



**9010ZH**

05.2025

# Sanicubic GR



**ZH** 安装和使用说明

**EN** Operating/installation manual





## (ZH) 警告

警告至少八岁以上儿童,身体、精神或感官有缺失者,及不具备操作该设备经验者必需在专人指导下,且了解该设备的使用方式前提下方可操作该设备。儿童不得随意玩耍。用户设备清洁和维护保养不得由未监管儿童完成。

## 电路连接

电气安装必须由具有合格资质的电气工程师执行完成。  
电源须为I级标准。设备电源必须接地。电源电路必须配有30毫安高灵敏漏电断路器的保护。无插座设备应连接在电源主开关上,该电源能确保断开所有电极(触点之间距离至少3毫米)。该连接必须专门用于提供产品的电源。请遵守使用国的有关现行规定。  
如设备电源线损坏,须由产品制造商或其售后服务部门更换以避免伤及用户。

**操作本机前, 请断开电源!**

## (EN) WARNING

This device may be used by children who are at least 8 years old, by people with reduced physical, sensory or mental capacities or those without knowledge or experience, if they are properly supervised and if the instructions relating to using the device completely safely have been given to them and the associated risks have been understood. Children must not play with the device. Cleaning and maintenance undertaken by the user must not be carried out by unsupervised children.

## ELECTRICAL CONNECTIONS

The electrical installation must be done by a qualified electrical engineer.

The device's power supply must be connected to ground (class I) and protected by a high sensitivity differential breaker (30 mA). Devices without plug must be connected to a main switch on the power supply which disconnects all poles (contact separation distance of at least 3 mm). The connection must be used exclusively to provide the power of the product.

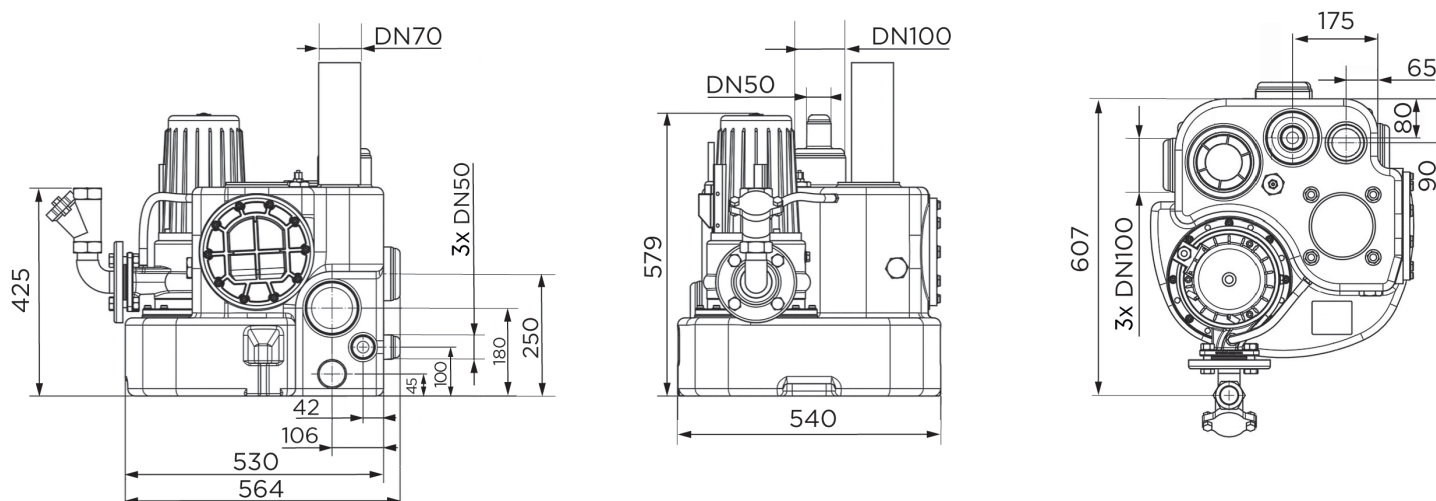
Connect the device to the mains according to the country's standards.

If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual.

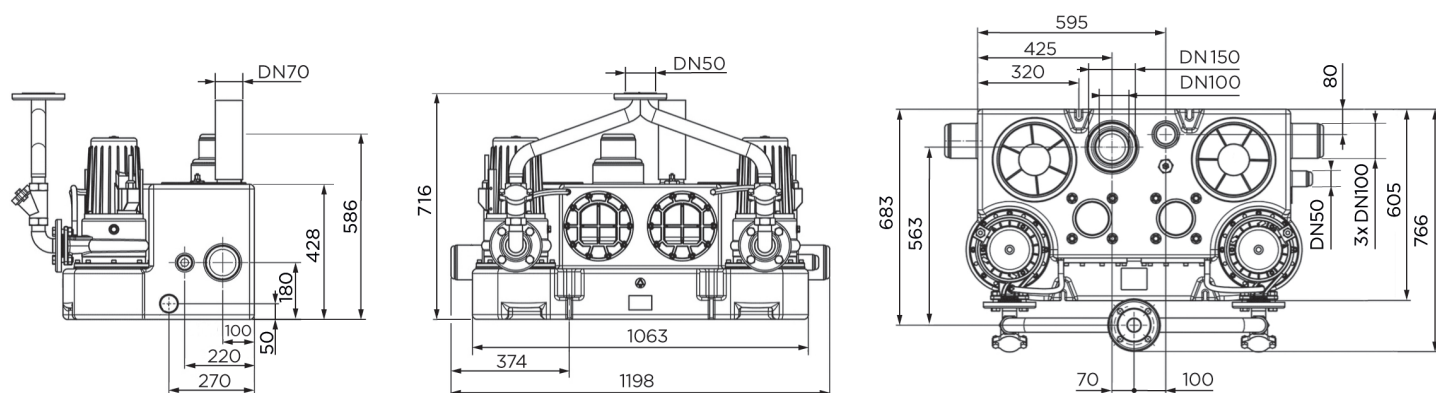
**Disconnect electrical power before working on the unit!**

## 尺寸 / DIMENSIONS

Sanicubic 1 GR





Sanicubic 2 GR



## 1. 安全指南

### 1.1 警告标识

	含义
<b>危险</b>	该术语定义了如不能避免则可能导致死亡或严重伤害的高风险危险。
<b>警告</b>	该术语定义了一种中度风险的危险，如果不能避免，可能会导致轻度到重度伤害。
<b>财产损害</b>	该术语定义了如不予以考虑则可能导致机器及其操作风险的危害。
	一般危险的警告。 危险性由表中所列的指示说明进行定义。
	该符号描述的是与电压有关的危险并提供关于电压保护的信息。

### 1.2 综述

本操作安装手册包含了Sanicubic GR污水提升站的调试、操作与维护的重要说明。严格按照操作说明可确保安全运行、防止伤害和财产损失。请遵循每一章节内的安全说明。安装和调试污水提升站之前，合格的工作人员/操作人员需认真阅读并理解全部指令内容。

### 1.3 使用场合

污水提升站仅适用于本手册所描述的应用领域。

- 污水提升站仅在技术完善的条件下运行。
- 在组装完成之前，请勿操作提升泵站。
- 污水提升站仅可提升输送本手册所述流体介质。
- 污水提升站不可无流体空载。
- 请勿超过本手册规定的适用范围。

### 1.4 员工资格和培训

本设备的调试和维护必须由合格的专业人员操作。

### 1.5 维护、检验及安装安全指南

- 任何修改或变更污水提升站可致保修失效。
  - 仅可使用原厂配件或制造商认可配件。制造商不承担使用其他配件所造成的任何损害的责任。
  - 运营方必须确保所有维护、检查和组装工作均由事先阅读过本操作和组装手册的合格、授权人员进行。
  - 操作提升站前，请关闭电源并拔下电源插头。
  - 请严格按照本手册所述步骤关闭提升站。
  - 输送危险介质的泵站必须进行净化。在初次（或重新）启动之前，应注意5调试章节列出的注意事项。
  - 未经授权人员（例如儿童）必须远离提升泵站。
  - 请遵守操作和安装手册中的所有安全说明。
- 本操作手册必须始终存放在安装地点，以便操作人员查阅。

### 1.6 未遵守操作手册产生的风险及后果


如果因未能遵守本操作安装手册导致丧失保修权力或相应的权力受到损失，制造商将不承担任何责任。

## 2. 运输/存放/废弃处理

### 2.1 验收

- 收到产品时请检查提升站包装是否完好无损。
- 如发生损坏，请记录确切的损坏情况并立即书面通知经销商。

### 2.2 运输

危险
 <b>提升站坠落</b> 提升站坠落有受伤风险！ ⇨ 注意观察指示的重量。 ⇨ 采用适当的运输工具。


- 提升泵站必须水平运输。
- 根据重量表选择适当的运输工具。

	毛重	托架重量
Sanicubic 1 GR SE71.1 S	64 公斤	80 公斤
Sanicubic 1 GR SE71.1 T		
Sanicubic 1 GR SE71.2 T		
Sanicubic 1 GR SE71.3 T	68 公斤	
Sanicubic 1 GR SE71.4 T		
Sanicubic 2 GR SE71.1 T	137 公斤	150 公斤
Sanicubic 2 GR SE71.2 T		
Sanicubic 2 GR SE71.3 T	144 公斤	160 公斤
Sanicubic 2 GR SE71.4 T		

- 检查提升泵站是否在运输中发生损坏。

### 2.3 临时存放

- 必须存放于阴凉干燥、避光防霜通风地方。
- 提升泵站必须保持水平。
- 延长储存期后进行调试时，请采取以下预防措施确保提升站的安装：

财产损害
 <b>潮湿、肮脏或损坏的开口和连接点。</b> 渗漏或损坏提升站！ ⇨ 安装时清洁提升站封闭开口。

### 2.4 废弃处理

- 本设备不得作为生活垃圾处理，应放至电子设备专用回收点处理。设备材料和组件可重复使用。电子电气产品废弃处理，任何形式的旧家电循环再利用和回收，有利于保护环境。

## 3. 说明

### 3.1 一般描述

Sanicubic GR 系列污水提升泵站为即接即用型单泵或双泵提升泵站，可短时浸没，配有防气体和异味的塑料集水箱。这些提升泵站与具有气压式自动液位控制功能的立式切割泵配套使用。并配备液位传感器及配套的控制箱。

