

The complete range of  
**pump technology**

- Lifting stations
- Pumping stations
- Submersible pumps
- Hybrid lifting stations
- Control units



# This is KESSEL.

Since 1963, KESSEL has stood like no other company for innovative and reliable drainage technology. We have established ourselves as the impulse generator in the industry and are now a worldwide premium supplier.



Competent partner  
**since 1963**



International player  
**60+**  
**countries**



Innovative premium supplier  
**3.000+**  
**products**



Safe employer  
**765**  
**employees**



Sustainable company  
**141,5 mio. €**  
**in sales**

During the production of our products as well as their operation on-site, we keep quality assurance, environmental protection and worker's safety at the top of our list.

We also place great value in the relationship with our customer, providing consultation, installation support, commissioning and after-sales service.

One thing is certain, our innovation, quality, reliability and service is number one in the industry.

KESSEL – Leading in drainage



**Made in Germany**



KESSEL Headquarters Lenting, Germany

## Leading in drainage.

No matter whether the task involves discharging water, wastewater treatment or backwater protection: if the best solution is required, there is no option but KESSEL.



### Backwater protection

Backwater valves  
Backwater chambers



### Pump technology

Backwater pumping station  
Hybrid lifting station  
Lifting stations  
Pumping stations  
Submersible pumps,  
conversions and control units



### Drains & channels

Bathroom drains  
Floor drains  
Basement drains  
Outdoor drains



### Separators

Grease separators  
Coalescence / Oil /  
Fuel separators  
Sediment separators  
Starch separators

# Everything from one source

## The KESSEL system



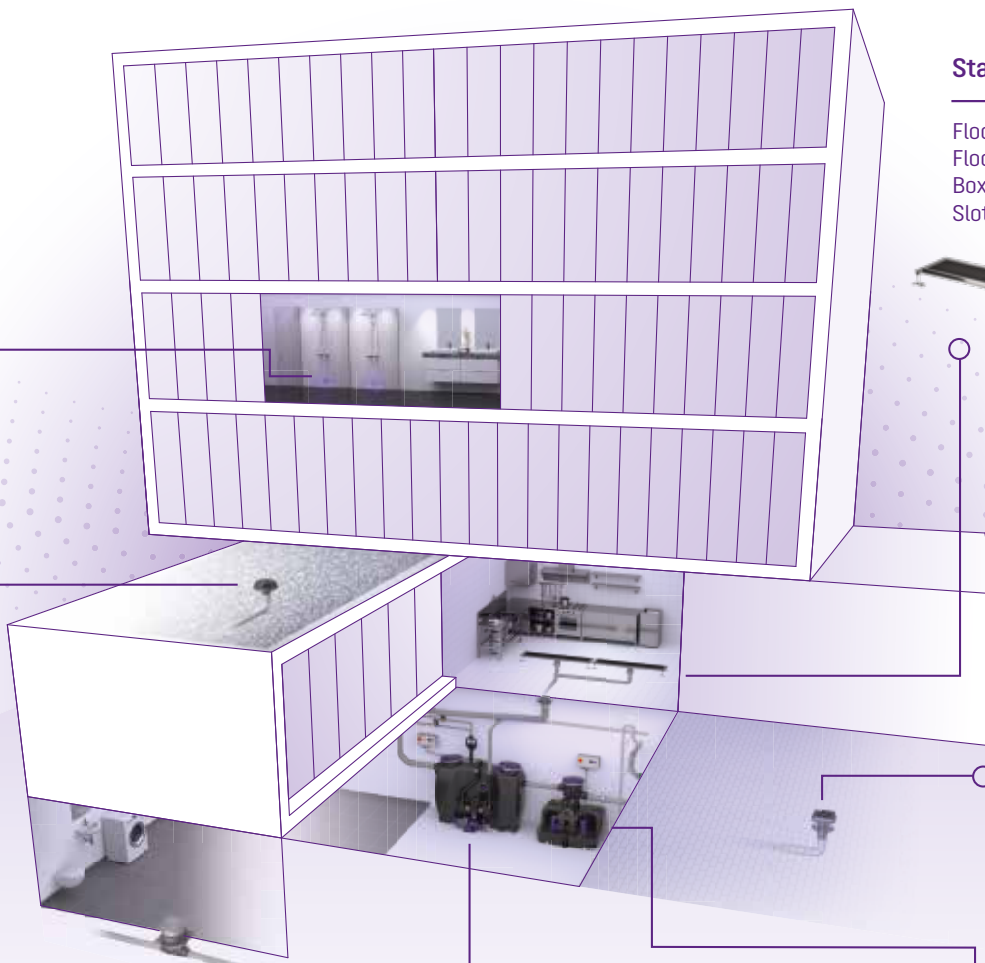
### Bathroom drains

- Floor drains
- Shower channels
- Wall drains



### Stainless steel drains

- Floor drains
- Floor trays
- Box channels
- Slotted channels



### Outdoor drains

- Roof drains
- Gutter drains



### Outdoor drains

- Floor drains
- Yard drains
- Parking deck drains



### Backwater protection

- Backwater valves
- Backwater chambers
- Backwater pumping stations



### Separators

- Grease separators
- Light liquid separators
- Starch separators
- Sediment separators



### Pumping technology

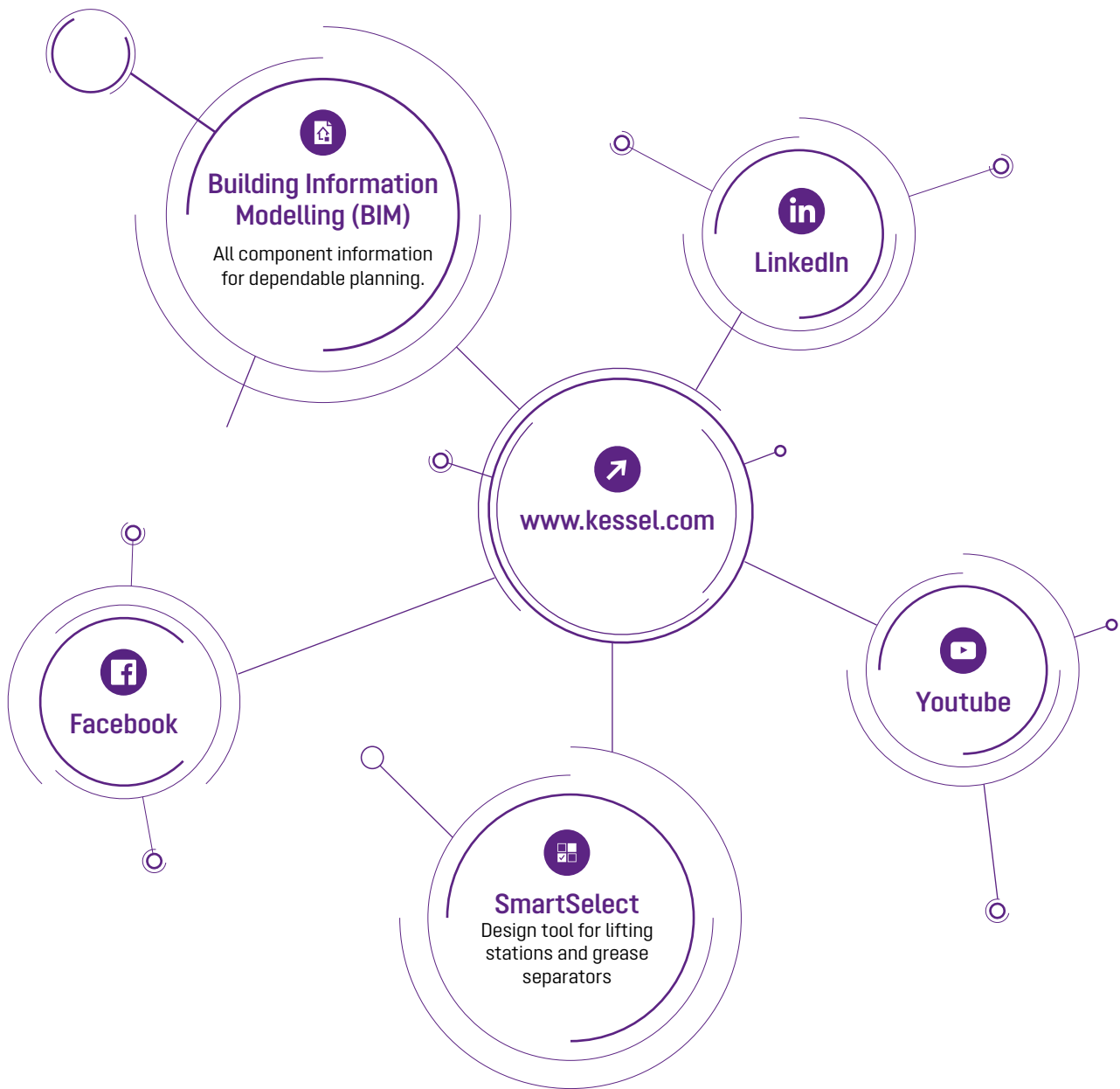
- Lifting stations
- Pumping stations
- Submersible pumps
- Hybrid lifting stations





## KESSEL SmartServices

# Our digital services offer



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get always the newest information  
about KESSEL and our products



BIM



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SmartSelect



Youtube

# Overview of Range of lifting stations and pumps

## Lifting stations



Lifting station  
**Aqualift F XL**

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Lifting station  
**Aqualift S 100 / 200**

➤ Page 28



Lifting station  
**Aqualift F**

➤ Page 14



Lifting station  
**Aqualift S Compact**

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Lifting station  
**Aqualift F Basic**

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Lifting station  
**Minilift S**

➤ Page 36



Lifting station  
**Aqualift F Compact**

➤ Page 24



Compact lifting station  
**Minilift F**

➤ Page 27



## Hybrid technology



Hybrid lifting station  
**Ecolift XL**




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**Installation situation**

-  Outdoor, underground installation
-  Indoor, on-the-floor installation
-  Floor slab installation




**Pump types**

-  Macerator
-  Multi-vane
-  Single-channel






**Type of wastewater**

-  Wastewater with sewage
-  Wastewater without sewage

**Wastewater quantity**

-  Low
-  Medium
-  High

**Level sensors**









-  Pressure sensor
-  Conductance probe
-  Float switch
-  Level sensor
-  Optical probe

**Pumping stations**



Pumping station **Aquapump XXL**

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Conversion kits for collecting tanks **Aquapump Retrofit**











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Pumping station **Aquapump XL**

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**Submersible pumps, conversions and control units**



Submersible pump **Aquadive GTF**

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Submersible pump **Aquadive STZ**

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Submersible pump **Aquadive KTP**

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**Warning and control units**

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Pumping station **Aquapump XL Basic**










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Pumping station **Aquapump Medium**









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Pumping station **Aquapump Small**

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Hybrid lifting station **Ecolift L**

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Backwater pumping station **Pumpfix F**

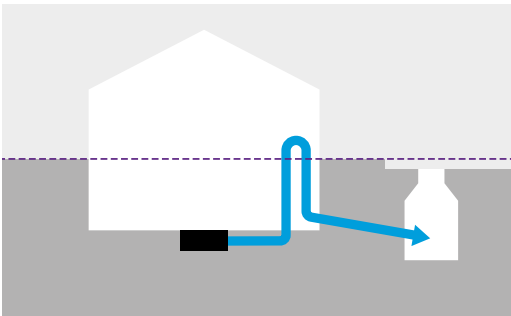
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# Everything specialists need to know

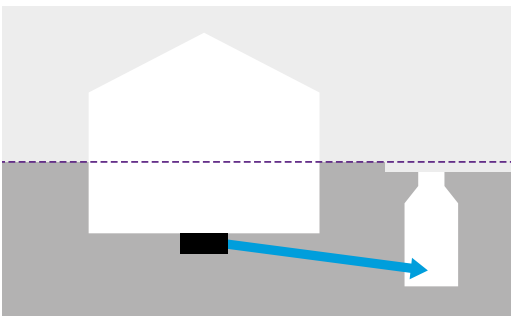
## Location of sewer

If the sewage is higher than the drainage point, the wastewater must be lifted to the sewer with a lifting station via a back-water loop.



No slope to the sewer

↗ Lifting stations: page 106



Slope to the sewer

↗ Hybrid lifting stations: page 66

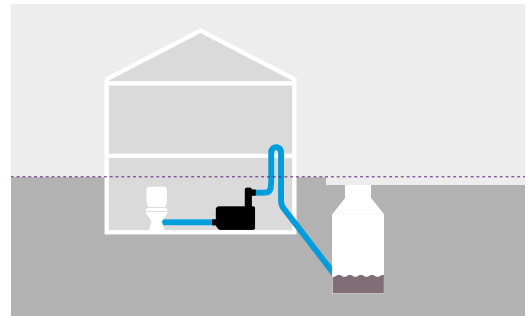
## Protection strategy

### Individual protection

Each drainage location, such as washbasins, showers or washing machines, is protected with its own backwater protection.

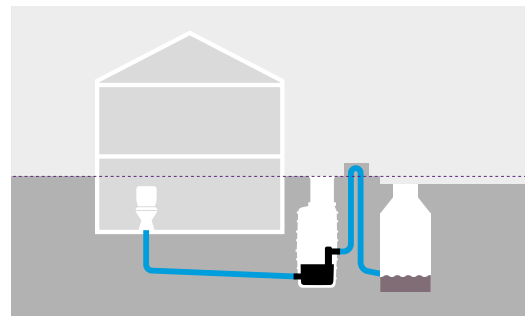
## Installation locations

Is your system to be installed inside or outside the building?



Inside the building

↗ Lifting stations: page 106



Outside the building

↗ Pumping stations: page 142

### Central protection

Backwater valves or lifting stations installed in the main wastewater pipe, protecting all drainage fixtures.



## Types of wastewater

The particle size of a pump specifies how many millimetres of free passage through the pump are available.



### Lifting stations for water with sewage EN 12050-1

Wastewater with sewage is involved whenever pipes are connected that transport water from urinals or toilets to the sewer. This is termed "black water".

**Maximum particle size: 40 mm**



### Lifting stations for water without sewage EN 12050-2

Wastewater without sewage is water without faecal content, for example shower water or water from a washing machine. This is termed "grey water".

**Maximum particle size: 10 mm**

## Explosion protection

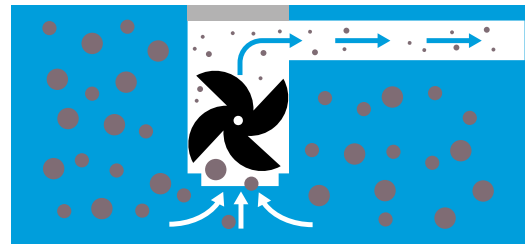


Accidents or spills could result in hazardous liquids entering the lifting station which could result in an explosion risk environment. If the possibility is real, an ATEX explosion protected pumping system should be used.

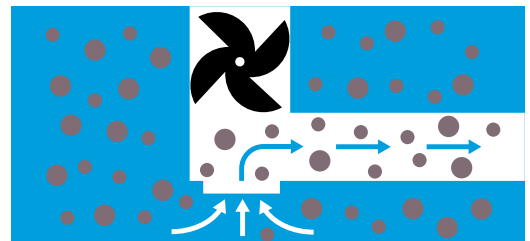
## Pump operation classification

KESSEL pumps are classified as S1 or S3 operating duty. An S1 class pump is a continuous duty pump designed to run without interruption, ideal for rainwater applications or for a continuous industrial wastewater flow. S3 operating duty pumps are intermittent duty and require periodic breaks to stop and cool down. An S3 50% classified pump, for example, should not run more than 50% of the time and are perfect for standard wastewater from homes, apartments or commercial buildings.

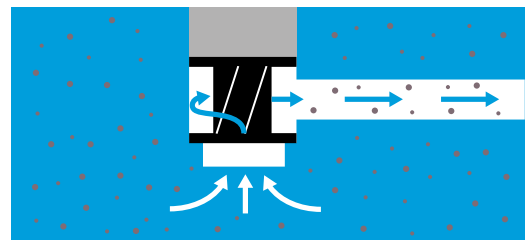
## Pump types



**Macerator pumps** are especially designed for wastewater containing raw sewage. These systems cut the wastewater into small particles which allows connection to small diameter pressure pipes.



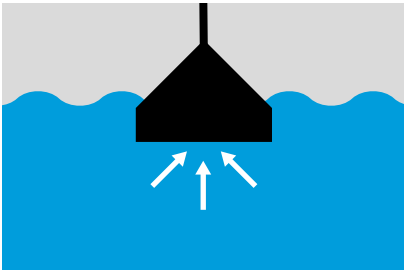
**Multi-vane impeller pumps** are designed for wastewater with or without raw sewage. A large area inside the pump allows any solids to freely pass into the properly sized pressure pipe without contacting the impeller.



**Single-channel impeller pumps** are especially designed for solids free or small particle wastewater. The impeller design efficiently moves high volumes of wastewater with minimal power consumption.

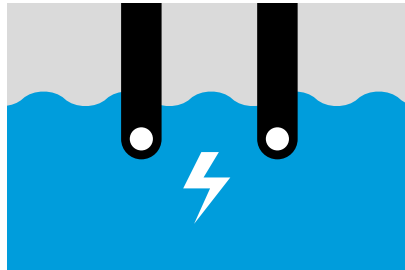
## Level sensors / probes and alarm probes

Level sensors and probes measure the level of the pumping medium in the collecting tank of a lifting station and trigger the pumping process of one or more pumps. If the level in the collecting tank continues to rise, an acoustic alarm signal can be given via an alarm probe (which also measures the level of the pumping medium).



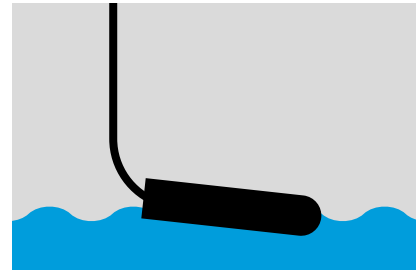
### Pressure sensor

Activates based on changes in air pressure resulting from rising or falling water levels in the tank. Unsuitable for applications when the pumps are very far away from the control unit or if condensation build up in the pressure tube is an issue.



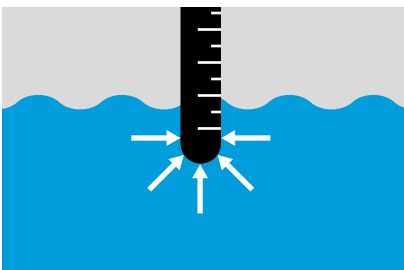
### Conductance probe

Activated when a conductive fluid permits current flow between two measuring points – simple and low-cost, but only works with conductive fluids and cannot be used for pumping rainwater or condensate.



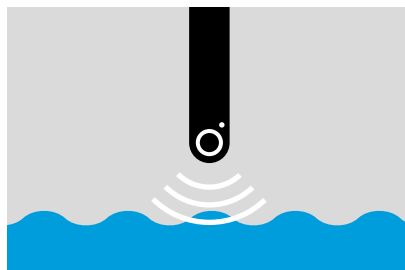
### Float switch

Actuated by a float swimming on the pumping medium's surface – simple and proven, but not recommended for heavily soiled wastewater, as material deposits on the float can interfere with level measurement.



### Hydrostatic sensor

Based on the conversion of different water pressure values to analogue signals – can be used to measure both alarm and pumping levels with a single sensor, but usually costs more than other sensors and probes.



### Optical probe

Detects moisture on the sensor surface by monitoring the refraction angle of an infrared signal – ideal as an alarm probe as it works reliably even after long periods of inactivity, but can be triggered by mistake when wastewater is warm or heavily foaming.

## Telemetric system – *TeleControl*

The KESSEL *TeleControl* system allows pump activity, messages or errors to be sent via a GSM interface to up to three mobile phones. This keeps the pump operator informed about the current operational status of the lifting station and allows a quick reaction time if required.



Illustration shows Art. no. 28 792



### Operator/owner

Receives a weekly message with the operational status of the lifting station.



### Facility manager

Receives all pump actions, messages and errors and is always kept up-to-date with the status of the lifting station.



### Plumber

Receives all error messages and can decide if and when an on-site inspection of the system is required.

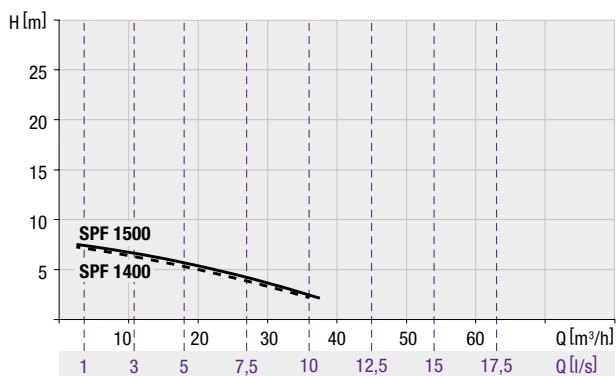
## Specification pump drives

SPF 1500, SPF 3000, SPF 4500 and SPF 5500

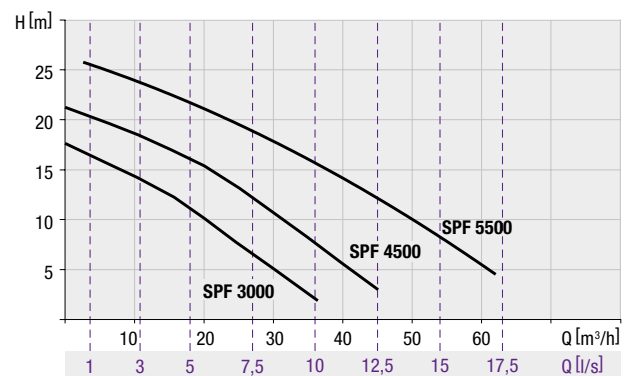


Pump type	Pump drive SPF 1500	Pump drive SPF 3000	Pump drive SPF 4500	Pump drive SPF 5500
Weight	24 kg	24 kg	26 kg	38 kg
Voltage	400 V	400 V	400 V	400 V
Frequency	50 Hz	50 Hz	50 Hz	50 Hz
Electric power P1	1,4 kW	3,2 kW	4,5 kW	5,7 kW
Mechanical power P2	1,1 kW	2,7 kW	3,7 kW	4,7 kW
Nominal current	2,7 A	5,4 A	7,5 A	9,1 A
Speed of rotation	1700 rpm	3400 rpm	3400 rpm	3400 rpm
Operating mode	S1 - 100% / S3 - 50%	S1 - 100% / S3 - 50%	S1 - 100% / S3 - 50%	S3 - 30%
Protection class	I (protective earth)	I (protective earth)	I (protective earth)	I (protective earth)
Protection type	IP68 (5 mWS / 72 h)	IP68 (5 mWS / 72 h)	IP68 (5 mWS / 72 h)	IP68 (5 mWS / 72 h)
Type of cable	H07RN-F7G1,5	H07RN-F7G1,5	H07RN-F7G1,5	H07RN-F7G1,5
Length of cable	5 m*	5 m*	5 m*	5 m*
Medium temperature	40 °C	40 °C	40 °C	40 °C
Maximum head of delivery	8 m	16 m	20 m	27 m
Maximum flow rate	40 m³/h	47 m³/h	55 m³/h	60 m³/h
Impeller type	Multi-vane impeller	Multi-vane impeller	Multi-vane impeller	Multi-vane impeller
Material impeller	Cast iron (GG20)	Cast iron (GG20)	Cast iron (GG20)	Cast iron (GG20)
Material housing	Cast iron and aluminium	Cast iron and aluminium	Cast iron and aluminium	Cast iron and aluminium
Shaft sealing	2x Rotary shaft seal	Mechanical seal SiC/SiC	Mechanical seal SiC/SiC	Mechanical seal SiC/SiC
Insulation material class	F (155 °C)	F (155 °C)	F (155 °C)	F (155 °C)
Thermal engine protection	Yes	yes	Yes	Yes
Starting frequency	20 starts/hour	20 starts/hour	20 starts/hour	20 starts/hour

\* Underground installation: 10m

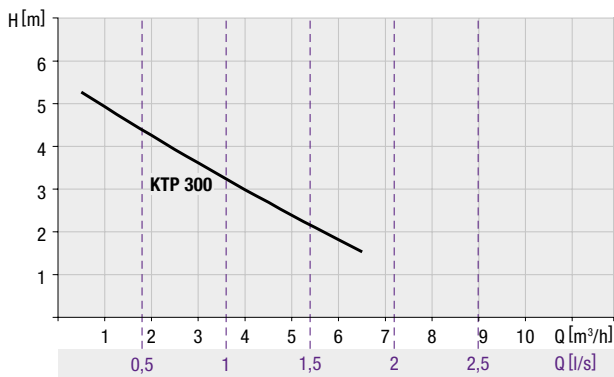


Pump SPF 1400 and SPF 1500

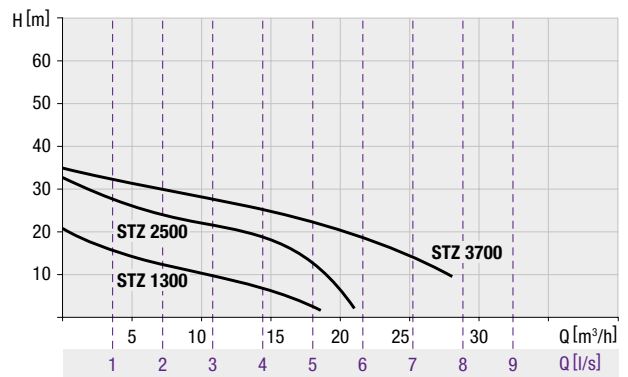


Pump SPF 3000, SPF 4500 and 5000

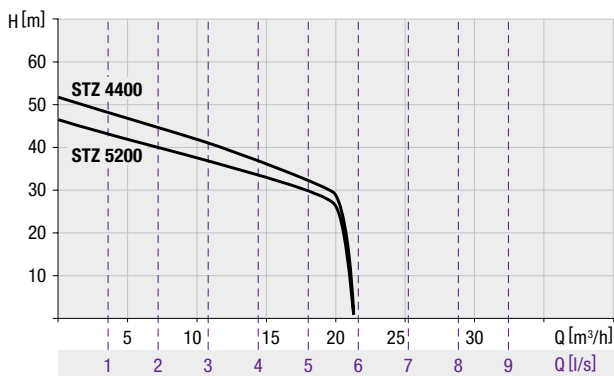




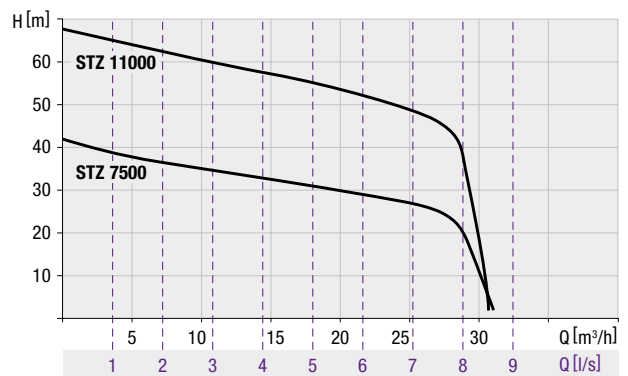
Pump KTP 300



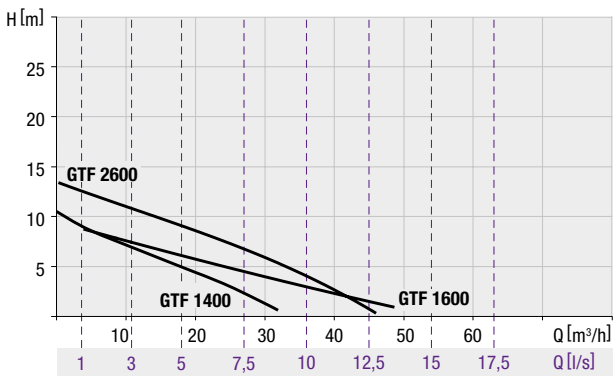
Pump STZ 1300, STZ 2500 and STZ 3700



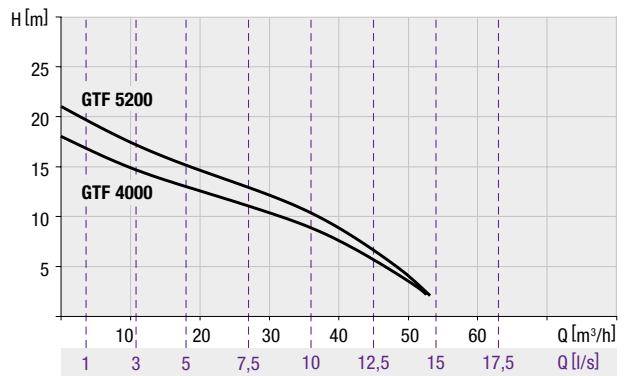
Pumpe STZ 4400 und STZ 5200



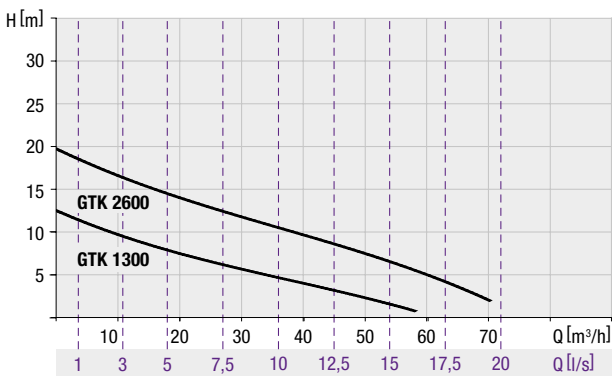
Pumpe STZ 7500 und STZ 11000



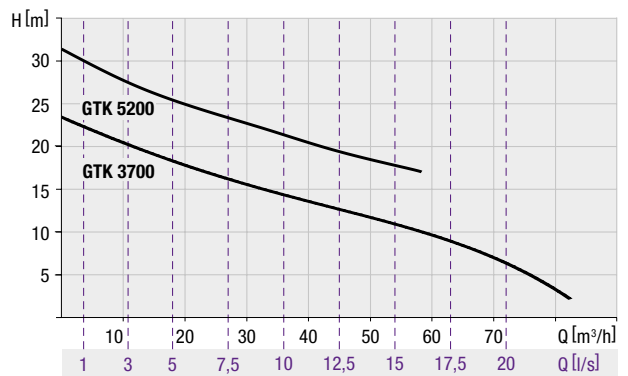
Pumpe GTF 1400, GTF 1600 und GTF 2600



Pumpe GTF 4000 und GTF 5200



Pumpe GTK 1300 und GTK 2600



Pumpe GTK 3700 und GTK 5200

## Lifting station *Aqualift F / F XL*

The powerful choice for commercial, industrial and communal applications.

