

# Submersible Dewatering Pumps





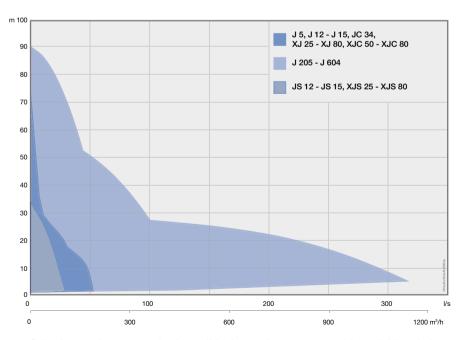
## **Dewatering Solutions for the Real World**

In the real world time is money, and worksites have no time for unwanted water. Sulzer has the solutions in a complete pump range for reliable dewatering.

This brochure is an overview of Sulzer's submersible dewatering pumps, which are the result of more than 50 years of technical and real-world experience. Each pump type is presented with its key features, as well as dimensions, performance curves and the most important technical data for specific pump models.

Whether you work in mining, tunneling or construction, the pumps here are your best insurance against waterrelated downtime. From purchasing to service, you can turn to Sulzer for dewatering solutions that make a difference in the real world.

### CONTENT PAGE Dewatering Solutions for the Real World 2 Submersible Drainage Pumps Type ABS J (small) 4-5 Type ABS XJ (medium) 6-7 Type ABS J (large) 8-9 Submersible Drainage Center-Line Pumps Types ABS JC and XJC 10-11 Submersible Sludge Pumps Type ABS JS 12-13 Type ABS XJS 14-15 AquaTronic and Other Supervision Options 16 **Overview of Electronic Supervision Features** 17 **Pump Options and Accessories** 18-19



### Performance range 50 Hz

Sulzer's complete range of submersible dewatering pumps provides reliable solutions for all major dewatering needs.

## Submersible Drainage Pump Type ABS J

Submersible drainage pump type ABS J is suitable for pumping water and dirty water mixed with light abrasives. The low weight and compact design makes for convenient transport, handling and installation.

### 1 Easy start

A built-in contactor connected to the thermal sensors in the stator windings protects the motor from overheating and features an automatic restart function.

### 2 Wear resistance

An impeller in white cast iron with a full upper shroud and adjustable wear parts coated in nitrile rubber ensure high abrasion resistance.

### **3** Reliable operation

A double mechanical shaft seal in an oil bath, with primary and secondary seal surfaces in silicon carbide, extends the life of the pump. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

## 4 Serviceability

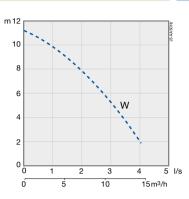
Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. An adjustable diffuser ensures proper clearance throughout the impeller lifetime. By removing the top cover of the pump, the electrical junction area can easily be checked.

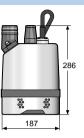


### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 5

J 5	1
Motor rating P2	0
Voltage (V)	2
Full load (A)	2
Speed	2
Strainer hole	6
Discharge connections	H
	Т
Weight (excl. cable)	9
Motor protection	E
Electric cable	1

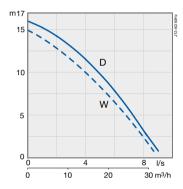
1-PHASE 0.48 kW, 1~ 230 2.9 2690 rpm 6 mm Hose 2" Thread G/BSP 2" 9.5 kg Built-in 10 m

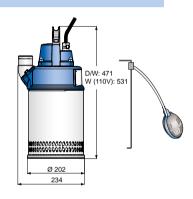




### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 12

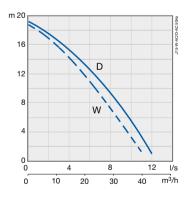
J 12 W/J 12 WKS*	1-PHASE	
J 12 D/J 12 DKS**		3-PHASE
Motor rating P2	0.9 kW, 1~	1 kW, 3~
Voltage (V)	110 / 230	230 / 400 / 500
Full load (A)	10.9 / 5.2	4.0/2.3/1.9
Speed	2750 rpm	2800 rpm
Strainer hole	6.5 x 22 mm	
Discharge connections	Hose 11/2", 2", 21/2", 3""	
-	Thread G/BSP	2", 21/2", 3"
Weight (excl. cable)	16 kg	
Motor protection	Built-in	
Electric cable	20 m	

