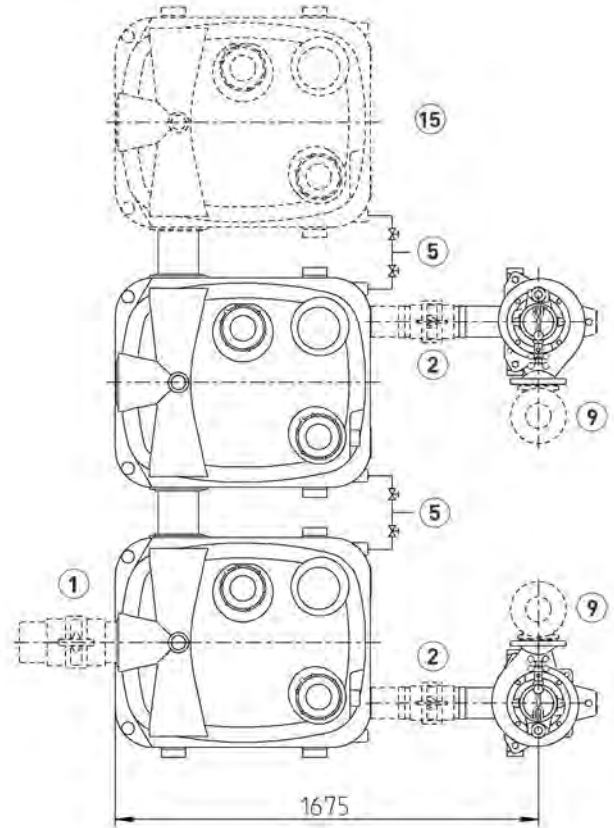
# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

### Example of installation






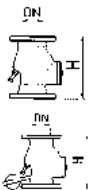
### Example of installation with additional tank



Sewage lifting units are to be used in building drainage systems in accordance with the construction and testing principles of EN 12050 for the transport of faeces and domestic wastewater (EN 12056, DIN 1986-3). They are to be installed in accordance with the regulations of EN 12056-4 with collection tanks inside buildings, 60 cm free-standing for

operation and maintenance. The pressure pipe has to be passed above the locally defined backflow level and a non-return valve tested according to EN 12050-4 must be installed. The ventilation pipe must be passed above the roof.


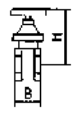



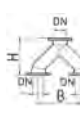



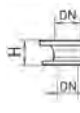

### MECHANICAL ACCESSORY

				Code No.
	<b>① Inlet gate valve PVC</b>	with two pipe sockets, DN 150, PN2.5	660x450 (HxW)	<b>JP28591</b>
	<b>② Stop valve</b>	with two pipe sockets, DN 100, PN1	300x295 (HxW)	<b>JP45173</b>
	<b>③ Sluice valve</b>	DN 100, PN 10, EN 1171	345x190 (HxB)	<b>JP00329</b>
	<b>④ Swing-type check valve</b>	R 101 EN 12050-4	DN 100, PN 4, flange PN 10, EN 558, 300 (H)	<b>JP00325</b>
		R 100 G EN 12050-4	DN 100, PN 4, flange PN 10, EN 558, with counter weight, 300(H)	<b>JP00324</b>




# COMPLI 1500/2500 HL

## SEWAGE LIFTING STATIONS

### MECHANICAL ACCESSORY

				Code No.
	<b>⑤ Hand diaphragm pump</b>	for emergency purposes (up to H geod 15 m)	640x1½" (HxD)	JP00255
	<b>⑥ Stop valve</b>	brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
	<b>⑦ Elastic connection</b>	1½" (DN 40), PN 4	120x50 (HxD)	JP44777
	<b>⑧ Hose band clamp</b>	1½"		JP44763
	<b>⑨ Flanged connection</b>	B 80 (similar Q-piece 90°), DN 80 PN10/PN6 C 100 (similar Q-piece 90°), DN 100 PN10/PN6	150x100 (HxB) 175x120 (HxB)	JP00578 JP00579
	<b>⑩ Flanged Y-pipe</b>	DN 100/100/100	355x480(HxB), PN 10	JP00203
	<b>⑪ Flanged spigot</b>	DN 100 PN 10, F-KS DN 100 PN 10, F-piece	153x110 (HxD) 100x114 (HxD)	JP08673 JP00688
	<b>⑫ Elastic connection</b>	DN 100, PN 4 DN 100, PN 4	200x110 (HxD) 200x114 (HxD)	JP44778 JP44774
	<b>⑬ Hose band clamp</b>	4" (DN 100)		JP44767
	<b>⑭ Reducing adapter</b>	DN 80/100 to PN 10, (similar FFR-piece), H=100		JP00498
	<b>⑮ Tank</b>	500 l		JP45945

### ELECTRICAL ACCESSORY

				Code No.
	<b>① Seal leak detector</b>	DKG		JP44900
	<b>② Rechargeable battery</b>	for mains independent alarm		JP44850
	<b>③ Smart Home</b>	FTJP radio transmitter		JP47209

# COMPLI 1500/2500 HL

SEWAGE LIFTING STATIONS

## COMPLI MC

### SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM

- Ready to connect pipe
- Submersible
- Clamp-type inlet flange
- Versatile connection facilities
- Small dimensioned pressure pipe
- High delivery head
- PE-tank
- MultiCut cutting system
- Smart Home capable



#### DESCRIPTION

The sewage lifting stations compli 100, compli 500 and compli 1000 with MultiCut cutting system are used especially for disposal in special objects, such as weekend cottages, houseboats, toilets in production halls or mobile sanitary facilities.

The MultiCut cutting system enables wastewater to be pumped through long and small-dimensioned pressure pipes to the nearest sewer whereby the pressure pipes can follow the terrain. This type of wastewater transport is more economical in many cases than disposal by gravity sewer. The external cutting system ensures safe operation.

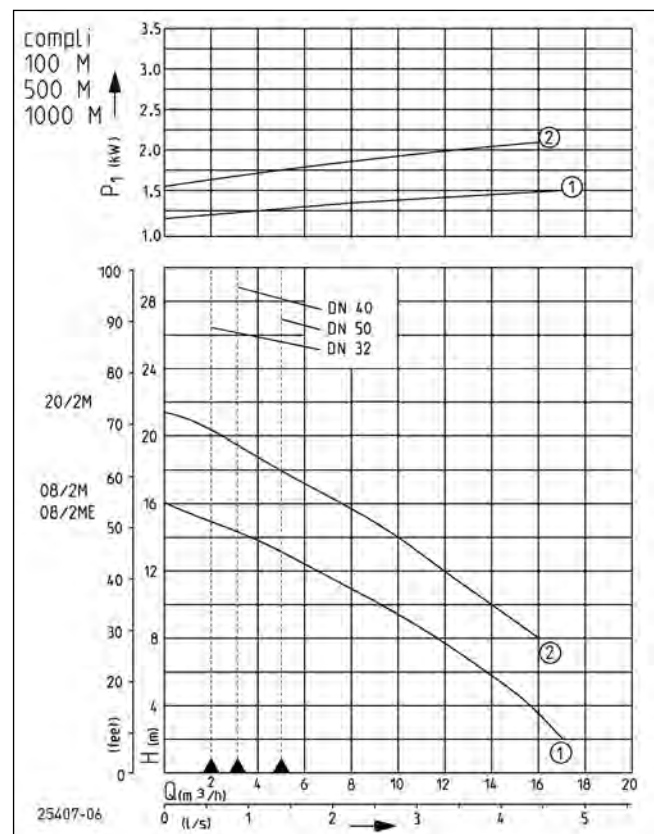
The submersible units are permitted for general use in areas subject to flooding. The control unit has to be fitted in a well ventilated flood-proof room. The PE tanks have freely accessible drains, a top-mounted cleaning opening and a clamp-type inlet flange for an easy installation. The inlet height is variable depending on the type and inlet pipe:

compli 100: DN 50: 150, 250 mm; DN 150/DN 50: 180, 275 a.315 mm

compli 500/1000: DN 100:180, 250 mm; DN 100: 180-340 mm.

For the connection of an inlet pipe DN 100 a PVC reducer DN 150/ DN 100 is added to the compli 500 and 1000. A vertical inlet neck is mounted on top of the tank for an inlet pipe DN 150 or DN 100. If the rear inlet is not used it must be closed with the sealing set DN 150 (accessory). The duplex units compli 1000 have two pumps, that operate alternately. In case of peak load operation both pumps operate at the same time.

#### PERFORMANCE



Type	Delivery head H [m]	2	4	6	8	10	12	14	16	18	20
compli 108/2+508/2+1008/2 ME/M	Flow rate Q [m <sup>3</sup> /h]	17	16	14	12	9	7	4			
compli 120/2+520/2+1020/2 M					16	14	12	10	8	5	3

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# COMPLI MC

## SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM

### SCOPE OF SUPPLY

Ready-to-connect tank system (capacity 38 l respectively 115 l) in keeping with German / European standard 12050 with height-adjustable DN 100 revolver clamping flange for inlet height 180/250 mm for compli 100; compli 500 and 1000 PVC-tube DN 150 (180, 275, 315 mm), DN 100 (180-340 mm), additional horizontal and vertical inlets, diam. 50 mm, adapter DN 150/DN 100, pre-mounted submersible pump, one elastic connection each with clamps for plastic pressure pipes and jointing tube for DN 70 ventilation pipe, mounted non-return valve, automatic float

switch circuit, control (IP 44 type of protection) with motor protection, contactor, transformer, mains-dependable optionally acknowledgeable alarm system and potential-free contact for collective failure messages, optical display of sense of direction (three-phase current), alarm and operation, button for test run. Single units with adjustable maintenance interval display and input for additional high water alarm

Cable between tank and control 4 m, cable between control and plug 1.5 m.

### MECHANICAL DATA

Pump	Vertical single-stage	Shaft	voll gegen Medium abgedeckt
Free passage	7 mm	Impeller	Vortex impeller, GFK
Bearing	Ball bearings, grease-lubricated	Motor housing	Grey cast iron
Oil chamber	Yes	Pump housing	Grey cast iron
Run dry protection	Yes	Submersible	Yes

### ELECTRICAL DATA

Wires	6G1,5	Insulation class	F
Type of enclosure	IP 68	Winding thermostat	Yes

### COMPLI MC

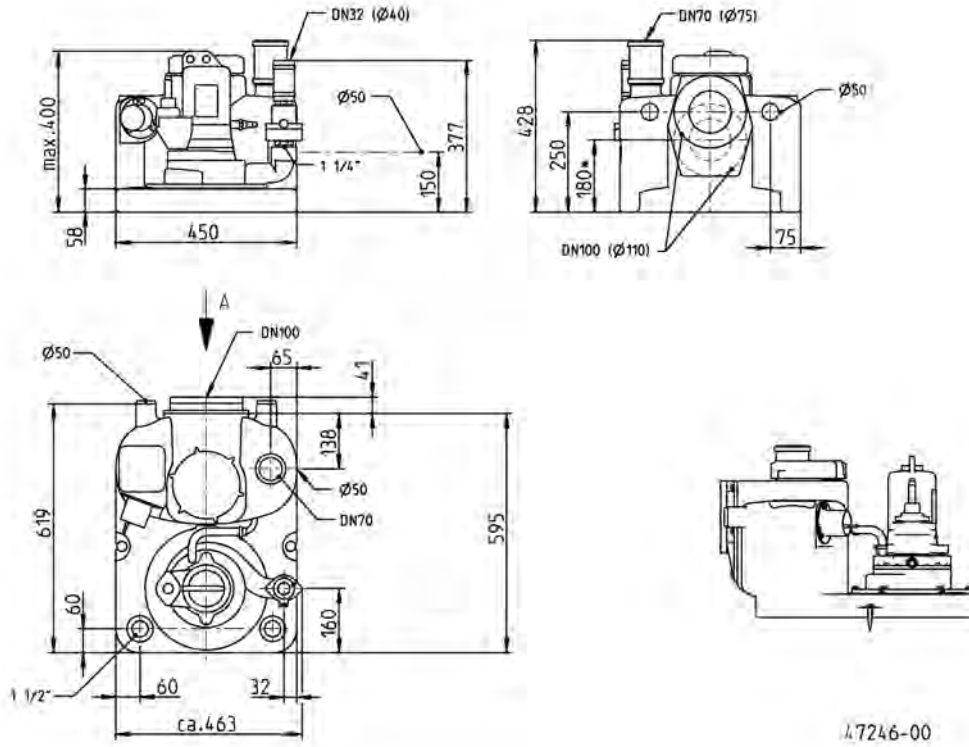
Type	Code No.	Voltage	Motor rating		Current	Plug	Pressure		Tank capacity	Weight
			P1	P2			pipe	outlet		
compli 108/2 ME	<b>JP50088</b>	1/N/PE~230 V	1.70 kW	1.14 kW	7.5 A	Safety	DN 32	DN 32	38 l	42 kg
compli 108/2 M	<b>JP50089</b>	3/N/PE~400 V	1.65 kW	1.24 kW	2.8 A	CEE	DN 32	DN 32	38 l	41 kg
compli 120/2 M	<b>JP50090</b>	3/N/PE~400 V	2.30 kW	1.85 kW	3.9 A	CEE	DN 32	DN 32	38 l	43 kg
compli 508/2 ME	<b>JP50096</b>	1/N/PE~230 V	1.70 kW	1.14 kW	7.5 A	Safety	DN 40	DN 40	117 l	50 kg
compli 508/2 M	<b>JP50097</b>	3/N/PE~400 V	1.65 kW	1.24 kW	2.8 A	CEE	DN 40	DN 40	117 l	49 kg
compli 520/2 M	<b>JP50098</b>	3/N/PE~400 V	2.30 kW	1.85 kW	3.9 A	CEE	DN 40	DN 40	117 l	51 kg
compli 1008/2 ME	<b>JP50112</b>	1/N/PE~230 V	1.70 kW	1.14 kW	7.5 A	Safety	DN 40	DN 40	117 l	77 kg
compli 1008/2 M	<b>JP50114</b>	3/N/PE~400 V	1.65 kW	1.24 kW	2.8 A	CEE	DN 40	DN 40	117 l	75 kg
compli 1020/2 M	<b>JP50115</b>	3/N/PE~400 V	2.30 kW	1.85 kW	3.9 A	CEE	DN 40	DN 40	117 l	79 kg



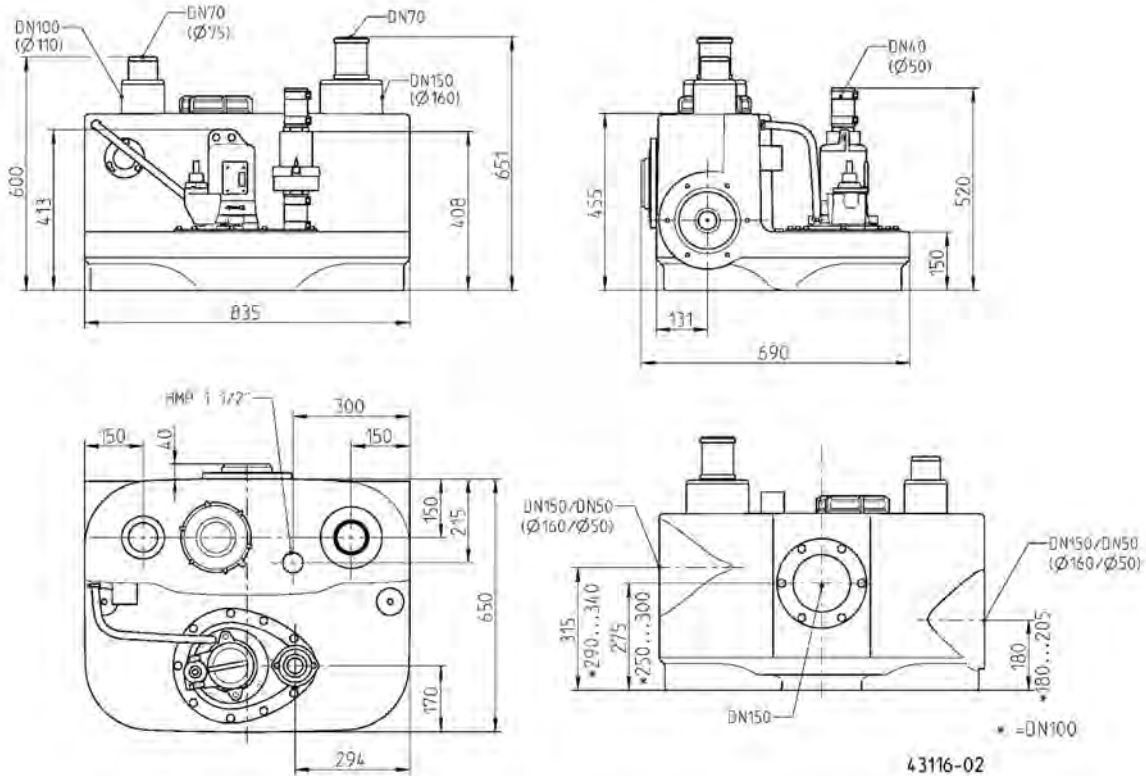
# COMPLI MC

## SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM

### Dimensions compli 100 M (mm)



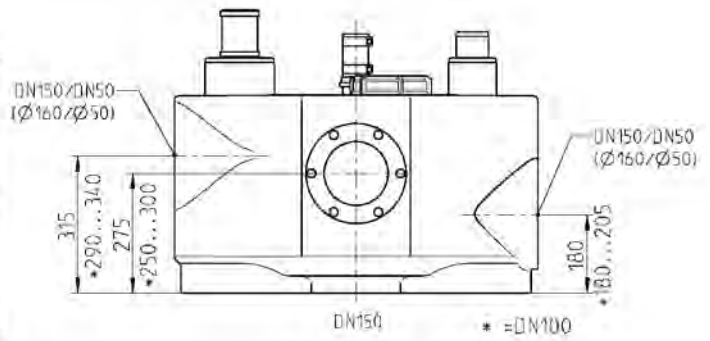
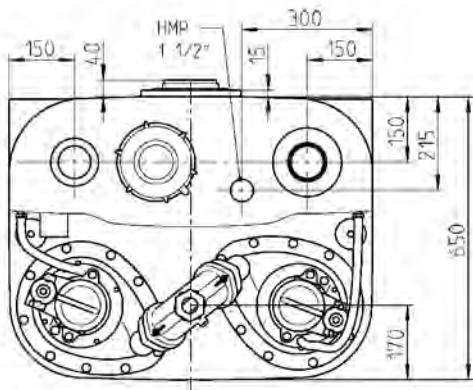
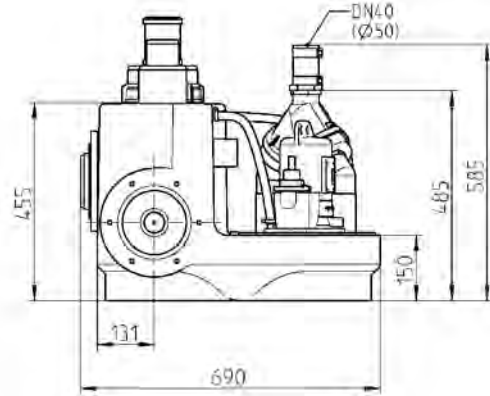
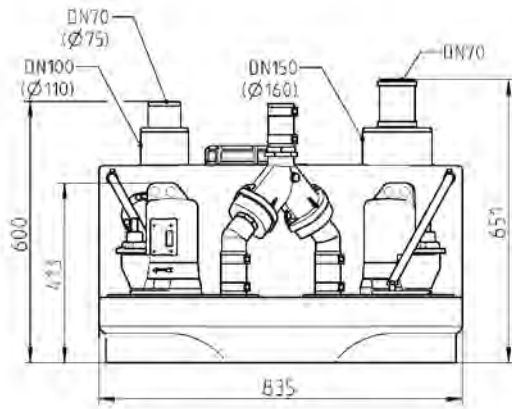
### Dimensions compli 500 M (mm)



# COMPLI MC

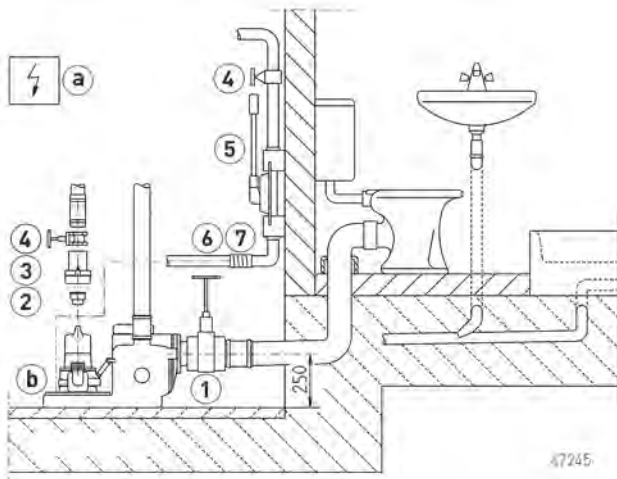
## SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM

### Dimensions compli 1000 M (mm)

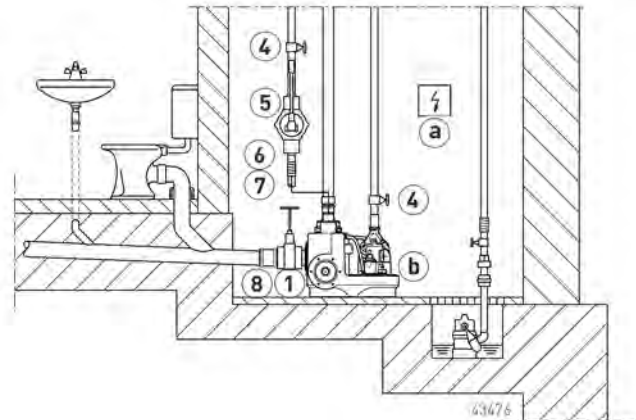


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### Example of installation compli 100



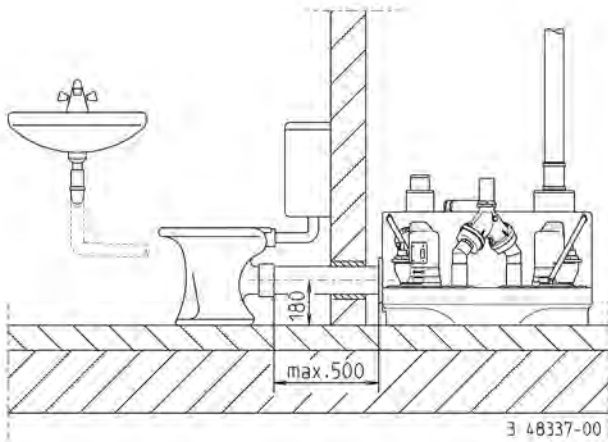
### Example of installation compli 500 / 1000



# COMPLI MC

## SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM


### Example of installation compli 1000



### MECHANICAL ACCESSORY

				Code No.
	① Inlet gate valve PVC	with two pipe sockets, DN 100, PN1	360x295 (HxW)	JP28297
		with two pipe sockets, DN 150, PN2.5	660x450 (HxW)	JP28591
	② Reducing socket	1 1/4" - 1 1/2"		JP44769
		1 1/4" - 2"		JP44772
	③ Swing-type check valve	R40 EN 12050-4 1 1/2" (DN 40), PN 4	150x120 (HxB)	JP00317
		R50 EN 12050-4 2" (DN 50), PN 4	150x120 (HxB)	JP00326
	Ball-type check valve	K50 EN 12050-4 2" (DN 50), PN 6	185x155 (HxB)	JP44782
	④ Stop valve	1 1/4" (DN 32), PN 16	110x60 (HxB)	JP44785
		brass, 1 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
	⑤ Hand diaphragm pump	for emergency purposes (up to H geod 15 m)	640x1 1/2" (HxD)	JP00255
	⑥ Elastic connection	1 1/2" (DN 40), PN 4	120x50 (HxD)	JP44777
		2" (DN 50), PN 4	150x63 (HxD)	JP44775
	⑦ Hose band clamp	1 1/2"		JP44763
		2"		JP44764
	⑧ Opening set	DN 150, required for lateral connection		JP43156



### ELECTRICAL ACCESSORY

			Code No.
	ⓐ Rechargeable battery	for mains independent alarm	JP44850

# COMPLI MC

SEWAGE LIFTING STATIONS WITH MULTICUT CUTTING SYSTEM

## ELECTRICAL ACCESSORY

			Code No.
	<b>b</b> Seal leak detector	DKG	JP44900
	<b>c</b> Smart Home	FTJP radio transmitter	JP47209

## OVERVIEW

### SEWAGE PUMPS

MULTICUT CUTTING SYSTEM	Type	Page
For backflow protection of detached houses	<b>MultiCut 08</b>	<b>209</b>
For pressure drainage systems	<b>MultiCut 20-76</b>	<b>215</b>
As tandem unit	<b>MultiCut Tan</b>	<b>221</b>
MULTISTREAM SINGLE CHANNEL IMPELLER	Type	Page
For wastewater and sewage containing fibres and solids	<b>DN 65</b>	<b>225</b>
	<b>DN 80</b>	
	<b>DN 100</b>	
	<b>DN 150</b>	
	<b>DN 200</b>	
MULTIFREE VORTEX IMPELLER	Type	Page
For wastewater and sewage containing fibres and solids with long-fibre additions prone to matting	<b>DN 65</b>	<b>239</b>
	<b>DN 80</b>	
	<b>DN 100</b>	

# OVERVIEW

## SEWAGE PUMPS - NOMENCLATURE

### Example MultiCut


MultiCut 25 /2 M E

① ② ③ ④ ⑤

### Example MultiStream/MultiFree

MultiFree 55 /4 CW2, Ex

① ② ③ ④ ⑥

<b>① Type</b>	<b>Description</b>  Multicut MultiStream MultiFree			
<b>② Motor rating</b>	<b>Description</b>  08 10 15 20 25 35 36 55 75 76 100 150 200 230 300	<b>Performance P1</b>  ~ 0,8 kW ~ 1,0 kW ~ 1,5 kW ~ 2,4 kW ~ 2,6 kW ~ 3,5 kW ~ 3,6 kW ~ 5,5 kW ~ 7,5 kW ~ 7,6 kW ~ 10,0 kW ~ 15,0 kW ~ 20,0 kW ~ 23,0 kW ~ 30,0 kW		
<b>③ Number of poles</b>	<b>Description</b>  2 4	<b>RPM</b>  2900 min <sup>-1</sup> 1450 min <sup>-1</sup>		
<b>④ Impeller + Construction</b>	<b>Description</b>  M A1 / A2 B1 / B2 / B3 / B4 / B5 B6 C1 / C5 / C6 C2 / C3 / C4 C7 AW1 / AW2 BW1 / BW2 CW1 / CW2 / CW3	<b>Impeller</b>  Multicut cutting system Single channel impeller Single channel impeller Single channel impeller Single channel impeller Single channel impeller Single channel impeller Single channel impeller Vortex impeller Vortex impeller Vortex impeller	<b>Free passage</b>  7 mm 40 mm 70 mm 70 mm 100 mm 100 mm 100 mm 100 mm 65 mm 80 mm 100 mm	<b>Discharge branch</b>  DN 32 DN 65 DN 80 DN 100 DN 100 DN 150 DN 200 DN 65 DN 80 DN 100
<b>⑤ Type of current</b>	E ES	1-phase 1-phase with built-in level control		
<b>⑥ Construction</b>	Ex	with ex-proof		

# OVERVIEW

## SEWAGE PUMPS MULTICUT - ACCESSORY

### ACCESSORY

Type	Code no.	08/2 M	08/2 M EX	08/2 ME	08/2 MS	08/2 MES	20/2 M PLUS	25/2 ME	35/2 M	36/2 M	45/2 M	75/2 M	76/2 M	35/2 M TAN	36/2 M TAN	45/2 M TAN
CHAIN CERTIFIED 2.5M 320 KG	JP45901	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN CERTIFIED 5.0M 320 KG	JP45902	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN CERTIFIED 7.5M 320 KG	JP47365	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SHACKLE CERTIFIED 500 KG	JP45904	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WEBBING WITH SHACKLE	JP45168	•		•	•	•										
PUMP HANGING	JP45925		•				•	•	•	•	•	•				
GUIDE RAIL SYSTEM GR 35	JP14094		•				•	•	•	•	•	•	•	•	•	•
GUIDE RAIL SYSTEM GR 35 -08	JP29953	•		•	•	•										
GUIDE RAIL 1", 1500 MM	JP48937	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 20000 MM	JP48938	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 2500 MM	JP48939	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GUIDE RAIL 1", 3000 MM	JP48940	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SHIFT OF CENTRE OF GRAVITY GR35	JP44757											•	•			
SWING-TYPE CHECK VALVE R 40	JP00317	•	•	•	•	•	•	•	•	•	•					
SWING-TYPE CHECK VALVE R 50	JP00326	•	•	•	•	•	•	•	•	•	•					
BALL CHECK VALVE K 50	JP44782	•	•	•	•	•	•	•	•	•	•	•	•			
ELBOW BALL CHECK VALVE KE 40	JP44783	•	•	•	•	•	•	•	•	•	•	•	•			
DUPLEX SWING-TYPE CHECK VALVE	JP09155	•	•	•												
STOP VALVE DN 40 PN 16	JP44786	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
STOP VALVE DN 40 PN 16, Stainless st.	JP48403	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
STOP VALVE DN 50 PN 16	JP44787	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ELASTIC CONNECTION 1 1/2"	JP44777	•	•	•	•	•	•	•	•	•	•					
ELASTIC CONNECTION 2" (63)	JP44775	•	•	•	•	•	•	•	•	•	•					
HOSE BAND CLAMP 1 1/2"	JP44763	•	•	•	•	•	•	•	•	•	•					
HOSE BAND CLAMP 2"	JP44764	•	•	•	•	•	•	•	•	•	•					
BASES MC 20	JP44759	•	•	•			•									
BASES M	JP20980							•	•	•	•					
BASE M 220	JP22302											•	•			
RETAINING PLATE	JP23100	•	•	•			•	•	•	•	•	•	•			
REDUCING SOCKET 2 X 1 1/2	JP44776	•	•	•			•	•	•	•	•	•	•			
REDUCING SOCKET 1 1/2 X 1 1/4	JP44769	•	•	•	•	•	•	•	•	•	•	•	•			
REDUCING SOCKET 2 X 1 1/4	JP44772	•	•	•	•	•	•	•	•	•	•	•	•			
PIPE CONNECTION 1 1/4"	JP16870	•	•	•	•	•	•	•	•	•	•	•	•			
COUPLING CONNECTION C	JP14076	•	•	•	•	•	•	•	•	•	•	•	•			
HOSE CONNECTION M 42 MM	JP14077	•	•	•	•	•	•	•	•	•	•					
FLUSHING TUBE Type 0	JP45408		•				•									
FLUSHING TUBE Type I	JP28221							•	•	•	•			•	•	•
FLUSHING TUBE Type II	JP28222											•	•			
FLUSHING TUBE Type I M	JP40333	•		•	•	•										
ALARM UNIT AG3	JP44891				•	•										
ALARM UNIT AG10	JP44892				•	•										
<b>Single units</b>																
BASICLOGO AD 00 E	JP00289			•												
STATIC AIR LEVEL CONTROL	JP17101			•												
BASICLOGO AD 12 EXME, TLS	JP43163							•								
SOFT STARTING MODUL F.AD12 EXME	JP24138							•								

# OVERVIEW

## SEWAGE PUMPS MULTICUT - ACCESSORY

### ACCESSORY

Type	Code no.	08/2	08/2	08/2	08/2	08/2	20/2	25/2	35/2	36/2	45/2	75/2	76/2	35/2	36/2	45/2
		M	M EX	ME	MS	MES	M PLUS	ME	M	M	M	M	M	M	M TAN	M TAN
BASICLOGO AD 25 EXM, DRP	JP43159	•	•													
BASICLOGO AD 46 EXM, DRP	JP43160						•									
BASICLOGO AD 610 EXM, DRP	JP43161								•	•	•					
HIGHLOGO 1-25 LC	JP47984	•	•													
HIGHLOGO 1-46 LC	JP47985						•									
HIGHLOGO 1-610 LC	JP47986								•	•	•					
HIGHLOGO 1-00 E	JP47987			•												
<b>Duplex units</b>																
BASICLOGO BD 00 E	JP45735			•												
STATIC AIR LEVEL CONTROL	JP17101			•												
BASICLOGO BD 25 EXM, DRP	JP43165	•	•													
BASICLOGO BD 46 EXM, DRP	JP43166						•									
BASICLOGO BD 610 EXM, DRP	JP43167								•	•	•					
HIGHLOGO 2-25 LC	JP47993	•	•													
HIGHLOGO 2-46 LC	JP47994						•									
HIGHLOGO 2-610 LC	JP47995								•	•	•					
HIGHLOGO 2-00 E	JP47996			•												
PRESSURE SWITCH MODULE	JP26196			•												
RECHARGEABLE BATTERY 9 V	JP44850	•	•	•	•	•	•	•	•	•	•	•	•			
SEAL LEAK DETECTOR DKG	JP44900	•		•	•	•	•	•	•	•	•	•	•			
SEAL LEAK DETECTOR DKG EX	JP00249		•				•	•	•	•	•	•	•			
SMART HOME FTJP	JP47209	•	•	•	•	•	•	•	•	•	•	•	•			

Electrical accessories for the tandem units on request.

# OVERVIEW

## SEWAGE PUMPS MULTISTREAM/MULTIFREE - ACCESSORY

### ACCESSORY

Type	Code no.	MultiStream															MultiFree						
		A1	A2	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	AW1	AW2	BW1	BW2	CW1	CW2	CW3
CHAIN, CERTIFIED 2.5M 320 KG	JP45901	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 5M 320KG	JP45902	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHAIN, CERTIFIED 7.5M, 320KG	JP47365	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SHACKLE CERTIFIED	JP45904	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PUMP HANGING	JP45925	•	•	•	•	•	•	•	•				•			•	•	•	•	•	•	•	•
GUIDE RAIL SYSTEM GR 65	JP00494	•	•													•	•						
GUIDE RAIL SYSTEM GR 80	JP00495			•	•	•	•	•									•	•					
GUIDE RAIL SYSTEM GR 100	JP00496								•											•			
GUIDE RAIL SYSTEM GR 101	JP21037							•					•	•							•	•	
GUIDE RAIL SYSTEM GR 151	JP00693									•	•	•										•	•
GUIDE RAIL SYSTEM GR 200S	JP42275															•							
GUIDE RAIL 1", 1500 MM	JP48937	•	•	•	•	•	•	•	•				•	•		•	•	•	•	•	•	•	•



# OVERVIEW

## SEWAGE PUMPS MULTISTREAM/MULTIFREE - ACCESSORY

### ACCESSORY

Type	Code no.	MultiStream															MultiFree						
		A1	A2	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	AW1	AW2	BW1	BW2	CW1	CW2	CW3
GUIDE RAIL 1", 20000 MM	JP48938	•	•	•	•	•	•	•	•	•					•	•		•	•	•	•	•	•
GUIDE RAIL 1", 2500 MM	JP48939	•	•	•	•	•	•	•	•	•					•	•		•	•	•	•	•	•
GUIDE RAIL 1", 3000 MM	JP48940	•	•	•	•	•	•	•	•	•					•	•		•	•	•	•	•	•
GUIDE RAIL 1 1/2", 1500 MM	JP48968										•	•	•				•						
GUIDE RAIL 1 1/2", 2000 MM	JP48969										•	•	•				•						
GUIDE RAIL 1 1/2", 2500 MM	JP48970										•	•	•				•						
GUIDE RAIL 1 1/2", 3000 MM	JP48971										•	•	•				•						
SECURING LEVER	JP50179										•												
SWING-TYPE CHECK VALVE R 80	JP00706	•	•	•	•	•	•	•									•	•	•	•			
SWING-TYPE CHECK VALVE R 101	JP00325								•	•					•	•				•	•	•	
SWING-TYPE CHECK VALVE R 80 G	JP00707	•	•	•	•	•	•	•									•	•	•	•			
SWING-TYPE CHECK VALVE R 100 G	JP00324								•	•					•	•				•	•	•	
SWING-TYPE CHECK VALVE R 150 G	JP00345										•	•	•										
BALL-TYPE CHECK VALVE K 80	JP44781	•	•	•	•	•	•	•									•	•	•	•			
SLUICE VALVE DN 80	JP00639	•	•	•	•	•	•	•									•	•	•	•			
SLUICE VALVE DN100	JP00329								•	•					•	•				•	•	•	
SLUICE VALVE DN150	JP00328										•	•	•										
FLANGED SPIGOT DN 80	JP00686	•	•	•	•	•	•	•									•	•	•	•			
FLANGED SPIGOT DN 80/100	JP00687	•	•	•	•	•	•	•									•	•	•	•			
FLANGED SPIGOT DN 80/100	JP09821	•	•	•	•	•	•	•									•	•	•	•			
FLANGED SPIGOT DN 100	JP00688								•	•					•	•				•	•	•	
FLANGED SPIGOT DN 100 F-KS	JP08673								•	•					•	•				•	•	•	
ELASTIC CONNECTION 3" (90)	JP44768	•	•	•	•	•	•	•									•	•	•	•			
ELASTIC CONNECTION 4" (114)	JP44774								•	•					•	•				•	•	•	
ELASTIC CONNECTION 4" (110)	JP44778								•	•					•	•				•	•	•	
HOSE BAND CLAMP 3"	JP44766	•	•	•	•	•	•	•									•	•	•	•			
HOSE BAND CLAMP 4"	JP44767								•	•					•	•				•	•	•	
FLANGED Y-PIPE 80/100/80 A390	JP00448	•	•	•	•	•	•	•									•	•	•	•			
FLANGED Y-PIPE 80/100/80 A480	JP00202	•	•	•	•	•	•	•									•	•	•	•			
FLANGED Y-PIPE 100/100/100 A480	JP00203								•	•					•					•	•	•	
REDUCING ADAPTER DN80/100	JP00498	•	•	•	•	•	•	•									•	•	•	•			
PUMP BASE A 170	JP00681	•																					
PUMP BASE A 220	JP00682		•														•	•					
PUMP BASE B 170	JP00683			•																•			
PUMP BASE B 220	JP00684				•	•	•													•			
PUMP BASE C 220	JP11453																				•		
PUMP BASE C 275	JP00685							•	•	•					•				•				•
PUMP BASE C 325	JP00701										•											•	
PUMP BASE C 410	JP00702											•	•		•	•							
FLANGED CONNECTION A 80	JP00577	•	•														•	•					
FLANGED CONNECTION B 80	JP00578			•	•	•	•	•											•	•			
FLANGED CONNECTION C 100	JP00579								•	•					•	•				•	•	•	
FLUSHING TUBE Type I * 10/...45/...	JP28221	•	•	•	•	•	•	•	•	•							•	•	•	•	•	•	•
FLUSHING TUBE Type II * 55/...100/...	JP28222				•			•	•	•					•					•	•	•	
FLUSHING TUBE Type III * 150/...300/...	JP28223							•				•	•		•	•							
SEAL LEAK DETECTOR DKG	JP44900	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SEAL LEAK DETECTOR DKG EX	JP00249	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

\* AW1, AW2, BW1 and CW1 flushing effect from 4 m delivery head, CW2 flushing effect from 6 m delivery head and BW2, CW3 flushing effect from 10 m delivery head



## MULTICUT 08

### SEWAGE PUMPS



- Reliable solids transport due to improved cutting technology
- External adjustable cutting mechanism
- Controllable oil chamber
- Installed motor protection
- SiC mechanical seal
- Independent of sense of rotation
- Moisture-sealed cable inlet with plug-in cable connection
- Ex-version: Impeller and replaceable wear plate made from fibre-glass reinforced plastic

#### DESCRIPTION

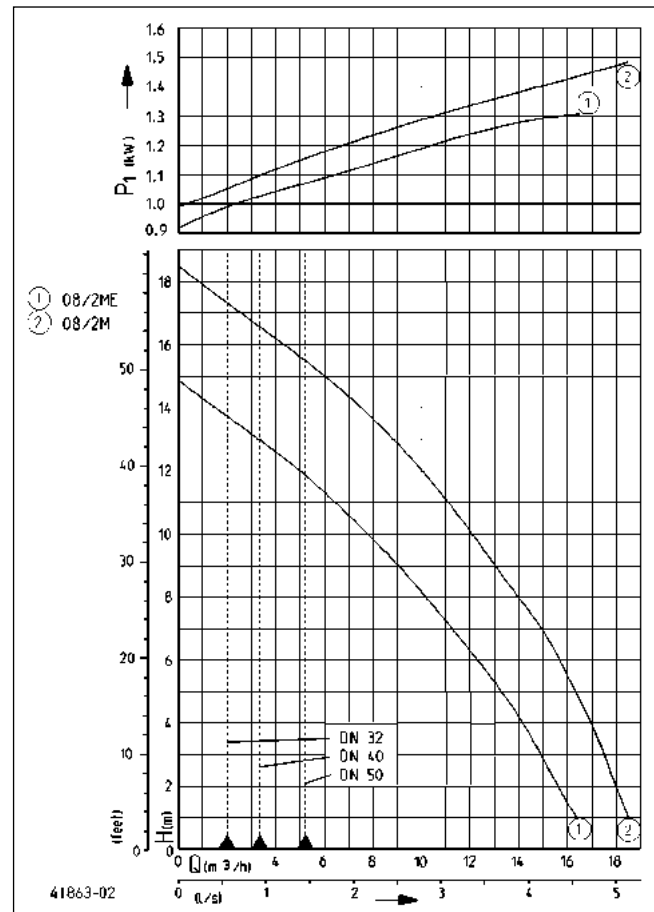
Centrifugal submersible sewage pumps fitted with the MultiCut cutting system are used as stationary appliances for backpressure protection of detached houses. They are suitable for pumping domestic wastewater with the usual additions (as specified in German standard DIN 1986, Part 3).

For pumping from ducts which are connected to the public sewer system, explosion-proof submersible pumps of have to be used. On account of the upstream cutting system, the pressurised line as from DN 32 - as from DN 80 minimum without cutting system - may be routed parallel to the terrain.

Operating conditions up to a temperature of the material to be transported of 40° celsius, submerged motor: continuous operation (S1), emerged motor: intermittent operation (S3) (e.g. 35% = 3.5 min. operation, 6.5 min. break).

The unique MultiCut cutting system ensures a maximum of operational safety at outstanding delivery characteristics. Fitted with a cutter plate made of hardened stainless steel and a three-bladed knife, it disintegrates coarse additions in the wastewater with more than 200,000 cutting processes per minute before they can get into the pump hydraulics. Solids which cannot be transported are rejected outside of the pump by the cutting rotor as the cutting system is located upstream from the pump hydraulics. Specifically arranged grooves on the cutter plate ensure additional safety as the cutting unit is permanently cleaned automatically during the delivery.

#### PERFORMANCE



Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
08/2 ME/MES	Flow rate $Q$ [m³/h]	16.5	15.5	15.0	14.0	13.0	12.0	11.0	10.0	9.0	7.5	6.5	5.0	3.5	1.5		
08/2 M/MS		18.5	18.0	17.5	17.0	16.5	15.5	15.0	14.0	13.0	12.0	11.0	10.0	9.0	7.5	6.0	4.5

We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# MULTICUT 08

## SEWAGE PUMPS

### SCOPE OF SUPPLY

Pump ready for connection according to EN 12050 with 10 m cable and CEE plug 16 A (type M + MS) or schuko plug (type ME + MES). Ex II 2 G Ex db IIB T4 Gb

For pumps with automatic switch control, the pump base are included in delivery. As Ex-pump with 10 m cable without plug. Complete motor protection only in connection with appropriate controls units (see accessories).

