



New!

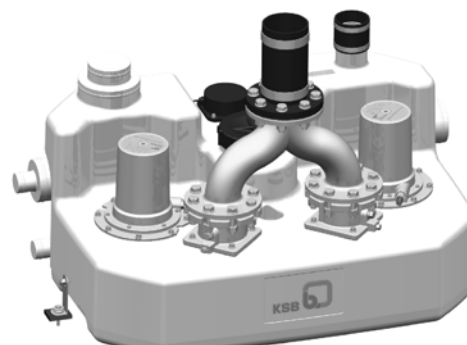
with LevelControl 2



mini-Compacta U1.60



mini-Compacta U1.100



mini-Compacta UZ1.150

Floodable sewage lifting units

CE – EN 12 050-1

Applications

Disposal of sewage from toilet facilities below the backwash level, e.g.:

- Basement flats
- Bars, basement party rooms and saunas
- Cinemas and theatres
- Department stores and hospitals
- Hotels, restaurants and pubs or schools

mini-Compacta U60

Particularly compact package units with a tank footprint as small as 500 x 500 mm, for installation in a pit or at floor level.

mini-Compacta U100

Powerful single-pump units with a high effective volume for above-average sewage volumes and high discharge heads in single-family houses.

mini-Compacta UZ150

Dual-pump units for installations requiring uninterrupted waste water drainage, e.g. in basement flats, restaurants / pubs, cinemas, etc. In accordance with EN12 050-1 a stand-by pump is required for such applications.

mini-Compacta US100/UZS150

Single- / Dual-pump units with cutter. Used in all cases where only small pipe cross sections are possible before connection to the collecting main, above all for subsequent installation in old buildings. They are used above and below the backwash level, also as pumped drainage system.

Fluid pumped

Domestic sewage and faeces.

For aggressive fluids, use variant C.

Operating data

Q up to 36 m³/h, 10 l/s

H up to 25 m

t up to 40 °C, for max. 5 minutes up to 65 °C

Mode of operation

Intermittent operation S3 50 % to VDE.

Max. number of start-ups: 60 / h

Bearings

Maintenance-free greased-for-life deep-groove ball bearings.

Designation

mini-Compacta UZ 1.150 D / C

Small package unit _____

Type series _____

U = floodable single-pump unit

UZ = floodable dual-pump unit

S = with cutter

Hydraulics code _____

Total volume of collecting tank (litres) _____

D = Three-phase motor

E = A.c. motor

C = for aggressive fluids

(Check accessories for corrosion resistance)

Materials

mini-Compacta	U60, U100, UZ150	US100, UZS150	U60 /C, U100 /C, UZ150 /C
Tank	Polyethylene	Polyethylene	Polyethylene
Pump casing	Polyethylene	Grey cast iron	Polyethylene
Impeller	Ultradur	Grey cast iron	Ultradur
Cutter	-	Nori-hard	-
Motor shaft	Stainless steel	Stainless steel	Stainless steel (V4A)
Casing cover	Grey cast iron	Grey cast iron	Stainless steel (V4A)
Check valve	Grey cast iron	-	Stainless steel (V4A)
Float	Polypropylene	Polypropylene	Polypropylene
Screws, bolts and nuts	Stainless steel	Stainless steel	Stainless steel (V4A)

Drive

Surface-cooled three-phase or single-phase a.c. motors with motor protection. Protected against overheating by integrated temperature control devices.

Motor design to VDE 0530, Part 1/IEC 34-1.

Enclosure IP 68

Thermal class F



Voltage 400 V (D) or 230 V (E)

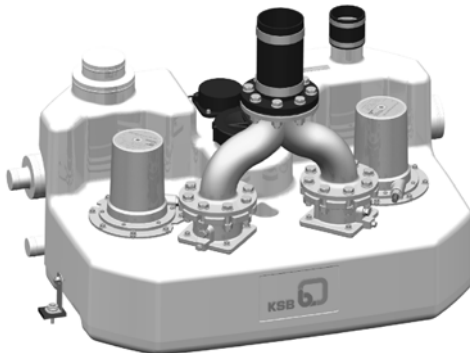
Frequency 50 Hz



Other voltages and frequencies on request.

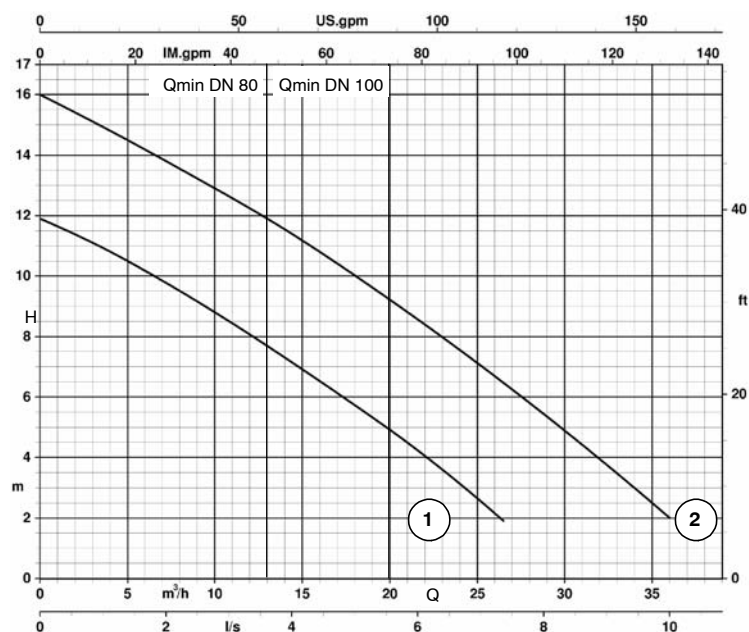
CE – EN 12 050-1

Range of mini-Compacta sewage lifting units

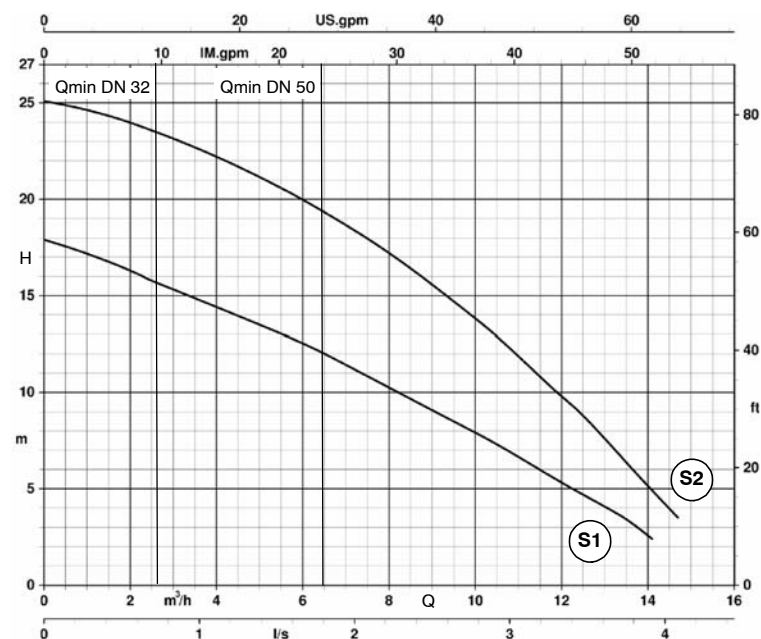
	Single-pump units
	mini-Compacta U60
<ul style="list-style-type: none"> - Hydraulics code 1 - $H_{\max.}$ 11.9 m - $Q_{\max.}$ 26.5 m³/h 	
Tank volume Installation examples	60 l Single-family houses, toilets, wash-basins and showers, basement party rooms and secondary toilets, for toilets subsequently installed in refurbished buildings
Design	Small plug-in sewage lifting unit in compact design, fully floodable, with gas- and water-proof plastic collecting tank with integrated check valve, centrifugal pump with free-flow impeller for automatic operation via electronic control unit.
	mini-Compacta U100
<ul style="list-style-type: none"> - Hydraulics codes 1 and 2 - $H_{\max.}$ 16.0 m - $Q_{\max.}$ 36 m³/h 	
Tank volume Installation examples	100 l Single or two-family houses, building extensions, developed basements, bathroom and sauna facilities in private buildings
Design	Plug-in single-pump lifting unit, fully floodable, with gas- and water-proof plastic collecting tank with integrated check valve, centrifugal pump with free-flow impeller for automatic operation via electronic control unit.

	Dual-pump unit
	mini-Compacta UZ150
<ul style="list-style-type: none"> - Hydraulics codes 1 and 2 - $H_{max.}$ 16.0 m - $Q_{max.}$ 36 m³/h 	
Tank volume Installation examples	150 l Basement flats, single or two-family houses, sanitary facilities in cinemas, theatres, restaurants and bars, public baths and sauna facilities
Design	Plug-in, micro-processor controlled sewage lifting unit designed as dual-pump station, fully floodable, gas- and water-proof plastic collecting tank with two integrated check valves and Y-pipe, two centrifugal pumps with free-flow impeller, for automatic alternate, stand-by and peak-load operation.

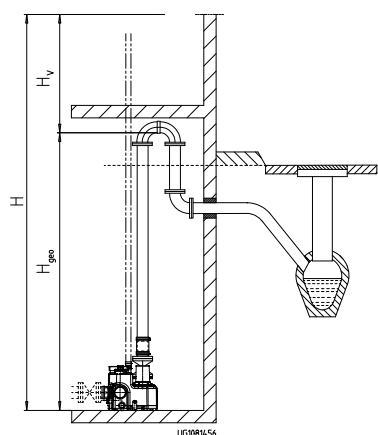
	mini-Compacta with cutter	
	Single-pump unit	Dual-pump unit
	mini-Compacta US100	mini-Compacta UZS150
<ul style="list-style-type: none"> - Hydraulics codes S1 and S2 - $H_{max.}$ 25.0 m - $Q_{max.}$ 14.5 m³/h 		
Tank volume Installation examples	100 l Refurbished buildings, weekend houses, houseboats, mobile sanitary facilities, for connecting sanitary appliances to a distant sewer	150 l Single or two-family houses, outlying houses, sewage disposal from sanitary installations with extraordinarily long discharge lines or in topographically difficult locations
Design	Plug-in, micro-processor controlled single-pump unit, fully floodable, gas and water-proof plastic collecting tank, centrifugal pump with cutter, for automatic operation.	Plug-in, micro-processor controlled sewage lifting unit designed as dual-pump station, fully floodable, gas and water-proof plastic collecting tank, two centrifugal pumps with cutter, for automatic alternate, stand-by and peak-load operation.

mini-Compacta U60, U100, UZ150


- ① mini-Compacta U1.60, U1.100, UZ1.150
- ② mini-Compacta U2.100, UZ2.150

mini-Compacta US100, UZS150


- Ⓢ1 mini-Compacta US1.100, UZS1.150
- Ⓢ2 mini-Compacta US2.100, UZS2.150




A mini-Compacta unit can be selected on the basis of the above selection charts for sewage quantities led to the lifting unit from the usual sanitary installations of a building.