The *Aqualift F / F XL* are powerful lifting stations for domestic, commercial, industrial and communal applications. They are ideal for lifting rainwater that occurs below the backwater level or for use after a separator. However, they can also be used for wastewater with sewage. All components, such as tanks and pumps, are modular in design and can be used in any combination.

The *Aqualift F / F XL* can be combined with six different tanks with a capacity of 50, 120, 200, 300, 450 or 900 liters. It is also available with pumps in different capacity classes and as a Mono or Duo system for different requirements.

The *Aqualift F* systems with 50 and 120 liter tanks are perfect for domestic use and the larger *Aqualift F XL* series with tank volumes up to 900 liters and more powerful pump are designed for use in commercials, industrial and communal applications.



1 Lifting station 2 Grease separator *EasyClean*

Always the right choice:    
kessel.com/smartselect

### Pressure sensor

The *Aqualift F* operates with a highly reliable pressure switch for pneumatic level measurement. An optionally available alarm sensor guarantees additional safety.

### Powerful pumps and control unit

The *Aqualift F / F XL* has powerful pumps in the versions S1 and/or S3 with a wide range of applications from an input power of 1.400 W to 5.500 W, a sensor control and a Comfort control unit with self-diagnosis system SDS.

### Multiple inlet connections

The *Aqualift F / F XL* offers variable inlet connection sizes with diameters ranging from 110 to 160 mm and the option of adding further inlets with diameters from Ø 50 to Ø 200 mm on the pre-scored areas on the sides and back.

Lifting stations 60 Hz/400 V

Now also available in 60 Hz for more information contact us at [info@kessel.com](mailto:info@kessel.com)

If you want to use the *Aqualift F / F XL* outside a building:

➤ Pumping station *Aquapump XL*: page 50

**Maximum reliability**

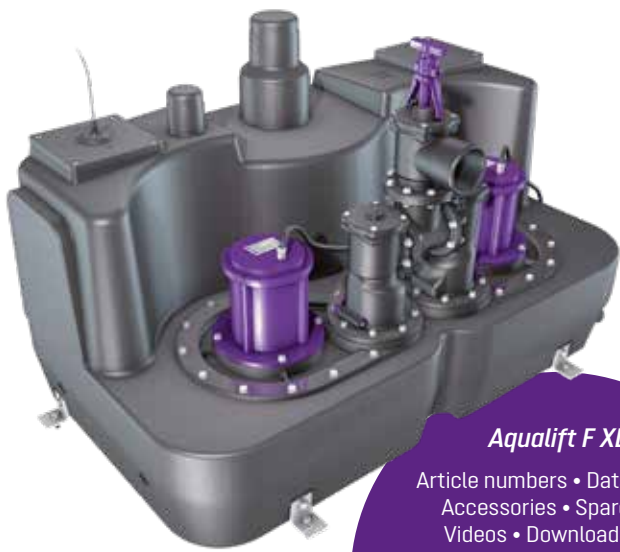
The intelligent control unit with integrated self-diagnosis system SDS and battery buffering continually monitors all electrical components and keeps an electronic operating log which can be read out.

**Modbus  
on request**



**Aqualift F**  
Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aqualift-f](http://www.kessel.com/aqualift-f)



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**Aqualift F**  
for domestic or light commercial use

**Aqualift F XL**  
for commercial, industrial or communal use

# Lifting station *Aqualift F XL Duo* 900 liter tank volume for free-standing installation in frost-free rooms



EN 12050-1

Tank volume: 900 liters  
Pump volume: 500 liters

### Polyethylene storage chamber

with air pressure level detector, clean-out opening. Spigots for vertical inlet  $\varnothing$  110 mm / 160 mm, ventilation  $\varnothing$  75 mm and for manual diaphragm pump  $\varnothing$  32 mm. Horizontal inlet  $\varnothing$  50 mm to  $\varnothing$  200 mm by sawing.



Illustration shows Art. no. 11 054-900I

### Pumps

Pressure sensor controlled twin wastewater SPF pumps with multi-vane impeller to pump wastewater with or without sewage (open channel passage 40 mm). Pump is rated submersible (IP 68), pump cable length 5 m. With sound-absorbing underlay mat (10 mm thick).

**Vertical / horizontal outlet** with integrated non-return valve, with/without closure valve (provided loose), with elastic hose section or flange.

### Pressure outlet:

vertical  $\varnothing$  110 without closure valve,  
horizontal  $\varnothing$  110 with plastic closure valve or vertical DN 80 with cast iron closure valve

### Comfort control unit

with mains power ON / OFF switch and multilingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 400 V 50 Hz. With potential-free/BMS contact (optional 230 V).

➤ **Accessories:** page 40

➤ **Note:** Also available in 60 Hz / 400 V page 14

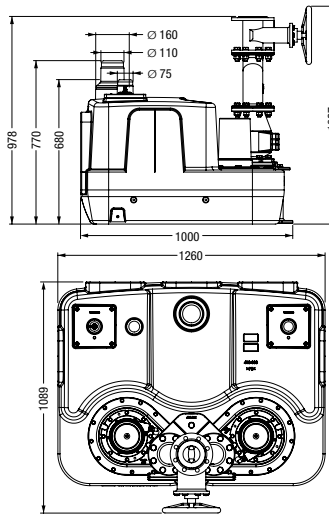
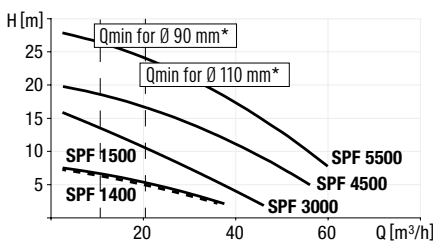


Illustration shows lifting station with closure valve

### Duo version with two pumps

SPF pump	Voltage	Art. no.
Without closure valve		
3000-S3	400 V	11 054-900I
4500-S3	400 V	11 069-900I
5400-S3	400 V	11 082-900I

### Pumping capacity



Pump type	Input Power (P1)	Power (P2)	Voltage	Amperage	Weight	Pumping capacity	Pumping height
SPF 3000-S3-50%*	3.5 kW	2.8 kW	400 V	5.7 A	188 kg	47 m³/h	16 m
SPF 4500-S3-50%*	4.7 kW	3.7 kW	400 V	7.8 A	189 kg	55 m³/h	20 m
SPF 5500-S3-30%*	5.8 kW	4.9 kW	400 V	9.6 A	211 kg	60 m³/h	27 m

\* Definition of S3-pump see page 101





# Lifting station *Aqualift F XL Duo* 450 liter tank volume

for free-standing installation in frost-free rooms



EN 12050-1

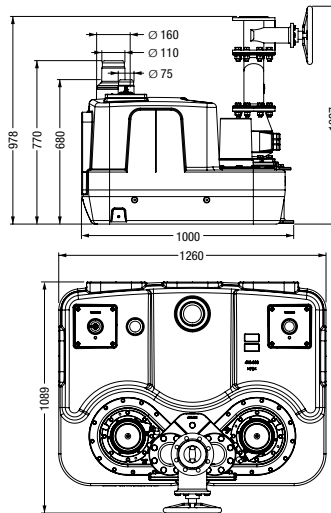
**Tank volume:** 450 liters  
**Pump volume:** 250 liters

**Polyethylene storage chamber**

with air pressure level detector, clean-out opening. Spigots for vertical inlet Ø 110 mm / 160 mm, ventilation Ø 75 mm and for manual diaphragm pump Ø 32 mm. Horizontal inlet Ø 50 mm to Ø 200 mm by sawing.



Illustration shows Duo version with cast iron closure valve



**Pumps**

Pressure sensor controlled twin wastewater *SPF* pumps with multi-vane impeller to pump wastewater with or without sewage (open channel passage 40 mm). Pump is rated submersible (IP 68), pump cable length 5 m. With sound-absorbing underlay mat (10 mm thick).

**Vertical / horizontal outlet** with integrated non-return valve, with/without closure valve (provided loose), with elastic hose section or flange.

**Pressure outlet:**

vertical Ø 110 without closure valve, horizontal Ø 110 with plastic closure valve or vertical DN 80 with cast iron closure valve

**Comfort control unit**

with mains power ON / OFF switch and multilingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 230 V or 400 V at 50 Hz. With potential-free/BMS contact (optional 230 V).

- **Accessories:** page 40
- **Note:** Also available in 60 Hz / 400 V page 14

**Duo version with two pumps**

SPF pump	Voltage	Art. no.
<b>Without closure valve</b>		
3000-S3	400 V	11 054
3000-S1	400 V	11 115
4500-S3	400 V	11 069
4500-S1	400 V	11 126
5500-S3	400 V	11 082

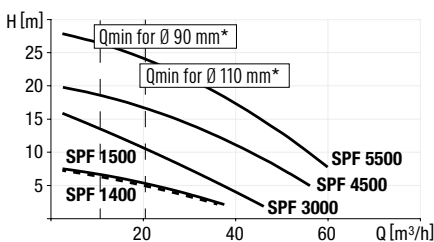
**With plastic closure valve**

3000-S3	400 V	11 055
3000-S1	400 V	11 116

**With cast iron closure valve**

3000-S3	400 V	11 057
3000-S1	400 V	11 118
4500-S3	400 V	11 070
4500-S1	400 V	11 127
5500-S3	400 V	11 083

**Pumping capacity**



Pump type	Input Power (P1)	Power (P2)	Voltage	Amperage	Weight	Pumping capacity	Pumping height
SPF 3000-S1/S3-100/50%*	3.2 kW	2.7 kW	400 V	5.4 A	188 kg	47 m³/h	16 m
SPF 4500-S1/S3-100/50%*	4.5 kW	3.7 kW	400 V	7.5 A	189 kg	55 m³/h	20 m
SPF 5500-S3-30%*	5.7 kW	4.7 kW	400 V	9.1 A	211 kg	60 m³/h	27 m

\* Definition of S1 and S3-pumps see page 101



# Lifting station *Aqualift F XL Mono / Duo* 300 liter tank volume for free-standing installation in frost-free rooms



**CE** EN 12050-1

**Tank volume:** 300 liters

**Pump volume:** 175 liters

### Polyethylene storage chamber

with clean-out opening. Spigots for vertical inlet Ø 110 mm/160 mm, ventilation Ø 75 mm and for manual diaphragm pump Ø 32 mm. Horizontal inlet Ø 50 mm to Ø 200 mm by sawing.

### Pumps

Pressure sensor controlled twin wastewater *SPF* pumps with multi-vane impeller to pump wastewater with or without sewage (open channel passage 40 mm). Pump is rated submersible (IP 68), pump cable length 5 m. With sound-absorbing underlay mat (10 mm thick).

**Vertical/ horizontal outlet** with integrated non-return valve, with/without closure valve (provided loose), with elastic hose section or flange.

### Pressure outlet:

vertical Ø 110 without closure valve, horizontal Ø 110 with plastic closure valve or vertical DN 80 with cast iron closure valve

### Comfort control unit

with mains power ON / OFF switch and multi-lingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 230 V or 400 V at 50 Hz. With potential-free/BMS contact (optional 230 V).

➔ **Accessories:** page 40

➔ **Note:** Also available in 60 Hz / 400 V page 14

### Pumping capacity

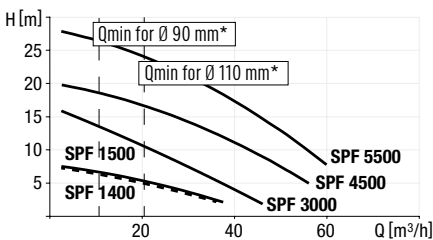


Illustration shows Duo version with plastic closure valve

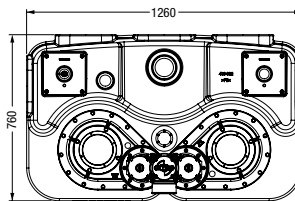
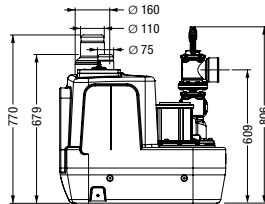
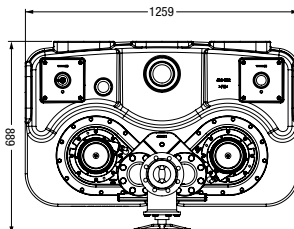
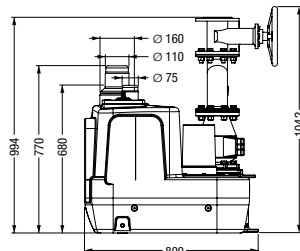


Illustration shows Duo version with cast iron closure valve



### Mono version with one pump

SPF pump	Voltage	Art. no.
Without closure valve		
1400-S3	230 V	11 009
1500-S3	400 V	11 027
3000-S3	400 V	11 045
4500-S3	400 V	11 064
5500-S3	400 V	11 077

### With plastic closure valve

1400-S3	230 V	11 011
1500-S3	400 V	11 029
3000-S3	400 V	11 047

### With cast iron closure valve

1400-S3	230 V	11 015
1500-S3	400 V	11 033
3000-S3	400 V	11 051
4500-S3	400 V	11 066
5500-S3	400 V	11 079

### Duo version with two pumps

SPF pump	Voltage	Art. no.
Without closure valve		
1400-S3	230 V	11 010
1400-S1	230 V	11 090
1500-S3	400 V	11 028
1500-S1	400 V	11 100
3000-S3	400 V	11 046
3000-S1	400 V	11 110
4500-S3	400 V	11 065
4500-S1	400 V	11 123
5500-S3	400 V	11 078

### With plastic closure valve

1400-S3	230 V	11 012
1400-S1	230 V	11 091
1500-S3	400 V	11 030
1500-S1	400 V	11 101
3000-S3	400 V	11 048
3000-S1	400 V	11 111

### With cast iron closure valve

1400-S3	230 V	11 016
1400-S1	230 V	11 092
1500-S3	400 V	11 034
1500-S1	400 V	11 103
3000-S3	400 V	11 052
3000-S1	400 V	11 113
4500-S3	400 V	11 067
4500-S1	400 V	11 124
5500-S3	400 V	11 080

Pump type	Input Power (P1)	Power (P2)	Voltage	Amperage	Weight	Pumping capacity	Pumping height
SPF 1400-S1-100%*	1.6 kW	1.1 kW	230 V	7.3 A	99 kg	38 m³/h	7 m
SPF 1500-S1-100%*	1.4 kW	1.1 kW	400 V	2.7 A	98 kg	40 m³/h	8 m
SPF 3000-S1-100%*	3.2 kW	2.7 kW	400 V	5.4 A	188 kg	47 m³/h	16 m
SPF 4500-S1-100%*	4.5 kW	3.7 kW	400 V	7.5 A	189 kg	55 m³/h	20 m
SPF 5500-S3-30%*	5.7 kW	4.7 kW	400 V	9.1 A	211 kg	60 m³/h	27 m

\* Definition of S1 and S3-pumps see page 101

# Lifting station *Aqualift F XL Mono / Duo* 200 liter tank volume

for free-standing installation in frost-free rooms



EN 12050-1

Tank volume: 200 liters

Pump volume: 120 liters

### Polyethylene storage chamber

with clean-out opening. Spigots for vertical inlet  $\varnothing$  110 mm/160 mm, ventilation  $\varnothing$  75 mm and for manual diaphragm pump  $\varnothing$  32 mm. Horizontal inlet  $\varnothing$  50 mm to  $\varnothing$  200 mm by sawing.

### Pumps

Pressure sensor controlled single or twin wastewater *SPF* pumps with multi-vane impeller to pump wastewater with or without sewage (open channel passage 40 mm). Pump is rated submersible (IP 68), pump cable length 5 m. With sound-absorbing underlay mat (10 mm thick).

**Vertical/ horizontal outlet** with integrated non-return valve, with/without closure valve (provided loose), with elastic hose section or flange.

### Pressure outlet:

vertical  $\varnothing$  110 without closure valve,  
horizontal  $\varnothing$  110 with plastic closure valve or vertical DN 80 with cast iron closure valve

### Comfort control unit

with mains power ON / OFF switch and multilingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 230 V or 400 V at 50 Hz. With potential-free/BMS contact (optional 230 V).

➤ **Accessories:** page 40

➤ **Note:** Also available in 60 Hz / 400 V page 14

### Pumping capacity

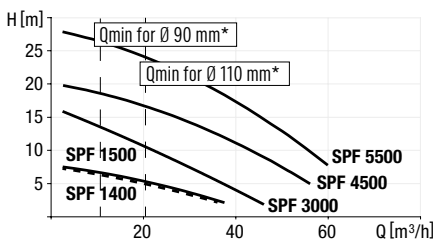


Illustration shows Duo version with plastic closure valve

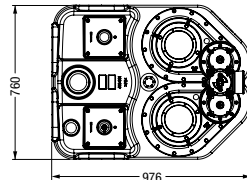
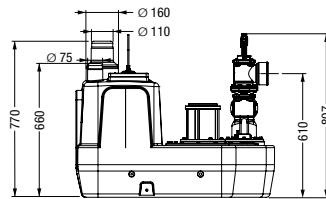
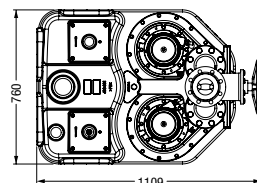
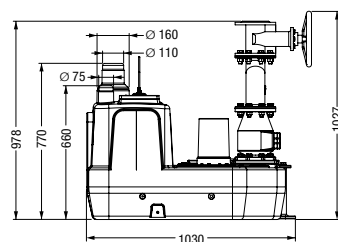


Illustration shows Duo version with cast iron closure valve



### Mono version with one pump

SPF pump	Voltage	Art. no.
Without closure valve		
1400-S3	230 V	11 000
1500-S3	400 V	11 018
3000-S3	400 V	11 036
4500-S3	400 V	11 059
5500-S3	400 V	11 072

### With plastic closure valve

1400-S3	230 V	11 002
1500-S3	400 V	11 020
3000-S3	400 V	11 038

### With cast iron closure valve

1400-S3	230 V	11 006
1500-S3	400 V	11 024
3000-S3	400 V	11 042
4500-S3	400 V	11 061
5500-S3	400 V	11 074

### Duo version with two pumps

SPF pump	Voltage	Art. no.
Without closure valve		
1400-S3	230 V	11 001
1400-S1	230 V	11 085
1500-S3	400 V	11 019
1500-S1	400 V	11 095
3000-S3	400 V	11 037
3000-S1	400 V	11 105
4500-S3	400 V	11 060
4500-S1	400 V	11 120
5500-S3	400 V	11 073

### With plastic closure valve

1400-S3	230 V	11 003
1400-S1	230 V	11 086
1500-S3	400 V	11 021
1500-S1	400 V	11 096
3000-S3	400 V	11 039
3000-S1	400 V	11 106

### With cast iron closure valve

1400-S3	230 V	11 007
1400-S1	400 V	11 088
1500-S3	230 V	11 025
1500-S1	400 V	11 098
3000-S3	400 V	11 043
3000-S1	400 V	11 108
4500-S3	400 V	11 062
4500-S1	400 V	11 121
5500-S3	400 V	11 075

Pump type	Input Power (P1)	Power (P2)	Voltage	Amperage	Weight	Pumping capacity	Pumping height
SPF 1400-S1/S3-100/50%*	1.6 kW	1.1 kW	230 V	7.3 A	99 kg	38 m <sup>3</sup> /h	7 m
SPF 1500-S1/S3-100/50%*	1.4 kW	1.1 kW	400 V	2.7 A	98 kg	40 m <sup>3</sup> /h	8 m
SPF 3000-S1/S3-100/50%*	3.2 kW	2.7 kW	400 V	5.4 A	188 kg	47 m <sup>3</sup> /h	16 m
SPF 4500-S1/S3-100/50%*	4.5 kW	3.7 kW	400 V	7.5 A	189 kg	55 m <sup>3</sup> /h	20 m
SPF 5500-S3-30%*	5.7 kW	4.7 kW	400 V	9.1 A	211 kg	60 m <sup>3</sup> /h	27 m

\* Definition of S1 and S3-pumps see page 101

# Lifting station *Aqualift F Duo* 120 liter tank volume

for free-standing installation in frost-free rooms



**CE** EN 12050-1

**Tank volume:** 120 liters  
**Pump volume:** 50 liters

**Polyethylene storage chamber** with clean-out opening. With sound-absorbing underlay mat (10 mm thick). Connection for inlet  $\varnothing$  110 and ventilation  $\varnothing$  75, connection coupling for manual diaphragm pump  $\varnothing$  32 mm.

**Pumps**

SPF pumps for wastewater with or without sewage, pressure sensor controlled with multi-vane impeller. Open channel passage 40 mm. Pumps are rated submersible (IP 68), pump cable length 5 m. Outlet with integrated non-return valve, connection coupling  $\varnothing$  110 with elastic hose section.

**Pressure outlet:**

vertical  $\varnothing$  110 without closure valve or horizontal  $\varnothing$  110 with closure valve

**Comfort control unit**

with mains power ON / OFF switch and multilingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 230 / 400 V 50 Hz. With potential-free contact.

- **Accessories:** page 40
- **Note:** Also available in 60 Hz / 400 V page 14



Illustration shows Art. no. 28 628-C

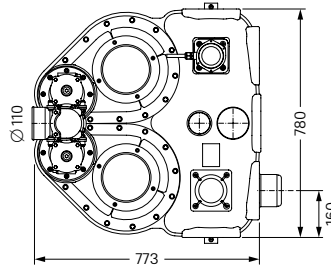
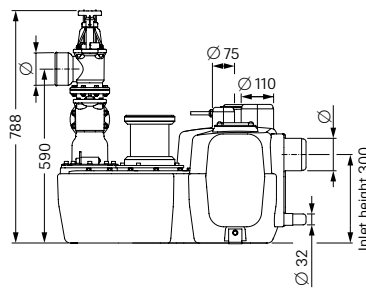


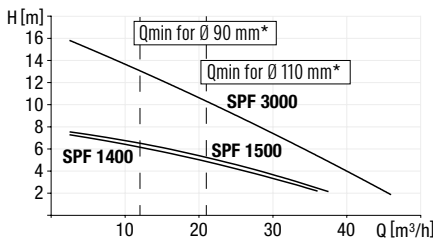
Illustration shows Art. no. 28 629-C

**Duo version with two pumps**

SPF pump	Voltage	Art. no.
<b>Without closure valve</b>		
1400-S3	230 V	28 628-C
1500-S3	400 V	28 764
3000-S3	400 V	28 765
1400-S1	230 V	11 605
1500-S1	400 V	11 604
3000-S1	400 V	11 606
<b>With closure valve</b>		
1400-S3	230 V	28 629-C
1500-S3	400 V	28 766
3000-S3	400 V	28 767
1400-S1	230 V	11 608
1500-S1	400 V	11 607
3000-S1	400 V	11 609

\* according to EN 12056-4

**Pumping capacity**



Pump type	Input Power (P1)	Power (P2)	Voltage	Frequency	Amperage	Fuses surge-proof	Cable connections 5 m Length	Media temperature	Weight (Pump)	Protection	RPM	Pumping capacity	Pumping height
SPF 1400-S1/S3-100/50%*	1.6 kW	1.1 kW	230 V	50 Hz	7.3 A	16 A	3 × 1.0 mm <sup>2</sup>	40°C	23 kg	IP 68	1.370	38 m <sup>3</sup> /h	7 m
SPF 1500-S1/S3-100/50%*	1.4 kW	1.1 kW	400 V	50 Hz	2.7 A	3 × 16 A	7 × 1.5 mm <sup>2</sup>	40°C	24 kg	IP 68	1.415	40 m <sup>3</sup> /h	8 m
SPF 3000-S1/S3-100/50%*	3.2 kW	2.7 kW	400 V	50 Hz	5.4 A	3 × 16 A	7 × 1.5 mm <sup>2</sup>	40°C	24 kg	IP 68	2.845	47 m <sup>3</sup> /h	16 m

\* Definition of S1 and S3-pumps see page 101



# Lifting station *Aqualift F Mono* 50 liter tank volume

for free-standing installation in frost-free rooms



**CE** EN 12050-1

**Tank volume:** 50 liters  
**Pump volume:** 20 liters

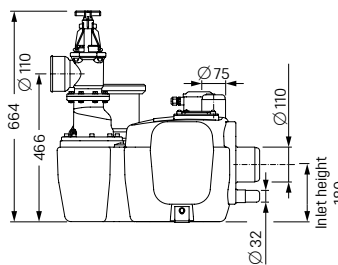
**Polyethylene storage chamber** with clean-out opening. With sound-absorbing underlay mat (10 mm thick). Connection for inlet  $\varnothing$  110 and ventilation  $\varnothing$  75, connection coupling for manual diaphragm pump  $\varnothing$  32 mm.



Illustration shows Art. no. 28 646-C

**Pump**

SPF pump for wastewater with or without sewage, pressure sensor controlled with multi-vane impeller. Open channel passage 40 mm. Pump is rated submersible (IP 68), pump cable length 5 m. Outlet with integrated non-return valve, connection coupling  $\varnothing$  110 with elastic hose section.



**Pressure outlet:**

vertical  $\varnothing$  110 without closure valve or horizontal  $\varnothing$  110 with closure valve

**Comfort control unit**

with mains power ON / OFF switch and multilingual digital display (EN, DE, FR, IT, PL, NL) showing current operational status, settings and logbook; control unit is splash proof (IP 54), wall mounted, voltage 230 / 400 V 50 Hz. With potential-free contact.

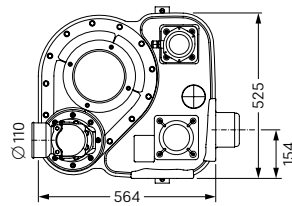


Illustration shows Art. no. 28 648-C

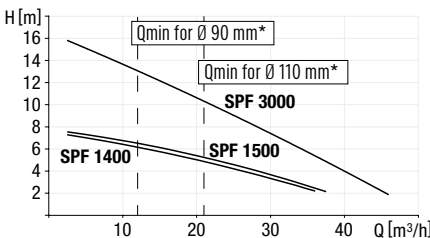
- **Accessories:** page 40
- **Note:** Also available in 60 Hz / 400 V page 14

**Mono version with one pump**

SPF pump	Voltage	Art. no.
<b>Without closure valve</b>		
1400-S3	230 V	28 646-C
1500-S3	400 V	28 751
3000-S3	400 V	28 752
<b>With closure valve</b>		
1400-S3	230 V	28 648-C
1500-S3	400 V	28 753
3000-S3	400 V	28 754

\* according to EN 12056-4

**Pumping capacity**



Pump type	Input Power (P1)	Power (P2)	Voltage	Frequency	Amperage	Fuses surge-proof	Cable connections 5 m Length	Media temperature	Weight (Pump)	Protection	RPM	Pumping capacity	Pumping height
SPF 1400-S3-50%*	1.6 kW	1.1 kW	230 V	50 Hz	7.3 A	16 A	3 × 1.0 mm <sup>2</sup>	40°C	23 kg	IP 68	1.370	38 m <sup>3</sup> /h	7 m
SPF 1500-S3-50%*	1.4 kW	1.1 kW	400 V	50 Hz	2.7 A	3 × 16 A	7 × 1.5 mm <sup>2</sup>	40°C	24 kg	IP 68	1.415	40 m <sup>3</sup> /h	8 m
SPF 3000-S3-50%*	3.2 kW	2.7 kW	400 V	50 Hz	5.4 A	3 × 16 A	7 × 1.5 mm <sup>2</sup>	40°C	24 kg	IP 68	2.845	47 m <sup>3</sup> /h	16 m

\* Definition of S3-pumps see page 101

## Lifting station *Aqualift F Basic*

The economic version for domestic wastewater.