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Pump housing	Grey cast iron
Oil chamber	Yes	Submersible	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	DN 32

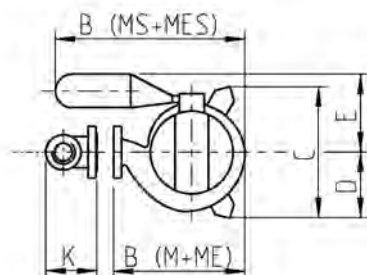
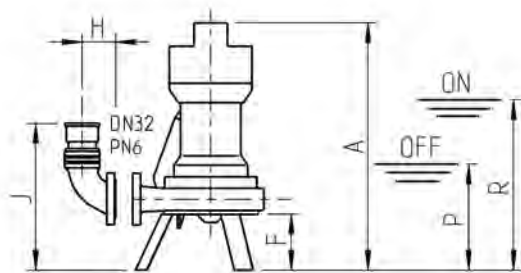
### ELECTRICAL DATA

Power line	10m H07RN-F	Winding thermostat	Yes
Type of enclosure	IP 68		

### MULTICUT 08

Type	Code No.	Voltage	Motor rating P1	Motor rating P2	Current	Wires	Motor protection	Plug	S3	Motor housing	Weight
<b>Without level control</b>											
08/2 ME	JP50342	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	In motor	Safety	10 %	Stainless steel	16.2 kg
08/2 M	JP50344	3/PE~400 V	1.65 kW	1.24 kW	2.8 A	4G1,0	In motor	CEE-16A	10 %	Stainless steel	16.5 kg
08/2 M, Ex	JP50346	3/PE~400 V	1.65 kW	1.24 kW	2.8 A	6G1,5	With control unit	Without	35 %	Grey cast iron	28.0 kg
<b>With built-in level control</b>											
08/2 MES	JP50343	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	In motor	Safety	10 %	Stainless steel	16.6 kg
08/2 MS	JP50345	3/PE~400 V	1.65 kW	1.24 kW	2.8 A	4G1,0	In motor	CEE-16A	10 %	Stainless steel	17.2 kg

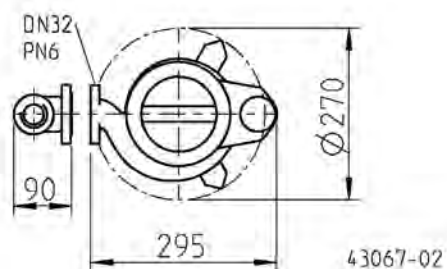
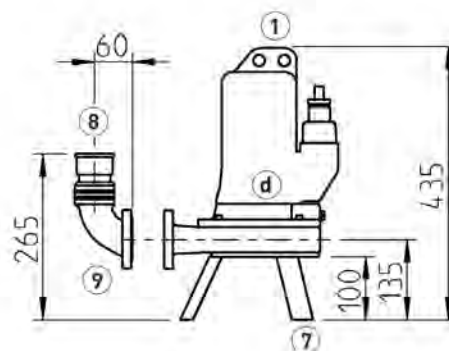
### Dimensions 08/2 M (mm)



25981-09

Typ	A	B	C	D	E	F	G	H	J	K	P	R
08/2M +ME	445	235	230	-	-	100	128	60	265	90	-	-
08/2MS+MES	445	340	-	115	140	100	128	60	265	90	190	305

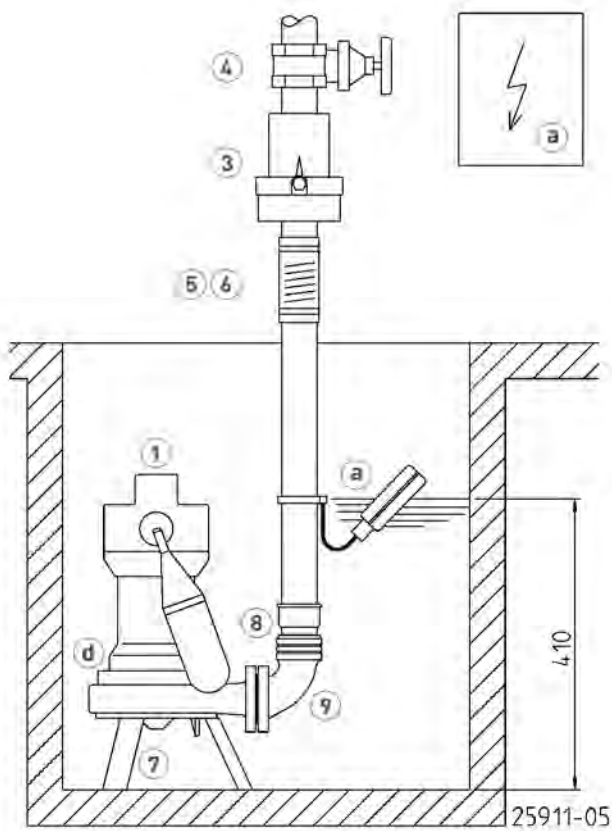
### Dimensions 08/2 M, EX (mm)



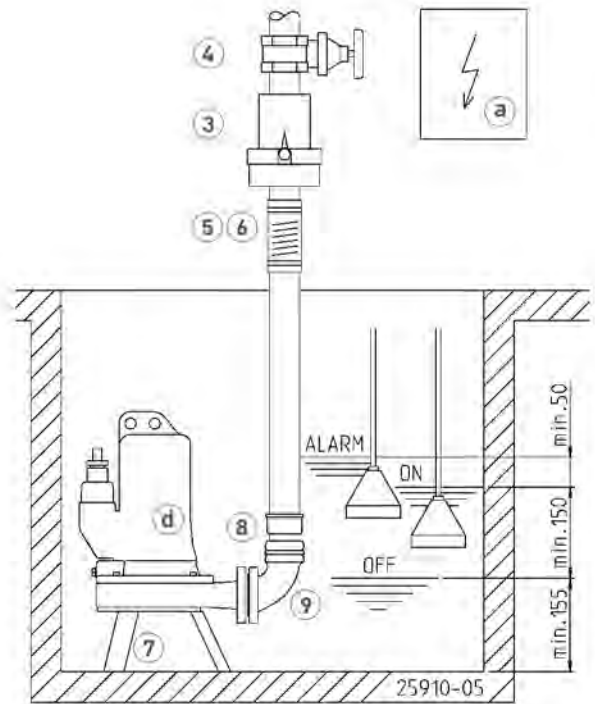
# MULTICUT 08

## SEWAGE PUMPS

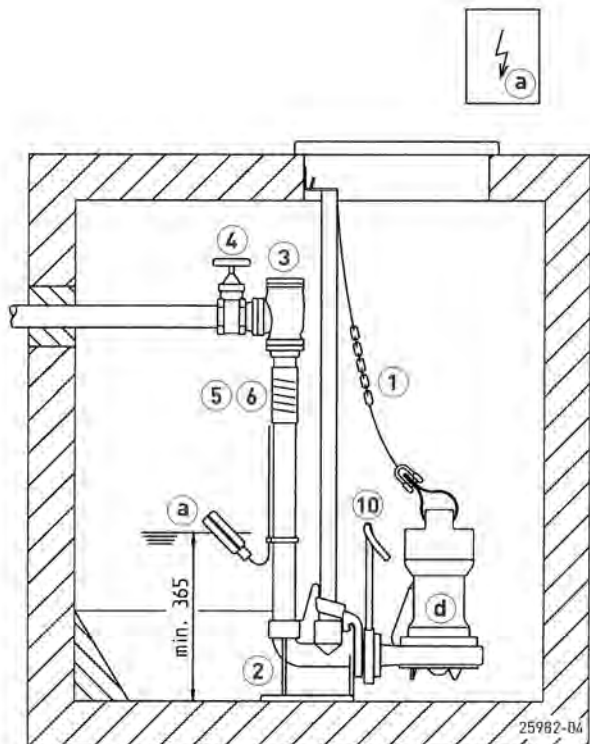
Example of pump base installation



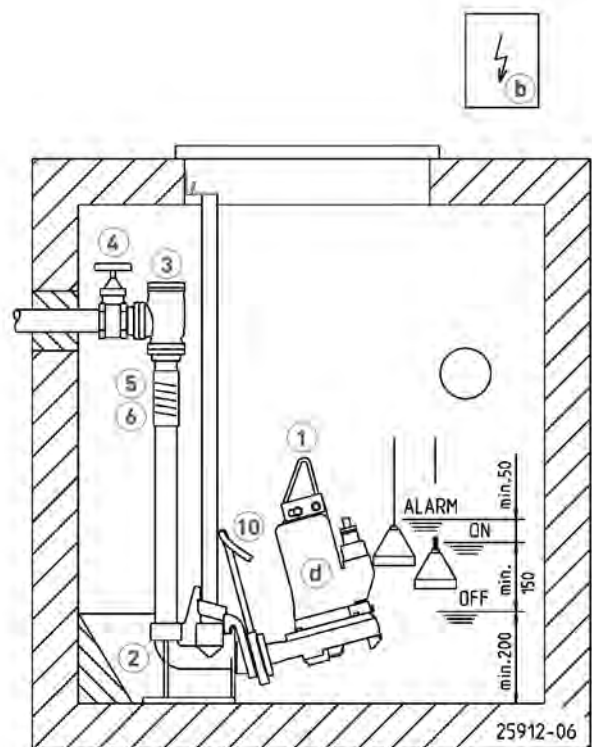
Example of pump base installation with ex-proof



Example of guide rail installation



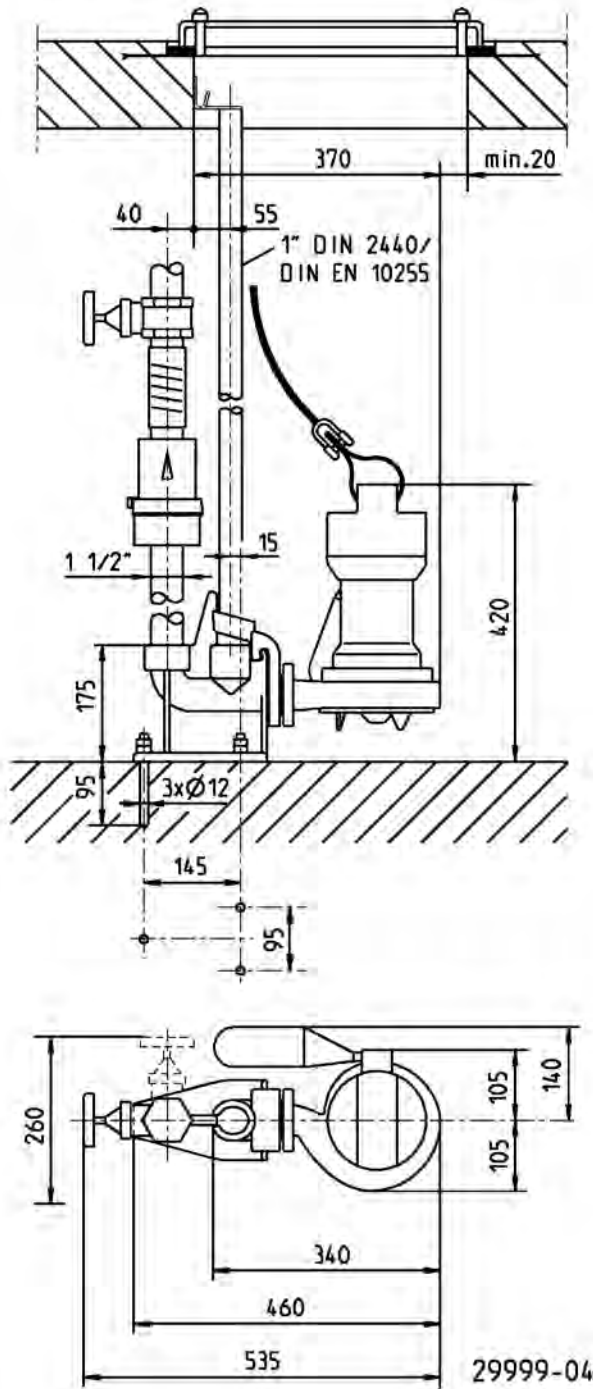
Example of guide rail installation with ex-proof



# MULTICUT 08

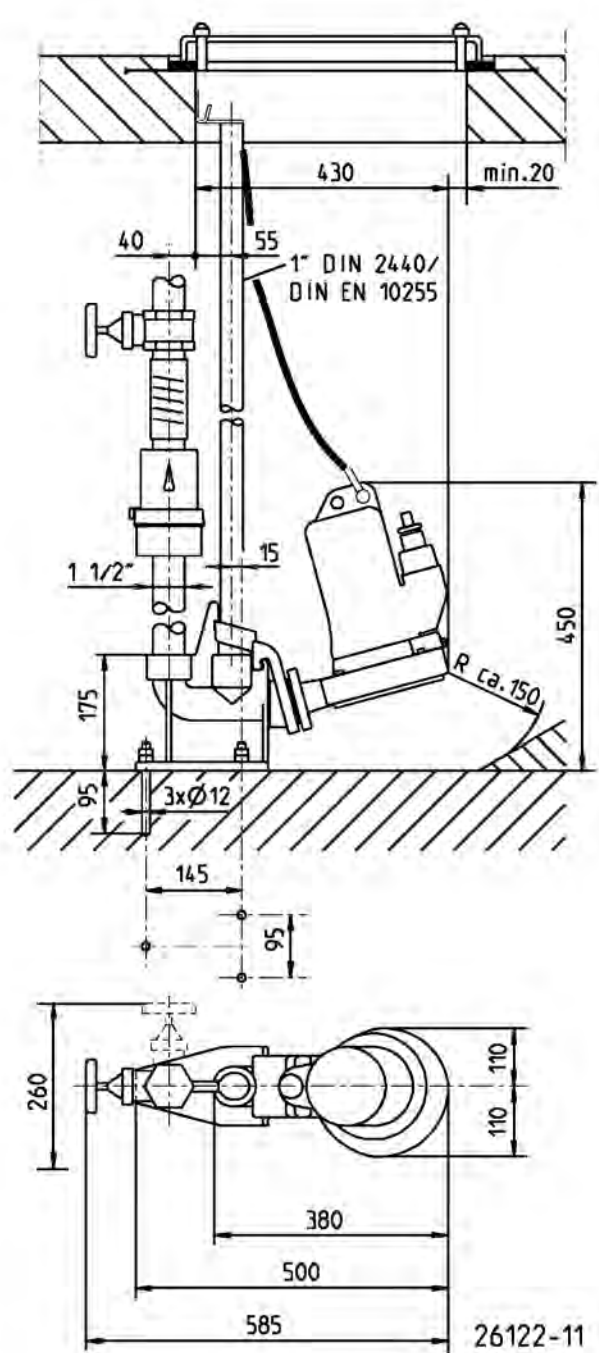
SEWAGE PUMPS

Example of guide rail installation



Single unit - min. sump (cm)  
 without GR: 40x40  
 with GR and swing-type check valve: 40x65  
 with GR and ball-type check valve: 40x65

Example of guide rail installation with ex-proof

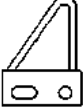

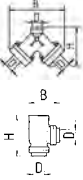







Duplex unit - min. sump (cm)  
 without GR and swing-type check valve, check valve: 60x60  
 without GR and elbow-ball check valve: 60x80  
 with GR and duplex swing-type check valve: 60x60  
 with GR and duplex swing-type check valve or -valve: 65x85

# MULTICUT 08

## SEWAGE PUMPS





### MECHANICAL ACCESSORY

			Code No.	
	<b>① Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901	
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902	
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP47365	
		Shackle, certified, 630 kg, stainless steel	JP45904	
		Pump hanging (08 Ex - 100...)	JP45925	
		<b>Webbing</b>	with shackle	JP45168
	<b>② Guide rail system</b>	GR 35	1 1/2" female thread for MultiCut pumps	JP14094
		GR 35	1 1/2" female thread for MultiCut 08 without Ex-proof	JP29953
		Guide rail 1"	1500 mm	JP48937
		Guide rail 1"	2000 mm	JP48938
	Guide rail 1"	2500 mm	JP48939	
	Guide rail 1"	3000 mm	JP48940	
	<b>③ Swing-type check valve</b>			
	R40 EN 12050-4	1/2" (DN 40), PN 4	150x120 (HxB)	JP00317
	DR 40 EN 12050-4	1/2" (DN 40), PN 4	200x280 (HxB)	JP09155
	R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>			
	KE40 EN 12050-4	1/2" (DN 40), PN 6	170x125 (HxB)	JP47974
	K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
	<b>④ Stop valve</b>	brass, 1/2" (DN 40), PN 16	125x60 (HxB)	JP44786
		stainless steel, 1/2" (DN 40), PN 16	125x80 (HxB)	JP48403
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
	<b>⑤ Elastic connection</b>	1/2" (DN 40), PN 4	120x50 (HxD)	JP44777
		2" (DN 50), PN 4	150x63 (HxD)	JP44775
	<b>⑥ Hose band clamp</b>	1/2"	JP44763	
		2"	JP44764	
	<b>⑦ Bases</b>	(for 08/2 MS and MES in scope of supply)	JP44759	
	<b>Retaining plate</b>	in connection with startic-air level control	JP23100	
	<b>⑧ Reducing socket</b>	1/4"-1/2"	JP44769	
		1/4"-2"	JP44772	
		1 1/2"-2" for guide rail system GR 35	JP44776	
	<b>⑨ Pipe connection</b>	1 1/4" (female thread)	JP16870	
	<b>⑩ Flushing tube</b>	Type I-M stainless steel with connection flange (not PKS-B 800)	JP40333	
		Type 0	08 Ex, 20/2	JP45408

# MULTICUT 08

## SEWAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>a Alarm unit</b>		
	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
	AG10	subm. ball contact switch, mains dependent, potential-free contact, 9.5 m cable	JP44892
	<b>b Control for single units</b>		
	Control unit AD 00 E	230 V	JP00289
	Control unit HIGHLOGO 1-00 E	230 V	JP47987
	+ startic air level control		JP17101
	Control unit AD 25 ExM, TLS	400 V	JP43159
	Control unit HIGHLOGO 1-25 LC	400 V	JP47984
	<b>Control for duplex units</b>		
Control unit BD 00 E	230 V, for pumps U3-U6, US 62-105, UV3, UV 300, 08/2 ME	JP45735	
Control unit HIGHLOGO 2-00 E	230 V	JP47996	
+ startic air level control		JP17101	
Control unit BD 25 ExM, TLS	400 V	JP43165	
Control unit HIGHLOGO 2-25 LC	400 V	JP47993	
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Seal leak detector</b>	DKG	JP44900
		DKG Ex for explosion-proof pumps	JP00249
	<b>Smart Home</b>	FTJP radio transmitter	JP47209



## MULTICUT SEWAGE PUMPS

- Reliable solids transport due to improved cutting technology
- External adjustable cutting mechanism
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Moisture-sealed cable inlet with plug-in cable connection
- Installed motor protection



### DESCRIPTION

Centrifugal submersible sewage pumps fitted with the MultiCut cutting system are used as stationary appliances in pressurised drainage systems for discharge in sparsely populated areas or of detached houses. They are suitable for pumping domestic wastewater with the usual additions (as specified in German standard DIN 1986, Part 3).

For pumping from ducts which are connected to the public sewer system, explosion-proof submersible pumps of the UFK series have to be used. On account of the upstream cutting system, the pressurised line as from DN 32 - as from DN 80 minimum without cutting system - may be routed parallel to the terrain.

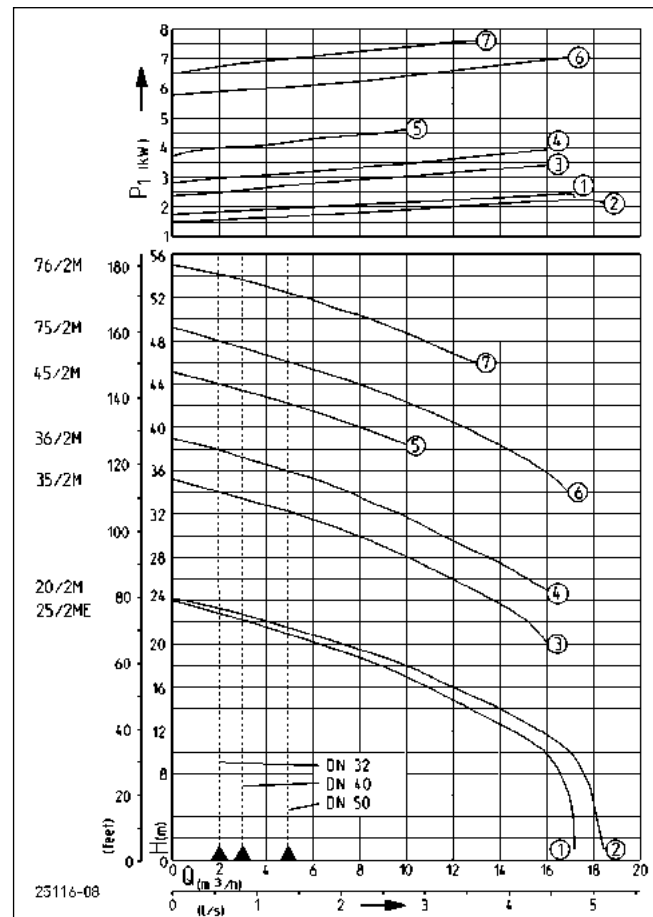
Operating conditions up to a temperature of the material to be transported of 40° Celsius

Submerged motor: Continuous operation (S1)

Emerged motor: Intermittent operation (S3) (e.g. 20% = 2 min. operation, 8 min. break)

The unique MultiCut cutting system ensures a maximum of operational safety at outstanding delivery characteristics. Fitted with a cutter plate made of hardened stainless steel and a three-bladed knife, it disintegrates coarse additions in the wastewater with more than 200,000 cutting processes per minute before they can get into the pump hydraulics. Solids which cannot be transported are rejected outside of the pump by the cutting rotor as the cutting system is located upstream from the pump hydraulics. Specifically arranged grooves on the cutter plate ensure additional safety as the cutting unit is permanently cleaned automatically during the delivery.

### PERFORMANCE



Type	Delivery head H [m]	6	9	12	15	18	21	25	28	32	34	36	38	40	44	46	48	50	52	54
20/2 M plus	Flow rate Q [m³/h]	18	17	16	13	10	6													
25/2 ME		17	16	15	12	9	5													
35/2 M							16	13	10	5										
36/2 M								16	14	10	7	5	2							
45/2 M													10	8	2					
75/2 M											17	16	15	13	8	5	2			
76/2 M																13	11	9	6	3

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# MULTICUT

## SEWAGE PUMPS

### SCOPE OF SUPPLY

Sewage pump with or without explosion-proof in keeping with German/European standard EN 12050 with 10 m cable, without plug, without base.

Ex II 2 G Ex db IIB T4 Gb

Special technical note for 25/2 ME:

As the rated output of the motor exceeds 1.4 kW, the permission of the local power supply organisation has to be obtained prior to ordering and commissioning. A soft starting device (starting current approx. 33A) can only be installed in the contro unit AD 12 ExME if a new order is placed in the factory.

### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, grey cast iron 20/2 M: GFK
Seal on motor side	Duplex shaft seal, from 75/2M: mechanical seal	Motor housing	Grey cast iron
Oil chamber	Yes	Pump housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Submersible	Yes
		Pressure outlet	DN 32

### ELECTRICAL DATA

Power line	10m H07RN-F	Winding thermostat	Yes
Type of enclosure	IP 68	Motor protection	Thermostat
Insulation class	F		

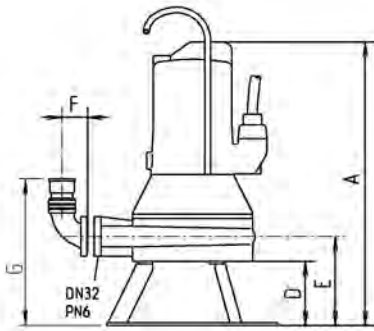
### MULTICUT

Type	Code No.	Voltage	Motor rating		Current	Wires	Fuse	S3	Weight
			P1	P2					
<b>Without ex-proof</b>									
20/2 M plus	<b>JP50350</b>	3/PE~400 V	2.40 kW	1.91 kW	4.0 A	6G1,5	10 A	25 %	29.0 kg
25/2 ME	<b>JP50356</b>	1/N/PE~230 V	2.70 kW	2.04 kW	12.0 A	6G1,5	16 A	35 %	38.0 kg
35/2 M	<b>JP50357</b>	3/PE~400 V	3.70 kW	3.04 kW	6.6 A	6G1,5	10 A	40 %	40.5 kg
36/2 M	<b>JP50363</b>	3/PE~400 V	4.20 kW	3.42 kW	7.3 A	6G1,5	10 A	30 %	40.5 kg
45/2 M	<b>JP50369</b>	3/PE~400 V	4.84 kW	3.93 kW	7.9 A	6G1,5	10 A	25 %	42.0 kg
75/2 M	<b>JP50375</b>	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg
76/2 M	<b>JP50377</b>	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg
<b>With ex-proof</b>									
20/2 M plus, Ex	<b>JP50352</b>	3/PE~400 V	2.40 kW	1.91 kW	4.0 A	6G1,5	10 A	25 %	29.0 kg
25/2 ME, Ex	<b>JP50355</b>	1/N/PE~230 V	2.70 kW	2.04 kW	12.0 A	6G1,5	16 A	35 %	38.0 kg
35/2 M, Ex	<b>JP50359</b>	3/PE~400 V	3.70 kW	3.04 kW	6.6 A	6G1,5	10 A	40 %	40.5 kg
36/2 M, Ex	<b>JP50365</b>	3/PE~400 V	4.20 kW	3.42 kW	7.3 A	6G1,5	10 A	30 %	40.5 kg
45/2 M, Ex	<b>JP50371</b>	3/PE~400 V	4.84 kW	3.93 kW	7.9 A	6G1,5	10 A	25 %	42.0 kg
75/2 M, Ex	<b>JP50376</b>	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg
76/2 M, Ex	<b>JP50378</b>	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg

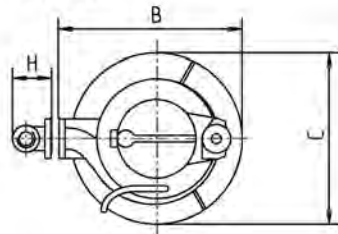
# MULTICUT

## SEWAGE PUMPS

### Dimensions pump base (mm)



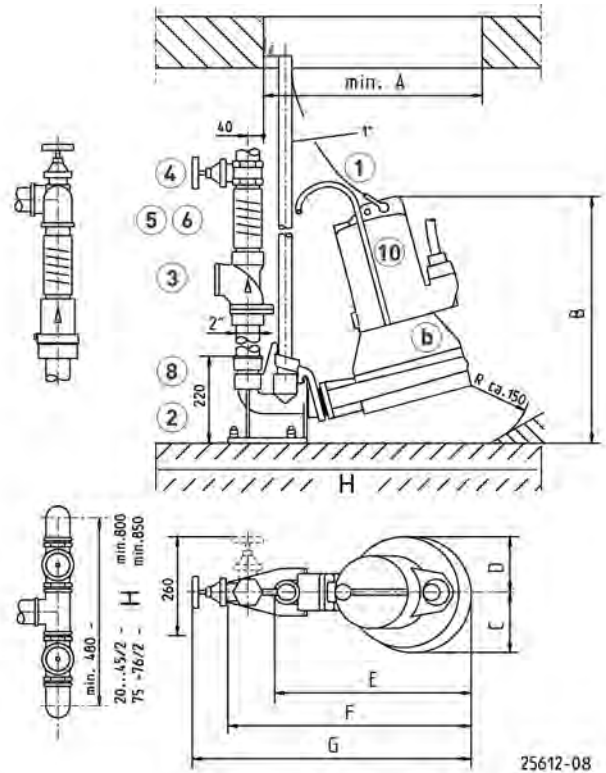
1 1/4"  
1 1/4"-1 1/2"



Typ	A	B	C	D	E	F	G	H
20/2M	440	290	230	100	140	60	230	90
25/2ME	520	330	250	140	180	60	270	90
35/2M+36/2M	520	330	250	140	180	60	270	90
45/2M	520	330	255	140	180	60	270	90
75/2M+76/2M	665	430	400	150	210	60	300	90

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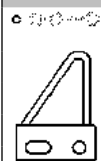
### Example of guide rail installation (mm)



25612-08

	A	B	C	D	E	F	G	H	min.
20/2M plus	430	450	110	110	380	500	585	400 x 700mm	
25/2ME-36/2M	470	490	125	125	420	540	635	400 x 700mm	
45/2M	470	490	130	125	420	540	635	400 x 700mm	
75/2M+76/2M	545	625	155	140	500	615	705	400 x 800mm	

### MECHANICAL ACCESSORY



#### ① Chain

certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)  
certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)  
certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)  
Shackle, certified, 630 kg, stainless steel  
Pump hanging (08 Ex - 100...)

Code No.

JP45901  
JP45902  
JP47365  
JP45904  
JP45925

#### ② Guide rail system

GR 35 1 1/2" female thread for MultiCut pumps  
Guide rail 1" 1500 mm  
Guide rail 1" 2000 mm  
Guide rail 1" 2500 mm  
Guide rail 1" 3000 mm

JP14094  
JP48937  
JP48938  
JP48939  
JP48940








**Dislocate of grafity center** MultiCut 75... and 76...

JP44757



# MULTICUT

## SEWAGE PUMPS

### MECHANICAL ACCESSORY

				Code No.
	<b>③ Swing-type check valve</b>			
	R40 EN 12050-4	1½" (DN 40), PN 4	150x120 (HxB)	JP00317
	R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>			
	KE40 EN 12050-4	1½" (DN 40), PN 6	170x125 (HxB)	JP47974
	K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
	<b>④ Stop valve</b>	brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
		stainless steel, 1½" (DN 40), PN 16	125x80 (HxB)	JP48403
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787
	<b>⑤ Elastic connection</b>	1½" (DN 40), PN 4	120x50 (HxD)	JP44777
		2" (DN 50), PN 4	150x63 (HxD)	JP44775
	<b>⑥ Hose band clamp</b>	1½"		JP44763
		2"		JP44764
	<b>⑦ Pump base</b>		20/2M	JP44759
		M	25/2ME - 45/2M	JP20980
		M 220	75/2M - 76/2M	JP22302
	<b>Retaining plate</b>	in connection with startic-air level control		JP23100
	<b>⑧ Reducing socket</b>	1¼"-1½"		JP44769
		1¼"-2"		JP44772
		1 1/2"-2" for guide rail system GR 35		JP44776
<b>⑨ Pipe connection</b>	1 1/4" (female thread)		JP16870	
	<b>⑩ Flushing tube</b>	Type 0	08 Ex, 20/2	JP45408
		Type I	10/... - 45/...	JP28221
		Type II	55/... - 100/...	JP28222



### ELECTRICAL ACCESSORY

				Code No.
	<b>a Control for single units</b>			
	Control unit AD 12 ExME, TLS	25/2 ME		JP43163
	soft starting device			JP24138
	Control unit AD 46 ExM, TLS	20/2 M		JP43160
	Control unit HIGHLOGO 1-46 LC			JP47985
	Control unit AD 610 ExM, TLS	35/2 M - 45/2 M		JP43161
	Control unit HIGHLOGO 1-610 LC			JP47986
	<b>Control for duplex units</b>			
	Control unit BD 46 ExM, TLS	20/2 M		JP43166
	Control unit HIGHLOGO 2-46 LC			JP47994
Control unit BD 610 ExM, TLS	35/2 M - 45/2 M		JP43167	
Control unit HIGHLOGO 2-610 LC			JP47995	
	<b>Rechargeable battery</b>	for mains independent alarm		JP44850

# MULTICUT

SEWAGE PUMPS

## ELECTRICAL ACCESSORY

			Code No.
	<b>b Seal leak detector</b>	DKG	JP44900
		DKG Ex for explosion-proof pumps	JP00249
	<b>Smart Home</b>	FTJP radio transmitter	JP47209

# MULTICUT

SEWAGE PUMPS

# MULTICUT TANDEM

## SEWAGE PUMPS



- Reliable solids transport due to improved cutting technology
- Large delivery head
- External adjustable cutting mechanism
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Moisture-sealed cable inlet with plug-in cable connection
- Installed motor protection

### DESCRIPTION

Centrifugal submersible sewage pumps fitted with the MultiCut cutting system are used as stationary appliances in pressurised drainage systems for discharge in sparsely populated areas or of detached houses. They are suitable for pumping domestic wastewater with the usual additions (as specified in German standard DIN 1986, Part 3).

In the MultiCut tandem systems (TAN), two MultiCut pumps are connected to one unit in order to achieve a higher head.

For pumping from ducts which are connected to the public sewer system, explosion-proof submersible pumps of the UFK series have to be used. On account of the upstream cutting system, the pressurised line as from DN 32 - as from DN 80 minimum without cutting system - may be routed parallel to the terrain.

Operating conditions up to a temperature of the material to be transported of 40° Celsius

Submerged motor:

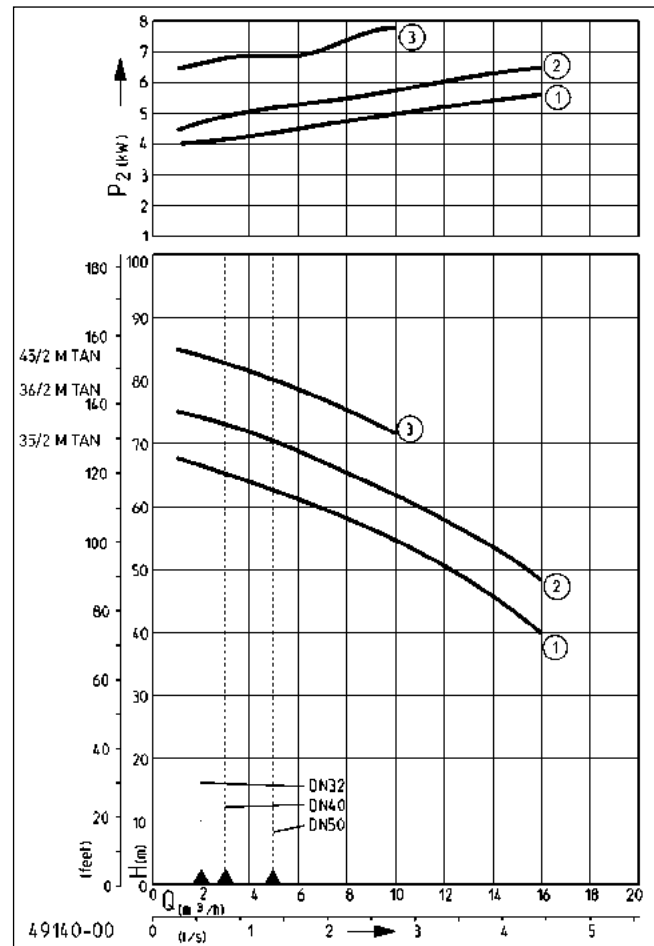
Continuous operation (S1)

Emerg motor:

Intermittent operation (S3) (e.g. 40% = 4 min. operation, 6 min. break)

The unique MultiCut cutting system ensures a maximum of operational safety at outstanding delivery characteristics. Fitted with a cutter plate made of hardened stainless steel and a three-bladed knife, it disintegrates coarse additions in the wastewater with more than 200,000 cutting processes per minute before they can get into the pump hydraulics. Solids which cannot be transported are rejected outside of the pump by the cutting rotor as the cutting system is located upstream from the pump hydraulics. Specifically arranged grooves on the cutter plate ensure additional safety as the cutting unit is permanently cleaned automatically during the delivery.

### PERFORMANCE



Type	Delivery head H [m]	40	44	48	52	56	60	64	68	72	76	80	84
35/2 M Tan	Flow rate Q [m³/h]	16.0	15.0	13.5	11.5	9.5	7.0	4.0	1.0				
36/2 M Tan				16.0	15.0	13.0	11.0	9.0	6.5	3.5			
45/2 M Tan										10.0	8.0	5.0	2.0

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.



# MULTICUT TANDEM

## SEWAGE PUMPS

### SCOPE OF SUPPLY

Sewage pumps with ex-proof in keeping with German/European standard EN 12050, 10 m cable, without plug.

Attention: Further mechanical and electrical accessory on request. All electrical data refer to a single pump!

Ex II 2 G Ex db IIB T4 Gb

### MECHANICAL DATA

Pump	vertical, double-stage	Run dry protection	Yes
Ex-proof	With ex-proof	Impeller	Vortex impeller, grey cast iron
Bearing	Ball bearings, grease-lubricated	Motor housing	Grey cast iron
Seal on motor side	Duplex rotary shaft seals	Pump housing	Grey cast iron
Oil chamber	Yes	Submersible	Yes
Seal on medium side	SiC mechanical seal	Pressure outlet	DN 32

### ELECTRICAL DATA

Voltage	3/PE~400 V	Insulation class	F
Power line	10m H07RN-F	Winding thermostat	Yes
Wires	6G1,5	Motor protection	Thermostat
Type of enclosure	IP 68	Fuse	10 A

### MULTICUT TANDEM

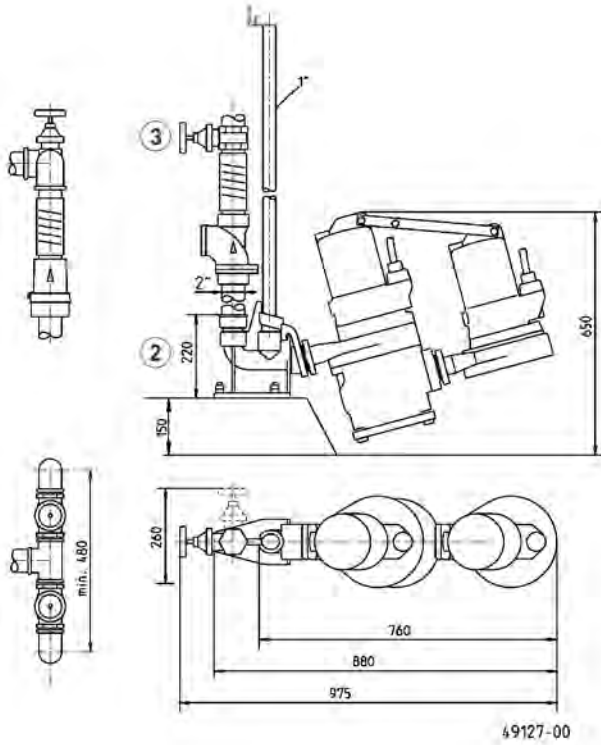
Type	Code No.	Motor rating		Current	S3	Weight
		P1	P2			
35/2 M Tan, EX	<b>JP50362</b>	3.70 kW	3.04 kW	6.6 A	40 %	94 kg
36/2 M Tan, EX	<b>JP50368</b>	4.20 kW	3.42 kW	7.3 A	30 %	94 kg
45/2 M Tan, EX	<b>JP50374</b>	4.84 kW	3.93 kW	7.9 A	25 %	97 kg



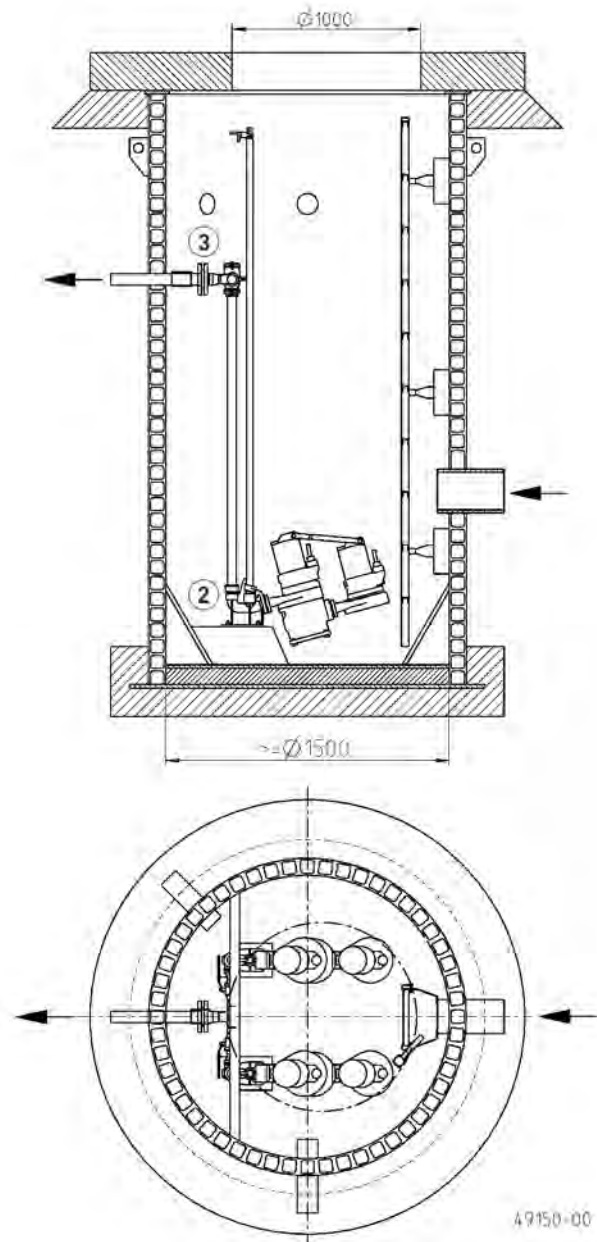
# MULTICUT TANDEM

SEWAGE PUMPS


Dimensions tandem system (mm)



Example of tandem system installation



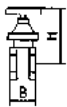
## MECHANICAL ACCESSORY

			Code No.	
	<b>① Chain</b> certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.) certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.) certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.) Shackle, certified, 630 kg, stainless steel		<b>JP45901</b> <b>JP45902</b> <b>JP47365</b> <b>JP45904</b>	
	<b>② Guide rail system</b> GR 35 Guide rail 1" Guide rail 1" Guide rail 1" Guide rail 1"	1 1/2" female thread for MultiCut pumps 1500 mm 2000 mm 2500 mm 3000 mm		<b>JP14094</b> <b>JP48937</b> <b>JP48938</b> <b>JP48939</b> <b>JP48940</b>


# MULTICUT TANDEM

## SEWAGE PUMPS

### MECHANICAL ACCESSORY

				Code No.
	③ Stop valve	brass, 1½" (DN 40), PN 16	125x60 (HxB)	JP44786
		stainless steel, 1½" (DN 40), PN 16	125x80 (HxB)	JP48403
		brass, 2" (DN 50), PN 16	140x70 (HxB)	JP44787

### ELECTRICAL ACCESSORY

				Code No.
	ⓐ Seal leak detector	DKG Ex for explosion-proof pumps		JP00249

# MULTISTREAM

## SEWAGE PUMPS

- Adjustable single-channel impeller
- Connection alternatively PN6 or PN10
- Safe to run dry
- Controllable oil chamber
- Plug-type cable connection (MultiStream 10...-100...)
- SiC mechanical seal independent of sense of rotation
- Moisture-sealed cable inlet
- Installed motor protection



### DESCRIPTION

The centrifugal submersible sewage pumps MultiStream are suitable for handling effluent or sewage in municipal and industrial pumping stations as well as in surface water drainage applications. The smaller types are also used very successfully as portable units to deal with emergency situations.

The submersible pumps are made in accordance to EN 12050 with 10 m cable and free lead ends, are available with or without explosion protection (Ex II 2 G Ex db IIB T4 Gb). The through shaft is fully encapsulated against the pumped media and with its short shaft end a long life span is ensured.

The adjustable axial gap of the MultiStream-pump makes it possible to re-optimize the efficiency in case of abrasion by adjusting only one single screw. This can be done very cost-effective when the maintenance is carried out and the pump keeps its optimum performance on a long-term basis.

MultiStream-pumps are recommended for:

effluent which contains fibrous matter / effluent which contains solids / mixed water / raw effluent / rainwater



### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Bearing	Ball bearings, grease-lubricated	Impeller	Channel impeller, grey cast iron
Seal on motor side	Duplex shaft seal, from 55/: mechanical seal		from 55/2... spheroidal graphite iron
Oil chamber	Yes	Motor housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Pump housing	Grey cast iron
		Submersible	Yes

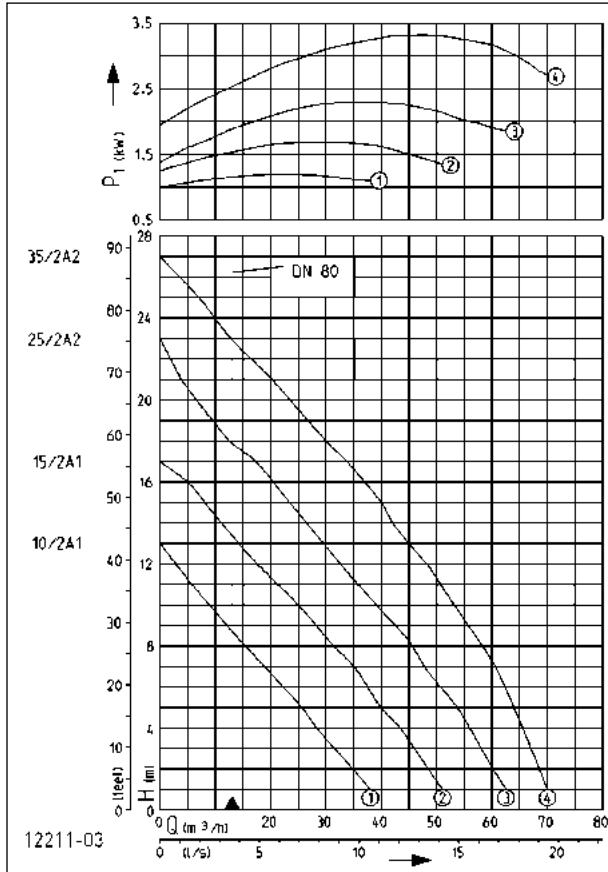
### ELECTRICAL DATA

Power line	10m H07RN-F	Type of enclosure	IP 68
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# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
10/2 A1	JP09615	AD 25	JP00310	BD 25
15/2 A1	JP09616	AD 25	JP00310	BD 25
25/2 A2	JP09617	AD 46	JP14353	BD 46
35/2 A2	JP09651	AD 610	JP14354	BD 610
10/2 A1, Ex	JP09628	AD 25 X	JP09683	BD 25 X
15/2 A1, Ex	JP09629	AD 25 X	JP09683	BD 25 X
25/2 A2, Ex	JP09630	AD 46 X	JP14355	BD 46 X
35/2 A2, Ex	JP09653	AD 610 X	JP14356	BD 610 X

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24
10/2 A1	Flow rate Q [m³/h]	38	35	32	29	26	22	19	15	12	9							
15/2 A1		50	48	46	43	40	37	35	32	28	25	18	11	5				
25/2 A2		62	60	58	56	54	51	48	46	42	39	33	27	20	13	7		
35/2 A2		70	69	67	66	64	63	61	58	56	53	48	43	37	30	24	16	10

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7 \text{ m/s}$  is marked in the Q-H-diagram (operative limit).