For units with higher ratings please refer to type series booklet Compacta 2317.55-10.

H_v for installation conforming to specification

Units with shockproof plug or 5 pole CEE plug

Hydraulics code	Dual-pump units	Single-pump units	Total volume	Effective volume *)			P ₁ kW	P ₂ kW	n = rpm	50 Hz 1~230 V ≈A	50 Hz 3~400 V ≈A		Ident No.	appr. kg
				H = 180 mm └┐	H = 250 mm └┐	vertical └┐								
No.	mini-Compacta		I	I	I	I						m		
mini-Compacta Standard model with integrated check valve Dual-pump units UZ with Y-pipe														
①	- -	U1.60 D U1.60 E	60 60	20 20	- -	30 30	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 500 29 131 501	41 42
①	- -	U1.100 D U1.100 E	100 100	30 30	44 44	62 62	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 504 29 131 505	48 49
②	- -	U2.100 D U2.100 E	100 100	30 30	44 44	62 62	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 506 29 131 507	49 50
①	UZ1.150 D UZ1.150 E	- -	150 150	57 57	83 83	91 91	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 630 29 131 631	100 111
②	UZ2.150 D UZ2.150 E	- -	150 150	57 57	83 83	91 91	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 632 29 131 633	102 113
mini-Compacta S Model with cutter														
Ⓢ1	- -	US1.100 D US1.100 E	100 100	33 33	46 46	64 64	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 508 29 131 509	56 67
Ⓢ2	- -	US2.100 D US2.100 E	100 100	33 33	46 46	64 64	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 510 29 131 511	57 68
Ⓢ1	UZS1.150 D UZS1.150 E	- -	150 150	- -	85 85	95 95	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 634 29 131 635	116 127
Ⓢ2	UZS2.150 D UZS2.150 E	- -	150 150	- -	85 85	95 95	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 636 29 131 637	117 128
mini-Compacta C Model for aggressive fluids, with integrated check valve														
①	- -	U1.60 D/C U1.60 E/C	60 60	20 20	- -	30 30	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 512 29 131 513	41 42
①	- -	U1.100 D/C U1.100 E/C	100 100	30 30	44 44	62 62	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 516 29 131 517	48 49
②	- -	U2.100 D/C U2.100 E/C	100 100	30 30	44 44	62 62	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 518 29 131 519	49 50
①	UZ1.150 D/C UZ1.150 E/C	- -	150 150	57 57	83 83	91 91	0.93 1.01	0.75 0.75	2800 2800	- 4.5	1.7 -	4 + 1 4 + 1	29 131 638 29 131 639	100 111
②	UZ2.150 D/C UZ2.150 E/C	- -	150 150	57 57	83 83	91 91	1.75 2.0	1.5 1.5	2800 2800	- 8.7	3.0 -	4 + 1 4 + 1	29 131 640 29 131 641	102 113
Units with mains plug (UK design) or 5 pole CEE plug														
mini-Compacta Standard model with integrated check valve Dual-pump units UZ with Y-pipe														
①	- - -	U1.60 D ¹⁾ U1.60 E ¹⁾ U1.60 E ²⁾	60 60 60	20 20 20	- - -	30 30 30	0.93 1.01 1.01	0.75 0.75 0.75	2800 2800 2800	- 4.5 4.5	1.7 - -	4 + 1 4 + 1 4 + 1	29 131 534 29 131 532 29 131 533	41 42 42
①	- - -	U1.100 D ¹⁾ U1.100 E ¹⁾ U1.100 E ²⁾	100 100 100	30 30 30	44 44 44	62 62 62	0.93 1.01 1.01	0.75 0.75 0.75	2800 2800 2800	- 4.5 4.5	1.7 - -	4 + 1 4 + 1 4 + 1	29 131 537 29 131 535 29 131 536	48 49 49
②	- - -	U2.100 D ¹⁾ U2.100 E ¹⁾ U2.100 E ²⁾	100 100 100	30 30 30	44 44 44	62 62 62	1.75 2.0 1.01	1.5 1.5 1.5	2800 2800 2800	- 8.7 8.7	3.0 - -	4 + 1 4 + 1 4 + 1	29 131 540 29 131 538 29 131 539	49 50 50
①	UZ1.150 D ¹⁾ UZ1.150 E ¹⁾ UZ1.150 E ²⁾	- - -	150 150 150	57 57 57	83 83 83	91 91 91	0.93 1.01 1.01	0.75 0.75 1.5	2800 2800 2800	- 4.5 4.5	1.7 - -	4 + 1 4 + 1 4 + 1	29 131 545 29 131 666 29 131 668	100 111 111
②	UZ2.150 D ¹⁾ UZ2.150 E ¹⁾ UZ2.150 E ²⁾	- - -	150 150 150	57 57 57	83 83 83	91 91 91	1.75 2.0 2.0	1.5 1.5 1.5	2800 2800 2800	- 8.7 8.7	3.0 - -	4 + 1 4 + 1 4 + 1	29 131 548 29 131 667 29 131 669	102 113 113
mini-Compacta S Model with cutter														
Ⓢ1	- -	US1.100 E	100	33	46	64	2.0	1.5	2800	8.7	-	4 + 1	29 131 541	56
Ⓢ2	-	US2.100 E	100	33	46	64	2.0	1.5	2800	8.7	-	4 + 1	29 131 542	57
Ⓢ1	UZS1.150 E	-	150	-	85	95	2.0	1.5	2800	8.7	-	4 + 1	29 131 549	116
Ⓢ2	UZS2.150 E	-	150	-	85	95	2.0	1.5	2800	8.7	-	4 + 1	29 131 613	117

*) Effective volume as a function of inlet nozzle level H (mm)

¹⁾ DN₂ 65 ²⁾ DN₂ 80 / 100

Product features

to our customers' benefit

mini-Compacta U1.60

The smallest, fully fledged lifting unit to EN 12050-1 by KSB

Your benefit:

- Reduced investment costs due to smaller footprint

LevelControl operated

Your benefit:

- Reliable operation due to self-diagnosis

LevelControl operated

Your benefit:

- Information about the operating status of the system is provided via a volt-free contact

Steep characteristic curve

Your benefit:

- Reliable function: unit automatically adapts to friction losses in the piping

Manifold connection options

Your benefit:

- Straightforward, time-saving installation

Analog level sensor

Your benefit:

- Direct level detection enables automatic response to varying operating conditions

LevelControl operated

Your benefit:

- Energy savings thanks to novel, demand-driven torque adjustment on cutter model



Shaft seal

Impeller end: shaft seal ring
(mechanical seal on mini-Compacta US / UZS and "C" variant)

Impeller end: shaft seal ring
A grease fill is provided between the two seal elements.

Special design on request

Systems for improved fire protection / halogen-free cables

Flooding

The mini-Compacta units are protected against flooding.

Max. submersion depth: 2 metres

Flooding period: 7 days

The units must not be installed in outdoor pits.

All electrical equipment such as socket, CEE plug and alarm switchgear must be installed in a dry, flood-proof location.

Installation at Site

EN 12 056-4 "Sewage Lifting Units – Planning and Design" stipulates that domestic waste water produced below the backwash level and rain water from surfaces below the backwash level must be led into the public sewer system by an automatic lifting unit preventing backwash.

If the responsible authorities have not determined the backwash level, the backwash level is taken to be at least the street level (including footways) at the connection point.

Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced. The installation room must be sufficiently lit and well ventilated. For drainage of rooms in which sewage lifting units to EN

12 050-1 are located a pump sump with a special drainage pump (e.g. Ama-Drainer) has to be provided.

Pipe connections on sewage lifting units must be provided with sound-proof insulation and have to be flexible.

Collecting tanks for sewage containing faeces must not be integrated into the structure of the building. Within the building, only sewage lifting units with separately installed collecting tanks may be used for handling faeces-containing sewage.

EN 12 050-1 stipulates that in installations where sewage disposal must not be interrupted, a lifting unit with dual-pump set must be installed.

Surface water outside the building below the backwash level must not be combined with the domestic sewage but must be handled separately by a waste water lifting unit outside the building.

A gate valve must be fitted on the inlet side as well as on the discharge side downstream of the check valve (see accessories).

The discharge line of the lifting unit must be led above the backwash level (in the form of a pipe loop).

The effective volume of the lifting unit must be greater than the volumetric content of the discharge pipe up to the backwash loop.

The flow velocity in the discharge line must not be less than 0.7 m/s and must not exceed 2.3 m/s (EN 12 056-4).

Lead the vent pipe out of the roof.

The vent pipe connection must have a minimum nominal diameter of DN 50. If changes of direction are unavoidable, the pipe should be laid with a gradient of at least 1:50.

Application limits

The units are designed for S3 operation (intermittent operation). They are used for disposal of domestic sewage from toilets, bathrooms, washrooms and showers.

