

# SILENCER 300

**INTELLIGENT  
BOOSTER  
PUMP**



## **INTELLIGENT BOOSTER PUMP**

Silencer 300 intelligent permanent magnet variable frequency booster pump, using permanent magnet motor, centrifugal impeller, guide vane structure. The pump features smooth operation, low noise, no leakage, anti-condensation and simple operation.

**FLOFAB**  
SINCE 1981  
PUMP SOLUTIONS MANUFACTURER

SILENCER 300

# Intelligent Booster Pump



## MODEL INSTRUCTION

SILENCER—300

Rated Power (W)

Product Code

### CONFIGURATION

- Pump body: Plastic
- Impeller: Plastic
- Casing: Plastic
- Pump cover: Stainless steel
- Coupling: Aluminum alloy

### FEATURES

- Six speed regulation;
- Low noise, No leakage;
- Freeze Protection
- Multiple function protections: dry-run protection, jam protection, over and under voltage protection, and fault alarm light

### PRECAUTIONS

- Liquid temperature: + 2°C-+ 60°C
- Maximum ambient temperature: + 40°C
- PH: 6.5 to 8.5
- Protection level: IPX4
- The volume ratio of solid impurities in the medium does not exceed 0.01 %, and the particle size is not larger than 0.1 mm.

## TECHNICAL SPECIFICATIONS

Max. Power

Up to 320W  
0.435 HP

Max. Flow

60 m<sup>3</sup>/h  
264 US GPM

Max. Head

32 m  
105 ft.

Sound Pressure  
Level

55 dB

Size

1"x1"  
25 x 25 mm

## PROTECTION FUNCTIONS

### → PROTECTION FUNCTIONS

Intelligent control: monitors pump pressure, adapts to the user's usage situation, provides constant pressure water supply, and offers a stable, safe, and comfortable water environment for the user.

#### Jammed Rotation Protection

If the motor experiences a jammed rotation, the motor fault alarm light will illuminate, and the pump will stop. After 3 seconds, it will automatically attempt to restart. If it fails 5 times, the pump will completely stop.

#### Phase Loss Protection

If the motor experiences a phase loss, the motor fault alarm light will illuminate, and the pump will stop. After 60 seconds, it will automatically attempt to restart. If it fails 5 times, the pump will completely stop.

#### Overcurrent protection

When there is a short circuit or overcurrent in the motor, the motor fault alarm light will illuminate, and the pump will stop. After 60 seconds, it will automatically attempt to restart. If it fails 5 times, the pump will completely stop.

#### No-load protection

When there is no water in the pump chamber, after the motor runs dry for 10 seconds, the water shortage alarm light will illuminate, and the pump will stop.

#### Water shortage protection

When there is water in the pump chamber, but the pump has been running for 3 minutes and still cannot discharge water, the water shortage alarm light will illuminate, and the pump will stop. The first restart will occur 5 minutes later, the second to fourth restarts will occur 2 hours later, and after the fifth time, it will restart every 6 hours.

#### Leakage protection

When a leak is detected in the piping, it will not affect the normal operation of the pump. Only when the valve is completely closed will the pump frequently start and stop to alert the user.

#### Under voltage protection

When the power supply voltage drops below 1 SOV, the motor fault alarm light will illuminate, and the pump will stop. The pump will resume operation when the voltage is detected to be above 170V.

#### Over voltage protection

When the power supply voltage exceeds 270V, the motor fault alarm light

### High temperature protection

When the water temperature exceeds 70°C, the high/low temperature alarm light will illuminate, and the pump will automatically stop. The pump will automatically resume operation when the water temperature drops by 10°.

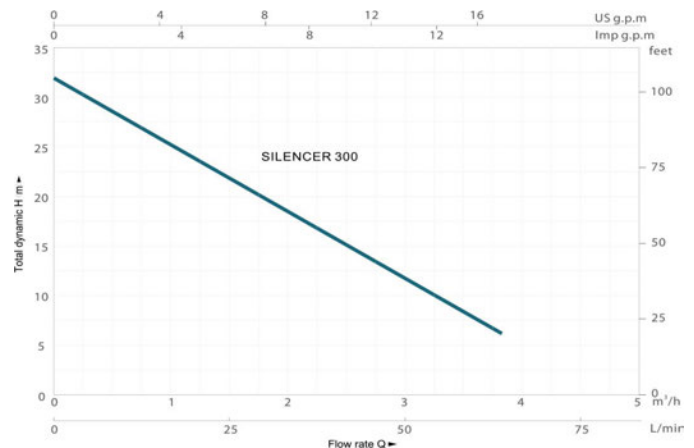
### Freeze Protection

When the water temperature falls below 4°C, the high/low temperature alarm light will flash, and the pump will automatically start to prevent the pump chamber from freezing.