### 3.2 应用

Sanicubic GR 系列污水提升泵站用于排放（收集和泵送）下水道回流水位以下的生活污水。

#### 应用限制

严禁泵送以下液体和物质：

- 固体物质、纤维物质、焦油、沙子、水泥、灰浆、砂纸、一次性湿巾、纸板、碎屑、废物、内脏、油脂、油；
- 含有有害物质的废水，例如来自餐馆的未经处理的油腻污水（此类废水必须安装符合标准 EN 1825 的油脂分离器）。

### 3.3 运作模式

污水靠重力流入 Sanicubic GR 提升泵站。

水箱设计为无压运行：箱内必须保持常压状态。

箱内水位上升时，会压缩吸水管（拧在水箱顶部）内的空气。当水位达到预设启动液位时，水泵启动并通过排水管将污水排出水箱。球阀（双泵式提升泵站有两个）可防止排放管内的污水回流到水箱中。

对于双泵型号，两台水泵交替运行。当水箱内水位过高时，第二台泵将自动启动。

控制箱配有蜂鸣器，水泵发生故障或水箱中的水位过高时会触发蜂鸣器报警。可通过专用接线端子连接外部报警装置（请参阅报警器说明书）。接线位置详见控制箱电路图。

### 3.4 所含附件列表

Sanicubic GR 系列污水提升泵站出厂配置包含：

- 一台或多台 Sanipump® ZFS 71 叶轮切割泵；
- 一个紧急排水接头或手动隔膜泵接头；
- 一个气动控制装置和一个控制箱；
- 一根水箱通风软管；
- 一个 DN 32 排放口弯头；
- 一个或多个 DN 32 球形止回阀；
- 一根 DN32/50 Y 型管（仅适用于双泵式提升泵站）。

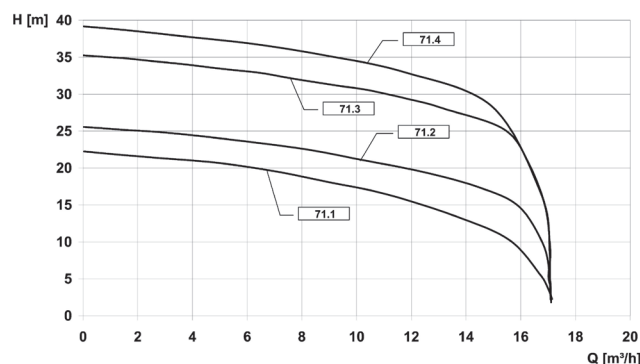
### 3.5 技术参数

SANICUBIC 1 GR SANICUBIC 2 GR	SE71.1 S	SE71.1 T	SE71.2 T	SE71.3 T	SE71.4 T
额定功率 P1 (瓦)	2200	2100	2100	3900	3900
输出功率 P2 (瓦)	1700	1700	1700	3200	3200
电压 U (伏)	230	400	400	400	400
最大吸收电流 (A)	10,5	3,7	3,7	6,5	6,5
转速 (50 赫兹) (n <sup>-1</sup> )	2800	2800	2800	2800	2800
防水等级	IP 68	IP 68	IP 68	IP 68	IP 68
最大流量 Q (立方/小时)	17	17	17	17	17
最大垂直排污高度 H (米)	22	22	25	35	39
最高允许温度	55°C				
运行模式	S3 25%				
SANICUBIC 1 GR					
排放管口径	G1"1/4				
输入口径	DN50, DN100				
最小进水高(毫米)	250 (后部及侧面进水口) 576 (顶部进水口)				
SANICUBIC 2 GR					
排放管口径	DN50				
输入口径	DN50, DN 100, DN150				
最小进水高度 (毫米)	250 (后部及侧面进水口) 586 (顶部进水口)				

### 材料

水箱	PE LD	叶轮	GG-20
泵体	GG-20	轴	不锈钢
机座	GG-20	管道系统	不锈钢
阀门	GG-20	密封件	碳/陶瓷

### 3.6 性能曲线



### 3.7 概述

参见第8页

### 3.8 尺寸

参见第2页

## 4. 安装

### 4.1 安装前的准备工作

- 检查铭牌上的参数与控制装置和泵站的参数（电源电压、频率）是否相符。
- 设备的安装和操作必须遵守当地规定和EN12056-4标准。必须由合格的专业人员进行调试。
- **Sanicubic GR** 安装空间必须足够大，设备四周及上方至少应有600毫米的空间，易于维修。安装间的高度约为2至2.5米。
- 该空间必须光线充足且通风，无浸水并且能够防冻。
- 报警信号必须始终对用户可见。
- 如果排放的污水含有油脂，应加装油水分离器。
- 除上述污水外，其他污水（如手工业或工业废水）未经事先处理不得排入管道。
- 安装间的地面必须能够承受整个泵站的负载。
- 在地下室或存在渗水风险的场所，建议在检查井中安装排水泵。

### 4.2 调试

- 设备上方天花板上设有吊钩，可用于水泵吊装以及可能的维护和维修工作。
- 安装前应检查所有管道和建筑结构的尺寸，并与泵站尺寸进行比对。需特别注意进水管不得低于泵站的进水口位置。
- 将提升站在空地上安装好并使用水平仪找平。
- 为避免出现浮动风险，请使用随产品提供的安装工具将其固定在地面。

### 4.3 管道安装

#### 财产损失



- ⇒ 提升站不得作为管线的检测点使用。
- ⇒ 将管前端在提升站上支撑好。实现无限制连接。
- ⇒ 采用合适方法消除管线热膨胀。

#### 4.3.1 入口管

#### 很重要

建议入口管安装止回阀和截止阀。必须安装止回阀和截止阀，从而不影响提升泵的拆卸。

#### 注意

所有管件必须能够防止噪音传播并具备柔性。

管线已架好。

1. 选择要使用的连接开口。

进水管需保持至少3%的坡度，以确保污水能够顺畅流入泵站。

2. 连接进水管时，应在所用进水管上锯一个孔。双泵式提升泵站的后面部进水口需使用圆孔锯或锯片开孔；切勿采用锤击方式开孔！

3. 开孔后将进水管插入孔中。

#### 很重要

建议优先采用顶部进水口。

如果无法采用顶部进水口，可采用距离地面250毫米的后面部进水口。

在万不得已的情况下，可以采用距离地面180毫米的侧面进水口，但必须严格遵守以下措施：

1. 通过下挖提升泵站下方地面（图A）或垫高所连接卫生设施下方的地面（图B），使管道轴线比提升泵站地面高250毫米。

图 A:

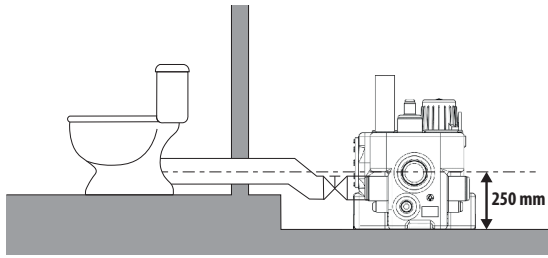
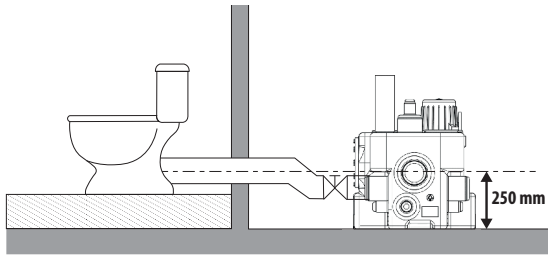


图 B:



2. 在靠近泵站处调整管道轴线。

### 注意

必须正确设置液位传感器，确保泵体完全注满水后立即启动泵送。参见 5.2。

### 财产损失



#### 泵体未充分注水。

有停机风险！

⇒ 建议优先采用顶部进水口。

### 注意

低于 250 mm 的进水口可能导致进水管内杂物沉积，严重时甚至堵塞。因此，应尽量采用顶部进水口。

### 4.3.2 排水连接

### 财产损失



#### 不当安装排水管。

安装空间渗漏和淹水！

⇒ 提升站不得作为管线的检测点使用。

⇒ 排水管不得接入其它排放管线。

为防止污水管回流，将排水阀安装成“回路”，因此其最高点的基础位于回流水位之上。

在止回阀下游安装一个截止阀，以便于清洗或更换止回阀。

必须在提升泵站的排放管上安装止回阀（包含在供货中）。

在水泵的水平排放口处，安装有 DN32 90° 法兰弯头，其垂直末端为 1-1/4" 螺纹。

对于双泵式提升泵站，供货中包含一根带有 DN50 排放口（法兰式）的 Y 型管。

必要时，管道和配件必须用管箍或悬臂梁进行加固。

### 4.3.3 排气管

### 很重要

根据 EN 12050-1 标准规定，顶部必须设有通风口。提升站必须保持通风，水箱即可一直保持大气压力。空气必须双向自由流通，无安装隔膜阀。

• 将泵站的通风管（直径为 75 毫米）直接连接到建筑物的通风管，或单独安装并引至屋顶。

• 通风管必须通过柔性接头垂直连接至通风口。

• 连接处应防臭。

排气管不得接入隔油池入口一侧排气管。

### 财产损失



#### 通风不足。

提升泵不工作的风险！

⇒ 必须保持空气自由流通。

⇒ 请勿堵塞出风口。

⇒ 请勿安装空气进气阀（隔膜阀）。

⇒ 不得接入机械排气扇。

### 4.4 电路连接

### 危险



⇒ 每次安装或拆卸水泵或对其进行任何其他作业之前，必须切断系统电源。

### 危险



#### 电路安装由非专业人员完成。

电击死亡危险。

⇒ 电路安装须由专业电工完成。

⇒ 电路安装须符合所在国现行标准。

• 所有使用的电气装置必须符合 IEC 60364/NF C 15-100 标准，这意味着电源插座必须配备接地端子。

• 在系统接入的电网中，必须在控制装置上游单独安装一个高灵敏度漏电保护器（I < 30 毫安）；或者，为防止漏电保护器跳闸导致控制装置发生故障，必须在控制装置与每台水泵之间单独加装漏电保护器。

