



# Product Catalogue 2024/25

Lifting units · Submersible pumps · Grease separators · Borehole pumps · Pumping stations  
Rainwater harvesting systems · Pumps for home and garden · Booster systems · Controls · Accessories

Publisher:  
Zehnder Pumpen GmbH  
Zwönitzer Straße 19  
08344 Grünhain-Beierfeld  
GERMANY  
Phone: +49 3774 52-100 / Fax: +49 3774 52-150  
Email: [info@zehnder-pumpen.de](mailto:info@zehnder-pumpen.de)

Our General Terms and Conditions of Delivery and Services,  
as well as our General Terms and Conditions of Purchase, can be viewed online:  
<https://www.zehnder-pumpen.de/AGB/>

As of 09/2024. Subject to change, errors, and typographical errors.

# Reliable solutions for water supply and disposal

Overcoming Challenges Together - with Zehnder Pumps



Dear Business Partners,

I am pleased to present to you the latest edition of our product catalogue. As the Managing Director of Zehnder Pumpen GmbH, I would like to thank you for your interest in our products. Our goal is to provide you not only with products but also with solutions that exceed your expectations.

We understand the specific requirements of plumbing wholesale, specialist dealers, and installers. Therefore, we focus on delivering innovative and reliable pumps that are easy to install, maintenance-friendly, and energy-efficient. Our products are designed to ensure long-term satisfaction and minimal operating costs for you and your customers.

True to the values of the SFA Group, we emphasise inventiveness, simplicity, and social responsibility. Every product in our catalogue exemplifies how we address complex plumbing challenges with simple, effective solutions. We strive to simplify work processes for you and your customers, which is ensured by clear product information and technical support.

Our customer service team is always ready to provide comprehensive advice—whether it's about selecting the right products or answering technical questions. Our field representatives are always nearby to offer personal support and ensure the successful realisation of your projects.

We are proud to work with you and look forward to continuing our partnership. We are always grateful for feedback that helps us further improve our products and services.

Please do not hesitate to contact us. Together, we can ensure that the needs of your customers are met efficiently and successfully.

Best regards,

A handwritten signature in blue ink, which appears to read 'Herold', is placed above the printed name.

Hans-Jörg Herold

Managing Director of Zehnder Pumpen GmbH

# Pumps for home, industry, and garden

From the ore mountains to the world



Zehnder Pumpen GmbH is a renowned manufacturer of pumps and systems for water supply and disposal, based in Germany. Our products are used throughout Europe and beyond, reflecting our customers' and partners' trust in our flexibility and quality. We proudly adhere to „Made in Germany“ producing branded products that achieve high customer satisfaction.

Our team consists of experienced employees dedicated to maintaining the high quality of our products in all areas. Continuous development strengthens our market position, ensuring reliable products with longevity and the highest quality. We prioritise meeting and constantly improving the highest quality standards for our products.

In addition to the technical features of our products, we place great emphasis on our excellent service. We ensure that our partners in the after-sales sector meet high standards by providing targeted training. Our top priority is to offer our customers optimal support and ensure their complete satisfaction with our high-quality products and services.

# Quality and sustainability combined

## Certifications of Zehnder Pumpen GmbH

Through our international certifications in quality management, environmental management, and occupational health and safety management, Zehnder Pumpen GmbH demonstrates its commitment to high quality and sustainable practices. We place great emphasis on ensuring that our products and processes align with the highest standards. These accolades reinforce our dedication to our customers, employees, and the environment.



ISO 14001:2015

By implementing DIN ISO 14001, we have established an effective environmental management system that reduces our environmental impact. This demonstrates our active commitment to protecting and preserving our environment and contributing to sustainability. We are proud to make our contribution to a better future.



ISO 45001:2018

Thanks to DIN ISO 45001, we effectively minimise risks and prevent accidents. Through regular review and adjustment, we continuously improve our occupational safety measures. This ensures compliance with legal requirements and demonstrates our responsibility towards our employees.

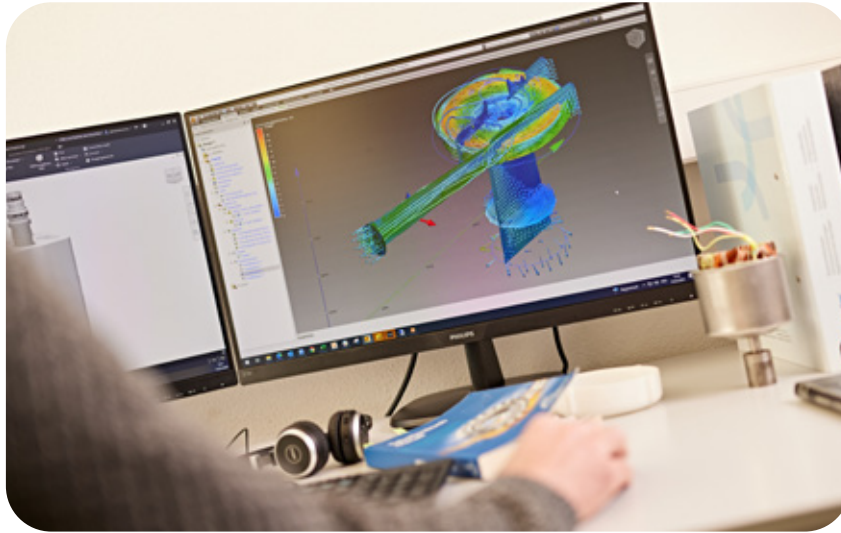


ISO 9001:2015

Our implementation of DIN ISO 9001 guarantees high quality across all company areas. Through constant process review and optimisation, we ensure the highest standards and customer satisfaction. Our quality management system forms the foundation for long-term success and continuous improvement within the company.



# 360-degree expertise



## Development

Product development at Zehnder Pumpen is carried out using the latest methods and technologies. In addition to using CAD, we employ Computational Fluid Dynamics (CFD) simulations to ensure optimal product functionality. Furthermore, 3D printing techniques are used in the creation of prototypes, enabling quick and efficient implementation of various development processes and designs.



## Manufacturing

We manufacture in Germany and rely on regional suppliers to ensure short delivery times and the highest quality. In our facility, we use state-of-the-art technologies such as ultrasonic welding to ensure our products meet the highest standards. Additionally, we continually invest in innovative processes to deliver top-level products to our customers. Sustainability and efficiency are central aspects of all our production processes, setting us apart from other providers.



## Technical consultation

Our customer is at the centre of everything we do. We strive to provide personal and expert advice on your questions and concerns regarding our products, their installation, and maintenance. Our field service team also offers on-site project consultations. For specific projects, we can act flexibly and adapt to special requirements. You can rely on us to provide you with an individual and detailed quote without delay in the shortest possible time.

# - All from one source



## Sales

We have a strong sales team that operates both internally and in the field. We place great emphasis on close coordination with our customers to best meet their needs and requirements. We work closely with our production planning to produce and deliver products on schedule according to our customers wishes. Our sales team is always available to our customers, providing support in a straightforward and honest manner.



## Logistics

Our company is based in the idyllic town of Grünhain, yet we operate globally. We supply customers in over 70 countries across all continents. Whether it's a small package of spare parts or a large sea freight container, we ensure that the items leave our shipping department on time and arrive safely at the customer's location. Thanks to digitised logistics processes, we always have an overview of all orders and can guarantee high delivery reliability.



## Repair

Zehnder pumps are not disposable products. We carry out all repairs of our pumps and systems in our own workshop. Often, repairs of our pumps and systems are economically viable due to moderate spare part prices. With our high spare part availability, we can quickly replace defective parts. Additionally, we offer consulting services to support our customers in carrying out maintenance and repairs.

# Content



## General information

Foreword	3
Pumps for domestic, industrial and garden use	4
Quality and sustainability combined	5
360 degree expertise - everything from a single source	6
Content	8

## Submersible pumps

ZPK®	10
S-ZPK	12
Puddle pump type FSP 330	14
ZM	16
TDP 800	18
Vectis®	20
S-Vectis 400	22
E-ZW®	24
E-ZWM	26
Drain Inox	28
Drainprofi B	29
Flood emergency kit E-ZW	30
Flood emergency kit Vectis	32
ZPG® 50	34
ZPG® 71	35
Solida 125 Cutter	36
Solida 262 / 635	37
Solida 290 / 390 / 490	38
Solida 500 / 800 / 1100 / 1300	39
Solida 700 / 900 / 1000 / 1500	40
ZFS® 71 Ex	41
ZF 80 Ex	42
ZF 100 Ex	43
Accessories for submersible pumps	44

## Grease separator

Grease separators free-standing	48
Grease separators for underground installation	50
Mobile grease separators	51
Accessories for grease separators	52

## Lifting units

SWH-F for use downstream of grease separators	54
S-SWH-F for aggressive media <b>NEW</b>	56
Type D-SWH	57
SWH® 100	58
S-SWH 100	60
UFB 200	62
S-UFB 200	63
SWH 500	64
ZKH 20	65
Microboy / Microboy Pro	66
Gerios®	67
Kompaktboy® Simplex	68
Kompaktboy® Duplex	70
Kompaktboy® SE 71 Simplex	72
Kompaktboy® SE 71 Duplex	74
Boy Simplex	76
Boy Duplex	78
W 80 Simplex	80
W 80 Duplex	82
WUZ 100 Simplex	84
WUZ 100 Duplex	86
Accessories for Lifting units	88

## Pumping stations

FPS Basic for sewage	90
FPS Basic for wastewater	92
FPS-K Simplex & Duplex for wastewater	94
FPS-K Simplex & Duplex for sewage	96
FPS-KE (without pump) & manhole cover	98

## Pumps for home and garden

Garden 1000	100
Garden 2000	101
Gardenpress Ad Pro	102
Gardenpress Kit 02	103
Domestic waterworks Garden	104
CPS 15	106
CPS 20	107
CPS 20 SM	108
CPS 25	109
CPS 35	110
Domestic water systems CPS with Kit 02	112
Domestic water systems CPS with Kit 05	113
Domestic water systems CPS 15 / 20 Ad Pro	114
Domestic water systems CPS 15 / 20 / 25 ZP Control 05	115
Domestic waterworks CPS	116



## Controls

ZPS control system for single and double units	118
ZP Speedcontrol Box & Motor	120
ZP Control Ad Pro	121
ZP Safe	121
Control switch Kit 02	122
Control switch Kit 05 Optimatik	123
ZP Speedcontrol Comfort	124
ZP Control 01 T <b>NEW</b>	125
ZP Control 01 & 05	126
Three-phase switching units	127
Float switches	127

## Pressure booster systems

CPN with Speedcontrol Comfort	128
DPA CPS / CPN with ZP Speedcontrol Comfort	130
ZPV Simplex / Duplex / Triplex	132
BZPV Simplex	138
BZPV Duplex	140

## Borehole pumps

Aquastream 50°	142
Aquastream 50° water supply packages	143
Aquastream 50° SE	144
Aquastream 50° SE water supply packages <b>NEW</b>	145
TM 3"	146
TM 4"	147
TM irrigation packages	148
TM water supply packages	149
TM sE	150
Aquasub	151
Aqua 5	152
Rainsub 60	153
Combipress 60 water supply packages	154
Wellworker 60	156
Wellworker 100	158
Wellworker 180	159
Wellworker 250	160
Wellworker 420	161
Accessories for borehole pumps	162
Wellworker irrigation packages with ZP Control 05	165
Wellworker irrigation packages with ZP Speedcontrol Comfort	166
Wellworker irrigation packages with ZP Speedcontrol Box	167

## Rainwater harvesting system

Series Raincenter Pro 15	168
Series Raincenter 25	169
Tacomat 2	170
Tacomat 5	171
Drinking water separation station	172
Lademax	173
Accessories for Rainwater harvesting	174

## Customised PE/PE tanks

Special tanks round / square	176
------------------------------	-----

## Contact

Customer service centres	178
--------------------------	-----

# ZPK® series


 MADE IN GERMANY

## Submersible waste water pumps

### Features

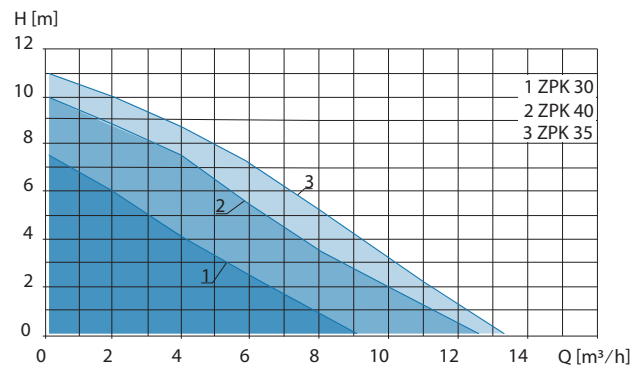
- Submersible waste water pump, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Version for larger solids (30 mm) available (ZPK 40)
- Mechanical seal and additional shaft seal
- Integrated thermal winding protection to prevent overheating damage
- Version 'A' with mounted float switch
- Version 'KS' with mounted compact float switch (fits into pipes with an inner diameter larger than 250 mm)
- Incl. 10 m power cable and plug, 90° hose connecting bend (ZPK 30: DN 25; ZPK 35 and ZPK 40: DN 32)



### Applications

- Pumping of clear water and waste water from pits, drainage manholes, cellars etc.
- Portable pump for emergency drainage
- Drainage of domestic waste water without faeces from showers, washing machines, wash basins etc.

### Characteristics



### Installation example



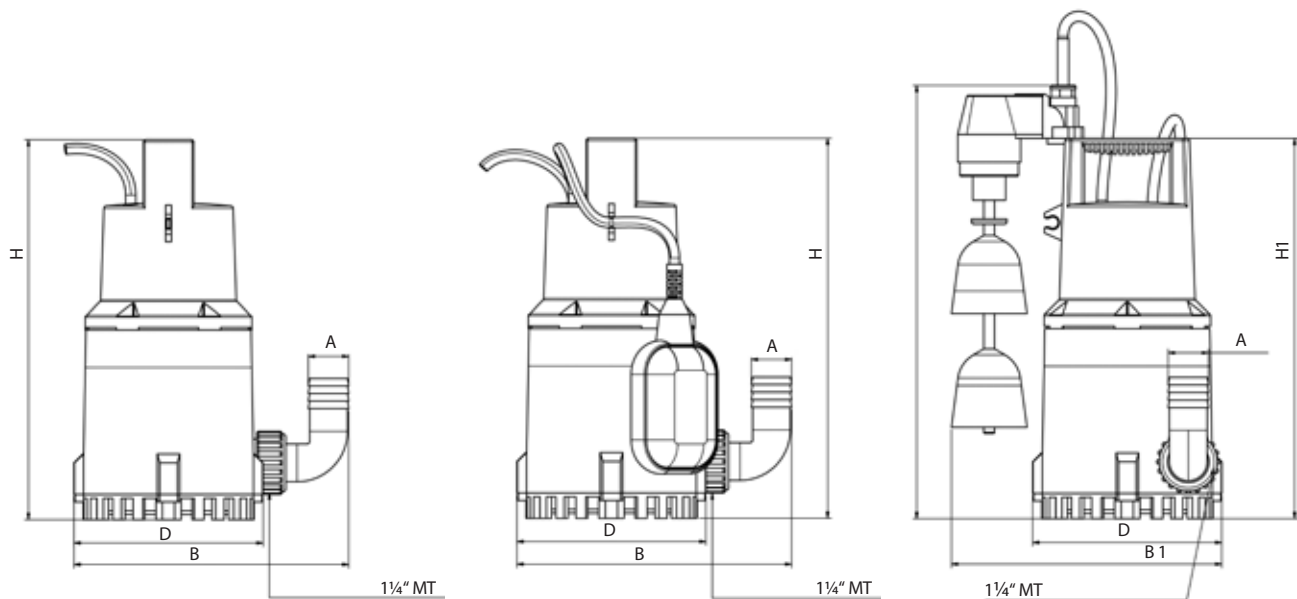
Fig.: ZPK A with float switch in pit

## Submersible waste water pumps

### Technical data

ZPK	30	30 A	30 KS	35	35 A	35 KS	40	40 A	40 KS
Article number	13011	13013	13015	13022	13023	13025	13036	13037	13038
Discount group	A	A	A	A	A	A	A	A	A
Weight (kg)	4.2	4.5	4.6	6.2	6.5	6.7	6.2	6.4	6.7
<b>Electrical characteristics</b>									
Voltage (V)	230	230	230	230	230	230	230	230	230
Current (A)	1.3	1.3	1.3	3.7	3.7	3.7	3.7	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Input power P1 (W)	300	300	300	850	850	850	850	850	850
Output power P2 (W)	130	130	130	430	430	430	430	430	430
Speed (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Immersion depth (m)	5	5	5	5	5	5	5	5	5
Power cable length (m)	10	10	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>									
Max. head (m)	7.5	7.5	7.5	11.0	11.0	11.0	10.0	10.0	10.0
Max. flow rate (m <sup>3</sup> /h)	7.0	7.0	7.0	11.0	11.0	11.0	10.0	10.0	10.0
Solids handling (mm)	10	10	10	10	10	10	30	30	30
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90	90	90	90
Min. cut-in water level (mm)	120	120	120	160	160	160	200	200	200
Min. cut-out water level (mm)	25	25	25	25	25	25	45	45	45

### Dimensions



ZPK	30	30 A	30 KS	35	35 A	35 KS	40	40 A	40 KS
H (mm)	272	272	314	302	302	344	342	342	383
H <sub>1</sub> (mm)	-	-	272	-	-	302	-	-	341
W (mm)	186	186	-	186	186	-	186	186	-
W <sub>1</sub> (mm)	-	-	215	-	-	215	-	-	215
D (mm)	150	150	150	150	150	150	150	150	150
A (mm)	DN 25	DN 25	DN 25	DN 32	DN 32	DN 32	DN 32	DN 32	DN 32

# S-ZPK series

Submersible waste water pumps for aggressive media

## Features

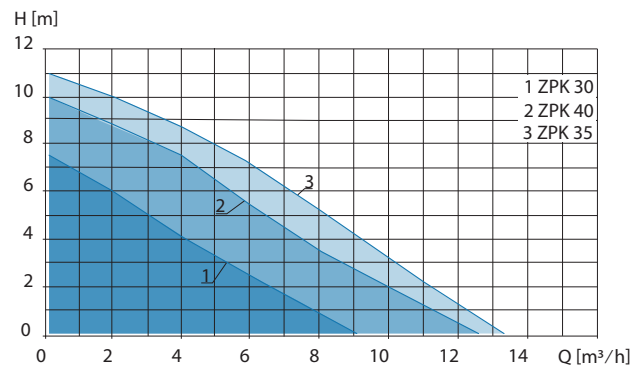
- High-quality, silicon carbide mechanical seal, stainless steel motor housing (1.4404), stainless steel motor shaft, all seals made of Viton®
- Mechanical seal and additional shaft seal
- Integrated thermal winding protection to prevent overheating damage
- Version 'A' with mounted float switch
- Version 'KS' with mounted compact float switch (fits into pipes with an inner diameter larger than 250 mm)
- Incl. 10 m power cable and plug, 90° hose connecting bend (ZPK 30: DN 25; ZPK 35 and ZPK 40: DN 32)



## Applications

- Pumping of slightly acidic condensate, aggressive or saline water (max. 15% salt content)
- For use behind water softening systems and for calorific value condensate
- Lifting of domestic faecal-free waste water

## Characteristics



## Installation example



Fig.: S-ZPK KS with compact float in concrete pit

# S-ZPK series

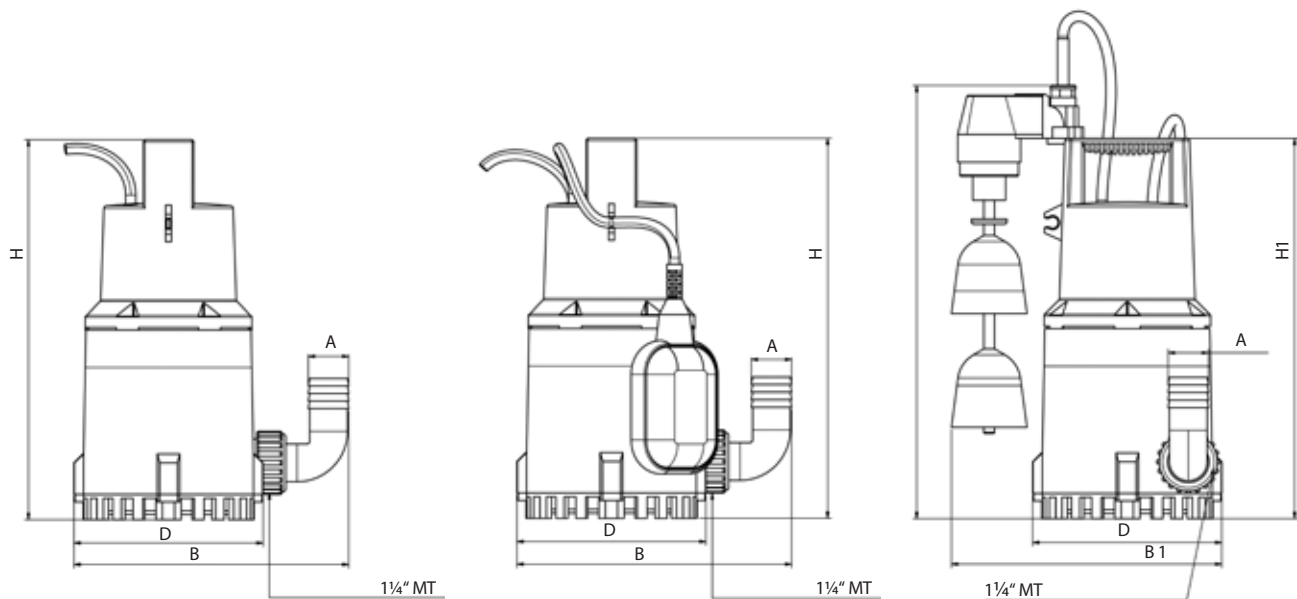


Submersible waste water pumps for aggressive media

## Technical data

S-ZPK	30	30 A	30 KS	35	35 A	35 KS	40	40 A	40 KS
Article number	13031	13030	17577	13032	13034	17947	17828	17829	17241
Discount group	A	A	A	A	A	A	A	A	A
Weight (kg)	4.24	4.45	4.59	6.22	6.45	6.66	6.23	6.43	6.65
<b>Electrical characteristics</b>									
Voltage (V)	230	230	230	230	230	230	230	230	230
Current (A)	1.3	1.2	1.3	3.7	3.7	3.7	3.7	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Input power P1 (W)	300	300	300	850	850	850	850	850	850
Output power P2 (W)	130	130	130	430	430	430	430	430	430
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Immersion depth (m)	5	5	5	5	5	5	5	5	5
Power cable length (m)	10	10	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>									
Max. head (m)	7.5	7.5	7.5	11.0	11.0	11.0	10.0	10.0	10.0
Max. flow rate (m <sup>3</sup> /h)	7.0	7.0	7.0	11.0	11.0	11.0	10.0	10.0	10.0
Solids handling (mm)	10	10	10	10	10	10	30	30	30
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90	90	90	90
Min. cut-in water level (mm)	120	120	120	160	160	160	200	200	200
Min. cut-out water level (mm)	25	25	25	25	25	25	45	45	45

## Dimensions



ZPK	30	30 A	30 KS	35	35 A	35 KS	40	40 A	40 KS
H (mm)	272	272	314	302	302	344	342	342	383
H <sub>1</sub> (mm)	-	-	272	-	-	302	-	-	341
B (mm)	186	186	-	186	186	-	186	186	-
B <sub>1</sub> (mm)	-	-	215	-	-	215	-	-	215
D (mm)	150	150	150	150	150	150	150	150	150
A (mm)	DN 25	DN 25	DN 25	DN 32	DN 32	DN 32	DN 32	DN 32	DN 32

# Puddle pump FSP 330



## Submersible waste water pumps

### Features

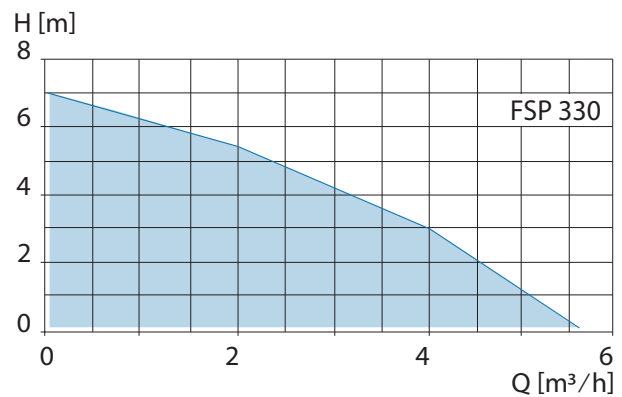
- Submersible waste water pump, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Intake from 15 mm and suction down to 1 mm
- Mechanical seal and additional shaft seal
- Motor winding with thermal winding protection
- In automatic mode with ENS 1.1 (art.no.11414), switch-on point approx. 2,5 cm, switch-off point approx. 3 mm
- Vertical pressure outlet 1" MPT with hose connection DN 25
- Integrated non-return valve
- Puddle pump FSP 330 with ENS 1.1 fits into pipes with an inner diameter larger than 200 mm
- Incl. 10 m power cable and plug



### Applications

- Portable pump for emergency drainage
- For cellars, washhouses, pools, manholes and where water must be pumped out 'completely'

### Characteristics



### Installation example



Fig.: Puddle pump in flooded washroom

# Puddle pump FSP 330

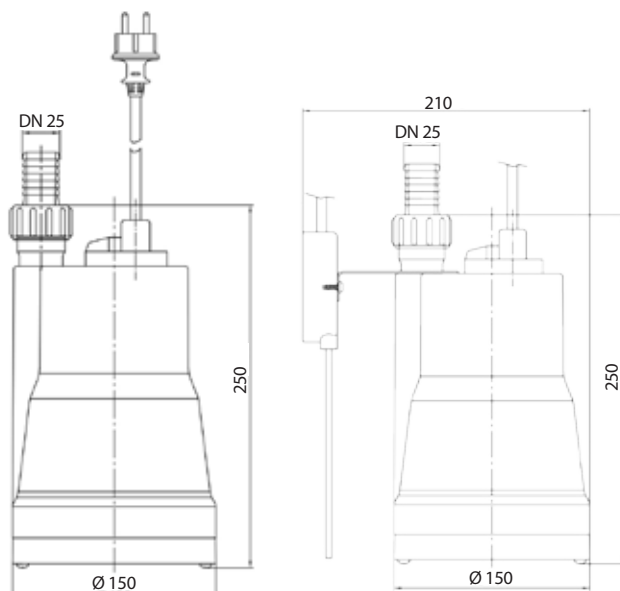


Submersible waste water pumps

## Technical data

	Puddle pump Type FSP 330	ENS 1.1 for puddle pump Type FSP 330	ENS 1.1 universal	ENS 1.1 universal 1000 mm
Article number	13187	11414	11416	11419
Discount group	A	A	A	A
Weight (kg)	3.8	1.5	1.5	1.5
<b>Electrical characteristics</b>				
Voltage (V)	230	230	230	230
Current (A)	1.3	max. 6	max. 6	max. 6
Frequency (Hz)	50	50	50	50
Input power P1 (W)	300	-	-	-
Output power P2 (W)	160	-	-	-
Power P max. (W)	-	1.000	1.000	1.000
Speed (min-1)	2.800	-	-	-
Protection class	IP 68	IP 68 (plug IP 20)	IP 68 (plug IP 20)	IP 68 (plug IP 20)
Immersion depth (m)	5	-	-	-
Power cable length (m)	10	10	10	10
<b>Hydraulic characteristics</b>				
Max. head (m)	7.0	electronic level control for puddle pump FSP 330 for automatic operation	electronic level control with 300 mm electrode length for universal application (function "Emptying" or "Filling" adjustable), I <sub>max</sub> = 6 A	electronic level control with 1000 mm electrode length for universal application (function "Emptying" or "Filling" adjustable), I <sub>max</sub> = 6 A
Max. flow rate (m <sup>3</sup> /h)	5.5			
Solids handling (mm)	1			
Max. medium temp. (°C)	40			
Min. cut-in water level (mm)	15			
Min. cut-out water level (mm)	1	-	-	-

## Dimensions



## Accessories

Controls ENS 1.1 for puddle pump Type FSP 330



ENS 1.1 universal



# ZM series

## Submersible waste water pumps

### Features

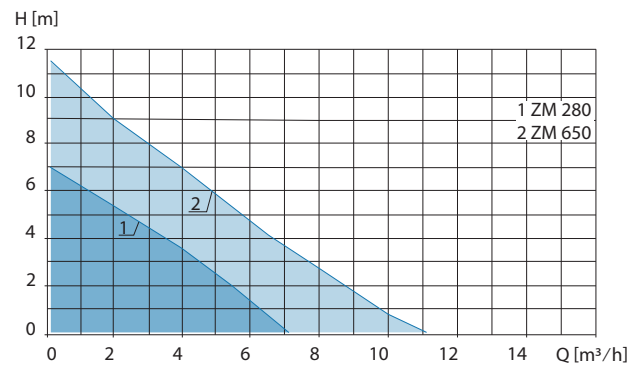
- Submersible waste water pump, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Motor winding with thermal winding protection
- Mechanical seal and additional shaft seal
- Stainless steel motor shaft and motor housing
- Jacket cooling
- Space-saving installation due to vertical pressure outlet 1" MT with hose connection DN 25
- Version 'A' with mounted float switch
- Version 'KS' with mounted compact float switch (fits into pipes with an inner diameter larger than 250 mm)
- Incl. 10 m power cable and plug



### Applications

- Pumping of clear water and waste water
- Portable pump for emergency drainage

### Characteristics



### Installation example



Fig.: Submersible pump ZM A with float switch in pit



# ZM series



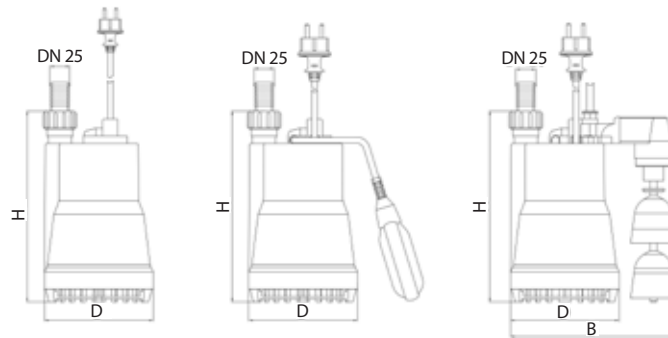
## Submersible waste water pumps

### Technical data

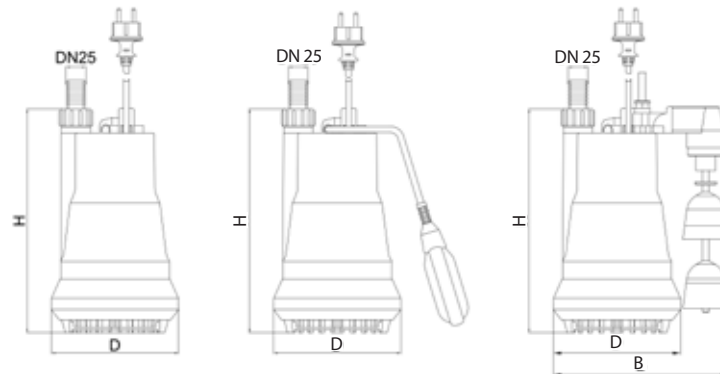
ZM	280	280 A	280 KS	650	650 A	650 KS
Article number	13179	13181	13182	15219	15221	15223
Discount group	A	A	A	A	A	A
Weight (kg)	3.4	3.6	4.2	6.2	6.4	6.6
<b>Electrical characteristics</b>						
Voltage (V)	230	230	230	230	230	230
Current (A)	1.3	1.3	1.3	2.9	2.9	2.9
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	300	300	300	600	600	600
Output power P2 (W)	160	160	160	350	350	350
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Immersion depth (m)	5	5	5	5	5	5
Power cable length (m)	10	10	10	10	10	10
<b>Hydraulic characteristics</b>						
Max. head (m)	6.0	6.0	6.0	11.0	11.0	11.0
Max. flow rate (m <sup>3</sup> /h)	7.0	7.0	7.0	9.0	9.0	9.0
Solids handling (mm)	10	10	10	10	10	10
Max. medium temp. (°C)	40	40	40	40	40	40
Min. cut-in water level (mm)	40	40	40	40	40	40
Min. cut-out water level (mm)	20	20	20	20	20	20

### Dimensions

Type: ZM 280



Type: ZM 650



ZM	280	280 A	280 KS	650	650 A	650 KS
H (mm)	250	250	250	292	292	292
B (mm)	-	-	217	-	-	229
D (mm)	150	150	150	166	166	166

# TDP series



## Submersible waste water pumps

### Features

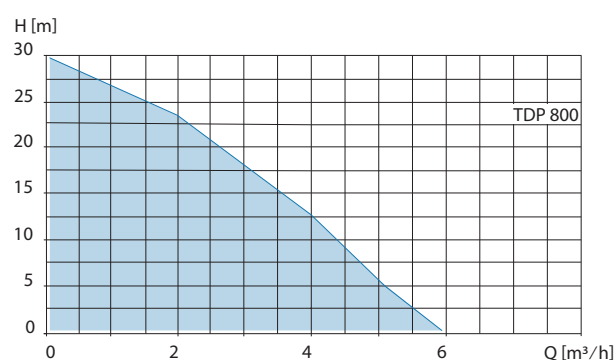
- Multi-stage submersible pressure pump with large head, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Motor winding with thermal winding protection
- Mechanical seal and additional shaft seal
- Jacket cooling
- Vertical pressure outlet 1" MT with hose connection DN 25
- Version 'A' with mounted float switch
- Incl. hose nozzle G1 x 20 and G1 x 13
- Incl. 10 m power cable and plug



### Applications

- Pumping of slightly dirty waste water
- Irrigation from rain barrel or cistern

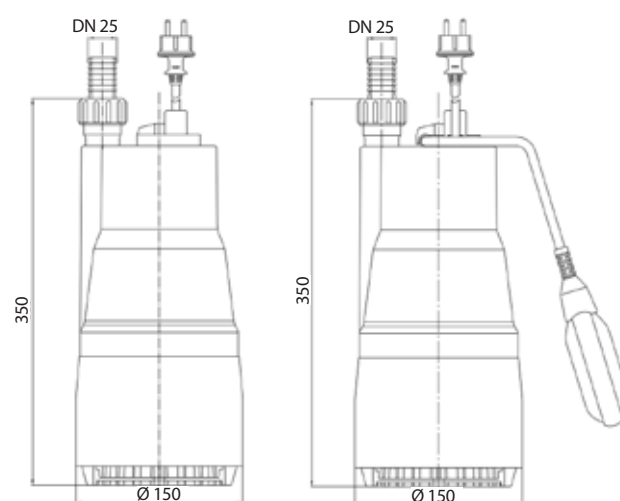
### Characteristics



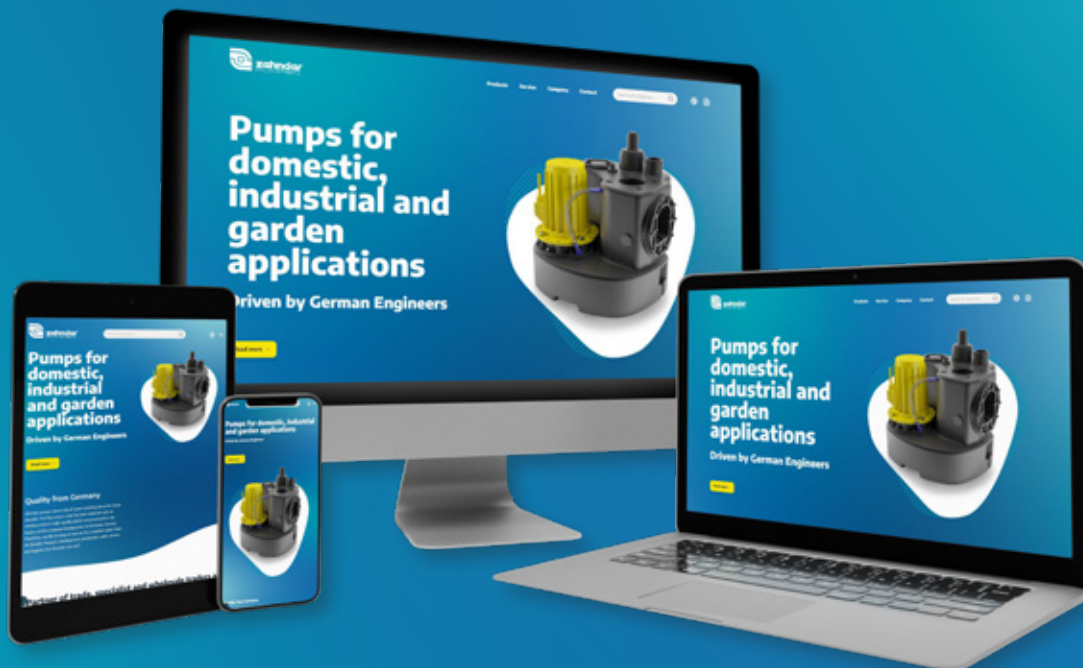
### Technical data

TDP	800	800 A
Article number	13646	13643
Discount group	A	A
Weight (kg)	6.8	6.9
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	3.4	3.4
Frequency (Hz)	50	50
Input power P1 (W)	760	760
Output power P2 (W)	410	410
Speed (min-1)	2.800	2.800
Protection class	IP 68	IP 68
Immersion depth (m)	5	5
Power cable length (m)	10	10
<b>Hydraulic characteristics</b>		
Max. head (m)	30.0	30.0
Max. flow rate (m³/h)	6.0	6.0
Solids handling (mm)	3	3
Max. medium temp. (°C)	40	40
Min. cut-in water level (mm)	300	300
Min. cut-out water level (mm)	20	20

### Dimensions



# Our **NEW** **WEBSITE** is **LIVE**



 [www.zehnder-pumpen.de](http://www.zehnder-pumpen.de) 

## Discover our new Website!

Visit our newly redesigned website with a modern design and enhanced features. At [www.zehnder-pumpen.de](http://www.zehnder-pumpen.de), you can directly view technical documents such as user manuals and data sheets and easily request quotes. Our platform is fully optimised for use on smartphones and tablets, allowing you to conveniently access all information on the go. Experience the new ease with which you can find and retrieve information!



Simply scan  
and discover.

## Vectis® series

### Submersible waste water pumps

#### Features

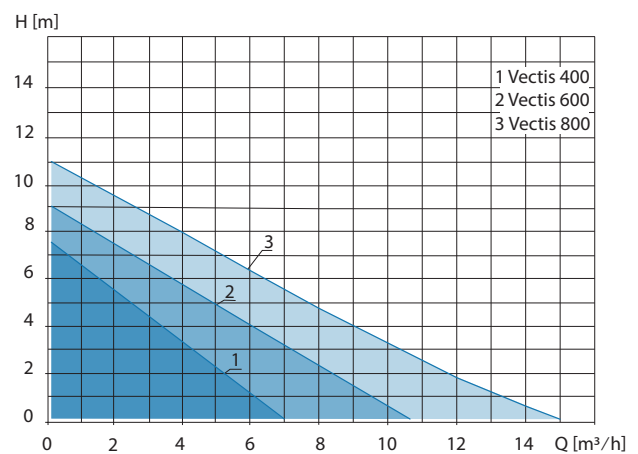
- Submersible waste water pump, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Built-in thermal winding protection for the prevention of overheating damage
- Triple sealing by shaft sealing rings
- Integrated vent screw
- Horizontal pressure outlet 1 ¼" MT
- Automatic pump control due to lever float switch
- Flat suction function due to removable suction Strainer
- Continuous operation possible due to supplied locking device for the float switch
- Incl. 10 m power cable and plug, non-return valve, Connection bend 90° 1¼" IT



#### Applications

- Pumping of clear water and waste water from pits, cellars etc.
- Portable pump for emergency drainage
- Drainage of domestic waste water without faeces from showers, washing machines, wash basins etc.

#### Characteristics



#### Installation example



Fig.: Vectis® 600 in pit

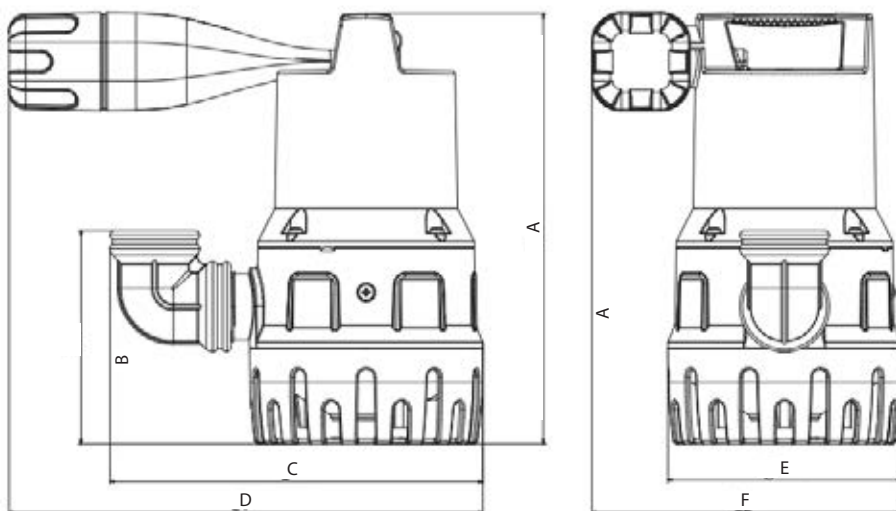
# Vectis® series

Submersible waste water pumps

## Technical data

Vectis®	400	600	800
Article number	21664	22060	22061
Discount group	E	E	E
Weight (kg)	4.6	6.0	6.5
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	1.4	2.3	3.4
Frequency (Hz)	50	50	50
Input power P1 (W)	400	600	800
Output power P2 (W)	300	400	600
Speed (min-1)	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68
Immersion depth max. (m)	7	7	7
Power cable length (m)	10	10	10
<b>Hydraulic characteristics</b>			
Max. head (m)	7.5	9.0	11.0
Max. flow rate (m <sup>3</sup> /h)	7.0	11.0	15.0
Solids handling (mm)	10	20	20
Max. medium temp. (°C)	35	35	35
Min. cut-in water level (mm)	190	250	250
Min. cut-out water level (mm)	90	150	150

## Dimensions



Vectis®	400	600	800
A (mm)	254	311	311
B (mm)	126	145	145
C (mm)	220	279	279
D (mm)	280	296	296
E (mm)	138	172	172
F (mm)	183	200	200

# S-Vectis® 400

Submersible waste water pumps for aggressive media

## Features

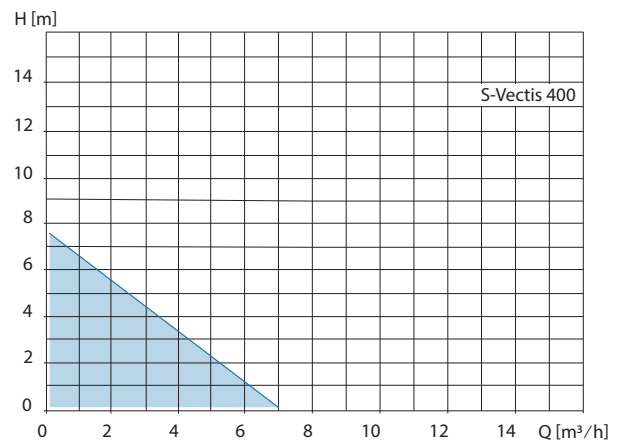
- Submersible waste water pump aggressive media, made of corrosion- and shock-resistant polypropylene and particularly high-quality stainless steel
- Built-in thermal winding protection for the prevention of overheating damage
- Sealing by mechanical seal and additional shaft seal ring
- Integrated vent screw
- Horizontal pressure outlet 1 ¼" MPT
- Automatic mode due to lever float switch
- Flat suction function due to removable suction strainer
- Continuous operation possible due to supplied locking device for the float switch
- Incl. 10 m power cable and plug, non-return valve, connection bend 90° 1¼" IT



## Applications

- Pumping of slightly acidic condensate, aggressive or saline water (max. 15% salt content)
- Portable pump for emergency drainage
- Drainage of domestic waste water without faeces from showers, washing machines, wash basins etc.

## Characteristics



## Installation example



Fig.: S-Vectis® 400 in pit

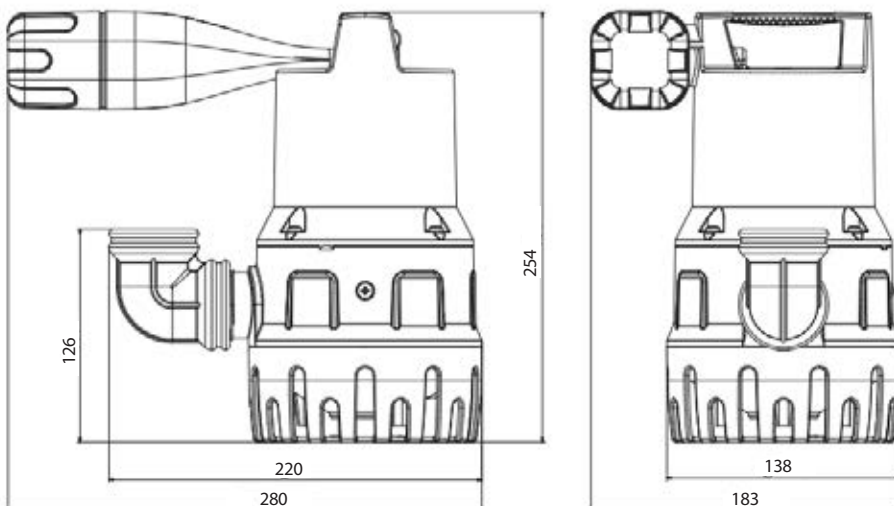
# S-Vectis® 400

Submersible waste water pumps for aggressive media

## Technical data

S-Vectis®	400
Article number	23018
Discount group	A
Weight (kg)	4.6
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	1.4
Frequency (Hz)	50
Input power P1 (W)	400
Output power P2 (W)	300
Speed (min-1)	2.800
Protection class	IP 68
Immersion depth max. (m)	7
Power cable length (m)	10
<b>Hydraulic characteristics</b>	
Max. head (m)	7.5
Max. flow rate (m <sup>3</sup> /h)	7.0
Solids handling (mm)	10
Max. medium temp. (°C)	35
Min. cut-in water level (mm)	190
Min. cut-out water level (mm)	90

## Dimensions



# E-ZW® series


 MADE IN GERMANY

## Submersible waste water pumps

### Features

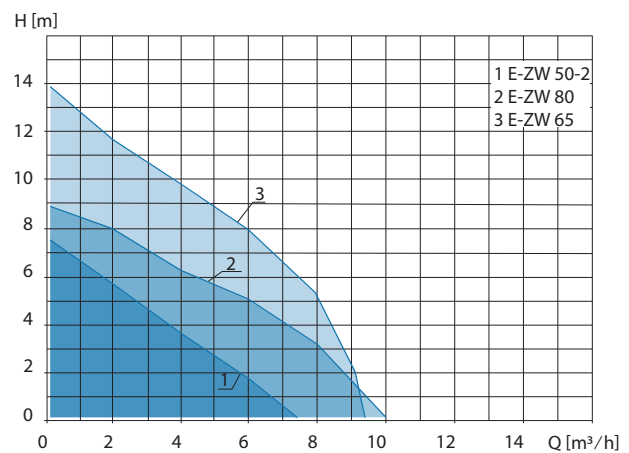
- Submersible waste water pump made of stainless steel
- Motor winding with thermal winding protection
- Mechanical seal and additional shaft seal
- Pump housing, motor housing, shaft and suction strainer made of stainless steel, impeller made of polyamide
- Jacket cooled single phase motor
- Vertical pressure outlet 1 ¼" FT
- Version 'A' with mounted float switch
- Version 'KS' with mounted compact float switch (fits into pipes with an inner diameter larger than 300 mm)
- Incl. 10 m power cable and plug



### Applications

- Pumping of clear water and waste water from pits, drainage manholes, cellars etc.
- Portable pump for emergency drainage
- Drainage of domestic waste water without faeces from showers, washing machines, wash basins etc.

### Characteristics



### Installation example



Fig.: E-ZW® with float switch in confined pit

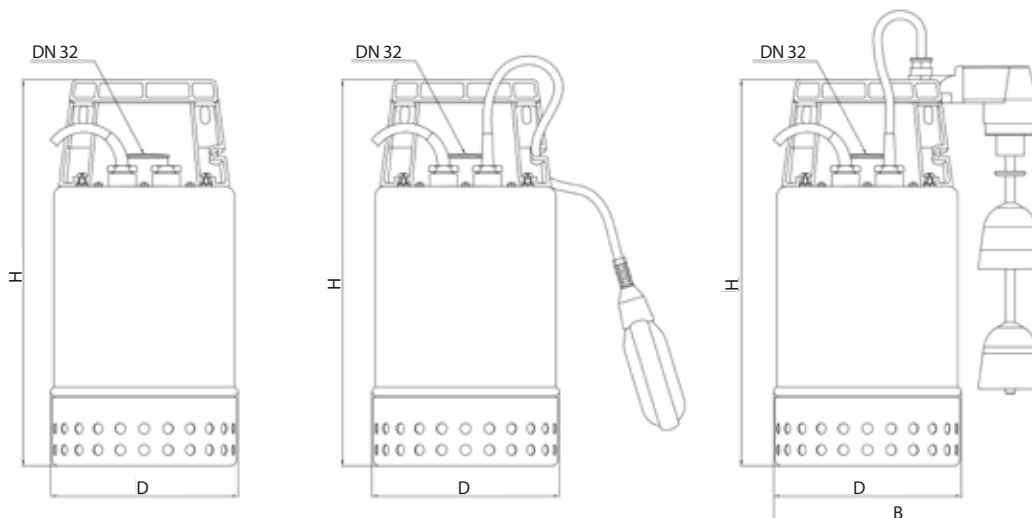


## Submersible waste water pumps

### Technical data

E-ZW®	50-2	50 A-2	50 KS-2	65	65 A	65 KS	80	80 A	80 KS
Article number	12829	12818	12811	15230	15225	16920	15245	15239	15242
Discount group	A	A	A	A	A	A	A	A	A
Weight (kg)	6.3	6.5	6.9	8.1	8.3	8.3	8.2	8.4	8.5
<b>Electrical characteristics</b>									
Voltage (V)	230	230	230	230	230	230	230	230	230
Current (A)	1.8	1.8	1.8	3.7	3.7	3.7	3.7	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Input power P1 (W)	380	380	380	850	850	850	850	850	850
Output power P2 (W)	210	210	210	430	430	430	430	430	430
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Immersion depth (m)	5	5	5	5	5	5	5	5	5
Power cable length (m)	10	10	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>									
Max. head (m)	7.5	7.5	7.5	14.0	14.0	14.0	8.5	8.5	8.5
Max. flow rate (m <sup>3</sup> /h)	7.5	7.5	7.5	9.5	9.5	9.5	10.0	10.0	10.0
Solids handling (mm)	10	10	10	10	10	10	30	30	30
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90	90	90	90
Min. cut-in water level (mm)	200	380	200	200	400	200	200	420	200
Min. cut-out water level (mm)	45	140	45	45	180	45	45	160	45

### Dimensions



E-ZW®	50-2	50 A-2	50 KS-2	65	65 A	65 KS	80	80 A	80 KS
H (mm)	336	336	356	360	360	360	370	370	370
B (mm)	-	-	250	-	-	250	-	-	250
D (mm)	176	176	176	176	176	176	176	176	176

## E-ZWM series

### Submersible waste water pumps

#### Features

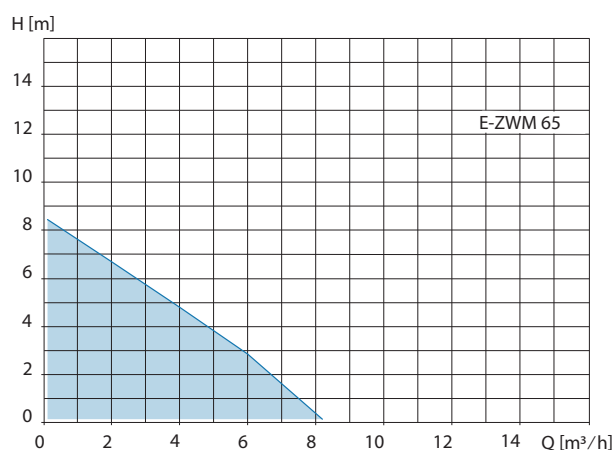
- Submersible waste water pump made of stainless steel
- Long time run mode for heavy usage
- Long lasting sealing system due to magnetic coupling between motor and impeller
- Pump housing, motor housing, shaft and suction strainer made of stainless steel, impeller made of polyamide
- Jacket cooled single phase motor
- Vertical pressure outlet 1 ¼" FT
- Version 'A' with mounted float switch
- Version 'KS' with mounted compact float switch (fits into pipes with an inner diameter larger than 300 mm)
- Incl. 10 m power cable and plug



#### Applications

- Pumping of clear water and waste water from pits, drainage manholes, cellars for heavy usage (long time run mode)
- Drainage of domestic waste water without faeces from showers, washing machines, wash basins etc. under heavy strain (endurance function)
- Circulation pump, fountain pump for heavy usage (endurance function)

#### Characteristics



#### Installation example



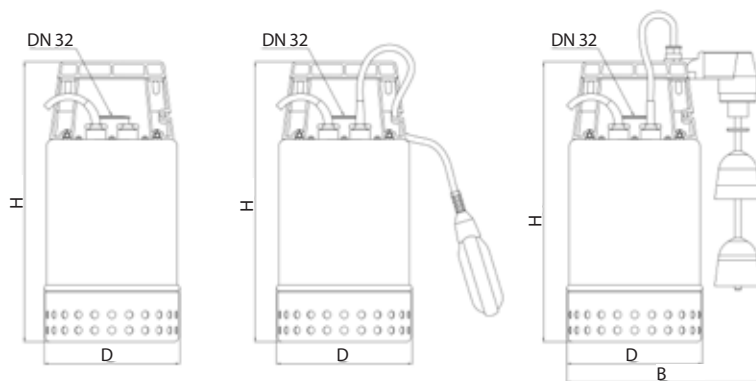
Fig.: E-ZWM 65 KS with compact float switch in confined pit

## Submersible waste water pumps

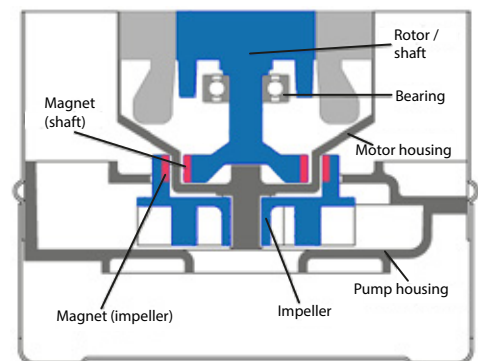
### Technical data

E-ZW M	65	65 A	65 KS
Article number	15237	15236	16921
Discount group	A	A	A
Weight (kg)	8.3	8.5	8.8
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	2.9	2.9	2.9
Frequency (Hz)	50	50	50
Input power P1 (W)	600	600	600
Output power P2 (W)	350	350	350
Speed (min-1)	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68
Immersion depth (m)	5	5	5
Power cable length (m)	10	10	10
<b>Hydraulic characteristics</b>			
Max. head (m)	8.5	8.5	8.5
Max. flow rate (m <sup>3</sup> /h)	8.5	8.5	8.5
Solids handling (mm)	10	10	10
Max. medium temp. (°C)	40	40	40
Medium temp. short term (°C)	90	90	90
Min. cut-in water level (mm)	200	400	200
Min. cut-out water level (mm)	45	180	45

### Dimensions



Scheme E-ZWM:



E-ZW	M 65	M 65 A	M 65 KS
H (mm)	360	360	360
B (mm)	-	-	250
D (mm)	176	176	176

# Series Drain Inox

Submersible waste water pumps

## Features

- Jacket-cooled submersible pump made of stainless steel
- Built-in thermal protection
- Sealing by double mechanical seal
- Squirrel cage motor
- Float switch for automatic operation and dry-running protection
- Incl. 10 m power cable H 07 RN-F



Type: Drain Inox 50 MA





Type: Drain Inox 90 MA

## Technical data

Drain Inox	50 MA	90 MA
Article number	19490	19010
Discount group	E	E
Weight (kg)	4.5	12.0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	2.0	4.4
Frequency (Hz)	50	50
Input power P1 (W)	400	550
Output power P2 (W)	250	350
Speed (min-1)	2.800	2.800
Protection class	IP 68	IP 68
Power cable length (m)	10	10
<b>Hydraulic characteristics</b>		
Max. head (m)	8.0	13.0
Max. flow rate (m <sup>3</sup> /h)	9.0	15.0
Solids handling (mm)	10	10
Max. medium temp. (°C)	35	35
Medium temp. short term (°C)	75	75

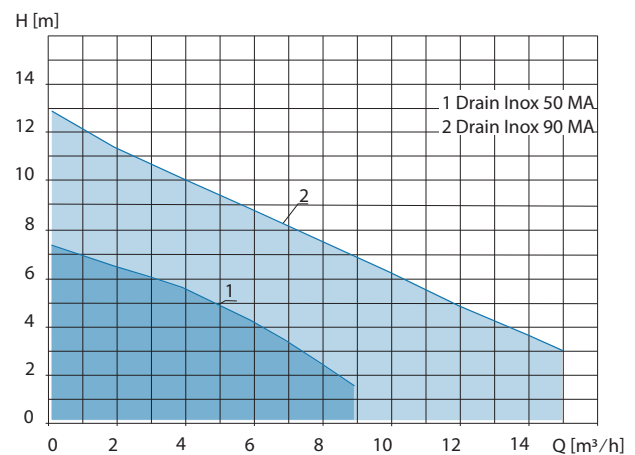
## Accessories only for Draininox 50 MA

Type	Art.-no.	Disc. group	Figure
Flat suction adapter	19061	E	
Stainless steel lever for precise alignment of the float switch	19065	E	

## Applications

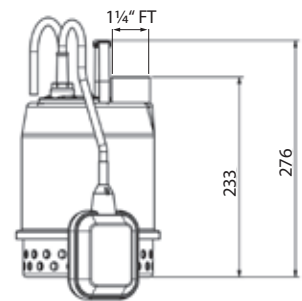
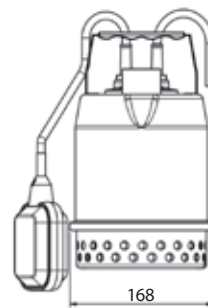
- Basement drainage
- Rainwater
- Manufacturing / industry
- Agriculture
- Suited for clear to slightly contaminated water with suspended stones (no stones) up to grain size of 10 mm, not for faeces-containing waste water.

