



## 18. Technical data

### Supply voltage

- 1 x 90-120 V  $-10\%/+6\%$ , 50/60 Hz, PE.
- 1 x 200-240 V  $-10\%/+6\%$ , 50/60 Hz, PE.

### Operation via generator

Recommended generator output must be equal to P1 [kW] + 50% and minimum P1 + 10%.

### Starting current

The motor starting current is equal to the highest value stated on the motor nameplate.

### Starting

Soft starting.

### Run-up time

Maximum 2 seconds.

### Motor protection

The motor is protected against dry running, overvoltage, undervoltage, overload and overtemperature.

### Power factor

PF = 1.

### Service factor

- 0.5 hp: 1.85 at 115 V/230 V.
- 0.75 hp: 2.05 at 230 V.
- 1.0 hp: 2.25 at 230 V.
- 1.5 hp: 1.65 at 230 V.

### Motor cable

3 Wire, 14 AWG XLPE.  
Length: 5 feet.

### Motor liquid

Type SML 2.

### pH values

5 to 9.

### Liquid temperature

The temperature of the pumped liquid must not exceed 104°F.

**Note:** If liquids with a viscosity higher than that of water are to be pumped, please contact Grundfos.

### Discharge port

- 5 SQ/SQE: 1" NPT.
- 10-15 SQ/SQE: 1½" NPT.
- 22-30 SQ/SQE: 1½" NPT.

### Storage conditions

Minimum ambient temperature: 4°F.  
Maximum ambient temperature: 140°F.

### Freeze protection

**Note:** The motor must not be stored without being filled with motor liquid.

If the pump has to be stored after use, it must be stored on a frost-free location or it must be ensured that the motor liquid is frost-proof.

### Operating conditions

Minimum ambient liquid temperature: 32°F.  
Maximum ambient liquid temperature: 104°F.

### Motor dimensions (MS 3 and MSE 3)

- 0.5 hp: 20.9" length x 2.68" diameter.
- 0.75 hp: 20.9" length x 2.68" diameter.
- 1.0 hp: 22.3" length x 2.68" diameter.
- 1.5 hp: 22.3" length x 2.68" diameter.

### Motor weights (MS 3 and MSE 3)

- 0.5 hp: 6.0 lbs.
- 0.75 hp: 7.1 lbs.
- 1.0 hp: 8.2 lbs.
- 1.5 hp: 8.2 lbs.

### Pump end dimensions

Pump diameter: 2.68".  
Pump diameter, incl. cable guard: 2.91".

### Pump end dimensions (min. and max.)

- 5 SQ/SQE: 10.6" to 18.0".
- 10 SQ/SQE: 10.6" to 14.8".
- 15 SQ/SQE: 10.6" to 16.9".
- 22 SQ/SQE: 10.6" to 16.9".
- 30 SQ/SQE: 10.6" to 13.7".

### Pump end weights (min. and max.)

All SQ/SQE models: 2.2 lbs to 3.5 lbs.

### Well diameter

Minimum 3".

### Installation depth

Maximum 500 feet below static water level.