

# **Application**

With its performance graduations, the compli 500 lifting station has been designed for use in detached houses with increased domestic waste-water inlet and for a larger storage capacity. During the design work, special attention was given to easy handling (weight!), space-saving erection and uncomplicated installation.

The submersible unit is 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 has freely accessible drains, a cleaning opening at the top and a clamp-type inlet flange for an easy installation.

The inlet height can be variegated according to the feeding pipe:

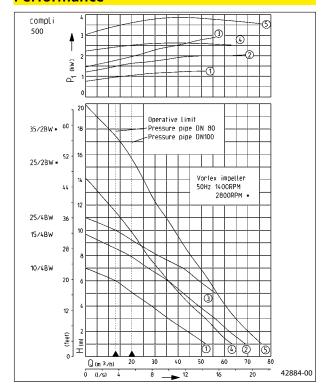
- DN 100: 180-205 mm (left), 250-300 mm (center) und 290-340 mm (right), each continuously adjustable
- DN 150/DN 50: 180 mm (left), 275 mm (center) und 315 mm (right)

For the connection of a DN 100 feeding pipe a reducer DN 150/100 is enclosed. The tank has vertical inlet in DN 150 or DN 100. If not in use, the rear inlet must be closed with the plug set DN 150 (accessory).

The vortex impeller of the pump offers the safety you can rely on.



# **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 plug in
- Submersible
- Clamp-type inlet flange
- Versatile connection facilities
- PE tank
- Vortex impeller



# Sewage lifting stations

Туре	Tank capacity l	Inlet height mm	Free passage mm	Clamp- type inlet flange	Connec- ting flange PN 10	for connecting pipe	Ventila- tion	Weight approx.	Code No.
compli 510/4 BW	115		70	DN 150	DN 80	DN 100	DN 70	63 kg	JP 09191
compli 515/4 BW	115		70	DN 150	DN 80	DN 100	DN 70	63 kg	JP 09192
compli 525/4 BW	115	Variable (see dimensions)	70	DN 150	DN 80	DN 100	DN 70	63 kg	JP 09193
compli 525/2 BW	115	umensions)	70	DN 150	DN 80	DN 100	DN 70	70 kg	JP 09194
compli 535/2 BW	115		70	DN 150	DN 80	DN 100	DN 70	73 kg	JP 09195

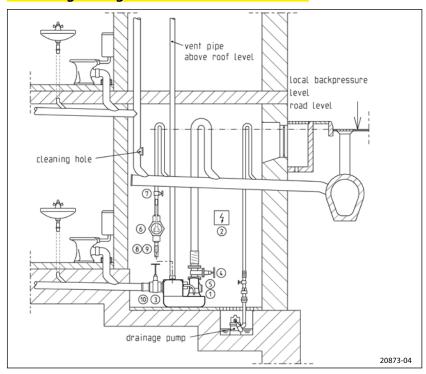
## **Performance**

Туре	Delivery head H [m]	1	2	3	4	5	6	7	8	9	10	11	13	15	17	19
compli 510/4 BW	Flow rate Q [m <sup>3</sup> /h]	52	44	37	29	22	13									
compli 515/4 BW		69	62	56	49	42	36	27	19							
compli 525/4 BW						56	49	42	32	22	13					
compli 525/2 BW		63	57	52	46	41	36	31	27	23	18	15	6			
compli 535/2 BW		76	70	65	61	57	53	49	45	42	38	34	28	22	15	6

## **Electrical data**

Туре	Type of current	Voltage Volt	Motor	rating P <sub>2</sub> kW		Cable (4 m) Tank control	Cable (1.5 m) Control plug	Plug
compli 510/4 BW	3-phase	3/N/PE~400	1.3	1.0	2.8	H07RN-F-6 G 1.5	H05VV-F-5 G 1.5	CEE-
compli 515/4 BW	3-phase	3/N/PE~400	2.2	1.7	3.9	H07RN-F-6 G 1.5	H05VV-F-5 G 1.5	CEE-
compli 525/4 BW	3-phase	3/N/PE~400	3.0	2.2	5.1	H07RN-F-6 G 1.5	H05VV-F-5 G 1.5	CEE-
compli 525/2 BW	3-phase	3/N/PE~400	3.2	2.5	5.3	H07RN-F-6 G 1.5	H05VV-F-5 G 1.5	CEE-
compli 535/2 BW	3-phase	3/N/PE~400	4.0	3.3	7.0	H07RN-F-6 G 1.5	H05VV-F-5 G 1.5	CEE-

# **Mounting arrangement**



All types have DN 80 / PN 10 connecting flange, however with pipe socket DN 100. For this reason, non-return valves and shut-off valves for the pressure pipe need to be chosen for DN 80 only in case of direct erection. The downstream pressure pipe is connected to DN 100 by an elastic connection.