## Characteristics

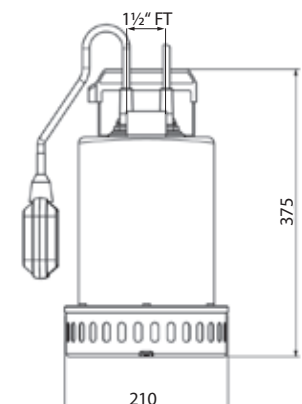


## Dimensions

Type: Drain Inox 50 MA



Type: Drain Inox 90 MA



# Drainprofi B

## Submersible waste water pumps

### Features

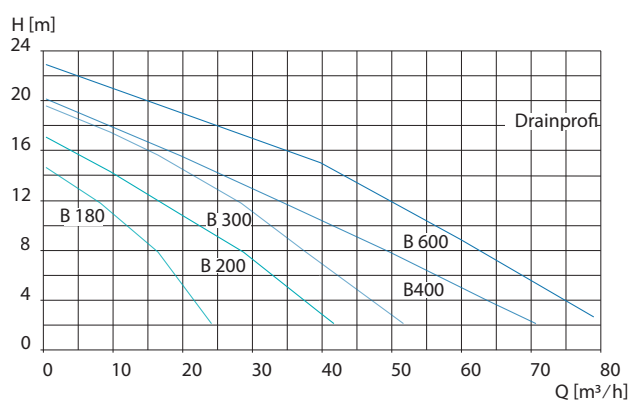
- Robust submersible motor pump for construction sites
- Mechanical seal on engine side in oil bath
- Immersion depth 5 m
- B 180 - 200: incl. Storz coupling Type "C" / B 300 - 600: incl. Storz coupling Type "B"
- 230 V: with float switch, starting device, capacitor and thermal protector
- 400 V: with three phase switchgear
- Incl. 10 m power cable H 07 RN-F



### Applications

- For private dwellings or public buildings
- For keeping construction pits dry
- Use in fountain systems, etc.
- Waste water with light and abrasive contaminations

### Characteristics

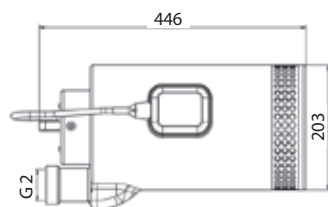


### Technical data

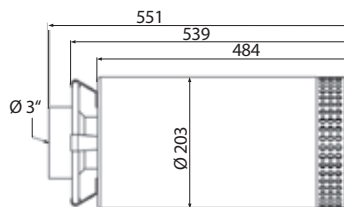
Drainprofi B	180	180	200	200	300	400	600
Article number	16933	17050	19054	19055	12900	19058	19059
Discount group	K	K	K	K	K	K	K
Weight (kg)	21.0	21.0	35.0	35.0	38.0	38.0	43.0
<b>Electrical characteristics</b>							
Voltage (V)	230	400	230	400	400	400	230
Current (A)	9.5	3.3	13.5	4.6	6.5	9.5	13.0
Frequency (Hz)	50	50	50	50	50	50	50
Input power P1 (W)	2.200	2.000	2.900	2.900	3.700	5.000	7.000
Output power P2 (W)	1.100	1.100	1.800	1.800	2.250	3.000	4.500
Speed (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>							
Max. head (m)	15.0	15.0	17.5	17.5	19.0	21.0	23.0
Max. flow rate (m <sup>3</sup> /h)	25.0	25.0	42.0	42.0	54.0	72.0	84.0
Solids handling (mm)	10	10	10	10	10	10	10
Max. medium temp. (°C)	35	35	35	35	35	35	35
Medium temp. short term (°C)	50	50	50	50	50	50	50

### Dimensions

Type: Drainprofi B 180/200



Type: Drainprofi B 300/400/600



# Flood emergency kit E-ZW



## Submersible waste water pumps

### Features

- Stainless steel pump with high pump pressure
- Motor winding with thermal winding protection
- Mechanical seal and additional shaft seal
- Pump housing, motor housing, shaft and suction strainer are made of stainless steel, impeller made of polyamide
- Jacket cooled single phase motor
- Float switch for level control
- Stainless steel pump E-ZW 65 A with integrated non-return valve, float switch with float hinge and mounting bracket to fix the pump in the box, 10 m power cable and Storz coupling C
- Pump removable from box without disassembly
- 15 M hose with Storz coupling C
- Pinch and kink protection for the hose made of plastic
- Transport box (W 60 x H 30 x D 40 cm) with 8 x 8 mm holes, acts at the same time as a protective cage
- Incl. 10 m power cable and plug

### Applications

- Complete set for emergency drainage
- Pumping of (invasive) ground water and high water
- Pump can be easily removed and used outside the box



### Installation example



Fig.: Flood kit in flooded washroom

# Flood emergency kit E-ZW

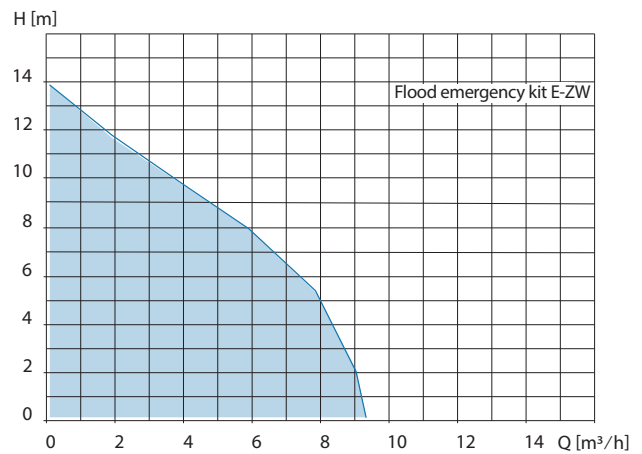


Submersible waste water pumps

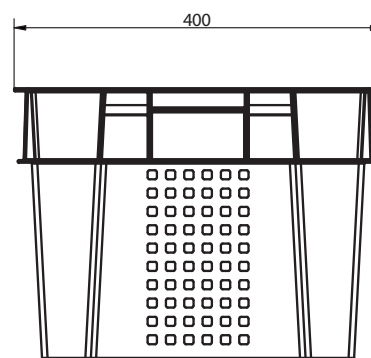
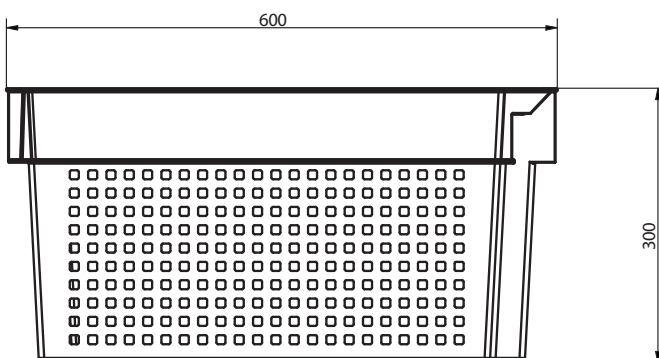
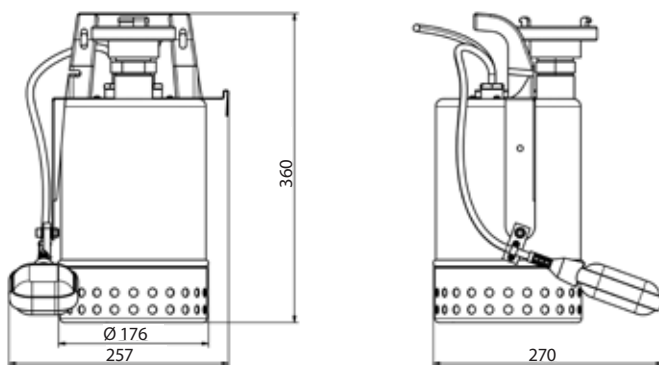
## Technical data

Flood emergency kit	
Article number	16916
Discount group	A
Weight (kg)	17
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	3.7
Frequency (Hz)	50
Input power P1 (W)	850
Output power P2 (W)	430
Speed (min-1)	2.800
Protection class	IP 68
Immersion depth (m)	5
Power cable length (m)	10
<b>Hydraulic characteristics</b>	
Max. head (m)	14.0
Max. flow rate (m <sup>3</sup> /h)	9.5
Solids handling (mm)	10
Max. medium temp. (°C)	40
Medium temp. short term (°C)	90
Min. cut-in water level (mm)	200
Min. cut-out water level (mm)	45

## Characteristics



## Dimensions



# Flood emergency kit Vectis

Submersible waste water pumps

## Features

- Submersible waste water pump, made of corrosion- and shock-resistant polypropylene and high-grade stainless steel
- Motor winding with thermal winding protection
- Sealing by triple shaft seal ring
- Integrated vent screw
- Horizontal pressure outlet 1 ¼" MT
- Automatic mode due to lever float switch
- Flat suction function due to removable suction strainer
- 15 M hose with Storz coupling C
- Pinch and kink protection for the hose made of plastic
- Transport box (W 40 x H 33.3 x D 30 cm) also functions as a protective basket
- Continuous operation possible due to supplied locking device for the float switch
- Incl. 10 m power cable and plug, non-return valve, Connection bend 90° 1¼" IT

## Applications

- Complete set for emergency drainage
- Pumping of (invasive) ground water and high water
- Pump can be easily removed and used outside the box



## Installation example



Fig.: Flood kit Vectis in flooded washroom



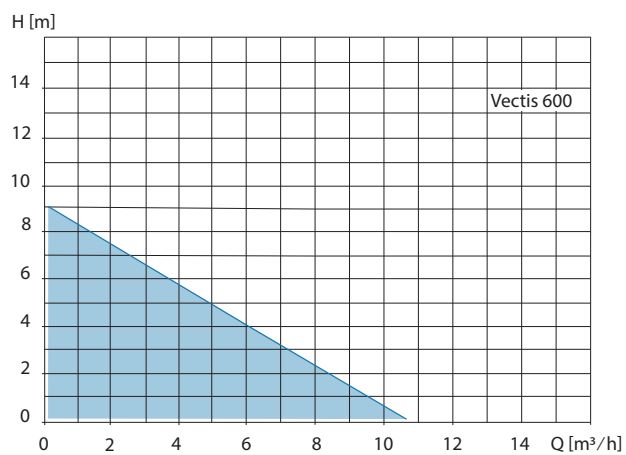
# Flood emergency kit Vectis

Submersible waste water pumps

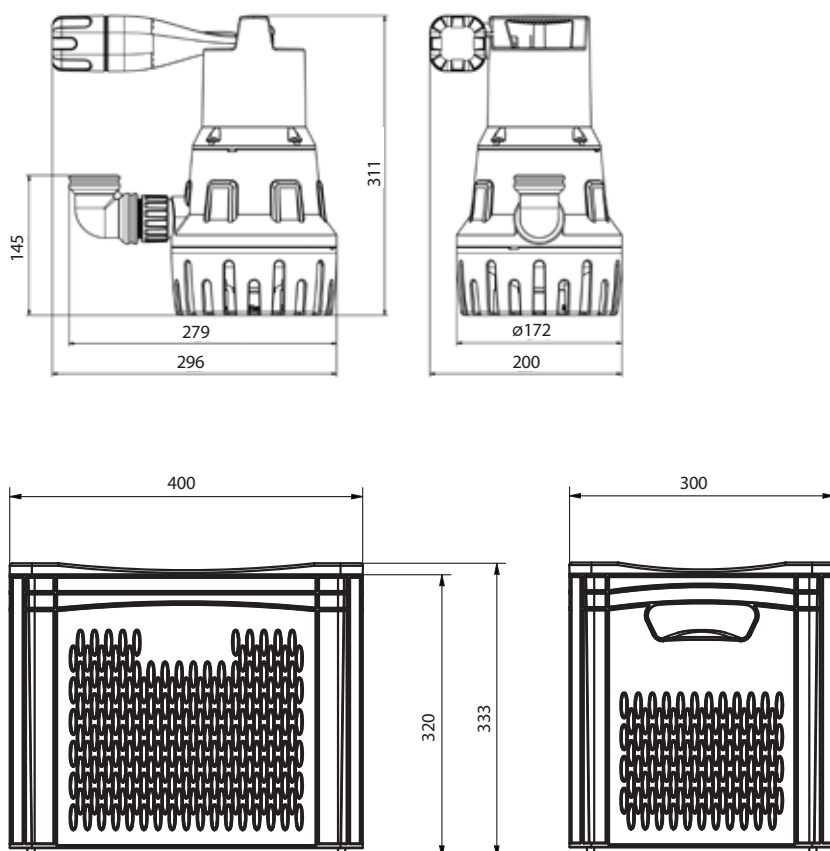
## Technical data

Flood emergency kit Vectis	
Article number	23061
Discount group	A
Weight (kg)	11.7
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	2.3
Frequency (Hz)	50
Input power P1 (W)	600
Output power P2 (W)	400
Speed (min-1)	2.800
Protection class	IP 68
Immersion depth (m)	7.0
Power cable length (m)	10.0
<b>Hydraulic characteristics</b>	
Max. head (m)	9.0
Max. flow rate (m <sup>3</sup> /h)	11.0
Solids handling (mm)	20
Max. medium temp. (°C)	35
Min. cut-in water level (mm)	250
Min. cut-out water level (mm)	150

## Characteristics



## Dimensions



# ZPG® 50 series

## Submersible waste water pumps

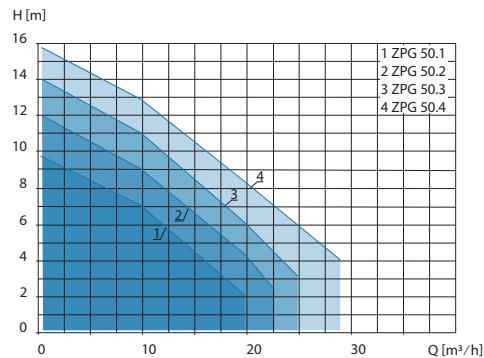
### Features

- Submersible waste water pump made of cast iron for portable and stationary (coupling system) purposes
- Pump housing, motor housing and impeller made of cast iron, shaft made of stainless steel
- Motor winding with thermal winding protection (M-Version only)
- Mechanical seal and additional shaft seal
- Three phase or single phase motor
- Version M (single phase 230 V): pump with 10 m power cable and plug, version WA with mounted float switch
- ZPG 50.X.T retrofittable float switch available as an accessory
- Version T (three phase 400 V): pump with 10 m power cable
- All pumps without stand feet and outlet bend
- Optional coupling system (see accessories)
- Available as complete system incl. FPS pumping station or as guide rail system with coupling for existing manholes

### Applications

- Pumping of waste water
- Pumping of rainwater and surface water
- Portable pump for emergency drainage and drainage of manholes

### Characteristics



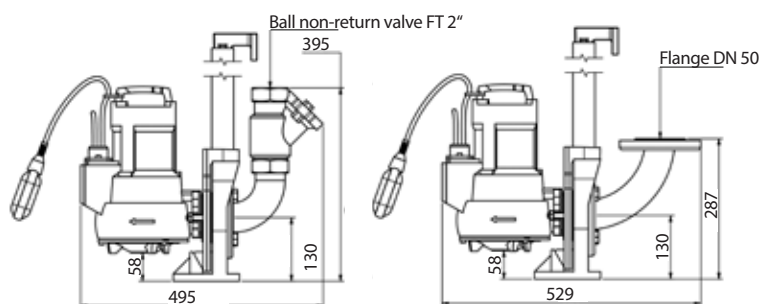
### Technical data

ZPG®	50.1 W	50.1 WA	50.2 W	50.2 WA	50.3 W	50.3 WA	50.4 W	50.4 WA	50.1 D	50.2 D	50.3 D	50.4 D
Article number	13049	13056	13060	13065	13069	13074	13078	13083	16936	13066	13075	13084
Discount group	B	B	B	B	B	B	B	B	B	B	B	B
Weight (kg)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
<b>Electrical characteristics</b>												
Voltage (V)	230	230	230	230	230	230	230	230	400	400	400	400
Current (A)	5.0	5.0	6.0	6.0	8.2	8.2	8.2	8.2	2.3	2.8	3.0	3.5
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	1.000	1.000	1.250	1.250	1.800	1.800	1.800	1.800	900	1.100	1.500	2.050
Output power P2 (W)	550	550	750	750	1.100	1.100	1.100	1.100	550	750	1.100	1.500
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>												
Max. head (m)	9.6	9.6	11.9	11.9	13.9	13.9	16.1	16.1	9.6	11.9	13.9	16.1
Max. flow rate (m³/h)	20.0	20.0	23.0	23.0	25.0	25.0	29.0	29.0	20.0	23.0	25.0	29.0
Solids handling (mm)	45	45	45	45	45	45	45	45	45	45	45	45
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40	40	40	40
Medium temp. short term (°C)	70	70	70	70	70	70	70	70	70	70	70	70

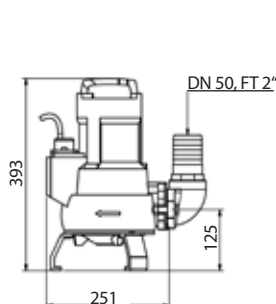
operating mode S1 (continuous operation) - motor submerged completely; operating mode S3 - 40% - motor emerged

### Dimensions

#### fixed application



#### portable application



## Submersible waste water pumps

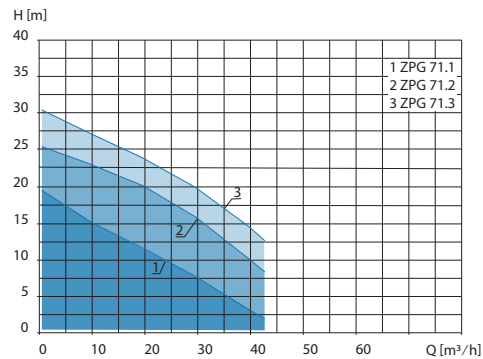
### Features

- Submersible waste water pump made of cast iron for portable and stationary (coupling system) purposes
- Pump housing, motor housing and impeller made of cast iron, shaft made of stainless steel
- Double bidirectional mechanical seals with intermediate oil chamber
- Horizontal pressure outlet DN 50
- Blockage-free operation by 40 mm solids handling
- Lateral cable gland with strain relief and kink protection
- Version T (three phase 400 V) with 10 m power cable
- Version M (single phase 230 V) with 10 m power cable, control unit with motor protection, capacitor and plug
- Optional coupling system (see accessories)

### Applications

- Pumping of waste water
- Pumping of rainwater and surface water
- Portable pump for emergency drainage and drainage of manholes

### Characteristics

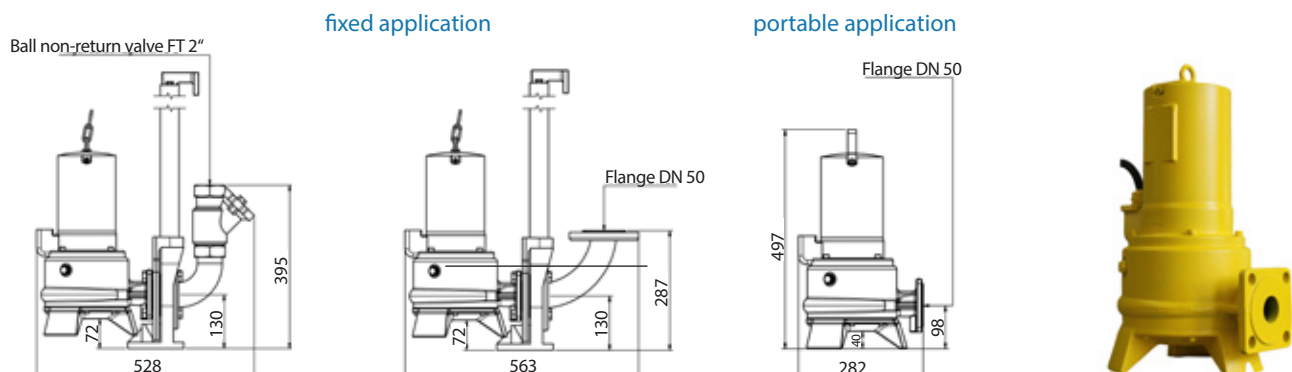


### Technical data

ZPG®	71.1 W	71.1 D	71.2 D	71.3 D
Article number	17836	17835	17837	17838
Discount group	B	B	B	B
Weight (kg)	44.0	44.0	44.0	46.0
<b>Electrical characteristics</b>				
Voltage (V)	230	400	400	400
Current (A)	10.5	3.7	6.5	6.5
Frequency (Hz)	50	50	50	50
Input power P1 (W)	2.200	2.100	3.900	3.900
Output power P2 (W)	1.600	1.700	3.200	3.200
Speed (min-1)	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10
<b>Hydraulic characteristics</b>				
Max. head (m)	19.0	19.0	26.0	31.0
Max. flow rate (m³/h)	43.0	43.0	43.0	43.0
Solids handling (mm)	40	40	40	40
Max. medium temp. (°C)	40	40	40	40
Medium temp. short term (°C)	70	70	70	70

operating mode S1 (continuous operation) - motor submerged completely; operating mode S3 - 40% - motor emerged

### Dimensions



# Solida 125 Cutter

## Submersible waste water pumps

### Features

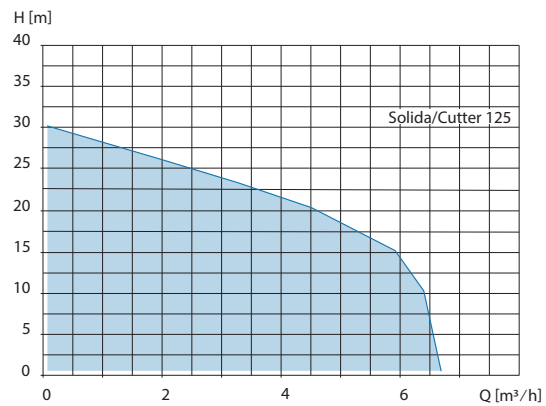
- Submersible pump with blade for waste water
- 230 V version optionally with float switch (MA), for automatic operation and dry run protection
- Horizontal pressure outlet 1½" IT
- Version 125 M with start-up box with capacitor and thermal overload protection (230 V version only)
- Incl. 10 m cable H07 RN-F, 230 V version with Schuko plug



### Applications

- Drainage of cesspits (where explosion protection is not required)
- Pressurised drainage
- Faeces-containing waste water (where explosion protection is not required).
- Drainage of swimming pools, soakaways etc.
- Lowering of groundwater level and drainage
- Suited for contaminated water, also with fibrous solids

### Characteristics



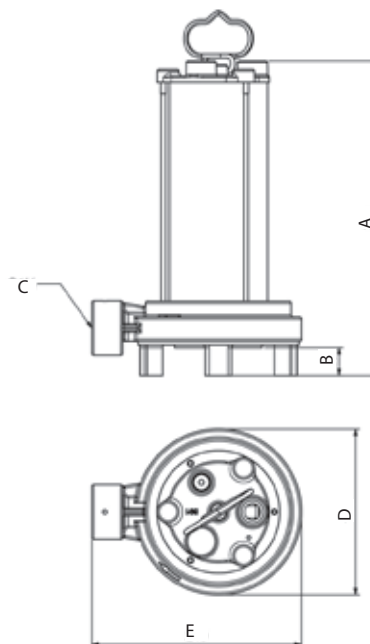
### Technical data

Solida	125 M	125 MA	125 T
Article number	19036	19034	19035
Discount group	E	E	E
Weight (kg)	21.9	21.9	21.2
<b>Electrical characteristics</b>			
Voltage (V)	230	230	400
Current (A)	9.2	9.2	2.9
Frequency (Hz)	50	50	50
Input power P1 (W)	1.800	1.800	1.500
Output power P2 (W)	1.200	1.200	1.150
Speed (min-1)	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68
Connection cable length (m)	10	10	10
<b>Hydraulic characteristics</b>			
Max. head (m)	30.0	30.0	30.0
Max. flow rate (m³/h)	6.6	6.6	6.6
Solids handling (mm)	cutter		
Max. medium temp. (°C)	50.0	50.0	50.0
Immersion depth max. (m)	20	20	20

### Accessories

Type	Art.-no.	Discount group
coupling system Solida 125 GR	19062	E

### Dimensions



Solida	125 M	125 T
A (mm)	416	396
B (mm)	29	29
C (mm)	1½"	1½"
D (mm)	190	190
E (mm)	240	240

# Solida 262 / 635

## Submersible waste water pumps

### Features

- Submersible pump with impeller
- Float switch for automatic operation and dry run protection (A)
- Double mechanical seal in oil chamber
- Incl. 5 m cable H 07 RN-F and plug (230V version), 10 m cable (400 V)



Type: Solida 262 C (A)  
Solida 635 C (A)

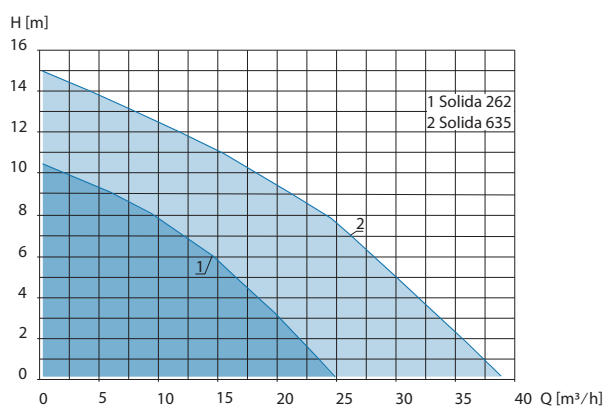


Type: Solida 262 T / T+G  
Solida 635 T / T+G

### Applications

- Drainage
- Industry
- Agriculture
- Suitable for contaminated water with suspended solids (grain size max. 32 mm)

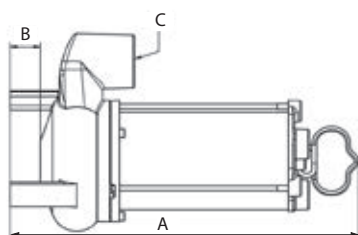
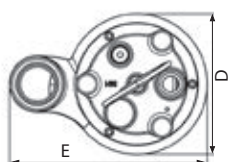
### Characteristics



### Technical data

Solida	262 C (A)	262 T	262 T+G (A)	635 C (A)	635 T	635 T+G (A)
Article number	19024	19025	19026	19027	19028	19029
Discount group	E	E	E	E	E	E
Weight (kg)	16.5	16.7	19.1	21.8	19.3	21.8
<b>Electrical characteristics</b>						
Voltage (V)	230	400	400	230	400	400
Current (A)	4.2	1.7	1.7	7.3	2.7	2.7
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	830	770	770	1.300	1.300	1.300
Output power P2 (W)	500	500	500	950	1.000	1.000
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10
<b>Hydraulic characteristics</b>						
Max. head (m)	10.5	10.5	10.5	15.0	15.0	15.0
Max. flow rate (m³/h)	24.0	24.0	24.0	39.0	39.0	39.0
Solids handling (mm)	32	32	32	32	32	32
Max. medium temp. (°C)	45	45	45	45	45	45
Immersion depth max. (m)	20	20	20	20	20	20

### Dimensions



Solida	262 C/T+G	262 T	635 C/T+G	635 T
A (mm)	450	400	484	440
B (mm)	60	60	60	60
C (mm)	2"	2"	2"	2"
D (mm)	172	172	172	172
E (mm)	250	250	250	250

# Solida 290 / 390/ 490

## Submersible waste water pumps

### Features

- Submersible pump with vortex impeller
- Float switch for automatic operation and dry run protection (A)
- Double mechanical seal in oil chamber
- Incl. 5 m cable H 07 RN-F and plug (230V version), 10 m cable (400 V)



Type: Solida 290 C  
Solida 390 C  
Solida 490 C

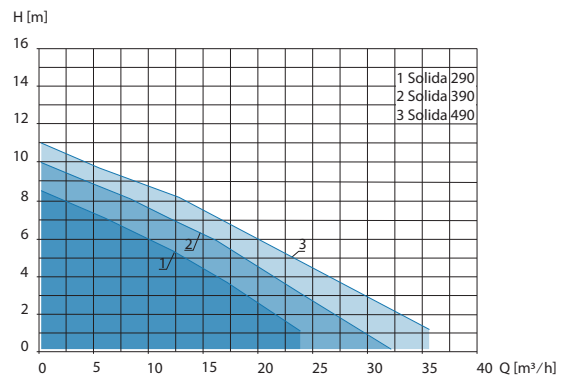


Type: Solida 290 T / T+G  
Solida 390 T / T+G  
Solida 490 T / T+G

### Applications

- Drainage
- Industry
- Agriculture
- Suitable for contaminated water with suspended solids (grain size max. 50 mm)

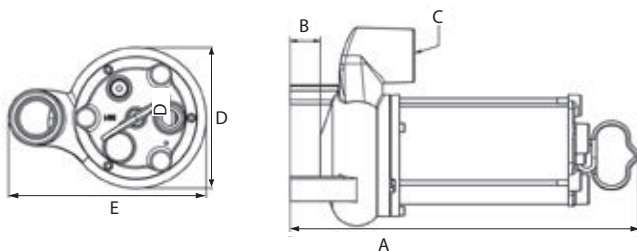
### Characteristics



### Technical data

Solida	290 C (A)	290 T	290T+G(A)	390 C (A)	390 T	390T+G(A)	490 C (A)	490 T	490T+G(A)
Article number	22781	22782	22783	19042	19043	19044	19045	19046	19047
Discount group	E	E	E	E	E	E	E	E	E
Weight (kg)	16.9	18.7	19.5	18.2	16.6	18.2	19.4	16.7	19.4
<b>Electrical characteristics</b>									
Voltage (V)	230	400	400	230	400	400	230	400	400
Current (A)	4.2	1.7	1.7	5.5	2.3	2.3	7.3	2.7	2.7
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Input power P1 (W)	970	970	970	1.260	1.180	1.180	1.500	1.450	1.450
Output power P2 (W)	650	650	650	820	800	800	1.100	1.100	1.100
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10	10	10	10
<b>Hydraulic characteristics</b>									
Max. head (m)	8.5	8.5	8.5	10.0	10.0	10.0	11.0	11.0	11.0
Max. flow rate (m³/h)	24.0	24.0	24.0	30.0	30.0	30.0	39.0	39.0	39.0
Solids handling (mm)	50	50	50	50	50	50	50	50	50
Max. medium temp. (°C)	45	45	45	45	45	45	45	45	45
Immersion depth max. (m)	20	20	20	20	20	20	20	20	20

### Dimensions



Solida	290 C/ T+G	290 T	390 C/ T+G	390T	490 C/ T+G	490T
A (mm)	492	492	502	502	527	527
B (mm)	65	65	65	65	65	65
C (mm)	2"	2"	2"	2"	2"	2"
D (mm)	162	162	162	162	162	162
E (mm)	235	235	235	235	235	235

# Solida 500 / 800 / 1100 / 1300

## Submersible waste water pumps

### Features

- Submersible pump for waste water with vortex impeller
- Passage for suspended particles
- Double mechanical seal in oil chamber
- Single phase with condenser and motor protection in external start-up device, three phase the motor protection has to be done by customer
- Coupling system on request
- Incl. 10 m cable H 07 RN-F and plug (230 V)



Type: Solida 500/50  
Solida 800/50

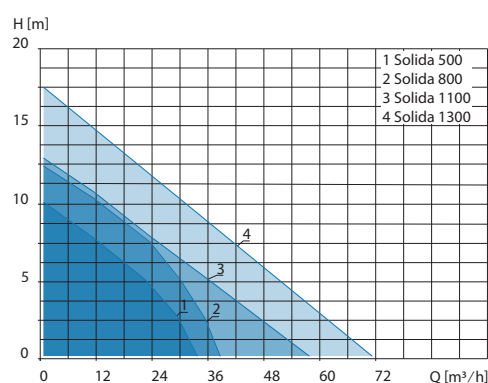


Type: Solida 1100/65  
Solida 1300/65

### Applications

- Waste water and industrial waste water
- Sewage (everywhere where no explosion protection is required)
- Faeces (everywhere where explosion protection is not required)
- Groundwater lowering and drainage
- Suitable for contaminated water with suspended solids

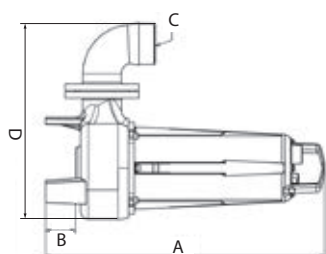
### Characteristics



### Technical data

Solida	500/50	500/50	800/50	800/50	1100/65	1300/65
Article number	19048	19049	19050	19051	19037	19038
Discount group	E	E	E	E	E	E
Weight (kg)	32.0	30.5	34.5	31.0	40.0	42.5
<b>Electrical characteristics</b>						
Voltage (V)	230	400	230	400	400	400
Current (A)	9.2	3.3	11.4	4.0	6.0	8.1
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	1.800	1.630	2.100	2.100	3.400	5.100
Output power P2 (W)	1.200	1.100	1.400	1.400	2.500	3.800
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10
<b>Hydraulic characteristics</b>						
Max. head (m)	10.0	10.0	11.5	11.5	13.0	18.5
Max. flow rate (m³/h)	30.0	30.0	36.0	36.0	54.0	66.0
Solids handling (mm)	50	50	50	50	65	65
Max. medium temp. (°C)	40	40	40	40	40	40
Immersion depth max. (m)	20	20	20	20	20	20

### Dimensions



Solida	500/50		800/50		1100/65	1300/65
	230V	400V	230V	400V	400V	400V
A (mm)	518	508	543	508	584	609
B (mm)	70	70	70	70	65	65
C (mm)	2"	2"	2½"	2½"	3"	3"
D (mm)	354	354	362	362	417	417

# Solida 700 / 900 / 1000 / 1500

## Submersible waste water pumps

### Features

- Submersible pump for waste water with channel impeller
- Passage for suspended particles
- Double mechanical seal in oil chamber
- Single phase with condenser and motor protection in external three phase the motor protection has to be done by customer
- Coupling system on request
- Incl. 10 m cable H 07 RN-F and plug (230 V)



Type: Solida 700/50  
Solida 900/50

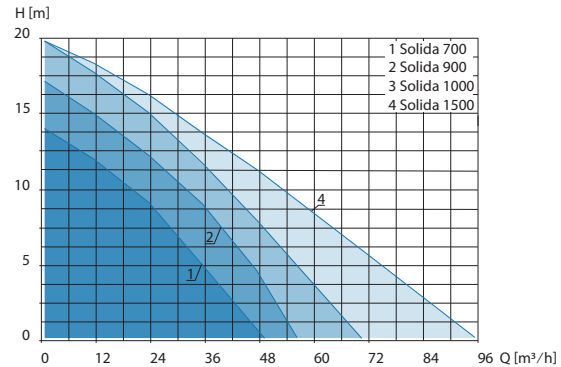


Type: Solida 1000/65  
Solida 1500/65

### Applications

- Waste water and industrial waste water
- Sewage (everywhere where no explosion protection is required)
- Faeces (everywhere where explosion protection is not required)
- Groundwater lowering and drainage
- Contaminated water with suspended solids

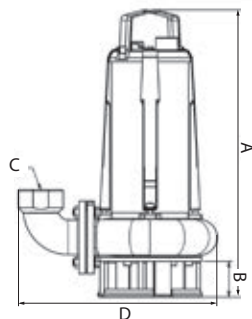
### Characteristics



### Technical data

Solida	700/50	700/50	900/50	900/50	1000/50	1500/65
Article number	19030	19031	19032	19033	19022	19023
Discount group	E	E	E	E	E	E
Weight (kg)	31.0	31.0	35.0	31.0	35.0	44.0
<b>Electrical characteristics</b>						
Voltage (V)	230	400	230	400	400	400
Current (A)	9.2	3.3	11.4	4.0	5.9	9.0
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	2.050	1.950	2.600	2.400	3.300	5.750
Output power P2 (W)	1.350	1.300	1.800	1.700	2.500	4.250
Speed (min-1)	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10	10
<b>Hydraulic characteristics</b>						
Max. head (m)	10.0	14.0	16.0	16.0	20.5	19.5
Max. flow rate (m³/h)	48.0	48.0	60.0	60.0	66.0	90.0
Solids handling (mm)	50	50	50	50	50	50
Max. medium temp. (°C)	40	40	40	40	40	40
Immersion depth max. (m)	20	20	20	20	20	20

### Dimensions



Solida	700/50	700/50	900/50	900/50	1000/50	1000/65
A (mm)	518	508	543	508	543	609
B (mm)	70	70	70	70	70	609
C (mm)	354	354	362	362	362	417
D (mm)	2"	2"	2½"	2½"	2½"	3"



# ZFS® 71 series - Cutting unit pump



## Sewage pumps

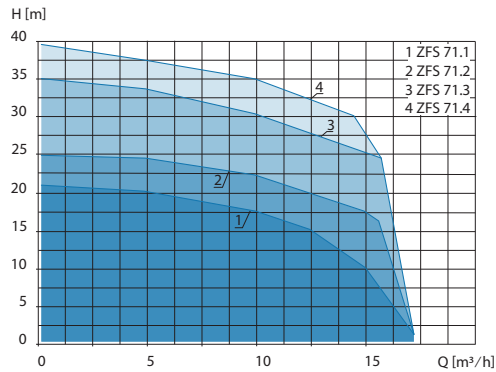
### Features

- Energy-efficient, explosion-proof sewage pump made of cast iron for portable and stationary (coupling system) purposes
- Robust, adjustable cutting system made of corrosion-resistant special alloy
- Cutting gap pre-adjusted to  $\leq 0.05$  mm
- Motor housing, pump housing, seal carrier and impeller made of cast iron
- Double bidirectional mechanical seals with intermediate oil chamber
- Horizontal pressure outlet with flange DN 50
- Lateral cable gland with strain relief and kink protection
- Available as complete system incl. FPS pumping station or as guide rail system with coupling for existing manholes
- Without stand feet and outlet bend
- Incl. 10 m power cable

### Applications

- Pumping of sewage from collection sumps
- Pressure drainage
- Installation in polyethylene or concrete manholes
- As grinder pump on sewage lifting units

### Characteristics

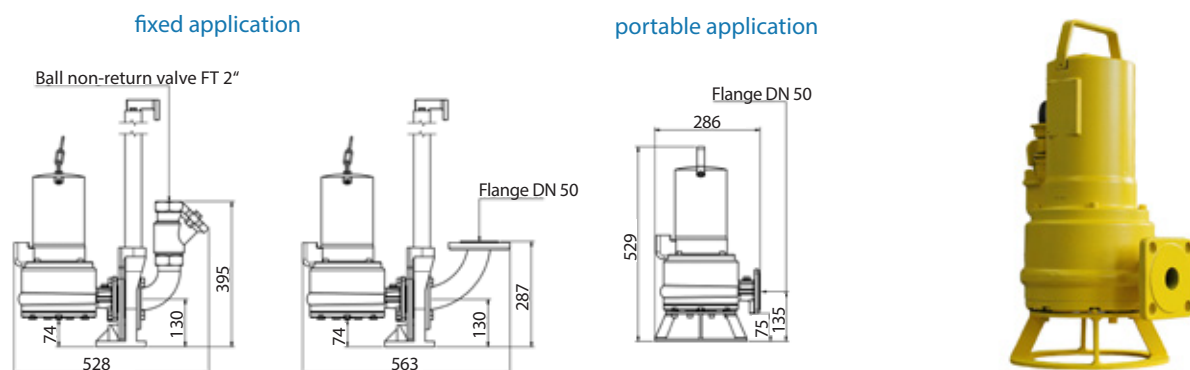


### Technical data

ZFS®	71.1 WEX	71.1 DEX	71.2 DEX	71.3 DEX	71.4 DEX
Article number	17381	17382	17383	17384	17385
Discount group	B	B	B	B	B
Weight (kg)	45.0	45.0	45.0	49.0	49.0
<b>Electrical characteristics</b>					
Voltage (V)	230	400	400	400	400
Current (A)	10.5	3.7	3.7	6.5	6.5
Frequency (Hz)	50	50	50	50	50
Input power P1 (W)	2.200	2.100	2.100	3.900	3.900
Output power P2 (W)	1.600	1.700	1.700	3.200	3.200
Speed (min-1)	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10	10
<b>Hydraulic characteristics</b>					
Max. head (m)	22	22	25	35	39
Max. flow rate (m³/h)	17	17	17	17	17
Max. medium temp. (°C)	40	40	40	40	40
Immersion depth max. (m)	5	5	5	5	5

operating mode S1 (continuous operation) - motor submerged completely; operating mode S3 - 40% - motor emerged

### Dimensions



# ZF 80 series



## Sewage pumps

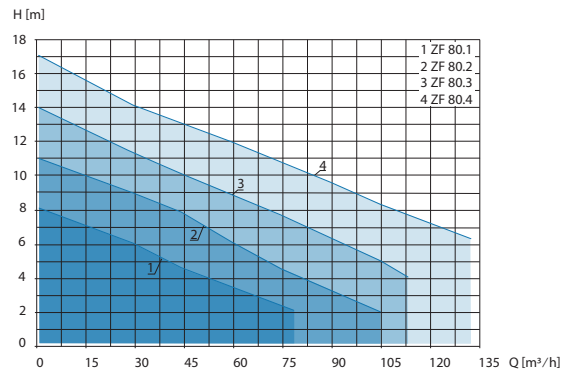
### Features

- Submersible sewage pump made of cast iron
- Explosion-proof version
- High pumping capacity
- Motor housing, pump housing and seal carrier made of cast iron
- Single-channel impeller made of cast iron with fibre cutting insert
- Double bidirectional mechanical seals with intermediate oil chamber
- Pressure outlet DN 100
- Guide rail system with coupling foot for existing manholes available
- Without stand feet and outlet bend
- Incl. 10 m power cable

### Applications

- Pumping of sewage with coarse and long-fibred ingredients
- Installation in domestic and public concrete pumping stations
- Applicable for vertical and horizontal dry well installations (intermittent duty S3)

### Characteristics



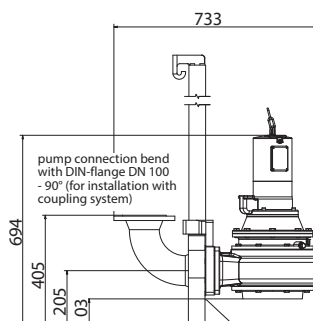
### Technical data

ZF	80.1 Ex	80.2 Ex	80.3 Ex	80.4 Ex
Article number	11231	11226	11232	11230
Discount group	B	B	B	B
Weight (kg)	84.0	86.0	88.0	90.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	5.7	5.7	9.5	9.5
Frequency (Hz)	50	50	50	50
Input power P1 (W)	3.200	3.200	4.400	4.400
Output power P2 (W)	2.500	2.500	3.300	3.300
Speed (min-1)	1.450	1.450	1.450	1.450
Protection class	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10
<b>Hydraulic characteristics</b>				
Max. head (m)	8	11	14	17
Max. flow rate (m³/h)	80	105	115	130
Solids handling (mm)	80	80	80	80
Max. medium temp. (°C)	40	40	40	40
Immersion depth max. (m)	5	5	5	5

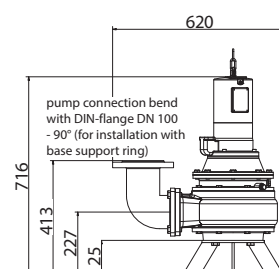
operating mode S1 (continuous operation) - motor submerged completely; operating mode S3 - 40% - motor emerged

### Dimensions

#### fixed application



#### portable application



# ZF 100 series



## Sewage pumps

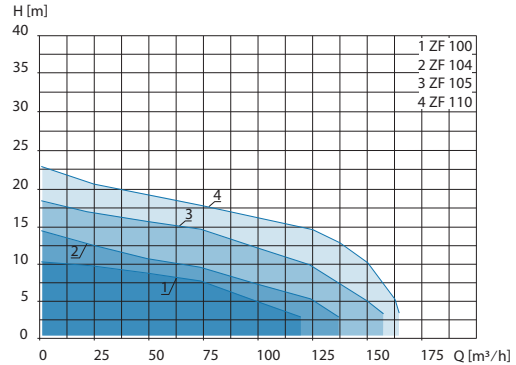
### Features

- Submersible sewage pump made of cast iron
- Explosion-proof version
- High pumping capacity
- Motor housing, pump housing and seal carrier made of cast iron
- Single-channel impeller made of cast iron with fibre cutting insert
- Double bidirectional mechanical seals with intermediate oil chamber
- Pressure outlet DN 100
- Guide rail system with coupling foot for existing manholes available
- Without stand feet and outlet bend
- Incl. with 10 m power cable

### Applications

- Pumping of sewage with coarse and long-fibred ingredients
- Installation in domestic and public concrete pumping stations
- Applicable for vertical and horizontal dry well installations (intermittent duty S3)

### Characteristics



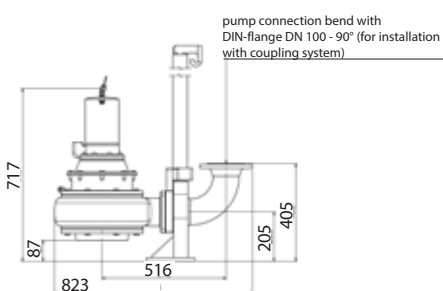
### Technical data

ZF	100 Ex	104 Ex	105 Ex	110 Ex
Article number	11234	11236	11249	11267
Discount group	B	B	B	B
Weight (kg)	112.0	142.0	146.0	155.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	9.5	9.5	12.1	16.6
Frequency (Hz)	50	50	50	50
Input power P1 (W)	4.400	4.400	6.300	8.700
Output power P2 (W)	3.300	3.300	5.500	7.500
Speed (min-1)	1.450	1.450	1.450	1.450
Protection class	IP 68	IP 68	IP 68	IP 68
Power cable length (m)	10	10	10	10
<b>Hydraulic characteristics</b>				
Max. head (m)	10	13	18	22
Max. flow rate (m³/h)	120	140	160	165
Solids handling (mm)	100	100	100	100
Max. medium temp. (°C)	40	40	40	40

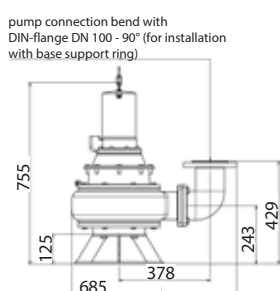
operating mode S1 (continuous operation) - motor submerged completely; operating mode S3 - 40% - motor emerged

### Dimensions

#### fixed application



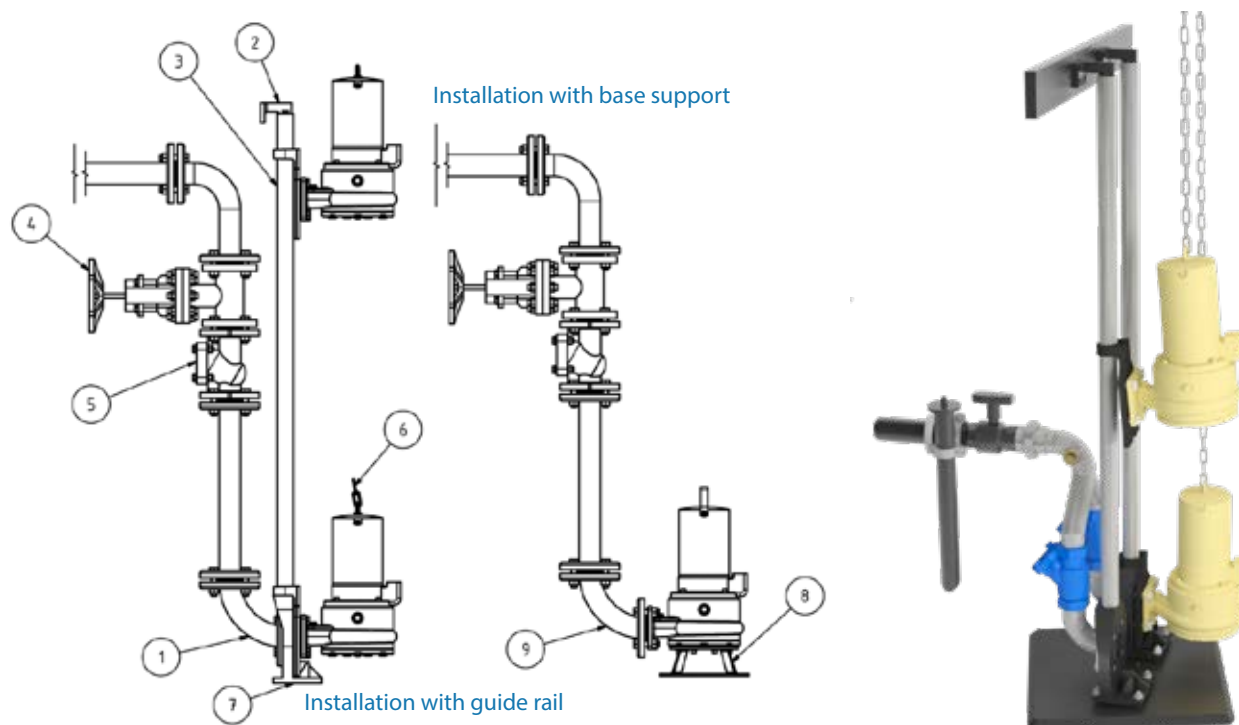
#### portable application














# Accessories

for submersible pumps






## Features



Type	Art.-no.	Discount group	Pos. in drawing	Figure
Base support ring ZFS	12019	B	8	
Base support ring ZF 80	23099	B	8	
Base support ring ZF 100 - ZF 110	23101	B	8	
Flanged pipe bend 90° DN 100 cast-iron with 1 x DIN-flange for installation with base support ring	12009	B	9	
Pump feet set ZPG 50	12018	B	8	
Coupling system ZPG 50	12040	B	2 + 7	
Coupling system ZFS/ZPG 71	12029	B	2 + 7	
Coupling system DN 100	12043	B	2 + 7	
Flanged pipe bend 90° DN 100 cast-iron with 2 x DIN-flange for coupling system	12012	B	1	
Flanged pipe bend 90° DN 50 PE	11927	B	1 + 9	
Flanged pipe bend 90° DN 65 PE	11928	B	1 + 9	
Flanged pipe bend 90° DN 80 PE	11929	B	1 + 9	
Flanged pipe bend 90° DN 50 VA	12347	B	1 + 9	

# Accessories

for Submersible pumps

Type	Art.-no.	Discount group	Pos. in drawing	Figure
Y-pipe DN 50/50/50 PE for duplex unit	11992	B		
Y-pipe DN 50/65/50 PE for Duplex	11993	B		
Y-pipe DN 65/65/65 PE for duplex unit	11994	B		
Y-pipe DN 65/80/65 PE for duplex unit	11995	B		
Y-pipe DN 50/80/50 PE for duplex unit	11996	B		
Y-pipe DN50/100/50 PE for duplex unit	12001	B		
Y-pipe DN 80/80/80 PE for duplex unit	12002	B		
Y-pipe DN100/100/100 PE for Miniboy/Boy Duplex Y-pipe DN100/100/100 PE	11997	B		
Y-pipe DN100/125/100 PE	12006	B		
Y-pipe DN100/150/100 PE	12005	B		
Guide rail 1¼" VA	12931	B	3	
Guide rail 2" VA	12941	B	3	
Ball non-return valve DN 50 GG	14394	B	5	
Ball non-return valve DN 65 GG	14395	B	5	
Ball non-return valve DN100 GG	14398	B	5	
Non-return valve 1¼" FT PE DN 32	14393	B		
Non-return valve 1½" FT PE DN 40	14392	B		
Non-return valve 2" FT PE DN 50	14391	B		
Non-return valve DN100 PE	14401	B	5	
Retrofit kit non-return valve ZPK / S-ZPK	17016	B		
Double nipple 2" 100 mm GV	11335	B		
Angle compression fitting 2" FPT d63 PE	11101	B		
Compression fitting 2" FPT d63 PE	11100	B		
Gate valve 1¼" FT MS	10638	B		
Gate valve 1½" FT MS	10640	B		
Gate valve 2" FT MS	10641	B		
Gate valve DN 50 GG	10646	B	4	
Gate valve DN 65 GG	10647	B	4	
Gate valve DN 100 GG	10649	B	4	
Accessory Set for Back Pressure Bell + 8/6mm Air Hose 10m + Mounting Bracket + Fastening Material	23293	B		
















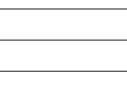
# Accessories

for submersible pumps

Type	Art.-no.	Discount group	Figure
Lowering chain 5 mm VZ (je m)	10419	B	
Lowering chain 5 mm VA (je m) DIN 763	10420	B	
Lowering chain 6 mm VA	16962	B	
Shackle NG 0,4 M10 VZ	11187	B	
Shackle NG 8 VA	16589	B	
Pressure pipe DN 50 1 m PE 1 x Flange	12048	B	
Pressure pipe DN 50 1 m PE 2 x Flange	12055	B	
Pressure pipe DN 65 1 m PE 2 x Flange	12056	B	
Pressure pipe extension DN 50 PE (per metre)	12058	B	
Pressure pipe extension DN 65 PE (per metre)	12059	B	
Pressure pipe DN 100 1 m PE	12049	B	
Pressure pipe DN 100 2 m PE	12050	B	
Pressure pipe DN 100 3 m PE	12051	B	
Pressure pipe 2 x G 2" MPT GV	11362	B	
Reducer DN 50/65 PE flanged	10449	B	
Reducer DN 65/80 PE flanged	10450	B	
Reducer DN 50/80 PE flanged	10455	B	
Reducer DN 50/100 PE flanged	10456	B	
Reducer DN 80/100 PE flanged	10454	B	
Flange piece DN 50 PE	11931	B	
Flange piece DN 65 PE	10654	B	
Compression fitting 2" DN 50 d63 PE flange-sleeve-piece	11102	B	
Threaded flange DN 50 FPT 2" GV PN10/16	12101	B	
Threaded flange V4A, DN50, 2" PN16 DIN 2566, Form C	22596	B	
Pipe bend 90° long 2" FT/MPT GV	12106	B	
Pipe bend 90° long 2" MPT GV	12142	B	
Pump connecting bend 90° 2" VA MPT	12391	B	
Pipe bend 90° 2" MPT GV	12122	B	

## Accessories

for submersible pumps

Type	Art.-no.	Discount group	Figure
Ball non-return valve 2" FPT cast-iron PN10	12104	B	
Air valve B for pumping station 'basic'	14485	B	
Air valve C for pumping station 'comfort'	14486	B	
Shackle NS 0,25 M8 GV	11186	B	
Shackle NG 5 VA	16552	B	
C-hose 2" - 10 m with C-couplings	11358	B	
C-hose 2" - 20 m with C-couplings	11359	B	
B-hose 3" - 10 m with B-couplings	11360	B	
B-hose 3" - 20 m with B-couplings	11361	B	
Storz adapter B/C	11338	B	
Storz coupling C/2" FPT	11316	B	
Storz coupling B/2 1/2" FPT	11317	B	
Storz coupling B/3" FPT	11319	B	
Storz coupling C/2" MPT	11320	B	
Connection cable for ZPG/ZFS/ ZF 80 - ZF 104 (per metre)	12493	B	
Connection cable ZF 105 - ZF 110 (per metre)	11781	B	

## Mounting accessories

Type	Art.-no.	Discount group
Mounting accessories DN 50 VA	15438	B
Mounting accessories DN 65 VA	15439	B
Mounting accessories DN 80 VA	15440	B
Mounting accessories DN 100 VA	15441	B
Mounting accessories DN 125 VA	15442	B
Mounting accessories DN 150 VA	15443	B

\*consisting of 4 x hexagon bolt, 4 x hexagon nut, 1 x flat gasket

## Free standing

### Features

- Free standing, polyethylene grease separator in frost-free rooms
- Compact oval design
- Acc. to DIN EN 1825 without partition between silt trap and separating chamber
- Connections for inlet and outlet suitable for PEHD-pipe
- Odour-proof inspection cover 1 x up to NS 2, 2 x for NS 4-10
- Circular sight glass, sampling device, filling devices and discharge device optionally available

### Applications

- Sewage treatment in restaurants and food producing industry



### Installation example



Fig.: Grease separator NS 4 with rinsing and disposal facilities, sampling unit DN 150








# Grease separators

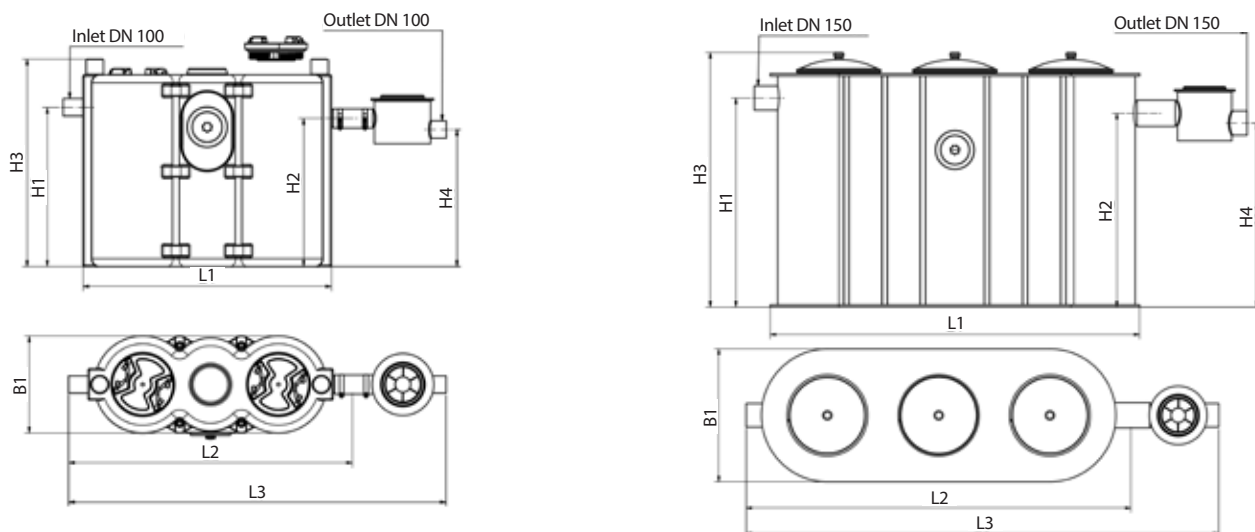


Free standing

## Technical data

Grease separator	NS 1 oval	NS 2 oval	NS 4 oval	NS 7	NS 10
					
Article number	14317	14319	14321	14326	14328
Discount group	C	C	C	C	C
Weight (kg)	64.0	64.0	79.0	260.0	295.0
<b>Characteristics</b>					
DN	100	100	100	150	150
Sludge trap (l)	107	214	360	714	1001
Grease reservoir (l)	181	181	181	409	409

## Dimensions



Grease separator	NS 1 oval	NS 2 oval	NS 4 oval	NS 7	NS 10
L1 (mm)	1170	1170	1570	2420	2420
L2 (mm)	1420	1420	1820	2625	2625
L3 (mm)	2187	2187	2587	3392	3392
H1 (mm)	855	1005	1005	1370	1535
H2 (mm)	755	935	935	1270	1435
H3 (mm)	1310	1310	1310	1670	1670
H4 (mm)	685	865	865	1205	1370
B1 (mm)	630	630	630	950	950

# Grease separators



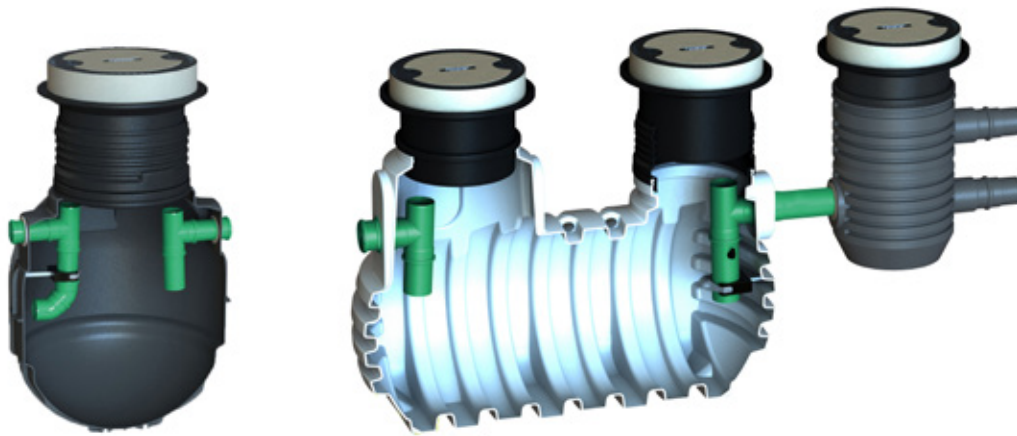
For underground installation

## Features

- Seamless plastic container made from one piece
- All installation parts made of plastic
- Low maintenance costs due to easy to clean inner surface
- Space-saving
- No odour nuisance in the building
- Included in the set: tank with piping, sampling shaft, telescopic dome shaft, and concrete covers (accessible for passenger cars or trucks)

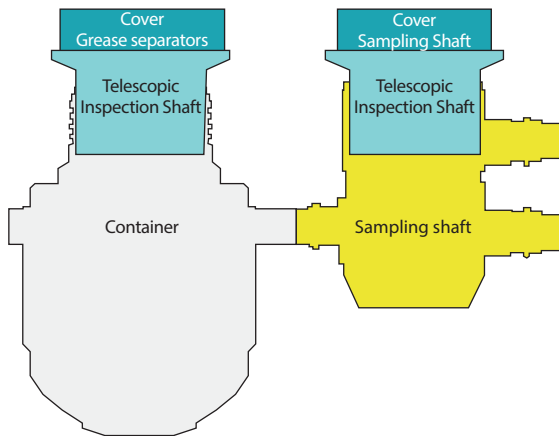
## Applications

- Waste water treatment in catering and food processing companies

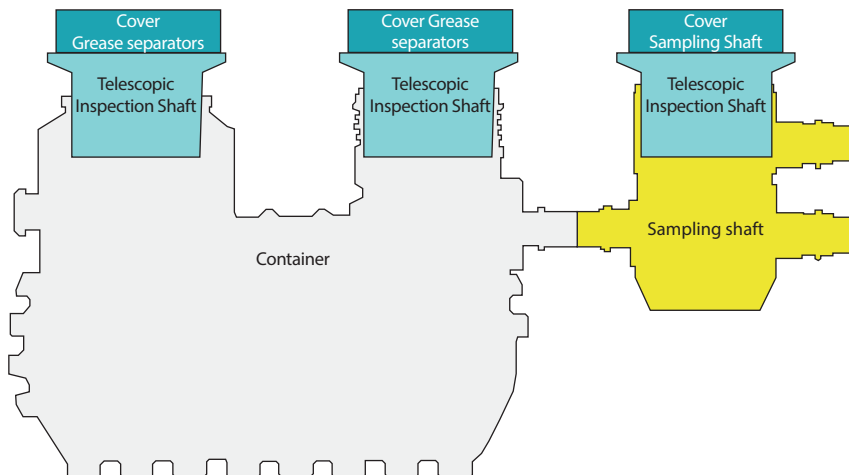


## Set features

NS 2 and NS 4



NS 7, NS 10 and NS 15



## Technical data

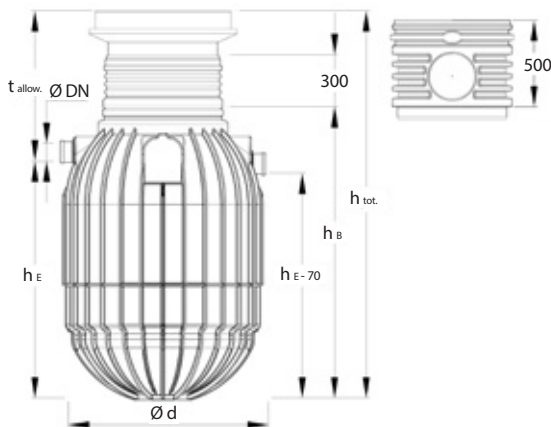
Grease separators	NS 2-200-2		NS 4-500		NS 7-700		NS 10-1500		NS 15-1500	
	B125 (Car)	D400 (Truck)	B125 (Car)	D400 (Truck)	B125 (Car)	D400 (Truck)	B125 (Car)	D400 (Truck)	B125 (Car)	D400 (Truck)
Article number	23698	23699	23700	23701	21702	23703	23704	23705	23706	23707
Discount group	C	C	C	C	C	C	C	C	C	C
Weight (kg)	344	444	403	503	468	568	553	653	553	653
<b>Characteristics</b>										
DN	110	110	110	110	160	160	200	200	200	200
Sludge trap (l)	200	200	500	500	700	700	1500	1500	1500	1500
Grease reservoir (l)	200	200	300	300	350	350	600	600	600	600



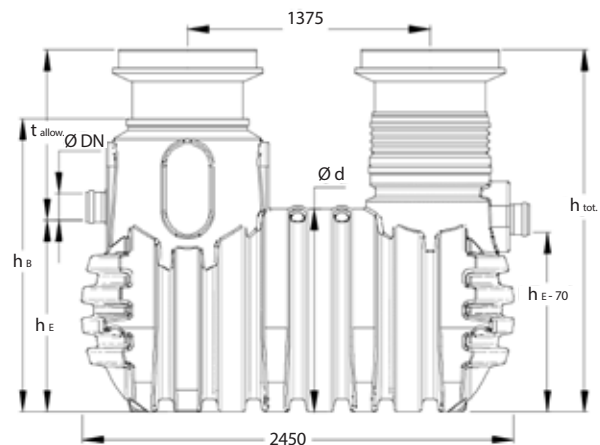
The container with the corresponding intermediate piece (300mm) and the sampling shaft (without intermediate piece) form a level surface. If an elevation is needed, intermediate pieces (22023=300mm, 22024=500mm) must be ordered additionally.

