



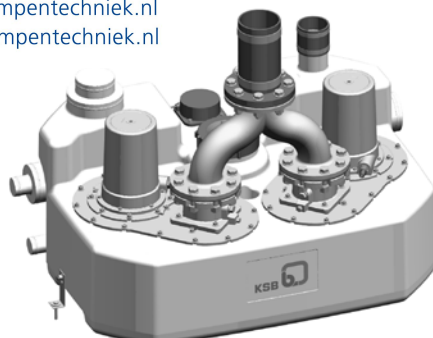
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Floodable sewage lifting units

CE - EN 12 050-1



Compacta U3.100



Compacta UZ3.150



Compacta UZ3.450

Applications

Compacta units are used for the disposal of sewage from toilets, washing and shower facilities as well as bathrooms below the flood level in **sections** of private, commercial, industrial buildings, e.g.:

- Basement flats
- Bars, basement party rooms and saunas
- Cinemas and theatres
- Department stores and hospitals
- Hotels, restaurants and pubs or schools
- Public buildings
- Joint sewage disposal for rows of houses
- Industrial plants

Compacta U

Powerful single-pump units with a high effective volume for above-average waste water volumes and high discharge heads.

Compacta UZ

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.

Fluid pumped

Domestic waste water, clean and dirty water, waste water containing fibrous matter as well as faeces.
For handling aggressive fluids, special materials are available upon request.

Operating data

Q up to 140 m³/h, 39 l/s

H up to 24.5 m

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

Higher H/Q data on request.

Mode of operation

Intermittent operation

S3 to VDE

Continuous operation

S1 on request

Bearings

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

Designation

Type series _____ Compacta UZ 5. 300 D
 U = Floodable single-pump unit
 UZ = Floodable dual-pump unit
 Hydraulics code _____
 Total volume of collecting tank (litres) _____
 D = Three-phase motor

Materials

Compacta	Hydraulics code	
	3 to 5	10 to 15
Tank	Polyethylene	Polyethylene
Pump casing	Grey cast iron	Grey cast iron
Impeller	Grey cast iron	Grey cast iron
Motor shaft	Stainless steel	Stainless steel
Check valve	Grey cast iron	-
Float	Polypropylene	Polypropylene
Screws, bolts and nuts	Stainless steel	Stainless steel

Special materials on request

Drive

Surface-cooled three-phase 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

Frequency 50 Hz

Starting method d.o.l.

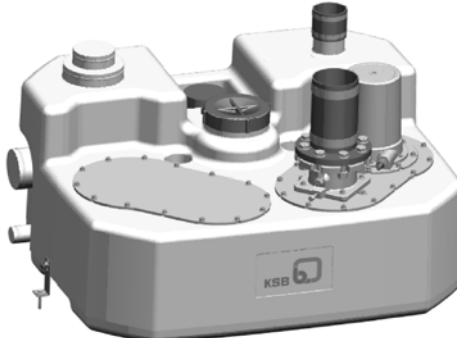
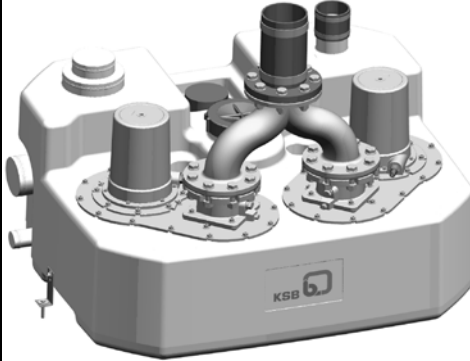
from 5.5 kW: d.o.l. or star-delta

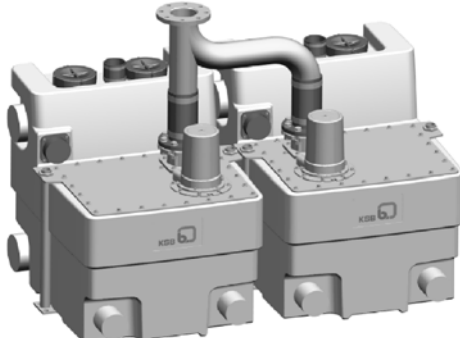
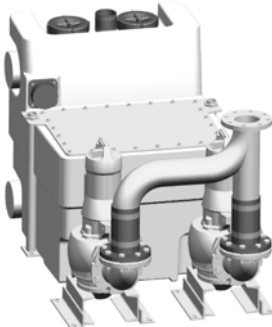
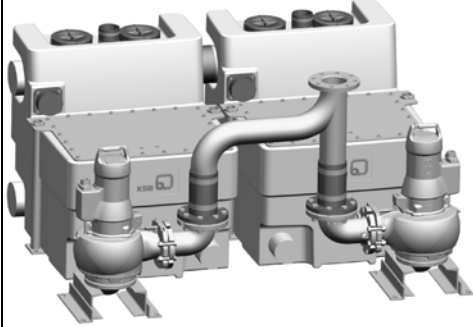
Three-phase voltages and frequencies other than 400 V / 50 Hz on request.

CE - EN 12 050-1

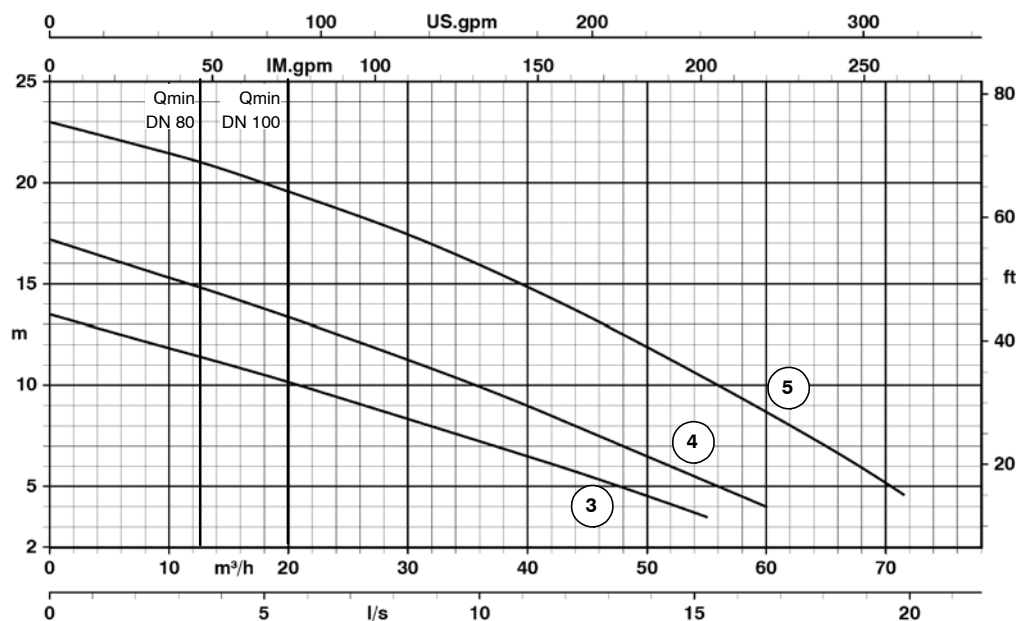


Range of Compacta sewage lifting units

Single-pump units		
	Compacta U100	Compacta U300
- Hydraulics code 3 to 5 - H_{max.} 23 m - Q_{max.} 71.5 m³/h - Free passage 65 mm		
Tank volume Installation examples	100 l Single or two-family houses, toilets, showers, bathroom and sauna facilities in private buildings	300 l Converted cellars, washing facilities with toilets, shower facilities with toilets, drainage installations with exceptionally long discharge lines
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 units		
	Compacta UZ150	Compacta UZ300
- Hydraulics code 3 to 5 - H_{max.} 23 m - Q_{max.} 71.5 m³/h - Free passage 65 mm		
Tank volume Installation examples	150 l Basement flats, single / two-family houses, hillside houses, surface water from house entrances (DIN 1986-100), public baths and sauna facilities.	300 l Restaurants, pubs, clubs, larger toilet facilities, several residential units, surface water from garage driveways and light wells (DIN 1986-100)
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.	

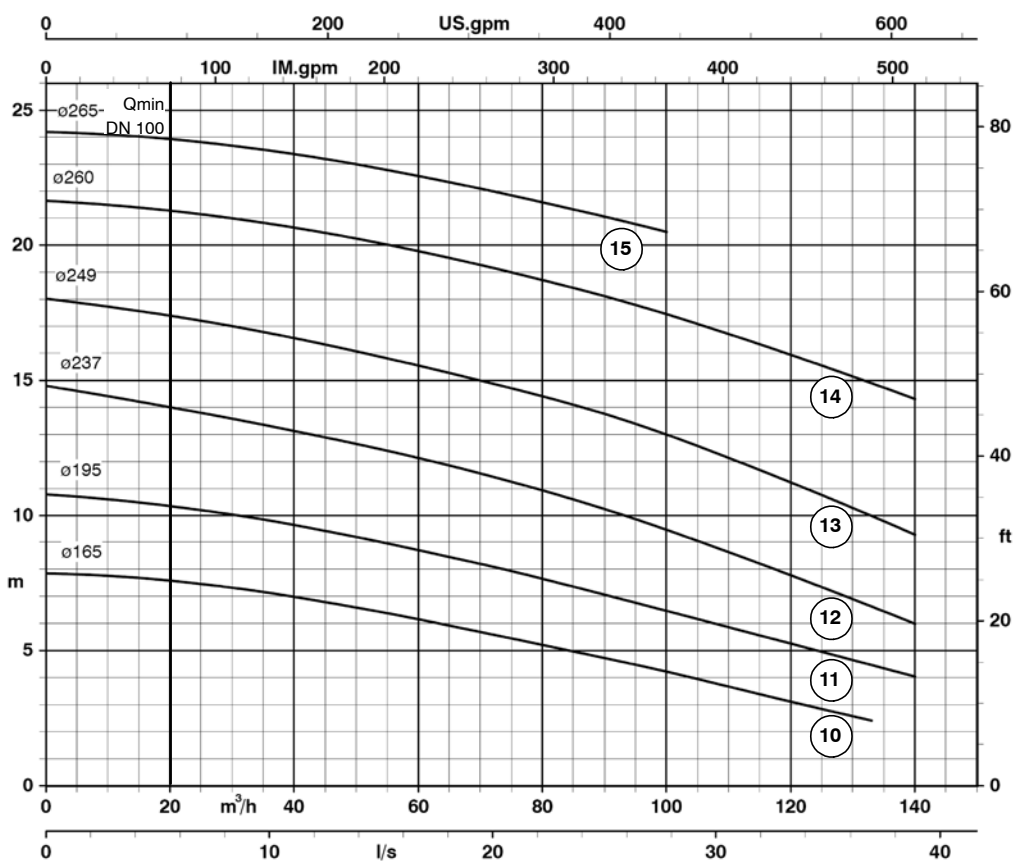
Dual-pump units		
	Compacta UZ450	Compacta UZ900
- Hydraulics code 3 to 5 - $H_{\max}$. 23 m - $Q_{\max}$. 71.5 m³/h - Free passage 65 mm		
Tank volume	450 l	900 l
Installation examples	Hotels, schools, public buildings, basement storage areas with recreation rooms	Blocks of flats, indoor swimming pools, industrial businesses
Design	Plug-in (UZ900 ready-to-connect), micro-processor controlled sewage lifting unit designed as dual-pump station, fully floodable, gas- and water-proof plastic collecting tank (UZ 900 – two tanks in battery design), with two integrated check valves, two centrifugal pumps with free-flow impeller, for automatic alternate, stand-by and peak-load operation.	
Lifting units for fluids containing larger solids		
	Compacta UZ450	Compacta UZ900
- Hydraulics code 10 to 15 - $H_{\max}$. 24.3 m - $Q_{\max}$. 140 m³/h - Free passage 80 mm - 2 waste water pumps installed downstream of collecting tank		
Tank volume	450 l	900 l
Installation examples	Department stores, hospitals, theatres, sports halls, shopping centres	Intermediate floors of underground and suburban railways, public buildings; airports, railway stations, rows of houses, municipal districts, industrial, sports and exhibition buildings
Design	Ready-to-connect, micro-processor controlled sewage lifting unit designed as dual pump station, fully floodable, gas- and water-proof plastic collecting tank (UZ 900 – two tanks in battery design), with two submersible waste water pumps with free-flow impellers installed downstream of the collecting tanks, for automatic alternate, stand-by and peak-load operation.	

