

# Submersible Drainage Pump J 12

**SULZER**

## Specification

Electric submersible pump.  
 Maximum submergence: 20 m (65 ft). Protection class IP 68.  
 Max temperature of pumped medium at max power input and continuous duty 40 °C (104 °F).  
 Max medium density 1100 kg/m<sup>3</sup> (0.0397 lbs/inch<sup>3</sup>).  
 pH of the pumped medium 5-8.  
 Strainer hole: 6.5 x 22 mm (1/4" x 7/8"). Max number of starts 30/hr.

**J 12 W/WKS\*** Medium head, single-phase

**J 12 D/DKS\*** Medium head, 3-phase

\* option: built in float switch excl. 575V

## 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>: 1.1 kW (1.5 Hp). Speed: 3360 rpm  
 η: 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<sub>2</sub>: 1.1 kW (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	230	380	460	575
Nominal current, A	4.3	2.6	2.1	1.7

## Power cable

20 m/65 ft H07RN8-F:  
 3x1.5 sq.mm (single-phase)  
 4x1.5 sq.mm (3-phase)

## Motor protection

Built-in thermal switches in the stator windings (140°C/284°F, ±5).

## Shaft seal

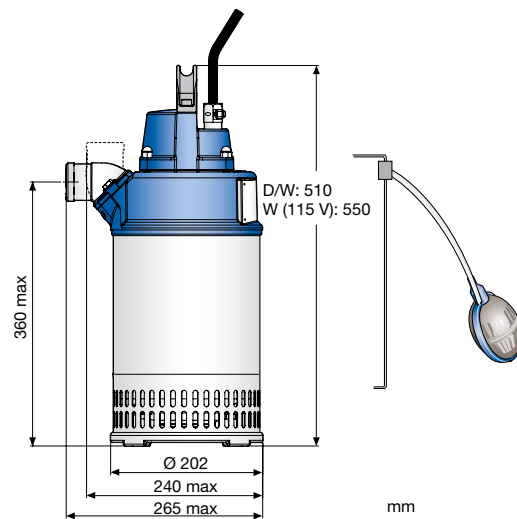
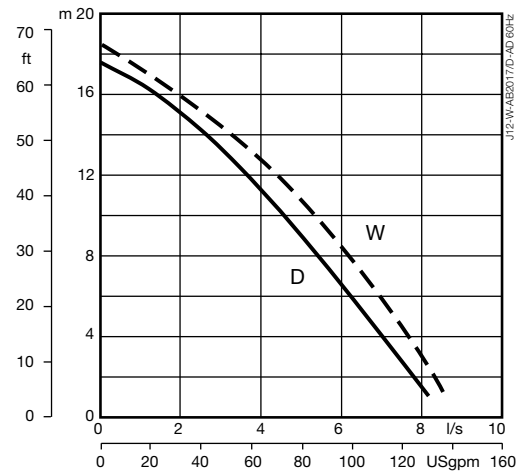
Double mechanical seal in oil bath.  
 Primary seal: Silicon carbide on silicon carbide.  
 Secondary seal: Silicon carbide on silicon carbide.

## Bearings

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

## Discharge connections

1 1/2", 2" (standard), 2 1/2", 3" hose connections.  
 2", 2 1/2", 3" B.S.P. threaded connections.  
 2", 3" NPT thread.



## Weight

D: 18 kg (40 lb)  
 W: 19 kg (42 lb)  
 (without cable)

## Options and accessories

Zinc anodes. Surface protection coating.  
 Bottom suction adapter. Series connection.  
 Starter and control units. Floatation ring.  
 Carry case. Repair kit.  
 Discharge connection accessories and hose.

## Materials

Description	Material	EN	ASTM
Castings	Aluminium	EN 1706:AC-43100	ASTM A1Si10mg
Casing / Fasteners	Stainless steel	10088:X5CrNi18-10 (1.4301)	AISI 304
Shaft	Stainless steel	10088:X20Cr13 (1.4021)	AISI 420
Impeller	White cast iron	EN-GJN-HV600(XCr23)	ASTM A 532: Alloy III A
Wear parts / O-rings	Nitrile rubber		