Sewage lifting stations with cutting system MultiCut



Application

The sewage lifting stations compli 100, compli 500 and compli 1000 with MultiCut cutting system are uses especially for disposal in special objects, such as weekend cottages, houseboats, toilets in production halls or mobile sanitary facilities.

The MultiCut cutting system enables wastewater to be pumped through long and small-dimensioned pressure pipes to the nearest sewer whereby the pressure pipes can follow the terrain. This type of wastewater transport is more economical in many cases than disposal by gravity sewer. The external cutting system ensures safe operation.

The submergible units are permitted for general use in areas subject to flooding. The control unit has to be fitted in a well ventilated flood-proof room. The PE tanks have freely accessible drains, a top-mounted cleaning opening and a clamp-type inlet flange for an easy installation. The inlet height is variable depending on the type and inlet pipe:

compli 100

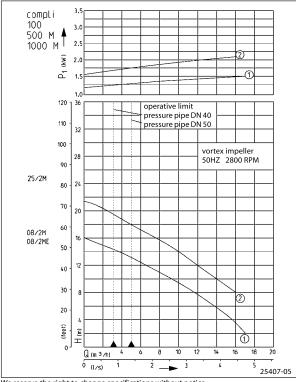
compli 500 and 1000

- DN 50: 150, 250 mm DN 150/DN 50: 180, 275 a. 315 mm
- DN 100: 180, 250 mm DN 100: 180-340 mm.

For the connection of an inlet pipe DN 100 a PVC reducer DN 150/DN 100 is added to the compli 500 and 1000. A vertical inlet neck is mounted on top of the tank for an inlet pipe DN 150 or DN 100. If the rear inlet is not used it must be closed with the sealing set DN 150 (accessory). The duplex units compli 1000 have two pumps, that operate alternately. In case of peak load operation both pumps operate at the same time.



Performance



We reserve the right to change specifications without notice

Pump performance is subject to ISO 9906 tolerances

The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056. This data is represented in the performance curve as a limit of application.

- Ready-to-connect
- Submersible
- Clamp type inlet flange
- Versatile connectivity
- Small dimensioned pressure pipe
- High delivery head
- PE tank
- MultiCut cutting system



Sewage lifting stations

Туре		Tank capacity l	Inlet height mm			Discharge branch	Connection pipe external Ø	Ventilation	Weight approx.	Code No.
compli 108/	/2 ME	38	180/250	7 mm	DN 100	DN 50	63 mm	DN 70	41,0 kg	JP 09347
compli 108/	/2 M	38	180/250	7 mm	DN 100	DN 50	63 mm	DN 70	35,5 kg	JP 09346
compli 125/	/2 M	38	180/250	7 mm	DN 100	DN 50	63 mm	DN 70	46,5 kg	JP 09877
compli 508/	/2 ME 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	60,0 kg	JP 43128
compli 508/	/2 M 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	60,0 kg	JP 43129
compli 525/	/2 M 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	65,0 kg	JP 43130
compli 1008/	/2 ME 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	115,0 kg	JP 43131
compli 1008/	/2 M 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	115,0 kg	JP 43132
compli 1025/	/2 M 1	115	variabel	7 mm	DN 150	DN 40	50 mm	DN 70	125,0 kg	JP 43133

Performance

Туре	Delivery head H [m]	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
compli08/2 M E	Delivery date Q [m³/h]	17	16	14	12	9	7	4										
compli08/2 M		17	16	14	12	9	7	4										
compli25/2 M					16	14	12	10	8	5	3							

Electrical data

Туре	Type of current	Voltage Volt	Motor ra P ₁	ting kW P ₂	Current Amp.	Cable (4 m) Tank control	Cable (1,5 m) Control plug	Plug
compli08/2 ME	1-phase	1/N/PE~230	1,70	1,14	7,5	H 07 RN-F-5 G 1,5	H 05 VV-F-3 G 1,5	Safety-
compli08/2 M	3-phase	3/N/PE~400	1,65	1,24	2,8	H 07 RN-F-5 G 1,5	H 05 VV-F-5 G 1,5	CEE-
compli25/2 M	3-phase	3/N/PE~400	2,30	1,85	3,9	H 07 RN-F-6 G 1,5	H 05 VV-F-5 G 1,5	CEE-

In keeping with the construction and testing principles of German / European standard DIN EN 12050, sewage lifting stations are used for the transport of faecal matter and domestic wastewater in building drainage systems as described in German standard DIN 1983 T3. In keeping with the stipulations of German / European standard DIN EN 12056-4 they have to be mounted with collecting tanks inside building permitting a free space of 60 cm for operation and repair. A non-return valve tested in keeping with German / European standard DIN EN 12050-4 has to be fitted in the pressure pipe. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof.

