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# PRODUCTMANUAL

INTELLIGENT FLUID CONTROL SYSTEM

More reliable and intelligent drainage system













## AWARD CERTIFICATE

- USA MUSE International Creative Awards
- USA IDA International Design Awards





- Utility model patent certificate for water seepage detection of sewage lifting device
- Utility model patent certificate for the backwashing device of sewage lifting units
- Utility model patent certificate for anti-blocking of rainwater lifting device
- Utility model patent certificate for check valve of sewage lifting device
- Utility model patent certificate for cutting device of sewage lift pump
- Utility model patent certificate for pump body structure of sewage lifting device
- Design patent certificate of sewage lifting unit AIZL-1500
- Design patent certificate of sewage lifting unit AIZL-750
- Design patent certificate of AIZL controller
- Design patent certificate of check valve
- Design patent certificate of sewage lifting tank inlet accessories
- Design patent certificate of Sewage lifting device inlet structure
- Design patent certificate of sewage lifting device with reflux check valve.







## SOFTWARE COPYRIGHT

- AIZL Test System 1.0
- AIZL Fault Reporting System 1.0
- AIZL Detection System 1.0
- AIZL Applet V1.0
- AIZL Applet V2.0
- AIZL Cloud-Control Management System V1.0
- AIZL Running System 1.0
- AIZL Management System of Sewage Lifting Units V1.0





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Shanghai Zhiliu Pump Industry Co., Ltd. is a National High-Tech Enterprise in China's smart fluid equipment sector, specializing in the R&D, design, and production of Sewage Lifting Units, Sewage Pumps, Circulation Pumps, and intelligent drainage control systems. With independent innovation across the entire industry chain as its core competitive advantage, it has established itself as a technical benchmark and quality model in the industry.

As a pioneer in the independent development of water pumps, motors, control systems, valves, and tank structures, the company has obtained more than 20 national patents, passed international authoritative CE certification, and won the American IDA and MUSE design awards. The integration of Al-driven technologies into its products has solidified its position as a leader in China's intelligent fluid equipment industry.

## Industry Leadership: Driven by Technological Innovation and Market Coverage

## Leading Technology Globally, Defining New Industry Standards

With full control over the entire value chain, the company is the first in China to independently develop the entire process, from core motors and intelligent control systems to complete machine structures. It has broken free from traditional supply chain dependencies and leads the industry with its technological barriers.



#### Al-Powered Intelligent Water Supply and Drainage:

The company pioneered the integration of Internet of Things (IoT) technology into its products, creating intelligent systems with remote control, wireless alarms, and real-time monitoring. Users can manage device status, receive fault alerts, and perform remote operations through mobile devices, effectively addressing the common issues of "delayed response and inefficient maintenance" in traditional equipment.









Five Disruptive Technological Breakthroughs

1. Intelligent Touchscreen Controller System (Industry's first to support dynamic detection and multi-terminal interconnectivity)

2. Leakage Monitoring & Auto Shut-off Technology (Precisely identifies overflow and pipe burst risks; proactively cuts off water supply)

3. Magnetic Pneumatic Valve (Eradicates odor leakage issues, replacing traditional passive carbon filtration)

4. Fully Automatic Tap Water-Based Self-Cleaning System (Eliminates pseudo-cleaning techniques; achieves zero manual maintenance)

5.S1 Duty Oil-Cooled External Motor

(Breaks limits of continuous operation and ultra-quiet performance; 30% lower noise vs. global competitors)