The economical alternative: for the disposal of domestic wastewater, we offer the lifting station *Aqualift F Basic* – cutting edge technology at an unbeatable price. It is suitable without any restrictions for the drainage of private toilets, showers and sinks in frost-protected rooms below the backwater level. The lifting station with integrated backflow preventer discharges the wastewater through the pressure pipe by means of a flood-proof pump.



1 Lifting station 2 Pressure pipe



### Pump

The pump SPF 1300 with blockage-proof multi-vane vortex impeller pumps wastewater quantities of up to 32 m<sup>3</sup> over a maximum height of 9.2 m. Thanks to the wedge-shaped tank base, wastewater and solids drain directly into the pump intake.

### Control unit with float switch

The control unit *Aqualift F Basic* 230 V is used for continuous water level monitoring and fail-safe / precise pump operation. Switching and alarm levels are measured by a float switch.

### Variable inlets

Ø 50 / 110 mm inlet connection from above, two additional 110 mm inlet connections on both sides. The pre-scored area on the back also enables further inlets with a diameter of up to 110 mm to be attached.

If you want to use the *Aqualift F Basic* outside the building:

➤ Pumping station *Aquapump Small*: page 64

# Lifting station *Aqualift F Basic*

for free-standing installation in frost-free rooms



**CE** EN 12050-1

**Tank volume:** 50 liters

**Pump volume:** 20 liters

**Polyethylene storage chamber** with screwed access opening. Inlet connection from above  $\varnothing$  50/110 mm. Two additional  $\varnothing$  110 mm inlet connections at both sides. With  $\varnothing$  75 mm vent connection. Connection coupling for emergency diaphragm pump  $\varnothing$  32 mm.

### Pump

SPF 1300 pump for wastewater with or without sewage, float switch controlled (level and alarm) with multi-vane impeller. Open channel passage 40 mm. Pump is rated submersible. Pump cable length 5 m. Including back-water preventer, with plastic spigot pressure outlet  $\varnothing$  90 mm including elastic hose connection.

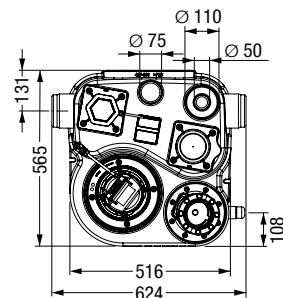
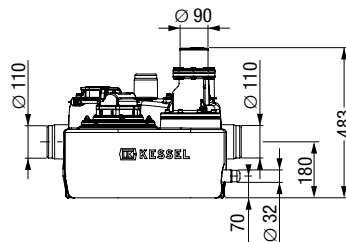
### Control unit Basic 230 V

with function display, button for manual pump start and to reset alarm. Battery buffered alarms (battery included). With connection option for on-site potential free-contact.

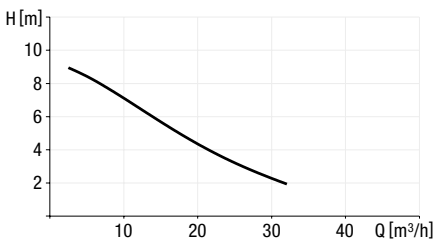
**Accessories:** page 40



SPF pump	Voltage	Art. no.
1300-S3	230 V	28 798



## Pumping capacity



Pump type	Input Power (P1)	Power (P2)	Voltage	Frequency	Amperage	Fuses	Cable connections 5 m Length	Media temperature	Weight (Pump)	Protection	RPM	Pumping capacity	Pumping height
SPF 1300-S3-15%*	1.5 kW	1.0 kW	230 V	50 Hz	6.7 A	C 10 A	3 × 1.5 mm²	40°C	approx. 24 kg	IP 54	2.900	32 m³/h	9.2 m

\* Definition of S3-pumps see page 101



# Lifting station *Aqualift F Compact*

The compact version for complete basement drainage.

One for all: the *Aqualift F Compact* takes over the complete basement drainage. The lifting station pumps the wastewater, even black water, into the sewer located above – even after a pipe burst or flooding – thanks to the floor drain integrated into the cover. The compact dimensions allow for the straightforward installation or free-standing set-up of the *Aqualift F Compact*. It is controlled by the Comfort control unit with self-diagnosis system SDS that is supplied ready for connection.

The *Aqualift F Compact* is available in two versions, either for freestanding set-up or for floor slab installation (available with black or recessed tileable cover). In addition, each device is available as a Mono or Duo lifting station.

## *Aqualift F Compact*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aqualift-f-compact](http://www.kessel.com/aqualift-f-compact)



- 1 Lifting station 2 Pressure pipe set 3 Extension section  
4 Gasket set 5 Control unit

### Floor slab installation

The *Aqualift F Compact* is almost invisible if it is installed in the floor slab. The integrated drain in the cover handles basement surface water even in the event of a pipe burst or flooding, the *Aqualift F Compact* continually pumps away the wastewater, keeping the basement dry.

### Installation in waterproof concrete

The KESSEL sealing kit for installation in waterproof concrete ensures reliable protection against moisture damage. The extension section with central flange and elastomeric waterproofing membrane enable implementation also in deeper installation situations.

### Maximum safety

The intelligent control unit with integrated self-diagnosis system SDS and battery buffering continually monitors all electrical components and keeps an electronic operating log which can be read out.



- 1 Lifting station 2 Control unit 3 Pressure pipe

# Lifting station *Aqualift F Compact Mono / Duo*

for installation in a concrete slab / floor



Z-53.2-484 Max 2 WC connections

Tank volume: 40 liters  
Pump volume: 20 liters

**Polyethylene storage chamber** for installation in a concrete slab / floor, with recessed cover for on-site tiling and drain, installation depth (D) 490 to 600 mm, with odour trap, sealing water height 50 mm, with lateral inlet  $\varnothing$  110.

Installation area 800 × 800 mm.

### Upper section and cover

With telescopic upper section for free height and level adjustment, recessed cover for on-site tiling, made of polymer class A 15, with moisture protective sealing flange.

### Pump

Single or twin removable SPZ pump(s) with macerator, pressure sensor controlled, with integrated backwater flap.

### Control unit

with SDS control unit (self-diagnosis system) for fully automatic pump control, splash water protected (IP 54), wall mounted.

Pressure connection: 1 1/2 inch outer thread or pressure pipe  $\varnothing$  40 mm for PVC glued connection or pressure pipe set (Art. no. 28 040).

Power cable length: 5 m

**Note:** A ventilation pipe must be provided for on site.

➔ **Accessories:** page 40



Illustration shows Mono version 28 701X

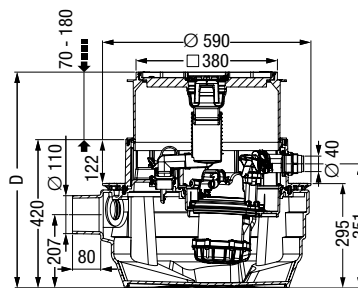
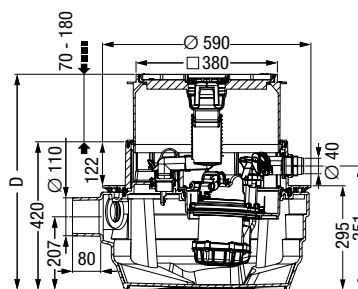
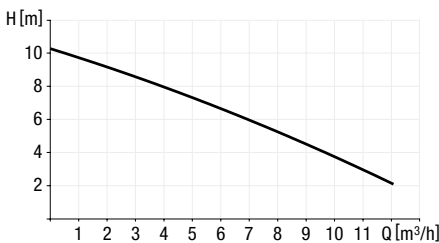


Illustration shows Duo version 28 704X



### Pumping capacity



### Pump type

Current type	Voltage	Current	Power P1/P2	RPM	Motor protection	Pumping height	Pumping capacity
SPZ 1000-S3-50%*	230 V	5.2 A	1.2 kW / 0.69 kW	2800 min <sup>-1</sup>	integrated	10 m	11.5 m³/h
SPZ 1000-S3-50% resistant*	230 V	5.2 A	1.2 kW / 0.69 kW	2800 min <sup>-1</sup>	integrated	10 m	11.5 m³/h

\* Definition of S3-pumps see page 101

### Mono version with one pump

SPZ pump	Voltage	Art. no.
<b>With recessed cover for on-site tiling</b>		
1000-S3	230 V	28 701X
1000-S3 resistant	230 V	28 701XC
<b>With black cover</b>		
1000-S3	230 V	28 701S
1000-S3 resistant	230 V	28 701SC

### Duo version with two pumps

SPZ pump	Voltage	Art. no.
<b>With recessed cover for on-site tiling</b>		
1000-S3	230 V	28 704X
1000-S3 resistant	230 V	28 704XC
<b>With black cover</b>		
1000-S3	230 V	28 704S
1000-S3 resistant	230 V	28 704SC



# Lifting station *Aqualift F Compact Mono / Duo* for free-standing installation



Z-53.2-484 Max 2 WC connections

**Tank volume:** 40 liters

**Pump volume:** 20 liters

**Polyethylene storage chamber** for free-standing installation, with lateral inlet  $\varnothing$  110. Installation area 700 × 700 mm.

### Pump

Single or twin removable SPZ pump(s) with macerator, pressure sensor controlled, with integrated backwater flap.

### Control unit

with SDS control unit (self-diagnosis system) for fully automatic pump control, splash water protected (IP 54), wall mounted.

Pressure connection: 1 1/2 inch outer thread or pressure pipe  $\varnothing$  40 mm for PVC glued connection or pressure pipe set (Art. no. 28 040).

**Power cable length:** 5 m

**Note:** A ventilation pipe must be provided for on site.

➤ **Accessories:** page 40



Illustration shows Mono version 28 717

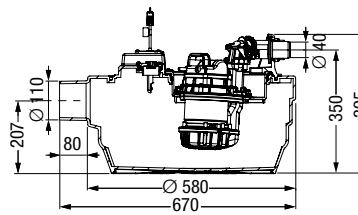
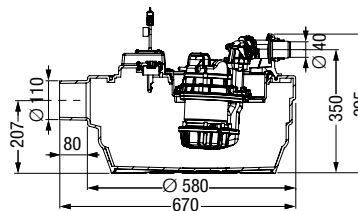
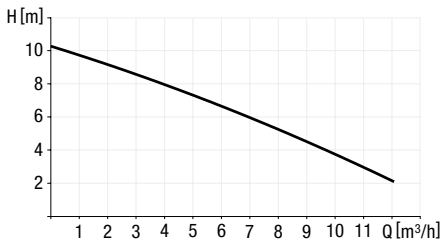


Illustration shows Duo version 28 718



### Pumping capacity



### Pump type

Pump type	Current type	Voltage	Current	Power P1/P2	RPM	Motor protection	Pumping height	Pumping capacity
SPZ 1000-S3-50%*	Alternating current	230 V	5.2 A	1.2 kW / 0.69 kW	2800 min <sup>-1</sup>	integrated	10 m	11.5 m³/h
SPZ 1000-S3-50% resistant*	Alternating current	230 V	5.2 A	1.2 kW / 0.69 kW	2800 min <sup>-1</sup>	integrated	10 m	11.5 m³/h

\* Definition of S3-pumps see page 101



# Lifting station *Minilift F*

The small version with the powerful macerator SharkTwister.

Compact and also suitable for black water: the *Minilift F* for free-standing set-up drains the toilet and other sanitary units in rooms below the backwater level or without sufficient slope to the next wastewater collecting pipe. The small lifting station chops faeces and toilet paper reliably with the powerful high-quality macerator SharkTwister.


### Powerful macerator SharkTwister

The built-in stainless steel pump with the powerful high-quality macerator reliably chops faeces and toilet paper – thus providing maximum operational safety.

**Minilift F**

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/minilift-f](http://www.kessel.com/minilift-f)



### Intelligent control technology

The SharkTwister is controlled by intelligent control technology with an acoustic alarm function – without the need for a separate control unit.

### Straightforward maintenance

The pump is integrated ready to plug in without the help of an electrician and can be removed for maintenance in no time at all.

## Compact lifting station *Minilift F* for free-standing installation in frost protected rooms

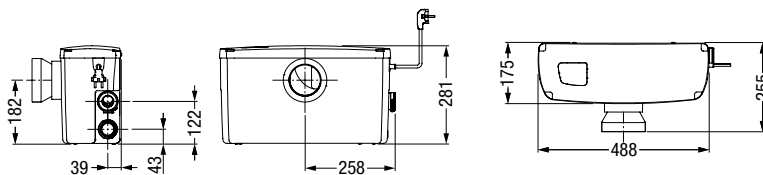
EN 12050-3

Plug-and-play sewage lifting station with macerator for wastewater disposal from a single toilet.

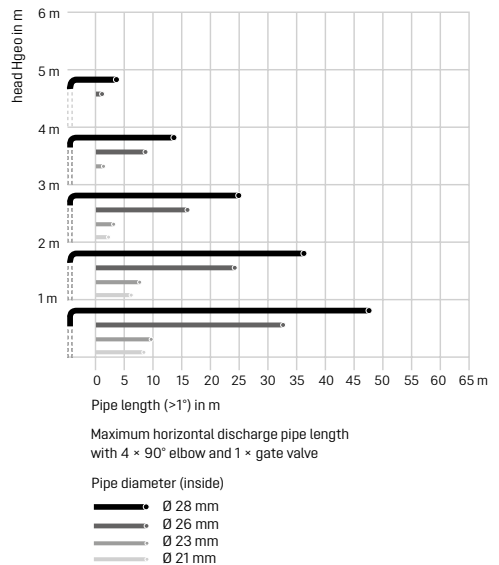
For free-standing set-up.

With pneumatic level control, with activated carbon filter, interior electronics separate from wastewater tank - easy, odour free maintenance

**Power cable length:** 1.6 m



Voltage	Art. no.
230 V	28 520





# Lifting station *Aqualift S 100 / S 200*

The flexible option for free-standing set-up.

Flexible and powerful: The *Aqualift S 100 / S 200* lifting station is the perfect choice for renovation or other installation situations that require free-standing set-up. Due to its small installation area, it can also be easily integrated in small rooms by retrofitting. And thanks to the one-handed closure that can be operated without tools, maintenance is quick and easy.

## *Aqualift S 100 / S 200*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aqualift-s-100-200](http://www.kessel.com/aqualift-s-100-200)



### Wastewater tank

Tanks with 100 and 200 l capacity are available to choose from. Both tanks fit through standard size doors with 80 cm wide passage. They can therefore be retrofitted into most rooms without any issue.

### Pumps

The *Aqualift S 100 / S 200* is equipped with one or two pumps. There are two models to choose from: a 650 watt pump with S1 mode (continuous operation) with float switch or control unit and a 1.3 kilowatt pump with S3 mode (non-continuous operation) with control unit. Both pump types handle wastewater without sewage by means of a multi-vane impeller.

### Ideal for connecting to grease separators

The *Aqualift S 100 / S 200 Duo* with two pumps is ideally suited for drainage systems which cannot afford to go off-line – for example directly after a grease separator.

The large easy-access maintenance cover, which can be opened in seconds using the tool free one-handed closure, also contributes to the system's ease of use. An additional advantage is the norm approved integrated sampling chamber located inside the *Aqualift S*. With the new *Aqualift S 100 / S 200*, an extra sampling chambers is no longer required.



1 Lifting station 2 Grease separator 3 Pressure pipe

# Lifting station *Aqualift S 200 Duo Tronic* for free-standing installation and wastewater without sewage



EN 12050-2

**Lifting station** for wastewater without sewage, free-standing set-up, preassembled for final installation on site.

- With odour-tight cover and quick-release closure for easy maintenance
- Tank made of PE, resistant to aggressive wastewater
- Including backflow preventer for the pressure pipe
- Including socket Ø 110 and Ø 160 mm for inlet and sampling
- Pumps with multi-vane impeller for maximum operating reliability

**Version:**

Type of system: Twin station / Pump control: Control unit / Backflow preventer: integrated / Installation situation: free-standing set-up / Type of wastewater: wastewater without sewage

**General characteristics:**

Colour: black / Standard: EN 12050-2

**Dimensions:**

Length: 670 mm / Width: 655 mm / Height: 815 mm

**Tank:**

Inlet nominal size (Ø): 110 – 160 mm / Tank volume: 220 l  
Pressure pipe connection (Ø): 63 mm

Pumping volume: 100 l

**Coverage features:**

Cover material: Polymer / Colour of cover: violet / Tightness: odour-tight / Locking: Quick-release closure

**Free passage:** 30 mm

**Pump:**

Type of fuse required (electrical protection): C 16 A / Max. temperature (permanent) of conveyed material: 40 °C / Connection type: coded plug / Length of mains cable for pump: 5 m / Protection class (pump): IP 68 (3 m) / Type of pump connection cable: H07RN-F 3G 1.0 mm<sup>2</sup>

**Comfort control unit:**

Including: Self-diagnosis system (SDS), battery buffering, multi-line digital display, log book function, USB interface, GSM interface / Potential-free contact: optional / Protection class control unit: IP 54 / Length of mains cable for control unit: 1.4 m / Type of level measurement: pneumatic / Alarm sensor: Immersion pipe

**Note:** Pumps available as resistant versions on request: individual@kessel.de

➤ **Accessories:** page 40



Illustration shows Art. no. 28 518

**Duo version with two pumps**

GTF pump	Voltage	Art. no.
600-S1	230 V	28 517
1250-S1	230 V	28 518

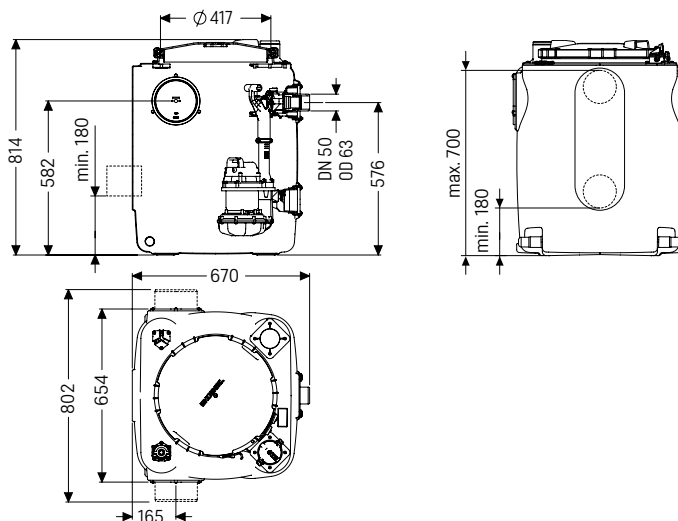
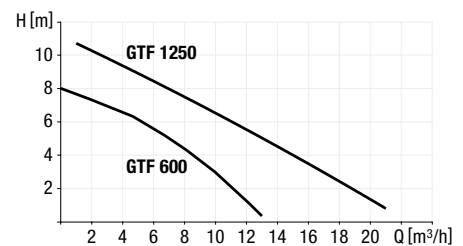


Illustration shows.: Art. no. 28 518

**Pumping capacity**



Pump type	Voltage	Current	Power (P1/P2)	RPM	Pumping height	Pumping capacity
GTF 600-S1*	230 V ~ 50 Hz	2.9 A	0.65 kW / 0.4 kW	2750 min <sup>-1</sup>	8 m	12 m <sup>3</sup> /h
GTF 1250-S1*	230 V ~ 50 Hz	5.4 A	1.3 kW / 0.8 kW	2700 min <sup>-1</sup>	11 m	20 m <sup>3</sup> /h

\* Definition of S1-pump see page 101



## Lifting station *Aqualift S 100 Mono / Duo Tronic*

for free-standing installation and wastewater without sewage



EN 12050-2

**Lifting station** for wastewater without sewage, free-standing set-up, preassembled for final installation on site.

- With odour-tight cover and quick-release closure for easy maintenance
- Tank made of PE, resistant to aggressive wastewater
- Including backflow preventer for the pressure pipe
- Including socket Ø 110 and Ø 160 mm for inlet and sampling
- Pump/s with multi-vane impeller for maximum operating reliability

**Version:**

Type of system: Single or twin station / Pump control: Control unit / Backflow preventer: integrated / Installation situation: free-standing set-up / Type of wastewater: wastewater without sewage

**General characteristics:**

Colour: black / Standard: EN 12050-2

**Dimensions:**

Length: 670 mm / Width: 530 mm / Height: 650 mm

**Tank:**

Inlet nominal size (Ø): 110 – 160 mm / Tank volume: 120 l

Pressure pipe connection (Ø): 63 mm

Pumping volume: 50 l

**Coverage features:**

Cover material: Polymer / Colour of cover: violet /

Tightness: odour-tight / Locking: Quick-release closure

**Free passage:** 10 mm

**Pump:**

Type of fuse required (electrical protection): C 16 A /

Max. temperature (permanent) of conveyed

material: 40 °C / Connection type: coded plug /

Length of mains cable for pump: 5 m /

Protection class (pump): IP 68 (3 m) /

Type of pump connection cable: H07RN-F 3G 1.0 mm<sup>2</sup>

**Comfort control unit:**

Including: Self-diagnosis system (SDS), battery buffering, multi-line digital display, log book function,

USB interface, GSM interface / Potential-free contact:

optional / Protection class control unit: IP 54 /

Length of mains cable for control unit: 1.4 m /

Type of level measurement: pneumatic / Alarm sensor: Immersion pipe

**Note:** Pumps available as resistant versions on request: individual@kessel.de

➔ **Accessories:** page 40



Illustration shows Art. no. 28 515

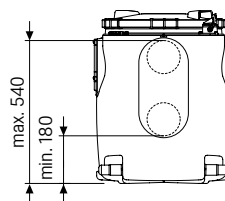
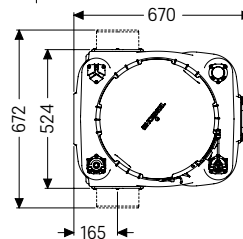
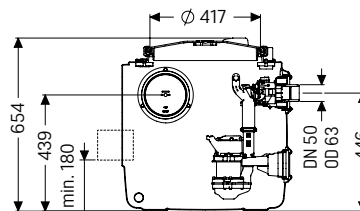


Illustration shows: Art. no. 28 513

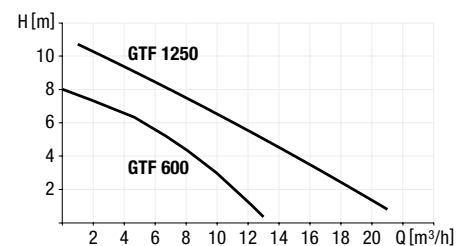
**Mono version with one pump**

GTF pump	Voltage	Art. no.
600-S1	230 V	28 513
1250-S1	230 V	28 514

**Duo version with two pumps**

GTF pump	Voltage	Art. no.
600-S1	230 V	28 515
1250-S1	230 V	28 516

**Pumping capacity**



**Pump type**

Pump type	Voltage	Current	Power (P1/P2)	RPM	Pumping height	Pumping capacity
GTF 600-S1*	230 V ~ 50 Hz	2.9 A	0.65 kW / 0.4 kW	2750 min <sup>-1</sup>	8 m	12 m <sup>3</sup> /h
GTF 1250-S1*	230 V ~ 50 Hz	5.4 A	1.3 kW / 0.8 kW	2700 min <sup>-1</sup>	11 m	20 m <sup>3</sup> /h

\* Definition of S1-pump see page 101

# Lifting station *Aqualift S 100 Mono*

for free-standing installation and wastewater without sewage



EN 12050-2

**Lifting station** for wastewater without sewage, free-standing set-up, preassembled for final installation on site.

- With odour-tight cover and quick-release closure for easy maintenance
- Tank made of PE, resistant to aggressive wastewater
- Including backflow preventer for the pressure pipe
- Including socket  $\varnothing$  110 and  $\varnothing$  160 mm for inlet and sampling
- Pump/s with multi-vane impeller for maximum operating reliability

**Version:**

Type of system: Single station / Pump control: Float switch / Backflow preventer: integrated / Installation situation: free-standing set-up / Type of wastewater: wastewater without sewage

**General characteristics:**

Colour: black / Standard: EN 12050-2

**Dimensions:**

Length: 670 mm / Width: 530 mm / Height: 650 mm

**Tank:**

Inlet nominal size ( $\varnothing$ ): 110 – 160 mm / Tank volume: 120 l

Pressure pipe connection ( $\varnothing$ ): 63 mm

Pumping volume: 25 l

**Coverage features:**

Cover material: Polymer / Colour of cover: violet /

Tightness: odour-tight / Locking: Quick-release closure

**Free passage:** 10 mm

**Pump:**

Type of fuse required (electrical protection): C 16 A /

Max. temperature (permanent) of conveyed material:

40 °C / Connection type: Schuko (earthed contact)

2-pin / Length of mains cable for pump: 5 m /

Protection class (pump): IP 68 (3 m) /

Type of pump connection cable: H07RN-F 3G 1.0 mm<sup>2</sup>

**Note:** Pumps available as resistant versions on request:

individual@kessel.de

➤ **Accessories:** page 40



Illustration shows Art. no. 28 511

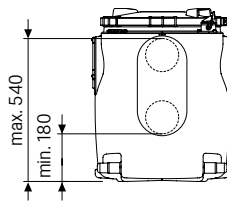
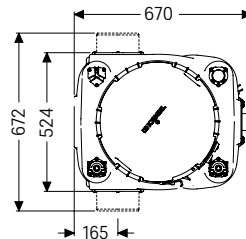
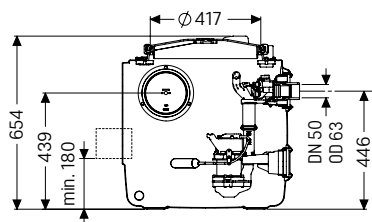
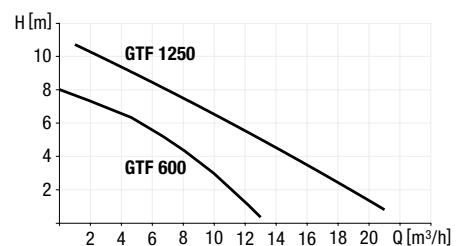


Illustration shows: Art. no. 28 511

**Mono version with one pump**

GTF pump	Voltage	Art. no.
600-S1	230 V	28 511
1250-S1	230 V	28 512

**Pumping capacity**



Pump type	Voltage	Current	Power (P1/P2)	RPM	Pumping height	Pumping capacity
GTF 600-S1*	230 V ~ 50 Hz	2.9 A	0.65 kW / 0.4 kW	2750 min <sup>-1</sup>	8 m	12 m <sup>3</sup> /h
GTF 1250-S1*	230 V ~ 50 Hz	5.4 A	1.3 kW / 0.8 kW	2700 min <sup>-1</sup>	11 m	20 m <sup>3</sup> /h

\* Definition of S1-pump see page 101



# Lifting station *Aqualift S Compact*

## The flexible version for wastewater without sewage.

The *Aqualift S Compact* is the first lifting station in our range that can be converted comfortably from a Mono to a Duo system after floor slab installation. Yet that is not the only feature that makes the *Aqualift S Compact* so special: the free suspension and acoustic decoupling of the pump(s) also makes particularly quiet operation possible.

The *Aqualift S Compact* is available with float switch or pneumatic level measurement. The lifting station can also take up and discharge water additionally from the surface through the drain integrated in the black or tileable cover. It is delivered from the factory with either one or two pumps; the new GTF 500 and GTF 500 resistant (for aggressive wastewater such as heating condensate).

### *Aqualift S Compact*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aqualift-s-compact](http://www.kessel.com/aqualift-s-compact)



1 Lifting station 2 Extension section with flange 3 Cover with integrated inlet

### Maximum safety

The *Aqualift S Compact* is available with a pressure sensor *Tronic*, which measures the level of the wastewater precisely and reliably: as soon as the maximum water level is reached, the pump activates and pumps the water through a pressure pipe into the sewer.

### Floor slab installation

The lifting station is almost invisible because it is installed in the floor slab. The integrated drain in the cover handles basement surface water. Even in the event of a pipe burst or flooding, the *Aqualift S Compact* continually pumps away the wastewater keeping the basement dry.

### Installation in waterproof concrete

The KESSEL sealing kit for installation in waterproof concrete ensures reliable protection against moisture damage. The extension section with central flange and elastomeric waterproofing membrane enable implementation also in deeper installation situations.

# Lifting station *Aqualift S Compact Mono / Duo Tronic*

for installation in a concrete slab / floor



**CE** EN 12050-2

**Tank volume:** 65 liters

**Pump volume:** 20 liters

### Polyethylene storage chamber

for installation in a concrete slab / floor,  
installation depth (D) 490 to 620 mm,  
with lateral inlet  $\varnothing$  110 mm.  
Installation area 700 × 700 mm.

