

# Submersible dewatering pumps





## Dewatering solutions for the real world

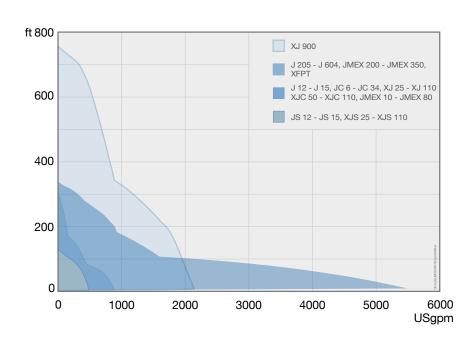
In the real world time is money, and worksites have no time for unwanted water. Sulzer has the solutions in a complete pump range for reliable dewatering.

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 water-related downtime. From purchasing to service, you can turn to Sulzer for dewatering solutions that make a difference in the real world.

#### Performance range 60 Hz

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



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## Submersible drainage pump J

Submersible drainage pump 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.

## 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.

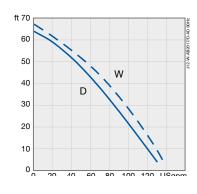
## 4 Serviceability

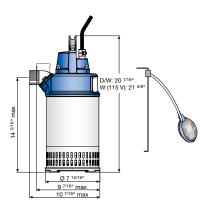
Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. An adjustable diffuser ensures proper clearance throughout the impeller lifetime. By removing the top cover of the pump, the electrical junction area can easily be checked.



#### Submersible drainage pump J 12

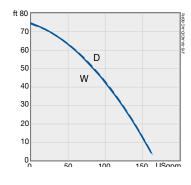
J 12 W/J 12 WKS* J 12 D/J 12 DKS**	1-phase	3-phase
Motor rating P2	1.5 Hp, 1~	1.5 Hp, 3~
Voltage (V)	115 or 230	230/460 or 575
Full load amps (A)	13.8 or 6.9	4.3/2.1 or 1.7
Speed	3'360 rpm	3'380 rpm
Strainer hole	1/4" x 7/8"	
Discharge connections	Thread NPT 2",	3"
Weight (excl. cable)	42 lb. (W), 40 lb	). (D)
Motor protection	Built in	
Electric cable	65 ft.	

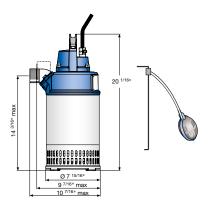




#### Submersible drainage pump J 15

1-phase	
	3-phase
2.0 Hp, 1 ~	2.3 Hp, 3 ~
230	230/460 or 575
10.3	6.2/3.1 or 2.5
3'420 rpm	3'320 rpm
1/4" x 7/8"	
Thread NPT 2"	, 3"
46 lb. (W), 42 l	b. (D)
Built in	
65 ft.	
	2.0 Hp, 1 ~ 230 10.3 3'420 rpm 1/4" x 7/8" Thread NPT 2", 46 lb. (W) , 42 I Built in





- \* Built-in float switch available as option.
- \*\* KS version not available in 575 V.



## Submersible drainage pump XJ

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

## 3 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.

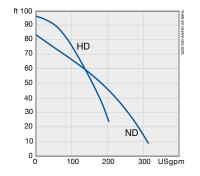
## 6 Flexibility

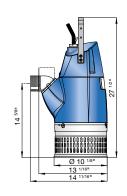
Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application.

#### Submersible drainage pump XJ 25

XJ 25 ND\* Medium head XJ 25 HD\* High head Motor rating P2 4 Hp, 3 ~ 230 / 460 / 575 Voltage (V) Full load (A) 9.8 / 4.9 / 3.9 Speed 3'500 rpm Strainer hole 5/16"x 7/8" Thread NPT 21/2", 3", 4" Discharge connections Weight (excl. cable) 86 lb. Motor protection Built in

65 ft.





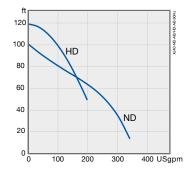
Electric cable

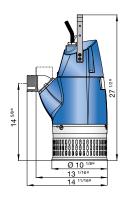
#### Submersible drainage pump XJ 40

XJ 40 ND	Medium head
XJ 40 HD	High head
Motor rating P2	6 Hp, 3 ~
Voltage (V)	230 / 460 / 575
Full load (A)	14.8 / 7.4 / 5.9
Speed	3'470 rpm
Strainer hole	5/16" x 7/8"