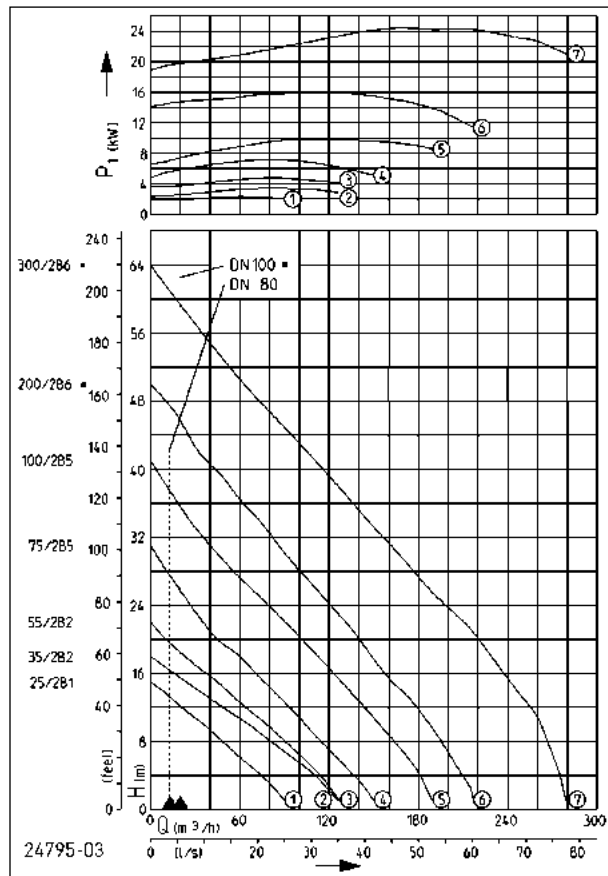
### MULTISTREAM DN 65, N = 2900 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
10/2 A1	3/PE~400 V	1.3 kW	1.10 kW	2.7 A	6G1,5	10 A	60 %	40 mm	DN 65	41 kg
15/2 A1	3/PE~400 V	1.8 kW	1.50 kW	3.3 A	6G1,5	10 A	50 %	40 mm	DN 65	42 kg
25/2 A2	3/PE~400 V	2.6 kW	2.10 kW	4.4 A	6G1,5	10 A	40 %	40 mm	DN 65	48 kg
35/2 A2	3/PE~400 V	3.7 kW	3.04 kW	6.6 A	6G1,5	10 A	40 %	40 mm	DN 65	52 kg

# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
25/2 B1	JP09618	AD 46	JP14353	BD 46
35/2 B2	JP09652	AD 610	JP14354	BD 610
55/2 B2	JP09663	AS 46	JP14406	BS 46
75/2 B5	JP00485	AS 610	JP14407	BS 610
100/2 B5	JP09740	AS 1016	JP14408	BS 1016
200/2 B6	JP00492	AS 1624	JP14409	BS 1624
300/2 B6	JP00471	AS 2440	JP14410	BS 2440
25/2 B1, Ex	JP09631	AD 46 X	JP14355	BD 46 X
35/2 B2, Ex	JP09654	AD 610 X	JP14356	BD 610 X
55/2 B2, Ex	JP09664	AS 46	JP14406	BS 46
75/2 B5, Ex	JP09665	AS 610	JP14407	BS 610
100/2 B5, Ex	JP09741	AS 1016	JP14408	BS 1016
200/2 B6, Ex	JP00472	AS 1624	JP14409	BS 1624
300/2 B6, Ex	JP00473	AS 2440	JP14410	BS 2440

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	3	6	9	12	15	18	21	24	27	30	33	36	40	43	46	50	53	56	60	
25/2 B1	Flow rate Q [m³/h]	91	80	62	43	21																
35/2 B2		126	117	97	73	49	23															
55/2 B2		127	118	103	85	65	44	24	6													
75/2 B5		150	142	126	110	93	77	59	42	27	15											
100/2 B5		190	184	173	159	144	129	113	97	78	63	46	32	18								
200/2 B6		217	215	204	191	177	162	149	136	120	104	91	77	62	43	28	19					
300/2 B6		280	277	270	263	254	242	229	216	199	183	167	152	136	113	100	84	63	49	34	17	

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0.7$  m/s is marked in the Q-H-diagram (operative limit).

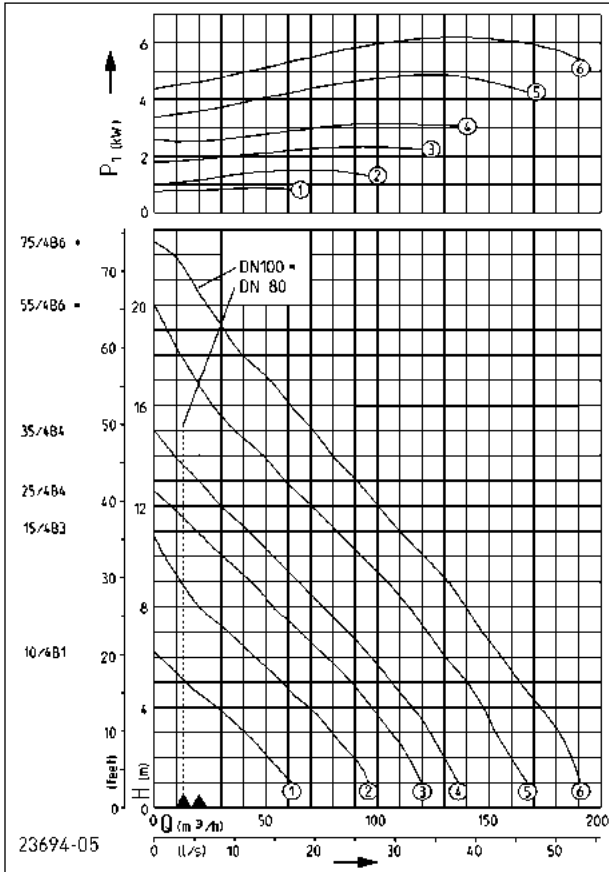
### MULTISTREAM DN 80 / 100, N = 2900 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
25/2 B1	3/PE~400 V	2.6 kW	2.10 kW	4.4 A	6G1,5	10 A	40 %	70 mm	DN 80	45 kg
35/2 B2	3/PE~400 V	3.7 kW	3.04 kW	6.6 A	6G1,5	10 A	40 %	70 mm	DN 80	55 kg
55/2 B2	3/PE~400/690 V	5.2 kW	4.45 kW	8.7 A/5.0 A	10G2,5	16 A	40 %	70 mm	DN 80	88 kg
75/2 B5	3/PE~400/690 V	7.7 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	70 mm	DN 80	98 kg
100/2 B5	3/PE~400/690 V	10.5 kW	9.20 kW	17.6 A/10.2 A	10G2,5	25 A	30 %	70 mm	DN 80	121 kg
200/2 B6	3/PE~400/690 V	17.3 kW	15.40 kW	28.8 A/16.7 A	10G2,5	35 A	45 %	70 mm	DN 100	212 kg
300/2 B6	3/PE~400/690 V	27.0 kW	24.45 kW	43.0 A/24.7 A	7G6+3x1	50 A	35 %	70 mm	DN 100	257 kg

# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
10/4 B1	JP09620	AD 25	JP00310	BD 25
15/4 B3	JP09622	AD 25	JP00310	BD 25
25/4 B4	JP09623	AD 46	JP14353	BD 46
35/4 B4	JP09647	AD 610	JP14354	BD 610
55/4 B6	JP00486	AS 610	JP14407	BS 610
75/4 B6	JP00489	AS 610	JP14407	BS 610
10/4 B1, Ex	JP09633	AD 25 X	JP09683	BD 25 X
15/4 B3, Ex	JP09635	AD 25 X	JP09683	BD 25 X
25/4 B4, Ex	JP09636	AD 46 X	JP14355	BD 46 X
35/4 B4, Ex	JP09649	AD 610 X	JP14356	BD 610 X
55/4 B6, Ex	JP09666	AS 610	JP14407	BS 610
75/4 B6, Ex	JP09667	AS 610	JP14407	BS 610

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	20
10/4 B1	Flow rate Q [m³/h]	60	51	40	28	14	3												
15/4 B3		98	89	79	69	57	45	33	20	12	5								
25/4 B4		120	114	106	97	87	77	65	53	43	31	19							
35/4 B4		132	125	119	112	104	95	85	74	64	53	43	30	10					
55/4 B6		167	160	154	147	140	132	123	114	104	93	82	72	49	39	28	19	12	
75/4 B6		191	188	181	173	163	157	149	141	131	122	113	104	82	73	62	52	41	24

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0.7$  m/s is marked in the Q-H-diagram (operative limit).

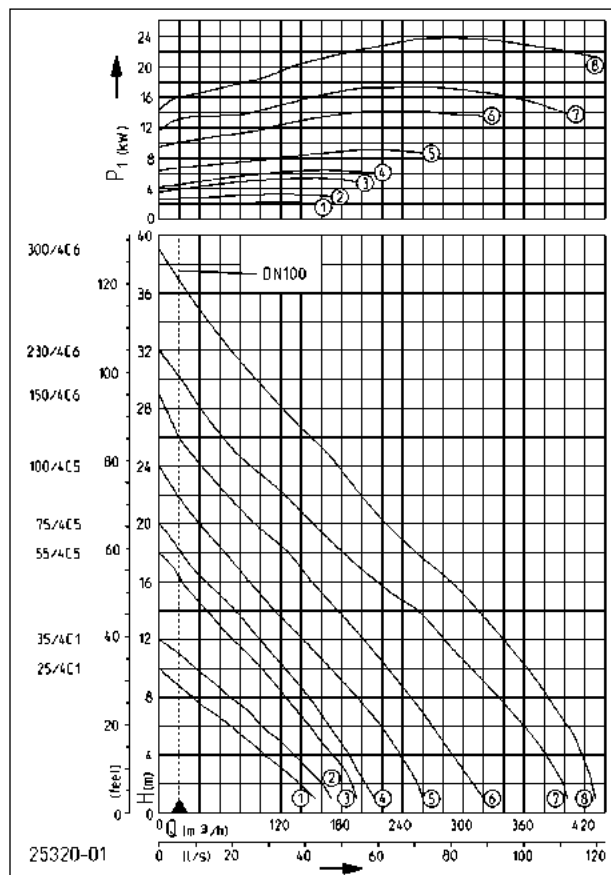
### MULTISTREAM DN 80 / 100, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
10/4 B1	3/PE~400 V	0.95 kW	0.73 kW	2.4 A	6G1,5	10 A	50 %	70 mm	DN 80	45 kg
15/4 B3	3/PE~400 V	1.80 kW	1.40 kW	3.4 A	6G1,5	10 A	40 %	70 mm	DN 80	50 kg
25/4 B4	3/PE~400 V	2.70 kW	2.04 kW	4.6 A	6G1,5	10 A	25 %	70 mm	DN 80	59 kg
35/4 B4	3/PE~400 V	3.50 kW	2.65 kW	6.9 A	6G1,5	10 A	25 %	70 mm	DN 80	62 kg
55/4 B6	3/PE~400/690 V	5.80 kW	4.65 kW	10.2 A/5.9 A	10G2,5	16 A	20 %	70 mm	DN 100	111 kg
75/4 B6	3/PE~400/690 V	7.20 kW	5.90 kW	12.8 A/7.4 A	10G2,5	20 A	25 %	70 mm	DN 100	116 kg

# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Single unit		Duplex unit			
Type	Code No.	Type	Code No.	Type	Code No.
25/4 C1	JP09624	AD 46	JP14353	BD 46	JP45739
35/4 C1	JP09648	AD 610	JP14354	BD 610	JP45741
55/4 C5	JP09901	AS 610	JP14407	BS 610	JP14412
75/4 C5	JP09904	AS 610	JP14407	BS 610	JP14412
100/4 C5	JP09275	AS 1016	JP14408	BS 1016	JP14413
150/4 C6	JP09882	AS 1624	JP14409	BS 1624	JP14414
230/4 C6	JP09885	AS 1624	JP14409	BS 1624	JP14414
300/4 C6	JP09888	AS 2440	JP14410	BS 2440	JP14415
25/4 C1, Ex	JP09637	AD 46 X	JP14355	BD 46 X	JP14360
35/4 C1, Ex	JP09650	AD 610 X	JP14356	BD 610 X	JP14361
55/4 C5, Ex	JP09902	AS 610	JP14407	BS 610	JP14412
75/4 C5, Ex	JP09905	AS 610	JP14407	BS 610	JP14412
100/4 C5, Ex	JP09276	AS 1016	JP14408	BS 1016	JP14413
150/4 C6, Ex	JP09883	AS 1624	JP14409	BS 1624	JP14414
230/4 C6, Ex	JP09886	AS 1624	JP14409	BS 1624	JP14414
300/4 C6, Ex	JP09889	AS 2440	JP14410	BS 2440	JP14415

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	3	5	7	9	12	14	16	18	20	23	24	26	27	28	29	30	31	34	37	38	
25/4 C1	Flow rate Q [m <sup>3</sup> /h]	154	122	87	51	16																	
35/4 C1		170	146	119	89	54																	
55/4 C5		198	181	160	136	112	74	45	22														
75/4 C5		212	195	179	160	138	99	74	46	22													
100/4 C5		260	247	228	207	182	142	114	89	65	40	9											
150/4 C6		320	302	280	260	236	202	177	152	126	96	54	43	20	14	8							
230/4 C6		405	390	372	344	320	283	255	218	182	155	110	91	62	51	40	32	22	8				
300/4 C6		430	421	411	393	374	341	315	289	254	225	188	176	151	135	117	107	95	83	47	19	10	

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7$  m/s is marked in the Q-H-diagram (operative limit).

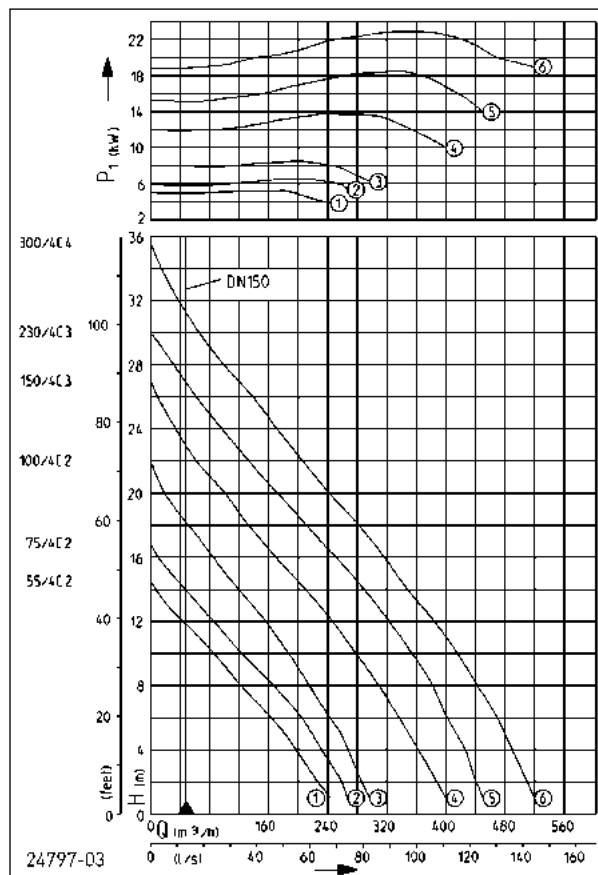
### MULTISTREAM DN 100, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
25/4 C1	3/PE~400 V	2.4 kW	1.90 kW	4.2 A	6G1,5	10 A	30 %	100 mm	DN 100	63 kg
35/4 C1	3/PE~400 V	3.5 kW	2.65 kW	6.9 A	6G1,5	10 A	25 %	100 mm	DN 100	67 kg
55/4 C5	3/PE~400/690 V	5.8 kW	4.65 kW	10.2 A/5.9 A	10G2,5	16 A	20 %	100 mm	DN 100	119 kg
75/4 C5	3/PE~400/690 V	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	20 A	25 %	100 mm	DN 100	124 kg
100/4 C5	3/PE~400/690 V	9.5 kW	7.94 kW	17.2 A/10.0 A	10G2,5	25 A	25 %	100 mm	DN 100	138 kg
150/4 C6	3/PE~400/690 V	15.0 kW	13.20 kW	26.7 A/15.5 A	10G2,5	35 A	40 %	100 mm	DN 100	247 kg
230/4 C6	3/PE~400/690 V	19.3 kW	17.00 kW	34.1 A/19.8 A	10G2,5	35 A	35 %	100 mm	DN 100	275 kg
300/4 C6	3/PE~400/690 V	25.5 kW	22.65 kW	45.5 A/26.4 A	7G6+3x1	50 A	25 %	100 mm	DN 100	296 kg

# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
55/4 C2	JP00487	AS 610	JP14407	BS 610
75/4 C2	JP00490	AS 610	JP14407	BS 610
100/4 C2	JP09678	AS 1016	JP14408	BS 1016
150/4 C3	JP00491	AS 1624	JP14409	BS 1624
230/4 C3	JP00883	AS 1624	JP14409	BS 1624
300/4 C4	JP00493	AS 2440	JP14410	BS 2440
55/4 C2, Ex	JP09668	AS 610	JP14407	BS 610
75/4 C2, Ex	JP09669	AS 610	JP14407	BS 610
100/4 C2, Ex	JP09679	AS 1016	JP14408	BS 1016
150/4 C3, Ex	JP00474	AS 1624	JP14409	BS 1624
230/4 C3, Ex	JP00884	AS 1624	JP14409	BS 1624
300/4 C4, Ex	JP00475	AS 2440	JP14410	BS 2440

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	3	5	7	9	11	13	15	17	19	20	21	24	25	27	29	30	31	33	34	
55/4 C2	Flow rate Q [m³/h]	245	214	184	144	105	62	22														
75/4 C2		270	245	216	185	146	105	64	26													
100/4 C2		300	278	258	229	202	167	130	96	65	33	18										
150/4 C3		400	373	349	325	295	263	227	192	150	116	100	81	34	21							
230/4 C3		455	434	415	394	369	338	308	272	231	191	172	153	98	80	45	17					
300/4 C4		520	500	478	455	426	399	364	334	298	263	242	223	172	157	118	83	66	51	26	15	

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7$  m/s is marked in the Q-H-diagram (operative limit).

### MULTISTREAM DN 150, N = 1450 MIN-1

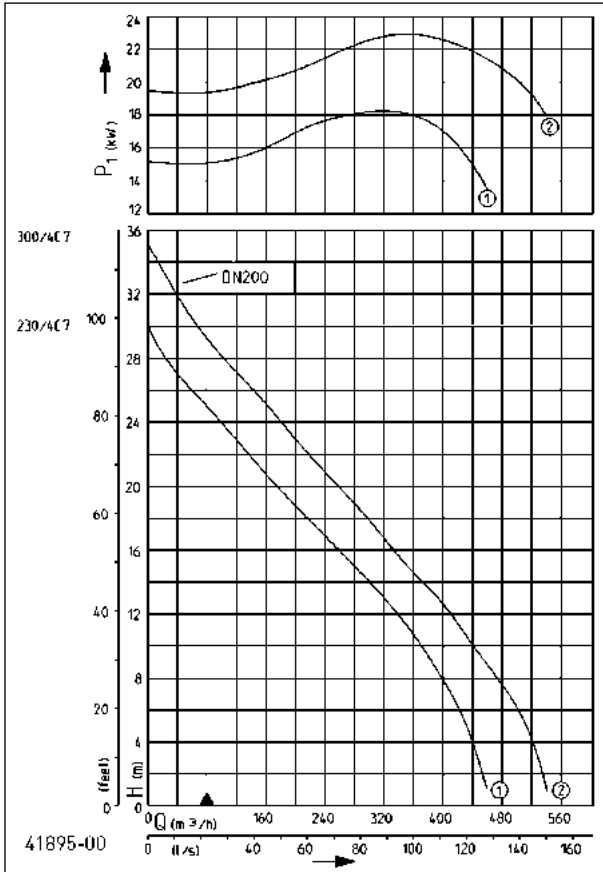
Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
55/4 C2	3/PE~400/690 V	5.8 kW	4.65 kW	10.2 A/5.9 A	10G2,5	16 A	20 %	100 mm	DN 150	125 kg
75/4 C2	3/PE~400/690 V	7.2 kW	5.90 kW	12.8 A/7.4 A	10G2,5	20 A	25 %	100 mm	DN 150	131 kg
100/4 C2	3/PE~400/690 V	9.5 kW	7.94 kW	17.2 A/10.0 A	10G2,5	25 A	25 %	100 mm	DN 150	149 kg
150/4 C3	3/PE~400/690 V	15.0 kW	13.20 kW	26.7 A/15.5 A	10G2,5	35 A	40 %	100 mm	DN 150	268 kg
230/4 C3	3/PE~400/690 V	19.3 kW	17.00 kW	34.1 A/19.8 A	10G2,5	35 A	35 %	100 mm	DN 150	288 kg
300/4 C4	3/PE~400/690 V	25.5 kW	22.65 kW	45.5 A/26.4 A	7G6+3x1	50 A	25 %	100 mm	DN 150	308 kg



# MULTISTREAM

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
230/4 C7	JP09392	AS 1624	JP14409	BS 1624
300/4 C7	JP09394	AS 2440	JP14410	BS 2440
230/4 C7, Ex	JP09393	AS 1624	JP14409	BS 1624
300/4 C7, Ex	JP09395	AS 2440	JP14410	BS 2440

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	3	5	7	9	11	13	15	17	19	20	21	24	25	27	29	30	31	33	34	
230/4 C7	Flow rate Q [m³/h]	460	443	429	409	387	358	322	282	240	196	177	158	97	78	42	11					
300/4 C7		540	524	509	483	453	427	396	355	318	280	258	238	180	165	126	87	71	54	26	15	

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7 \text{ m/s}$  is marked in the Q-H-diagram (operative limit).

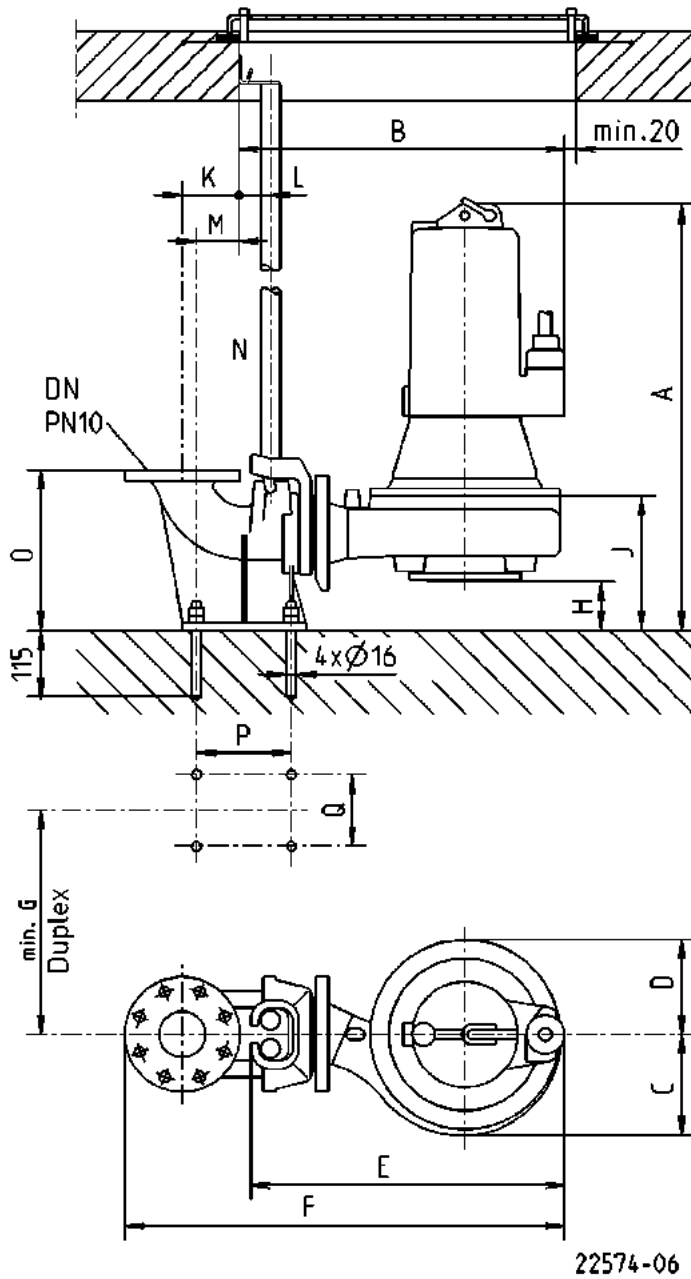
### MULTISTREAM DN 200, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
230/4 C7	3/PE~400/690 V	19.3 kW	17.00 kW	34.1 A/19.8 A	10G2,5	35 A	35 %	100 mm	DN 200	295 kg
300/4 C7	3/PE~400/690 V	25.5 kW	22.65 kW	45.5 A/26.4 A	7G6+3x1	50 A	25 %	100 mm	DN 200	315 kg

# MULTISTREAM

SEWAGE PUMPS

## Dimensions guide rail system



# MULTISTREAM

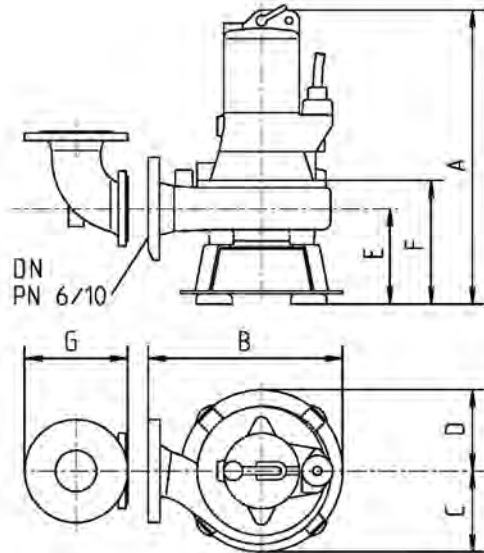
## SEWAGE PUMPS

	GR	DN	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
10/2 A1	65	80	510	460	110	105	435	660	390	108	213	100	55	74	1"	280	165	125
15/2 A1	65	80	510	460	110	105	435	660	390	108	213	100	55	74	1"	280	165	125
25/2 A2	65	80	510	480	130	125	455	680	390	108	220	100	55	74	1"	280	165	125
35/2 A2	65	80	545	480	130	125	455	680	390	108	220	100	55	74	1"	280	165	125
25/2 B1	80	80	520	475	130	110	455	675	390	95	225	100	55	74	1"	280	165	125
35/2 B2	80	80	555	495	145	125	475	695	390	92	225	100	55	74	1"	280	165	125
55/2 B2	80	80	680	525	145	125	510	725	390	92	225	100	55	74	1"	280	165	125
75/2 B5	80	80	685	565	180	165	550	765	390	85	235	100	55	74	1"	280	165	125
100/2 B5	80	80	745	565	180	165	550	765	390	85	235	100	55	74	1"	280	165	125
200/2 B6	101	100	910	680	235	190	660	900	480	155	315	110	55	82	1"	345	175	385
300/2 B6	101	100	1000	680	235	190	660	900	480	155	315	110	55	82	1"	345	175	385
10/4 B1	80	80	520	475	130	110	455	675	390	95	225	100	55	74	1"	280	165	125
15/4 B3	80	80	520	490	145	125	470	690	390	95	225	100	55	74	1"	280	165	125
25/4 B4	80	80	520	570	190	160	545	770	390	85	225	100	55	74	1"	280	165	125
35/4 B4	80	80	555	570	190	160	545	770	390	85	225	100	55	74	1"	280	165	125
55/4 B6	101	100	765	670	235	190	650	890	480	155	315	110	55	82	1"	345	175	385
75/4 B6	101	100	765	670	235	190	650	890	480	155	315	110	55	82	1"	345	175	385
25/4 C1	100	100	565	570	185	160	550	790	390	95	270	110	55	82	1"	310	175	150
35/4 C1	100	100	600	570	185	160	550	790	390	95	270	110	55	82	1"	310	175	150
55/4 C5	101	100	765	645	230	180	625	865	480	125	315	110	55	82	1"	345	175	385
75/4 C5	101	100	765	645	230	180	625	865	480	15	315	110	55	82	1"	345	175	385
100/4 C5	101	100	825	645	230	180	625	865	480	125	315	110	55	82	1"	345	175	385
150/4 C6	101	100	910	755	290	250	735	975	580	105	315	110	55	82	1"	345	175	385
230/4 C6	101	100	1000	755	290	250	735	975	580	105	315	110	55	82	1"	345	175	385
300/4 C6	101	100	1000	755	290	250	735	975	580	105	315	110	55	82	1"	345	175	385
55/4 C2	151S	150	790	770	260	200	740	1055	480	150	340	145	80	122	1.5"	435	260	385
75/4 C2	151S	150	790	770	260	200	740	1055	480	150	340	145	80	122	1.5"	435	260	385
100/4 C2	151S	150	850	770	260	200	740	1055	480	150	340	145	80	122	1.5"	435	260	385
150/4 C3	151	150	935	885	325	260	855	1175	630	130	340	145	80	122	1.5"	435	260	385
230/4 C3	151	150	1025	885	325	260	855	1175	630	130	340	145	80	122	1.5"	435	260	385
300/4 C4	151	150	1025	885	325	260	855	1175	630	130	340	145	80	122	1.5"	435	260	385
230/4 C7	200S	200	1070	935	325	260	905	1305	630	175	385	200	80	193	1.5"	535	350	400
300/4 C7	200S	200	1070	935	325	260	905	1305	630	175	385	200	80	193	1.5"	535	350	400

# MULTISTREAM

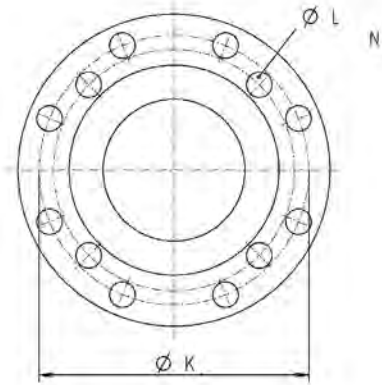
## SEWAGE PUMPS

### Dimensions pump base



22575-05

### Discharge outlet



29044

# MULTISTREAM

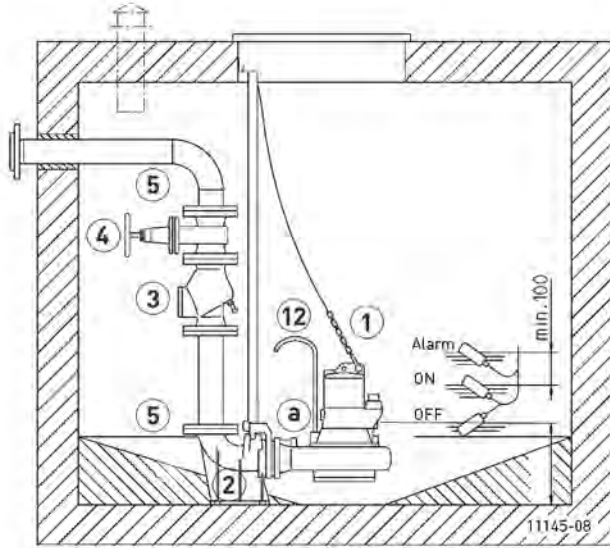
## SEWAGE PUMPS

	DN	A	B	C	D	E	F	G	K	L	N
10/2 A1	65	475	325	110	105	135	175	175	130/145	14/18	4
15/2 A1	65	475	325	110	105	135	175	175	130/145	14/18	4
25/2 A2	65	475	345	135	135	135	185	175	130/145	14/18	4
35/2 A2	65	510	345	135	135	135	185	175	130/145	14/18	4
25/2 B1	80	530	340	135	135	185	240	200	150/160	18	4
35/2 B2	80	570	380	145	135	185	240	200	150/160	18	4/8
55/2 B2	80	700	395	145	135	185	240	200	150/160	18	4/8
75/2 B5	80	725	460	195	195	215	280	200	150/160	18	4/8
100/2 B5	80	785	460	195	195	215	280	200	150/160	18	4/8
200/2 B6	100	885	535	235	195	210	290	230	170/180	18	4/8
300/2 B6	100	975	535	235	195	210	290	230	170/180	18	4/8
10/4 B1	80	530	340	135	135	185	240	200	150/160	18	4/8
15/4 B3	80	535	380	160	160	185	240	200	150/160	18	4/8
25/4 B4	80	535	440	190	160	185	240	200	150/160	18	4/8
35/4 B4	80	570	440	190	160	185	240	200	150/160	18	4/8
55/4 B6	100	740	520	235	195	210	290	230	170/180	18	4/8
75/4 B6	100	740	520	235	195	210	290	230	170/180	18	4/8
25/4 C1	100	600	450	195	195	235	305	230	170/180	18	4/8
35/4 C1	100	635	450	195	195	235	305	230	170/180	18	4/8
55/4 C5	100	775	480	230	195	240	320	230	170/180	18	4/8
75/4 C5	100	775	480	230	195	240	320	230	170/180	18	4/8
100/4 C5	100	835	480	230	195	240	320	230	170/180	18	4/8
150/4 C6	100	925	610	290	250	250	330	230	170/180	18	4/8
230/4 C6	100	1015	610	290	250	250	330	230	170/180	18	4/8
300/4 C6	100	1015	610	290	250	250	330	230	170/180	18	4/8
55/4 C2	150	770	580	260	215	240	320	320	225/240	18/22	8
75/4 C2	150	770	580	260	215	240	320	320	225/240	18/22	8
100/4 C2	150	830	580	260	215	240	320	320	225/240	18/22	8
150/4 C3	150	925	695	325	260	250	330	320	225/240	18/22	8
230/4 C3	150	1015	695	325	260	250	330	320	225/240	18/22	8
300/4 C4	150	1015	695	325	260	250	330	320	225/240	18/22	8
230/4 C7	200	1015	725	325	260	250	330	0	295	22	8
300/4 C7	200	1015	725	325	260	250	330	0	295	22	8

# MULTISTREAM

## SEWAGE PUMPS



### Example of installation guide rail system



Types of operation: Up to 40°C medium temperature  
 Motor submerged: continuous operation S1

Motor not submerged intermittent operation S3  
 (e.g. 20% = 2 min operation and 8 min pause)



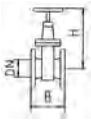

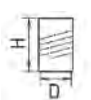





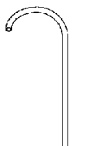
### MECHANICAL ACCESSORY

			Code No.
	<b>① Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP47365
		Shackle, certified, 630 kg, stainless steel	JP45904
		Pump hanging (08 Ex - 100...)	JP45925
	<b>② Guide rail system</b>	GR 65                      DN 80, 170x226x280 (AxBxH)	JP00494
		GR 80                      DN 80, 170x229x280 (AxBxH)	JP00495
		GR 100                     DN 100, 200x254x310 (AxBxH)	JP00496
		GR 101                    DN 100, 235x254x345 (AxBxH)	JP21037
		GR 151                    DN 150, 260x332x435 (AxBxH)	JP00693
		GR 200S                 DN 200, 305x410x535 (AxBxH)	JP42275
		Securing lever            C2	JP50179
		Guide rail 1"             1500 mm	JP48937
		Guide rail 1"             2000 mm	JP48938
		Guide rail 1"             2500 mm	JP48939
		Guide rail 1"             3000 mm	JP48940
		Guide rail 1,5"         1500 mm	JP48968
		Guide rail 1,5"         2000 mm	JP48969
Guide rail 1,5"         2500 mm	JP48970		
Guide rail 1,5"         3000 mm	JP48971		

# MULTISTREAM

## SEWAGE PUMPS


### MECHANICAL ACCESSORY

			Code No.
	<b>③ Swing-type check valve</b> R 80 EN 12050-4 R 80 G EN 12050-4 R 101 EN 12050-4 R 100 G EN 12050-4 R 150 G EN 12050-4	DN 80, PN 4, flange PN 10, EN 558, 260 (H)	<b>JP00706</b>
		DN 80, PN 4, flange PN 10, EN 558, with counter weight, 260 (H)	<b>JP00707</b>
		DN 100, PN 4, flange PN 10, EN 558, 300 (H)	<b>JP00325</b>
		DN 100, PN 4, flange PN 10, EN 558, with counter weight, 300(H)	<b>JP00324</b>
		DN 150, PN 10, flange PN 10, EN 558, with counter weight, 400 (H)	<b>JP00345</b>
	<b>Ball-type check valve</b> K 80 EN 12050-4	DN 80, PN 4, flange PN 10, EN 558, 260 (H)	<b>JP49205</b>
	<b>④ Sluice valve</b>	DN 80, PN 10, EN 1171      315x180 (HxB)	<b>JP00639</b>
		DN 100, PN 10, EN 1171      345x190 (HxB)	<b>JP00329</b>
		DN 150, PN 10, EN 1171      430x210 (HxB)	<b>JP00328</b>
	<b>⑤ Flanged spigot</b>	DN 80 PN 10, F-KS      75x90 (HxD)	<b>JP00686</b>
		DN 80 PN 10, F-KS      85x110 (HxD)	<b>JP00687</b>
		DN 80/100, PN 10, F-piece      76x114 (HxD)	<b>JP09821</b>
		DN 100 PN 10, F-KS      153x110 (HxD)	<b>JP08673</b>
		DN 100 PN 10, F-piece      100x114 (HxD)	<b>JP00688</b>
	<b>⑥ Elastic connection</b>	DN 80      200x90 (HxD)	<b>JP44768</b>
		DN 100, PN 4      200x110 (HxD)	<b>JP44778</b>
		DN 100, PN 4      200x114 (HxD)	<b>JP44774</b>
	<b>⑦ Hose band clamp</b>	3" (DN 80)	<b>JP44766</b>
		4" (DN 100)	<b>JP44767</b>
	<b>⑧ Flanged Y-pipe</b>	DN 80/100/80      355x390(HxB), PN 10	<b>JP00448</b>
		DN 80/100/80      355x480(HxB), PN 10	<b>JP00202</b>
		DN 100/100/100      355x480(HxB), PN 10	<b>JP00203</b>
	<b>⑨ Reducing adapter</b>	DN 80/100 to PN 10, (similar FFR-piece), H=100	<b>JP00498</b>
	<b>⑩ Pump base</b>	A 170, for A1      76x245 (HxB)	<b>JP00681</b>
		A 220, for A2, AW1, AW2      90x295 (HxB)	<b>JP00682</b>
		B 170, for B1      115x280 (HxB)	<b>JP00683</b>
		B 220, for B2,B3,B4,BW1      115x315 (HxB)	<b>JP00684</b>
		C 275, for B5,B6,C1,C5,BW2,CW3      145x385 (HxB)	<b>JP00685</b>
		C 325, for C2,CW2      145x565 (HxB)	<b>JP00701</b>
		C 410, for C3,C4,C6,C7      145x650 (HxB)	<b>JP00702</b>
	<b>⑪ Flanged connection</b>	A 80 (similar Q-piece 90°), DN 80 PN10/DN 65 PN6      130x75 (HxB)	<b>JP00577</b>
		B 80 (similar Q-piece 90°), DN 80 PN10/PN6      150x100 (HxB)	<b>JP00578</b>
		C 100 (similar Q-piece 90°), DN 100 PN10/PN6      175x120 (HxB)	<b>JP00579</b>
	<b>⑫ Flushing tube</b>	Type I      10/... - 45/...	<b>JP28221</b>
		Type II      55/... - 100/...	<b>JP28222</b>
		Type III      150/... - 300/...	<b>JP28223</b>

# MULTISTREAM

SEWAGE PUMPS

## ELECTRICAL ACCESSORY

			Code No.
	<b>a</b> Seal leak detector	DKG DKG Ex for explosion-proof pumps	JP44900 JP00249



# MULTIFREE

## SEWAGE PUMPS

- Connection alternatively PN6 or PN10
- Safe to run dry
- Controllable oil chamber
- Plug-in cable connection
- SiC mechanical seal independent of sense of rotation
- Moisture-sealed cable inlet
- Installed motor protection



### DESCRIPTION

"The centrifugal submersible sewage pumps MultiFree are suitable for handling effluent or sewage in municipal and industrial pumping stations as well as in surface water drainage applications. The smaller types are also very successfully as portable units to deal with emergency situations.

The submersible pumps are made in accordance to EN 12050 with 10 m cable and free lead ends, are available with or without explosion protection (Ex II 2 G Ex db IIB T4 Gb). The through shaft is fully encapsulated against the pumped media and with its short shaft end a long life span is ensured.

MultiFree-sewage pumps are recommended for:

effluent which contains fibrous matter prone to matting / effluent which contains solids / abrasive effluent / effluent which contains trapped air or gas / mixed water / raw effluent / raw sludge / surface water / rainwater



### MECHANICAL DATA

Pump	Vertical single-stage	Run dry protection	Yes
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, spheroidal graphite iron
Seal on motor side	Duplex shaft seal, from 55/: mechanical seal	Motor housing	Grey cast iron
Oil chamber	Yes	Pump housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Submersible	Yes

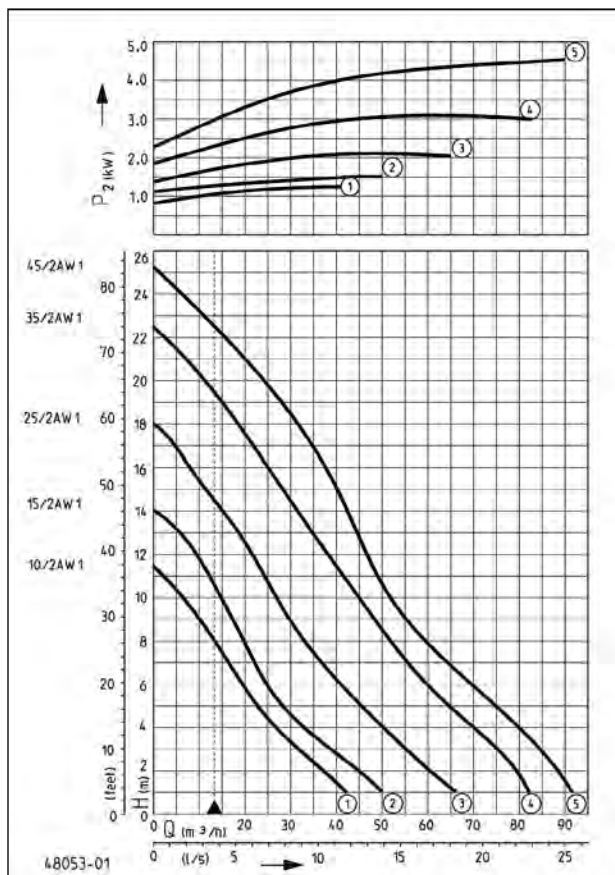
### ELECTRICAL DATA

Power line	10m H07RN-F	Winding thermostat	Yes
Type of enclosure	IP 68		

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Single unit		Duplex unit			
Type	Code No.	Type	Code No.	Type	Code No.
10/2 AW1	JP47280	AD 25	JP00310	BD 25	JP45737
15/2 AW1	JP47278	AD 25	JP00310	BD 25	JP45737
25/2 AW1	JP09149	AD 46	JP14353	BD 46	JP45739
35/2 AW1	JP09151	AD 610	JP14354	BD 610	JP45741
45/2 AW1	JP46796	AD 910	JP47263	BD 910	JP47264
10/2 AW1, Ex	JP47281	AD 25 X	JP09683	BD 25 X	JP09681
15/2 AW1, Ex	JP47279	AD 25 X	JP09683	BD 25 X	JP09681
25/2 AW1, Ex	JP09150	AD 46 X	JP14355	BD 46 X	JP14360
35/2 AW1, Ex	JP09152	AD 610 X	JP14356	BD 610 X	JP14361
45/2 AW1, Ex	JP46870				

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22
10/2 AW1	Flow rate Q [m³/h]	45	37	31	27	22	19	16	13	10	7						
15/2 AW1		50	45	37	33	28	25	22	20	17	15	10					
25/2 AW1		68	61	55	51	46	41	37	33	30	27	22	16	9			
35/2 AW1		82	80	76	70	65	59	56	52	48	44	38	32	26	19	11	2
45/2 AW1		95	90	84	78	75	72	64	60	54	52	46	41	37	30	24	18

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0.7$  m/s is marked in the Q-H-diagram (operative limit).

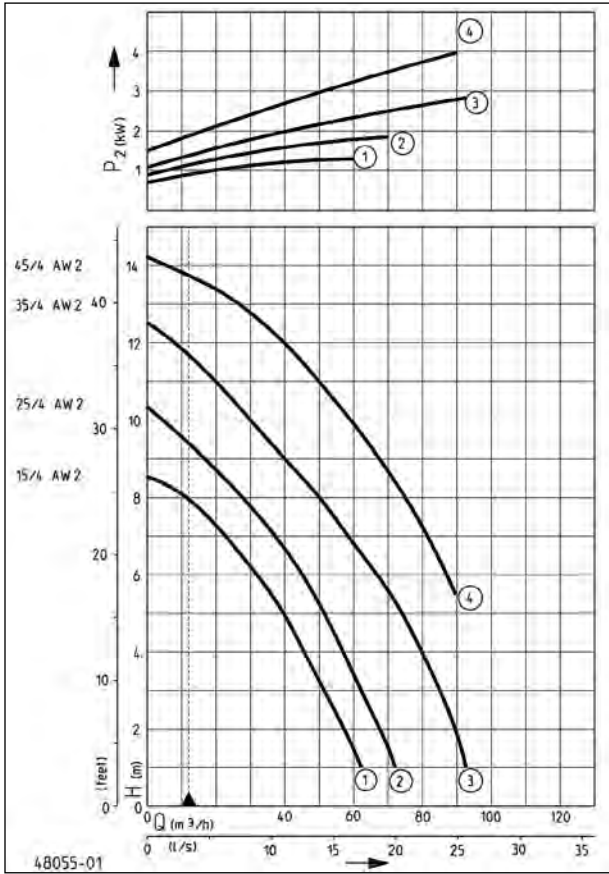
### MULTIFREE DN 65, N = 2900 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
10/2 AW1	3/PE~400 V	1.70 kW	1.40 kW	3.3 A	6G1,5	10 A	50 %	65 mm	DN 65	43 kg
15/2 AW1	3/PE~400 V	2.10 kW	1.70 kW	3.8 A	6G1,5	10 A	45 %	65 mm	DN 65	43 kg
25/2 AW1	3/PE~400 V	2.90 kW	2.30 kW	4.9 A	6G1,5	10 A	35 %	65 mm	DN 65	43 kg
35/2 AW1	3/PE~400 V	4.05 kW	3.34 kW	7.1 A	6G1,5	10 A	35 %	65 mm	DN 65	46 kg
45/2 AW1	3/PE~400 V	6.00 kW	5.00 kW	9.4 A	6G1,5	20 A	20 %	65 mm	DN 65	51 kg

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Single unit		Duplex unit			
Type	Code No.	Type	Code No.	Type	Code No.
15/4 AW2	JP46791	AD 25	JP00310	BD 25	JP45737
25/4 AW2	JP46793	AD 46	JP14353	BD 46	JP45739
35/4 AW2	JP46794	AD 610	JP14354	BD 610	JP45741
45/4 AW2	JP46795	AD 910	JP47263	BD 910	JP47264
15/4 AW2, Ex	JP46792	AD 25 X	JP09683	BD 25 X	JP09681
25/4 AW2, Ex	JP46867	AD 46 X	JP14355	BD 46 X	JP14360
35/4 AW2, Ex	JP46868	AD 610 X	JP14356	BD 610 X	JP14361
45/4 AW2, Ex	JP46869				

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14
15/4 AW2	Flow rate Q [m³/h]	63	57	51	45	39	33	24	13				
25/4 AW2		73	67	62	57	52	46	38	29	18	6		
35/4 AW2		93	89	84	79	73	67	59	50	40	30	9	
45/4 AW2							90	81	75	68	60	41	8

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7 \text{ m/s}$  is marked in the Q-H-diagram (operative limit).