Compacta - Hydraulics code 3 to 5

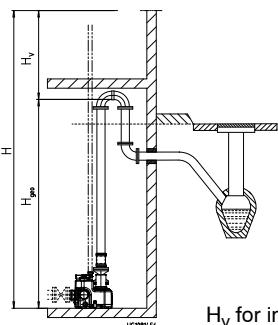


- 3 U3.100/3.300
UZ3.150/3.300
UZ3.450/3.900
- 4 U4.100/4.300
UZ4.150/4.300
UZ4.450/4.900
- 5 U5.100/5.300
UZ5.150/5.300
UZ5.450/5.900

Compacta - Hydraulics code 10 to 15



- 10 UZ10.450/10.900
- 11 UZ11.450/11.900
- 12 UZ12.450/12.900
- 13 UZ13.450/13.900
- 14 UZ14.450/14.900
- 15 UZ15.450/15.900



A 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 lower ratings please refer to type series booklet mini-Compacta 2317.54-10.

Compacta - with free passage of 65 mm for domestic waste water and faeces

Hydraulics code	Dual-pump units	Single-pump units	Total volume	Effective volume *)									
				H = 250 mm	H = 320 mm	vertical							
No.	Compacta		l	l	l	l	P ₁ kW	P ₂ kW	n = 1/min	50 Hz 3~400 V ≈A	m	Ident. No.	ap- prox. kg
Compacta Model with integrated check valve Dual-pump units UZ with Y-pipe													
3	-	U3.100 D	100	38	-	58	2.74	2.15	2800	4.7	4 + 1	29 131 550	80
	-	U3.300 D	300	113	113	133	2.74	2.15	2800	4.7	4 + 1	29 131 551	109
	UZ3.150 D	-	150	65	-	75	2.74	2.15	2800	4.7	4 + 1	29 131 642	151
	UZ3.300 D	-	300	113	113	133	2.74	2.15	2800	4.7	4 + 1	29 131 643	160
4	-	U4.100 D	100	38	-	58	3.72	3.0	2800	6.0	4 + 1	29 131 552	82
	-	U4.300 D	300	113	113	133	3.72	3.0	2800	6.0	4 + 1	29 131 553	111
	UZ4.150 D	-	150	65	-	75	3.72	3.0	2800	6.0	4 + 1	29 131 646	155
	UZ4.300 D	-	300	113	113	133	3.72	3.0	2800	6.0	4 + 1	29 131 647	164
5	-	U5.100 D	100	38	-	58	5.2	4.2	2800	8.4	4 + 1	29 131 554	84
	-	U5.300 D	300	113	113	133	5.2	4.2	2800	8.4	4 + 1	29 131 555	113
	UZ5.150 D	-	150	65	-	75	5.2	4.2	2800	8.4	4 + 1	29 131 650	159
	UZ5.300 D	-	300	113	113	133	5.2	4.2	2800	8.4	4 + 1	29 131 651	168

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

	Dual- pump units	Single- pump units	Total volume	Effective volume *)							
	Compacta		l	H = 700 mm l	P ₁ kW	P ₂ kW	n = 1/min	50 Hz 3~400 V ≈A	m	Ident. No.	ap- prox. kg
Compacta Model with integrated check valve Collecting tank with very high effective volume											
3	UZ3.450 D	-	450	290	2.74	2.15	2800	4.7	4 + 1	29 131 644	197
	UZ3.900 D	-	900	580	2.74	2.15	2800	4.7	4 + 1	29 131 645	277
4	UZ4.450 D	-	450	290	3.72	3.0	2800	6.0	4 + 1	29 131 648	201
	UZ4.900 D	-	900	580	3.72	3.0	2800	6.0	4 + 1	29 131 649	281
5	UZ5.450 D	-	450	290	5.2	4.2	2800	8.4	4 + 1	29 131 652	205
	UZ5.900 D	-	900	580	5.2	4.2	2800	8.4	4 + 1	29 131 653	285

Compacta - with free passage of 80 mm for larger solids in the fluid handled

	Dual-pump units	Single-pump units	Total volume	Effective volume *) H = 700 mm	P ₁ kW	P ₂ kW		50 Hz 3~400 V ≈A			ap- prox. kg
	Compacta		l	l			n = 1/min		m	Ident. No.	
10	UZ10.450 D UZ10.900 D	1) -	450 900	290 580	5.13 5.13	3.7 3.7	1450 1450	8.4 8.4	10 10	29 131 654 29 131 655	305 380
11	UZ11.450 D UZ11.900 D	1) -	450 900	290 580	5.13 5.13	3.7 3.7	1450 1450	8.4 8.4	10 10	29 131 656 29 131 657	315 390
12	UZ12.450 D UZ12.900 D	- -	450 900	290 580	6.9 6.9	5.5 5.5	1450 1450	YΔ 12.5 YΔ 12.5	10 10	29 131 658 29 131 659	400 485
13	UZ13.450 D UZ13.900 D	- -	450 900	290 580	9.1 9.1	7.5 7.5	1450 1450	YΔ 16.3 YΔ 16.3	10 10	29 131 660 29 131 661	420 505
14	UZ14.450 D UZ14.900 D	- -	450 900	290 580	13.6 13.6	11.8 11.8	1450 1450	YΔ 25.0 YΔ 25.0	10 10	29 131 662 29 131 663	470 555
15	UZ15.450 D UZ15.900 D	- -	450 900	290 580	13.6 13.6	11.8 11.8	1450 1450	YΔ 25.0 YΔ 25.0	10 10	29 131 664 29 131 665	470 555

1) Single-pump units on request

Shaft seal

Impeller end: mechanical seal

Motor-end: mechanical seal (shaft seal ring on Compacta units with hydraulics code 3 to 5)

Shaft seal cooled and lubricated by oil reservoir between the seals.

Connection nozzles

Compacta	Inlet side	Discharge side	Venting	Connection for hand diaphragm pump
U3. to 5.100	horizontal: 2 x DN 150 / 100, graded, inlet nozzle level 250 mm vertical: 1 x DN 150 / 100, graded	DN 80 / 100 discharge line DN 80 optionally possible	DN 70	DN 40 (Rp 1 1/2)
U3. to 5.300	horizontal: 1 x DN 100 1 x DN 150 / 100, graded, inlet nozzle level 250 mm 1 x DN 200 / 150, graded, inlet nozzle level 320 mm vertical: 1 x DN 150 / 100, graded	DN 80 / 100 discharge line DN 80 optionally possible	DN 70	DN 40 (Rp 1 1/2)
UZ3. to 5.150	horizontal: 1 x DN 100 / 50, graded, 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) discharge line DN 80 optionally possible	DN 70	DN 40 (Rp 1 1/2)
UZ3. to 5.300	horizontal: 1 x DN 100 1 x DN 150 / 100, graded, inlet nozzle level 250 mm 1 x DN 200 / 150, graded, inlet nozzle level 320 mm vertical: 1 x DN 150/100, graded	DN 80 / 100 (Discharge line from Y-pipe DN 100) discharge line DN 80 optionally possible	DN 70	DN 40 (Rp 1 1/2)
UZ3. to 5.450	horizontal: 2 x DN 150 1 x DN 200 / 150, graded, inlet nozzle level 700 mm	DN 80 / 100 (Discharge line from Y-pipe DN 100) discharge line DN 80 optionally possible	DN 70	DN 40 (Rp 1 1/2)
UZ3. to 5.900	horizontal: 2 x DN 150 2 x DN 200 / 150, graded, inlet nozzle level 700 mm	DN 80 / 100 (Discharge line from Y-pipe DN 100)	DN 70	DN 40 (Rp 1 1/2)
UZ10. to 15.450	horizontal: 2 x DN 150 1 x DN 200 / 150, graded, inlet nozzle level 700 mm	DN 100	DN 70	DN 40 (Rp 1 1/2)
UZ10. to 15.900	horizontal: 2 x DN 150 2 x DN 200 / 150, graded, inlet nozzle level 700 mm	DN 100	DN 70	DN 40 (Rp 1 1/2)

Installation at site

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

If the responsible authorities have not specified the flood level, the flood 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 flood 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 flood 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 backflow 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.

Special designs on request

- Higher H/Q data
- Materials for aggressive fluids
- Tank made of stainless steel (1.4301, 1.4571)
- Systems for improved fire protection / halogen-free cables
- Compacta Z with dry-installed volute casing pumps, mode of operation S1, see type series booklet 2317.53-10

Flooding

The 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.

Product features
to our customers' benefit
Compacta UZ150
LevelControl operated
Your benefits:

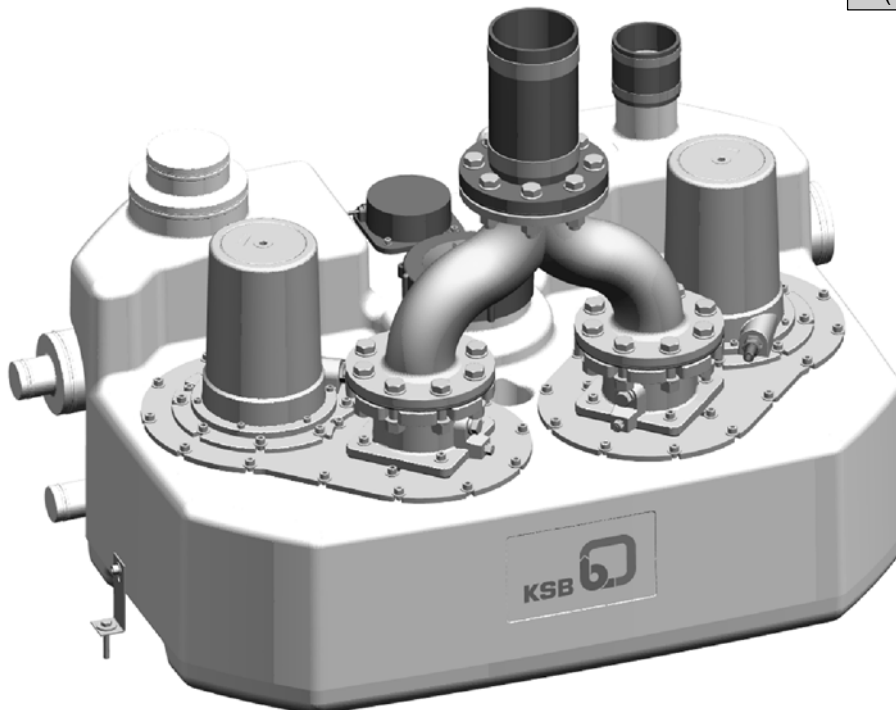
- New generation based on new platform
- Ensures safe and reliable operation

Y-pipe (dual-pump units)
Your benefits:

- Always included in KSB's scope of supply
- Simplifies planning and reduces installation time

Standard-compliant check valve
Your benefit:

- Low-noise pump operation; uninterrupted normal operation during maintenance work (dual-pump units)


Inlet connections
Your benefits:

- Various positioning options and diameters
- Easy to adapt to the most complicated site conditions

Collecting tank
Your benefits:

- Improved volume / footprint ratio
- Better space utilisation

Integrated grips
Your benefits:

- Ergonomically designed
- Safe handling during transport and installation

Application limits

The units are designed for S3 operation (intermittent operation). The max. permissible inflow must always be smaller than the capacity of one pump.

