

Submersible trash pump XJS 80

Specification

Electric submersible pump.

Maximum submergence: 65 ft. Protection class IP 68.

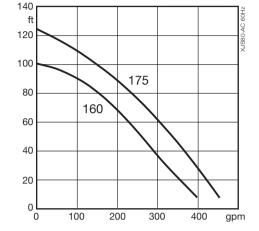
Max temperature of pumped medium at max power input and continuous duty 104 $^{\circ}$ F.

Max medium density 0.0397 lbs/inch3.

pH of the pumped medium 5-8.

Free passage: 1 7/8" x 2 3/8". Max number of starts 30/hour. Min. impeller diameter for duty with low water level or intermittent dry running. Max impeller diameter requires half motor or more submersed for continuous duty. (Pump can operate lying down.)

XJS 80 D - 160 3-phase
XJS 80 D - 160 AT* 3-phase
XJS 80 D - 175 3-phase
XJS 80 D - 175 AT* 3-phase



Electric motor

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 P2: 13 Hp. 2 pol. Speed: 3520 rpm ŋ: 87.8 (50 %), 88.7 (75 %), 89 (100 % load)

^{***}For pumps with built in contactor.

Voltage, V	230	460	575
Nominal current, A	31.4	15.7	12.6

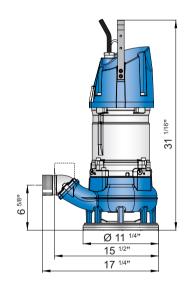
Starting method and motor protection

XJS 80 AT: Direct on line start (DOL 575 V) with built in Aqua-Tronic unit, which automatically adjusts phase order by dual contactors, ensuring correct motor rotation.

Soft start (230-460 V) is built in with the AquaTronic unit, where three thyristors reduces start current to three times the nominal current. Here two relays ensures correct motor rotation.

The AquaTronic unit monitors motor temperature, by use of NTC thermistors built into stator windings, and stops the motor at high temperature. It will also stop the motor at high amperage or if a phase is missing.

XJS 80: Direct on line start with built in contactor. Pumps to be used with VFD must have terminal block instead of contactor. Thermal switches (284 °F, ±5) built into the stator windings are connected to the contactor and stops the pump at high temperature.



^{**} Max measurement based on largest discharge size.

Power Cable

Heavy duty power cable for submersible pump applications. 65 ft AWG 8/4 W (UL, CSA, MSHA) 208, 230 V 65 ft AWG 12/4 SOOW (UL, CSA, MSHA) 460, 575 V

Shaft Seal

Double mechanical seal in oil bath.

Primary seal: Silicon carbide on silicon carbide. Secondary seal: Silicon carbide on carbon.

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^{*}AquaTronic: Built-in electronic pump control.

Bearings

Upper bearing: Single-row deep groove ball bearing. Lower bearing: Double angular contact ball bearing.

Discharge connections

2 ½", 3", 4" hose connections.

2 ½", 3" (standard), 4" NPT threaded connections.

Weight

141 lbs (without cable)

Options and accessories

Level sensor. Service data kit. Zinc anodes. Surface protection coating. Floatation device. Discharge connection accessories and hose.

Pump control

Features	XJS 80	XJS 80 AT		
		AT	AT+ Level Sensor	Service Data Kit Read out
Run mode	•	•	•	-
Integrated start equipment	•	•	•	-
Automatic direction of rotation	-	•	•	-
Motor protection high temp	•	•	•	•
Motor protection high amp	-	•	•	•
Protection against missing phase	-	•	•	•
Level control	-	-	•	-
Dry run protection	-	-	•	-
Automatic restarting	-	-	•	-
E-mode (Automatic stop/run)	-	-	•	-
Indication of water in oil	-	-	-	•
Indication of low motor insulation	-	-	-	•
Indication of high or low voltage	-	-	-	•
Indication of high temperature	-	-	-	•
Indication of high amp	-	-	-	•
Indication of phase unbalance	-	-	-	•
USB cable connection	-	•	•	•
Crash log (10 latest)	-	-	-	•
Documentation (spare part list, workshop manual)	-	-	-	•

^{•• =} Fault indication when pump is automatically stopped to protect the motor.

TECHNICAL DATASHEET 2

Materials

Description	Material	EN	ASTM	
Motor housing	Aluminium	EN 1706:AC-43100	ASTM AlSi10mg	
Handle	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 A 536-80:60-40-18	
Fasteners	Stainless steel	10088:X5CrNiMo 17122 (1.4401)	AISI 316	
O-rings	Nitrile rubber			
Coating	2 component epoxy paint 120 µm			

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TECHNICAL DATASHEET 3