Thread NPT 2½", 3", 4" Discharge connections

Weight (excl. cable) 93 lb. Motor protection Built in 65 ft. Electric cable

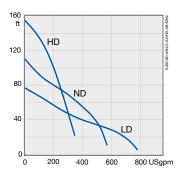


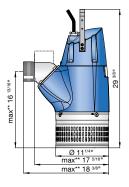


#### Submersible drainage pump XJ 50

XJ 50 LD XJ 50 ND	High flow Medium head
XJ 50 HD	High head
Motor rating P2	9 Hp, 3 ~
Voltage (V)	230 / 460 / 575
Full load (A)	22.4 / 11.2 / 9.0
Speed	3'520 rpm
Strainer hole	5/16"x 7/8"
Discharge connections	Thread NPT 3", 4", 6"
Mojaht (aval. aabla)	120 lb

Weight (excl. cable) 130 lb. Built in Motor protection Electric cable 65 ft.





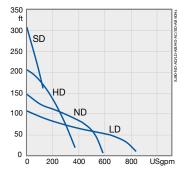
#### Submersible drainage pump XJ 80

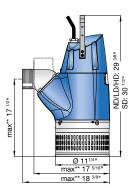
XJ 80 LD	High flow
XJ 80 ND	Medium head
XJ 80 HD*	High head
XJ 80 SD	High head
Motor rating P2	13 Hp, 3 ~
Voltage (V)	230 / 460 / 575
Full load (A)	31.4 / 15.7 / 12.6
Speed	3'520 rpm
Strainer hole	5/16" x 7/8"
Discharge connections	Thread NPT 3", 4", 6"
Mojaht (aval aahla)	ND/LD/LD: 120 lb

Weight (excl. cable) ND/LD/HD: 139 lb.

SD: 172 lb.

Motor protection Built in 65 ft. Electric cable



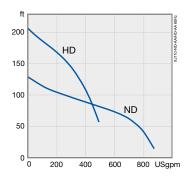


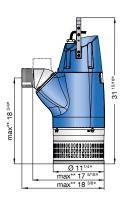
#### Submersible drainage pump XJ 110

XJ 110 ND	Medium head
XJ 110 HD	High head
Motor rating P2	18 Hp, 3 ~
Voltage (V)	230 / 460 / 575
Full load (A)	42.8 / 21.4 / 17.1
Speed	3'500 rpm
Strainer hole	5/16" x 7/8"
Discharge connections	Thread NPT 3", 4", 6"
\Maight (aval aabla)	170 lb

Weight (excl. cable) 179 lb. Motor protection Built in

Electric cable 65 ft.





<sup>\*\*</sup> Max measurement based on largest discharge size.

## Submersible drainage pump XJ 900

Submersible drainage pump XJ is designed for difficult application environments with abrasives and small solids. The innovative design allows for easy conversion from high head to high flow.

## 1 Easy conversion from ND to HD

The pump is fitted with impellers and diffusers for both HD and ND versions. When connected in series they give high head and when connected in paralell they give high volume. This gives fewer parts and a simplified conversion from ND to HD.

## Wear resistance for long life

Impellers and flow elbows in white cast iron together with rubber coated volutes ensure a long lifetime and high efficiency. The impellers are built back to back together with double exit volutes which gives low axial forces and secures long bearing life.

## 3 Reliable operation

Strong cast iron construction with outer casing gives good cooling and enables the pump to run all the way until the water level reaches the strainer. Double mechanical seals with silicon carbide surface give extended service life.

## 4 Built-in motor protection

Bimetal thermal switches or Pt100 sensors in stator windings are used to protect the motor from overheating. Moisture sensors are used in the oil chamber, the motor chamber and in the connection chamber to signal the ingress of moisture into the motor. An additional monitoring option for Pt100 sensors in bearings for temperature measurement provides an added level of protection.

## Serviceability

External inspection ports for the oil and the motor chambers enable quick and easy evaluation of the shaft seal during service. The electrical installation can be easily checked by removing the inspection cover of the pump.

## 6 Reduced environmental impact

The high-efficiency IE3 motor and the new hydraulics combined with low-friction bearings reduce power losses and extend stator life. The result is low total energy costs and minimized carbon footprint.

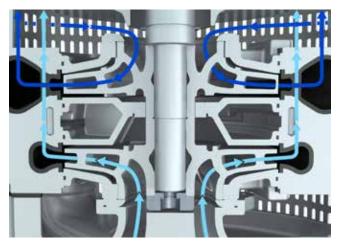


#### State of the art design

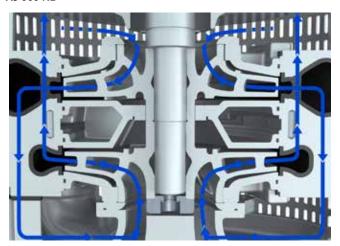
The innovative design with dual impellers allows for a quick and simple conversion between hydraulic performance options, reducing the need to addition inventory to cover the range. Both high head and high flow versions use the same two impellers.