## Dimensions

Type: NS 2 / NS 4



Type: NS 7 / NS 10 / NS 15



Grease separators	NS 2-200-2	NS 4-500	NS 7-700	NS 10-1500	NS 15-1500
Connection Ø DN	110	110	160	200	200
H <sub>ε</sub> (mm)	820	1350	1080	1280	1280
Cover class. B*	t <sub>allow.</sub> (mm)	800-980	870-1050	880-1060	930-1110
	h <sub>tot.</sub> (mm)	1620-1800	2220-2400	1960-2140	2210-2390
Cover class. D*	t <sub>allow.</sub> (mm)	830-1010	910-1090	920-1100	970-1150
	h <sub>tot.</sub> (mm)	1650-1830	2260-2440	2000-2180	2250-2430
Container	Ø d (mm)	1160	1160	1150	1400
	h <sub>B</sub> (mm)	1030	1650	1655	1905
	Weight (kg)	41.0	100.0	165.0	250.0

\* When using the 500 mm intermediate piece, the installation depths increase by 200 mm.

# Grease separators

mobile

## Features

- Polyethylene grease separator for installation in frost-free rooms for mobile flushing systems

## Applications

- Mobile usage in places where permanent installation is impossible
- Mobile food stalls
- Mobile dishwashers
- Occasional food preparation
- Caution! daily cleaning required

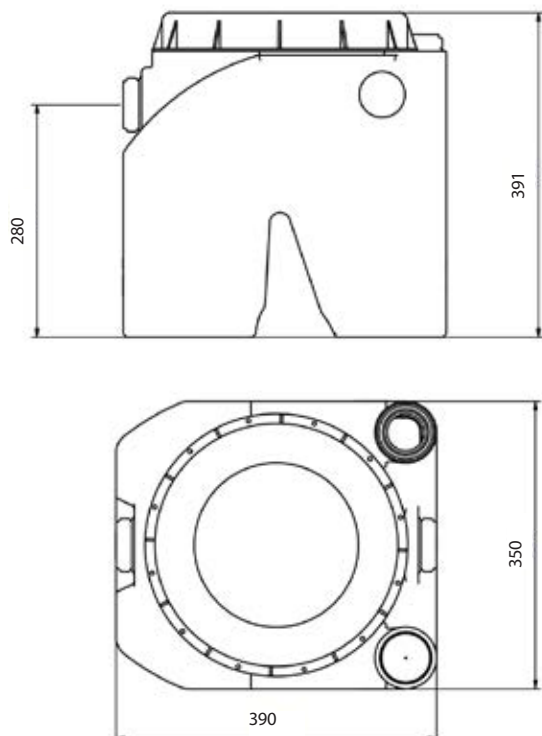


## Technical data

### Grease separators mobile S 0,5

Article number	18131
Discount group	C
Weight (kg)	4,0
<b>Characteristics</b>	
DN	50
Sludge trap (l)	8
Total volume (l)	24

## Dimensions











## Installation example



Fig.: mobile grease separator in use behind a food truck

# Accessories

for grease separators

Type	Art.-no.	Discount group	Figure
<b>Accessories for grease separators in free-standing</b>			
Flushing and disposal unit NS 1-2 incl. ZFS pump and control	23405	C	
Flushing and disposal unit NS 4 incl. ZFS pump and control	23407	C	
Flushing and disposal unit NS 7-10 incl. ZFS pump and control	23408	C	
Flushing and disposal pump	20369	C	
Control for flushing and disposal pump	22207	C	
Sampling device DN100	16899	C	
Sampling device DN25	14334	C	
Circular sight glass	16898	C	
Suction device DN65	16900	C	
Filling device G1	16901	C	
Filling device G1 1/2	14314	C	
Grease layer thickness gauge	17365	C	
<b>Accessories for grease separator underground installation</b>			
Dome assembly for passenger vehicle for grease separator	21766	C	
Dome assembly for truck for grease separator	21767	C	
Dome assembly for passenger vehicle for sampling shaft	22015	C	
Dome assembly for truck for sampling shaft	22016	C	
Sampling shaft DN 110 for Grease separators underground installation without telescopic shaft/concrete cover	21768	C	
Sampling shaft DN 160 for Grease separators underground installation without telescopic shaft/concrete cover	21774	C	
Sampling shaft DN 200 for Grease separators underground installation without telescopic shaft/concrete cover	21775	C	
Intermediate piece 300 with NBR profile seal	22023	C	
Intermediate piece 500 with NBR profile seal, only for NS2 and NS4	22024	C	
Extraction system DN 65 NS 7-700, NS 10-1500, NS 15-1500	22003	C	
Suction device DN 65 NS 7-700, NS 10-1500, NS 15-1500	22004	C	
Extraction key	22222	C	
Grease layer thickness gauge	22211	C	

# SWH-F 500 series

MADE IN GERMANY

## Waste water lifting units

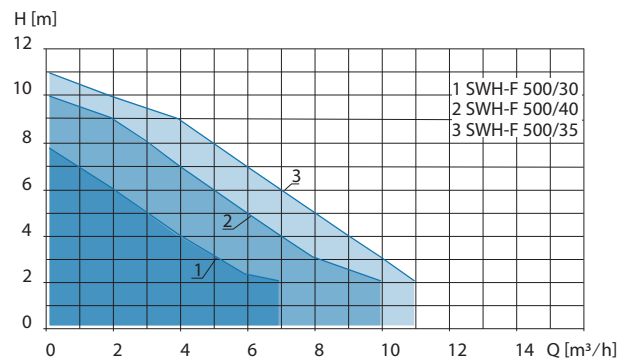
### Features

- Grease-resistant tank made of PE with 75 l usable volume
- Single unit with built-in submersible wastewater pump Type ZPK with float switch
- Duplex unit with 2 pumps ZPK and control unit with pneumatic level control ZPS2 (see page 118)
- Motor housing and shaft made of stainless steel, suction drain, impeller and pump housing made of polypropylene
- Double sealing by mechanical seal and additional shaft seal
- Piping made of PVC with external non-return valves and pressure outlet 1 ¼" FT

### Applications

- As lifting unit behind grease separators (according to DIN 4040-100 only in design with 30 mm solids handling)
- Pumping of domestic waste water from washing machines, showers, wash basins etc.
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Installation example



Fig.: SWH-F 500 behind Grease separators

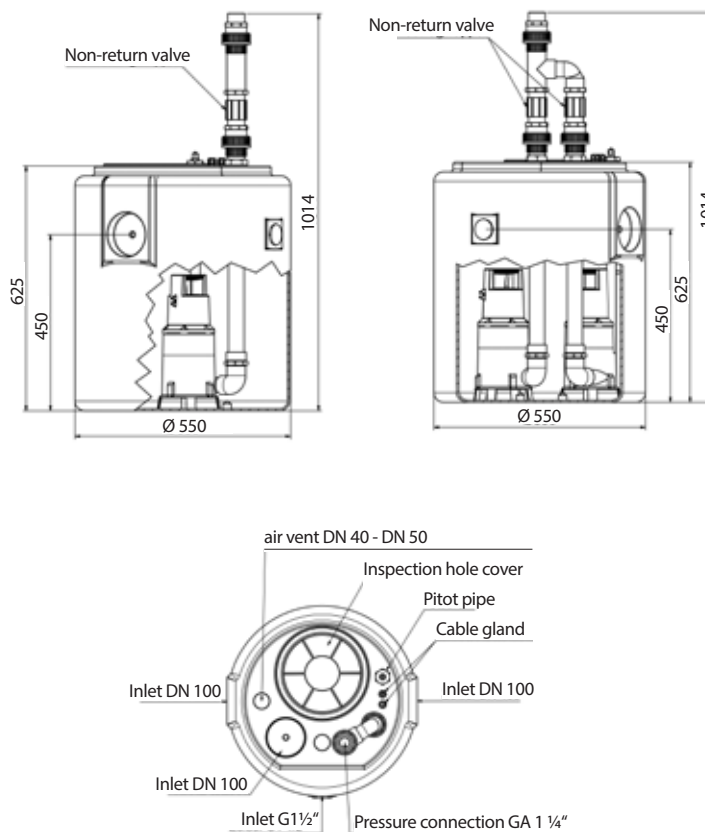
### Technical data

SWH-F	Simplex			Duplex		
	500/30	500/35	500/40	500/30	500/35	500/40
Article number	17454	17456	17458	17455	17457	17459
Discount group	B	B	B	B	B	B
Weight (kg)	19.5	21.0	22.0	25.0	27.0	30.0
<b>Electrical characteristics</b>						
Voltage (V)	230	230	230	230	230	230
Current (A)	1.3	3.7	3.7	1.3	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	300	850	850	300	850	850
Output power P2 (W)	130	430	430	130	430	430
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>						
Max. head (m)	7.5	11.0	10.0	7.5	11.0	10.0
Max. flow rate (m <sup>3</sup> /h)	7.0	11.0	10.0	7.0	11.0	10.0
Solids handling (mm)	10	10	30	10	10	30
Max. medium temp. (°C)	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90



According to DIN 4040-100, the use of a small compressor set for air bubbling (Art.-no.: 14894) and a mains-independent alarm switchgear (Art.-no.: 13001) is mandatory for lifting units for use behind the grease separator.

### Dimensions



## Waste water lifting units for aggressive media

### Features

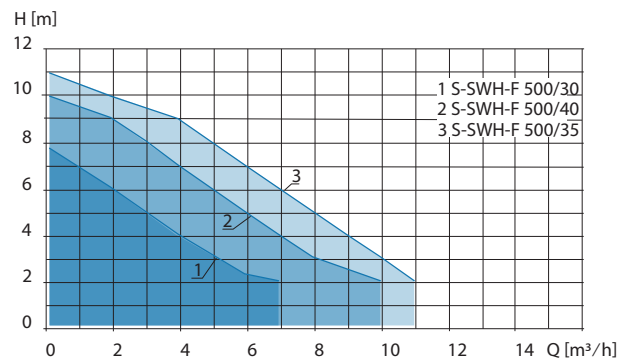
- Grease-resistant tank made of PE with 75 l usable volume
- Single unit with built-in submersible wastewater pump Type S-ZPK with float switch
- Duplex unit with 2 pumps ZPK and control unit with pneumatic level control S-ZPS2 (see page 118)
- High-quality mechanical seal made of silicone carbide (SiC), motor housing made of 1.4404 stainless steel, motor shaft made of stainless steel
- Piping made of PVC with external non-return valves and pressure outlet 1 1/4" FT



### Applications

- Pumping of slightly acidic condensate, aggressive or saline water (max. 15% salt content)
- Pumping of domestic waste water from washing machines, showers, wash basins etc.
- Above-ground installation in frost-free rooms below the backflow level

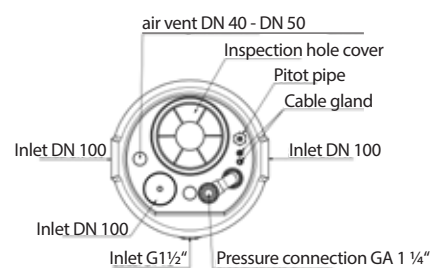
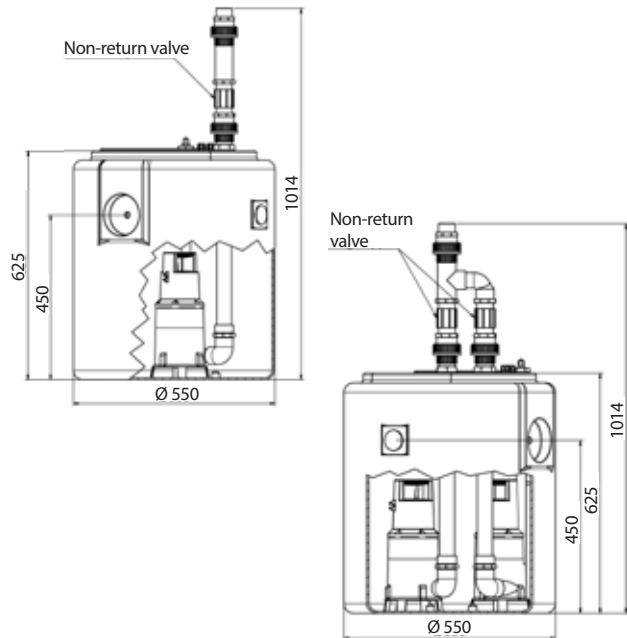
### Characteristics



### Technical data

S-SWH-F	Simplex			Duplex		
	500/30	500/35	500/40	500/30	500/35	500/40
Article no.	23713	23714	23715	23716	23717	23718
Discount group	B	B	B	B	B	B
Weight (kg)	19.5	21.0	22.0	25.0	27.0	30.0
<b>Electrical characteristics</b>						
Voltage (V)	230	230	230	230	230	230
Current (A)	1.3	3.7	3.7	1.3	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	300	850	850	300	850	850
Output power P2 (W)	130	430	430	130	430	430
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>						
Max. head (m)	7.5	11.0	10.0	7.5	11.0	10.0
Max. flow rate (m³/h)	7.0	11.0	10.0	7.0	11.0	10.0
Solids handling (mm)	10	10	30	10	10	30
Max. medium temp. (°C)	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90

### Dimensions





# D-SWH

## Waste water lifting units

### Features

- Versatile use (shower & washbasin) due to 2 inlets at the bottom side
- Compact size for discreet installation
- Sound pressure level (1m) at 46 dB
- Low switch-on height (55 mm)
- Installation height shower tray 12 cm
- Prepared shower inlet DN 40, usable on both sides
- Pressure outlet DN 32
- Tank ventilation through activated carbon filter



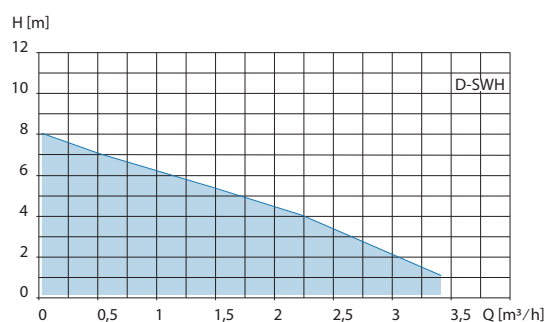
### Technical data

	D-SWH
Article number	21547
Discount group	A
Weight (kg)	4
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	1.3
Frequency (Hz)	50
Input power P1 (W)	250
Speed (min-1)	2.800
Protection class	IP 44
Power cable length (m)	2.0
<b>Hydraulic characteristics</b>	
Max. head (m)	5.0
Max. flow rate (m <sup>3</sup> /h)	3.9
Max. medium temp. (°C)	40

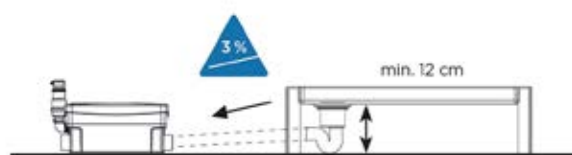
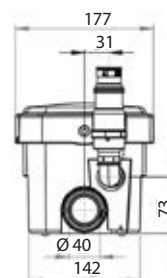
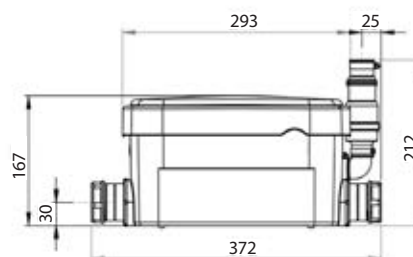
### Applications

- Overcomes gravity drainage problems and enables basement showers
- Pump suitable for shower and washbasin

### Characteristics



### Dimensions



## Waste water lifting units

### Features

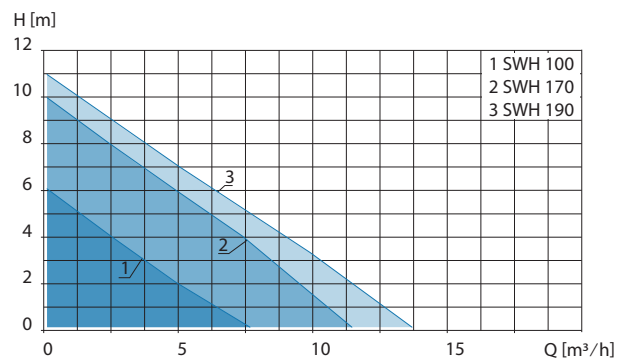
- Pre-assembled ready for connection - easy installation
- PP collection container with 20 l usable capacity
- Switching device integrated in lid with audible high water alarm signal
- Double safety due to 2nd float (alarm float)
- Potential-free contact for external alarm or washing machine stop
- Prepared shower inlet DN 50 usable on both sides (container bottom edge to middle of shower inlet only 80 mm)
- All connections prepared; all connection pieces included in scope of delivery
- Pressure outlet 1 ¼" FT with integrated non-return valve
- Active carbon filter for container ventilation
- Pump fixed on lid for easy cleaning and maintenance
- Incl. 1.5 m power cable and plug



### Applications

- Pumping of domestic waste water from washing machines, showers, wash basins etc.
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Installation example

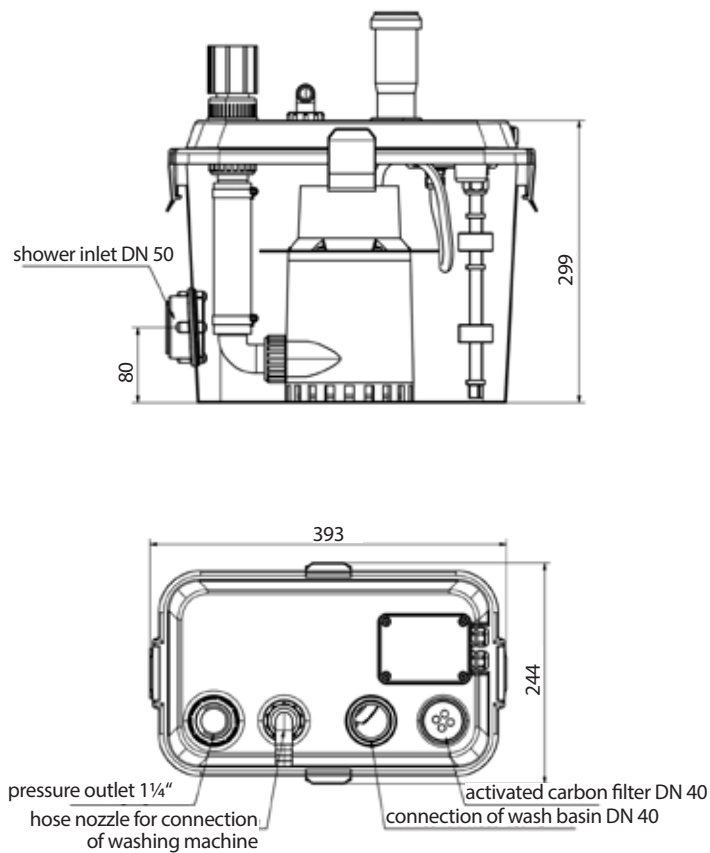


Fig.: SWH 100 in kitchen in basement apartment

### Technical data

SWH	100	170	190
Article number	11463	11468	11471
Discount group	A	A	A
Weight (kg)	5.0	6.0	6.0
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	1.3	3.7	3.7
Frequency (Hz)	50	50	50
Input power P1 (W)	300	850	850
Output power P2 (W)	130	430	430
Speed (min-1)	2.800	2.800	2.800
Protection class	IP 57	IP 57	IP 57
Power cable length (m)	1.5	1.5	1.5
<b>Hydraulic characteristics</b>			
Max. head (m)	6	10	11
Max. flow rate (m <sup>3</sup> /h)	8	11.5	14
Solids handling (mm)	10	10	10
Usable volume (l)	20	20	20
Max. medium temp. (°C)	40	40	40
Medium temp. short term (°C)	90	90	90

### Dimensions



### Detailed view



# S-SWH® 100 series



Waste water lifting units for aggressive media

## Features

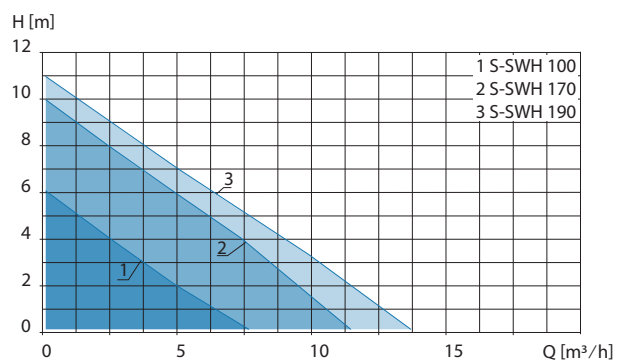
- For use behind water softening systems and for calorific value condensate
- PP collection container with 20 l usable capacity
- High-quality, silicone carbide mechanical seal, stainless steel motor housing (1.4404), stainless steel motor shaft
- Ready for connection - pump and control unit already integrated
- Switching device integrated in lid with audible high water alarm signal
- Potential-free contact for external alarm or washing machine stop
- Prepared shower inlet DN 50 usable on both sides
- All connections prepared; all connection pieces included in scope of delivery
- Pressure outlet 1 ¼" FT with integrated non-return valve
- Active carbon filter for container ventilation
- Incl. 1.5 m power cable and plug



## Applications

- Drainage of slightly acidic condensate, aggressive or saline water (max. 15% salt content)
- Lifting waste water without sewage from domestic applications

## Characteristics



## Installation example

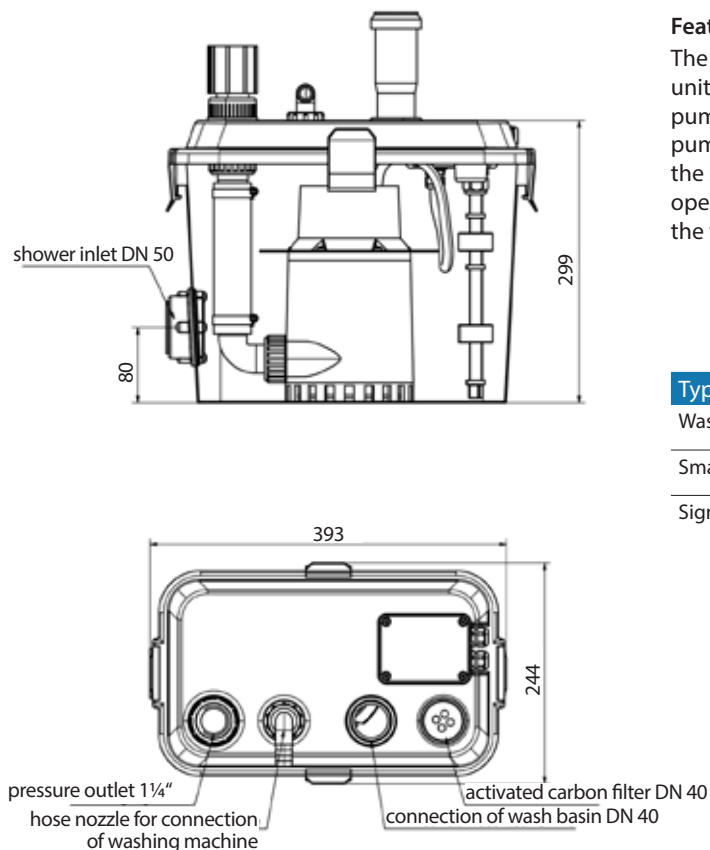


Fig.: SWH / S-SWH100 in basement bathroom

### Technical data

S-SWH	100	170	190
Article number	11466	11470	11472
Discount group	A	A	A
Weight (kg)	5	6	6
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	1.3	3.7	3.7
Frequency (Hz)	50	50	50
Input power P1 (W)	300	850	850
Output power P2 (W)	130	430	430
Speed (min-1)	2.800	2.800	2.800
Protection class	IP 57	IP 57	IP 57
Power cable length (m)	1.5	1.5	1.5
<b>Hydraulic characteristics</b>			
Max. head (m)	6	10	11
Max. flow rate (m <sup>3</sup> /h)	8	11.5	14
Solids handling (mm)	10	10	10
Usable volume (l)	20	20	20
Max. medium temp. (°C)	40	40	40
Medium temp. short term (°C)	90	90	90

### Dimensions



### Accessories

#### Features washing machine stop:

The washing machine stop can be applied everywhere, where units do not dispose of suds directly, but through an inline pumping system. The switch device is connected to the pumping system. The washing machine plug is plugged into the socket of the switch device. The system is now ready for operation. If the pumping system fails, the power supply to the washing machine is interrupted.

Type	Art.-no.	Discount group
Washing machine stop	13003	B
Small horn 230 V	12068	B
Signal light red, 230 VAC	12075	B



# UFB 200 series



## Waste water lifting units

### Features

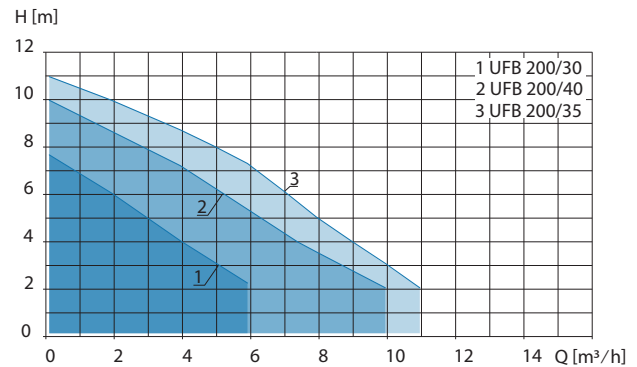
- Underfloor box with collection container made of PE with 20 l usable capacity
- Built-in submersible waste water pump type ZPK with float switch
- Connection for air vent and cable gland
- Inlet DN 50 (HT) is supplied loose - can be inserted on-site by drilling into the tank
- Pressure outlet 1 1/4" MT with integrated non-return valve
- Incl. 10 m connection cable with Schuko plug, plastic grate cover, siphon, sand trap, inlet connection piece DN 50, extended attachment piece and closed cover plate (optional as accessory)



### Applications

- Pumping of domestic waste water from washing machines, showers, wash basins etc.
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



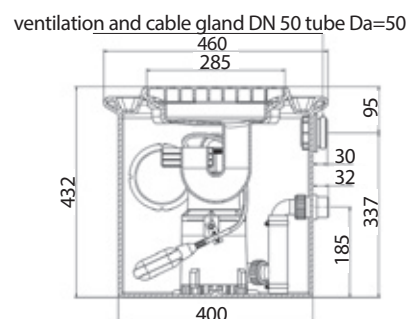
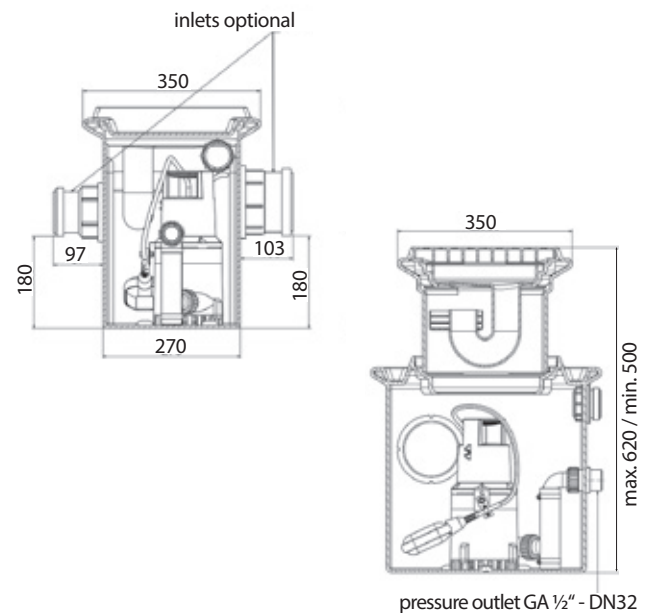
### Technical data

UFB	200/30	200/35	200/40
Article number	11491	11513	11515
Discount group	A	A	A
Weight (kg)	6.1	7.0	8.0
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	1.3	3.7	3.7
Frequency (Hz)	50	50	50
Input power P1 (W)	300	850	850
Output power P2 (W)	130	430	430
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>			
Max. head (m)	7.5	11.0	10.0
Max. flow rate (m³/h)	7.0	11.0	10.0
Solids handling (mm)	10	10	30
Max. medium temp. (°C)	40	40	40
Medium temp. short term (°C)	90	90	90

Accessories	Art.-no.	Discount group
Abdeckpl. UFB 300x300 mm	11492	B
Aufsatzstück UFB inkl. O-Ring	11493	B
inletstutzen Kunstst. DN 50	20752	B
inletstutzen Kunstst. DN 70	20753	B
inletstutzen Kunstst. DN 100	20754	B

Additional side inlets can also be installed on customer request. Please observe minimum installation height! (Sketch required).

### Dimensions



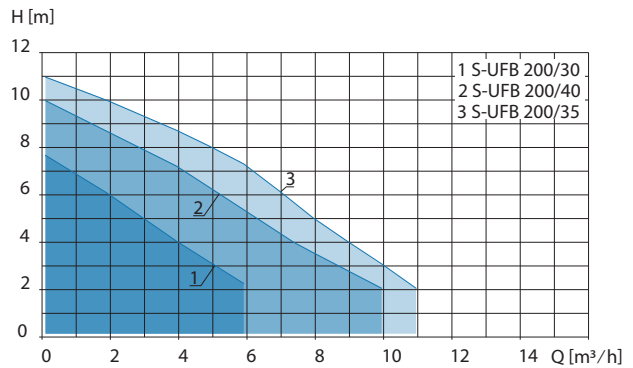
### Features

- Underfloor box with collection container made of PE with 20 l usable capacity
- For use behind water softening systems and for calorific value condensate
- High-quality, silicone carbide mechanical seal, stainless steel motor housing (1.4404), stainless steel motor shaft
- Built-in submersible waste water pump type ZPK with float switch
- Connection for air vent and cable gland
- Inlet DN 50 (HT) is supplied loose - can be inserted on-site by drilling into the tank
- Pressure outlet 1 1/4" MT with integrated non-return valve
- Incl. 10 m connection cable with Schuko plug, plastic grate cover, siphon, sand trap, inlet connection piece DN 50, extended attachment piece and closed cover plate (optional as accessory)

### Applications

- Pumping of slightly acidic condensate, aggressive or saline water (max. 15% salt content)
- For underfloor installation in the base plate
- Lifting of grey water from domestic use

### Characteristics



### Technical data

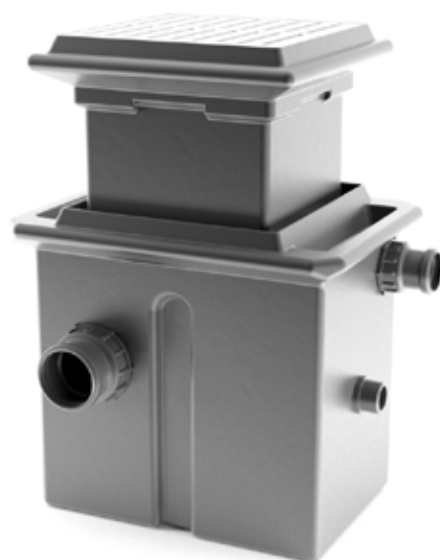
S-UFB	200/30	200/35	200/40
Article number	11498	11514	17948
Discount group	A	A	A
Weight (kg)	6.1	7.0	8.0
<b>Electrical characteristics</b>			
Voltage (V)	230	230	230
Current (A)	1.3	3.7	3.7
Voltage (V)	230	230	230
Frequency (Hz)	50	50	50
Input power P1 (W)	300	850	850
Output power P2 (W)	130	430	430
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>			
Max. head (m)	7.5	11.0	10.0
Max. flow rate (m³/h)	7.0	11.0	10.0
Solids handling (mm)	10	10	30
Max. medium temp. (°C)	40	40	40
Medium temp. short term (°C)	90	90	90

Accessories	Art.-no.	Discount group
Cover plate for UFB 300x300 mm	11492	B
Extension piece UFB incl. O-Ring	11493	B
Inlet connection DN 50	20752	B
Inlet connection DN 70	20753	B
Inlet connection DN 100	20754	B

### Dimensions

- See UFB 200 series

Fig.: UFB 200 / S-UFB 200 with optional extension and additional connection inlet



# SWH 500 series



## Waste water lifting units

### Features

- Collection container made of PE with 75 l usable capacity
- Single unit with built-in waste water submersible pump type E-ZW with float switch
- Double unit with 2 pumps type E-ZW and separate control box with pneumatic level control ZPS2
- Pump housing, motor housing, shaft and suction strainer made of stainless steel, impeller made of polyamide
- Double sealing by mechanical seal and shaft seal
- Pressure outlet 1 1/4" FT
- Incl. waterproof cable gland with 3 m connection cable and Schuko plug, mounted ready to plug in



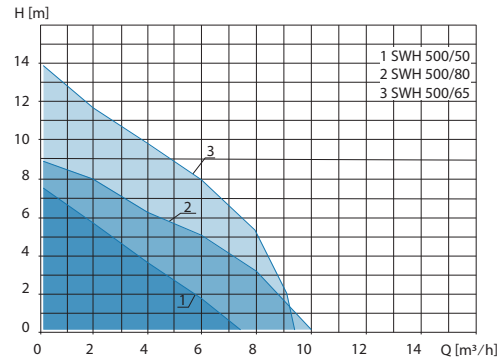
### Technical data

SWH	Simplex			Duplex		
	500/50	500/65	500/80	500/50	500/65	500/80
Article number	11544	11546	11548	11545	11547	11549
Discount group	B	B	B	B	B	B
Weight (kg)	21.5	23.0	24.0	28.0	31.0	33.0
<b>Electrical characteristics</b>						
Voltage (V)	230	230	230	230	230	230
Current (A)	1.8	3.7	3.7	1.8	3.7	3.7
Frequency (Hz)	50	50	50	50	50	50
Input power P1 (W)	380	850	850	380	850	850
Output power P2 (W)	210	430	430	210	430	430
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800	2.800
Protection class	IP 57	IP 57	IP 57	IP 57	IP 57	IP 57
<b>Hydraulic characteristics</b>						
Max. head (m)	7.5	14.0	8.5	7.5	14.0	8.5
Max. flow rate (m <sup>3</sup> /h)	7.5	9.5	10.0	7.5	9.5	10.0
Solids handling (mm)	10	10	30	10	10	30
Max. medium temp. (°C)	40	40	40	40	40	40
Medium temp. short term (°C)	90	90	90	90	90	90

### Applications

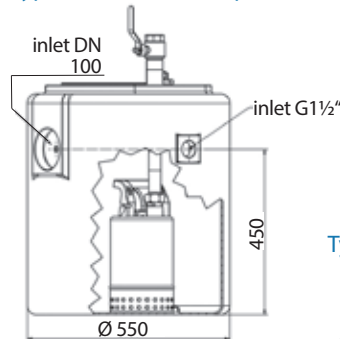
- Above-ground installation in frost-free rooms below the backflow level
- Pumping of domestic waste water from washing machines, showers, wash basins etc.

### Characteristics

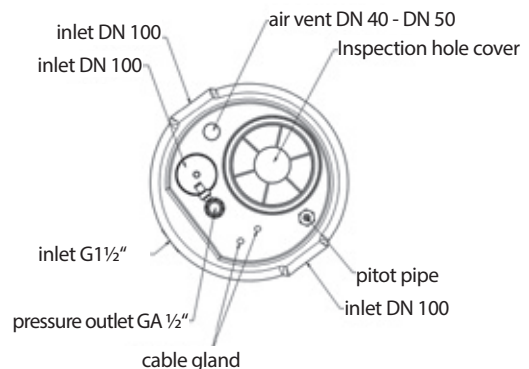
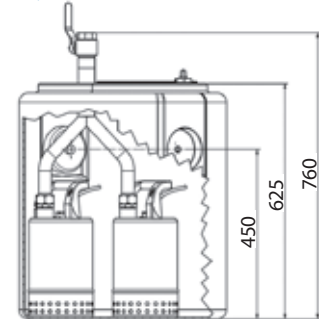


### Dimensions

Type: SWH 500/50 Simplex



Type: SWH 500/50 Duplex





# ZKH 20

## Condensate lifting unit

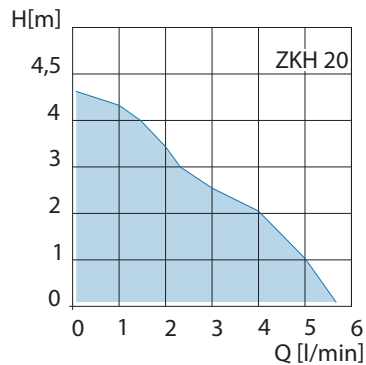
### Features

- On-off control automatically via a robust float switch
- In case of pump failure (unacceptably high water level in the tank), an alarm switch can switch off the air conditioner or the condensing boiler
- Tank volume 1.2 l
- Integrated non-return valve to prevent condensate return
- The unit has a 28 mm diameter inlet, if necessary use adapter DN 19, 32, 40
- Equipped with wall mounting device

### Applications

- Pumping off condensate from air-conditioning units and condensate from condensing boilers with a pH value up to 2.5

### Characteristics

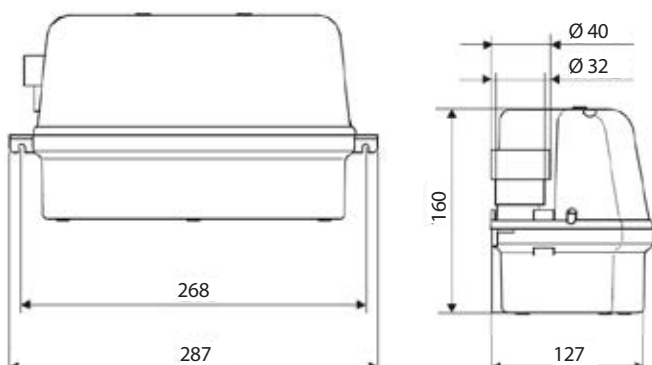


### Technical data

ZKH 20	
Article number	21842
Discount group	A
Weight (kg)	2.0
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	0.52
Frequency (Hz)	50
Input power P1 (W)	60
Protection class	IP 24
<b>Hydraulic characteristics</b>	
Max. head (m)	4.5
Max. flow rate (m <sup>3</sup> /h)	0.34
Solids handling (mm)	1.0
Max. medium temp. (°C)	80



### Dimensions



# Microboy series



## Macerators

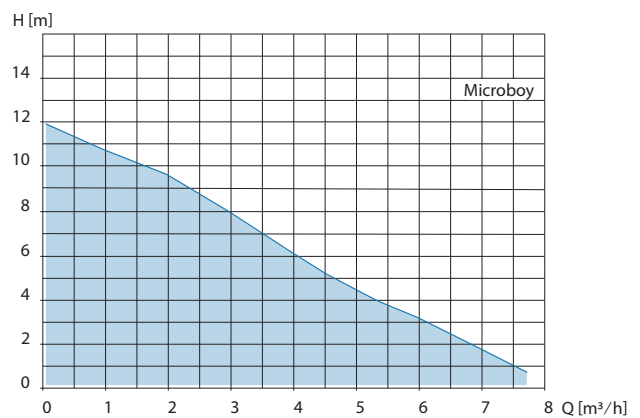
### Features

- Terpolymer container for direct connection to EURO-Toilets with minimum inlet height
- 4 Additional lateral inlets DN 40 for connection of washbasin, shower or bidet
- Container ventilation via active carbon filter
- Robust, dry installed vortex pump with stainless steel cutting system
- Alarm signal in case of fault
- Emergency discharge possible via motor shaft with slot
- Pressure outlet 1 1/4" FT with integrated non-return valve, optionally left or right
- Incl. 1,5 m power cable and plug, audible alarm included

### Applications

- Single WC lifting unit for limited use in private areas below the backflow level, e.g. in the basement area or when renovating old buildings
- Connection of a WC, wash basin, shower or bidet

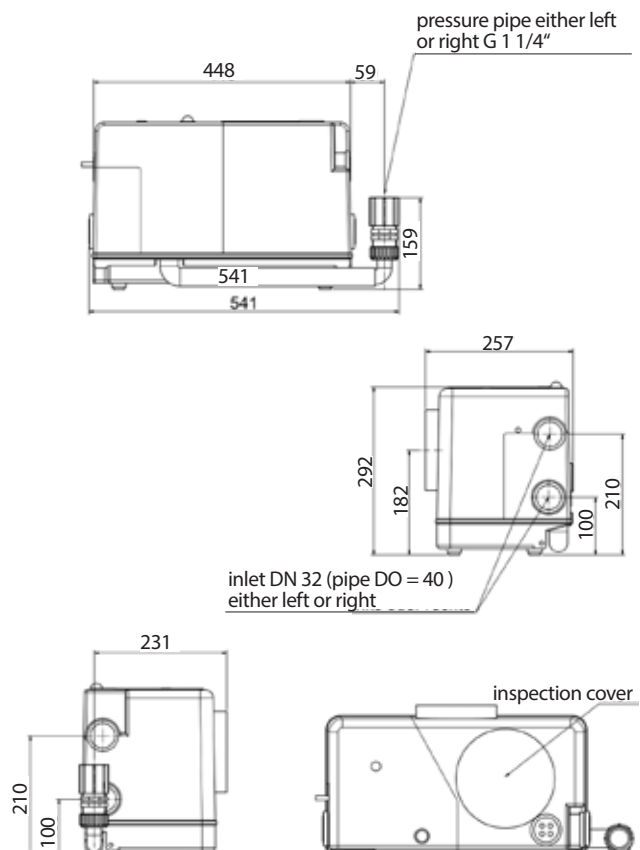
### Characteristics



### Technical data

Microboy	E2	Pro
Article number	10525	18190
Discount group	A	A
Weight (kg)	11.0	11.0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	2.5	2.5
Frequency (Hz)	50	50
Input power P1 (W)	600	600
Output power P2 (W)	350	350
Speed Motor (min <sup>-1</sup> )	2.800	2.800
Protection class	IP 54	IP 54
<b>Hydraulic characteristics</b>		
Max. head (m)	11.8	11.8
Max. flow rate (m³/h)	7.5	7.5
Max. medium temp. (°C)	40	40
Medium temp. short term (°C)	90	90

### Dimensions



**i** Features Microboy Pro: high performance cutting system (cuts wet wipes and hygiene products)



Macerators

Features

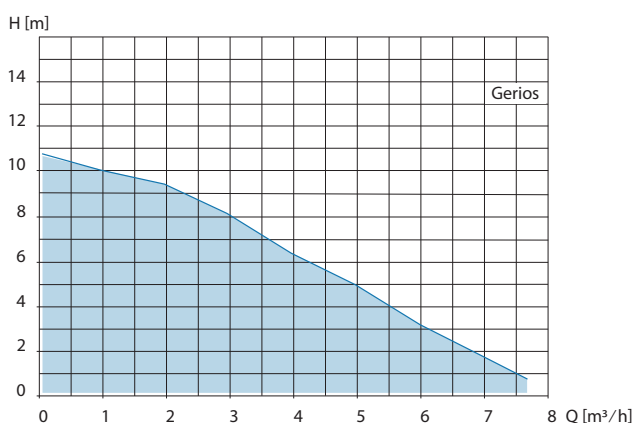
- Connection of one free-standing or wall-mounted toilet
- 2 Lateral inlets with non-return-valves, 3 freely selectable connections at the top of the tank (2 x inlet, 1 x vent)
- Optimised high-performance cutting system made of corrosion-resistant special steel 1.4112 with particular high hardness, wear resistance and cutting performance
- Tank made of ABS for direct connection to a free-standing toilet with minimum inlet height
- Tank ventilation via activate carbon filter; optional ventilation via DN 40 pipe
- Robust, wet-installed pump
- Integrated alarm signal in case of malfunction
- Pressure outlet 1 1/4" FT with integrated non-return valve on top; outlet horizontal or vertical (90° bend)



Applications

- Single toilet lifting unit for limited use in private areas be low the backflow level, e.g. basements or refurbishments
- Connection of one free-standing or wall-mounted toilet, sink, shower and bidet
- Direct connection or installation behind pre-wall element possible

Characteristics

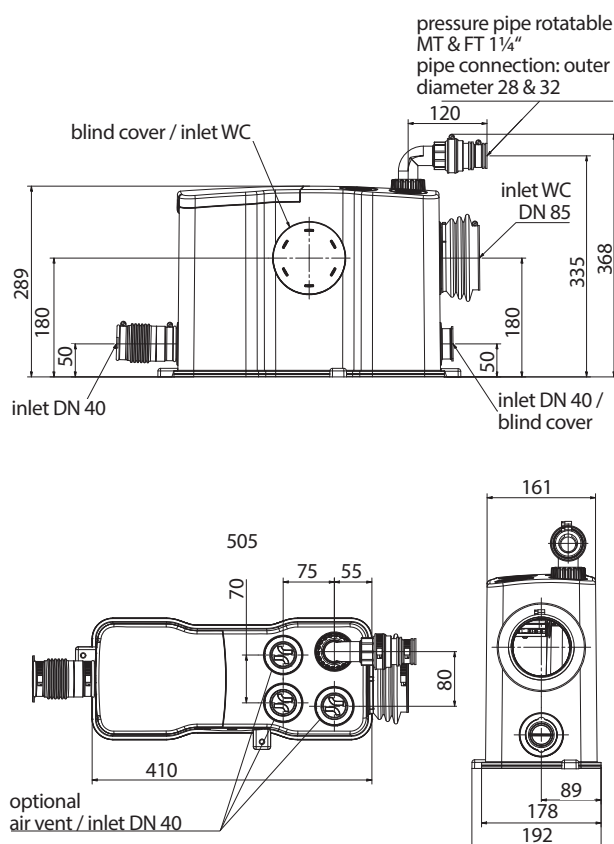


Technical data

Gerios®	
Article number	20559
Discount group	A
Weight (kg)	9.5
Electrical characteristics	
Voltage (V)	230
Current (A)	2.5
Frequency (Hz)	50
Input power P1 (W)	560
Output power P2 (W)	350
Speed (min-1)	2.800
Protection class	IP 68
Power cable length (m)	1.5 m
Hydraulic characteristics	
Max. head (m)	11.0
Max. flow rate (m³/h)	7.5
Max. medium temp. (°C)	40
Medium temp. short term (°C)	60

Accessories	Art.-no.	Discount group
Humidity sensor	22346	B

Dimensions



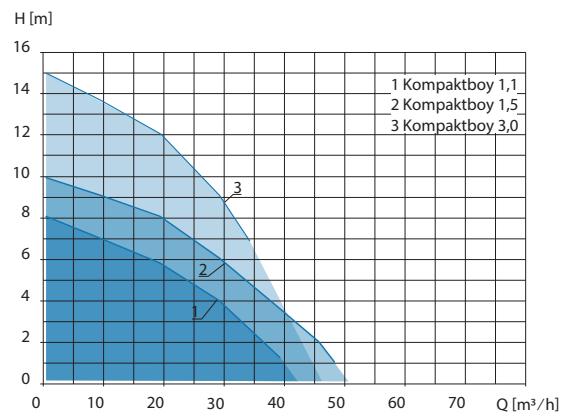
### Features

- Compact dimensions; space-saving contribution even through manhole opening (60 cm)
- Pre-assembled - connection pieces, non-return valve integrated (except 3kW)
- Integrated pressure measurement for mm-precise switch points
- All-side connections for easy installation in cramped rooms
- Container made of polyethylene with 55 l capacity (19 l - 45 l switching volume, depending on inlet depth)
- Vortex pumps with high efficiency and low operation noise
- Mechanical seal and shaft seal with intermediate oil chamber
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- With integrated check valve DN 100 (except Kompaktboy 3.0-2P, which has external cast iron check valves)
- Connection flange piece DN 100 for pressure pipe (DN 80 optional)
- Flexible connection with tension clamps for pressure pipe and ventilation pipe
- Incl. ZPS1: comfortable, pneumatic level control with microcontroller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)





### Applications

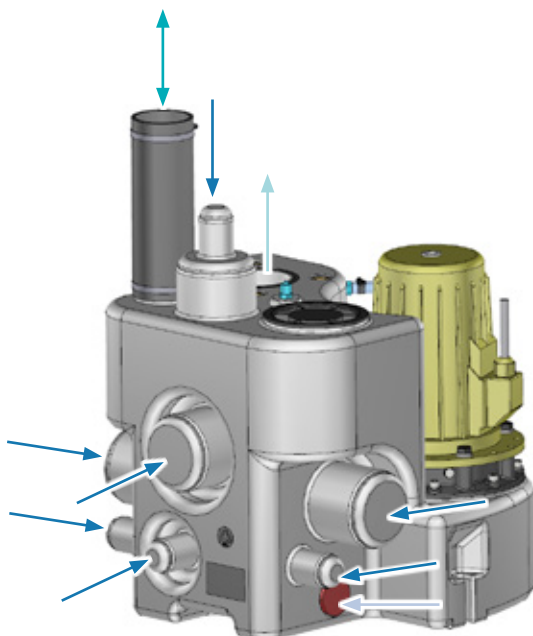
- Pumping of domestic sewage from basement apartments, homes or apartment buildings
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

-  Ø Inlets outside: DN 50 / DN 100
-  Ø Venting - outside Ø 75 mm
-  Ø Pressure outlet : DN 100
-  1½" connection hand diaphragm pump

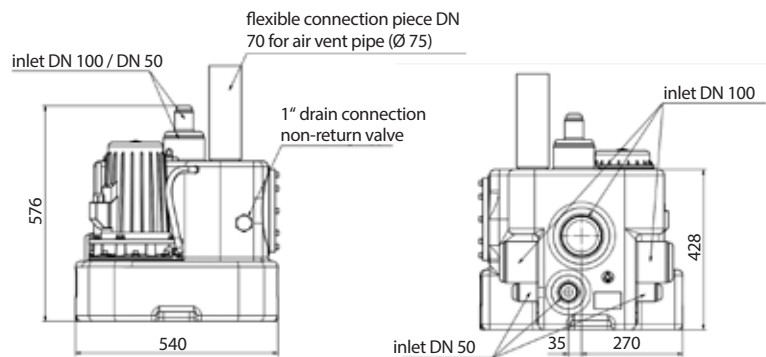
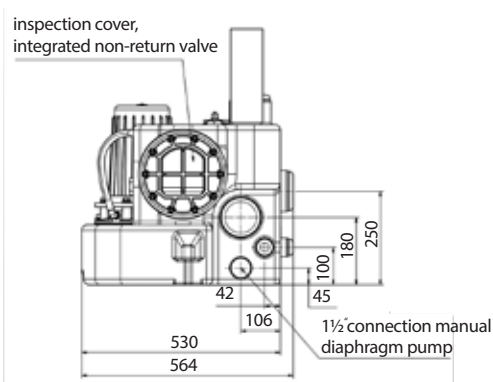


### Technical data

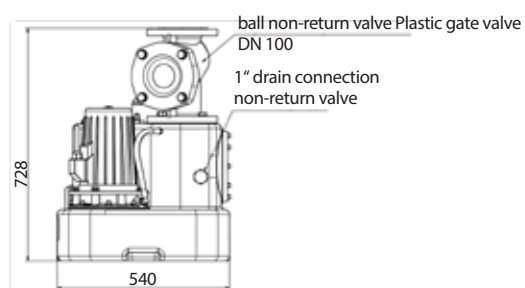
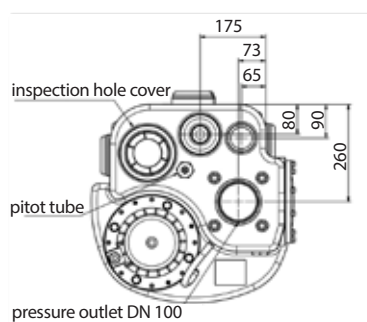
Kompaktboy Simplex	1.1 W	1.1 D	1.5 D	3.0 D 2P
Article number	10428	10440	10461	10466
Discount group	A	A	A	A
Weight (kg)	45.0	43.0	45.0	62.0
<b>Electrical characteristics</b>				
Voltage (V)	230	400	400	400
Current (A)	7.6	2.9	3.3	6.2
Frequency (Hz)	50	50	50	50
Input power P1 (W)	1.700	1.400	1.800	3.800
Output power P2 (W)	1.100	1.100	1.500	3.000
Speed Motor (min <sup>-1</sup> )	1.400	1.400	1.400	2.800
Protection class	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>				
Max. head (m)	8.1	8.1	9.9	15.0
Max. flow rate (m <sup>3</sup> /h)	41.0	41.0	49.0	35.0
Solids handling (mm)	50	50	50	50
Diameter inlets DN	50, 100	50, 100	50, 100	50, 100
Diameter outlet DN	100	100	100	100
Vent outside - Ø (mm)	75	75	75	75
Total volume (l)	55	55	55	55
Max. medium temp. (°C)	55	55	55	55
Impeller type	vortex impeller	vortex impeller	vortex impeller	vortex impeller
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic

### Dimensions

Types: Kompaktboy 1.1 W 230 V; Kompaktboy 1.1 D 400 V; Kompaktboy 1.5 D 400 V



Type: Kompaktboy 3.0 D 2P 400V



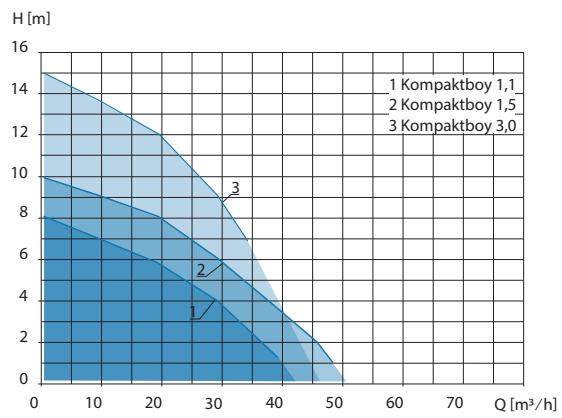
### Features

- Pre-assembled - connection pieces, non-return valve integrated (except 3kW)
- Integrated pressure measurement for mm-precise switch points
- All-side connections for easy installation in cramped rooms
- Polyethylene container with 150 litres capacity and up to 80 litres switching volume
- Vortex pumps with high efficiency and low operation noise
- Mechanical seal and shaft seal with intermediate oil chamber
- Pre-assembled lifting unit with 3,5 m connection cable to the motor and 3,5 m pneumatic tube to the control
- With integrated non-return valves DN 100 (Kompaktboy Duplex 3,0-2P with external cast iron non-return valves)
- Incl. Y-pipe DN 100/100/100
- Incl. connection flange piece DN 100 for pressure pipe (DN 80 optional)
- Incl. flexible connection with tension clamps for pressure pipe and ventilation pipe
- Incl. ZPS2: comfortable, pneumatic level control with microcontroller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)

### Applications

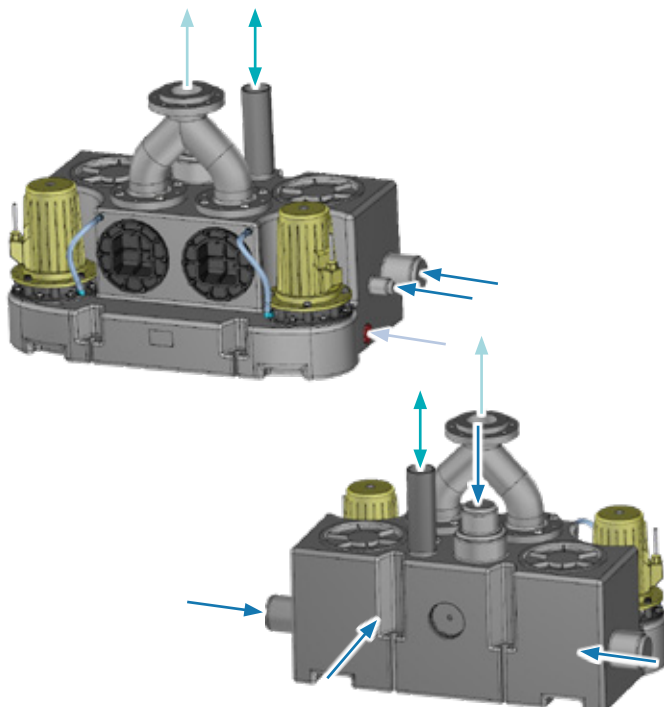
- Removal of domestic sewage out of single- or multi family houses
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

- Ø Inlets outside: DN 50 / DN 100
- Ø Venting - outside Ø 75 mm
- Ø Pressure outlet : DN 100
- 1½" connection hand diaphragm pump

