# Floodable Sewage Lifting Unit

# mini-Compacta / Compacta

Accessories

# **Type Series Booklet**





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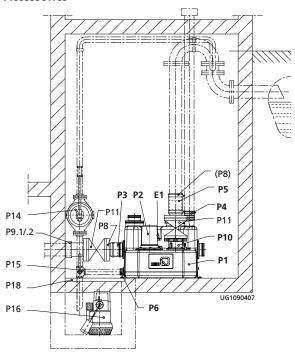


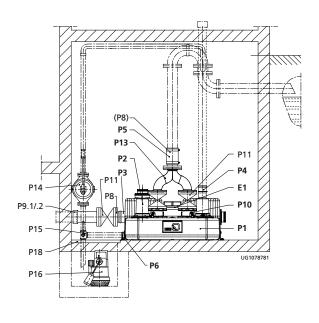
# **Building Services: Drainage**

**Floodable Sewage Lifting Units** 

# mini-Compacta / Compacta

#### Accessories





1 For redundant drainage pumps (P16) see Ama-Drainer N and Ama-Drainer 4../5.. type series booklets.

# Symbols key

Symbol	Description
L	Included in the scope of supply
X	Available as accessory
-	Not available

# System accessories

	Description			min	i-Co	mpa	acta					Co	mpa	cta				Mat. No.	[kg]
Position			090	U100	UZ150	US40	US100	UZS150	U100	U300	UZ150	UZ300	UZ35.450	UZ35.900	UZ10-15.450	UZ10.+11.900	UZ1215.900		
P3	Flexible hose connection (inlet)	DN 50	X	-	X	X	-	X	-	-	X	-	-	-	-	-	-	18040370	0,2
		DN 100	L	L	L	-	L	L	L	X	L	X	-	-	-	-	-	18040203	0,4
		DN 150	-	X	X	-	X	X	X	L	X	L	L	L	L	L	L	18040338	0,7
		DN 200	-	-	-	-	-	-	-	X	-	X	X	X	X	X	X	18040972	0,7
P5	Flexible hose connection	DN 32	-	-	-	X	X	X	-	-	-	-	-	-	-	-	-	18040329	0,6
	(discharge side)	DN 50	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	18040330	0,6
		DN 80/65 <sup>1)</sup>	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	19074057	4,8
		DN 80/80	X	X	X	-	-	-	X	X	X	X	X	-	-	-	-	19070679	5,2
		DN 80/100	L	L	L	-	-	-	L	L	L	L	L	L	-	-	-	18041615	1,3
		DN 100/100	-	-	-	-	-	-	-	-	-	-	-	-	L	L	L	18041616	5,4
P8	Stub flange	DN 65/65 <sup>1)</sup>	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	19074058	3,8