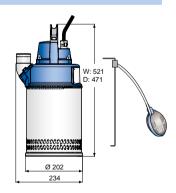




### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 15

J 15 W/J 15 WKS* J 15 D/J 15 DKS**	1-PHASE	3-PHASE	
Motor rating P2	1.4 kW, 1~	1.4 kW, 3~	
Voltage (V)	230	230 / 400 / 500	
Full load (Á)	8.1	5.0 / 2.9 / 2.3	
Speed	2800 rpm	2800 rpm	
Strainer hole	6.5 x 22 mm	-	
Discharge connections	Hose 11/2", 2", 21/2", 3"		
-	Thread G/BSP 2	2", 2½", 3"	
Weight (excl. cable)	18 kg (W), 16.5	kg (D)	
Motor protection	Built-in		
Electric cable	20 m		





\* Built in float switch available as option.

\*\* KS version not available in 500 V.

## Submersible Drainage Pump Type ABS XJ

Submersible drainage pump type ABS XJ is excellent for pumping water and dirty water mixed with light abrasives. The slim design makes the pump easy to move and easy to handle.

### Easy and fail-safe starting

Instead of a built-in contactor, an optional AquaTronic unit can be used. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.)

## 2 Wear resistance

An impeller and wear ring in white cast iron, as well as diffusers coated in oil-resistant nitrile rubber, provide high abrasion resistance.

## **8** Reliable operation

Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. A double cable-entry seal system

increases the protection against moisture entering the electrical junction area. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

## 4 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. The adjustable wear ring ensures proper clearance throughout the impeller lifetime. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

### **5** Less energy and environmental impact

The high-efficiency motor and new hydraulics combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

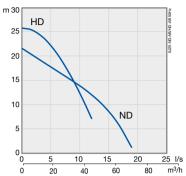
### 6 Flexibility

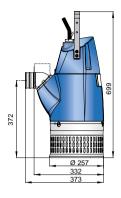
Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application.



### SUBMERSIBLE DRAINAGE PUMP TYPE ABS XJ 25

XJ 25 ND* XJ 25 HD*	MEDIUM HEAD HIGH HEAD
Motor rating P2	2.5 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	8.8 / 5.1 / 4.3 / 2.9 / 2.0
Speed	2920 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 21/2", 3", 4"
·	Thread G/BSP 21/2", 3", 4"
Weight (excl. cable)	39 kg
Motor protection	Built-in
Electric cable	20 m

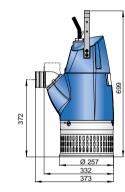




#### SUBMERSIBLE DRAINAGE PUMP TYPE ABS XJ 40

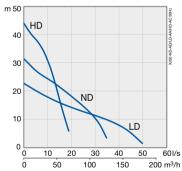
XJ 40 ND* XJ 40 HD*	MEDIUM HEAD HIGH HEAD	30				
Motor rating P2	3.7 kW, 3~			HD		
Voltage (V)	230 / 400 / 500-550 / 690 / 1000					
Full load (A)	13.2 / 7.6 / 6.1 / 4.4 / 3.0	20			7	
Speed	2860 rpm					
Strainer hole	7.5 x 22 mm					
Discharge connections	Hose 21/2", 3", 4"	10				
0	Thread G/BSP 21/2", 3", 4"	10				
Weight (excl. cable)	42 kg					
Motor protection	Built-in					
Electric cable		0				
Electric cable	20 m	Ő	5	1	0	15
		0	2	0	40	6

m 40 🛛



#### SUBMERSIBLE DRAINAGE PUMP TYPE ABS XJ 50

XJ 50 ND* XJ 50 LD* XJ 50 HD*	MEDIUM HEAD HIGH FLOW HIGH HEAD
Motor rating P2	5.6 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	19.7 / 11.3 / 9.0-10.8 / 6.6 / 4.5
Speed	2930 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 3", 4", 6"
·	Thread G/BSP 3", 4", 6"
Weight (excl. cable)	59 kg
Motor protection	Built-in
Electric cable	20 m