## Extensive Market Coverage, Global Presence Demonstrating Strength

#### **Domestic Leadership**

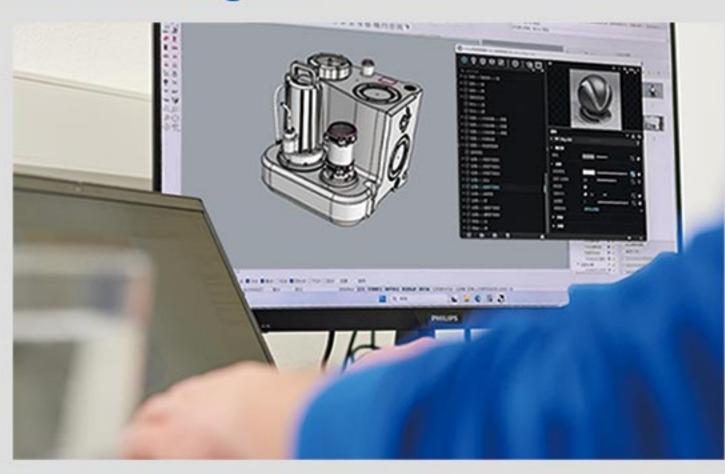
With over 400 sales and service outlets nationwide, our products are widely deployed in high-end residential properties, commercial complexes, municipal projects, and more, commanding a dominant market share in China.

#### **Global Influence**

Exported to over 30 countries, including Germany, France, the Netherlands, Poland, the USA, Lithuania, Russia, UAE, Thailand, Japan, Israel, New Zealand, and the Maldives, our solutions are acclaimed by international clients as the "Chinese Benchmark in Smart Innovation".



## **Core Strengths**



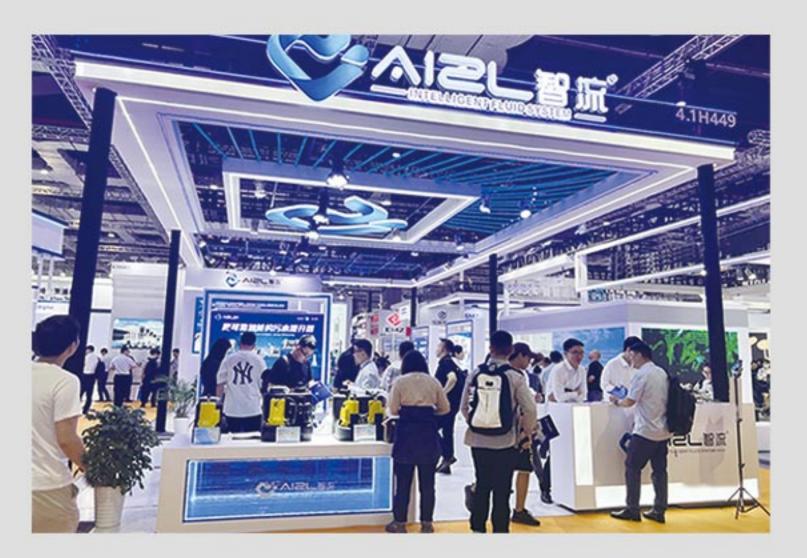
#### Intelligent Manufacturing System

Rigorous Full-Process Quality Assurance: Equipped with top-tier industry testing laboratories, we integrate advanced systems such as performance testers for intelligent sewage lifting units, automated motor testing units, and airtightness validation machines. With precision tolerances of ≤0.01mm in critical components and military-grade quality control standards, our products consistently exceed international benchmarks in performance, noise reduction, and lifespan.



#### Comprehensive Solutions for All Scenarios

From household basement sewage lifting to commercial circulation water supply, Zhiliu offers integrated solutions that combine "products + services + data management." Through Al algorithms, the company optimizes energy consumption and reduces failure rates, cutting overall operation and maintenance costs by 30% for customers.



## Mission & Vision: Reshaping the Future of the Industry with Technology

Zhiliu Pump Industry Co., Ltd. is driven by the mission to "lead global water transmission with Chinese intelligent manufacturing." The company continues to invest in R&D, deepen collaborations with top global research institutions, and drive the industry's shift from "functional" to "smart ecosystem" solutions. Moving forward, Zhiliu will focus on technological innovation, long-term service reliability, and international quality standards, establishing itself as a globally trusted brand for intelligent fluid equipment, and showcasing the extraordinary power of Chinese manufacturing to the world.