<sup>1)</sup> For the UK only



	Description			mir	ni-Co	mp	acta					Co	mpa	cta				Mat. No.	[kg]
Position			090	U100	UZ150	US40	US100	UZS150	U100	U300	UZ150	UZ300	UZ35.450	UZ35.900	UZ10-15.450	UZ10.+11.900	UZ1215.900		
P8	Stub flange	DN 80/100	X	X	X	-	-	-	X	X	X	X	X	-	-	-	-	18040303	0,4
		DN 100/100	X	X	X	-	X	X	X	X	X	X	X	-	-	-	-	19075270	4,5
		DN 150/150	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X	19075269	9,1
		DN 200/200	-	-	-	-	-	-	-	X	-	X	X	X	X	X	X	19075271	12,3
P9.1	Flanged socket	DN 100	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-	00262135	9,5
		DN 150	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X	01020844	14,5
		DN 200	-	-	-	-	-	-	-	X	-	X	X	X	X	X	X	00263071	18,5
P9.2	Flange adapter	DN 100	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-	01070642	4,45
		DN 150	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X	01070641	7,5
		DN 200	-	-	-	-	-	-	-	X	-	X	X	X	X	X	X	01132654	8,3
P10	RK swing check valve, PN 4	Rp 1 1/4	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	01009771	0,1
		Rp 2	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	01009773	0,5
P10	Ball non-return valve, PN 10	G 1 1/4	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	01120610	0,9
		G 2	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	01036090	2,835
P10	Swing check valve, PN 16	DN 80 <sup>2)</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48829254	16,5
		DN 100	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	48829255	20,9
D44		DN 150 <sup>2)</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48829256	60
P11	Socket gate valve	Rp 1 1/4	-	-	-	X	X	X	-	-	-	-	-	-	-	-	-	01014219	0,627
D44	B. II I	Rp 2	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	00411503	1,287
P11	Ball valve	Rp 1 1/4	-	-	-	X	X	X	-	-	-	-	-	-	-	-	-	01120607	0,572
D4.43\		Rp 2	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	01050382	1,238
P11 <sup>3)</sup>	Flanged ball valve, stainless steel 1.4408	DN 80	X	X	X	-	-	-	X	X	X	X	X	X	-	-	-	01723156	18,8
P11		DN 100 DN 100	X	X	X	-	-	-	X	X	X	X	-	-	X	X	X	01723239	35
PII	Gate valve, PN 1	DN 100	<i>X</i>	X	X	X	X	X	X	X	X	X	-	-	-	-	-	01121713	3,5
		DN 200	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X	01121714	9,2
P11	Gate valve to KSB's choice,	DN 65	-	-	- X	-	ļ-	-	-	X	- X	X	X	X	X	X	X	01056707	13,4
FII	PN 10	DN 80	X	X	X	-	-	-	X	X	X	X	X	X	-	-	ļ-	01056707	+
		DN 100	X	X	X	- X	- X	-	X	X	X	X	X	X	- X	-	X	01056708	18,9 22,5
		DN 150	_	X	-	_	X	X	X	X	X	X		X		X	<u> </u>	01056709	42,7
		DN 200	-	^	X	-	^	X	_	X	_	-	X		X	X	X		
P12	Set of installation accessories	DN 80	X	X	X	-	+-	-	X	X	X	X	X	X	<i>X</i>	<i>X</i>	_	01132653 18072644	61,5
F 12	Set of histaliation accessories	DN 100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18060163	1,4
		DN 150	^	X	X	-	X	X	X	X	X	X	X	X	X	X	X	18076348	2
		DN 200	-	^	^	<u> </u>	_	^	-	X	_	X	X	X	X	X	X	18040967	4,2
P13	Y-pipe	DN 50		H			-	X	-	^		^	^	^	^	^	_	01121711	8,5
F 13	galvanised steel, with union	DN 30	-	-	-	-	-	^	-	-	-	-	_	-	-	-	-	01121711	6,3
P13	Y-pipe	DN 80	-	-	L	-	-	-	-	-	L	L	X	-	-	-	-	18040966	8
	grey cast iron, including installation accessories																		
P13	Y-pipe	DN 100	-	-	-	-	-	-	-	-	-	-	-	X	X	-	X	18040252	15,6
	Galvanised steel, including installation accessories																		
	steel, A = 525 mm																		1
P13	Y-pipe Galvanised steel, including	DN 100	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	18040911	15,5
	installation accessories steel, A = 570 mm																		
P13	Y-pipe	DN 80	-	-	<b>X</b> <sup>3)</sup>	-	-	-	-	-	<b>X</b> <sup>3)</sup>	<b>X</b> <sup>3)</sup>	<b>X</b> 3)	-	-	-	-	18041115	8
	including installation accessorie	S																	

For Compacta UZ, ZF, ZK Only for variant C

<sup>2)</sup> 3)



	Description			min	i-Co	mpa	acta					Co	mpa	cta				Mat. No.	[kg]
Position			090	U100	UZ150	US40	US100	UZS150	U100	U300	UZ150	UZ300	UZ35.450	UZ35.900	UZ10-15.450	UZ10.+11.900	UZ1215.900		
P13	Y-pipe	DN 100	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	18041287	15,6
	including installation accessories																		
	stainless steel (1.4571), A = 525 mm																		
P13.1	Adapter flange	DN 100/150	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	01134592	12
P14	Hand diaphragm pump	Rp 1 1/2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00520485	12
P15	Three-way plug valve	Rp 1 1/2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	19053063	1,5
P20	Blind flange	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	18040964	3,8
		-	-	-	-	-	X	X	X	X	X	X	X	X	-	-	-	18040965	3,8
		-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	18041731	3,8
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	18040353	10,4
		-	-	-	-	-	X	X	X	X	X	X	-	-	-	-	-	18041087	1,2
-	Package offer for any spare parts required during 10 years' operation, single pump	-	X	X	-	X	X	-	-	-	-	-	-	-	-	-	-	18040943	-



#### P3 - Flexible hose connection (inlet)



Fig. 1: Flexible hose connection (inlet)

In accordance with EN 12050-1, flexible, vibration-damping connections must be used for all hydraulic connections on the inlet side and discharge side of sewage lifting units.

Connection sets for the inlet side comprise:

- Various cross-sections
- · Flexible hose connection
- Fitting hose clips

#### **Available versions**

Available versions of flexible hose connections (inlet)

Description	Mat. No.
Flexible hose connection (inlet) for inlet line, with fabric-reinforced hose and two hose clips, DN 50	18040370
Flexible hose connection for inlet line, with fabric-reinforced hose and two hose clips, DN 100	18040203
Flexible hose connection for inlet line, with fabric-reinforced hose and two hose clips, DN 150	18040338
Flexible hose connection for inlet line, with fabric-reinforced hose and two hose clips, DN 200	18040972

# Scope of supply

Standard scope of supply U60, U(S)100 and UZ(S)150: Connection set for inlet DN 100 included.

Standard scope of supply U300, UZ300:

Connection set for inlet DN 150 included.

# Technical data

Technical data of the flexible hose connection (inlet)

Description	DN 50	DN 100	DN 150	DN 200
Fabric-reinforced hose	60 × 4,5 × 50 mm	110 × 4 × 100 mm	162 × 5 × 120 mm	203 × 3 × 200 mm
Hose clip	50 - 70 × 13 mm	110 - 130 × 13 mm	160 - 180 × 13 mm	210 - 230 × 13 mm



## P5 - Flexible hose connection (discharge side)



Fig. 2: Flexible hose connection (discharge side)

In accordance with EN 12050-1, flexible, vibration-damping connections must be used for all hydraulic connections on the inlet side and discharge side of sewage lifting units.