When the water temperature rises to 7°C, it will return to standby mode.

If the temperature does not reach 7°C, the pump will run for 10 minutes before stopping and then testing for a restart. This cycle will continue until the water temperature reaches 7°C, with a stop-and-test duration of approximately 3-5 seconds.

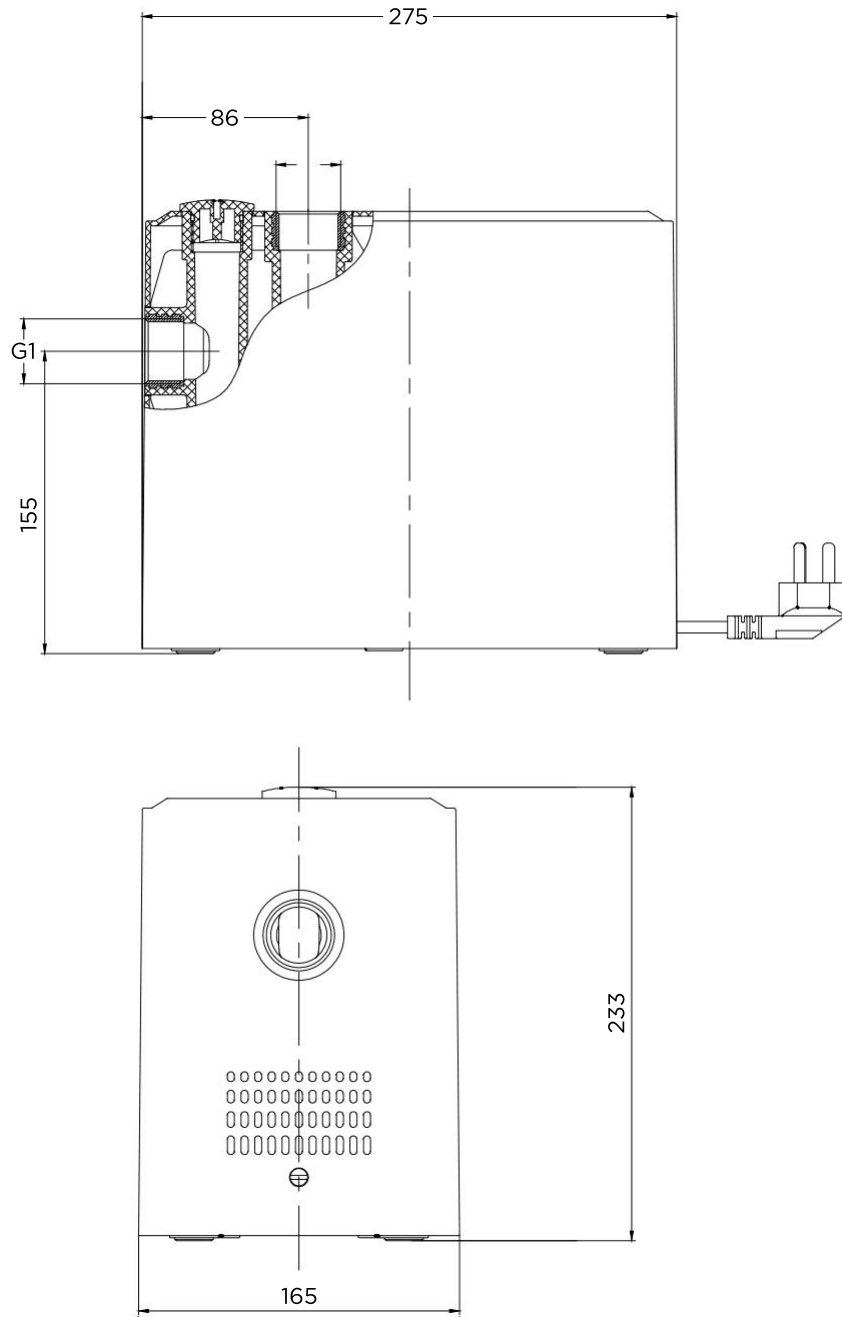
**Table 1 Performance Chart**



MODEL	Power kW	Max. head m	Max flow m <sup>3</sup> /h	Suct. Max m	Size inch
Silencer 300	0.32	32	3.6	3	1"x1"