Compacta - Hydraulics code 3 to 5

Intermittent operation S3, 50 % to VDE.

Max. number of start-ups: 60 / h

Compacta - Hydraulics code 10 to 15

The units must be selected so as to ensure that the reference values $Q_Z : Q_P$ indicated in the opposite table are not exceeded.

Compacta	$Q_Z : Q_P$
UZ 10.450/10.900	0.6
UZ 11.450/11.900	0.6
UZ 12.450/12.900	0.7
UZ 13.450/13.900	0.8
UZ 14.450/14.900	0.8
UZ 15.450/15.900	0.8

Q_Z = max. permissible inflow [m^3/h]

Q_P = duty point of one pump [m^3/h]

Motor rating	Max. switching frequency per pump
2.5 to 7.5 kW.	20 / h
above 7.5 kW	15 / h

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.

Compacta / Control unit combinations

Compacta Single-pump units	Control unit
U3.100 D, U4.100 D, U5.100 D U3.300 D, U4.300 D, U5.300 D	LevelControl Basic D
Dual-pump units	Control unit
UZ3.150 D, UZ4.150 D, UZ5.150 D UZ3.300 D, UZ4.300 D, UZ5.300 D UZ3.450 D, UZ4.450 D, UZ5.450 D, UZ10.450 D, UZ11.450 D UZ3.900 D, UZ4.900 D, UZ5.900 D, UZ10.900 D, UZ11.900 D	LevelControl Basic 2 ZD100
UZ12.450 D UZ12.900 D	LevelControl Basic 2 ZD140
UZ13.450 D UZ13.900 D	LevelControl Basic 2 ZD180
UZ14.450 D, UZ15.450 D UZ14.900 D, UZ15.900 D	LevelControl Basic 2 ZD250

LevelControl Basic D (CU 1 10 V T45 1 0 0 B D)

- Standard control unit for three-phase motor
- Plug-in, with 1 m power supply cable
- Three-phase connection
- 4 m motor connection 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; otherwise "operational availability" is indicated only)
- Pump protection by thermal circuit breaker
- Input for external fault message
- General fault message (NC, NO)
- Integrated alarm buzzer
- Battery-backed, mains-independent alarm
- Straightforward parameterisation of tank data via DIL switch during commissioning



LevelControl Basic D

LevelControl Basic 2 control unit

- Plug-in, with 1 m power supply cable (up to UZ5.450)
- 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 and protection switch
- 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

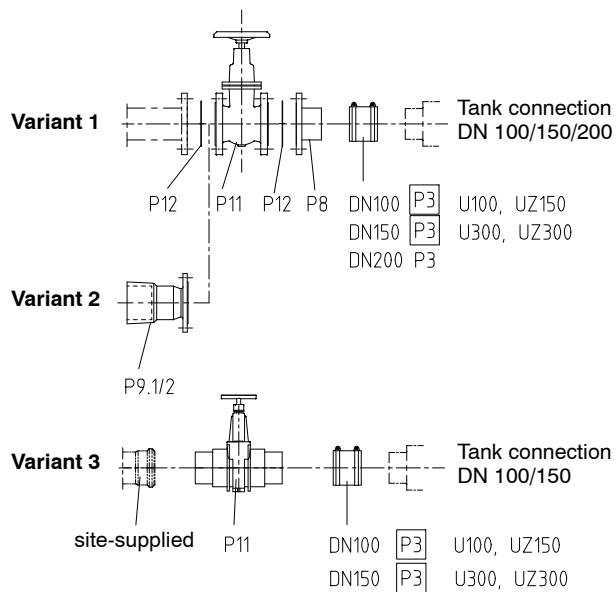


LevelControl
Basic 2 BS

Special features of LevelControl Basic models

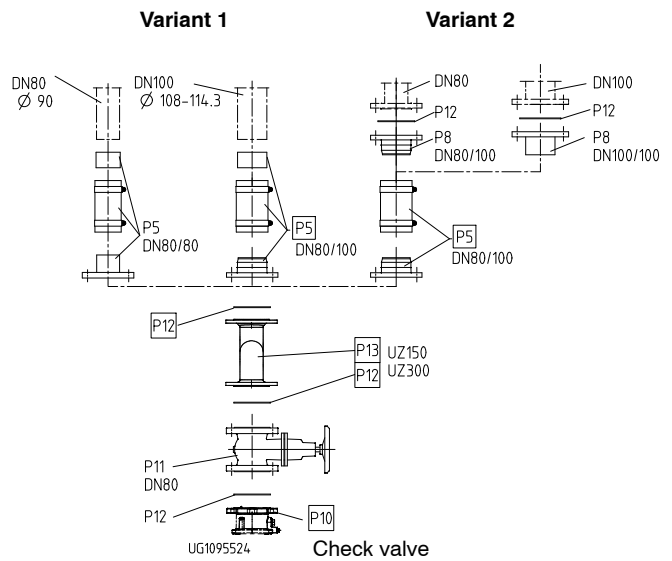
LevelControl Basic 2 D (BC 1 400 DVNA 100 B 0)	- Single-pump control unit - For controlling a single pump driven by a three-phase motor with a power rating of up to 4 kW
LevelControl Basic 2 ZD (BC 2 400 DVNA 100 B 0)	- Standard dual-pump control unit - For controlling two pumps driven by three-phase motors with power ratings of up to 4 kW each
LevelControl Basic 2 ZD140 (BS 2 400 SVNA 140 B 0)	- Standard dual-pump control unit - For controlling two pumps driven by three-phase motors with power ratings of up to 5.5 kW each - Star-delta starting
LevelControl Basic 2 ZD180 (BS 2 400 SVNA 180 B 0)	- Standard dual-pump control unit - For controlling two pumps driven by three-phase motors with power ratings of up to 7.5 kW each - Star-delta starting
LevelControl Basic 2 ZD250 (BS 2 400 SVNA 250 B 0)	- Standard dual-pump control unit - For controlling two pumps driven by three-phase motors with power ratings of up to 12 kW each - Star-delta starting

Compacta U100, U300, UZ150, UZ300 Inlet line

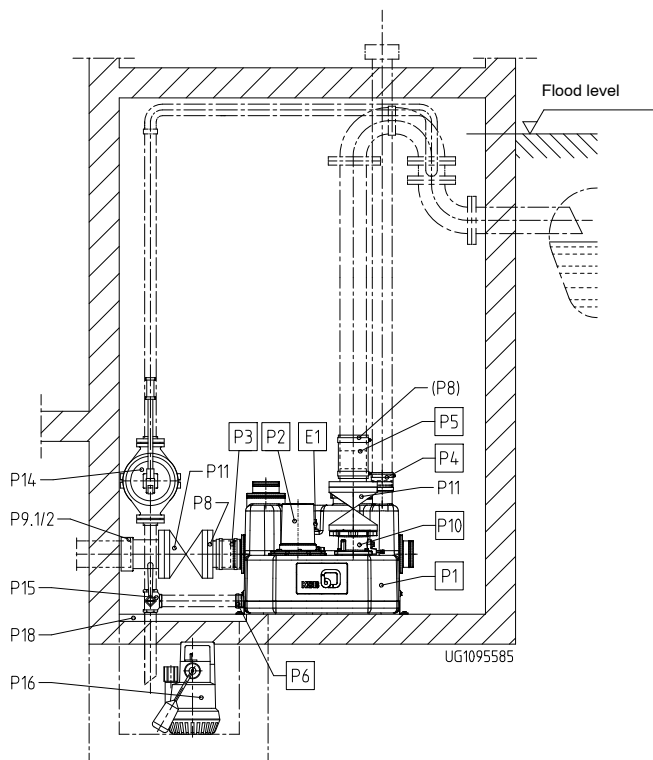


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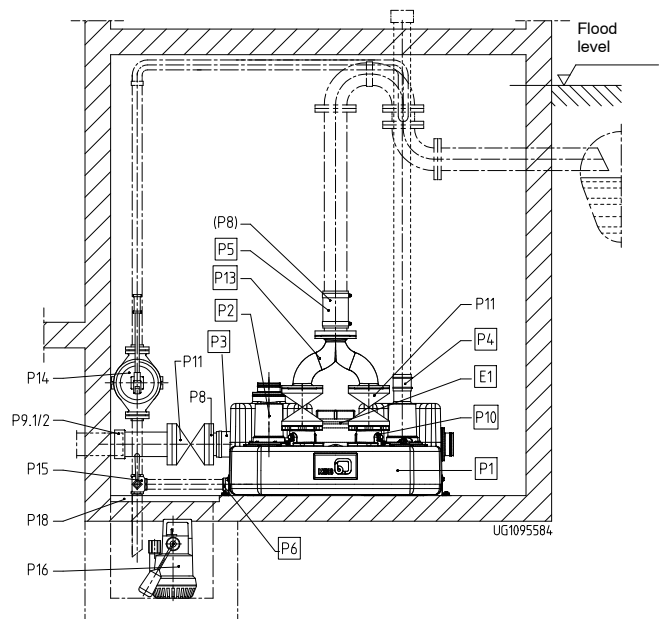
Discharge line



Compacta U100, U300 Single-pump unit



Compacta UZ150, UZ300 Dual-pump unit



Compacta U100	Compacta U300	Compacta UZ150	Compacta UZ300	Scope of supply / Accessories
☐ P 1	☐ P 1	☐ P 1	☐ P 1	Gas-, smell- and water-proof collecting tank of impact-resistant plastic
☐ P 2	☐ P 2	☐ P 2	☐ P 2	Fully floodable submersible motor pump
☐ P 3 P 3 -	☐ P 3 ☐ P 3 -	☐ P 3 P 3 P 3	☐ P 3 ☐ P 3 P 3	Flexible hose connection and hose clips DN 100 Flexible hose connection and hose clips DN 150 Flexible hose connection and hose clips DN 200
☐ P 4	☐ P 4	☐ P 4	☐ P 4	Flexible hose connection and hose clips (venting)
☐ P 5 P 5	☐ P 5 P 5	☐ P 5 P 5	☐ P 5 P 5	Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hosetail DN 100, fabric reinforced rubber hose and adapter hose for outer pipe diameters of 108 - 114.3 mm Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hosetail DN 80, fabric reinforced rubber hose and adapter hose for outer pipe diameters of 83 - 90 mm
☐ P 6	☐ P 6	☐ P 6	☐ P 6	Flexible hose connection and hose clips (hand diaphragm pump)
P 8	P 8	P 8	P 8	Flanged coupling with hosetail
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 DN 200 for outside pipe diameter of 222 mm
P 9.2	P 9.2	P 9.2	P 9.2	Flange adapter (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 200 for outside pipe diameters of 189.0 - 212.0 mm, L 145 mm
☐ P10	☐ P10	☐ P10 ²⁾	☐ P10 ²⁾	Check valve with full port and lifting screw
P 11	P 11	P11 ²⁾	P 11 ²⁾	Shut-off gate valve
P 12	P 12	P 12 ²⁾	P 12 ²⁾	Set of mounting accessories
-	-	☐ P13	☐ P13	Y-pipe DN 80 with 2 sets of mounting accessories
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	Three-way plug valve ISO 7/I-Rp 1 1/2
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	Cover plate A, 560 □ for pits 500 x 500 mm (for Ama-Drainer)
☐ E 1	☐ E 1	-	-	Analog level sensor for pump and alarm buzzer
-	-	☐ E 1	☐ E 1	Analog level sensor for pump 1, pump 2 and alarm buzzer, stand-by pump automatically starts up during peak loads
☐ E 3 ¹⁾	☐ E 3 ¹⁾	☐ E 3 ¹⁾	☐ 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⁾	Alarm switchgear AS 0
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⁾	Alarm switchgear AS 4
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⁾	Moisture sensor F 1