# INTELLIGENT CONTROLLER





- Intelligent interconnection, support WIFI connect to realize remote setting, detection, and information sending.
- Clear and easy-to-operate, human-computer interaction, colored high-definition LCD large screen.
- Equipped with electronic air pressure sensing module as standard, and optional float control.
- The starting liquid level, alarm liquid level, etc. can be adjusted stepless, and the liquid level is accurate to the millimeter level.
- With overload, overheating, dry running, overtime operation, phase failure alarm and protection functions.
- Built-in buzzer alarm and terminal with external alarm.

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 Delay stop function can effectively eliminate the sound of "water hammer" and prevent dirt from adhering to the impeller.

- 24-hour inspection function.
- Real-time liquid level, voltage, current detection.
- Support both 220V and 380V versions.
- Stylish and beautiful, with safety protection design.
- Manual, stop and automatic modes.
- Support record and query of the system working time and water pump running time and times.
- Various fault information can be displayed.
- Small size: 180\*98\*40mm(L\*W\*H).

Туре	NO.	U[V]	Control
AIZL-ICM220S1.1	10001	220	One pump controlled
AIZI -ICM220S2 1	10002	220	Two pumps controlled

# INTELLIGENT CONTROLLER

— AIZL-ICN

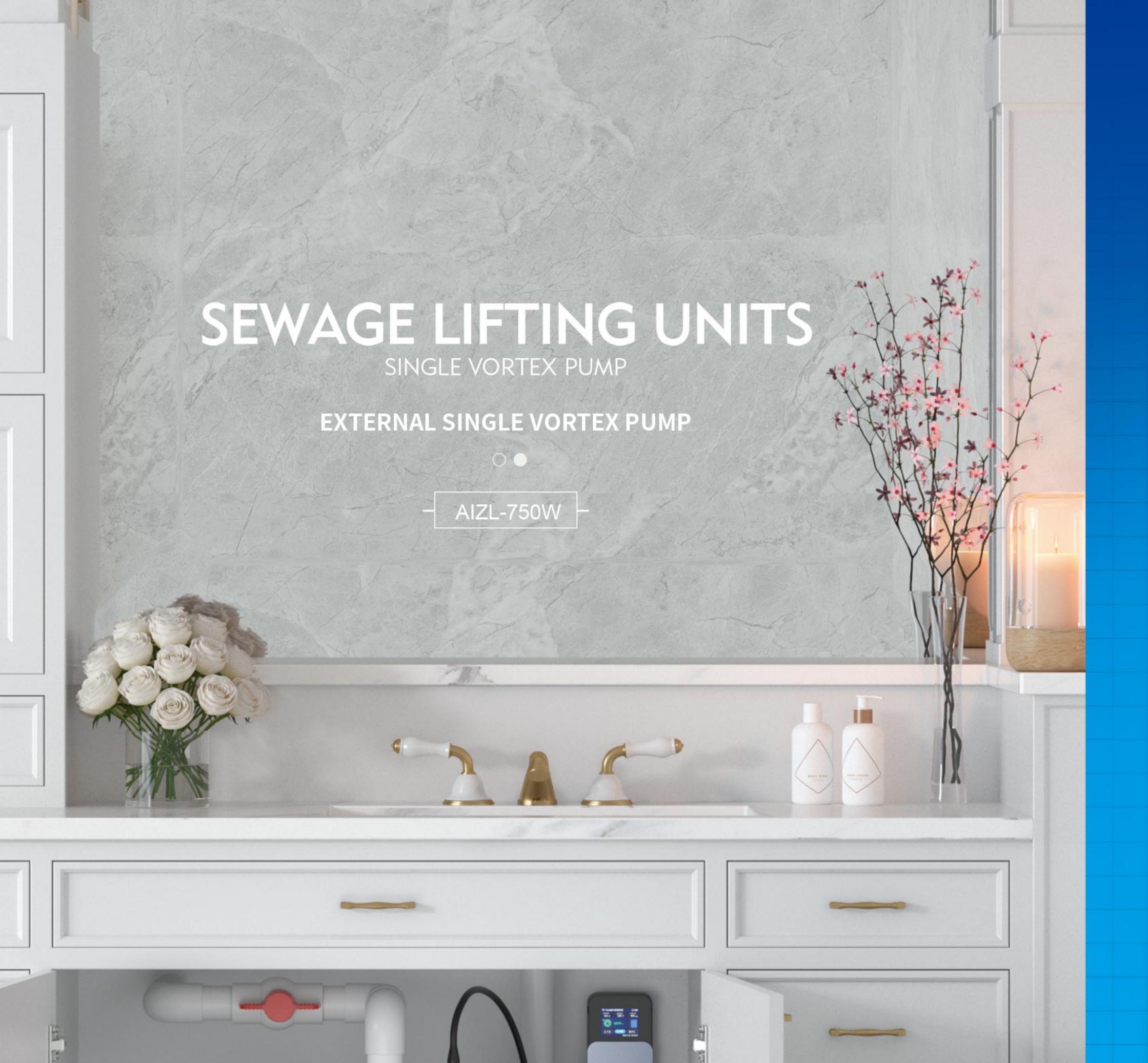


- Intelligent interconnection, support WIFI connect to realize remote setting, detection, and information sending.
- Clear and easy-to-operate, human-computer interaction, colored high-definition LCD large screen.
- Equipped with electronic air pressure sensing module as standard, and optional float control.
- The starting liquid level, alarm liquid level, etc. can be adjusted stepless, and the liquid level is accurate to the millimeter level.
- Periodic backwashing function, which can change the time and cycle of backwashing.
- With water seepage detection and pop-up water seepage alarm information.
- Water leakage detection and pop-up water leakage alarm information,
  and also has the function of shutting down the tap water inlet.
- With overload, overheating, dry running, overtime operation, phase failure alarm and protection functions.