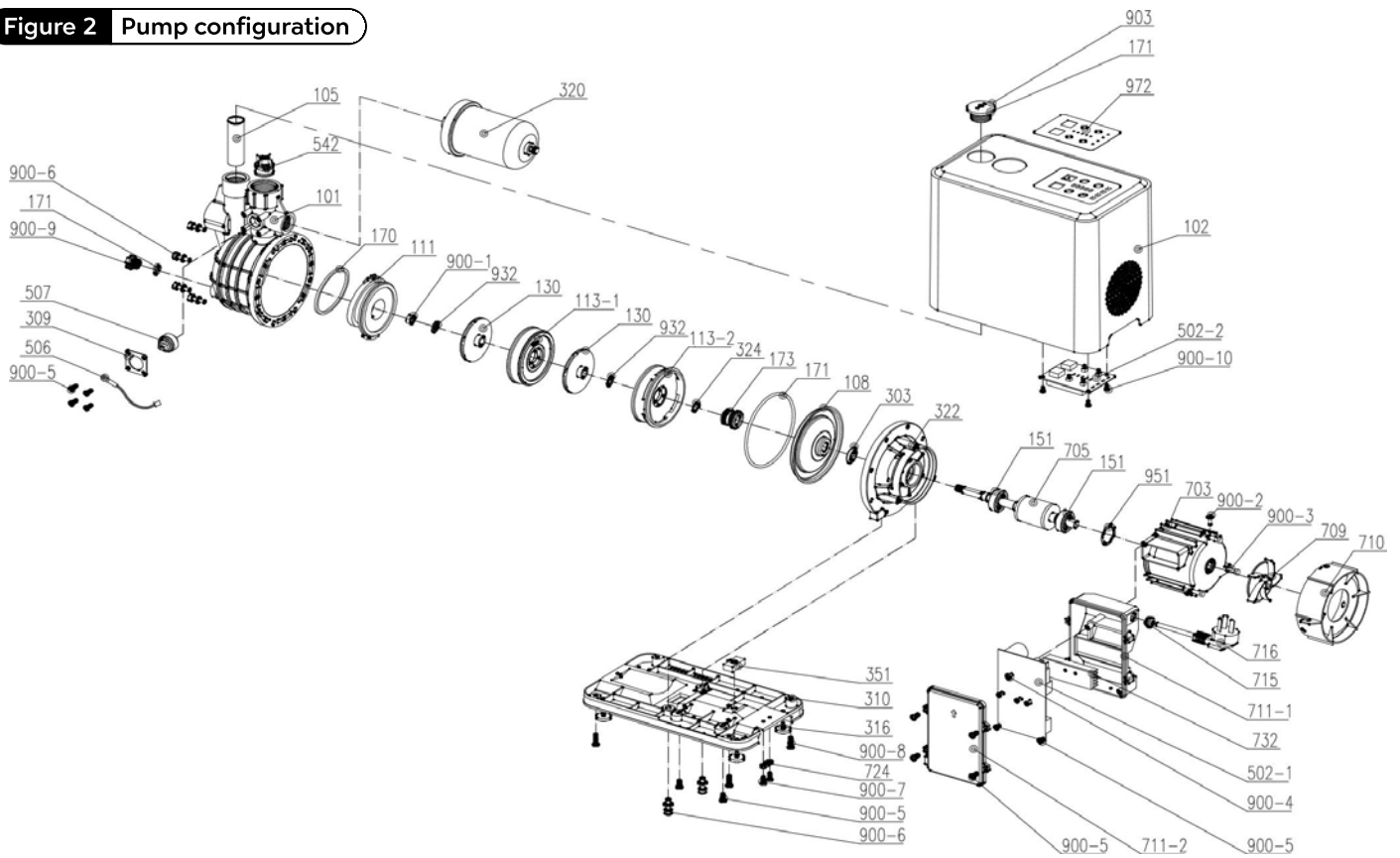
MODEL	Q(m <sup>3</sup> /h)	0	0.5	1	1.5	2	2.5	3	3.5	3.8
	Q(L/min)	0	8	17	25	33	42	50	58	63
Silencer 300	H(m)	32	29.5	26	22	18.7	15.2	12	8.5	6.3