Connection sets for the discharge side comprise:

- Various cross-sections
- Flexible hose connection
- Fitting hose clips
- Stub flange

#### **Available versions**

Available versions of flexible hose connections (discharge side)

Description	Mat. No.
Flexible hose connection (discharge side) for discharge line, with fabric-reinforced hose, hose clips and hexagon nipple, DN 32	18040329
Flexible hose connection For discharge line, comprises fabric-reinforced hose, adapter hose, hose clips and hexagon nipple, DN 50	18040330
Flexible hose connection (discharge side) for discharge line, comprises fabric-reinforced hose, reducing nipple, connecting pipe, threaded flange DN 80 and hose clips, DN 80/65	19074057
Flexible hose connection (discharge side) for discharge line, with fabric-reinforced hose, adapter hose, stub flange made of steel, and hose clips, DN 80/80.	19070679
The adapter hose can be used for connecting pipes of outside diameters ranging from 83 to 90 mm.	
Flexible hose connection for discharge pipe, comprises fabric-reinforced hose, adapter hose, stub flange with pipe connection and hose clips, DN 80/100	18041615
The adapter hose can be used for connecting pipes of outside diameters ranging from 108 - 114.3 mm.	
Flexible hose connection for discharge pipe, comprises fabric-reinforced hose, adapter hose, stub flange with pipe connection and hose clips, DN 100/100	18041616
The adapter hose can be used for connecting pipes of outside diameters ranging from 108 - 114.3 mm.	

# Scope of supply

Standard scope of supply U60, U100, U300, UZ150, UZ300, UZ3. to UZ5.450 and UZ3. to UZ5.500: Flexible hose connections DN 80/100 included.

Standard scope of supply UZ10. to UZ15.450 and UZ10. to UZ15.900:

Flexible hose connections DN 100/100 included.

#### **Technical data**

Technical data of the flexible hose connection (discharge side)

Description	DN 32	DN 50	DN 80/65	DN 80/80	DN 80/100	DN 100/100
Fabric-reinforced hose	42 × 4 × 120 mm	60 × 5 × 90 mm	75 × 5 × 150 mm	90 × 6 × 200 mm	115 × 6 × 200 mm	115 × 6 × 200 mm
Adapter hose	-	-	-	81 × 5 × 50 mm	108 × 3 × 60 mm	108 × 3 × 60 mm
Hose clip	50 × 20 mm	70 × 25 mm	70 - 90 × 13 mm	100 × 25 mm	126 × 25 mm	126 × 25 mm
Stub flange	Hexagon nipple: R 1 <sup>1</sup> / <sub>4</sub> × 150 mm Material: S185+Z	Hexagon nipple: R 2 × 60 mm Material: A4	R 2 $^{1}/_{2}$ × 50 mm on flange DN 80, PN 16 Material: ST, A4	Material: steel	Material: PP	Material: steel



#### P8 - Stub flange



Stub flange for connecting flanged pipes to the inlet side (e.g. if a flanged inlet-side gate valve is fitted in addition) or for connecting plain-end pipes to the discharge side of sewage lifting units (connection sets P5 can also be used).

#### **Available versions**

Available versions of stub flanges

Description	Mat. No.
Stub flange, DN 65/65 (not illustrated)	19074058
Stub flange, DN 80/100	18040303
Stub flange, DN 100/100	19075270
Stub flange, DN 150/150	19075269
Stub flange, DN 200/200	19075271

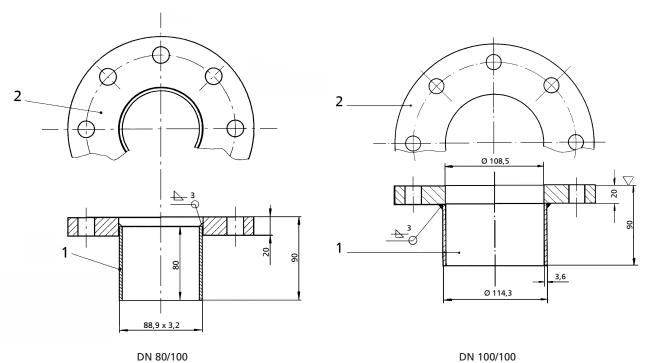
#### **Technical data**

Technical data of the stub flange

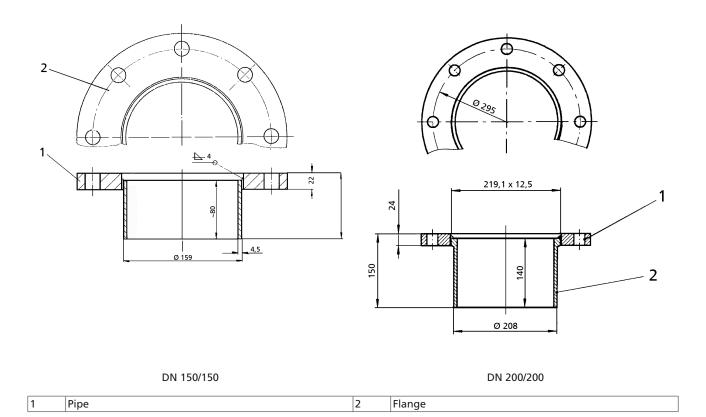
Feature	DN 65	DN 80/100	DN 100/100	DN 150/150	DN 200/200
Material	Steel	PP	Steel	Steel	Steel
Flange / bolt hole pattern to EN 1092-1/2	PN 10/16	PN 10/16	PN 10/16	PN 10/16	PN 10

