

# Submersible Trash Pump JS 12

**SULZER**

## 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 °F.  
 Max medium density 0.0397 lbs/inch<sup>3</sup>. pH of the pumped medium 5-8.  
 Free passage Ø 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

\* option: built in float switch excl. 575 V  
 \*\* Impeller diameter for duty with low water level or intermittent duty dry running.

## Electric Motor

Single-phase induction motor with built-in capacitor, 60 Hz.  
 Service factor 1.1. Class F insulation.  
 Motor rating P<sub>2</sub>: 1.5 Hp. Speed: 3360 rpm  
 η: 59.1 (50 %), 66.3 (75 %), 69.5 (100 % load)

Voltage, V	230
Nominal current, A	6.9

3-phase squirrel-cage induction motor, 60 Hz.  
 Service factor 1.1. Class F insulation.  
 Dual voltage stator 230/460 V (single voltage contactor coil).  
 Motor rating P<sub>2</sub>: 1.5 Hp. Speed: 3380 rpm.  
 D.O.L. start with built-in contactor.  
 η: 74.6 (50 %), 75.3 (75 %), 72.3 (100 % load)

Voltage, V	208	230/460	575
Nominal current, A	4.7	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

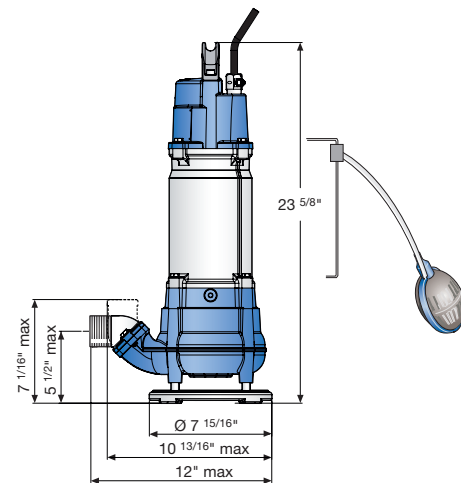
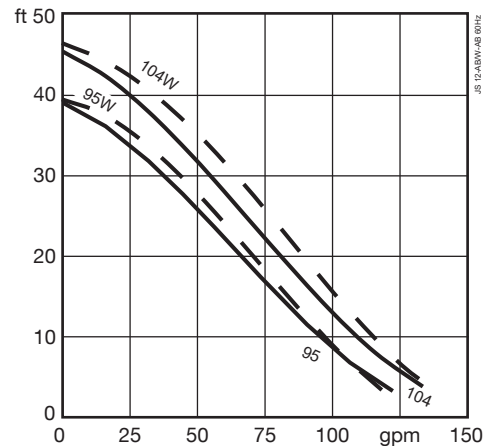
Built-in thermal switches in the stator windings (284°F, ±5).

## 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 1/2", 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.

## Materials

Description	Material	ASTM
Motor housing	Aluminium	ASTM A510mg
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	