Connection nozzles

mini-Compacta	Inlet side	Discharge side	Venting	Connection for hand diaphragm pump
U60	horizontal: 2 x DN 100, offset by 90°, inlet nozzle level 180 mm, 1 x DN 50 vertical: 1 x DN 100/50, graded	DN 80/100 optional: discharge line DN 80/80	DN 50	DN 40 (Rp 1 1/2)
U100	horizontal: 1 x DN 150/100, graded, inlet nozzle level 180 mm, 2 x DN 150/100, graded, inlet nozzle level 250 mm vertical: 1 x DN 150/100, graded	DN 80/100 optional: discharge line DN 80/80	DN 70	DN 40 (Rp 1 1/2)
UZ150	horizontal: 1 x DN 150/100, graded, inlet nozzle level 180 mm, 1 x DN 100/50, graded, inlet nozzle level 250 mm, 1 x DN 150/100, graded, inlet nozzle level 250 mm vertical: 1 x DN 150/100, graded	DN 80/100 (discharge line from Y-pipe DN 100) optional: discharge line DN 80/80	DN 70	DN 40 (Rp 1 1/2)
US100	horizontal: 1 x DN 150/100, graded, inlet nozzle level 180 mm, 2 x DN 150/100, graded, inlet nozzle level 250 mm vertical: 1 x DN 150/100, graded	DN 50 (discharge line DN 32 possible)	DN 70	DN 40 (Rp 1 1/2)
UZS150	horizontal: 1 x DN 150/50, graded, 1 x DN 150/100, graded, inlet nozzle level 250 mm vertical: 1 x DN 150/100, graded	2 x DN 50 (discharge line DN 32 possible)	DN 70	DN 40 (Rp 1 1/2)

Electrical installation – Control units

All switchgears and control units required for operation of the unit are included in the scope of supply. They feature an integrated acoustic alarm and volt-free signalling contact for transmitting fault messages to an alarm switchgear or directly to a control room. All switchgears and control units are supplied in enclosure IP 54 and must, therefore, be installed in a flood-proof location in a well-ventilated room.

mini-Compacta / control unit combinations

mini-Compacta Single-pump units	Control unit
U1.60 D	LevelControl Basic D
U1.100 D U2.100 D US1.100 D US2.100 D	LevelControl Basic D Optional: LevelControl Advanced D
U1.60 E	LevelControl Basic E25
U1.100 E	LevelControl Basic E25 Optional: LevelControl Advanced E25
U2.100 E	LevelControl Basic E40 Optional: LevelControl Advanced E40
US1.100 E US2.100 E	LevelControl Advanced ES
Dual-pump units	Control unit
UZ1.150 D UZ2.150 D UZS1.150 D UZS2.150 D	LevelControl Basic 2 ZD Optional: LevelControl Advanced ZD
UZ1.150 E	LevelControl Basic 2 ZE25 Optional: LevelControl Advanced ZE25
UZ2.150 E	LevelControl Basic 2 ZE40 Optional: LevelControl Advanced ZE40
UZS1.150 E UZS2.150 E	LevelControl Advanced ZES

LevelControl Basic control unit

- Plug-in, with 1 m power supply cable
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Acknowledgement button
- Indicator lamp for pump status
- Indicator lamp for high water
- Indicator lamp for rotary field (three-phase current only)
- Pump protection by thermal circuit breaker
- Input for external fault message
- General fault message or volt-free "system operational" message
- Integrated alarm buzzer
- Battery-backed, mains-independent alarm
- Straightforward parameterisation of tank data via DIL switch during commissioning

Special features of LevelControl Basic models

LevelControl Basic D (CU 1 10 V T45 1 0 0 A D)	<ul style="list-style-type: none"> – Standard single-pump control unit for three-phase motor – Three-phase connection
LevelControl Basic E25 (CU 1 10 V SC2 1 0 0 A A)	<ul style="list-style-type: none"> – Integrated run capacitor (C = 25 µF) for operating a single-phase motor with a power rating of 0.75 kW – Single-phase mains connection
LevelControl Basic E40 (CU 1 10 V SC4 1 0 0 A A)	<ul style="list-style-type: none"> – Integrated run capacitor (C = 40 µF) for operating a single-phase motor with a power rating of 1.5 kW – Single-phase mains connection



LevelControl Basic D

LevelControl Basic 2 control unit

- Plug-in, with 1 m power supply cable
- Three-phase connection
- Integrated master switch (LevelControl Basic 2 BS only)
- Numerical display with status indication (traffic light) and navigation keys
- Fluid level indication
- Indication of operating data
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Indicator lamps
- Indicator lamp for high water
- Pump protection by thermal circuit breaker
- Integrated alarm buzzer
- Battery-backed, mains-independent alarm
- Two inputs for external fault message and remote acknowledgement
- General fault message or volt-free "system operational" message
- Even distribution of pump operating hours due to automatic pump changeover
- Parameterisable service intervals
- Diagnostic and message functions
- Straightforward system configuration thanks to factory parameterisation and parameterisation assistant
- Numerous additional functions (e.g. monitoring of supply voltage, intelligent system monitoring, and many more)



LevelControl
Basic 2 BC



LevelControl
Basic 2 BS

Special features of LevelControl Basic models

LevelControl Basic 2 ZD (BC2 400 DVNA 100 B0)	<ul style="list-style-type: none"> - Standard dual-pump control unit - Three-phase connection
LevelControl Basic 2 ZE25 (BC2 230 XVNA 040 BA)	<ul style="list-style-type: none"> - Dual-pump control unit with integrated run capacitors ($C = 25 \mu\text{F}$) for operating two single-phase motors with a power rating of 0.75 kW each - Single-phase connection
LevelControl Basic 2 ZE40 (BC2 230 XVNA 063 BA)	<ul style="list-style-type: none"> - Dual-pump control unit with integrated run capacitors ($C = 40 \mu\text{F}$) for operating two single-phase motors with a power rating of 1.5 kW each - Single-phase connection

LevelControl Advanced control unit

- Plug-in, with 1 m power supply cable
- 4 m motor connection cable
- Integrated master switch (LevelControl Advanced SU only)
- Multilingual graphical display with status indication (traffic light) and navigation keys
- Easy parameterisation of the main functions in the Quick Menu and Root Menu
- Indication of the liquid level in the root menu
- Indication of operating data
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Indicator lamps for pump status
- Indicator lamp for high water
- Pump protection by thermal circuit breaker
- Integrated alarm buzzer
- Battery-backed, mains-independent alarm
- Two inputs for external fault message and remote acknowledgement
- General fault message or volt-free "system operational" message
- Even distribution of pump operating hours due to automatic pump changeover
- Parameterisable service intervals
- 20 plain-text diagnostic and message functions
- Archiving of data of the last 30 faults
- Straightforward system configuration using parameterisation assistant ("Wizard")
- Numerous additional functions (e.g. monitoring of supply voltage, measuring effective power, determining the power factor, intelligent system monitoring, and many more)



LevelControl
Advanced CU

LevelControl
Advanced SU

Special features of LevelControl Advanced models

LevelControl Advanced D (CU 1 10 V T5 1 0 0 Z D) (optional - instead of Level-Control Basic D, for U100 only)	<ul style="list-style-type: none"> - Single-pump control unit - Three-phase connection
LevelControl Advanced E25 (SU 1 10 V SC2 1 0 0 Z A) (optional - instead of Level-Control Basic E25)	<ul style="list-style-type: none"> - Single-pump control unit with integrated run capacitor (C = 25 µF) for operating a single-phase motor with a power rating of 0.75 kW - Single-phase connection
LevelControl Advanced E40 (CU 1 10 V SC4 1 0 0 Z A) (optional - instead of Level-Control Basic E40)	<ul style="list-style-type: none"> - Single-pump control unit with integrated run capacitor (C = 40 µF) for operating a single-phase motor with a power rating of 1.5 kW - Single-phase connection
LevelControl Advanced ES (SU 1 10 V SCC 1 0 0 Z A)	<ul style="list-style-type: none"> - Single-pump control unit with integrated run capacitor (C = 40 µF) for operating a single-phase motor with a power rating of 1.5 kW - Additional load-dependent cut-in / cut-out of a start capacitor (C = 66 µF) - Single-phase connection
LevelControl Advanced ZD (CU 2 10 V T5 1 0 0 Z D)	<ul style="list-style-type: none"> - Standard dual-pump control unit - Three-phase connection
LevelControl Advanced ZE25 (SU 2 10 V SC2 1 0 0 Z A)	<ul style="list-style-type: none"> - Dual-pump control unit with integrated run capacitors (C = 25 µF) for operating two single-phase motors with a power rating of 0.75 kW each - Single-phase connection
LevelControl Advanced ZE40 (SU 2 10 V SC4 1 0 0 Z A)	<ul style="list-style-type: none"> - Dual-pump control unit with integrated run capacitors (C = 40 µF) for operating two single-phase motors with a power rating of 1.5 kW each - Single-phase connection
LevelControl Advanced ZES (SU 2 10 V SCC 1 0 0 Z A)	<ul style="list-style-type: none"> - Dual-pump control unit with integrated run capacitors (C = 40 µF) for operating two single-phase motors with a power rating of 1.5 kW each - Additional load-dependent cut-in / cut-out of a start capacitor (C = 66 µF) per pump - Single-phase connection

**mini-Compacta U60, U100, UZ150
US100, UZS150**

Inlet line

Variant 1 ¹⁾

Tank connection
DN 100

Variant 2

Tank connection
DN 100/150

Variant 3

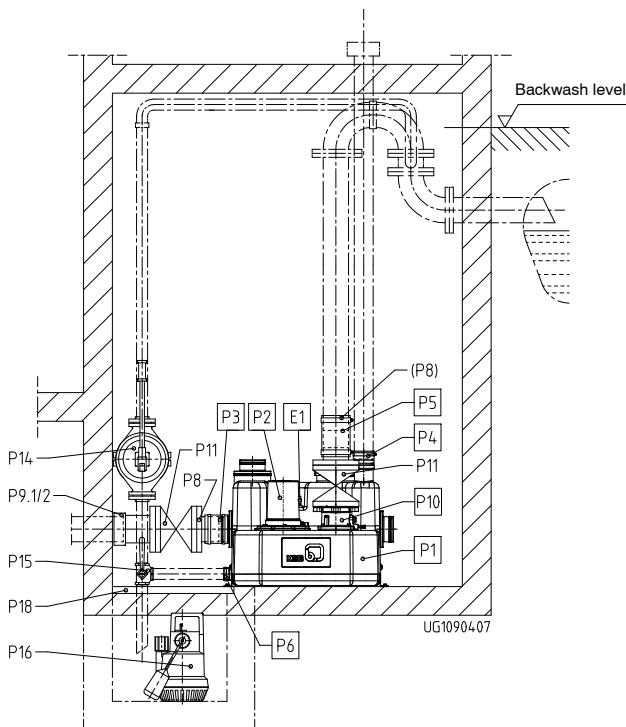
Variant 4

Tank connection
DN 100/150

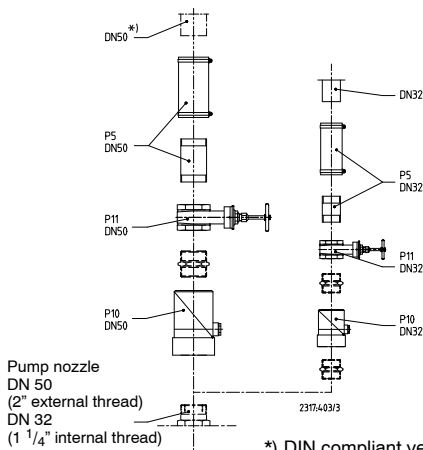
site-supplied P11 P3 DN100
P3 DN150 2317-4-01/2

1) For direct connection to toilet only. For standard applications EN 12056-4 stipulates a waste water gate valve