#### **Dimensions**

Dimensions of the stub flange









## P9.1 - Flanged socket



Flanged socket made of grey cast iron for connecting pipes made of ductile cast iron to the inlet side of sewage lifting units (e.g. if a flanged inlet-side gate valve is used). The pipe to be connected is fitted with an O-ring and inserted into the flanged socket.

#### **Available versions**

Available versions of flanged sockets

Description	Mat. No.
Flanged socket DN 100 for outside pipe diameter of 118 mm	00262135
Flanged socket DN 150 for outside pipe diameter of 170 mm	01020844
Flanged socket DN 200 for outside pipe diameter of 222 mm	00263071

#### **Technical data**

Technical data of the flanged socket

Feature	Value
Design	To DIN 28622
Material	Grey cast iron
Flange pattern	PN 10/16, to EN 1092-1/2 <sup>4)</sup>



#### P9.2 - Flange adapter



Flange adapter made of grey cast iron for connecting pipes of various materials (sewer pipes, high temperature pipes, etc.) to a flanged gate valve on the inlet side of sewage lifting units. The clamped connection on the pipe connection side establishes a tight connection with the flanged end, even for slightly varying pipe cross-sections.

#### **Available versions**

Available versions of flange adapters

Description	Mat. No.
Flange adapter DN 100 for outside pipe diameter of 107.2 - 127.8 mm, length 105 mm	01070642
Flange adapter DN 150 for outside pipe diameter of 158.2 - 181.6 mm, length 105 mm	01070641
Flange adapter DN 200 for outside pipe diameter of 189.5 - 212.0 mm, length 145 mm	01132654

#### **Technical data**

Technical data of the flange adapter

Feature	Value	
Design	To DIN 28622	
Material	Grey cast iron	
Flange pattern	PN 10/16 <sup>5)</sup>	



#### P10 - RK swing check valve, PN 4



For discharge pipes with a nominal diameter < DN 80 it is generally recommended (and stipulated by law in Germany!) that sewage lifting units be fitted with a cutter (e.g. for refurbished buildings).

The standard scope of supply of sewage lifting units with a cutter does not include any discharge-side lift check valves in order to allow for a flexible choice of discharge side connections matching the installation conditions. If lift check valves are required, they are available as accessories, e.g. swing check valves.

#### **Available versions**

Available versions of RK swing check valves

Description	Mat. No.
RK swing check valve, Rp 1 1/4	01009771
RK swing check valve, Rp 2	01009773

# **Technical data**

Technical data of the RK swing check valve

Feature	Value
Design	To CE EN 12050-4, with full port and drain plug
Material	Plastic
Connection	Internal/internal thread ISO 7/1

#### **Dimensions**

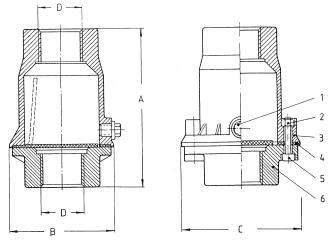


Fig. 3: Dimensions of swing check valves RK 32 and 50

Dimensions of the ball check valve

Туре	Α	В	С	D
	[mm]	[mm]	[mm]	
DN 32 / Rp 1 1/4	90	70	90	Rp 1 1/4
DN 50 / Rp 2	160	105	121	Rp 2



#### P10 - Lift check valve, PN 10



For discharge pipes with a nominal diameter < DN 80 it is generally recommended (and stipulated by law in Germany!) that sewage lifting units be fitted with a cutter (e.g. for refurbished buildings).

The standard scope of supply of sewage lifting units with a cutter does not include any discharge-side lift check valves in order to allow for a flexible choice of discharge side connections matching the installation conditions. If lift check valves are required, they are available as accessories, e.g. ball check valves

#### **Available versions**

Available versions of lift check valves

Description	Mat. No.
Ball non-return valve, G 1 1/4	01120610
Ball non-return valve, G 2	01036090

#### **Technical data**

Technical data of the lift check valve

Feature	Value
Design	To CE EN 12050-4, with full port
Material	Grey cast iron
Max. pressure load	PN 10

#### **Dimensions**

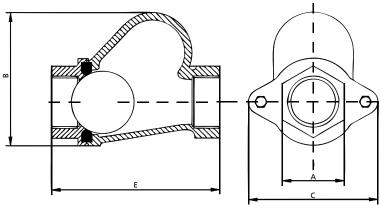


Fig. 4: Dimensions of the ball check valve

Dimensions of the ball check valve

Туре	Α	В	С	E
	[mm]	[mm]	[mm]	[mm]
DN 32 / 1 <sup>1</sup> / <sub>4</sub>	50	107	105	135
DN 50 / 2	70	140	132	175

#### Loss coefficients

Loss coefficients of the ball check valve

Туре	Loss coefficient
DN 32 / 1 <sup>1</sup> / <sub>4</sub>	2,5
DN 50 / 2	2,0



#### P10 - Swing check valve, PN 16



The standard scope of supply of all single-pump and dual-pump sewage lifting units with free-flow impellers F1 to F5 includes the required swing check valve(s) in DN 80.