In the HD version, the water circulates from the first impeller to the second impeller, connecting the impellers in series, creating higher pressure.

For the ND version, the impellers are connected in parallel. The water flows into both impellers simultaneously, creating higher flow.



**XJ 900 ND** 



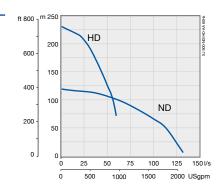
**XJ 900 HD** 

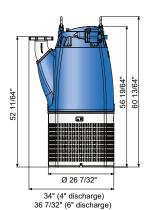
#### Submersible drainage pump XJ 900

Motor protection

XJ 900 ND High flow XJ 900 HD High head Motor rating P2 145 Hp 3~ Voltage (V) 480 / 575 Full load (A) 154 / 124 Speed 3'560 rpm Strainer hole 5/16" - 1 5/16" DN100/4" (standard HD) Discharge connections DN150/6" (standard ND) Flanged connections Class 250 (standard HD) Class 150 (standard ND) Weight (excl. cable) 2'600 lb.

Built-in Electric cable 100 ft. (longer cable on request)





## Submersible drainage pump J

Submersible drainage pump 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.

## 3 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 easy-to-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.

## 5 Flexibility

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

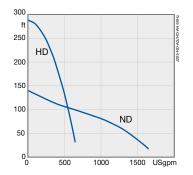


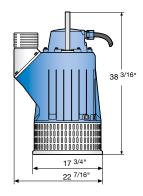
#### Submersible drainage pump J 205

J 205 ND Medium head J 205 HD High head 35 Hp, 3 ~ Motor rating P2 Voltage (V) 230/460 or 575 Full load amps (A) 82/41 or 33 3'500 rpm Speed Strainer hole 5/16" x 1 5/16" Thread NPT 4", 6", 8" Discharge connections Weight (excl. cable) 342 lb.

Weight (excl. cable) 342 lb.

Motor protection Built in
Electric cable 65 ft.



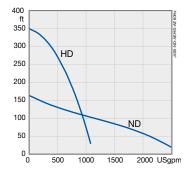


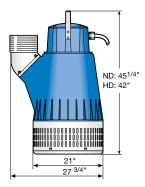
#### Submersible drainage pump J 405

J 405 ND Medium head J 405 HD High head Motor rating P2 57 Hp, 3 ~ 460 or 575 Voltage (V)\* Full load amps (A) 68 or 54 Speed 3'537 rpm Strainer hole 5/16" x 1 5/16" Thread NPT 4", 6", 8" Discharge connections Weight (excl. cable) 595 lb.

Motor protection Thermal overload sensors

Electric cable 65 ft.



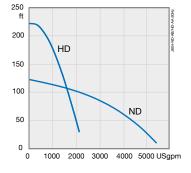


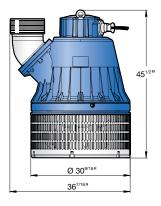
#### Submersible drainage pump J 604

J 604 ND Medium head J 604 HD High head Motor rating P2 94 Hp, 3 ~ Voltage (V)\* 460 or 575 113 or 91 Full load amps (A) Speed 1'730 rpm Strainer hole 1/2" x 2 3/8" Thread NPT 6", 8", 10" Discharge connections Weight (excl. cable) 1'157 lb.

Motor protection Thermal overload sensors

Electric cable 100 ft.





<sup>\*</sup> Consult factory for 230 V version.

## Submersible drainage center-line pumps JC and XJC

Submersible drainage center-line pumps 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 18-21.) 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.

## 3 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 - XJC 110 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 - XJC 110 are equipped with high-efficiency motors and new hydraulics, which combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

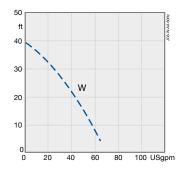
## 6 Flexibility

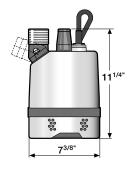
Pumps XJC 50 - XJC 110 allow conversion between high-volume and high-head hydraulics with only a few parts, ensuring the right performance for the application.



