

# Lifting Station Type ABS Sanisett 1 and 2

Synthetic, single or twin pumping station, designed as a complete wastewater sump for above- or below-ground installation and for fitting with pumps from the Robusta, Coronada, IP, Piranha and MF ranges.



## Application

For the effective dewatering of domestic and commercial wastewater (faecal-free), from buildings and areas below the sewer level in accordance with EN 12050-2.

In addition to the pumping of wastewater from washing machines, sinks, dishwashers, showers and bathtubs, the Sanisett is suitable also for the pumping of sewage containing faecal matter outside of areas covered by EN when installed using Piranha pump(s).

For applications where pumping cannot be interrupted the twin pumping station unit should be installed.

## Features

- Globular shape for extra strength. Below-ground version has PP-30GF manhole cover with floor run-off and option of odour lock with aeration and venting. Above-ground version has a plastic lid (tank must be vented above roof level).
- Universally adjustable in height and can be swivelled, thus allowing easy alignment with floor levels and tiling patterns, independent of the inflow or direction of the discharge lines.
- Sanisett 1 for one KS version pump (Coronada, IP, Piranha, MF) or pump with built-in level control (Robusta).
- Sanisett 2 for two non-KS pumps. Separate KS level control system, with support bracket for discharge line junction piece and KS float switches.
- Two inflow ports at 90° offset (DN 100/150) for DIN push-on connection. Two DN 70 inflow ports, one for venting and use as a cable duct (supplied as standard with plug/cable inlet seal). One discharge port DN 50 with R 1½" PVC female adaptor.
- Plastic cover for protection of the floor grating during installation work supplied as standard.
- Heads up to 20 m with Piranha 08/09 pumps.
- Suitable for use as a floor drain.
- Maximum allowable temperature of medium 40 °C, short term to 60 °C (max. 5 minutes).

## Motor

Water pressure sealed, squirrel cage 2-pole induction motor. Insulation: Class B (130 °C) for Robusta; class F (155 °C) for Coronada, IP, MF and Piranha. Protection type: IP 68

## Pump

- Light drainage pump type ABS Robusta 200 WTS, for pumping of ground and rain water, water from hand-basins, and washing machine effluent.
- Light drainage pump type ABS Coronada 250 WKS. For wastewater (as Robusta above), but suitable also for aggressive ground water thanks to the stainless steel pump housing and a mechanical seal for shaft sealing.
- Light drainage pump type ABS IP, high-grade stainless steel pump for aggressive media and for the pumping of fluids containing gaseous or abrasive particles. Up to 30 mm solids passage.
- Light wastewater pump type ABS MF 154 W to 804 D, for wastewater with large solid particles present. Up to 40 mm solids passage.
- Submersible grinder pump type ABS Piranha 08/09 with heads up to 20 m which can be used to cut up and pump wastewater containing solids.

Pump selection is determined by the intended application and by the volume of the medium.



## Tank

Synthetic, corrosion-resistant, gas- and odour-tight tank, in accordance with EN 12050-2. Supplied as standard with cover, seals, junction piece, pipe adapters and support bracket. Pump(s) and installation kit not included.

Capacity: 180 litres

Weight: 14 kg (without pump)

**Note:** Where there is groundwater pressure present the tank must be installed as specified in the Installation and Operating instructions.

## Materials

| Description   | Material                          |
|---|-----------------------------------|
| Tank  | Polyethylene                      |
| <b>Robusta</b>  |                                   |
| Pump Housing  | PP                                |
| Rotor Shaft   | Stainless steel 1.4057 (AISI 431) |
| Motor Housing   | Stainless steel 1.4301 (AISI 304) |
| Impeller  | PA                                |
| Seals   | NBR                               |
| Cable   | Neoprene                          |
| <b>Coronada</b>   |                                   |
| Pump Housing  | Stainless steel 1.4301 (AISI 304) |
| Motor Housing   | Stainless steel 1.4301 (AISI 304) |
| Rotor Shaft   | Stainless steel 1.4305 (AISI 303) |
| Impeller  | PPO                               |
| Cable   | Neoprene                          |
| <b>IP</b>   |                                   |
| Motor housing, Volute, Rotor Shaft, Impeller, Fasteners | Stainless steel 1.4401 (AISI 316) |
| Mechanical Seal   | Silicon carbide                   |
| Static seals  | Viton                             |
| Motor Cable   | PVC                               |
| <b>Piranha 08/09 and MF</b>                             |                                   |
| Upper Lid   | Stainless steel 1.4301 (AISI 304) |
| Motor Housing   | Cast iron EN-GJL-250              |
| Rotor Shaft   | Stainless steel 1.4021 (AISI 420) |
| Volute  | Cast iron EN-GJL-250              |
| Impeller *  | Polyamide                         |
| Seal  | Neoprene                          |
| Fasteners   | Stainless steel 1.4401 (AISI 316) |