To keep the choice of discharge-side piping for large Compacta lifting units with F10 to F15 impellers as flexible as possible, the scope of supply of these sewage lifting units does not include a swing check valve.

If suitable swing check valves are required for these models, they can be selected in DN 100 from the available accessories.

#### **Available versions**

Available versions of swing check valves

Description	Mat. No.
Swing check valve, DN 80	48829254
Swing check valve, DN 100	48829255
Swing check valve, DN 150	48829256

#### **Technical data**

Technical data of the swing check valve

Feature	Value
Design	To CE EN 12050-4, with full port, lifting device with tommy screw
Material	Grey cast iron
Flange pattern	PN 10/16, drilled to EN 1092-1/2

#### **Dimensions**

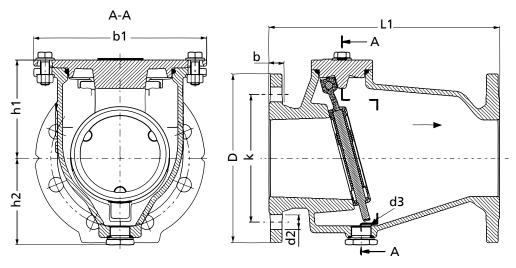


Fig. 5: Dimensions of the swing check valves

Dimensions of the swing check valves

DN	D	b	b1	d2	h1	h2	k	L1	Number of
	[mm]	bolt holes							
80	200	19	200	19	125	100	160	260	8
100	220	19	225	19	138	113	180	300	8
150	285	19	340	23	193	148	240	400	8



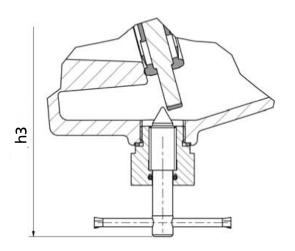


Fig. 6: Dimensions of the lifting device

h3 Distance to the valve centre: 152 mm

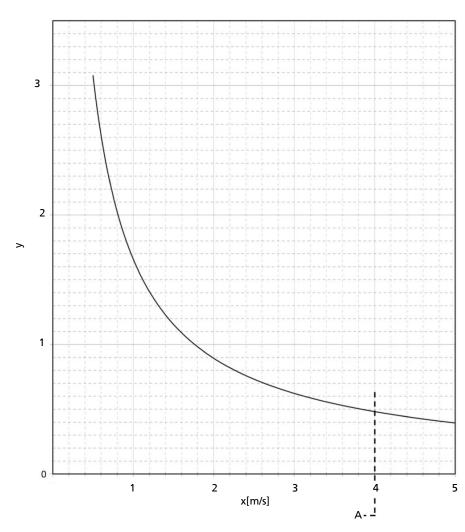


Fig. 7: Loss coefficient

х	Flow velocity [m/s]	у	Loss coefficient ζ
Α	Operating limit		



#### P11 - Socket gate valve CuZn, PN 16



To be able to disconnect the sewage lifting unit from the discharge pipe in the event of a fault or for any maintenance work, installing a discharge-side gate valve is recommended to prevent the content of the discharge pipe from flowing back to the sewage lifting unit (also see EN 12056-4).

Socket gate valves made of brass (CuZn) are especially suited for small sewage lifting units with a cutter and discharge pipes with a small nominal diameter (DN 32 / DN 50).

#### **Available versions**

Available versions of socket gate valves

Description	Mat. No.
Socket gate valve, Rp 1 1/4	01014219
Socket gate valve CuZn PN 10-12 DIN 3352, Rp 2	00411503

# **Technical data**

Technical data of the socket gate valve

Feature	Value
9	Internal/internal thread and full port
Material	Brass (CuZn)
Sealing elements	PTFE
Max. pressure load	PN 16

#### **Dimensions**

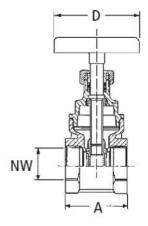


Fig. 8: Dimensions of the socket gate valve

Dimensions of the socket gate valve

Туре	NW (nom. diameter)	A	D	
	[mm]	[mm]	[mm]	
Rp 1 1/4	46	52	70	
Rp 2	65	61	70	



#### P11 - Ball valve, CuZn, PN 16



To be able to disconnect the sewage lifting unit from the discharge pipe in the event of a fault or for any maintenance work, installing a discharge-side ball valve is recommended to prevent the content of the discharge pipe from flowing back to the sewage lifting unit (also see EN 12056-4).