### Upper section and cover

Vertically and laterally adjustable upper section,  
with black / recessed cover for on-site tiling,  
integrated drain, made of polymer, load class K 3,  
with moisture protective sealing flange.

### Pump

Single or twin removable *GTF* pump(s) for  
wastewater without sewage, float switch /  
air pressure sensor controlled with multi-vane  
impeller, with integrated non-return flap,  
pumping volume 20 liters (*GTF 500* / *GTF 1200*),  
pressure pipe connection  $\varnothing$  40 mm.

### Control unit

Tronic versions with SDS control unit (self-diagnosis  
system) for fully automatic pump control, splash  
water protected (IP 54), wall mounted.

**Power cable length:** 5 m

**Note:** A ventilation pipe must be provided for on site.

**Accessories:** page 40



Illustration shows Art. no. 280 550X

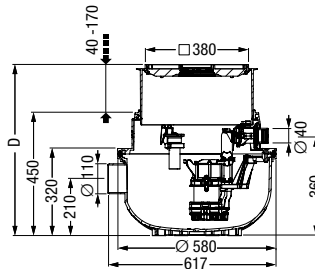
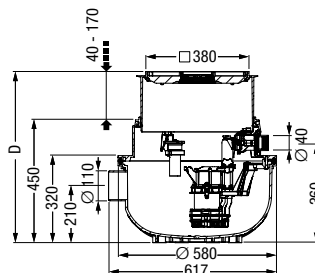
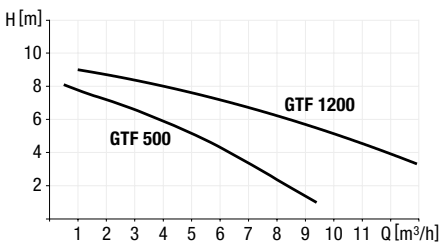


Illustration shows Art. no. 280 550XC



### Pumping capacity



### Pump type

Pump type	Voltage	Amperage	Power P1/P2	RPM	Pumping height	Pumping capacity
<b>GTF 500-S1*</b>	230 V ~ 50 Hz	2.7 A	0.6 kW / 0.36 kW	2800 min <sup>-1</sup>	8 m	10 m <sup>3</sup> /h
<b>GTF 500-S1 resistant*</b>	230 V ~ 50 Hz	2.7 A	0.6 kW / 0.36 kW	2800 min <sup>-1</sup>	8 m	10 m <sup>3</sup> /h
<b>GTF 1200-S1*</b>	230 V ~ 50 Hz	6.2 A	1.4 kW / 0.84 kW	2650 min <sup>-1</sup>	9 m	15.5 m <sup>3</sup> /h
<b>GTF 1200-S1 resistant*</b>	230 V ~ 50 Hz	6.2 A	1.4 kW / 0.84 kW	2650 min <sup>-1</sup>	9 m	15.5 m <sup>3</sup> /h

\* Definition of S1-pump see page 101

### Mono version with one pump

GTF pump	Voltage	Art. no.
<i>With recessed cover for on-site tiling</i>		
500-S1	230 V	280 550X
500-S1 resistant	230 V	280 550XC
1200-S1	230 V	281 250X
1200-S1 resistant	230 V	281 250XC

### With black cover

500-S1	230 V	280 550S
500-S1 resistant	230 V	280 550SC
1200-S1	230 V	281 250S
1200-S1 resistant	230 V	281 250SC

### Duo version with two pumps

GTF pump	Voltage	Art. no.
<i>With recessed cover for on-site tiling</i>		
500-S1	230 V	280 530X
500-S1 resistant	230 V	280 530XC
1200-S1	230 V	281 230X
1200-S1 resistant	230 V	281 230XC

### With black cover

500-S1	230 V	280 530S
500-S1 resistant	230 V	280 530SC
1200-S1	230 V	281 230S
1200-S1 resistant	230 V	281 230SC



Always the right choice:    
**kessel.com/smartselect**



## Lifting station *Aqualift S Compact Mono*

for installation in a concrete slab / floor



**CE** EN 12050-2

**Tank volume:** 65 liters

**Pump volume:** 16 liters

### Polyethylene storage chamber

for installation in a concrete slab/floor,  
installation depth (D) 490 to 620 mm,  
with lateral inlet  $\varnothing$  110 mm.  
Installation area 700 × 700 mm.

### Upper section and cover

Vertically and laterally adjustable upper section,  
with black / recessed cover for on-site tiling,  
integrated drain, made of polymer, load class K 3,  
with moisture protective sealing flange.

### Pump

Single removable *GTF* pump for wastewater  
without sewage, float switch / air pressure sensor  
controlled with multi-vane impeller, with integrated  
non-return flap, pumping volume 16 liters (*GTF 500* /  
*GTF 1200*), pressure pipe connection  $\varnothing$  40 mm.

### Control unit

Tronic versions with SDS control unit (self-diagnosis  
system) for fully automatic pump control, splash  
water protected (IP 54), wall mounted.

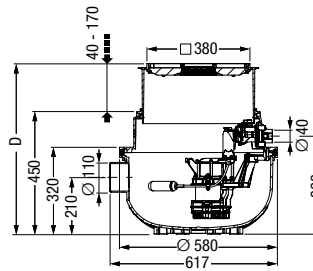
**Power cable length:** 5 m

**Note:** A ventilation pipe must be provided for on site.

**Accessories:** page 40

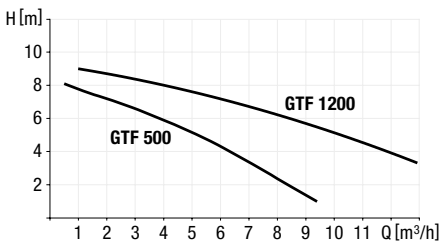


Illustration shows Art. no. 280 500X



GTF pump	Voltage	Art. no.
With recessed cover for on-site tiling		
500-S1	230 V	280 500X
500-S1 resistant	230 V	280 500XC
1200-S3	230 V	281 200X
1200-S3 resistant	230 V	281 200XC
With black cover		
500-S1	230 V	280 500S
500-S1 resistant	230 V	280 500SC
1200-S3	230 V	281 200S
1200-S3 resistant	230 V	281 200SC

### Pumping capacity



### Pump type

Pump type	Voltage	Amperage	Power P1/P2	RPM	Pumping height	Pumping capacity
GTF 500-S1*	230 V ~ 50 Hz	2.7 A	0.6 kW / 0.36 kW	2800 min <sup>-1</sup>	8 m	10 m <sup>3</sup> /h
GTF 500-S1 resistant*	230 V ~ 50 Hz	2.7 A	0.6 kW / 0.36 kW	2800 min <sup>-1</sup>	8 m	10 m <sup>3</sup> /h
GTF 1200-S3*	230 V ~ 50 Hz	6.2 A	1.4 kW / 0.84 kW	2650 min <sup>-1</sup>	9 m	15.5 m <sup>3</sup> /h
GTF 1200-S3 resistant*	230 V ~ 50 Hz	6.2 A	1.4 kW / 0.84 kW	2650 min <sup>-1</sup>	9 m	15.5 m <sup>3</sup> /h

\* Definition of S1 and S3-pumps see page 101







## Lifting station *Minilift S*



The *Minilift S* for wastewater without sewage makes everything possible.

Small in size but great possibilities: The plug-in ready *Minilift S* lifting station for restricted use is suitable for the disposal of wastewater from individual drainage objects, such as a wash basin, dishwasher or shower.

Adjustable  
pumping volume

3 pump capacities

Resistance to hot  
water and brine



Together with the grease separator UnderSink the Minilift S creates a perfect team for small kitchens.

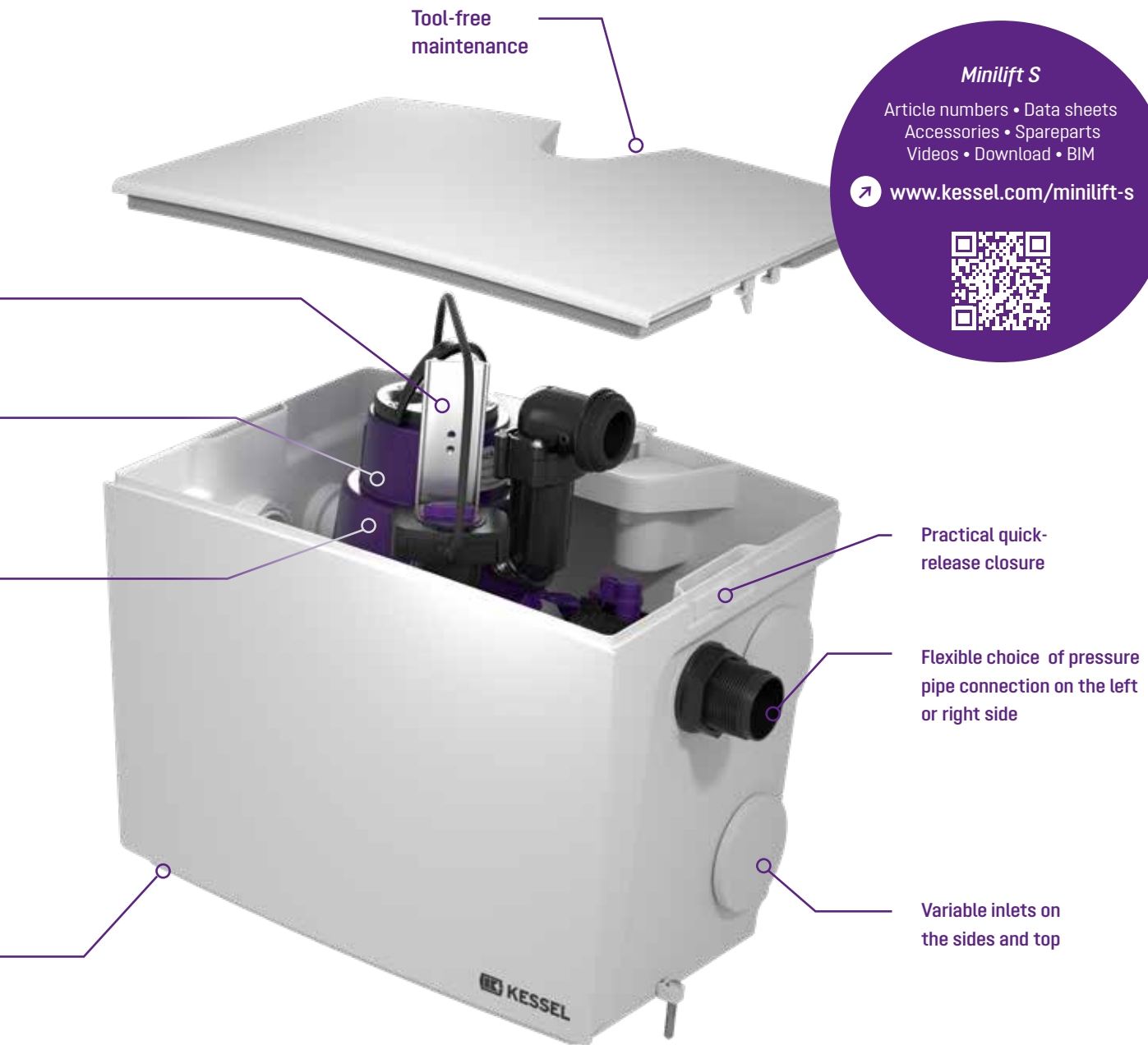
Feet for sound decoupling  
and slip protection



A clean matter: The *Minilift S* is a practical solution for washing machines and wash basin in laundry rooms.



The *Minilift S* plays out its functional strengths in utility rooms. A water softener, backwash filter or heating system can be connected without any problems.



**Minilift S**  
 Article numbers • Data sheets  
 Accessories • Spareparts  
 Videos • Download • BIM

[www.kessel.com/minilift-s](http://www.kessel.com/minilift-s)



The *Minilift S* is ideal for renovations in small bathrooms next to a hobby room or in a workshop.



A talented solution for the office: The *Minilift S* can easily find a place in small office kitchens.

## Minilift S lifting station for free-standing installation

The plug-in ready *Minilift S* lifting station for restricted use is suitable for the disposal of domestic wastewater and ideal for connecting a shower, bathtub, washbasin, sink, dishwasher or washing machine.

**Type of wastewater:** wastewater without sewage

**Installation situation:** free-standing set-up

**Version:**

**Type of system:** single station

**Pump control:** float switch

**Backflow preventer:** integrated

**Resistant:**

- Resistant to saline media,
- Wastewater from softening units and
- Wastewater containing condensate from heating systems

**Pressure pipe connection options:**

1 1/2" thread, PVC adhesive connection, click adapter

**Ventilation:** activated carbon filter

**Cable length:** 5 m

**Condition as supplied:** plug-in ready

➔ **Accessories:** page 40

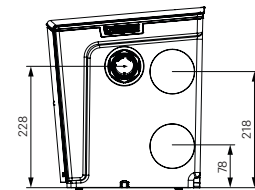
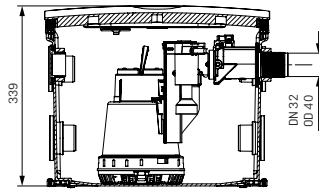
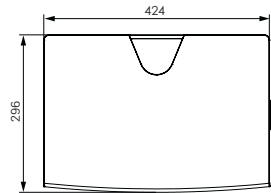
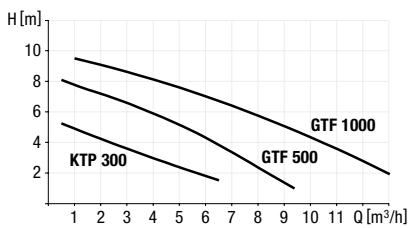


Fig.: Article 28561

Pump	Voltage	Art. no.
<b>Submersible pump KTP 300</b>		
KTP 300	230 V	<b>28 561</b>
KTP 300 resistant	230 V	<b>28 561C</b>
<b>Submersible pump GTF 500</b>		
GTF 500	230 V	<b>28 562</b>
GTF 500 resistant	230 V	<b>28 562C</b>
<b>Submersible pump GTF 1000</b>		
GTF 1000	230 V	<b>28 563</b>
GTF 1000 resistant	230 V	<b>28 563C</b>

### Pumping capacity



Pump type	Power P1/P2	Power supply	Current	RMP	Plug	Cable length	Pumping height	Pumping capacity
KTP 300	0.34 kW / 0.21 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	6 m	max. 8 m³/h
KTP 300 Resistant	0.34 kW / 0.21 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	6 m	max. 8 m³/h
GTF 500	0.6 kW / 0.36 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	8 m	max. 10 m³/h
GTF 500 Resistant	0.6 kW / 0.36 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	8 m	max. 10 m³/h
GTF 1000	1.27 kW / 0.73 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	10 m	max. 14.5 m³/h
GTF 1000 Resistant	1.27 kW / 0.73 kW	230 V ~ 50 Hz	1.6 A	2800 min	Schuko earthed safety plug	5 m	10 m	max. 14.5 m³/h



# Lifting station *Minilift S*

For installation in a concrete floor / slab



**CE** EN 12050-2

**Tank volume:** 26 liters

**Pump volume:** 7 liters

**Polyethylene storage chamber** for installation in a concrete slab/floor, installation depth (D) 330 to 460 mm, with lateral inlet  $\varnothing$  50 mm. Installation area 600 × 600 mm.

### Upper section and cover

Vertically and laterally adjustable upper section, with black / recessed cover for on-site tiling, integrated drain, made of polymer, load class K 3, with moisture protective sealing flange.

### Pump

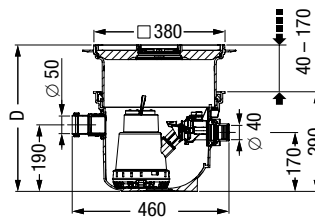
Single removable *KTP* pump for wastewater without sewage, float switch, with multi-vane impeller, with integrated non-return flap, pressure pipe connection 40 mm.



Illustration shows Art. no. 280 570X

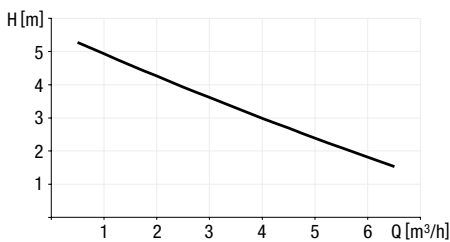


Illustration shows Art. no. 280 570S



KTP pump	Voltage	Art. no.
With recessed cover for on-site tiling		
300-S1	230 V	280 570X
300-S1 resistant	230 V	280 570XC
With black cover		
300-S1	230 V	280 570S
300-S1 resistant	230 V	280 570SC

## Pumping capacity



Pump type	Power P1 / P2	Voltage	Amperage	RPM	Plug	Cable length	Pumping height	Pumping capacity
KTP 300-S1*	0.34 kW / 0.21 kW	230 V ~ 50 Hz	1.6 A	2800 min <sup>-1</sup>	Schuko	5 m	6 m	8 m³/h
KTP 300-S1 resistant*	0.34 kW / 0.21 kW	230 V ~ 50 Hz	1.6 A	2800 min <sup>-1</sup>	Schuko	5 m	6 m	8 m³/h

\* Definition of S1-pumps see page 101



Always the right choice:    
[kessel.com/smartselect](http://kessel.com/smartselect)


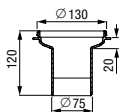

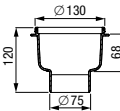

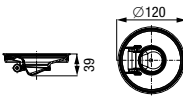

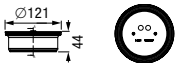

## Accessories

### Alarm unit

				Art. no.
with electrode probe	<b>Compatibility:</b> For lifting station <i>Aqualift F Basic</i> , <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Function:</b> High water / flood alarm system; for conductive liquids <b>Cable length:</b> 5 m (extendable up to 30 m)			20 222
with optical probe	<b>Compatibility:</b> For lifting station <i>Aqualift F Basic</i> , <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Function:</b> High water / flood alarm system; for conductive / non-conductive liquids <b>Cable length:</b> 5 m (extendable up to 30 m)			20 223
	<b>Cable length:</b> 10 m (extendable up to 30 m)			20 224

Potential-free contact	<b>Compatibility:</b> For warning devices Art. no. 20 222 and 20 223			80 074
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### Hygiene and odour stop

			Cover	Art. no.
Drain body	<b>Compatibility:</b> For lowest installation; for installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)			black grey 680 796 680 798
Drain body	<b>Compatibility:</b> Seal water height 50 mm; for installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)			black grey 680 795 680 797
additionally <i>Multistop</i>	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Function:</b> Odour, foam, rodent and insect stop			48 500
additionally <i>Megastop</i>	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Function:</b> Mechanical odour trap inclusive hair filter for KESSEL upper sections			48 550
additionally odour trap	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Seal water height:</b> 50 mm <b>(Ventilation always required when in use!)</b>			680 696

### Hygiene


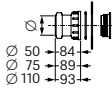
Hair filter	<b>Compatibility:</b> Art. no. 48 500; for lifting station <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)			Art. no. 48 700
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## Accessories

Installation set		Outer diameter Ø (mm)	Art. no.
Installation set	<p><b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> and <i>Aqualift S Compact</i>; for installation in waterproof concrete</p> <p><b>Inclusive:</b></p> <ul style="list-style-type: none"> <li>1 Extension section with central flange</li> <li>2 Pressure pipe set Ø 32: Art. no. 83 077 Ø 40: Art. no. 83 079</li> <li>3 Adapter (Ø 75/Ø 110 socket)</li> <li>4 Seal insert</li> <li>5 Casing</li> <li>6 Puddle flange (2)</li> </ul>	Ø 32	83 077
		Ø 40	83 079
Sealing flange set			Art. no.
for sealing against water exerting pressure from outside	<p><b>Compatibility:</b> Suitable for <i>Aqualift S Compact</i> lifting station for installation in the floor slab. Diameter of waterproofing membrane: 800 mm</p> <p><b>Inclusive:</b> 4 mating flange segments as well as elastomeric waterproofing membrane made of NR/SBR and screws</p>		83 078
Extension sections			Art. no.
with centre flange	<p><b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> and <i>Aqualift S Compact</i></p> <p><b>Additional function:</b> For installation in waterproof concrete</p> <p><b>Inclusive:</b> Temporary construction debris cover, fully assembled, gasket set (counter flange made of polymer, screwed, elastomer sealing sheet made of NK/SBR Ø 800 mm)</p> <p><b>Extension:</b> Max. 360 mm</p>		83 075
with flange and counter flange	<p><b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> and <i>Aqualift S Compact</i></p> <p><b>Additional function:</b> For connection to an on-site sealing sheet</p> <p><b>Inclusive:</b> Screws</p> <p><b>Extension:</b> Max. 140 mm (In case of deeper installation ensure maintenance capability!)</p>		83 073
with gasket	<p><b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> and <i>Aqualift S Compact</i></p> <p><b>Extension:</b> Max. 180 mm (In case of deeper installation ensure maintenance capability!)</p>		83 070
for deeper installation with flange	<p><b>Compatibility:</b> For installation in a concrete floor <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)</p> <p><b>Inclusive:</b> Gasket</p> <p><b>Extension:</b> Max. 147 mm (In case of deeper installation ensure maintenance capability!)</p>		830 070
Pressure pipe set		Outer diameter Ø (mm)	Art. no.
Pressure pipe set	<p><b>Compatibility:</b></p> <p>Ø 40 / Ø 50: <i>Aqualift F Compact</i>, <i>Aqualift S Compact</i></p> <p>Ø 40: <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)</p> <p><b>Inclusive:</b> 5 m pressure pipe hose</p> <p>Ø 40 (DN 32 mm)</p> <p>Ø 50 (DN 40 mm)</p>	Ø 40	28 040
		Ø 50	28 062



## Accessories

Inlet adaptor		Outer diameter Ø (mm)	Drill size in mm	Art. no.
with gasket and threaded ring	<b>Compatibility:</b> Ø 50 / Ø 75 / Ø 110: <i>Aqualift S Compact</i> Ø 50 / Ø 75: <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Inclusive:</b> Flat seal		60	39 005
			92	39 007
			121	39 100

Transition sections		Outer diameter Ø (mm)	Art. no.
Transition section	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)	Ø 40/50	681 111
	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Inclusive:</b> Sealing ring Ø 50	Ø 50/75	27 126
	<b>Compatibility:</b> For installation in a concrete floor <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Inclusive:</b> Ø 110 socket / Ø 75 spigot for use as connection piece, gasket	Ø 75/110	27 602

Hole saw		Outer pipe diameter in mm	Drill size in mm	Art. no.
Hole saw set	<b>Compatibility:</b> Ø 50 – Ø 200: <i>Aqualift F Mono / Duo</i> , <i>Aqualift F XL</i> Ø 50 – Ø 160: <i>Aqualift S 100 / Aqualift S 200</i> Ø 50 – Ø 110: <i>Aqualift F Basic</i> , <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> Ø 50 / Ø 75: <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Inclusive:</b> Saw blade holder	Ø 50	60	500 101
		Ø 75	92	500 100
		Ø 110	121	
		Ø 110	121	500 102
		Ø 125	133	
		Ø 160	168	
	Ø 200 <sup>1)</sup>	200		

1) use a power drill with at least 1000 watts




Sealing		Nominal pipe diameter in mm	Outer pipe diameter in mm	Art. no.
Pipe sealing gasket	<b>Compatibility:</b> DN 50 – DN 200: <i>Aqualift F Mono / Duo</i> , <i>Aqualift F XL</i> DN 50 – DN 150: <i>Aqualift S 100 / Aqualift S 200</i> DN 50 – DN 100: <i>Aqualift F Basic</i> , <i>Aqualift F Compact</i> , <i>Aqualift S Compact</i> DN 50 / DN 70: <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC) <b>Drill size:</b> Ø 50: 60 mm Ø 75: 92 mm Ø 110: 121 mm Ø 125: 133 mm Ø 160: 168 mm Ø 200: 210 mm	DN 50	Ø 50	850 114
		DN 70	Ø 75	850 116
		DN 100	Ø 110	850 117
		DN 125	Ø 125	850 118
		DN 150	Ø 160	850 119
		DN 200	Ø 200	850 123

## Accessories

		Outer diameter Ø (mm)	Art. no.
<b>Backflow preventer for push-fit connection</b>			
<b>Backflow preventer for push-fit connection</b>	<p><b>Compatibility:</b> For systems for outdoor installation, for push-fitting into an inlet Ø 50 for lifting station <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)</p> <p><b>Function:</b> Prevents potential backflow in the inlet pipe</p>	Ø 50	28 093
	 		
<b>Click adapter</b>			
<b>Click adapter</b>	<p><b>Compatibility:</b> For changeover to PE connection; for lifting station <i>Aqualift F Compact</i>, <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)</p>	Ø 40	28 086
			
<b>Adapter set</b>	<p><b>Compatibility:</b> Lifting station <i>Aqualift S 100 &amp; 200</i></p> <p><b>Function:</b> Optional set facilitating external pipe connection</p> <p><b>Contain:</b> Adapter with internal thread 2" and a fitting with external thread 2" and quick-connection ending for easy installation</p>		28 097
			
<b>Control unit accessories</b>			
<b>Audible alarm</b>	<p><b>Compatibility:</b> For all control units 230 V not for warning devices Art. no. 20 222 and 20 223</p> <p><b>Cable length:</b> 20 m</p>		20 162
			
<b>Potential-free contact</b>	<p><b>Compatibility:</b> For all control units 230 V not for warning devices Art. no. 20 222 and 20 223</p>		80 072
			
<b>Safety</b>			
<b>TeleControl telemetric system</b>	<p><b>Compatibility:</b> For connection to KESSEL Comfort control units 230 Volt and 400 Volt</p> <p><b>Function:</b> Relaying of full text messages to up to three mobile phones</p> <p><b>Inclusive:</b> With internal antenna (without SIM card)</p>		28 792
			
<b>Antenna booster with magnetic base</b>	<p><b>Compatibility:</b> For <i>TeleControl</i> telemetric system to improve the reception</p> <p><b>Cable length:</b> 2.5 m</p>		28 793
			
<b>Extension cable</b>	<p><b>Compatibility:</b> For antenna booster</p> <p><b>Cable length:</b> 2 m</p>		28 794
<b>Air compressor set</b>	<p><b>Function:</b> For use in combination with lifting station and pumping stations with pressure control: prevents soiling, avoids the formation of condensate in the pressure hose, makes operation of systems possible with pressure hose lengths &gt; 10 m – 30 m</p> <p><b>Inclusive:</b> T-piece connection, 20 m pressure hose</p>		28 048
			
<b>PE-pressure hose extension (per meter)</b>	<p><b>Compatibility:</b> For Art. no. 28 048</p>		680 071

## Accessories

### Level sensor

			Art. no.
Level sensor with immersion pipe 433 mm	Compatibility: For <i>Aqualift F XL</i>		681 040
	Cable length: 10 m		
Level sensor with immersion pipe 288 mm	Compatibility: For <i>Aqualift F Duo</i>		681 042
	Cable length: 10 m		
Level sensor with immersion pipe 181 mm	Compatibility: For <i>Aqualift F Mono</i>		681 046
	Cable length: 10 m		
	Cable length: 30 m		681 041
	Cable length: 30 m		681 043
	Cable length: 30 m		681 047

### Cover plates

			Cover	Art. no.	
Surface water tight	<p>Compatibility: For installation in a concrete floor <i>Aqualift F Compact</i>, <i>Aqualift S Compact</i> and <i>Minilift S</i> (280 570X, 280 570S, 280 570XC and 280 570SC)</p> <p>Inclusive: Gasket</p> <p>Version recessed for on-site tiling, grey: For tile thicknesses of 18 mm (Ventilation always required when in use!)</p>			tileable	830 052
				black	830 050


## Accessories

### Upgrade set

			Art. no.
<b>Alarm float switch</b>	<b>Compatibility:</b> Can be combined with 230 V Comfort control units; for lifting station <i>Aqualift F Compact</i> <b>Inclusive:</b> Float switch, float switch bracket <b>Cable length:</b> 5 m		28 016
	<b>Compatibility:</b> For use with 230 V and 400 V Comfort control units; for lifting station <i>Aqualift F Mono/Duo</i> <b>Inclusive:</b> Float switch, support plate, cover <b>Cable length:</b> 5 m		28 015
	<b>Compatibility:</b> For use with 230 V and 400 V Comfort control units <b>Inclusive:</b> Float switch, support plate, cover <b>Cable length:</b> 5 m		28 014

### Cable extensions


for extension from 15 m or 25 m (cable length delivered: 5 m)