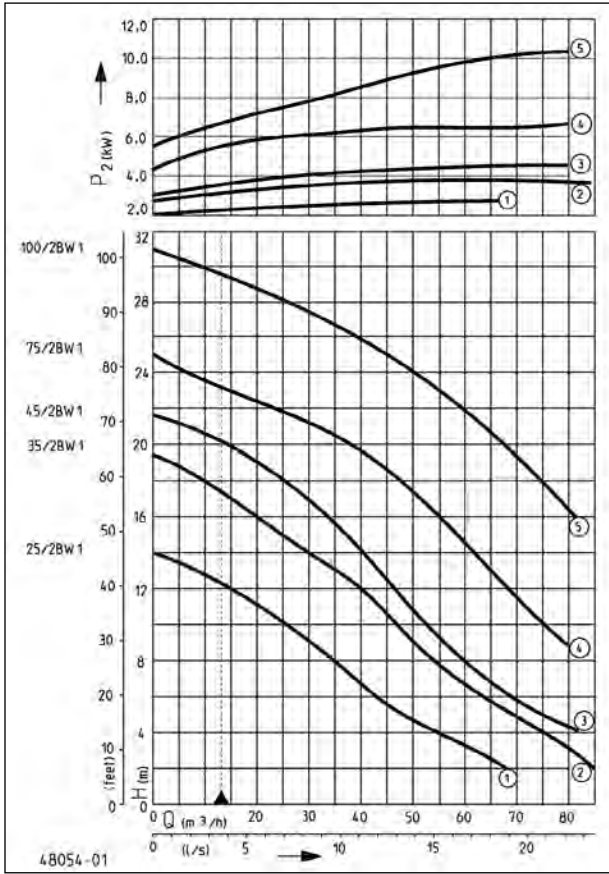
### MULTIFREE DN 65, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
15/4 AW2	3/PE~400 V	1.8 kW	1.40 kW	3.5 A	6G1,5	10 A	40 %	65 mm	DN 65	49.0 kg
25/4 AW2	3/PE~400 V	2.7 kW	2.00 kW	4.6 A	6G1,5	10 A	25 %	65 mm	DN 65	49.5 kg
35/4 AW2	3/PE~400 V	4.2 kW	3.18 kW	7.8 A	6G1,5	10 A	20 %	65 mm	DN 65	53.0 kg
45/4 AW2	3/PE~400 V	5.6 kW	4.30 kW	9.8 A	6G1,5	20 A	10 %	65 mm	DN 65	55.0 kg

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
25/2 BW1	JP09498	AD 46	JP14353	BD 46
35/2 BW1	JP09500	AD 610	JP14354	BD 610
45/2 BW1	JP46856	AD 910	JP47263	BD 910
75/2 BW1	JP46873	AS 610	JP14407	BS 610
100/2 BW1	JP46871	AS 1016	JP14408	BS 1016
25/2 BW1, Ex	JP09499	AD 46 X	JP14355	BD 46 X
35/2 BW1, Ex	JP09501	AD 610 X	JP14356	BD 610 X
45/2 BW1, Ex	JP46857			
75/2 BW1, Ex	JP46874	AS 610	JP14407	BS 610
100/2 BW1, Ex	JP46872	AS 1016	JP14408	BS 1016

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24	26	28	30	
25/2 BW1	Flow rate Q [m³/h]	68	62	55	49	43	38	35	31	27	15											
35/2 BW1		90	85	80	74	70	65	60	53	50	47	40	30	20	10							
45/2 BW1				85	78	72	66	61	57	54	46	41	35	27	12							
75/2 BW1									80	74	65	59	53	46	36	26	12					
100/2 BW1														82	75	67	60	51	40	29	14	

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7 \text{ m/s}$  is marked in the Q-H-diagram (operative limit).

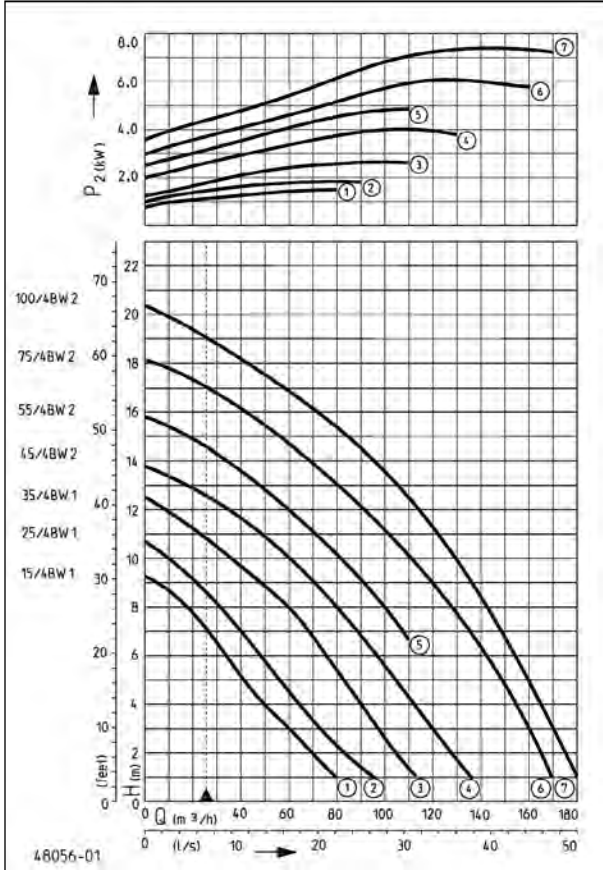
### MULTIFREE DN 80, N = 2900 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
25/2 BW1	3/PE~400 V	3.27 kW	2.55 kW	5.4 A	6G1,5	10 A	25 %	80 mm	DN 80	46 kg
35/2 BW1	3/PE~400 V	4.84 kW	3.95 kW	8.2 A	6G1,5	10 A	25 %	80 mm	DN 80	49 kg
45/2 BW1	3/PE~400 V	6.00 kW	5.00 kW	9.4 A	6G1,5	20 A	20 %	80 mm	DN 80	56 kg
75/2 BW1	3/PE~400/690 V	8.05 kW	6.80 kW	9.4 A/7.9 A	10G2,5	20 A	25 %	80 mm	DN 80	96 kg
100/2 BW1	3/PE~400/690 V	12.20 kW	10.70 kW	21.0 A/12.2 A	10G2,5	25 A	20 %	80 mm	DN 80	116 kg

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit	
	Code No.	Type	Code No.	Type
15/4 BW1	JP09455	AD 46	JP14353	BD 46
25/4 BW1	JP09456	AD 46	JP14353	BD 46
35/4 BW1	JP09457	AD 610	JP14354	BD 610
45/4 BW2	JP46858	AD 910	JP47263	BD 910
55/4 BW2	JP48267	AS 610	JP14407	BS 610
75/4 BW2	JP46877	AS 610	JP14407	BS 610
100/4 BW2	JP46875	AS 1016	JP14408	BS 1016
15/4 BW1, Ex	JP09458	AD 46 X	JP14355	BD 46 X
25/4 BW1, Ex	JP09459	AD 46 X	JP14355	BD 46 X
35/4 BW1, Ex	JP09460	AD 610 X	JP14356	BD 610 X
45/4 BW2, Ex	JP46859			
55/4 BW2, Ex	JP48268	AS 610	JP14407	BS 610
75/4 BW2, Ex	JP46878	AS 610	JP14407	BS 610
100/4 BW2, Ex	JP46876	AS 1016	JP14408	BS 1016

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
15/4 BW1	Flow rate Q [m³/h]	80	71	60	50	42	34	27	18	4						
25/4 BW1		95	84	74	64	55	47	40	32	21	9					
35/4 BW1		115	107	98	90	82	75	68	59	49	35	10				
45/4 BW2		138	128	119	110	105	98	90	80	69	57	31				
55/4 BW2								110	100	93	83	60	34			
75/4 BW2		170	159	152	147	142	136	130	124	117	110	90	67	38	5	
100/4 BW2		180	176	170	165	160	155	150	145	138	131	116	97	73	44	8

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0.7$  m/s is marked in the Q-H-diagram (operative limit).

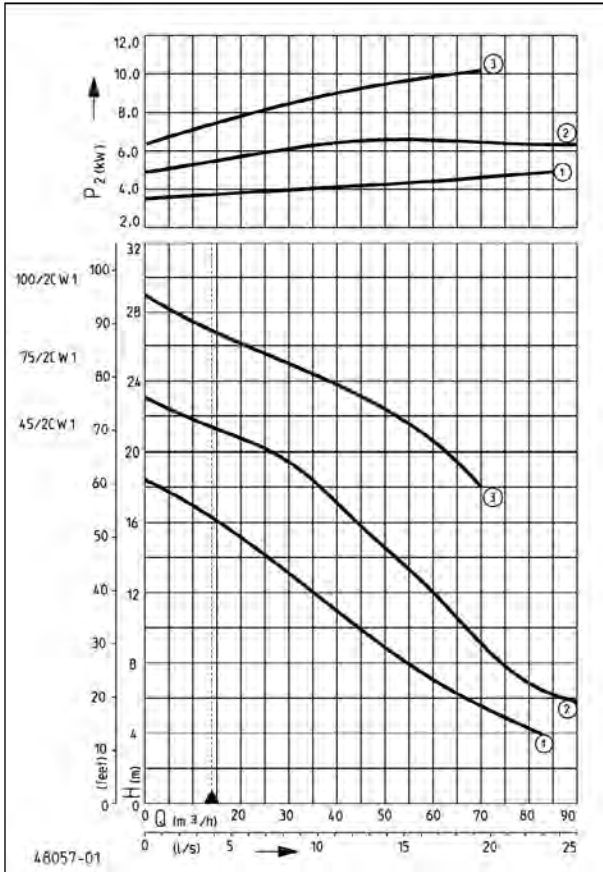
### MULTIFREE DN 80, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
15/4 BW1	3/PE~400 V	2.20 kW	1.7 kW	4.0 A	6G1,5	10 A	35 %	80 mm	DN 80	47 kg
25/4 BW1	3/PE~400 V	2.80 kW	2.1 kW	4.7 A	6G1,5	10 A	25 %	80 mm	DN 80	47 kg
35/4 BW1	3/PE~400 V	4.20 kW	3.2 kW	7.8 A	6G1,5	10 A	20 %	80 mm	DN 80	51 kg
45/4 BW2	3/PE~400 V	5.50 kW	4.2 kW	9.6 A	6G1,5	10 A	10 %	80 mm	DN 80	73 kg
55/4 BW2	3/PE~400/690 V	6.39 kW	5.1 kW	11.0 A/6.4 A	10G2,5	16 A	15 %	80 mm	DN 80	109 kg
75/4 BW2	3/PE~400/690 V	8.25 kW	6.7 kW	14.2 A/8.2 A	10G2,5	20 A	15 %	80 mm	DN 80	113 kg
100/4 BW2	3/PE~400/690 V	10.00 kW	8.4 kW	17.6 A/10.2 A	10G2,5	25 A	20 %	80 mm	DN 80	136 kg

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Type	Single unit		Duplex unit		
	Code No.	Type	Code No.	Type	Code No.
45/2 CW1	<b>JP47352</b>	AD 910	<b>JP47263</b>	BD 910	<b>JP47264</b>
75/2 CW1	<b>JP46881</b>	AS 610	<b>JP14407</b>	BS 610	<b>JP14412</b>
100/2 CW1	<b>JP46879</b>	AS 1016	<b>JP14408</b>	BS 1016	<b>JP14413</b>
45/2 CW1, Ex	<b>JP47353</b>	AD 910	<b>JP47263</b>	BD 910	<b>JP47264</b>
75/2 CW1, Ex	<b>JP47229</b>	AS 610	<b>JP14407</b>	BS 1016	<b>JP14413</b>
100/2 CW1, Ex	<b>JP46880</b>	AS 610	<b>JP14407</b>	BS 1016	<b>JP14413</b>

Additional requirements, see technical data control units

Type	Delivery head H [m]	4	5	6	7	8	9	10	12	14	16	18	20	22	24	26	28
45/2 CW1	Flow rate Q [m³/h]	84	74	67	60	54	50	46	38	29	17	5					
75/2 CW1				95	85	77	71	67	61	55	47	39	28	11			
100/2 CW1												70	62	52	39	25	9

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7 \text{ m/s}$  is marked in the Q-H-diagram (operative limit).

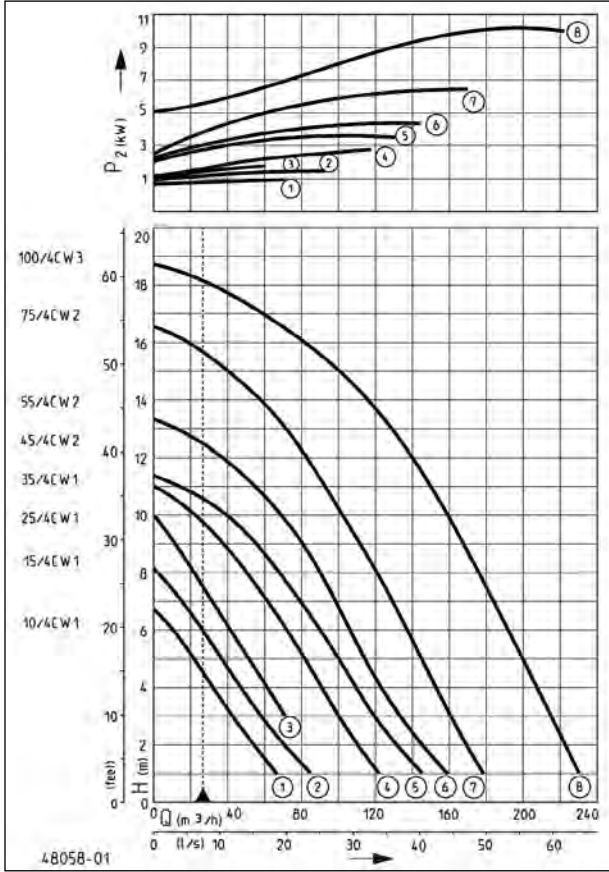
### MULTIFREE DN 100, N = 2900 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
45/2 CW1	3/PE~400 V	6.0 kW	5.0 kW	9.4 A	6G1,5	20 A	20 %	100 mm	DN 100	51.0 kg
75/2 CW1	3/PE~400/690 V	8.1 kW	6.8 kW	13.7 A/7.9 A	10G2,5	20 A	25 %	100 mm	DN 100	98.5 kg
100/2 CW1	3/PE~400/690 V	12.2 kW	10.7 kW	21.0 A/12.2 A	10G2,5	25 A	20 %	100 mm	DN 100	110.0 kg

# MULTIFREE

## SEWAGE PUMPS

### PERFORMANCE



Single unit		Duplex unit			
Type	Code No.	Type	Code No.	Type	Code No.
10/4 CW1	JP09610	AD 25	JP00310	BD 25	JP45737
15/4 CW1	JP09612	AD 46	JP14353	BD 46	JP45739
25/4 CW1	JP09655	AD 46	JP14353	BD 46	JP45739
35/4 CW1	JP09858	AD 610	JP14354	BD 610	JP45741
45/4 CW2	JP47236	AD 910	JP47263	BD 910	JP47264
55/4 CW2	JP47372	AS 610	JP14407	BS 610	JP14412
75/4 CW2	JP47234	AS 610	JP14407	BS 610	JP14412
100/4 CW3	JP47354	AS 1016	JP14408	BS 1016	JP14413
10/4 CW1, Ex	JP09609	AD 25 X	JP09683	BD 25 X	JP09681
15/4 CW1, Ex	JP09611	AD 46 X	JP14355	BD 46 X	JP14360
25/4 CW1, Ex	JP09656	AD 46 X	JP14355	BD 46 X	JP14360
35/4 CW1, Ex	JP09859	AD 610 X	JP14356	BD 610 X	JP14361
45/4 CW2, Ex	JP47237				
55/4 CW2, Ex	JP47373	AS 610	JP14407	BS 610	JP14412
75/4 CW2, Ex	JP47235	AS 610	JP14407	BS 610	JP14412
100/4 CW3, Ex	JP47355	AS 1016	JP14408	BS 1016	JP14413

Additional requirements, see technical data control units

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	12	14	16	18
10/4 CW1	Flow rate Q [m³/h]	68	51	37	26	15	11								
15/4 CW1		85	69	56	46	37	28	18	5						
25/4 CW1				70	59	50	41	32	23	11					
35/4 CW1		120	112	100	90	81	71	60	48	35	20				
45/4 CW2		142	130	118	108	98	85	79	68	56	43				
55/4 CW2		160	145	134	122	109	105	95	88	78	67	37			
75/4 CW2		180	170	162	150	143	136	126	118	109	101	84	58	19	
100/4 CW3		230	223	216	208	200	193	184	173	168	158	138	116	85	29

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances.

The minimum flow rate in the pressure pipe of  $v = 0,7$  m/s is marked in the Q-H-diagram (operative limit).

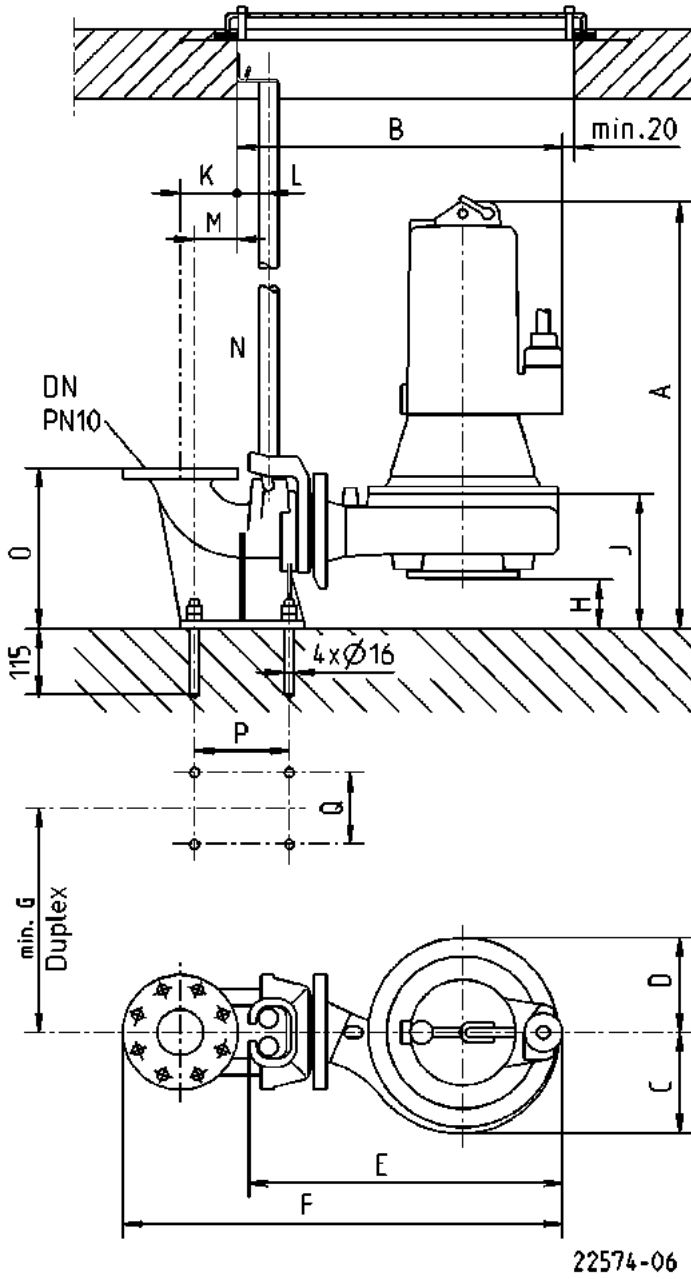
### MULTIFREE DN 100, N = 1450 MIN-1

Type	Voltage	Motor rating		Current	Wires	Fuse	S3	Free pas- sage	Pressure outlet	Weight
		P1	P2							
10/4 CW1	3/PE~400 V	1.80 kW	1.40 kW	3.6 A	6G1,5	10 A	40 %	100 mm	DN 100	49 kg
15/4 CW1	3/PE~400 V	2.40 kW	1.90 kW	4.4 A	6G1,5	10 A	30 %	100 mm	DN 100	49 kg
25/4 CW1	3/PE~400 V	2.80 kW	2.04 kW	4.7 A	6G1,5	10 A	20 %	100 mm	DN 100	49 kg
35/4 CW1	3/PE~400 V	4.00 kW	3.00 kW	7.4 A	6G1,5	10 A	20 %	100 mm	DN 100	53 kg
45/4 CW2	3/PE~400 V	5.30 kW	4.10 kW	9.3 A	6G1,5	20 A	10 %	100 mm	DN 100	81 kg
55/4 CW2	3/PE~400/690 V	6.39 kW	5.10 kW	11.0 A/6.4 A	10G2,5	16 A	15 %	100 mm	DN 100	113 kg
75/4 CW2	3/PE~400/690 V	8.25 kW	6.60 kW	14.2 A/8.2 A	10G2,5	20 A	15 %	100 mm	DN 100	117 kg
100/4 CW3	3/PE~400/690 V	12.95 kW	10.60 kW	20.3 A/11.7 A	10G2,5	25 A	15 %	100 mm	DN 100	139 kg

# MULTIFREE

## SEWAGE PUMPS

### Dimensions guide rail system





# MULTIFREE

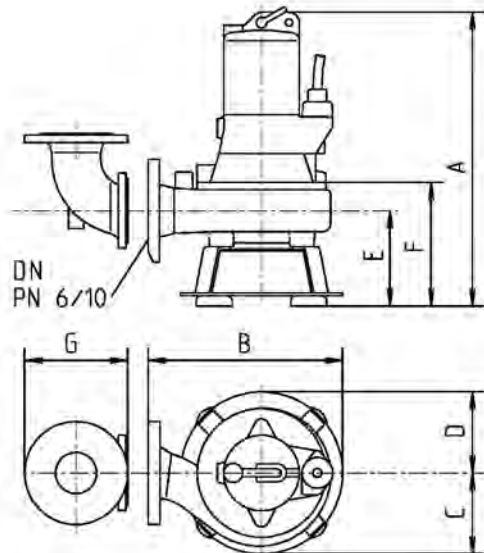
## SEWAGE PUMPS

	GR	DN	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
10/2 AW1	65	80	520	490	130	130	470	690	390	115	220	100	55	74	1"	280	165	125
15/2 AW1	65	80	520	490	130	130	470	690	390	115	220	100	55	74	1"	280	165	125
25/2 AW1	65	80	520	490	130	130	470	690	390	115	220	100	55	74	1"	280	165	125
35/2 AW1	65	80	555	490	130	130	470	690	390	115	220	100	55	74	1"	280	165	125
45/2 AW1	65	80	605	505	130	130	485	705	390	115	225	100	55	74	1"	280	165	125
15/4 AW2	65	80	555	525	140	130	510	725	390	110	260	100	55	74	1"	280	165	125
25/4 AW2	65	80	555	525	140	130	510	725	390	110	260	100	55	74	1"	280	165	125
35/4 AW2	65	80	590	525	140	130	510	725	390	110	260	100	55	74	1"	280	165	125
45/4 AW2	65	80	640	545	140	130	530	745	390	110	260	100	55	74	1"	280	165	125
25/2 BW1	80	80	535	490	140	140	485	705	390	85	235	100	55	74	1"	280	165	125
35/2 BW1	80	80	570	490	140	140	485	705	390	85	235	100	55	74	1"	280	165	125
45/2 BW1	80	80	615	520	140	140	505	725	390	85	235	100	55	74	1"	280	165	125
75/2 BW1	80	80	700	540	140	140	520	740	390	85	235	100	55	74	1"	280	165	125
100/2 BW1	80	80	760	540	140	140	520	740	390	85	235	100	55	74	1"	280	165	125
15/4 BW1	80	80	530	505	140	140	485	705	390	85	235	100	55	74	1"	280	165	125
25/4 BW1	80	80	535	505	140	140	485	705	390	85	235	100	55	74	1"	280	165	125
35/4 BW1	80	80	570	505	140	140	485	705	390	85	235	100	55	74	1"	280	165	125
45/4 BW2	80	80	660	630	200	175	610	830	480	95	280	100	55	74	1"	280	165	125
55/4 BW2	80	80	725	630	200	175	610	830	480	95	280	100	55	74	1"	280	165	125
75/4 BW2	80	80	730	630	205	175	610	830	390	95	280	100	55	74	1"	280	165	125
100/4 BW2	80	80	790	630	205	175	610	830	390	95	280	100	55	74	1"	280	165	125
45/2 CW1	100	100	650	550	140	140	530	775	390	120	270	110	55	82	1"	310	175	150
75/2 CW1	100	100	730	570	140	140	550	795	390	120	270	110	55	82	1"	310	175	150
100/2 CW1	100	100	790	570	140	140	550	795	390	120	270	110	55	82	1"	310	175	150
10/4 CW1	100	100	565	540	140	140	520	760	390	120	270	110	55	82	1"	310	175	150
15/4 CW1	100	100	565	540	140	140	520	760	390	120	270	110	55	82	1"	310	175	150
25/4 CW1	100	100	565	540	140	140	520	760	390	120	270	110	55	82	1"	310	175	150
35/4 CW1	100	100	605	540	140	140	520	760	390	120	270	110	55	82	1"	310	175	150
45/4 CW2	101	100	710	635	195	195	620	860	480	135	330	110	55	82	1"	345	175	385
55/4 CW2	101	100	775	635	195	195	620	860	480	135	330	110	55	82	1"	345	175	385
75/4 CW2	101	100	775	635	195	195	620	860	480	135	330	110	55	82	1"	345	175	385
100/4 CW3	101	100	870	640	215	175	620	865	480	145	360	110	55	82	1"	345	175	385

# MULTIFREE

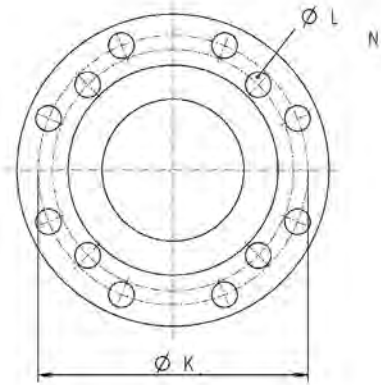
## SEWAGE PUMPS

### Dimensions pump base



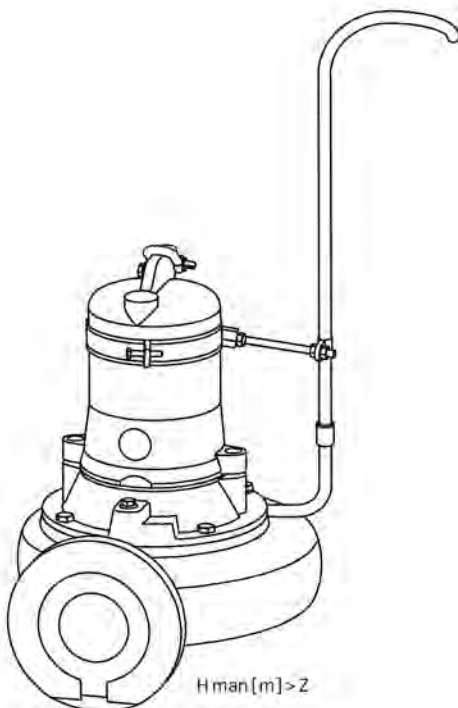
22575-05

### Discharge outlet



29044

### Minimum flushing tube head (m)



# MULTIFREE

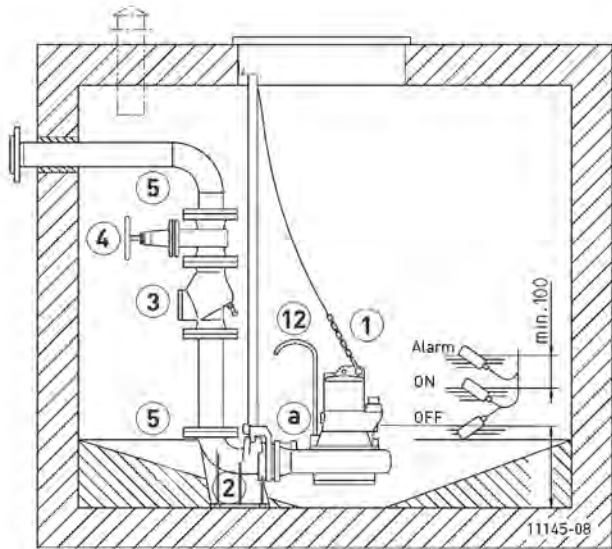
## SEWAGE PUMPS

	DN	A	B	C	D	E	F	G	K	L	N	Z
10/2 AW1	65	500	375	130	130	150	200	175	130/145	14/18	4	4
15/2 AW1	65	500	375	130	130	150	200	175	130/145	14/18	4	4
25/2 AW1	65	500	375	130	130	150	200	175	130/145	14/18	4	4
35/2 AW1	65	500	375	130	130	150	200	175	130/145	14/18	4	4
45/2 AW1	65	580	375	130	130	150	200	175	130/145	14/18	4	4
15/4 AW2	65	590	400	140	130	210	295	175	130/145	14/18	4	4
25/4 AW2	65	590	400	140	130	210	295	175	130/145	14/18	4	4
35/4 AW2	65	625	400	140	130	210	295	175	130/145	14/18	4	4
45/4 AW2	65	675	415	140	130	210	295	175	130/145	14/18	4	4
25/2 BW1	80	550	390	140	140	195	260	200	150/160	18	4/8	4
35/2 BW1	80	585	390	140	140	195	260	200	150/160	18	4/8	4
45/2 BW1	80	640	390	140	140	195	260	200	150/160	18	4/8	4
75/2 BW1	80	780	410	140	140	195	260	200	150/160	18	4/8	4
100/2 BW1	80	780	410	140	140	195	260	200	150/160	18	4/8	4
15/4 BW1	80	560	375	140	140	195	260	200	150/160	18	4/8	4
25/4 BW1	80	560	375	140	140	195	260	200	150/160	18	4/8	4
35/4 BW1	80	595	375	140	140	195	260	200	150/160	18	4/8	4
45/4 BW2	80	705	500	200	175	220	330	200	150/160	18	4/8	10
55/4 BW2	80	775	500	200	175	220	330	200	150/160	18	4/8	10
75/4 BW2	80	775	500	205	175	220	330	200	150/160	18	4/8	10
100/4 BW2	80	835	500	205	175	220	330	200	150/160	18	4/8	10
45/2 CW1	100	770	405	140	140	220	290	230	170/180	18	4/8	4
75/2 CW1	100	750	425	140	140	220	290	230	170/180	18	4/8	4
100/2 CW1	100	810	425	140	140	220	290	230	170/180	18	4/8	4
10/4 CW1	100	590	390	140	140	220	290	230	170/180	18	4/8	4
15/4 CW1	100	590	390	140	140	220	290	230	170/180	18	4/8	4
25/4 CW1	100	590	390	140	140	220	290	230	170/180	18	4/8	4
35/4 CW1	100	625	390	140	140	220	290	230	170/180	18	4/8	4
45/4 CW2	100	720	490	195	195	245	335	230	170/180	18	4/8	6
55/4 CW2	100	785	490	195	195	245	335	230	170/180	18	4/8	6
75/4 CW2	100	785	490	195	195	245	335	230	170/180	18	4/8	6
100/4 CW3	100	870	500	215	175	235	360	230	170/180	18	4/8	10

# MULTIFREE

## SEWAGE PUMPS





### Example of installation guide rail system



Types of operation: Up to 40°C medium temperature  
 Motor submerged: continuous operation S1

Motor not submerged intermittent operation S3  
 (e.g. 20% = 2 min operation and 8 min pause)

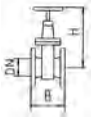



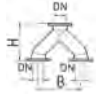




### MECHANICAL ACCESSORY

			Code No.
	<b>① Chain</b>	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	<b>JP45901</b>
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	<b>JP45902</b>
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	<b>JP47365</b>
		Shackle, certified, 630 kg, stainless steel	<b>JP45904</b>
		Pump hanging (08 Ex - 100...)	<b>JP45925</b>
	<b>② Guide rail system</b>	GR 65                      DN 80, 170x226x280 (AxBxH)	<b>JP00494</b>
		GR 80                      DN 80, 170x229x280 (AxBxH)	<b>JP00495</b>
		GR 100                     DN 100, 200x254x310 (AxBxH)	<b>JP00496</b>
		GR 101                    DN 100, 235x254x345 (AxBxH)	<b>JP21037</b>
		Guide rail 1"                1500 mm	<b>JP48937</b>
Guide rail 1"                2000 mm	<b>JP48938</b>		
Guide rail 1"                2500 mm	<b>JP48939</b>		
Guide rail 1"                3000 mm	<b>JP48940</b>		
	<b>③ Swing-type check valve</b>	R 80 EN 12050-4            DN 80, PN 4, flange PN 10, EN 558, 260 (H)	<b>JP00706</b>
		R 80 G EN 12050-4        DN 80, PN 4, flange PN 10, EN 558, with counter weight, 260 (H)	<b>JP00707</b>
		R 101 EN 12050-4         DN 100, PN 4, flange PN 10, EN 558, 300 (H)	<b>JP00325</b>
		R 100 G EN 12050-4      DN 100, PN 4, flange PN 10, EN 558, with counter weight, 300(H)	<b>JP00324</b>
		<b>Ball-type check valve</b>	
		K 80 EN 12050-4            DN 80, PN 4, flange PN 10, EN 558, 260 (H)	<b>JP49205</b>


# MULTIFREE

## SEWAGE PUMPS

### MECHANICAL ACCESSORY

				Code No.
	④ Sluice valve	DN 80, PN 10, EN 1171	315x180 (HxB)	JP00639
		DN 100, PN 10, EN 1171	345x190 (HxB)	JP00329
	⑤ Flanged spigot	DN 80 PN 10, F-KS	75x90 (HxD)	JP00686
		DN 80 PN 10, F-KS	85x110 (HxD)	JP00687
		DN 80/100, PN 10, F-piece	76x114 (HxD)	JP09821
		DN 100 PN 10, F-KS	153x110 (HxD)	JP08673
		DN 100 PN 10, F-piece	100x114 (HxD)	JP00688
	⑥ Elastic connection	DN 80	200x90 (HxD)	JP44768
		DN 100, PN 4	200x110 (HxD)	JP44778
		DN 100, PN 4	200x114 (HxD)	JP44774
	⑦ Hose band clamp	3" (DN 80)		JP44766
		4" (DN 100)		JP44767
	⑧ Flanged Y-pipe	DN 80/100/80	355x390(HxB), PN 10	JP00448
		DN 80/100/80	355x480(HxB), PN 10	JP00202
		DN 100/100/100	355x480(HxB), PN 10	JP00203
	⑨ Reducing adapter	DN 80/100 to PN 10, (similar FFR-piece), H=100		JP00498
	⑩ Pump base	A 220, for A2, AW1, AW2	90x295 (HxB)	JP00682
		B 220, for B2,B3,B4,BW1	115x315 (HxB)	JP00684
		C 220, for CW1	145x330 (HxB)	JP11453
		C 275, for B5,B6,C1,C5,BW2,CW3	145x385 (HxB)	JP00685
		C 325, for C2,CW2	145x565 (HxB)	JP00701
	⑪ Flanged connection	A 80 (similar Q-piece 90°), DN 80 PN10/DN 65 PN6	130x75 (HxB)	JP00577
		B 80 (similar Q-piece 90°), DN 80 PN10/PN6	150x100 (HxB)	JP00578
		C 100 (similar Q-piece 90°), DN 100 PN10/PN6	175x120 (HxB)	JP00579
	⑫ Flushing tube	Type I	10/... - 45/...	JP28221
		Type II	55/... - 100/...	JP28222

### ELECTRICAL ACCESSORY

				Code No.
	a Seal leak detector	DKG		JP44900
		DKG Ex for explosion-proof pumps		JP00249

# MULTIFREE

SEWAGE PUMPS

## OVERVIEW

### WASTEWATER SUMPS

POLY SUMPS PKS	Type	Page
Buoyancy proof sumps as complete pump station in connection with pressure drainage systems, as wastewater collection sump in combination with gravity sewers or for transporting wastewater over distance.	<b>PKS 800</b>	<b>257</b>
	<b>Replacement set</b>	<b>263</b>
	<b>PKS 1000</b>	<b>267</b>
	<b>PKS 1200 until 3000</b>	<b>275</b>
PRESSURE PIPE END SUMP	Typ	Seite
Buoyancy proof pressure pipe end sump for reduction of odour nuisance during the transfer from a pressure pipe into an open gravity sewer.	<b>PKS 1000 DLE</b>	<b>279</b>
INSTALLATION SETS	Typ	Seite
They are intended for the reconstruction of older and corroded sump installations or for the new installation of on-site sumps. The coordinated components can be flexibly adapted on site.	<b>DN 40 - DN 150</b>	<b>281</b>

# OVERVIEW

## PKS 800 SUMPS - ACCESSORY

### ACCESSORY

Type	Code no.	PKS-B 800-32	PKS-B 800-D32	Replacement set
2. INLET DN150 WITH SEALING ELEMENT	JP42181	•		
DISCHARGE PIPE ASSEMBLY 08 *	JP44857	•	•	
COUPLING UNIT MULTICUT *	JP44855	•	•	
COUPLING UNIT REPLACEMENT	JP46865			•
COUPLING UNIT D MULTICUT	JP42227			•
GUIDE RAIL REPLACEMENT SET	JP48061			•
PIPE CONNECTION 1 1/2"	JP48250			•
PIPE CONNECTION 2"	JP48251			•
WALL FASTENING	JP48666			•
ELEVATION ADJUSTMENT	JP48667			•
COVER CL.A	JP46437	•	•	
LIFTING DEVICE FOR CL.A	JP44969	•	•	
COVER WITHOUT VENTILATION CL. B	JP44972	•	•	
CONCRETE RING, 625X100 Ø785	JP44975	•	•	
SCREWED JOINT 40 - 1 1/4"	JP44796	•	•	
SCREWED JOINT 50 - 1 1/4"	JP44797	•	•	
SCREWED JOINT 63 - 1 1/4"	JP44798	•	•	
PERROT C-COUPLING	JP41582	•	•	
PERROT FLUSHING CONNECTION -32/40	JP42059	•	•	
FLUSHING CONNECTION -32/40	JP42060	•	•	
PERROT HOSE COUPLING	JP19202	•	•	
PERROT DRS-CONNECTION	JP22421	•	•	
DRS-CONNECTION WITH COVER	JP42178	•	•	
PERROT BREATHING VALVE	JP22422	•	•	
PERROT DRS + BREATHING VALVE	JP22419	•	•	
BREATHING VALVE WITH COVER	JP42179	•	•	
STORZ C BREATHING VALVE	JP41583	•	•	
DRS + BREATHING VALVE WITH COVER	JP42180	•	•	
STORZ C DRS-CONNECTION 1/2"	JP41584	•	•	
STORZ C DRS-CONNECTION 3/4"	JP41585	•	•	
PERROT PRESSURE GAUGE	JP44854	•	•	
PERROT CLAW COUPLING	JP22420	•	•	
PERROT FLUSHING CONNECTION 1"	JP22466	•	•	
SUMP EXTENSION PSV-A/B 375	JP46429	•	•	
SUMP EXTENSION PSV-A 855	JP46430	•	•	
SUMP EXTENSION PSV-A 1335	JP46431	•	•	
GUIDE RAIL EXTENSION PKS-B-32	JP46439	•		
GUIDE RAIL EXTENSION PKS-B-D32	JP48064		•	
OPERATING HANDLE T-KEY PKS (TELESCOPIC)	JP46438	•	•	
VENTILATION PIPE DN 100	JP44858	•	•	

\* for duplex units order 2 x



# OVERVIEW

## PKS 1000 SUMPS - ACCESSORY

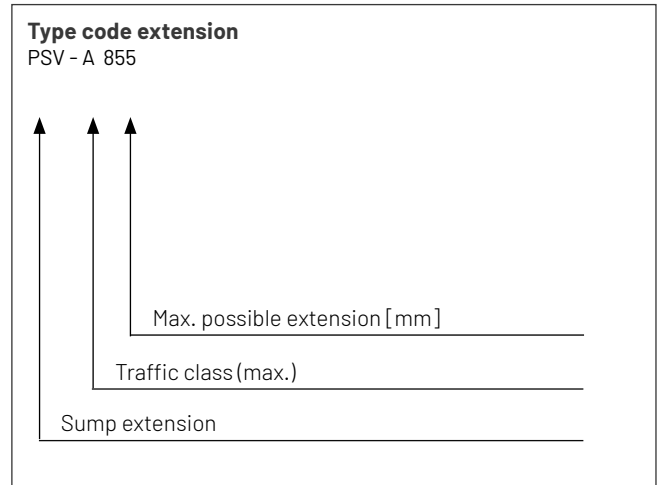
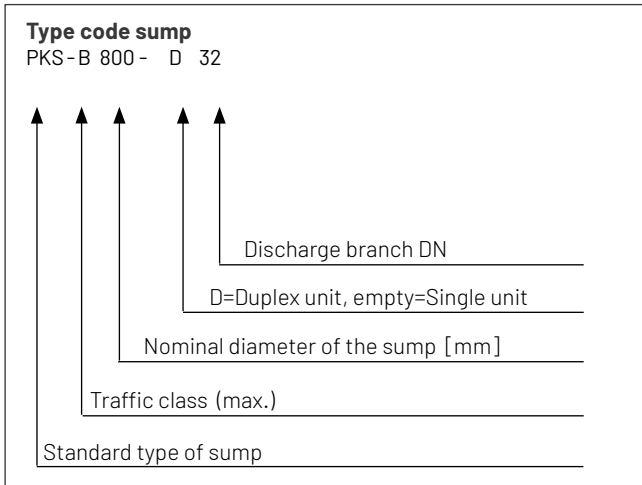
### ACCESSORY

Type	Code no.	PKS-D 1000-(D)40	PKS-D 1000-D65/D80	PKS-D 1000-DLE
COVER WITHOUT VENTILATION CL. B Ø610	JP44972	•	•	
COVER WITHOUT VENTILATION CL. D Ø610	JP29175	•	•	
COVER CL. B Ø610	JP44973			•
COVER CL. D Ø610	JP29035			•
ACCESS AID, GRAB HANDLE	JP44610	•		•
ACCESS AID, SLEEVE	JP44611	•		•
SCREWED JOINT 50-1 1/2"	JP45948	•		
SCREWED JOINT 63-1 1/2"	JP45949	•		
PSV-D 1000X500 SG T (10)	JP44407	•		
PSV-D 1000X500 T (10)	JP44408	•		
PSV-D 1000X500 SG (10)	JP44403	•		•
PSV-D 1000X500 (10)	JP44404	•	•	
GUIDE RAIL, STAINLESS STEEL, 1150 MM *	JP50268	•		
GUIDE RAIL, STAINLESS STEEL, 1650 MM *	JP50269	•		
GUIDE RAIL, STAINLESS STEEL, 2150 MM *	JP50270	•		
GUIDE RAIL, STAINLESS STEEL 2650 MM *	JP50271	•		
GUIDE RAIL, STAINLESS STEEL, 3150 MM *	JP50272	•		
GUIDE RAIL, STAINLESS STEEL, 3650 MM *	JP50273	•		
GUIDE RAIL, STAINLESS STEEL, 1550 MM **	JP50276		•	
GUIDE RAIL, STAINLESS STEEL, 2050 MM **	JP50277		•	
GUIDE RAIL, STAINLESS STEEL, 2550 MM **	JP50278		•	
GUIDE RAIL, STAINLESS STEEL, 3050 MM **	JP50279		•	
GUIDE RAIL, STAINLESS STEEL, 3550 MM **	JP50280		•	
FIRE HOSE COUPLING SIZE C, 1 1/2"	JP44770		•	
PERROT FLUSHING CONNECTION -65/80	JP22353	•		
FLUSHING CONNECTION -32/40	JP42060	•		
PERROT FLUSHING CONNECTION -32/40	JP42059	•	•	
PERROT HOSE CONNECTION	JP19202	•	•	
PERROT DRS-CONNECTION	JP22421	•	•	
PERROT BREATHING VALVE	JP22422	•	•	
PERROT DRS WITH BREATHING VALVE	JP22419	•	•	
PERROT PRESSURE GAUGE	JP44854	•	•	
PERROT CLAW COUPLING	JP22420	•	•	
PERROT FLUSHING CONNECTOR 1"	JP22466	•	•	
UNDERGROUND VALVE DN 80 *	JP18936		•	
SET OF EARTH INSTALLATION EQUIPMENT 0.7 M *	JP18938		•	
SET OF EARTH INSTALLATION EQUIPMENT 1.0-1.4M *	JP18939		•	
SET OF EARTH INSTALLATION EQUIPMENT 1.25-1.8M *	JP18940		•	
SEAL LUBRICANT 1KG TUBE	JP44605	•	•	•
SEAL LUBRICANT 3KG BUCKET	JP44606	•	•	•
VENTILATION PIPE DN 100	JP44858	•	•	
ADDITIONAL INLET DN 150	JP44523	•	•	
ADDITIONAL INLET DN 200	JP44524	•	•	
ADDITIONAL INLET DN 250	JP44525	•	•	

\* for duplex units order 2 x, \*\* for duplex units order 4 x

# OVERVIEW

## TYPE CODE WASTEWATER SUMPS | FLUSHING CONNECTION AND ACCESSORY



### FLUSHING CONNECTION AND ACCESSORY

PKS 800 direct connection					PKS 800/PKS 1000-40			PKS 800/PKS 1000-65/80	
Ⓐ	Ⓑ	Ⓒ			Ⓓ	Ⓔ		Ⓕ	Ⓖ
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩ ⑪

Description	Code no.
For direct connection to the pressure pipe unit 32 or ball-type check valve	
Ⓐ Breathing valve with cover	JP42179
Ⓑ DRS-connection with cover	JP42178
Ⓒ DRS + breathing valve with cover	JP42180
Perrot or Storz C system	
Ⓓ Perrot flushing connection -32/40	JP42059
Ⓔ Perrot flushing connection -65/80	JP22353
Ⓕ Storz C flushing connection -32/40	JP42060
Ⓖ Storz C coupling 1 1/2"	JP44770
Accessory for Perrot system	
① Perrot breathing valve	JP22422
② Perrot DRS-connection	JP22421
③ Perrot DRS + breathing valve	JP22419
④ Perrot thread connection 1"	JP22466
⑤ Perrot claw coupling	JP22420
⑥ Perrot hose connection	JP19202
⑦ Perrot pressure gauge	JP44854
⑧ Perrot C-coupling	JP41582
Accessory for Storz system	
⑨ Storz C breathing valve	JP41583
⑩ Storz C DRS-connection 1/2"	JP41584
⑪ Storz C DRS-connection 3/4"	JP41585

## PKS 800

### WASTEWATER SUMPS

For MultiCut-Pumps

- . Mark of conformity
- . Suitable for traffic to class B 125
- . Corrosion resistant components
- . Patented security locking
- . Inlet designed for optimised flow
- . Smooth benched deposit free collection chamber
- . Coupling system with guide tube
- . Ball check valve with pump and pressure pipe is removable
- . Residual volume as of 36 litres



#### DISCRIPTION

The buoyancy proof sump is supplied as a complete prefabricated pump station for use in pressure drainage systems and as a sewage collection sump for use with gravity sewers. The sumps are equipped with one or two pumps. They are suitable for accessible areas (class A 15) or for traffic areas (class B 125).