Other specifications of German / European standard DIN EN 12056-4, paragraphs 5.1 and 5.2:

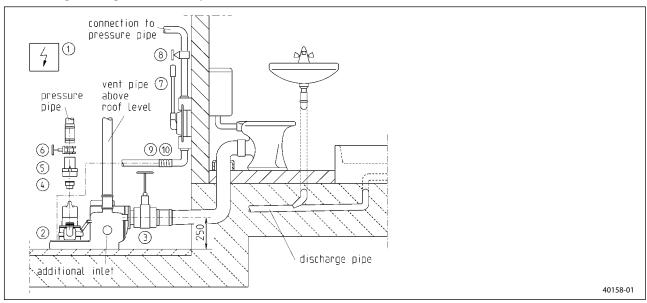
- Pump sump for the drainage of the operation room
- Stop valve on the pressure side
- Stop valve on the inlet side
- Disposal units have to be mounted buoyancy-proof

Use in pressurised drainage systems:

When compli 100 is used in a pressurised drainage system in keeping with German / European standard 1671, a PN 6 swing-type check valve and a PN 16 system valve have to be installed in the pressure pipe.



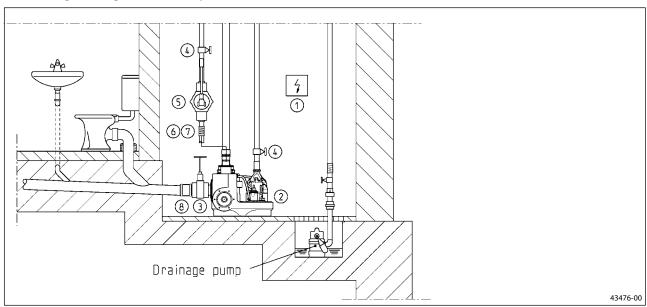
Mounting arrangement compli 100



Accessories compli 100

710003501103 00	·p							
								Code No.
6	1	Rechargeable battery for mains-independent alarm						JP 07562
	2	Seal leak detector DKG						JP 00252
E = = = = = = = = = = = = = = = = = = =	3	PVC sluice valve (with pipe socket) for 4" inlet (DN 100), PN 1	<u>H</u> 360	B 295	E 60	F 81	D 110	JP 28297
	4	Reducing socket 1¼"–2						JP 14274
±	5	Swing-type check valve R 50, 2" (DN 50), PN 4, DIN EN 12050-4	H 150	B 120	D 2"			JP 00326
D		Ball-type check valve K 50, 2" (DN 50), PN 6, DIN EN 12050-4	H 185	B 150	D 			JP 09857
E	6	Stop valve for pressure side, 2" (DN 50), PN 16	H 140	B max. 67	D 2"			JP 11838
=	7	Hand diaphragm pump (bis H _{geod} 15 m)	H ca. 64	E 0 430	D 1½"			JP 00255
Ä =	8	Stop valve, 1½ " (DN 40), PN 16	H 125	B max. 60	D 1½"			JP 11837
	9	Elastic connection 1½" (DN 40), PN 4	H 120	D 50				JP 20368
	10	Clamp 1½"						JP 03571