	Lifting station <i>Aqualift F Mono</i> <i>Aqualift F Compact Mono</i> <i>Aqualift S Compact Mono</i> <i>Aqualift S 100 Mono</i> <i>Aqualift S 100 Mono Tronic</i>	Lifting station <i>Aqualift F Duo</i> <i>Aqualift F Compact Duo</i> <i>Aqualift S Compact Duo</i> <i>Aqualift S 100 Duo Tronic</i> <i>Aqualift S 200 Duo Tronic</i>		Art. no.
<b>Cable extension for probe (10 m)</b>	<b>Extension to 15 m:</b> 1×80 889 <b>Extension to 25 m:</b> 2×80 889	<b>Extension to 15 m:</b> 1×80 889 <b>Extension to 25 m:</b> 2×80 889		80 889
<b>Cable extension for pump (10 m)</b>	<b>Extension to 15 m:</b> 1×80 891 <b>Extension to 25 m:</b> 2×80 891	<b>Extension to 15 m:</b> 2×80 891 <b>Extension to 25 m:</b> 4×80 891		80 891

### Inlet socket

			Outer diameter Ø (mm)	Art. no.
<b>Inlet socket</b>	<b>Compatibility:</b> For <i>Aqualift S 100 / Aqualift S 200</i> lifting station <b>Inclusive:</b> Lip seal and three PT screws for fixing		Ø 110	680 986
			Ø 160	680 987

### Flexible pressure pipe connection

			Outer diameter Ø (mm)	Art. no.
<b>for manual diaphragm pump</b>	<b>Compatibility:</b> For PE pipe connections; for lifting station <i>Aqualift F Basic</i> , <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i> <b>Inclusive:</b> Two hose clamps <b>Length:</b> 200 mm		Ø 32	28 660
<b>for ventilation</b>	<b>Compatibility:</b> For PE pipe connections; for <i>Aqualift F Basic</i> , <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i> <b>Inclusive:</b> Two hose clamps <b>Length:</b> 200 mm		Ø 70	28 661
<b>for connection adapter and pressure pipes</b>	<b>Compatibility:</b> For PE pipe connections; for <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i> ; Art. no. 28 663: <i>Aqualift F Basic</i> <b>Inclusive:</b> Two hose clamps <b>Length:</b> 200 mm		Ø 90 Ø 110	28 662 28 663

## Accessories

Closure valves		Outer diameter Ø (mm)	Art. no.
Closure valve, vertical	<p><b>Compatibility:</b> For lifting station <i>Aqualift F Basic</i>, <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i></p> <p><b>Function:</b> For the pressure pipe of KESSEL lifting stations with plastic fitting; for connection to pressure pipe, a KESSEL flange connector or adaptor is required.</p> <p><b>Inclusive:</b> Gasket, screw</p>	Ø 90	28 715
Closure valve with flange adaptor, vertical	<p><b>Compatibility:</b> For lifting station <i>Aqualift F Basic</i>, <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i></p> <p><b>Function:</b> For the pressure pipe of KESSEL lifting stations with plastic fitting</p> <p><b>Inclusive:</b> With screwed flange adaptor, for connection to a standard flange DN 80 according to DIN 2501 (without sealing gasket and screw)</p>	Ø 90	28 716
Closure valve	<p><b>Compatibility:</b> With lateral pressure pipe for lifting stations <i>Aqualift F</i></p>	Ø 90 Ø 110	28 682 28 683
	<p><b>Compatibility:</b> For installation on the inlet side (no pressure) for lifting stations <i>Aqualift F</i></p>	Ø 110 Ø 160	28 698 28 699
Connection flange		Outer diameter Ø (mm)	Art. no.
in PE	<p><b>Compatibility:</b> For KESSEL plastic fittings; for lifting station <i>Aqualift F XL</i></p>	Ø 90	28 713
	<p><b>Compatibility:</b> For KESSEL plastic fittings; for <i>Aqualift F Basic</i> and <i>Aqualift F XL</i>; also in combination with closure valve Art. no. 28 715</p> <p><b>Function:</b> Spigot end for DN 100 pressure pipe connection</p>	Ø 110	28 712
<b>Manual diaphragm pump 1 1/2 inch</b>			Art. no.
Manual diaphragm pump in cast iron	<p><b>Compatibility:</b> For manually pumping wastewater; for lifting station <i>Aqualift F Mono / Duo</i> and <i>Aqualift F XL</i></p> <p><b>Inclusive:</b> With a ball valve on inlet and outlet side</p>		28 680
Flange adaptor		Outer diameter Ø (mm)	Art. no.
in PE	<p><b>Compatibility:</b> From KESSEL fitting to standard flange; for lifting station <i>Aqualift F XL</i></p>	DN 80	28 714
in cast iron	<p><b>Compatibility:</b> For use with cast iron pressure pipes; for lifting station <i>Aqualift F XL</i></p> <p><b>Function:</b> Adaptor from DN 80 to DN 100</p> <p><b>Inclusive:</b> Flange according to DIN 2501</p>	-	28 068

## Accessories

Backflow preventer		Outer diameter Ø (mm)	Art. no.
in cast iron	<b>Compatibility:</b> For lifting station <i>Aqualift F XL</i> <b>Inclusive:</b> DN 80 flange according to DIN 2501, backflow preventer with flap and flap opening lever	DN 80	28 021
			
Connection adaptor		Outer diameter Ø (mm)	Art. no.
in cast iron	<b>Compatibility:</b> For connection from lifting station <i>Aqualift F XL</i> to on-site pressure pipe. Fits PE pressure pipes <b>Inclusive:</b> Flange according to DIN 2501, single gasket <b>Outer diameter:</b> DN 80: OD 90 mm DN 100: OD 110 mm	Ø 90	28 067
			
		Ø 110	28 020
			
Gate closure valve		Outer diameter Ø (mm)	Art. no.
in cast iron	<b>Compatibility:</b> For lifting station <i>Aqualift F XL</i> <b>Inclusive:</b> DN 80 flange according to DIN 2501, gate closure valve including closure wheel	DN 80	28 041
			
Y-Coupling		Outer diameter Ø (mm)	Art. no.
in cast iron	<b>Compatibility:</b> For lifting station <i>Aqualift F XL</i> <b>Inclusive:</b> DN 80 (OD 80 mm) flange according to DIN 2501	Ø 80	28 042
			
Sealing gasket		Outer diameter Ø (mm)	Art. no.
Sealing gasket (rubber)	<b>Compatibility:</b> Flange according to DIN 2501, for pressure pipe connections; for lifting station <i>Aqualift F XL</i>	DN 80	28 043
		DN 100	28 044
Bolt set M16	<b>Compatibility:</b> For Art. no. 28 043 and 28 044 <b>Inclusive:</b> 4 bolts, 4 nuts, 8 washers		28 078



## Pumping station *Aquapump XXL*

The powerful solution for extremely large amounts of water.

It couldn't be more powerful. The *Aquapump XXL* can even cope with large quantities of wastewater and is particularly suitable for commercial and industrial use thanks to its overall size. The pumping station has been designed as a modular system and can be variably combined with technical and chamber modules. The *Aquapump XXL* is groundwater-resistant to a depth of 3,000 mm.

The pumping station is available as a Mono or Duo system with particularly powerful pumps with an input power of up to 11 kW. A Comfort control unit can optionally be added.

### Flexible installation

Thanks to the modular design with a large selection of chamber modules and upper sections, the pumping station can be installed both underground and in a floor slab. Our standard engineering chambers are groundwater-resistant up to three metres and can be built up to a height of five metres.



### *Aquapump XXL*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM



[www.kessel.com/aquapump-xxl](http://www.kessel.com/aquapump-xxl)



# Engineering systems base *Aquapump XXL Mono / Duo*

Wet installation, for wastewater with or without sewage



CE EN 12050-1

Tank volume: 1800 liters  
Pump volume: max. 900 liters

**Polyethylene system base (corrugated chamber)**  
for underground installation, resistant to aggressive media. With Ø 160 mm inlet. For connection to Ø 1000 mm system chamber. Handles groundwater depths up to 3.000 mm.

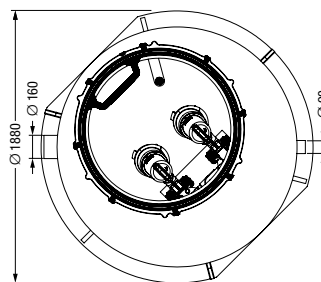
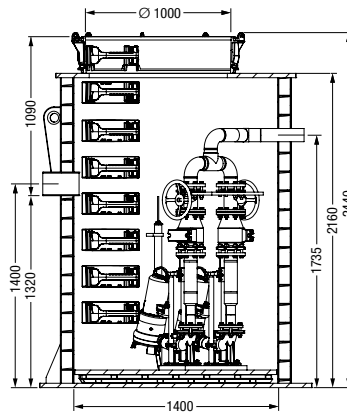
With **single or twin removable wastewater pump(s)**

- with macerator (STZ)
- with multi-vane impeller (GTF)
- single-channel impeller (GTK)

for wastewater with or without sewage (without ATEX requirements). With hydrostatic sensor for level measurement. Pressure pipe Ø 90 mm outside diameter (welded PE pipe is to be used for the pressure pipe), including backflow preventer and closure valve on pressure pipe side. Power cable length: 10 m (30 m on request).

**Control unit**  
With control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54).

- **Installation:** in combination with system chambers page 58
- **Accessories:** pages 69



## Mono version with one pump

STZ pump	Pumping volume in liters	Voltage	Art. no.
4400-S1*	820	400 V	874 30 35
5200-S1*	820	400 V	874 30 36
7500-S1*	820	400 V	874 30 37
11000-S1*	820	400 V	874 30 38

GTF pump	Pumping volume in liters	Voltage	Art. no.
5200-S1	900	400 V	874 30 43

GTK pump	Pumping volume in liters	Voltage	Art. no.
5200-S1	900	400 V	874 30 45

## Duo version with two pumps

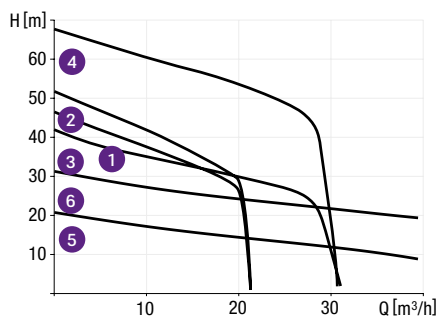
STZ pump	Pumping volume in liters	Voltage	Art. no.
4400-S1*	800	400 V	874 30 39
5200-S1*	800	400 V	874 30 40
7500-S1*	800	400 V	874 30 41
11000-S1*	800	400 V	874 30 42

GTF pump	Pumping volume in liters	Voltage	Art. no.
5200-S1	880	400 V	874 30 44

GTK pump	Pumping volume in liters	Voltage	Art. no.
5200-S1	880	400 V	874 30 46

\* ATEX version

## Pumping capacity



Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
1 STZ 4400-S1*	400 V	7.5 A	4.4 kW	3.7 kW	21.3 m³/h	46.7 m
2 STZ 5200-S1*	400 V	8.7 A	5.2 kW	4.4 kW	21.3 m³/h	52 m
3 STZ 7500-S1*	400 V	13 A	7.5 kW	6.4 kW	30.7 m³/h	42 m
4 STZ 11000-S1*	400 V	18.8 A	11 kW	9.5 kW	30.6 m³/h	68 m
5 GTF 5200-S1*	400 V	8.7 A	5.2 kW	4.4 kW	52.8 m³/h	21 m
6 GTK 5200-S1*	400 V	8.7 A	5.2 kW	4.4 kW	51.6 m³/h	31.6 m

\* Definition of S1-pumps see page 101

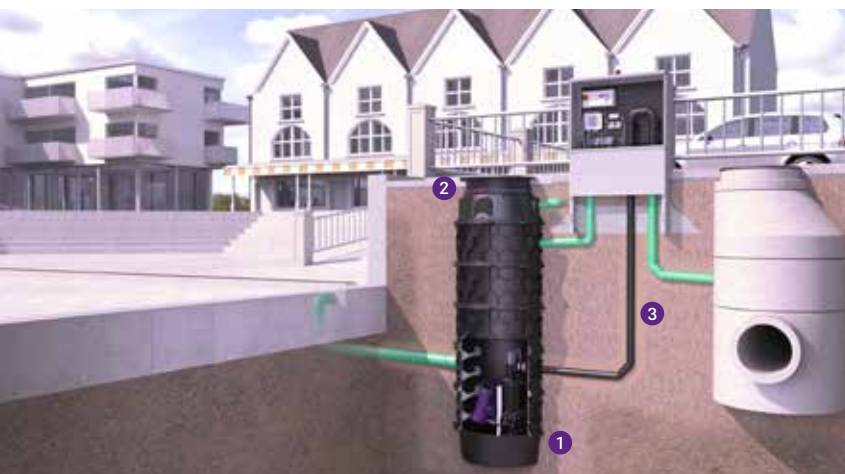


## Pumping station *Aquapump XL*

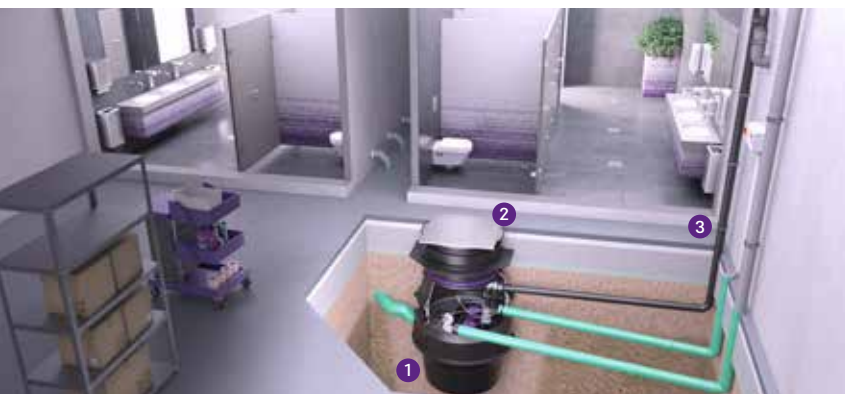
The powerful version for commercial, industrial and communal applications.

For the highest demands: the *Aquapump XL* can cope with large quantities of wastewater containing sewage and is therefore suitable not only for typical residential buildings but also particularly for commercial and industrial use. The pumping station has been designed as a modular system and can be combined with the appropriate KESSEL chamber system.

The *Aquapump XL* is available as a Mono or Duo system with pumps in different capacity classes. A wide selection of upper sections and covers ensure that the pumping station can be installed flexibly at different installation locations.



1 Pumping station 2 Engineering chamber 3 Pressure pipe



1 Pumping station 2 Engineering chamber 3 Pressure pipe

### *Aquapump XL*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aquapump-xl](http://www.kessel.com/aquapump-xl)



#### Maximum reliability

The intelligent control unit with integrated self-diagnosis system SDS and battery buffering continually monitors all electrical components and keeps an electronic operating log which can be read out.

#### Dry installation

easy, clean servicing

In comparison with wet installation, dry installation offers mainly hygienic advantages for maintenance and repair, since the pumping station has a separate collecting chamber. In addition, these dry installation systems do not require ATEX pumps.



#### Wet installation

available in ATEX version



The pumps can be operated in potentially explosive areas – this means at locations where explosive gases may occur due to wastewater and/or light liquids with sewage.



#### Flexible installation

Thanks to the modular design with a large selection of chamber modules and upper sections, the pumping station can be installed both in the ground and in a floor slab. The systems are groundwater-resistant to a depth of 3.000 mm.

Pumping stations 60 Hz/400 V, dry installation

Now also available in 60 Hz for more information contact us at [info@kessel.com](mailto:info@kessel.com)

If you want to use the *Aquapump XL* inside the building:

➤ Lifting station *Aqualift F XL*: page 14

# Engineering systems base *Aquapump XL Mono / Duo*

Wet installation, for wastewater with or without sewage



EN 12050-1 ATEX version

**Tank volume:** 680 liters

**Pump volume:** max. 310 liters

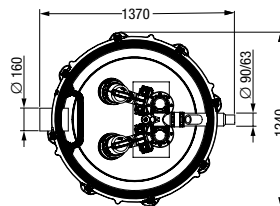
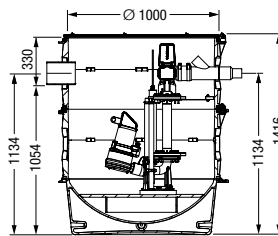
**Polyethylene system base** for underground installation, resistant to aggressive media. With  $\varnothing$  160 mm inlet. For connection to  $\varnothing$  1000 mm system chamber. Handles groundwater depths up to 3.000 mm.

With **single or twin removable wastewater pump(s)** with macerator for wastewater with or without sewage. With hydrostatic sensor for level measurement. Pressure pipe  $\varnothing$  63/90 mm outside diameter (welded PE pipe is to be used for the pressure pipe), including backflow preventer and closure valve on pressure pipe side. Power cable length: 10 m (30 m on request).

**Control unit**

With control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54).

- **Installation:** in combination with system chambers page 58
- **Accessories:** pages 69



**Mono version with one macerator pump**

STZ pump	Pumping volume in liters	Voltage	Art. no.
1300-S1	310	400 V	874 30 14
2500-S1	310	400 V	874 30 15
3700-S1	310	400 V	874 30 16

**Duo version with two macerator pumps**

STZ pump	Pumping volume in liters	Voltage	Art. no.
1300-S1	300	400 V	874 30 17
2500-S1	300	400 V	874 30 18
3700-S1	300	400 V	874 30 19

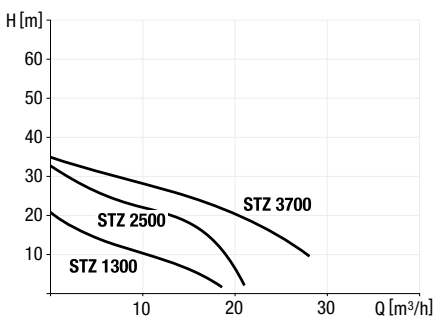
**Engineering systems base *Aquapump XL* in combination with system chamber  $\varnothing$  1000**

Access opening  $\varnothing$  600

Access opening  $\varnothing$  800



**Pumping capacity**



**Pump type**

Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
STZ 1300-S1	400 V	2.5 A	1.3 kW	0.9 kW	20 m³/h	21 m
STZ 2500-S1	400 V	4.4 A	2.5 kW	1.9 kW	21 m³/h	33 m
STZ 3700-S1	400 V	6.4 A	3.7 kW	3.1 kW	28 m³/h	35 m

\* Definition of S1-pumps see page 101



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# Engineering systems base *Aquapump XL Mono / Duo*

Wet installation, for wastewater with or without sewage



EN 12050-1 EN 12050-2

Tank volume: 680 liters  
 Pump volume: max. 350 liters

**Polyethylene system base** for underground installation, resistant to aggressive media. With Ø 160 mm inlet. For connection to Ø 1000 mm system chamber. Handles groundwater depths up to 3.000 mm.

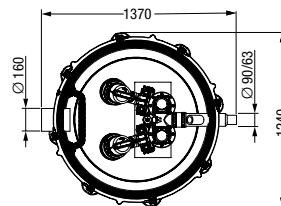
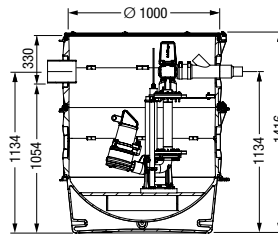
With **single or twin removable wastewater pump(s)**

- with multi-vane impeller (GTF)
- single-channel impeller (GTK)

for wastewater with or without sewage (without ATEX requirements). With float switch / hydrostatic sensor for level measurement. Pressure pipe Ø 63/90 mm outside diameter (welded PE pipe is to be used for the pressure pipe), including backflow preventer and closure valve on pressure pipe side. Power cable length: 10 m (30 m on request).

**Control unit**  
 With control unit (versions with hydrostatic sensor) with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54).

- **Installation:** in combination with system chambers page 58
- **Accessories:** pages 69



## Mono version with one pump

GTF pump	Pumping volume in liters	Voltage	Art. no.
1400-S1**	340	230 V	874 30 32
1400-S1	340	230 V	874 30 33
1400-S1	340	400 V	874 30 47
1600-S1	350	400 V	874 30 20
2600-S1	350	400 V	874 30 21
4000-S1	350	400 V	874 30 22

GTK pump	Pumping volume in liters	Voltage	Art. no.
1300-S1	350	400 V	874 30 26
2600-S1	350	400 V	874 30 27
3700-S1	350	400 V	874 30 28

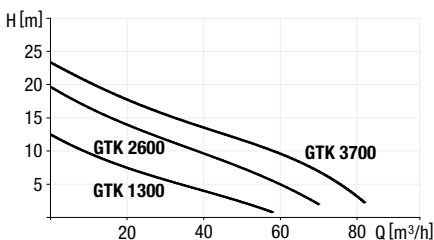
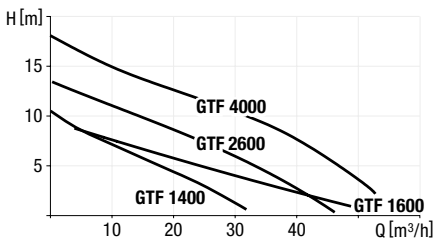
## Duo version with two pumps

GTF pump	Pumping volume in liters	Voltage	Art. no.
1400-S1	340	230 V	874 30 34
1400-S1	340	400 V	874 30 48
1600-S1	340	400 V	874 30 23
2600-S1	340	400 V	874 30 24
4000-S1	340	400 V	874 30 25

GTK pump	Pumping volume in liters	Voltage	Art. no.
1300-S1	340	400 V	874 30 29
2600-S1	340	400 V	874 30 30
3700-S1	340	400 V	874 30 31

\*\* Version with float switch

## Pumping capacity



Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
GTF 1400-S1*	230 V	6.5 A	1.5 kW	1.1 kW	31 m³/h	10.5 m
GTF 1600-S1*	400 V	2.9 A	1.6 kW	1.2 kW	49 m³/h	9.3 m
GTF 2600-S1*	400 V	4.5 A	2.6 kW	2.1 kW	46 m³/h	13.6 m
GTF 4000-S1*	400 V	6.6 A	4.0 kW	3.4 kW	53 m³/h	18 m

\* Definition of S1-pumps see page 97

Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
GTK 1300-S1*	400 V	2.5 A	1.3 kW	1.0 kW	57 m³/h	12.4 m
GTK 2600-S1*	400 V	4.9 A	2.6 kW	2.1 kW	71 m³/h	19.6 m
GTK 3700-S1*	400 V	6.5 A	3.7 kW	3.1 kW	82 m³/h	23.5 m

\* Definition of S1-pumps see page 101





# Engineering systems base *Aquapump XL Mono / Duo*

Wet installation, for wastewater without sewage and rainwater



CE EN 12050-2

**Tank volume:** 680 liters

**Pump volume:** approx. 100 liters

Base and inlet / outlet made of PE  
For installation in a concrete slab and for outdoor underground installation in combination with system chamber.

**Version:**

- For wastewater without sewage
- Pump station *Aquapump XL Mono / Duo* with welded on chamber ring
- With multi-vane impeller
- Inlet Ø 160 mm
- Pressure pipe connection Ø 40 mm
- Backflow preventer
- Closure valve on pressure pipe side
- Pressure sensor

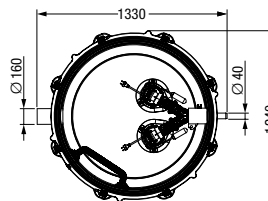
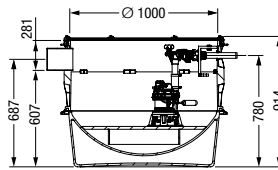
**Cable length:** 10 m (30 m on request)

**Installation:**

Handles groundwater depths up to 3.000 mm

➤ **Installation:** in combination with system chambers page 58

➤ **Accessories:** pages 69



**Mono version with one pump**

GTF pump	Pumping volume in liters	Voltage	Art. no.
----------	--------------------------	---------	----------

With float switch

600-S1	90	230 V	874 30 04
1200-S3	100	230 V	874 30 09

With SDS control unit and pneumatic level measurement (with pressure sensor)

600-S1	90	230 V	874 30 05
1200-S3	100	230 V	874 30 10

**Duo version with two pumps**

GTF pump	Pumping volume in liters	Voltage	Art. no.
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With SDS control unit and pneumatic level measurement (with pressure sensor)

600-S1	90	230 V	874 30 07
1200-S3	100	230 V	874 30 12

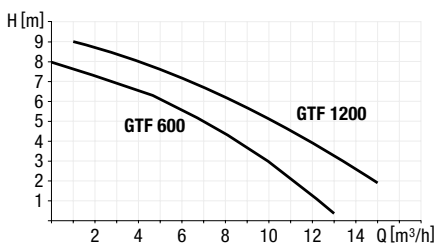
Engineering systems base *Aquapump XL* in combination with system chamber Ø 1000

Access opening Ø 600

Access opening Ø 800



**Pumping capacity**



**Pump type**

Current type	Voltage	Amperage	Power (P1/P2)	Rpm	Motor protection	Protection	Pumping capacity	Pumping height
GTF 600-S1*	230 V	2.9 A	650 W / 400 W	2.800 min <sup>-1</sup>	integrated	IP 68	12 m³/h	8 m
GTF 1200-S3-50%*	230 V	4.9 A	1180 W / 720 W	2.800 min <sup>-1</sup>	integrated	IP 68	15.5 m³/h	9 m

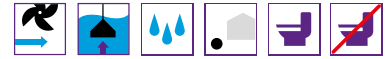
\* Definition of S1 and S3-pumps see page 101



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# Engineering system base *Aquapump XL Mono / Duo*

Dry installation, for wastewater with or without sewage



**CE** EN 12050-1

Tank volume: 335 liters

Pump volume: 160 liters

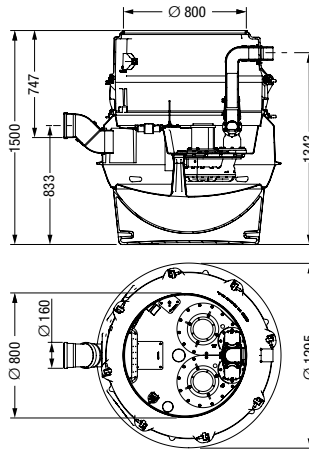
**Polyethylene system base** for underground installation, resistant to aggressive media. With  $\varnothing$  160 mm inlet. For connection to  $\varnothing$  800 mm upper sections. Handles groundwater depths up to 3.000 mm.

With **single or twin removable wastewater pump(s)** with multi-vane impeller for wastewater with or without sewage. Dry installation. With pneumatic level measurement. Pressure pipe  $\varnothing$  90 mm outside diameter (welded PE pipe is to be used for the pressure pipe), including backflow preventer and closure valve on pressure pipe side. Power cable length: 10 m.

**Control unit**

With control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54). 230 V-versions ready to plug in.

- **Installation:** in combination with system chambers page 58
- **Accessories:** pages 69
- **Note:** page 50 (60 Hz/400 V)



**Mono version with one pump**

SPF pump	Voltage	Art. no.
1400-S3	230 V	874 20 12
1500-S3	400 V	874 20 13
3000-S3	400 V	874 20 14
4500-S3	400 V	874 20 15

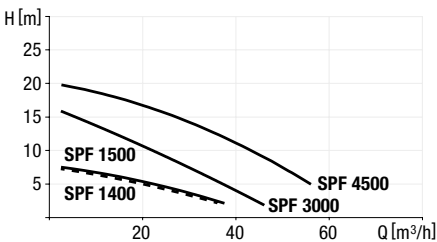
**Duo version with two pumps**

SPF pump	Voltage	Art. no.
1400-S3	230 V	874 20 16
1500-S3	400 V	874 20 17
3000-S3	400 V	874 20 18
4500-S3	400 V	874 20 19
1400-S1	230 V	874 20 20
1500-S1	400 V	874 20 21
3000-S1	400 V	874 20 22
4500-S1	400 V	874 20 23

Engineering systems base *Aquapump XL* in combination with an upper section  $\varnothing$  800



**Pumping capacity**



**Pump type**

Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
SPF 1400-S1/S3-100/50%*	230 V	7.3 A	1.6 kW	1.1 kW	38 m³/h	7 m
SPF 1500-S1/S3-100/50%*	400 V	2.7 A	1.4 kW	1.1 kW	40 m³/h	8 m
SPF 3000-S1/S3-100/50%*	400 V	5.4 A	3.2 kW	2.7 kW	47 m³/h	16 m
SPF 4500-S1/S3-100/50%*	400 V	7.5 A	4.5 kW	3.7 kW	55 m³/h	20 m

\* Definition of S1 and S3-pumps see page 101





# Engineering systems base *Aquapump XL Mono / Duo*

Dry installation, for wastewater with or without sewage



CE EN 12050-1

Tank volume: 335 liters

Pump volume: 160 liters

**Polyethylene system base** for underground installation, resistant to aggressive media.

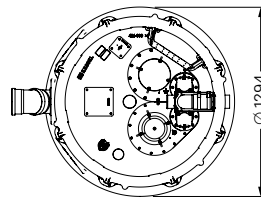
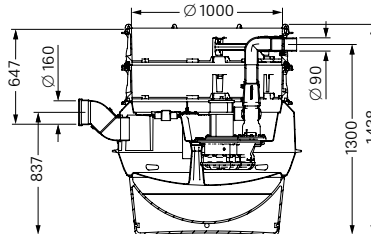
With Ø 160 mm inlet. For connection to Ø 1000 mm system chamber. Handles groundwater depths up to 3.000 mm.

