

Submersible Sludge Pump JS 12

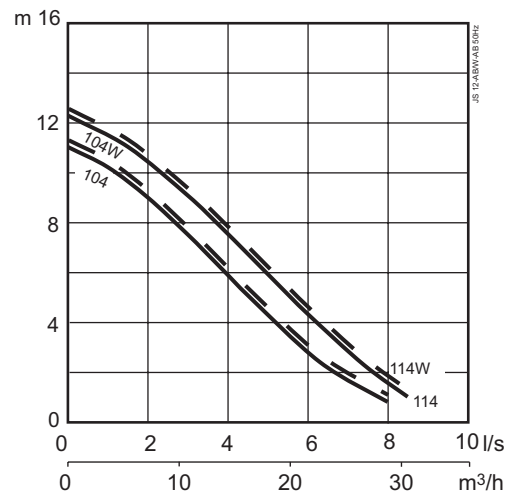
SULZER

Specification

Electric submersible pump.
 Maximum submergence: 20 m. Protection class IP 68.
 Max temperature of pumped medium at max power input and continuous duty 40 °C.
 Max medium density 1100 kg/m³. pH of the pumped medium 5-8.
 Free passage Ø 40 mm. Max no. of starts 30/hour.
 Max impeller diameter requires half motor or more submersed for continuous duty. (Pump can operate lying down.)

JS 12 W/WKS* -104** single-phase
JS 12 W/WKS* -114 single-phase
JS 12 D/DKS* -104** 3-phase
JS 12 D/DKS* -114 3-phase

* option: built in float switch excl. 500 V
 ** Impeller diameter for duty with low water level or intermittent dry running.



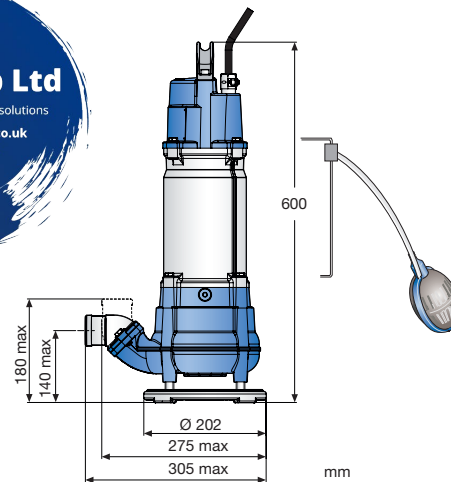
Electric Motor

Single-phase motor with built-in capacitor, 50 Hz.
 Service factor 1.1. Class F insulation.
 Motor rating P₂: 0.9 kW. Speed: 2770 rpm
 η: 65.2 (50 %), 71.1 (75 %), 69.0 (100 % load)

| Voltage, V | 230 |
|--------------------|-----|
| Nominal current, A | 5.5 |

3-phase squirrel-cage induction motor, 50 Hz.
 Service factor 1.1. Class F insulation.
 Motor rating P₂: 0.9 kW. Speed: 2770 rpm
 D.O.L. start with built-in contactor.
 η: 78.0 (50 %), 76.0 (75 %), 70.5 (100 % load)

| Voltage, V | 230 | 400 | 500 |
|--------------------|-----|-----|-----|
| Nominal current, A | 3.8 | 2.2 | 1.8 |



Power Cable

20 m type H07RN8-F:
 4 x 1.5 sq.mm. (3-phase)
 3 x 1.5 sq.mm. (single-phase)

Motor Protection

Built-in thermal switches in the stator winding (140°C, ±5).

Shaft Seal

Double mechanical seal in oil bath.
 Primary seal: Silicon carbide on silicon carbide.
 Secondary seal: Silicon carbide on silicon carbide.

Bearings

Upper bearing: Single-row deep groove ball bearing.
 Lower bearing: Single-row deep groove ball bearing.

Discharge Connections

2" (standard), 2 ½", 3" hose connections.
 2", 2 ½", 3" B.S.P. threaded connections.

Weight

D: 19 kg, W: 20 kg (without cable)

Options and Accessories

Zinc anodes. Surface protection coating.
 Starter and control units. Floatation ring. Repair kit.
 Discharge connection accessories and hose.

Materials

| Description | Material | EN | ASTM |
|-------------------|-------------------|----------------------------|-----------------------|
| Motor housing | Aluminium | EN 1706:AC-43100 | ASTM AISi10mg |
| Fasteners | Stainless steel | 10088:X5CrNi18-10 (1.4301) | AISI 304 |
| Rotor shaft | Stainless steel | 10088:X20Cr13 (1.4021) | AISI 420 |
| Volute / Impeller | Nodular cast iron | 1563:ENGJS-HB150 | ASTM A536-80:60-40-18 |
| O-rings | Nitrile rubber | | |