**mini-Compacta U60, U100, US100
Single-pump unit**



**Discharge line
mini-Compacta US100**



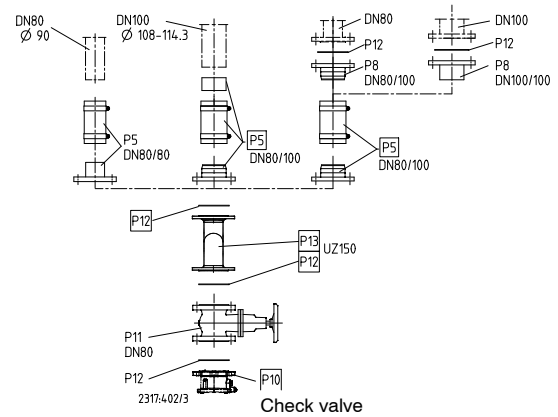
*) DIN compliant version DN 50

mini-Compacta U60, U1010, UZ150

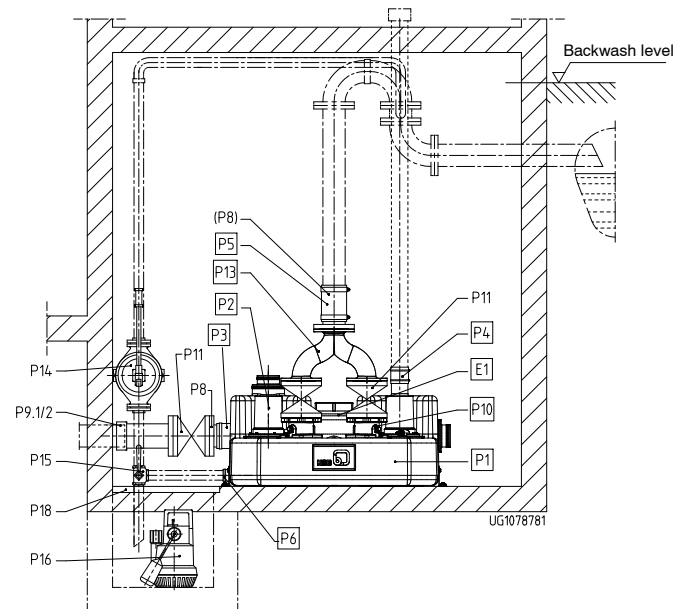
Discharge line

Variant 1

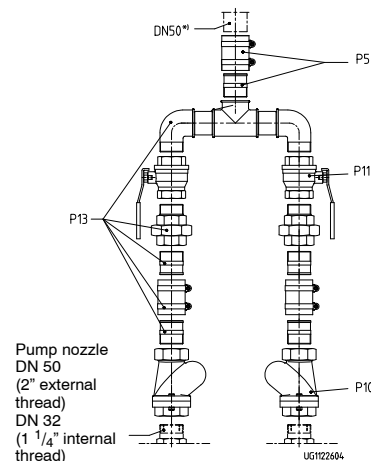
Variant 2



**mini-Compacta UZ150, UZS150
Dual-pump unit**



**Discharge line
mini-Compacta UZS150**



*) DIN compliant version DN 50

mini-Compacta U60	mini-Compacta U100	mini-Compacta UZ150	mini-Compacta US100	mini-Compacta UZS150	Scope of supply / Accessories
<input type="checkbox"/> P 1	<input type="checkbox"/> P 1	<input type="checkbox"/> P 1	<input type="checkbox"/> P 1	<input type="checkbox"/> P 1	Gas-, smell- and water-proof collecting tank of impact-resistant plastic
<input type="checkbox"/> P 2	<input type="checkbox"/> P 2	<input type="checkbox"/> P 2	<input type="checkbox"/> P 2	<input type="checkbox"/> P 2	Fully floodable submersible motor pump
<input type="checkbox"/> P 3	<input type="checkbox"/> P 3	<input type="checkbox"/> P 3	<input type="checkbox"/> P 3	<input type="checkbox"/> P 3	Flexible hose connection and hose clips DN 100 (inlet)
P 3 -	- P 3	P 3 P 3	- P 3	P 3 P 3	Flexible hose connection and hose clips DN 50 Flexible hose connection and hose clips DN 150
<input type="checkbox"/> P 4	<input type="checkbox"/> P 4	<input type="checkbox"/> P 4	<input type="checkbox"/> P 4	<input type="checkbox"/> P 4	Flexible hose connection and hose clips (venting)
<input type="checkbox"/> P 5	<input type="checkbox"/> P 5	<input type="checkbox"/> P 5	-	-	Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hoesetail DN 100, fabric reinforced rubber hose and adapter hose for outer pipe diameters of 108 - 114.3 mm
P 5	P 5	P 5	-	-	Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hoesetail DN 80, fabric-reinforced rubber hose
-	-	-	P 5	P 5	Flexible hose connection for discharge line, consisting of rubber hose, nipple joint and hose clips
<input type="checkbox"/> P 6	<input type="checkbox"/> P 6	<input type="checkbox"/> P 6	<input type="checkbox"/> P 6	<input type="checkbox"/> P 6	Flexible hose connection and hose clips (hand diaphragm pump)
P 8	P 8	P 8	P 8	P 8	Flanged coupling with hoesetail
P 9.1 -	P 9.1 P 9.1	P 9.1 P 9.1	P 9.1 P 9.1	P 9.1 P 9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm DN 150 for outside pipe diameter of 170 mm
P 9.2 -	P 9.2 P 9.2	P 9.2 P 9.2	P 9.2 P 9.2	P 9.2 P 9.2	Flange adapter (for connecting pipe of different materials) DN 100 for outside pipe diameters of 107.2 - 127.8 mm, L 105 mm DN 150 for outside pipe diameters of 158.2 - 181.6 mm, L 105 mm
<input type="checkbox"/> P 10	<input type="checkbox"/> P 10	<input type="checkbox"/> P 10	P 10	P 10	Check valve with full port and lifting screw Check valve
P 11	P 11	P 11	P 11	P 11	Shut-off gate valve
P 12	P 12	P 12	P 12	P 12	Set of mounting accessories
-	-	<input type="checkbox"/> P 13	-	-	Y-pipe DN 80 with 2 sets of mounting accessories
-	-	-	-	P 13	Y-pipe DN 50
P 14	P 14	P 14	P 14	P 14	Hand diaphragm pump ISO 7/I-Rp 1 1/2
P 15	P 15	P 15	P 15	P 15	Three-way plug valve ISO 7/I-Rp 1 1/2
P 16	P 16	P 16	P 16	P 16	Fully automatic drainage pump Ama-Drainer SE/SD with swing check valve
P 18	P 18	P 18	P 18	P 18	Cover plate A, 560 □ for pits 500 x 500 mm (for Ama-Drainer)
<input type="checkbox"/> E 1	<input type="checkbox"/> E 1	-	<input type="checkbox"/> E 1	-	Analog level sensor for pump and alarm buzzer
-	-	<input type="checkbox"/> E 1	-	<input type="checkbox"/> E 1	Analog level sensor for pump 1, pump 2 and alarm buzzer, stand-by pump automatically starts up during peak loads
<input type="checkbox"/> E 3 ¹⁾	<input type="checkbox"/> E 3 ¹⁾	<input type="checkbox"/> E 3 ¹⁾	<input type="checkbox"/> E 3 ¹⁾	<input type="checkbox"/> E 3 ¹⁾	Electronic control unit with integrated alarm and charging circuit, with high-quality rechargeable battery and alarm buzzer
E 50 ¹⁾	E 50 ¹⁾	E 50 ¹⁾	E 50 ¹⁾	E 50 ¹⁾	Alarm switchgear AS 0
E 51 ¹⁾	E 51 ¹⁾	E 51 ¹⁾	E 51 ¹⁾	E 51 ¹⁾	Alarm switchgear AS 2
E 52 ¹⁾	E 52 ¹⁾	E 52 ¹⁾	E 52 ¹⁾	E 52 ¹⁾	Alarm switchgear AS 4
E 53 ¹⁾	E 53 ¹⁾	E 53 ¹⁾	E 53 ¹⁾	E 53 ¹⁾	Alarm switchgear AS 5
E 64 ¹⁾	E 64 ¹⁾	E 64 ¹⁾	E 64 ¹⁾	E 64 ¹⁾	Moisture sensor F 1

¹⁾ not shown in drawing

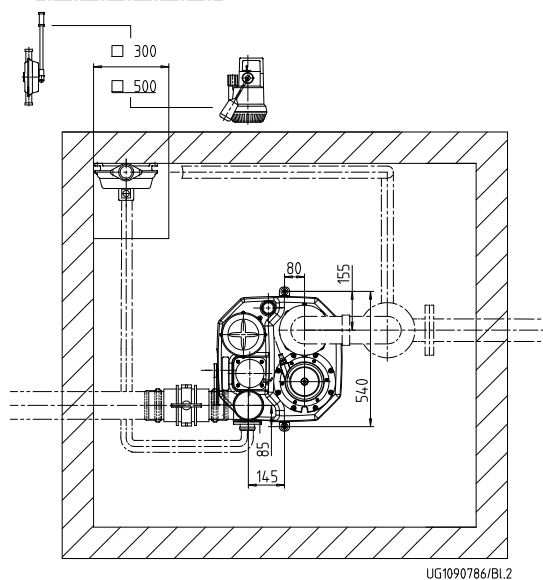
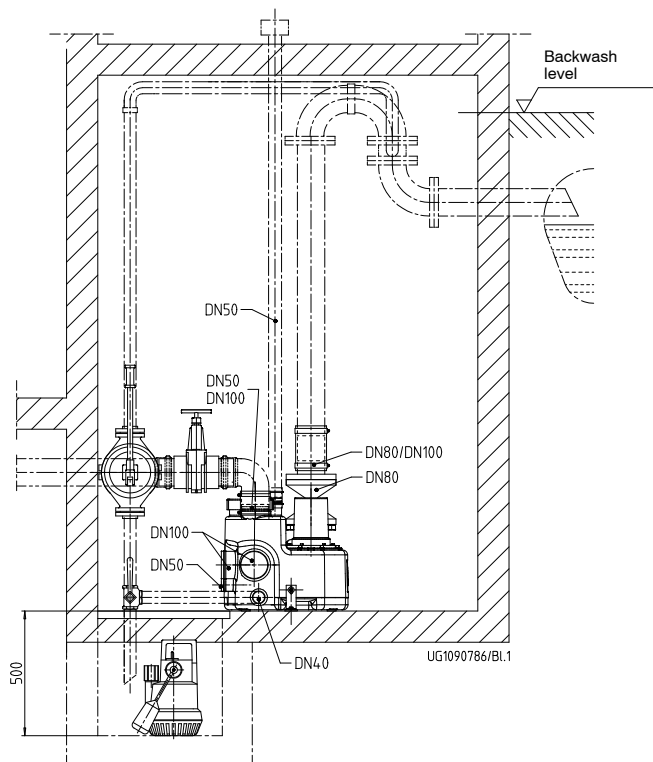
The items marked ☐ are included in the scope of supply

Connection examples

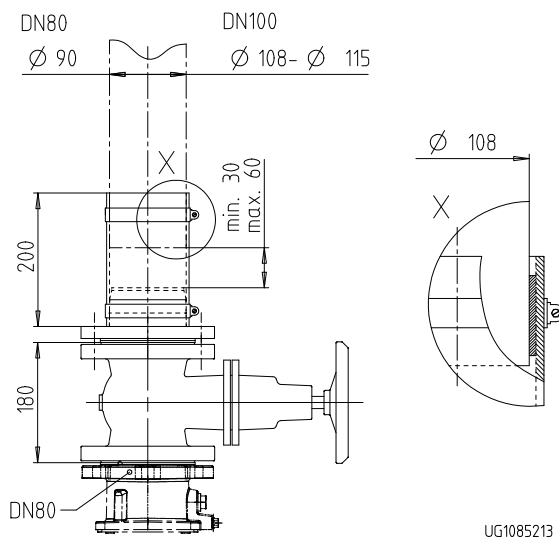
Note:

Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced.