#### Submersible drainage center-line pump JC 6

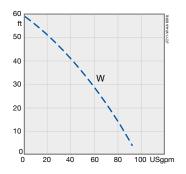
JC 6 W 1-phase Motor rating P2 0.6 Hp, 1 ~ Voltage (V) 115 Full load amps (A) 5.4 Speed 3'450 rpm Thread NPT 2" Discharge connections Weight (excl. cable) 30 lb. Motor protection Built in Electric cable 32 ft.

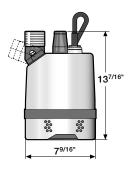




#### Submersible drainage center-line pump JC 11 W-2

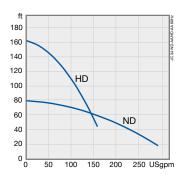
JC 11 W-2 1-phase Motor rating P2 1.0 Hp, 1 ~ Voltage (V) 115 Full load amps (A) 10.3 Speed 3'316 rpm Discharge connections Thread NPT 2" Weight (excl. cable) 29 lb. Motor protection Built in Electric cable 32 ft.

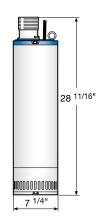




#### Submersible drainage center-line pump JC 34

**JC 34 ND** Medium head JC 34 HD High head 6.0 Hp, 3 ~ Motor rating P2 230/460 or 575 Voltage (V) Full load amps (A) 16/8.0 or 6.4 Speed 3'400 rpm 5/16" x 1 5/16" Strainer hole Thread NPT 2", 3" Discharge connections 68 lb. Weight (excl. cable) Motor protection Built in Electric cable 65 ft.







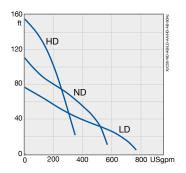
#### Submersible drainage center-line pump XJC 50

XJC 50 LD\* High flow XJC 50 ND\* Medium head XJC 50 HD\* High head 9 Hp, 3 ~ Motor rating P2 Voltage (V) 230 / 460 / 575 Full load (A) 22.4 / 11.2 / 9.0 Speed 3'520 rpm 5/16" x 7/8" Strainer hole

Discharge connections Thread NPT 3", 4", 6"

Weight (excl. cable) 130 lb.

Motor protection Built in Electric cable 65 ft.





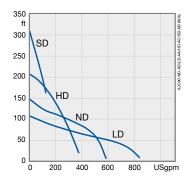
#### Submersible drainage center-line pump XJC 80

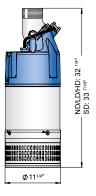
XJC 80 LD\* High flow XJC 80 ND\* Medium head XJC 80 HD\* High head XJC 80 SD\* High head Motor rating P2 13 Hp, 3 ~ 230 / 460 / 575 Voltage (V) Full load (A) 31.4 / 15.7 / 12.6 Speed 3'520 rpm Strainer hole 5/16" x 7/8"

Discharge connections Thread NPT 3", 4", 6"

Weight (excl. cable) ND/LD/HD: 139 lb., SD: 172 lb.

Motor protection Built in Electric cable 65 ft.

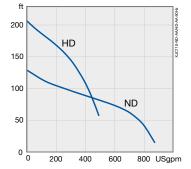




#### Submersible drainage center-line pump XJC 110

XJC 110 ND\* Medium head XJC 110 HD\* High head Motor rating P2 18 Hp, 3~ 230 / 460 / 575 Voltage (V) Full load (A) 42.8 / 21.4 / 17.1 Speed 3'500 rpm Strainer hole 5.16" x 7/8" Thread NPT 3", 4", 6" Discharge connections

Weight (excl. cable) 176 lb.
Motor protection Built in
Electric cable 65 ft.





<sup>\*</sup> Option: AquaTronic, built-in electronic pump control.

## Submersible trash pump JS

Submersible trash pump 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.

## 3 Reliable operation

Both the impeller and volute are made from heavy-duty 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.

## 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.

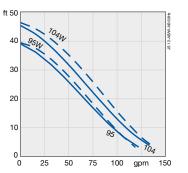


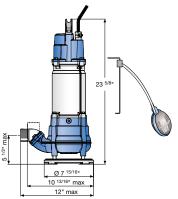
#### Submersible trash pump JS 12

JS 12 W/WKS* -95	1-phase	
JS 12 W/WKS* -104	1-phase	
JS 12 D/DKS* -95		3-phase
JS 12 D/DKS* -104		3-phase
Motor rating P2	1.5 Hp, 1 ~	1.5 Hp, 3 ~
Voltage (V)	230	230/460 or 575
Full load amps (A)	6.9	4.3/2.1 or 1.7
Speed	3'360 rpm	3'380 rpm
Free passage	Ø 1 9/16"	

Discharge connections Thread NPT 2", 3" Weight (excl. cable) 44 lb. (W), 42 lb. (D)

Motor protection Built in Electric cable 65 ft.