• 该电源接口必须专用于 Sanicubic GR 设备。

• 请严格遵守 EN 12056-4 标准的要求。

• 三相连接时，外部熔断器保护必须采用三级自动断路器。以确保故障时电网完全隔离并防止两相运行。

• 所有电气设备，包括控制装置、报警装置及电源插座，都必须安装在干燥且防淹的房间内。

• 电机过载可能导致过热。电机过热时切勿触碰其高温表面。

### 警告



#### 电机表面高温。

有烫伤风险！

⇒ 切勿在没有防护设备的情况下触摸电机外壳。

提升泵站的接线图见控制箱说明书。

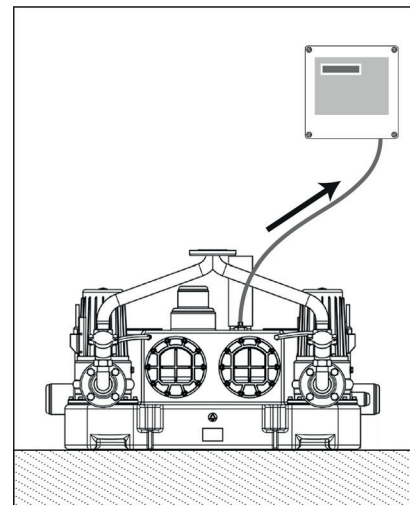
### 5. 调试

#### 5.1 启用的前提条件

• 在提升泵站投入使用之前，请确保提升泵站及所有保护装置的电气连接正确无误。

• 安装并连接控制箱：请参阅控制箱随附的安装说明书。

• 控制箱安装需确保气动软管和吸水管始终保持向上倾斜：



只有这样，才能保证自动控制装置正常运行。

## 财产损失



**气动软管向下倾斜，位置较低。**  
**软管受压、扭曲。**  
**软管过长。**  
 存在冷凝风险！  
 可能干扰检测信号。  
 ⇒ 请遵守上述及控制箱安装说明书中的安装规则。

## 5.2 启用操作

控制装置已预设为使用 DN100 入口，进水高度为 250 毫米。如果仅采用顶部入水方式，可在控制装置上设置其他开关点以增加有效容积。

控制装置预设参数如下：

最小进水高度	停机液位 N1	启动液位 N2	启动液位 N3 (仅限双泵式提升泵站)	报警液位 HW	切换容积 单泵/双泵
250 毫米	30 毫米	140 毫米	160 毫米	180 毫米	26 升/47 升
428 毫米	30 毫米	250 毫米	260 毫米	290 毫米	45 升/80 升

上电。

- 三相系统：
  - 检查相位连接：

控制箱配有相位控制器，防止两相运行。强制启动水泵（在双泵系统中，两台泵依次启动）。如果出现“相位” [Phase error] 报警，请切断泵站电源，并在控制箱内正确连接三相电源。

- 检查泵的转向：

使用工具拧开水泵顶部的小盖子。此时可以看到电机轴上端，上面有油漆标记。强制启动水泵。观察标记旋转方向与（电机外壳上的）箭头是否一致。如果不一致，请切断电源并在控制箱内调换两相接线。将盖子拧回原位。双泵系统：对另一台水泵重复上述操作。

## 警告



**设备配有切割刀片。**  
 可能造成手指或身体其他部位被夹伤、割伤，甚至截肢。  
 ⇒ 请远离运动部件。

- 按下“自动” [Auto] 按键进行运行测试：
  - 通过正常进水（清洗池、马桶等）向集水箱注水。系统应自动启动、排空箱体并停止。系统停止后，排放管中的水不得流回水箱。在双泵系统中，两台水泵应交替启动。
  - 根据安装条件和扬程高度调整延迟时间，确保水泵尽可能排空集水箱，避免长时间“呼呼”运行（抽水时噪音较大）。泵送结束时（控制装置上显示 0 厘米），吸水管应离开液体。延迟时间可通过控制箱进行调整。
  - 试运行期间，应检查所有管道和连接处是否有泄漏，并在必要时重新密封。

如果系统正常运行，请保持自动模式。

- 控制箱设置：

开启“全天候自动启动”功能（在控制箱屏幕上选择[24 hours start]，然后设置为[is activated]）。即使没有达到启动液位，水泵也会短时运行。防止其因长期未使用而出现卡滞。

## 5.3 应用界限

## 财产损失



**超压超温。**  
 高温或有毒液体泄漏！  
 ⇒ 遵守文档中的操作规范。  
 ⇒ 避免关闭阀门运行提升泵。  
 ⇒ 必须避免设备无泵送液体空载。

使用中遵守以下参数和数值：

参数	数值
液体最高允许温度	35°C ≤55°C（最长泵送 5 分钟）
运行模式	间歇运行 S3 25%

- 提升泵站不适用于连续运行！
- 最大进水流量必须始终小于泵在计算扬程下的流量（参见 3.6）。
- 避免让提升泵站长期处于停机状态（参见 5.2）。

## 财产损失



**提升泵站长期不运行。**  
 密封件有卡滞风险。  
 ⇒ 在控制箱开启“全天候自动启动”功能。  
 ⇒ 外出时请勿切断提升泵站的电源。

## 6. 停用

- 关闭进水管阀门。
- 排空水箱。关闭排放管阀门。
- 切断电源并锁定系统。
- 检查液压部件和切割刀片。必要时进行清洁。

## 警告



**设备配有切割刀片。**  
 可能造成手指或身体其他部位被夹伤、割伤，甚至截肢。  
 ⇒ 请远离运动部件。  
 ⇒ 即使水泵已断电，操作时也必须小心谨慎。

- 清理水箱。

## 7. 维护/保养

## 危险



⇒ 操作本机前，请断开电源！

## 警告



**污水提升站由非专业人士操作。**  
 受伤风险！  
 ⇒ 维修和维护应由受过培训的专业人士完成  
 ⇒ 遵守安全和基本指令。

## 警告



**T 在没有充分准备的情况下对提升泵站进行操作。**  
 有受伤风险！  
 ⇒ 正确关停提升泵站，并采取措施防止其意外启动。  
 ⇒ 关闭进水阀门。  
 ⇒ 排空提升泵站。  
 ⇒ 关闭排水阀门。  
 ⇒ 待提升泵站冷却至环境温度。

## 7.1 检查和维护计划

根据 EN 12056-4 标准，必须对提升泵站进行定期维护检修，以确保污水正常排放并及时发现和排除故障。

用户每月应至少观察两个运行周期，检查提升泵站是否正常运行。

根据 EN 12056-4 标准，提升泵站的维护必须由具备相关资质的人员进行。最长间隔如下：

- 工业用提升泵站：3 个月；
- 小型公共设施用提升泵站：6 个月；
- 家用提升泵站：1 年。

## 7.2 检查项目清单

检查电源。检查参数值是否与铭牌上的标称值一致。  
 检查电源是否接地。

检查电源是否接入 30 毫安 漏电保护器。

按下强制启动按钮，检查电机是否正常运行。如果异常，请检查水泵是否堵塞。

在三相系统中，检查泵的转向。

进行多周期运行测试。

检查柔性接头的安装及磨损情况。

检查报警装置的功能和有效性。


检查截止阀和止回阀的功能和密封性。

清洁并检查水位传感装置。

查阅报警日志（控制箱内）。

查阅水泵运行日志（控制箱内）

检查液压部件和切割刀片。必要时进行清洁。

警告	
	<b>设备配有切割刀片。</b> 可能造成手指或身体其他部位被夹伤、割伤，甚至截肢。 ⇒ 请远离运动部件。 ⇒ 即使水泵已断电，操作时也必须小心谨慎。

对操作人员进行技术指导和（或）培训。

### 7.3 集水箱维护


定期检查箱体内壁，清洁传感器。

用水管冲洗箱体，清除内壁沉积物。

### 7.4 维护合同

正如所有高性能、技术设备一样，必须进行维护保养从而确保 Sanicubic GR 污水提升站的可持续性能水平。建议与专业公司签署维护合同定期检查维护设备。更多详细信息，敬请详洽。

## 8. 故障查找及解决方案

危险	
	⇒ 操作本机前，请断开电源！

主要问题	故障原因	解决方案
1、电机不运转。	电压过低或无电压	检查电源
	电源连接不正确	纠正
	电源线故障	更换/联系售后
	电容器故障（仅限单相电机）	更换/联系售后
	转子或叶轮卡死	清洁
	电机接触器因过热、卡死或电压故障而断开	检查/联系售后
	控制失灵/压力开关故障	检查/联系售后
	气动软管或连接处泄漏	检查/更换
	电机故障	更换/联系售后
2、电机空转不排水。	叶轮堵塞或磨损	清洁/更换
	止回阀堵塞	清洁
	截止阀堵塞或关闭	清洁/开启
	排水管堵塞	清洁
	吸水管堵塞	清洁
	转向错误	纠正
	水箱缺水	关闭/联系售后
	水箱通气孔堵塞	清洁
	泵壳排气孔堵塞	清洁
3、电机间歇运行。	电压异常或波动	纠正/联系售后
	温控开关安装不当	检查/联系售后
	电流消耗过高	联系售后
4、电机无法停机。	控制故障	联系售后
	压力开关功能异常	更换/联系售后