¹⁾ not shown in drawing

²⁾ One pair / set is required for the discharge line

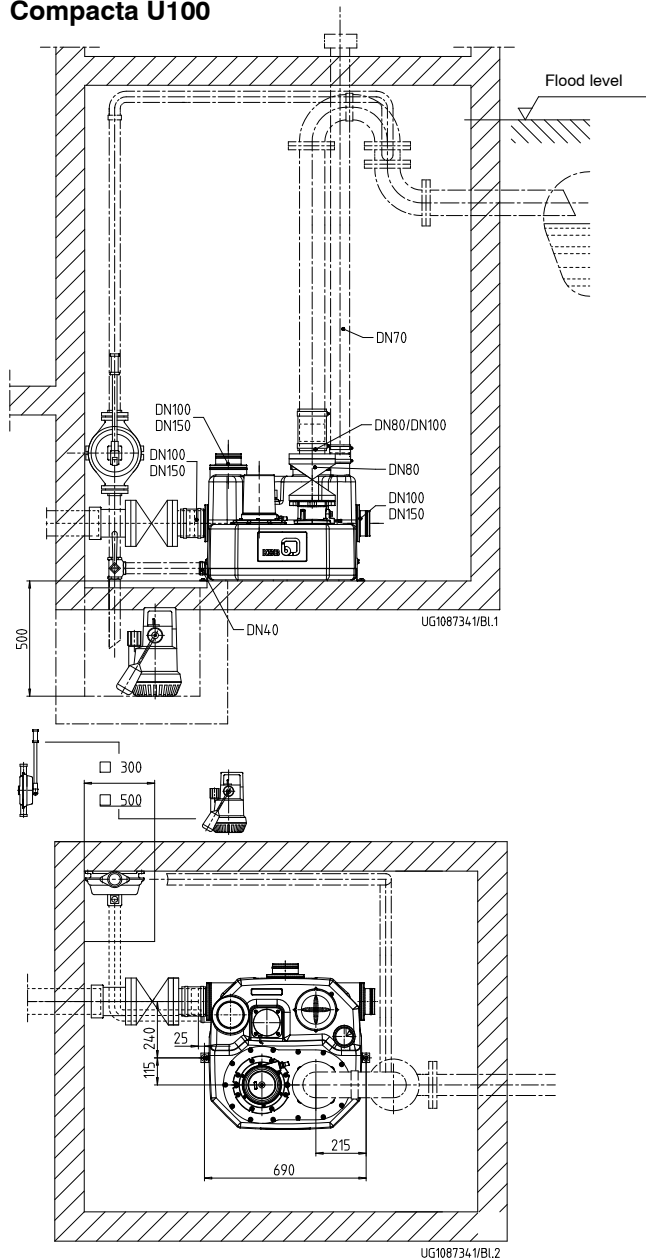
The items marked ☐ are included in the scope of supply

Connection examples

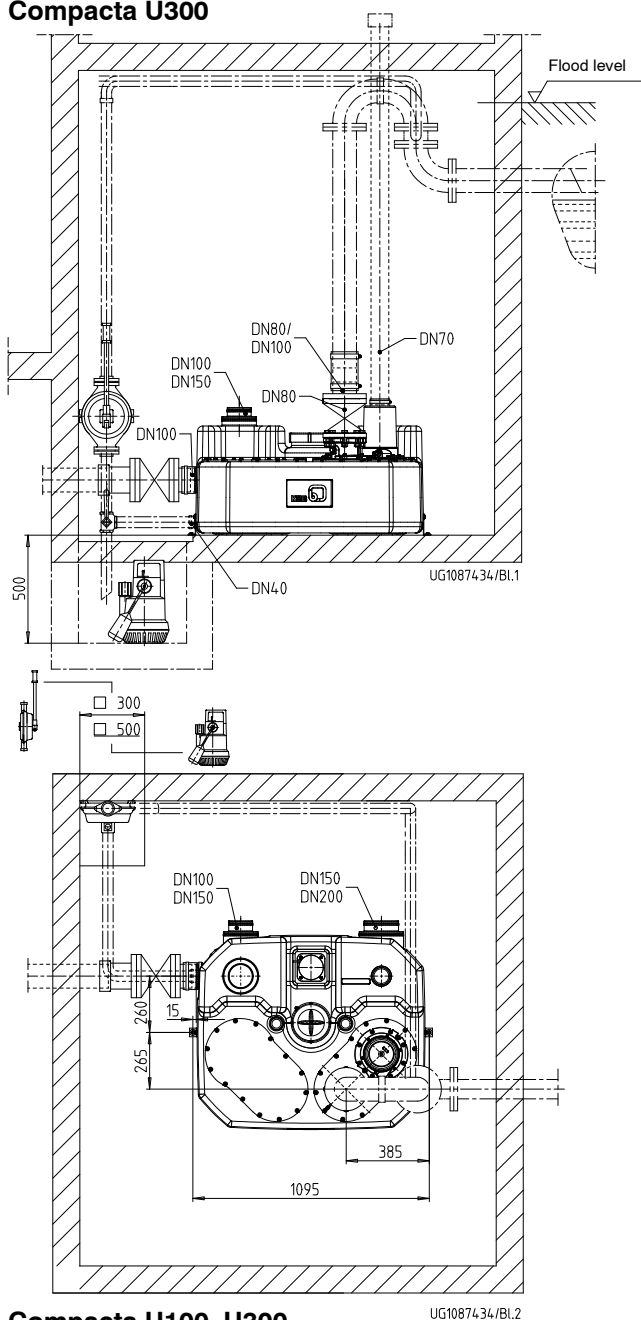
Note:

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.

Compacta U100

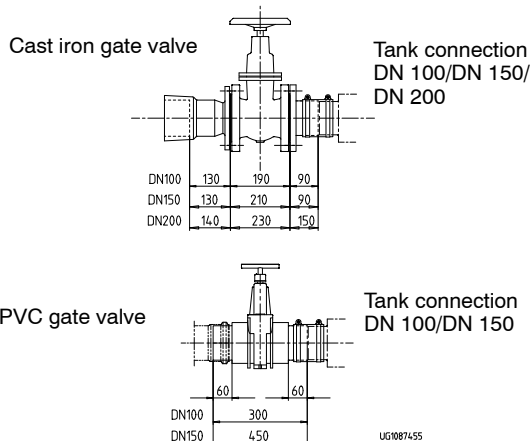


Compacta U300



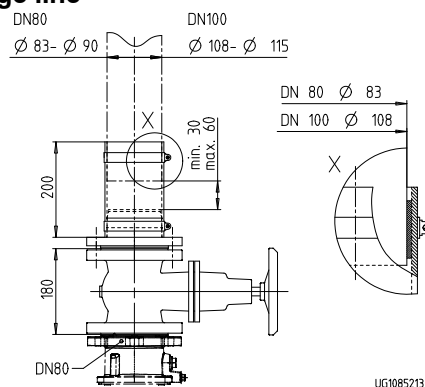
Compacta U100, U300

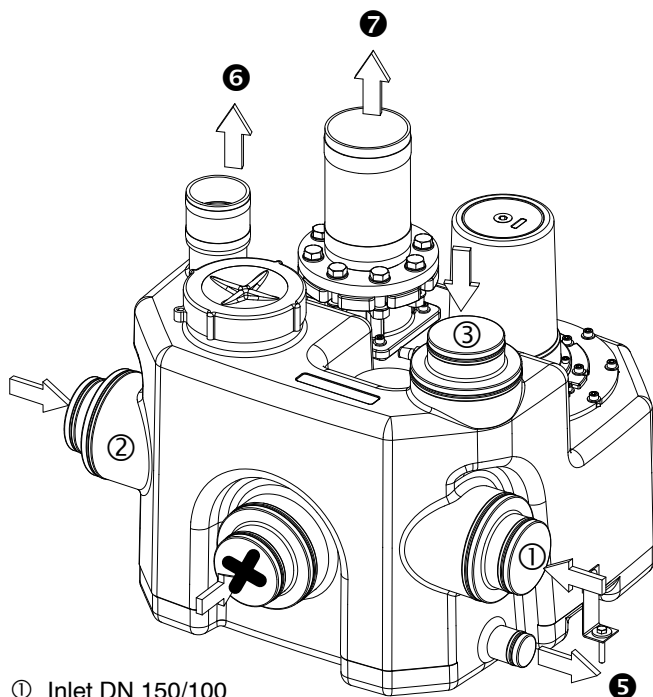
Inlet line



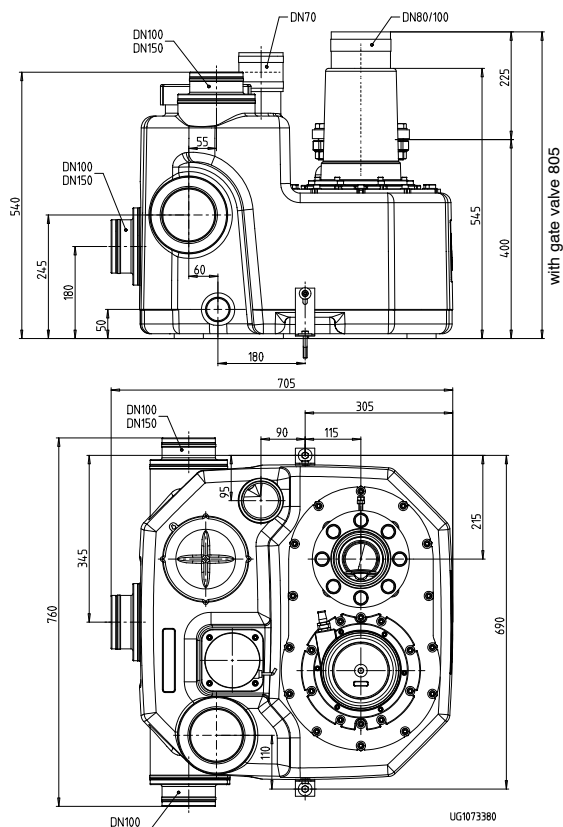
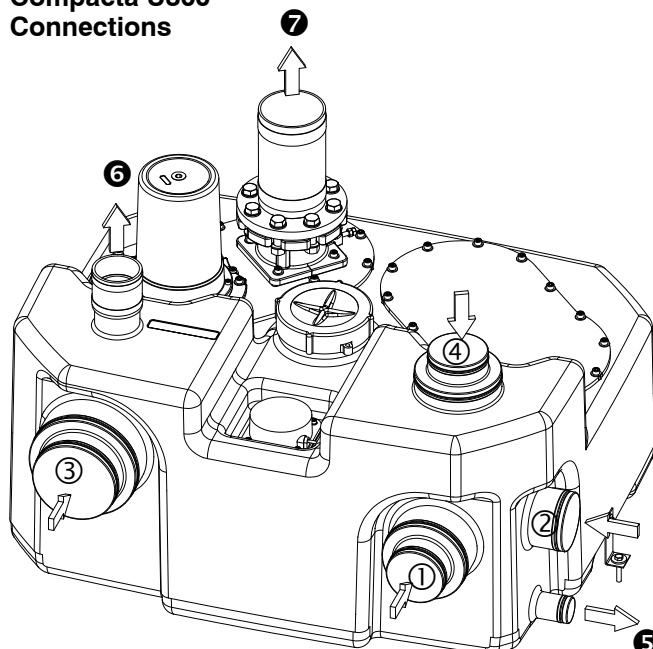
Compacta U100, U300