#### Submersible trash pump JS 15

JS 15D/DKS* -104	3-phase
JS 15D/DKS* -114	3-phase
Motor rating P2	2.3 Hp, 3 ~
Voltage (V)	230/460 or 575
Full load amps (A)	6.2/3.1 or 2.5
Speed	3'320 rpm
Free passage	Ø 1 9/16"
Discharge connections	Thread NPT 2", 3"

Weight (excl. cable)

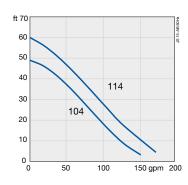
Motor protection

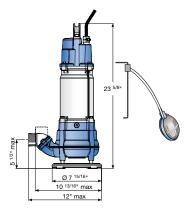
Electric cable

44 lb.

Built in

65 ft.





 $<sup>^{\</sup>star}$  Built-in float switch available as option. KS version not available in 575 V.

## Submersible trash pump XJS

Submersible trash pump 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 18-21.)

## 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.

## 3 Reliable operation

Both the impeller and volute are made from heavy-duty 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.

## 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

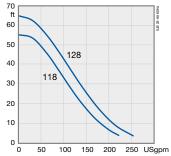
The high-efficiency motor and hydraulics combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

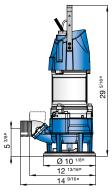
#### Submersible trash pump XJS 25

XJS 25 D\* -118 XJS 25 D\* -128

Motor rating P2 4 Hp, 3 ~ Voltage (V) 230 / 460 / 575 9.8 / 4.9 / 3.9 Full load (A) 3'500 rpm Speed Free passage 2 3/16" x 1 3/4" Thread NPT 21/2", 3", 4" Discharge connections

Weight (excl. cable) 86 lb. Motor protection Built in Electric cable 65 ft.





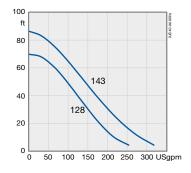
#### Submersible trash pump XJS 40

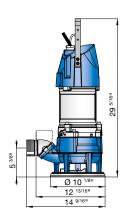
#### XJS 40 D\* -128 XJS 40 D\* -143

Motor rating P2 6 Hp, 3 ~
Voltage (V) 230 / 460 / 575
Full load (A) 14.8 / 7.4 / 5.9
Speed 3'470 rpm
Free passage 2 3/16" x 1 3/4"
Discharge connections Thread NPT 2½",3", 4"

Weight (excl. cable) 90 lb.

Motor protection Built in
Electric cable 65 ft.





#### Submersible trash pump XJS 50

#### XJS 50 D\* -143 XJS 50 D\* -160

 Motor rating P2
 9 Hp, 3 ~

 Voltage (V)
 230 / 460 / 575

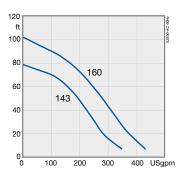
 Full load (A)
 22.4 / 11.2 / 9.0

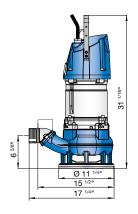
 Speed
 3'520 rpm

 Free passage
 1 7/8" x 2 3/8"

Discharge connections Thread NPT 21/2", 3", 4"

Weight (excl. cable) 130 lb.
Motor protection Built in
Electric cable 65 ft.





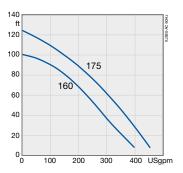
#### Submersible trash pump XJS 80

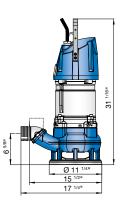
#### XJS 80 D\* -160 XJS 80 D\* -175

Discharge connections Thread NPT: Weight (excl. cable) 141 lb.

Weight (excl. cable) 141 lb.

Motor protection Built in
Electric cable 65 ft.





#### Submersible trash pump XJS 110

#### XJS 110 D\* -155 XJS 110 D\* -166

 Motor rating P2
 18 Hp, 3 ~

 Voltage (V)
 230 / 460 / 575

 Full load (A)
 42.8 / 21.4 / 17.1

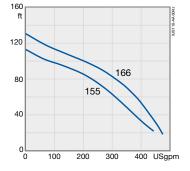
 Speed
 3'500 rpm

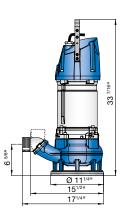
 Free passage
 1 7/8" x 2 3/8"

Discharge connections Thread NPT 2½", 3", 4"

Weight (excl. cable) 176 lb.