- Built-in buzzer alarm and terminal with external alarm.

- Delay stop function.
- 24-hour inspection function.
- Real-time liquid level, voltage, current detection.
- Support both 220V and 380V versions.
- Stylish and beautiful, with safety protection design.
- Manual, stop and automatic modes.
- Support record and query of the system working time and water pump running time and times.
- Various fault information can be displayed.
- Small size: 246\*180\*107mm(L\*W\*H).

Туре	NO.	U[V]	CONTROL
AIZL- ICN220S1.1	13011	220	One pump controlled
AIZL- ICN220D2.1	13012	220	Two pumps controlled
AIZL- ICN380S1.1	13013	380	One pump controlled
AIZL-ICN380D2.1	13014	380	Two pumps controlled





Intelligent Touch Screen Controller

Adopt AIZL-ICM intelligent controller - small and pretty, LCD touch screen, electronic air pressure sensor control, multiple safety protections, IoT function, remote control, alarm and push Notifications.

## Multifunctional air pressure detection device

Featuring a slip-on flange design that also serves as an inspection cover. It includes a built-in 75mm large-diameter anti-clogging pressure-sensing sleeve, ensuring more stable and accurate liquid level detection while preventing sensor failures.

## **Power Pneumatic Valve**

It remains fully sealed when not in use and automatically opens to balance air pressure during operation. Completely avoiding the issue of valves remaining open to the room, which fails to address odor emissions.

## S1 Standard 304 stainless steel oil-cooled motor

The motor housing is made of 304 stainless steel, ensuring long-lasting durability and corrosion-resistance. The motor is equipped with 1800ml of premium insulating mineral oil, enhancing cooling efficiency and extending its lifespan. It also ensures long-duration continuous operation while reducing noise levels, making the equipment qui-



## Anti-clogging dual-seal flexible inlet

Technology patents: 202421831176.7 202430481411.1

AIZL's innovative water inlet structure ensures the inlet channel remains at a This reduces operational vibrations, constant  $\phi$ 110mm, preventing blockages caused by narrowing of the channel. The matchings rubber corrugated pipe and inlet pipe allow for faster, more flexible, and reliable connections.