\* Piranha 09: cast iron EN-GJL-250

## Technical Data

| Pump type:   | Robusta 200 TS/KS     | Coronada 250 W/KS     | Piranha 08 W/KS       | Piranha 08 D/KS       | Piranha 09 W/KS       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Pump discharge internal thread                       | G 1¼"                 | G 1¼"                 | G 1¼"                 | G 1¼"                 | G 1¼"                 |
| Solids passage (mm)                                  | 10                    | 10                    | n.a. <sup>(1)</sup>   | n.a. <sup>(1)</sup>   | n.a. <sup>(1)</sup>   |
| Motor power * (kW): P <sub>1</sub><br>P <sub>2</sub> | 0.36<br>0.16          | 0.50<br>0.25          | 1.41<br>1.00          | 1.34<br>1.00          | 2.56<br>1.84          |
| Rated current (A)                                    | 1.60                  | 2.28                  | 6.41                  | 2.71                  | 11.6                  |
| Rated voltage (V)                                    | 220-240 1~            | 220-240 1~            | 220-240 1~            | 400 3~                | 220-240 1~            |
| Speed (r/min)  | 2900                  | 2900                  | 2900                  | 2900                  | 2900                  |
| Cable type **  | 3G 1.0                | 3G 1.0                | 3G 1.0                | 4G 1.0                | 3G 1.0                |
| Cable length (m)***                                  | 10                    | 10                    | 5 <sup>(2)</sup> , 10 | 5 <sup>(2)</sup> , 10 | 5 <sup>(2)</sup> , 10 |
| Pump weight (kg)                                     | 3.8                   | 4.5                   | 18.0                  | 18.0                  | 23.0                  |
| Pump type:   | Piranha 09 D/KS       | MF 154W/KS            | MF 324W/KS            | MF 334D/KS            | MF 354W/KS            |
| Pump discharge internal thread                       | G 1¼"                 | G 1½"                 | G 1½"                 | G 1½"                 | G 2"                  |
| Solids passage (mm)                                  | n.a. <sup>(1)</sup>   | 20                    | 30                    | 30                    | 40                    |
| Motor power * (kW): P <sub>1</sub><br>P <sub>2</sub> | 2.56<br>2.00          | 0.65<br>0.42          | 0.83<br>0.54          | 0.83<br>0.56          | 1.10<br>0.70          |
| Rated current (A)                                    | 4.64                  | 2.80                  | 3.60                  | 1.40                  | 4.80                  |
| Rated voltage (V)                                    | 400 3~                | 220-240 1~            | 220-240 1~            | 400 3~                | 220-240 1~            |
| Speed (r/min)  | 2900                  | 2900                  | 2900                  | 2900                  | 2900                  |
| Cable type **  | 4G 1.0                | 3G 1.0                | 3G 1.0                | 3G 1.0                | 3G 1.0                |
| Cable length (m)***                                  | 5 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 |
| Pump weight (kg)                                     | 23.0                  | 8.5                   | 8.5                   | 8.5                   | 14.0                  |
| Pump type:   | MF 404D/KS            | MF 504W/KS            | MF 804D/KS            | IP 900D/KS            | IP 900W/KS            |
| Pump discharge internal thread                       | G 2"                  | G 2"                  | G 2"                  | G 2"                  | G 2"                  |
| Solids passage (mm)                                  | 40                    | 40                    | 40                    | 30                    | 30                    |
| Motor power * (kW): P <sub>1</sub><br>P <sub>2</sub> | 1.14<br>0.80          | 2.05<br>1.45          | 2.40<br>1.80          | 1.4<br>1.1            | 1.5<br>1.1            |
| Rated current (A)                                    | 2.00                  | 9.00                  | 4.13                  | 2.4                   | 6.6                   |
| Rated voltage (V)                                    | 400 3~                | 220-240 1~            | 400 3~                | 400 3~                | 220-240 1~            |
| Speed (r/min)  | 2900                  | 2900                  | 2900                  | 2900                  | 2900                  |
| Cable type **  | 4G 1.0                | 3G 1.0                | 4G 1.0                | 4G 1.0                | 3G 1.0                |
| Cable length (m)***                                  | 3 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 | 3 <sup>(2)</sup> , 10 | 10                    | 10                    |
| Pump weight (kg)                                     | 14.0                  | 17.0                  | 20.0                  | 12.0                  | 12.0                  |

