

# ELECTRIC SUBMERSIBLE SEWAGE PUMP

## GSS2045

*The ABS range of GSS Sewage Pumps for sewage and wastewater applications, offers reliable sewage pumps from 1.95kW to 1000kW (50HZ). The GSS range delivers blockage-free pumping and superior reliability, along with the highest motor efficiency in the submersible pump industry.*

### **BLOCKAGE-FREE PUMPING**

Blockage-free sewage pumping is critical for trouble free and cost-effective operation of pumping stations and treatment works. Frequent unexpected call-outs to clear pump blockage are costly and soon erode your initial investment. Not to mention the possibility of a major environmental hazard caused by overflowing pumping stations. The GSS range minimises unscheduled stops, expensive call-outs, pump downtime and pump efficiency losses.

A variety of accessories are available to allow adaption of ABS GSS sewage pumps to other manufacturer's guide rail systems to facilitate prompt and easy pump replacement on existing installations.

### **KEY BENEFITS**

- reduces operating costs through blockage free pumping
- reduces maintenance costs with excellent serviceability
- reduces power consumption with industry leading motor efficiency



For further information on our full range of  
pumps please contact GenSet on **01639 777000**

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## SPECIFICATION

Power at Shaft	18.5kW
Power from Mains	20.73kW
Hose Size	8" (200mm)
Voltage	400v
Nominal Speed	1450 rpm
Starter	Auto Transformer
Discharge	200mm
Running Amps	35.65
Cable Length	30m
Cable Type	Individually screened

## DIMENSIONS

Length x Width	689mm x 569mm
Height	825mm
Weight	266 kg
Flowrate	650m <sup>3</sup> /hr
Head	25m
Solids	125 mm
Generator Size	30KVA

## MOTOR

Three-phase squirrel-cage motor 400 V3-, 50 Hz, 2-pole (2900 min<sup>-1</sup>), 4-pole (1450 min<sup>-1</sup>) and 6-pole (980 min<sup>-1</sup>), protection type IP 68, stator insulation class F for standard AFP or H for AFP(K) version to 180° C, direct starting up to 3 kW, from 4 kW star-delta or direct starting is possible. Motors with other operating voltages and frequencies are available.

## MATERIALS

Motor housing	Cast Iron GG-25
Rotor shaft	Stainless steel 1.4021 (AISI 420)
Volute	Cast Iron GG-25
Impeller CB	Cast Iron GG-25
Impeller Vortex	Cast Iron GG-25
Fasteners in contact with medium	Stainless steel 1.4401 (AISI 316)

## HYDRAULICS - VORTEX

The ABS range of GSS sewage pumps are suitable for sludge, clear and waste water and for applications where sewage containing solid and fibrous material is present. Vortex hydraulics are particularly suitable for fluids containing gaseous and abrasive matter due to the recessed impeller design.

## VORTEX IMPELLER

Vortex impeller for pumping of materials which tend to "rope".

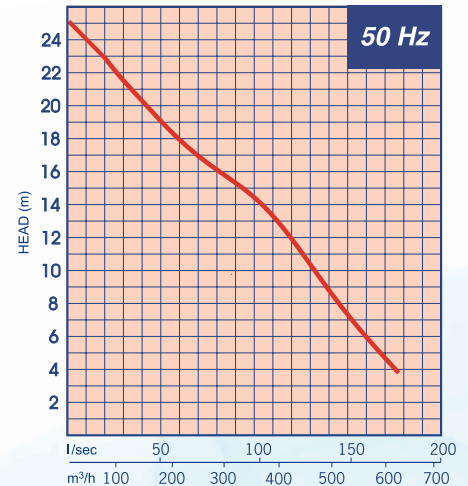
## DISCHARGE OUTLET

Discharge outlet with DIN-flange: DN 80, 100, 150 and 200.

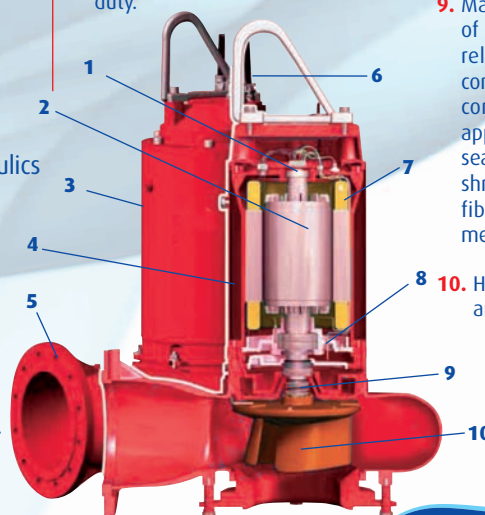
## OPTIONS

Rotor shafts	Stainless steel 1.4401 (AISI 316)
Impellers	Stainless steel 1.4460 (AISI 329)

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1. Sealed for life maintenance-free bearings for the lower and upper bearings designed for 50,000 hours Bearing temperature monitoring is available as an option on certain models..
2. Solid stainless steel shaft designed to ensure increased seal and bearing life, low vibration and quiet operation.
3. Modular System for fast and easy maintenance and spare parts handling. Smooth surfaces make it easy to clean.
4. Optional highly efficient closed loop cooling system with internal recirculation impeller and optimized heat exchanger.
5. The GSS submersible pumps have CONTRABLOCK, closed, or vortex impellers. A suitable hydraulic unit is combined with the appropriate motor according to the required duty.
6. Separate, sealed connection chamber. In addition cable gland with strain relief and anti-kink protection. Cable certified for permanent use in sewage.
7. **HIGHEST MOTOR EFFICIENCY IN THE SUBMERSIBLE INDUSTRY**  
Watertight high efficiency squirrel cage motor, designed for continuous operation with Class B temperature rise (80° C) and stator windings impregnated to Class H (=180° C) for longer motor life. Dry stator without any oil filling. With thermal sensors in each phase of the stator winding. All motors also available with protection for use in hazardous areas according to international standards, eg EExdII BT4 and FM (optional extra). Designed for use with variable frequency drives.
8. Seal-minder for detection of moisture. (optional extra)
9. Main mechanical seals with rings of solid silicon carbide. Superior reliability and durability over conventional mechanical seals in contractor and sewage pump applications. Shaft and mechanical seals are protected by a spiral and shredding system which prevents fibers etc. from reaching the mechanical seal.
10. Hardening of the impeller vanes and wearplate (option)



**abs**  
We know how water works

**GenSet**  
The market leader