## 9. 标准

本设备符合建筑产品法规的 EN 12050-1 标准（粪便污水提升泵站）以及欧洲低电压、电磁兼容性和机器指令。

## 10. 保修

作为制造商，我们自设备购买之日起提供 24 个月的保修服务。

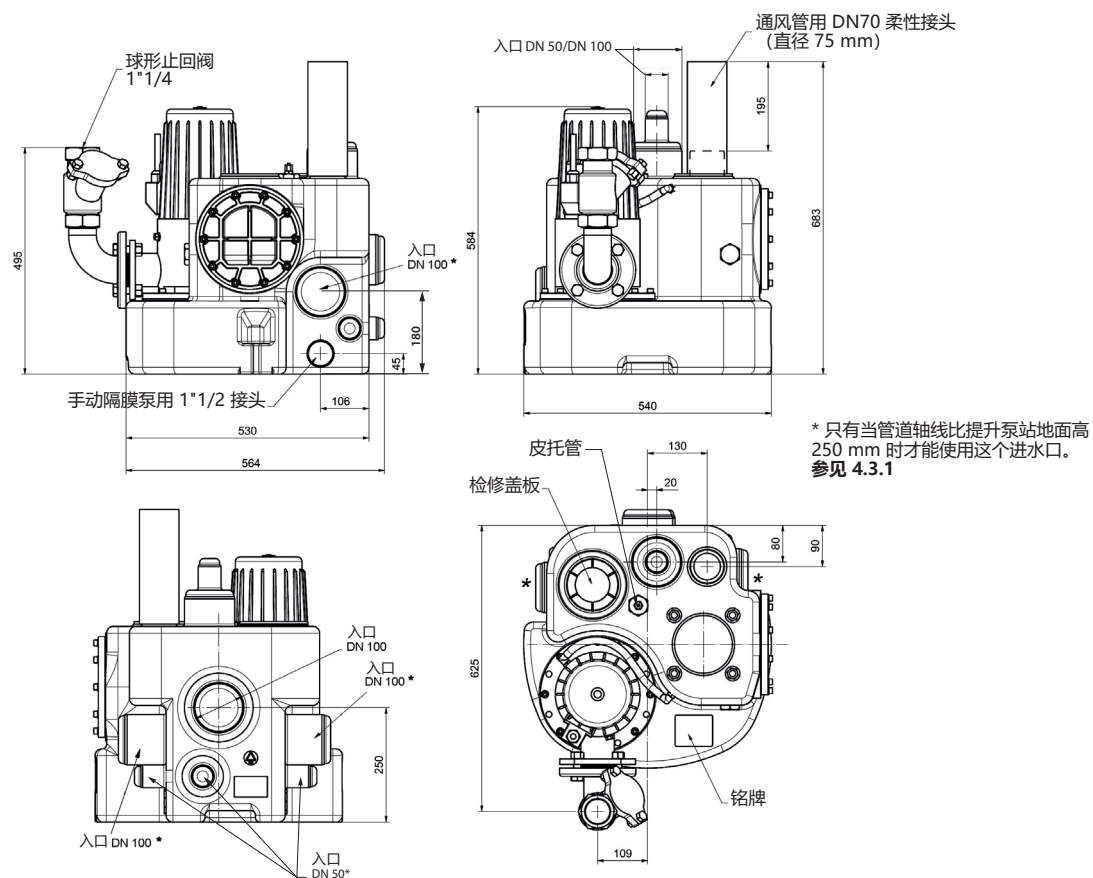
以您持有的发票为凭证。在本保修期内，我们将视情况对材料或制造缺陷导致的所有故障提供免费维修或更换服务。

因安装不当和（或）使用不当以及磨损造成的损坏不在保修范围内。

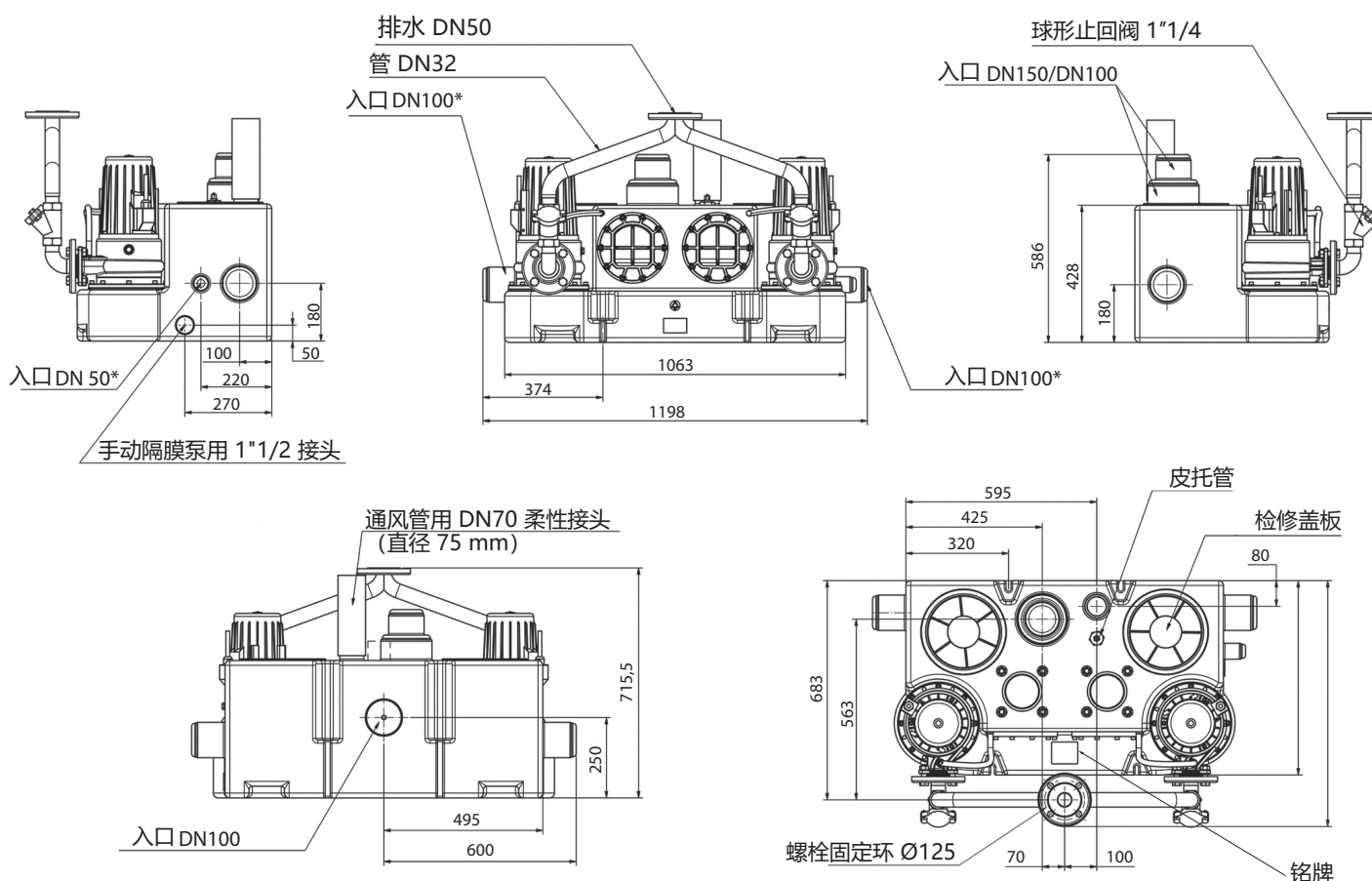
对于设备故障引发的间接损失，我们概不负责。

## 附录 A: 概述

## SANICUBIC 1 GR



## SANICUBIC 2 GR



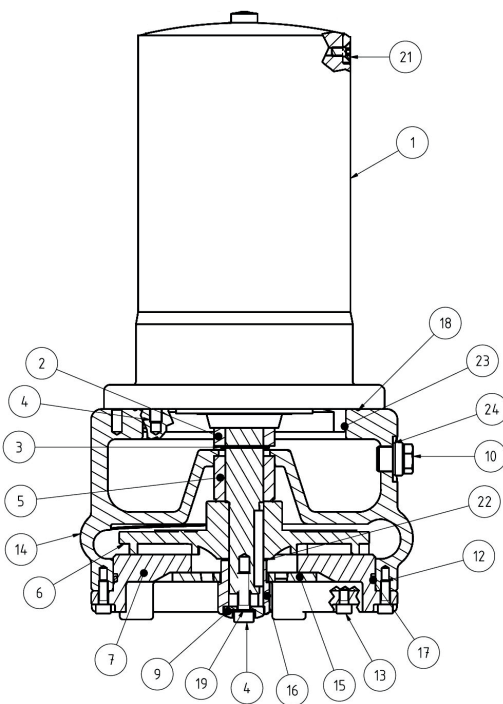
## 附录 B：螺栓固定环

## 提升站

商品编号	名称	数量
117337	Sanicubic GR SE71 水箱	1
	Sanicubic 2 GR SE71 水箱	(1)
17481	Sanicubic GR SE71 吸水口	1 (2)
117191	R 3/8" 柔性直管	1 (2)
60219	全套皮托管	1
117012	带密封垫的检修盖板	1
	双泵系统检修盖板	(2)
	双泵系统检修盖板的密封垫	(2)
200102	Sanicubic GR SE71 230 V 控制箱	1
255302	Sanicubic GR SE71 400 V 控制箱	1
	Sanicubic 2 GR SE71 400 V 控制箱	(1)

## 水泵



## 水泵剖面图



	商品编号	名称	数量
	17749	SANICUBIC 1 GR SE71.1 S 配套水泵	1
	17463	SANICUBIC GR SE71.1 T 配套水泵	1 (2)
	17562	SANICUBIC GR SE71.2 T 配套水泵	1 (2)
	17563	SANICUBIC GR SE71.3 T 配套水泵	1 (2)
	17564	SANICUBIC GR SE71.4 T 配套水泵	1 (2)
1	17587	SANICUBIC 1 GR SE71.1 S 电机, 带机壳	1
1	17586	SANICUBIC GR SE71.1 T 和 SE71.2 T 电机, 带机壳	1
1	17588	SANICUBIC GR SE71.3 T 和 SE71.4 T 电机, 带机壳	1
2	17356	GLRD LD1/25-G38 - 电机侧	1
3	11679	密封垫 DIN471-A25x1.2	1
4	16381	沉头螺钉 M8x25-A2	5
5	17377	GLRD MG1/25-G6 液体侧	1
6	17373	SANIPUMP ZFS 71.1 转子, Ø135	1
6	17371	SANIPUMP ZFS 71.2 转子, Ø145	1
6	17372	SANIPUMP ZFS 71.3 转子, Ø160	1
6	17351	SANIPUMP ZFS 71.4 转子, Ø170	1
7	17391	SANIPUMP ZFS 71 水箱安装盖板	1
	17109	沉头螺钉 M5x10-A2 DIN965	3
9	17352	SANIPUMP ZFS 71 切割轮螺纹接头	1
10	11640	螺纹塞G 3/8 (通风用)	1
10	11639	螺纹塞 G3/8 DIN910 (注油用)	1
12	15320	内六角螺钉 M6x20-A2	4
13	10008	内六角螺钉 M6x10-A2	4
14	17355	SANIPUMP ZFS 71 泵壳	1
15	17353	SANIPUMP ZFS 71 切割盘	1
16	17354	SANIPUMP ZFS 71 切割轮	1
17	11822	O型圈 160 x 3.5-NBR70	1
18	11629	O型圈 147 x 3	1
19	11672	铜制密封圈 8x14x1	1
21	10666	内六角螺钉 M6x12-A2 DIN 912	2
22	17375	调整垫圈 10x30x0.1 1.4301	2
22	17376	调整垫圈 10x30x0.5 1.4301	2
23	11656	O型圈 125x2-NBR70	1
24	11646	Pos 230 用铜质密封圈 17x22x1.5	2
	11645	齿形防松垫圈 S8x13x0.8 A2	4
	11690	Wisura NFW 工业白油	0,4L

## 1. SAFETY

### 1.1 IDENTIFICATION OF WARNINGS

	Meaning
<b>DANGER</b>	This term defines a high risk of danger, which can lead to death or serious injury, if not avoided.
<b>WARNING</b>	This term defines a medium risk of danger, which can lead to serious or minor injury, if not avoided.
<b>NOTICE</b>	This term characterises dangers to the machine and its proper operation.
	Warning of a general danger. The danger is specified by indications given in the table.
	This symbol characterises dangers associated with the voltage and provides information on voltage protection.