Ball valves made of brass (CuZn) are especially suited for small sewage lifting units with a cutter and discharge pipes with a small nominal diameter (DN 32 / DN 50).

#### **Available versions**

Available versions of ball valves

Description	Mat. No.
Ball valve, Rp 1 1/4	01120607
Ball valve CuZn PN 16, Rp 2	01050382

# **Technical data**

Technical data of the ball valve

Feature	Value
Material	Brass (CuZn)
Max. pressure load	PN 16

#### **Dimensions**

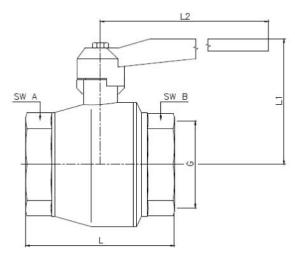


Fig. 9: Dimensions of the ball valve

Dimensions of the ball valve

Туре	L	L1	L2	SW A	SW B	
	[mm]	[mm]	[mm]	[mm]	[mm]	
Rp 1 1/4	82	65	115	47	47	
Rp 2	105	87	150	66	66	



#### P11 - Flanged ball valve, stainless steel, PN 16



To be able to disconnect the sewage lifting unit from the discharge line or inlet line in the event of a fault or for any maintenance work, or to prevent any undesired backflow/inflow, installing gate valves is recommended (also see EN 12056-4).

Flanged ball valves are especially suited for sewage lifting units of variant C that are used for pumping aggressive fluids.

#### **Available versions**

Available versions of flanged ball valves

Description	Mat. No.
Flanged ball valve, stainless steel 1.4408, DN 80	01723156
Flanged ball valve, stainless steel 1.4408, DN 100	01723239

# **Technical data**

Technical data of the ball valve

Feature	Value
Material	Stainless steel 1.4408
Max. pressure load	PN 16
Max. temperature	180 °C
Flange pattern	PN 10/16, to EN 1092-1/2

#### **Dimensions**

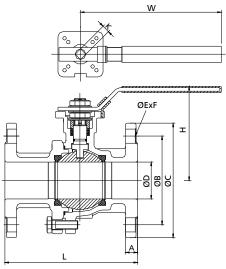


Fig. 10: Dimensions of the flanged ball valve

Dimensions of the flanged ball valve [mm]

DN	Α	В	С	D	Н	K	L	E×F	W
80	24	160	200	76	174	17	180	18×8	300
100	24	160	220	100	198	22	190	22×8	335



#### P11 - PVC gate valve



To be able to disconnect the sewage lifting unit from the inlet pipe in the event of a fault or for any maintenance work, or to prevent any undesired inflow, installing an inlet-side gate valve is recommended (also see EN 12056-4).

Simple PVC gate valves can be used for this purpose.

#### **Available versions**

Available versions of gate valves

Description	Mat. No.
Gate valve, PN 1, DN 100	01121715
PVC gate valve PN 1, DN 150	01121714
PVC gate valve PN 1, DN 200	01506896

#### **Technical data**

Technical data of the gate valve

Feature	Value
Material	Plastic (PVC)
Material of the sealing element	EPDM
Max. pressure load	PN 1
Max. temperature	40 °C, for a short time (up to max. 5 minutes) up to 65 °C

#### **Dimensions**

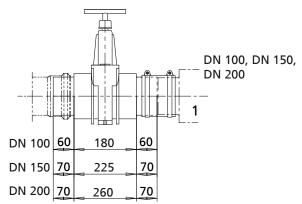


Fig. 11: Dimensions of the PVC gate valve

-	I	
∣1	Tank connection	



#### P11 - Gate valve to KSB's choice



Fig. 12: Gate valve to KSB's choice (example)

In the event of a fault or for any maintenance work, using gate valves is recommended in accordance with EN 12056-4:

- Removing the discharge line / inlet line
- Preventing undesired inflow / backflow

#### **Available versions**

Available versions of gate valves

Description	Mat. No.
Gate valve to KSB's choice, PN 10, DN 65	01056707
Gate valve to KSB's choice, PN 10, DN 80	01056708
Gate valve to KSB's choice, PN 10, DN 100	01056709
Gate valve to KSB's choice, PN 10, DN 150	01056710
Gate valve to KSB's choice, PN 6, DN 200	01132653

# **Technical data**

Technical data of the gate valve

Feature	Value
Material	Grey cast iron
Material of the gate valve wedge	NBR
Flange pattern	PN 10/16, to EN 1092-1/2 <sup>6)</sup>
Maximum temperature	120 °C

## **Dimensions**

Dimensions of the gate valve

	Dimension	DN 65	DN 80	DN 100	DN 150	DN 200
		[mm]	[mm]	[mm]	[mm]	[mm]
pS	L	170	180	190	210	230
¥	Н	265	290	325	457	534
	D1	118	138	158	212	268
	Dz	185	200	220	285	340
	D0	145	160	180	240	295
588	5	4 × 18	8 × 18	8 × 18	8 × 22	12 × 22

6) DN 200 drilled to PN 10



#### P12 - Installation accessories



Installation accessories are generally required for connecting flanges made of steel, grey cast iron or plastic. This comprises:
- 8 hexagon head bolts with nuts (for DN 200: 12 bolts and nuts)
- 1 gasket

#### **Available versions**

# Available versions

Description	Mat. No.
Set of installation accessories, DN 80	18072644
Set of installation accessories, DN 100	18060163
Set of installation accessories, DN 150	18076348
Set of installation accessories, DN 200	18040967



#### P13 - Y-pipes

DN 50



Version for sewage lifting units with a cutter

For all dual-pump sewage lifting units with a free-flow impeller up to UZ300 the required Y-pipe is included in the scope of supply.