### Threaded Inlet

Connected via external threaded joints for a secure seal, eliminating the risk of detachment and water leakage common with traditional internal insert connections. This structure is used on all three sides of the collection tank.

### Anti-floating fixed base

Concave-designed fixed base, allowing the equipment to be securely fastened to the base plate with fastening screws. lowers noise levels, and prevents the equipment from floating.

#### Flexible connection lownoises check valve

Built-in swing flap check valve, connected to the φ50mm pressure drainage pipe via a custom silicone pressure tube. This effectively reduces vibration in the pressure drainage pipe, is easy to install, and ensures reliable sealing.

## Multiple Sealing Structure Design

The motor is equipped with a separate sealing oil chamber and injected with high-grade mineral oil, allowing operating components are immersed in the oil, and the sealing effect is better! At the same time, the motor adopts double-end mechanical seals and lip shaft seals to make the sealing effect better. The sealing structure with multiple layers of protection prevents leakage and is safer and more stable.

## Large-Diameter Vortex Pump

Utilizing Large-Diameter Vortex pumps facilitates the efficient discharge of various impurities in bathrooms, mitigating blockage issues.

## Intelligent Sewage Lifting Units -External single vortex pump

● AIZL-750W



#### CHARACTERISTIC

- Oil-cooled 304 stainless steel motor, offering low operational noise and an extended service life.
- S1 Duty External Large-Diameter Vortex Pump, preventing block ages and ensuring stable operation.
- Magnetic pneumatic valve, closed when not in use to prevent odor.
- Intelligent AIZL-ICM controller IoT Function, remote control, debugging and push notifications.
- Utilizes a more advanced, precise, and stable electronic liquid level pressure sensor.
- Double-end mechanical seal and a 150ml oil chamber seal for enhanced sealing integrity.
- Fully enclosed HDPE container with 21- liter capacity.
- Anti-clogging dual-seal flexible inlet connection technology
- Flexibly-Connected Silent Swing Flap Check Valve
- IP68 protection grade, fully immersed (except for the controller).
- Inlets: 3×Ф110, 5×Ф50
- Pressurized Outlet:1×φ50mm