Preformed transport eyelets / transport handles provide easy transport and placing into its final position.

A comprehensive range of pumps from the MultiCut sewage pump series 08/2 M to 45/2 M, with or without Ex rating together with control units which have been specially optimised for pressure drainage applications is available to ensure that the pump station meets the required discharge performance.

The buoyancy proof plastic sumps of high grade polyethylene are approved by the German Institute for Construction Engineering (DIBt) and are provided with inlet DN 150, port DN 100 for power cable and venting and a discharge branch DN 32.

The newly designed unique coupling system made of Polyphthalamide (PPA) is located above the water level. The stainless steel ball valve is provided with a safety locking device. The coupling valve can only be opened after closing the ball valve. A certified stainless steel chain and a guide tube facilitate the lifting of the pump or the coupling of the pump and coupling unit. This allows a maintenance of the ball check valve outside the sump.

Depending on the used extension it is possible to extend the sump to a total height of 2.75 metres. The required type of loading class depends on the site.

**Single unit:** The total volume is 640 litres. The storage volume up to the lower edge of the inlet is 145 litres and the residual volume is 36 litres.

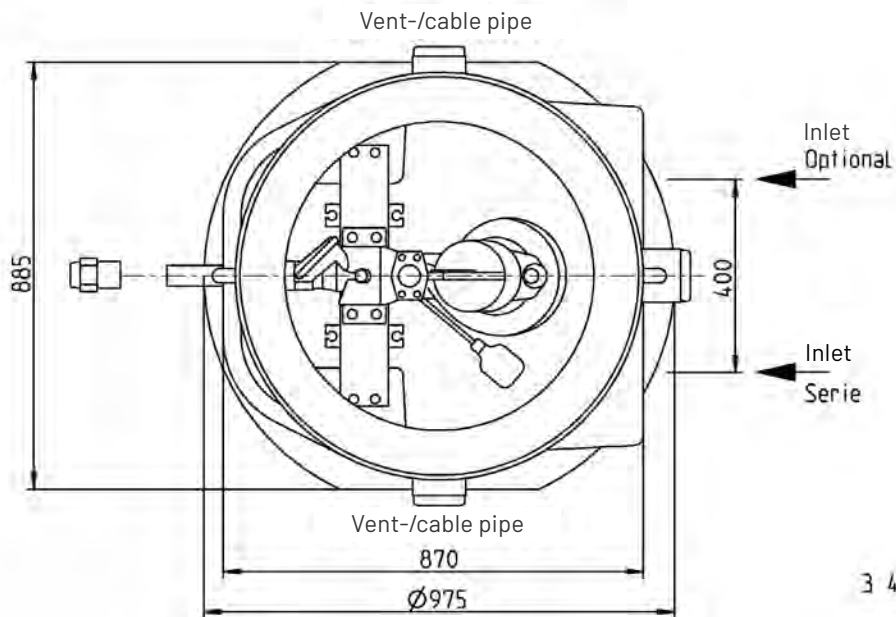
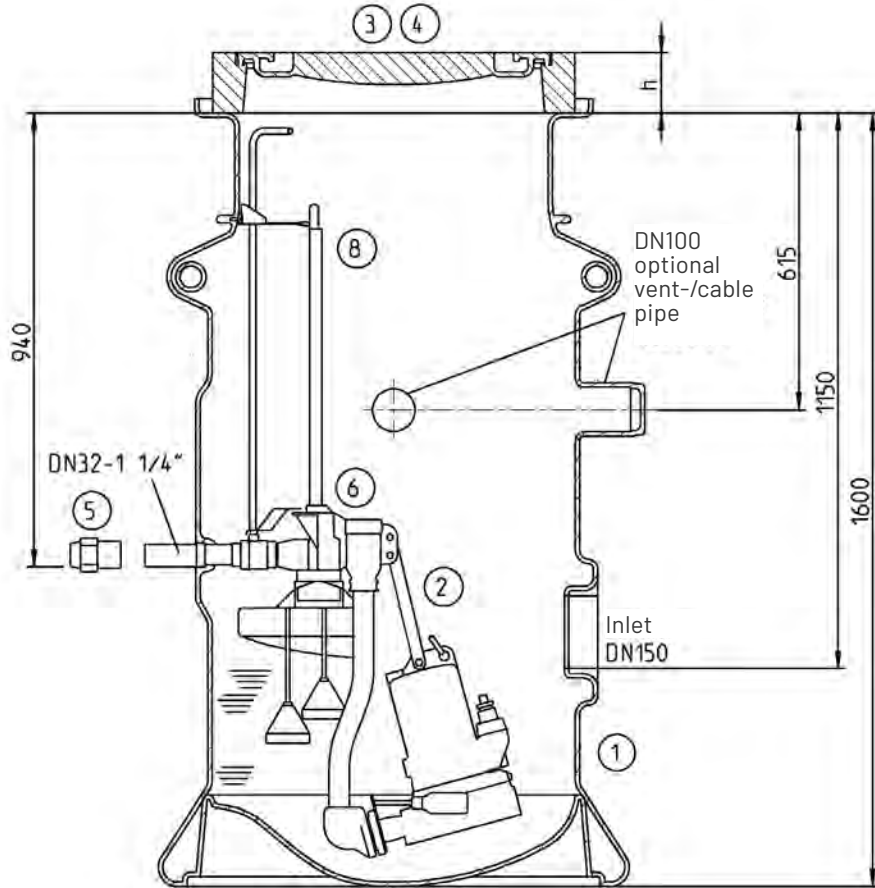
**Duplex unit:** The total volume is 740 litres. The storage volume up to the lower edge of the inlet is 190 litres and the residual volume is 85 litres.

# PKS 800

## WASTEWATER SUMPS

For MultiCut-Pumps

Single unit PKS-B 800-32

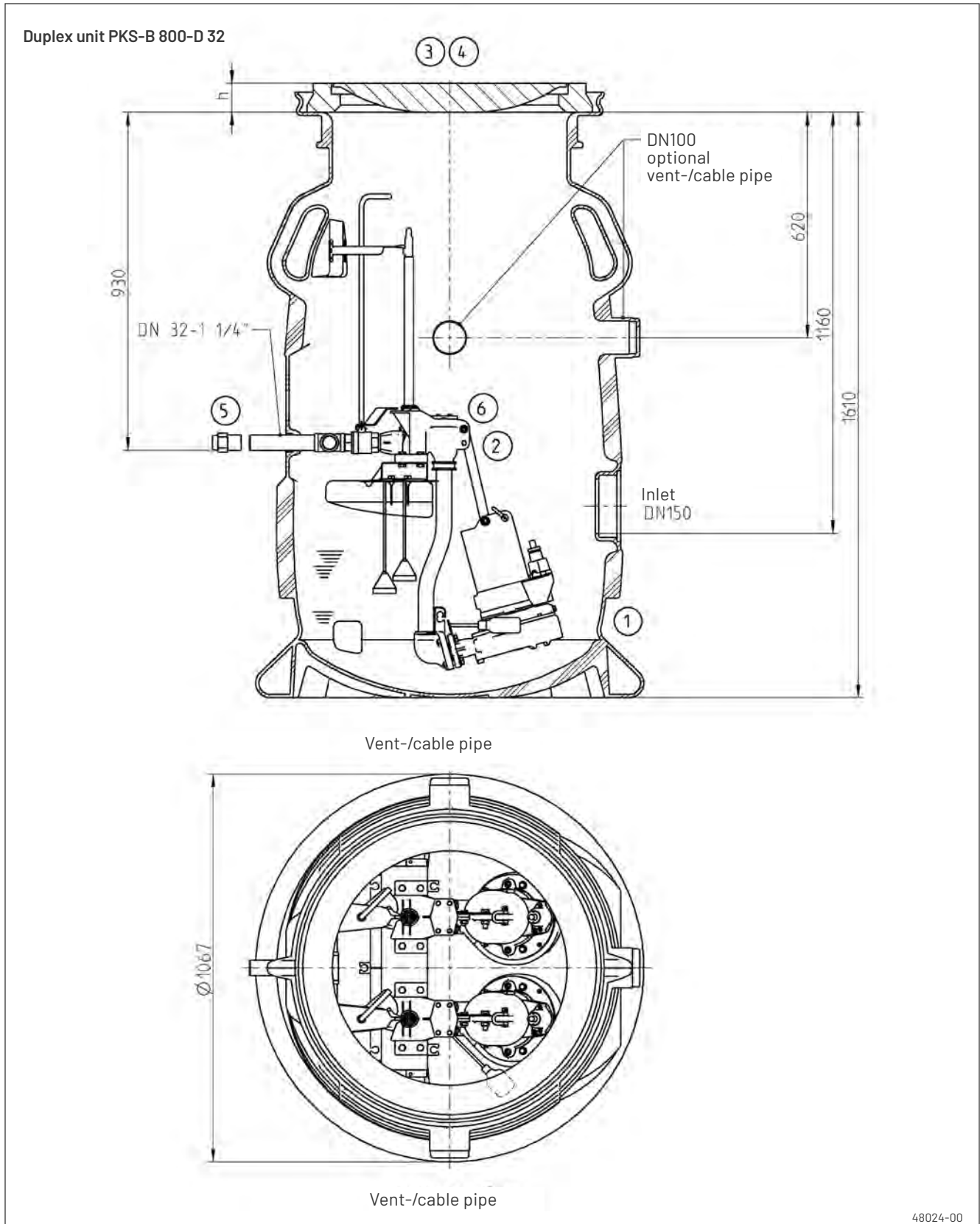


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# PKS 800

## WASTEWATER SUMPS

For MultiCut-Pumps



# PKS 800

## WASTEWATER SUMPS

For MultiCut-Pumps

### Dimensions sump extensions

#### Single unit PKS-B 800-32

Dimensions (without cover) mm	Height	Inlet	Pressure outlet	Buoyancy proof depth
Sump	1600	1150	940	1600
<b>Class A</b>				
Sump + 1 x PSV-A/B 375	1975	1525	1315	1975
Sump + 1 x PSV-A 855	2455	2005	1795	2455
Sump + 1 x PSV-A 1335	2935	2485	2275	2935
<b>Class B</b>				
Sump + 1 x PSV-A/B 375	1975	1525	1315	1975
Sump + 2 x PSV-A/B 375	2360	1910	1700	2360
Sump + 3 x PSV-A/B 375	2740	2290	2080	2740

Volume	Sump	Extension	Switching point			
			PSV	Off	On	Alarm / peak load
PKS-B 800-32	640 l	159 l	36 l	110 l	145 l	145 l

#### Duplex unit PKS-B 800-D 32

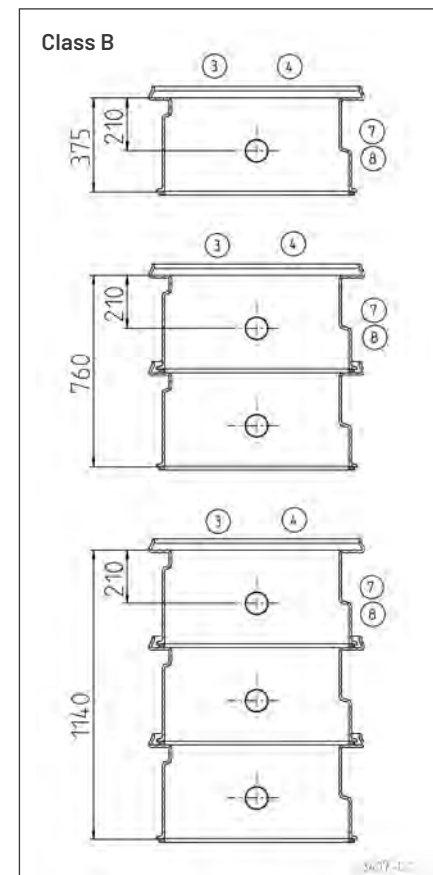
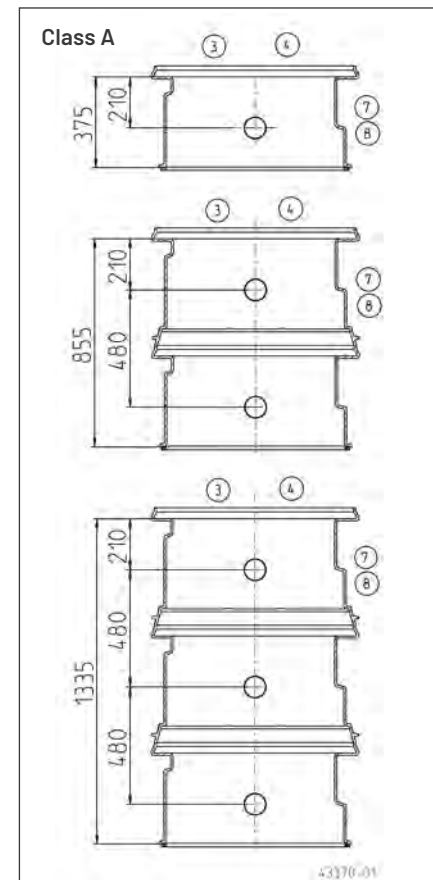
Dimensions (without cover) mm	Height	Inlet	Pressure outlet	Buoyancy proof depth
Sump	1610	1160	930	1610
<b>Class A</b>				
Sump + 1 x PSV-A/B 375	1985	1535	1305	1985
Sump + 1 x PSV-A 855	2465	2015	1785	2465
Sump + 1 x PSV-A 1335	2945	2495	2265	2945
<b>Class B</b>				
Sump + 1 x PSV-A/B 375	1985	1535	1305	1985
Sump + 2 x PSV-A/B 375	2370	1920	1690	2370
Sump + 3 x PSV-A/B 375	2750	2300	2070	2750

Volume	Sump	Extension	Switching point			
			PSV	Off	On	Alarm / peak load
PKS-B 800-D32	740 l	159 l	85 l	140 l	190 l	190 l

### PUMP TYPES FOR PKS 800

#### MultiCut-Pumps:

08/2 M, 08/2 ME, 20/2 M plus, 25/2 ME, 35/2 M, 36/2 M, 45/2 M



# PKS 800

## WASTEWATER SUMPS

For MultiCut-Pumps

### SCOPE OF SUPPLY

#### PKS-B 800-32 (single unit)

Plastic sump, coupling system and guide tube, stainless steel ball valve with extension and security locking. Stainless steel discharge branch DN 32 with internal thread 1¼", 2 sleeves DN 150 (KG-pipe) for the inlet (one ready for connection) and 3 ports DN 100 (KG-pipe) for cable and venting.

#### PKS-D 800-D32 (duplex unit)

Plastic sump, coupling system and guide tube, 2 stainless steel ball valves with extension and security locking. Stainless steel discharge branch DN 32 with internal thread 1¼", 1 sleeve DN 150 (KG-pipe) for the inlet, 3 ports DN 100 (KG-pipe) for cable and venting.

#### PSV -Sump extension

Sump extension, sealing for neck of sump and 2 ports for cable and venting DN 100 (KG-pipe).

### ACCESSORY

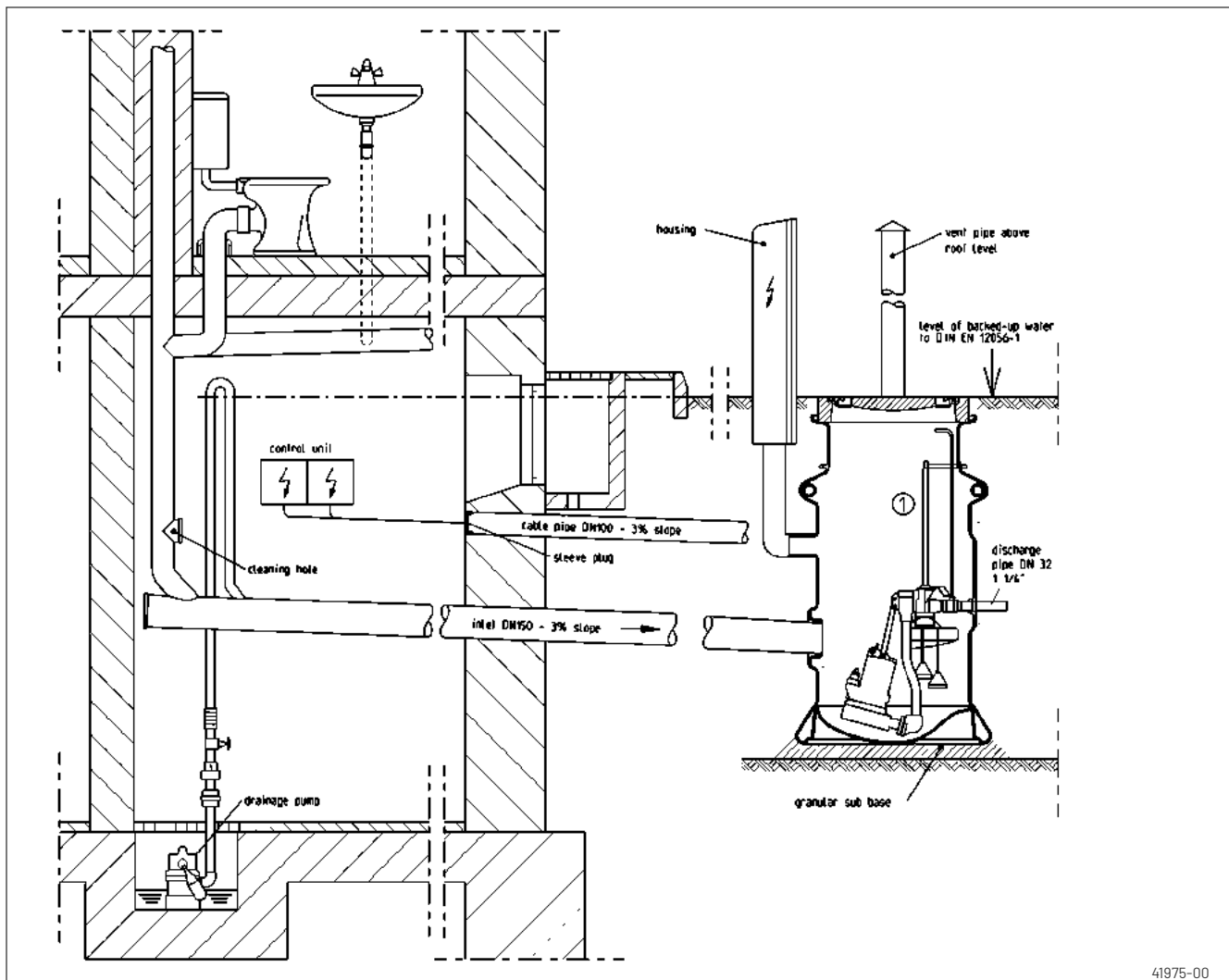
Type		Code-No.	Weight (kg)
① Poly-sump	PKS-B 800-32	JP09475	78
	PKS-B 800-D32	JP47345	80
	Second inlet (single unit) with sealing element DN 150	JP42181	
② Discharge pipe assembly-32 *	08/2M Ex, 20/2M plus up to 45/2M, Ex	JP44855	8
	08/2M	JP44857	8
③ Cover cl. A	∅ 600 cl. A 15, h= 80, D 785	JP46437	90
	Lifting device for cl. A	JP44969	
	Cover cl. B without ventilation	∅ 610 cl. B 125, h= 125, D 750	JP44972
④ Concrete ring	625 x 100 mm, ∅ 785	JP44975	32
⑤ Single ended quick release coupling with female thread and clamp	1¼" to ∅ 40 mm (DN 32)	JP44796	
	1¼" to ∅ 50 mm (DN 40)	JP44797	
	1¼" to ∅ 63 mm (DN 50)	JP44798	
⑥ DRS-connection ½" with cover		JP42178	
	Breathing valve with cover	Further accessories on request.	JP42179
	DRS-connection + Breathing valve with cover		JP42180
⑦ Sump extension	PSV-A/B 375	JP46429	25
	PSV-A 855	JP46430	40
	PSV-A 1335	JP46431	54
	Guide rail extension PKS-B -32	single unit	JP46439
Guide rail extension PKS-B -D32	double unit	JP48064	
⑧ Operating handle T-Key (telescopic) *	for extension (incl. 1.5 m chain)	JP46438	
⑨ Ventilation pipe	DN 100, stainless steel	JP44858	

\* incl. 2.5 m chain, if duplex unit order 2x

# PKS 800

## WASTEWATER SUMPS

For MultiCut-Pumps



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### INSTALLATION CHARACTERISTICS

The PKS-Sump complies with all the requirements of standards DIN EN 12056/752/476 and is supplied ready for installation and connecting up. It's low weight facilitates transport and installation. It can be installed and connected in a short time without the need of expensive construction machinery.

Checking and maintenance work on the valves can be easily carried out from above - without the need to enter the sump.

Important functional features have also been taken into consideration when designing the PKS sump: a smooth benched collection chamber without any septic zones, inlets DN 150 orientated in the flow direction and a pressure tight discharge connection which is water tight resistant to any longitudinal stresses.



## REPLACEMENT SET FOR WASTEWATER SUMPS

- Subsequent use of the existing sump
- No or minor field damage
- Corrosion-resistant materials
- Valve unit and pump with pressure pipe can be lifted out of sump



### DESCRIPTION

The replacement set has been specially designed for the use in pump stations of pressure drainage systems from the years 1989-2007. It can be used in all situations where the age of the existing system or inadequate ventilation damaged the original components necessitate the replacement due to the aggressive conditions in the pump sump.

Where previously, due to cost considerations, it was standard practice to use grey cast iron and galvanised steel fixtures in pump chambers, this replacement set for single pump stations uses only corrosion-resistant materials such as stainless steel and modern glass-fibre reinforced plastics. They can be used to replace the existing fixtures on a one-to-one basis.

The existing sump can remain in the ground. When the replacement set is installed, the pressure pipe in the sump is usually disconnected. In special cases, the pressure pipe can also be disconnected with the appropriate accessories outside the sump.

With the new replacement set, you can lift the pump and the discharge pipe assembly out of the sump in one piece for servicing. This gives you access to both the pump and the check valve, without having to climb into the chamber.

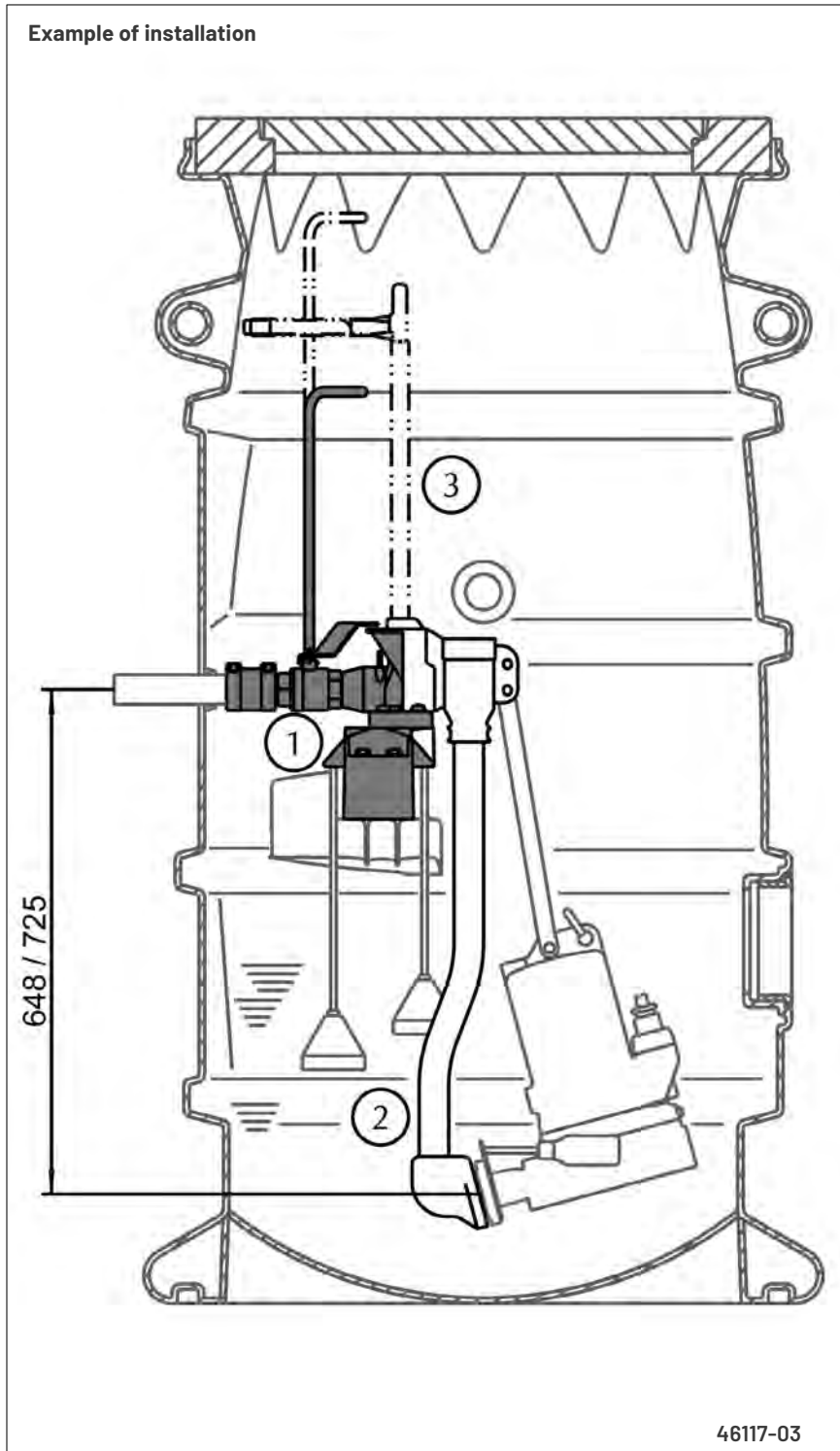
When deciding which replacement set model to use, refer to the year of manufacture of the plastic sump or contact us. We will be happy to assist!

In addition with the optional accessories for wall fastening and elevation adjustment other sumps with a diameter of 800-1000 mm can be equipped.

We can also advise you on which replacement set to use for other types of sump.

# REPLACEMENT SET FOR WASTEWATER SUMPS

Example of installation



## AVAILABLE PUMP TYPES FOR PKS 800

### MultiCut-Pumps:

08/2 M, 08/2 ME, 20/2 M plus, 25/2 ME, 35/2 M, 36/2 M, 45/2 M

# REPLACEMENT SET

FOR WASTEWATER SUMPS

## SCOPE OF SUPPLY

### Replacement set for single units

Tie-bar and coupling system made of high-strength fibre-glass reinforced plastic, stainless-steel ball valve with extension and elastic connection (10 bar pressure-stable).

### Discharge pipe assembly

Stainless steel discharge with ball-check valve in high-strength plastic, pump tensile and certified chain in stainless steel

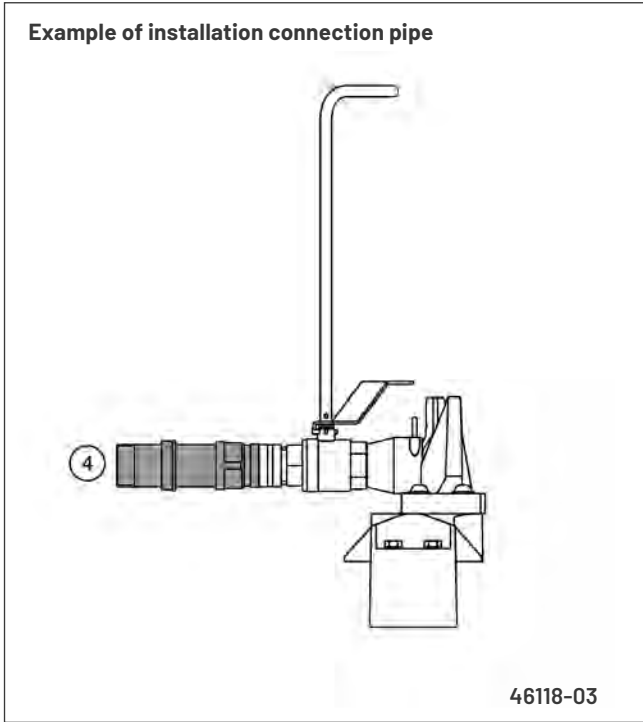
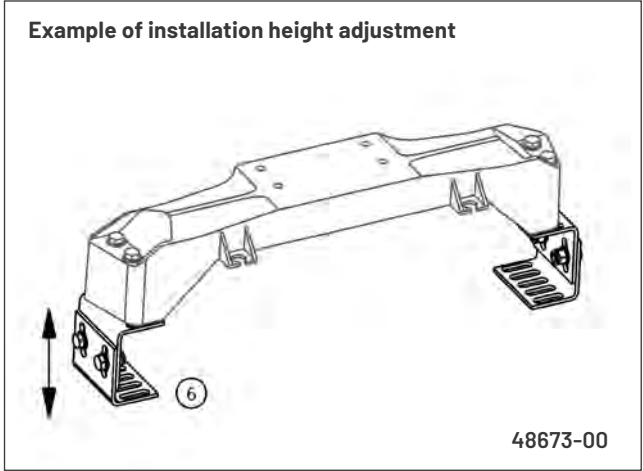
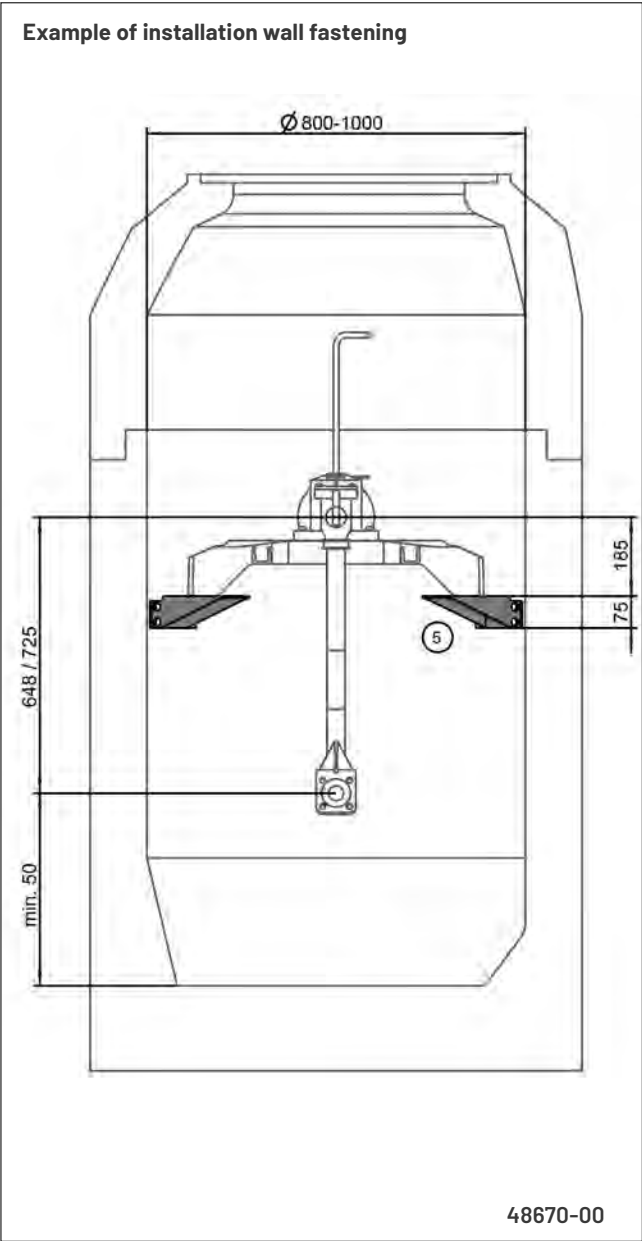
## REPLACEMENT SET FOR SINGLE UNITS

Type		Code no.
① Replacement set	for the years 1989-2007	JP48025
<b>Accessories:</b>		
② Discharge pipe assembly	length 648, 1989-1996	JP46865
Discharge pipe assembly	length 725, 1997-2007	JP42227
③ Guide rail replacement set	1997-2007	JP48061
④ Connection pipe 1½"	when disconnecting outside the sump	JP48250
Connection pipe 2"	when disconnecting outside the sump	JP48251
⑤ Wall fastening		JP48666
⑥ Height adjustment	96-147 mm	JP48667

Duplex unit on request

# REPLACEMENT SET

FOR WASTEWATER SUMPS



## PKS 1000

### WASTEWATER SUMPS

For Multicut pumps

- . According EN 13598-2
- . Suitable for traffic up to class D 400
- . Corrosion-proof
- . Buoyancy-proof and ground water proof
- . Max. installation depth 4.90 m

#### DESCRIPTION

The buoyancy proof and practicable plastic sump in high-grade polypropylene (PP) corresponds to EN 13598-2. It is used in pressure drainage systems as well as a standard pump sump. It is suitable for use in areas with traffic load up to 40 tons. (DIN EN 124, group 4). The PKS-D can be placed on natural ground without concrete works. The modular design offers easy transport and installation.

In order to adjust the pumping stations to the required pumping conditions a wide range of MultiCut submersible sewage pumps is available, both with or without explosion protection.

The sump is available in two versions, with a ladder (SG) using pumps MultiCut 20/2 M to 45/2 M and without a ladder using the larger MultiCut types 75/2 M and 76/2 M. Both versions have a connection piece for inlet, two sockets with seal for ventilation and cable duct, a facility for installing a flushing connection and a DN 40 pressure outlet.

The standard installation depth without a cover is 2.27 m. The installation depth can be extended to 4.90 m by the use of sump extensions (installation depth in ground water not more than 5 m). The total volume is 1372 litres. The volume storage below the inlet is 396 litres.

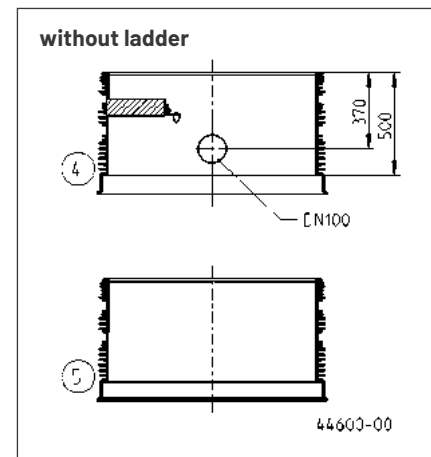
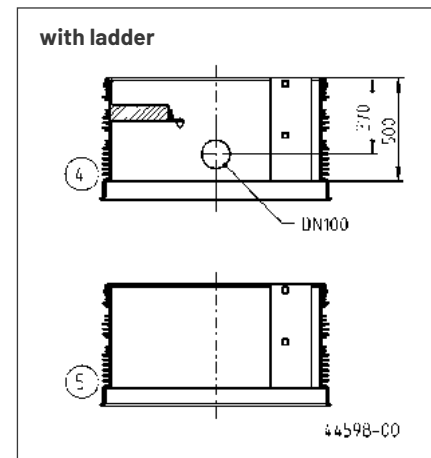
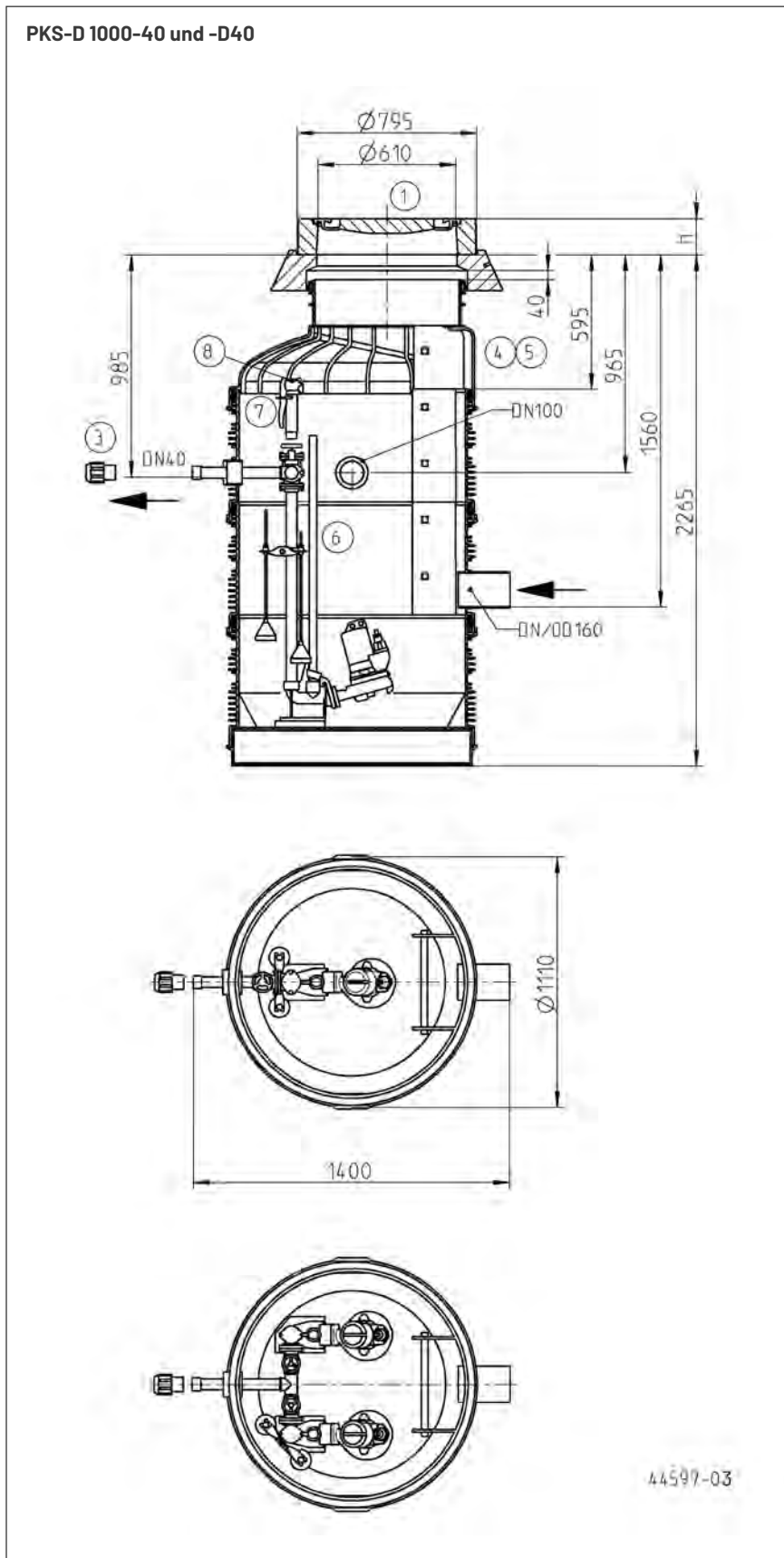
If extensions are used, one of the extensions must be ordered with a tie-bar.



# PKS 1000

## WASTEWATER SUMPS

For Multicut pumps



### POSSIBLE PUMP TYPES

#### MultiCut pumps

20/2 M plus, 25/2 ME, 35/2 M, 36/2 M, 45/2 M, 75/2 M and 76/2 M

We reserve the right to change specifications without notice. Illustration without ladder.

# PKS 1000

## WASTEWATER SUMPS

For Multicut pumps

### Scope of supply

#### PKS-D 1000-40 (single unit)

The poly-sump consist of an underpart with an inlet and a discharge branch, an extension element, a cone 1000/625 and a concrete support ring for the manhole cover (accessory). The segments are sealed with sealing rings. Inlet socket DN/OD 160 (DN 150) for PVC collar (KGU), 2 sockets DN 100 for ventilation/cable duct, 1 socket plug DN 100, guide rail

system, pipework with elbow ball check valve and stop valve in DN 40 in stainless steel, facility for flushing connection system "Perrot".

#### PKS-D 1000-D40 (duplex unit)

The poly-sump consist of an underpart with an inlet and a discharge branch, an extension element, a cone 1000/625 and a concrete support ring for the manhole

cover (accessory). The segments are sealed with sealing rings. Inlet socket DN/OD 160 (DN 150) for PVC collar (KGU), 2 sockets DN 100 for ventilation/cable duct, 1 socket plug DN 100, 2 guide rail systems, pipework with elbow ball check valves and stop valves in DN 40 in stainless steel, facility for flushing connection system "Perrot".