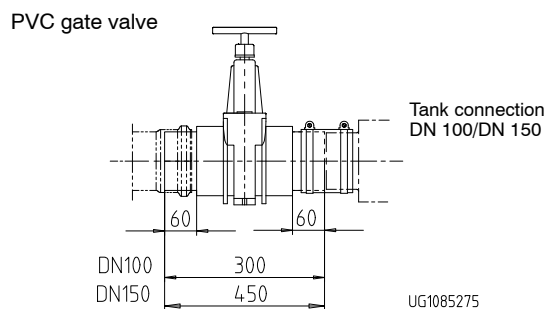
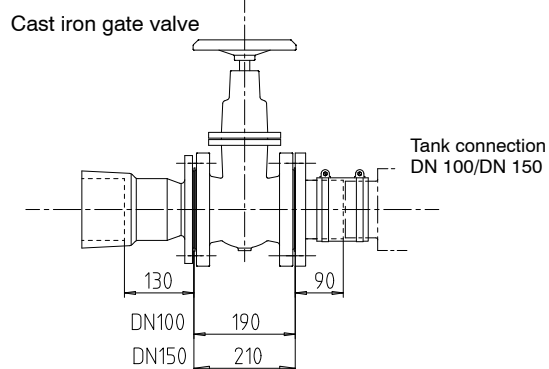
mini-Compacta U60



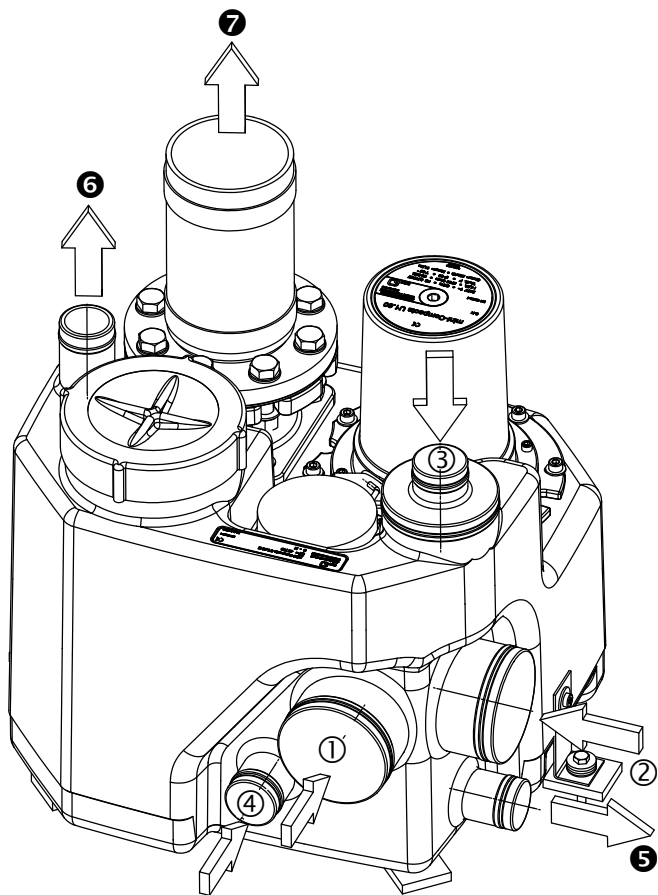
mini-Compacta U60 Discharge line



mini-Compacta U60 Inlet line



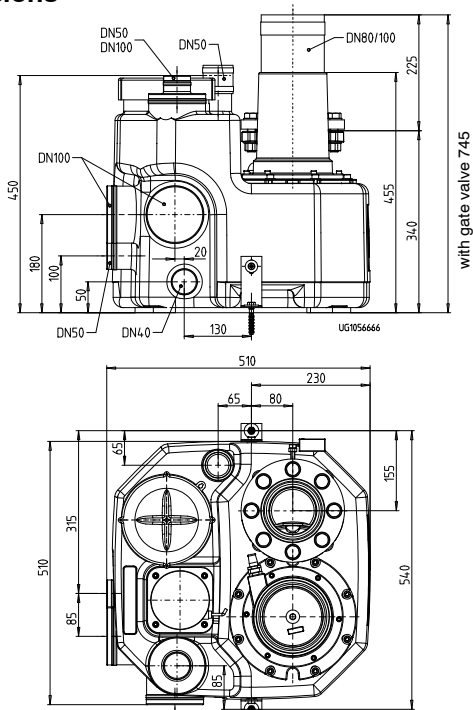
mini-Compacta U60 Connections



- ① Inlet DN 100
- ② Inlet DN 100
- ③ Inlet DN 100/50
- ④ Inlet DN 50 ¹⁾
- ⑤ Drain DN 40
- ⑥ Vent DN 50
- ⑦ Discharge line DN 80/100

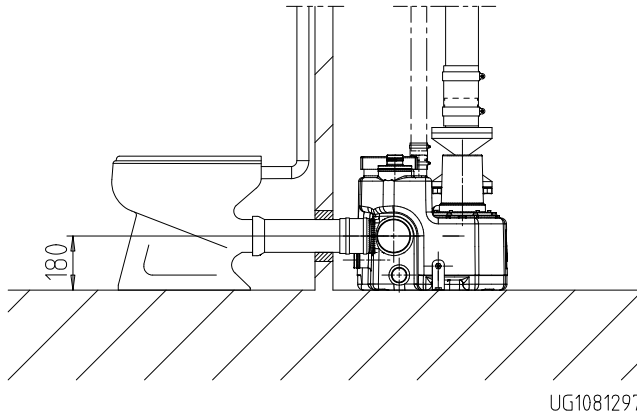
1) To prevent backflow, all sanitary applications must be connected to mini-Compacta units with their pipe invert at least 180 mm above the tank floor.