In keeping with the construction and testing principles of German / European standard DIN EN 12050, sewage lifting stations are to be used for the transport of faecal matter and domestic waste-water 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. The pressure pipe has to be passed above the locally defined backpressure level and a non-return valve tested in keeping with German / European standard 12050-4 has to be mounted. In keeping with German / European standard 12056 the ventilation pipe has to be passed up to the roof.

DIN EN 12056 paragraph 5.1 In applications where the waste-water inlet must not be interrupted a double system has to be installed



# Accessories

recessories				Article
	1	Seal leak detector DKG (for 25/2 BW and 35/2 B	BW)	No. JP 00252
<u> </u>	2	Rechargeable battery for mains-independent alarm		JP 07562
B	3	PVC sluice valve (with two pipe sockets) for 4" inlet (DN 100) PN 1  H 36	B E F D 0 295 60 81 110	JP 28297
	4	Sluice valve* for 3" pressure side (DN 80), PN 10, H DIN EN 1171 31	B D 5 180 DN 80 for 3" pressure side	JP 00639
	5	Swing-type check valve * R 80, PN 4, flange PN 10, DIN 3202, DIN EN 12050-4 without counterweight		JP 00706
		Swing-type check valve * R 80 G, PN 4, flange PN 10, DIN 3202, DIN EN 12050-4 with adjustable counterweight  Ball-type check valve * K 80,	H D DN 260 80	JP 00707
		PN 4, flange PN 10, DIN 3202, DIN EN 12050-4		JP 09842
	6	<b>Hand diaphragm pump</b> for emergency purposes (up to H <sub>geod</sub> 15 m)	H E D approx. 640 430 1½"	JP 00255
B	7	<b>Stop valve,</b> 1½" (DN 40), PN 16	H B D 125 max. 60 1½″	JP 11837
T D	8	Elastic connection 1½" (DN 40), PN 4	H D 120 50	JP 20368
	9	Clamp 1½"		JP 03571
	10	Opening set DN 150 (required for lateral connection)		JP 43156

<sup>\*</sup> with screws and seal

### **Technical data**

### Pump

Vertical, single-stage, submersible, vortex impeller, volute casing with DN 80 vertical outlet suitable for DN 100 pipework, flanged to PE tank with cleaning opening.

#### Bearing

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

#### Motor

Submersible, IP 68 type of protection, insulation class F, winding thermostats for the protection of the drives against overheating, automatic start-up by three-contact circuit and control. Connection to mains by 16 A CEE plug, S 3 type of operation in keeping with German standard VDE.

#### Seal

Double 10/4-25/4 BW radial shaft sealing ring, 25/2 BW and 35/2 BW silicon carbide mechanical seal independent of rotation and safe to run dry. Oil chamber with double radial shaft sealing ring towards the motor compartment. Connection possibility for seal leak detector on 25/2 BW and 35/2 BW.

#### Materials

Tank made of corrosion resistant and non-polluting polyethylene; pump, motor housing and single-vane impeller made of wear-resistant grey cast iron; shaft made of stainless steel (versions 10/4-25/4 BW) or completely covered towards the media (version 25/2 and 35/2 BW); rubber inlet hose.

### Scope of supply

Ready for plug in sewage lifting unit according to DIN EN 12050-1 with clamp flange DN 150, reducer DN 150/100, built-on subm. sewage pump and connection flange DN 80 with pipe socket Ø 110 mm, elastic connection c/w hose clamps, PVC collar DN 70 for ventilation connection, autom. level controller, control unit (IP 44) c/w motor protection, motor contactor, transformer, mains-dependent alarm unit and potential-free contact for collective failure messages, with optical display of sense of rotation, alarm and operation, and manual-0-automatic switch. 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 the mounting drawing.

Standard DIN EN 12056-4, paragraphs 5.1 and 5.2

- Working area of 60 cm above and around all parts that have to be operated.
- Pump sump for the drainage of the operation room
- Swing-type check valve on the pressure side
- Stop valve on the pressure side
- Stop valve on the inlet side
- Disposal units have to be mounted buoyancy-proof

### Dimensions compli 500 (mm)