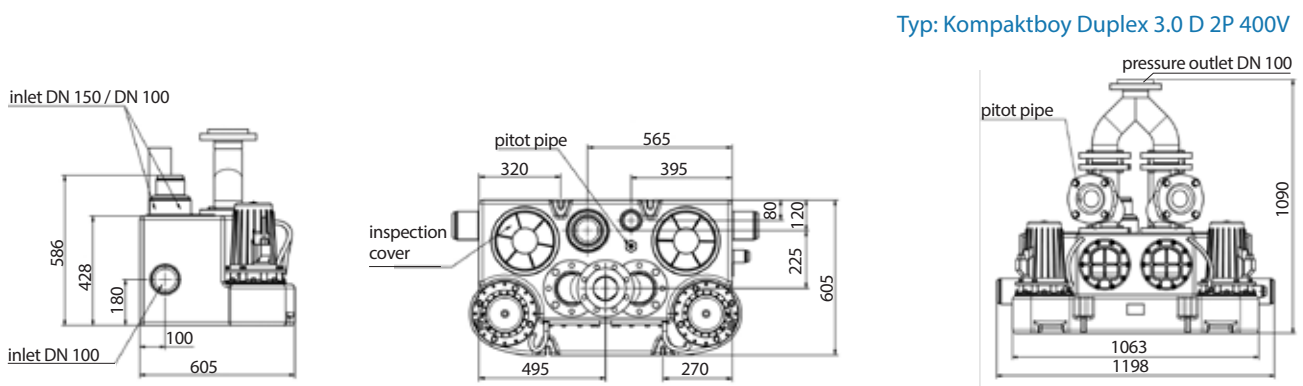
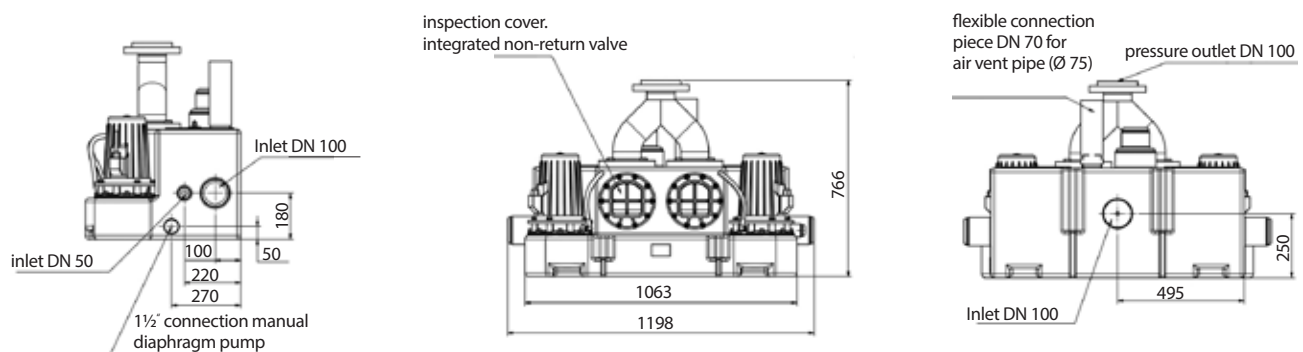


### Technical data

Kompaktboy Duplex	1.1 W	1.1 D	1.5 D	3.0 D 2P
Article number	17557	17558	17559	17560
Discount group	A	A	A	A
Weight (kg)	76.0	76.0	98.0	126.0
<b>Electrical characteristics</b>				
Voltage (V)	230	400	400	400
Current (A)	7.6	2.9	3.3	6.2
Frequency (Hz)	50	50	50	50
Input power P1 (W)	1.700	1.400	1.800	3.800
Output power P2 (W)	1.100	1.100	1.500	3.000
Speed Motor (min <sup>-1</sup> )	1.400	1.400	1.400	2.800
Protection class	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>				
Max. head (m)	8.1	8.1	9.9	15.0
Max. flow rate (m <sup>3</sup> /h)	41.0	41.0	49.0	35.0
Solids handling (mm)	50	50	50	50
Diameter inlets DN	50, 100	50, 100	50, 100	50, 100
Diameter outlet DN	100	100	100	100
Vent outside - Ø (mm)	75	75	75	75
Total volume (l)	150	150	150	150
Max. medium temp. (°C)	55	55	55	55
Impeller type	vortex impeller	vortex impeller	vortex impeller	vortex impeller
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic

### Dimensions

Types: Kompaktboy Duplex 1.1 W 230 V; Kompaktboy Duplex 1.1 D 400 V; Kompaktboy Duplex 1.5 D 400 V



# Kompaktboy® SE 71 Simplex



## Sewage lifting units

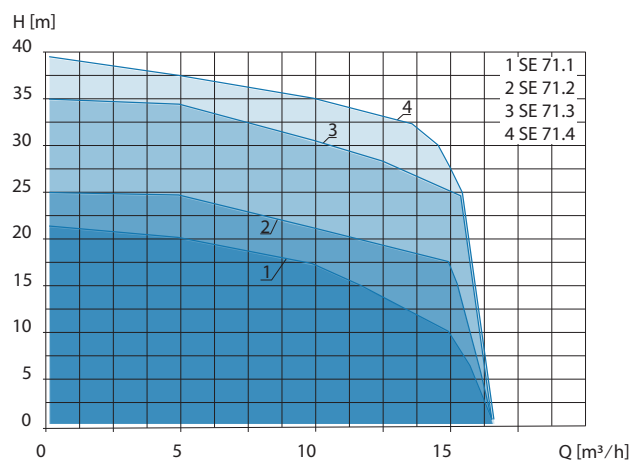
### Features

- Polyethylene container with 55 litres capacity
- Built-in grinder pump with robust, adjustable cutting system made of corrosion-resistant special alloy
- Suitable for long pressure pipes (DN 50)
- Two mechanical seals with intermediate oil chamber
- Pressure outlet flange DN 50 with flanged connecting bend and non-return ball valve 1 1/4" FT
- Additional connections 1 1/2" for manual diaphragm pump
- Air vent DN 70 (Ø 75mm)
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. 90° pump connecting bend DN 50
- Incl. non-return ball valve 1 1/4" FT
- Incl. flexible connection with tension clamps for ventilation pipe
- Incl. ZPS1: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)

### Applications

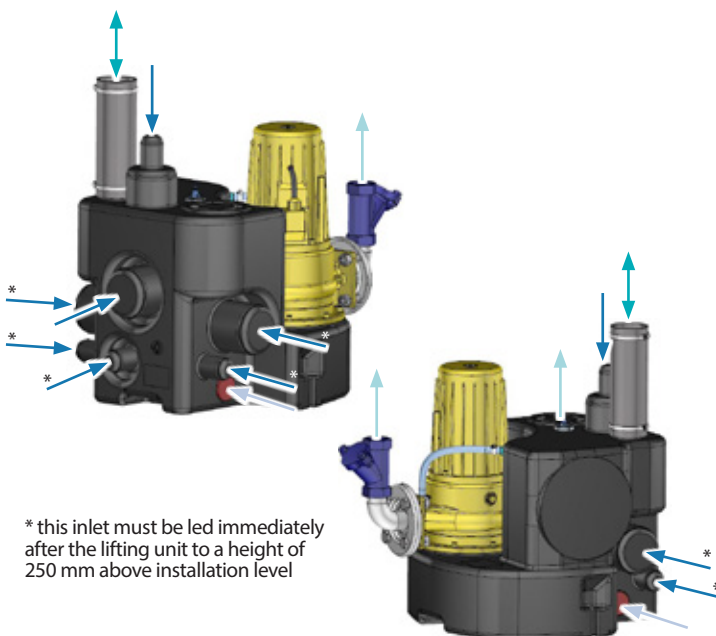
- Pumping of domestic sewage from basement apartments or homes for greater heads or long pressure pipes
- Above-ground installation in frost-free rooms below the backflow level
- Fits into manholes with a cover > Ø 590 mm

### Characteristics



### Outlet / Inlet

- Ø Inlets outside: DN 50 / DN 100
- ↔ Ø Venting - outside Ø 75 mm
- Ø Pressure outlet : DN 50
- 1 1/2" connection hand diaphragm pump

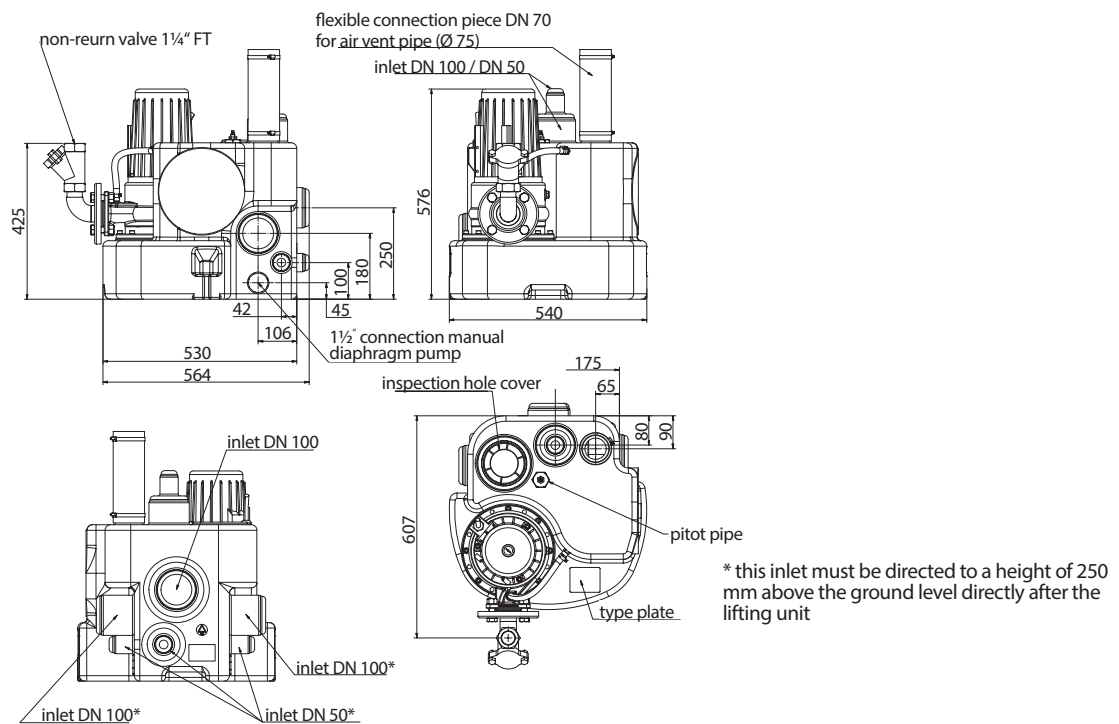




### Technical data

Kompaktboy SE 71 Simplex	71.1 W	71.1 D	71.2 D	71.3 D	71.4 D
Article number	17750	17472	17473	17474	17475
Discount group	A	A	A	A	A
Weight (kg)	68.0	64.0	64.0	68.0	68.0
<b>Electrical characteristics</b>					
Voltage (V)	230	400	400	400	400
Current (A)	10.5	3.7	3.7	6.5	6.5
Frequency (Hz)	50	50	50	50	50
Input power P1 (W)	2.200	2.100	2.100	3.900	3.900
Output power P2 (W)	1.700	1.700	1.700	3.200	3.200
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>					
Max. head (m)	22.0	22.0	25.0	35.0	39.0
Max. flow rate (m <sup>3</sup> /h)	17.0	17.0	17.0	17.0	17.0
Diameter inlets DN	50, 100	50, 100	50, 100	50, 100	50, 100
Diameter outlet DN	50	50	50	50	50
Vent outside - Ø (mm)	75	75	75	75	75
Total volume (l)	55	55	55	55	55
Max. medium temp. (°C)	55	55	55	55	55
Impeller type	cutter	cutter	cutter	cutter	cutter
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic

### Dimensions



# Kompaktboy® SE 71 Duplex



## Sewage lifting units

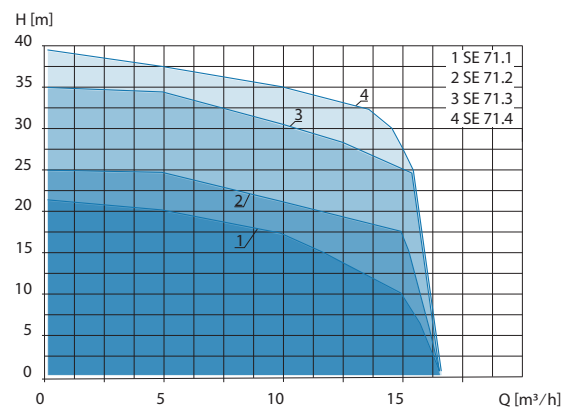
### Features

- Polyethylene container with 150 litres capacity
- Two built-in grinder pumps with robust, adjustable cutting system made of corrosion-resistant special alloy
- Suitable for long pressure pipes (DN 50)
- Two mechanical seals with intermediate oil chamber
- Pressure outlet flange DN 50 with flanged connecting bend and non-return ball valve 1 1/4" FPT
- Air vent DN 70 (Ø 75mm)
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. 2 x 90° pump connecting bend DN 50
- Incl. 2 x non-return ball valve 1 1/4" FPT
- Incl. stainless steel Y-pipe DN 50/50/50 with pressure outlet flange DN 50
- Incl. flexible connection with tension clamps for ventilation pipe
- Incl. ZPS2: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)

### Applications

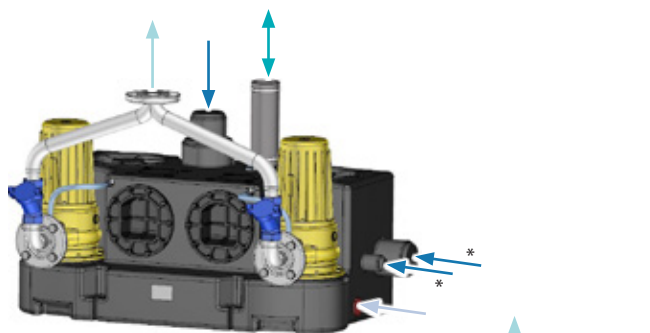
- Pumping of domestic sewage from homes and apartment buildings for greater heads or long pressure pipes
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics

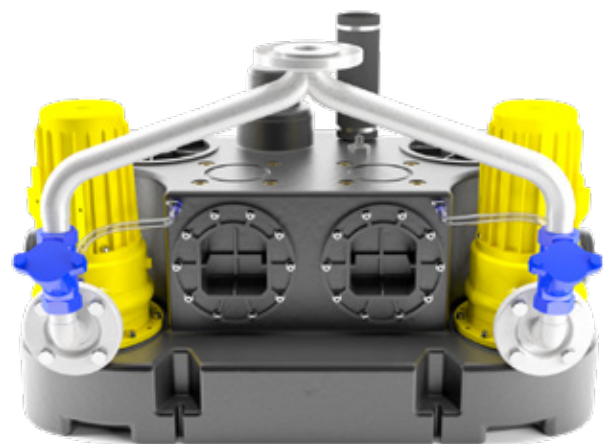
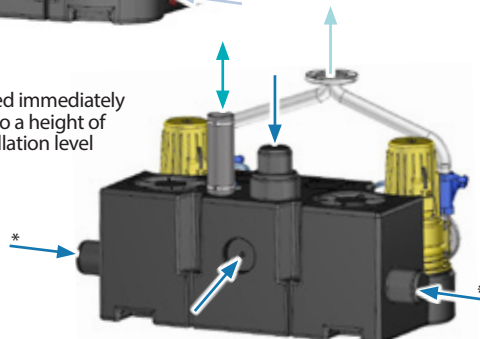


### Outlet / Inlet

- Ø Inlets outside: DN 150 / DN 100
- ↔ Ø Venting - outside Ø 75 mm
- Ø Pressure outlet: DN 50
- 1 1/2" connection hand diaphragm pump



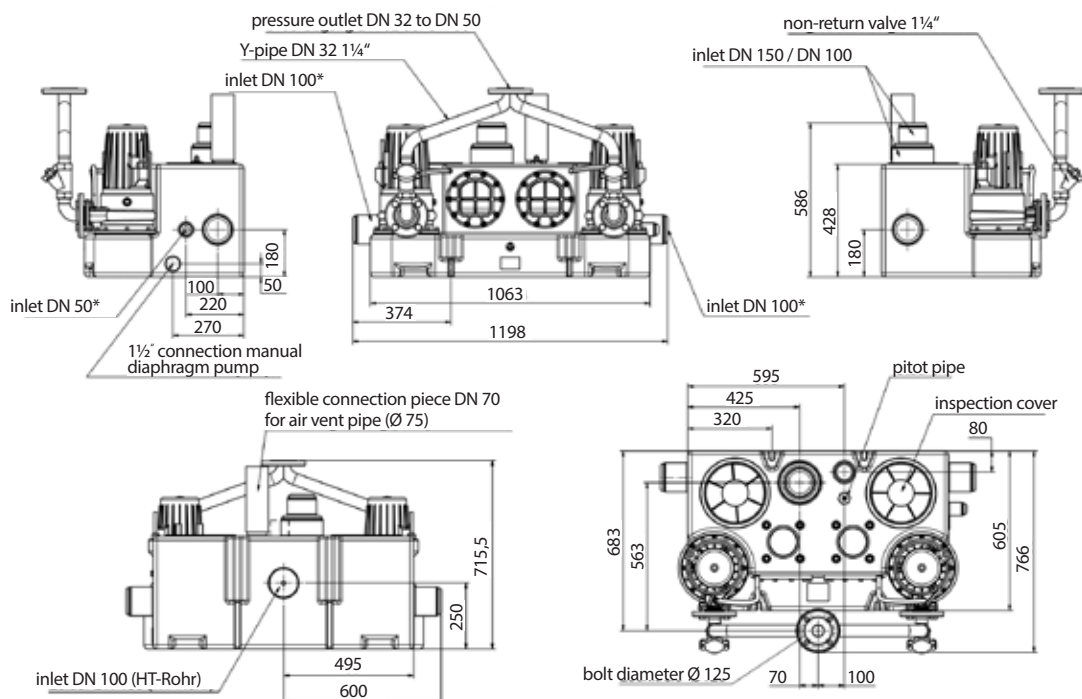
\* this inlet must be led immediately after the lifting unit to a height of 250 mm above installation level



### Technical data

Kompaktboy SE 71 Duplex	71.1 D	71.2 D	71.3 D	71.4 D
Article number	17462	17751	17752	17753
Discount group	A	A	A	A
Weight (kg)	137.0	137.0	144.0	144.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	3.7	3.7	6.5	6.5
Frequency (Hz)	50	50	50	50
Input power P1 (W)	2.100	2.100	3.900	3.900
Output power P2 (W)	1.700	1.700	3.200	3.200
Speed Motor (min <sup>-1</sup> )	2.800	2.800	2.800	2.800
Protection class	IP 68	IP 68	IP 68	IP 68
<b>Hydraulic characteristics</b>				
Max. head (m)	22.0	25.0	35.0	39.0
Max. flow rate (m <sup>3</sup> /h)	17.0	17.0	17.0	17.0
Diameter inlets DN	150, 100	150, 100	150, 100	150, 100
Diameter outlet DN	50	50	50	50
Vent outside - Ø (mm)	75	75	75	75
Total volume (l)	150	150	150	150
Max. medium temp. (°C)	55	55	55	55
Impeller type	cutter	cutter	cutter	cutter
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic

### Dimensions



\* this inlet must be directed to a height of 250 mm above the ground level directly after the lifting unit

# Boy Simplex

MADE IN GERMANY

## Sewage lifting units

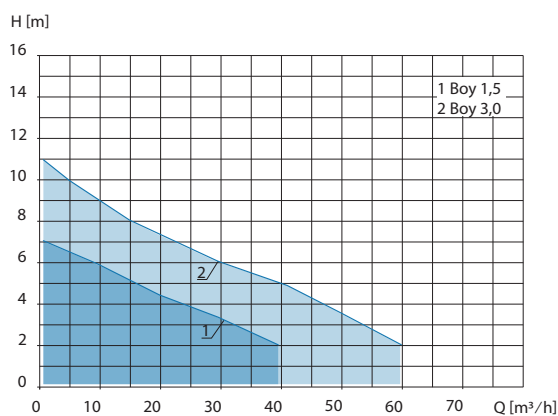
### Features

- Polyethylene container with 140 litres capacity and up to 70 litres switching volume
- Vortex pump with high efficiency
- Blockage-free operation due to 50 mm solids handling
- Mechanical seal and shaft seal with intermediate oil chamber
- Pressure outlet DN 100 (DN 80 optional)
- 2 Inlets for HT pipe DN 100
- Additional connection 1 1/2" for manual diaphragm pump
- Air vent DN 70 (Ø 75mm)
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. non-return valves DN 100 (DN 80 optional)
- Incl. connection flange piece DN 100 for pressure pipe (DN 80 optional)
- Flexible connection with tension clamps for pressure pipe and ventilation pipe
- Incl. ZPS1: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)

### Applications

- Pumping of domestic sewage from basement apartments, homes or apartment buildings
- Above-ground installation in frost-free rooms below the backflow level

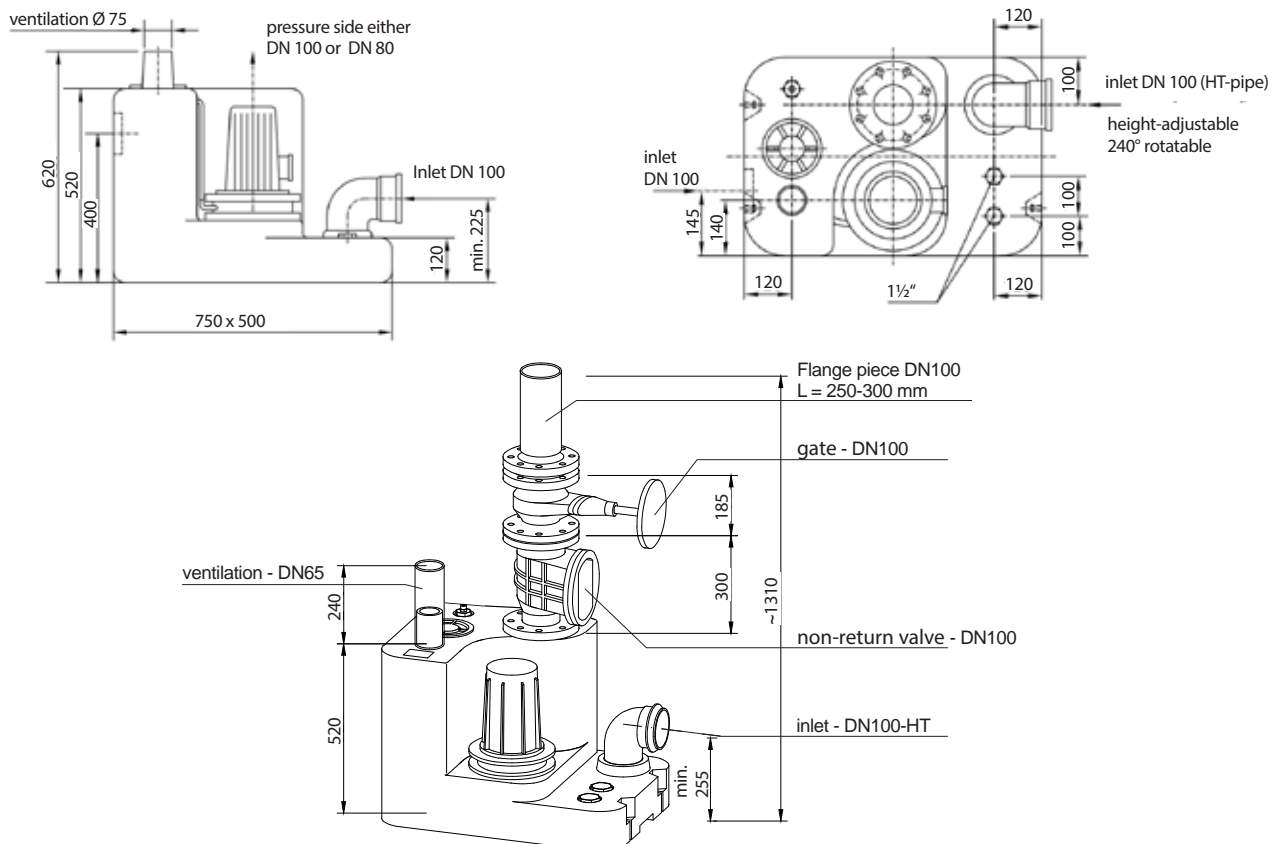
### Characteristics



### Technical data

Boy	1.5 D	3.0 D
Article number	10527	10531
Discount group	A	A
Weight (kg)	65.0	75.0
<b>Electrical characteristics</b>		
Voltage (V)	400	400
Current (A)	3.3	6.9
Frequency (Hz)	50	50
Input power P1 (W)	1.900	4.000
Output power P2 (W)	1.500	3.000
Speed Motor (min <sup>-1</sup> )	1.400	1.400
Protection class	IP 68	IP 68
<b>Hydraulic characteristics</b>		
Max. head (m)	7.0	11.0
Max. flow rate (m <sup>3</sup> /h)	40.0	60.0
Solids handling (mm)	50	50
Diameter inlets DN	100	100
Diameter outlet DN	100 (80)	100 (80)
Vent outside - Ø (mm)	75	75
Total volume (l)	140	140
Max. medium temp. (°C)	55	55
Impeller type	vortex impeller	vortex impeller
Switching mode	pneumatic	pneumatic

### Dimensions



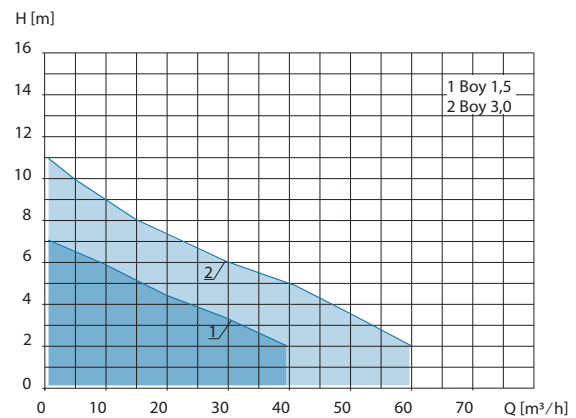
### Features

- Polyethylene container with 200 litres capacity and up to 100 litres switching volume
- Vortex pumps with high efficiency
- Blockage-free operation due to 50 mm solids handling
- Mechanical seal and shaft seal with intermediate oil chamber
- Additional connection 1 1/2" for manual diaphragm pump
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. 2 non-return valves DN 100
- Incl. Y-pipe DN 100/100/100
- Incl. connection flange piece DN 100 for pressure pipe
- Incl. flexible connection with tension clamps for pressure pipe and ventilation pipe
- Incl. ZPS2: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)

### Applications

- Pumping of domestic sewage from basement apartments, homes or apartment buildings
- Facilities which need continuous sewage drainage
- Above-ground installation in frost-free rooms below the backflow level

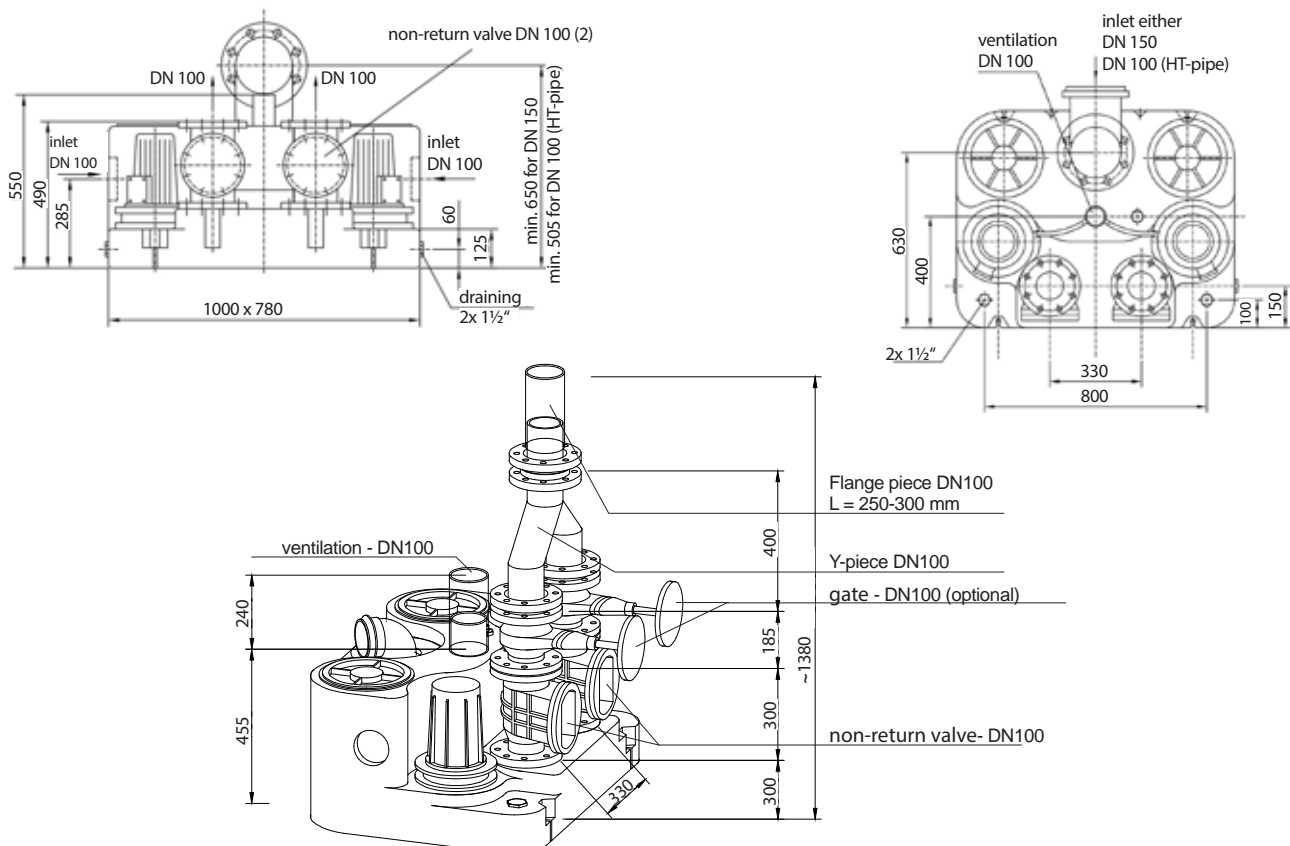
### Characteristics



### Technical data

Boy Duplex	1.5 D	3.0 D
Article number	10534	10535
Discount group	A	A
Weight (kg)	90.0	110.0
<b>Electrical characteristics</b>		
Voltage (V)	400	400
Current (A)	3.3	6.9
Frequency (Hz)	50	50-60
Input power P1 (W)	1.900	4.00
Output power P2 (W)	1.500	3.000
Speed Motor (min <sup>-1</sup> )	1.400	1.400
Protection class	IP 68	IP 68
<b>Hydraulic characteristics</b>		
Max. head (m)	7.0	11.0
Max. flow rate (m <sup>3</sup> /h)	40.0	60.0
Solids handling (mm)	50	50
Diameter inlets DN	100 (150)	100 (150)
Diameter outlet DN	100	100
Vent outside - Ø (mm)	110	110
Total volume (l)	200	200
Max. medium temp. (°C)	55	55
Impeller type	vortex impeller	vortex impeller
Switching mode	pneumatic	pneumatic

### Dimensions



# W 80 Simplex

MADE IN GERMANY

## Sewage lifting units

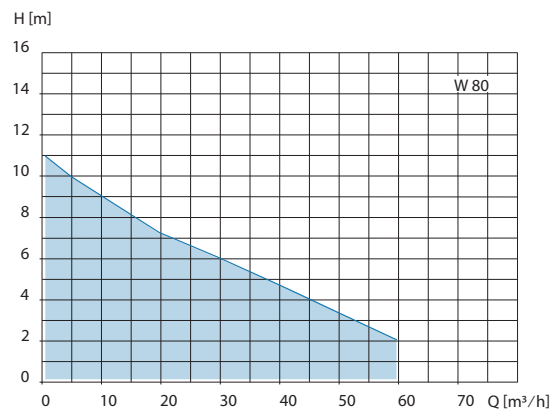
### Features

- Polyethylene container with 350 litres capacity and up to 175 litres switching volume
- Vortex pump with large solids handling (80 mm)
- Mechanical seal and shaft seal with intermediate oil chamber
- Pump housing with cast-on outlet bend DN 100
- Lateral inlet with loose-type flange DN 100
- Additional connection 1 1/2" for manual diaphragm pump
- Air vent with loose-type flange DN 100 (Ø 110 mm)
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. ZPS1: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault (see page 118)
- Incl. small compressor set with bubbler system
- Important information! Non-return valve, gate valve and further junction fittings optional (see accessories)
- Custom dimensions, custom inlets and on-site-assembly possible

### Applications

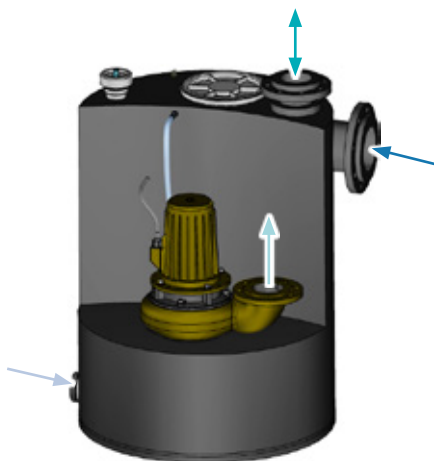
- Drainage of sewage from apartment buildings or industrial premises etc.
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

- Ø Inlets outside DN 150
- ← Ø Venting - outside DN 100
- Ø Pressure outlet: DN 50
- 1 1/2" connection hand diaphragm pump





# W 80 Simplex

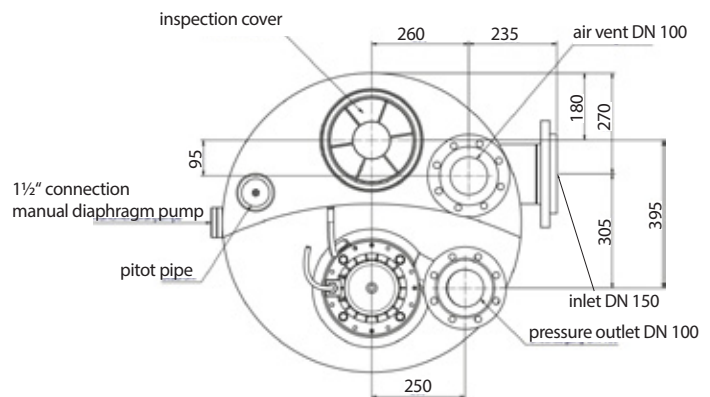
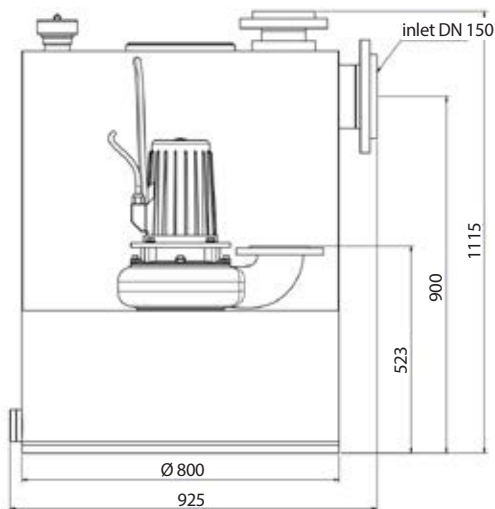


Sewage lifting units

## Technical data

W 80	Simplex
Article number	10537
Discount group	B
Weight (kg)	137.0
<b>Electrical characteristics</b>	
Voltage (V)	400
Current (A)	6.9
Frequency (Hz)	50
Input power P1 (W)	4.000
Output power P2 (W)	3.000
Speed Motor (min <sup>-1</sup> )	1.400
Protection class	IP 57
<b>Hydraulic characteristics</b>	
Max. head (m)	11.0
Max. flow rate (m <sup>3</sup> /h)	60.0
Solids handling (mm)	80
Diameter inlets DN	150
Diameter outlet DN	100
Vent outside - Ø (mm)	110
Total volume (l)	350
Max. medium temp. (°C)	55
Impeller type	Vortex impeller
Switching mode	pneumatic

## Dimensions



# W 80 Duplex



## Sewage lifting units

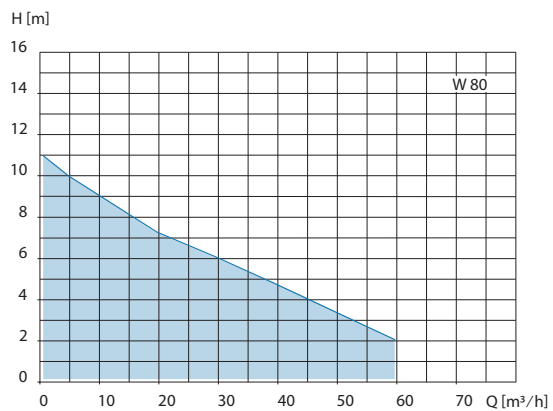
### Features

- Polyethylene container with 480 litres capacity and up to 270 litres switching volume
- 2 Vortex pumps with large solids handling (80 mm)
- Mechanical seal and shaft seal with intermediate oil chamber
- Additional connection 1 1/2" for manual diaphragm pump
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. ZPS2: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (see page 118)
- Incl. small compressor set with bubbler system
- Important information! Non-return valve, gate valve and further junction fittings optional (see accessories)
- Custom dimensions, custom inlets and on-site-assembly possible

### Applications

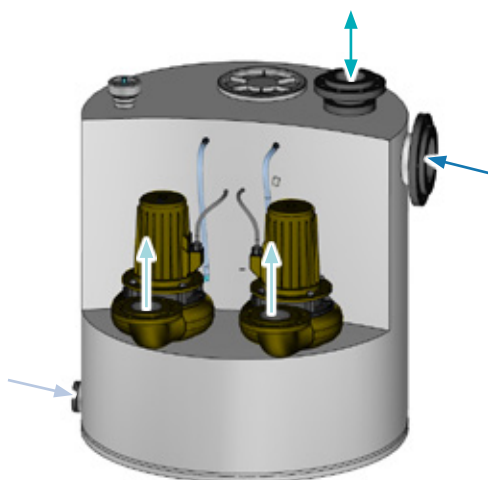
- Drainage of domestic sewage from apartment buildings, schools, public or industrial facilities
- Facilities which need continuous sewage drainage
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

- Ø Inlet outside DN 150
- ↔ Ø Venting - outside DN 100
- Ø Pressure outlet: DN 100
- 1 1/2" connection hand diaphragm pump



# W 80 Duplex

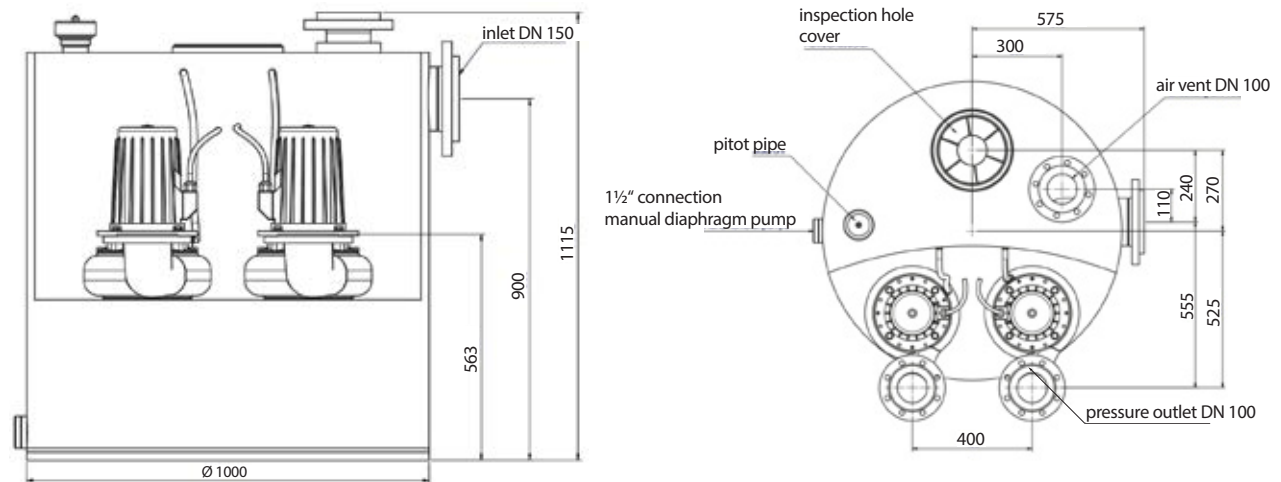


Sewage lifting units

## Technical data

W 80	Duplex
Article number	10539
Discount group	B
Weight (kg)w	205.0
<b>Electrical characteristics</b>	
Voltage (V)	400
Current (A)	6.9
Frequency (Hz)	50
Input power P1 (W)	4.000
Output power P2 (W)	3.000
Speed Motor (min <sup>-1</sup> )	1.400
Protection class	IP 57
<b>Hydraulic characteristics</b>	
Max. head (m)	11.0
Max. flow rate (m <sup>3</sup> /h)	60.0
Solids handling (mm)	80
Diameter inlets DN	150
Diameter outlet DN	100
Vent outside - Ø (mm)	110
Total volume (l)	480
Max. medium temp. (°C)	55
Impeller type	Vortex impeller
Switching mode	pneumatic

## Dimensions



# WUZ 100 Simplex



## Sewage lifting units

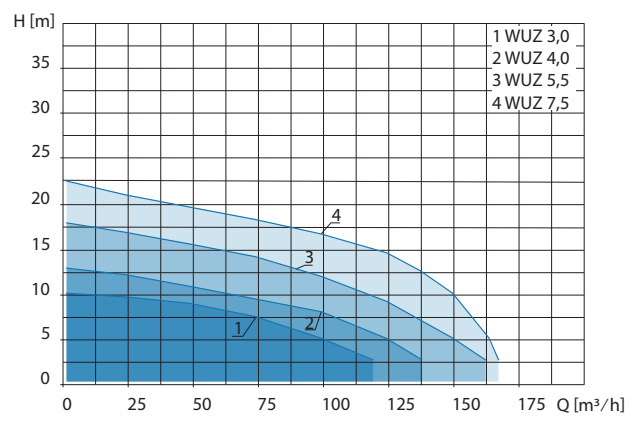
### Features

- Polyethylene container with 480 litres capacity and up to 270 litres switching volume
- Single-channel impeller pump with fibre cutting insert and large solids handling (80 mm / 100 mm)
- Mechanical seal (up to 4kW) or chilled casting seal (> 5 kW) and shaft seal with intermediate oil chamber
- Additional connection 1 1/2" for manual diaphragm pump
- Star-delta-start for 7.5 kW unit
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. ZPS1: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (7.5 kW ZPS1 control with star-delta-start) (see page 118)
- Incl. small compressor set with bubbler system
- Important information! Non-return valve, gate valve and further junction fittings optional (see accessories)
- Custom dimensions, custom inlets and on-site-assembly possible

### Applications

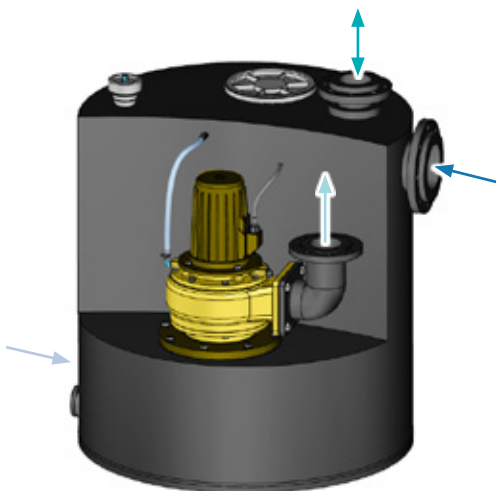
- Drainage of sewage from apartment buildings or industrial premises etc.
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

- Ø Inlet outside DN 150
- ↔ Ø Venting - outside DN 100
- Ø Pressure outlet: DN 100
- 1 1/2" connection hand diaphragm pump



# WUZ 100 Simplex

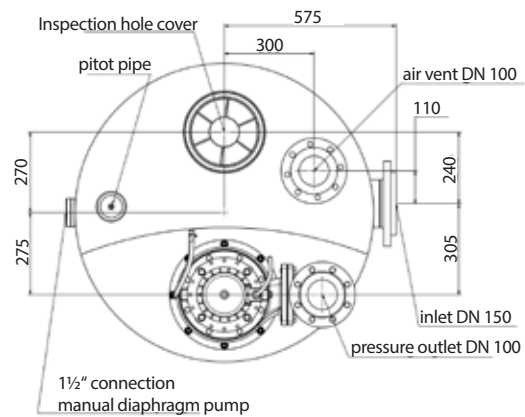
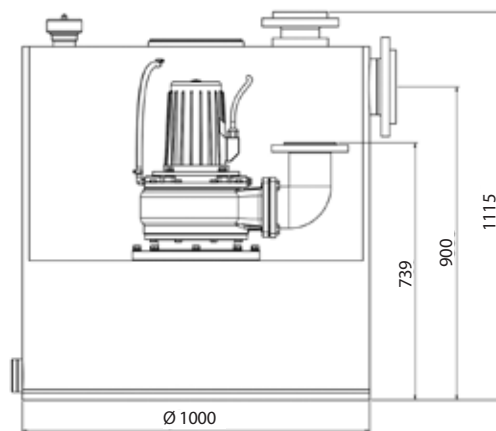


## Sewage lifting units

### Technical data

WUZ 100 Simplex	3.0	4.0	5.5	7.5
Article number	10545	10546	10548	10549
Discount group	B	B	B	B
Weight (kg)	210.0	220.0	225.0	240.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	6.9	11.2	12.1	16.9
Frequency (Hz)	50	50	50	50
Input power P1 (W)	4.000	5.500	6.300	8.700
Output power P2 (W)	3.000	4.000	5.500	7.500
Speed Motor (min <sup>-1</sup> )	1.400	1.400	1.400	1.400
Protection class	IP 57	IP 57	IP 57	IP 57
<b>Hydraulic characteristics</b>				
Max. head (m)	10.0	13.0	18.0	22.0
Max. flow rate (m <sup>3</sup> /h)	120.0	140.0	160.0	165.0
Solids handling (mm)	80	80	100	100
Diameter inlets DN	150	150	150	150
Diameter outlet DN	100	100	100	100
Vent outside - Ø (mm)	110	110	110	110
Total volume (l)	480	480	480	480
Max. medium temp. (°C)	55	55	55	55
Impeller type	channel impeller	channel impeller	channel impeller	channel impeller
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic

### Dimensions



# WUZ 100 Duplex



## Sewage lifting units

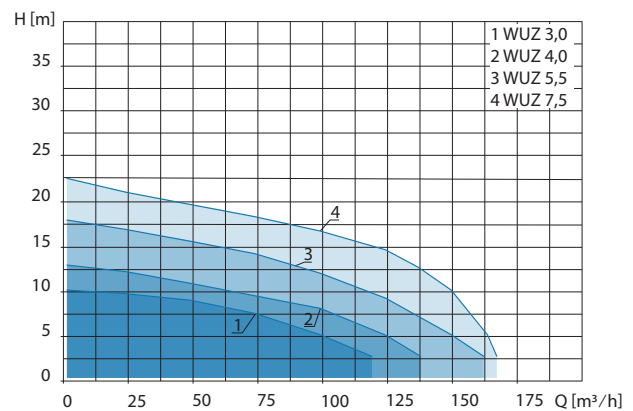
### Features

- Polyethylene container with 1000 litres capacity and up to 500 litres switching volume
- Two single-channel impeller pumps with fibre cutting insert and large solids handling (80 mm / 100 mm)
- Mechanical seal (up to 4kW) or chilled casting seal (> 5 kW) and shaft seal with intermediate oil chamber
- Additional connection 1 1/2" for manual diaphragm pump
- Star-delta-start for 7.5 kW unit
- Operating mode S3 - 25%
- Pre-assembled lifting unit with 3.5 m connection cable to the motor and 3.5 m pneumatic tube to the control
- Incl. ZPS2: comfortable, pneumatic level control with micro controller, LCD plain text display for filling level, maintenance, operating hours, fault message and alarm signal in switchbox for indoor installation (7.5 kW ZPS2 control with star-delta-start) (see page 118)
- Incl. small compressor set with bubbler system
- Important information! Non-return valve, gate valve, Y-pipe and further junction fittings optional (see accessories)
- Custom dimensions, custom inlets and on-site-assembly possible

### Applications

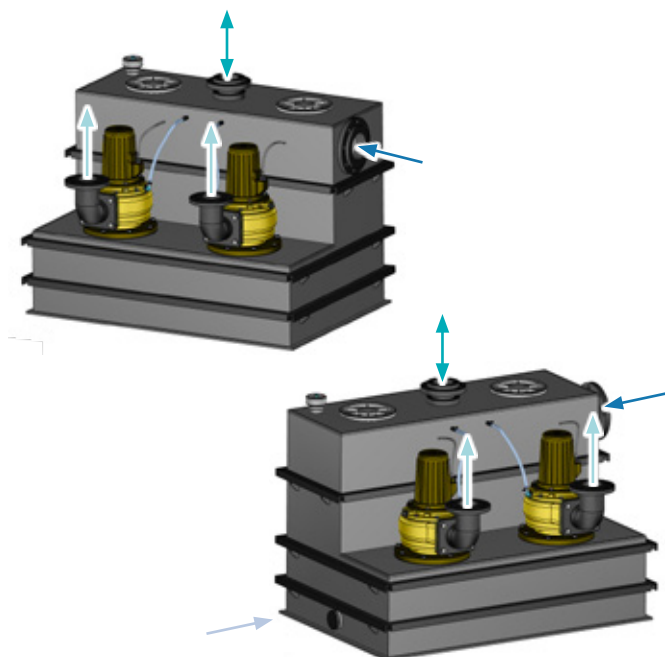
- Drainage of domestic sewage from apartment buildings, residential areas, hospitals, schools etc.
- Facilities which need continuous sewage drainage
- Above-ground installation in frost-free rooms below the backflow level

### Characteristics



### Outlet / Inlet

- Ø Inlet outside DN 150
- ↔ Ø Venting - outside DN 100
- Ø Pressure outlet: DN 100
- 1 1/2" connection hand diaphragm pump



# WUZ 100 Duplex

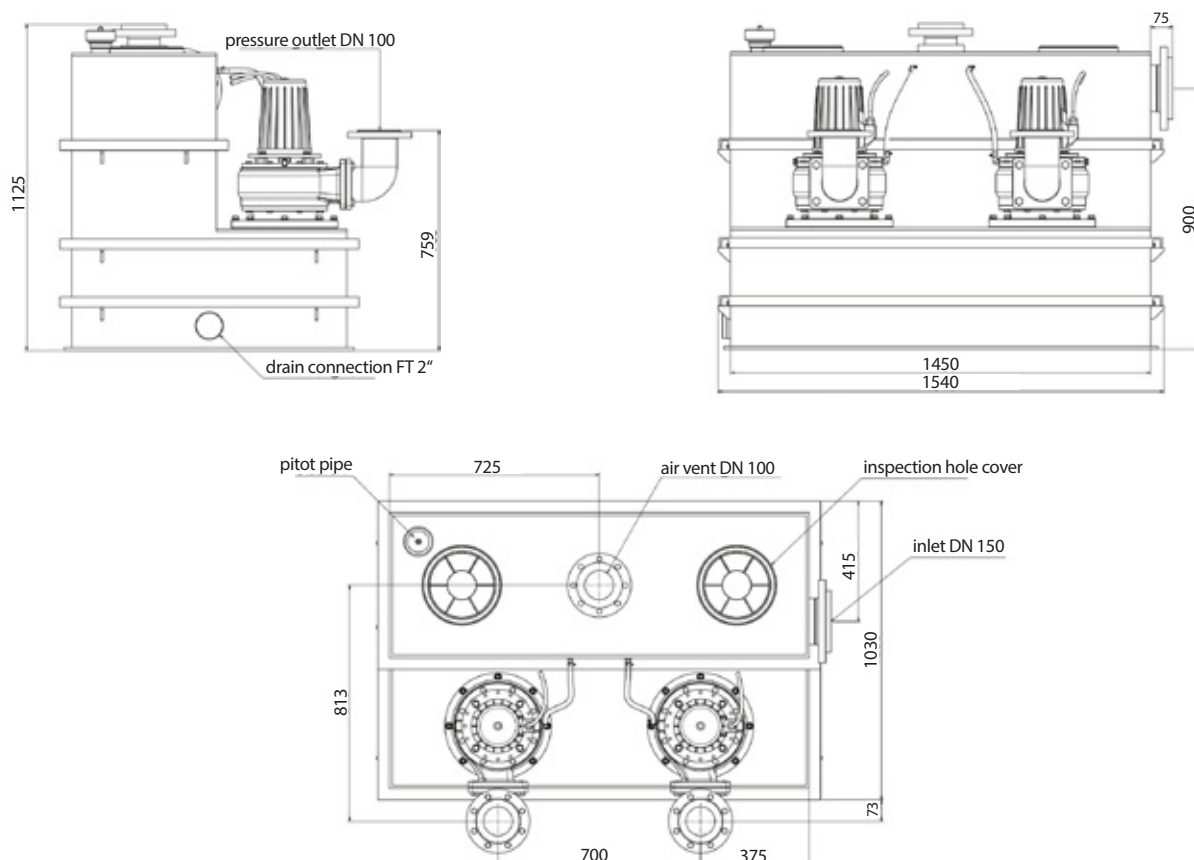


Sewage lifting units

## Technical data











WUZ 100 Duplex	3.0	4.0	5.5	7.5
Article number	10551	10553	10555	10556
Discount group	B	B	B	B
Weight (kg)	370.0	385.0	400.0	425.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	6.9	11.2	12.1	16.9
Frequency (Hz)	50	50	50	50
Input power P1 (W)	4.000	5.500	6.300	8.700
Output power P2 (W)	3.000	4.000	5.500	7.500
Speed Motor (min <sup>-1</sup> )	1.400	1.400	1.400	1.400
Protection class	IP 57	IP 57	IP 57	IP 57
<b>Hydraulic characteristics</b>				
Max. head (m)	10.0	13.0	18.0	22.0
Max. flow rate (m <sup>3</sup> /h)	120.0	140.0	160.0	165.0
Solids handling (mm)	80	80	100	100
Diameter inlets DN	150	150	150	150
Diameter outlet DN	100	100	100	100
Vent outside - Ø (mm)	110	110	110	110
Total volume (l)	1.000	1.000	1.000	1.000
Max. medium temp. (°C)	55	55	55	55
Impeller type	channel impeller	channel impeller	channel impeller	channel impeller
Switching mode	pneumatic	pneumatic	pneumatic	pneumatic

## Dimensions



# Accessories







for Lifting units

Type	Art.-no.	Discount group	Figure
Gate valve DN 50 cast-iron	10646	B	
Gate valve DN 80 cast-iron	10648	B	
Gate valve DN 100 cast-iron	10649	B	
Gate valve DN 125 cast-iron	10650	B	
Gate valve DN 150 cast-iron	10651	B	
Plastic gate valve DN 80 kpl.	10643	B	
Plastic gate valve DN 100 kpl.	10642	B	
Non-return valve DN 80 PE	14400	B	
Non-return valve DN 100 PE	14401	B	
Ball non-return valve DN 50 cast-iron	14394	B	
Ball non-return valve DN 100 cast-iron	14398	B	
Flange piece DN 50 PE	11931	B	
Flange piece DN 65 PE	10654	B	
Flange piece DN 80 PE	11933	B	
Flange piece DN 100 PE	11935	B	
Flange piece DN 125 PE	11949	B	
Flange piece DN 150 PE	11956	B	
Pipe bend 90° DN 100 PE	10441	B	
Pipe bend 90° DN 125 PE	10442	B	
Pipe bend 90° DN 150 PE	10443	B	
Reducer DN 125/100 PE flanged	10452	B	
Reducer DN 150/100 PE flanged	10453	B	
Y-piece DN 50/50/50 PE for duplex unit	11992	B	
Y-piece DN 50/65/50 PE for duplex unit	11993	B	
Y-piece 2" VA	12385	B	
Y-piece DN 100/100/100 PE for Kompaktboy Duplex	17569	X01	
Y-piece DN 100/100/100 PE for Miniboy/Boy Duplex	11997	B	
Y-piece DN 100/100/100 PE for W80 Duplex	11998	B	
Y-piece DN 100/100/100 PE for WUZ 100 Duplex	11999	B	
Y-piece DN 100/125/100 PE for duplex unit	12006	B	
Y-piece DN 100/150/100 PE for duplex unit	12005	B	
Y-piece 1 1/4" VA for Kompaktboy Duplex SE 71	17755	X01	
Manual diaphragm pump 1 1/2"	10430	B	



# Accessories

for Lifting units

Type	Art.-no.	Discount group	Figure
Three-way changeover valve 1 1/2" RB	10433	B	
Mains-independent alarm switchgear	13001	B	
Float switch 10 m OPTI1 emptying function, yellow RAL 1018	14499	A	
Small horn KH 1 - 12 VDC	12076	B	
Small horn 230 V	12068	B	
Reducer DN 50/65 PE flanged	10449	B	
Flange piece DN 80 / DN 100 PE	11934	B	
Compression fitting 2" DN 50 d63 PE flange-sleeve-piece	11102	B	
Compression fitting 2" FPT d63 PE	11100	B	

Type	Art.-no.	Discount group
Mounting accessories DN 50 VA	15438	B
Mounting accessories DN 50 VZ	15444	B
Mounting accessories DN 65 VA	15439	B
Mounting accessories DN 65 VZ	15445	B
Mounting accessories DN 80 VA	15440	B
Mounting accessories DN 80 VZ	15446	B
Mounting accessories DN 100 VA	15441	B
Mounting accessories DN 100 VZ	15447	B
Mounting accessories DN 125 VA	15442	B
Mounting accessories DN 125 VZ	15448	B
Mounting accessories DN 150 VA	15443	B
Mounting accessories DN 150 VZ	15449	B

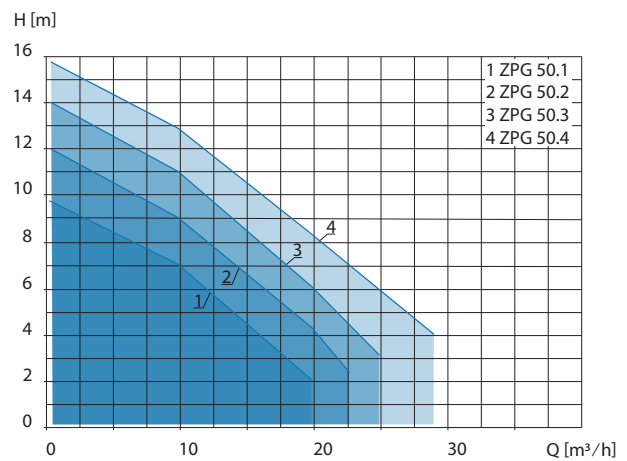
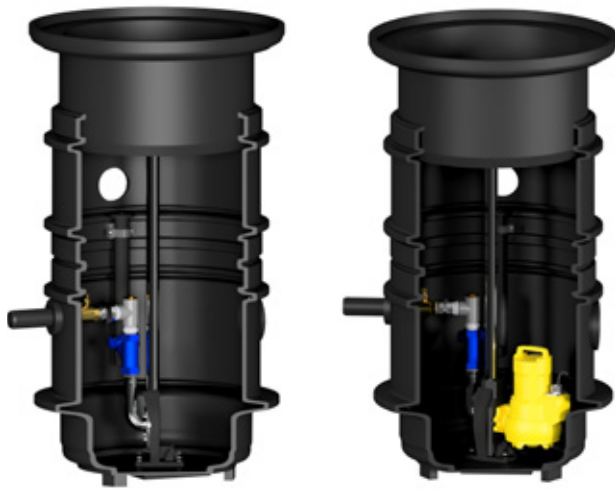
### Features

- Pumping station made of corrosion-resistant PE-LLD
- Buoyancy-proof up to ground water level of max. 0.5 m from manhole's lower edge
- Installation of one pump of the series ZPG 50
- DN 32 stainless steel piping, completely mounted with coupling system
- Non-return valve, gate valve and flushing connection 1"
- Pressure outlet PE-HD 63 x 5.8 – outside the manhole
- 1 Pc. Inlet DN 150, suitable for KG pipe, further inlets possible as option
- 2x connection DN 100 for cable gland and air vent

### Applications

- Pumping of sewage from homes
- As drainage pumping station
- For pressure drainage
- For installation outside buildings
- Also drivable with manhole covers class B and D

### Characteristics



### Scope of delivery



**ZPG 50**  
for waste water  
and rainwater



**ZPS 1**  
Control system  
for a pump with  
acoustic and  
visual alarm



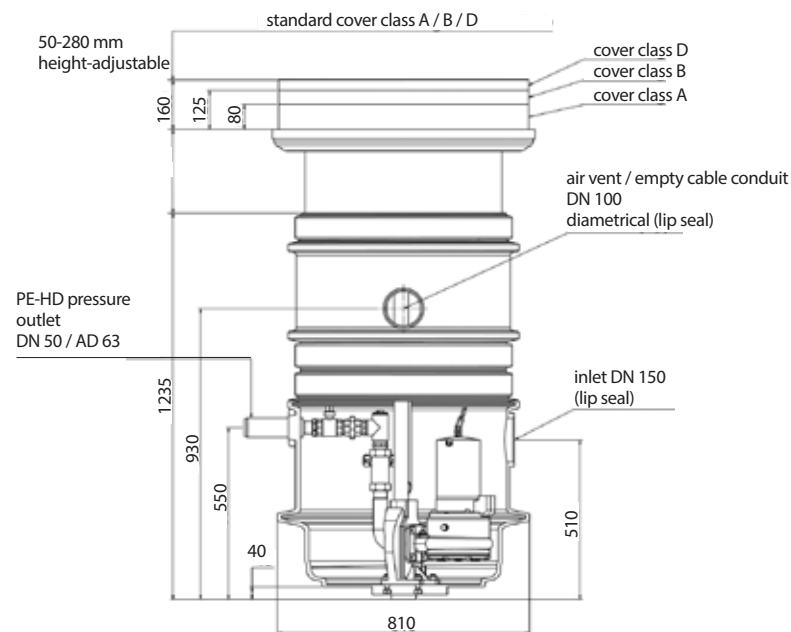
**BEGU Shaft Cover**  
Depending on the version  
cover class A, B, or D