### 1.2 GENERAL POINTS

The operation manual at hand provides basic notes which have to be taken into account during assembly, operation and maintenance works. Therefore, before assembly and commissioning, this operation manual has to be read by the assembler as well as the responsible personnel/operator at all costs. It always has to be available on site of operation of the machine/plant.

The general safety notes listed under the main point safety are not the only notes to be taken into account. Please also observe the specific safety instructions, such as those for private use, listed under other main points.

### 1.3 INTENDED USE

Only use the pumping station in the fields of application described in this documentation.

- The lifting station must only be operated in technically perfect conditions.
- Do not operate the partially assembled lifting station.
- The lifting station must only pump the fluids described in this documentation.
- The lifting station must never operate without pumped fluid.
- Consult us for operating modes not described in this documentation.
- Never exceed the usage limits defined in the documentation.
- The safe operation of the station is only ensured if it is used as described in this manual.

### 1.4 QUALIFICATION AND TRAINING OF STAFF

Commissioning and maintenance of this device must be performed by a qualified professional. Please refer to installation standard EN 12056-4.

### 1.5 SAFETY INSTRUCTIONS FOR MAINTENANCE, INSPECTION AND ASSEMBLY WORK

- Any alteration or modification of the pumping station will void the warranty.
- Only use original parts or parts recognised by the manufacturer. The use of other parts may void the manufacturer's liability for any resulting damage.
- The customer has to ensure that all maintenance, inspection and assembly work is carried out by authorised and qualified specialist personnel, who have been sufficiently informed through relevant and adequate study of the operating manual.
- Work on the machine is to be done only when it is shut down. The procedure for shutting down the machine is described in the operating manual and is to be precisely adhered to.
- Lifting stations that discharge fluids that are harmful to health must be cleaned. Before recommissioning, observe the commissioning instructions (see 5. *Commissioning*).
- Keep unauthorised persons (e.g. children) away from the lifting station.
- Observe all safety instructions and instructions in this operating (and installation) manual.

This operating manual must always be available on site so it can be accessed by qualified staff and the operator.

### 1.6 RISKS AND CONSEQUENCES OF NONCOMPLIANCE WITH THE OPERATING MANUAL


Failure to comply with this operating and installation manual will result in the loss of warranty rights and rights to damages.

## 2. TRANSPORT, TEMPORARY STORAGE, DISPOSAL

### 2.1 RECEIVING INSPECTION

- When receiving goods, check the condition of the lifting station's packaging.
- In case of damage, note the exact damage and immediately notify the dealer in writing.

### 2.2 TRANSPORT

DANGER	
	<b>Dropping the pumping station.</b> Risk of injury if the pumping station is dropped! ⇒ Keep the pumping station horizontal when moving it. ⇒ Observe the indicated weight. ⇒ Never suspend the pumping station by the power cord. ⇒ Use suitable means of transport.

- Always transport the lifting station in a horizontal position.
- Choose suitable means of transport.

	GROSS WEIGHT	TOTAL WEIGHT OF THE PALLET
Sanicubic 1 GR SE71.1 S	64 kg	80 kg
Sanicubic 1 GR SE71.1 T		
Sanicubic 1 GR SE71.2 T		
Sanicubic 1 GR SE71.3 T	68 kg	
Sanicubic 1 GR SE71.4 T		

	GROSS WEIGHT	TOTAL WEIGHT OF THE PALLET
Sanicubic 2 GR SE71.1 T	137 kg	150 kg
Sanicubic 2 GR SE71.2 T		
Sanicubic 2 GR SE71.3 T	144 kg	160 kg
Sanicubic 2 GR SE71.4 T		

- Inspect the pumping station to make sure there is no damage due to transport.

### 2.3 TEMPORARY STORAGE/PACKAGING

- The machine can be kept in interim storage and conserved in a cool, dark, dry and frost-free site.
- The systems should stand in horizontal position.
- In the case of commissioning after an extended storage period, take the following precautions to ensure storage of the pumping station:

#### NOTICE



**Wet, dirty or damaged openings and junction points.**  
Leaks or damage to the pumping station!  
⇒ Clear the pumping station's blocked openings at the time of installation.

### 2.4 DISPOSAL



The device must not be disposed of as household waste and must be disposed of at a recycling point for electrical equipment. The device's materials and components are reusable. The disposal of electrical and electronic waste, recycling and recovery of any form of used appliances contribute to the preservation of our environment.

## 3. DESCRIPTION

### 3.1 GENERAL DESCRIPTION

The effluent lifting stations **Sanicubic GR** are single or double systems that are ready to plug in and safe against flooding, with collection chambers made of gas- and odour-proof plastic. They work with vertical cutting unit pumps with automatic pneumatic level control. They are completely equipped with switch boxes and all necessary switching elements.

### 3.2 APPLICATIONS

The effluent lifting units of the **Sanicubic GR** production series are used for the disposal (collection and conveying) of domestic effluent that develops underneath the canal backflow level.

The following liquids/substances are not allowed in discharge systems:

- Solid materials, fibres, tar, sand, cement, ash, coarse paper, hand towels, wipes, cardboard, rubble, rubbish, slaughterhouse waste, oils, greases, etc.
- Wastewater containing harmful substances (for example, untreated greasy waste from restaurants). Pumping these liquids and substances requires the fitting of a compliant grease trap.

### 3.3 OPERATING PRINCIPLE

The wastewater flows by gravity into the **Sanicubic GR** lifting station. The collecting tank is designed for **non-pressure operation**. Wastewater is collected there at atmospheric pressure before being discharged to the sewer.

The water rising in the tank compresses the air in the dip tube screwed to the top of the tank. When the preset switch-on height is reached, the pump is activated and pumps the water out of the tank via the discharge line. A non-return ball valve (two in double systems) prevents the water from flowing back from the discharge line into the tank.

For double pumps models, both pumps operate each in turn, alternately. In case of abnormal operation, both engines run simultaneously (or if one pump fails, the other takes over).

The control box is equipped with an audible alarm that is activated in case of pump(s) failure or if the water level in the tank is too high. External alarm devices can be connected to the terminal blocks provided (refer to the control box manual). Their location is indicated on the wiring diagram of the switchgear.

### 3.4 SCOPE OF SUPPLY

The sewage lifting stations of the **Sanicubic GR** series are supplied with:

- built-on macerator pump(s) of the **Sanipump® ZFS 71** series,
- connection for emergency drainage or manual diaphragm pump,
- pneumatic control and control box
- flexible connection for venting the collection chamber

- pressure outlet connection DN 32
- non-return ball valve(s) DN 32
- Y-pipe DN 32/50 (only for double system).

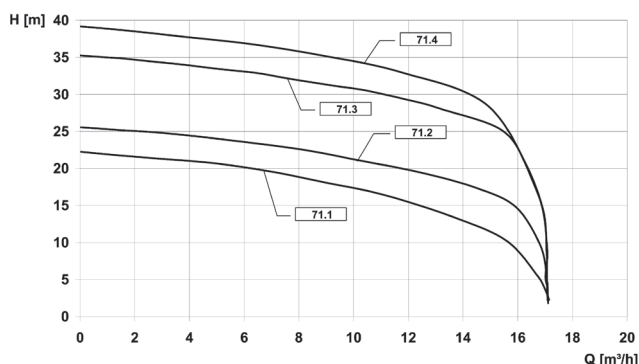
### 3.5 TECHNICAL DATA

SANICUBIC GR 1 SANICUBIC GR 2	SE71.1 S	SE71.1 T	SE71.2 T	SE71.3 T	SE71.4 T
Power P1 (kW)	2.2	2.1	2.1	3.9	3.9
Power P2 (kW)	1.7	1.7	1.7	3.2	3.2
Voltage U (V)	230	400	400	400	400
Maximum absorbed current (A)	10.5	3.7	3.7	6.5	6.5
Rated speed at 50 Hz (n-1)	2800	2800	2800	2800	2800
IP code	IP 68	IP 68	IP 68	IP 68	IP 68
Max. flow rate (m³/h)	17	17	17	17	17
Max. discharge height (m)	22	22	25	35	39
Max. temperature of the pumped liquid	55°C				
Operating mode	S3 25%				
Sanicubic GR 1					
Discharge diameter	1-1/4"				
Inlets diameter	DN50, DN100				
Inlets Height h (mm)	250 (back and side inlets) 576 (upper inlet)				
Sanicubic GR 2					
Discharge diameter	DN50				
Inlets diameter	DN50, DN100, DN150				
Inlets Height h (mm)	250 (back and side inlets) 586 (upper inlet)				

#### Material

Tank	PE LD	Impeller	GG-20
Pump housing	GG-20	Shaft	Stainless steel
Motor housing	GG-20	Pipework	Stainless steel
Valve	GG-20	Seals	Carbone/Céramique

### 3.6 CURVE



### 3.7 OVERVIEW

See pg. 16.

### 3.8 DIMENSIONS

See pg. 2.

## 4. INSTALLATION

### 4.1 PREPARATION

- The characteristics shown on the rating plate have been compared with those on the order and installation (supply voltage, frequency).
- The installation room must be protected against frost.
- The installation room is adequately lit.
- The work has been prepared in accordance with the standard EN 12056-4.
- The plant room where the **Sanicubic** will be installed must be large enough to allow a 600 mm clearance around and above the device to facilitate maintenance. The height of the room should be approximately 2 to 2.5 m.
- The alarm signal is always visible to the user (if necessary, use an external alarm contact switch).
- In case of discharge of greasy effluents, the use of a degreasing tank is essential.