Mounting arrangement compli 500 / 1000

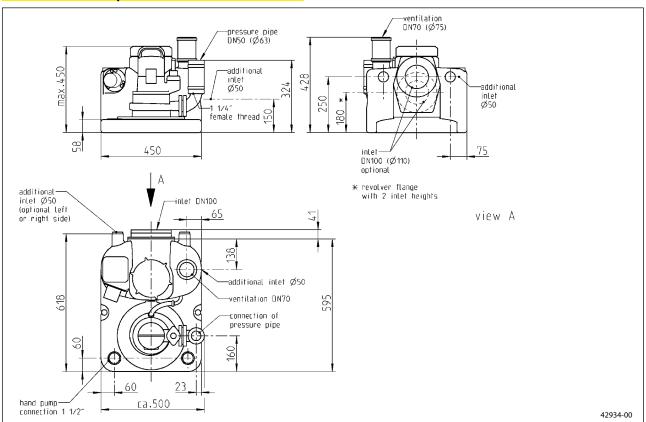


Accessories compli 500 / 1000

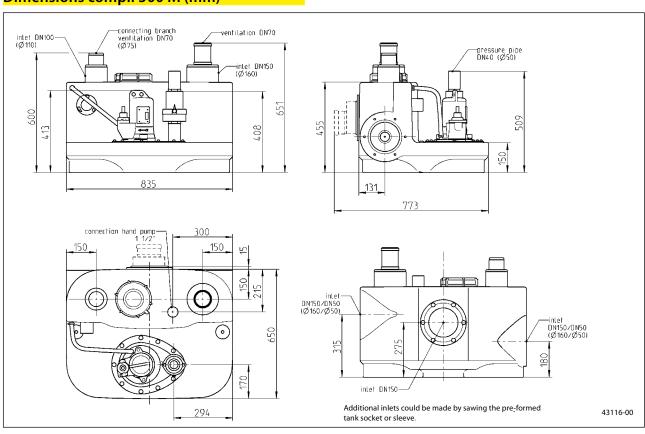
								Code No.
0	1	Rechargeable battery for mains-independent alarm						JP 07562
	2	Seal leak detector DKG						JP 00252
	3	PVC sluice valve (with pipe socket) for inlet 4" (DN 100), PN 1 for inlet 6" (DN 150), PN 2,5	H 360 660	B 295 450	60 110	F 81 105	D 110 160	JP 28297 JP 28591
A =	4	Stop valve, 1½ " (DN 40), PN 16 for pressure side	H 125	B max. 60	D 1½"			JP 11837
D ±	5	Hand diaphragm pump (bis H _{geod} 15 m)	H ca. 640	E) 430	<u>D</u> 1½"			JP 00255
	4	Stop valve, 1½ " (DN 40), PN 16	H 125	B max. 60	D 1½"			JP 11837
Д Т	6	Elastic connection 1½" (DN 40), PN 4	<u>H</u> 120	<u>D</u> 50				JP 20368
	7	Clamp 11/2"						JP 03571
	8	Opening set DN 150						JP 43156



Dimensions compli 100 M (mm)

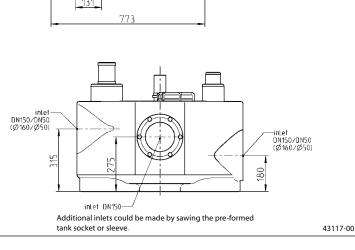


Dimensions compli 500 M (mm)



connecting branch ventilation DN70 (Ø75) inter DN100 (Ø160) inter DN40 (Ø160) pressure pipe DN40 (Ø50)

Dimensions compli 1000 M (mm)



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Technical data

Pump

Vertical, single-stage, submersible pump housing with DN 50 outlet, open impeller, MultiCut cutting system - adjustable, flanged to PE tank with cleaning opening.

Bearing

Common shaft for pump and motor, grease-packed ball bearing.

Seal

Silicon-carbide mechanical seal independent of the sense of rotation, oil chamber and duplex radial shaft seal towards the motor compartment, safe to run dry.

Moto

Submersible, IP 68 type of protection, insulation class F, winding thermostats for the protection of the drives against overheating, automatic activation through control unit only.

Materials

Tank made of polyethylene; pump, motor housing and singlevane impeller made of wear-resistant grey cast iron GG-25; shaft completely covered towards the media, cutting equipment made of hardened stainless steel (57 HRC); rubber inlet hose

Scope of supply

Ready-to-connect tank system (capacity 38 I respectively 115 I) in keeping with German / European standard 12050 with height-adjustable DN 100 revolver clamping flange for inlet height 180/250 mm for compli 100; compli 500 and 1000 PVC-tube DN 150 (180, 275, 315 mm), DN 100 (180-340 mm), additional hori-

zontal and vertical inlets, diam. 50 mm, pre-mounted submersible pump, one elastic connection each with clamps for plastic pressure pipes and jointing tube for DN 70 ventilation pipe, automatic float switch circuit, control (IP 44 type of protection) with motor protection, contactor, transformer, mains-dependable optionally acknowledgeable alarm system and potential-free contact for collective failure messages, optical display of sense of direction (three-phase current), alarm and operation, button for test run.

To be fitted with a micro-processor control as well upon request. Cable between tank and control 4 m,

cable between control and plug 1.5 m.

Accessories to be ordered according to mounting drawing.

MultiCut cutting system

The unique MultiCut cutting system ensures a maximum of operational safety at outstanding delivery characteristics. Fitted with a cutter plate made of hardened stainless steel and a three-bladed knife, it disintegrates coarse additions in the waste-water with more than 62,000 cutting processes per minute before they can get into the pump hydraulics. Solids which cannot be transported are rejected outside of the pump by the cutting rotor as the cutting system is located upstream from the pump hydraulics. Specifically arranged grooves on the cutter plate ensure additional safety as the cutting unit is permanently cleaned automatically during the delivery..