With **single or twin removable wastewater pump(s)** with multi-vane impeller for wastewater with or without sewage. Dry installation. With pneumatic level measurement. Pressure pipe Ø 90 mm outside diameter (welded PE pipe is to be used for the pressure pipe), including backflow preventer and closure valve on pressure pipe side. Power cable length: 10 m.

**Control unit**

With control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54). 230 V-versions ready to plug in.

- **Installation:** in combination with system chambers page 58
- **Accessories:** pages 69
- **Note:** page 50 (60 Hz/400 V)



**Mono version with one pump**

SPF pump	Voltage	Art. no.
1400-S3	230 V	874 20 00
1500-S3	400 V	874 20 01
3000-S3	400 V	874 20 02
4500-S3	400 V	874 20 03

**Duo version with two pumps**

SPF pump	Voltage	Art. no.
1400-S3	230 V	874 20 04
1500-S3	400 V	874 20 05
3000-S3	400 V	874 20 06
4500-S3	400 V	874 20 07
1400-S1	230 V	874 20 08
1500-S1	400 V	874 20 09
3000-S1	400 V	874 20 10
4500-S1	400 V	874 20 11

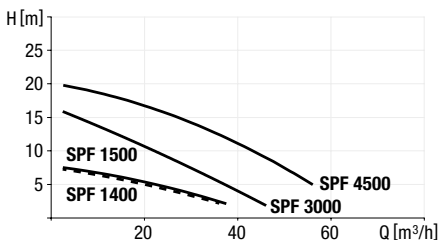
Engineering systems base *Aquapump XL* in combination with system chamber Ø 1000

Access opening Ø 600

Access opening Ø 800



**Pumping capacity**



**Pump type**

Pump type	Voltage	Amperage	Input Power (P1)	Power (P2)	Pumping capacity	Pumping height
SPF 1400-S1/S3-100/50%*	230 V	7.3 A	1.6 kW	1.1 kW	38 m³/h	7 m
SPF 1500-S1/S3-100/50%*	400 V	2.7 A	1.4 kW	1.1 kW	40 m³/h	8 m
SPF 3000-S1/S3-100/50%*	400 V	5.4 A	3.2 kW	2.7 kW	47 m³/h	16 m
SPF 4500-S1/S3-100/50%*	400 V	7.5 A	4.5 kW	3.7 kW	55 m³/h	20 m

\* Definition of S1 and S3-pumps see page 101



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## Pumping station *Aquapump XL Basic*



The economical solution for larger quantities of wastewater with sewage.

Best quality at a fair price: The *Aquapump XL Basic* pumping station for underground installation is the cost-effective solution for detached houses and apartment buildings to dispose of wastewater with sewage.

The model is available as a Mono and Duo system in installation depths of 1,900 mm and 2,350 mm. Always there: a control unit for the control of the pump or pumps – including an alarm function and pressure sensor.

### 100% waterproof and odour-tight

Like all KESSEL chambers, the tank of the *Aquapump XL Basic* pumping station is also absolutely waterproof and odour-tight. This is what we stand for with our guarantee that we have voluntarily extended to 20 years.

### Integrated backflow preventer

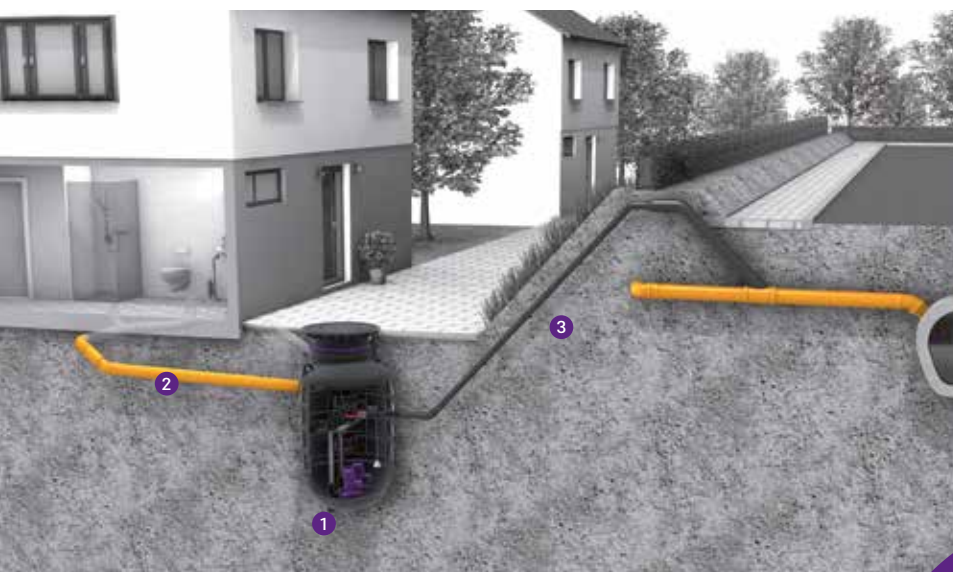
All variants are equipped with a backflow preventer as standard.

### Tool-free maintenance

The pump(s) is/are particularly easy to remove and maintain thanks to quick-release closures.

### Powerful and efficient.

The pumping station has either one or two type AP 501 pumps. The non-clogging multi-vane vortex impeller provides for added safety.



- 1 Pumping station *Aquapump XL Basic*
- 2 Inlet connection
- 3 Pressure pipe

### *Aquapump XL Basic*

Article numbers • Data sheets  
Accessories • Spareparts  
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[www.kessel.com/aquapump-xl-basic](http://www.kessel.com/aquapump-xl-basic)



# Pumping station *Aquapump XL Basic Mono/Duo*

Wet installation, for wastewater with or without sewage



The pumping station for wastewater with or without sewage is suitable for underground installation and is equipped with a backflow preventer for the pressure pipe. The PE tank is resistant to domestic wastewater and includes a pedestrian class polymer cover plate. The pump with multi-vane impeller ensures maximum operating reliability. Quick-release closures enable the integrated components to be removed easily. The components are pre-assembled for final assembly on site. Including openings for inlet, ventilation and cable duct.

**Type of wastewater:** wastewater with sewage

**Installation situation:** underground installation

**Backflow preventer:** integrated

**General characteristics:**

**Colour:** black

**Standard:** EN 12050-1

**Dimensions (LxW):** 1,260x1,220 mm

**Tank:**

**Inlet nominal size (DN/OD):** 90/100 mm

**Pumping volume:** 200 l

**Pressure pipe connection (DN/OD):** 50 mm/63 mm

**Mains frequency:** 50 Hz

**Operating mode:** S1

**Speed:** 2,900 U/min

**Type of fuse required (electrical protection):** C 16 A

**Max. temperature (permanent) of conveyed material:** 40 °C

**Impeller type:** Multi-vane impeller

**Length of mains cable for pump:** 10 m

**Protection class (pump):** IP 68

**Temperature monitoring:** integrated

**Comfort Control unit:**

**Self-diagnosis system (SDS):** yes

**Battery buffering:** yes

**Potential-free contact:** optional

**Protection class control unit:** IP 54

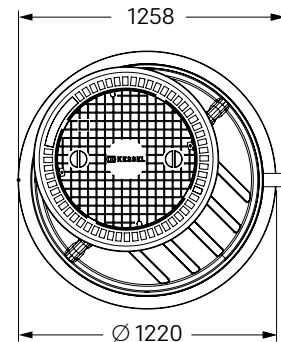
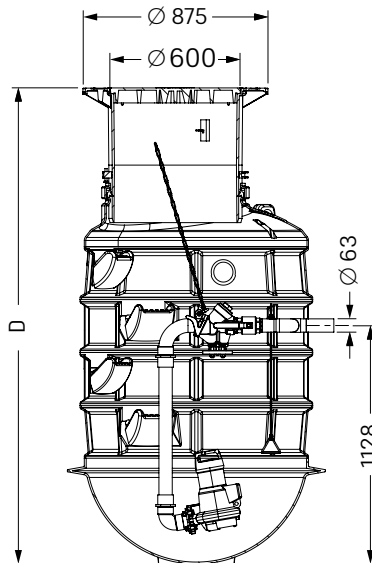
**Connection type:** Schuko (earthed contact) 2-pin

**Length of mains cable for control unit:** 1.45 m

**Type of level measurement:** pneumatic

**Level measurement instrument:** Pressure sensor

**Accessories:** pages 69



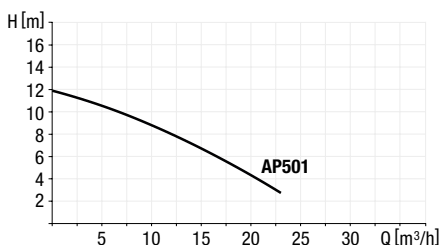
## Mono version with one pump

Shaft size in mm	Installation depths D in mm	Art. no.
1300	1400 - 1850	<b>879 711</b>
1800	1900 - 2350	<b>879 721</b>

## Duo version with two pumps

Shaft size in mm	Installation depths D in mm	Art. no.
1300	1400 - 1850	<b>878 711</b>
1800	1900 - 2350	<b>878 721</b>

## Pumping capacity



## Pump type

Pump type	Voltage	Amperage	Power (P1/P2)	Pumping capacity	Pumping height
AP 501	230 V	6.0 A	1.25 kW / 0.75 kW	6,3 m³/h	12 m

## Engineering system chamber Ø 1000 with access opening Ø 600

for combination with engineering system base *Aquapump XL*

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

**Installation:** For underground installation; handles groundwater depths up to 3.000 mm

**Modular design comprising:**

- Chamber rings with access steps fitted
- With telescopic height adjustable upper section
- Round cover made of cast iron
- Includes all sealing gaskets and wedge connectors required for installation

**Delivery:** As individual elements

**Remark:** Covers surface water tight

**Note:** Additional installation depths (on request)



Installation depth D in mm	Class A/B	Class D
	Art. no.	Art. no.
D1: 380 - 629*	874 00 00	874 00 01
D2: 630 - 879*	874 00 06	874 00 07
D3: 880 - 1129*	874 00 12	874 00 13
D4: 1130 - 1379	874 00 18	874 00 19
D5: 1380 - 1629	874 00 24	874 00 25
D6: 1630 - 1879	874 00 30	874 00 31
D7: 1880 - 2129	874 00 36	874 00 37
D8: 2130 - 2379	874 00 42	874 00 43
D9: 2380 - 2629	874 00 48	874 00 49
D10: 2630 - 2879	874 00 54	874 00 55
D11: 2880 - 3129	874 00 60	874 00 61
D12: 3130 - 3379**	874 00 66	874 00 67
D13: 3380 - 3629**	874 00 72	874 00 73
D14: 3630 - 3879**	874 00 78	874 00 79
D15: 3880 - 4129**	874 00 84	874 00 85

\* Installation depth D 1 - D 3 only in combination with pumping station Wet installation

\*\* Installation depth D 12 -15 pay attention to maximum installation depth 5.000 mm in combination with engineering system base

## Engineering system chamber Ø 1000 with access opening Ø 800

for combination with engineering system base *Aquapump XL*

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

**Installation:** For installation in the concrete slab; handles groundwater depths up to 3.000 mm

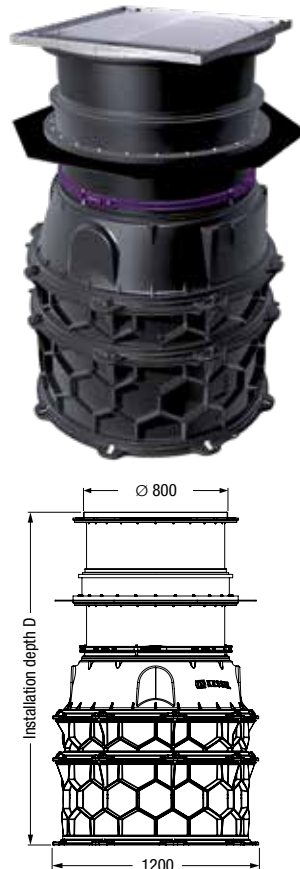
**Modular design comprising:**

- For waterproof concrete with flange and counter flange
- Chamber rings with access steps fitted
- With telescopic height adjustable upper section
- Square cover made of stainless steel, class A/L 15 or round cover in class K 3
- Includes all sealing gaskets and wedge connectors required for installation

**Delivery:** As individual elements

**Remark:** Covers surface water tight

**Note:** Additional installation depths, upper sections and covers class B/D (on request)



### Cover tileable, square

Installation depth D in mm	Art. no.
668 - 917	874 00 03
918 - 1167	874 00 09
1168 - 1417	874 00 15
1418 - 1667	874 00 21
1668 - 1917	874 00 27

### Cover not tileable, square, anti-slip

Installation depth D in mm	Art. no.
653 - 902	874 00 05
903 - 1152	874 00 11
1153 - 1402	874 00 17
1403 - 1652	874 00 23
1653 - 1902	874 00 29

### Cover not tileable, round

Installation depth D in mm	Art. no.
638 - 887	874 02 22
888 - 1137	874 02 23
1138 - 1387	874 02 24
1388 - 1637	874 02 25
1638 - 1887	874 02 26

# Engineering system chamber Ø 1000 with access opening Ø 800

for combination with engineering system base *Aquapump XL*

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

**Installation:** For underground installation; handles groundwater depths up to 3.000 mm

**Modular design comprising:**

- Chamber rings with access steps fitted
- With telescopic height adjustable upper section
- Covers made of stainless steel
- Includes all sealing gaskets and wedge connectors required for installation

**Delivery:** As individual elements

**Remark:** Covers surface water tight

**Note:** Additional installation depths, upper sections and covers class B / D (on request)



Illustration shows Art. no. 874 01 43



Illustration shows Art. no. 874 00 20

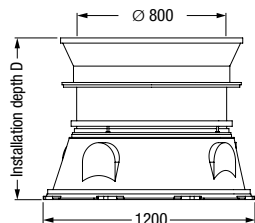


Illustration shows Art. no. 874 01 58

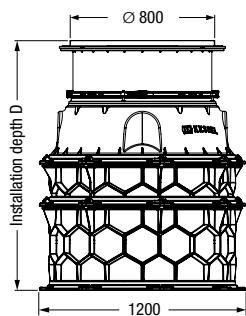


Illustration shows Art. no. 874 00 02

## Round cover

Installation depth D in mm Art. no.

### Class K 3

D1:	375 - 624	874 01 22
D2:	625 - 874	874 01 23
D3:	875 - 1124	874 01 24
D4:	1125 - 1374	874 01 25
D5:	1375 - 1624	874 01 26
D6:	1625 - 1874	874 01 27
D7:	1875 - 2124	874 01 28
D8:	2125 - 2374	874 01 29
D9:	2375 - 2624	874 01 30
D10:	2625 - 2874	874 01 31
D11:	2875 - 3124	874 01 32
D12:	3125 - 3374**	874 01 33
D13:	3375 - 3624**	874 01 34
D14:	3625 - 3874**	874 01 35
D15:	3875 - 4124**	874 01 36

## Square cover

Installation depth D in mm Art. no.

### Class B

D1:	620 - 869	874 01 41
D2:	870 - 1119	874 01 42
D3:	1120 - 1369	874 01 43

### Class D

D1:	620 - 869	874 01 58
D2:	870 - 1119	874 01 59
D3:	1120 - 1369	874 01 60

\*\* Installation depth D 12 -15 pay attention to maximum installation depth 5.000 mm in combination with engineering system base

## Square cover

Installation depth D in mm Art. no.

### Class A/L 15, not tileable, anti-slip

D1:	396 - 645	874 00 04
D2:	646 - 895	874 00 10
D3:	896 - 1145	874 00 16
D4:	1146 - 1395	874 00 22
D5:	1396 - 1645	874 00 28
D6:	1646 - 1895	874 00 34
D7:	1896 - 2145	874 00 40
D8:	2146 - 2395	874 00 46
D9:	2396 - 2645	874 00 52
D10:	2646 - 2895	874 00 58
D11:	2896 - 3145	874 00 64
D12:	3146 - 3395**	874 00 70
D13:	3396 - 3645**	874 00 76
D14:	3646 - 3895**	874 00 82
D15:	3896 - 4145**	874 00 88

### Class A/L 15, tileable

D1:	411 - 660	874 00 02
D2:	661 - 910	874 00 08
D3:	911 - 1160	874 00 14
D4:	1161 - 1410	874 00 20
D5:	1411 - 1660	874 00 26
D6:	1661 - 1910	874 00 32
D7:	1911 - 2160	874 00 38
D8:	2161 - 2410	874 00 44
D9:	2411 - 2660	874 00 50
D10:	2661 - 2910	874 00 56
D11:	2911 - 3160	874 00 62
D12:	3161 - 3410**	874 00 68
D13:	3411 - 3660**	874 00 74
D14:	3661 - 3910**	874 00 80
D15:	3911 - 4160**	874 00 86

\*\* Installation depth D 12 -15 pay attention to maximum installation depth 5.000 mm in combination with engineering system base

## Upper section Ø 800

Made of polymer / stainless steel

**Compatibility:**

For use as upper section for the engineering system base *Aquapump XL Mono / Duo* for the version with minimum installation depth page 146

**Version:**

with / without waterproof flange

**square, tileable, without waterproof flange**

Installation depth D in mm (min./max.)

65 - 314

Covers

Class A/L 15

Art. no.

874 01 75



**square, tileable, with waterproof flange**

282 - 531

Class A/L 15

874 01 76



**square, not tileable, without waterproof flange**

50 - 299

Class A/L 15

874 01 77



**square, not tileable, anti-slip, with waterproof flange**

267 - 516

Class A/L 15

874 01 78



**square, without waterproof flange**

274 - 523

Class B

874 01 79

274 - 523

Class D

874 01 80



**round, without waterproof flange**

65 - 314

Class K 3

874 01 81

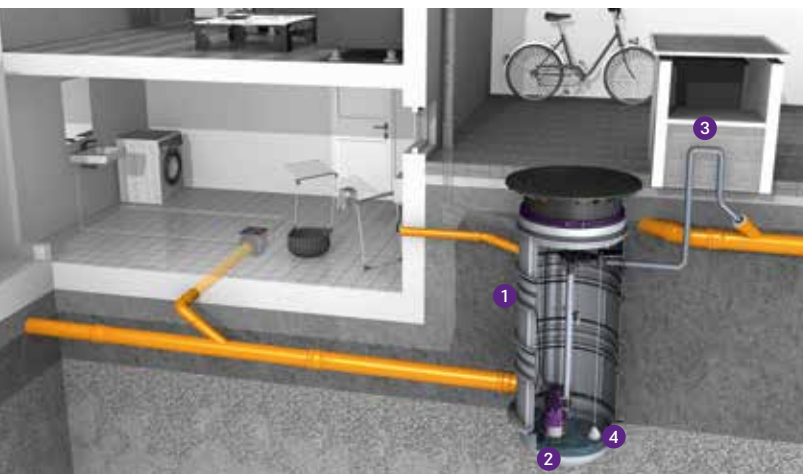




# Pumping station *Aquapump Medium*

The compact version for wastewater with or without sewage and rainwater.

The pumping station *Aquapump Medium* is used for the disposal of wastewater with or without sewage below the backwater level. The installation chamber, 600 mm in diameter, contains the pump STZ 1000 for grey and black water and is resistant to groundwater to a depth of 2.500 mm.



1 Pumping station 2 Pump 3 Pressure pipe 4 Pressure sensor



1 Pumping station 2 Pump 3 Pressure pipe

## *Aquapump Medium*

Article numbers • Data sheets  
Accessories • Spareparts  
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[www.kessel.com/aquapump-medium](http://www.kessel.com/aquapump-medium)



### Height-adjustable upper section

The upper section offers vertical adjustability by up to 500 mm. For simple adaptation to the ground level.

### Innovative pressure sensor

The pumping station is available with an innovative pressure sensor, which measures the level of wastewater precisely and reliably: as soon as the maximum water level is reached, the pump pumps the water into the sewage system via a pressure pipe.

### Maximum safety

The intelligent control unit (for systems with pressure sensor) with integrated self-diagnosis system SDS continually monitors all the electrical components.

### Convenient installation

The low weight of the chamber components, straightforward connection technology, high degree of pre-assembly (lower section of the chamber with pressure pipe), fixed connecting pieces for the inlet and pressure pipe and the bore holes with lip seals for the venting and conduit pipe all contribute to fast and easy installation.

### Permanent protection

The chamber system is absolutely waterproof and resistant to dirt deposits or aggressive media.

In addition, it reliably prevents root penetration. Simple pump maintenance work is particularly easy thanks to integrated guide pipes.

**If you want to use the *Aquapump Medium* inside the building:**

➤ [Lifting station \*Aqualift F\* and \*S\*: page 14/28](#)



## Pumping station *Aquapump Medium*

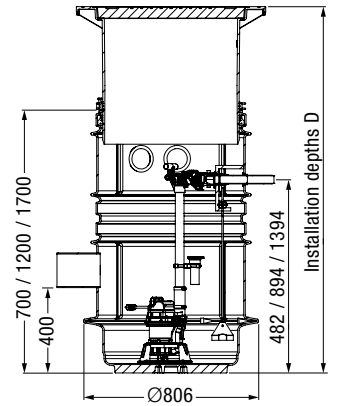
for wastewater with or without sewage



**CE** EN 12050 (max 2 WC connections)

**Polyethylene storage chamber** Ø 600 for underground installation, resistant to aggressive media. With upper section made of polymer, vertically adjustable, cover class A in polymer load up to 600 kg, class B in cast iron and concrete load up to 12.5 t and cover class D in cast iron load up to 40 t. Groundwater resistant. Inlet Ø 160 mm, connection for pipe gasket for Ø 110 according to EN 1401 and EN 12666-1 - each for ventilation or conduit pipe. Installation: Handles groundwater depths up to 2.500 mm

With **single or twin removable wastewater pump(s)** with macerator for wastewater with or without sewage. Available with float switch or pressure sensor. Pressure pipe Ø 40 mm (version B/D) or Ø 40/63 mm (version A) outside diameter for PVC glue connection, with integrated non-return flap. Power cable length: 10 m (Schuko)



### Control unit

Pressure sensor controlled versions with control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54).

**Note:** Consider frost free depth of pressure pipe. For installations without explosion proof requirements.

### Pumping capacity



Pump type	Voltage	Amperage	Power (P1/P2)	RPM	Motor protection	Protection	Pumping capacity	Pumping height
STZ 1000-S3-50%*	230 V	5.2 A	1080 W / 620 W	2.800 min <sup>-1</sup>	integrated	IP 68	11.5 m <sup>3</sup> /h	10 m

\* Definition of S3-pumps see page 101



### Single station with one pump and float switch

Cover class	STZ pump	Installation depths D in mm	Art. no.
A	1000	800 - 1250	827 710A
A	1000	1300 - 1750	827 720A
A	1000	1800 - 2250	827 730A
A	1000	2300 - 2750	827 740A
A	1000	2800 - 3250	827 750A
B	1000	800 - 1250	827 710B
B	1000	1300 - 1750	827 720B
B	1000	1800 - 2250	827 730B
B	1000	2300 - 2750	827 740B
B	1000	2800 - 3250	827 750B
D	1000	800 - 1250	827 710D
D	1000	1300 - 1750	827 720D
D	1000	1800 - 2250	827 730D
D	1000	2300 - 2750	827 740D
D	1000	2800 - 3250	827 750D

### Single station with one pump with SDS control unit, pressur sensor and optical probe

Cover class	STZ pump	Installation depths D in mm	Art. no.
A	1000	800 - 1250	827 711A
A	1000	1300 - 1750	827 721A
A	1000	1800 - 2250	827 731A
A	1000	2300 - 2750	827 741A
A	1000	2800 - 3250	827 751A
B	1000	800 - 1250	827 711B
B	1000	1300 - 1750	827 721B
B	1000	1800 - 2250	827 731B
B	1000	2300 - 2750	827 741B
B	1000	2800 - 3250	827 751B
D	1000	800 - 1250	827 711D
D	1000	1300 - 1750	827 721D
D	1000	1800 - 2250	827 731D
D	1000	2300 - 2750	827 741D
D	1000	2800 - 3250	827 751D

### Twin station with two pumps with SDS control unit, pressur sensor and optical probe

Cover class	STZ pump	Installation depths D in mm	Art. no.
A	1000	800 - 1250	826 711A
A	1000	1300 - 1750	826 721A
A	1000	1800 - 2250	826 731A
A	1000	2300 - 2750	826 741A
A	1000	2800 - 3250	826 751A
B	1000	800 - 1250	826 711B
B	1000	1300 - 1750	826 721B
B	1000	1800 - 2250	826 731B
B	1000	2300 - 2750	826 741B
B	1000	2800 - 3250	826 751B
D	1000	800 - 1250	826 711D
D	1000	1300 - 1750	826 721D
D	1000	1800 - 2250	826 731D
D	1000	2300 - 2750	826 741D
D	1000	2800 - 3250	826 751D

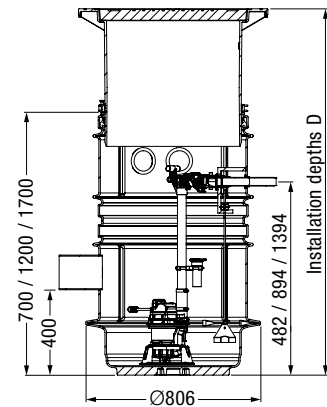
# Pumping station *Aquapump Medium*

for wastewater without sewage and rainwater



**CE** EN 12050-2

**Polyethylene storage chamber** Ø 600 for underground installation, resistant to aggressive media. With upper section made of polymer, vertically adjustable, cover class A in polymer load up to 600 kg, class B in cast iron and concrete load up to 12.5 t and cover class D in cast iron load up to 40 t. Groundwater resistant. Inlet Ø 110 mm (*GTF 600*) or Ø 160 mm (*GTF 1200*), connection for pipe gasket for Ø 110 according to EN 1401 and EN 12666-1 - each for ventilation or conduit pipe. Installation: Handles groundwater depths up to 2.500 mm



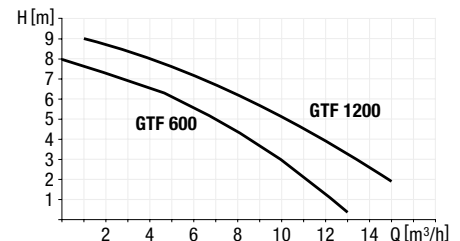
With **single or twin removable wastewater pump(s)** with multi-vane impeller for wastewater without sewage. Available with float switch or pneumatic level measurement. Pressure pipe Ø 40 mm outside diameter for PVC glue connection, with integrated non-return flap, 10 mm max solid size. Power cable length: 10 m (Schuko)

### Control unit

Pneumatic versions with control unit with self-diagnosis system (SDS), battery buffering and logbook function, control unit is splashproof (IP 54).

**Note:** Consider frost free depth of pressure pipe.

### Pumping capacity



Pump type	Current type	Voltage	Amperage	Power (P1/P2)	RPM	Motor protection	Protection	Pumping capacity	Pumping height
GTF 600-S1*	Alternating current	230 V	2.9 A	650 W / 400 W	2.800 min <sup>-1</sup>	integrated	IP 68	12 m <sup>3</sup> /h	8 m
GTF 1200-S3-50%*	Alternating current	230 V	4.9 A	1180 W / 720 W	2.800 min <sup>-1</sup>	integrated	IP 68	15.5 m <sup>3</sup> /h	9 m

\* Definition of S1 and S3-pumps see page 101



Additional installation depths on request

### Single station with one pump and float switch

Cover class	Pump	Installation depths D in mm	Art. no.
A/B	GTF 600	800 - 1250	825 810B
A/B	GTF 600	1300 - 1750	825 820B
A/B	GTF 600	1800 - 2250	825 830B
A/B	GTF 1200	800 - 1250	827 810B
A/B	GTF 1200	1300 - 1750	827 820B
A/B	GTF 1200	1800 - 2250	827 830B
D	GTF 600	800 - 1250	825 810D
D	GTF 600	1300 - 1750	825 820D
D	GTF 600	1800 - 2250	825 830D
D	GTF 1200	800 - 1250	827 810D
D	GTF 1200	1300 - 1750	827 820D
D	GTF 1200	1800 - 2250	827 830D

### Single station with one pump with SDS control unit, pneumatic level measurement and optical probe

Cover class	Pump	Installation depths D in mm	Art. no.
A/B	GTF 600	800 - 1250	825 811B
A/B	GTF 600	1300 - 1750	825 821B
A/B	GTF 600	1800 - 2250	825 831B
A/B	GTF 1200	800 - 1250	827 811B
A/B	GTF 1200	1300 - 1750	827 821B
A/B	GTF 1200	1800 - 2250	827 831B
D	GTF 600	800 - 1250	825 811D
D	GTF 600	1300 - 1750	825 821D
D	GTF 600	1800 - 2250	825 831D
D	GTF 1200	800 - 1250	827 811D
D	GTF 1200	1300 - 1750	827 821D
D	GTF 1200	1800 - 2250	827 831D

### Twin station with two pumps with SDS control unit, pneumatic level measurement and optical probe

Cover class	Pump	Installation depths D in mm	Art. no.
A/B	GTF 600	800 - 1250	824 811B
A/B	GTF 600	1300 - 1750	824 821B
A/B	GTF 600	1800 - 2250	824 831B
A/B	GTF 1200	800 - 1250	826 811B
A/B	GTF 1200	1300 - 1750	826 821B
A/B	GTF 1200	1800 - 2250	826 831B
D	GTF 600	800 - 1250	824 811D
D	GTF 600	1300 - 1750	824 821D
D	GTF 600	1800 - 2250	824 831D
D	GTF 1200	800 - 1250	826 811D
D	GTF 1200	1300 - 1750	826 821D
D	GTF 1200	1800 - 2250	826 831D

## Pumping station *Aquapump Small*

The economic version for wastewater with or without sewage.

