Sewage lifting stations compli 1200 Duplex units



Application

With their performance graduations, the compli 1200 lifting stations has been designed for larger storage capacities, if wastewater of several residential units or wastewater from commercial enterprises, for example, have to be disposed of. During the design work, special attention was given to easy handling, spacesaving erection and uncomplicated installation.

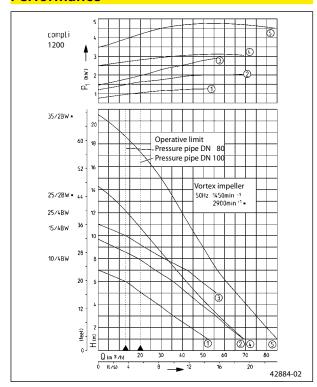
A fitting (to be provided by the customer) can be used at the rear inlet port of the stage housing to mount the unit variably in height (560 to 700 mm) as well as capable of rotating (180°) .

The submergible unit is permitted for general use in areas subject to flooding without requiring additional outlay. The control unit has to be fitted in a well ventilated flood-proof room.

The construction with PE tank has freely accessible drains and a clamp-type inlet flange for easy installation. The top-mounted cleaning opening and the easy replaceability of the pre-mounted pumps also ensure time-saving servicing. Duplex systems have two pump units on one tank which are switched alternately or, if and when required, they are operated both in order to cope with peak load or reserve operation. This automatic switching sequence increase safety in particular for use in commercial or public buildings, and is always required in keeping with German / European standard DIN EN 12056-4, when the wastewater inflow must not be interrupted.



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
- Height-variable inlet
- Clamp-type inlet flange made of stainless steel
- Duplex swing-type check valve
- PE tank



Sewage disposal units

| Туре | Tank capacity I | Inlet height mm | Free passage mm | • | Connec- ting flange PN 10 | for connec- ting pipe | Ventila- tion | Weight approx. | Code No. |
|------------------|--------------------|-----------------------|--------------------|--------|---------------------------------|--------------------------|------------------|----------------|----------|
| compli 1210/4 BW | 350 | 560 | 70 | DN 150 | DN 80 | DN 100 | DN 70 | 145.0 kg | JP 09168 |
| compli 1215/4 BW | 350 | up to | 70 | DN 150 | DN 80 | DN 100 | DN 70 | 145.0 kg | JP 09169 |
| compli 1225/4 BW | 350 | 700 | 70 | DN 150 | DN 80 | DN 100 | DN 70 | 145.0 kg | JP 09170 |
| compli 1225/2 BW | 350 | variable | 70 | DN 150 | DN 80 | DN 100 | DN 70 | 149.0 kg | JP 09171 |
| compli 1235/2 BW | 350 | | 70 | DN 150 | DN 80 | DN 100 | DN 70 | 158.0 kg | JP 09172 |

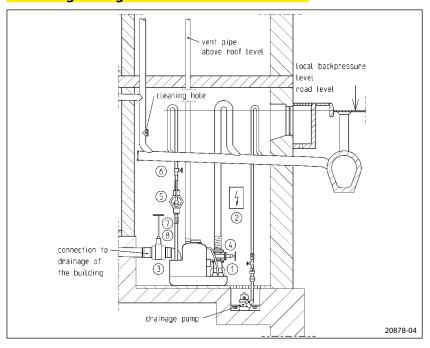
Performance

| Туре | Delivery head H [m] | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 13 | 15 | 17 |
|------------------|---------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| compli 1210/4 BW | Flow rate Q [m³/h] | 52 | 44 | 37 | 29 | 22 | 13 | | | | | | | | |
| compli 1215/4 BW | | 69 | 62 | 56 | 49 | 42 | 36 | 27 | 19 | | | | | | |
| compli 1225/4 BW | | | | | | 56 | 49 | 42 | 32 | 22 | 13 | | | | |
| compli 1225/2 BW | | 69 | 64 | 58 | 52 | 47 | 42 | 37 | 33 | 28 | 23 | 20 | 8 | | |
| compli 1235/2 BW | | 85 | 80 | 75 | 71 | 66 | 62 | 57 | 54 | 50 | 47 | 44 | 36 | 30 | 21 |

Electrical data

| Туре | Type of current | Voltage Volt | Motor rat | ting kW P ₂ | Current Ampere | _ | Cable (4 m) Tank control | Cable (1.5 m) Control plug | Plug |
|------------------|-----------------|-----------------|-----------|---------------------------|-------------------|------|-----------------------------|-------------------------------|------|
| compli 1210/4 BW | 3-phase | 3/N/PE~400 | 1.3 | 1.0 | 2.8 | 1451 | H07RN-F-6 G 1.5 | H05VV-F-5 G 1.5 | CEE- |
| compli 1215/4 BW | 3-phase | 3/N/PE~400 | 2.2 | 1.7 | 3.9 | 1405 | H07RN-F-6 G 1.5 | H05VV-F-5 G 1.5 | CEE- |
| compli 1225/4 BW | 3-phase | 3/N/PE~400 | 3.0 | 2.2 | 5.1 | 1363 | H07RN-F-6 G 1.5 | H05VV-F-5 G 1.5 | CEE- |
| compli 1225/2 BW | 3-phase | 3/N/PE~400 | 3.3 | 2.6 | 5.4 | 2812 | H07RN-F-6 G 1.5 | H05VV-F-5 G 1.5 | CEE- |
| compli 1235/2 BW | 3-phase | 3/N/PE~400 | 4.8 | 4.0 | 8.2 | 2886 | 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, a non-return valve 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 disposal units 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.



Accessories

| | | | Code No. |
|--------|---|---|----------------------|
| | 1 | Seal leak detector DKG (for 25/2 BW and 35/2 BW) Please account one seal leak detector per pump | JP 00252 |
| 6 | 2 | Rechargeable battery for control for mains-independent alarm | JP 07562 |
| | 3 | PVC sluice valve H B E F D (with two pipe sockets) 660 450 110 105 160 for 6" inlet (DN 150) PN 2.5 | JP 28591 |
| | 4 | Sluice valve* for 3" pressure side (DN 80), PN 10, DIN EN 1171 H B D 315 180 DN 80for 3" pressure | side JP 00639 |
| | 6 | Hand diaphragm pump for emergency purposes (up to H _{geod} 15 m) H E D approx. 640 430 1½" | JP 00255 |
| | 7 | Stop valve, 1½" (DN 40), PN 16 H B D 125 max. 60 1½" | JP 11837 |
| D T | 8 | Elastic connection 1½" (DN 40), PN 4 $\frac{H}{120} = \frac{D}{50}$ | JP 20368 |
| | 9 | Clamp 11/2" | JP 03571 |

^{*} with screws and seal

Technical data

Pump

Vertical, single-stage, submersible, vortex impeller, spiral casing with vertical DN 100 outlet, flanged to PE tank with cleaning opening and pre-mounted duplex swing-type check valve.

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 with reed contacts and control. Connection to mains by 16 A CEE plug, S 3 type of operation in keeping with German standard VDE.

Seal

Duplex 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 duplex 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 environmentally compatible polyethylene; pump and motor housing, single-vane impeller and duplex swing-type check valve 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-to-connect sewage disposal unit in keeping with German / European standard DIN EN 12050 with DN 150 clamp-type inlet flange, pre-mounted submersible pump (two pumps in duplex-system) and DN 80 connecting flange with pipe unit. Ø110, pre-mounted duplex swing-type checke valve, one elastic connection each with clamps for plastic pressure pipe and ventilation pipe, automatic level control. Control unit (IP 44 type of protection) with motor protection, contactors, transformer, mains-independent alarm system and potential-free make contact for collective failure messages, with optical display of sense of rotation, alarm and operation as well as two manual-0-automatic switch. With automatic changeover system and peak load function. To be fitted with a micro-processor control as well upon request.

Cable: between tank and control 4 m, between control and plug 1.5 m.

Accessories to be ordered according to mounting drawing.

Dimensions compli 1200 (mm)