mini-Compacta U60 Dimensions



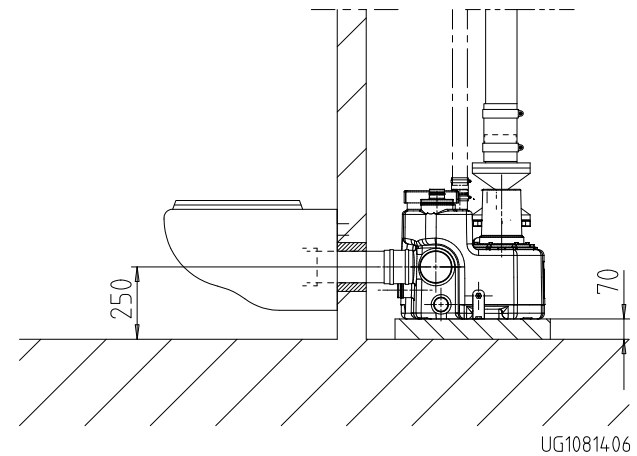
mini-Compacta U60 / U100 / US100

Connection to floor-mounted toilet bowl



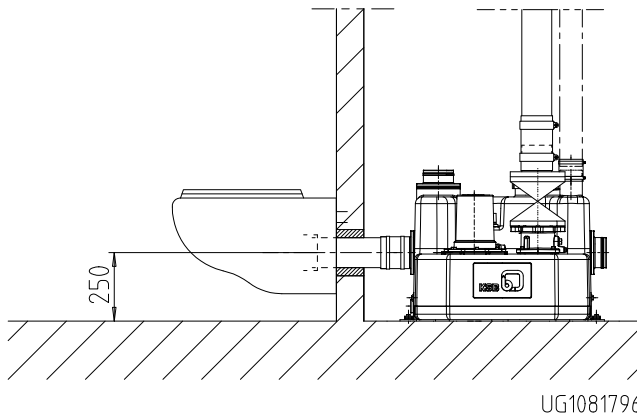
mini-Compacta U60

Connection to wall-mounted toilet bowl



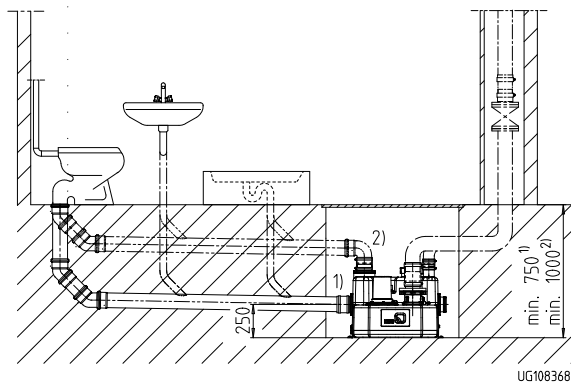
mini-Compacta U100 / US100

Connection to wall-mounted toilet bowl



mini-Compacta U60 / U100 / US100

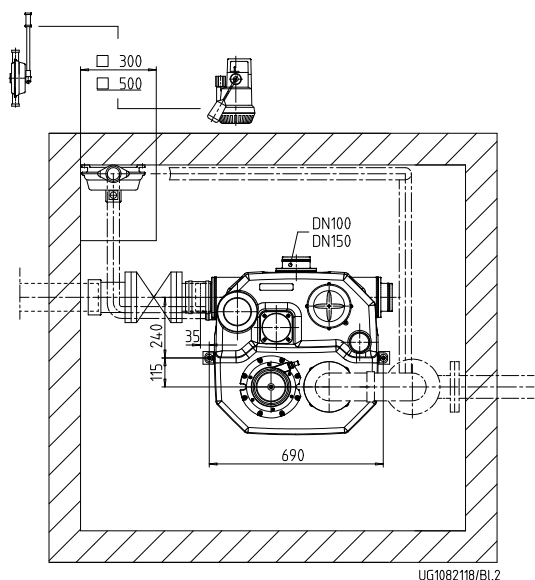
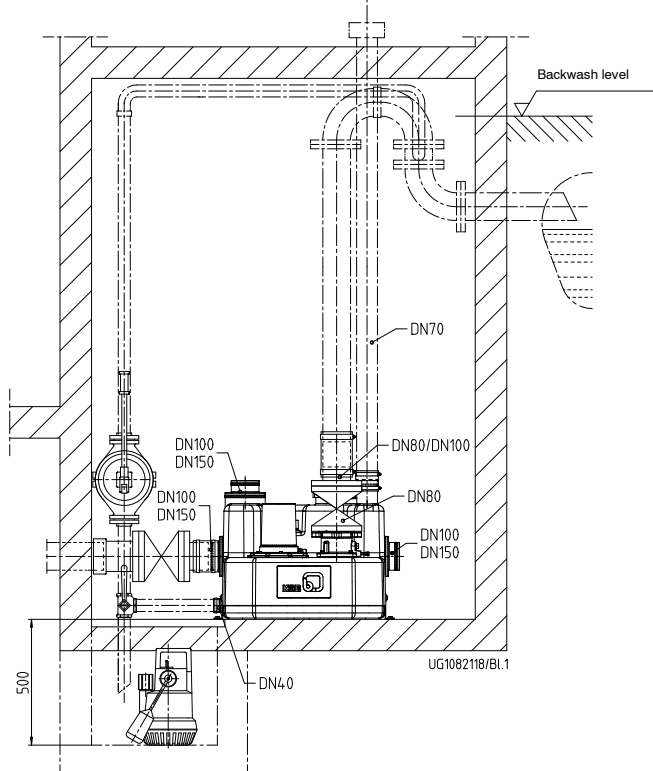
Pit installation



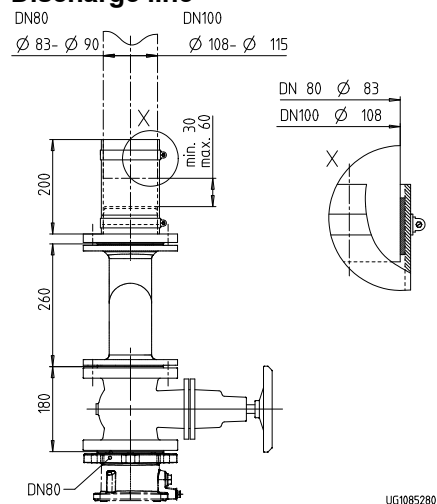
Note:

Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced.

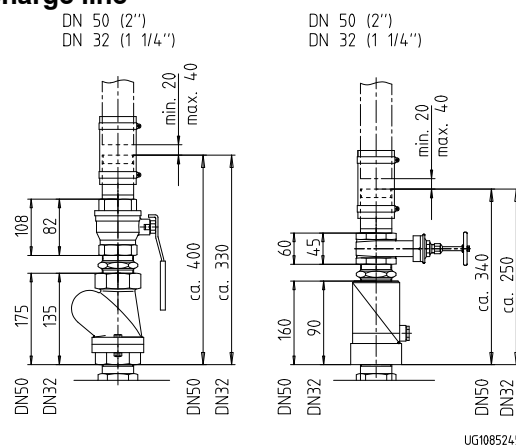
mini-Compacta U100 / US100



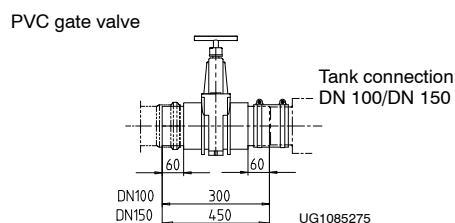
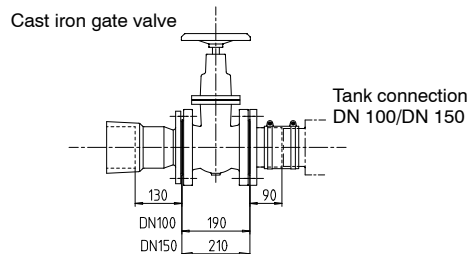
**mini-Compacta U100
Discharge line**



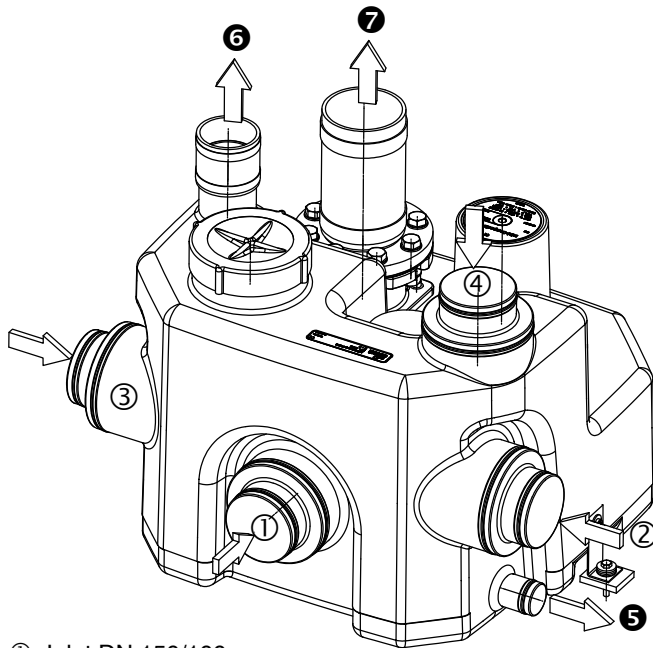
**mini-Compacta US100
Discharge line**



**mini-Compacta U100 / US100
Inlet line**

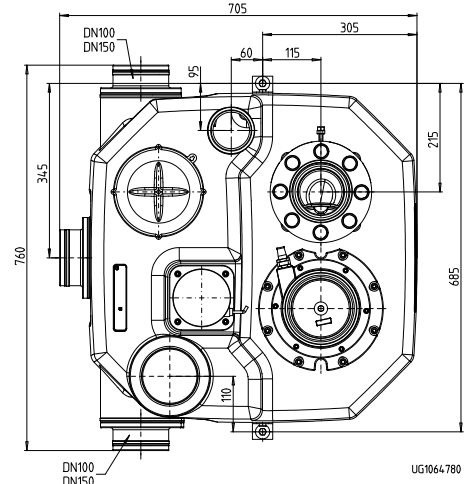
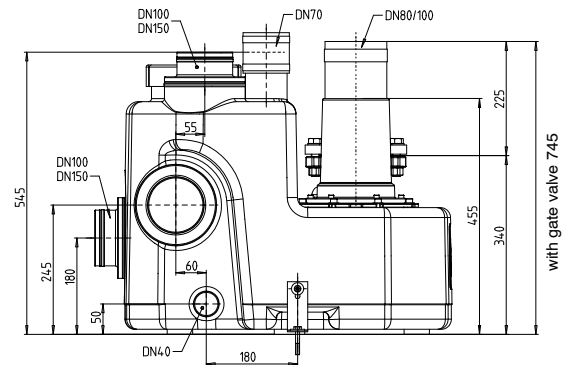


mini-Compacta U100 Connections

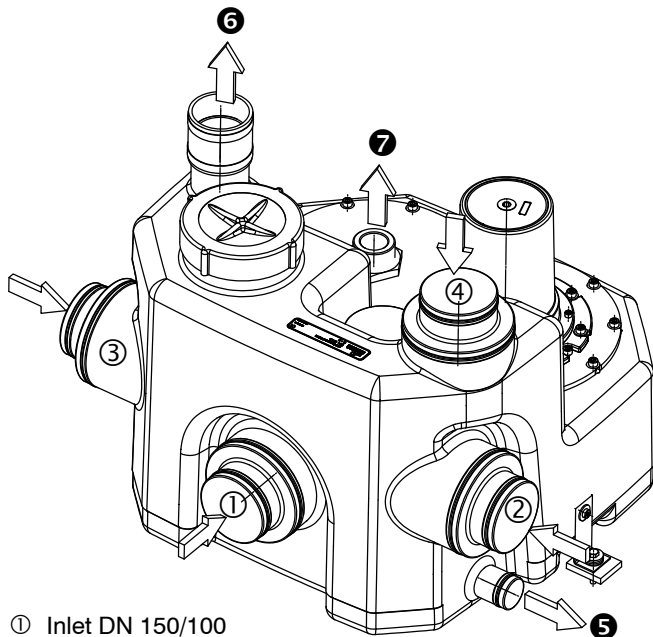


- ① Inlet DN 150/100
- ② Inlet DN 150/100
- ③ Inlet DN 150/100
- ④ Inlet DN 150/100
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

mini-Compacta U100 Dimensions

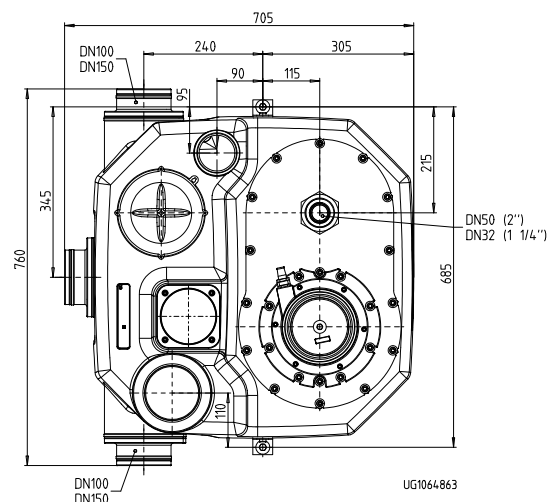
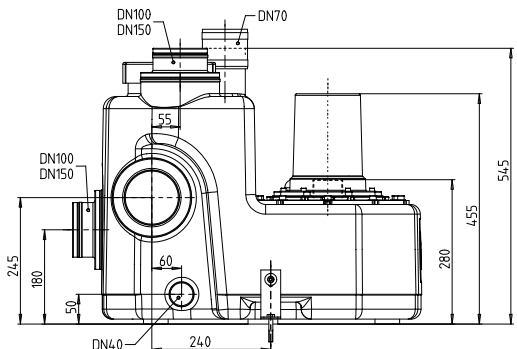


mini-Compacta US100 Connections



- ① Inlet DN 150/100
- ② Inlet DN 150/100
- ③ Inlet DN 150/100
- ④ Inlet DN 150/100
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 50 (DN 32)