Discharge line

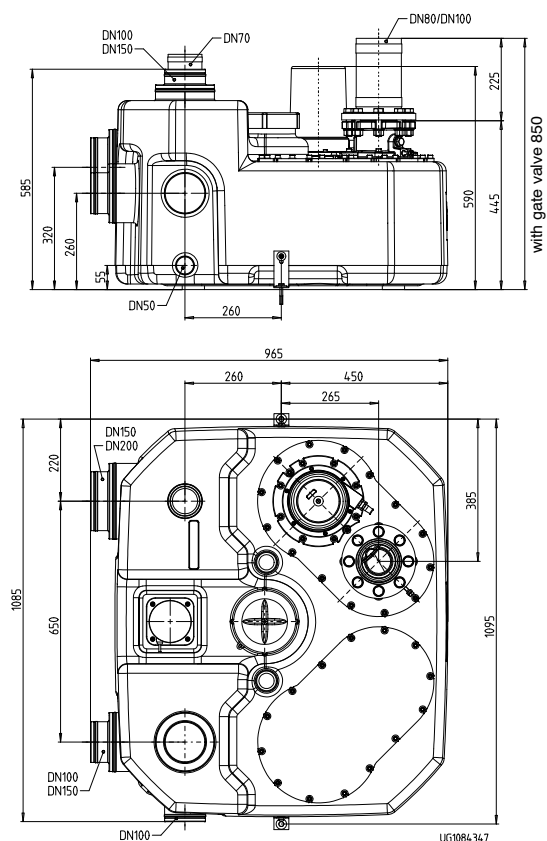


**Compacta U100
Connections**


- ① Inlet DN 150/100
- ② Inlet DN 150/100
- ③ Inlet DN 150/100
- ✕ Inlet cannot be used
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

**Compacta U100
Dimensions**

**Compacta U300
Connections**


- ① Inlet DN 150/100
- ② Inlet DN 100
- ③ Inlet DN 200/150
- ④ Inlet DN 150/100
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

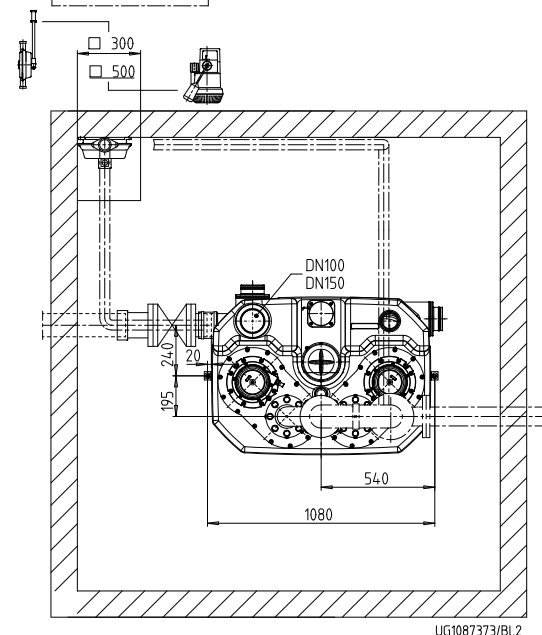
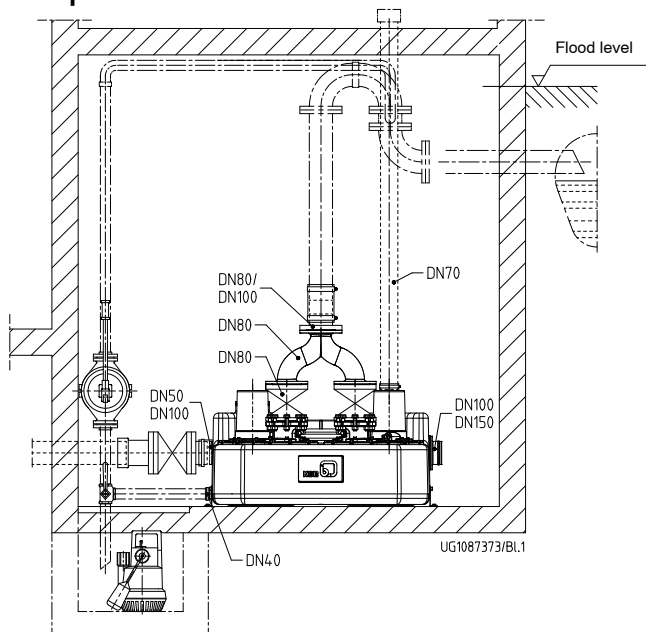
**Compacta U300
Dimensions**


Connection examples

Note:

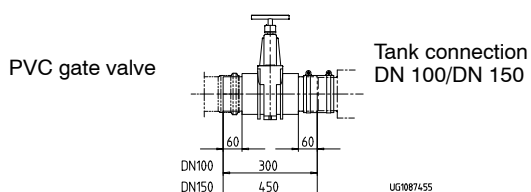
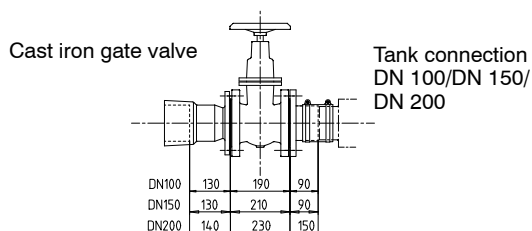
Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced.

Compacta UZ150

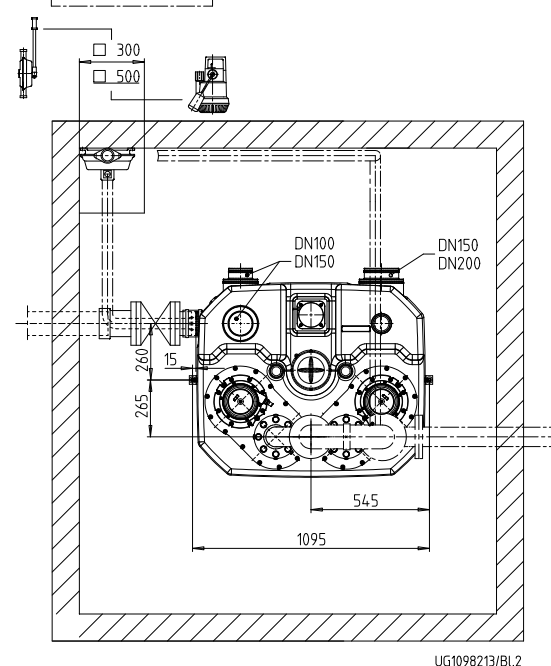
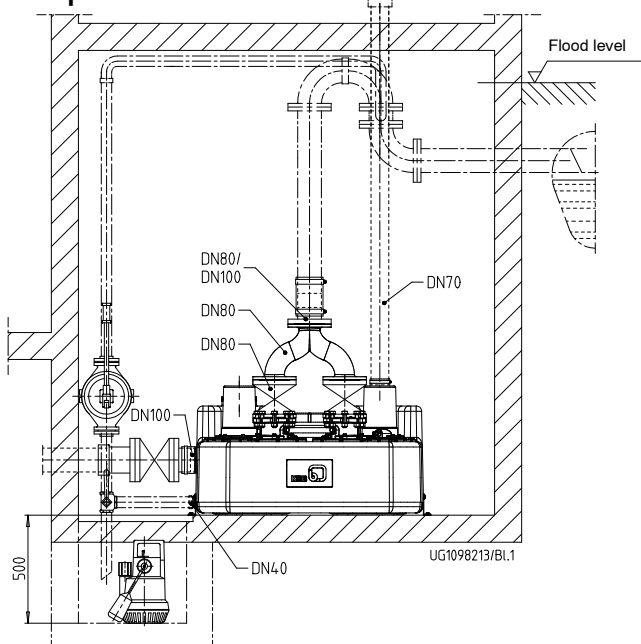


Compacta UZ150, UZ300

Inlet line

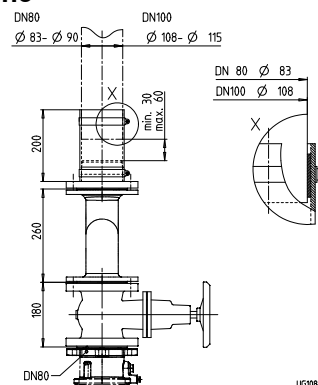


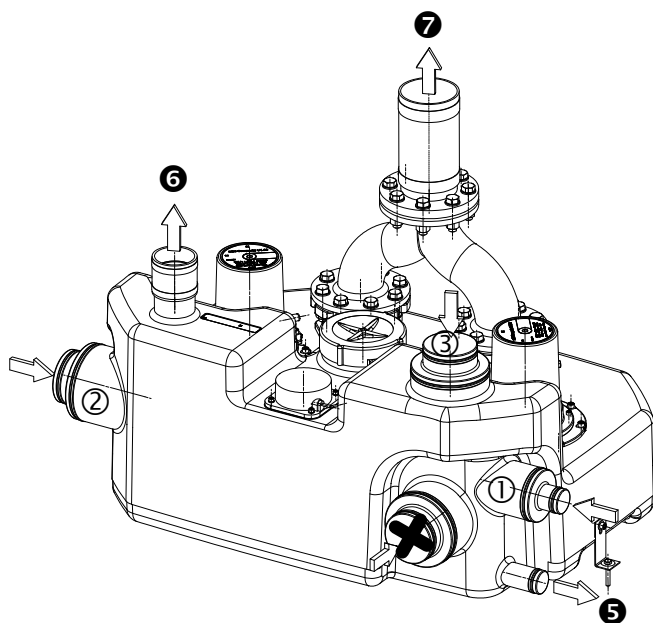
Compacta UZ300



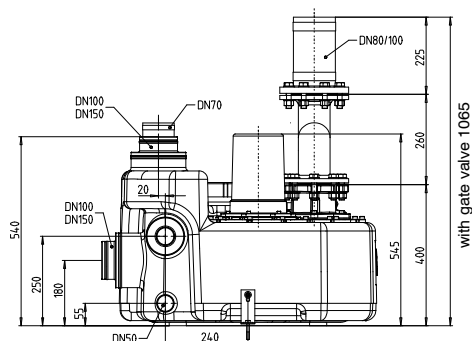
Compacta UZ150, UZ300

Discharge line

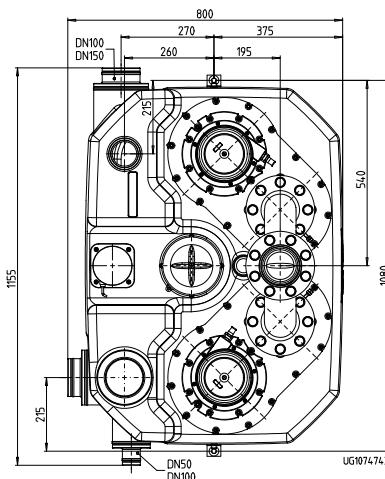
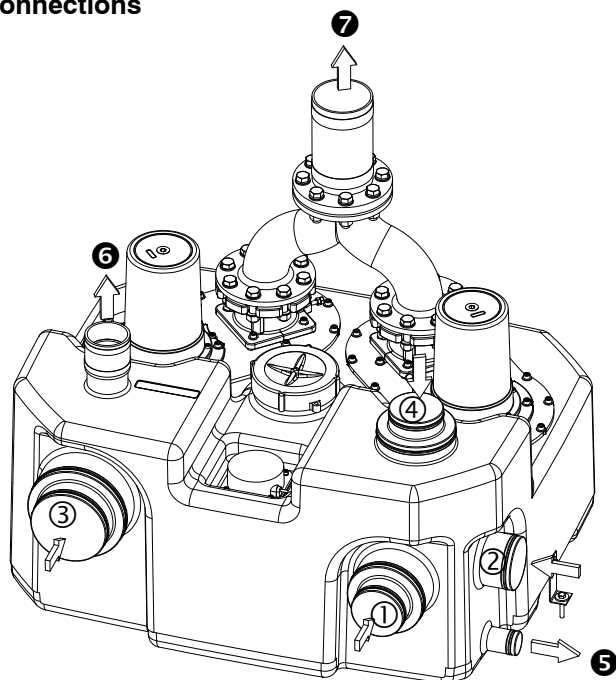