<sup>(1)</sup> = Piranha shredding system.

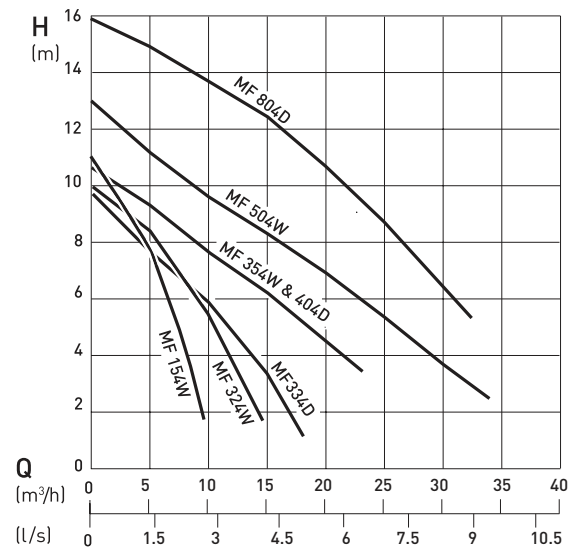
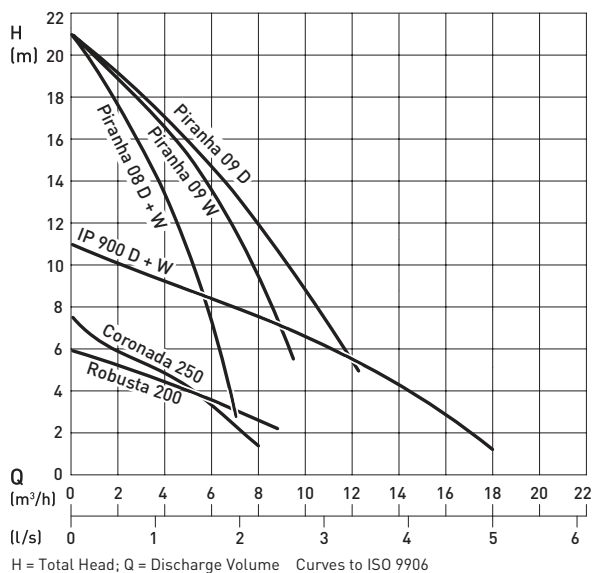
\* P<sub>1</sub> = Power at mains, P<sub>2</sub> = Power at motor shaft

<sup>(2)</sup> = KS version only.

\*\* Robusta, Coronada, Piranha and MF: H07RN-F with Schuko plug on single phase or CEE plug on three phase.  
IP: H05V V-F with Schuko plug on single phase or without plug on three phase.