The pumping station *Aquapump Small* makes looking for an economic alternative child's play as far as the disposal of wastewater with or without sewage outside buildings is concerned. It provides cutting-edge technology at an unbeatable price, housed in a sturdy installation chamber.

The pumping station *Aquapump Small* is available either as a Mono or Duo system. It is equipped with a float switch and a control unit (Tronic version).

### 100 % waterproof and odour-tight

Like all KESSEL installation chambers, the tank of the pumping station *Aquapump Small* is absolutely waterproof and odour-tight and is covered by our guarantee, which we have voluntarily extended to 20 years.

### Suspended pump(s)

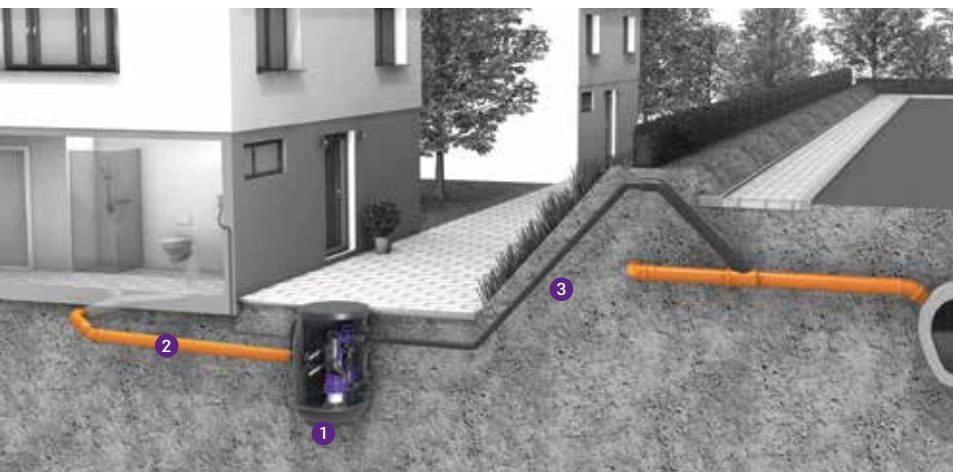
The pumping station has either one or two freely suspended pumps of the type STF 1300. Noise levels during operation are reduced by decoupling from the tank body.

### Tool-free maintenance

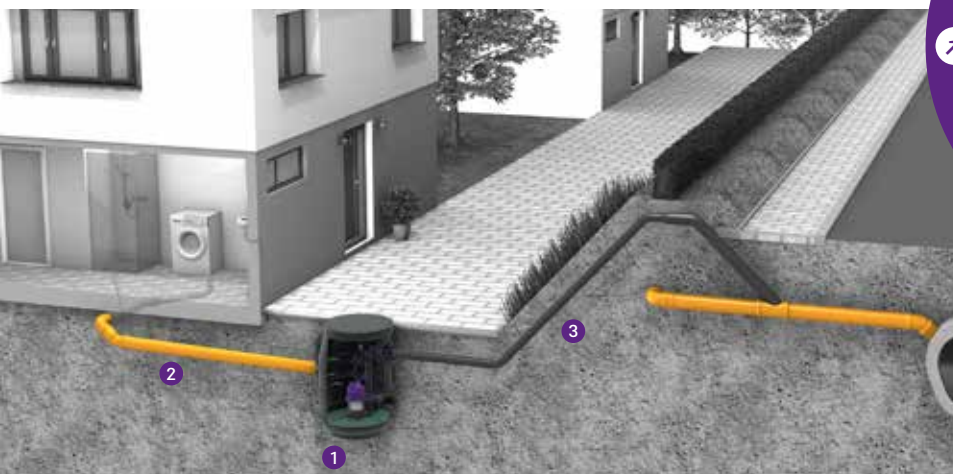
The pump can be removed and serviced very easily thanks to the quick-release closures.

### Variable upper section

The optional upper section is inclinable and height adjustable from 140 to 440 mm.



1 Pumping station 2 Inlet connection 3 Pressure pipe



1 Pumping station 2 Inlet connection 3 Pressure pipe

### *Aquapump Small*

Article numbers • Data sheets  
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[www.kessel.com/aquapump-small](http://www.kessel.com/aquapump-small)



If you want to use the *Aquapump Small* inside a building:

➤ Lifting station *Aqualift F Basic*: page 22

# Pumping station *Aquapump Small*

for wastewater with or without sewage

CE EN 12050-1

### Pump volume:

25 liters (Mono) / 60 liters (Tronic / Duo)

**Polyethylene storage chamber** for underground installation (installation depth max. 440 mm), drilling surfaces on three sides for inlet  $\varnothing$  110/160 mm, pipe gasket and ventilation. With polymer cover, screwed, load class 300 kg.

Float switch controlled **single or twin removable wastewater pump(s)** with multi-vane impeller for wastewater with or without sewage (open channel passage 40 mm). Pump is rated submersible (IP 68). Pressure pipe connection  $\varnothing$  50/63 mm with integrated non-return flap.

### Control unit

Tronic versions with Basic control unit with self-diagnosis system (SDS), battery buffering, control unit is splash proof (IP 54).

### Note:

- A ventilation pipe must be provided for on site.
- Consider frost free depth of pressure pipe.
- For installations without explosion proof requirements.

➔ **Accessories:** pages 69



Illustration shows Mono version Art. no. 829 710



Illustration shows Duo version Art. no. 828 711

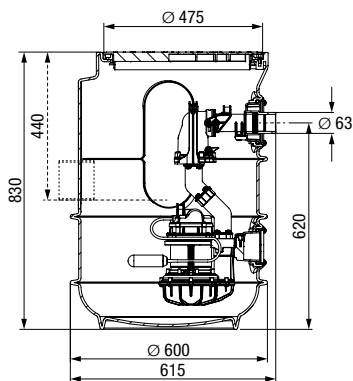


Illustration shows Mono version Art. no. 829 710

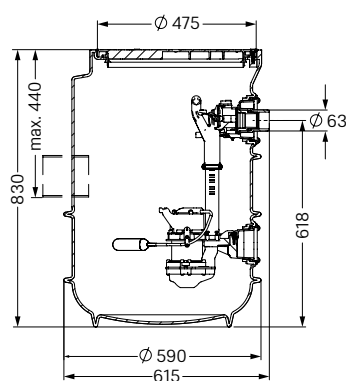


Illustration shows Mono version Art. no. 829 810

Pump type	Voltage	Amperage	Power (P1/P2)	RPM	Pumping capacity	Pumping height
STF 1300-S3-50%*	230 V ~ 50 Hz	6.0 A	1.3 kW / 0.8 kW	2.650 min <sup>-1</sup>	21 m <sup>3</sup> /h	max. 10 m
GTF 600-S1*	230 V ~ 50 Hz	2.9 A	0.65 kW / 0.4 kW	2.750 min <sup>-1</sup>	12 m <sup>3</sup> /h	max. 8 m
GTF 1250-S3*	230 V ~ 50 Hz	5.4 A	1.3 kW / 0.8 kW	2.700 min <sup>-1</sup>	20 m <sup>3</sup> /h	max. 11 m

\* Definition of S1 and S3-pumps see page 101



## With or without sewage

### Mono version with one pump

STF pump	Level measurement	Art. no.
----------	-------------------	----------

#### Without control unit

1300-S3	float switch	829 710
---------	--------------	---------

#### With control unit

1300-S3	float switch	829 711
---------	--------------	---------

### Duo version with two pumps

STF pump	Level measurement	Art. no.
----------	-------------------	----------

#### With control unit

1300-S3	float switch	828 711
---------	--------------	---------

## Without sewage and rainwater

### Mono version with one pump

GTF pump	Level measurement	Art. no.
----------	-------------------	----------

#### Without control unit

600-S1	float switch	829 810
--------	--------------	---------

1250-S3	float switch	829 850
---------	--------------	---------

#### With control unit

600-S1	float switch	829 811
--------	--------------	---------

1250-S3	float switch	829 851
---------	--------------	---------

### Duo version with two pumps

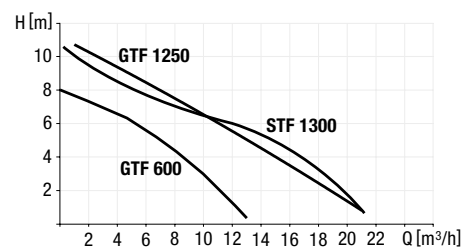
GTF pump	Level measurement	Art. no.
----------	-------------------	----------

#### With control unit

600-S1	float switch	828 811
--------	--------------	---------

1250-S3	float switch	828 851
---------	--------------	---------

## Pumping capacity





## Pumping station *Aquapump Retrofit*

Submersible pumps for collecting tanks.

Permanently dry: if a permanent solution is required, existing collecting tanks provided by the customer can be retrofitted with a pumping station for stationary use.



### *Aquapump Retrofit*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM



[www.kessel.com/aquapump-retrofit](http://www.kessel.com/aquapump-retrofit)



### **Pumps**

The pumping station has either one or two (mostly freely suspended) pumps of the types STZ, GTF and GTK from 600 to 4000 W.

### **Tool-free maintenance**

The pump can be removed and serviced very easily thanks to the quick-release closures.

# Pumping station *Aquapump Retrofit*

Wet installation, for installation in on-site collection tank



**Version contains:**

- Pump base, backwater flaps and gate closure valves
- Hydrostatic level sensor
- KESSEL Comfort 400 V control unit
- PE pressure pipe with Ø 63 mm (DN 50) and Ø 90 mm (DN 80)



**Pumping capacity:** max. ... m<sup>3</sup>/h

**Voltage:** 400 V ~ 50 Hz

**Cable length:** 10 m

**Note:** *Aquapump Retrofit* should be installed in a chamber with a minimum diameter of 1.000 mm

**Pump STZ**

- For wastewater with or without sewage
- Pump(s) with high performance macerating system for operational reliability
- Mono or Duo version
- ATEX Certification

**Pump GTF**

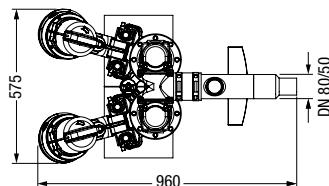
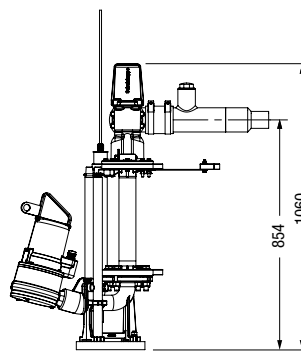
- For wastewater with or without sewage (check your local ATEX regulations)
- With multi-vane impeller
- Mono or Duo version

**Pump GTK**

- For wastewater with or without sewage (check your local ATEX regulations)
- Single-channel impeller pumps - high performance, ultra-low energy usage
- Duo version

**On request:**

- Vertical pressure outlet
- Variable pressure pipe height / lengths
- Custom pressure pipe sizes



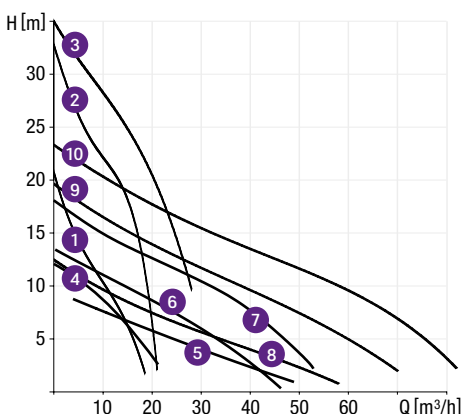
**Mono version with one pump**

Pump	Art. no.
<b>STZ</b>	
STZ 1300	<b>STZ1300-M*</b>
STZ 2500	<b>STZ2500-M*</b>
STZ 3700	<b>STZ3700-M*</b>
<b>GTF</b>	
GTF 1400	<b>GTF1400-M*</b>
GTF 1600	<b>GTF1600-M*</b>
GTF 2600	<b>GTF2600-M*</b>
GTF 4000	<b>GTF4000-M*</b>
<b>GTK</b>	
GTK 1300	<b>GTK1300-M*</b>
GTK 2600	<b>GTK2600-M*</b>
GTK 3700	<b>GTK3700-M*</b>

**Duo version with two pumps**

Pump	Art. no.
<b>STZ</b>	
STZ 1300-D	<b>874 40 10</b>
STZ 2500-D	<b>874 40 12</b>
STZ 3700-D	<b>874 40 14</b>
<b>GTF</b>	
GTF 1400-D	<b>874 40 20</b>
GTF 1600-D	<b>874 40 22</b>
GTF 2600-D	<b>874 40 24</b>
GTF 4000-D	<b>874 40 26</b>
<b>GTK</b>	
GTK 1300-D	<b>874 40 30</b>
GTK 2600-D	<b>874 40 32</b>
GTK 3700-D	<b>874 40 34</b>

**Pumping capacity**



Pump type	Voltage	Amperage	Input power (P1)	Power (P2)	Pumping capacity	Pumping height
1 STZ 1300-S1*	400 V	2.5 A	1.3 kW	0.9 kW	20 m <sup>3</sup> /h	21 m
2 STZ 2500-S1*	400 V	4.4 A	2.5 kW	1.9 kW	21 m <sup>3</sup> /h	33 m
3 STZ 3700-S1*	400 V	6.4 A	3.7 kW	3.1 kW	28 m <sup>3</sup> /h	35 m
4 GTF 1400-S1*	230 V	6.5 A	1.5 kW	1.1 kW	31 m <sup>3</sup> /h	10.5 m
5 GTF 1600-S1*	400 V	2.9 A	1.6 kW	1.2 kW	49 m <sup>3</sup> /h	9.3 m
6 GTF 2600-S1*	400 V	4.5 A	2.6 kW	2.1 kW	46 m <sup>3</sup> /h	13.6 m
7 GTF 4000-S1*	400 V	6.6 A	4.0 kW	3.4 kW	53 m <sup>3</sup> /h	18 m
8 GTK 1300-S1*	400 V	2.5 A	1.3 kW	1.0 kW	57 m <sup>3</sup> /h	12.4 m
9 GTK 2600-S1*	400 V	4.9 A	2.6 kW	2.1 kW	71 m <sup>3</sup> /h	19.6 m
GTK 3700-S1*	400 V	6.5 A	3.7 kW	3.1 kW	82 m <sup>3</sup> /h	23.5 m

\*Definition of S1-pump see page 101

# Pumping station *Aquapump Retrofit*

for rainwater or non-WC wastewater, for installation in on-site collection tank



Product: KESSEL EN 12050-2

**Version contains:**

- Two removable pumps
- *Aqualift Comfort* 230 V duo control unit
- Pressure sensor level control for conductive and non conductive liquids
- Pressure piping with non-return flap and closure lev
- Pressure connection: Ø 40 mm pressure pipe for PVC glue connection
- PE-HD fixing mount for installation and mounting of pumping system
- With *Comfort* control unit for wall mounting in dry, frost protected rooms, splash-proof, fully automate pump level control with optical and audible alarm system, detailed operation and warning status in multiple line digital display. Optional forwarding of alarm and fault message via GSM interface



Cable length: 10 m

**Pump GTF 1200 and GTF 1250**

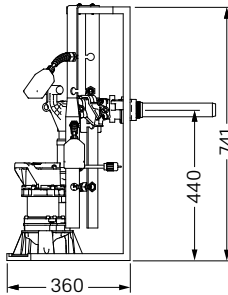
Fuses: 3 x 16 A  
 Protection: IP 68 (pump), 20mWS / 48h  
 Operating mode: S1



**Pump GTF 1000**

Motor protection: integrated  
 Protection: IP 68 (pumps), IP 54 (control unit)  
 Operating mode: S1

Illustration shows Pump GTF 600 with pressure sensor controlled



**Pump GTF 600**

Motor protection: integrated  
 Protection: IP 68 (pumps), IP 54 (control unit)  
 Operating mode: S1

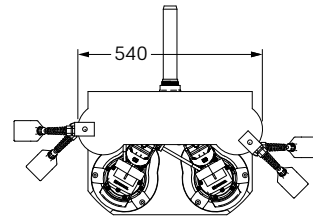


Illustration shows Pump GTF 600 with float switch

**Duo version with two pumps**

GTF pump	Art. no.
With pressure sensor controlled	
GTF 600	874 40 00*
GTF 1000	874 40 02*
GTF 1200	874 40 04*
GTF 1250	874 40 06*
With float switch	
GTF 600	874 40 01*
GTF 1000	874 40 03*
GTF 1200	874 40 05*
GTF 1250	874 40 07*

\*Custom made product (delivery time on request)

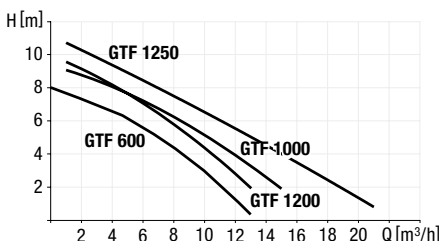
**Mono Tronic version with one pump**

STZ pump	Art. no.
With pressure sensor	
1000	AQUALI1000F_T
With float switch	
1000	AQUALI1000F_TS

**Duo Tronic version with two pumps**

STZ pump	Art. no.
With pressure sensor	
1000	AQUALI1000F_D
With float switch	
1000	AQUALI1000F_DS

**Pumping capacity**



**Pump type**

Pump type	Voltage	Amperage	Power (P1/P2)	RPM	Pumping capacity	Pumping height
GTF 600-S1*	230 V ~ 50 Hz	2.9 A	0.65 kW / 0.4 kW	2.750 min <sup>-1</sup>	12 m <sup>3</sup> /h	8 m
GTF 1000-S1*	230 V ~ 50 Hz	5.6 A	1.3 kW / 0.75 kW	2.800 min <sup>-1</sup>	13.5 m <sup>3</sup> /h	10 m
GTF 1200-S1*	230 V ~ 50 Hz	6.2 A	1.4 kW / 0.84 kW	2.650 min <sup>-1</sup>	15.5 m <sup>3</sup> /h	9 m
GTF 1250-S1*	230 V ~ 50 Hz	5.4 A	1.3 kW / 0.8 kW	2.700 min <sup>-1</sup>	20 m <sup>3</sup> /h	11 m

\* Definition of S1-pump see page 101



## Accessories

### Upper section

Art. no.

#### Upper section

**Compatibility:** For pumping station *Aquapump Basic*  
**Extension:** From 140 - 440 mm, height adjustable;  
 two can also be installed on top of each other



829 100

### Closure valves

Art. no.

#### Closure valve

**Compatibility:** For pumping station  
*Aquapump Basic Mono* version



829 200

#### Closure valve

**Compatibility:** For pumping station  
*Aquapump Basic Duo* version



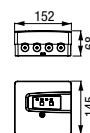
829 250

### Alarm unit

Art. no.

#### with electrode probe

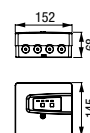
**Compatibility:** For pumping station *Aquapump Basic*,  
 engineering system base *Aquapump XL*  
**Function:** High water / flood alarm system;  
 for conductive liquids  
**Inclusive:** Visual and audible alarm warning, battery  
 back up, with Logbook, connection for remote alarm  
 speaks (Art. no. 20 162) or upgradable with potential  
 free contact.  
**Voltage:** 230 V ~ 50 Hz (IP 54)  
**Plug:** 2 pin grounded  
**Cable length:** 5 m (extendable up to 30 m)



20 222

#### with optical probe

**Compatibility:** For pumping station *Aquapump Basic*,  
 engineering system base *Aquapump XL*  
**Function:** High water / flood alarm system;  
 for conductive / non-conductive liquids  
**Inclusive:** Visual and audible alarm warning, battery  
 back up, with Logbook, connection for remote alarm  
 speaks (Art. no. 20 162) or upgradable with potential  
 free contact.  
**Voltage:** 230 V ~ 50 Hz (IP 54)  
**Plug:** 2 pin grounded  
**Cable length:** 5 m (extendable up to 30 m)



20 223

**Cable length:** 10 m (extendable up to 30 m)

20 224

#### Potential-free contact

**Compatibility:**  
 For warning devices Art. no. 20 222 and 20 223



80 074

## Accessories

### Extension section


			Art. no.
500 mm	<b>Compatibility:</b> Engineering system base backwater chamber <b>Inclusive:</b> 2 access steps, installed <b>Note:</b> Without gasket and connecting wedges		680 371
250 mm	<b>Compatibility:</b> Engineering system base backwater chamber <b>Inclusive:</b> 1 access step, installed <b>Note:</b> Without gasket and connecting wedges		680 370

### Gasket / Connection and attachment set



			Voltage	Art. no.
Cable piping gasket set	<b>Compatibility:</b> Control unit 230 V and 400 V		in the building 230 V	85 401
			in the building 400 V	85 402
			in the chamber 230 V	85 403
			in the chamber 400 V	85 404
Set of connecting wedges	<b>Compatibility:</b> Art. no. 680 371 and 680 370 <b>Set-content:</b> 10 pieces			680 373
Profiled gasket	<b>Compatibility:</b> Art. no. 680 371 and 680 370			680 125
Cable attachment set	<b>Compatibility:</b> Engineering systems base <b>Set-content:</b> 3 pieces of clamps			28 076

### Cable extensions

for extension from 20 m or 30 m (cable length delivered: 10 m, for 230 V)

	Mono version Pumping station <i>Aquapump XL</i> dry installation, pumping station <i>Aquapump Medium</i> Ø 600/1000	Duo version Pumping station <i>Aquapump XL</i> dry installation, pumping station <i>Aquapump Medium</i> Ø 600/1000		Art. no.
Cable extension for probe (10 m)	Extension to 20 m: 1×80 889 Extension to 30 m: 2×80 889	Extension to 20 m: 1×80 889 Extension to 30 m: 2×80 889		80 889
Cable extension for pump (10 m)	Extension to 20 m: 1×80 891 Extension to 30 m: 2×80 891	Extension to 20 m: 2×80 891 Extension to 30 m: 4×80 891		80 891

### Level sensor

			Art. no.
Level sensor with immersion pipe 288 mm	<b>Compatibility:</b> For <i>Aquapump XL</i> , for wastewater with or without sewage <b>Cable length:</b> 10 m		681 042
	<b>Cable length:</b> 30 m		681 043
Level sensor	<b>Compatibility:</b> For <i>Aquapump XL</i> , for wastewater without sewage <b>Cable length:</b> 10 m		681 044
	<b>Cable length:</b> 30 m		681 045

## Accessories

Safety		Art. no.	
<b>TeleControl telemetric system</b>	<b>Compatibility:</b> For connection to KESSEL Comfort control units 230 Volt and 400 Volt <b>Function:</b> Relaying of full text messages to up to three mobile phones <b>Inclusive:</b> With internal antenna (without SIM card)	28 792	
<b>Equipotential bonding rail</b>	<b>Compatibility:</b> For ATEX pumping stations Mono	28 088	
	<b>Compatibility:</b> For ATEX pumping stations Duo	28 089	
<b>Antenna booster with magnetic base</b>	<b>Compatibility:</b> For TeleControl telemetric system to improve the reception <b>Cable length:</b> 2.5 m	28 793	
<b>Extension cable</b>	<b>Compatibility:</b> For antenna booster <b>Cable length:</b> 2 m	28 794	
<b>Warning beacon</b>	<b>Function:</b> For the additional visual display of faults, for installation on the outdoor control cabinet, with switching unit for connection to the control unit	97 715	
<b>Installation set Thermostat / Hygrostat</b>	<b>Function:</b> As an additional module for installation in the outdoor kiosk to reduce condensation	97 713	
<b>Air compressor set</b>	<b>Function:</b> For use in combination with lifting station and pumping stations with pressure control: prevents soiling, avoids the formation of condensate in the pressure hose, makes operation of systems possible with pressure hose lengths > 10 m - 30 m <b>Inclusive:</b> T-piece connection, 20 m pressure hose	28 048	
<b>PE-pressure hose extension (per meter)</b>	<b>Compatibility:</b> For Art. no. 28 048	680 071	
<b>Optical probe</b>		Art. no.	
<b>Optical probe</b>	<b>Inclusive:</b> 3 adaptors <b>Cable length:</b> 5 m (Optional cable extension)	80 888	
<b>Pump removal chain</b>		Length in mm	
<b>to remove pumps (made of stainless steel)</b>	<b>Compatibility:</b> For pumping stations with wet installation <b>Inclusive:</b> Screw hooks, shackles	2	680 528
		3	680 529
		4	680 530
		5	680 531
<b>Junction box</b>		Art. no.	
<b>Junction box</b>	<b>Compatibility:</b> For extension of level probe	28 799	

## Accessories

### Outdoor control cabinet

for installation of control units, modems, heating element, warning beacon outside of buildings

	Height over ground level: 870 mm		Height over all in mm	Width / depth in mm	Art. no.
for control unit, heating, warning beacon			1740	460/320	97 716
for heating and pressure pipe			1740	590/320	97 714
for control unit, modem, heating, warning beacon			1740	785/320	97 723
for control unit, modem, heating, warning beacon and pressure pipe			1790	1115/320	97 724

**Note:**

- factory cut holes available on request: [info@kessel.com](mailto:info@kessel.com)
- if the Outdoor Control Cabinet is exposed to direct sunlight, it is recommended that an optional cooling system is installed

### Peltier cooler set

Peltier cooler set	Compatibility: For horizontal mounting on KESSEL outdoor control cabinets	Inclusive: Mains adapter, thermostat	Art. no.
			681 148

### Clamp connector

Clamp connector	Compatibility: For on site connection of pressure pipes	Outer diameter Ø (mm)	Art. no.
		DN 32 - 32	28 094
		DN 32 - 50	28 095
		DN 80 - 80	28 090
		DN 50 - 50	28 091
		DN 50 - 80	28 092



### Click adapter

Adapter set	Compatibility: Aquapump Small	Function: Optional set facilitating external pipe connection	Contain: Adapter with internal thread 2" and a fitting with external thread 2" and quick-connection ending for easy installation	Outer diameter Ø (mm)	Art. no.
					28 097



## Outdoor control cabinet

preassembled version; with factory-mounted system components; outdoor pillar cabinet

**Material:** Glass-fibre reinforced polyester

**Version includes:**

- standard cabinet with profiled surface
- open floor
- three-point locking with swivel handle
- with Euro lock cylinder
- door opening angle 180°

**Protection rating:** IP44

**Colour:** RAL 7035

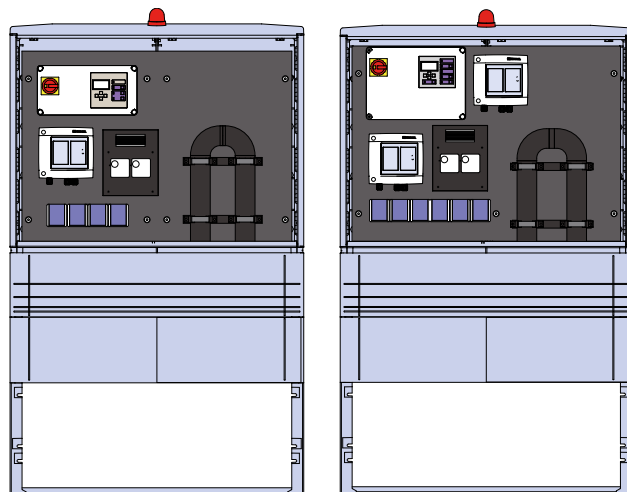
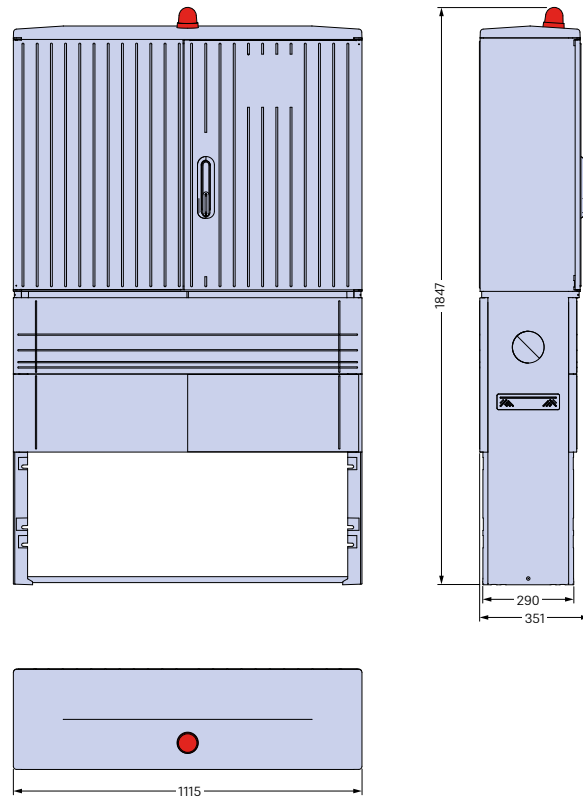


Illustration shows Example for Aqualift S/F

Illustration shows Example for Ecolift XL

## Submersible pumps

# *Aquadive GTK, KTP, GTF and STZ*

Pump - whenever and wherever you want.