For sewage lifting units with a cutter or with a large capacity (UZ450, UZ900) as well as for C variants (for pumping aggressive fluids) a suitable Y-pipe must be ordered from the accessories.



Version for sewage lifting units of sizes UZ450/UZ900 and all C variants (material variants)

#### **Technical data**

Technical data of the Y-pipe

Feature	Value
Flange pattern	PN 10/16, to EN 1092-1/2

#### **Available versions**

Available versions of the standard design

Description	Mat. No.
Y-pipe, DN 50, galvanised steel, with union nuts, for sewage lifting units with a cutter UZS150	01121711
Y-pipe, DN 80, grey cast iron, A = 325 mm, with 16 hexagon head bolts, nuts and 2 sealing elements, for sewage lifting units UZ35.450	18040966
Y-pipe, DN 100, Material: steel, A = 525 mm, with 8 hexagon head bolts, nuts and 1 sealing element, steel, A = 525 mm (A = distance between the two pipes), for sewage lifting units UZ35.900, UZ1015.450, UZ12-15.900	18040252
Y-pipe, DN 100, with 8 hexagon head bolts, nuts and 1 sealing element, steel, A = 570 mm (A = distance between the two pipes), for sewage lifting units UZ10. and 11.900	18040911

Available versions of the C-variant for aggressive fluids

Description	Mat. No.
Y-pipe, DN 80, grey cast iron with high-quality coating (Rilsan®), 16 hexagon head bolts, nuts and 2 sealing elements, for sewage lifting units UZ1.150/C - UZ5.450/C	18041115
Y-pipe, DN 100, stainless steel (1.4571), $A = 525$ mm, with 8 hexagon head bolts, nuts and 1 sealing element, stainless steel (1.4571), $A = 525$ mm ( $A = 600$ distance between the two pipes), for sewage lifting units UZ35.900/C	18041287



#### P13.1 - GG transition flange



For connecting large Compacta lifting units, a transition from a DN 100 to a DN 150 flange might be necessary, depending on the installation requirements. A transition flange is available for this purpose.

#### **Available versions**

Available versions of GG transition flanges

Description	Mat. No.
Adapter flange, DN 100/150	01134592

# **Technical data**

Technical data of the GG transition flange

Feature	Value
Material	Grey cast iron
Flange pattern	PN 10/16, to EN 1092-1/2
Scope of supply	Includes 16 stay bolts, discs and nuts, length 30 mm

#### **Dimensions**

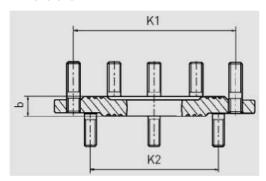


Fig. 13: Dimensions of the GG transition flange

Dimensions of the GG transition flange

K1	K2	b
[mm]	[mm]	[mm]
240	180	30



#### P14 - Hand diaphragm pump



A hand diaphragm pump can be used to drain the sewage lifting unit in the event of a fault or power failure, or for any maintenance work.

#### **Available versions**

Available versions of hand diaphragm pumps

Description	Mat. No.
Hand diaphragm pump	00520485

# **Technical data**

Technical data of the hand diaphragm pump

Feature	Value
Material	Grey cast iron
Connection	Rp 1 1/2
Discharge head	15 m

Feature	Value
Suction lift	7 m
Flow rate	30 l/min
Strokes per minute	45
Weight	15 kg

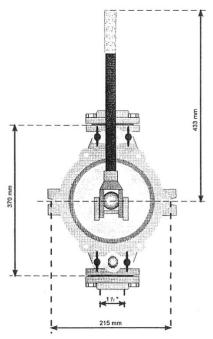


Fig. 14: Dimensions of the hand diaphragm pump



## P15 - Three-way plug valve



A three-way plug valve combined with a hand diaphragm pump (see P14) might be required to drain the sewage lifting unit in the event of a fault or power failure, or for any maintenance work.

#### **Available versions**

Available versions of three-way plug valves

Description	Mat. No.
Three-way plug valve, Rp 1 1/2	19053063

#### **Technical data**

Technical data of the three-way plug valve

Feature	Value
Material	Brass
Connection	Rp 1 1/2
Width across flats of connection	WAF22



#### P20 - Blind flange



For maintenance work or in the event of a fault, the rotating assembly or one of the pumps may have to be removed temporarily. Blind flanges are available for this purpose. On dual-pump stations they tightly cover the opening in the tank where one of the pumps has been removed and allow the sewage lifting unit to resume operation with the remaining pump. Blind flanges prevent any leakage of the fluid, even if the sewage lifting unit is completely full.

