

MANUAL

GSH self-priming pump

Replacement for Goan 5,5PK and 7,5PK



Version: 2023-05



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1 PREFACE

The GSH is a product of Van der Ende Group. By adapting the standard pump from Lowara, it has become possible to exchange a self-priming pump directly for a Goan pump.

More technical information can be found in the product leaflet.

Before installing the pump, carefully read the supplied Lowara manual. The manual of the Lowara pump can also be accessed via <u>the website</u>.

2 VERSIONS

The GSH40-200/55 (5.5kW) is available in only one version. This model is interchangeable with a Goan 5.5 HP (4.0 kW) and 7.5 HP (5.5 kW). When replacing a 5.5 HP Goan, it should be noted whether the maximum current value to be set falls within the maximum motor current of the new pump.

3 SPECIFICATIONS

3.1 Technical specifications

| Max. capacity | 48 m ³ /h | | |
|------------------------------------|----------------------|--|--|
| Max. discharge head | 45 m | | |
| Max. pressure housing: | 6 bar | | |
| Power: | 5,5 kW | | |
| Current: | 10,9 A | | |
| Voltage: | 3~400 Volt | | |
| frequency: | 50 Hz | | |
| Dust and water ingress protection: | IP55 | | |
| Isolation class: | F | | |
| Material pump: | 316L stainless steel | | |
| Material pump housing: | S235 | | |
| Material impeller: | 316L stainless steel | | |
| Seal: | Carbon, ceramic, FPM | | |

3.2 Capacity table

| GSH 40-200/55 ZAZ | | | | | | | |
|-------------------|------------------------------|--------------|-------------|--|--|--|--|
| Capacity [L/min] | Capacity [m ³ /h] | Pressure [m] | Current [A] | | | | |
| 801 | 48 | 12 | 10,9 | | | | |
| 776 | 47 | 15 | 10,9 | | | | |
| 705 | 42 | 20 | 10,7 | | | | |
| 630 | 38 | 25 | 10,4 | | | | |
| 545 | 33 | 30 | 10,1 | | | | |
| 437 | 26 | 35 | 9,6 | | | | |
| 306 | 18 | 40 | 8,8 | | | | |
| 130 | 8 | 45 | 7,3 | | | | |



3.3 Schematic GSH

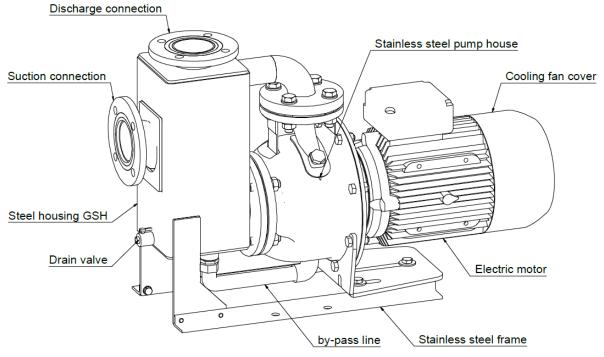


Figure 1 Schematic GSH

4 INSTALLATION

- 1. The GSH40-200 has the same connection flanges and installation dimensions as a Goan 5.5 HP and 7.5 HP.
- 2. A hopper with a shut-off valve is recommended in the delivery pipe, as close as possible to the pump housing.
- 3. Air must be able to leave the piping system on the discharge side of the pump.
- 4. Installing a non-return valve or foot valve in the suction line is not necessary, but recommended. A foot valve affects the time it takes for the pump to remove air from the suction line, a foot valve is recommended for a long suction line.
- 5. Fit a pressure gauge in the discharge pipe. With the help of this pressure gauge, the pressure and thus the operation of the pump can always be checked.
- 6. Fit a pressure gauge (vacuum) in the suction line. This allows you to check the pump for proper operation.

5 INSTALLING

5.1 Filling pump housing

The pump can be filled with water through the mounted hopper. The pump must be filled with at least 25 liters of water (two buckets). When filling it must be ensured that the pump housing is completely filled with water. The suction pipe does not need to be completely filled.

5.2 Starting (first time)

When the pump is filled with water and the vent valve is open, the pump can be started. The direction of rotation must be checked (arrow on the cooling fan cover of the motor). The suction of the water can take some time, especially with a longer suction line. Make sure that the air can leave the system somewhere in the discharge pipe. After some time, the pump starts pumping water and supplying pressure.

5.3 Starting (normal use)

As long as the pump and the suction line are full of water, the pump will immediately pressurize when starting in normal operation. The pump then works in the same way as a normal self-priming pump.

5.4 Starting (When the pump sucks air)

If the pump has sucked in air during operation, the self-priming operation of the pump will be switched on again, this happens automatically. The air must be able to leave the pump housing on the pressure side.

6 PROBLEMS AND SOLUTIONS

6.1 Pump does not suck in water

If the pump does not suck in water, this can have the following causes:

- The pump has no or insufficient water in the pump housing. Fill the system with additional water through the hopper. If there is already water in the pump housing, it is possible to top up when the pump is in operation.
- The suction pipe is leaking, so that the pump continues to suck air. Fill the pump housing and the suction line with water and check for leaks (vacuum gauge in the suction line).
- The bypass line is clogged. Disassemble it and check it for the presence of dirt. After checking and, if necessary, removing the blockage, reassemble the assembly.

6.2 Pump does not produce pressure

If the pump delivers less pressure than in normal use, this can have several causes. See operating instruction supplied with the pump.

7 REPAIR AND MAINTENANCE

For maintenance, refer to the supplied operating manual for the pump.







Aartsdijkweg 23, 2676 LE Maasdijk, The Netherlands +31 174 51 50 50 · info@vanderendegroup.com · www.vanderendegroup.com