ND

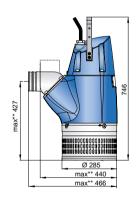
20

80

60

25 l/s

m³/h



#### SUBMERSIBLE DRAINAGE PUMP TYPE ABS XJ 80

XJ 80 SD*	HIGH HEAD
XJ 80 HD*	HIGH HEAD
XJ 80 LD*	HIGH FLOW
XJ 80 ND*	MEDIUM HEAD

 Motor rating P2
 8.3 kW, 3~

 Voltage (V)
 230 / 400 /

 Full load (A)
 27.8 / 16 /

 Speed
 2920 rpm

 Strainer hole
 7.5 x 22 m

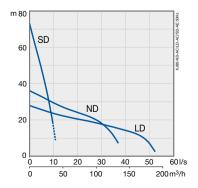
 Discharge connections
 Hose 3", 4

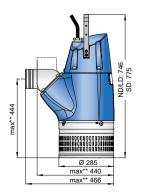
 Thread G/L
 Weight (excl. cable)

Motor protection

Electric cable

230 / 400 / 500-550 / 690 / 1000 27.8 / 16 / 13.8 / 9.3 / 6.4 2920 rpm 7.5 x 22 mm Hose 3", 4", 6" Thread G/BSP 3", 4", 6" 63 kg (ND/LD), 78 kg (SD) Built-in 20 m





\* Option: AquaTronic, built-in electronic pump control.

\*\* Max measurement based on largest discharge size.

## Submersible Drainage Pump Type ABS J

Submersible drainage pump type ABS J is suitable for pumping water and dirty water mixed with light abrasives. The pump design enables convenient transport, handling and installation.

### Easy to start

Pump J 205 has a built-in contactor connected to the thermal sensors in the stator windings, which protects the motor from overheating and features an automatic restart function. Pumps J 405 and J 604 have thermal sensors in the stator windings that protect the motor from overheating by means of an external control panel.

### 2 Wear resistance

Abrasive-resistant impellers, combined with diffusers and wear rings coated in oil-resistant nitrile rubber, provide extended pump life in tough applications.

### 8 Reliable operation

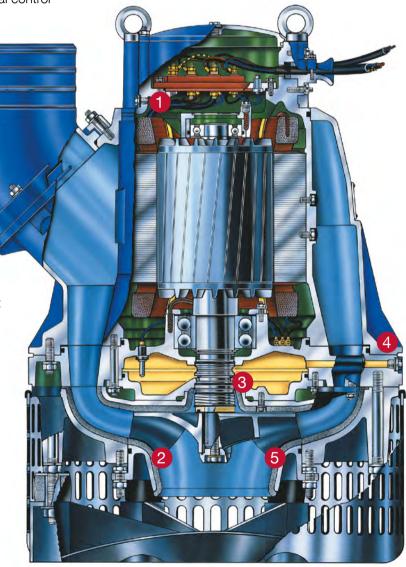
Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide, extend the life of the pump. In pumps J 205 and J 405, the primary and secondary seals comprise an easyto-replace seal cartridge. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

## 4 Serviceability

External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked. The adjustable wear ring ensures proper clearance throughout the impeller lifetime.

### **6** Flexibility

Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application.