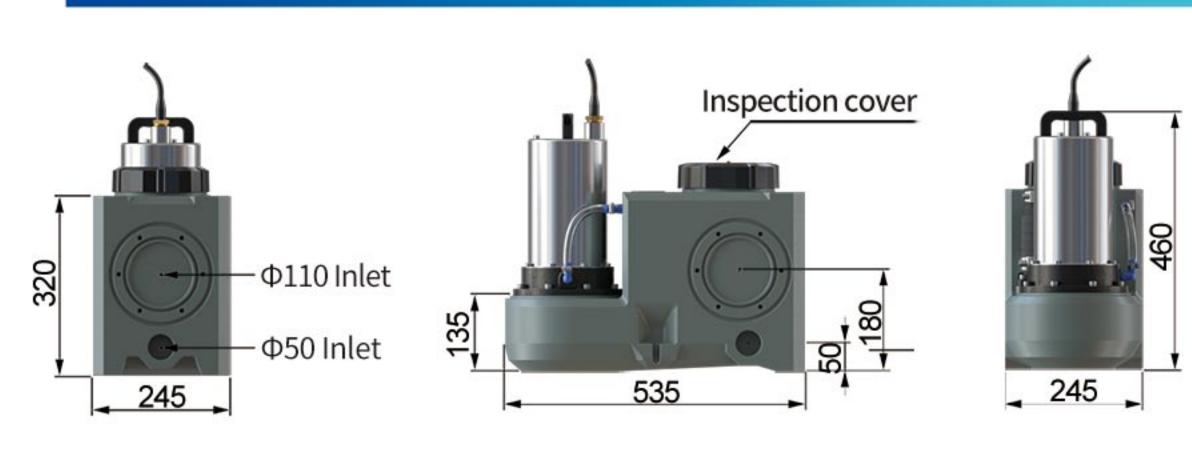
#### APPLICATION

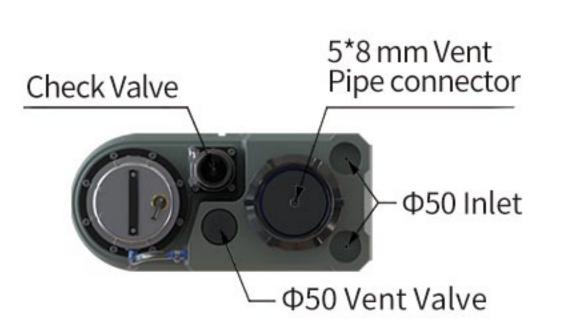
-Suitable for sewage discharge from private basement bathrooms and kitchens in villas and large apartment complexes.

#### TECHNICAL PARAMETERS

Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids Handling(mm)	Weigh (Kg)
AIZL -750W	11009	0.75	220	6	2800	18	11.5	40	27

## **OVERALL DIMENSIONS**

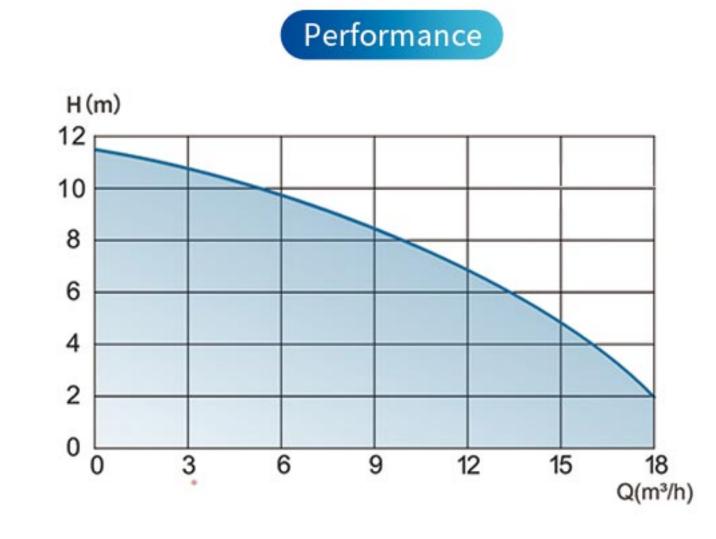






## SCOPE OF SUPPLY

- PE water collection tank, integrated Check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors, fasteners and air pressure sensing tube.
- AIZL-ICM intelligent controller.





## Intelligent Sewage Lifting Units -External single vortex pump

## • AIZL-750W Pro



#### CHARACTERISTIC

- Oil-cooled 304 stainless steel motor, offering low operational noise and an extended service life.
- S1 Duty External Large-Diameter Vortex Pump, preventing block ages and ensuring stable operation.
- Magnetic pneumatic valve, closed when not in use to prevent odor.
- Intelligent AIZL-ICM controller IoT Function, remote control, debugging, and push notifications.
- Utilizes a more advanced, precise, and stable electronic liquid level pressure sensor.
- Double-end mechanical seal and a 150ml oil chamber seal for enhanced sealing integrity.
- Fully enclosed HDPE container with 21- liter capacity.
- Anti-clogging dual-seal flexible inlet connection technology.
- Flexibly-Connected Silent Swing Flap Check Valve.
- IP68 protection grade, fully immersed (except for the controller).
- Inlets:3×Ф110,5×Ф50
- Pressurized Outlet:1×φ50mm

