# Submersible trash pump JS 12



## **Specification**

Electric submersible pump.

Maximum submergence: 65 ft. Protection class IP 68.

Max temperature of pumped medium at max power input and continuous duty 104  $^{\circ}$ F.

Max medium density 0.0397 lbs/inch³. pH of the pumped medium 5-8.

Free passage  $\emptyset$  1 9/16". 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\* -95\*\* single-phase
JS 12 W/WKS\* -104 single-phase
JS 12 D/DKS\* -95\*\* 3-phase
JS 12 D/DKS\* -104 3-phase

#### **Electric motor**

Single-phase induction motor with built-in capacitor, 60 Hz. Service factor 1.1. Class F insulation. Motor rating  $P_2$ : 1.5 Hp. Speed: 3360 rpm  $\eta$ : 59.1 (50 %), 66.3 (75 %), 69.5 (100 % load)

Voltage, V	115	230
Nominal current, A	13.8	6.9

3-phase squirrel-cage induction motor, 60 Hz. Service factor 1.1. Class F insulation. Motor rating  $P_2$ : 1.5 Hp. Speed: 3380 rpm. D.O.L. start with built-in contactor.  $\eta$ : 74.6 (50 %), 75.3 (75 %), 72.3 (100 % load)

Voltage, V	230	460	575
Nominal current, A	4.3	2.1	1.7

#### Power cable

Heavy duty power cable for submersible pump applications. 65 ft AWG 14/3 SOOW (UL, CSA, MSHA), single-phase 65 ft AWG 16/4 SOOW (UL, CSA, MSHA), 3-phase

#### Motor protection

Built-in thermal switches in the stator windings (284°F, ±5).

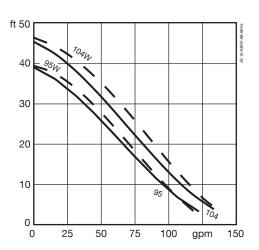
#### Shaft seal

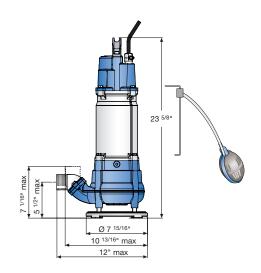
Double mechanical seal in oil bath.

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", 2 ½", 3" hose connections. 2" (standard), 3" NPT threaded connections.

#### Weight

D: 42 lb, W: 44 lb (without cable)

### Options and accessories

Zinc anodes. Surface protection coating.

Starter and control units.

Floatation ring. Repair kit.

Discharge connection accessories and hose.

<sup>\*</sup> option: built in float switch excl. 575 V

<sup>\*\*</sup> Impeller diameter for duty with low water level or intermitent duty dry running.

## **Materials**

Description	Material	ASTM
Motor housing	Aluminium	ASTM AlSi10mg
Fasteners	Stainless steel	AISI 304
Rotor shaft	Stainless steel	AISI 420
Volute / Impeller	Nodular cast iron	ASTM A536-80:60-40-18
O-rings	Nitrile rubber	