- Wastewater other than those mentioned above, for example, of artisanal or industrial origin, must not be discharged into the pipes without prior treatment.
- The floor of the room must be able to support the load of the entire installation.
- In underground rooms or rooms where there is a risk of water infiltration, it is recommended to place a drainage pump in a manhole.

#### 4.2 FITTING

- A hook in the ceiling above the set-up site of the lifting unit facilitates assembly and potential maintenance and repair work on the pump.
- Prior to assembly, all construction and connection measurements should be checked and compared with the dimensions of the system. Here you should pay special attention that the constantly downward-inclining supply connection never lies lower than the inflow height of the collecting tank.
- Fit the pumping station on the bare ground and level it with a spirit level.
- To avoid any risk of the pumping station floating, attach it to the ground using the mounting kit provided.

#### 4.3 HYDRAULIC CONNECTION

##### NOTICE



- ⇒ The pumping station must not be used as a control point for piping.
- ⇒ Prop up the pipes upstream from the pumping station. Make connections without constraints.
- ⇒ Use suitable means to compensate for thermal expansion of the piping.

##### 4.3.1 Inlet

##### IMPORTANT

It is recommended that you mount check valves and stop valves on the inlet pipes. These must be mounted so that they do not hinder disassembly of the pumping station.

##### NOTE

All piping connections must prevent the propagation of noise and be flexible.

The piping is supported.

1. Choose the connection openings to use.

Maintain a minimum slope of 3% on the inlet pipes to ensure proper flow to the plant.

2. To connect the inlet pipes, saw the opening of the inlet pipe to be used. The rear inlet of the double lift system must be opened with a hole saw or a blade; do not use a hammer!

3. Then insert the inlet pipe into the opening.

##### IMPORTANT

**Preferably use the upper inlet.**

If it is not possible to use the upper inlet, use the rear inlet located 250 mm from the floor.

As a last resort, the case of connection to the side inlets located 180 mm from the floor is possible under the strict condition that the following measures are observed:

1. Raise the axis of the pipe to 250 mm above the floor of the lifting station, either by lowering the floor under the station (fig. A) or by raising the floor under the connected sanitary installation (fig. B).

Fig. A :

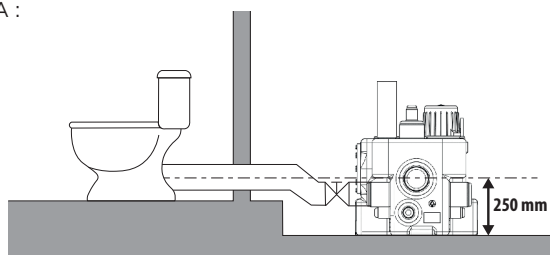
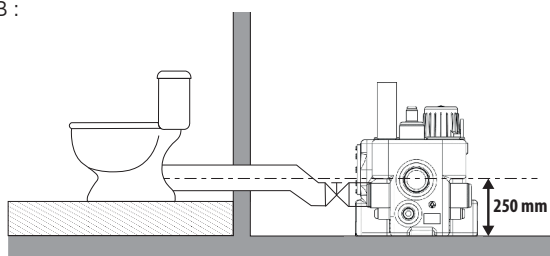


Fig. B :



2. Change the axis of the pipe as close as possible to the station.

##### NOTE

It is imperative that the level sensor is set correctly so that the pump casing is completely filled for immediate pumping. See 5.2.

##### NOTICE



##### Insufficiently filled pump housing.

- Danger of de-priming!
- ⇒ Preferably use the upper inlet.

##### NOTE

Using inlets lower than the 250 mm inlet can lead to dirt deposits in the inlet lines and in extreme cases to blockage of the line. Therefore, the higher inlet should be used whenever possible.

##### 4.3.2 Discharge

##### NOTICE



##### Improper fitting of the discharge pipe.

- Leaks and flooding of the installation room!
- ⇒ The pumping station must not be used as a control point for piping.
- ⇒ Do not connect other drain pipes to the discharge pipe.

To prevent the risk of back-flow of water from the sewer, install the discharge pipe in a «loop» so that its base, at the highest point, is located above the back-flow level.

Fit a shutoff valve behind the check valve.

A bend DN 50, 90° is mounted as standard on the horizontal pressure discharge of the pump, which ends in a vertical direction drilled with 1"/ internal thread.

The installation of the non-return ball valve(s) included in the scope of delivery in the pressure line of the lifting unit is mandatory

It is recommended to install a shut-off valve behind the non-return ball valve in order to facilitate maintenance and possible replacement of the non-return ball valve.

For double lifting units, a Y-pipe with a DN50 pressure outlet (flange) is included in the scope of delivery.

The pressure pipe must be laid steadily rising and without unnecessary jumps in a bend above the backflow level and then steadily falling to the sewer connection. Pipe and fittings must be supported with pipe clamps or brackets, if necessary.

##### 4.3.3 Ventilation

##### IMPORTANT

**According to the recommendations of EN 12050-1, it must be equipped with a vent above the roof. The pumping station must always be ventilated so that the tank is always at atmospheric pressure. The ventilation must be completely free and air must flow in both directions (no diaphragm valve fitted).**

- Connect the station's ventilation pipe Ø75 mm, either directly to the building's ventilation pipe or installed separately and directed above the roof.

- The connection should be made vertically to the ventilation opening using the flexible sleeve.

- The connection must be smell-proof.

- The vent pipe must not be connected to the vent pipe on the inlet side of a grease trap.

##### NOTICE



##### Insufficient ventilation.

- Risk that the pumping station will not work!
- ⇒ Do not connect to a mechanically controlled ventilator
- ⇒ Ventilation must remain free
- ⇒ Do not block the vent outlet
- ⇒ Do not install an air intake valve (diaphragm valve).

##### 4.4 ELECTRICAL CONNECTION

##### DANGER



- ⇒ **Disconnect electrical power before working on the unit!**

**DANGER****Electrical connection work performed by an unqualified individual.**

Risk of death by electric shock!

⇒ The electrical connection must be performed by a qualified and licensed electrician.

⇒ The electrical installation must meet the current standards in the country.

- All electrical installations used must comply with IEC 60364/NF C 15-100, which means that sockets must, for example, be equipped with earth terminals.

- The electrical power supply must be protected with a high sensitivity circuit breaker set to 30 mA upstream of the control unit, or to prevent a failure of the control unit when the residual current circuit breaker responds, one residual current circuit breaker per pump must be installed between the control box and the lifting station.

This connection must be used exclusively for the **Sanicubic** power supply.

- Please observe the regulations of EN 12056-4.

- In the case of a three-phase current connection, the external protection must generally be 3-pole mechanically interlocked with automatic circuit breakers. This ensures complete disconnection from the mains and prevents 2-phase operation.

- All electrical devices such as control system, alarm transmitter and socket must be installed in dry rooms so that they are protected against flooding.

- The motor can overheat due to overload. In case of overheating, never touch the hot surfaces on the motor.

**WARNING****Hot surface.**

Burn Hazards!

⇒ Never touch the surface of the motor housing without protective equipment.

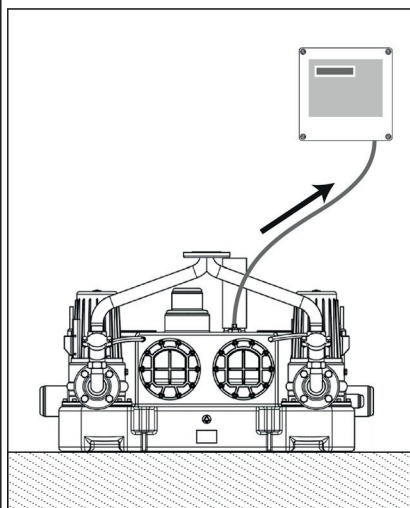
The wiring diagram of the lifting station is available in the instructions manual for the control box and should be kept there to facilitate the work of the maintenance and service personnel.

**5. COMMISSIONING****5.1 PREPARATION**

- Before commissioning, all connections have to be checked again for correct installation. It must have been made sure that the safety regulations have been complied with.

- Install and connect the control box: refer to the installation instructions supplied with the control box.

- The control must be installed in such a way that the blue pneumatic hose for the level control can be laid rising steadily from the lifting unit to the connection at the switch box.



This is the only way to ensure proper functionality of the automatic control.

**NOTICE****Pneumatic hose with downward slope, low points. Control line kinked or squeezed. Control line extended.**

Risk of condensation!

Risk of signal disruption!

⇒ Follow the installation rules above and in the control box manual.

**5.2 COMMISSIONING OPERATIONS.**

The lifting station has been prepared by the factory for using DN 100 inlet with 250 mm inlet height 250 mm. If only the upper inlet is used, other switching points can be set on the control for increasing the switching volume.

Inlet height	Switch-off point N1	Switch-on point N2	Peak load on N3 Double system only	Flood HW	Switching volume simple/double
250 mm	30 mm	140 mm	160 mm	180 mm	26 L / 47 L
428 mm	30 mm	250 mm	260 mm	290 mm	45 L / 80 L

Switch on the power.

- Three-phase installation:

- Check the phase connection:

The control box is equipped with a phase monitor to prevent two-phase operation. Force start the pump (pumps, one after the other on two-pump systems). In case of a «Phase» alarm, switch off the power at the station, connect the 3 phases correctly at the control box.

- Check the direction of rotation of the pump:

Using a coin, unscrew the small cover on top of the pump. The upper part of the motor shaft is now visible and marked with a trace of paint. Turn the pump on by hand. Observe the direction of rotation of the mark and compare it with the direction of the arrow (motor housing). If they are not identical, switch off the power and invert 2 of the phases at the control box. Screw the cover back on. Two-pumps installation: do the same with the other pump.

**WARNING****Presence of cutting blades.**

Risk of pinching, cutting or amputating fingers or other body parts.

⇒ Keep away from moving parts.

- On the control box, press the button «Auto» to carry a test Run:

- Open the inspection cover.

- Fill the collecting tank via the normal inlet (washbasin, toilet...) until the pump switches on. The station must automatically switch on, pump the tank empty and switch off again. After switching off, no water may flow from the pressure line back into the tank.