### SUMPS AND ACCESSORY

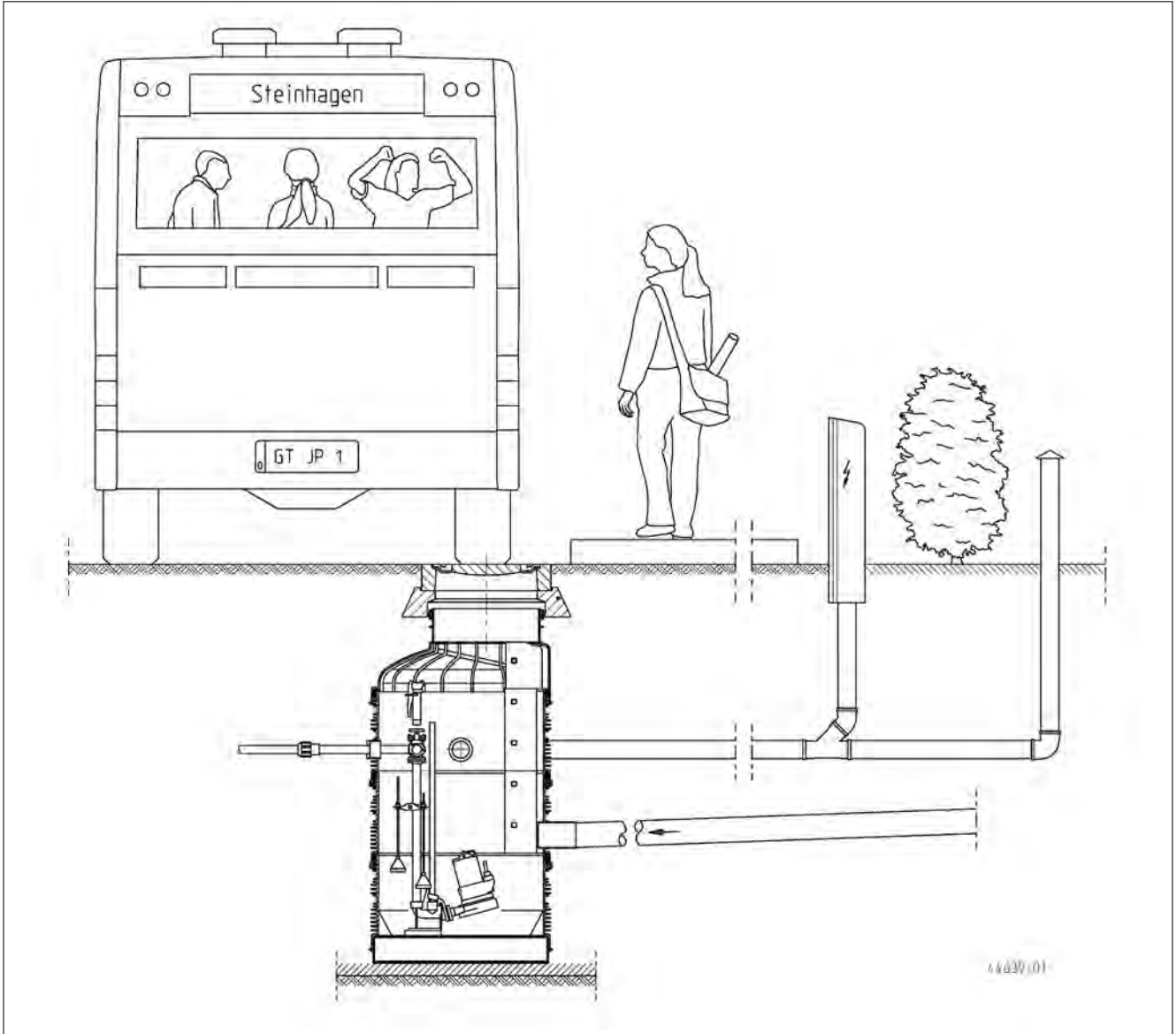
Type		Code Nr.	Weight
Poly-sump PKS-D 1000-40		<b>JP44358</b>	280.0 kg
Poly-sump PKS-D 1000-D40		<b>JP44359</b>	300.0 kg
Poly-sump PKS-D 1000-D40 (75)	without ladder for 75/2 M and 76/2 M	<b>JP44361</b>	300.0 kg
① Cover cl. B without ventilation d610	h=125	<b>JP44972</b>	110.0 kg
Cover cl. D without ventilation d610	h=160	<b>JP29175</b>	190.0 kg
② Access aid, grab handle		<b>JP44610</b>	4.0 kg
Access aid, sleeve		<b>JP44611</b>	1.5 kg
③ Screw joint 1 1/2"- 50mm	with female thread and clamping connection	<b>JP45948</b>	0.3 kg
Screw joint 1 1/2"- 63mm	with female thread and clamping connection	<b>JP45949</b>	0.4 kg
④ PSV-D 1000x500 SG T (10)	tie-bar, ladder	<b>JP44407</b>	34.0 kg
PSV-D 1000x500 T (10)	tie-bar	<b>JP44408</b>	32.0 kg
⑤ PSV-D 1000x500 SG (10)	ladder	<b>JP44403</b>	16.6 kg
PSV-D 1000x500 (10)		<b>JP44404</b>	15.6 kg
⑥ Guide tube 1" stainless steel	1150 mm	<b>JP50268</b>	2.8 kg
Guide tube 1" stainless steel	1650 mm	<b>JP50269</b>	4.0 kg
Guide tube 1" stainless steel	2150 mm	<b>JP50270</b>	5.2 kg
Guide tube 1" stainless steel	2650 mm	<b>JP50271</b>	6.5 kg
Guide tube 1" stainless steel	3150 mm	<b>JP50272</b>	7.5 kg
Guide tube 1" stainless steel	3650 mm	<b>JP50273</b>	9.0 kg
Attention: For duplex units please order 2 x guide tubes			
⑦ Perrot flushing connection -32/40		<b>JP42059</b>	3.2 kg
Storz C flushing connection PKS		<b>JP42060</b>	1.4 kg
⑧ Perrot breathing valve		<b>JP22422</b>	0.6 kg
Perrot DRS connection		<b>JP22421</b>	0.5 kg
Perrot flush connector 1"		<b>JP22466</b>	0.3 kg
Perrot claw coupling		<b>JP22420</b>	0.5 kg
Perrot hose connection	Ø 50 mm	<b>JP19202</b>	0.4 kg
Perrot pressure gauge		<b>JP44854</b>	1.4 kg
⑨ Ventilation pipe DN 100	stainless steel	<b>JP44858</b>	4.3 kg
⑩ Second and changed inlet DN 150		<b>JP44523</b>	
Second and changed inlet DN 200		<b>JP44524</b>	
Second and changed inlet DN 250		<b>JP44525</b>	
⑪ Seal lubricant 1 kg tube		<b>JP44605</b>	1.0 kg
Seal lubricant 3 kg bucket		<b>JP44606</b>	3.0 kg
⑫ Dislocate of gravity center for 75/2 M and 76/2 M per pump		<b>JP44757</b>	

# PKS 1000

## WASTEWATER SUMPS

For Multicut pumps

### INSTALLATION EXAMPLE



**Attention:** Concerning space capacity the installation of submersible switches is not possible.



## PKS 1000

### POLY-SUMPS

For MultiStream- and MultiFree pumps

- . According EN 13598-2
- . Suitable for traffic up to class D 400
- . Corrosion-proof
- . Buoyancy-proof and ground water proof
- . Max. installation depth 4.90 m

#### DESCRIPTION

The buoyancy proof and practicable plastic sump in high-grade polypropylene (PP) corresponds to EN 13598-2. It is used in pressure drainage systems as well as a standard pump sump. It is suitable for use in areas with traffic load up to 40 tons. (DIN EN 124, group 4). The PKS-D can be placed on natural ground without concrete works. The modular design offers easy transport and installation.

The sump has a connection piece for inlet, two sockets with seal for ventilation and cable duct, a facility for installing a flushing connection and a DN 80 pressure outlet.

The standard installation depth without a cover is 2.77 m. The installation depth can be extended to 4.90 m by the use of sump extensions (installation depth in ground water not more than 5 m). The total volume is 1764 litres. The storage volume below the inlet is 395 litres.

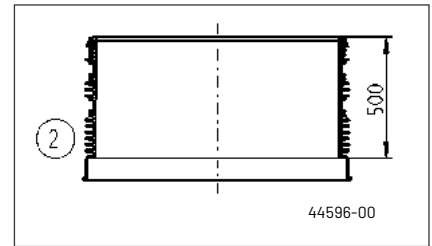
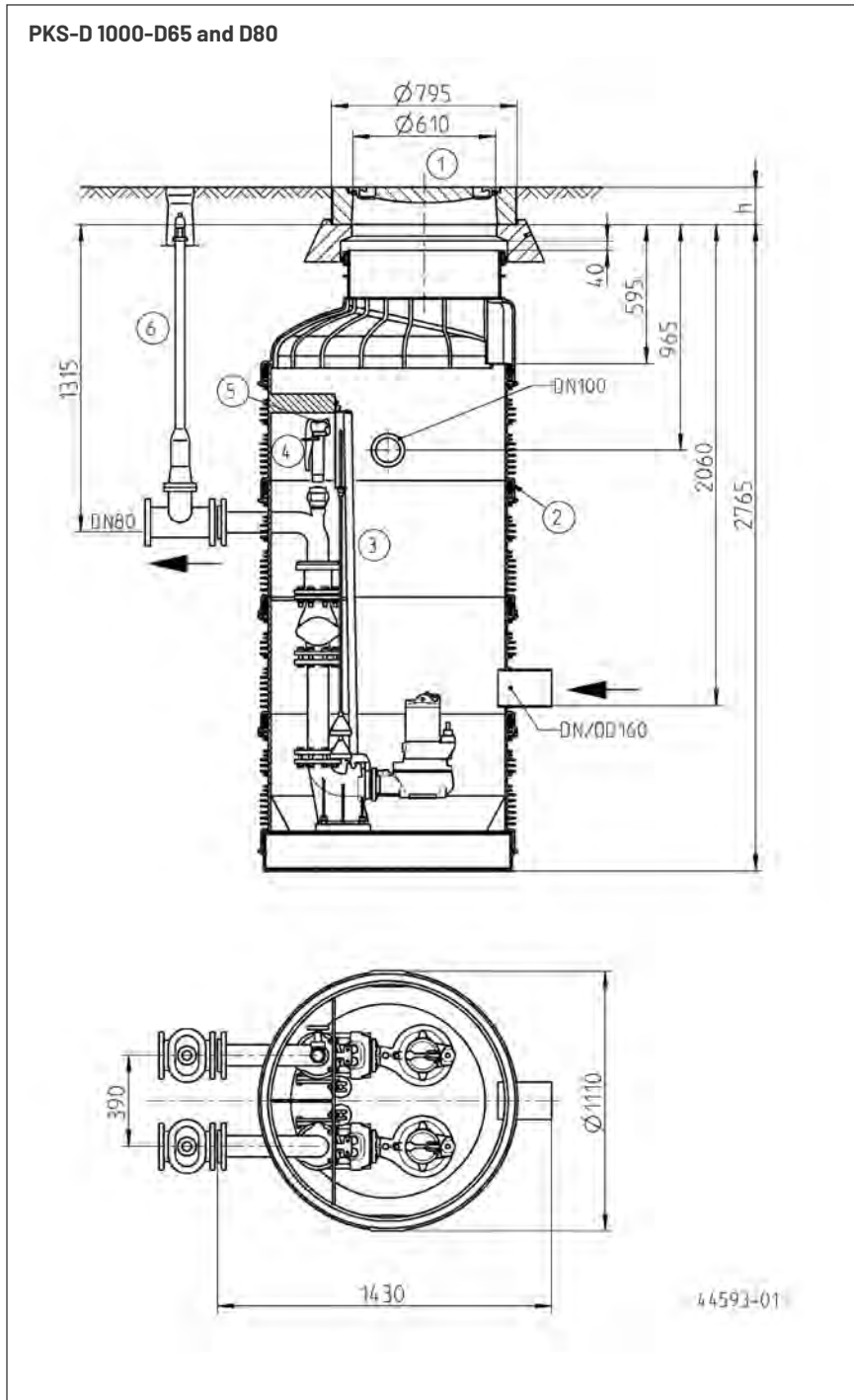
In order to adjust the pumping stations to the required pumping conditions a wide range of single channel impeller or vortex impeller pumps is available, both with or without explosion protection.



# PKS 1000

## POLY-SUMPS

For MultiStream and MultiFree pumps



We reserve the right to change specifications without notice

### AVAILABLE PUMP TYPES

MultiStream pumps DN 65  
MultiStream pumps DN 80

MultiFree pumps DN 65  
MultiFree pumps DN 80

# PKS 1000

## POLY-SUMPS

For MultiStream and MultiFree pumps

### SCOPE OF SUPPLY

#### PKS-D 1000-D65 /D80 (duplex units)

The poly-sump consists of an underpart with an inlet and a discharge branch, an extension element with tie-bar, a cone 1000/625 and a concrete support ring for the manhole cover (accessory). The segments are sealed with sealing rings.

Inlet socket DN/OD 160 (DN 150) for PVC collar (KGU), 2 sockets DN 100 for ventilation/cable duct, 1 socket plug DN 100, 2 guide rail systems, pipework with non-return valves and a facility to install a flushing connection system "Perrot".

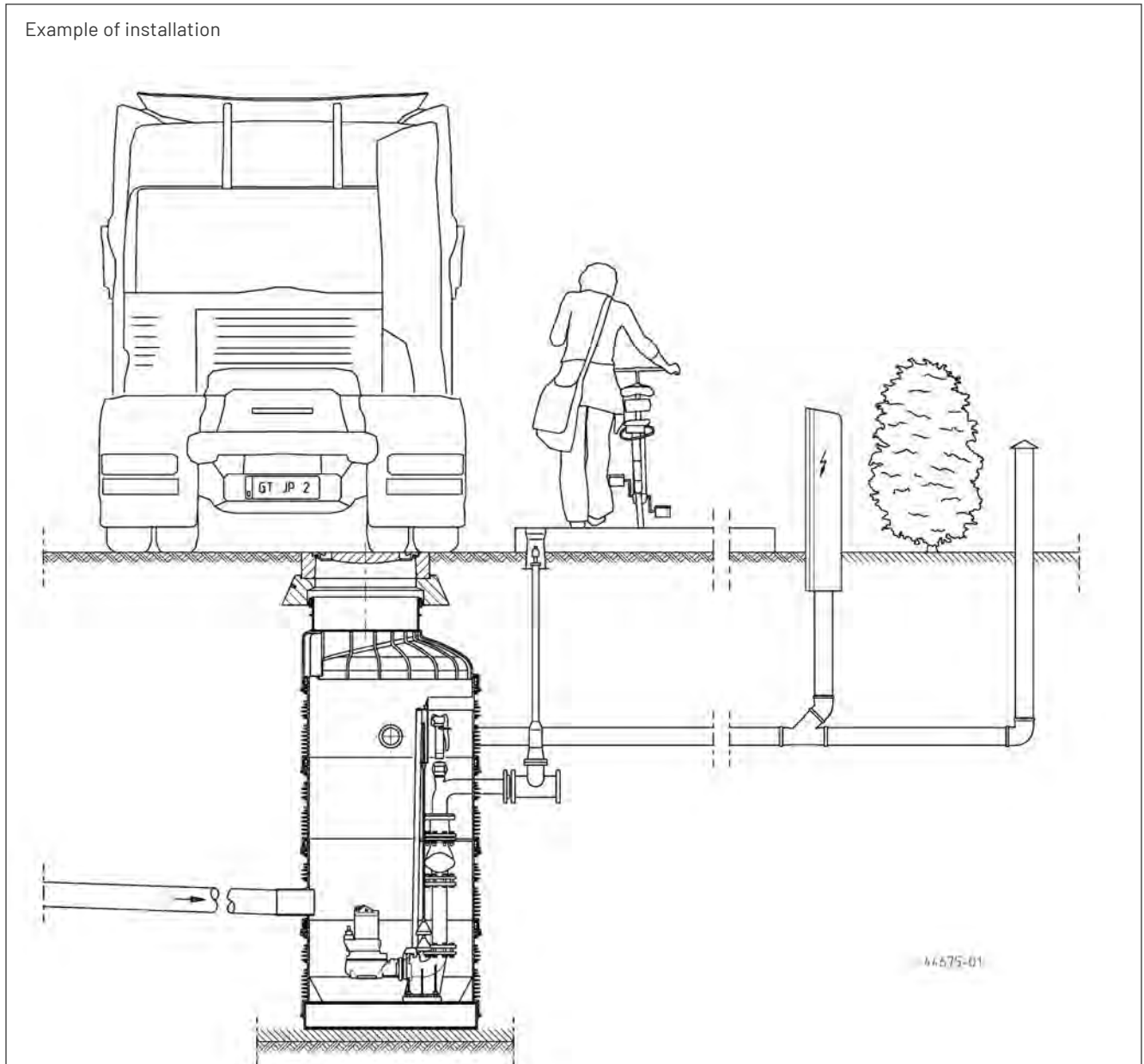
### SUMPS AND ACCESSORY

Type		Code No.	Weight
Poly-sump PKS-D 1000-D65		<b>JP44379</b>	442 kg
Poly-sump PKS-D 1000-D80		<b>JP44381</b>	443 kg
<b>1</b> Cover without ventilation, class B d610	h=125	<b>JP44972</b>	110.0 kg
Cover without ventilation, class D d610	h=160	<b>JP29175</b>	190.0 kg
<b>2</b> PSV-D 1000x500 (10)		<b>JP44404</b>	15.6 kg
<b>3</b> Guide tube 1" stainless steel 1	1550 mm	<b>JP50276</b>	3.8 kg
Guide tube 1" stainless steel 1	2050 mm	<b>JP50277</b>	5.0 kg
Guide tube 1" stainless steel 1	2550 mm	<b>JP50278</b>	6.2 kg
Guide tube 1" stainless steel 1	3050 mm	<b>JP50279</b>	7.5 kg
Guide tube 1" stainless steel 1	3550 mm	<b>JP50280</b>	8.6 kg
Attention! Please note that you need to order four guide tubes.			
<b>4</b> Fire hose coupling size C, 1 1/2"		<b>JP44770</b>	0.3 kg
Perrot flushing connection G 250	Galvanised	<b>JP22353</b>	1.4 kg
<b>5</b> Perrot hose connection	Ø 50 mm	<b>JP19202</b>	0.4 kg
Perrot DRS connection		<b>JP22421</b>	0.5 kg
Perrot breathing valve		<b>JP22422</b>	0.6 kg
Perrot pressure gauge		<b>JP44854</b>	1.4 kg
Perrot claw coupling		<b>JP22420</b>	0.5 kg
Perrot flush connector R 1"		<b>JP22466</b>	0.3 kg
<b>6</b> Underground valve DN 80		<b>JP18936</b>	24.0 kg
Set of earth installation equipment 0.7 m		<b>JP18938</b>	30.0 kg
Set of earth installation equipment 1.0 -1.4 m		<b>JP18939</b>	32.0 kg
Set of earth installation equipment 1.25 -1.8 m		<b>JP18940</b>	33.0 kg
<b>7</b> Ventilation pipe DN 100	Stainless steel	<b>JP44858</b>	4.3 kg
<b>8</b> Second or changed inlet DN 150		<b>JP44523</b>	
Second or changed inlet DN 200		<b>JP44524</b>	
Second or changed inlet DN 250		<b>JP44525</b>	
<b>9</b> Seal lubricant 1 kg tube		<b>JP44605</b>	1.0 kg
Seal lubricant 3 kg bucket		<b>JP44606</b>	3.0 kg

# PKS 1000

## POLY-SUMPS

For MultiStream and MultiFree pumps



Attention: Concerning space capacity the installation of submersible switches is not possible.

## PKS 1200 – 3000

### WASTEWATER SUMPS

- . Custom made
- . Various diameter and installation depths
- . Suitable for traffic up to class D 400
- . Corrosion-resistant (PE-HD)
- . Durable
- . Fracture proof
- . Ground water tight
- . Ready for assembly and easy to install

#### DESCRIPTION

The buoyancy-proof poly-sumps suitable for traffic (up to class D) are mainly used in industrial and municipal applications. The design and the low weight allow an easy transport and set up, even in rough terrain.

Depending on the requirements at site, diameters from 1200 to 3000 mm and installation depths up to 7 m can be realised with standard sumps of this series.

A wide range of submersible pumps is available to customize the pumping stations and meet the local operating conditions.

The sumps are double-walled and monolithic. A welded berm at the bottom ensures a sediment free collecting chamber. The grey interior colour simplifies an inspection.

Mounted guide rail feet at the sump bottom, stainless steel guide rails with tie-bar under the manhole cover and stainless steel ladders, ease the installation and maintenance of the pumps.

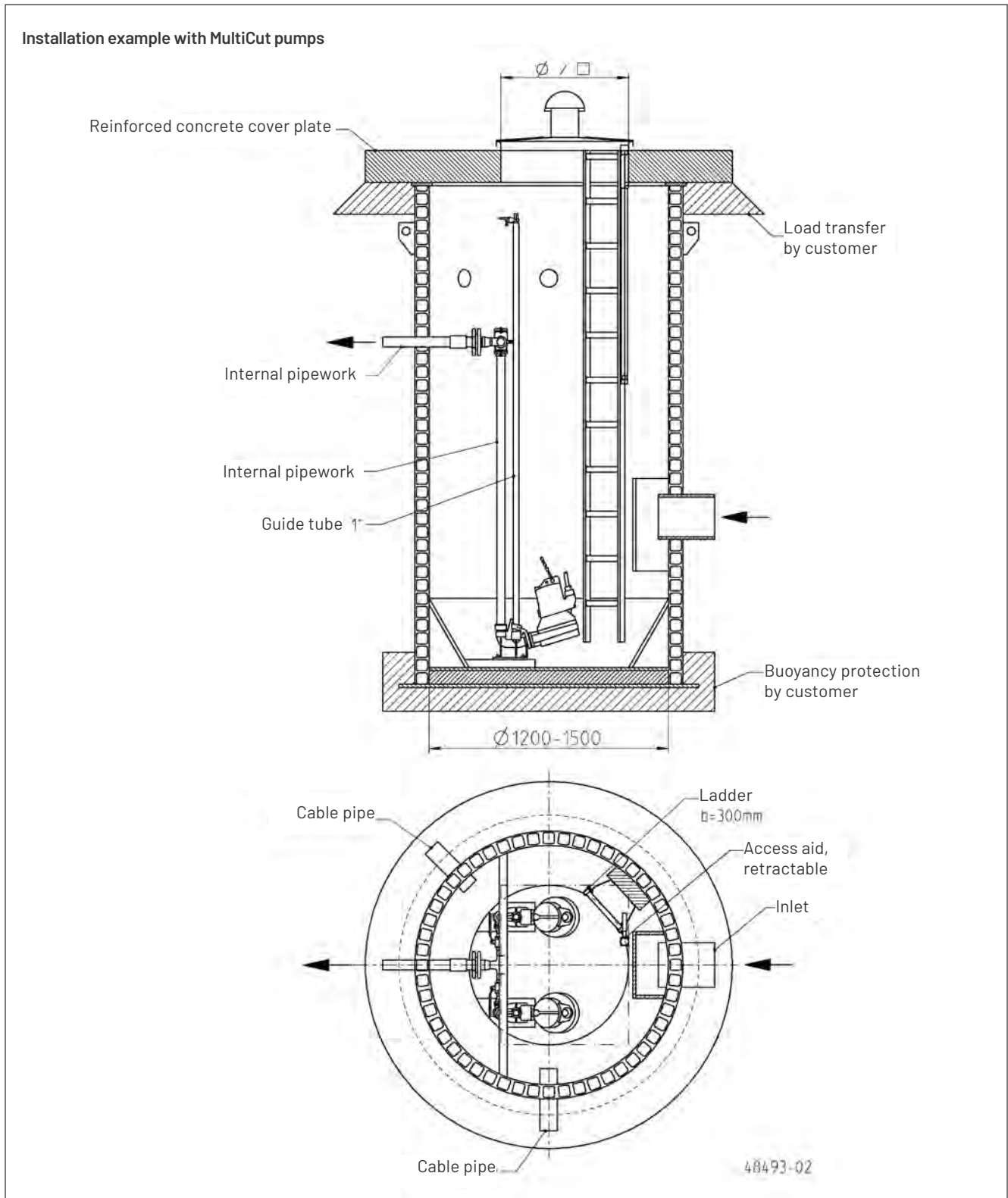
The PE or stainless steel pipework in the sump leads to the outside of the sump including swing-type check valves and also gate valves (outside connection in PE).

The sump is delivered to the building site ready for installation with cover plate and manhole cover(s). The buoyancy protection must be arranged by the customer at site.



# PKS 1200 - 3000

## WASTEWATER SUMPS



We reserve to change specifications without notes

Greater sump diameter, installation and submergence depths on request

### AVAILABLE PUMP TYPES

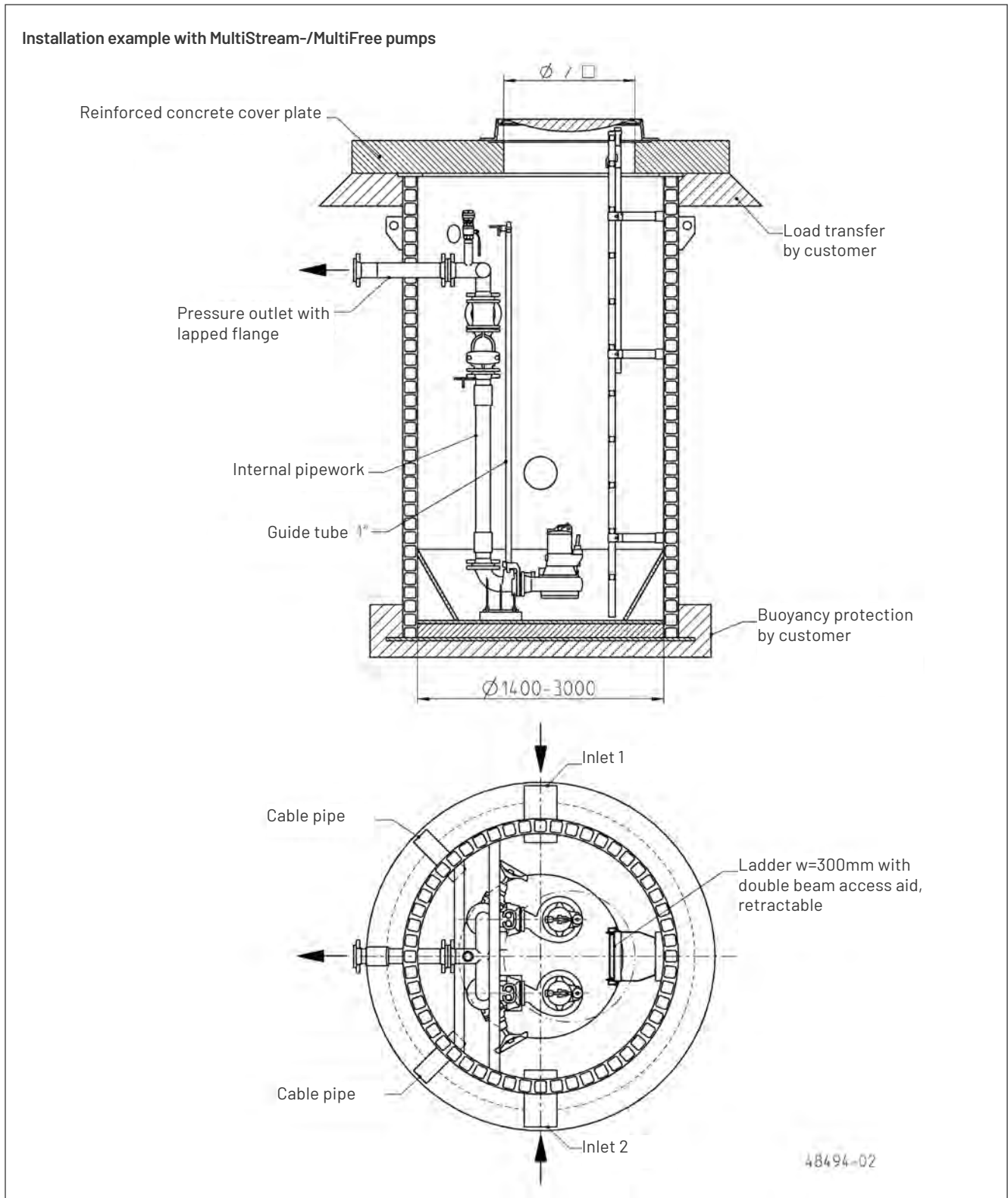
#### MultiCut-Pumps

20/2 M plus, 25/2 ME, 35/2 M, 36/2 M, 45/2 M, 75/2 M and 76/2 M,

Tandem units 35/2M TAN EX, 36/2M TAN EX, 45/2M TAN EX possible from PKS 1500

# PKS 1200 - 3000

## WASTEWATER SUMPS



We reserve to change specifications without notes

Greater sump diameter, installation and submergence depths on request

### AVAILABLE PUMP TYPES

MultiStream-Pumpen DN 65  
 MultiStream-Pumpen DN 80  
 MultiStream-Pumpen DN 100  
 MultiStream-Pumpen DN 150

MultiFree-Pumpen DN 65  
 MultiFree-Pumpen DN 80  
 MultiFree-Pumpen DN 100

# PKS 1200 - 3000

## WASTEWATER SUMPS

### SUMP DIAMETER

			PKS - Schachttype (Inner diameter)								
Pump types	Pump types	Discharge branch	1200	1400	1500	1600	1800	2000	2200	2500	3000
MultiCut	08... - 76...	DN 32	•	•	•						
MultiCut Tan	35... - 45...	DN 32			•	•	•	•			
MultiStream	10... - 35...	DN 65		•	•	•	•	•	•		
	10... - 35...	DN 80		•	•	•	•	•	•		
	55... - 100...	DN 80				•	•	•	•	•	
	25... - 100...	DN 100			•	•	•	•	•	•	•
	150... - 300...	DN 100					•	•	•	•	•
	55... - 300...	DN 150						•	•	•	•
MultiFree	10... - 45...	DN 65		•	•	•	•	•	•		
	15... - 45...	DN 80		•	•	•	•	•	•		
	55... - 100...	DN 80				•	•	•	•	•	
	10... - 100...	DN 100			•	•	•	•	•	•	

The combination between the pump type and the sump was made under consideration of a 300 mm wide stainless steel ladder as well as a wise proportion between the pump size and the wastewater volume. Special applications might differ from the standard.

### POSSIBLE ACCESSORIES DEPENDING ON PUMP TYPE, SUMP DIAMETER AND DEPTH ON REQUEST

FOR EXAMPLE:

- Inlet connection in required number and dimension from DN 100 up to DN 300
- Connections for conduits in required quantity in DN 100
- Various internal pipework from DN 40 to DN 200 in stainless steel or PE
- Different models of stop valves
- Several versions of non-return valves
- Various cover plates with and without PE coating from class A up to class D.
- Manhole cover from class A up to class D in grey cast iron or stainless steel, round or squared in the necessary or required number fitting to the used pumps
- Accessories for example:
  - ◊ Flushing connection
  - ◊ Fire hose connection, System Storz
  - ◊ Anti-fall guard rail
  - ◊ Access aid
  - ◊ Collide chamber
  - ◊ .....

**We create your individual offer under consideration of your requirements. Please contact us!**



## PKS 1000-DLE

### POLYETHYLENE PRESSURE PIPE END SUMP

For wastewater pipelines

- . Buoyancy-proof and ground water proof
- . Corrosion-proof
- . Buoyancy-proof and ground water proof
- . Suitable for traffic to class D 400
- . Flume according to DWA A 157
- . According to EN 13598-2



#### DESCRIPTION

The buoyancy-proof accessible and practicable sump consists of single modular segments and is used as a transfer chamber between pressure pipes and gravity sewers as specified by DWA A 157. The pressure pipe enters the chamber below the water level. This plastic chamber fulfils the corrosion resistance required by DWA A 157. Taking up the (up to 80 DN) pressure pipe into the transfer chamber below the water level discourages the formation, agitation and emission of H<sub>2</sub>S from the pressure pipe and thus reduces odour.

It is suitable for use in areas with motor vehicle traffic (DIN EN 124 group 4). The pump chamber PKS-D 1000-DLE can be installed on firm undisturbed soil without the need for any concrete work. The modular construction enables simple transport and relocation.

The buoyancy proof plastic sump of high grade polypropylen (PP), corresponds to EN 13598-2. with a connection piece for inlet and a connection piece for discharge. The installation depth without cover is 1.22 m. Through the application of additional sump extensions (see accessory), the installation depth can be extended up to max. 4.68 m and therefore guarantees the necessary standing height of two meters.

#### SCOPE OF SUPPLY

Plastic chamber in modular segments consisting of chamber floor with DLE flume and 1 connection piece DN 100 for inlet and 1 connection piece DN 200 for discharge, cone with ladder and one access gate Ø 610 mm and one concrete supporting ring (120 kg) for seating of the chamber cover (accessory). The sealing of the segments is performed by DN 1000 sealing element.

#### INSTALLATION NOTE

The plastic chamber PKS-D 1000-DLE is manufactured from the environmentally compatible material polypropylen (PP). This material features several benefits, for one it is characterised by a high chemical stability, e. g. against hydrosulphide. Another benefit is the self-cleaning effect due to the smooth surface of the material PP

All these benefits ensure long-term quality and reduce the cost for maintenance or even redevelopment. Due to the modular system the chamber is completed through the single segments and can be very easily installed on site. The relatively low weight of the single segments, PP weighs 90% less than concrete, makes heavy machinery unnecessary.

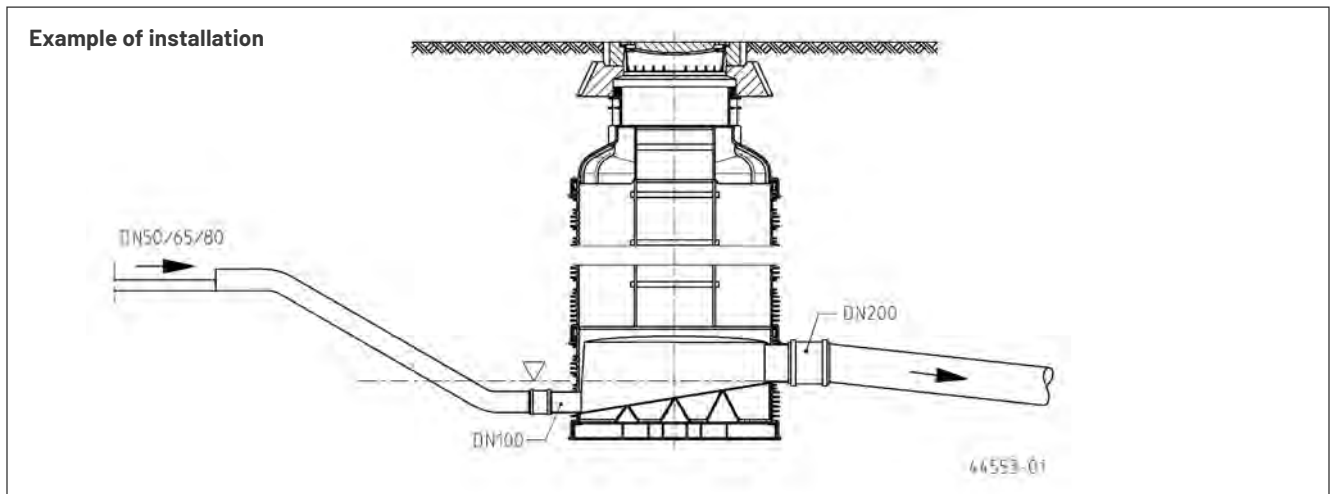
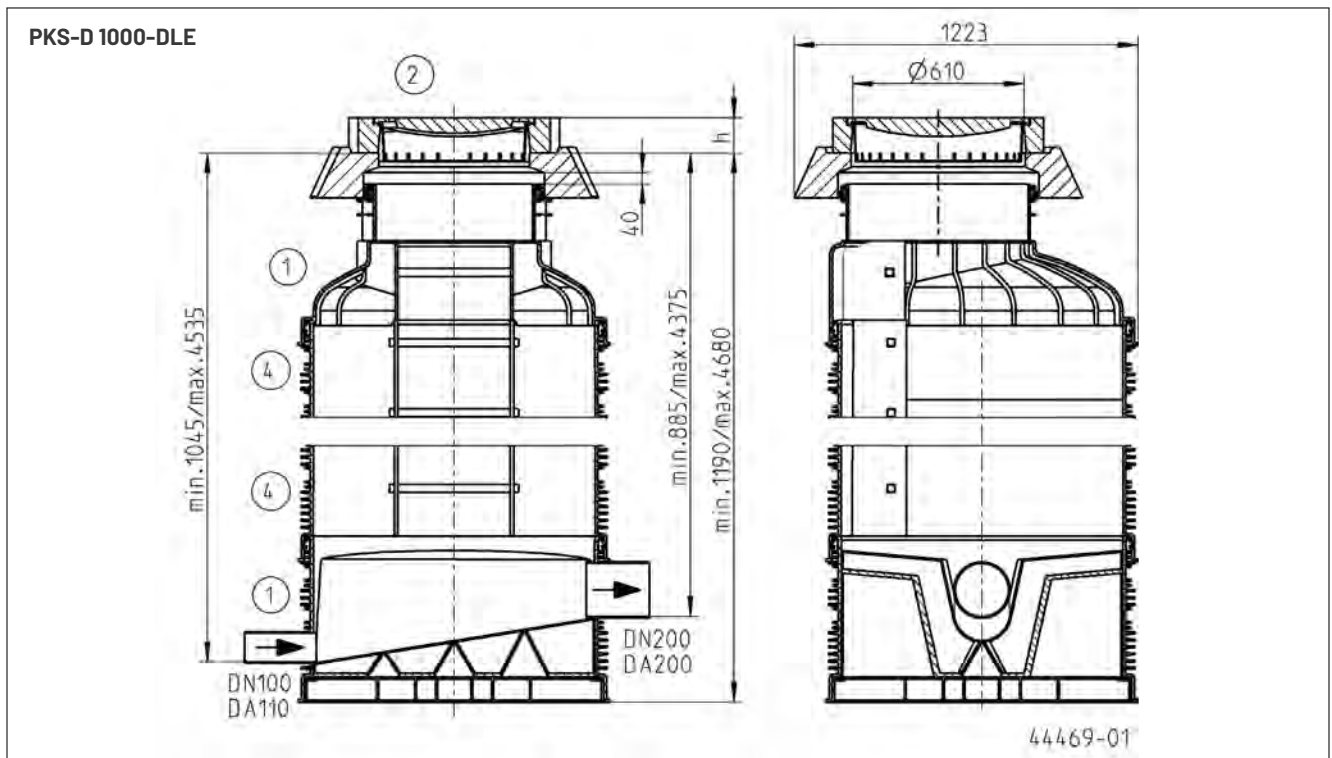
The PKS-D 1000-DLE complies in all constructional characteristics with the DWA A157 (buildings of sewer systems) as well as the DWA M154 (odour emission of drainage systems). These recommend a turbulence free inlet of waste water into the pressure pipe end sump which delivers the waste water into the sewerage. The particular formation of the chamber floor (top of pressure pipe = floor level of continuative channel) counteracts often occurring odour problems and corrosion defects in transfer chambers.

The PKS-D 1000-DLE is buoyancy-proof and tight against ground water and therefore also suitable for water protection areas.

# PKS 1000-DLE

## POLYETHYLENE PRESSURE PIPE END SUMP

For wastewater pipelines

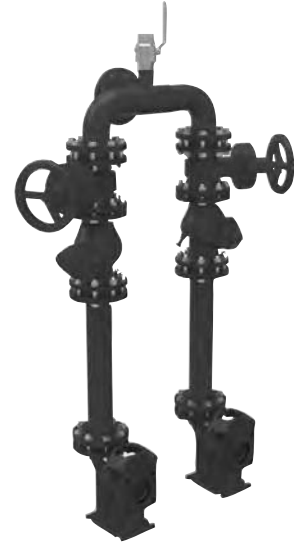


### ACCESSORY

Description		Code no.	Weight (kg)
① <b>PKS-D 1000-DLE</b>		<b>JP44367</b>	215
② <b>Manhole cover BEGU with ventilation and dirt bucket</b>	Ø 610 Kl. B 125 h = 125	<b>JP44973</b>	112
	Ø 610 Kl. D 400 h = 160	<b>JP29035</b>	197
③ <b>Access aid, sleeve</b>		<b>JP44611</b>	2
<b>Access aid, grab handle</b>		<b>JP44610</b>	4
④ <b>Sump extension PSV-D</b>	1000 x 500 SG (10)	<b>JP44403</b>	17
⑤ <b>Seal lubricant PKS-D</b>	1 kg tube (sufficient for two seals)	<b>JP44605</b>	1
	3 kg bucket	<b>JP44606</b>	3

## INSTALLATION SETS

DN 40 - DN 150



- . Flexible customizable
- . Corrosion resistant
- . Optimally matched components

### APPLICATION

When constructing a pump station, the installation sets can ease the work remarkable, as all components are harmonized and can be adapted at site very flexible. The sets can be used in existing stations that are renovated as well as in new constructions.

By the use of stainless steel, PE and PP the installation sets are as far as possible free of corrosion and offer a long term solution for your underground building. The sets can be used for the pumps of the US, Multidrain, MultiCut, MultiStream and MultiFree series with free passages between DN 32 up to DN 150 and cover a wide range of applications.

Nearly any sump with an inner diameter of 1,0 m or more can be equipped with an installation set, beginning from the private pressure drainage station, over industrial rain water pump stations up to municipal mains pumping stations.

Especially the flexible height adjustment at site is of high interest and offers an easy stock keeping.

### SCOPE OF DELIVERY

#### Fitting Set

Components	DN 40	DN 50	DN 65 (Rohr DN 80) DN 80 DN 100 DN 150
Coupling foot and pump claw	gray cast iron	gray cast iron	gray cast iron
Ball-type check valve	GRP	-	-
Swing-type check valve	-	PP	gray cast iron
Stop valve/ball valve	stainless steel	brass	gray cast iron
Y pice in duplex units	stainless steel	PP	PE or stainless steel
Guide tube bracket	stainless steel	stainless steel	stainless steel
Bolts and nuts	stainless steel	stainless steel	stainless steel

The standard fitting set ends in the sump and allows an individual connection to the pressure pipe as per requirements at site.

- When the pipeline leads into the sump, the following connections can be made:
  - DN 40 with 1 1/2" female thread
  - DN 50 with 2" female thread
  - DN 80 - DN 150 with flange
- When using a wall sealing element, the following connections can be made:
  - DN 40 with 1 1/2" male thread
  - DN 50 with 2" male thread
  - DN 80 - DN 150 by PE-pipe w/o flange
- When using a wall duct with a stainless steel puddle flange, the following connections can be made:
  - DN 40 with 1 1/2" male thread
  - DN 50 with 2" male thread
  - DN 80 - DN 150 with flange end

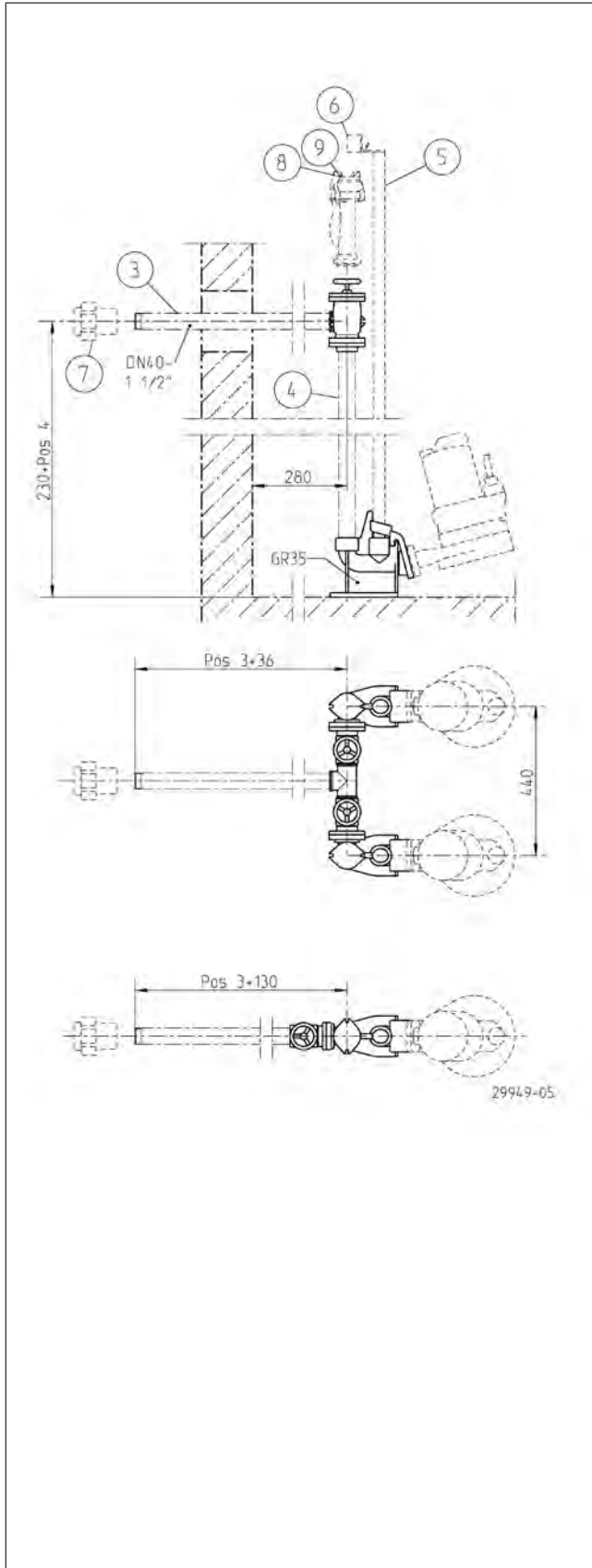
#### Accessory

The kind of wall duct and additional accessories can be selected in accordance to the requirements at site.