### product overview

Pumping station incl FPS Basic, pump and pneumatic control unit ZPS (version WA with float switch)  
- BEGU shaft cover optional

Type	Article number	Discount group
FPS Basic E-ZPG 50.1 W 230 V	21564	B
FPS Basic E-ZPG 50.1 WA 230 V	21565	B
FPS Basic E-ZPG 50.1 D 400 V	21608	B
FPS Basic E-ZPG 50.2 W 230 V	21566	B
FPS Basic E-ZPG 50.2 WA 230 V	21567	B
FPS Basic E-ZPG 50.2 D 400 V	21609	B
FPS Basic E-ZPG 50.3 W 230 V	21568	B
FPS Basic E-ZPG 50.3 WA 230 V	21569	B
FPS Basic E-ZPG 50.3 D 400 V	21610	B
FPS Basic E-ZPG 50.4 W 230 V	21570	B
FPS Basic E-ZPG 50.4 WA 230 V	21571	B
FPS Basic E-ZPG 50.4 D 400 V	21611	B

### Dimensions



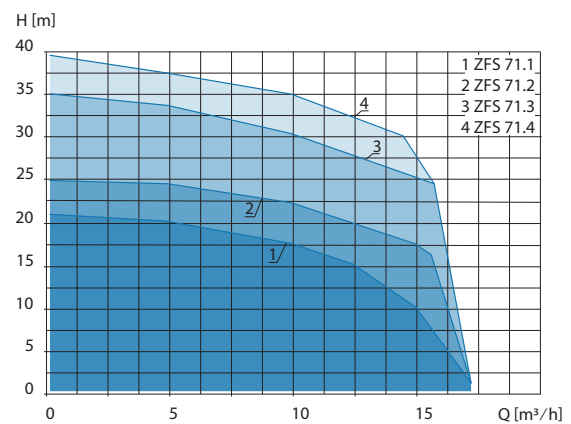
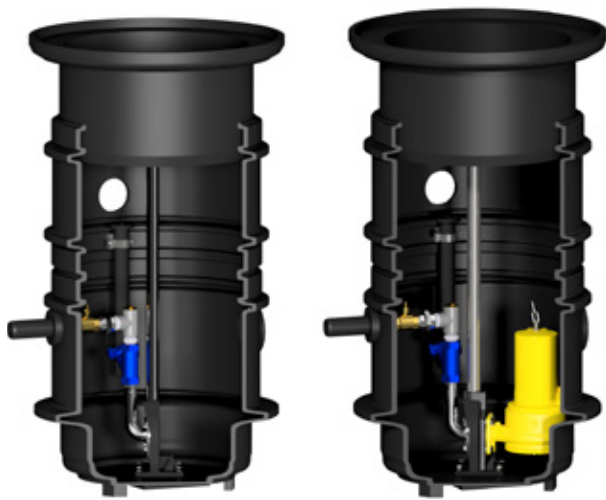
### Features

- Pumping station made of corrosion-resistant PE-LLD
- Buoyancy-proof up to ground water level of max. 0.5 m from manhole's lower edge
- Installation of one pump of the series ZFS 71
- DN 32 stainless steel piping, completely mounted with coupling system
- Non-return valve, gate valve and flushing connection 1"
- Pressure outlet PE-HD 63 x 5.8 – outside the manhole
- 1 Pc. inlet DN 150, suitable for KG pipe, further inlets possible as option
- 2X connection DN 100 for cable gland and air vent

### Applications

- Disposal of wastewater from single-family homes
- As drainage pumping station
- For pressure drainage
- For installation outside buildings
- Also drivable with manhole covers class B and D

### Characteristics



### Scope of delivery



**ZFS 71**  
for swage water  
and waste water



**ZPS 1**  
Control system  
for a pump with  
acoustic and  
visual alarm



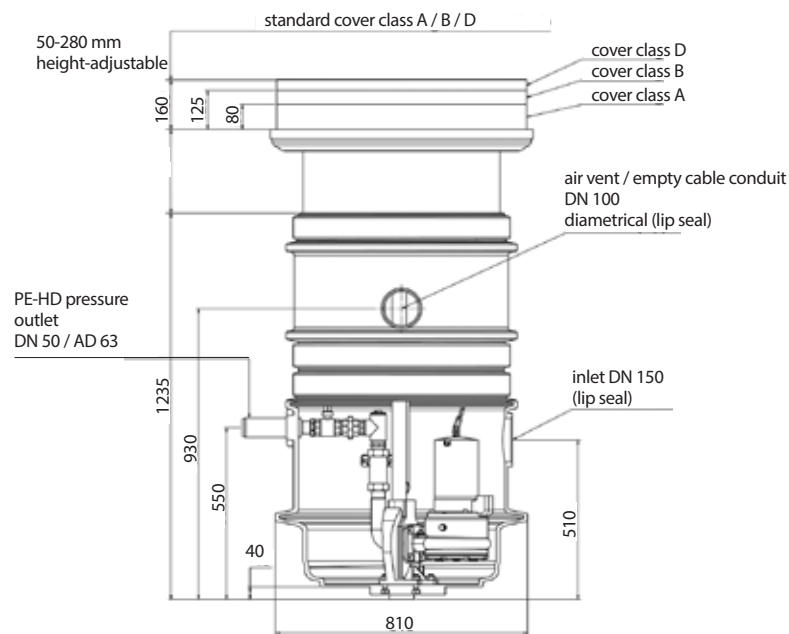
**BEGU Shaft Cover**  
Depending on the version  
cover class A, B, or D

### Product overview

Pumping station incl FPS Basic, pump and pneumatic control unit ZPS 1 or ZPS 2 (version WA with float switch)  
- BEGU shaft cover optional

Type	Article number	Discount group
FPS Basic 1200 E-ZFS 71.1 230V	21395	B
FPS Basic 1200 E-ZFS 71.1 400V	21348	B
FPS Basic 1200 E-ZFS 71.2 400V	21349	B
FPS Basic 1200 E-ZFS 71.3 400V	21350	B
FPS Basic 1200 E-ZFS 71.4 400V	21351	B

### Dimensions



# FPS-K Simplex- and Duplex



Pumping stations with submersible waste water pump(s)

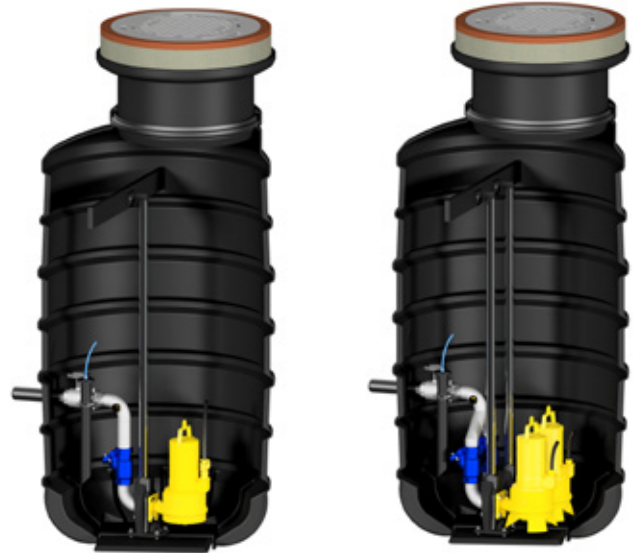
## Features

- Pumping station made of corrosion-resistant PE-LLD
- Buoyancy-proof up to ground water level of max. 1.2 m from manhole's lower edge
- High inlet depths possible (max. 2.94 m)
- For the installation of one or two pumps of the series ZPG 50 or ZPG 71
- Stainless steel piping DN 50, pre-assembled with coupling system
- Non-return valve, gate valve and flushing connection 1"
- Pressure outlet PE-HD 63 x 5.8 – outside the manhole
- 1 Pc. Inlet DN 150, suitable for KG-pipe, further inlets possible as option 2x connection DN 100 for cable gland and air vent
- Manhole equipped with pressure line and fittings
- BEGU manhole cover class A-D optional (see accessories)
- Further inlets possible as an option

## Applications

- Disposal of wastewater from single-family and multi-family homes
- As drainage pumping station
- For pressure drainage
- For installation outside buildings
- Also drivable with manhole covers class B and D

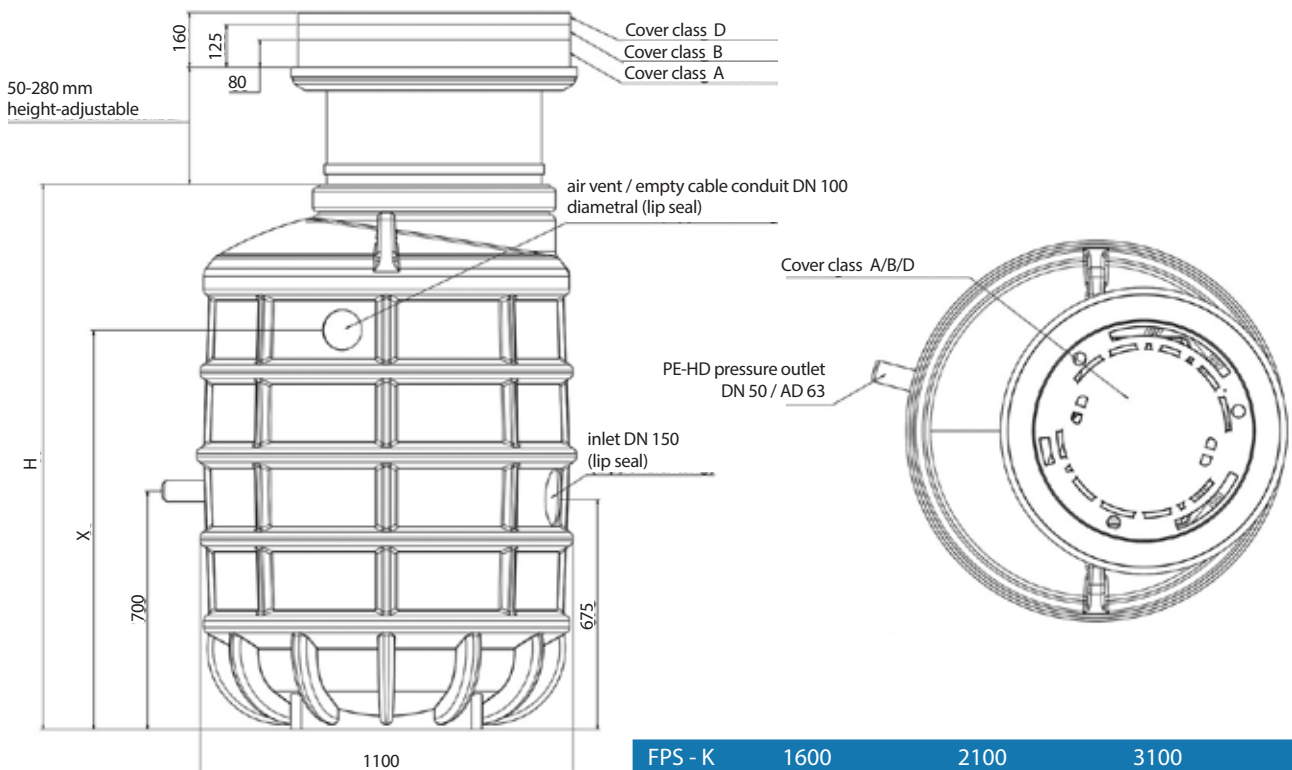
Pumping stations



Simplex unit

Duplex unit

## Dimensions



# FPS-K Simplex- and Duplex



Pumping stations with submersible waste water pump(s)

## Product overview

Pumping station incl FPS Basic, pump and pneumatic control unit ZPS (version WA with float switch)  
- BEGU shaft cover optional

Pumps	FPS 1600	FPS 2100	FPS 3100
<b>Simplex unit</b>			
ZPG 50.1 W 230 V	21572	21580	21588
ZPG 50.1 WA 230 V	21573	21581	21589
ZPG 50.1 D 400 V	21612	21616	21620
ZPG 50.2 W 230 V	21574	21582	21590
ZPG 50.2 WA 230 V	21575	21583	21591
ZPG 50.2 D 400 V	21613	21617	21621
ZPG 50.3 W 230 V	21576	21584	21592
ZPG 50.3 WA 230 V	21577	21585	21593
ZPG 50.3 D 400 V	21614	21618	21622
ZPG 50.4 W 230 V	21578	21586	21594
ZPG 50.4 WA 230 V	21579	21587	21595
ZPG 50.4 D 400 V	21615	21619	21623
ZPG 71.1 230 V	21396	21398	21400
ZPG 71.1 400 V	21352	21359	21366
ZPG 71.2 400 V	21353	21360	21367
ZPG 71.3 400 V	21354	21361	21368

<b>Duplex unit</b>			
2 x ZPG 50.1 W 230 V	21596	21600	21604
2 x ZPG 50.1 D 400 V	21624	21628	21632
2 x ZPG 50.2 W 230 V	21597	21601	21605
2 x ZPG 50.2 D 400 V	21625	21629	21633
2 x ZPG 50.3 W 230 V	21598	21602	21606
2 x ZPG 50.3 D 400 V	21626	21630	21634
2 x ZPG 50.4 W 230 V	21599	21603	21607
2 x ZPG 50.4 D 400 V	21627	21631	21635
2 x ZPG 71.1 230 V	21402	21404	21406
2 x ZPG 71.1 400 V	21373	21380	21387
2 x ZPG 71.2 400 V	21374	21381	21388
2 x ZPG 71.3 400 V	21375	21382	21389

Height manhole H	1600	2100	3100
Height with attachment class A	1730 - 1960	2230 - 2460	3230 - 3460
Max. inlet depth	1360	1860	2860
Height with attachment class B	1775 - 2005	2275 - 2505	3275 - 3505
Max. inlet depth	1405	1905	2905
Height with attachment class D	1810 - 2040	2310 - 2540	3310 - 3540
Max. inlet depth	1440	1940	2940

# FPS-K Simplex- and Duplex



Pumping stations with waste water pump(s)

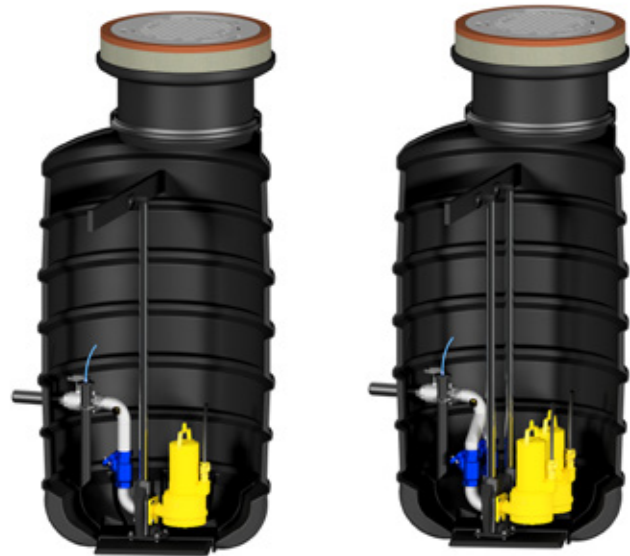
## Features

- Pumping station made of corrosion-resistant PE-LLD
- Buoyancy-proof up to ground water level of max. 1.2 m from manhole's lower edge
- High inlet depths possible (max. 2.94 m)
- For the installation of one or two pumps of the series ZFS 71
- Stainless steel piping DN 50, pre-assembled with coupling system
- Non-return valve, gate valve and flushing connection 1"
- Pressure outlet PE-HD 63 x 5.8 – outside the manhole
- 1 Pc. Inlet DN 150, suitable for KG-pipe, further inlets possible as option
- 2X connection DN 100 for cable gland and air vent
- Manhole equipped with pressure line and fittings
- BEGU manhole cover class A-D optional (see accessories)
- Further inlets possible as an option

## Applications

- Disposal of wastewater from single-family and multi-family homes
- As drainage pumping station
- For pressure drainage
- For installation outside buildings
- Also drivable with manhole covers class B and D

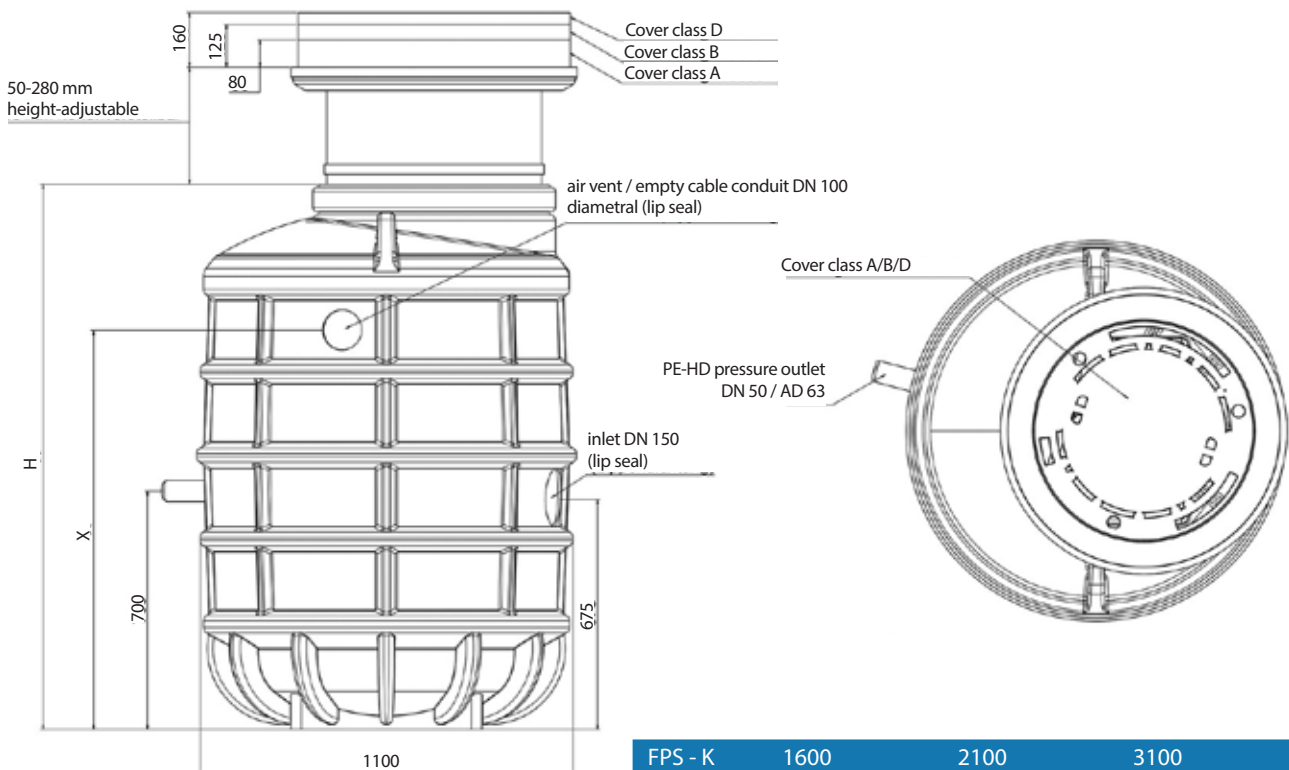
Pumping stations



Simplex unit

Duplex unit

## Dimensions





# FPS-K Simplex- and Duplex



Pumping stations with waste water pump(s)

## Product overview

Pumping station incl FPS Basic, pump and pneumatic control unit ZPS (version WA with float switch)  
- BEGU shaft cover optional

Pumps	FPS 1600	FPS 2100	FPS 3100
<b>Simplex pumping stations</b>			
ZFS 71.1 230 V	21397	21399	21401
ZFS 71.1 400 V	21355	21362	21369
ZFS 71.2 400 V	21356	21363	21370
ZFS 71.3 400 V	21357	21364	21371
ZFS 71.4 400 V	21358	21365	21372
<b>Duplex pumping stations</b>			
2 x ZFS 71.1 230 V	21403	21405	21407
2 x ZFS 71.1 400 V	21376	21383	21390
2 x ZFS 71.2 400 V	21377	21384	21391
2 x ZFS 71.3 400 V	21378	21385	21392
2 x ZFS 71.4 400 V	21379	21386	21393
<b>Height manhole H</b>			
Height with attachment class A	1600	2100	3100
Max. inlet depth	1730 - 1960	2230 - 2460	3230 - 3460
Height with attachment class B	1360	1860	2860
Max. inlet depth	1775 - 2005	2275 - 2505	3275 - 3505
Height with attachment class D	1405	1905	2905
Max. inlet depth	1810 - 2040	2310 - 2540	3310 - 3540
Max. inlet depth	1440	1940	2940

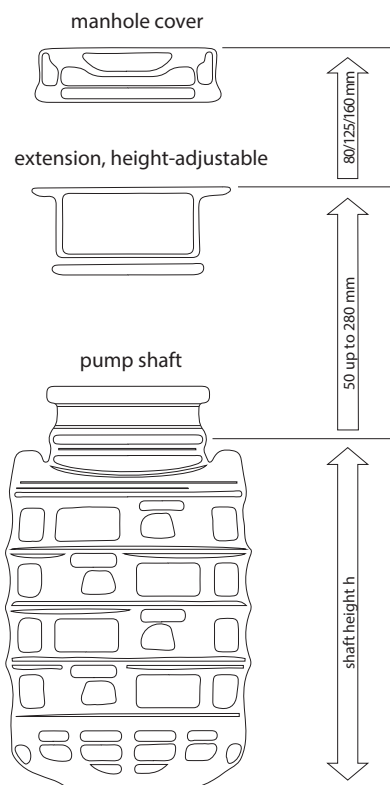
# FPS-K Simplex- and Duplex



## Pumping stations

### Product overview

Type	Art.-no.	Discount group
<b>FPS-CS simplex pumping station with extension piece, piping and valves (excl. pump and control unit)</b>		
FPS-KE(A) H=1600 mm	14479	B
FPS-KE(A) H=2100 mm	14474	B
FPS-KE(A) H=3100 mm	14475	B
<b>FPS-CD duplex pumping station with extension piece, piping and valves (excl. pump and control unit)</b>		
FPS-KD(A) H=1600 mm	14490	B
FPS-KD(A) H=2100 mm	14477	B
FPS-KD(A) H=3100 mm	14478	B
<b>Accessories</b>		
BEGU-cover class A	16035	B
BEGU-cover class B	16038	B
BEGU-cover class D	16044	B
Top piece H = 500 mm	21344	B



# FPS-K Simplex- and Duplex

## Pumping stations

### Manhole cover



Manole cover class A (concrete-cast)



Manole cover class B (concrete-cast)



Manole cover class D (concrete-cast)

### Load classes of the manhole cover according to EN 124:

#### Cover class A

For use in pedestrian areas where vehicles have no access (15 kN load test)

#### Cover class B

For use in car parks & pedestrian areas where infrequent vehicle access is likely (incl. driveways (125 kN load test)

#### Cover class D

For use in carriageways of roads, hard shoulders and parking areas (400 kN load test)

### Installation example



Fig.: Pumping station with grinder pump ZFS 71

# Garden 1000

Pumps for home and garden

## Features

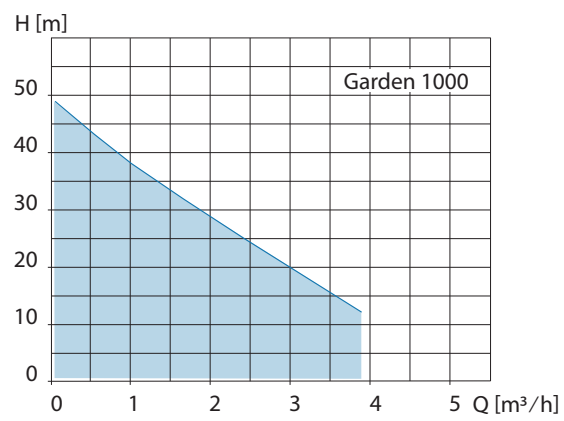
- Self-priming electric centrifugal pump with built-in injector, capable of conveying gases dissolved in water during suction
- Self-priming up to 8 m
- Suction and discharge connection 1" FT
- With handle
- Smooth running
- Stainless steel pump housing
- Motor with thermal protection switch
- Motor bearing with lifetime lubrication
- Wired, incl. 1.5 meter power cable H07RN-F, with plug



## Applications

- Domestic water supply
- Garden irrigation
- Washing facilities
- Decanting of tanks etc.
- Supply of clear water without aggressive and abrasive components

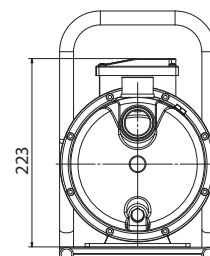
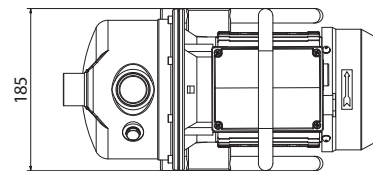
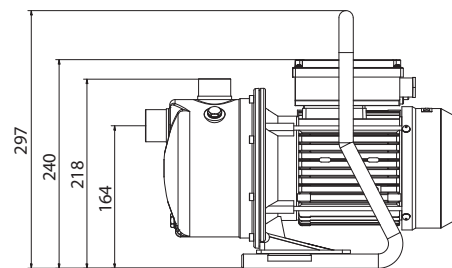
## Characteristics



## Technical data

Garden 1000	
Article number	18562
Discount group	E
Weight (kg)	11.8
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.2
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	750
Speed (min-1)	2.800
Protection class	IP 55
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Max. head (m)	50.0
Max. flow rate (m³/h)	3.6
Max. medium temp. (°C)	40
Max. operating pressure (bar)	8

## Dimensions



# Garden 2000

Pumps for home and garden

## Features

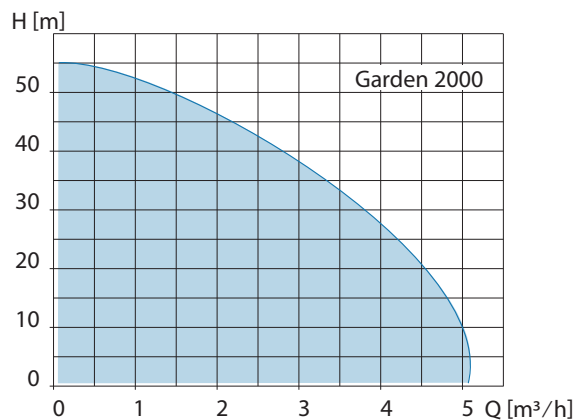
- Self-priming, multistage centrifugal pump
- Self-priming up to 8 m
- Suction and discharge connection 1" FT
- Smooth running
- Stainless steel pump housing
- Motor with thermal protection switch
- Wired, incl. 1.5 meter power cable H07RN-F, with plug

## Applications

- Domestic water supply
- Garden irrigation
- Washing facilities
- Decanting of tanks etc.
- Supply of clear water without aggressive and abrasive components



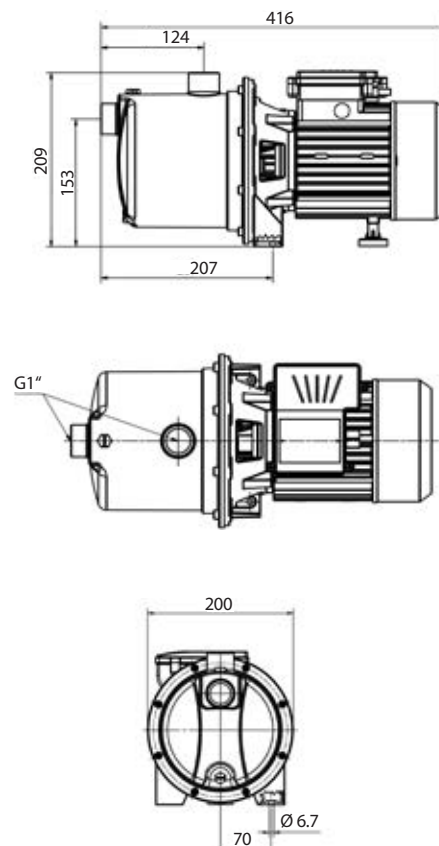
## Characteristics



## Technical data

Garden 2000	
Article number	23034
Discount group	E
Weight (kg)	11.3
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.2
Frequency (Hz)	50
Input power P1 (W)	1.300
Output power P2 (W)	900
Speed (min-1)	2.800
Protection class	IP 54
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Max. head (m)	54.0
Max. flow rate (m³/h)	5.0
Max. medium temp. (°C)	40
Max. operating pressure (bar)	8

## Dimensions



# Gardenpress Ad Pro series

## Domestic water system

### Features

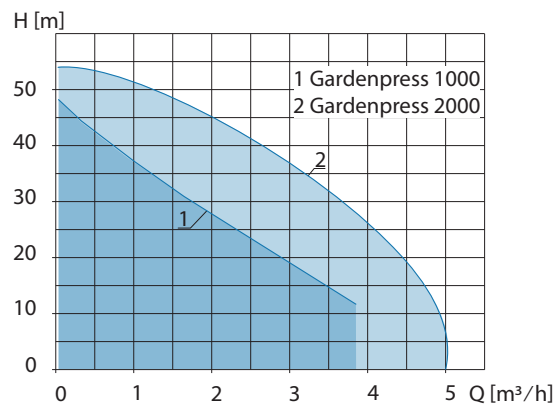
- Self-priming up to 8 m
- Single-stage (Garden 1000) or multistage (Garden 2000) centrifugal pump
- Smooth running
- Discharge connection 1" IT. suction connection 1" IT
- Stainless steel pump housing
- Motor with thermal protection switch
- Wired, incl. 1.5 meter power cable H07RN-F, with plug
- AdPro automatic switch: Adjustable switch-on pressure from 1.5 to 3.5 bar. When a consumer is opened the pump switches on automatically. When all consumers are closed, the pump switches off automatically. Additional dry-running protection.



### Applications

- Domestic water supply
- Water supply from wells, springs and water bodies
- Garden irrigation and sprinkling
- Pressure boosting
- Supply of clear water without aggressive and abrasive components

### Characteristics

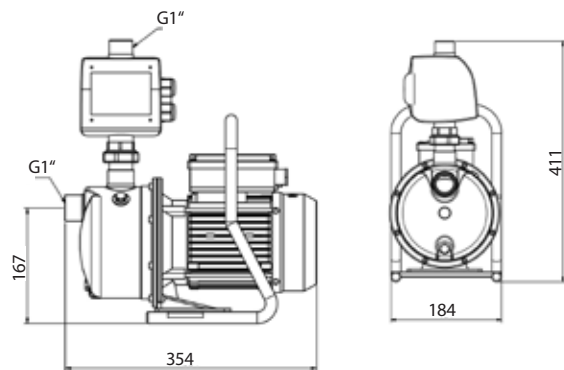


### Technical data

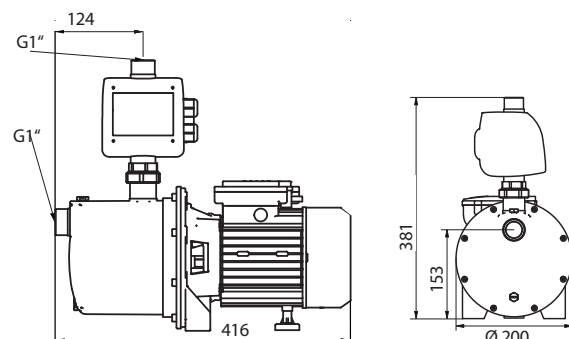
Gardenpress	1000/ Ad Pro	2000/ Ad Pro
Article number	20245	23278
Discount group	E	E
Weight (kg)	12.8	12.3
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	5.2	5.2
Frequency (Hz)	50	50
Input power P1 (W)	1.000	1.300
Output power P2 (W)	750	900
Speed (min-1)	2.900	2.800
Protection class	IP 55	IP 55
Power cable length (m)	1.5	1.5
<b>Hydraulic characteristics</b>		
Max. head (m)	50.0	54.0
Max. flow rate (m³/h)	3.6	5.0
Max. medium temp. (°C)	40	40
Max. operating pressure (bar)	8	8

### Dimensions

Type: Gardenpress 1000



Type: Gardenpress 2000



# Gardenpress Kit 02

Domestic water system

## Features

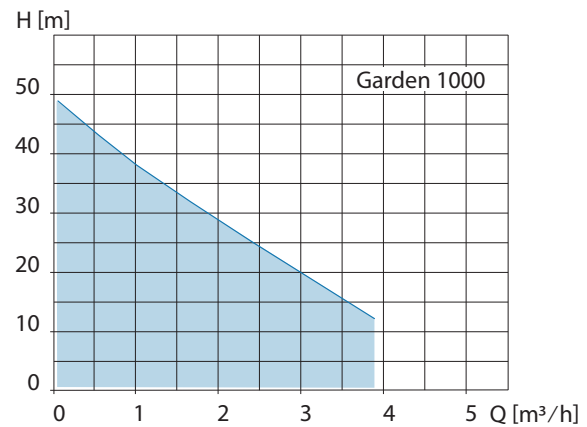
- Self-priming up to 8 m
- With handle
- Smooth running
- Discharge connection 1" IT, suction connection 1" IT
- Stainless steel pump housing
- Motor with thermal protection switch
- Wired, incl. 1.5 meter power cable H07RN-F, with plug
- Automatic switch KIT 02: When opening a consumer, the pump switches on automatically. Are all consumers closed, the pump switches off automatically. Additional dry run protection



## Applications

- Domestic water supply
- Water supply from wells, springs and water bodies
- Garden irrigation and sprinkling
- Pressure boosting
- Supply of clear water without aggressive and abrasive components

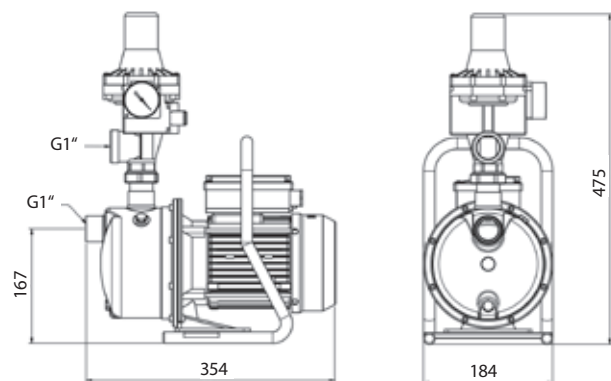
## Characteristics



## Technical data

<b>Gardenpress</b>	<b>1000/ Kit 02</b>
Article number	18734
Discount group	E
Weight (kg)	11.8
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.2
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	750
Speed (min-1)	2.800
Protection class	IP 44
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Max. head (m)	50.0
Max. flow rate (m³/h)	3.6
Max. medium temp. (°C)	40
Max. operating pressure (bar)	8

## Dimensions



# Garden 1000

Domestic waterworks

## Features

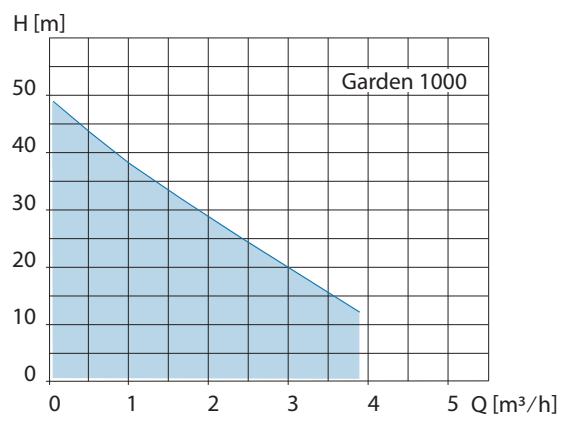
- Digital pressure switch for automatic operation: digital adjustable switch-on and switch-off pressure (time-consuming and inaccurate adjustment by means of springs as with mechanical pressure switch)
- Integrated dry run protection: pump is stopped automatically in case of water shortage and malfunction is indicated (automatic re-start possible)
- Low pressure loss with simultaneous water withdrawal at many consumers
- Self-priming, maintenance-free, single-stage centrifugal pump Garden 1000
- Reduction of switching frequency due to 20 l expansion vessel
- Tank: steel painted, stainless steel or powder coated with butyl membrane (butyl membrane: 4 years warranty)



## Applications

- Rainwater harvesting systems
- Irrigation
- Pressure boosting
- Supply of clear water without aggressive and abrasive components

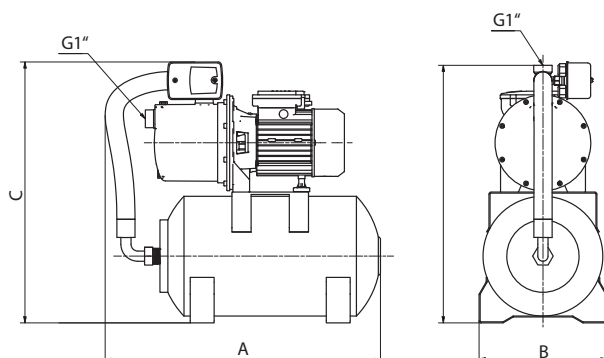
## Characteristics



## Technical data

Domestic waterworks	HWW Garden 1000/ZPC01	HWW-P Garden 1000/ZPC01	HWW-E Garden 1000/ZPC01
Article number	20261	20986	20987
Discount group	E	E	E
Weight (kg)	19.3	17.8	17.8
<b>Expansion tank</b>			
Material	steel	PU/Epoxy	stainless steel
Filling quantity (l)	20	20	20

## Dimensions



Domestic water-works	HWW Garden 1000/ZPC01	HWW-P Garden 1000/ZPC01	HWW-E Garden 1000/ZPC01
A (mm)	600	600	600
B (mm)	263	263	263
C (mm)	580	580	580



# Garden 2000

## Domestic waterworks

### Features

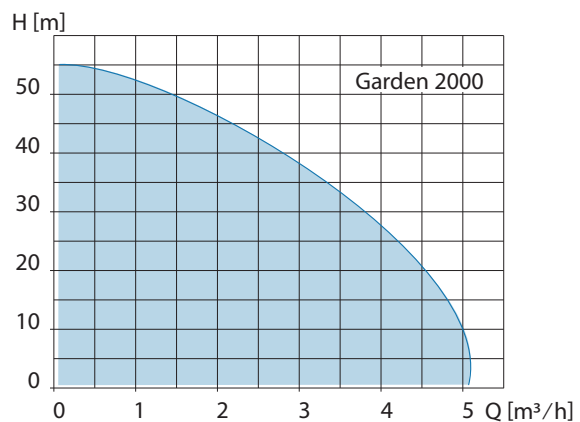
- Digital pressure switch for automatic operation: digital adjustable switch-on and switch-off pressure (time-consuming and inaccurate adjustment by means of springs as with mechanical pressure switch)
- Integrated dry run protection: pump is stopped automatically in case of water shortage and malfunction is indicated (automatic re-start possible)
- Low pressure loss with simultaneous water withdrawal at many consumers
- Self-priming, maintenance-free, single-stage centrifugal pump Garden 2000
- Reduction of switching frequency due to 20 l expansion vessel
- Tank: steel painted, stainless steel or powder coated with butyl membrane (butyl membrane: 4 years warranty)



### Applications

- Domestic water supply
- Garden irrigation
- Washing facilities
- Decanting of tanks etc.
- Supply of clear water without aggressive and abrasive components

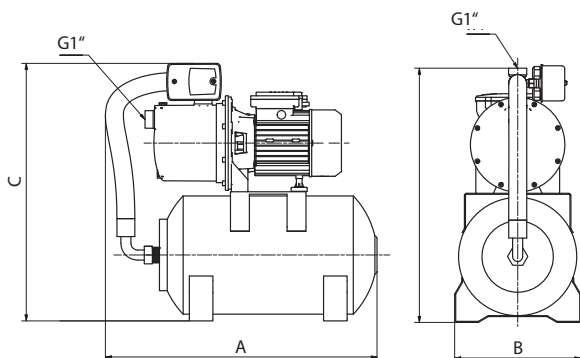
### Characteristics



### Technical data

Domestic waterworks	HWW Garden 2000/ZPC01	HWW-P Garden 2000/ZPC01	HWW-E Garden 2000/ZPC01
Article number	23279	23281	23280
Discount group	E	E	E
Weight (kg)	18.1	17.7	17.8
<b>Expansion tank</b>			
Material	steel	PU/Epoxy	stainless steel
Filling quantity (l)	20	20	20

### Dimensions



Domestic water-works	HWW Garden 2000/ZPC01	HWW-P Garden 2000/ZPC01	HWW-E Garden 2000/ZPC01
A (mm)	610	520	550
B (mm)	255	264	275
C (mm)	554	570	550

# CPS 15 series

## Garden pump

### Features

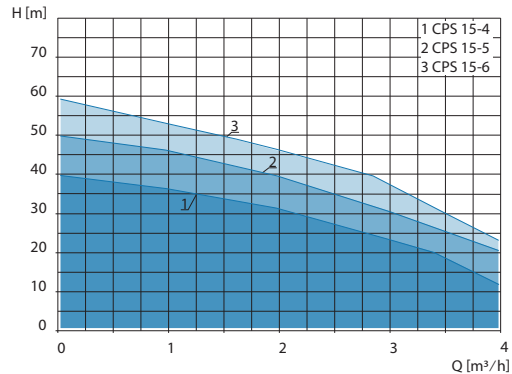
- Self-priming, horizontal, multistage centrifugal pumps with stainless steel impellers
- Very quiet, smooth running
- Excellent hydraulic performance
- Motor bearing with lifetime lubrication
- Shaft made of stainless steel 1.4401
- Guide wheels made of glass fiber-reinforced Noryl®
- High efficiency - energy-saving operation
- Motor in robust industrial quality
- Self-priming up to 8 m



### Applications

- Domestic water supply
- Rain water harvesting
- Pressure boosting
- Irrigation
- For clear water without aggressive and abrasive components

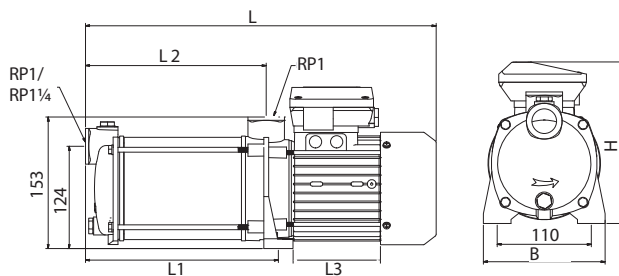
### Characteristics



### Technical data

CPS 15	15-4 MB	15-4 MB	15-4 GG	15-4 GG	15-5 MB	15-5 MB	15-5 GG	15-5 GG	15-6 MB	15-6 MB	15-6 GG	15-6 GG
Article number	18581	18580	18587	18586	18583	18582	18589	18588	18585	18584	18591	18590
Discount group	E	E	E	E	E	E	E	E	E	E	E	E
Weight (kg)	11.0	10.6	12.0	10.4	11.75	11.6	11.4	11.4	13.0	13.0	13.0	13.3
<b>Electrical characteristics</b>												
Voltage (V)	230	3~230/ 3~400	230	3~230/ 3~400	230	3~230/ 3~400	230	3~230/ 3~400	230	3~230/ 3~400	230	3~230/ 3~400
Current (A)	4.0	2.8/ 1.6	4.0	2.8/ 1.6	5.0	3.3/ 1.9	5.0	3.3/ 1.9	5.7	4.2/ 2.4	5.7	4.2/ 2.4
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
Capacitor C (µF)	16	-	16	-	20	-	20	-	25	25	25	-
Input power P1 (W)	900	900	900	900	1.100	1.100	1.100	1.100	1.300	1.300	1.300	1.300
Output power P2 (W)	700	700	700	700	850	850	850	850	1.000	1.000	1.000	1.000
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	-	1.5	-	1.5	-	1.5	-	1.5	-	1.5	-
<b>Hydraulic characteristics</b>												
Max. head (m)	40.0	40.0	40.0	40.0	50.0	50.0	50.0	50.0	60.0	60.0	60.0	60.0
Max. flow rate (m³/h)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	22.0	22.0	22.0	22.0
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40	40	40	40

### Dimensions



CPS	15-4 GG	15-5 GG	15-6 GG	15-4 B	15-5 B	15-6 B
L (mm)	409	450	458	409	433	458
L1 (mm)	198	220	243	237	262	285
L2 (mm)	195	219	243	195	219	243
L3 (mm)	-	-	-	88	88	88
B (mm)	150	190	150	134	134	134
H (mm)	196	200	196	196	196	196

# CPS 20 series

## Garden pump

### Features

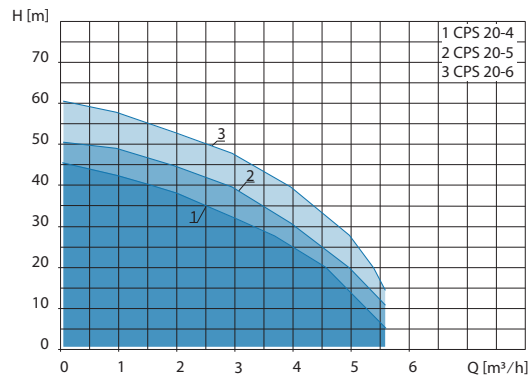
- Self-priming, horizontal, multistage centrifugal pumps with stainless steel impellers
- Very quiet, smooth running
- Excellent hydraulic performance
- Motor bearing with lifetime lubrication
- Shaft made of stainless steel 1.4401
- Guide wheels made of glass fiber-reinforced Noryl®
- High efficiency - energy-saving operation
- Motor in robust industrial quality
- Self-priming up to 8 m



### Applications

- Domestic water supply
- Rain water harvesting
- Pressure boosting
- Irrigation
- For clear water without aggressive and abrasive components

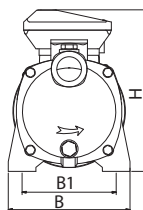
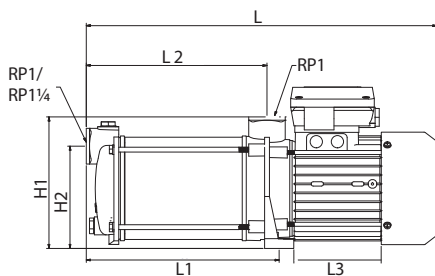
### Characteristics



### Technical data

CPS 20	20-4 MB	20-4 M GG	20-4 B	20-4 GG	20-5 MB	20-5 M GG	20-5 B	20-5 GG	20-6 M GG	20-6 GG
Article number	18594	18597	18592	18596	18595	18599	18593	18598	18601	18600
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	11.0	12.0	10.6	11.0	12.0	12.0	11.4	11.9	17.0	16.6
<b>Electrical characteristics</b>										
Voltage (V)	230	230	3~230/ 3~400	3~230/ 3~400	230	230	3~230/ 3~400	3~230/ 3~400	230	3~230/ 3~400
Current (A)	5.0	5.0	3.3/ 1.9	3.3/ 1.9	6.1	6.1	4.4/ 2.5	4.4/ 2.5	7.4	5.2/ 3.0
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Capacitor C (µF)	20	20	-	-	25	25	-	-	25	-
Input power P1 (W)	1.100	1.100	1.100	1.100	1.350	1.350	1.350	1.350	1.650	1.650
Output power P2 (W)	850	850	850	850	1.050	1.050	1.050	1.050	1.300	1.300
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	-	-	1.5	1.5	-	-	1.5	-
<b>Hydraulic characteristics</b>										
Max. head (m)	45.0	45.0	45.0	45.0	52.0	53.0	52.0	53.0	64.0	64.0
Max. flow rate (m³/h)	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40	40

### Dimensions



CPS	20-4GG	20-5GG	20-6GG	20-4 B	20-5 B
L (mm)	409	433	480	409	433
L1 (mm)	215	239	277	236	260
L2 (mm)	195	219	247	195	219
L3 (mm)	-	-	-	90	90
B (mm)	150	150	165	135	135
B1 (mm)	120	120	130	110	110
H (mm)	196	196	238	196	196
H1 (mm)	163	163	184	163	163
H2 (mm)	126	126	142	126	126

# CPS 20 SM series

## Garden pump

### Features

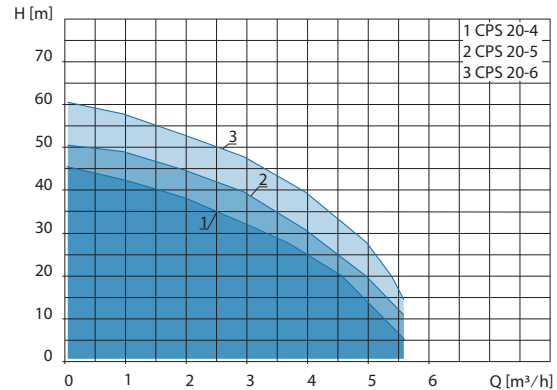
- Self-priming, horizontal, multistage centrifugal pumps with stainless steel impellers
- Very quiet, smooth running
- Excellent hydraulic performance
- Motor bearing with lifetime lubrication
- Shaft made of stainless steel 1.4401
- Guide wheels made of glass fiber-reinforced Noryl®
- High efficiency - energy-saving operation
- Motor in robust industrial quality
- With on / off switch
- Self-priming up to 8 m



### Applications

- Domestic water supply
- Rain water harvesting
- Pressure boosting
- Irrigation
- For clear water without aggressive and abrasive components

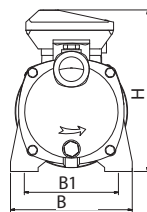
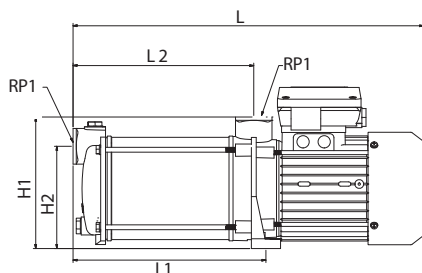
### Characteristics



### Technical data

CPS 20 SM	20-5	20-6
Article number	18564	18565
Discount group	E	E
Weight (kg)	13.5	17.3
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	5.8	7.3
Frequency (Hz)	50	50
Capacitor C (µF)	25	25
Input power P1 (W)	1.350	1.650
Output power P2 (W)	1.050	1.300
Speed (min-1)	2.850	2.850
Protection class	IP 55	IP 55
Power cable length (m)	1.5	1.5
<b>Hydraulic characteristics</b>		
Max. head (m)	52.0	64.0
Max. flow rate (m³/h)	5.4	5.4
Max. medium temp. (°C)	40	40

### Dimensions



CPS	20-5 SM	20-6 SM
L (mm)	433	480
L1 (mm)	239	277
L2 (mm)	219	247
B (mm)	150	165
H (mm)	196	238
H1 (mm)	163	184
H2 (mm)	126	142

# CPS 25 series

## Garden pump

### Features

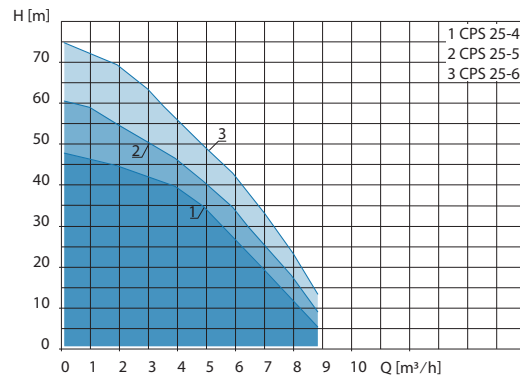
- Self-priming, horizontal, multistage centrifugal pumps with stainless steel impellers
- Very quiet, smooth running
- Excellent hydraulic performance
- Motor bearing with lifetime lubrication
- Shaft made of stainless steel 1.4401
- Guide wheels made of glass fiber-reinforced Noryl®
- High efficiency - energy-saving operation
- Motor in robust industrial quality
- Self-priming up to 8 m



### Applications

- Domestic water supply
- Rain water harvesting
- Pressure boosting
- Irrigation
- For clear water without aggressive and abrasive components

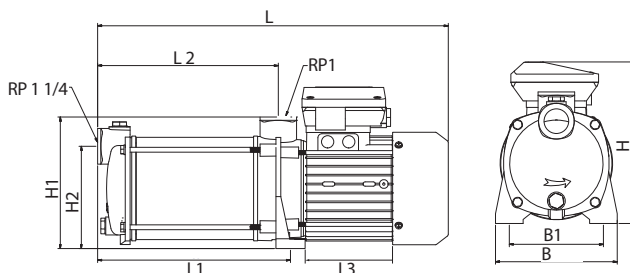
### Characteristics



### Technical data

CPS 25	25-4 MB	25-4 M GG	25-4 B	24-4 GG	25-5 MB	25-5 M GG	25-5 B	25-5 GG	25-6 M GG	25-6 GG
Article number	18603	18607	18602	18606	18605	18609	18604	18608	18611	18610
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	15.9	16.5	15.9	15.7	17.1	18.2	17.5	17.9	22.0	21.1
<b>Electrical characteristics</b>										
Voltage (V)	230	230	3~230/ 3~400	3~230/ 3~400	230	230	3~230/ 3~400	3~230/ 3~400	230	3~230/ 3~400
Current (A)	7.4	7.4	5.1/2.9	5.1/2.9	9.0	9.0	6.6/3.8	6.6/3.8	10.8	7.7/4.4
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Capacitor C (µF)	25	25	-	-	40	40	-	-	40	-
Input power P1 (W)	1.650	1.650	1.650	1.650	2.000	2.000	2.000	2.000	2.400	2.400
Output power P2 (W)	1.300	1.300	1.300	1.300	1.500	1.500	1.500	1.500	1.850	1.850
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	-	-	1.5	1.5	-	-	1.5	-
<b>Hydraulic characteristics</b>										
Max. head (m)	50.0	50.0	50.0	50.0	62.0	62.0	62.0	62.0	75.0	75.0
Max. flow rate (m³/h)	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Max. medium temp. (°C)	40	40	40	40	40	40	40	40	40	40

### Dimensions



CPS	25-4GG	25-5GG	25-6GG	25-4 B	25-5 B
L (mm)	431	456	518	431	456
L1 (mm)	230	253	277	242	267
L2 (mm)	197	222	247	197	222
L3 (mm)	-	-	-	100	100
B (mm)	165	165	165	154	154
B1 (mm)	130	130	130	123	123
H (mm)	238	238	253	238	238
H1 (mm)	184	238	198	238	238
H2 (mm)	142	184	152	174	174

# CPS 35 series

## Garden pump

### Features

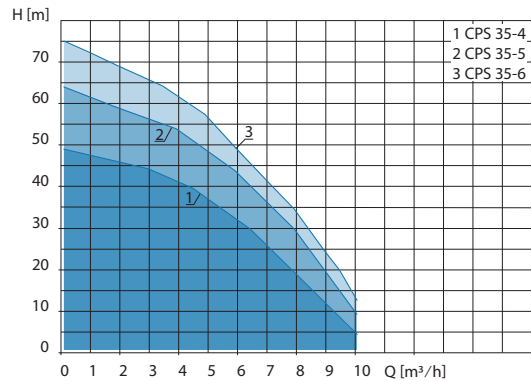
- Self-priming, horizontal, multistage centrifugal pumps with stainless steel impellers
- Very quiet, smooth running
- Excellent hydraulic performance
- Motor bearing with lifetime lubrication
- Shaft made of stainless steel 1.4401
- Guide wheels made of glass fiber-reinforced Noryl®
- High efficiency - energy-saving operation
- Motor in robust industrial quality
- Self-priming up to 8 m



### Applications

- Domestic water supply
- Rain water harvesting
- Pressure boosting
- Irrigation
- For clear water without aggressive and abrasive components

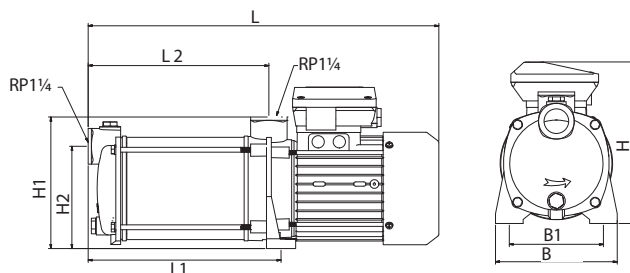
### Characteristics



### Technical data

CPS	35-4 GG	35-4 GG	35-4 B	35-5 GG	35-5 GG	35-5 B	35-6 GG	35-6 GG
Article number	18613	18612	20223	18615	18614	20224	18617	18616
Discount group	E	E	E	E	E	E	E	E
Weight (kg)	17.2	16.9	17.2	19.3	18.8	17.9	22.1	22.1
<b>Electrical characteristics</b>								
Voltage (V)	230	3~230/ 3~400	3~230/ 3~400	230	3~230/ 3~400	3~230/ 3~400	230	3~230/ 3~400
Current (A)	8.3	5.6/ 3.2	5.6/ 3.2	9.9	7.0/ 4.0	7.0/ 4.0	12.6	8.2/ 4.7
Frequency (Hz)	50	50	50	50	50	50	50	50
Capacitor C (µF)	30	-	-	40	-	-	50	-
Input power P1 (W)	1.800	1.800	1.800	2.200	2.200	2.200	2.800	2.800
Output power P2 (W)	1.400	1.400	1.400	1.650	1.650	1.650	2.100	2.100
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	-	-	1.5	-	-	1.5	-
<b>Hydraulic characteristics</b>								
Max. head (m)	50.0	50.0	50.0	62.0	62.0	62.0	75.0	75.0
Max. flow rate (m³/h)	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Max. medium temp. (°C)	40	40	40	40	40	40	40	40

### Dimensions



CPS	35-4	35-5	35-6
L (mm)	431	456	518
L1 (mm)	228	253	277
L2 (mm)	197	222	247
B (mm)	165	165	165
H (mm)	238	238	242
H1 (mm)	184	184	199
H2 (mm)	142	142	142

# Pump bracket

Accessories for garden pump

## Features

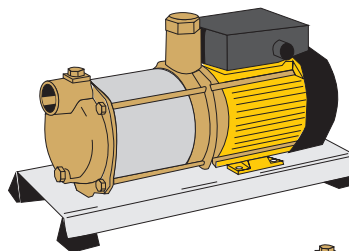
- Removable base plate for fixed and easy mounting of the pump
- Removable mounting brackets for wall or floor mounting
- Rubber vibration damper for sound decoupling
- Base plate made of corrosion-resistant stainless steel
- Mounting bracket made of powder-coated steel
- Incl. mounting material

## Applications

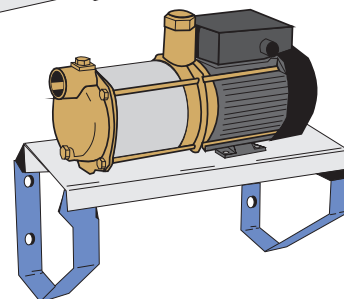
- For vibration-free mounting of the pumps CPS 15/20/SM (Art.-No.: 20655) and CPS 25 ( Art.-No.: 20656)
- For wall mounting or floor installation

pump bracket	small	big
Article number	20655	20656
Discount group	H	H

## Application example



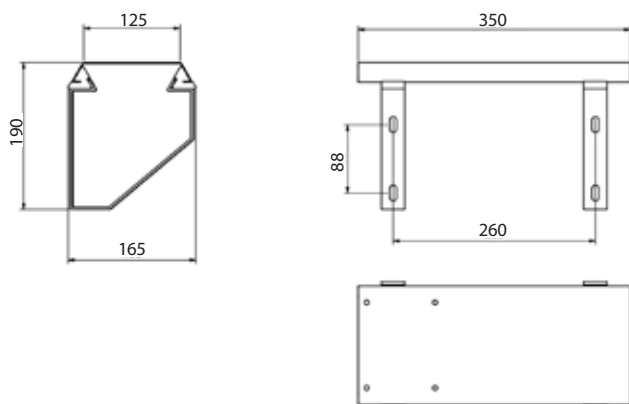
floor installation



wall mounting

## Dimensions

Small pump bracket Art.-no. 20655

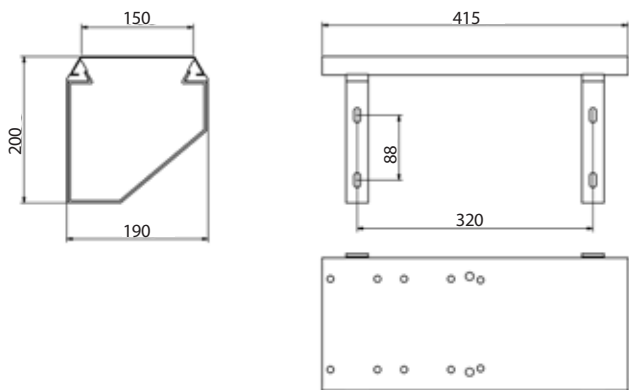


Due to the protruding terminal box (230 V), installation is only possible on the floor, with some distance to the wall, or with the suction side to the right.