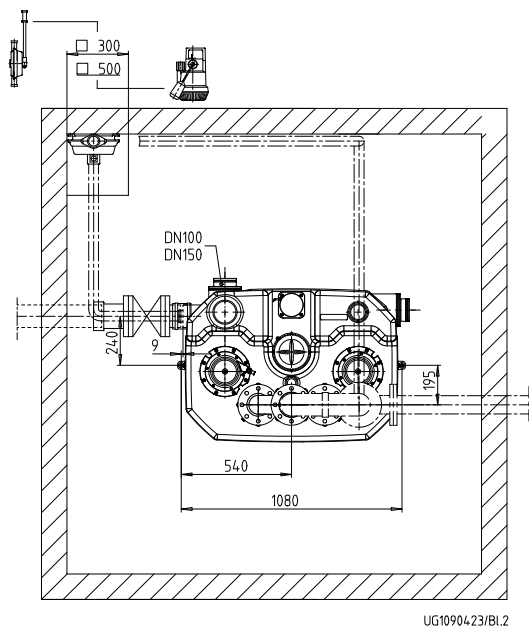
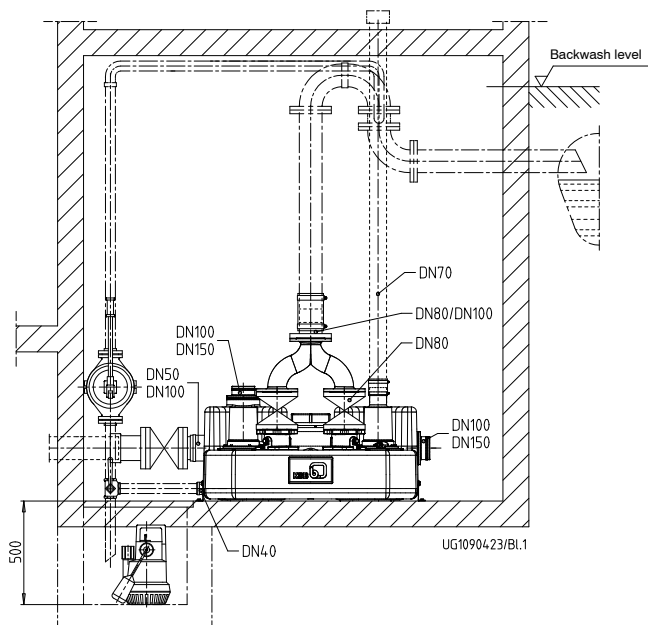
mini-Compacta US100 Dimensions



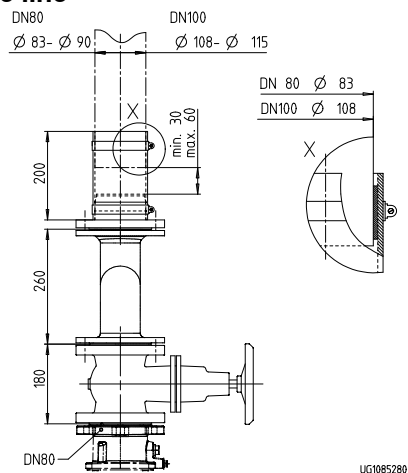
Note:

Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced.

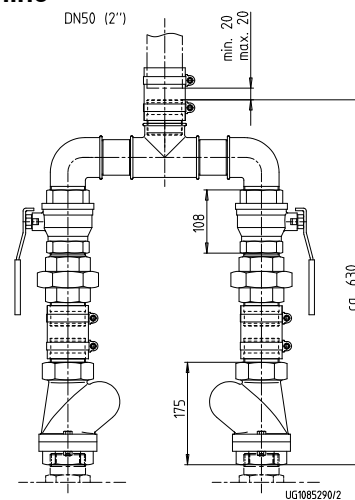
mini-Compacta UZ150 / UZS150



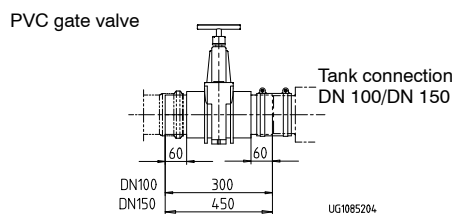
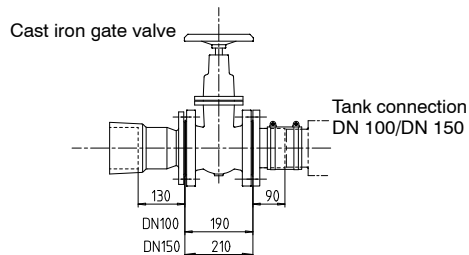
**mini-Compacta UZ150
Discharge line**

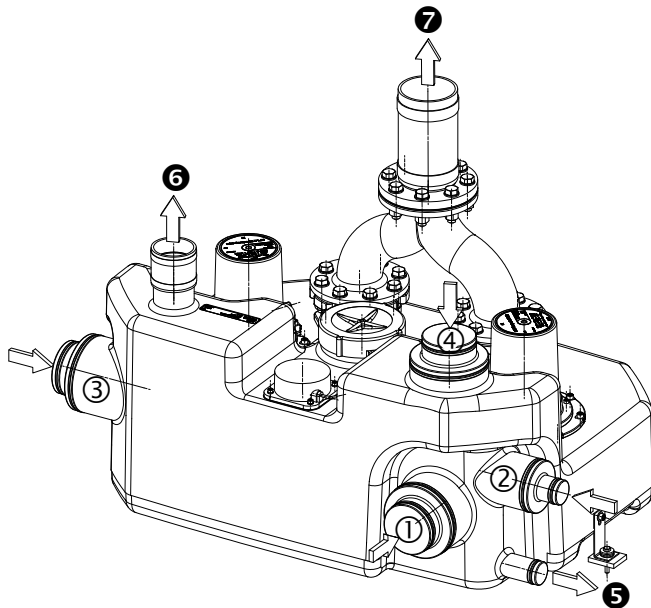


**mini-Compacta UZS150
Discharge line**

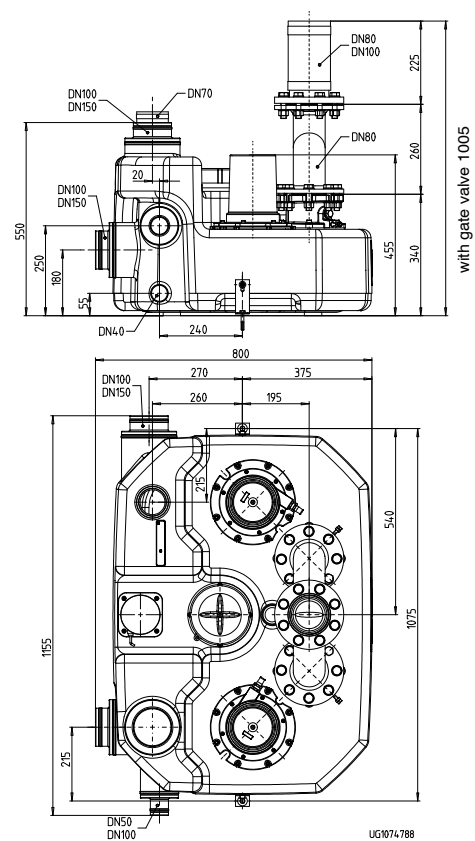
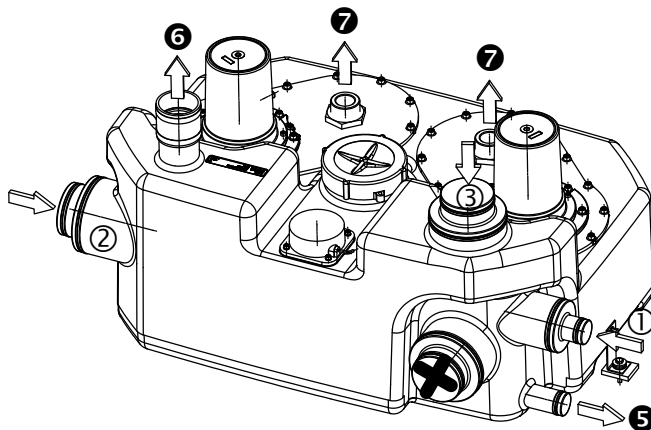


**mini-Compacta UZ150 / UZS150
Inlet line**

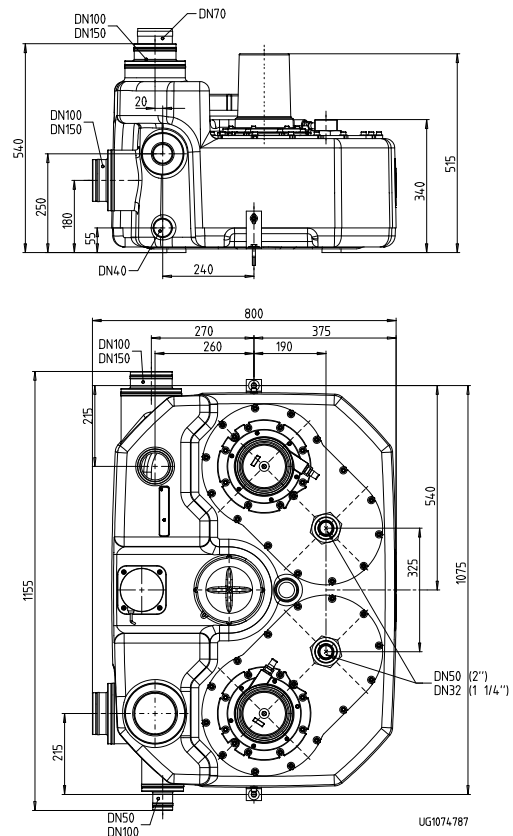


**mini-Compacta UZ150
Connections**


- ① Inlet DN 150/100
- ② Inlet DN 100/50
- ③ Inlet DN 150/100
- ④ Inlet DN 150/100
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

**mini-Compacta UZ150
Dimensions**

**mini-Compacta UZS150
Connections**


- ① Inlet DN 100/50
- ② Inlet DN 150/100
- ③ Inlet DN 150/100
- ✖ Inlet cannot be used on "S" models
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line 2x DN 50 (DN 32)

**mini-Compacta UZS150
Dimensions**


Selection Tool for Drainage Duties

The table below for your guidance is based on KSB's long-standing experience. The data are standard values and are not to be considered as generally binding recommendations. They shall not be the basis for warranty claims.

Please contact your nearest KSB sales branch and/or our technical departments for in-depth advice.