Motor protection Built in Electric cable 65 ft.





<sup>\*</sup> Option: AquaTronic, built-in electronic pump control.

## Submersible drainage pump J MEX (MSHA)

Submersible drainage pumps J 10 - 350 MEX are approved explosion proof mine pumps suitable for pumping water and dirty water mixed with light abrasive soil. Approved MSHA (Mine Safety and Health Administration) and D.O.E.R. (Pennsylvania Department of Environmental Resources). Applications include gassy coal mines, tunnels, strip mines, and quarries where MSHA permissibility is required.

## Convenient handling

- Designed to make your life easier
- Lightweight silumin parts makes transport, handling and installation easy

## 2 Reliability

- Compact design with durable silumin housing and mechanical shaft seals in silicon carbide provide a pump that you can rely on
- Sealminder moisture detector protects the pump if seal leakage occur

## 3 Reliable operation

- Minimizes time for maintenance
- Double outer casing and good heat transfer enables pump to operate continuously at low levels or even run dry without damaging the motor
- Thermal overload protection shuts off the pump upon an overtemp. condition

#### Wear resistance

- One investment, years of cost efficient pumping
- Stainless steel impeller, shaft and hardwear as well as adjustable wear parts in oil resistant nitrile rubber provide a long life and high efficiency

## 6 Robust design

 Rigid stainless steel shaft with heavy duty bearings gives vibration free operation

## 6 Complete supply – MSHA approved pump and panel

 All J MEX series are equipped with MSHA approved power cable and are supplied with a manual or automatic control panel



J 10B MEX 3-phase
Motor rating P2 1.8 Hp

Voltage (V)

Dual 230/460 or 575

Full load amps (A)

Speed

Speed

3'450 rpm

Free passage

3/16" x 3/4"

Discharge connections

Dual 7.0/3.5 or 2.8

3/16" x 3/4"

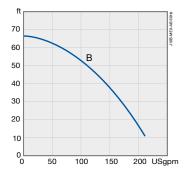
Thread NPT 3"

Motor protection Thermal overload sensors

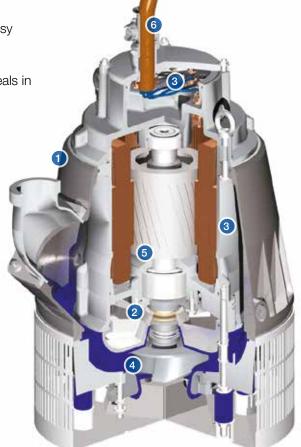
77 lb.

Electric cable 50 ft.

Weight (excl. cable)







#### Submersible drainage pump J 20B MEX

J 20B MEX 3-phase Motor rating P2 3.6 Hp, 3 ~ Voltage (V) 460 or 575 Full load amps (A) 5.4 or 4.3 Speed 3'450 rpm 3/16" x 3/4" Free passage Discharge connections Thread NPT 3"

Weight (excl. cable) 77 lbs

Motor protection Thermal overload sensors

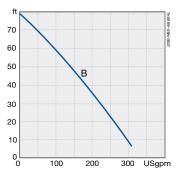
Electric cable 50 ft.

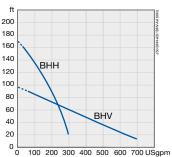
#### Submersible drainage pump J 50B MEX

J 50BHH MEX 3-phase 3-phase J 50BHV MEX Motor rating P2 8.2 Hp. 3 ~ Voltage (V) 460 or 575 10.3 or 8.2 Full load amps (A) Speed 3'450 rpm Free passage 1/4" x 1 5/16" Discharge connections Thread NPT 4" Weight (excl. cable) 120 lb.

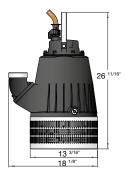
Motor protection Thermal overload sensors

Electric cable 50 ft.









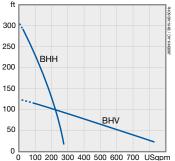
#### Submersible drainage pump J 80B MEX

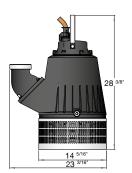
J 80BHH MEX 3-phase J 80BHV MEX 3-phase 13.6 Hp, 3 ~ Motor rating P2 Voltage (V) 460 or 575 Full load amps (A) 16.2 or 13.0 3'450 rpm Speed Free passage 1/4" x 1 5/16" Thread NPT 3",6" Discharge connections

Weight (excl. cable) 177 lb.