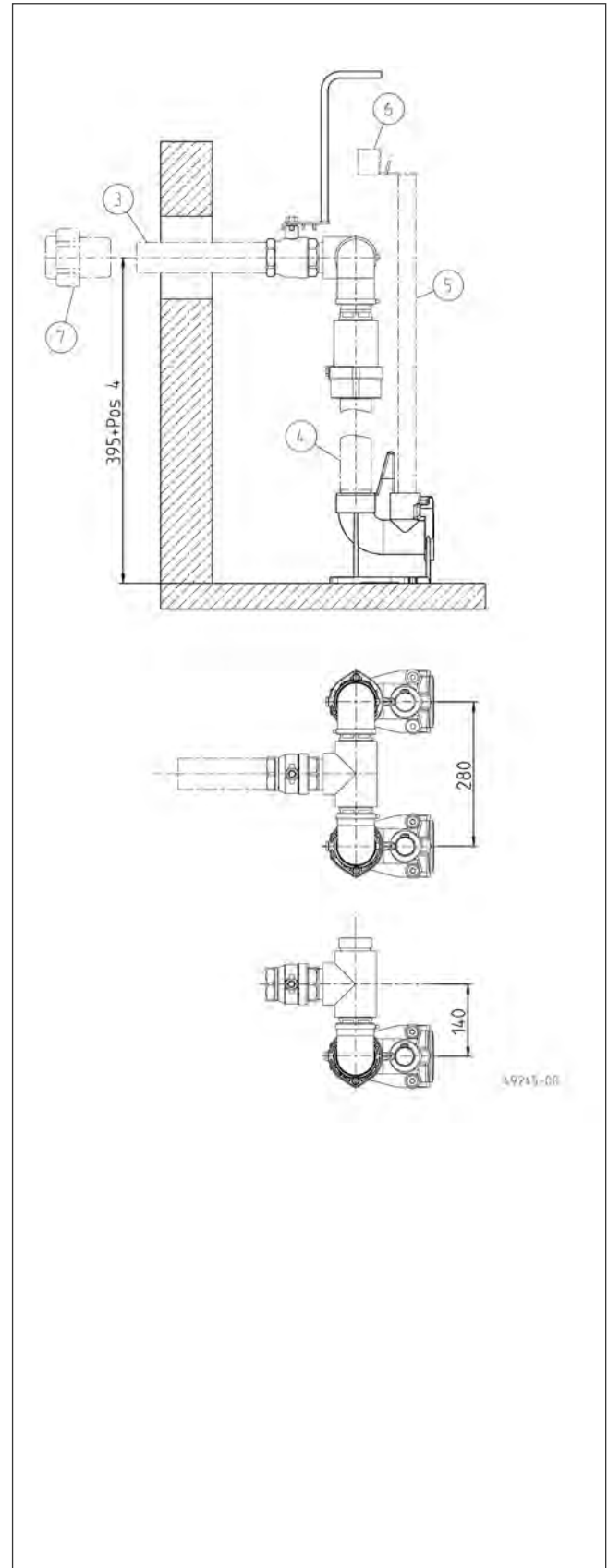
# INSTALLATION SETS

DN 40 - DN 150

DN 40 for MultiCut pumps



DN 50 for sewage pumps



# INSTALLATION SETS

DN 40 - DN 150

		Code No.	Weight kg
<b>① Fitting Set</b>			
DN 40 Single unit	MultiCut	<b>JP48923</b>	12.9
Duplex unit	MultiCut	<b>JP48924</b>	26.1
DN 50 Single unit	US 62-253, US 75-155, UV 600	<b>JP48925</b>	14.3
Duplex unit	US 62-253, US 75-155, UV 600	<b>JP48926</b>	26.6
<b>② Reducing socket</b>	for US 62-152, US 73-153	<b>JP48069</b>	0.4
<b>Securing lever</b>	for US 75-155	<b>JP41024</b>	0.5
	for UV 600	<b>JP49171</b>	0.5
<b>T-Key</b>		<b>JP46438</b>	1.0
<b>③ Wall bushing set</b>	DN 40, 870 lg	<b>JP48927</b>	3.3
	DN 50, 400 lg	<b>JP48928</b>	1.6
<b>④ Pipe work per pump</b>	stainless steel		
DN 40, 1000 mm lg		<b>JP48929</b>	3.7
DN 40, 1500 mm lg		<b>JP48930</b>	5.5
DN 40, 2000 mm lg		<b>JP48931</b>	7.3
DN 40, 2500 mm lg		<b>JP48932</b>	9.1
DN 50, 1000 mm lg	PP	<b>JP48933</b>	1.2
DN 50, 1500 mm lg		<b>JP48934</b>	1.8
DN 50, 2000 mm lg		<b>JP48935</b>	2.4
DN 50, 2500 mm lg		<b>JP48936</b>	3.0
<b>⑤ Guide rail per pump</b>	stainless steel		
1000 mm lg	1"	<b>JP50318</b>	2.5
1500 mm lg	1"	<b>JP48937</b>	3.7
2000 mm lg	1"	<b>JP48938</b>	4.9
2500 mm lg	1"	<b>JP48939</b>	6.1
3000 mm lg	1"	<b>JP48940</b>	7.3
<b>⑥ Tie-bar for guide rail retainer</b>	stainless steel , Ø 1000-2000	<b>JP48941</b>	6.6
<b>⑦ Screwed joint</b>	1 1/2" Ø 50 mm	<b>JP45948</b>	0.3
	1 1/2" Ø 63 mm	<b>JP45949</b>	0.4
	2" Ø 63 mm	<b>JP45950</b>	0.5
<b>⑧ Perrot Flushing connection -32/40</b>	galvanised	<b>JP42059</b>	3.2
<b>Storz C Flushing connection -32/40</b>	1 1/2", galvanised	<b>JP42060</b>	1.4
<b>⑨ Perrot Breathing valve</b>		<b>JP22422</b>	1.5
Perrot DRS-Connection		<b>JP22421</b>	0.5
Perrot DRS + Breathing valve		<b>JP22419</b>	1.5
Perrot Flushing connector 1"		<b>JP22466</b>	0.4
Perrot Claw coupling		<b>JP22420</b>	0.5
Perrot Hose connection		<b>JP19202</b>	0.4
Perrot Pressure gauge		<b>JP44854</b>	0.4
Perrot C-Coupling		<b>JP41582</b>	0.4
Storz C Breathing valve		<b>JP41583</b>	8.3
Storz C DRS-Connection 1/2"		<b>JP41584</b>	8.3
Storz C DRS-Connection 3/4"		<b>JP41585</b>	8.3
<b>⑩ Ventilation pipe</b>		<b>JP44858</b>	4.3

# INSTALLATION SETS

DN 40 - DN 150

## DN 80 /100 /150 PE

	Ø1500		Ø2000	
	DN65-DN80	DN100	DN100	DN150
A	220	185	375	370
B	380	370	520	520
C	ca. 1200	ca. 1300	ca. 1500	ca. 1700
E	480	480	700	700
F	895+Pos3	1000+Pos3	1035+Pos3	1300+Pos3

45642-04

## DN 80 /100 /150 stainless steel

	Ø1500		Ø2000	
	DN65-DN80	DN100	DN100	DN150
A	220	185	375	370
B	380	370	520	520
C	ca. 1200	ca. 1300	ca. 1500	ca. 1700
E	480	480	700	700
F	870+Pos3	990+Pos3	1025+Pos3	1315+Pos3

45642-04

# INSTALLATION SETS

DN 40 - DN 150

				Code No.	Weight kg
<b>① Fitting Set</b>					
DN 65 (pipe DN 80)	for plastic	Ø D 1500	<b>JP50266</b>	154	
DN 80	for plastic	Ø D 1500	<b>JP48942</b>	155	
DN 100	for plastic	Ø D 1500	<b>JP48943</b>	214	
DN 100	for plastic	Ø D 2000	<b>JP48944</b>	216	
DN 150	for plastic	Ø D 2000	<b>JP48945</b>	428	
DN 65 (pipe DN 80)	for stainless steel	Ø D 1500	<b>JP50267</b>	155	
DN 80	for stainless steel	Ø D 1500	<b>JP48946</b>	155	
DN 100	for stainless steel	Ø D 1500	<b>JP48947</b>	220	
DN 100	for stainless steel	Ø D 2000	<b>JP48948</b>	246	
DN 150	for stainless steel	Ø D 2000	<b>JP48949</b>	431	
<b>② Wall bushing set</b>					
PE-plastic pipe with spigot	DN 80		<b>JP45559</b>	7.0	
for ring seal to be provided by customer	DN 100		<b>JP45560</b>	8.8	
	DN 150		<b>JP45561</b>	17.5	
Stainless steel wall duct	DN 80		<b>JP45695</b>	16.0	
	DN 100		<b>JP45696</b>	21.1	
	DN 150		<b>JP45697</b>	31.7	
<b>③ Pipe work per pump</b>					
		<b>order 1 piece per pump</b>			
DN 80, 1000 mm lg, reducible	F-piece, plastic		<b>JP48950</b>	3.9	
DN 80, 1500 mm lg, reducible	F-piece, plastic		<b>JP48951</b>	5.0	
DN 80, 2000 mm lg, reducible	F-piece, plastic		<b>JP48952</b>	6.0	
DN 100, 1000 mm lg, reducible	F-piece, plastic		<b>JP48953</b>	5.0	
DN 100, 1500 mm lg, reducible	F-piece, plastic		<b>JP48954</b>	6.6	
DN 100, 2000 mm lg, reducible	F-piece, plastic		<b>JP48955</b>	8.3	
DN 150, 1000 mm lg, reducible	F-piece, plastic		<b>JP48956</b>	10.2	
DN 150, 1500 mm lg, reducible	F-piece, plastic		<b>JP48957</b>	13.5	
DN 150, 2000 mm lg, reducible	F-piece, plastic		<b>JP48958</b>	16.8	
DN 80, 500 mm lg	FF-piece, stainless steel		<b>JP48959</b>	12.5	
DN 80, 1000 mm lg	FF-piece, stainless steel		<b>JP48960</b>	16.0	
DN 80, 1500 mm lg	FF-piece, stainless steel		<b>JP48961</b>	19.5	
DN 100, 500 mm lg	FF-piece, stainless steel		<b>JP48962</b>	15.6	
DN 100, 1000 mm lg	FF-piece, stainless steel		<b>JP48963</b>	21.6	
DN 100, 1500 mm lg	FF-piece, stainless steel		<b>JP48964</b>	27.6	
DN 150, 500 mm lg	FF-piece, stainless steel		<b>JP48965</b>	24.5	
DN 150, 1000 mm lg	FF-piece, stainless steel		<b>JP48966</b>	32.5	
DN 150, 1500 mm lg	FF-piece, stainless steel		<b>JP48967</b>	40.5	
<b>④ Guide rail, stainless steel</b>					
		<b>order 2 pieces per pump</b>			
1000 mm lg	1"		<b>JP50318</b>	2.5	
1500 mm lg	1"		<b>JP48937</b>	3.7	
2000 mm lg	1"		<b>JP48938</b>	4.9	
2500 mm lg	1"		<b>JP48939</b>	6.1	
3000 mm lg	1"		<b>JP48940</b>	7.3	
1500 mm lg	1 1/2"		<b>JP48968</b>	5.4	
2000 mm lg	1 1/2"		<b>JP48969</b>	7.2	
2500 mm lg	1 1/2"		<b>JP48970</b>	9.6	
3000 mm lg	1 1/2"		<b>JP48971</b>	10.8	
<b>⑤ Tie-bar for guide rail retainer</b>					
	stainless steel, Ø 1000-2000		<b>JP48941</b>	7.0	

# INSTALLATION SETS

DN 40 - DN 150

			Code No.	Weight kg	
⑥	<b>Perrot Flushing connection -65/80</b>	galvanised	<b>JP22353</b>	1.4	
	<b>Storz C Coupling</b>	1 1/2", galvanised	<b>JP44770</b>	0.3	
		2", galvanised	<b>JP50217</b>	0.4	
⑦	Perrot Breathing valve		<b>JP22422</b>	1.4	
	Perrot DRS-Connection		<b>JP22421</b>	0.5	
	Perrot DRS + Breathing valve		<b>JP22419</b>	1.5	
	Perrot Flushing connector 1"		<b>JP22466</b>	0.4	
	Perrot Claw coupling		<b>JP22420</b>	0.5	
	Perrot Hose connection		<b>JP19202</b>	0.4	
	Perrot Pressure gauge		<b>JP44854</b>	0.3	
	Perrot C-Coupling		<b>JP41582</b>	0.4	
	Storz C Breathing valve		<b>JP41583</b>	8.3	
	Storz C DRS-Connection 1/2"		<b>JP41584</b>	8.3	
	Storz C DRS-Connection 3/4"		<b>JP41585</b>	8.3	
	⑧	<b>Securing lever</b> for C2-pumps,	stainless steel	2 x required for duplex units	<b>JP50179</b>
⑨	<b>Ventilation pipe</b>			<b>JP44858</b>	4.3



## BREEZE

### BREEZE PRESSURE PIPE CLEANING SYSTEM

#### DESCRIPTION

Odour problems are a perennial concern where sewers are concerned. Odours develop due to the solid matter and lack of oxygen contained in the wastewater. Longer conveying distances and added collection of wastewater in a pumping station increase the residence times, and result in the wastewater starting to decay within the sewer. Once this decaying process has started, there is no stopping it.

Practical operation has shown that after some 2 hours, the oxygen content decreases to such an extent through bacterial decomposition that corrosive hydrogen sulphide forms.

The objective must therefore be to maintain a high level of oxygen in the wastewater and to convey it as rapidly as possible to the treatment plant.

Take advantage of our extensive experience and request a free system design from us (compliant with DWA directive A 116) to suit your particular application. The ideal duration of the flushing process and the flow velocities will be computed for each section of the pressure pipe using a special computer programme.

Breeze units offer the following options:

- Ventilation of the wastewater in the sump (PSV)
- Ventilation of the wastewater in the pressure pipe (SH)
- Flushing and partial discharge of the pressure pipe (MH)

#### Aeration of the sump

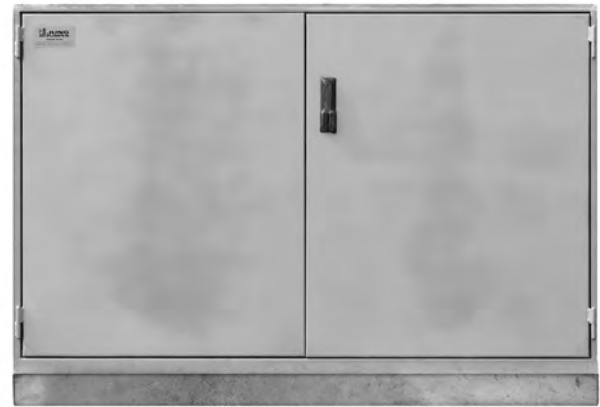
The Breeze PSV is used in collection chambers to maintain the oxygen content of the wastewater. Air bubbles are introduced into the wastewater in the pump sump with a special air hose.

#### Aeration of the pressure pipe

Breeze SH is used in pressure pipes which are laid with only positive gradients. A compressor introduces air into the pressure pipe and supplies the wastewater with oxygen.

#### Flushing of the pressure pipe

Breeze MH is used for flushing pressure pipes. Besides providing oxygen, the compressed air is also used to attain the minimum flow velocity of the wastewater in the pressure pipe.



Breeze MH



Flushing block



Control

#### PATENTED CONTROL

All systems incorporate a microprocessor control with a display and patented software. This ensures that in addition to the conventional fixed flushing times (time and duration), variable flushing times are triggered automatically by the control depending upon actual wastewater volumes. Demand-oriented flushing results in high system efficiency and helps to prevent or reduce odour emissions.

It goes without saying that shutdown periods can be set for the weekend or at night to prevent any potential nuisance caused by compressor noise.

By selecting a suitable location, the Breeze MH can optionally even flush out several pressure pipes at different times. This reduces investment costs since one unit can perform the work of up to three units.

#### FLUSHING BLOCK

The compact and corrosion-resistant flushing block incorporates the necessary components, such as a manometer, pressure switch, load transfer and sound absorber.

# BREEZE PSB

## PRESSURE PIPE FLUSHING

### DESCRIPTION

The Breeze PSV is used in collection chambers to maintain the oxygen content of the wastewater.

Air bubbles are introduced into the wastewater in the pump sump with a special air hose. The oil-free compressor operates until the pump level is reached and the pump continues conveying the wastewater into the pressure pipe.

The system is controlled in an energy-efficient way. Operation is paused if volumes of wastewater are too large and so short idle periods result before the pumping operation re-starts. If volumes are low and idle times are accordingly long, compressed air is continuously introduced into the wastewater to prevent the wastewater from "collapsing" and causing unpleasant odours.

To ensure safe operation, the sewage pump must be vented with a flushing pipe.



Similar to illustration



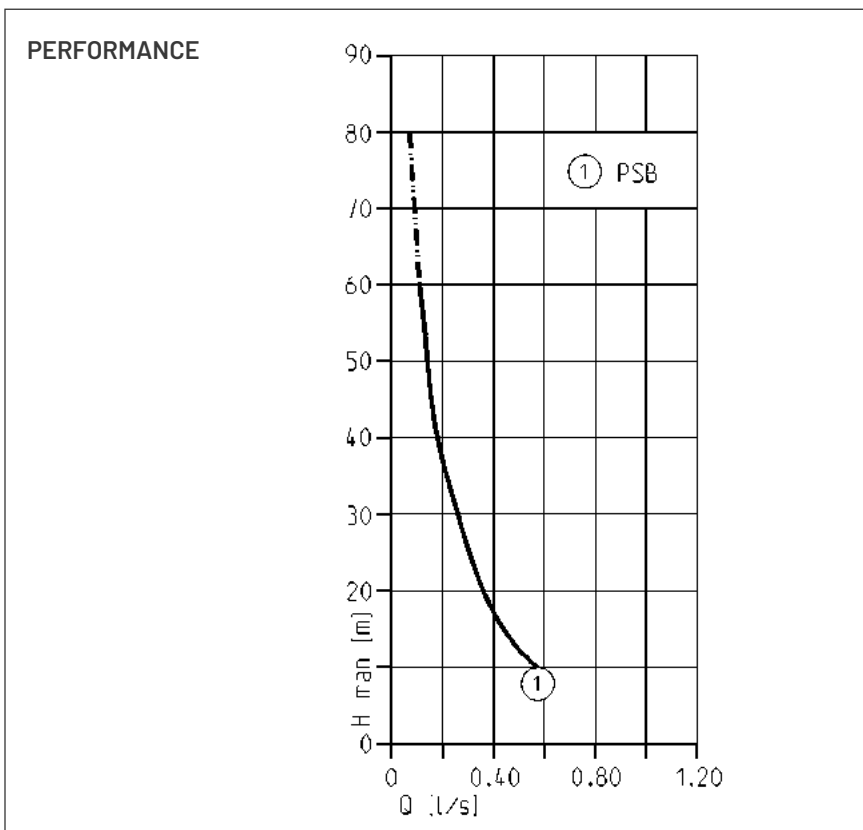
Control



Flushing block

### PERFORMANCE

Type	Flow rate $H_{man}$ [m]	10	20	30	40	50	60
Breeze PSB	$Q$ [l/s]	0.57	0.36	0.26	0.18	0.14	0.11



# BREEZE PSB

## PRESSURE PIPE FLUSHING

### SCOPE OF SUPPLY

The oil-free compressor, control unit in plastic housing with transparent cover (protection category IP 44) and flushing block are fully installed in the empty housing. 10 m pressure hose, non-return valve and 7.5 m aeration hose are supplied loose.

Empty housing with a separate plinth in fibre-glass reinforced polyester including exhaust vent with exhaust air grid and supply air grid. Door with three-point lock and profile half cylinder.

Microprocessor control with display, Manual-0-Automatic selector switch, safety thermostat and main switch.

### UNIT

Designation	Weight	Code No.
Breeze PSV	90 kg	JP48757

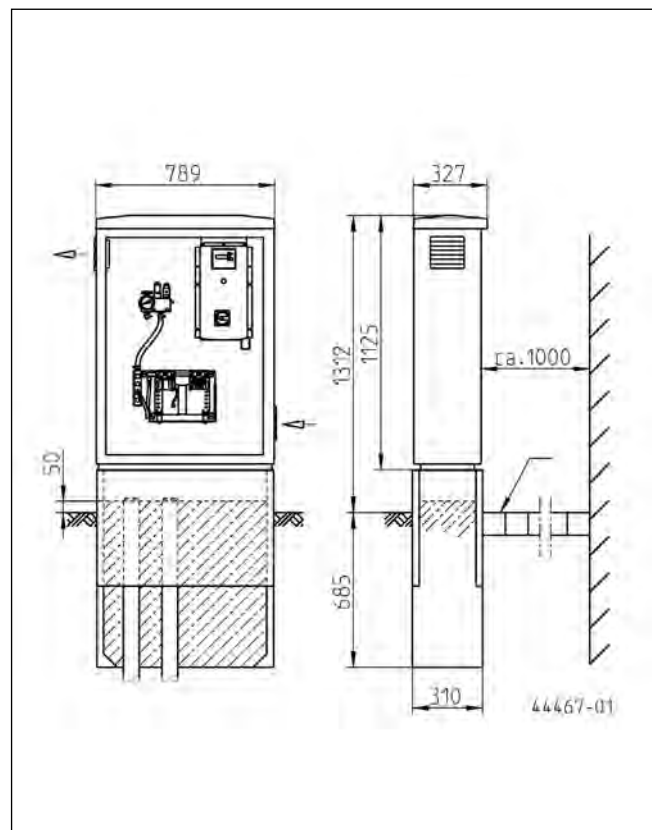
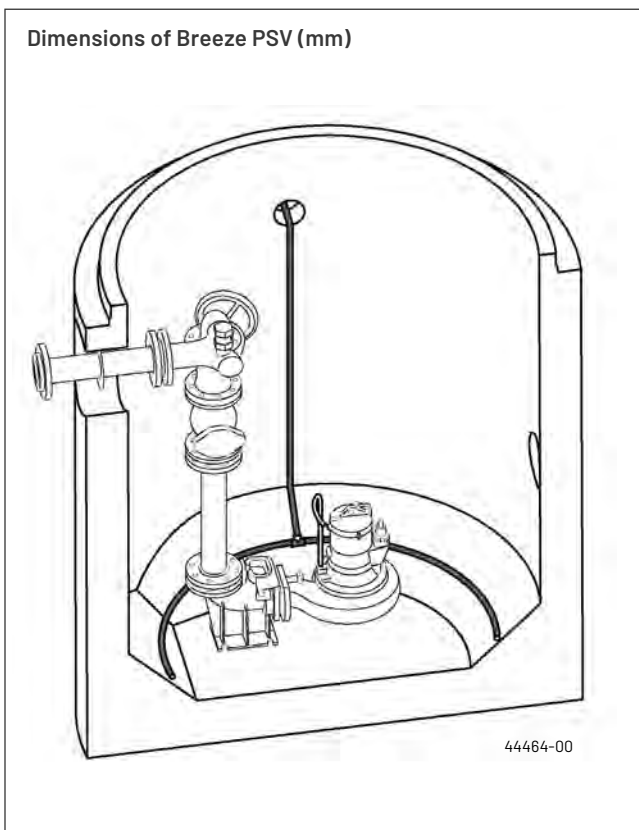
### ACCESSORY

Designation	Code No.
Flushing pipe, type 0	JP45408
Flushing pipe, type I	JP28221
Flushing pipe, type II	JP28222
Flushing pipe, type III	JP28223

Flushing type selection see accessory Multistream/Multifree

### TECHNICAL DATA

Type	Voltage	Motor rating kW		Current	Rotational speed	Max. operating noise	Max. compressor pressure	Operating pressure	Fusedelay
	V	P1	P2	A	min <sup>-1</sup>	dB (A)	bar	max.bar	A
Breeze PSV	1/N/PE~230	0.74	0.45	3.4	1380	67	8	6	16



# BREEZE SH

## PRESSURE PIPE FLUSHING

### DESCRIPTION

If residence times are too long, the pressure pipe line must also be selectively ventilated. Breeze SH is used in pressure pipes which are laid with only positive gradients. An oil-free compressor introduces air into the pressure pipe. The air then rises to the highest point of the pipeline and supplies the wastewater with oxygen.

To maintain the oxygen concentration in the wastewater, as a rule of thumb a quantity of air amounting to 10% of the pipe contents should be introduced every two hours.



Similar to illustration



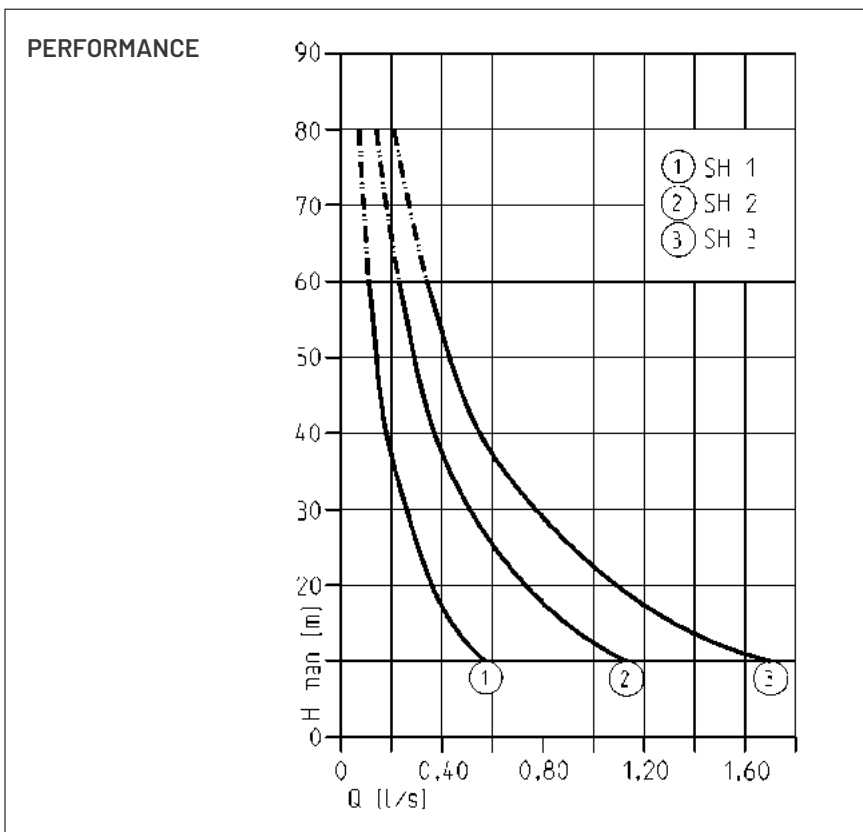
Control



Flushing block

### PERFORMANCE

Type	Flow rate $H_{man}$ [m]	10	20	30	40	50	60
Breeze SH1		0.57	0.36	0.26	0.18	0.14	0.11
Breeze SH2	$Q$ [l/s]	1.14	0.72	0.52	0.36	0.28	0.22
Breeze SH3		1.71	1.08	0.78	0.54	0.42	0.33



# BREEZE SH

## PRESSURE PIPE FLUSHING

### SCOPE OF SUPPLY

The oil-free compressors, control unit in plastic housing with transparent cover (protection category IP 44) and flushing block are fully installed in the empty housing. 5 m pressure hose and non-return valve are supplied loose.

Empty housing with a separate plinth in fibre-glass reinforced polyester including exhaust vent with exhaust air and supply air grilles. Door with three-point lock and profile half cylinder.

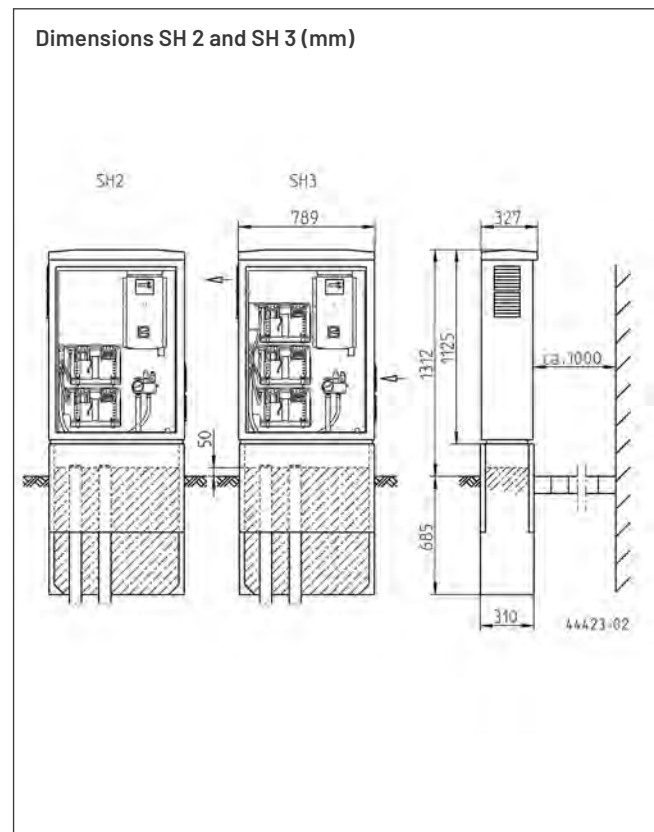
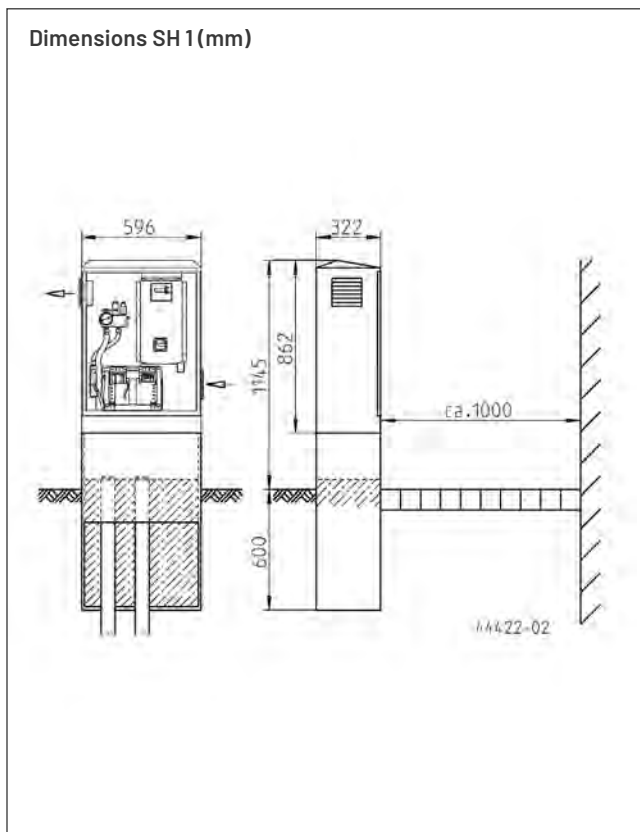
Microprocessor control with display, Manual-0-Automatic selector switch, safety thermostat and main switch.

### UNITS

Designation	Weight	Code No.
Breeze SH1	90 kg	<b>JP48754</b>
Breeze SH2	98 kg	<b>JP48755</b>
Breeze SH3	118 kg	<b>JP48756</b>
Accessory		
Pressure hose, 10 m		<b>JP44703</b>

### TECHNICAL DATA

Type	Voltage	Motor rating kW		Current A	Rotational speed min <sup>-1</sup>	Max. opera- ting noise dB (A)	Max. compres- sor pressure bar	Operating pressure max.bar	Fuse (delay) A
	V	P1	P2						
Breeze SH1	1/N/PE~230	0.69	0.42	3.3	1425	67	8	6	16
Breeze SH2	1/N/PE~230	1.34	0.84	6.6	1425	70	8	6	16
Breeze SH3	1/N/PE~230	2.00	1.26	9.9	1425	72	8	6	16



# BREEZE MH

## PRESSURE PIPE FLUSHING

### DESCRIPTION

If residence times are long, the pressure piping must be systematically flushed out. A compressor introduces air into the pipe line to

- shorten the residence time of the wastewater
- introduce oxygen into the wastewater
- reduce H<sub>2</sub>S formation
- loosen deposits through high flow velocities

A minimum flow velocity of 0.7 m/s must be attained at all parts of the pressure pipe, including at the largest cross section. If the pump does not reach the specified velocity, the Breeze MH units are used in support. They blow compressed air directly into the pipe and so effect a partial discharge of the piping.

The ideal duration of the flushing process and the flow velocity are computed for each section of the pressure pipe using a special computer programme.

A minimum flow velocity of  $v > 0.7$  m/s must be ensured in all sections of the pressure pipe, including at the largest cross section.

Breeze MH1 to MH4 can also be used with additional sound proofing in particularly sensitive areas. Noise emissions can be reduced by up to 10 dB(A) in this way.



Breeze MH 2S (with additional sound proofing)



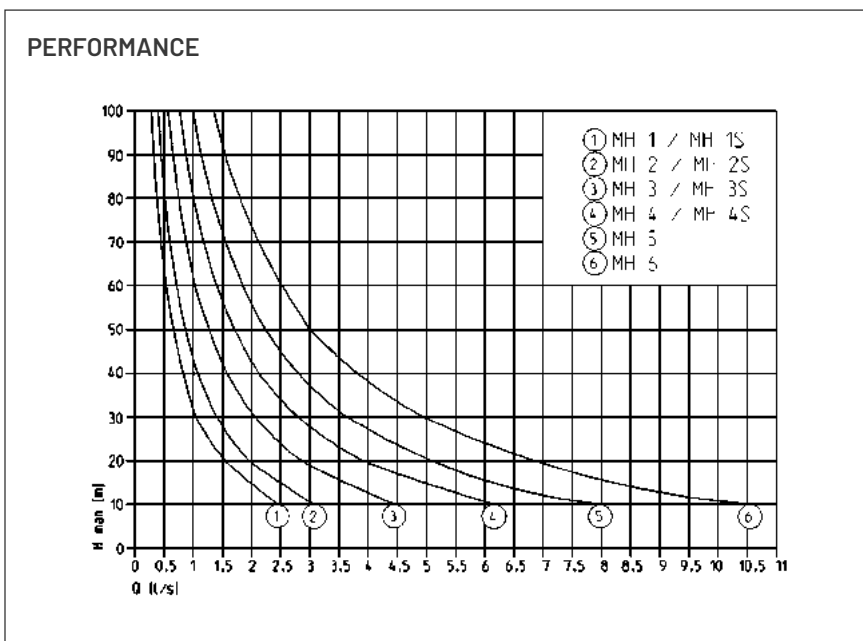
Flushing block



Control

### PERFORMANCE

Type	H <sub>man</sub> [m]	10	20	30	40	50	60
<b>Breeze MH 1(S)</b>	Q [l/s]	2.5	1.6	1.1	0.8	0.7	0.5
<b>Breeze MH 2(S)</b>		3.1	2.0	1.4	1.1	0.9	0.7
<b>Breeze MH 3(S)</b>		4.5	2.9	2.1	1.6	1.3	1.0
<b>Breeze MH 4(S)</b>		6.2	3.9	2.8	2.1	1.7	1.4
<b>Breeze MH 5</b>		8.0	5.1	3.7	2.8	2.2	1.8
<b>Breeze MH 6</b>		10.7	6.9	4.3	3.8	3.0	2.5



# BREEZE MH

## PRESSURE PIPE FLUSHING

### SCOPE OF SUPPLY

The piston compressor with sound absorber, control unit in plastic housing with transparent cover (protection category IP 44) and flushing block are fully installed in a joint-free concrete box. 5 m pressure hose and non-return valve are supplied loose.

Washed concrete box (S-type units with additional sound proofing), double-winged galvanised sheet door, supply and exhaust air openings with weather protection grille, double locking with a profile half cylinder.

Microprocessor control with display, Manual-0-Automatic selector switch, safety thermostat and main switch.

### UNITS

Designation	Weight	Code No.
Breeze MH 1	1430 kg	<b>JP43751</b>
Breeze MH 2	1445 kg	<b>JP43752</b>
Breeze MH 3	1505 kg	<b>JP43753</b>
Breeze MH 4	1505 kg	<b>JP43754</b>
Breeze MH 5	1560 kg	<b>JP43755</b>
Breeze MH 6	1605 kg	<b>JP43756</b>
with additional sound proofing		
Breeze MH 1S	1465 kg	<b>JP43757</b>
Breeze MH 2S	1480 kg	<b>JP43758</b>
Breeze MH 3S	1540 kg	<b>JP43759</b>
Breeze MH 4S	1540 kg	<b>JP43760</b>

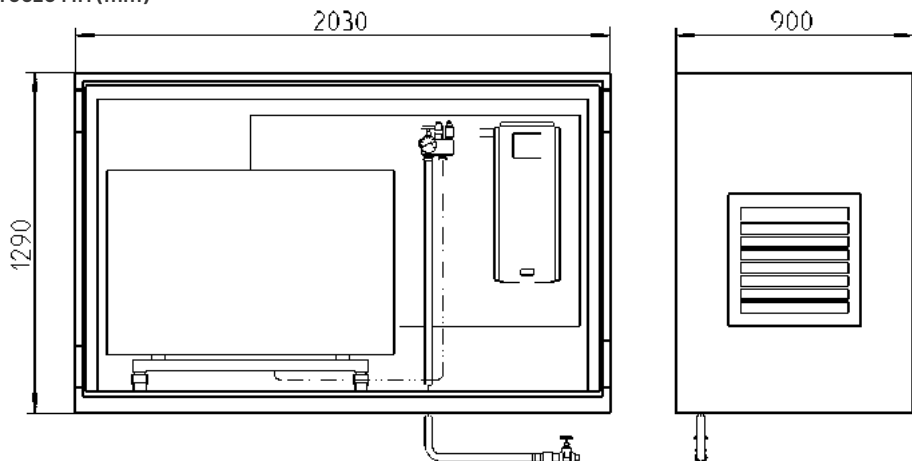
### ACCESSORY

Designation	Code No.
Flushing device for 2 pipes, fitting by manufacturer	<b>JP44272</b>
Flushing device for 3 pipes, fitting by manufacturer	<b>JP44273</b>
Pre-fabricated foundation 1000 kg	<b>JP48554</b>
Pressure hose, 10 m	<b>JP44703</b>
Additional heating element	<b>JP30370</b>
Ventilator partitional wall (MH1S-MH4S)	<b>JP44370</b>
Surcharge for oil level check	<b>JP29849</b>

### TECHNICAL DATA

Type	Voltage	Motor output		Current	Rotational speed	Max. operating noise	Max. compressor pressure	Operating pressure	Pre-fuse (delay)
	V	P1 kW	P2 kW	A	min <sup>-1</sup>	dB(A)	bar	max. bar	A
Breeze MH 1(S)	3x230/400	2.21	1.7	7.9/4.6	1450	66 (56)	10	6	20
Breeze MH 2(S)	3x230/400	3.08	2.4	10.7/6.2	1450	67 (57)	10	6	25
Breeze MH 3(S)	3x230/400	3.65	3.0	11.7/6.8	1450	67 (57)	10	6	25
Breeze MH 4(S)	3x400/690	5.00	4.0	10.0/5.8	1450	68 (58)	10	6	25
Breeze MH 5	3x400/690	6.70	5.5	12.0/6.9	1450	70	10	6	25
Breeze MH 6	3x400/690	9.40	7.5	18.0/10.4	1450	72	10	6	35

Dimensions Breeze MH (mm)

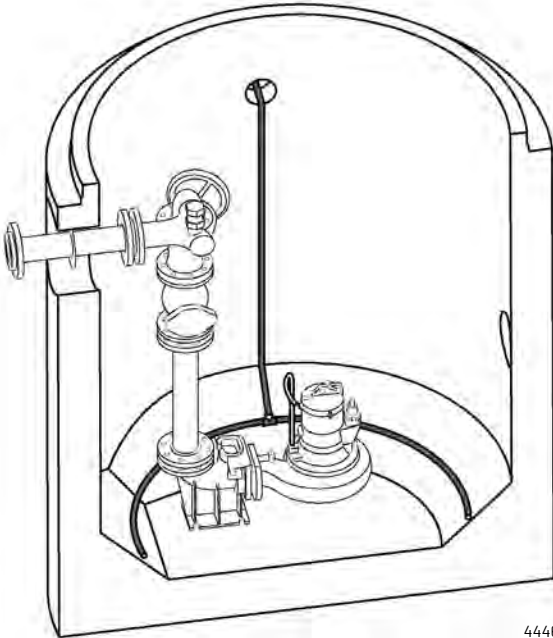


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# BREEZE

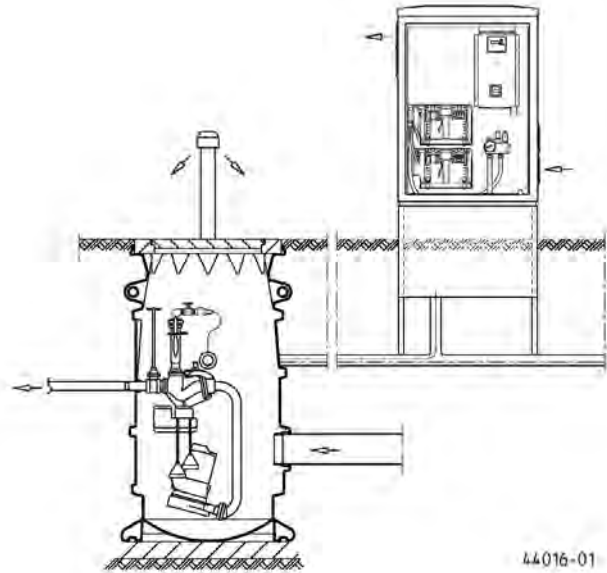
## EXAMPLE OF INSTALLATION

Example of installation Breeze PSV



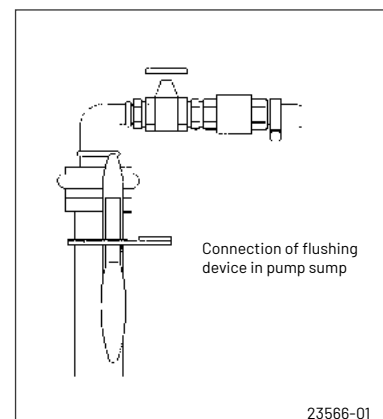
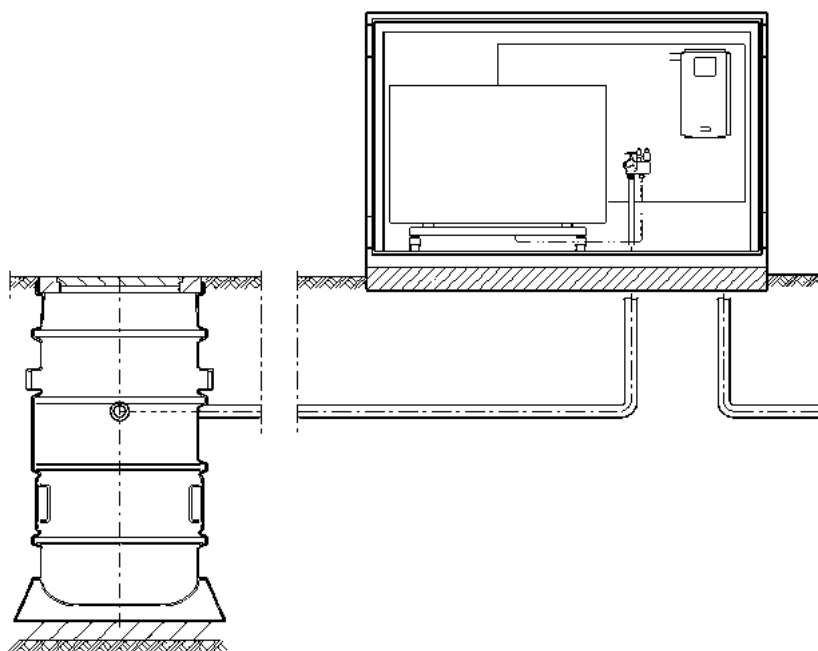
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Example of installation Breeze SH



44016-01

Example of installation Breeze MH



23566-01

44426-00



## OVERVIEW CONTROL UNITS

### BASICLOGO

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PCB control units for level control of one or two d.o.l. or Y-Δ starting pumps.

- BasicLogo AD/BD control units with selectable level contact switches
- BasicLogo AD/BD control units with integrated static air level control (for pressure drainage systems)
- BasicLogo AD/BD modular control units with selectable level contact switches

### HIGHLOGO

Page 300



Microprocessor controls for level-controlled operation of one or more direct starting or Y-Δ starting pumps.

Comfortable and easy operation with multifunction button and clear text display. Wide range of features included in standard model.

- Control units with integrated level detection (for pressure drainage)
- Modular control units with selectable level contact switches

### LEVEL CONTROL SENSOR

Page 304



Various level controls for the combination with BasicLogo and HighLogo controls for all applications

- Ball contact switch (pack) and Ex-Auxiliary switching device
- Static air level control
- Air diaphragm control unit
- Hydrostatic level control using a pressure transducer

### ALARM SYSTEMS AND ACCESSORY

Page 306



Various accessories for pumps and lifting stations as well as for complete control units in casings for outdoor installation.

- Alarm system
- Alarm system for washing machines
- Protective motor plug
- Switching device for trial run
- Steal leak control units
- Casing for outdoor installation
- Signal transmitter a. installation material

# CONTROL UNITS

## BASICLOGO

### DESCRIPTION

Electronic control unit for level control of one (AD) or two (BD) d.o.l. starting submersible pump(s).

The BasicLogo with the standard features meets all the necessary requirements for the reliable control of sewage pumps. It can be adapted to individual requirements and is suitable for use with both non explosion protected and explosion protected submersible pumps (AD/BD ...Ex types).

The control unit can be combined with a large variety of different level controls to suit the application concerned, and it is supplied with a buzzer as standard with a facility for off the line operation.

All BD types (for two pumps) automatically start up pumps 1 and 2 alternately. The resting pump is switched on during peak load or fault. Alternative operation of the unit without peak load function is possible, but with automatic switchover to the standby pump in the event of a fault. Variegated automatic start delay time after a power failure to prevent extreme rushes of current.

The clear and robust design of the unit enables it to be used outdoors in an empty outdoor casing at temperatures as low as -20°C without the need for any heating.