This applies to the following 230 V variants:

- GG: CPS 20-6 / CPS 25 / CPS 35
- B: CPS 25-4 und 25-5
- SM: CPS 20-6

Big pump bracket Art.-No. 20656



# CPS with Kit 02

Domestic water system

## Features

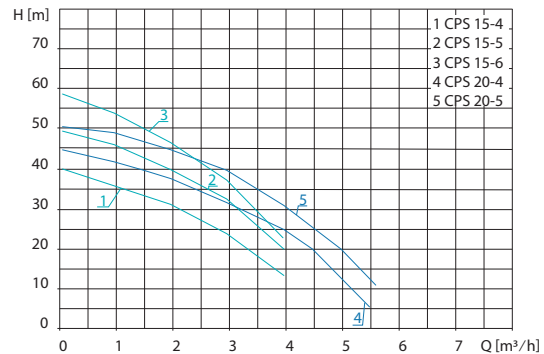
- Self-priming, maintenance-free, multistage, horizontal centrifugal pump
- Self-priming up to 8 m
- Kit 02 PRO: suction connection 1" IT, pressure connection 1" IT
- Automatic switch KIT 02: When a consumer is opened, the pump switches on automatically. When all consumers are closed, the pump switches off automatically. Additional dry run protection
- Alpha brass suction and discharge casing
- Guide wheels made of special Noryl®



## Applications

- Complete water supply package for: rainwater harvesting systems, sprinkling, pressure boosting, clear water without aggressive and abrasive components

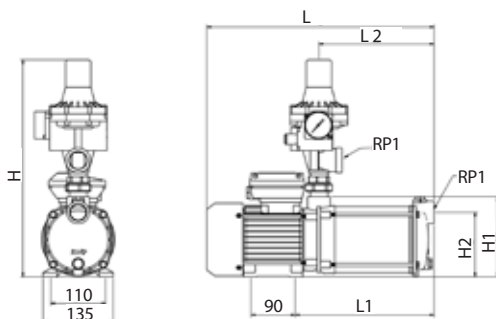
## Characteristics



## Technical data

CPS MB/ Kit 02 pro	15-4	15-5	15-6	20-4	20-5
Article number	18736	18737	18738	19242	19243
Discount group	E	E	E	E	E
Weight (kg)	13.6	15.0	16.6	12.0	13.4
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	230
Current (A)	4.0	5.0	5.7	5.0	6.1
Frequency (Hz)	50	50	50	50	50
Capacitor C (µF)	16	20	25	20	25
Input power P1 (W)	900	1.100	1.300	1.100	1.350
Output power P2 (W)	700	850	1.000	850	1.050
Speed (min-1)	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>					
Max. head (m)	40.0	50.0	60.0	42.0	53.0
Max. flow rate (m³/h)	4.0	4.0	4.0	5.4	5.2
Max. medium temp. (°C)	40	40	40	40	40

## Dimensions



CPS	15-4	15-5	15-6	20-4	20-5
L (mm)	405	432	456	409	433
L1 (mm)	235	260	283	236	260
L2 (mm)	195	218	242	195	219
H (mm)	393	393	393	403	403
H1 (mm)	153	153	153	163	163
H2 (mm)	125	125	125	126	126



# CPS with Kit 05

Domestic water system

## Features

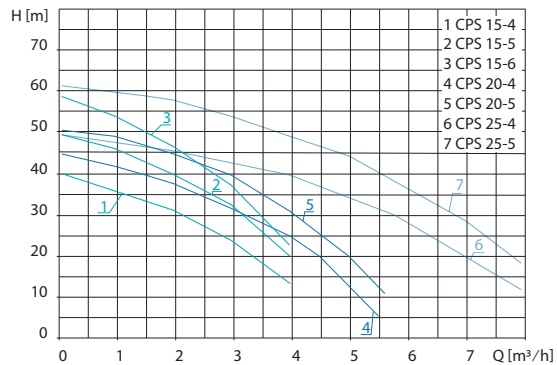
- Self-priming, maintenance-free, multistage, horizontal centrifugal pump
- Self-priming up to 8 m
- Kit 05 Optimatic: Suction connection 1" FT, pressure connection 1" MT
- Kit 05 Optimatic: When opening a consumer, the pump switches on automatically. Are all consumers closed, the pump switches off automatically. Additional dry-running protection and auto-reset function.
- LED display of the operating status
- Alpha brass suction and discharge casing
- Guide wheels made of special Noryl®



## Applications

- Complete water supply package for: rainwater harvesting systems, sprinkling, pressure boosting, clear water without aggressive and abrasive components

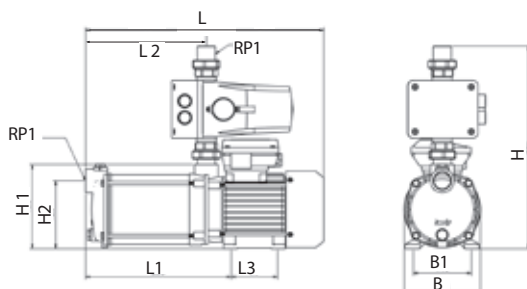
## Characteristics



## Technical data

CPS MB/ Kit 05 OPTIMATIC	15-4	15-5	15-6	20-4	20-5	25-4	25-5
Article number	18742	18743	18744	19244	19245	18748	18749
Discount group	E	E	E	E	E	E	E
Weight (kg)	11.9	13.3	14.9	12.0	13.4	17.8	20.1
<b>Electrical characteristics</b>							
Voltage (V)	230	230	230	230	230	230	230
Current (A)	4.0	5.0	5.7	5.0	6.1	7.4	9.0
Frequency (Hz)	50	50	50	50	50	50	50
Capacitor C (µF)	16	20	25	20	25	25	40
Input power P1 (W)	900	1.100	1.300	1.100	1.350	1.650	2.000
Output power P2 (W)	700	850	1.000	850	1.050	1.300	1.500
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>							
Max. head (m)	40.0	50.0	60.0	43.0	53.0	50.0	62.0
Max. flow rate (m³/h)	4.0	4.0	4.0	5.0	5.2	9.0	9.0
Max. medium temp. (°C)	40	40	40	40	40	40	40

## Dimensions



CPS	15-4	15-5	15-6	20-4	20-5	25-4	25-5
L (mm)	405	432	456	409	433	431	456
L1 (mm)	235	260	283	236	260	242	267
L2 (mm)	210	214	214	214	214	234	234
L3 (mm)	90	90	90	90	90	100	100
B (mm)	135	135	135	135	135	165	165
B1 (mm)	110	110	110	110	110	123	123
H (mm)	397	397	397	407	407	418	418
H1 (mm)	153	153	153	163	163	174	174
H2 (mm)	125	125	125	126	126	132	132

# CPS 15/20 AdPro

Domestic water system

## Features

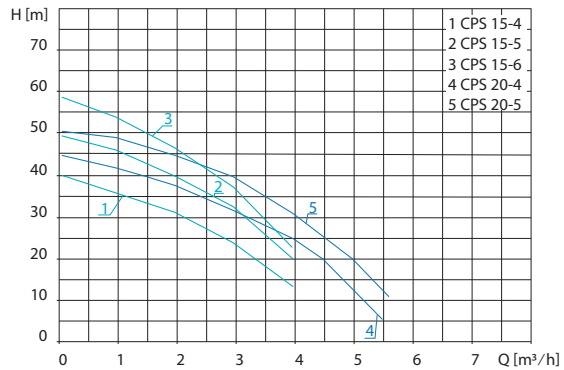
- Self-priming, maintenance-free, multistage, horizontal centrifugal pump
- Self-priming up to 8 m
- Suction and discharge casing made of dezincification-resistant alpha brass
- Guide wheels made of special Noryl®
- Ad Pro: Suction connection 1" FT, pressure connection 1" MT
- AdPro automatic switch: Adjustable switch-on pressure from 1.5 to 3.5 bar. When a consumer is opened the pump switches on automatically. When all consumers are closed, the pump switches off automatically. Additional dry-running protection.



## Applications

- Complete water supply package for: rainwater harvesting systems, sprinkling, pressure boosting, clear water without aggressive and abrasive components

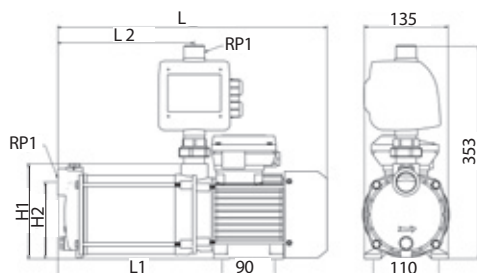
## Characteristics



## Technical data

CPS/ ZP Control AdPro	15-4	15-5	15-6	20-4	20-5
Article number	20247	20248	20249	20250	20251
Discount group	E	E	E	E	E
Weight (kg)	12.22	13.62	13.62	13.22	14.62
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	230
Current (A)	4.0	5.0	5.8	5.0	6.1
Frequency (Hz)	50	50	50	50	50
Capacitor C (µF)	16	20	25	20	25
Input power P1 (W)	900	1.100	1.300	1.100	1.350
Output power P2 (W)	700	850	1.000	850	1.050
Speed (min-1)	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>					
Max. head (m)	40.0	50.0	60.0	45.0	52.0
Max. flow rate (m³/h)	4.0	4.0	4.0	5.4	5.4
Max. medium temp. (°C)	40	40	40	40	40

## Dimensions



CPS	15-4	15-5	15-6	20-4	20-5
L (mm)	405	432	456	409	433
L1 (mm)	235	260	283	236	260
L2 (mm)	195	218	242	195	219
H1 (mm)	153	153	153	163	163
H2 (mm)	124	124	125	126	126

# CPS 15/20/25 ZP Control 05

Domestic water system

## Features

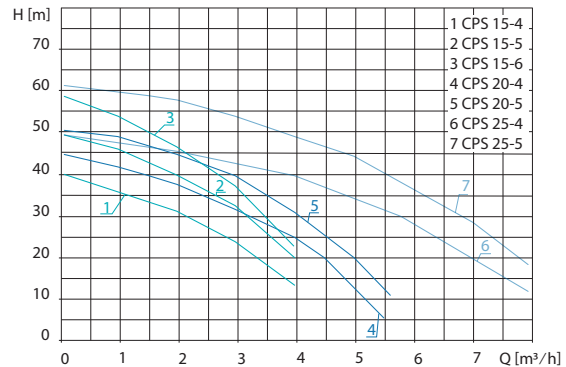
- Self-priming, maintenance-free, multistage, horizontal centrifugal pump
- Self-priming up to 8 m
- Suction and discharge casing made of dezincification-resistant alpha brass
- Guide wheels made of special Noryl®
- ZP Control 05: Suction connection 1" FT, pressure connection 1" MT, (CPS 25-5 suction port 1 1/4" FT)
- ZP Control 05 automatic switch: When opening a consumer, the pump switches on automatically. Are all consumers closed, the pump switches off automatically. Additional dry-running protection. Switch-on pressure adjustable.



## Applications

- Complete water supply package for: rainwater harvesting systems, sprinkling, pressure boosting, clear water without aggressive and abrasive components

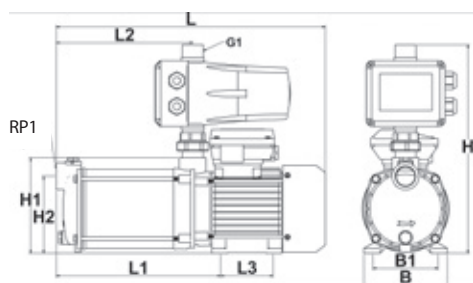
## Characteristics



## Technical data

CPS	15-4	15-5	15-6	20-4	20-5	25-4	25-5
Article number	20254	20255	20256	20257	20258	20259	20260
Discount group	E	E	E	E	E	E	E
Weight (kg)	12.7	14.1	14.1	13.7	15.1	18.7	21.0
<b>Electrical characteristics</b>							
Voltage (V)	230	230	230	230	230	230	230
Current (A)	4.0	5.0	5.8	5.0	6.1	7.4	9.0
Frequency (Hz)	50	50	50	50	50	50	50
Capacitor C (µF)	16	20	25	20	25	25	40
Input power P1 (W)	900	1.100	1.300	1.100	1.350	1.650	2.000
Output power P2 (W)	700	850	1.000	850	1.050	1.300	1.500
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>							
Max. head (m)	40.0	50.0	60.0	45.0	52.0	50.0	62.0
Max. flow rate (m³/h)	4.0	4.0	4.0	5.4	5.4	8.7	8.7
Max. medium temp. (°C)	40	40	40	40	40	40	40

## Dimensions



CPS	15-4	15-5	15-6	20-4	20-5	25-4	25-5
L (mm)	405	432	456	409	433	431	456
L1 (mm)	235	260	283	236	260	242	267
L2 (mm)	195	218	242	195	219	197	222
L3 (mm)	90	90	90	90	90	100	100
B (mm)	135	135	135	135	135	154	154
B1 (mm)	110	110	110	110	110	123	123
H (mm)	335	335	335	345	345	356	356
H1 (mm)	153	153	153	163	163	174	174
H2 (mm)	125	125	125	126	126	132	132

# CPS with ZP Control 01 Basic

## Domestic waterworks

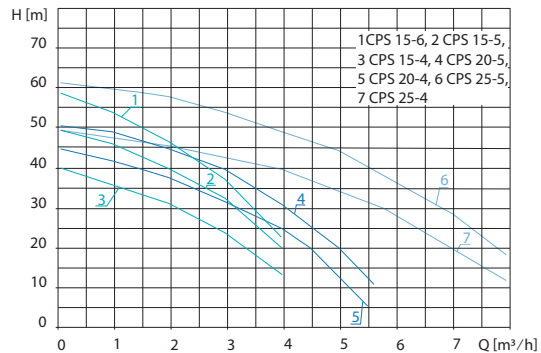
### Features

- Digital pressure switch for automatic operation: digital adjustable switch-on and switch-off pressure (time-consuming and inaccurate adjustment via tension springs as with mechanical pressure switches)
- Integrated dry run protection: pump is stopped automatically and malfunction is displayed (automatic re-start possible)
- Low pressure loss with simultaneous water withdrawal at many consumers
- Self-priming, maintenance-free, multistage, horizontal centrifugal pump
- Pressure and suction connection 1" FT (CPS 25-5 suction connection 1 1/4" FT)
- Alpha brass suction and discharge casing
- Guide wheels made of special Noryl®
- L-2521 light metal motor housing
- 20 L diaphragm pressure tank
- Incl. 2 m power cable H 07 RNF and plug

### Applications

- Rainwater harvesting systems
- Irrigation
- Pressure boosting
- Supply of clear water without aggressive and abrasive components

### Characteristics



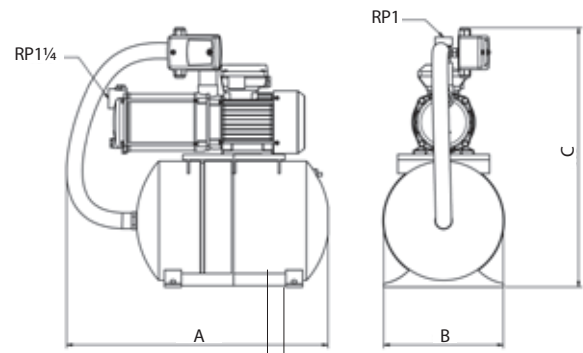
### Type

Art.-no.	Type	Discount group
<b>Diaphragm pressure tank made of steel, painted</b>		
20263	HWW CPS 15-4 B / ZPC01B	E
20264	HWW CPS 15-5 B / ZPC01B	E
20265	HWW CPS 15-6 B / ZPC01B	E
20266	HWW CPS 20-4 B / ZPC01B	E
20267	HWW CPS 20-5 B / ZPC01B	E
20268	HWW CPS 25-4 B / ZPC01B	E
20269	HWW CPS 25-5 B / ZPC01B	E

Art.-no.	Type	Discount group
<b>Diaphragm pressure tank powder-coated, with buthyl diaphragm (4 years warranty)</b>		
20988	HWW-P CPS 15-4 B / ZPC01B	E
20990	HWW-P CPS 15-5 B / ZPC01B	E
20992	HWW-P CPS 15-6 B / ZPC01B	E
20994	HWW-P CPS 20-4 B / ZPC01B	E
20996	HWW-P CPS 20-5 B / ZPC01B	E
20998	HWW-P CPS 25-4 B / ZPC01B	E
21000	HWW-P CPS 25-5 B / ZPC01B	E

Art.-no.	Type	Discount group
<b>Stainless steel diaphragm pressure tank</b>		
20989	HWW-E CPS 15-4 B / ZPC01B	E
20991	HWW-E CPS 15-5 B / ZPC01B	E
20993	HWW-E CPS 15-6 B / ZPC01B	E
20995	HWW-E CPS 20-4 B / ZPC01B	E
20997	HWW-E CPS 20-5 B / ZPC01B	E
20999	HWW-E CPS 25-4 B / ZPC01B	E
21001	HWW-E CPS 25-5 B / ZPC01B	E

### Dimensions



HWW	15-4	15-5	15-6	20-4	20-5	25-4	25-5
A (mm)	560	565	565	565	595	580	570
B (mm)	256	256	256	256	256	256	256
C (mm)	555	505	540	540	540	555	565
Weight (kg)	17.5	15.8	17.6	15.7	17.5	20.1	22.5



# Retrofit packages & pre-filter / filter inserts

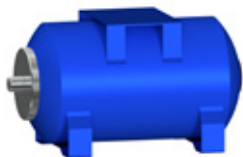
Accessories for house and garden pumps

## Retrofit packages

- All retrofit packages include:
  - expansion tank
  - manometer
  - metal hose
  - 5-way piece
  - mounting accessories

## Type

Art.-no.	Type	Disc.group
<b>Diaphragm pressure vessel made of steel, painted</b>		
19379	Retrofit package BZ steel 20 l	E
19380	Retrofit package BZ steel 60 l	E
19381	Retrofit package BZ steel 100 l	E
19382	Retrofit package BZ steel 200 l	E
19383	Retrofit package BZ steel 300 l	E
<b>Diaphragm pressure vessel made of stainless steel</b>		
19384	Retrofit package BZ stainless steel 20 l	E
19385	Retrofit package BZ stainless steel 50 l	E
<b>Diaphragm pressure vessel powder coated</b>		
19386	Retrofit package BZ PU/Epoxy 20 l	E
19387	Retrofit package BZ PU/Epoxy 60 l	E
<b>Accessories</b>		
12443	5-way T-piece G1" MS	X01
19364	5-way T-piece 1 1/4" Messing	X
18418	Pressure gauge 6 bar	X01
12447	Pressure gauge 6 bar connection thread axial	X01
18417	Pressure gauge 10 bar	X01
14823	Metal hose 1" x 600	X
19365	Metal hose 1" x 800	X
19073	Metal hose 1" x 600 INOX	H
19072	Metal hose 1" x 800 INOX	H
12456	Metal hose 1" x 600 Winkel -DIN 15	X
19366	Metal hose 1 1/4" x 500	X



\* Tank steel painted



\* Tank stainless steel



\* Tank powder-coated (maintenance-free)



- Tank each incl.:
- Metal hose
  - 5-Way Piece
  - Mounting material

## Pre-filter & Filter inserts

- For filtration of suspended solids
- Use in the suction line of garden pumps
- With brass female threaded connections on both sides
- With washable filter insert

## Type

Art.-no.	Type	Disc. group	Height (mm)	Ø (mm)	water flow rate (m³/h)
18572	Pre-filter, complete 1" F5	E	179	122	2.3
18569	Filter insert 1" F5" AMG	E	-	-	-
18573	Pre-filter, complete 1" F7	E	231	122	2.8
18570	Filter insert 1" F7" AMG	E	-	-	-
18574	Pre-filter, complete 1" F9	E	299	122	3.5
18566	Filter insert 1" F9" AMG	E	-	-	-
18577	Pre-filter, complete 1 1/4" F5	E	189	126	2.9
18567	Filter insert 1 1/4" F5" AMG	E	-	-	-
18578	Pre-filter, complete 1 1/4" F7	E	241	126	3.6
18568	Filter insert 1 1/4" F7" AMG	E	-	-	-
18579	Pre-filter, complete 1 1/4" F9	E	319	126	4.2
18571	Filter insert 1 1/4" 11/2" F9"	E	-	-	-
18575	Pre-filter, complete 1 1/2" F9	E	325	126	4.2
18571	Filter insert 1 1/4" 11/2" F9"	E	-	-	-



Pre-filters are maintenance-intensive components. Inadequate maintenance can lead to pump damage. The maintenance frequency of the filter is significantly reduced if the cleanest possible water is drawn in. For this purpose, the use of a floating intake is suitable. In combination with a floating intake, it has proven effective to install the filter on the pressure side of the pump.



Pre-filter 1" F5"



Pre-filter 1" F7"



Pre-filter 1" F9"



Filter inserts for 1" F7" & 1" F9"



## Level control

### Features

- Very comfortable control with simple operating logic
- Control box for wall mounting made of plastic
- Displays of operation modes via clear text display and signal lights
- Automatic operation of one three phase or single phase pump(s)
- Automatically alternating operation with double pump system
- Switching on of the 2nd pump at peak load, switchover to idle pump in case of malfunction in double pump system
- Programmable starting delay and follow-up time
- Visual and audible fault signal with potential-free outputs
- Level control by means of dynamic pressure method, float switches or 4 - 20 mA interface for external sensor
- Displaying of operating hours, power consumption and maintenance interval
- Error memory for the last 64 errors

### Applications

- Automatic control of one pump (ZPS1) or of two pumps (ZPS2)



### Technical data

#### Pneumatic control units

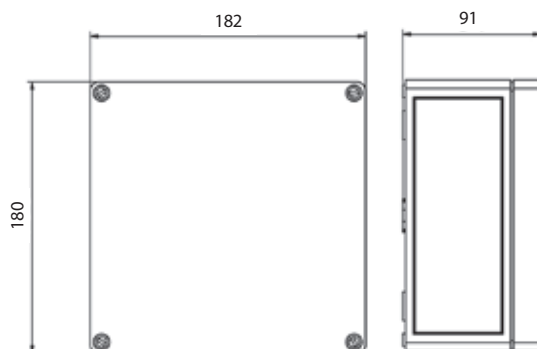
Type	Art.-no.	Discount group
ZPS 1-W 230 V pneumatic	12417	B
ZPS 2-W 230 V pneumatic	12485	B
ZPS 1 400 V pneumatic	12994	B
ZPS 2 400 V pneumatic	12998	B
ZPS1-LCD-SD 400 V pneumatic	12792	B
ZPS2-LCD-SD 400 V pneumatic	12793	B
Small compressor set	14894	B
Pneumatic tube blue 8/6 mm	14817	B

#### Float control units

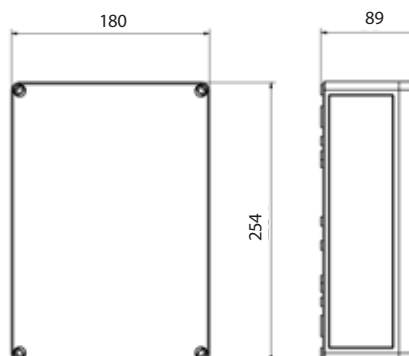
Type	Art.-no.	Discount group
ZPS 1-W 230 V Floats	12510	B
ZPS 2-W 230 V Floats	12511	B
ZPS 1 400 V Floats	12993	B
ZPS 2 400 V Floats	12997	B
PS 1 star/delta Floats	12798	B
PS 2 star/delta Floats	12799	B
Version with Ex-proof float for simplex units	11126	B
Version with Ex-proof float for duplex units	11462	B

### Dimensions

#### Simplex unit












#### Duplex unit



# Switch controls

for submersible pumps

Type	Art.-no.	Discount group	Figure
Mechanical seal control device	12069	B	
Housing extension	12079	B	
External cabinet type 1 complete	12082	B	
External cabinet type 3 complete	12085	B	
External cabinet type 4 complete	12086	B	
Box heating with thermostat 100W, 230V, for external cabinet type 1	24137	B	
Box heating with thermostat 200W, 230V, for external cabinet type 3 & 4	24138	B	
Flashing light 230 VAC - red	12077	B	
Flashing light 12 VDC - red	12078	B	
Small horn KH 1 - 12 VDC	12076	B	
Mains-independent alarm switchgear	13001	B	
Signal light red, 230 VAC	12075	B	
Small horn 230 V	12068	B	
Float switch 10 m OPTI1	14499	B	
Float switch 10m for interm. coupling	11393	B	
Washing machine stop	13004	B	
ENS 1.1 universal (300 mm)	11416	B	
ENS 1.1 universal (1000 mm)	11419	B	

# ZP Speedcontrol Box & Motor

## Speed control

### Features

#### ZP Speedcontrol Box

- With ART system (Automatic-Reset Test); in the event of dry running, the system automatically stops and periodically restarts automatically
- Automatic recovery of system settings after power failure
- Built-in pressure transmitter with digital display
- Recording of operating sequences and thus information hours of operation, number of start-ups, number of power interruptions; alarm recording: Type and number of alarm messages since start-up
- STC function (Smart Temperature Control): if the electronics of the inverter reaches a temperature of 85°C, the frequency is throttled, thus reducing the temperature, but the water flow is maintained
- Designed for wall mounting
- Pressure sensor included in scope of delivery
- Supply voltage 1x230V (MT box) or 3x400V (TT box)
- Control pressure: 0.5 - 10 bar (on request with other pressure sensor 0.5 - 16 bar)

### Applications

- Pump control by means of frequency converter, can control a single pump or 2 pumps in a network (master-slave mode with alternating pump activation)



### Technical data

ZP Speedcontrol Box	MT	TT
Article number	20295	20296
Discount group	E	E
Weight (kg)	4.5	4.5
<b>Electrical characteristics</b>		
Voltage (V)	230	400
Motor voltage (V)	3 x 230	3 x 400
Frequency (Hz)	50/60	50/60
Max. current consumption (A)	12	9
Protection class	IP 55	IP 55
Power cable length (m)	1.5	1.5
<b>Hydraulic characteristics</b>		
Temp. max. (°C)	50	50
Max. allowable pressure (bar)	15	15
Adjustable pressure (bar)	0.5 - 16	0.5 - 16

### Features

#### ZP Speedcontrol Motor

- With ART system (Automatic-Reset Test); in the event of dry running, the system automatically stops and periodically restarts automatically
- Automatic recovery of system settings after power failure
- Protection device against incorrect connection and overcurrents
- Protection device against short circuits
- Control panel with LCD display
- Installation on pump motor (adapter piece required)
- Potential-free contact for alarm forwarding
- Internal voltage sensor with real-time indication on display
- Operating data recording: operating hours, restarts and number of mains disconnections
- Alarm memory: alarm Type and number of alarms
- Frequency range: 15 - 48 Hz
- Differential pressure: 0.2 - 1.5 bar
- Control pressure: 0.5 - 10 bar or 0.5 - 16 bar (depending on installed pressure sensor - standard 0.5 - 10 bar)

### Applications

- Frequency controlled controller for vertical pumps
- Control for single pump or double system in network in master-slave mode



### Technical data

ZP Speedcontrol Motor	
Article number	20647
Discount group	E
Weight (kg)	3.17
<b>Electrical characteristics</b>	
Voltage (V)	~3 x 400 V
Frequency (Hz)	50/60
Max. current consumption (A)	9
Protection class	IP 65
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Temp. max. (°C)	50



# ZP Control AdPro & ZP Safe

## Pressure switches

### Features

#### ZP Control AdPro

- Integrated dry run protection
- Protection against pressure shocks
- With ART system (Automatic Reset Test). In case of dry running, the system stops automatically and restarts periodically

### Features

#### ZP Safe

- Alarm at fast switching intervals triggered by pressure loss at the expansion vessel
- Auto reset after triggering of the dry run protection
- Calibration modes: self-learning & manual adjustment

### Applications

- The Ad Pro is a compact device for the automatic control and control and protection of electric pumps. It combines pressure switch, float switch and check valve



### Applications

- Overcurrent monitoring / dry-running protection for pumps through current measurement



### Technical data

	ZP Control AdPro
Article number	20293
Discount group	E
Weight (kg)	0.72
<b>Electrical characteristics</b>	
Voltage (V)	~1x120 / ~1x230
Frequency (Hz)	50/60
Max. current consumption (A)	16 (8)
Max. power motor (kW)	1.5
Protection class	IP 65
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Temp. max. (°C)	60
Max. allowable pressure (bar)	10
Max. flow rate (m <sup>3</sup> /h)	10.0

### Technical data

	ZP Safe
Article number	20056
Discount group	E
Weight (kg)	0.4
<b>Electrical characteristics</b>	
Voltage (V)	~1x110 - 230
Frequency (Hz)	50/60
Max. current consumption (A)	16
Max. power motor (kW)	2.2
Protection class	IP 44
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Temp. max. (°C)	50

# Control switch Kit 02

## Pressure switches

### Features

- Housing, cover and inner housing made of reinforced polyamide, diaphragm made of natural rubber
- Manometer for pressure indication
- Integrated non-return valve
- Maintenance-free - pressure surges are compensated by spring force
- With 3 automatic restart attempts after dry run shutdown (version pro)
- Switch for restart after malfunction
- Wired: 1.5 m cable with plug and 0.5 m cable with coupling to the connect the pump

### Applications

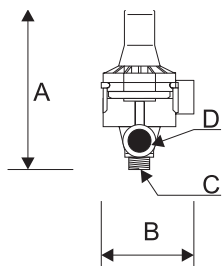
- Electronic automatic switch for the control of pumps for rainwater harvesting, water supply and sprinkling for house systems: when a consumer is opened, the pump switches on automatically; if all consumers are closed the pump switches off automatically
- For clear to slightly contaminated water without aggressive and abrasive components



### Technical data

Control switch Kit	02-3 pro	02-4 pro	02-3	02-4	Wall mount
Article number	19066	19068	19252	18404	19074
Discount group	E	E	E	E	E
Weight (kg)	1.8	1.3	1.8	1.3	0.32
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	-
Frequency (Hz)	50/60	50/60	50/60	50/60	-
Max. perm. rated current (A)	10	10	10	10	-
Protection class	IP 54	IP 54	IP 54	IP 54	-
Power cable length (m)	1.5	1.5	1.5	1.5	-
<b>Hydraulic characteristics</b>					
Max. medium temp. (°C)	60	60	60	60	-
Max. flow rate (m <sup>3</sup> /h)	1.5	2.4	1.5	2.4	-
Max. perm. pressure (bar)	10	10	10	10	-
Diff. between start and stop (bar)	0.7	0.7	0.7	0.7	-
Min. flow rate (l/min)	0.5	0.5	0.5	0.5	-
Max. flow rate (m <sup>3</sup> /h)	8.0	8.0	8.0	8.0	-

### Dimensions



Control switch Kit	02-3/02-4
A (mm)	240
B (mm)	135
C (mm)	1" MT
D (mm)	1" FT

# Control switch Kit 05

## Pressure switches

### Features

- Housing, cover and inner housing made of reinforced polyamide, diaphragm made of natural rubber
- Display of operating states by LED
- Manometer for pressure indication
- Switch-on pressure variable
- Integrated non-return valve
- Maintenance-free - pressure surges are compensated by spring force
- 3 Automatic restart attempts after dry run shutdown
- Switch for restarting after malfunction
- With socket and manometer, connection parts optionally with brass fittings G1 (Type B)
- Wired: 1.5 m cable with plug (cable Type: H05 RR-F)

### Applications

- Electronic automatic switch for the control of pumps for rainwater harvesting, water supply and sprinkling for house systems: when a consumer is opened, the pump switches on automatically; if all consumers are closed the pump switches off automatically
- For clear to slightly contaminated water without aggressive and abrasive components

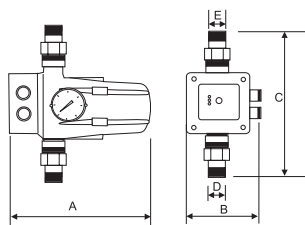


### Technical data

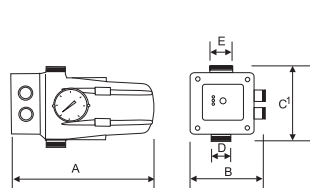
Control switch Kit	05 A OPTIMATIC MEL	05 A OPTIMATIC MEP
Article number	19070	19071
Discount group	E	E
Weight (kg)	2.3	2.0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Frequency (Hz)	50/60	50/60
Max. perm. rated current (A)	10	10
Protection class	IP 65	IP 65
Power cable length (m)	1.5	1.5
<b>Hydraulic characteristics</b>		
Max. medium temp. (°C)	60	60
Max. flow rate (m³/h)	1.5 - 2.5	1.5 - 2.5
Max. flow rate (m3/h)	10	10
Diff. between start and stop (bar)	0.5	0.5
Min. flow rate (l/min)	0.5	0.5
Max. flow rate (m³/h)	10.0	10.0

### Dimensions

Type: Kit 05 A OPTIMATIC MEL



Type: Kit 05 A OPTIMATIC MEP



Control switch Kit	05 A OPTIMATIC MEL	05 A OPTIMATIC MEP
A (mm)	214	214
B (mm)	128	128
C (mm)	244	150
D (mm)	1" MT	1" MT
E (mm)	1" MT	1" MT

# ZP Speedcontrol Comfort

## Speed control

### Features

- With ART system (Automatic Reset Test). In case of dry running, the system stops automatically and restarts periodically
- Automatic recovery of system settings after power failure
- Built-in pressure transmitter with digital display; built-in flow sensor with permanent digital acquisition; LCD control display with digital readout for easy entry of setting values; recording of operating sequences and thus information about hours of operation, number of start-ups, number of power interruptions; alarm recording: Type and number of alarm messages since start-up; PID access in expert menu.
- Protection device against incorrect connection and overcurrents
- Protection device against short circuits
- Built-in dry run protection
- AIS function (Anti-Ice System) with built-in temperature sensor: if the temperature falls below 5°C, the pump is activated in antifreeze mode.

### Technical data

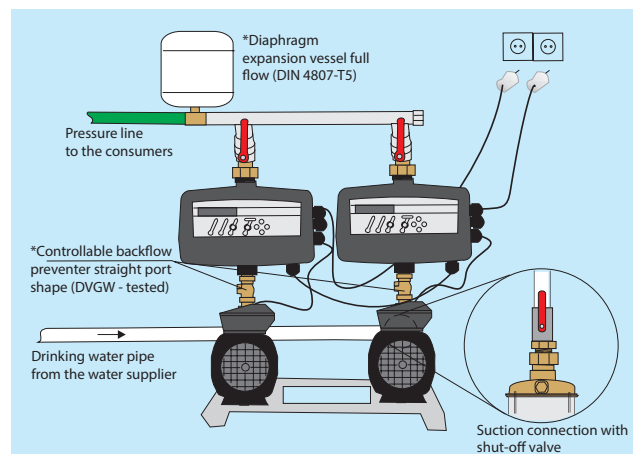
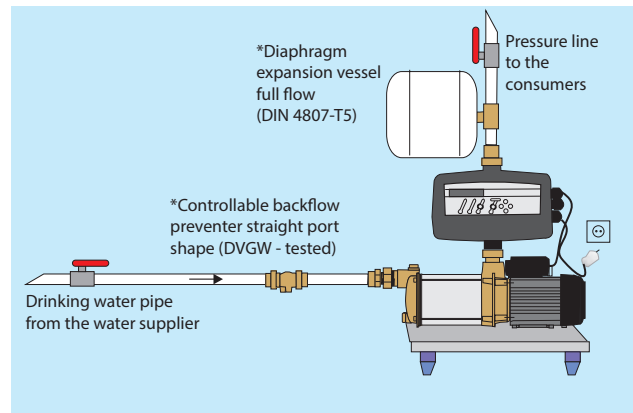
ZP Speedcontrol	Comfort
Article number	18858
Discount group	E
Weight (kg)	2.5
<b>Electrical characteristics</b>	
Voltage (V)	230
Frequency (Hz)	50/60
Max. Voltage (A)	10 A (3x230) 9 A (1x230)
Protection class	IP 55
Power cable length (m)	1.5
<b>Hydraulic characteristics</b>	
Max. medium temp. (°C)	40
Adjustable pressure (bar)	0.5 - 12
Max. allowable pressure (bar)	15
Max. flow rate (m <sup>3</sup> /h)	10.0

### Applications

- Control for pumps with alternating current (1 x 230 V) or three phase motor (3 x 230 V) with frequency converter the pump Type can be selected by means of configuration menu, preset is 1 x 230 V
- Control of 2 pumps possible in combination



### Application example



# ZP Control 01 T **NEU**

## Pressure switches

### Features

- Electronic pressure switch with integrated digital pressure gauge
- Works with real-time recording of the current consumption
- Patented system monitors and controls overcurrent protection, dry-running protection and switching cycle monitoring
- The ZP Control 01 T also offers the option of being synchronised with another ZP Control 01, so that 2 pumps can be operated and monitored.
- Can be used for either 230 V or 400 V applications
- Connection cable not included in delivery

### Applications

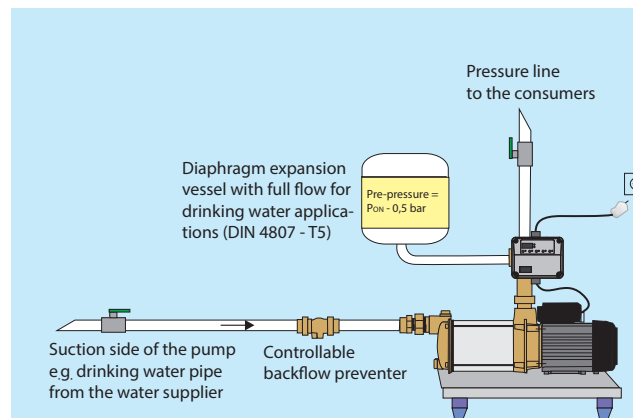
- Control and dry-running protection for pumps up to 4 kW



### Technical data

ZP Control 01 T	
Article number	24114
Discount group	E
Weight (kg)	0.7
Electrical characteristics	
Voltage (V)	3~230 / 3~400
Frequency (Hz)	50/60
Max. current consumption (A)	10.0
Max. power motor (kW)	4.4
Protection class	IP 55
Hydraulic characteristics	
Max. medium temp. (°C)	40
Adjustable pressure (bar)	0.5 - 12
Max. allowable pressure (bar)	12

### Application example



# ZP Control 01 & ZP Control 05

## Pressure switches

### Features

#### ZP Control 01

- ZP Control 01 Basic: digital pressure switch with min/max pressure setting or min or max pressure only, switching function can be reversed, pressure display in bar or psi, dry-running protection via minimum pressure detection
- ZP Control 01 Comfort: (in addition to ZP Control 01 Basic) dry-running protection via minimum pressure detection as well as current monitoring, overcurrent protection, alarm for fast switching alarm triggered by pressure loss at the expansion vessel, auto-reset after triggering of dry-running of the dry run protection



### Applications

- Control and dry run protection for pump systems up to 2.2 kW

### Technical data

ZP Control 01	Basic	Comfort
Article number	20054	20055
Discount group	E	E
Weight (kg)	0.4	0.4
<b>Electrical characteristics</b>		
Voltage (V)	~1x110 - 230	~1x110 - 230
Frequency (Hz)	50/60	50/60
Max. current consumption (A)	16	16
Max. power motor (kW)	2.2	2.2
Protection class	IP 55	IP 55
Power cable length (m)	1.5	1.5
<b>Hydraulic characteristics</b>		
Max. medium temp. (°C)	50	50
Adjustable pressure (bar)	0.5 - 7	0.5 - 7
Max. allowable pressure (bar)	8	8

### Features

#### ZP Control 05

- Pressure diaphragm and integrated non-return valve
- Built-in protection against dry running
- Digital display of the pressure (bar and psi)
- Built-in flow sensor with permanent digital detection
- Stand-by mode
- With ART system (Automatic Reset Test): In case of dry running, the system stops the system stops automatically and restarts periodically restarts.
- ZP Control 05 Comfort: (in addition to ZP Control 05 Basic): built-in pressure transmitter with digital display, integrated current sensor with digital output, protection device against overcurrent protection



### Applications

- For the control and protection of single phase pumps up to 2.2 kW

### Technical data

ZP Control 05	Comfort	Comfort incl. 3-part screwfitting	Basic	Basic incl. 3-part screwfitting
Article number	20294	20576	20645	20646
Discount group	E	E	E	E
Weight (kg)	1.3	1.3	1.3	1.3
<b>Electrical characteristics</b>				
Voltage (V)	~1x115 - 230	~1x115 - 230	~1x115 - 230	~1x115 - 230
Frequency (Hz)	50/60	50/60	50/60	50/60
Max. current consumption (A)	16	16	16	16
Max. power motor (kW)	2.2	2.2	2.2	2.2
Protection class	IP 65	IP 65	IP 65	IP 65
Power cable length (m)	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>				
Max. medium temp. (°C)	60	60	60	60
Max. allowable pressure (bar)	8	8	8	8
Switch on pressure (bar)	0.5 - 4	0.5 - 4	0.5 - 4	0.5 - 4
Max. flow rate (m³/h)	8.0	8.0	8.0	8.0

# Three-phase switching units & Float switches

## Controls

### Features

#### Three-phase switching units

- Automatic operation possible with float switch
- Incl. motor protection, control of rotation direction, manual-0-automatic switch and 16 A CEE-power plug
- Operation and malfunction indication



### Applications

- For the manual operation of a single pump, max. 4.0 kW

### Technical data

DSSG					
Article number	10632	10637	10636	10634	10635
Discount group	B	B	B	B	B
Weight (kg)	1.0	1.0	1.0	1.0	1.0
Electrical characteristics					
Voltage (V)	400	400	400	400	400
Rated current motor (A)	1.6-2.4	2.4-4	4-6	6.0-10	9-12

### Features

#### Float switches

Type	Article number	Article number	Article number	Discount group
<b>Float switches for retrofitting</b>				
Cable length	Function "emptying"= floated on	Function "Filling"= floated off	Function "Changing" f. both functions	
0,5 m	13146	13147	14526	A
2 m	14509	14514	14527	A
5 m	14504	14507	14529	A
10 m	14499	14495	14532	A
15 m	14521	14523	14536	A
20 m	14522	14524	14537	A
Intermediate plug for float switches			19075	A
<b>Float switch for retrofitting for low current applications</b>				
0.5 m	17053	-	-	A
2 m	17054	-	-	A
5 m	17055	-	-	A
10 m	17056	-	-	A
15 m	17057	-	-	A
20 m	17059	-	-	A



# CPN with Speedcontrol Comfort

## Pressure booster systems

### Features

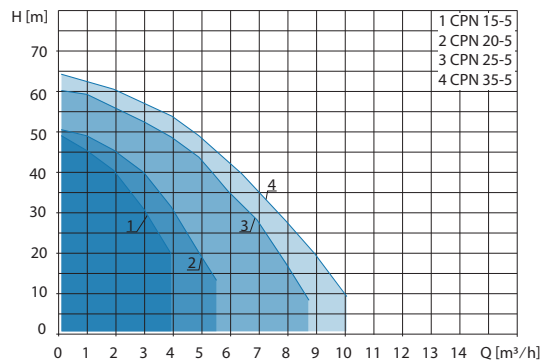
- Normal-priming, maintenance-free, multistage, horizontal centrifugal pump
- Automatic speed control via ZP Speedcontrol Comfort
- Automatic switch on and off of the pump
- Integrated dry run protection
- Delivery pressure constant - independent of the flow rate
- Individual adjustment of the system through freely adjustable differential pressure and follow-up time
- Easy operation due to illuminated LCD display
- Potential-free error message
- Alpha brass suction and discharge casing
- Pump housing and impellers made of stainless steel 1.4301
- Shaft made of stainless steel 1.4401
- Mechanical seal made of carbon + ceramic
- Guide wheels made of special Noryl®
- L-2521 light metal motor housing



### Applications

- Water supply package with speed controlled pressure boosting for: drinking water supply, rainwater harvesting systems, sprinkling, clear water without aggressive and abrasive components
- Operation of 2 pumps in a network is possible

### Characteristics



When used as a water supply or pressure boosting with automatic shut-off, a diaphragm pressure vessel must be provided on the pressure side in accordance with DIN 4807-5. The diaphragm pressure vessel is mandatory for the function of the frequency control. Our recommendation: Connection set CPN see page 129.

### Technical data

CPN ... Speedcontrol Comfort	15-5 B		20-5 B		25-5 B		35-5 B	
Mount	without	with	without	with	without	with	without	with
<b>Normal priming centrifugal pump with Speedcontrol, 3-phase 230 V / 400 V</b>								
Article number	19255	19258	19256	19259	19257	19260	20590	20591
Discount group	F	F	F	F	F	F	F	F
Weight (kg)	15.4	17.3	16.4	18.3	22.2	24.1	22.4	24.3
<b>Electrical characteristics</b>								
Voltage (V)	230	230	230	230	230	230	230	230
Current (A)	3.3	3.3	4.4	4.4	6.6	6.6	7.0	7.0
Frequency (Hz)	50	50	50	50	50	50	50	50
Input power P1 (W)	1.100	1.100	1.350	1.350	2.000	2.000	2.200	2.200
Output power P2 (W)	850	850	1.050	1.050	1.500	1.500	1.650	1.650
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>								
Max. head (m)	50.0	50.0	52.0	52.0	62.0	62.0	62.0	62.0
Max. flow rate (m³/h)	4.0	4.0	5.2	5.2	9.0	9.0	10.2	10.2
Max. medium temp. (°C)	40	40	40	40	40	40	40	40



# Connection set CPN Speedcontrol

Accessories for Pressure booster systems

## Features

- Due to the flow-through design, this diaphragm pressure expansion vessel is „flushed“ with fresh tap water every time water is drawn off. Thus there is never stagnating water during normal use. This largely prevents the formation of undesirable bacteria, which in return guarantees a better quality of the drinking water. In addition, the structure protects against pressure surges and too frequent pulsing with small withdrawals.

### Consisting of:

- Membrane expansion vessel Reflex DD 12 Liter, 10bar, 3/4“, Item number: 20236
- Flow-through fitting Reflex Flowjet 3/4“, Item number: 18853
- Backflow preventer RV281 1“ FT Honeywell Braukmann, Item number: 20235
- T-piece 1“ x 3/4“ x 1“, Item number: 20238

Connection set	CPN Speedmatic
Article number	20237
Discount group	F
Weight (kg)	3.7



# DPA CPS / CPN 15/20/25/35

## Pressure booster systems

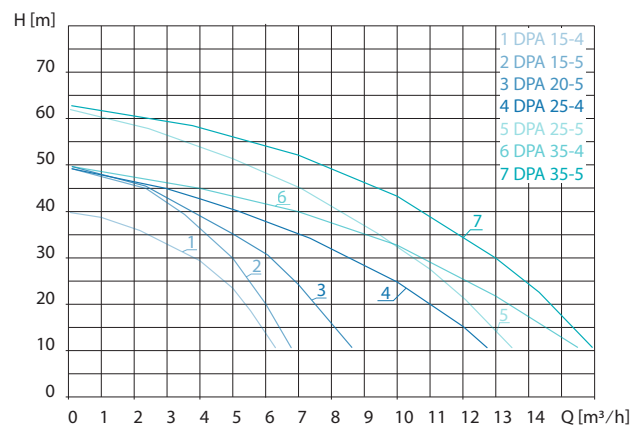
### Features

- Two normal-priming or self-priming, maintenance-free, multistage, horizontal centrifugal pumps of the CPS/CPN 15/25/35 series
- Electronic speed control for pressure stabilisation with alternating start-up and peak load switching of the pumps
- Dry running protection and motor protection
- Circuit function test of the individual pumps
- Potential-free output for fault indication
- Manifold 1½" with female thread
- Flow-through expansion tank, 18 l, PN 10 made of painted steel, compensates pressure surges
- Alpha brass suction and discharge casing
- Pump housing and impellers made of stainless steel 1.4301
- Shaft made of stainless steel 1.4021
- Mechanical seal made of carbon + ceramic
- Guide wheels made of special Noryl®
- L-2521 light metal motor housing

### Applications

- For rainwater harvesting in large buildings, e.g. apartment houses, schools, office buildings and industrial use
- For domestic water supply, pressure boosting and sprinkling
- Clear to slightly contaminated water without aggressive and abrasive components
- Designed for continuous operation

### Characteristics



# DPA CPS / CPN 15/20/25/35

Pressure booster systems

## Technical data - self-priming pump

DPA CPS .... B with ZP Speedcontrol Comfort	15-4	15-5	20-5 <b>NEW</b>	25-4	25-5	35-4	35-5
Duplex unit with self-priming pump for direct drinking water connection							
Article number	19398	19399	23695	19400	19401	20594	20595
Discount group	F	F	F	F	F	F	F
Weight (kg)	36.0	38.8	39.6	47.8	52.4	45.4	52.8
<b>Electrical characteristics</b>							
Voltage (V)	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230
Frequency (Hz)	50	50	50	50	50	50	50
Input power P1 (W)	2x900	2x1.100	2x1.350	2x1.650	2x2.000	2x1.800	2x2.200
Output power P2 (W)	2x700	2x700	2x1.050	2x1.300	2x1.500	2x1.400	2x1.650
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>							
Max. head (m)	40	50	52	50	62	50	62
Max. flow rate (m <sup>3</sup> /h)	6	6	8	13.5	13.5	15.3	15.3
Max. operating pressure (bar)	9	9	12	12	12	12	12
Max. medium temp. (°C)	40	40	40	40	40	40	40

## Technical data - normal-priming pump

DPA CPN .... B with ZP Speedcontrol Comfort	15-4	15-5	20-5 <b>NEW</b>	25-4	25-5	35-4	35-5
Duplex unit with normal-priming pump for connection to drinking water supply tank							
Article number	19442	19443	23696	19444	19445	20596	20597
Discount group	F	F	F	F	F	F	F
Weight (kg)	36.0	38.8	39.6	47.8	52.4	45.4	52.8
<b>Electrical characteristics</b>							
Voltage (V)	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230	1~230/ 3~ 230
Frequency (Hz)	50	50	50	50	50	50	50
Input power P1 (W)	2x900	2x1.100	2x1.350	2x1.650	2x2.000	2x1.800	2x2.200
Output power P2 (W)	2x700	2x700	2x1.050	2x1.300	2x1.500	2x1.400	2x1.650
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Hydraulic characteristics</b>							
Max. head (m)	40	50	52	50	62	50	62
Max. flow rate (m <sup>3</sup> /h)	6	6	8	13.5	13.5	15.3	15.3
Max. operating pressure (bar)	9	9	12	12	12	12	12
Max. medium temp. (°C)	40	40	40	40	40	40	40

# ZPV series

## Pressure booster systems

### General information

#### Main application

- pressure boosting

#### Pumping media

- drinking water
- service water
- cooling water
- liquids that do not attack the materials chemically and mechanically

#### Operating data

Parameter		Value
Flow rate	Q [m <sup>3</sup> /h]	≤ 65.4 <sup>1)</sup>
	Q [l/s]	≤ 18.2 <sup>1)</sup>
Head	H [m]	≤ 118
Pumped medium temperature	T <sub>min</sub> [°C]	≥ 0
	T <sub>max</sub> [°C]	≤ +60
Operating pressure	p [bar]	≤ 16
Prepressure	p <sub>vor</sub> [bar]	≤ 5 <sup>2)</sup>

1) For a system with 3 pumps (without reserve pump)

2) Consultation required for higher inlet pressure

#### Constructive design

- Fully automatic pressure boosting system
- Speed controlled
- Base plate design
- On the pressure side diaphragm pressure tank approved for drinking water as control tank, flow through according to DIN 4807-5, with shut-off valve and drainage valve
- 1 Or more vertical high pressure pumps with speed control
- Reliable operation due to hydraulic components made of stainless steel / brass
- Check valve for each pump
- One pressure sensor and one manometer each on the suction side and the pressure side of the system
- Bearing of the base plate on vibration dampening rubber buffers

#### Multi-pump system::

- Pressure side gate valve per pump
- Suction side gate valve per pump
- Suction and pressure side manifold pipe made of stainless steel

#### Installation

- Stationary dry installation

#### Certifications:



German drinking water certification: valves and non-return valves



English drinking water certification: complete system



French drinking water certification: complete system

#### Drive

- electric motor
- protection class IP55
- efficiency class IE5 according to IEC 60034-30

#### Automation

- display on each drive
- fault signalling contact per pump
- operation signal contact per pump

### Design and mode of action



Illustration of pressure booster system

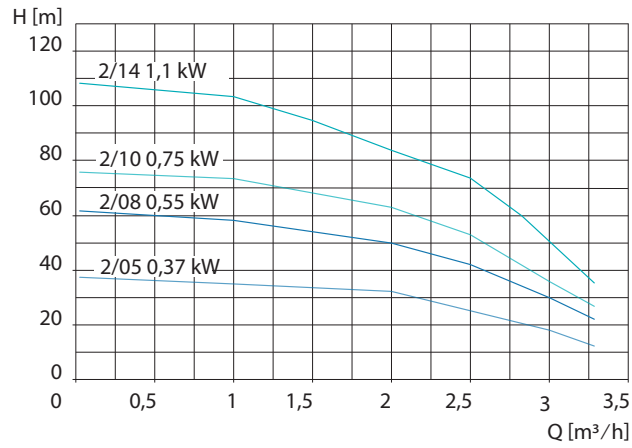
1	control cabinet
2	pump
3	control
4	diaphragm pressure tank
5	manifold pipe
6	base plate

# ZPV series

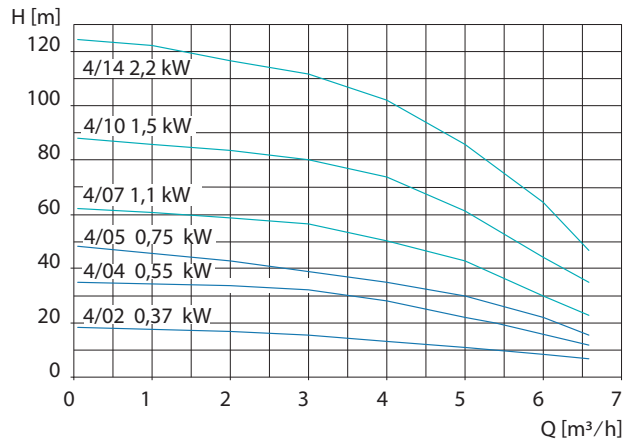
Pressure booster systems

## Characteristics

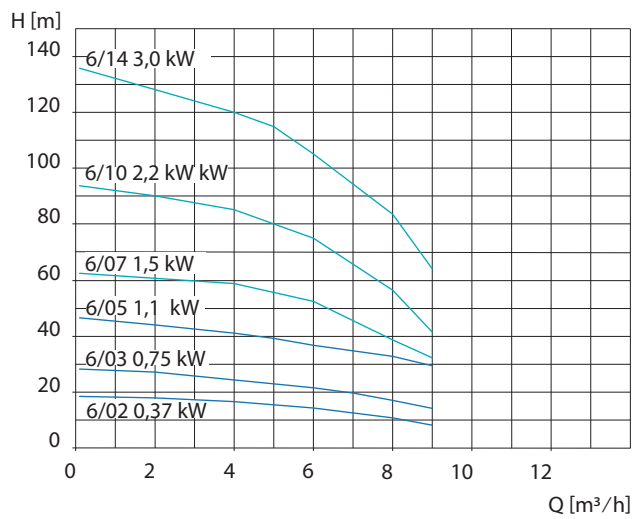
Size 2



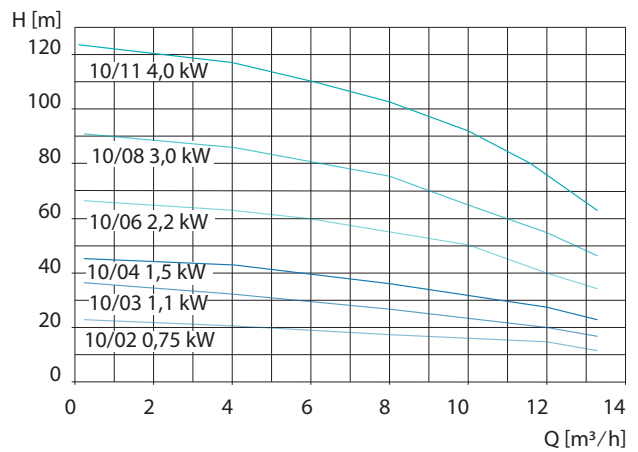
Size 4



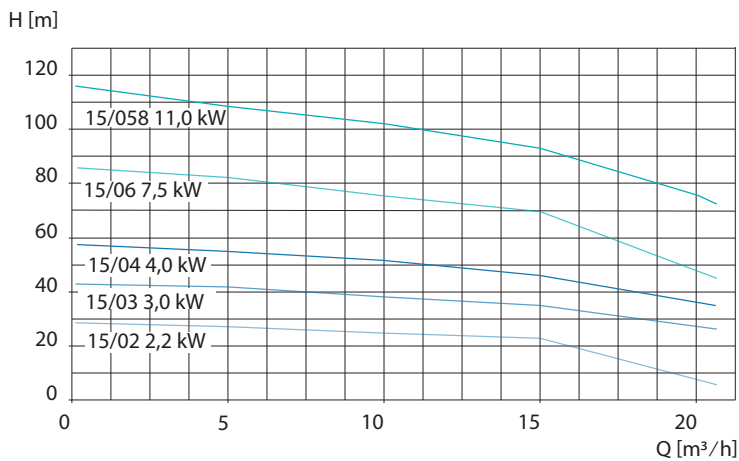
Size 6



Size 10



Size 15



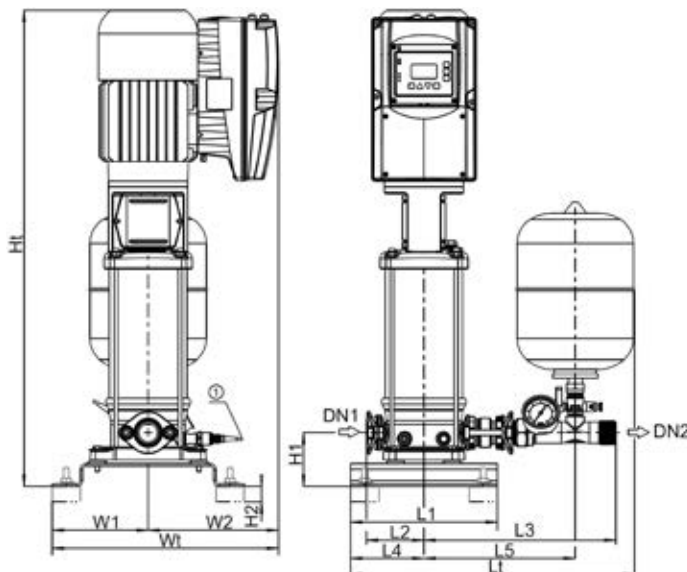
# ZPV Simplex

## Pressure booster systems

### Technical data

Type	Article number	Q <sub>max</sub> [m <sup>3</sup> /h]	H <sub>max</sub> [m]	P <sub>N</sub> [kW]	Motor efficiency	I <sub>n</sub> [A]	Sound pressure level [dB(A)]	Protection class [IP]	p [bar]	PN	Weight [kg]
ZPV I-2-5	21890	3.25	38	0.37	IE5	1.3	70	IP55	5	10	34
ZPV I-2-8	21891	3.25	62	0.55	IE5	1.6	70	IP55	5	16	34
ZPV I-2-10	21892	3.25	77	0.75	IE5	2.1	70	IP55	5	16	41
ZPV I-2-14	21893	3.25	107	1.10	IE5	3.0	70	IP55	5	16	43
ZPV I-4-2	21894	6.5	17	0.37	IE5	1.3	70	IP55	5	10	33
ZPV I-4-4	21895	6.5	33	0.55	IE5	1.6	70	IP55	5	10	33
ZPV I-4-5	21896	6.5	44	0.75	IE5	2.1	70	IP55	5	10	39
ZPV I-4-7	21897	6.5	61	1.10	IE5	3.0	70	IP55	5	16	40
ZPV I-4-10	21898	6.5	87	1.50	IE5	4.1	70	IP55	5	16	44
ZPV I-4-14	21899	6.5	123	2.20	IE5	5.6	70	IP55	3.5	16	48
ZPV I-6-2	21900	9	18	0.37	IE5	1.3	70	IP55	5	10	33
ZPV I-6-3	21901	9	28	0.75	IE5	2.1	70	IP55	5	10	39
ZPV I-6-5	21902	9	47	1.10	IE5	3.0	70	IP55	5	10	40
ZPV I-6-7	21903	9	66	1.50	IE5	4.1	70	IP55	5	16	43
ZPV I-6-10	21904	9	95	2.20	IE5	5.6	70	IP55	5	16	47
ZPV I-6-14	21905	9	136	3.00	IE5	7.6	71	IP55	2.5	16	58
ZPV I-10-2	21906	13	22	0.75	IE5	2.1	70	IP55	5	10	50
ZPV I-10-3	21907	13	33	1.10	IE5	3.0	70	IP55	5	10	52
ZPV I-10-4	21908	13	44	1.50	IE5	4.1	70	IP55	5	10	54
ZPV I-10-6	21909	13	66	2.20	IE5	5.6	70	IP55	5	16	60
ZPV I-10-8	21910	13	91	3.00	IE5	7.6	71	IP55	5	16	69
ZPV I-10-11	21911	13	124	4.00	IE5	9.4	71	IP55	3.5	16	85
ZPV I-15-2	21912	22	29	2.20	IE5	5.6	70	IP55	5	10	56
ZPV I-15-3	21913	22	45	3.00	IE5	7.6	71	IP55	5	10	64
ZPV I-15-4	21914	22	61	4.00	IE5	9.4	71	IP55	5	16	77
ZPV I-15-6	21915	22	93	5.50	IE5	16.7	71	IP55	5	16	83
ZPV I-15-8	21916	22	125	7.50	IE5	19.3	71	IP55	4.5	16	83