- Double installations : both pumps must be switched on alternately.

- Correct the delay time according to the installation conditions and the discharge height so that the pump empties the collection tank as much as possible and only runs briefly in snore mode (louder noise during pumping). The dip tube must no longer be immersed in the liquid at the end of the pumping process (display 0 cm in the control). The delay time can be changed on the control box.

- During the initial test run, check pipes for tightness and reseal them, if necessary.

- Close the inspection cover.

If the station is working properly, leave it in automatic mode.

- Setting at the control box:

Activate the option «Automatic start every 24 hours» («24h start» then «is activated» on the display of the control box). The pump(s) is (are) then activated briefly even if no load is applied via the switch-on level. This prevents blocking due to non-use.

**5.3 OPERATING LIMITS****NOTICE****Pressure and temperature limits exceeded.**

Leakage of hot or toxic fluid!

⇒ Observe the operating specifications in the documentation.

⇒ Avoid running the pump with the valve closed.

⇒ Dry running, without pumped fluid, must be avoided.

When in use, observe the following parameters and values:

Parameter	Value
Max. allowed temperature of the fluid	35 °C up to 55 °C when pumped 5 min max.
Operating mode	Intermittent service S3 25%

- The lifting unit is not designed for continuous operation! The conveying data stated on the factory plate apply only for intermittent periodic duty (S3 25 %).

- The maximum permissible feed flow must always be smaller than the feed volume of a pump (see 3.6).

- Do not leave the lifting station unused for a long time (see 5.2).

**NOTICE****Lifting station not in use for a long time.**

Risk of seal blockage.  
 ⇒ Activate the option «24 hours start» on the control box.  
 ⇒ Do not disconnect the power supply to the lifting station when not in use.

**6. DECOMMISSIONING**

1. Close the valve on the inlet pipes.
2. Drain the tank by pressing the forced mode button on the control box. Close the valve on the discharge pipes.
3. Switch off the electrical power supply and record the installation.
4. Inspect the hydraulic parts and shredding blades (depending on the model). Clean them if necessary.

**WARNING****Presence of cutting blades.**

Risk of pinching, cutting or amputating fingers or other body parts.  
 ⇒ Even when switched off, care must be taken when handling a pump.  
 ⇒ Keep away from moving parts.

5. Clean the tank.

**7. CLEANING/MAINTENANCE****DANGER**

⇒ **Disconnect electrical power before working on the unit!**

**WARNING****Work performed on the pumping station by unqualified staff.**

Risk of injury!  
 ⇒ Repairs and maintenance must be performed by specially trained staff

**WARNING****Work on the pumping station without adequate preparation.**

Risk of injury!  
 ⇒ Properly stop the pumping station and secure it against inadvertent operation.  
 ⇒ Close the inlet valves.  
 ⇒ Drain the pumping station.  
 ⇒ Close the valve on the discharge pipes  
 ⇒ Allow the pumping station to cool to room temperature.

**7.1 INSPECTION AND MAINTENANCE SCHEDULE.**

In accordance with EN 12056-4, pumping stations must be maintained to ensure the proper disposal of wastewater and to detect and eliminate malfunctions at an early stage.

The proper functioning of pumping stations must be checked by the user once a month by observing at least two operating cycles. While doing so, attention has to be paid for abnormalities, e.g. unusual running noises of the pump. If irregularities are noted, call qualified staff.

According to DIN EN 12056-4, lifting units have to be regularly checked within the following time intervals:

- every 12 months in case of installation in detached houses,
- every 6 months in apartment blocks,
- every 3 months in case of installation in commercial and industrial enterprises.

In order to guarantee permanent operational safety of the lifting unit, we recommend to conclude a maintenance agreement.

**7.2 CHECKLIST FOR INSPECTION AND MAINTENANCE**

Check the power supply. Compare the values with those of the rating plate.

Check the connection of the power supply to the earth.

Check the connection of the power supply to a 30 mA GFCI breaker.

Check the proper operation of the motors by pressing the forced mode buttons. If abnormal, make sure the pump is not clogged, check the resistance values of the engine coils.

Three-phase version: check the motor rotation direction.

Perform a functional test over several cycles.

Check the correct installation and state of wear of the flexible couplings.

Check the proper operation and effectiveness of the alarm device.

Check the proper operation and seal of the shut-off valves and non-return valves.

Dismount and clean the pitot tube.

Check the control line, check connections on the tank and on the control box.

Consult the alarm log (control box)

Consult the pump operation log (control box)

Inspect the hydraulic parts and cutting blades. Clean them if necessary.

**WARNING****Presence of cutting blades.**

Risk of pinching, cutting or amputating fingers or other body parts.  
 ⇒ Keep away from moving parts.

Advise and/or train operating staff.

**7.3 COLLECTING TANK**

Inspect the tank, check for possible deposits, the presence of grease and foreign bodies. Thoroughly clean the tank and remove foreign bodies.

**7.4 MAINTENANCE CONTRACT**

As with any technical, high-performance equipment, **Sanicubic GR** pumping stations must be maintained to ensure a sustainable level of performance. We recommend you take out a maintenance contract with a qualified company to carry out regular inspection and maintenance work. For more information, please contact us.

**8. INCIDENTS, CAUSES AND SOLUTIONS****DANGER**

⇒ **Disconnect electrical power before working on the unit!**

Malfunction	Cause	Remedies
Motor does not rotate.	Too low voltage, voltage missing.	Check voltage supply.
	Incorrect power connection.	Correction.
	Power cable defective.	Replacement (after-sales service).
	Fault on the capacitor - only with single-phase station.	Replacement (after-sales service).
	Impeller blocked.	Clean.
	Motor protection switched off due to overheating, blockage, voltage error.	Check/Customer service.
	Control error.	Check/Customer service.
	Pneumatic hose or connection leaky.	Check/Customer service.
	Motor defective.	Replacement (after-sales service).
Motor rotates, but does not deliver.	Impeller clogged or worn.	Clean/Replace.
	Check valve clogged.	Clean.
	Shut-off valve clogged or closed.	Clean/Open.
	Pressure line clogged.	Clean.
	Intake socket clogged.	Clean.
	Direction of rotation incorrect.	Correction.
	Water shortage in the tank.	Switch off/Customer service.
	Tank ventilation clogged.	Clean.
	Pump housing ventilation clogged.	Clean.
Motor rotates, but switches off.	Voltage wrong or fluctuates.	Correction/Customer service.
	Overcurrent release incorrectly set.	Set properly.
	Power consumption too high.	Customer service.
Motor does not switch off.	Control error.	Customer service.

## 9. STANDARDS

The lifting stations **Sanicubic GR** conform to Low Voltage, EMC and Machinery directives, and to EN 12050-1 Construction Products Regulation.

## 10. GUARANTEE

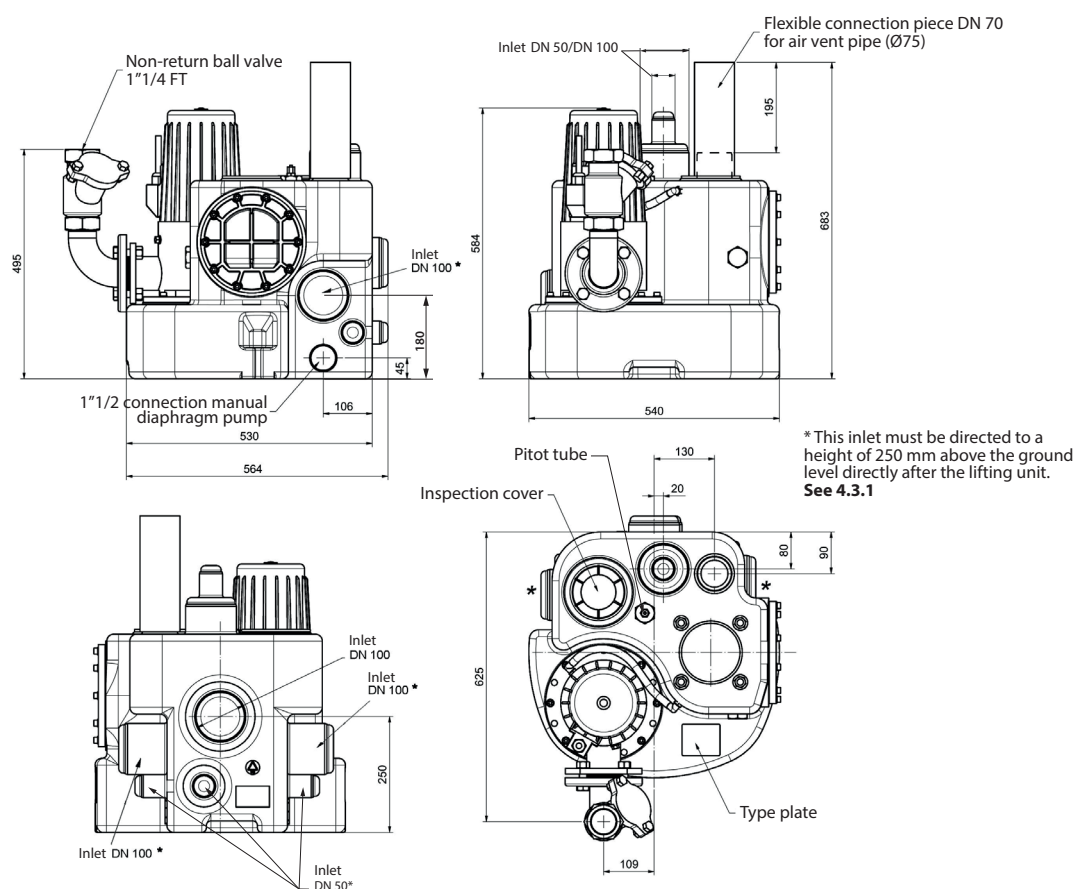
As the manufacturer, we provide a 24-month warranty for this appliance from the date of purchase.

Your receipt of purchase is valid as proof. Within this warranty period, we will, at our discretion, remedy all defects attributable to material or manufacturing faults by repair or replacement free of charge.