Motor protection Thermal overload sensors

Electric cable 50 ft.





#### Submersible drainage pump J 200B MEX

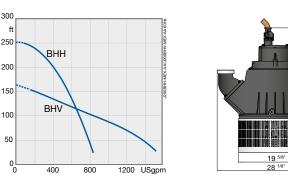
J 200BHV MEX 3-phase J 200BHH MEX 3-phase Motor rating P2 31.3 Hp, 3 ~ Voltage (V) 460 or 575 Full load amps (A) 38.2 or 30.6 Speed 3'450 rpm Free passage 1/4" x 2" Discharge connections

Thread NPT 4", 6"

Weight (excl. cable) 377 lb.

Motor protection Thermal overload sensors

Electric cable 50 ft.



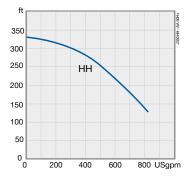
#### Submersible drainage pump J 350B MEX

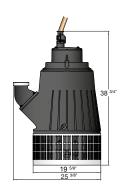
3-phase J 350HH MEX Motor rating P2 59.8 Hp, 3 ~ Voltage (V) 460 or 575 Full load amps (A) 69 or 55.2 3'550 rpm Speed Free passage 1/4" x 2" Thread NPT 4", 6" Discharge connections

Weight (excl. cable) 498 lb.

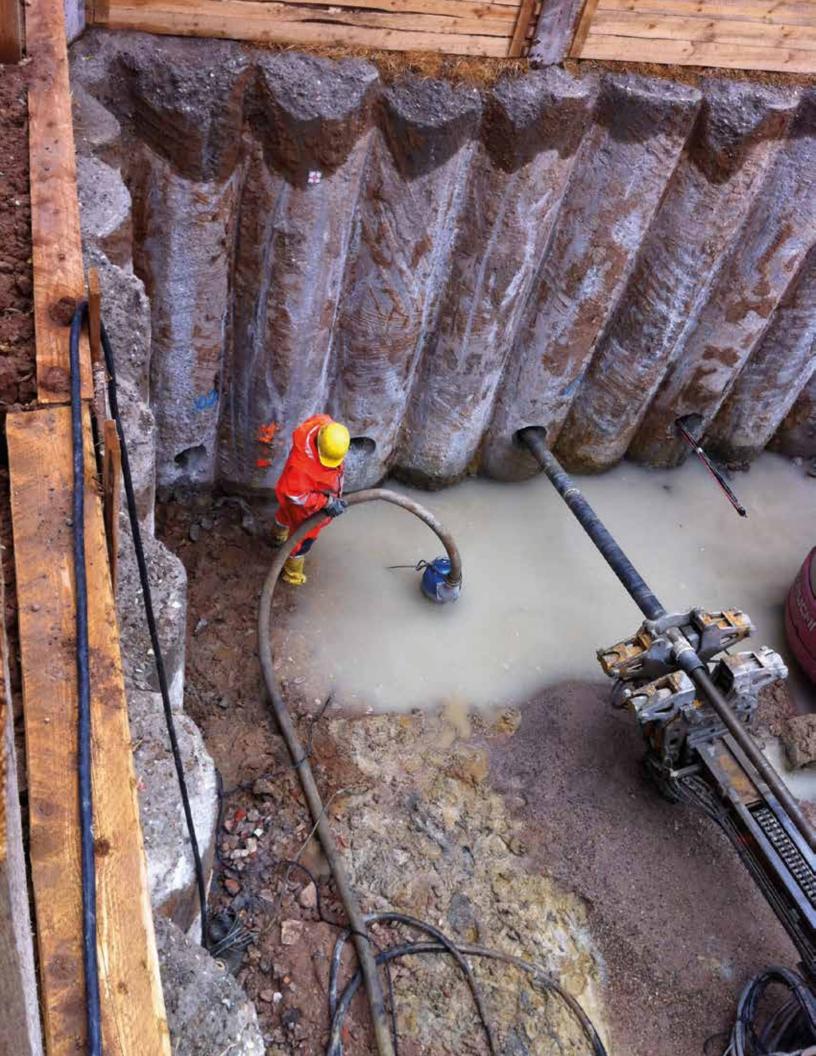
Motor protection Thermal overload sensors

Electric cable 50 ft.





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## Submersible sewage pump type ABS XFPT

Submersible sewage pump XFPT 80C - 150E is suitable for pumping sewage and water mixed with solids. The robust cast iron design provides a sturdy pump for rough conditions. The pump runs at any water level without overloading the motor.