\*\*\* Other lengths available on request

## Performance Curves 50 Hz



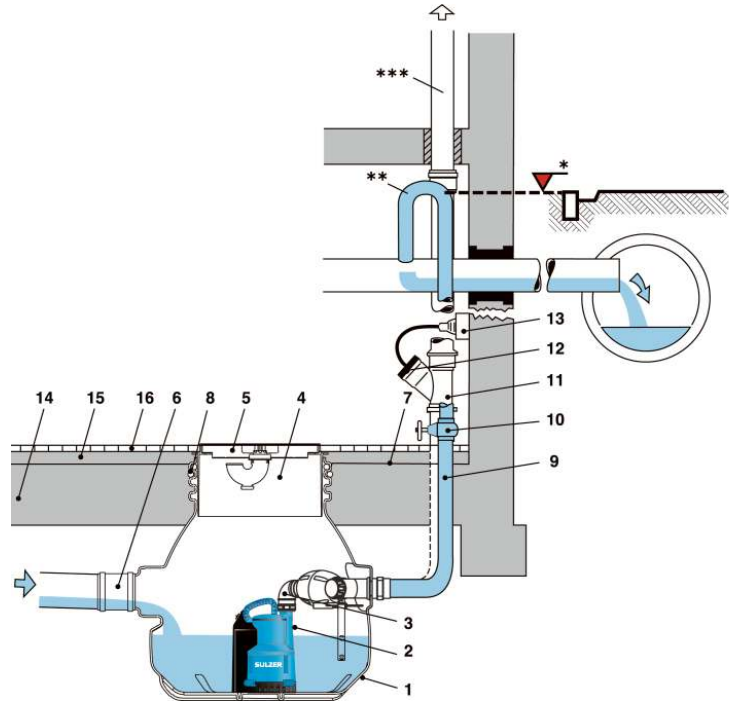
## Installation

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.

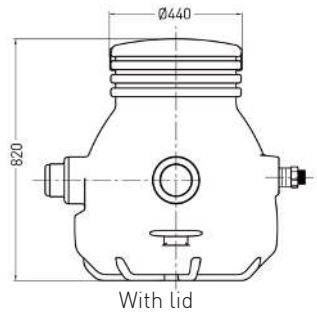
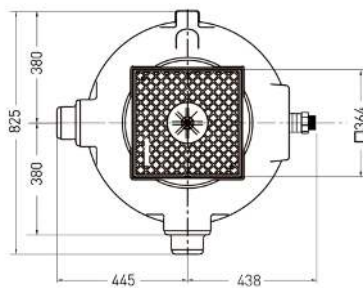
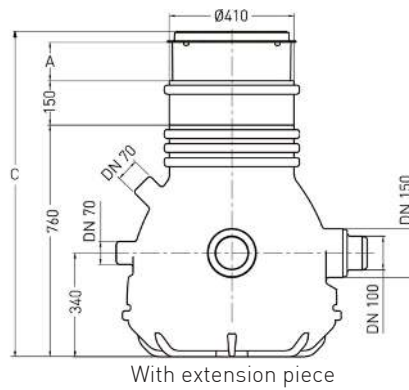
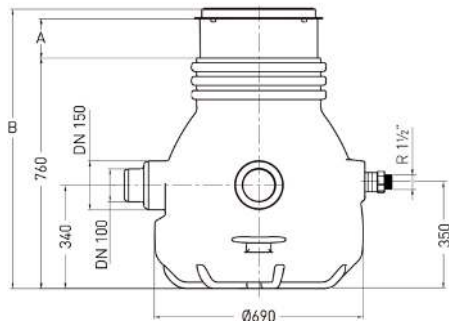
### Example: Sanisett 1 underfloor

1. Polyethylene tank
2. Sulzer wastewater pump with TS level-control system
3. Bend with non-return valve
4. Upper fitting
5. Cover plate with floor run-off and odour lock
6. Inflow port
7. Damp-proof course
8. Seal
9. Discharge line
10. Shut-off valve
11. Vent/cable duct DN 70 brought to above roof level
12. Cable inlet, odour tight
13. Earthed socket
14. Concrete
15. Screed
16. Floor tiles

- \* Backwash level
- \*\* Backwash loop with base above the backwash level
- \*\*\* External ventilation pipe



## Dimensions (mm)



## Inlet Diameters

| Ø      | [mm]           |
|--------|----------------|
| DN 70  | ø75 +0.2 -1.0  |
| DN 100 | ø110 +0.3 -1.0 |
| DN 150 | ø160 +0.4 -1.5 |