Fluid pumped	Type series Material variant	mini-Compacta	
		Standard	C
Domestic sewage and faeces from bathtubs, showers, washbasins, bidets, toilets, urinals, sinks, floor drains, dishwashers and washing machines		X	
Commercial sewage produced in kitchens, shower and toilet facilities, hospitals, hotels, sports facilities and swimming pools		X	X
Condensate from condensing boiler equipment (DIN 1986-3)			X
Kitchen waste water For drainage of greasy water, a grease separator must be fitted. (DIN 4040-1)		X	X
Lab water (Permission under water and waterways legislation or discharge permit required, DIN 1986-3)			¹⁾
Flushing water containing salt (seawater ≤ 15 °C)			X
Swimming pool water containing chlorine (DIN 19 643)			X
Aggressive waste water in low concentrations, pH 5 to 12, cleaning, disinfecting, washing-up and washing agents (DIN 1986-3)			X
Waste water from garages, containing road salt			X















¹⁾ Please contact KSB and provide the relevant analysis as well as the data on temperature and mode of operation

Special programme (upon request)


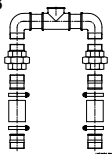


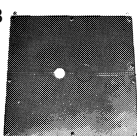

For improved fire protection in building services

Design: power supply cables free from halogen and noxious substances

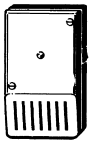
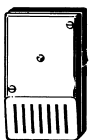
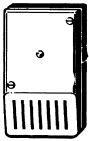


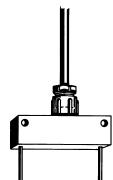
Unit accessories

				mini-Compacta					Ident No.	≈kg
● = Inlet and discharge side Z = Inlet side D = Discharge side				U60	U100	UZ150	US100	UZS150		
P 3		Flexible hose connection for inlet line, consisting of rubber hose and two hose clips	DN 50 DN 100 DN 150	Z - -	- - Z	Z - Z	- - Z	- - Z	18 040 370 18 040 203 18 040 338	0.1 0.2 0.3
P 5		Flexible hose connection for discharge line, consisting of rubber hose, hose clips and nipple joint	DN 50 DN 32	- -	- -	- -	D D	D D	18 040 330 18 040 329	0.3 0.2
		Flexible hose connection for discharge line, consisting of rubber hose, flanged coupling with hoesetail made of steel, and hose clips	DN 80/80	D	D	D	-	-	19 070 679	0.4
P 8		Flanged coupling with hoesetail Flanges drilled to PN 16, DIN 2501	plastic steel steel DN 80/100 DN 100/100 DN 150/150	D ● -	D ● Z	D ● Z	- Z Z	- Z Z	18 040 303 19 902 512 19 901 562	0.4 4.5 6.2
P 9.1		Flanged socket DIN 28 622, grey cast iron flange drilled to PN 16, DIN 2501 for connecting pipes made of ductile cast iron	DN 100 DN 150	Z -	Z Z	Z Z	Z Z	Z Z	00 262 135 01 020 844	8.6 11.8
P 9.2		Flange adapter grey cast iron for connecting pipes of different materials DN 100 for outside pipe diameters of 107.2 – 127.8 mm, L = 105 mm DN 150 for outside pipe diameters of 158.2 – 181.6 mm, L = 105 mm	DN 100 DN 150	Z -	Z Z	Z Z	Z Z	Z Z	01 070 642 01 070 641	4.8 7.5
P 10		Swing check valve RK, PN 4, plastic, CE 12 050-4 with full port and drain plug	ISO 7/I Rp 1 1/4 Rp 2	- -	- -	- -	D D	D D	01 009 771 01 009 773	0.2 0.6
		Ball non-return valve, PN 10, grey cast iron, CE 12 050-4 with full port	G 1 1/4 G 2	- -	- -	- -	D D	D D	01 120 610 01 036 090	0.9 1.1
P 11		Gate valve with socket ends, PN 16 CuZn	Rp 1 1/4 Rp 2	- -	- -	- -	D D	D D	01 014 219 00 411 503	0.5 0.8
		Ball valve, PN 16 CuZn	Rp 1 1/4 Rp 2	- -	- -	- -	D D	D D	01 120 607 01 050 382	0.5 0.6
		PVC gate valve, PN 1, with connection branch	DN 100 DN 150	Z -	Z Z	Z Z	Z Z	Z Z	01 121 715 01 121 714	3.5 9.1
		Gate valve KSB-COBRA grey cast iron, PN 10 Flanges drilled to PN 16, DIN 2501	DN 80 DN 100 DN 150	D Z -	D Z Z	D Z Z	- Z Z	- Z Z	48 829 250 48 829 251 48 829 252	17.5 22.5 43.0
		Gate valve to our choice (not shown), grey cast iron Flanges drilled to PN 16, DIN 2501	DN 80 DN 100 DN 150	D Z -	D Z Z	D Z Z	- Z Z	- Z Z	01 056 708 01 056 709 01 056 710	19.0 26.0 46.0
P 12		1 set of mounting accessories for one flanged connection made of steel or grey cast iron, consisting of: 8 hex. head bolts with nuts and 1 gasket	DN 80 DN 100 DN 150	D ● -	D ● Z	D ● Z	- Z Z	- Z Z	18 072 644 18 060 163 18 076 348	1.3 1.3 1.5



Unit accessories

			mini-Compacta					Ident No.	≈kg	
			U60	U100	UZ150	US100	UZS150			
● = Inlet and discharge side Z = Inlet side D = Discharge side										
P 13		Only required for material variant C. Y-pipe , grey cast iron, coated with 16 hex. head bolts, nuts and 2 sealing elements. Flanges drilled to PN 16, DIN 2501	DN 80	-	-	D	-	-	18 041 115	13.0
P 13		Y-pipe , galvanised steel with pipe couplings	DN 50	-	-	-	-	D	01 121 711	8.5
P 14		Hand diaphragm pump design LA, grey cast iron	ISO 7/I Rp 1 1/2	X	X	X	X	X	00 520 485	12.0
P 15		Three-way plug valve , brass, with wrench, size 22	ISO 7/I Rp 1 1/2	X	X	X	X	X	19 053 063	2.9
P 16		Fully automatic drainage pump Ama-Drainer SE/SD		X	X	X	X	X	-	-
P 18		Cover plate , walkable, steel, split, with profile joint and angle iron mounting frame, for Ama-Drainer SE/SD 560 □ for pits 500 x 500 mm Form A		X	X	X	X	X	18 075 627	13.0
P 20		Blind flange , steel, to close the pump casing when the rotating assembly has been removed		X	X	X	-	-	18 040 964	7.5
				-	-	-	X	X	18 040 965	8.1
		Blind flange , steel, to close the tank when the pump/plate assembly has been removed		-	-	-	X	X	18 040 965	9.1
One-off fee for any spare parts required during 10 years' operation of mini-Compacta U1.60 E/D, U1.100 E/D, U2.100 E/D (as per quotation text 2317.8002-10)									18 040 943	-

Electric Accessories

			Ident. No.	≈ kg
E 50		AS 0 alarm switchgear, mains-dependent , with circuit breaker, piezoceramic signal transmitter, 85 dBA at a distance of 1 m and 4.1 kHz, green equipment-on lamp Plastic housing IP 20, 140 x 80 x 57 mm Use float switch or moisture sensor F 1 (item E 8) as contactor.	230 V~/ 12 VA= 1.2 VA 29 128 401	0.5
E 52		AS 4 alarm switchgear, mains-independent , with circuit breaker, piezoceramic signal transmitter, 85 dBA at a distance of 1 m and 4.1 kHz, green equipment-on lamp, volt-free contact for hook-up to a control station, with self-charging power supply unit for 5 hours' operation in case of mains failure. Plastic housing IP 20, 140 x 80 x 57 mm Use float switch or moisture sensor F 1 (item E 8) as contactor.	230 V~/ 12 VA= 1.2 VA 29 128 442	1.2
E 51		AS 2 alarm switchgear, mains-dependent , with circuit breaker, piezoceramic signal transmitter, 85 dBA at a distance of 1 m and 4.1 kHz, green equipment-on lamp, volt-free contact for hook-up to a control station Plastic housing IP 20, 140 x 80 x 57 mm Use float switch or humidity sensor F 1 (item E 8) as contactor.	230 V~/ 12 VA= 1.2 VA 29 128 422	0.5
E 53		AS 5 alarm switchgear, mains-independent , with self-charging power supply unit for 10 hours' operation in case of a mains failure, mains pilot LED, warning indicator light, horn-off push button, volt-free contact for hook-up to a control station, ready for connection, with 1.8 m cable and plug. ISO housing IP 41, 190 x 165 x 75 mm Use float switch as contactor.	230 V~/ 12 V= 5 VA 00 530 561	1.7
		Horn suitable for indoor and outdoor installation, mount in a position where it is protected against direct rain, enclosure IP 33	12 V= 105 dB(A) 1.2 W 01 086 547	0.3
E 55		AS 1 alarm switchgear , in ISO plug housing IP 30, mains-independent, with self-charging power supply unit for 5 hours' operation in the case of mains failure, acoustic signal 70 dB(A) with circuit breaker and integrated signal transmitter with 3 m connection cable and 2 possible applications for alarm transmission: 1. High-water alarm by suspending the moisture sensor in a (pump) sump above the pump start-up level. 2. Water alarm signal at a water level of only 1 mm (!), by placing the contactor on the floor of rooms at risk of flooding, e.g. the cellar or next to the washing machine in the kitchen or bathroom. 65 x 120 x 40 mm (for Ama-Drainer SE/SD)	230 V~/ 9 V= 1.5 VA 00 533 740	0.9
E 64		Moisture sensor F 1 , as contactor for alarm switchgear AS 0, AS 2 or AS 4, with 3 m connection cable. Possible applications for alarm transmission: 1. High-water alarm by suspending the moisture sensor in a (pump) sump above the pump start-up level. 2. Water alarm signal at a water level of only 1 mm (!), by placing the contactor on the floor of rooms at risk of flooding, e.g. the cellar or next to the washing machine in the kitchen or bathroom. 52 x 21 x 20 mm	19 072 366	0.9

Electric Accessories

			E-Nr.	Ident-Nr.	≈ kg	
E 70		Horn suitable for indoor and outdoor installation, to be mounted in position where it is protected from direct rain, enclosure IP 33	12 V= 105 dB(A) 1.2 W		01 086 547	0.1
E 71		Combined alarm Flashlight and piezo buzzer Enclosure IP 65	12 V DC		01 139 930	0.4
E 72		Flashlight Enclosure IP 65	12 V DC		01 056 355	0.3
E 73		PC service tool with dongle Windows XP RS232 interface			47 121 210	0.2
E 300		Master switch 32 A for installation in the power supply line Plastic housing IP 65 90 x 90 x 145 mm for LevelControl Basic D, LevelControl Basic E or LevelControl Advanced CU			01 118 354	0.4
OE 1		Master switch installed for type BC, 3-pole, 20 A, lockable	E 045		01 143 084	0.2
OE 2		Control cabinet heating , with 20 W thermostat, for type BS	E 108		19 074 269	0.3