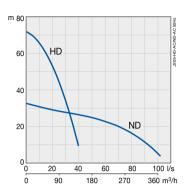


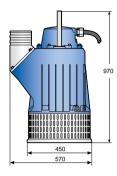
### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 205

### J 205 ND MEDIUM HEAD J 205 HD HIGH HEAD

Motor rating P2 Voltage (V) Full load (A) Speed Strainer hole Discharge connections

Weight (excl. cable) Motor protection Electric cable 21 kW, 3~ 230 / 400 / 500-550 / 690 / 1000 68 / 39 / 31.2 / 23 / 16 2910 rpm 8 x 34 mm Hose 4", 6", 8" Thread G/BSP 4", 6", 8" 155 kg Built-in 20 m

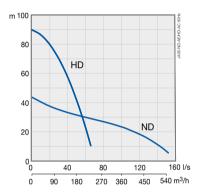


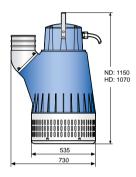


#### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 405

#### J 405 ND MEDIUM HEAD J 405 HD HIGH HEAD

Motor rating P2	35 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	108 / 62 / 51 / 36 / 25
Speed	2930 rpm
Strainer hole	8 x 34 mm
Discharge connections	Hose 4", 6", 8"
-	Thread G/BSP 4", 6", 8"
Weight (excl. cable)	270 kg
Motor protection	Thermal overload sensors
Electric cable	20 m

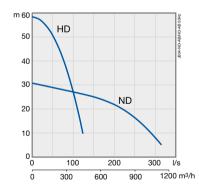


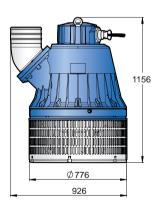


### SUBMERSIBLE DRAINAGE PUMP TYPE ABS J 604

#### J 604 ND MEDIUM HEAD J 604 HD HIGH HEAD

Motor rating P2	56 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	184 / 106 / 84 / 61 / 42
Speed	1450 rpm
Strainer hole	12 x 60 mm
Discharge connections	Hose 6", 8", 10"
-	Thread G/BSP 6", 8"
Weight (excl. cable)	525 kg
Motor protection	Thermal overload sensors
Electric cable	20 m





## Submersible Drainage Center-Line Pump Types ABS JC and XJC

Submersible drainage center-line pump types ABS JC and XJC are excellent for pumping water and dirty water mixed with light abrasives. The slim design makes them easy to move and easy to handle, and they are perfect for applications with limited installation space.

## Easy and fail-safe starting

In XJC pump models, an optional AquaTronic unit can be used instead of a built-in contactor. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.) In JC pump models, a built-in contactor with an automatic restart function protects the motor.

## 2 Wear resistance

An impeller and wear ring in white cast iron, as well as diffusers coated in oil-resistant nitrile rubber, provide high abrasion resistance.

## 8 Reliable operation

Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. Pumps XJC 50 and XJC 80 have a double cable-entry seal system that increases the protection against moisture entering the electrical junction area. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

## 4 Serviceability

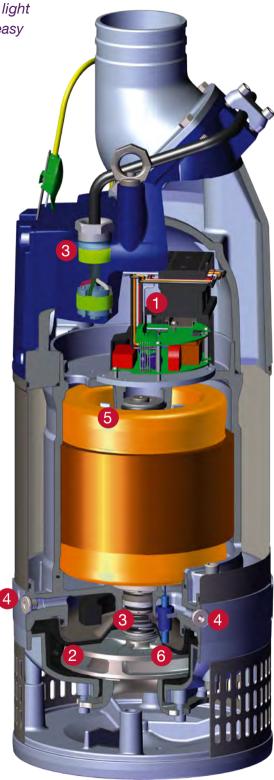
Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. The adjustable wear ring ensures proper clearance throughout the impeller lifetime. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

### 5 Less energy and environmental impact

Pumps XJC 50 and XJC 80 are equipped with high-efficiency motors and new hydraulics, which combine with lowfriction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

## 6 Flexibility

Pumps XJC 50 and XJC 80 allow conversion between highvolume and high-head hydraulics with only a few parts, ensuring the right performance for the application.