Use of a permanently installed pump is not always possible or meaningful. Submersible pumps offer flexible solutions for private and commercial applications.



### Powerful

Submersible motor pumps are suitable for pumping larger quantities of clear water, rainwater and wastewater in mobile use. These can be used to pump out chambers, basements or swimming pools.

### Flexible use

Our absolutely corrosion-free submersible pump has a pressure pipe connection R1 1/4, either vertical or lateral. The vertical connection is used for deep and narrow containers, while the lateral outlet can be used in wider chambers / pits.

### Aquadive

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/aquadive](http://www.kessel.com/aquadive)



Submersible pumps  
Now also available in resistant version



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**Submersible pumps *Aquadive***  
for mobile or stationery use

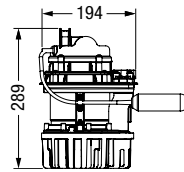
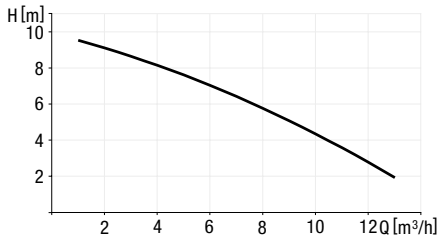


## Submersible pump *Aquadive GTF 1000 / GTF 1000 resistant* for wastewater without sewage



With/without float switch, without macerator,  
connection to pressure pipe 1 1/4 inch side / vertical  
**Cable length:** 10 m

### Pumping capacity



### GTF 1000

Pressure connection	Art. no.
Without float switch	
1 1/4 inch	28 760
With float switch	
1 1/4 inch	28 860

### GTF 1000 resistant

Pressure connection	Art. no.
Without float switch	
1 1/4 inch	28 760C
With float switch	
1 1/4 inch	28 860C

Pump type	Current type	Voltage	Current	Power (P1/P2)	Power consumption	RPM	Submersible depth	Motor protection	Particle size	Pumping capacity	Pumping height
GTF 1000-S3-30%*	Alternating current	230 V	5.6 A	1270 W / 730 W	1000 W	2.800 min <sup>-1</sup>	max. 10 m	integrated	max. 10 mm	14.5 m³/h	10 m
GTF 1000-S3-30% resistant*	Alternating current	230 V	5.6 A	1270 W / 730 W	1000 W	2.800 min <sup>-1</sup>	max. 10 m	integrated	max. 10 mm	14.5 m³/h	10 m

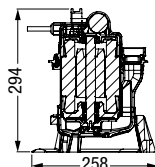
\* Definition of S3-pumps see page 101

## Submersible pump *Aquadive STZ 1000* for wastewater containing raw sewage



With / without float switch, with macerator,  
connection to pressure pipe 1 1/4 inch side / vertical  
**Cable length:** 10 m

### Pumping capacity



Pressure connection	Art. no.
Without float switch	
1 1/4 inch	28 779
With float switch	
1 1/4 inch	28 778

Pump type	Current type	Voltage	Current	Power (P1/P2)	Power consumption	RPM	Submersible depth	Motor protection	Pumping capacity	Pumping height
STZ 1000-S3-30%*	Alternating current	230 V	4.9 A	1080 W / 620 W	1000 W	2.800 min <sup>-1</sup>	max. 10 m	integrated	12 m³/h	10 m

\* Definition of S3-pumps see page 101

## Submersible pump *Aquadive GTF 500 / GTF 500 resistant* for wastewater without sewage

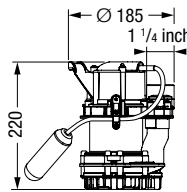


With / without float switch, with integrated low-intake, removable suction basket and convenient transport handle, connection to pressure pipe 1 1/4 inch vertical

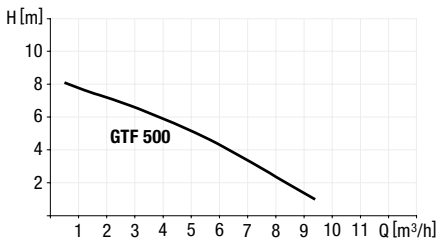
**Cable length:** 10 m

### *GTF 500 resistant:*

Resistant against aggressive wastewater containing salts, condensates and effluent from water softening systems.



### Pumping capacity



### *GTF 500*

Pressure connection	Art. no.
Without float switch	
1 1/4 inch	280 710
With float switch	
1 1/4 inch	280 810

### *GTF 500 resistant*

Pressure connection	Art. no.
Without float switch	
1 1/4 inch	280 750
With float switch	
1 1/4 inch	280 850

Pump type	Current type	Voltage	Current	Power (P1/P2)	RPM	Motor protection	Plug	Pumping capacity	Pumping height
GTF 500-S1*	Alternating current	230 V	2.7 A	600 W / 360 W	2.800 min <sup>-1</sup>	integrated	coded plug	10 m <sup>3</sup> /h	8 m
GTF 500-S1 resistant*	Alternating current	230 V	2.7 A	600 W / 360 W	2.800 min <sup>-1</sup>	integrated	Schuko	10 m <sup>3</sup> /h	8 m

\* Definition of S1-pumps see page 101

## Submersible pump *Aquadive KTP 300 / KTP 300 resistant* for wastewater without sewage

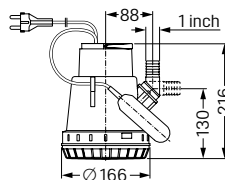
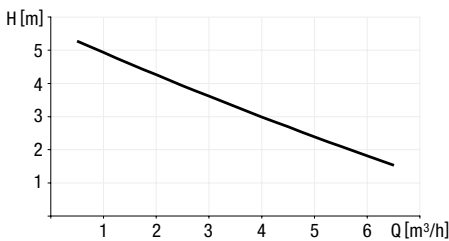


With/without float switch, with backwater flap, pivotable connection to pressure pipe 1 inch side / vertical

**Cable length:** 10 m

**Note:** Removable input basket - can pump down to a level of 8 mm.

### Pumping capacity



### *KTP 300*

Pressure connection	Art. no.
Without float switch	
1 inch	28 740
With float switch	
1 inch	28 840

### *KTP 300 resistant*

Pressure connection	Art. no.
Without float switch	
1 inch	28 740C
With float switch	
1 inch	28 840C



Pump type	Current type	Voltage	Current	Power (P1/P2)	RPM	Submersible depth	Motor protection	Plug	Pumping capacity	Pumping height
KTP 300-S1*	Alternating current	230 V	1.6 A	360 W / 210 W	2.800 min <sup>-1</sup>	max. 10 m	integrated	Schuko	8 m <sup>3</sup> /h	6 m
KTP 300-S1 resistant*	Alternating current	230 V	1.6 A	360 W / 210 W	2.800 min <sup>-1</sup>	max. 10 m	integrated	Schuko	8 m <sup>3</sup> /h	6 m

\* Definition of S1-pumps see page 101

# Warning and control units

## User-friendly solutions for all types of control tasks.

You can only get the best performance out of your device with the right settings. Whether 230 or 400 V, all parameters can be set easily with a suitable *Comfort* control unit. Our control units are delivered plug-in ready and can be connected without the help of an electrician (230 V units). The menu guidance is also very user-friendly – with a multi-line display in six languages. A remote signal generator or even a GSM modem, which sends messages in full text, can be connected for relaying messages.

### Maximum reliability

The intelligent control unit with integrated self-diagnosis system SDS and battery buffering continually monitors all electrical components and keeps an electronic operating log, which can be read out using separate software.

### Adjustable function parameters

The control units *230 V Comfort* and *400 V Comfort* offer convenient menu guidance on the display. This allows the function-relevant parameters and the operating hour counter to be set very easily.

### Countless customising possibilities

KESSEL offers a variety of probes for different requirements – also for products from other manufacturers – such as an ATEX version for potentially explosive areas. It also offers connection options for float switches, building management systems and conductance probes (only 230 V), submersible pressure switches, optical probes (only 230 V), level probes (on a terminal strip) or GSM interfaces for relaying full-text messages.

## 230 V Comfort control unit

### Mono-/Duo control unit with hydrostatic level sensor

#### Mono-/Duo control unit

Extremely versatile sensor system for measuring the level of wastewater with and without sewage. Including level probe for pneumatic level measurement and failure detection of the level probe via the control unit. The 10 m level probe cable can be extended to 30 m.

#### Note:

For greasy or hot wastewater, the use of a small compressor is **not** necessary.

#### Versions:

- with hydrostatic level sensor / without extra alarm probe
- with hydrostatic level sensor / float switch: with float switch for alarm level measurement, 10 m float switch cable (can be extended to 30 m)



Illustration shows Art. no. 28 731 P



Illustration shows Art. no. 28 731 PS

#### For Mono versions

Art. no.

With hydrostatic level sensor / without extra alarm probe

28 731 P

With hydrostatic level sensor / float switch

28 731 PS

#### For Duo versions

Art. no.

With hydrostatic level sensor / without extra alarm probe

28 746 P

With hydrostatic level sensor / float switch

28 746 PS

## 230 V Comfort control unit

Mono-/Duo control unit with pressure sensor

### Mono-/Duo control unit

Extremely versatile sensor system for measuring the level of wastewater with and without sewage. Including plunger for pneumatic level measurement. The 10 m pressure hose can be extended to 15 m (up to 30 m on request).

#### Note:

For greasy or hot wastewater use only in connection with the air compressor set (Article 28 048).

#### Versions:

- with pressure sensor / without extra alarm probe
- with pressure sensor/conductance probe: with separate conductance probe for alarm level measurement, 5 m cable (cannot be extended)
- with pressure sensor / float switch: with separate float switch for alarm level measurement, 10 m float switch cable (can be extended to 30 m)
- with pressure sensor / optical probe: with separate optical probe for alarm level measurement and failure detection of the optical probe via the control unit, 5 m cable for optical probe (can be extended to 30 m)



Illustration shows Art. no. 28 731 D



Illustration shows Art. no. 28 731 DL



Illustration shows Art. no. 28 731 DS



Illustration shows Art. no. 28 731 DO

### For Mono versions

Art. no.

With pressure sensor\* / without extra alarm probe

28 731 D

With pressure sensor\* / conductance probe

28 731 DL

With pressure sensor\* / float switch

28 731 DS

With pressure sensor\* / optical probe

28 731 DO

### For Duo versions

Art. no.

With pressure sensor\* / without extra alarm probe

28 746 D

With pressure sensor\* / conductance probe

28 746 DL

With pressure sensor\* / float switch

28 746 DS

With pressure sensor\* / optical probe

28 746 DO

\*air compressor available for pressure switches with over 10 m cable

## 230 V Comfort control unit

Mono-/Duo control unit with float switch

### Mono-/Duo control unit

Sensor system for level measurement for wastewater without sewage. With float switches to measure ON 1, ON 2 (only 28 746-S) and OFF levels. The 10 m float switch cable can be extended to 30 m.

#### Versions:

- with float switch / without extra alarm probe
- with float switch / float switch: with separate float switch for alarm level measurement



### For Mono versions

Art. no.

With float switch / without extra alarm probe

28 731 S

With float switch / float switch

28 731 SX

### For Duo versions

Art. no.

With float switch / without extra alarm probe

28 746 S

With float switch / float switch

28 746 SX

## 230 V Comfort control unit

Mono-/Duo control unit with conductance probe

### Mono-/Duo control unit

Sensor system for level measurement for wastewater without sewage. Including alarm level measurement. Not suitable for rainwater or non-diluted condensate. Including conductance probes for the measuring of ON 1, ON 2 (28 746-LLF / 28746-LLV only), OFF and ALARM level. Switching points cannot be adjusted freely. 5 m cable for conductance probe.

### Versions:

- with conductance probe/conductance probe: Level ON / OFF fixed, alarm level can be adjusted
- with conductance probe/conductance probe: ON 1 fixed / ON 2 variable / ALARM with fixed distance to ON 2
- with conductance probe/conductance probe: ON 1 variable / ON 2 fixed / ALARM with fixed distance to ON 2



Illustration shows  
Art. no. 28 746 LLF

Illustration shows  
Art. no. 28 731 LL

### For Mono versions

Art. no.

With conductance probe / conductance probe

28 731 LL

### For Duo versions

Art. no.

With conductance probe / conductance probe,  
ON 1 fixed/ON 2 variable

28 746 LLF

With conductance probe / conductance probe,  
ON 1 variable / ON 2 fixed

28 746 LLV

## 400 V Comfort control unit

Mono-/Duo control units

### Versions:

- Mono-/Duo control unit



Illustration shows  
Art. no. 28 755

### For Mono versions

Art. no. max. switching current (A) from - to

Without ATEX version

28 755	2.5 - 4.0
28 756	4.0 - 6.3
28 781	6.3 - 10.0

With ATEX version

28 759	2.5 - 4.0
28 761	4.0 - 6.3

### For Duo versions

Art. no. max. switching current (A) from - to

Without ATEX version

28 757	2×2.5 - 4.0
28 758	2×4.0 - 6.3
28 783	2×6.3 - 10.0

With ATEX version

28 762	2×2.5 - 4.0
28 763	2×4.0 - 6.3

## Accessories





### Hydrostatic level sensor

Art. no.

Level sensor	<b>Compatibility:</b> For <i>Aqualift F</i> lifting stations and pump stations; for use with Comfort 230 V and 400 V control units <b>Cable length:</b> 10 m		28 082
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### Level sensor

Art. no.

Level sensor with immersion pipe 433 mm	<b>Compatibility:</b> For lifting stations <i>Aqualift F XL</i> <b>Cable length:</b> 10 m <hr/> <b>Cable length:</b> 30 m		681 040
Level sensor with immersion pipe 288 mm	<b>Compatibility:</b> For lifting stations <i>Aqualift F Duo</i> and pump stations <i>Aquapump XL</i> <b>Cable length:</b> 10 m <hr/> <b>Cable length:</b> 30 m		681 042
Level sensor with immersion pipe 181 mm	<b>Compatibility:</b> For lifting stations <i>Aqualift F Mono</i> <b>Cable length:</b> 10 m <hr/> <b>Cable length:</b> 30 m		681 046
Level sensor	<b>Compatibility:</b> For pump stations <i>Aquapump XL</i> <b>Cable length:</b> 10 m <hr/> <b>Cable length:</b> 30 m		681 044
			681 045



### Float switch

Art. no.

Float switch	<b>Compatibility:</b> For use with Comfort 230 V and 400 V control units <b>Cable length:</b> 10 m		185-043
	<b>Compatibility:</b> For use with Comfort 230 V and 400 V control units <b>Cable length:</b> 20 m		185-045

### Safety




Art. no.

<i>TeleControl</i> telemetric system	<b>Compatibility:</b> For connection to KESSEL Comfort control units 230 Volt and 400 Volt <b>Function:</b> Relaying of full text messages to up to three mobile phones <b>Inclusive:</b> With internal antenna (without SIM card)		28 792
Antenna booster with magnetic base	<b>Compatibility:</b> For <i>TeleControl</i> telemetric system to improve the reception <b>Cable length:</b> 2.5 m		28 793
Extension cable	<b>Compatibility:</b> For antenna booster <b>Cable length:</b> 2 m		28 794


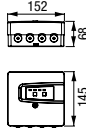

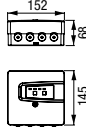


## Accessories

### Control unit accessories

			Art. no.
<b>Audible alarm</b>	<b>Compatibility:</b> For all warning- and control units <b>Cable length:</b> 20 m		20 162
<b>Potential-free contact</b>	<b>Compatibility:</b> For all control units 230 V; not for warning devices Art. no. 20 222 and 20 223		80 072
	<b>Compatibility:</b> For warning devices Art. no. 20 222 and 20 223		80 074

### Alarm unit

			Art. no.
<b>with electrode probe</b>	<b>Function:</b> For monitoring and reporting of flooding; for conductive liquids <b>Inclusive:</b> Visual and audible alarm warning, battery back up, with Logbook, connection for remote alarm speaks (Art. no. 20 162) or upgradable with potential free contact. <b>Voltage:</b> 230 V ~ 50 Hz (IP 54) <b>Plug:</b> 2 pin grounded <b>Cable length:</b> 5 m (extendable up to 30 m)	 	20 222
<b>with optical probe</b>	<b>Function:</b> For monitoring and reporting of flooding; for conductive / non-conductive liquids <b>Inclusive:</b> Visual and audible alarm warning, battery back up, with Logbook, connection for remote alarm speaks (Art. no. 20 162) or upgradable with potential free contact. <b>Voltage:</b> 230 V ~ 50 Hz (IP 54) <b>Plug:</b> 2 pin grounded <b>Cable length:</b> 5 m (extendable up to 30 m)	 	20 223
	<b>Cable length:</b> 10 m (extendable up to 30 m)		20 224

### Connector set

			Art. no.
<b>Connector set</b>	<b>Compatibility:</b> For connection to pump/probe cables for connection to the coded connectors from Art. no. 28 731 / 28 746		80 893

### USB housing socket

			Art. no.
<b>USB housing socket</b>	<b>Compatibility:</b> For routing the USB connection to the outside of the housing. For 230 Volt Comfort control units Mono/Duo		28 785

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## Accessories

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### Safety Art. no.

<b>Air compressor set</b>	<b>Function:</b> For use in combination with lifting station and pumping stations with pressure control: prevents soiling, avoids the formation of condensate in the pressure hose, makes operation of systems possible with pressure hose lengths > 10 m - 30 m <b>Inclusive:</b> T-piece connection, 20 m pressure hose		<b>28 048</b>
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<b>PE-pressure hose extension (per meter)</b>	<b>Compatibility:</b> For Art. no. 28 048		<b>680 071</b>
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### Cable extensions Art. no.

<b>for probe</b>	<b>Compatibility:</b> For warning and control units <b>Cable length:</b> 10 m		<b>80 889</b>
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<b>for pump</b>	<b>Compatibility:</b> For warning and control units <b>Cable length:</b> 10 m		<b>80 891</b>
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# Hybrid lifting station *Ecolift XL*

The powerful solution for commercial applications and multi-family homes.

Concentrated power: The *Ecolift XL* is a larger and more powerful version of the *Pumpfix*. This means that the hybrid lifting station is ideally suited to use in commercial buildings and apartment blocks. With a power rating of up to 4.5 kW, the *Ecolift XL* can also reliably pump the wastewater into a flooded sewer. In normal operation, the pump does not run at all and the wastewater simply drains to the sewer via gravity.

The *Ecolift XL* can be installed as a free-standing set-up, in an underground engineering chamber or in a concrete floor slab. It is available with various pump power ratings, a 230 V model and various 400 V models. The variants with one motor-driven closure system are suitable for grey water and those with two for black water.



1 Hybrid lifting station 2 Pressure pipe



1 Hybrid lifting station 2 Pressure pipe



1 Hybrid lifting station 2 Upper section for concrete floor slab



DGNB  
SUSTAINABILITY  
CHALLENGE  
2020  
INNOVATION  
FINALIST

### *Ecolift XL*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/ecolift-xl](http://www.kessel.com/ecolift-xl)



**Chamber covers**

Available in a stainless steel class A/L15 (tileable or not tileable) or in load classes B and D

**Additional inlet connection**

Three areas are available for easy on-site connection of conduit or ventilation pipes

**Honeycomb chamber design**

Provides additional chamber strength and prevents buoyancy. Additional inlets up to size Ø 160 mm can be installed on-site

**Integrated closure valve**

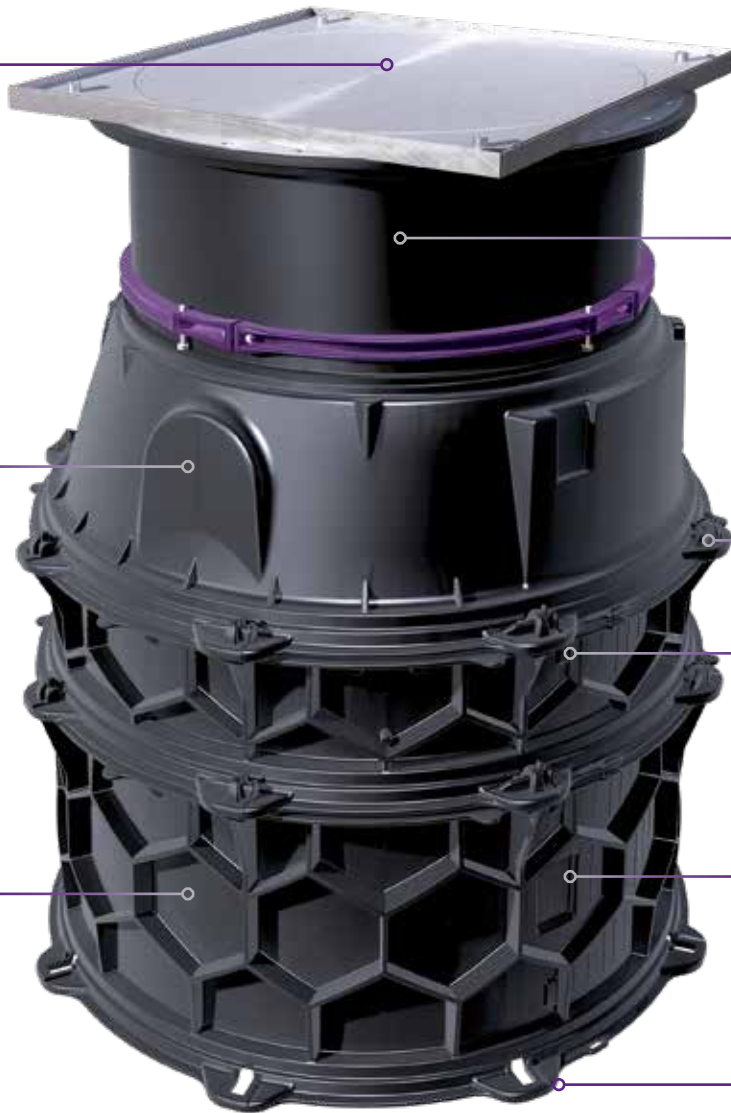
With safety lock to prevent accidental closure

**Safety / reliability**

Pneumatic level sensing and alarm sensor offer twice the reliability

**Sound / vibration decoupling**

All active components and the outlet pressure pipe are sound decoupled from the chamber



**Vertically adjustable upper section**

Available with Ø 600 mm or Ø 800 mm diameter with optional waterproofing connection flange

**Connection system**

The new chambers allows simple and fully watertight connections of the chamber components

**Modular system**

Sectional chamber components available in 250 mm and 500 mm heights

**Groundwater resistant**

For installation in up to 3000 mm of groundwater



**Pressure outlet connection**

Quick-release, no tools required

**Pressure outlet Ø 90 mm**

**Backwater flap closure system**

Available with up to two motorized backwater flaps for maximum backwater protection

# Hybrid lifting station *Ecolift L*

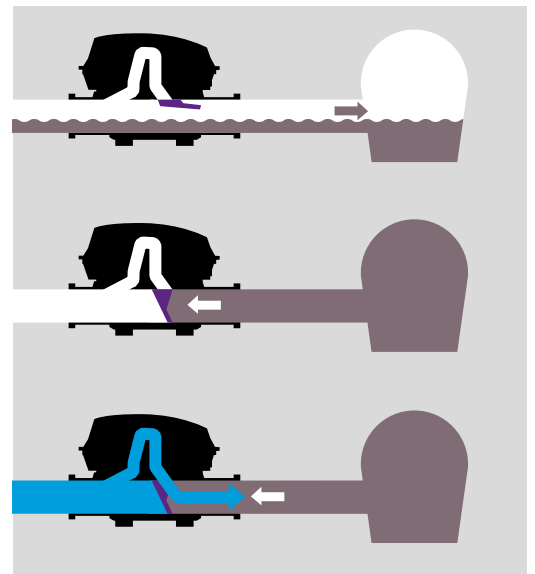
The intelligent alternative to a lifting station



The *Ecolift L* is the reliable drainage solution that pumps against backwater. Whether for the disposal of wastewater with sewage in a multi-dwelling building or the downstream of wastewater without sew downstream of the grease separator of a large kitchen: *The Ecolift L* does the job reliably. As in commercial use interruptions due to pump failure must be avoided, the system is also available as a Duo version with two pumps. That makes it the perfect backwater pumping station for larger projects.

### How it works

In normal operation it uses the natural slope to the sewage pipe. In the event of backwater from the sewage pipe, the pump is automatically switched on in order to reliably pump the building's wastewater into the flooded sewer by using a bypass.



1 Hybrid lifting station 2 Control unit



1 Hybrid lifting station 2 Grease separator

### *Ecolift L*

Article numbers • Data sheets  
Accessories • Spareparts  
Videos • Download • BIM

[www.kessel.com/ecolift-l](http://www.kessel.com/ecolift-l)





# Backwater pumping station *Pumpfix F*

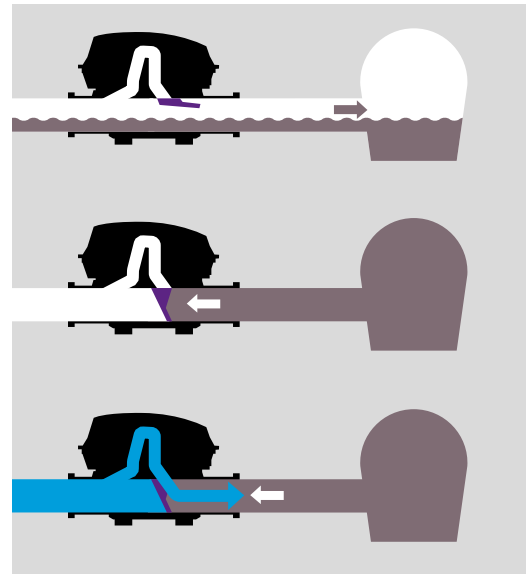
## The unique backwater solution.

More than a backwater valve: *Pumpfix F* is the only backwater valve that pumps against backwater. In normal operation, the backwater pumping station continuously disposes of the wastewater via the slope to the main sewer, making it energy-neutral. In the event of backwater, the backwater flap closes automatically to protect the building from flooding and any wastewater from the building is pumped into the flooded sewer via the integrated sewage. The integrated cutting system shreds solids meaning the *Pumpfix F* can be used with wastewater containing sewage. It can also drain basement staircases up to 5 m<sup>2</sup>.

*Pumpfix F* is available in two variants – for installation in an exposed drainage pipe and for floor slab installation, where you can choose between a black cover or tileable cover.

### Application

For flats under the backwater level with no access to a toilet above backwater level.



### How it works

*Pumpfix F* is the only backwater valve with hybrid function: In normal operation it uses the natural slope to the sewage pipe. In the event of backwater from the sewage pipe, the pump is automatically switched on in order to reliably pump the building's wastewater into the flooded sewer.



1 Backwater pumping station 2 Control unit 3 Sealing gasket set



1 Backwater pumping station 2 Control unit

**Pumpfix F**

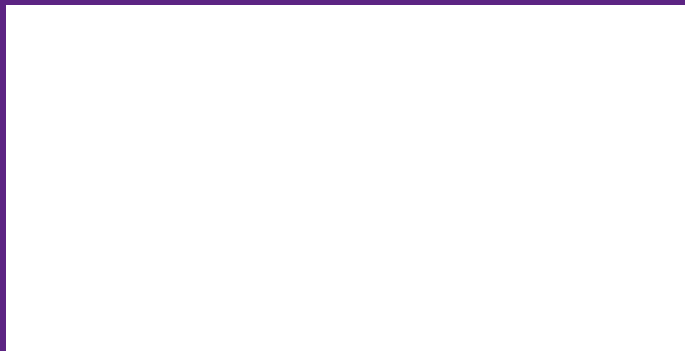
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[www.kessel.com/pumpfix-f](http://www.kessel.com/pumpfix-f)



**BIM**

files available at  
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