Silicon carbide mechanical seals and oil filled motor allows for continuous dry running.

## 2 Clog-free pumping

ContraBlock Plus impellers provide state of the art wastewater solids handling for clog free operation.

## 3 Easy handling

Open stainless steel lifting hoop, and large, stable cast iron (optional stainless steel) pump support stand provide easy handling and stable operation.

## 4 Reliability

Heavy duty shaft and bearings, as well as dual silicon carbide mechanical seals provide long life and market leading reliability. Seal protection system prolongs the life of the primary mechanical seal.

## 5 Serviceability

Cable plug system and ContraBlock Plus field adjustable wear plate allow for easy field service. Modular system reduces spare parts inventory requirements.

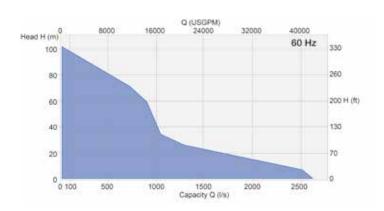
## Safety and monitoring features

All XFPT sewage pumps are available in Class I Div 1 Group C&D explosion proof versions as standard.

The XFPT range has built-in IE3 Premium Efficiency motors. Sulzer is the first company in the world to offer submersible motors with such a high standard.

#### Submersible sewage pump type ABS XFPT

XFPT 80C-150E 3-phase
Pump sizes 3.2 to 32 in.
Capacities up to 47'560 USgpm
Heads up to 360 ft.
Motor powers 2.7 to 1'005 Hp



# Overview of electronic supervision features

Submersible dewatering pumps 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

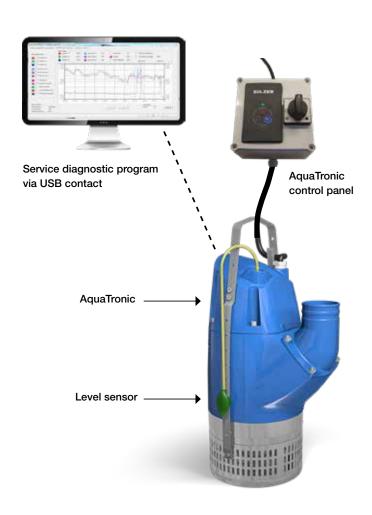
#### AquaTronic service diagnostic program

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

#### AquaTronic control panel

AquaTronic control panel is an option that combine with AquaTronic provides additional alarm and start/stop functions, as well as indications for important parameters.



The table below shows the range of features available when the AquaTronic unit and other electronic supervision options are used with the submersible dewatering pumps XJ 25-110, XJC 50-110 and XJS 25-110.

Electronic supervision feature	Basic pump configuration with contactor	Pump with AquaTronic	Pump with AquaTronic + level sensor	Pump with AquaTronic + AquaPlug/ AquaTronic control panel	Pump with AquaTronic + AquaPlug/ AquaTronic control panel + level sensor
Run mode	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Integrated start equipment	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Automatic correction of rotation		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Motor protection – high temp	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Motor protection – high amp		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
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)			$\checkmark$		$\checkmark$
Indication of water in oil				$\checkmark$	$\checkmark$
Indication of low motor insulation				$\checkmark$	$\checkmark$
Indication of high/low voltage				$\checkmark$	$\checkmark$
Indication of high temp				$\checkmark$	$\checkmark$
Indication of high amp				$\checkmark$	$\checkmark$
Indication of phase imbalance				$\checkmark$	<b>✓</b>
USB cable connection		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

<sup>=</sup> Fault indication when pump is automatically stopped to protect the motor

## 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 overamperage, overheating, low or high voltage or missing phase. Another feature of the AquaTronic 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 should be ordered when ordering the pump.



AquaTronic control panel is an option that combine with AquaTronic provides additional alarm and start/stop functions, as well as indications for important parameters.

#### 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 flotation ring

Sulzer offers a solution for pumps up to 99 lb. The ring is easy to install and can be used with dewatering pumps J 12-15, XJ 25-40.

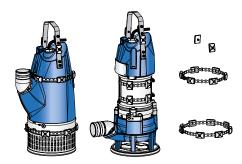


## Floatation system to prevent unnecessary wear

A modular flotation system is available, covering pumps from 130 to 1'320 lb. The modular flotation system is easy to build and used with dewatering pumps XJ 50-110, XJS 50-110, J 205-604.

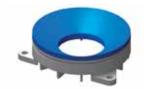
#### Zinc anode belts for more durable operation

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, 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 trash pumps with just a few repair kits.



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