Figure 1 Product Dimension



## PUMP CONFIGURATION

Figure 2 Pump configuration



POS.	COMPONENT	MATERIAL
101	Pump body	PP-GF30%
102	Casing	ABS
105	Filter	304 Stainless steel
108	Pump cover	304 Stainless steel
111	Inlet section	PPO-GF30%
113	Pump bowl	PPO-GF30%
113-1	Pump bowl assembly	PPO-GF30%
113-2	Pump bowl	PPO-GF30%
130	Impeller	PPO-GF30%
151	Deep groove ball bearings	6201-2RZ
170	Gasket	NBR
171	O-ring	NBR
173	Mechanical Seal	108-12
303	Water retaining ring	NBR
309	Press plate	304 Stainless steel
310	Base plate	ABS
316	Foot	NBR
320	Pressure tank	0.5L
322	Coupling	ADC12
324	Coax	304 Stainless Steel
351	Enclosure Pads	NBR
502-1	Drive board	Electronic component
502-2	Control Panel	Electronic component
506	Temperature sensor	Sensor
507	Pressure sensor	Sensor

POS.	COMPONENT	MATERIAL
542	Check valve	
703	Stator assembly	assembly
705	Rotor	
709	Fan	PP
710	Fan cover	PP
711-1	Wiring box holder	PP-GF30%
711-2	Terminal box cover	ABS
715	Cable sheath	NBR
716	Plug	
724	Clamping plate	PP
732	Heat sink	6063 alloy
900-1	Hexagon head nuts	304 Stainless steel
900-2	Phillips pan head screw	Q235
900-3	Hexagon head screws	Q235
900-4	Phillips pan head screw with washer	Q235
900-5	Phillips pan head tapping screw	201
900-6	Hexagon socket head cap screw with washer	201
900-7	Phillips pan head tapping screw	201
900-8	Phillips pan head tapping screw with washer	201
900-9	Vent cock	PA6+GF20%
900-10	Phillips pan head tapping screw	Q235
903	Water inlet plug	PA6+GF20%
932	Flat washer	304 stainless steel
951	Wave washer	65Mn
972	Film	

**Table 2 Silencer 300 Series Pump Error Code**

ERROR CODE	FAULT DESCRIPTION	TROUBLESHOOTING
E01	Communication failure	Communication failure between the panel and the board. Check if the connection wire between the board and the panel has poor contact.
E02	Jammed Rotation (Motor Fault Indicator Light Illuminated)	Check if the motor is jammed. How to recover after the alarm: 1. Automatically attempt to restart after 3 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover
E04	Pressure sensor failure	Check if the pressure sensor is damaged and if the signal wire is properly connected. How to recover after the alarm: 1. Clean the connection terminals. 2. Replace the pressure sensor.
E05	Out-of-step	Sudden excessive load impact, motor parameters do not match. How to recover after the alarm: 1. Automatically attempt to restart after 3 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E06	Phase Loss (Motor Fault Indicator Light Illuminated)	Check if the three phases of the motor are properly connected and if there are any broken wires. How to recover after the alarm: 1. Automatically attempt to restart after 60 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E07	Overcurrent (Motor Fault Indicator Light Illuminated)	Check if the motor is short-circuited and if there is any water at the motor connection points. How to recover after the alarm: 1. Automatically attempt to restart after 60 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E09	Communication failure	Communication failure between the panel and the board. Check if the connection wire between the board and the panel has poor contact.
E10	Jammed Rotation (Motor Fault Indicator Light Illuminated)	Check if the motor is jammed. How to recover after the alarm: 1. Automatically attempt to restart after 3 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E11	Pressure sensor failure	Check if the pressure sensor is damaged and if the signal wire is properly connected. How to recover after the alarm: 1. Clean the connection terminals. 2. Replace the pressure sensor.
E12	Out-of-step	Sudden excessive load impact, motor parameters do not match. How to recover after the alarm: 1. Automatically attempt to restart after 3 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E13	Phase Loss (Motor Fault Indicator Light Illuminated)	Check if the three phases of the motor are properly connected and if there are any broken wires. How to recover after the alarm: 1. Automatically attempt to restart after 60 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.
E14	Overcurrent (Motor Fault Indicator Light Illuminated)	Check if the motor is short-circuited and if there is any water at the motor connection points. How to recover after the alarm: 1. Automatically attempt to restart after 60 seconds, with a total of 5 attempts. 2. The user can press the power button to restart and recover.