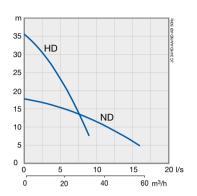


### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP TYPE ABS JC 34

### JC 34 ND, MEDIUM HEAD JC 34 HD, HIGH HEAD

Motor rating P2 Voltage (V) Full load (A) Speed Strainer hole Discharge connections
Weight (excl. cable) Motor protection Electric cable

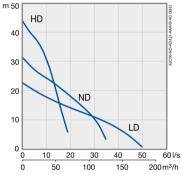
3 kW, 3~ 230 / 400 / 500 12.7 / 7.3 / 5.5 2850 rpm 8 x 33 mm Hose 2", 3" Thread G/BSP 2", 3" 31 kg Built-in 20 m





## SUBMERSIBLE DRAINAGE CENTER-LINE PUMP TYPE ABS XJC 50

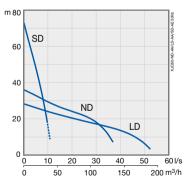
XJC 50 ND* XJC 50 LD* XJC 50 HD*	MEDIUM HEAD HIGH FLOW HIGH HEAD
Motor rating P2	5.6 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	19.7 / 11.3 / 9.0-10.8 / 6.6 / 4.5
Speed	2930 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 3", 4", 6"
-	Thread G/BSP 3", 4", 6"
Weight (excl. cable)	59 kg
Motor protection	Built-in
Electric cable	20 m

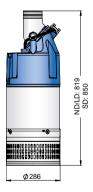




### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP TYPE ABS XJC 80

XJC 80 ND* XJC 80 LD* XJC 80 HD* XJC 80 SD*	MEDIUM HEAD HIGH FLOW HIGH HEAD HIGH HEAD
Motor rating P2	8.3 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	27.8 / 16 / 13.8 / 9.3 / 6.4
Speed	2920 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 3", 4", 6"
-	Thread G/BSP 3", 4", 6"
Weight (excl. cable)	63 kg (ND/LD), 78 kg (SD)
Motor protection	Built-in
Electric cable	20 m





\* Option: AquaTronic, built-in electronic pump control.

## Submersible Sludge Pump Type ABS JS

Submersible sludge pump type ABS JS is excellent for pumping dirty water and water mixed with solids. The pump has a slim design and low weight, which makes it easy to move and easy to handle.

## Easy to start

A built-in contactor connected to the thermal sensors in the stator windings protects the motor from overheating and features an automatic restart function.

## **2** Clog-free pumping

A free-flow vortex impeller and pump volute make the pump ideal for pumping solids. The impeller is available in different sizes to meet specific requirements.

### **8** Reliable operation

Both the impeller and volute are made from heavyduty ductile iron for maximum durability. Double mechanical shaft seals in an oil bath, with primary and secondary seal surfaces in silicon carbide, extend the life of the pump.

### 4 Convenient handling

The top cover and motor housing are made of lightweight aluminum, which creates a pump that is very easy to handle and install.

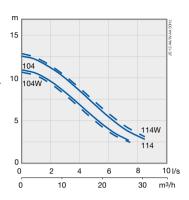
## **6** Serviceability

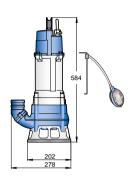
Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.



## SUBMERSIBLE SLUDGE PUMP TYPE ABS JS 12

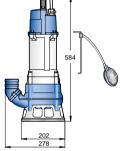
JS 12 W/WKS* -104 JS 12 W/WKS* -114 JS 12 D/DKS* -104 JS 12 D/DKS* -114	1-PHASE 1-PHASE	3-PHASE 3-PHASE	
Motor rating P2 Voltage (V)	0.9 kW, 1~ 230	0.9 kW, 3~ 230 / 400 / 500	
Full load (A)	5.1	3.3 / 1.9 / 1.5	
Speed	2850 rpm 2850 rpm		
Free passage	45 x 40 mm		
Discharge connections	Hose 2", 2½", 3"		
	Thread G/BSP 2	", 21⁄2", 3"	
Weight (excl. cable)	18 kg		
Motor protection	Built-in		
Electric cable	20 m		