**Compacta UZ150
Connections**


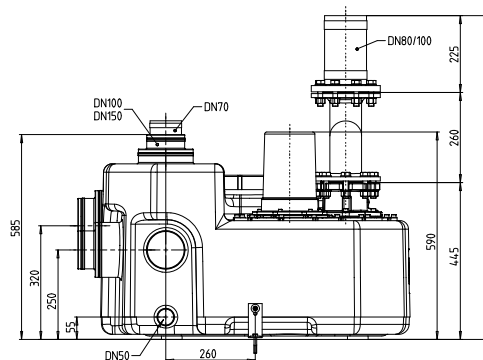
- ① Inlet DN 100/50
- ② Inlet DN 150/100
- ③ Inlet DN 150/100
- ✕ Inlet cannot be used
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

**Compacta UZ150
Dimensions**


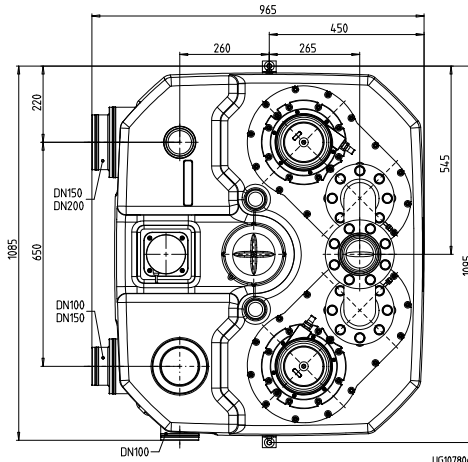
with gate valve 1065


**Compacta UZ300
Connections**


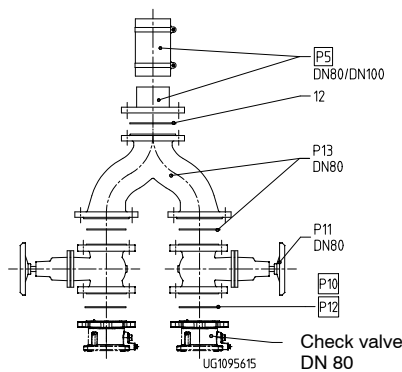
- ① Inlet DN 150/100
- ② Inlet DN 100
- ③ Inlet DN 200/150
- ④ Inlet DN 150/100
- ⑤ Drain DN 40
- ⑥ Vent DN 70
- ⑦ Discharge line DN 80/100

**Compacta UZ300
Dimensions**


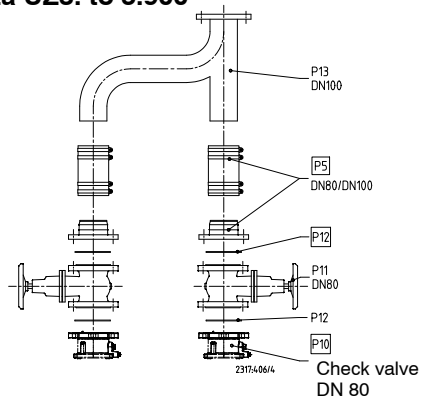
with gate valve 1110



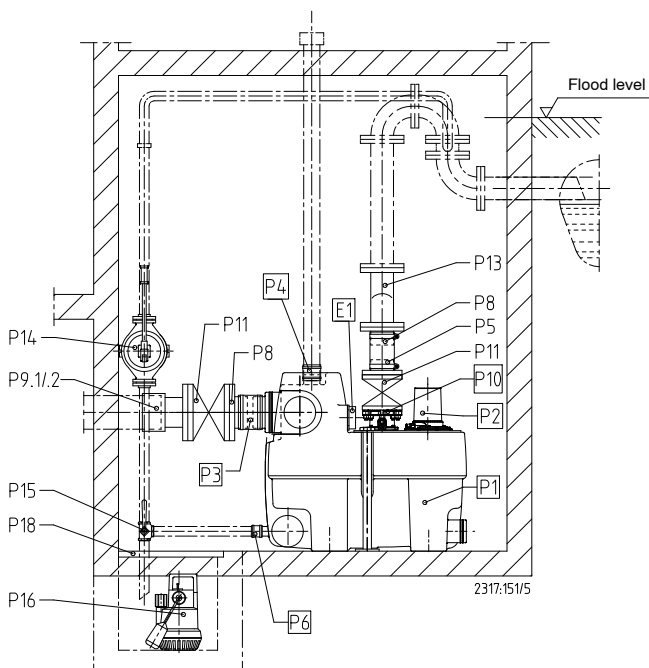
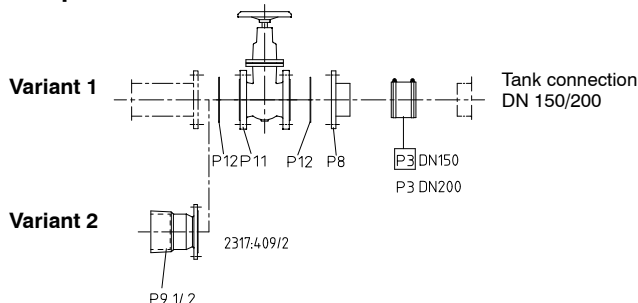
Discharge line Compacta UZ3. to 5.450



Compacta UZ3. to 5.900



Inlet line Compacta UZ3. to 5.450 Compacta UZ3. to 5.900



Compacta UZ 3. to 5.450	Compacta UZ 3. to 5.900	Scope of supply / Accessories
☐ P 1	☐ P 1	Collecting tank
☐ P 2	☐ P 2	Submersible motor pump
☐ P 3	☐ P 3	Flexible hose connection and hose clips DN 150 (inlet) Flexible hose connection and hose clips DN 200
☐ P 4	☐ P 4	Flexible hose connection and hose clips (venting)
☐ P 5	☐ P 5 ²⁾	Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hosetail DN 100, fabric reinforced rubber hose and adapter hose for outer pipe diameters of 108 - 114.3 mm Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 80 with hosetail DN 80, fabric reinforced rubber hose and adapter hose for outer pipe diameters of 83 - 90 mm
☐ P 6	☐ P 6	Flexible hose connection and hose clips (hand diaphragm pump)
☐ P 9.1	☐ P 9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm
☐ P 9.2	☐ P 9.2	Flange adapter (for connecting pipes of different materials) DN 150 for outside pipe diameter of 158.2-181.6 mm, L 105 mm DN 200 for outside pipe diameter of 189.0-212.0 mm, L 145 mm
☐ P10 ²⁾	☐ P10 ²⁾	Check valve
☐ P 11 ²⁾	☐ P 11 ²⁾	Gate valve
☐ P 12 ¹⁾²⁾	☐ P 12 ¹⁾²⁾	Set of mounting accessories
☐ P 13	☐ P 13	Y-pipe
☐ P 14	☐ P 14	Hand diaphragm pump
☐ P 15	☐ P 15	Three-way plug valve
☐ P 16	☐ P 16	Fully automatic drainage pump Ama-Drainer SE/SD
☐ P 18	☐ P 18	Cover plate
☐ E 1	☐ E 1	Automatic level transmitter for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads
☐ E 3 ¹⁾	☐ 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⁾	Alarm switchgear AS 0
☐ E 51 ¹⁾	☐ E 51 ¹⁾	Alarm switchgear AS 2
☐ E 52 ¹⁾	☐ E 52 ¹⁾	Alarm switchgear AS 4
☐ E 53 ¹⁾	☐ E 53 ¹⁾	Alarm switchgear AS 5
☐ E 55 ¹⁾	☐ E 55 ¹⁾	Alarm switchgear AS 1
☐ E 64 ¹⁾	☐ E 64 ¹⁾	Moisture sensor F 1

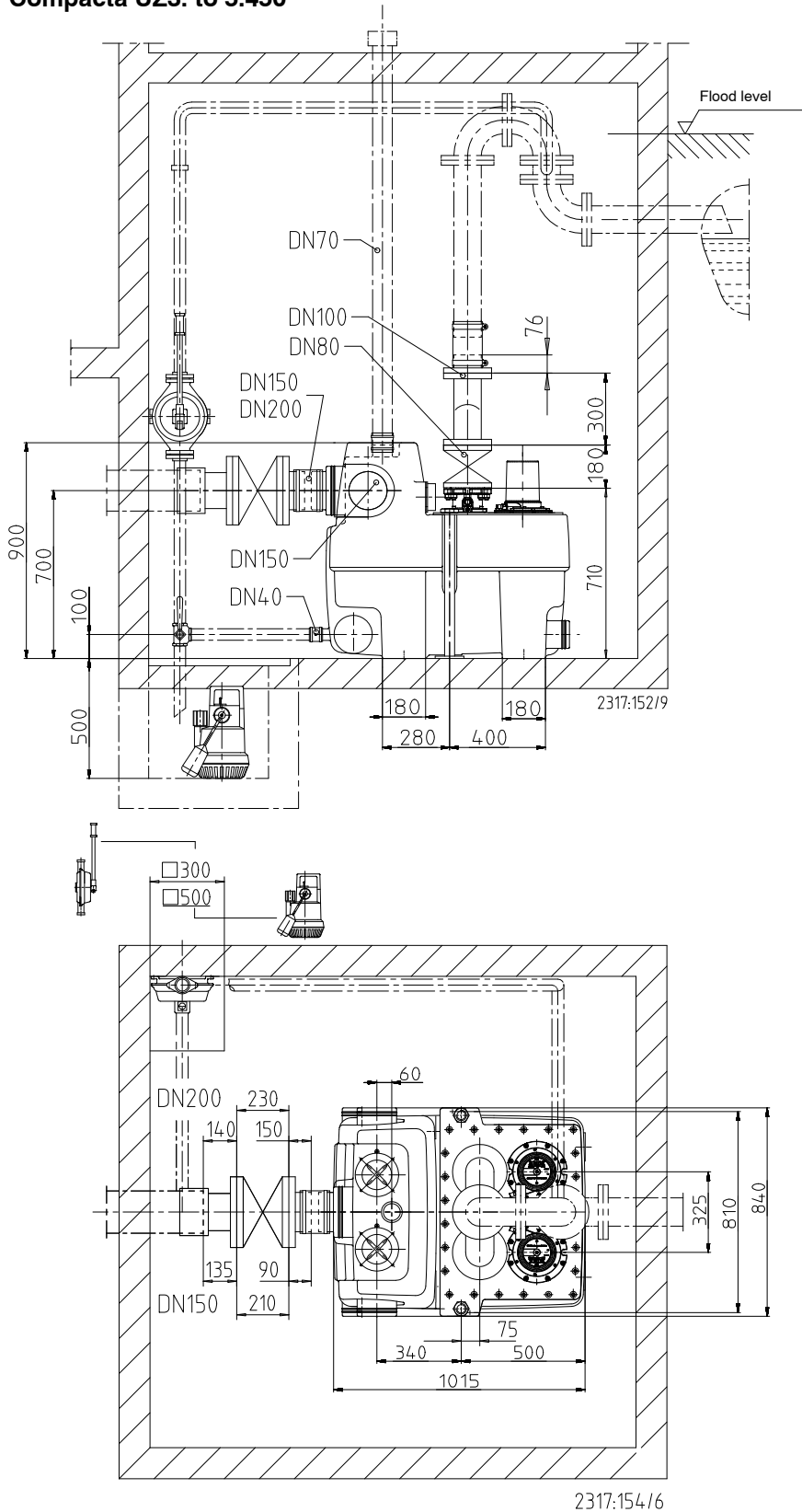
The items marked ☐ are included in the scope of supply

¹⁾ not shown in drawing

²⁾ One pair / set is included / required for the discharge line

Note:

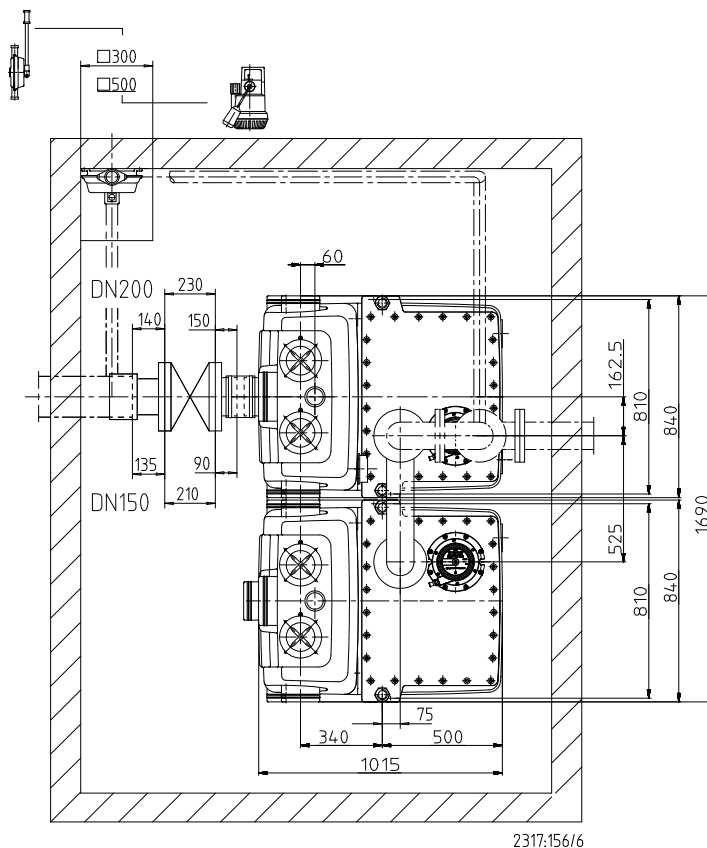
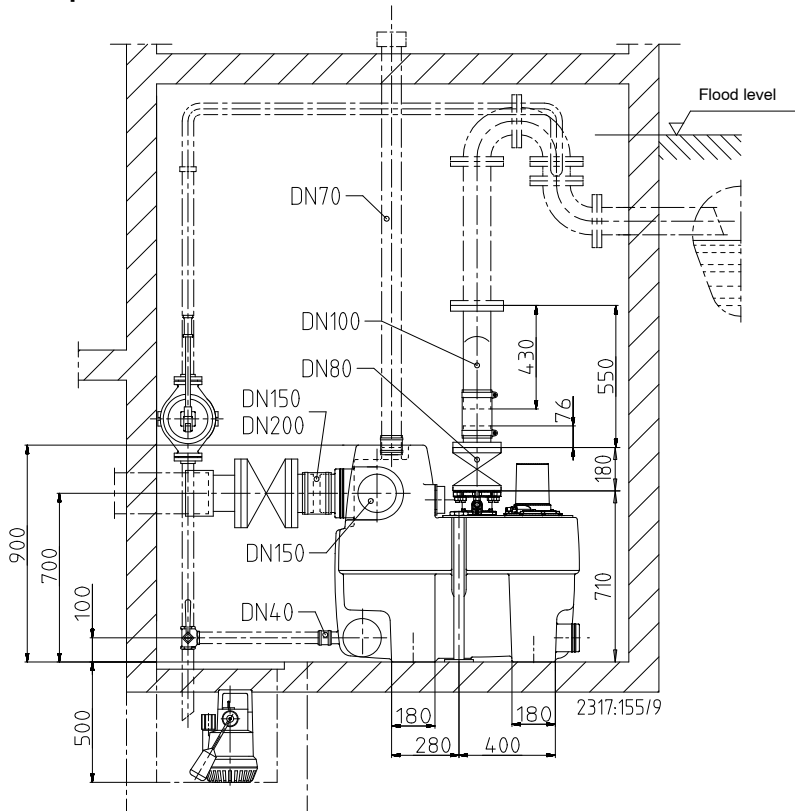
Rooms for sewage lifting units must be dimensioned so as to ensure that there is a working area of at least 60 cm width and height around and above all parts to be operated and serviced.

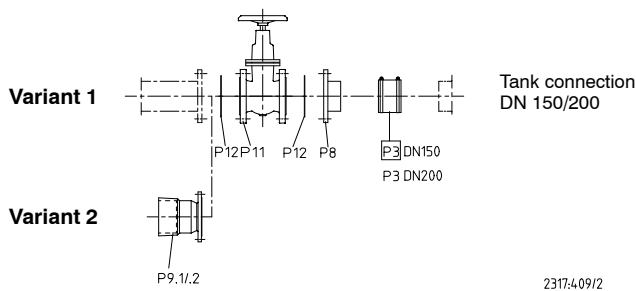
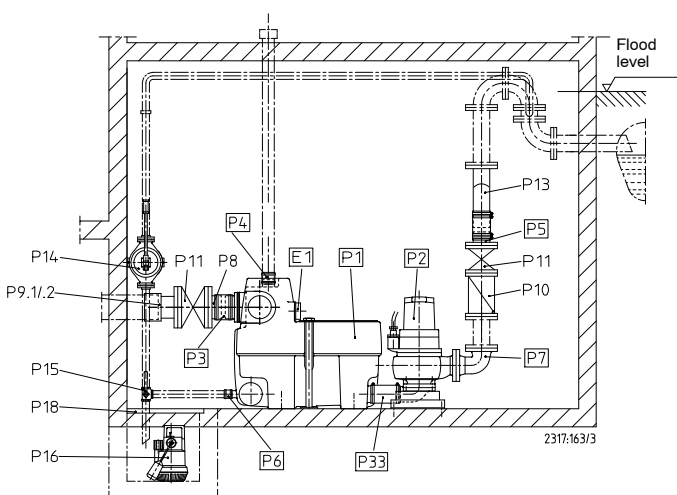
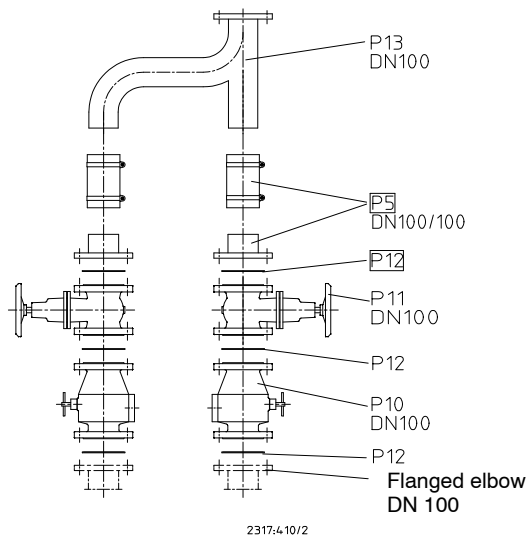
Compacta UZ3. to 5.450


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.

Compacta UZ3. to 5.900



Inlet line Compacta
UZ 10. to 15.450
UZ 10. to 15.900

Discharge line Compacta
UZ 10. to 15.450
UZ 10. to 15.900


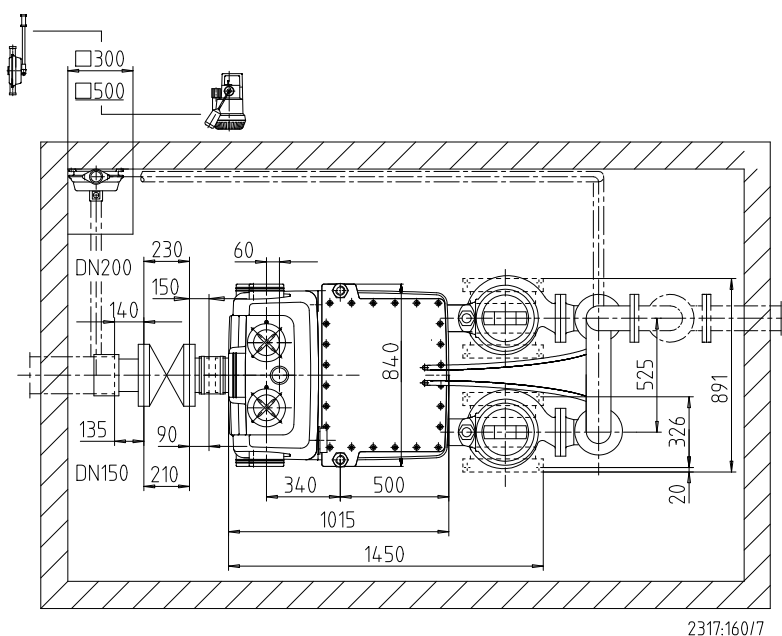
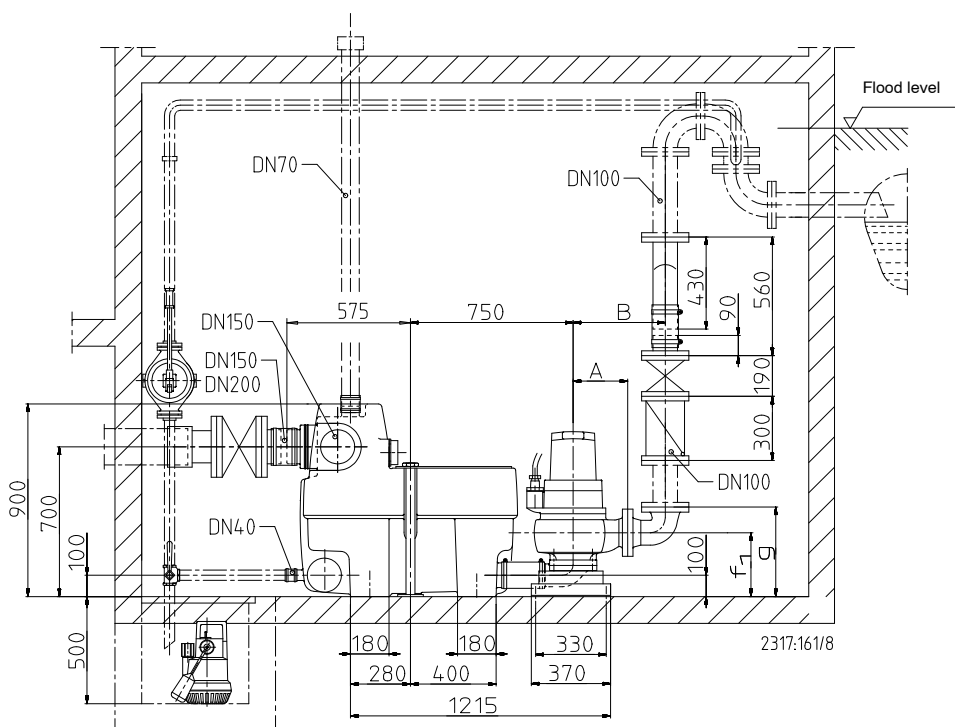
	Scope of supply / Accessories
☐ P 1	Collecting tank
☐ P 2	Submersible motor pump
☐ P 3	Flexible hose connection and hose clips DN 150 (inlet)
P 3	Flexible hose connection and hose clips DN 200
☐ P 4	Flexible hose connection and hose clips (venting)
☐ P 5 ²⁾	Flexible hose connection and hose clips for discharge line, consisting of flanged coupling DN 100 with hosetail DN 100, fabric reinforced rubber hose
☐ P 6	Flexible hose connection and hose clips (hand diaphragm pump)
☐ P 7 ²⁾	Flanged elbow DN 100
P 8 ²⁾	Flanged coupling with hosetail
P 9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm
P 9.2	Flange adapter (for connecting pipes of different materials) DN 150 for outside pipe diameters of 158.2 - 181.6 mm, L 105 mm DN 200 for outside pipe diameters of 189.0 - 212.0 mm, L 145 mm
P 10 ²⁾	Check valve
P 11 ²⁾	Gate valve
P 12 ¹⁾²⁾	Set of mounting accessories
P 13	Y-pipe
P 13.1 ¹⁾	Transition flange DN 100/150 to larger discharge pipe diameter (to be fitted downstream of Y-pipe)
P 14	Hand diaphragm pump
P 15	Three-way plug valve
P 16	Fully automatic drainage pump Ama-Drainer ... SE/SD
P 18	Cover plate
☐ P 33	Flexible hose connection for tank / pump DN 100, fabric reinforced rubber hose
☐ E 1	Automatic level transmitter for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads
☐ E 3 ¹⁾	Electronic control unit with integrated alarm and charging circuit, with high-quality rechargeable battery and alarm buzzer
☐ E 50 ¹⁾	Alarm switchgear AS 0
E 51 ¹⁾	Alarm switchgear AS 2
E 52 ¹⁾	Alarm switchgear AS 4
E 53 ¹⁾	Alarm switchgear AS 5
E 55 ¹⁾	Alarm switchgear AS 1
E 64 ¹⁾	Moisture sensor F 1

The items marked ☐ are included in the scope of supply
¹⁾ not shown in drawing

²⁾ One pair / set is required for the discharge line

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.