### Dimensions



# ZPV Simplex

## Pressure booster systems

Quantity pumps	Size	Stages	DN 1 [mm]	DN 2 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	Lt [mm]	H1 [mm]	H2 [mm]	Ht [mm]	W1 [mm]	W2 [mm]	Wt [mm]
1	02	05	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	643	170	220	390
1	02	08	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	718	170	220	390
1	02	10	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	761	170	235	405
1	02	14	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	847	170	235	405
1	04	02	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	579	170	220	390
1	04	04	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	622	170	220	390
1	04	05	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	653	170	235	405
1	04	07	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	698	170	235	405
1	04	10	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	783	170	240	210
1	04	14	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	893	170	230	400
1	06	02	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	586	170	220	390
1	06	03	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	621	170	235	405
1	06	05	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	671	170	235	405
1	06	07	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	743	170	240	410
1	06	10	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	842	170	230	400
1	06	14	G 1 1/4	G 1 1/4	260	102	340	130	268	503	95	28	982	170	240	410
1	10	02	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	666	190	235	425
1	10	03	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	692	190	235	425
1	10	04	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	741	190	240	430
1	10	06	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	818	190	230	420
1	10	08	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	911	190	240	430
1	10	11	G 1 1/2	G 1 1/2	340	129	379	170	309	584	125	28	1011	190	255	445
1	15	02	G 2	G 2	340	129	379	170	309	584	125	28	688	190	230	420
1	15	03	G 2	G 2	340	129	379	170	309	584	125	28	778	190	240	430
1	15	04	G 2	G 2	340	129	379	170	309	584	125	28	826	190	255	445
1	15	06	G 2	G 2	340	129	379	170	309	584	125	28	981	190	310	500
1	15	08	G 2	G 2	340	129	379	170	309	584	125	28	1093	190	330	520

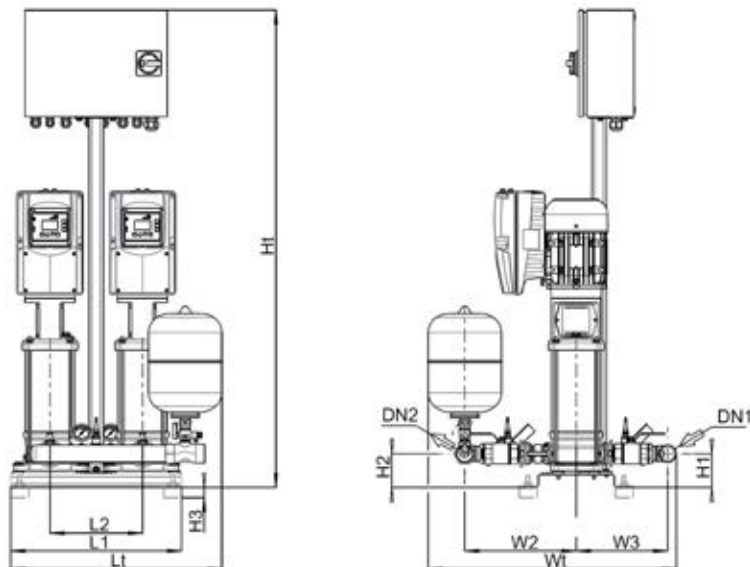
# ZPV Duplex

Pressure booster systems

## Technical data

Type	Article number	Q <sub>max</sub> [m <sup>3</sup> /h]	H <sub>max</sub> [m]	P <sub>N</sub> [kW]	Motor efficiency	I <sub>n</sub> [A]	Sound pressure level [dB(A)]	Protection class [IP]	p [bar]	PN	Weight [kg]
ZPV II-2-5	21917	3.25	38	0.37	IE5	1.3	70	IP55	5	10	83
ZPV II-2-8	21918	3.25	62	0.55	IE5	1.6	70	IP55	5	16	83
ZPV II-2-10	21919	3.25	77	0.75	IE5	2.1	70	IP55	5	16	99
ZPV II-2-14	21920	3.25	107	1.10	IE5	3.0	70	IP55	5	16	102
ZPV II-4-2	21921	6.5	17	0.37	IE5	1.3	70	IP55	5	10	81
ZPV II-4-4	21922	6.5	33	0.55	IE5	1.6	70	IP55	5	10	82
ZPV II-4-5	21923	6.5	44	0.75	IE5	2.1	70	IP55	5	10	94
ZPV II-4-7	21924	6.5	61	1.10	IE5	3.0	70	IP55	5	16	96
ZPV II-4-10	21925	6.5	87	1.50	IE5	4.1	70	IP55	5	16	103
ZPV II-4-14	21926	6.5	123	2.20	IE5	5.6	70	IP55	3.5	16	111
ZPV II-6-2	21927	9	18	0.37	IE5	1.3	70	IP55	5	10	82
ZPV II-6-3	21928	9	28	0.75	IE5	2.1	70	IP55	5	10	95
ZPV II-6-5	21929	9	47	1.10	IE5	3.0	70	IP55	5	10	96
ZPV II-6-7	21930	9	66	1.50	IE5	4.1	70	IP55	5	16	103
ZPV II-6-10	21931	9	95	2.20	IE5	5.6	70	IP55	5	16	112
ZPV II-6-14	21932	9	136	3.00	IE5	7.6	71	IP55	2.5	16	133
ZPV II-10-2	21933	13	22	0.75	IE5	2.1	70	IP55	5	10	120
ZPV II-10-3	21934	13	33	1.10	IE5	3.0	70	IP55	5	10	125
ZPV II-10-4	21935	13	44	1.50	IE5	4.1	70	IP55	5	10	130
ZPV II-10-6	21936	13	66	2.20	IE5	5.6	70	IP55	5	16	141
ZPV II-10-8	21937	13	91	3.00	IE5	7.6	71	IP55	5	16	158
ZPV II-10-11	21938	13	124	4.00	IE5	9.4	71	IP55	3.5	16	194
ZPV II-15-2	21939	22	29	2.20	IE5	5.6	70	IP55	5	10	139
ZPV II-15-3	21940	22	45	3.00	IE5	7.6	71	IP55	5	10	154
ZPV II-15-4	21941	22	61	4.00	IE5	9.4	71	IP55	5	16	182
ZPV II-15-6	21942	22	91	5.50	IE5	16.7	71	IP55	5	16	196
ZPV II-15-8	21943	22	125	7.50	IE5	19.3	71	IP55	4.5	16	196

## Dimensions





# ZPV Duplex

## Pressure booster systems

Quantity pumps	Size	Stages	DN 1	DN 2	L1 [mm]	L2 [mm]	Lt [mm]	H1 [mm]	H2 [mm]	Ht [mm]	W1 [mm]	W2 [mm]	W3 [mm]	Wt [mm]
2	02	05	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	291	235	655
2	02	08	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	02	10	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	02	14	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	04	02	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	291	235	655
2	04	04	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	291	235	655
2	04	05	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	291	235	655
2	04	07	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	04	10	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	04	14	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	291	235	655
2	06	02	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	305	249	683
2	06	03	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	305	249	683
2	06	05	G 1 1/2	G 1 1/2	480	260	595	95	95	1040	320	305	249	683
2	06	07	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	305	249	683
2	06	10	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	305	249	683
2	06	14	G 1 1/2	G 1 1/2	480	260	595	95	95	1340	320	305	249	683
2	10	02	G 2	G 2	640	340	740	125	125	1040	360	373	297	805
2	10	03	G 2	G 2	640	340	740	125	125	1340	360	373	297	805
2	10	04	G 2	G 2	640	340	740	125	125	1340	360	373	297	805
2	10	06	G 2	G 2	640	340	740	125	125	1340	360	373	297	805
2	10	08	G 2	G 2	640	340	740	125	125	1340	360	373	297	805
2	10	11	G 2	G 2	640	340	740	125	125	1340	360	373	297	805
2	15	02	NW65 PN 16	NW65 PN 16	640	340	715	125	125	1340	360	408	332	938
2	15	03	NW65 PN 16	NW65 PN 16	640	340	715	125	125	1340	360	408	332	938
2	15	04	NW65 PN 16	NW65 PN 16	640	340	715	125	125	1340	360	408	332	938
2	15	06	NW65 PN 16	NW65 PN 16	640	340	715	125	125	1590	360	408	332	938
2	15	08	NW65 PN 16	NW65 PN 16	640	340	715	125	125	1590	360	408	332	938

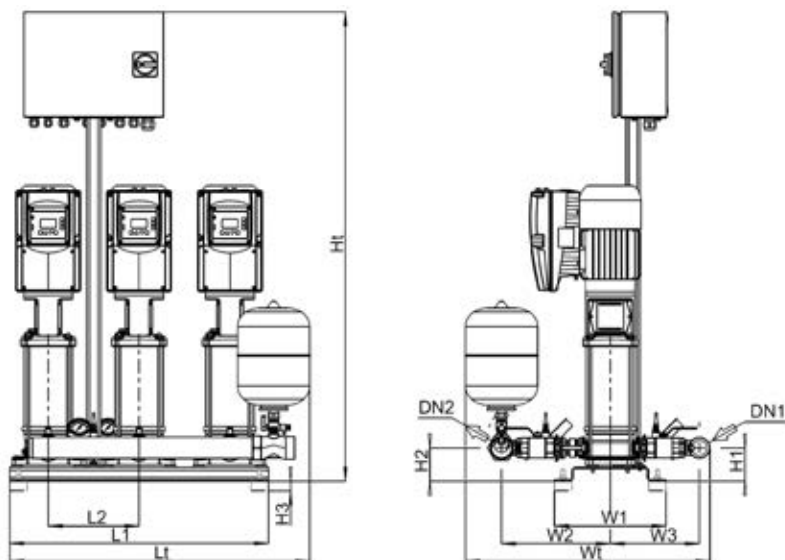
# ZPV Triplex

## Pressure booster systems

### Technical data

Type	Article number	Q <sub>max</sub> [m <sup>3</sup> /h]	H <sub>max</sub> [m]	P <sub>N</sub> [kW]	Motor efficiency	I <sub>n</sub> [A]	Sound pressure level [dB(A)]	Protection class [IP]	p [bar]	PN	Weight [kg]
ZPV III-2-5	21944	3.25	38	0.37	IE5	1.3	70	IP55	5	10	114
ZPV III-2-8	21945	3.25	62	0.55	IE5	1.6	70	IP55	5	16	115
ZPV III-2-10	21946	3.25	77	0.75	IE5	2.1	70	IP55	5	16	137
ZPV III-2-14	21947	3.25	107	1.10	IE5	3.0	70	IP55	5	16	142
ZPV III-4-2	21948	6.5	17	0.37	IE5	1.3	70	IP55	5	10	111
ZPV III-4-4	21949	6.5	33	0.55	IE5	1.6	70	IP55	5	10	112
ZPV III-4-5	21950	6.5	44	0.75	IE5	2.1	70	IP55	5	10	130
ZPV III-4-7	21951	6.5	61	1.10	IE5	3.0	70	IP55	5	16	133
ZPV III-4-10	21952	6.5	87	1.50	IE5	4.1	70	IP55	5	16	144
ZPV III-4-14	21953	6.5	123	2.20	IE5	5.6	70	IP55	3.5	16	155
ZPV III-6-2	21954	9	18	0.37	IE5	1.3	70	IP55	5	10	113
ZPV III-6-3	21955	9	28	0.75	IE5	2.1	70	IP55	5	10	132
ZPV III-6-5	21956	9	47	1.10	IE5	3.0	70	IP55	5	10	134
ZPV III-6-7	21957	9	66	1.50	IE5	4.1	70	IP55	5	16	143
ZPV III-6-10	21958	9	95	2.20	IE5	5.6	70	IP55	5	16	157
ZPV III-6-14	21959	9	136	3.00	IE5	7.6	71	IP55	2.5	16	189
ZPV III-10-2	21960	13	22	0.75	IE5	2.1	70	IP55	5	10	169
ZPV III-10-3	21961	13	33	1.10	IE5	3.0	70	IP55	5	10	177
ZPV III-10-4	21962	13	44	1.50	IE5	4.1	70	IP55	5	10	184
ZPV III-10-6	21963	13	66	2.20	IE5	5.6	70	IP55	5	16	200
ZPV III-10-8	21964	13	91	3.00	IE5	7.6	71	IP55	5	16	226
ZPV III-10-11	21965	13	124	4.00	IE5	9.4	71	IP55	3.5	16	276
ZPV III-15-2	21966	22	29	2.20	IE5	5.6	70	IP55	5	10	167
ZPV III-15-3	21967	22	45	3.00	IE5	7.6	71	IP55	5	10	220
ZPV III-15-4	21968	22	61	4.00	IE5	9.4	71	IP55	5	16	261
ZPV III-15-6	21969	22	93	7.5	IE5	16.7	71	IP55	5	16	278
ZPV III-15-8	21970	22	125	11.0	IE5	19.3	71	IP55	4.5	16	278

### Dimensions



# ZPV Triplex

## Pressure booster systems

Quantity pumps	Size	Stages	DN 1	DN 2	L1 [mm]	L2 [mm]	Lt [mm]	H1 [mm]	H2 [mm]	Ht [mm]	W1 [mm]	W2 [mm]	W3 [mm]	Wt [mm]
3	02	05	G 1 1/2	G 1 1/2	740	260	855	95	95	1040	320	291	235	655
3	02	08	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	02	10	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	02	14	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	04	02	G 1 1/2	G 1 1/2	740	260	855	95	95	1040	320	291	235	655
3	04	04	G 1 1/2	G 1 1/2	740	260	855	95	95	1040	320	291	235	655
3	04	05	G 1 1/2	G 1 1/2	740	260	855	95	95	1040	320	291	235	655
3	04	07	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	04	10	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	04	14	G 1 1/2	G 1 1/2	740	260	855	95	95	1340	320	291	235	655
3	06	02	G 2	G 2	740	260	855	95	95	1040	320	311	255	701
3	06	03	G 2	G 2	740	260	855	95	95	1340	320	311	255	701
3	06	05	G 2	G 2	740	260	855	95	95	1340	320	311	255	701
3	06	07	G 2	G 2	740	260	855	95	95	1340	320	311	255	701
3	06	10	G 2	G 2	740	260	855	95	95	1340	320	311	255	701
3	06	14	G 2	G 2	740	260	855	95	95	1340	320	311	255	701
3	10	02	G 2	G 2	980	340	1080	125	125	1040	360	373	297	805
3	10	03	G 2	G 2	980	340	1080	125	125	1340	360	373	297	805
3	10	04	G 2	G 2	980	340	1080	125	125	1340	360	373	297	805
3	10	06	G 2	G 2	980	340	1080	125	125	1340	360	373	297	805
3	10	08	G 2	G 2	980	340	1080	125	125	1340	360	373	297	805
3	10	11	G 2	G 2	980	340	1080	125	125	1340	360	373	297	805
3	15	02	NW65 PN 16	NW65 PN 16	980	340	1055	125	125	1340	360	408	332	938
3	15	03	NW65 PN 16	NW65 PN 16	980	340	1055	125	125	1340	360	408	332	938
3	15	04	NW65 PN 16	NW65 PN 16	980	340	1055	125	125	1340	360	408	332	938
3	15	06	NW65 PN 16	NW65 PN 16	980	340	1055	125	125	1340	360	408	332	938
3	15	08	NW65 PN 16	NW65 PN 16	980	340	1055	125	125	1340	360	408	332	938

# BZPV Simplex

## Pressure booster systems

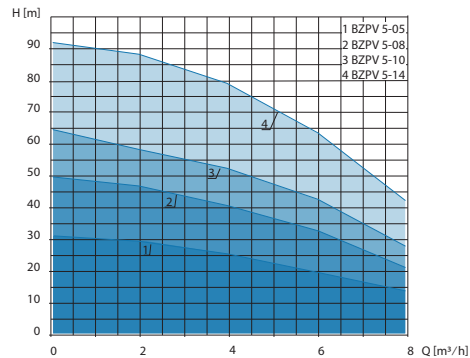
### Features

- Normal-priming, maintenance-free, multistage, vertical centrifugal pump
- Automatic speed control via motor controller
- Automatic switch on and off of the pump
- Delivery pressure constant - independent of the flow rate
- Individual adjustment of the system through freely adjustable differential pressure and follow-up time
- High efficiency - energy-saving operation
- Integrated dry run protection
- Motor bearing with lifetime lubrication
- Potential-free output for error message
- Inlet 1 1/4" IT, pressure outlet 1 1/4" IT
- Incl. 2 ball valves and non-return valve
- Connecting cable with CEE plug
- Flow-through expansion vessel, reduced T-piece made of stainless steel (art.-no. 20709)

### Applications

- Speed regulated pressure boosting for: domestic water supply, pressure boosting and irrigation
- Clear water without aggressive and abrasive components
- Suitable for continuous operation

### Characteristics

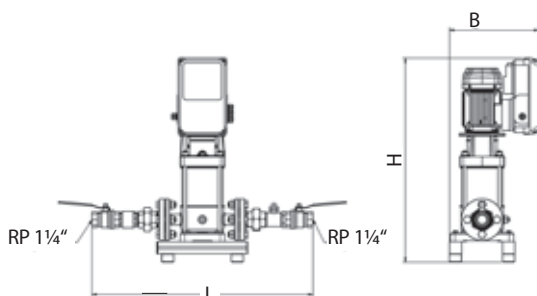


### Technical data

BZPV Simplex	5-5	5-8	5-10	5-14
Article number	20636	20637	20638	20639
Discount group	F	F	F	F
Weight (kg)	33.0	38.0	45.0	50.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	1.9	2.7	3.6	4.9
Frequency (Hz)	50	50	50	50
Input power P1 (W)	900	1.330	1.840	2.600
Output power P2 (W)	750	1.100	1.500	2.200
Speed (min-1)	2.900	2.900	2.900	2.900
Protection class	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	3.0	3.0	3,0	3.0
<b>Hydraulic characteristics</b>				
Max. head (m)	34.0	52.0	66.0	94.0
Max. flow rate (m³/h)	8.0	8.0	8.0	8.0
Max. medium temp. (°C)	90	90	90	90



### Dimensions



BZPV	5-5 E	5-8 E	5-10 E	5-14 E
L (mm)	750	750	750	750
B (mm)	263	263	263	263
H (mm)	630	755	874	982

# BZPV Duplex

## Pressure booster systems

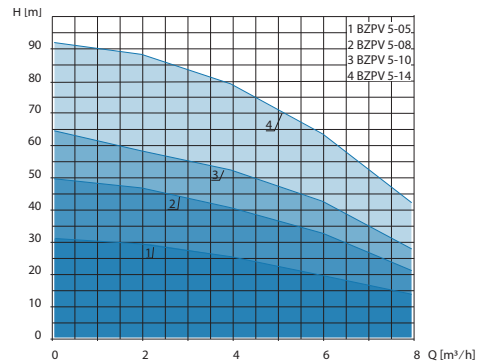
### Features

- Two normal-priming, maintenance-free, multistage vertical centrifugal pumps
- Electronic speed control for pressure stabilisation with alternating start-up and peak load switching of the pumps
- High efficiency - energy-saving operation
- Dry running protection and motor protection circuit
- Function test of the individual pumps possible
- Motor bearing with lifetime lubrication
- Potential-free output for error message
- Flow-through expansion tank, 18 l, PN 10 made of painted steel
- Mechanical seal made of carbon and ceramic
- 2" Manifold with male thread, pressure outlet 2" female thread

### Applications

- For rainwater harvesting in large-scale systems, e.g. multi-family homes, schools, office buildings and industrial use
- For domestic water supply, pressure boosting and sprinkling
- Clear water without aggressive and abrasive components
- Suitable for continuous operation

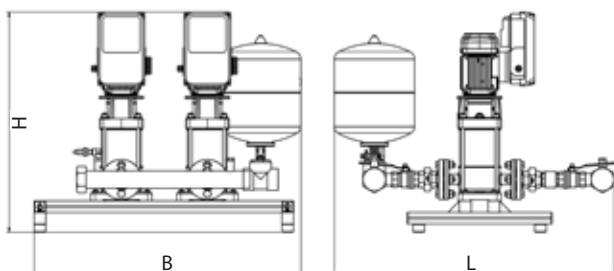
### Characteristics



### Technical data

BZPV Duplex	5-5	5-8	5-10	5-14
Article number	20640	20641	20642	20643
Discount group	F	F	F	F
Weight (kg)	84.0	94.0	108.0	118.0
<b>Electrical characteristics</b>				
Voltage (V)	400	400	400	400
Current (A)	1.9	2.7	3.6	4.9
Frequency (Hz)	50	50	50	50
Input power P1 (W)	900	1.330	1.840	2.200
Output power P2 (W)	750	1.100	1.500	1.330
Speed (min-1)	2.900	2.900	2.900	2.900
Protection class	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	3.0	3.0	3.0	3.0
<b>Hydraulic characteristics</b>				
Max. head (m)	34.0	52.0	66.0	94.0
Max. flow rate (m³/h)	16.0	16.0	16.0	16.0
Max. medium temp. (°C)	90	90	90	90

### Dimensions



BZPV	5-5 D	5-8 D	5-10 D	5-14 D
L (mm)	1020	1020	1020	1020
B (mm)	830	830	830	830
H (mm)	686	811	930	1038

# Aquastream 50®

## Borehole pump

### Features

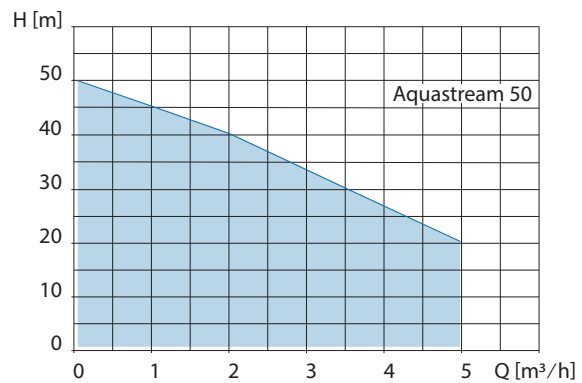
- Integrated automatic switch incl. dry-running protection
- Easy mounting: plug & play
- Automatic re-start function in case of detected dry running (4 start attempts directly, then 4 start attempts after 5 h and 24 h, reset via mains disconnection possible)
- Jacket flow cooling (no cooling jacket required)
- Thermal and current motor monitoring
- Double mechanical seal
- Impellers and guide wheels made of wear-resistant plastic
- Immersion depth max 22 m, water column above pump max 25 m
- Min. immersion depth for automatic operation = 15 cm
- For short pressure pipelines we recommend the use of a small diaphragm vessel
- Incl. 22 m power cable, safety plug & 20 m rope



### Applications

- Clear water pumping from wells
- Domestic water supply, garden irrigation

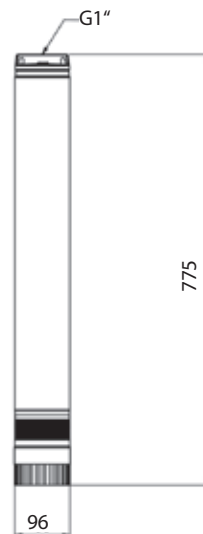
### Characteristics



### Technical data

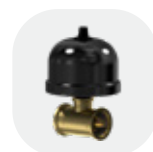
Aquastream 50	
Article number	20202
Discount group	E
Weight (kg)	12.0
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.0
Capacitor C (µF)	15
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	800
Speed (min-1)	2.900
Protection class pump	IP 68
Connection cable length (m)	22
<b>Hydraulic characteristics</b>	
Max. head (m)	50.0
Max. flow rate (m³/h)	5.5
Max. medium temp. (°C)	40
Max. immersion depth. (m)	25.0

### Dimensions



In order to guarantee perfect functioning of the integrated automatic switch with short or rigid pipes, it is necessary to install a small expansion vessel.

**We recommend:** Membrane tank 0.3 l incl. T-piece 1" - 1/2" outlet, Article number 21790



# Aquastream 50<sup>®</sup> water supply packages

## Borehole pump

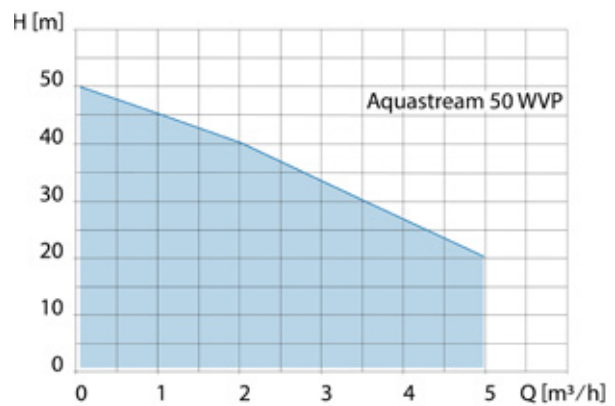
### Features

- Integrated automatic switch incl. dry-running protection
- Automatic re-start function in case of detected dry running (4 start attempts directly, then 4 start attempts after 5 h and 24 h, reset via mains disconnection possible)
- Jacket flow cooling (no cooling jacket required)
- Thermal and current motor monitoring
- Double mechanical seal
- Impellers and guide wheels made of wear-resistant plastic
- Water column above pump max = 25 m
- Min. immersion depth for automatic operation = 15 cm
- Pressure outlet 1" female thread
- Powder coated 20 l membrane tank with butyl membrane (4 years warranty on the membrane)
- Incl. 22 m power cable, safety plug, 20 m rope, butyl membrane container 20 l, closing cap 1/4" brass, reducer MT/FT 3/4", 5-way-piece 1", metal hose 500 mm, pressure gauge 6 bar

### Applications

- Clear water pumping from wells
- Domestic water supply, garden irrigation

### Characteristics



### Technical data

Aquastream 50 WVP	
Article number	20233
Discount group	E
Weight (kg)	19.2
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.0
Capacitor C (µF)	15
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	800
Speed (min-1)	2.900
Protection class pump	IP 68
Connection cable length (m)	22
<b>Hydraulic characteristics</b>	
Max. head (m)	50.0
Max. flow rate (m³/h)	5.5
Max. medium temp. (°C)	40
Max. immersion depth. (m)	25



# Aquastream 50<sup>®</sup> - floating intake

## Borehole pump

### Features

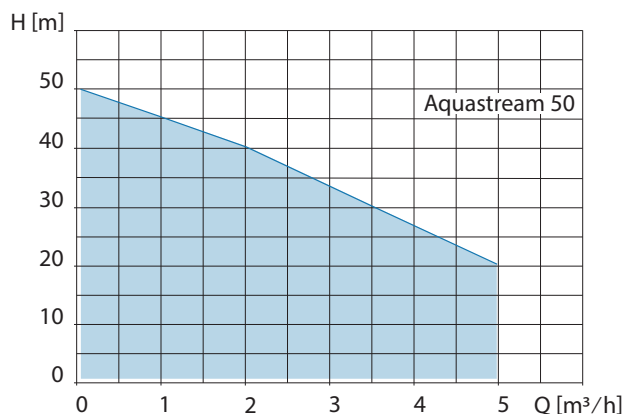
- Extraction of the cleanest water just below the water surface
- Integrated automatic switch incl. dry-running protection
- Automatic re-start function in case of detected dry running (4 start attempts directly, then 4 start attempts after 5 h and 24 h, reset via mains disconnection possible)
- Suction connection 1" IT for connection floating extraction (included in scope of delivery)
- Jacket flow cooling (no cooling jacket required)
- Thermal and current motor monitoring
- Double mechanical seal
- Impellers and guide wheels made of wear-resistant plastic
- Immersion depth max 22 m, water column above pump max 25 m. immersion depth for automatic operation = 15 cm
- For short pressure pipelines we recommend the use of a small diaphragm vessel
- Incl. 22 m power cable, safety plug & 20 m rope



### Applications

- Rainwater harvesting from cisterns
- Domestic water supply garden irrigation

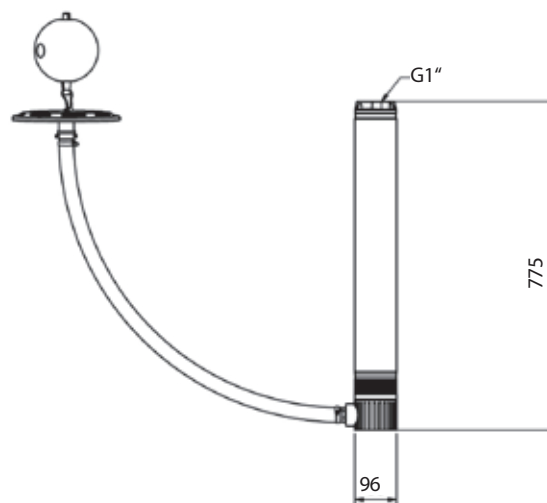
### Characteristics



### Technical data

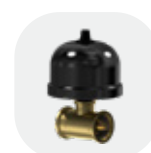
Aquastream 50 SE	
Article number	20234
Discount group	E
Weight (kg)	13.6
Electrical characteristics	
Voltage (V)	230
Current (A)	5.0
Capacitor C (µF)	15
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	800
Speed (min-1)	2.900
Protection class pump	IP 68
Connection cable length (m)	22
Hydraulic characteristics	
Max. head (m)	50.0
Max. flow rate (m³/h)	5.5
Max. medium temp. (°C)	40
Max. immersion depth. (m)	25.0

### Dimensions



In order to guarantee perfect functioning of the integrated automatic switch with short or rigid pipes, it is necessary to install a small expansion vessel.

**We recommend:** Membrane tank 0.3 l incl. T-piece 1" - 1/2" outlet, Article number 21790





# Aquastream 50<sup>®</sup> - floating intake - water supply packages

Borehole pump

NEW

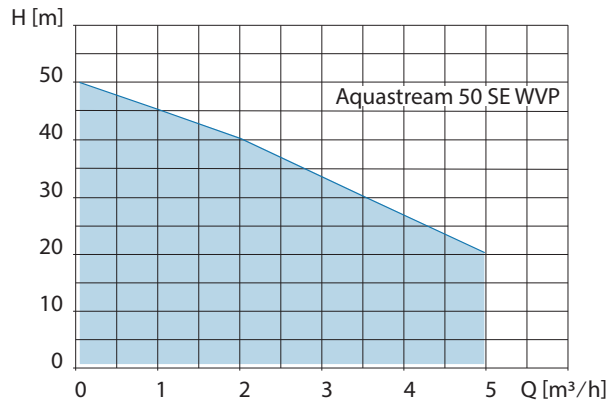
## Features

- Integrated automatic switch incl. dry-running protection
- Automatic re-start function in case of detected dry running (4 start attempts directly, then 4 start attempts after 5 h and 24 h, reset via mains disconnection possible)
- Jacket flow cooling (no cooling jacket required)
- Thermal and current motor monitoring
- Double mechanical seal
- Impellers and guide wheels made of wear-resistant plastic
- Water column above pump max 25 m
- Min. immersion depth for automatic operation = 15 cm
- Pressure outlet 1" female thread
- Powder-coated 20-litre membrane container with butyl membrane (4-year warranty on the membrane)
- Incl. 22 m mains cable, safety plug, 20 m cable, 20 l butyl membrane tank, 1/4" brass cap, 3/4" male/female reducer, 1" 5-way connector, 500 mm metal hose, 6 bar pressure gauge

## Applications

- Clear water pumping from wells
- Domestic water supply, garden irrigation

## Characteristics



## Technical data

### Aquastream 50 SE WVP

Article number	24156
Discount group	E
Weight (kg)	20.4
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	5.0
Capacitor C (µF)	15
Frequency (Hz)	50
Input power P1 (W)	1.000
Output power P2 (W)	800
Speed (min-1)	2.900
Protection class pump	IP 68
Connection cable length (m)	22
<b>Hydraulic characteristics</b>	
Max. head (m)	50.0
Max. flow rate (m³/h)	5.5
Max. medium temp. (°C)	40
Max. immersion depth. (m)	25.0



# TM (3 inch) series



## Borehole pump

### Features

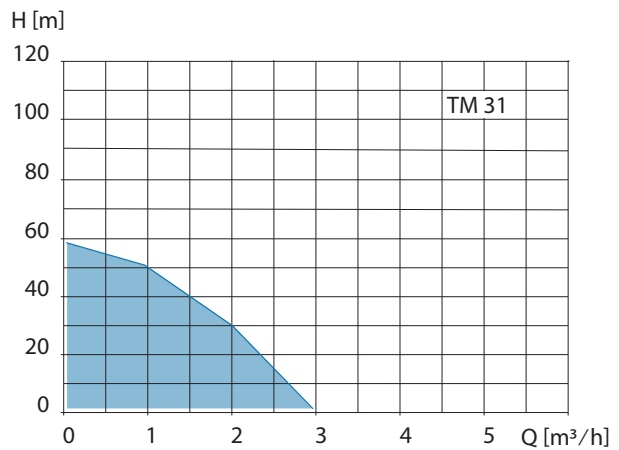
- Oil-filled asynchronous motor within stainless steel housing with thermal contact
- Jacket cooling for continuous duty horizontal / emerged - no additional cooling pipe required
- Stainless steel pump housing and motor shaft
- Powerful pump hydraulics with impellers and guide wheels made of wear-resistant plastic
- Sealed with high-grade mechanical seal
- Pump with 20 m power cable and plug with integrated capacitor, power switch and motor protection
- TM FU with 20 m pump cable, pressure regulator (100 Hz) and 1 m mains connection cable with plug, with enclosed 1" non-return valve
- Important information! Exclusive non-return valve with TM 31



### Applications

- Water pumping from deep wells and rainwater cisterns
- Domestic water supply, garden irrigation

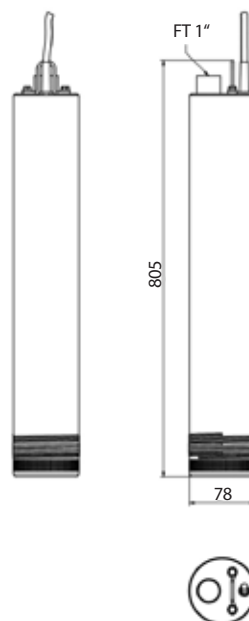
### Characteristics



### Technical data

TM	31
Article number	11962
Discount group	A
Weight (kg)	12.0
<b>Electrical characteristics</b>	
Voltage (V)	230
Current (A)	3.8
Capacitor C (µF)	16
Frequency (Hz)	50
Input power P1 (W)	860
Output power P2 (W)	460
Speed (min-1)	2.800
Protection class	IP 68
Connection cable length (m)	20
<b>Hydraulic characteristics</b>	
Max. head (m)	57.0
Max. flow rate (m³/h)	3.1
Max. medium temp. (°C)	35.0
Max. immersion depth. (m)	15

### Dimensions



# TM (4 inch) series



## Borehole pump

### Features

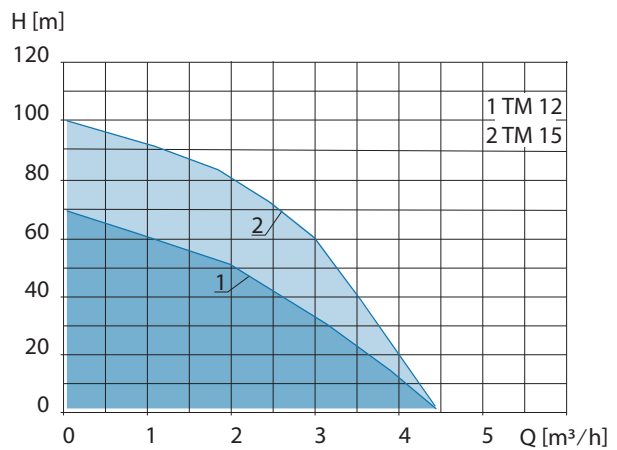
- Oil-filled asynchronous motor within stainless steel housing with thermal contact
- Jacket cooling for continuous duty horizontal / emerged - no additional cooling pipe required
- Stainless steel pump housing and motor shaft
- Powerful pump hydraulics with impellers and guide wheels made of wear-resistant plastic
- Sealed with high-grade mechanical seal
- Pump with 20 m power cable and plug with integrated capacitor, power switch and motor protection
- Important information! Exclusive non-return valve



### Applications

- Water pumping from deep wells and rainwater cisterns
- Domestic water supply, garden irrigation

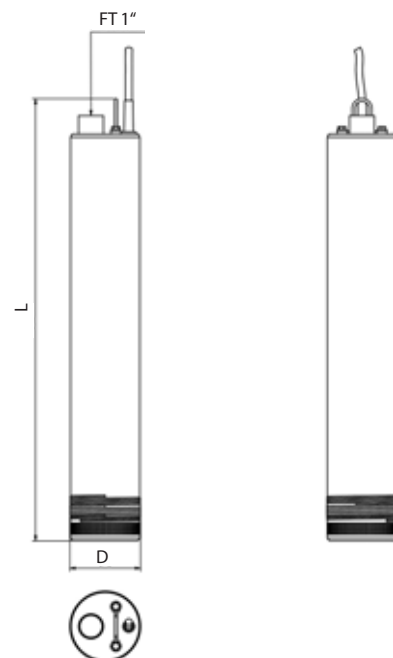
### Characteristics



### Technical data

TM	12	15
Article number	13913	13925
Discount group	A	A
Weight (kg)	12.0	14.0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	5.2	9.3
Capacitor C (µF)	20	30
Frequency (Hz)	50	50
Input power P1 (W)	1.200	2.100
Output power P2 (W)	800	1.200
Speed (min-1)	2.800	2.800
Protection class pump	IP 68	IP 68
Connection cable length (m)	20	20
<b>Hydraulic characteristics</b>		
Max. head (m)	68.0	100
Max. flow rate (m³/h)	4.5	4.5
Max. medium temp. (°C)	35.0	35.0
Max. immersion depth. (m)	15	15

### Dimensions



TM	12	15
D (mm)	100	100
L (mm)	625	770

# TM irrigation packages



## Borehole pump

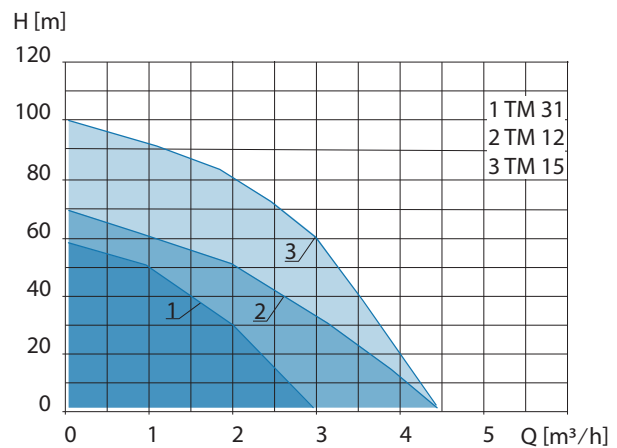
### Features

- Complete package for automatic operation of the borehole pump and with additional dry-run protection
- Oil-filled asynchronous motor within stainless steel housing with thermal contact
- Jacket cooling for continuous duty horizontal / emerged - no additional cooling pipe required
- Stainless steel pump housing and motor shaft
- Sealed with high-grade mechanical seal
- Powerful pump hydraulics with impellers and guide wheels made of wear-resistant plastic
- Pump with 20 m power cable and plug with integrated capacitor, power switch and motor protection, electronic pressure switch with dry-run protection
- 10 m stainless steel rope with 4 rope clips (version with floating intake: 4 m plastic rope and pump-support), non-return valve

### Applications

- Water pumping from deep wells and rainwater cisterns
- Domestic water supply, garden irrigation
- Agriculture

### Characteristics



### Technical data

Irrigation package TM	31	12-1	15-1	12-1 sE
Article number	11963	11943	11909	13917
Discount group	A	A	A	A
Weight (kg)	15.0	15.0	17.0	17.0
<b>Electrical characteristics</b>				
Voltage (V)	230	230	230	230
Current (A)	3.8	5.2	9.3	5.2
Capacitor C (µF)	16	20	30	20
Frequency (Hz)	50	50	50	50
Input power P1 (W)	860	1.200	2.100	1.200
Output power P2 (W)	460	800	1.200	800
Speed (min-1)	2.800	2.800	2.800	2.800
Protection class pump	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20	20	20	20
<b>Hydraulic characteristics</b>				
Max. head (m)	57.0	68	100	68
Max. flow rate (m³/h)	3.1	4.5	4.5	4.5
Max. medium temp. (°C)	35	35	35	35
Max. immersion depth. (m)	15	15	15	15



## Borehole pump

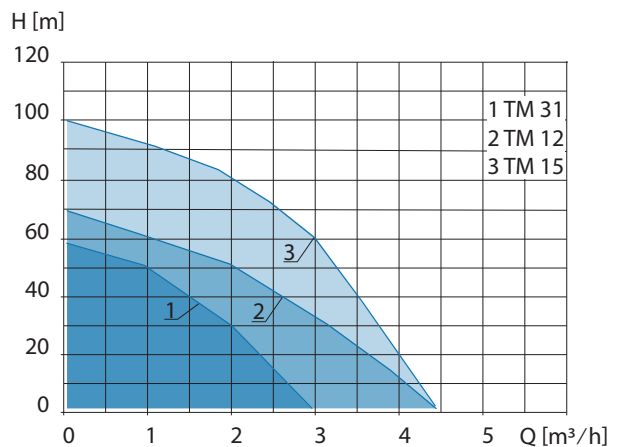
### Features

- Complete package for automatic operation of the borehole pump and with additional dry-run protection and expansion tank
- Oil-filled asynchronous motor within stainless steel housing with thermal contact
- Jacket cooling for continuous duty horizontal / emerged
- Sealed with high-grade mechanical seal
- Stainless steel pump housing and motor shaft
- Powerful pump hydraulics with impellers and guide wheels made of wear-resistant plastic (TM)
- ZP Control 01 Comfort: digital pressure display, switch-on and switch-off pressure digitally adjustable, double dry-running protection
- Borehole pump TM with 20 m power cable and plug with integrated capacitor, power switch and motor protection; 20 litres expansion tank, powder-coated, butyl-membrane; 4 years guarantee on expansion tanks and membrane; pressure switch, manometer, 5-way-piece, reinforced hose; dry-run protection Hydrostop; 10 m stainless steel rope with 4 rope clips; non-return valve

### Applications

- Water pumping from deep wells and rainwater cisterns
- Domestic water supply, garden irrigation
- Agriculture

### Characteristics



### Technical data

WVP TM	31	12-1	15-1	12-1sE
Article number	11964	11944	11910	13918
Discount group	A	A	A	A
Weight (kg)	21.0	21.0	23.0	23.0
<b>Electrical characteristics</b>				
Voltage (V)	230	230	230	230
Current (A)	3.8	5.2	9.3	5.2
Capacitor C (µF)	16	20	30	20
Frequency (Hz)	50	50	50	50
Input power P1 (W)	860	1.200	2.100	1.200
Output power P2 (W)	460	800	1.200	800
Speed (min-1)	2.800	2.800	2.800	2.800
Protection class pump	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20	20	20	20
<b>Hydraulic characteristics</b>				
Max. head (m)	57.0	68	100	68
Max. flow rate (m³/h)	3.1	4.5	4.5	4.5
Max. medium temp. (°C)	35	35	35	35
Max. immersion depth. (m)	15	15	15	15



## Borehole pump

### Features

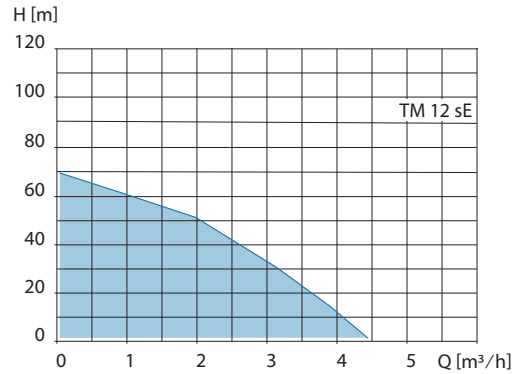
- Intake of the cleanest water short beneath the water surface
- Ideal for usage in cisterns, even in case of low water level
- Oil-filled asynchronous motor within stainless steel housing with thermal contact
- Jacket cooling for continuous duty horizontal / emerged - no additional cooling pipe required
- Stainless steel pump housing and motor shaft
- Sealed with high-grade mechanical seal
- Powerful pump hydraulics with impellers and guide wheels made of wear-resistant plastic
- Pump with 20 m power cable and plug with integrated capacitor, power switch and motor protection, floating discharge 1 1/4" with filter, tube length 1 m, horizontal bracket with clamps, 4 m plastic rope as drainage aid



### Applications

- Irrigation of home and garden and water supply from rainwater cisterns

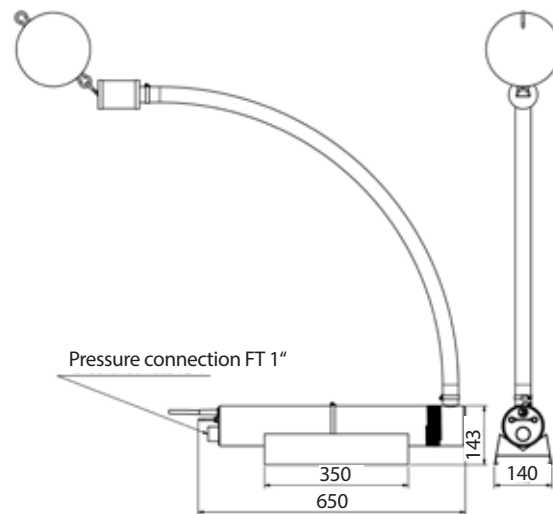
### Characteristics



### Technical data

TM	12-1 sE	Conversion kit floating intake for TM 4" series
Article number	13915	14096
Discount group	A	B
Weight (kg)	14.0	3.0
<b>Electrical characteristics</b>		
Voltage (V)	230	-
Current (A)	5.2	-
Capacitor C (µF)	20	-
Frequency (Hz)	50	-
Input power P1 (W)	1.200	-
Output power P2 (W)	800	-
Speed (min-1)	2.850	-
Protection class	IP 68	-
Connection cable length (m)	20	-
<b>Hydraulic characteristics</b>		
Max. head (m)	68.0	-
Max. flow rate (m³/h)	4.5	-
Max. medium temp. (°C)	35.0	-
Max. immersion depth. (m)	15	-

### Dimensions



# Aquasub

## Borehole pump

### Features

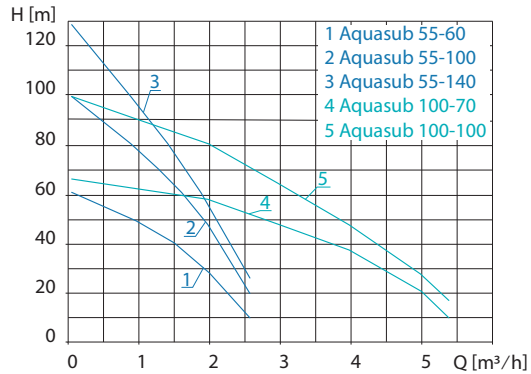
- Multistage submersible pump with integrated water-circulating motor
- Optimum efficiency - due to water-cooled motor
- Plug & play - fully electrically wired
- Optional sand blocking protection
- Incl. 20 m power cable H07 RNF, 230 V - version with plug
- Max. immersion depth 20 m



### Applications

- For open and drilled wells - well diameters from 4" (100 mm)
- For general water supply, pressure boosting and sprinkling
- For the delivery of clear water with little abrasive and without aggressive components

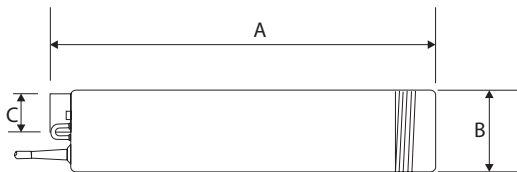
### Characteristics



### Technical data

Aquasub	55-60	55-100	55-140	100-70	100-100	50-60	55-100	55-140	100-70	100-100
Article number	18873	18872	18869	18865	18866	18871	18868	18870	18867	18864
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	10.0	13.0	14.0	13.0	15.0	10.0	13.0	14.0	13.0	15.0
<b>Electrical characteristics</b>										
Voltage (V)	230	230	230	230	230	400	400	400	400	400
Current (A)	4.1	7.0	9.0	7.0	9.0	1.6	2.8	3.5	2.8	3.8
Capacitor C (µF)	20	25	40	25	40	-	-	-	-	-
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	900	1.400	1.850	1.500	2.000	900	1.400	1.850	1.500	2.000
Output power P2 (W)	550	750	1.100	750	1.100	550	750	1.100	750	1.100
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
<b>Hydraulic characteristics</b>										
Max. head (m)	57.0	95.0	135.0	68.0	95.0	57.0	95.0	135.0	68.0	95.0
Max. flow rate (m³/h)	2.7	2.7	2.7	5.4	5.4	2.7	2.7	2.7	5.4	5.4
Max. medium temp. (°C)	35	35	35	35	35	35	35	35	35	35
Max. immersion depth. (m)	17.0	17.0	18.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

### Dimensions



Aquasub	55-60	55-100	55-140	100-70	100-100
A (mm)	560	672	830	565	680
B (mm)	100	100	100	100	100
C (mm)	1"	1¼"	1¼"	1¼"	1¼"

# AQUA 5

## Borehole pump

### Features

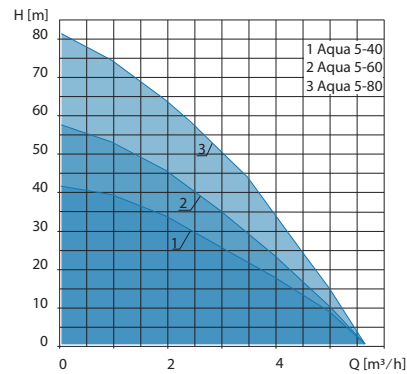
- Multistage submersible pump with integrated, water circulated motor
- Optimum efficiency - due to water-cooled motor
- Incl. 20 m power cable H07 RNF, 230 V - version with plug
- Optionally with float switch (type A)
- Guide wheels made of glass fiber-reinforced Noryl®



### Applications

- For open and drilled wells - well diameter from 5" (127 mm)
- For general water supply, pressure boosting, washing systems and sprinkling
- Rain water harvesting
- For the delivery of clear water with little abrasive and without aggressive components

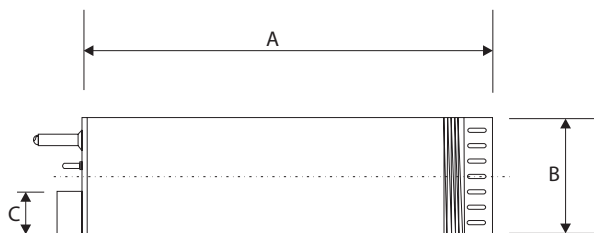
### Characteristics



### Technical data

Aqua 5	5-40 M	5-40 MA	5-60 M	5-60 MA	5-80 M	5-80 MA	5-60 T	5-80 T
Article number	18884	18885	18887	18888	18889	18890	18886	18891
Discount group	E	E	E	E	E	E	E	E
Weight (kg)	10.8	10.25	11.0	12.0	13.3	13.6	13.0	15.0
<b>Electrical characteristics</b>								
Voltage (V)	230	230	230	230	230	230	400	400
Current (A)	4.4	4.4	6.0	6.0	8.5	8.5	2.7	3.2
Capacitor C (µF)	20	20	25	25	40	40	-	-
Frequency (Hz)	50	50	50	50	50	50	50	50
Input power P1 (W)	1.000	1.000	1.250	1.250	1.800	1.800	1.250	1.800
Output power P2 (W)	600	600	750	750	1.200	1.200	750	1.200
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
<b>Hydraulic characteristics</b>								
Max. head (m)	45.0	45.0	57.0	57.0	82.0	82.0	57.0	82.0
Max. flow rate (m³/h)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max. medium temp. (°C)	35	35	35	35	35	35	35	35
Max. immersion depth. (m)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

### Dimensions



Aquasub	5-40	5-60	5-80
A (mm)	476	529	649
B (mm)	127	127	127
C (mm)	1¼"	1¼"	1¼"



# Rainsub 60

## Borehole pump

### Features

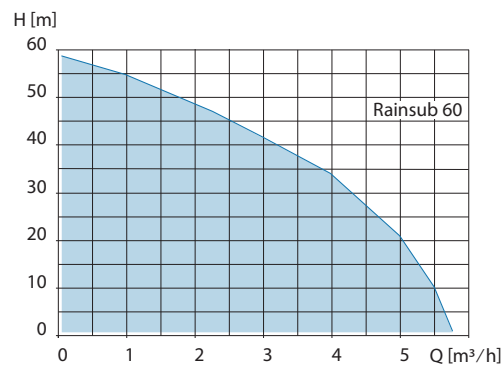
- Multistage, smooth running submersible motor pump
- Drinking water make-up possible via make-up modules, connection pipe available
- Double mechanical seal with oil chamber guarantees perfect sealing between hydraulic area and motor
- Corrosion-resistant, as pump casing and impellers are made of made of stainless steel
- Excellent hydraulic performance
- Plug & Play - AC version fully wired
- Due to particularly slim design suitable for many locations
- Stable due to pump base
- For connection of a floating intake
- Optional with float switch (type A)
- Incl. 20 m power cable H07 RNF, plug and integrated starting capacitor



### Applications

- Water supply
- Rain water harvesting
- Washing facilities
- Irrigation
- Pressure boosting
- For clear to slightly contaminated water without aggressive and abrasive components

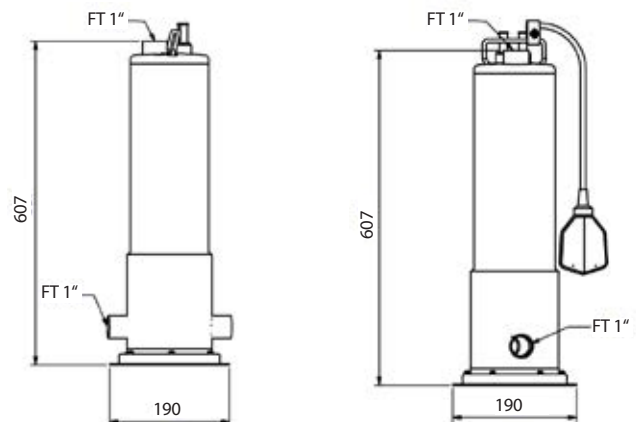
### Characteristics



### Technical data

Rainsub	60 M	60 MA
Article number	18893	18892
Discount group	E	E
Weight (kg)	14.0	14.0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	6.0	6.0
Capacitor C (µF)	25	25
Frequency (Hz)	50	50
Input power P1 (W)	1.250	1.250
Output power P2 (W)	750	750
Speed (min-1)	2.850	2.850
Protection class pump	IP 68	IP 68
Connection cable length (m)	20.0	20.0
<b>Hydraulic characteristics</b>		
Max. head (m)	57.0	57.0
Max. flow rate (m³/h)	5.7	5.7
Max. medium temp. (°C)	35	35
Max. immersion depth. (m)	20	20

### Dimensions



# HWA Combipress 60

Borehole pump

## Features

- Suction of the cleanest water due floating intake
- Drinking water feeding possible via system control, as intake connection available
- Stainless steel base plate for vertical installation
- Automatic switch KIT 02 PRO, incl. wall mount: When opening a consumer of a consumer, the pump switches on automatically. If all consumers are closed, the pump switches off automatically.
- Integrated dry run protection
- Pre-assembled floating intake with suction strainer
- Pump housing, impellers, suction nozzle made of stainless steel 1.4301, shaft made of stainless steel 1.4021
- Guide wheels made of special Noryl®
- Double mechanical seal made of carbon + ceramic
- Spiral suction hose made of antimicrobial thermoplastic
- Suction strainer and hose clamps made of corrosion-free stainless steel

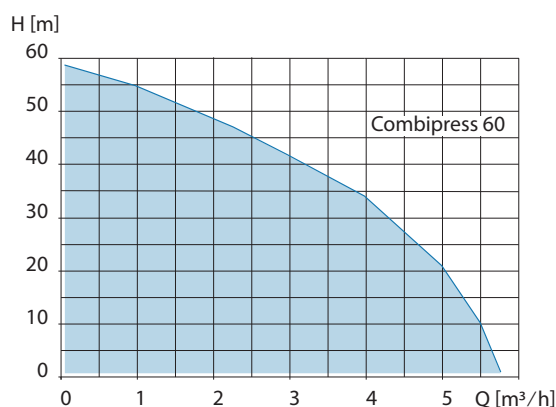


Suitable for usage with the Zehnder Tacomat 5. (see page. 171)

## Applications

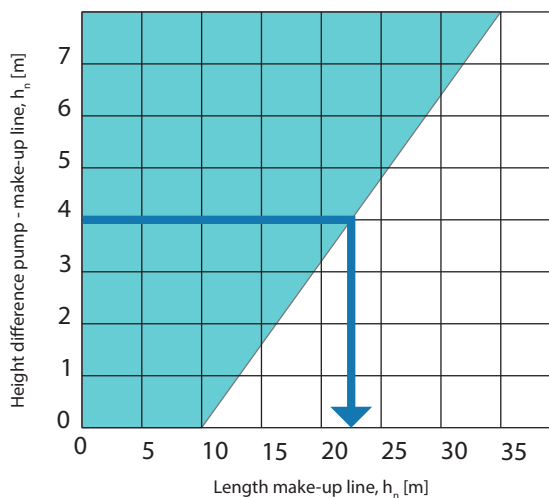
- Complete water supply package for rainwater harvesting systems
- Submersible motor pump Rainsub 60 for fully or partially submerged continuous operation
- Installation depth max. 20 m
- For clear water without aggressive and abrasive components

## Characteristics



## Range of application

Range of application of the Combipress 60 in combination with the backfeed modules of the constructional series Tacomat



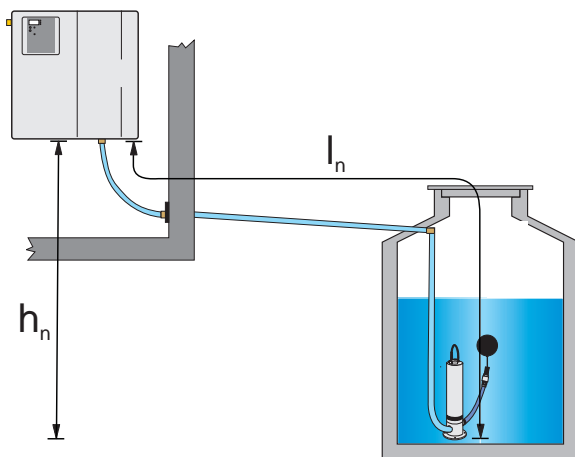
# HWA Combipress 60

Borehole pump

## Technical data

HWA Combipress 60	Kit 02	Kit 02 with float switch
Article number	19095	19284
Discount group	E	E
Weight (kg)	16.6	18.1
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	6.0	6.0
Capacitor C (μF)	25	25
Frequency (Hz)	50	50
Input power P1 (W)	1.250	1.250
Output power P2 (W)	750	750
Speed (min-1)	2.800	2.800
Protection class pump	IP 68	IP 68
Connection cable length (m)	20	20
<b>Hydraulic characteristics</b>		
Max. head (m)	57	57
Max. flow rate (m <sup>3</sup> /h)	5.7	5.7
Max. medium temp. (°C)	35	35

## Application example



Accessories	Art. no.	Discount group
Submersible pump maintenance kit	19109	H
Connection set	19102	H
Connecting kit for replenishment	19283	H

The backfeed line must have a continuous head from the TACOMAT to the

pump!