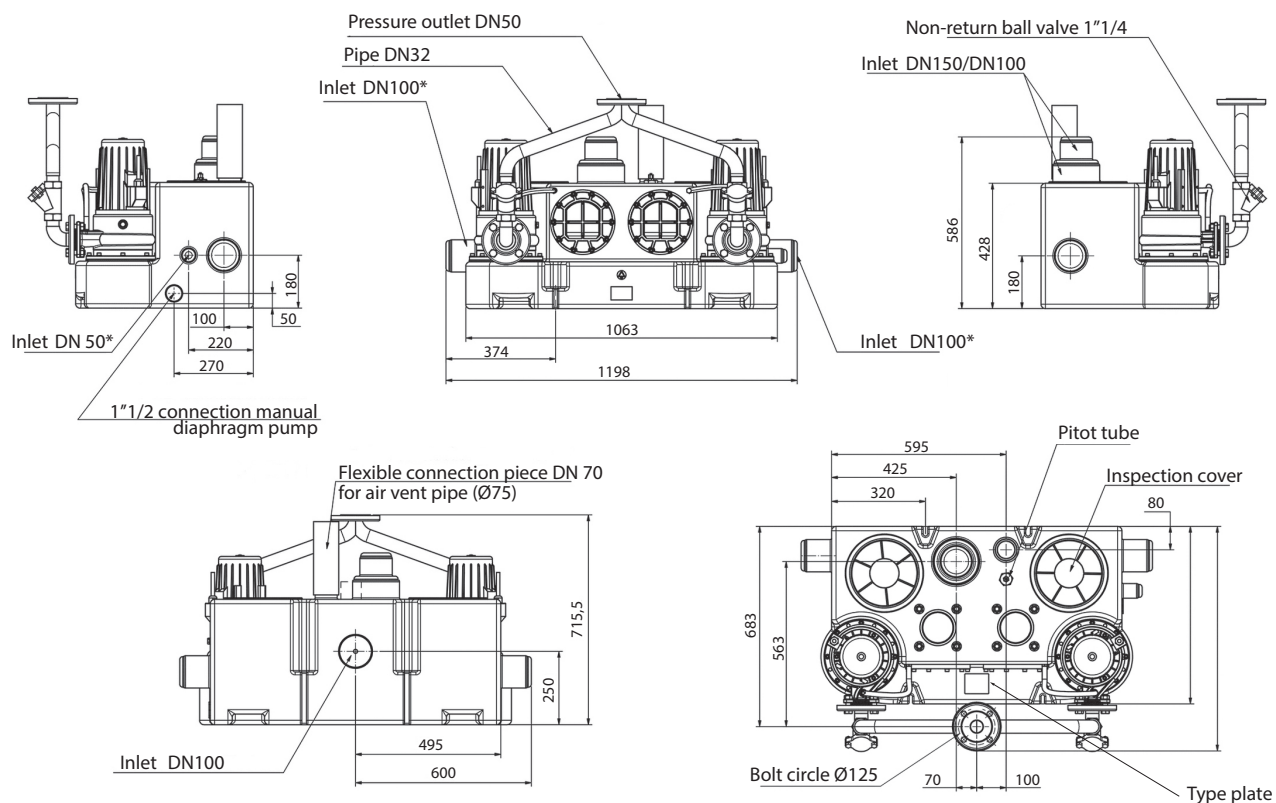
Damage caused by improper installation and/or use, and wear and tear is excluded from the warranty. We shall not be liable for consequential damage caused by failure of the device.

## APPENDIX A: OVERVIEW

### SANICUBIC 1 GR



### SANICUBIC 2 GR

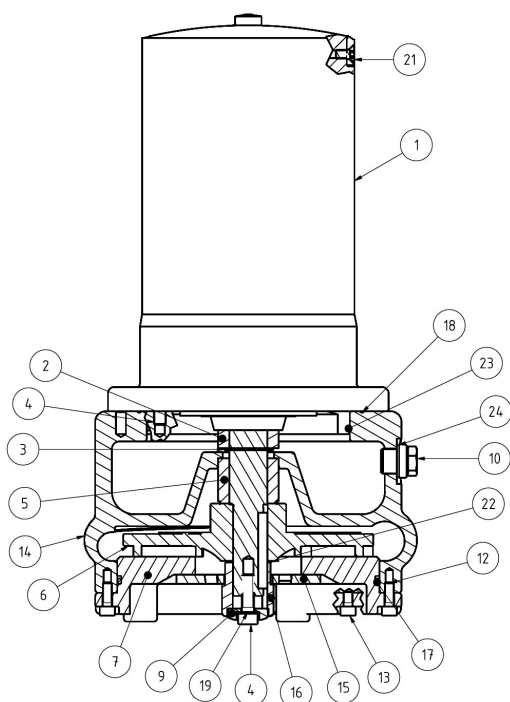


## APPENDIX B: LIST OF SPARE PARTS

### LIFTING STATION

QUANTITY	DESIGNATION	ART-No
1	Tank Sanicubic GR SE 71	117337
(1)	Tank Sanicubic 2 GR SE 71	
1 (2)	Suction nozzle Sanicubic GR SE 71	17481
1 (2)	Hose nozzle straight R 3/8"	117191
1	Pitot tube complete	60219
1	Inspection cover with sealing	117012
(2)	Inspection cover duplex unit	
(2)	Sealing for inspection cover duplex unit	
1	Control Box Sanicubic GR SE 71 230 V	200102
1	Control Box Sanicubic GR SE 71 400 V	255302
(1)	Control Box Sanicubic 2 GR SE 71 400 V	

### PUMP



ITEM	QUANTITY	DESIGNATION	ART-No
	1	Pump for Sanicubic 1 GR SE71.1 S	17749
	1 (2)	Pump for Sanicubic GR SE71.1 T	17463
	1 (2)	Pump for Sanicubic GR SE71.2 T	17562
	1 (2)	Pump for Sanicubic GR SE71.3 T	17563
	1 (2)	Pump for Sanicubic GR SE71.4 T	17564
1	1	Pot-type motor Sanicubic 1 GR SE71.1 S	17587
1	1	Pot-type motor Sanicubic GR SE71.1 T and SE71.2 T	17586
1	1	Pot-type motor Sanicubic GR SE71.3 T and SE71.4 T	17588
2	1	GLRD LD1/25-G38 - motor side	17356
3	1	Securing collar DIN471-A25x1,2	11679
4	5	Hexagonal socket head screw M8x25-A2	16381
5	1	GLRD MG1/25-G6 medium side	17377
6	1	Impeller Sanipump® ZFS 71.1 Ø135	17373
6	1	Impeller Sanipump® ZFS 71.2 Ø145	17371
6	1	Impeller Sanipump® ZFS 71.3 Ø160	17372
6	1	Impeller Sanipump® ZFS 71.4 Ø170	17351
7	1	Cover Sanipump® ZFS 71 for tank top mounting	17391
	3	Countersunk screw M5x10-A2 DIN965	17109
9	1	Knife fitting Sanipump® ZFS 71	17352
10	1	Sealing screw, bea. G 3/8 (Ventilation)	11640
10	1	Sealing screw G3/8 DIN910 (Oil)	11639
12	4	Hexagonal socket head screw M6x20-A2	15320
13	4	Hexagonal socket head screw M6x10-A2	10008
14	1	Pump housing Sanipump® ZFS 71	17355
15	1	Cutting plate Sanipump® ZFS 71	17353
16	1	Cutting knife Sanipump® ZFS 71	17354
17	1	O-ring 160 x 3,5-NBR70	11822
18	1	O-ring 147 x 3	11629
19	1	Sealing ring 8x14x1 Cu	11672
21	2	Hexagonal socket head screw M6x12-A2 DIN 912	10666
22	2	Shim ring 10x30x0,1 1.4301	17375
22	2	Shim ring 10x30x0,5 1.4301	17376
23	1	O-ring 125x2-NBR70	11656
24	2	Sealing ring 17x22x1,5 Cu for Pos 230	11646
	4	Tooth lock washers S8x13x0,8 A2	11645
	0,4L	Wisura technical white oil NFW	11690







Shaking up water

## SERVICE HELPLINES

### France

Tél : +33 1 44 82 25 55  
Fax : 03 44 94 46 19  
sav@sfa.fr

### Australia

Phone: +1300 554 779  
technical@sfapumps.com.au

### Benelux

Tel: +31 475 487100  
service@sfabeneluxbv.nl

### Brazil

Tel: (11) 3052-2292

### Česká Republika

Tel: +420 266 712 855  
sfa@sanibroy.cz

### Deutschland

Tel: +49 6074 309280  
Fax: +49 6074 3092890  
info@sfa-deutschland.de

### España

Tfno: +34 935 44 60 76 (ext 2)  
pedidossat@sfa.es

### Ireland

Tel: 1850 23 24 25 (Low Call)  
info@sfasaniflo.ie

### Italia

Tel: +39 02 3055 9420  
assistenza@sfa.it

### México

Tel: + 52 5570031086.  
sfasaniflo@sfasaniflo.mx

### New Zealand

Phone: 0800107264  
technical@sfapumps.co.nz

### Norge

Tlf: +46 (0)8 40 415 30  
service@sfasverige.se

### Magyarország

telefon: +40 722 560 010  
service@saniflo.ro

### Österreich

Tel: +43 1 7106070  
Fax: +43 1 7106070  
info@sfa-oesterreich.at

### Россия

Тел: (495) 258 29 51  
Факс: (495) 258 29 51

### Polska

Tel: (+4822) 732 00 33  
serwis@sfapoland.pl

### Portugal

Tel: +351 219 112 785  
+351 938 598 884  
sfa@sfa.pt

### România

telefon: +40 724 364 543  
service@saniflo.ro

### South Africa

Tel: +27 (0) 21 286 0028

### Suisse Schweiz Svizzera

Tel: +41 32 631 04 74  
Fax: +41 32 631 04 75  
info@sfa-switzerland.ch

### Sverige

Tlf: +46 (0)8 40 415 30  
service@sfasverige.se

### Türkiye

Tel: +90 212 275 30 88  
servis@sfapompa.com.tr

### United Kingdom

Tel: 08457 650011  
(Call from a land line)  
technical@saniflo.co.uk

### Việt Nam

Tel: +84 (0)977889364

### 中国

电话 : +86(0)21 6218 8969  
info@sfachina.cn

### भारत

Tel: +91 (0)22 6993 1900  
service@sfapumps.in

### 한국

Tel: +82 2 6925 5614  
technical@sfa-korea.co.kr

Service information : [www.sfa.biz](http://www.sfa.biz)