#### **Available versions**

Blind flanges for closing the pump casing when the rotating assembly has been removed

Description	Mat. No.
Blind flange for mini-Compacta U60, U100 and UZ150	18040964
Blind flange for mini-Compacta US40, plastic	18041731
Blind flange for (mini-)Compacta U(S)100, UZ(S)150, U(Z)300, UZ35.450 and UZ35.900	18040965
Blind flange for Compacta UZ1215.900 (without drawing)	18040353

Blind flanges for closing the tank when one of the pumps has been removed

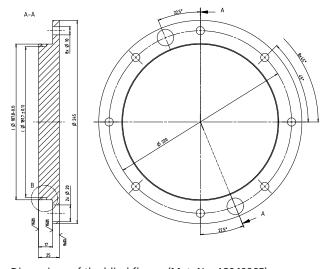
Description	Mat. No.
Blind flange for (mini-)Compacta U(S)100, UZ(S)150 and U(Z) 300 (not illustrated)	18041087

#### **Technical data**

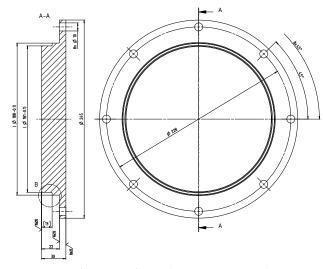
Technical data of the blind flange

Feature	Value
Material	Steel

#### **Dimensions**







Dimensions of the blind flange (Mat. No. 18040964)



# Package offer for any spare parts required during 10 years' operation

кѕв б.	mini-Compacta U / US / UZ / UZ
	re Herstellergarantie für die Lieferung kostenloser Ersatzteile a des Typs U1.60 DIE, U1.100 DIE, U81.100 DIE, U2.100 DIE, U82.100 DIE
Die KSB Aktiengesellschaft, . Fäkulienhabserlage ein Pks i kostenioser Ersatzteile.	ohann-Klein Str. 9, 67227 Frankemhal, bietet Ihnen für die qualitativ hochwert: in Sicherheit und empfishtit ihnen eine 10-jährige Herstellerganantie für die Lieferu
Ersatzteile umfasst, die währe beeintrüchtigen. Die Anforderu Partner oder direkt bei der KSI	ernen woden, bietet KSB Ihnen eine Garantie, welche die kostordose Anliederung all die Garantiereit überfelt werden und deutuch den Benirbeit ihren Honges- ng des Ersatztels erfolgt unter Neumung der Garantierunnen bei einem KSB hump- 1-Hoffen im Werk. Die Kosten für den Austausch des defeiden Ersotzeills sowie g erden durch Gase Garantie micht erfasst.
Die defekten Teile sind nur au Diesen Wunsch würde KSB sp	f ausdrücklichen KSB-Verlangen zurückzugeben und zur Abholung bereitzufrallt ätestens zum Zeitpunkt der Anlieferung des Ersatzteils aus dieser Garantie äuße
Leistungen aus der Garantie k Bestellung übersandt wird, für	innen Sie ab dem Datum der Garantiebestätigung durch KSB, die Ihnen nach ih eine Zeitdauer von 10 Jahren in Anspruch nehmen.
Mehrlamilienhäusem und Inst.	nur für Anwendungen mit hikuslichem Ab-(Schmutzwasser in Ein- u slasionen unter Einhaltung der Vorgaben der Betriebsanlieitung bzw. der EN 120 i Bestellung muss deshalb in den ensten 6 Monaten nach Erwerb erfolgen.
Ihre gesetzlichen Rechte als vertragliche Gewährleistungss	Verbraucher werden durch die Garantie nicht eingeschränkt, Ebenso bleib nsprüche von der Garantie unberühnt.
Solite Ihnen das Angebot zuss Installateur oder an einen Köll Garantiebestätigung zugesans	igen, geben Sie es bitte ausgefüllt und unterschrieben als ihre Bestellung an ihr Brumpan Partner in Ihrer Region. Sie erhalten dann in den nächsten Wochen i R.
Der Preis der Herstellergarant	e beträgt netto: © zuzüglich Steuer,
	ihr Installateur oder der für Sie zuständige KSB-Pumpen Partner mit) und ist an ihr Partner gegen dessen Rochung zehlber.
Standort der Anlage:	Name:
	Strate
	PLZ/Or:
	TelNr.:
Angaben des Typenschilds:	Typ: mini-Compacts
	Seriemummer: 8
Ort, Datum, Unterschrift	Adresso/Stempel
Endkunde	Installatour / KSB-Pumpon Partner

The package offer for any spare parts required during 10 years' operation comprises a 10-year spare parts warranty for all single-pump sewage lifting units of the mini-Compacta series within the stipulated conditions and limits. The 10-year spare parts warranty package is available for Germany only.

# Available package offers

Available package offers

Description	Mat. No.
Package offer for any spare parts required during 10 years' operation of mini-Compacta U40, U60, U100 and US100	18040943