- A = 130 max
- B = 790 min, 920 max
- C = 940 min, 1070 max

## Switching (mm) and Volume Levels (L)

| Tank / Pump                | On (1) | On (2) | Off (1 & 2) | Switching Volume | Residual Volume |
|----------------------------|--------|--------|-------------|------------------|-----------------|
| Sanisett 1 / Robusta       | 145    | n.a.   | 50          | 34               | 12              |
| Sanisett 1 / Coronada      | 280    | n.a.   | 120         | 76               | 33              |
| Sanisett 1 / IP            | 290    | n.a.   | 120         | 78               | 33              |
| Sanisett 1 / MF 154-334    | 290    | n.a.   | 90          | 84               | 25              |
| Sanisett 1 / MF 354-804    | 290    | n.a.   | 90          | 84               | 25              |
| Sanisett 1 / Piranha 08/09 | 290    | n.a.   | 90          | 84               | 25              |
| Sanisett 2 / Robusta*      | 200    | 240    | 75          | 46               | 19              |
| Sanisett 2 / Coronada      | 200    | 240    | 75          | 46               | 19              |
| Sanisett 2 / IP            | 200    | 240    | 75          | 46               | 19              |
| Sanisett 2 / MF 154-334    | 200    | 240    | 75          | 46               | 19              |
| Sanisett 2 / MF 354-804    | 200    | 240    | 75          | 46               | 19              |
| Sanisett 2 / Piranha 08/09 | 200    | 240    | 75          | 46               | 19              |

\* Hand-Auto switch must be set to Hand position when Robusta is installed in Sanisett 2.

## Accessories

| Description  | Part No. |
|--|----------|
| <b>Installation Kit:</b> Robusta, Coronada, MF 154-334 G 1¼" external thread   | 62665192 |
| MF 354-804 G 2" external thread  | 62665193 |
| IP 900 G 2" external thread  | 62665471 |
| Piranha 08/09 G 1¼" external thread  | 62665194 |
| Complete as discharge line with non-return valve and flexible connector.   |          |
| <b>Sump Extension</b> - one only to max. 150 mm may be used  | 62665196 |
| <b>Odour-lock Kit</b>  | 62665195 |
| <b>Above-ground Lid</b> (included as standard with above-ground version tank)  | 62665197 |
| <b>DPC Connection Kit</b> - cast iron ring with synthetic sealing and support rings for connecting top of tank to damp-proof course.   | 62665198 |
| <b>Frank Seal Kit</b> - Synthetic sealing and support rings for fitting to top of tank when embedded in waterproof concrete floor (max. groundwater pressure 0.2 bar).   | 62665231 |
| <b>Lid Insert</b> (stainless steel) - closes and seals run-off vent in manhole cover   | 41025020 |
| <b>Electrical</b>  |          |
| <b>Plug-in Alarm Kits:</b><br>Acoustic alarm with signalling unit for connection to 230 V Schuko socket. Acoustic alarm signal, potential-free NO (Normally Opened) contact (I max 12 A / V max 250 V). Optional rechargeable accumulators for mains-independent alarm signal.   |          |
| <b>With KS float switch</b>  | 16025001 |
| <b>With NSM05 "broken finger"</b>  | 16025003 |
| <b>With humidistat</b>   | 16025004 |
| <b>WM-Stop Alarm Kits:</b> Acoustic alarm with signalling unit for plugging in to a 230 V Schuko socket, with integral 230 V Schuko socket into which the washing machine is plugged (I max 16 A). Optional rechargeable accumulators for mains-independent alarm signal.  |          |
| <b>With KS float switch</b>  | 16025002 |
| <b>With NSM05 "broken finger"</b>  | 16025005 |
| <b>With humidistat</b>   | 16025006 |
| <b>NC-AKKU</b> - 9 V rechargeable battery for mains-independent operation  | 12820018 |
| <b>Control Panel</b> (for Sanisett 2) - with plastic housing, fuses, selector switch Hand-O-Automatic, switching relays with over-current release, run and fault lights, direction of rotation indication (for three-phase versions), Alarm with horn potential-free fault signal operating, voltage 230 V or 400 V, 50 Hz, terminal block.<br>Contact Sulzer for further information. |          |