Example:

1" PE-line,

Height difference  $h_n = 4 \text{ m} \Rightarrow$

Maximum backfeed  $I_n = 23 \text{ m}$

# Wellworker

## Borehole pump

### Features

- Multistage submersible pump with radial impellers for well diameters of 4" (100 mm) and larger
- Franklin motor - water filled (also available with Franklin 2-wire motor)
- Coupling - NEMA standard
- Flow rates up to 24 m<sup>3</sup>/h, heads up to 302 m
- Medium temperature 0 °C to 35 °C
- High operational safety due to thermal motor protection switch and self-cooling independent of the immersion depth
- Max. 20 starts per hour
- Motor cable 1.5 m as standard, 2.5 m for long lengths; special lengths available
- Pump head, jacket, flange shaft, pressure casing, pump foot and cable protection made of stainless steel 1.4301 (WELLWORKER 420 pump head made of brass OT58)
- Coupling made of stainless steel 1.4401
- Upper bearing made of Desmopan® with moving element made of stainless steel 1.4401 (Wellworker 420 bearing made of polyurethane with movable element made of stainless steel)
- Diffuser and impellers made of glass-fiber reinforced Noryl® (WELLWORKER 420 made of polycarbonate)
- Brass non-return valve enclosed

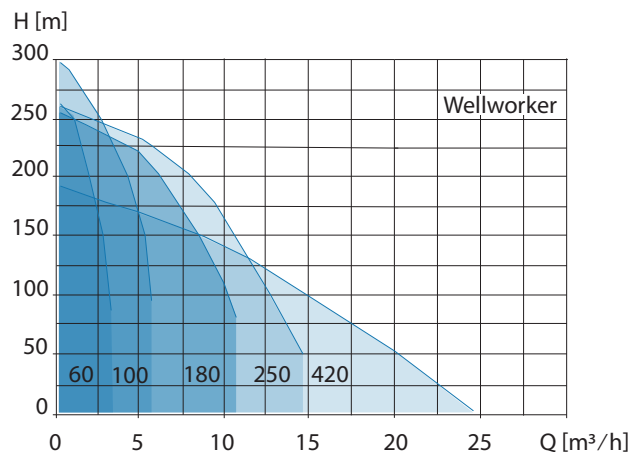
### Applications

- Water supply
- Irrigation
- Pressure boosting
- Fire extinguishing systems
- Fountains
- Groundwater lowering
- For clear to slightly polluted water with little abrasive and without aggressive components, max. permissible sand content: 150 g/m<sup>3</sup>



Wellworker pump series optionally available with coolant filled BBC motor, approved for potable water pumping.

### Characteristics



ErP-directive:  
Environment-friendly design for the submersible pumps. As regards the parameters, our pump series WELLWORKER 60 and 100 were approved as the most efficient technology on the market by the European Commission (MEI Index  $\geq 0.70$ ).



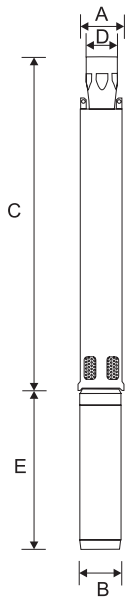
# Wellworker 60

Borehole pump

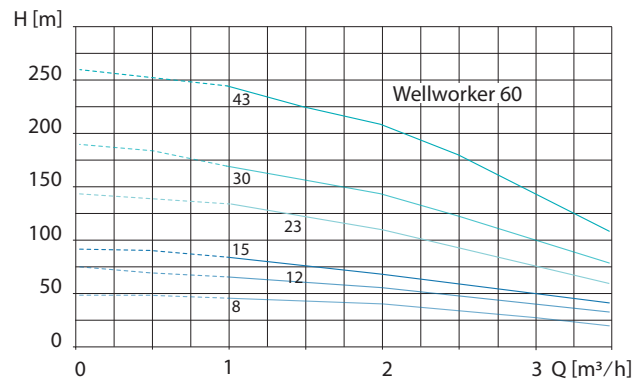
## Technical data

Wellworker 60	8-60	8-60	12-60	12-60	15-60	15-60	23-60	23-60	30-60	30-60	43-60	43-60
Article number	18904	18905	18894	18895	18896	18897	18898	18899	18900	18901	18902	18903
Discount group	E	E	E	E	E	E	E	E	E	E	E	E
Weight (kg)	11.3	10.7	12.7	11.8	14.5	13.2	18.0	15.9	20.0	18.2	26.4	22.1
<b>Electrical characteristics</b>												
Voltage (V)	230	400	230	400	230	400	230	400	230	400	230	400
Current (A)	4.0	1.1	6.0	1.6	7.3	2.1	8.9	3.0	11.1	4.0	15.9	5.9
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	370	370	550	550	750	750	1.100	1.100	1.500	1.500	2.200	2.200
Output power P2 (W)	222	222	330	330	450	450	660	660	900	900	1.320	1.320
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5
<b>Hydraulic characteristics</b>												
Max. head (m)	49.0	49.0	74.0	74.0	92.0	92.0	140.0	140.0	184.0	184.0	260.0	260.0
Max. flow rate (m <sup>3</sup> /h)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Max. medium temp. (°C)	30	30	30	30	30	30	30	30	30	30	30	30

## Dimensions



## Characteristics



Wellworker 60	8-60	12-60	15-60	23-60	30-60	43-60
A (mm)	94	94	94	94	94	94
B (mm)	99	99	99	99	99	99
C (mm)	400	491	559	739	940	1.276
D (mm)	1½"	1½"	1½"	1½"	1½"	1½"
E1~(mm)	242.1	270.8	298.5	355.9	384.1	460.4
E3~(mm)	223.0	242.1	270.8	298.5	327.2	355.9

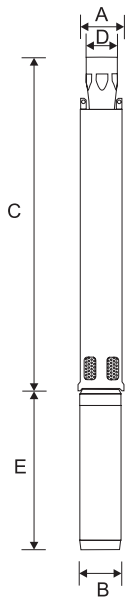
# Wellworker 100

Borehole pump

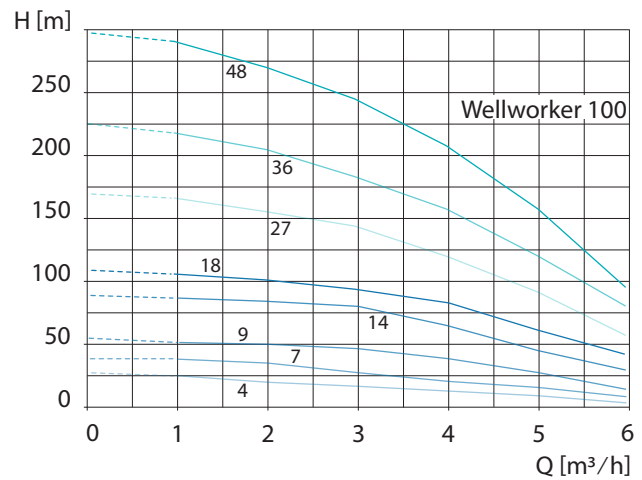
## Technical data

Wellworker 100	7-100	7-100	9-100	9-100	14-100	14-100	18-100	18-100	27-100	27-100	36-100	48-100
Article number	18916	18917	18918	18919	18906	18907	18908	18909	18910	18911	18912	18915
Discount group	E	E	E	E	E	E	E	E	E	E	E	E
Weight (kg)	12.0	11.1	13.8	12.5	16.9	14.8	18.3	16.5	23.9	19.6	27.5	32.8
<b>Electrical characteristics</b>												
Voltage (V)	230	400	230	400	230	400	230	400	230	400	400	400
Current (A)	6.0	1.6	7.3	2.1	8.9	3.0	11.1	4.0	15.9	5.9	7.8	10.0
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	550	550	750	750	1.100	1.100	1.500	1.500	2.200	2.200	3.000	4.000
Output power P2 (W)	358	358	488	488	715	715	975	975	1.430	1.430	1.950	2.600
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5
<b>Hydraulic characteristics</b>												
Max. head (m)	40.0	40.0	57.0	57.0	88.0	88.0	113.0	113.0	170.0	170.0	226.0	302.0
Max. flow rate (m <sup>3</sup> /h)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max. medium temp. (°C)	30	60	30	30	30	30	30	30	30	30	30	30

## Dimensions



## Characteristics



Wellworker 100	4-100	7-100	9-100	14-100	18-100	27-100	36-100	48-100
A (mm)	94	94	94	94	94	94	94	94
B (mm)	99	99	99	99	99	99	99	99
C (mm)	324	402	454	584	688	964	1.198	1.580
D (mm)	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"
E1~(mm)	242.1	270.8	298.5	355.9	384.1	460.4	-	-
E3~(mm)	223.0	242.1	270.8	298.5	327.2	355.9	422.8	538.3

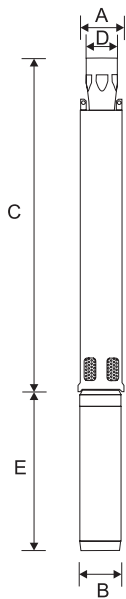
# Wellworker 180

Borehole pump

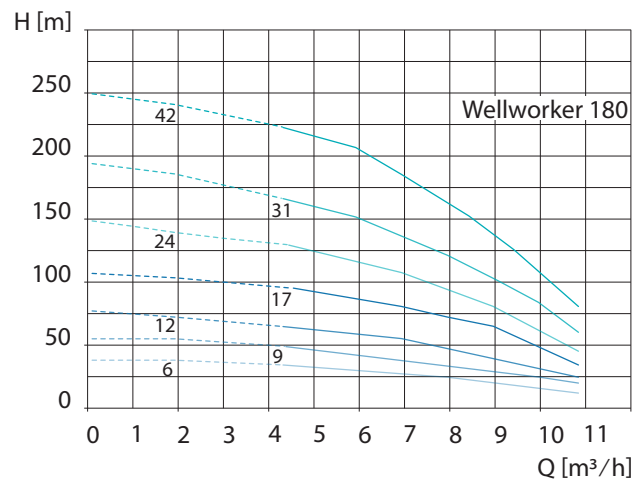
## Technical data

Wellworker 180	6-180	6-180	9-180	9-180	12-180	12-18	17-180	17-180	24-180	31-180	42-180
Article number	18927	18928	18929	18930	18920	18921	18922	18923	18924	18925	18926
Discount group	E	E	E	E	E	E	E	E	E	E	E
Weight (kg)	13.7	12.4	16.6	14.5	17.9	16.1	23.3	19.0	26.6	31.8	40.6
<b>Electrical characteristics</b>											
Voltage (V)	230	400	230	400	230	400	230	400	400	400	400
Current (A)	7.3	2.1	8.9	3.0	11.1	4.0	15.9	5.9	7.8	10.0	13.7
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	750	750	1.100	1.100	1.500	1.500	2.200	2.200	3.000	4.000	5.500
Output power P2 (W)	488	488	715	715	975	975	1.430	1.430	1.950	2.600	3.575
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5
<b>Hydraulic characteristics</b>											
Max. head (m)	37.0	37.0	55.0	55.0	74.0	74.0	104.0	104.0	147.0	190.0	257.0
Max. flow rate (m <sup>3</sup> /h)	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Max. medium temp. (°C)	30	30	30	30	30	30	30	30	30	30	30

## Dimensions



## Characteristics



Wellworker 180	6-180	9-180	12-180	17-180	24-180	31-180	42-180
A (mm)	94	94	94	94	94	94	94
B (mm)	99	99	99	99	99	99	99
C (mm)	441	545	648	864	1.106	1.391	1.771
D (mm)	2"	2"	2"	2"	2"	2"	2"
E1~(mm)	298.5	355.9	384.1	460.4	-	-	-
E3~(mm)	270.8	298.5	327.2	355.9	422.8	538.3	697.6

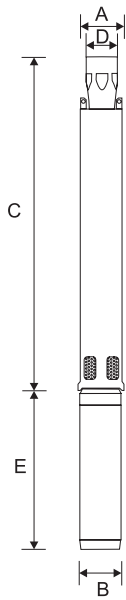
# Wellworker 250

Borehole pump

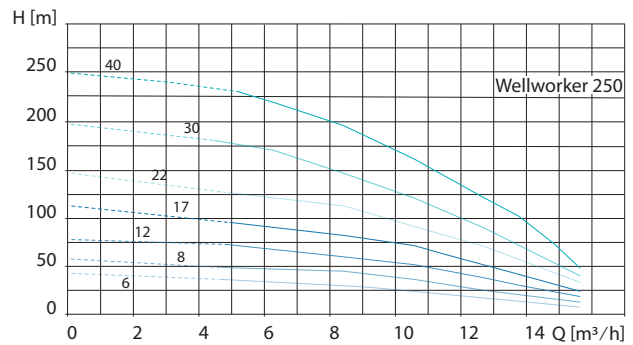
## Technical data

Wellworker 250	6-250	6-250	8-250	8-250	12-250	12-250	17-250	22-250	30-250	40-250
Article number	18937	18938	18939	18940	18931	18932	18933	18934	18935	18936
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	16.1	14.0	17.3	15.5	22.1	17.8	25.7	29.6	38.9	45.2
<b>Electrical characteristics</b>										
Voltage (V)	1~230 / 3~230	400	1~230 / 3~230	400	1~230 / 3~230	400	400	400	400	400
Current (A)	8.9	3.0	11.1	4.0	15.9	5.9	7.8	10.0	13.7	18.8
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Input power P1 (W)	1.100	1.100	1.500	1.500	2.200	2.200	3.000	4.000	5.500	7.500
Output power P2 (W)	715	715	975	975	1.430	1.430	1.950	2.600	3.575	4.875
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Hydraulic characteristics</b>										
Max. head (m)	40.0	40.0	53.0	53.0	79.0	79.0	112.0	145.0	197.0	262.0
Max. flow rate (m <sup>3</sup> /h)	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Max. medium temp. (°C)	30	30	30	30	30	30	30	30	30	30

## Dimensions



## Characteristics



Wellworker 250	6-250	8-250	12-250	17-250	22-250	30-250	40-250
A (mm)	94	94	94	94	94	94	94
B (mm)	99	99	99	99	99	99	99
C (mm)	470	549	707	948	1.145	1.503	1.898
D (mm)	2"	2"	2"	2"	2"	2"	2"
E1~(mm)	355.9	384.1	460.4	-	-	-	-
E3~(mm)	298.5	327.2	355.9	422.8	538.3	697.6	773.8



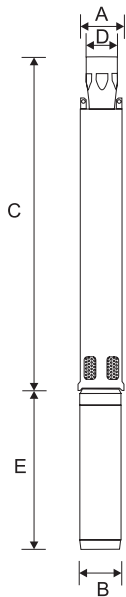
# Wellworker 420

Borehole pump

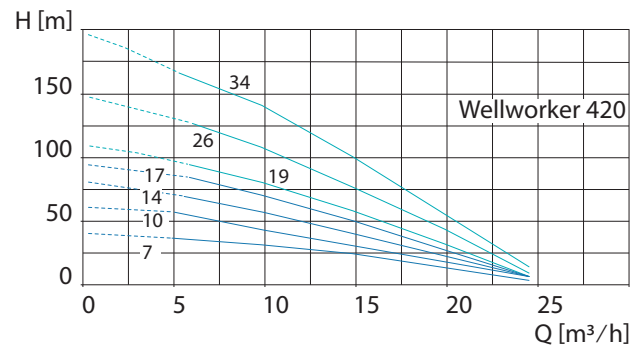
## Technical data

Wellworker 420	7-420	7-420	10-420	10-420	14-420	17-420	19-420	26-420	34-420
Article number	18948	18949	18941	18942	18943	18944	18945	18946	18947
Discount group	E	E	E	E	E	E	E	E	E
Weight (kg)	19.9	18.1	25.5	21.2	30.3	34.9	36.2	47.6	56.2
<b>Electrical characteristics</b>									
Voltage (V)	230	400	230	400	400	400	400	400	400
Current (A)	11.1	4.0	15.9	5.9	7.8	10.0	10.0	13.7	18.8
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Input power P1 (W)	1.500	1.500	2.200	2.200	3.000	4.000	4.000	5.500	7.500
Output power P2 (W)	975	975	1.430	1.430	1.950	2.600	2.600	3.575	4.875
Speed (min-1)	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Hydraulic characteristics</b>									
Max. head (m)	40.0	40.0	57.0	57.0	79.0	96.0	108.0	147.0	192.0
Max. flow rate (m <sup>3</sup> /h)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Max. medium temp. (°C)	30	30	30	30	30	30	30	30	30

## Dimensions



## Characteristics



Wellworker 420	7-420	10-420	14-420	17-420	19-420	26-420	34-420
A (mm)	94	94	94	94	94	94	94
B (mm)	99	99	99	99	99	99	99
C (mm)	820	1.055	1.435	1.665	1.825	2.435	3.130
D (mm)	2"	2"	2"	2"	2"	2"	2"
E1~(mm)	384.1	460.4	-	-	-	-	-
E3~(mm)	327.2	355.9	422.8	538.3	538.3	697.6	773.8

# Accessories

for Borehole pump

Type	Art.Nr.	Discount group
Switch box ZS three phase version up to 5.5 kW, direct activation	11289	B
Switch box ZS three phase version up to 4.0 kW, direct activation with dry-run protection	11290	B
Switch box ZS single phase version with dry-run protection	11293	B
Hang-in electrode made of stai without cable	11295	B
Electrode cable H07-RN-F 1x1,5mm <sup>2</sup>	11298	B
Stainless steel rope 4 mm 7 x 19 -WSC-1570 N/ qmm sZ	11305	B
Rope clamp 4/5mm stainless steel (2 pieces per loop required)	11304	B
Shrink-on sleeve up to 4x2.5mm incl. production of the shrink joint	11300	B
Underwater cable 4 X 1.5 mm <sup>2</sup> special cable blue	12458	B
Underwater cable 4 x 2.5 mm <sup>2</sup> special cable blue	12464	B

Type	Art.Nr.	Discount group
Hose adapter, nominal width 32	18998	F
Hose adapter, nominal width 40	18999	F
Rope clamp 4/5mm stainless steel (2 pieces per loop required)	11304	B
Stainless steel rope 4 mm 7 x 19 -WSC-1570 N/ qmm sZ	11305	B
<b>Underwater cable with plug</b>		
4 x 1.5 mm <sup>2</sup> 1.5 m	18981	F
4 x 1.5 mm <sup>2</sup> 2.5 m	18987	F
4 x 1.5 mm <sup>2</sup> 10.0 m	18982	F
4 x 1.5 mm <sup>2</sup> next gen 10.0 m	20779	F
4 x 1.5 mm <sup>2</sup> 20.0 m	18983	F
4 x 1.5 mm <sup>2</sup> next gen 20.0 m	20780	F
4 x 1.5 mm <sup>2</sup> 30.0 m	18984	F
4 x 1.5 mm <sup>2</sup> next gen 30.0 m	20781	F
4 x 1.5 mm <sup>2</sup> 40.0 m	18985	F
4 x 1.5 mm <sup>2</sup> next gen 40.0 m	20782	F
4 x 1.5 mm <sup>2</sup> 50.0 m	18986	F
4 x 1.5 mm <sup>2</sup> next gen 50.0 m	20783	F
4 x 4 mm <sup>2</sup> 4.0 m	18992	F
4 x 4 mm <sup>2</sup> 10.0 m	18989	F
4 x 4 mm <sup>2</sup> 20.0 m	18990	F
4 x 4 mm <sup>2</sup> 30.0 m	18991	F
4 x 4 mm <sup>2</sup> 50.0 m	18993	F
<b>Underwater cable with drinking water approval</b>		
Underwater cable 4 x 1.5 mm <sup>2</sup> (m)	12458	B
Underwater cable 4 x 2.5 mm <sup>2</sup> (m)	12464	B
Underwater cable 4 x 4.0 mm <sup>2</sup> (m)	12465	B
<b>Underwater cable H07 RN-F</b>		
4 x 1.5 mm <sup>2</sup> (pro m)	18994	E
4 x 2.5 mm <sup>2</sup> (pro m)	18995	E
4 x 4 mm <sup>2</sup> (pro m)	18996	E
4 x 6 mm <sup>2</sup> (pro m)	18997	E
4 x 10 mm <sup>2</sup> (pro m)	18255	E

# Accessories

for Borehole pump

Type	Art. no.	Discount group
<b>Cable connector</b>		
Cast sleeve bis 4 x 4.0 mm <sup>2</sup>	19008	E
Shrinking sleeve up to 4 x 10 mm <sup>2</sup>	11300	B
Cable Termination Kit Cable Connector Kit up to 4 x 4.0 mm <sup>2</sup> for 4"-motors	18253	E

Pump	D115x500	D115x800	D115x1000	D145x800	WD145x1000	Strainer basket*	Support clamps**
<b>Stainless steel cooling jackets for 4" submersible motor pumps for applications with horizontal installation of the pumps</b>							
Wellworker 8-60 230V	19000	-	-	-	-	19003	19002
Wellworker 12-60 230V	19000	-	-	-	-	19003	19002
Wellworker 15-60 230V	19000	-	-	-	-	19003	19002
Wellworker 23-60 230V	19000	-	-	-	-	19003	19002
Wellworker 30-60 230V	-	20620	-	-	-	19003	19002
Wellworker 43-60 230V	-	20620	-	-	-	19003	19002
Wellworker 8-60 400V	19000	-	-	-	-	19003	19002
Wellworker 12-60 400V	19000	-	-	-	-	19003	19002
Wellworker 15-60 400V	19000	-	-	-	-	19003	19002
Wellworker 23-60 400V	19000	-	-	-	-	19003	19002
Wellworker 30-60 400V	-	20620	-	-	-	19003	19002
Wellworker 43-60 400V	-	20620	-	-	-	19003	19002
Wellworker 4-100 230V	19000	-	-	-	-	19003	19002
Wellworker 7-100 230V	19000	-	-	-	-	19003	19002
Wellworker 9-100 230V	19000	-	-	-	-	19003	19002
Wellworker 14-100 230V	19000	-	-	-	-	19003	19002
Wellworker 18-100 230V	-	20620	-	-	-	19003	19002
Wellworker 27-100 230V	-	20620	-	-	-	19003	19002
Wellworker 4-100 400V	19000	-	-	-	-	19003	19002
Wellworker 7-100 400V	19000	-	-	-	-	19003	19002
Wellworker 9-100 400V	19000	-	-	-	-	19003	19002
Wellworker 14-100 400V	19000	-	-	-	-	19003	19002
Wellworker 18-100 400V	-	20620	-	-	-	19003	19002
Wellworker 27-100 400V	-	20620	-	-	-	19003	19002
Wellworker 36-100 400V	-	20620	-	-	-	19003	19002
Wellworker 48-100 400V	-	20620	-	-	-	19003	19002
Wellworker 6-180 230V	19000	-	-	-	-	19003	19002
Wellworker 9-180 230V	19000	-	-	-	-	19003	19002
Wellworker 12-180 230V	-	20620	-	-	-	19003	19002
Wellworker 17-180 230V	-	20620	-	-	-	19003	19002
Wellworker 6-180 400V	19000	-	-	-	-	19003	19002
Wellworker 9-180 400V	19000	-	-	-	-	19003	19002
Wellworker 12-180 400V	-	20620	-	-	-	19003	19002
Wellworker 17-180 400V	-	20620	-	-	-	19003	19002
Wellworker 24-180 400V	-	20620	-	-	-	19003	19002
Wellworker 31-180 400V	-	20620	-	-	-	19003	19002
Wellworker 42-180 400V	-	-	19001	-	-	19003	19002

\* optional strainer basket

\*\* Support clamps for horizontal mounting

# Accessories

for Borehole pump

pump	D115x500	D115x800	D115x1000	D145x800	D145x1000	Strainer basket*	Support clamps**
Stainless steel cooling jackets for 4" submersible motor pumps for applications with horizontal installation of the pumps							
Wellworker 8-250 230V	-	-	-	12812	-	20416	20417
Wellworker 8-250 230V	-	-	-	12812	-	20416	20417
Wellworker 12-250 230V	-	-	-	12812	-	20416	20417
Wellworker 6-250 400V	-	-	-	12812	-	20416	20417
Wellworker 8-250 400V	-	-	-	12812	-	20416	20417
Wellworker 12-250 400V	-	-	-	12812	-	20416	20417
Wellworker 17-250 400V	-	-	-	12812	-	20416	20417
Wellworker 22-250 400V	-	-	-	12812	-	20416	20417
Wellworker 30-250 400V	-	-	-	-	20354	20416	20417
Wellworker 40-250 400V	-	-	-	-	20354	20416	20417
Wellworker 7-420 230V	-	-	-	12812	-	20416	20417
Wellworker 10-420 230V	-	-	-	12812	-	20416	20417
Wellworker 7-420 400V	-	-	-	12812	-	20416	20417
Wellworker 10-420 400V	-	-	-	12812	-	20416	20417
Wellworker 14-420 400V	-	-	-	12812	-	20416	20417
Wellworker 17-420 400V	-	-	-	12812	-	20416	20417
Wellworker 19-420 400V	-	-	-	12812	-	20416	20417
Wellworker 26-420 400V	-	-	-	-	20354	20416	20417
Wellworker 34-420 400V	-	-	-	-	20354	20416	20417

\* optional strainer basket

\*\* Support clamps for horizontal mounting

# Irrigation package Wellworker

## Borehole pump

### Features

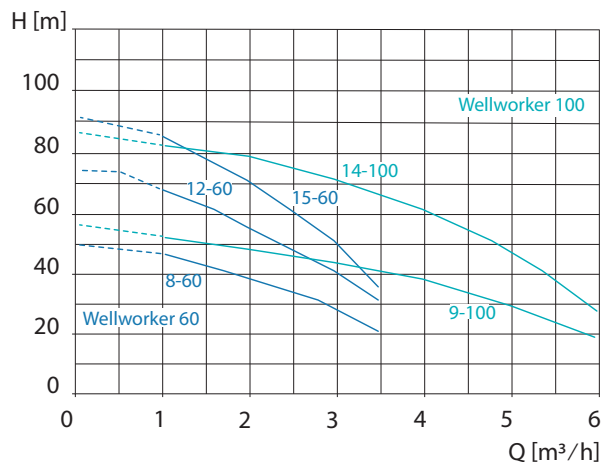
- Multistage deep well pump (230 V) with radial impellers type Wellworker
- Suitable for continuous operation
- Optimum efficiency
- Plug & Play - fully electrically wired, with stainless steel cable
- Automatic shaking function
- Electronic pressure switch with dry-running protection Type ZP Control 05 Comfort: precisely adjustable starting pressure 0.5 - 4 bar, integrated dry-running protection, overcurrent protection, auto-reset function
- 10m stainless steel rope with rope clips
- 20 m cable H07RNF



### Applications

- For general water supply and irrigation
- For the delivery of clear water with little abrasive and with out aggressive components

### Characteristics



### Technical data

Irrigation package	8-60	12-60	15-60	9-100	14-100
Article number	20341	20342	20343	20344	20345
Discount group	E	E	E	E	E
Weight (kg)	15.4	16.4	18.1	17.5	20.5
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	230
Current (A)	4.0	6.0	7.3	7.3	8.9
Frequency (Hz)	50	50	50	50	50
Input power P1 (W)	370	550	750	750	1.100
Output power P2 (W)	222	330	450	488	715
Speed (min-1)	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20.0	20.0	20.0	20.0	20.0
<b>Hydraulic characteristics</b>					
Max. head (m)	49.0	74.0	92.0	57.0	88.0
Max. flow rate (m³/h)	3.6	3.6	3.6	6.0	6.0
Max. medium temp. (°C)	30	30	30	30	30



#### The shaking function

The 2-wire motor automatically detects, when the hydraulic equipment of the pump gets stiff or blocked by sand or stones. In this case, the motor cuts-off the torque in fast cycles from left to right. If the pump gets released in this way, the motor keeps on running in the set direction (anticlockwise). If not, the an built-in over load protective device reacts. In practice, the shaking function provides additional safety in applications with solved solid particles in the pumped media or after a longer inoperative period.

# Irrigation package Wellworker FQ

## Borehole pump

### Features

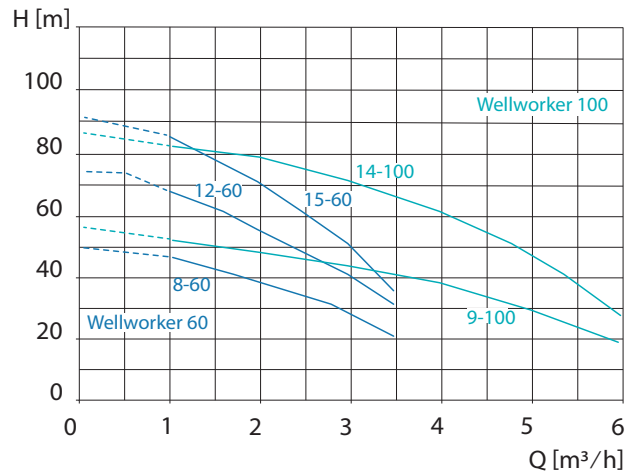
- Multistage deep well pump (230 V) with radial impellers type Wellworker
- Suitable for continuous operation
- Optimum efficiency
- Less power consumption due to Speedmatic
- Plug & Play - fully electrically wired, with stainless steel cable
- Automatic shaking function
- ZP Speedcontrol Comfort electronic control: frequency control with dry-running protection, auto-reset function, freely adjustable differential pressure and overrun time
- 10m stainless steel rope with rope clips
- 20 m cable H07RNF



### Applications

- For general water supply and irrigation
- For the delivery of clear water with little abrasive and with out aggressive components

### Characteristics



### Technical data

Irrigation package FQ	12-60	8-60	15-60	9-100	14-100
Article number	18882	19318	19319	19320	19321
Discount group	E	E	E	E	E
Weight (kg)	16.8	15.4	18.5	17.9	20.9
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	230
Current (A)	6.0	4.0	7.3	7.3	8.9
Frequency (Hz)	50	50	50	50	50
Input power P1 (W)	550	370	750	750	1.100
Output power P2 (W)	330	222	450	487	715
Speed (min-1)	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20.0	20.0	20.0	20.0	20.0
<b>Hydraulic characteristics</b>					
Max. head (m)	74.0	49.0	92.0	57.0	88.0
Max. flow rate (m³/h)	3.6	3.6	3.6	6.0	6.0
Max. medium temp. (°C)	30	30	30	30	30



#### The shaking function

The 2-wire motor automatically detects, when the hydraulic equipment of the pump gets stiff or blocked by sand or stones. In this case, the motor cuts-off the torque in fast cycles from left to right. If the pump gets released in this way, the motor keeps on running in the set direction (anticlockwise). If not, the an built-in over load protective device reacts. In practice, the shaking function provides additional safety in applications with solved solid particles in the pumped media or after a longer inoperative period.

# Irrigation package Wellworker FQB

## Borehole pump

### Features

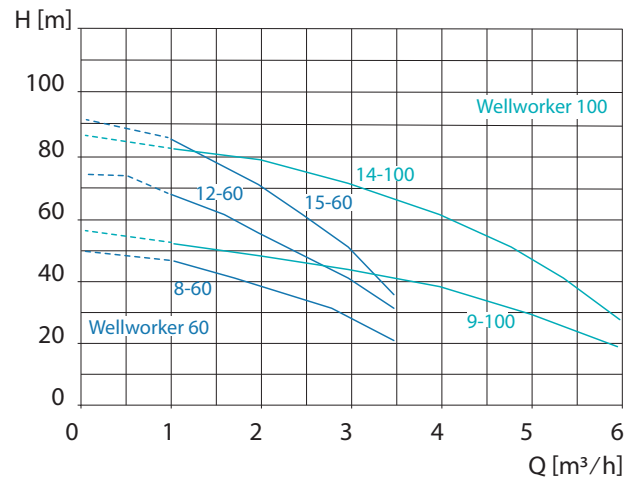
- Multistage deep well pump (230 V) with radial impellers type Wellworker
- Suitable for continuous operation
- Optimum efficiency
- Lower power consumption through speed control via Speedcontrol Box
- Plug & Play - fully electrically wired, with stainless steel cable
- Automatic shaking function
- Incl. pressure sensor
- Electronic speed control ZP Speedcontrol Box: Frequency control with dry-running protection, auto-reset function, freely adjustable differential pressure and overrun time.
- Easy wall mounting with connection for external pressure sensor
- Speedcontrol Box 230 V AC mains connection, pump motor three phase current 3 x 230 V
- 10 m stainless steel rope with rope clips
- 20 m cable H07RNF



### Applications

- For general water supply and irrigation
- For the delivery of clear water with little abrasive and with out aggressive components

### Characteristics



### Technical data

Irrigation package pro	8-60 FQB	12-60 FQB	15-60 FQB	9-100 FQB	14-100 FQB
Article number	20346	20347	20348	20349	20350
Discount group	E	E	E	E	E
Weight (kg)	17.4	16.8	18.5	17.9	20.9
<b>Electrical characteristics</b>					
Voltage (V)	230	230	230	230	230
Current (A)	4.0	6.0	7.3	7.3	8.9
Frequency (Hz)	50	50	50	50	50
Input power P1 (W)	370	550	750	750	1.100
Output power P2 (W)	222	330	450	488	715
Speed (min-1)	2.850	2.850	2.850	2.850	2.850
Protection class pump	IP 68	IP 68	IP 68	IP 68	IP 68
Connection cable length (m)	20.0	20.0	20.0	20.0	20.0
<b>Hydraulic characteristics</b>					
Max. head (m)	49.0	74.0	92.0	57.0	88.0
Max. flow rate (m³/h)	3.6	3.6	3.6	6.0	6.0
Max. medium temp. (°C)	30	30	30	30	30



#### The shaking function

The 2-wire motor automatically detects, when the hydraulic equipment of the pump gets stiff or blocked by sand or stones. In this case, the motor cuts-off the torque in fast cycles from left to right. If the pump gets released in this way, the motor keeps on running in the set direction (anticlockwise). If not, the an built-in over load protective device reacts. In practice, the shaking function provides additional safety in applications with solved solid particles in the pumped media or after a longer inoperative period.

# Raincenter Pro 15 series

## Rainwater harvesting systems

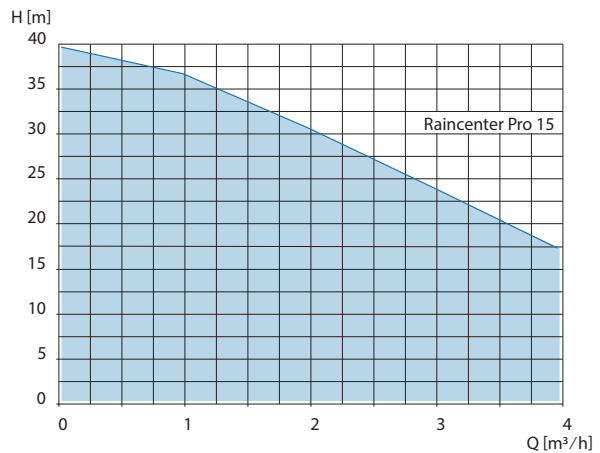
### Features

- Fully automatic, electronic control of the entire unit
- Integrated domestic waterworks CPS 15-4 with automatic switchgear KIT 02 PRO
- Suction height up to 8 m
- Quick assembly (plug & pump: connect > plug in > ready for operation)
- On-demand, in-house drinking water replenishment directly to the pump, without detours via the storage tank
- Automatic hygienic rinsing in the drinking water tank
- Automatic replenishment from the drinking water network in case of rainwater shortage
- Type comfort: level indicator with capacitive measuring method, connection option for feeder pump or backwater monitor
- Wall mounting set incl. device for vibration damping
- Level transmitter with 20 m cable

### Applications

- Compact central unit for automatic control and water supply of rainwater harvesting systems
- One- and two-family homes
- Clear water without aggressive and abrasive components

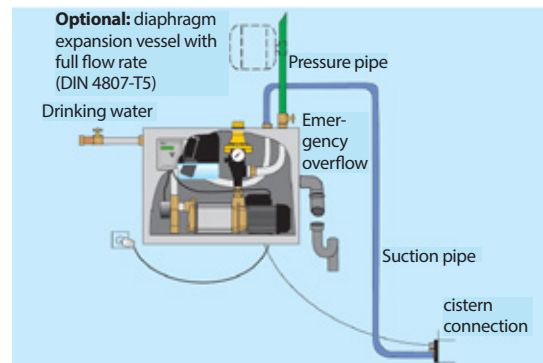
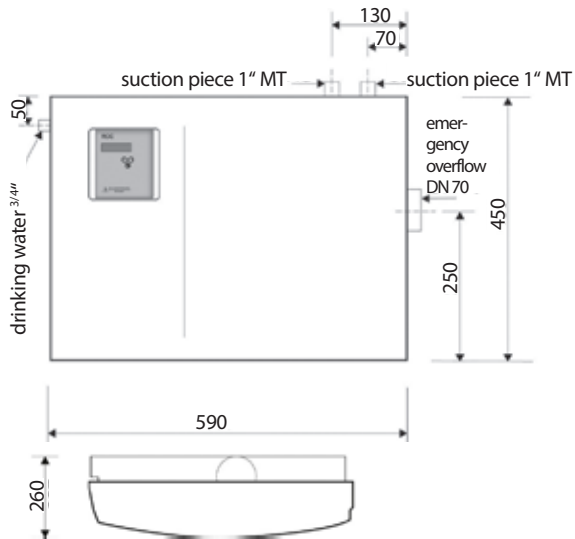
### Characteristics



### Technical data

Raincenter Pro 15	Pro Basic 15	Pro Comfort 15
Article number	19081	19084
Discount group	H	H
Weight (kg)	26,2	28,0
<b>Electrical characteristics</b>		
Voltage (V)	230	230
Current (A)	4,0	4,0
Frequency (Hz)	50	50
Capacitor C (µF)	16	16
Input power P1 (W)	900	900
Output power P2 (W)	700	700
Speed (min-1)	2.850	2.850
Protection class	IP 55	IP 55
<b>Hydraulic characteristics</b>		
Max. head (m)	40,0	40,0
Max. flow rate (m³/h)	4,0	4,0
Switch-on pressure (bar)	2,4	2,4
Make-up volume (m³/h)	3,5	3,5
Max. medium temp. (°C)	40	40

### Dimensions





# Raincenter 25 series

## Rainwater harvesting systems

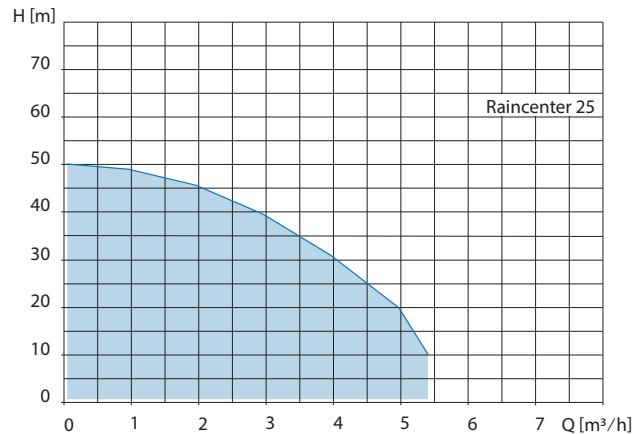
### Features

- Fully automatic, electronic control of the entire unit
- Integrated domestic waterworks CPS 20-5 with automatic switchgear ZP Control 05 Basic
- Suction height up to 8 m
- Quick assembly (plug & pump: connect > plug in > ready for operation)
- On-demand, in-house drinking water replenishment directly to the pump, without detours via the storage tank
- Automatic hygienic rinsing in the drinking water tank
- Type comfort: level indicator with capacitive measuring method, connection option for feeder pump or backwater monitor
- Wall mounting set incl. device for vibration damping
- Level transmitter with 20 m cable

### Applications

- Compact central unit for automatic control and water supply of rainwater harvesting systems
- Apartment buildings and similar objects
- Clear water without aggressive and abrasive components

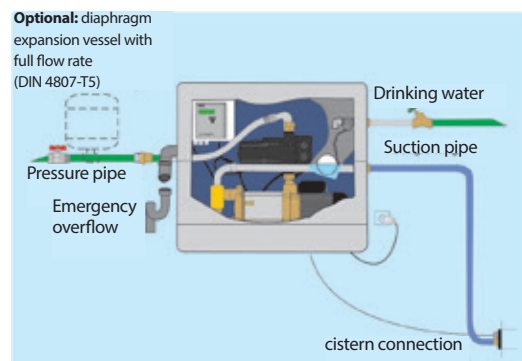
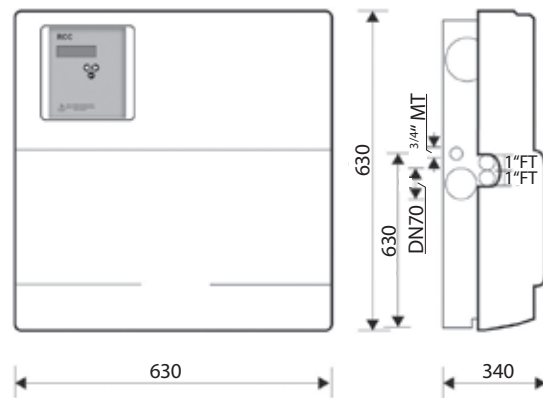
### Characteristics



### Technical data

Raincenter 25	Basic 25	Comfort 25	Comfort 25 FU
Article number	19080	19083	24140
Discount group	H	H	H
Weight (kg)	34,5	34,5	35,4
<b>Electrical characteristics</b>			
Voltage (V)	230	230	3~230
Current (A)	6,1	6,1	4,4
Frequency (Hz)	50	50	50
Capacitor C (µF)	25	25	-
Input power P1 (W)	1.350	1.350	1.350
Output power P2 (W)	1.050	1.050	1.050
Speed (min-1)	2.850	2.850	1.600 - 2.850
Protection class	IP 55	IP 55	IP 55
<b>Hydraulic characteristics</b>			
Max. head (m)	52,0	52,0	52,0
Max. flow rate (m³/h)	5,2	5,2	5,2
Switch-on pressure (bar)	2,4	2,4	1,5 - 4,0
Make-up volume (m³/h)	5,0	5,0	5,0
Max. medium temp. (°C)	40	40	40

### Dimensions



# Tacomat 2

## Rainwater harvesting systems

### Features

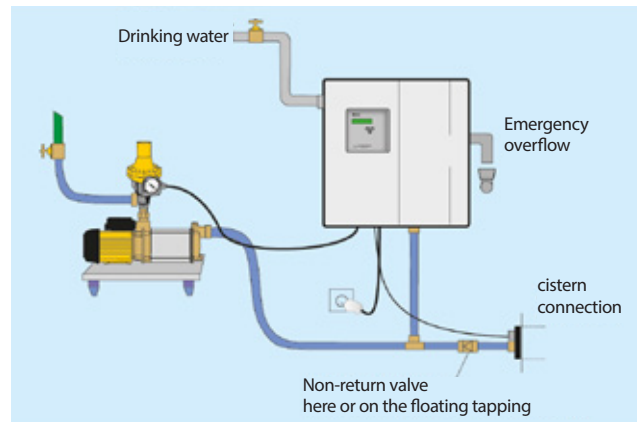
- Fully automatic, electronic control of the unit
- In combination with the pumps CPS 15
- In-house, on-demand drinking water replenishment
- Incl. wall mounting set
- Level transmitter with 20 m cable

### Applications

- Compact unit for automatic control and drinking water feeding of rainwater harvesting systems
- One- or two-family homes



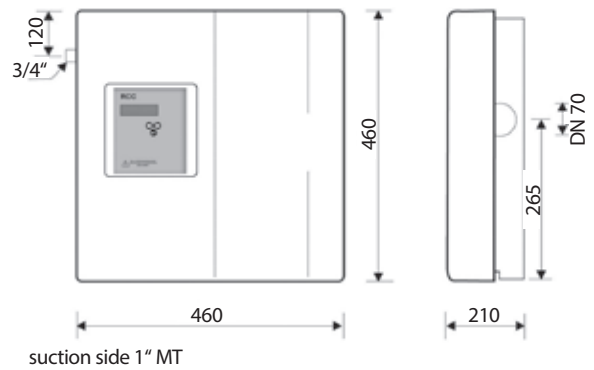
### Example of application



### Technical data

Tacomat 2	Basic 15	Comfort 15
Article number	19085	19086
Discount group	H	H
Weight (kg)	14	14
Make-up volume (m <sup>3</sup> /h)	3,5	3,5

### Dimensions



# Tacomat 5

## Rainwater harvesting systems

### Features

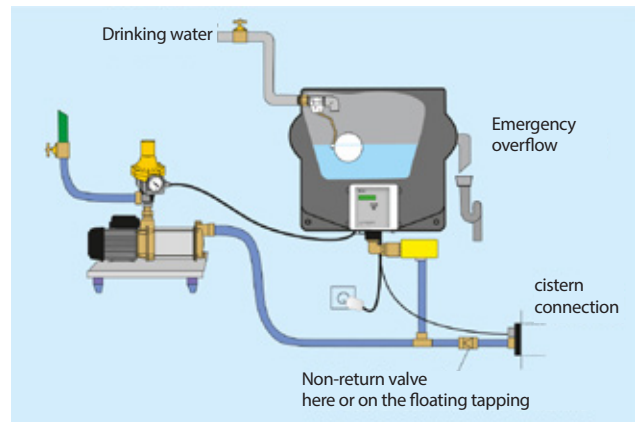
- Fully automatic, electronic control of the unit
- In combination with CPS 15/20/25 or Combipress 60
- In-house, on-demand drinking water replenishment
- Incl. wall mounting set
- Level transmitter with 20 m cable



### Applications

- Compact unit for automatic control and drinking water feeding of rainwater harvesting systems
- One- or two-family house

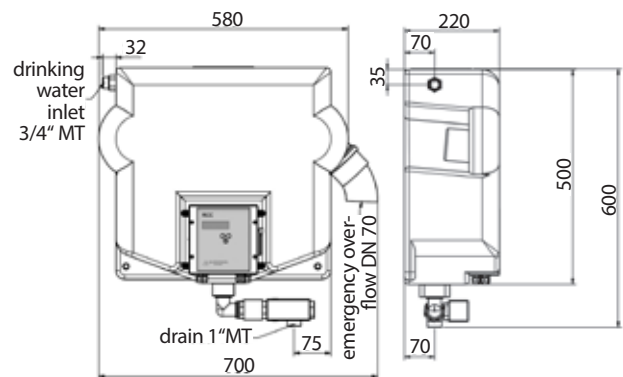
### Anwendungsbeispiel



### Technical data

Tacomat 5	Basic	Comfort
Article number	20454	20455
Discount group	H	H
Weight (kg)	9,0	9,0
Make-up volume (m <sup>3</sup> /h)	5,0	5,0

### Dimensions



# Drinking water separation station series

## Rainwater harvesting systems

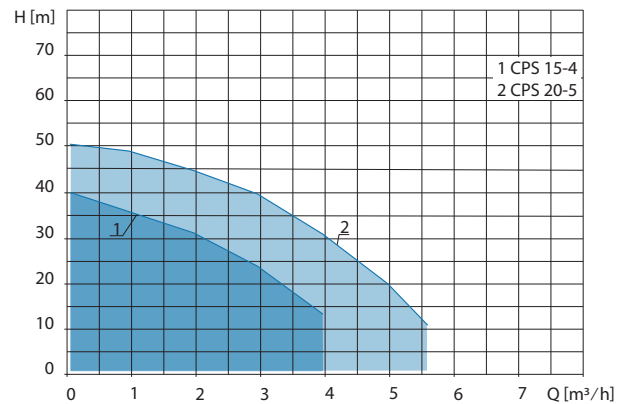
### Features

- Self-priming, maintenance-free, multi-stage, horizontal centrifugal pump
- Automatic drinking water separation
- Suction height up to 8.5 m
- Drinking water connection 3/4" AG, right; pressure line connection 1" FT, emergency overflow optionally right or left
- Automatic switch ZP Control 05 Basic / ZP Speedcontrol Comfort: When a consumer is opened, the pump switches on automatically. If all consumers are closed, the pump switches off automatically.
- Pressure stabilisation through speed control with ZP Speedcontrol Comfort
- Suction and discharge casing made of alpha brass
- Pump housing and impellers made of stainless steel 1.4301
- Shaft made of stainless steel 1.4401
- Mechanical seal made of carbon + ceramic
- Impellers made of special Noryl®
- Motor housing made of light metal L-2521
- O-ring made of NBR
- Housing kit-05, PPO recyclable

### Applications

- Irrigation
- Pressure booster systems
- For clear water without aggressive components

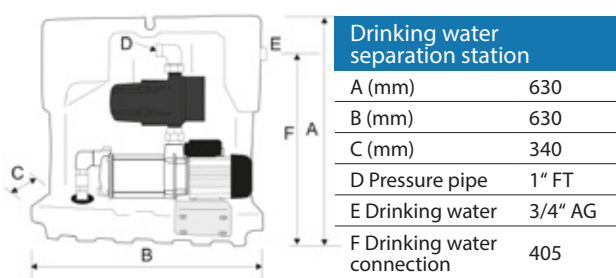
### Characteristics



### Technical data

Drinking water separation station	15-4 MB ZPC 05 Basic	20-5 MB ZPC 05 Basic	CPN 15-4 ZP Speedcontrol Comfort	CPN 20-5 ZP Speedcontrol Comfort
Article number	18859	18860	21290	21291
Discount group	H	H	H	H
Weight (kg)	30,0	30,0	31,2	33,6
<b>Electrical characteristics</b>				
Voltage (V)	230	230	1~230 /3~230	1~230 /3~230
Current (A)	4,0	6,1	2,8/1,6	4,4/2,5
Frequency (Hz)	50	50	50	50
Capacitor C (µF)	16	25	-	-
Input power P1 (W)	900	1350	900	1350
Output power P2 (W)	700	1050	700	1050
Speed (min-1)	2850	2850	2850	2850
Protection class	IP 55	IP 55	IP 55	IP 55
Power cable length (m)	1,5	1,5	1,5	1,5
<b>Hydraulic characteristics</b>				
Max. head (m)	40,0	52,0	40,0	52,0
Max. flow rate (m³/h)	12,0	5,2	4,0	5,4
Max. medium temp. (°C)	40,0	40,0	40,0	40,0

### Dimensions



# Lademax

## Rainwater harvesting systems

### Features

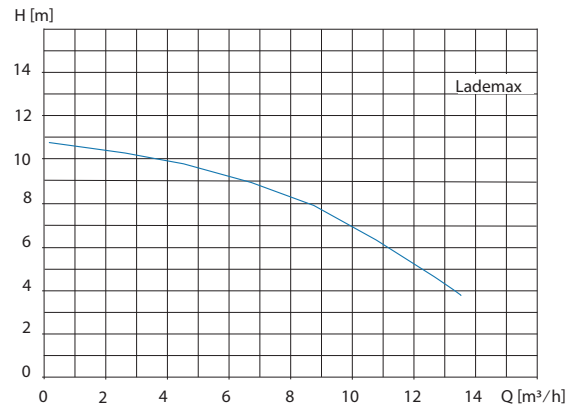
- Compact and corrosion-resistant sewage water submersible pump
- Including floating tap and check valve
- Fixed vertical float switch
- With built-in compressor
- Connecting cable, 10 m long



### Applications

- Feeder pump for rainwater modules with long suction pipes and greater suction heights
- Pumping service water

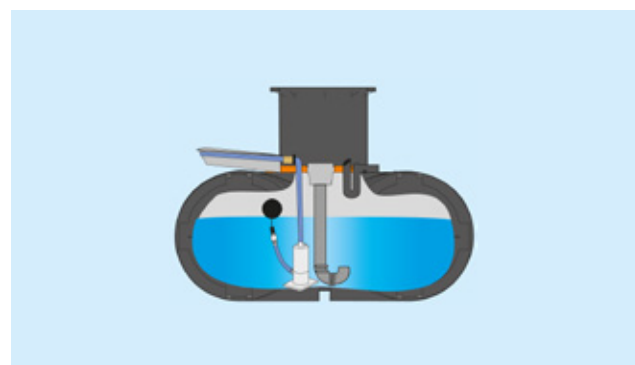
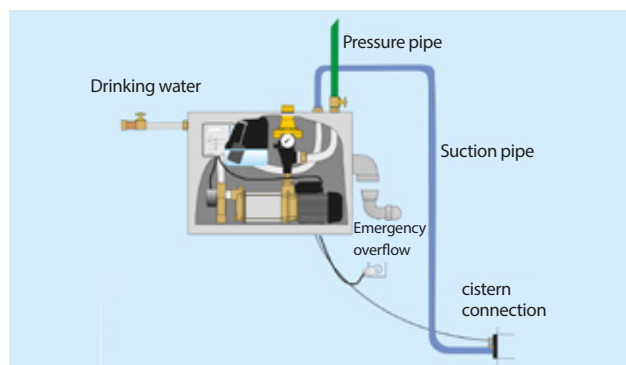
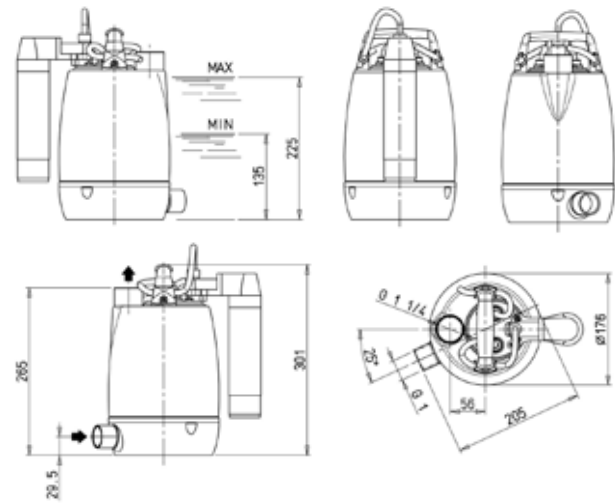
### Characteristics



### Technical data

Lademax	
Article number	19096
Discount group	H
Weight (kg)	8,0
Electrical characteristics	
Voltage (V)	230
Current (A)	3,5
Frequency (Hz)	50
Capacitor C (µF)	-
Input power P1 (W)	780
Output power P2 (W)	370
Speed (min-1)	2850
Protection class	IP 68
Hydraulic characteristics	
Max. head (m)	11,0
Max. flow rate (m³/h)	13,5
Max. medium temp. (°C)	40,0

### Dimensions





# Accessories

for Rainwater harvesting systems

Type	Art.-no.	Discount group	Weight	Figure
<b>Floating intake FLUX</b>				
Floating intake FLUX 2 m version 1" 2m	19113	H	3,0	
Floating intake FLUX 3 m version 1" 3m	19114	H	3,6	
Floating intake FLUX 2m version 1¼" 2m	19111	H	4,0	
Floating intake FLUX 3m version 1¼" 3m	19112	H	4,3	
Suction device for FLUX	19110	H	0,9	
Special rubber hose 1"	19125	H	0,3	
Special rubber hose 1¼"	19124	H	0,4	
<b>alphaClean Filter</b>				
alphaClean Filter DN 100	19450	H	2,0	
alphaClean Filter DN 100 RSK	19451	H	3,0	
alphaClean Filter DN 150 RSK	19452	H	5,0	
<b>Storage installation filter</b>				
Storage installation filter DN 100 S	19122	H	2,5	
Storage installation filter DN 150 W	19123	H	7,0	
<b>Underground installation filter</b>				
Underground installation filter DN 100	19119	H	2,0	
Underground installation filter DN 150	19120	H	7,5	
Extension piece 80 cm	19121	H	4,5	
<b>Calmed inlet</b>				
Calmed inlet DN 100 with transition sleeve	19115	H	2,0	
<b>Overflow siphon</b>				
Overflow siphon DN 100	19116	H	1,2	
Overflow siphon DN 100 with animal protection	19117	H	1,4	
<b>Outlet throttle</b>				
Outlet throttle	19394	H		

# Accessories

for Rainwater harvesting systems

Type	Art.-no.	Discount group	Weight	Figure
<b>Sealing inserts / information signs</b>				
Wall opening DN 100, 40mm	19137	H	1,0	
<b>Rapid DN 100 / DN 150 sealing insert Quick and easy feed-through of pipework and cable without dismantling the plug</b>				
Wall opening DN 100 universal with 1 x drill 32 mm / Rapid	19136	H		
Wall opening DN 150 universal with 3 drills 50 mm, 40 mm, 32 mm / Rapid	19138	H		

# Special polyethylene containers



according to customer requirements

## Features

- Special containers made of polyethylene (PE) or polypropylene (PP) in sealed or open version
- Round or angular free standing tanks without pressure
- Wall thickness meets the test and building codes of the institute for civil engineering in Berlin
- Connections either flanged or as plain end pipe
- Custom-designed containers available on request

## Applications

- Sewage collection containers
- Container for neutralisation plants
- Collecting basins
- Overflow tank
- Filter containers
- Initial collecting containers
- Silt traps

## Characteristics

- Low weight
- Food-grade quality and suitable for drinking water
- Impact and shock resistant
- High resistance against acids and caustic solutions
- PE (HWU) is weather and light resistant making it suitable for outdoor use

## Technical data

Container	round	angular
working volume (l)	50 - 20.000	100 - 20.000
max. length (mm)	-	5.000
max. width (mm)	-	2.500
max. height (mm)	-	2.500
max. diameter (mm)	2.000	-



special containers according to a technical drawing  
on-site welding available on request





# Special polyethylene containers



according to customer requirements

## Customised special containers

In our own container construction department we manufacture special containers made of polyethylene (PE) or polypropylene (PP) according to individual customer requirements. Our product variety ranges from lifting units to storage containers with a maximum storage volume of 20,000 litres, all 100% Made in Germany at our Grünhain site. The containers, which are available in round or square shapes, can be closed or open. They are manufactured in accordance with the testing and construction principles of the Institute for Building Technology in Berlin, which guarantees the highest quality.

The tank connections can be customised as flanges or pipe sockets to meet specific requirements. Our tanks are used in numerous applications, including as wastewater collection tanks, tanks for neutralisation systems and more. They offer robust, durable solutions for industry and environmental protection.

For customised solutions that meet the highest demands, contact us for comprehensive advice!



**We will be happy to advise you and provide you with a personalised quote.**

## 5 steps to a special container:

### 1. enquiry & technical coordination

No „off the shelf“ solution possible?

Then simply send an enquiry by email or call our technical experts. They will ask about your project and offer a possible solution.

### 2. design & drawing

Our design department designs the container based on the key data discussed and creates a detailed technical drawing.

### 3. technical approval

The customer receives the drawing for approval. Possible changes can of course be made.

### 4. quotation

The manufacturing and material costs are based on the drawing. Once all technical parameters have been clarified, we prepare a comprehensive quotation. The delivery time is also agreed with the customer.

### 5. production & test

We manufacture the container according to the specifications. After production, the container is inspected and tested for quality and that it is air tight. For this purpose, the tank is completely filled with water.



Fig.: Welding of PE panels

# Personal and reliable support

We are here for you - expert assistance for all pump questions



Feel free to contact us to discuss your concerns personally with our staff. We are here to assist you with technical advice, customer service, sales and order processing, or any other questions you may have.

## Order processing

---

### **Katja Fuhrmann**

Order processing

☎ 03774 / 52-126

✉ [orders@zehnder-pumpen.de](mailto:orders@zehnder-pumpen.de)

### **Caroline Gäbelein**

Order processing

☎ 03774 / 52-127

✉ [orders@zehnder-pumpen.de](mailto:orders@zehnder-pumpen.de)

### **Mandy Meißner**

Order processing

☎ 03774 / 52-129

✉ [orders@zehnder-pumpen.de](mailto:orders@zehnder-pumpen.de)

## Technical Consultation / Customer Service

---

### **Dirk Schneider**

Technical Consultation - Quotation preparation

☎ 03774 / 52-144

✉ [dirk.schneider@zehnder-pumpen.de](mailto:dirk.schneider@zehnder-pumpen.de)

### **Thomas Thanhäuser**

Technical Consultation - Quotation preparation - Service

☎ 03774 / 52-146

✉ [thomas.thanhaeuser@zehnder-pumpen.de](mailto:thomas.thanhaeuser@zehnder-pumpen.de)

### **Matthias Schmidt**

Technical Consultation - Quotation preparation - Service

☎ 03774 / 52-130

✉ [matthias.schmidt@zehnder-pumpen.de](mailto:matthias.schmidt@zehnder-pumpen.de)

**ZehnderPumpen**  **SFA** GROUP

**Zehnder Pumpen GmbH**

Zwönitzer Straße 19  
08344 Grünhain-Beierfeld  
Germany

Phone: +49 3774 52-100

Fax: +49 3774 52-150

Email: [info@zehnder-pumpen.de](mailto:info@zehnder-pumpen.de)

[www.zehnder-pumpen.de](http://www.zehnder-pumpen.de)

Certified according to DIN EN:

ISO 9001: 2015 | ISO 45001: 2018 | ISO 14001: 2015

*follow us:*



Your specialist dealer: