Lifting Station Type ABS Sanimat 1002

SULZER

Flood-proof, double lifting station, for automatic sewage pumping from areas below the backwash level in accordance with EN 12050-1. Ideal for effective dewatering of domestic residences or commercial developments. Suitable for new installations or for renovation of old buildings.

Features

- Plug-in unit with CEE plug and phase sequence changeover facility.
- Easily transported and fitted. Compact dimensions allow passage through a standard door opening.
- Dynamic pressure level sensor on the tank, with separate sensors for inflow level and high water alarm.
- Trouble-free maintenance thanks to simple removal of the motor housing.
- Five horizontal inlet ports (4 x DN 100, 1 x DN 150) and three vertical (2 x DN 100, 1 x DN 150). Vertical vent line DN 70. Two small diameter ports (DN 40/50) suitable only for wastewater. DN 40 is suitable for connection of a hand membrane pump.
- Discharge flange DN 80, plus flanged socket with 4" sleeve and clips (for discharge pipe DN 80/100).
- Direct toilet connection possible in the case of wall-mounted WC units.
- Integrated valve system consisting of two ball-type, non-return valves.
- Two pumps; very quiet thanks to 4-pole, slow-running motors.
- Vortex impeller with large free passage and rear blade mounting, for reliable pumping of both faecal and faecal-free sewage.
- Sloping container floor prevents deposits.
- Built-in mains alarm (visual and acoustic), can be converted to mains-independent by inserting battery.
- Maximum allowable temperature of medium is 40 °C, or up to 60 °C intermittent (max. 5 minutes).

Installation

Attention to the backwash level is of vital importance for effective dewatering. All outflow points located below the backwash level must be protected against back flow according to standard EN 12056.



1. Backwash level

2. Backwash loop with base above the backwash level.

3. External ventilation pipe.

Rooms for sewage lifting stations must be large enough that a working area of at least 60 cm width or height is available around all parts which have to be operated or maintained. A pump sump should be provided for dewatering of the room itself.



Tank

Synthetic, corrosion-resistant, gas- and odour-tight tank, in accordance with EN 12050-1. Supplied as standard with pumps, automatic level control and control box, non-return valves, 4" sleeve and flange.

Capacity: 140 litres

Motor

Water pressure sealed, squirrel cage 4-pole induction motor, with triple shaft seals and oil chamber. Electronic monitoring of stator temperature and overcurrent.

Insulation: Class F for 155 °C Protection type: IP68

Performance curves



* Minimum flow rate Q for discharge pipe.

H = Total Head; Q = Discharge Volume; Curves to ISO 9906

Materials

| Description | Material | |
|---------------|-----------------------------------|--|
| Tank | Polyethylene | |
| Motor housing | Cast iron EN-GJL-250 | |
| Rotor shaft | Stainless steel 1.4021 (AISI 420) | |
| Volute | Polyethylene | |
| Impeller | Cast iron EN-GJL-250 | |

Technical data

| Sanimat | 1002 D | 1002 D/HD | |
|----------------------|--|--|--|
| Discharge connection | Sleeve 4" DN 100 | Sleeve 4" DN 100 | |
| Motor power [kW]* | P ₁ = 1.77, P ₂ = 1.40 | P ₁ = 2.88, P ₂ = 2.20 | |
| Speed [r/min] | 1450 | 1450 | |
| Rated voltage [V] | 400 3~ | 400 3~ | |
| Rated current [A] | 3.5 | 5.2 | |
| Cable length [m]** | 4 + 1.5 | 4 + 1.5 | |
| Weight [kg]*** | 115 | 117 | |

Tank dimensions (mm)





Connections

- 1. Inflow DN 100
- 2. Inflow DN 100
- 3. Inflow/Hand membrane pump DN 40
- 4. Inflow/Vent DN 100
- 5. Inflow/Vent DN 70
- 6. Discharge flange DN 80
- 7. Inflow DN 50
- 8. Inflow/DN 150
- 9. Inflow/Vent DN 100
- 10. Inflow DN 100 11. Inflow DN 150
- 12. Inflow DN 100

Inlet diameters

 * P₁ = Power taken from mains.
P₂ = Power at motor shaft.
** Tank to control unit 4 m, control unit mains 1.5 m.
*** Additional weight with hand membrane

pump = 13 kg

| Ø | (mm) |
|--------|--------------------|
| DN 70 | +0.2 Ø 75 -1.0 |
| DN 100 | +0.3 Ø 110 -1.0 |
| DN 150 | +0.4 Ø 160 -1.5 |
| | Ø |



| | Description | Size | Part no. |
|-------------------|--|------------------|----------------------|
| Discharge side | Hand membrane pump with built-in, non-return valve for separate wall fixing. | G 1½" | 14990028 |
| | Shut-off valve (EN-GJL-250) including 1 set of bolts and 1 x flat gasket - flange PN 10/16. | DN 80 | 61420500 |
| | Flanged spigot kit including clamps and flexible connector (1 x DN 80/4" supplied as standard). | DN 80/4" | 62540032 |
| Inflow side | PVC double sleeve EN, HTMM | DN 100 DN 150 | 13760022 13760026 |
| | Flanged sleeve E-KS transition piece DIN-flange/push-on sleeve including 1 x set of bolts and 1 x flat gasket for vertical inflow. | DN 100 DN 150 | 62540025 62540026 |
| | Shut-off valve (EN-GJL-250) including 1 x set of bolts and 1 x flat gasket - flange PN 10/16. | DN 100 DN 150 | 61420501 61420503 |
| Electrical | NC-AKKU 9 V rechargeable battery for mains-independent alarm. | | 12820018 |
| | Extension cable kit one for each pump; consisting of pump- and level-control cables with plugs. | 15 m | 62665302 |

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Accessories

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