## SUBMERSIBLE SLUDGE PUMP TYPE ABS JS 15

SUBMERSIBLE SLUDGE PUMP TYPE ABS JS 15
JS 15D/DKS* -114 3-PHASE JS 15D/DKS* -126 3-PHASE
Motor rating P2         1.3 kW, 3~           Voltage (V)         230 / 400 / 500           Full load (A)         4.5 / 2.6 / 2.1           Speed         2850 rpm           Free passage         45 x 40 mm           Discharge connections         Hose 2", 2½", 3"           Weight (excl. cable)         18 kg           Motor protection         Built-in           Electric cable         20 m
0 10 20 30 m³/h



\* Built-in float switch available as option. KS version not available in 500 V.



## Submersible Sludge Pump Type ABS XJS

Submersible sludge pump type ABS XJS is excellent for pumping dirty water and water mixed with solids. The slim design makes the pump easy to move and easy to handle.

### Easy and fail-safe starting

Instead of a built-in contactor, an optional AquaTronic unit can be used. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.)

### 2 Clog-free pumping

A free-flow vortex impeller and pump volute make the pump ideal for pumping solids. The impeller is available in different sizes to meet specific requirements.

### 8 Reliable operation

Both the impeller and volute are made from heavyduty ductile iron for maximum durability. Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. A double cable-entry seal system increases the protection against moisture entering the electrical junction area.

### 4 Convenient handling

The top cover and motor housing are made of lightweight aluminum, which creates a pump that is very easy to handle and install.

### 5 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

## 6 Less energy and environmental impact

The high-efficiency motor and hydraulics combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.



### SUBMERSIBLE SLUDGE PUMP TYPE ABS XJS 25

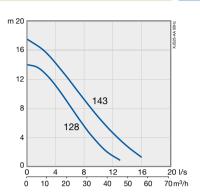
#### XJS 25 D\* -128 XJS 25 D\* -143

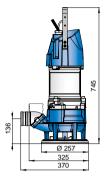
Motor protection

Electric cable

Motor rating P2 Voltage (V) Full load (A) Speed Free passage Discharge connections Weight (excl. cable)

2.5 kW, 3~ 230 / 400 / 500-550 / 690 / 1000 8.8 / 5.1 / 4.1 / 2.9 / 2.0 2920 rpm 45 x 55 mm Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4" 39 kg Built-in 20 m



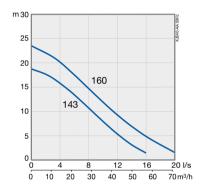


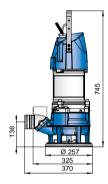
#### SUBMERSIBLE SLUDGE PUMP TYPE ABS XJS 40

#### XJS 40 D\* -143 XJS 40 D\* -160

Motor rating P2
Voltage (V)
Full load (A)
Speed
Free passage
Discharge connections

Weight (excl. cable) Motor protection Electric cable 3.7 kW, 3~ 230 / 400 / 500-550 / 690 / 1000 13.2 / 7.6 / 6.1 / 4.4 / 3.0 2860 rpm 45 x 55 mm Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4" 41 kg Built-in 20 m





#### SUBMERSIBLE SLUDGE PUMP TYPE ABS XJS 50

XJS 50 D\* -160 XJS 50 D\* -175

 Motor rating P2
 5.6 kW

 Voltage (V)
 230 / 2

 Full load (A)
 19.7 /

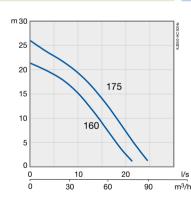
 Speed
 2930 r

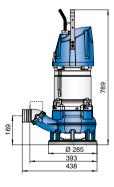
 Free passage
 48 x 6

 Discharge connections
 Hose 2

 Weight (excl. cable)
 59 kg

5.6 kW, 3~ 230 / 400 / 500-550 / 690 / 1000 19.7 / 11.3 / 9.0 / 6.6 / 4.5 2930 rpm 48 x 60 mm Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4" 59 kg Built-in 20 m