Control unit  
for one pump



Control unit  
for two pumps

- . Proven and sturdy control systems
- . User-friendly handling
- . Integrated optimised standard functions
- . Expandable functions
- . Usable down to -20°C without heating
- . Large range of level controls functions

### Control units for one pump

Type	Motor protection A	Pre-fuse A	Code No.
AD 00E		16	<b>JP00289</b>
AD 00		16	<b>JP00311</b>
AD 25	2.4-4.0	16	<b>JP00310</b>
AD 46	4.0-6.0	16	<b>JP14353</b>
AD 610	6.0-9.0	16	<b>JP14354</b>
AD 910			<b>JP47263</b>
AD 4 ExW	4.0	16	<b>JP25901</b>
AD 8 ExW	8.0	16	<b>JP25902</b>
AD 23 Ex	for one explosion protected pump	16	<b>JP09754</b>
AD 25 Ex		16	<b>JP09683</b>
AD 46 Ex		16	<b>JP14355</b>
AD 610 Ex		16	<b>JP14356</b>

### Control units for two pumps

Type	Motor protection	Pre-fuse A	Code No.
BD 00E	Sicherung 10	20	<b>JP45735</b>
BD 610EC	6.3-10.0	20	<b>JP45743</b>
BD 00	4.0-6.3	16	<b>JP45993</b>
BD 25	2.5-4.0	16	<b>JP45737</b>
BD 46	4.0-6.3	20	<b>JP45739</b>
BD 610	6.3-10.0	25	<b>JP45741</b>
BD 910			<b>JP47264</b>
BD 23 Ex	for two explosion protected pumps	16	<b>JP09755</b>
BD 25 Ex		16	<b>JP09681</b>
BD 46 Ex		20	<b>JP14360</b>
BD 610 Ex		25	<b>JP14361</b>

# CONTROL UNITS

## BASICLOGO

### BasicLogo control units for one or two pumps

Standard features:	AD 00 E	AD 00	AD 25, 46,610, 910	AD 4.8 ExW	AD 23, 25, 46, 610, 910 Ex	BD 00 E	BD 610 EC	BD 00	BD 25, 46, 610, 910	BD 23, 25, 46, 610, 910 Ex
ISO casing enclosure IP 44, 155 mm deep, HxW in mm	275x250	275x250	275x250	455x250	275x250	455x250	455x250	455x250	455x250	455x250
Operating voltage 50 Hzp	1/N/PE 230V	3/N/PE 230/400V	3/N/PE 230/400V	1/N/PE 230V	3/N/PE 230/400V	1/N/PE 230V	1/N/PE 230V	3/N/PE 230/400V	3/N/PE 230/400V	3/N/PE 230/400V
Starting	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
Motor contactor 4 kW/400 V AC3	1	1	1	1	1	2	2	2	2	2
Excess current relay for motor protection	-	-	1	-	1	-	-	-	-	-
Motor protection switch	-	-	-	1	-	-	2	2	2	2
Neozed fuse	-	-	-	-	-	10 A	-	-	-	-
Motor capacitor	-	-	-	1	-	-	2	-	-	-
A.C. power supply 230 V/2 A	1	1	1	1	1	1	1	1	1	1
Safety extra low voltage	1	1	1	1	1	1	1	1	1	1
Hand-Off-Automatic selector switch	1	1	1	1	1	2	2	2	2	2
Electronic buzzer	1	1	1	1	1	1	1	1	1	1
Alarm reset button	-	-	-	1	1	-	-	-	-	1
Temperature limiter with reset button	-	-	-	1	1	-	-	-	-	2
Indicator lamp for operation	1	1	1	1	1	2	2	2	2	2
Indicator lamp for sense of rotation	-	1	1	-	1	-	-	1	1	1
Indicator lamp for high water alarm	1	1	1	1	1	1	1	1	1	1
Indicator lamp for malfunction motor protection	-	-	1	1	1	-	2	2	2	2
Indicator lamp for malfunction temp. limiter	-	-	-	1	1	-	-	-	-	-
Pot. free contact for collective fault, 5A/250 V AC1	1	1	1	1	1	-	-	-	-	1
Watchdog timer 8.9 - 50.7 min.	-	-	-	1	1	-	-	-	-	1
Potential free contact, as before	-	-	-	1	1	1	1	1	1	1

possible level controls:	Art.Nr.									
Air diaphragm control unit with air bubbling system**	JP01080	•	•	•	•	•	•	•	•	•
Pressure switches for MultiCut pumps**	JP17101	•	•	•	•	•	•	•	•	•
Submersible switch pack A with 2 subm. ball contact switches 9.5 m cable and fixing devices*	JP16718	•	•	•	•	•	-	-	-	-
Submersible switch pack AmG with 2 subm. ball contact switches 9.5 m cable and counterweights	JP16719	•	•	•	•	•	-	-	-	-
Subm. switch pack B with 3 subm. ball contact switches, 9.5 m cable, fixing devices*	JP16725	-	-	-	-	-	•	•	•	•
Subm. switch pack BmG with 3 subm. ball contact switches, 9.5 m cable and counterweights	JP16726	-	-	-	-	-	•	•	•	•
Auxiliary switching unit ExH-A**	JP16720	-	-	-	-	•	-	-	-	-
Auxiliary switch module Ex II**	JP14427	-	-	-	•	-	-	-	-	-
Auxiliary switch unit ExH-B**	JP00295	-	-	-	-	-	-	-	-	•
Hydrostatic level control unit HD 04	JP44547	•	•	•	-	-	•	•	•	-
Hydrostatic level control unit HD 04 Ex	JP44548	-	-	-	•	•	-	-	-	•

possible accessories:	Art.Nr.									
Main switch in separate ISO casing, 7.5 kW	JP24508	1	1	1	1	1	1	1	1	1
Main switch 7.5 kW ***	JP18011	1	1	1	1	1	1	1	1	1
LCD working hour meter, plug-in	JP23243	1	1	1	1	1	2	2	2	2
Protection against running dry	JP41881	-	-	-	1	1	-	-	-	1
ESM4, error message module***	JP28999	1	1	1	1	1	1	1	1	1
ESV-Module	JP41850	-	-	-	1	-	-	-	-	1
Rechargeable battery for off the line operation	JP44850	1	1	1	1	1	1	1	1	1

\* Subm. switch packs for explosion proofed control units must only be used in conjunction with ExH-A or ExH-B auxiliary switching units.

\*\* require separate rechargeable battery

\*\*\* Only in conjunction with housing extension. Price on request.

Explosion proofed control units must not be installed in an explosion hazard location! 297

# CONTROL UNITS

## BASICLOGO

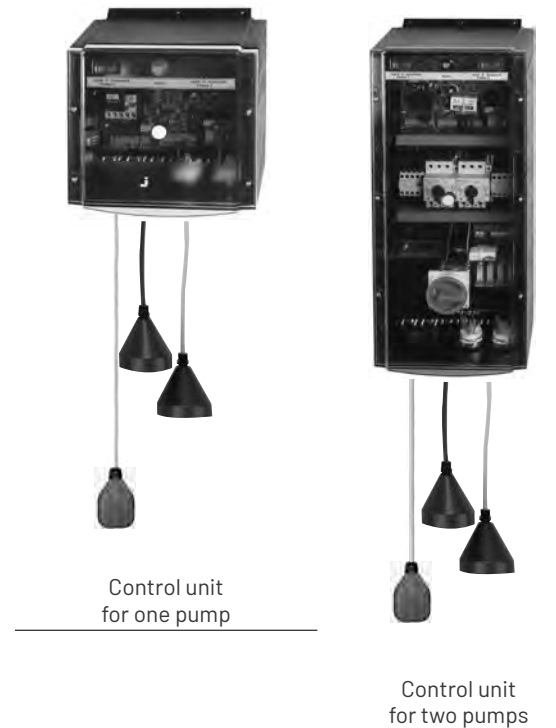
### DESCRIPTION

Electronic control unit for level control starting and time-dependent switching off of one (AD) or two (BD) explosion proof submersible pump(s), preferably with MultiCut cutting system.

All AD/BD ...ExM control units have a run dry protection (DRP) and an integrated static air level control with two independently operating pressure switches, which ensure high operating safety and low maintenance and therefore lower costs. In addition, the control units have a facility to adjust the pump follow-up time and start-up delay after a power failure, thereby optimising the pressure drainage system.

All BD ...ExM types for two pumps automatically start up pumps 1 and 2 alternately. The resting pump is switched on during peak load or fault. Alternative operation of the unit without peak load function is possible, but with automatic switchover to the standby pump in case of a fault. Variegated automatic start delay time after a power failure to prevent extreme rushes of current.

The clear and robust design of the unit enables it to be used outdoors in an empty casing at temperatures as low as -20°C without the need for any heating in the casing.



- Proven and system-coordinated control technology
- User-friendly handling
- Functions optimised for pressure drainage systems
- Usable down to -20°C without heating

### BasicLogo control units for a MultiCut pump with integrated static air level control

Type	Motor protection	Pre-fuse	Code No.
	A	A	
AD 8 ExME, DRP	8.0	16	<b>JP43162</b>
AD 12 ExME, DRP	12.0	16	<b>JP43163</b>
AD 25 ExM, DRP	2.4-4.0	16	<b>JP43159</b>
AD 46 ExM, DRP	4.0-6.0	16	<b>JP43160</b>
AD 610 ExM, DRP	6.0-9.0	16	<b>JP43161</b>

### BasicLogo control units for two MultiCut pumps with integrated level control

Type	Motor protection	Pre-fuse	Code No.
	A	A	
BD 25 ExM, DRP	2.5-4.0	16	<b>JP43165</b>
BD 46 ExM, DRP	4.0-6.3	20	<b>JP43166</b>
BD 610 ExM, DRP	6.3-10.0	25	<b>JP43167</b>

# CONTROL UNITS

## BASICLOGO

### BasicLogo control units for one or two MultiCut pumps with integrated level control

Standard features:	AD 8 ExME, DRP	AD 12 ExME, DRP	AD 25,46,610 ExM, DRP	AS 610 ExM, DRP	BD 25,46,610 ExM, DRP
ISO casing enclosure IP44, 155 mm deep, mm HxW	455x250	455x250	275x250	455x250	455x250
Operating voltage 50 Hz-	1/N/PE 230V	1/N/PE 230V	3/N/PE 230/400V	3/N/PE 230/400V	3/N/PE 230/400V
Starting	Direct	Direct	Direct	YΔ-Start	Direkt
Motor contactor 4 kW/400 V	1	1	1	-	2
Y-delta composite contactor 7.5 kW/400 V	-	-	-	1	-
Excess current relay for motor protection	-	-	1	1	-
Motor protection switch	-	-	-	-	2
Fixed motor protection	8 A	12 A	-	-	-
Motor capacitor	1	1	-	-	-
A.C. power supply 230 V/2 A	1	1	1	1	1
Safty extra low voltage	1	1	1	1	1
Hand-Off-Automatic selector switch	1	1	1	1	2
Electronic buzzer	1	1	1	1	1
Reset buttons for alarm and temperature limiter	1	1	1	1	1
Indicator lamp for operation	1	1	1	1	2
Indicator lamp for sense of rotation	-	-	1	1	1
Indicator lamp for high water alarm	1	1	1	1	1
Indicator lamp for malfunction motor	1	1	1	1	2
Indicator lamp for malfunction temperature limiter	1	1	1	1	-
Indicator lamp for water deficiency	1	1	1	1	1
Indicator lamp for span exceedance	1	1	1	1	1
Potential free contact for collective fault, 5A/250 V AC1	1	1	1	1	1
Potential free contact, as before, optionally pulsating	1	1	1	1	1
Pump follow-up time, adjustable from:	1-60 s	1-60 s	1-60 s	1-60 s	1-130 s
Watchdog timer, adjustable	534-3042 s	534-3042 s	534-3042 s	534-3042 s	534-3042 s
Start-up delay time, depending upon the follow-up time setting	1-10 s	1-10 s	1-10 s	1-10 s	-

Integrated static air level control and DRP					
Pressure switch for operation, operative range up to 3 m water level	1	1	1	1	1
Switch-on point 100 mm water level, switch-off point 50 mm water level					
Second pressure switch for emergency switch-on and alarm	1	1	1	1	1
Pressure sensor with 10 m air tube	2	2	2	2	2
Ex-proof level control for protection against dry running (DRP)	1	1	1	1	1

Accessories for standard casing:	Art.Nr.					
Main switch in separate ISO casing	JP24508	1	1	1	1	1
LCD working hour meter, plug-in	JP23243	1	1	1	1	2
Start delay module for freely adjustable start-up delay of 0-315 s	JP41850	1	1	1	1	1
Rechargeable battery for off the line operation	JP44850	1	1	1	1	1
Softstarting device to limit the starting current to max. 33A * only if 25/2 ME is connected	JP24138	-	1	-	-	-
Alarm system, acoustic sound emitted outside	JP27402	1	1	1	1	1
<b>Accessories only with housing extension</b>						
Housing extension to H 430 x W 250 mm	JP41873	-	-	1	-	-
Housing extension to H 610 x W 250 mm	JP41874	1	1	1	1	1
Amperemeter 0-10 A	JP23297	-	-	1	-	-
ESM4, single error message module**	JP28999	1	1	1	1	1
Main switch up to 6.5 kW	JP22402	1	1	1	1	1

\* only with the initial order, installed in factory.

\*\* require separate rechargeable battery

Explosion proofed control units must not be installed in an explosion hazard location!

Further accessories on request

# CONTROL UNITS

## HIGHLOGO MICROPROCESSOR CONTROL UNITS

### DESCRIPTION

Microprocessor control unit for switching one or two direct starting pumps on and off, depending on the level, either with or without explosion protection.

All information and alarm messages are shown on the large graphic display which, in conjunction with the multifunction button, allows the control unit to adapt intuitively and flexibly to local conditions and requirements. Settings are protected with a freely selectable password to prevent misuse. An initial commissioning menu enables a fast installation. With just a few settings, the system covers more than 90% of all installation conditions. Separate buttons for each pump, for manual-0-automatic operation or for acknowledging alarms, also enhance the operating comfort. An integrated event memory provides comfortable diagnostic options as well.

The HIGHLOGO makes it easy to show the different operating states in the display and with the aid of additional LEDs. The features it offers include an operating hour counter for the pumps, switch-on cycles, and current consumption, which are indicated clearly on a backlit display. A collective error message and a high-water alarm can be transmitted potential-free, such as by the FTJP radio transmitter, which enables the system to be linked to a smart home infrastructure. It is also possible, however, to link it to a warning light or buzzer (230V) with a powered connection. In case of a power failure, the optional rechargeable battery reliably transmits the high-water alarm.

The HIGHLOGO control units can be equipped with a GSM module. Via the module, specific error and status messages are sent directly by e-mail and/or SMS to programmed alarm receivers.

An optional battery module enables alarm forwarding even in the case of a power failure. The alarms are additionally coded for possible further processing in the control room.

Since connections are provided for different types of level sensors, ranging from a submersible ball contact switch for straightforward use to high-grade submersible sensors for municipal use,

this means that every possible application can be covered.

By activating a service menu, customers can be alerted to the required maintenance intervals. An individual phone number to contact can also be saved.

The compact design of the single and duplex systems allows them to be fitted in the building in a space-saving way but also in a discreet column out of doors.

For use specifically with pressure drainage systems, **HIGHLOGO ... LC control units are equipped with a static pressure module and dry run protection as standard.** The two pressure switches used for this purpose, with air hoses and open bells ending in the sump, have proved themselves in ground drainage for decades now, and the two-circuit system supplied as standard provides additional reassurance. The separate submersible ball contact switch for the dry run protection (DRP) also meets the requirements of the ATEX directive on explosion protection.

### TECHNICAL DATA

Housing 275x250x155 mm (HxWxT)

Weight: approx. 4kg

Protection category: IP 44, (IP 55 on request)

Operating voltage: 3/PE 230/400 V, 50 Hz

Motor contactor(s): 4KW/400V

Operating temperature: -20 ... 50°C

Humidity: 0 to 90% RH, with no condensation

### TYPE KEY

LC	with dry run protection float switch and pressure sensors
LCX	without dry run protection and pressure sensors
LCSX	with main switch but without dry run protection and pressure sensors



The following list gives some of the settings that can be made and read off:

- Switch-on delay after power failure
- Pump follow-up time
- Watchdog timing
- Automatic trial run
- Motor current monitoring
- Pump switching cycles
- Operating hours
- Level indicator
- Event memory

- . Intuitive use
- . Large backlit clear text display
- . Initial commissioning menu
- . Connection options for a range of different level sensors
- . Compact design
- . Multilanguage
- . ATEX-compliant with electro mechanical motor protection

### HighLogo ... LC (10 m)

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 1-25 LC	2.4-4.0	16	<b>JP47984</b>
HIGHLOGO 1-46 LC	4.0-6.0	16	<b>JP47985</b>
HIGHLOGO 1-610 LC	6.0-9.0	16	<b>JP47986</b>

### HighLogo ... LC (10 m)

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 2-25 LC	2.5-4.0	16	<b>JP47993</b>
HIGHLOGO 2-46 LC	4.0-6.3	20	<b>JP47994</b>
HIGHLOGO 2-610 LC	6.3-10.0	25	<b>JP47995</b>

# CONTROL UNITS

## HIGHLOGO MICROPROCESSOR CONTROL UNITS

### Single units ... LCX

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 1-25 LCX	2.4-4.0	16	<b>JP48286</b>
HIGHLOGO 1-46 LCX	4.0-6.0	16	<b>JP48287</b>
HIGHLOGO 1-610 LCX	6.0-9.0	16	<b>JP48288</b>
HIGHLOGO 1-25 LCSX	2.4-4.0	16	<b>JP48292</b>
HIGHLOGO 1-46 LCSX	4.0-6.0	16	<b>JP48293</b>
HIGHLOGO 1-610 LCSX	6.0-9.0	16	<b>JP48294</b>

### Duplex units ... LCX

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 2-25 LCX	2.5-4.0	16	<b>JP48289</b>
HIGHLOGO 2-46 LCX	4.0-6.3	20	<b>JP48290</b>
HIGHLOGO 2-610 LCX	6.3-10.0	25	<b>JP48291</b>
HIGHLOGO 2-25 LCSX	2.5-4.0	16	<b>JP48295</b>
HIGHLOGO 2-46 LCSX	4.0-6.3	20	<b>JP48296</b>
HIGHLOGO 2-610 LCSX	6.3-10.0	25	<b>JP48297</b>

### Hose set

DRP-float switch and pressure sensor set	10 m	<b>JP48301</b>
DRP-float switch and pressure sensor set	15 m	<b>JP48302</b>
DRP-float switch and pressure sensor set	20 m	<b>JP48303</b>

### HighLogo for one pump

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 1-00 E		16	<b>JP47987</b>
HIGHLOGO 1-00		16	<b>JP47988</b>
HIGHLOGO 1-25	2.5-4.0	16	<b>JP47989</b>
HIGHLOGO 1-46	4.0-6.0	16	<b>JP47990</b>
HIGHLOGO 1-610	6.3-9.0	16	<b>JP47991</b>
HIGHLOGO 1-910	6.0-12.0	20	<b>JP47992</b>

### HighLogo for two pumps

Type	Motor protection A	Pre-fuse A	Code no.
HIGHLOGO 2-00 E		20	<b>JP47996</b>
HIGHLOGO 2-00		16	<b>JP47997</b>
HIGHLOGO 2-25	2.5-4.0	16	<b>JP47998</b>
HIGHLOGO 2-46	4.0-6.3	20	<b>JP47999</b>
HIGHLOGO 2-610	6.3-10.0	25	<b>JP48000</b>
HIGHLOGO 2-910	6.3-10.0	25	<b>JP48001</b>

### Accessory

Type	Code no.
<b>Main switch</b>	15 kW, factory-fitting only <b>JP48002</b>
<b>Rechargeable battery</b>	for mains-independent alarm <b>JP44850</b>
<b>HighLogo GSM Modem</b>	for refitting (RTC module+GSM modem and flat antenna) <b>JP50444</b>
<b>HighLogo GSM Module</b>	factory assembled (RTC module+GSM modem and flat antenna) <b>JP49356</b>
<b>Parameterisation GSM module</b>	factory assembled, according to customer's specifications <b>JP55202</b>
<b>HighLogo 1 GSM rechargeable battery 12V</b>	for single units, factory assembled <b>JP25884</b>
<b>HighLogo 2 GSM rechargeable battery 12V</b>	for duplex units, factory assembled incl. casing enlargement <b>JP49357</b>
<b>GSM Antenna</b>	for roof mounting, can be mounted in installation column, 1.5m cable <b>JP49536</b>

### Level sensor

Type	Code no.
Static pressure module	<b>JP26196</b>
Static pressure sensor	with analogue backpressure indicator <b>JP26187</b>
Submersible sensor	with analogue level indicator <b>JP44808</b>
Ex submersible sensor	with analogue level indicator, housing extension required <b>JP44809</b>
Dry run protection	for explosion protected systems <b>JP44807</b>
Air diaphragm control unit	<b>JP01080</b>
Submersible switch	
Submersible switch package A	2 submersible switches 9.5 m and cable holder <b>JP16718</b>
Submersible switch package AmG	2 submersible switches 9.5 m with weights <b>JP16719</b>
Submersible switch package B	3 submersible switches 9.5 m and cable holder <b>JP16725</b>
Submersible switch package BmG	3 submersible switches 9.5 m with weights <b>JP16726</b>
EXH-A	Galvanic separation for package A <b>JP16720</b>
EXH-B	Galvanic separation for package B <b>JP00295</b>
Rechargeable battery	for mains-independent alarm <b>JP44850</b>

# MODULAR CONTROL UNITS

## BASICLOGO

### DESCRIPTION

BasicLogo control units have a modular design and are built to order. In their basic configuration, they meet all the requirements for level-dependent starting and stopping of one or two submersible pumps.

All BD/BS types (for two pumps) start up pumps automatically and alternate between the pumps. The resting pump is switched on during peak load (optionally) or in the event of a fault. After a power failure, pump start-up is staggered to prevent extreme rushes of current.

All control units are fitted with a Neozed 6A control fuse. A manual-0-automatic selector switch and an operational status indicator is incorporated for every pump.

The control unit can be adapted to individual applications by combining it with various different level controls.

We also offer a wide range of modules and control elements for extending the control unit to meet individual requirements, including voltmeters, impulse counters, time meters, seal leak detectors, main switches, speed regulators, and connection to an emergency power generator.

The size of the sheet steel casing depends upon the electrical features required.

**We build control units to your specification!**





# MODULAR CONTROL UNITS

## HIGHTLOGO

### DESCRIPTION

Microprocessor control unit for switching one or two direct starting pumps on and off, depending on the level, with the option of explosion protection.

All information and alarm messages are shown on the large graphic display which, in conjunction with the multifunction button, allows the control unit to adapt intuitively and flexibly to local conditions and requirements. Settings are protected with a freely selectable password to prevent misuse. An initial commissioning menu makes for fast installation. With just a few settings, the system covers more than 90% of all installation conditions. Separate buttons for each pump, for manual-0-automatic operation or for acknowledging alarms, also enhance the operating comfort. An integrated event memory provides comfortable diagnostic options as well.

The HIGHTLOGO makes it easy to show the different operating states in the display and with the aid of additional LEDs. The features it offers include an operating hour counter for the pumps, switch-on cycles, and current consumption, which are indicated clearly on a backlit display. A collective error message and a high-water alarm can be transmitted potential-free, such as by the FTJP radio transmitter, which enables the system to be linked to a smart home infrastructure. It is also possible, however, to link it to a warning light or buzzer (230 V) with a powered connection. In case of a power failure, the optional rechargeable battery reliably transmits the high-water alarm.

Since connections are provided for different types of level sensors, starting from a submersible ball contact switch for straightforward use to high-grade submersible sensors for municipal use, this means that every possible application can be covered.

By activating a service menu, customers can be alerted to the required maintenance intervals. An individual phone number to contact can also be saved.

We also offer a wide range of modules and control elements for extending the control unit to meet individual requirements, including voltmeters, leak detectors, speed regulators, and connection to an emergency power generator.

**We build control units to your specification!**



# CONTROL UNITS

## LEVEL CONTACT SENSOR

### DESCRIPTION

Submersible ball contact switches for direct level control of one single phase pump or for level control of 3-phase pumps and duplex units by control unit.

The hysteresis (difference between switch-on/switch-off) can be adjusted by altering the cable length of the submersible switch (= length of the cable from the fastening point to the float switch) within the range of 150-500 mm. A fixing device is available for fastening the submersible float switch cable inside the sump; for a suspended installation of the switch a counterweight is available which can be attached to the submersible switch cable.

For metallic isolation between the submersible ball contact switches and a control unit in the Ex-area. The auxiliary control device used provides intrinsically safe circuits for submersible switches or other operating units. Intrinsically safe means: explosion protection for the control circuits in accordance with EN 50014/50020.

In case of a power failure the transmission of switching commands is only possible if the auxiliary units are equipped with a rechargeable battery, the necessary automatic battery charger is standard scope of supply.



Submersible ball contact switch



ExH-A/B

### Submersible ball contact switch

Type	Cable type	Cable length	Code No.
<b>Single</b>			
Subm. ball contact switch, cable black	H07RN-F-3G1.0	1.0 m	<b>JP44802</b>
Subm. ball contact switch, cable black	H07RN-F-3G1.0	3.0 m	<b>JP44800</b>
Subm. ball contact switch, cable black	H07RN-F-3G1.0	5.0 m	<b>JP44804</b>
Subm. ball contact switch, cable black	H07RN-F-3G1.0	9.5 m	<b>JP44801</b>
Subm. ball contact switch, cable red (up to 95°C)	SiH-F-3G1.0	3.0 m	<b>JP44806</b>
Subm. ball contact switch, cable red (up to 95°C)	SiH-F-3G1.0	9.5 m	<b>JP44805</b>
<b>as a package</b>			
A: 2 units with set of fixing accessories	H07RN-F-3G1.0	2 x 9.5 m	<b>JP16718</b>
CmG: 1 unit with counterweight	H07RN-F-3G1.0	1 x 9.5 m	<b>JP16739</b>
AmG: 2 units with counterweight	H07RN-F-3G1.0	2 x 9.5 m	<b>JP16719</b>
B: 3 units with set of fixing accessories	H07RN-F-3G1.0	3 x 9.5 m	<b>JP16725</b>
BmG: 3 units with counterweight	H07RN-F-3G1.0	3 x 9.5 m	<b>JP16726</b>
BH: 3 units with set of fixing accessories	SiH-F-3G1.0	3 x 9.5 m	<b>JP24768</b>
BHmG: 3 units with counterweight	SiH-F-3G1.0	3 x 9.5 m	<b>JP24769</b>

### Ex-proof auxiliary control devices

Type	Code No.
ExH-A for control unit A...Ex in conjunction with subm.ball contact switches	<b>JP16720</b>
ExH-B or control unit A...Ex in conjunction with subm.ball contact switches	<b>JP00295</b>

Standard features:	KT	KT Hot water
Temperature resistance constantly/temporarily in °C	60/90	95/95
Breaking capacity 250 VAC	10 A (8 A)	10 A (8 A)
Breaking capacity 400 VAC	10 A (4 A)	10 A (4 A)
Contact closes with rising water level*	NO contact	NO contact
Protection (up to 4 bar)	IP 68	IP 68
Protection class (with earth conductor)	I	I
<b>Optional accessories:</b>		
Set of fixing accessories	<b>JP44789</b>	•
Counterweight for suspended installation	<b>JP44803</b>	•

Standard features:	ExH-A	ExH-B
ISO casing, enclosure IP54, 100 mm deep HxW in mm	180x130	180x130
Operating voltage 50 Hz	1/N/PE 230 V	1/N/PE 230 V
Number of intrinsically safe circuits	2	3
<b>Optional accessories:</b>		
Rechargeable battery for off the line operation	<b>JP44850</b>	1

\* Special versions with reverse operation or with changeover contact on request

# CONTROL UNITS

## LEVEL CONTACT SENSOR

### DESCRIPTION

Level contact sensors are used to monitor and control the water level in tanks and sumps. Once the water levels set have been reached, signals are sent through relay contacts to the higher control (BasicLogo AD/BD...) which switches the pumps on and starts the alarm in the event of high water.

The pneumatic level contact sensors M and LM are principally used in explosion-protected areas.

Type M works according to the open static air pressure system. As the water level rises the air pressure in the piping increases. A pressure switch is actuated and the pump is switched on. The pump is switched off depending upon the water level and the time. A second pressure sensor is used as an alarm and emergency start-up system. Both sensors are located beyond the wastewater once the switch-off point has been reached.

Type LM works according to the air bubbling system. The switch-on and switch-off points are indicated by a pressure switch for each. The pressure sensor for the switch-off point remains underwater. A compressor provides the necessary aeration for this system at intervals.

The HD 04 series works with a hydrostatic, electronic pressure sensor which is permanently underwater. It gives an analog electronic signal to an evaluation electronic unit which can be programmed to certain threshold water levels. The process can recognise minimal differences in water level and is usable in all areas.



M/LM



HD 04

### Pneumatic level contact sensor

Type	Code No.		
Static air level control (M) for single and duplex units	<b>JP17101</b>		
Air diaphragm control unit (LM) for single and duplex units	<b>JP01080</b>		
Standard features:	M	LM	
ISO casing, enclosure IP44, 155 mm deep, HxW mm	275x250	275x250	
Operating voltage 50 Hz	1/N/PE 230 V	1/N/PE 230 V	
Connection cable with safety plug	-	1,5 m	
Compressor and electrovalve	-	•	
Level monitoring	Static air pressure	Air bubbling	
Static air pressure switch for operation, operative range: 3 m water level, switch-on point 100 mm switch-off point 50 mm	1	1	
Second pressure switch for emergency switch-on and alarm	1	1	
Pressure sensor with 10 m air tube	2	2	
Follow-up time, adjustable from 1-120 s	•	-	
Watchdog timer, adjustable from 10-180 s	•	-	
Alarm delay, adjustable from 15-240 s	-	•	
Potential-free NO contact for basic load, peak load and alarm	3	3	
Optional accessories:			
Rechargeable battery for off the line operation	<b>JP44850</b>	1	1
Bracket for air tubs	<b>JP23100</b>	1	1

### Hydrostatic level contact sensor

Type	Code No.		
HD 04	<b>JP44547</b>		
HD 04 Ex with explosion protection (Zone 1/2)	<b>JP44548</b>		
Standard features:	HD 04	HD 04 Ex	
ISO casing, enclosure IP44, 155 mm deep, HxW mm	275x250	275x250	
Operating voltage 50 Hzp	1/N/PE 230 V	1/N/PE 230 V	
Freely programmable switch-on and switch-off points	•	•	
Minimum programmable level difference	1 cm	1 cm	
Submersible sensor made of stainless steel 1.4571	•	•	
PUR cable with integrated air tube for pressure equalisation 10 m	•	•	
Diaphragm material	Keramik	Keramik	
Compression Strength	10 mWS	10 mWS	
Measuring range in m water level	0-4	0-4	
Measured value signal in two-wire system, temperature-compensated	4-20 mA	4-20 mA	
Programmable switch-on points	4	4	
Programmable switch-off points	4	4	
Potential-free contacts for model	4	4	
Safety Barrier Ex ia II C	-	•	
Optional accessories:			
Analog output 4-20 mA+	<b>JP24206</b>	•	•
Analog output 0-10 V*	<b>JP24207</b>	•	•
Protective pipe for PKS-A 800-D32**	<b>JP45898</b>	•	•
Protective pipe for PKS-B**	<b>JP45897</b>	•	•
Protective pipe for PKS-D 40/D40**	<b>JP45899</b>	•	•
Protective pipe for PKS-D D65/D80**	<b>JP45900</b>	•	•

\* per device only 1 analog output possible  
 \*\* for mounting on a concrete sump wall.  
 Other mounting configurations on request. Length = 0.6 m.

# ALARM UNITS

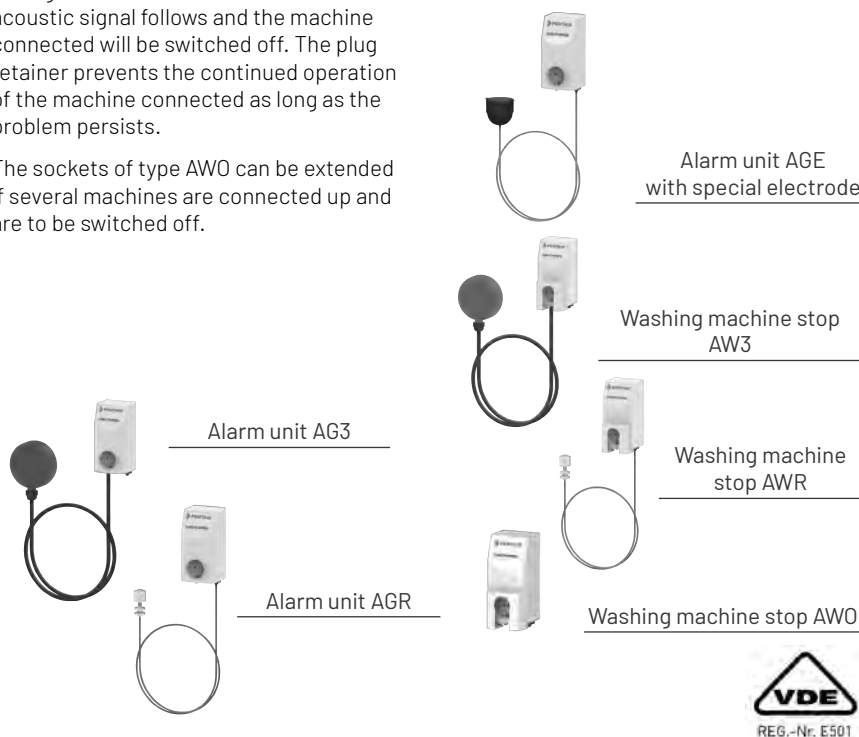
## DESCRIPTION

Alarm devices notify undesirably high water levels using a submersible ball contact switch or float switch, an electrode or a static air pressure system. They are useful where pumps are operated directly from the mains in a tank or sump without a control unit or level contact sensor.

All alarm devices emit an acoustic signal and have a potential-free contact for remote alarm signalling (not in the case of AW ...). They can be extended for mains-independent operation using a rechargeable battery, thereby providing protection from flooding in the sump in which the pump is located in the event of a power failure. The integrated socket enables the operation of both pump and alarm unit on one 230V socket. Either a washing machine or a dishwasher can be plugged into the alarm device.

If a high water level is detected, an acoustic signal follows and the machine connected will be switched off. The plug retainer prevents the continued operation of the machine connected as long as the problem persists.

The sockets of type AWO can be extended if several machines are connected up and are to be switched off.



## Alarm units

Type	Code No.
AG3 with ball contact switch and 3 m cable	<b>JP44891</b>
AG10 with ball contact switch and 9.5 m cable	<b>JP44892</b>
AGR with reed switch and 4 m cable	<b>JP44893</b>
AGE with special electrode and 1.5 m cable	<b>JP44894</b>

## Alarm units with washing machine stop

Type	Code No.
AW3 with ball contact switch and 3 m cable	<b>JP44895</b>
AWR with reed switch and 3 m cable (for Hebefix)	<b>JP44897</b>
AWO without level control sensor, for further machines	<b>JP44899</b>

Standard features:	AG3/10	AGR	AGE	Static air level control
Enclosure IP44, 125 mm deep HxW in mm	-	-	-	160x160
ISO casing with shock proof plug, IP20, 70 mm deep, HxW in mm	147x71	147x71	147x71	-
Operating voltage 50 Hz	1/N/PE 230 V	1/N/PE 230 V	1/N/PE 230 V	1/N/PE 230 V
Connection cable with safety plug	-	-	-	0,5 m
Power via alarm unit's socket	4000 VA	4000 VA	4000 VA	4000 VA
Level monitoring	KT-	Reed-	Elec-trode	Static air
Temperature resistance constantly/temporarily in °C	60/90	100/100	40/60	40/60
Set of fixing accessories	1	-	-	-
Static air level control for alarm, operating range: 3 m water level	-	-	-	1
Pressure sensor with 10 m air tube	-	-	-	1
Test button	-	-	-	1
Potential-free NO contact 5A/250VAC1	1	1	1	-
Potential-free changeover contact 5A/250VAC1	-	-	-	2
Electronic alarm buzzer	1	1	1	1
Optional accessories:				
Rechargeable battery for off the line operation	<b>JP44850</b>	1	1	1

Standard features:	AW3	AWR	AWO
ISO casing with shock proof plug, IP20, 70 mm deep, HxW in mm	147x71	147x71	147x71
Operating voltage 50 Hz	1/N/PE 230 V	1/N/PE 230 V	1/N/PE 230 V
Control transformer 230/12 V	1	1	1
Level monitoring	Subm. ball contact switch	Reed switch	-
Temperature resistance constantly/temporarily in °C	60/90	100/100	-
Set of fixing accessories	1	-	-
Breaking capacity of integrated socket Safety plug 230 V, switched off if alarm is set off	4000 VA	4000 VA	4000 VA
Electronic alarm buzzer	1	1	1
Optional accessories:			
Rechargeable battery for off the line operation	<b>JP44850</b>	1	1

# CONTROL UNITS

## DESCRIPTION

The components on this page promote the operating safety of pumps or lifting stations.

The **protective motor plug** protects the d.o.l. pump connected from electrical, mechanical and thermal overload up to a connected load of 4 kW. The protective device is fitted in an ISO casing and besides the integrated excess-current release it also includes a connection for a motor winding thermostat. The model with level control switches the pump on and off with the submersible ball contact switch connected.

The **seal leak detector** is used to monitor the sealing of the oil chamber between the motor and the hydraulic section of the oil chamber in the case of submersible pumps of the US/UB and MultiCut/MultiStream/MultiFree series. In the event of water penetrating the oil chamber, an integrated buzzer is activated. The device must be mounted in a location which allows it to be monitored easily and in a well ventilated room.

## Pump accessories

Type	Motor protection A	for pump type	Code No.
Protective safety motor plug	8	US 151 E	<b>JP40264</b>
CEE-Protective motor plug	8	US 152 E/153 E/155 E	<b>JP44753</b>
CEE-Protective motor plug without level control	2,5-4,0	US 152 D, 153 D, 155 D	<b>JP44754</b>
CEE-Protective motor plug with level control	2,8-4,0	without ex*, US 151 D	<b>JP44750</b>
	4,0-6,0	without ex*, US 251 D	<b>JP44751</b>
	6,0-9,0	without ex-proof*	<b>JP44752</b>
CEE-Protective motor plug with level control	2,8-4,0	without ex-proof*	<b>JP09725</b>
	4,0-6,0	without ex-proof*	<b>JP09726</b>
	6,0-9,0	without ex-proof*	<b>JP09727</b>
* The nominal current of the pump type required must be suitable for the activating range of the motor protection.			
DKG - seal leak detector			<b>JP44900</b>
DKG Ex - seal leak detector only for ex-proof pumps			<b>JP00249</b>

## Switching and control units

Type	Code No.
StP - Switching device for automatic test run	<b>JP01264</b>

## Radio transmitter

Type	Art.-Nr.
FTJP for ENOCEAN	<b>JP47209</b>

The **switching device for the automatic test run** of pumping stations with extended idle and dry phases prevents the shaft sealings in the pump from becoming stuck as it causes automatic short-term test runs. The StP is an additional device ready for connection to control units of the AD/BD and ND series.

Lifting stations, pump stations and alarm units which have a potential-free output can be integrated with the **radio transmitter FTJP** into a smart home infrastructure. Gateways that support the ENOCEAN radio protocol can be used to communicate with the FTJP. Programme the FTJP into the gateway provider's app.



CEE-Protective motor plug



Switching device for test run



Seal leak detector



Radio transmitter FTJP

## Equipment with CEE protective motor plug

Operating voltage 3/N/PE-230/400 V  
Enclosure IP 44, cable inlet M 25 x 16  
Temperature range -25° bis +50° C  
Max. breaking capacity 4 kW AC3  
Max. switching frequency 30 switches/hour.

### Features:

- 1 CEE-protective motor plug 16 A / 400 V, 5-pole with phase inverter
- 270 x 120 x 100 mm (H x B x T)
- 1 Motor contactor 4 kW
- 1 Motor contactor with motor protection relay (reset button can be activated from the exterior)
- 1 ON/OFF switch
- 1 Indicator lamp, red, for indicating rotational direction
- 1 Indicator lamp, white, for operation display

### For devices with level control:

- 1 Submersible ball contact switch with 9.5 m cable H07RN-F-3G1
- The electrical connection between the pump and the protective motor plug must be carried out by the customer.

## Equipment with seal leak detector

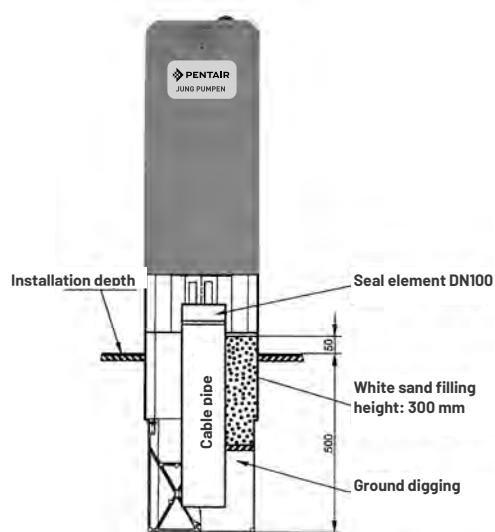
- Operating voltage: 1/N/PE-230 V
- ISO casing IP 20 (DKG)
- 147 x 71 x 70 mm (H x B x T)
- or ISO-casing with transparent cover IP 54 (DKG-Ex), 180 x 130 x 100 mm (H x B x T)
- 1 Electronic unit with transformer and control light
- 1 Ex-proof safety barrier for type DKG-Ex-(E) II (2) G [Ex ia] IIC/IIB)
- 1 Special electrode with 10 m cable
- 1 Potential-free NO contact for error messages
- 1 Acoustic alarm
- (For duplex units 2 units required)

## Equipment with switching device for test run

- Operating voltage: 1/N-230 V
- 1 ISO-casing with transparent cover, dimensions including screw joint 180 x 130 x 100 mm (H x B x T) with PG screw joint H 220 mm, IP 54
- 1 Power supply cable 0,5 m and plug
- 1 Digital timer with automatic changeover between summer and winter time, shortest operation: 1 sec., power reserve: approx. 20 h

# CONTROL UNITS

## CASING AND INSTALLATION MATERIALS



Casing	Protection category	Usable installation area		Depth of device		Outside dimensions			Pitch of holes		Code No. Basement	Code No.
		H	B	Area	Lock area	H	B	T	A	C		
Size 0	IP 44	700	545	240	200	862	596	322	495	160	<b>JP24854</b>	<b>JP12710</b>
Size 1	IP 43	915	675	260	225	1100	785	327	690	160	<b>JP24855</b>	<b>JP12711</b>
Size 2*	IP 43	915	1000	255	205	1125	1115	320	1020	160	<b>JP24856</b>	<b>JP12712</b>
Size 3*	IP 44	955	1340	255	205	1125	1445	320	1350	160	<b>JP24857</b>	<b>JP12713</b>
Size 3G*	IP 44	1185	1350	270	240	1350	1450	350	1350	160	<b>JP24857</b>	<b>JP20864</b>
Typ A	IP 44	700	250	194	168	1415	316	224	integrated		<b>integrated</b>	<b>JP23735</b>
Typ B	IP 44	650	400	195	180	1620	440	240	integrated		<b>integrated</b>	<b>JP19024</b>
Typ C	IP 43	840	400	190	140	1895	425	240	integrated		<b>integrated</b>	<b>JP19026</b>

\* preassembled for a double lock

Plastic base kit with M 12 threads for installation of the casing. Assembling and installation by the customer.

To avoid the development of condensation water inside the outdoor casing the bottom of the base should be filled with approx. 5 cm of white sand above the ground level. aufzufüllen! Alternative a special base stuffing could also be used.

Installation materials	Code No.
Lock with 3 keys	<b>JP22408</b>
Heating facility 230V/55W	<b>JP01918</b>
Thermostat for heating of casing	<b>JP24531</b>
Warning light, unmounted	<b>JP22375</b>
Flashlight, unmounted	<b>JP22859</b>
Horn, unmounted	<b>JP17591</b>
Cast resin bushing 7-16 mm Ø	<b>JP48333</b>
Cast resin bushing 8-24 mm Ø	<b>JP48334</b>
Sealing cone DN 100, vapour-proof	<b>JP44843</b>
Seal element DN 100, pressure-tight	<b>JP44848</b>
Ventilation pipe DN 100, stainless steel	<b>JP44858</b>

### Functions and specifications

#### Warning light

Orange, shock-resistant in accordance with EN 50014, burglar-proof, enclosure IP 65, for short flashes, with 7 W/230 V

#### Flashlight

Orange, shock-resistant in accordance with EN 50014, burglar-proof, enclosure IP 65, for flashlight with short but very intense flashes 230 V/15 mA.

#### Horn

Thermoplast (ABS) shock-resistant, grey 88 dB (A) / 1 m for mounting inside of the housing. Dimensions: 170 x 80 x 78 (H x W x D), enclosure IP 33, 230 V, 15 mA.

#### Cast resin bushing

Cast resin bushing complete with funnel and cast-resin. Approved for use in explosion hazardous areas.

#### Seal element

For the separation of explosion-hazardous areas (pmp sump) and ventilated rooms above respectively below the backpressure level with non explosion protected electrical equipment (e.g. housings for outdoor installation).

#### Above backpressure level (Code No. JP44843):

TÜV-certified water vapour proof sealing element (not tight against pressing water) for cable ducts DN 100 in accordance with VDE 0165.

Equipped with the following drills:

- 2 holes of 20 mm
- 2 holes of 14 mm
- 5 holes of 7 mm

#### Below backpressure level (Code No. JP44848):

Sealing element for cable ducts DN 100. In case of possible backpressure the sealing element ensures that the waste water can not flow into the connected building. Equipped with the following drills:

- 2 holes of 15 mm
- 2 holes of 8 mm
- 1 hole of 5 mm

#### Ventilation pipe

For the ventilation of sumps, it can be installed as the top end of the ventilation pipe that leads approx 400 mm above the ground level.

Material 1.4301. Dimensions: d = 108/168 x h = 700 mm

# OVERVIEW

## TYPE CODE CONTROL UNITS

### Control units for one or two pumps

Example:      AD      46      Ex      M  
                  ①      ②      ③      ④

		BASICLOGO	HIGHLOGO	Description
①	Type of control unit	AD	1	Single unit direct starting
		BD	2	Duplex unit direct starting
		AS	4	Single unit Y-Δ starting
		BS	5	Duplex unit Y-Δ starting
②	Size	46	46	
③	Version	E		For alternating current pump(s)
		EC		For alternating current pump with external operating capacitor
		EX		For pumps with explosion protection
④	Level contact sensor		LC	With DRP-float switches and pressure sensor
			LCX	Without DRP-float switches and pressure sensor
			LCSX	With main switch but without DRP-float switches and pressure sensor
		M		2 Diaphragm pressure switches
		ME		2 Diaphragm pressure switches for alternating current pumps
	TLS		Dry run protection	



DEUTSCHLAND

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