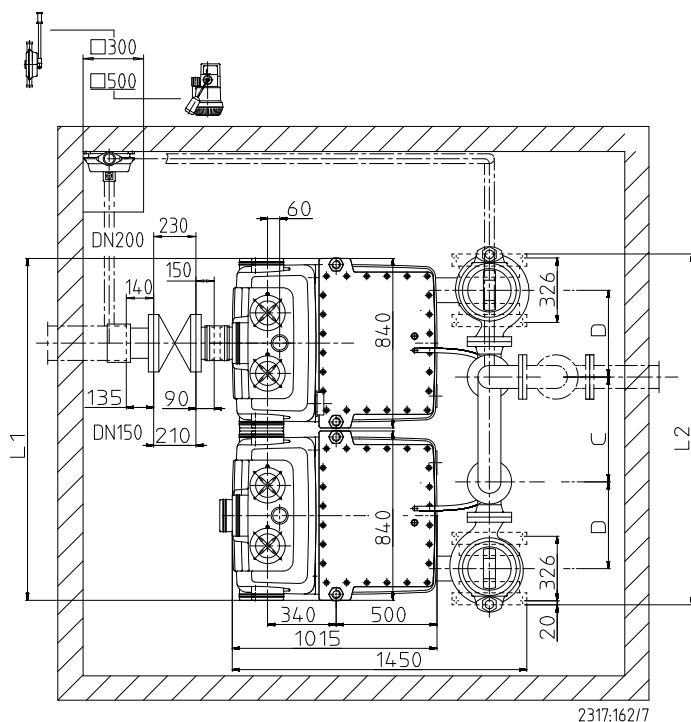
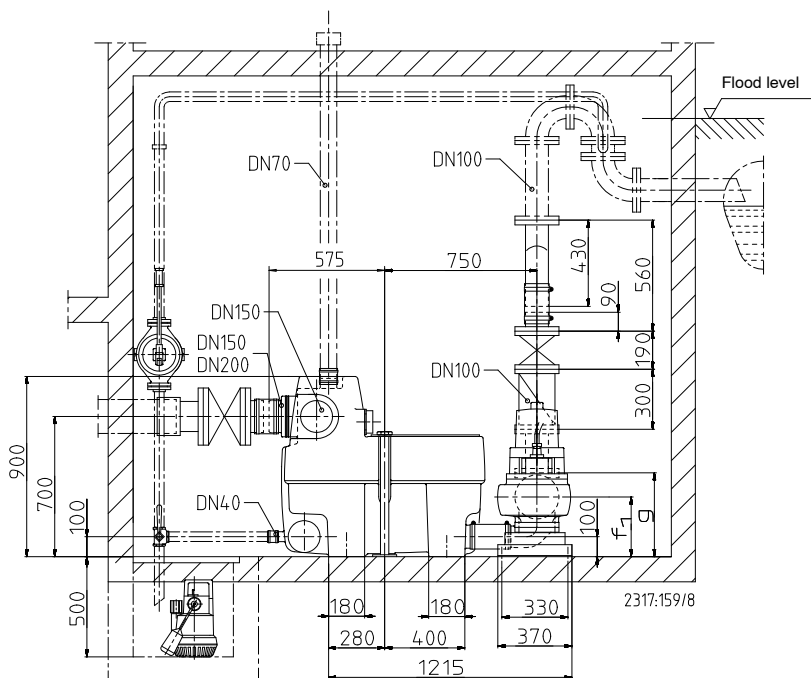
Compacta UZ10. to 15.450


mm

Compacta	A	B	f ₁	g
UZ10. and 11.450	230	405	280	400
UZ12. to 15.450	255	430	300	420

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.

Compacta UZ10. to 15.900


mm

Compacta	C	D	f ₁	g	L ₁	L ₂
UZ10. and 11.900	570	405	280	400	1695	1746
UZ12. to 15.900	525	430	300	420	1700	1751

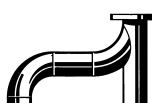
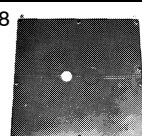
Unit accessories

				Compacta								Ident. No.	≈kg
				U100	U300	UZ150	UZ300	UZ3. - 5.450	UZ3. - 5.900	UZ10. - 15.450	UZ10. - 15.900		
● = Inlet and discharge side Z = Inlet side D = Discharge side													
P 3		Flexible hose connection for inlet line, consisting of rubber hose and two hose clips	DN 50 DN 100 DN 150 DN 200	- - Z -	- Z - Z	Z - - -	- Z - Z	- - - Z	- - - Z	- - - Z	- - - Z	18 040 370 18 040 203 18 040 338 18 040 972	0.1 0.2 0.3 0.5
P 5		Flexible hose connection for discharge line, consisting of rubber hose, adapter hose, flanged coupling with hosetail made of steel, and hose clips	DN 80/80	D	D	D	D	D	-	-	-	19 070 679	0.4
P 8		Flanged coupling with hosetail Flanges drilled to PN 16, DIN 2501 ²⁾	plastic steel steel steel DN 80/100 DN 100/100 DN 150/150 DN 200/200	D ● Z -	D ● Z Z	D ● Z -	D ● Z Z	D - Z Z	- - Z Z	- - Z Z	- - Z Z	18 040 303 19 902 512 19 901 562 11 037 421	0.4 4.5 6.2 12.3
P 9.1		Flanged socket DN 100 DIN 28 622, grey cast iron Flange drilled to PN 16, DIN 2501 ²⁾ for connecting pipes made of ductile cast iron	DN 100 DN 150 DN 200	Z Z -	Z Z Z	Z Z -	Z Z Z	- Z Z	- Z Z	- Z Z	- Z Z	00 262 135 01 020 844 00 263 071	8.6 11.8 18.5
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 200 for outside pipe diameters of 189.0 – 212.0 mm, L = 145 mm	DN 100 DN 150 DN 200	Z Z -	Z Z Z	Z Z -	Z Z Z	- Z Z	- Z Z	- Z Z	- Z Z	01 070 642 01 070 641 01 132 654	4.8 7.5 14.4
P 10 ¹⁾		KSB check valve, PN 16 grey cast iron, with full port, lifting device with T-screw CE – EN 12 050-4	DN 100	-	-	-	-	-	-	D	D	48 829 255	29.0
P 11		PVC gate valve, PN 1, with connection branch	DN 100 DN 150	Z Z	Z Z	Z Z	Z Z	- Z	- Z	- Z	- Z	01 121 715 01 121 714	3.5 9.1
P 11 ¹⁾		Gate valve KSB-COBRA Grey cast iron, PN 10 Flanges drilled to PN 16, DIN 2501 ²⁾	DN 80 DN 100 DN 150 DN 200	D Z Z -	D Z Z Z	D Z Z -	D Z Z Z	D - Z Z	D - Z Z	- D Z Z	- D Z Z	48 829 250 48 829 251 48 829 252 48 816 278	17.5 22.5 43.0 67.0
		Gate valve to our choice (not shown), grey cast iron Flanges drilled to PN 16, DIN 2501 ²⁾	DN 80 DN 100 DN 150 DN 200	D Z Z -	D Z Z Z	D Z Z Z	D Z Z Z	D - Z Z	D - Z Z	- D Z Z	- D Z Z	01 056 708 01 056 709 01 056 710 01 132 653	19.0 26.0 46.0 82.6

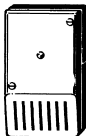
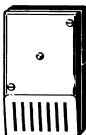
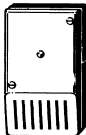
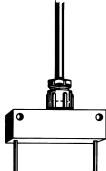
¹⁾One pair required for the discharge lines of UZ dual-pump units

²⁾ DN 200 drilled to PN 10

Unit accessories

			Compacta										Ident. No.	≈kg
			U100	U300	UZ150	UZ300	UZ3. - 5.450	UZ3. - 5.900	UZ10. - 15.450	UZ10. + 11.900	UZ12. - 15.900			
● = Inlet and discharge side Z = Inlet side D = Discharge side														
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 DN 200	D Z Z -	D Z Z Z	D Z Z -	D Z Z Z	D - Z Z	- Z Z Z	- D Z Z	- D Z Z	18 072 644 18 060 163 18 076 348 18 040 967	1.3 1.3 1.5 1.9	
P 13		Y-pipe , grey cast iron with 16 hex. head bolts, nuts and 2 gaskets Flanges drilled to PN 16, DIN 2501	DN 80	-	-	-	-	D	-	-	-	18 040 966	13.0	
		Y-pipe , steel, C = 525 mm Y-pipe , steel, C = 570 mm with 8 hex. head bolts, nuts and 1 gasket Flanges drilled to PN 16, DIN 2501	DN 100 DN 100	- -	- -	- -	- -	D D	- -	D D	- -	18 040 252 18 040 911	15.0 16.0	
P 13.1		Transition flange , grey cast iron, with 16 stay bolts, washers and nuts, L 30 mm Flanges drilled to PN 16, DIN 2501	DN 100/150	-	-	-	-	-	D	D	D	01 134 592	9.7	
P 14		Hand diaphragm pump design LA, grey cast iron	ISO 7/I Rp 1 1/2	X	X	X	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	X	X	X	19 053 063	2.9	
P 16		Fully automatic drainage pump Ama-Drainer SE/SD		X	X	X	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	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 - X	X - X	X - X	X - -	- - -	- - -	- X -	18 040 965 18 040 353 18 041 087	9.1 11.0 9.1	

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 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 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 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 No	Ident. No.	≈ 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 (for LevelControl Basic 2)	12 V= 105 dB(A) 1.2 W	01 086 547	0.1
E 71		Combined alarm Flashlight and piezo buzzer Enclosure IP 65 (for LevelControl Basic 2)	12 V DC	01 139 930	0.4
E 72		Flashlight Enclosure IP 65 (for LevelControl Basic 2)	12 V DC	01 056 355	0.3
E 73		PC service tool with dongle Windows XP RS232 interface (for LevelControl Basic 2)		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 1 or LevelControl Basic 2, BC type		01 118 354	0.4
		Signalling module for LevelControl Basic 2 Individual fault signalling and IO extension module for LevelControl Basic 2 - Six volt-free signalling relays (max. 30 V DC, 1 A) for signalling - High Water - Fault Pump 1 - Fault Pump 2 - Plus three other user-definable individual (fault) messages, e.g. Pump 1 Operational, Pump 2 Operational, External Fault, Sensor Fault, etc. - Analog output 0/4...20 mA The signalling module is supplied with all single-phase lifting units with cutter (with LevelControl Basic 2 ES or LevelControl Basic 2 ZES) as a standard.			
OE 200		Signalling module for BC type		19 075 182	0,3
OE 203		Signalling module for BS type		19 075 185	0,4



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