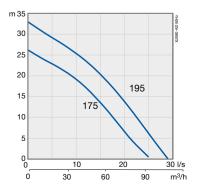
### SUBMERSIBLE SLUDGE PUMP TYPE ABS XJS 80

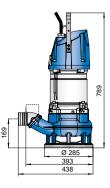
#### XJS 80 D\* -175 XJS 80 D\* -195

Motor protection

Electric cable

Motor rating P2	8.3 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	27.8 / 16 / 12.8 / 9.3 / 6.4
Speed	2920 rpm
Free passage	48 x 60 mm
Discharge connections	Hose 21/2", 3", 4"
-	Thread G/BSP 21/2", 3", 4"
Weight (excl. cable)	64 kg
Motor protection	Built in
Electric cable	20 m





\* Option: AquaTronic, built-in electronic pump control.

## AquaTronic and Other Supervision Options

Submersible dewatering pump types ABS XJ, XJC and XJS have several options for electronic supervision that make them even more reliable and easy to use. Most important is the AquaTronic unit, which ensures correct motor rotation every time.

### AquaTronic

The AquaTronic unit replaces the built-in contactor in the basic pump configurations and ensures that the motor always rotates correctly, no matter how the phases are connected. Key benefits of the AquaTronic unit include:

- Correction of motor rotation if phases are improperly connected
- Run mode
- Integrated start equipment (direct or soft start depending on pump model)
- Motor protection against high temperature, high amperage and missing phase

If the pump is also equipped with an optional Level Sensor, AquaTronic provides:

- Precise level control
- Protection against dry running

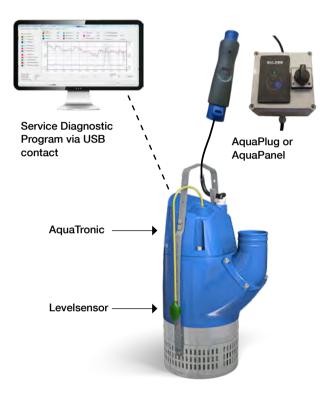
### AquaTronic Service Diagnostic Program

Connecting a PC to the AquaTronic unit via USB cable provides access to the Service Diagnostic Program, which offers:

- Pump status data (temp, voltage, moisture, etc.)
- Pump operating history
- Pump failure history
- Pump service and maintenance history
- Digital manual and spare parts documentation

### AquaPlug and AquaPanel

AquaPlug and AquaPanel are options that combine with AquaTronic to provide additional alarm and start/ stop functions, as well as indications for important parameters. AquaPlug is incorporated into the power line via 16A or 32A sockets, while AquaPanel is integrated into the control cabinet.



## **Overview of electronic supervision features**

The table below shows the range of features available when the AquaTronic unit and other electronic supervision options are used with the submersible drainage pump types ABS XJ, XJC and XJS.

Electronic supervision feature	Basic pump configuration with contactor	Pump with AquaTronic	Pump with AquaTronic + Level Sensor	Pump with AquaTronic + AquaPlug/ AquaPanel	Pump with AquaTronic + AquaPlug/ AquaPanel + Level Sensor
Run mode	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Integrated start equipment	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Automatic correction of rotation		V	V	V	$\checkmark$
Motor protection – high temp	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Motor protection – high amp		V	V	V	V
Protection against missing phase		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Level control			$\checkmark$		$\checkmark$
Protection against dry running			$\checkmark$		$\checkmark$
Automatic restart			$\checkmark$		$\checkmark$
Stop mode				$\checkmark$	$\checkmark$
E-mode (automatic stop/run)					$\checkmark$
Indication of water in oil				$\checkmark$	$\checkmark$
Indication of low motor insulation				V	$\checkmark$
Indication of high/ low voltage				$\checkmark$	$\checkmark$
Indication of high temp				$\checkmark$	$\checkmark$
Indication of high amp				$\checkmark$	$\checkmark$
Indication of phase imbalance				$\checkmark$	$\checkmark$
USB cable connection		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

Image: Second Second

## **Pump Options and Accessories**

### AQUATRONIC UNIT FOR CORRECT MOTOR ROTATION

Our built-in AquaTronic unit integrates electronic intelligence into the pump, ensuring correct motor rotation by automatically adjusting for incorrect phase order. It also protects the motor by stopping the pump in the event of over-amperage, overheating, low or high voltage or missing phase. Another feature of the AguaTronic unit is the internal software that allows pump performance and service diagnostics data to be viewed on a PC via USB link, enabling accurate evaluation of service and maintenance needs. The workshop manual and spare parts list, readily available in the AquaTronic unit, can be viewed via the link as well. The AquaTronic unit must be ordered when ordering the pump. Retrofitting is not possible.

### AQUAPLUG AND AQUAPANEL

AquaPlug and AquaPanel are options that combine with AquaTronic to provide additional alarm and start/stop functions, as well as indications for important parameters. AguaPlug is incorporated into the power line via 16A or 32A sockets, while AguaPanel is integrated into the control cabinet.

### LEVEL SENSOR FOR PRECISE AND COST EFFECTIVE WATER LEVEL CONTROL

Together with AquaTronic, the level sensor provides precise and cost-effective water level control, and helps lower power consumption.

### SOFTDRIVE FOR COST EFFECTIVE OPERATION

Sulzer offers a built-in SoftDrive concept on the J 205 pumps. It reduces starting current dramatically and provides smooth operation for both the power net and pump equipment. The pump can be started with a smaller-sized generator compared to a standard pump started directly on-line.

### QUICK AND EASY INSTALLATION WITH FLOATATION RING

Sulzer offers a solution for pumps up to 122 lb. The ring is easy to install and can be used with dewatering pumps J/JS 12-15, XJ/XJS 25-40.

### FLOATATION SYSTEM TO PREVENT UNNECESSARY WEAR

A modular flotation system is available, covering pumps from 155 to 1327 lbs. The modular floatation system is easy to build and used with dewatering pumps XJ 50-80, XJS 50-80, J 205-604.



18













### PROTECTIVE BELTS FOR MORE DURABLE OPERATION

Sulzer submersible dewatering pumps can easily be fitted with zinc anode belts providing protection against galvanic corrosion. The cast parts of the pump can also be protectively coated, ensuring trouble-free operation when pumping salty or brackish water.

### POLYURETHANE FOR PROLONGED DRAINAGE PUMP LIFE

Sulzer offers wear rings in polyurethane, which increases resistance when pumping fine sand and other abrasive mediums. Polyurethane-coated wear rings are available as an option on J 205-604.

### SERIES CONNECTIONS FOR PUMPING HIGH HEADS

With minimal effort, the standard Sulzer drainage pumps can be rebuilt to function in series for high head applications.

BOTTOM SUCTION ADAPTER FOR TOTAL WATER REMOVAL

On pumps J 12-15 and J 24, the standard bottom plate may be replaced by a bottom suction adapter. A basement floor or a tank can be pumped practically dry with this adapter.

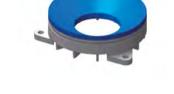
### REPAIR KITS THAT SAVE TIME AND MONEY

Sulzer offers repair kits for all submersible dewatering pumps. The repair kits include common parts required for a typical repair. Our modular pump design makes it possible to repair all drainage and sludge pumps with just a few repair kits.





00000000







E10361 en 4.2015 (1,000), Copyright © SULZER Ltd. 2015 This brochure is a general product presentation. It does not provide a warranty or guarantee of any kind. Please, contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.

E1051 en 4.2015 (1.000, Copyright @ SULZER Ltd. 2015

www.sulzer.com