#### **APPLICATION**

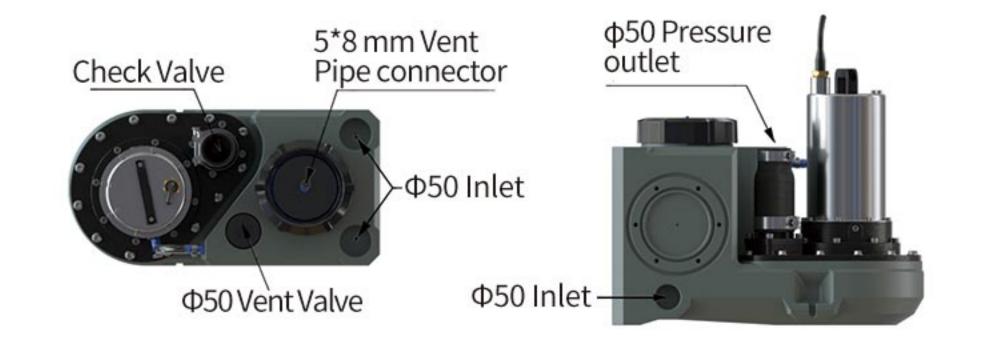
-Suitable for sewage discharge from private basement bathrooms and kitchens in villas and large apartment complexes.

#### TECHNICAL PARAMETERS

/ OVERALL DIMENSIONS

Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids Handling(mm)	Weight(Kg)
AIZL- 750W Pro	11027	0.75	220	6	2800	22.5	11.5	40	36

# Φ110 Inlet Φ50 Inlet 250



## SCOPE OF SUPPLY

- PE water collection tank, integrated Check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors, fasteners and air pressure sensing tube.
- AIZI IOM intelligent controller
- AIZL-ICM intelligent controller.





# SEWAGE LIFTING UNITS

**VORTEX INTELLIGENT PUMP** 

## INTELLIGENT VORTEX SEWAGE LIFTING UNIT

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— AIZL-1100 / AIZL-1500

## Multifunctional Air Pressure Detection Device

Featuring a slip-on flange design that also serves as an inspection cover. It includes a built-in 75mm large-diameter anti-clogging pressure-sensing sleeve, ensuring more stable and accurate liquid level detection while preventing sensor failures.



### **Multi-Directional Water Inlets**

Each side (left, right, and rear) of the collection tank is equipped with one dedicated  $\Phi$ 110mm inlet and one  $\phi$ 50mm threaded inlet. There is one dedicated  $\phi$ 110mm inlet and two  $\phi$ 50mm threaded inlets on the top. The  $\phi$ 110mm dedicated inlet (Patent numbers: 202421831176.7, 202430481411.1)

## Stylish Fully Sealed HDPE Container

Integrating principles of fluid mechanics, acoustics, and contemporary aesthetics, this container offers seamless sewage management with its discreet, elegant design. Manufactured through single-piece plastic processing and molding, it guarantees complete sealing, zero odor emission, and an extended service life of up to 50 years.



## Fully automatic running water backwashing system

This system utilizes running water for cleaning and automatically initiates backwashing at regular intervals. When activated, running water enters the backwashing device, and the cleaning head automatically cleans the inner walls of the water tank in a 360° motion, ensuring thorough cleaning without any blind spots and preserving its pristine condition even after extended usage.





1100 series: Paired with Zhiliu deluxe AIZL-ICN series intelligent controller



AIZL-ICN

1500 series: Paired with Zhiliu deluxe AIZL-ICN series intelligent controller

## S1 Duty 304 stainless steel oil-cooled motor

The motor housing is made of 304 stainless steel, ensuring long-lasting durability and corrosion-resistance. The motor is filled with 2000ml of food-grade, high-quality insulating mineral oil, which helps accelerate cooling, prolongs the motor's lifespan, and ensures it can operate continuously for extended periods. Additionally, it reduces motor noise, making the equipment quieter.

#### Low-Noise Check Valve

The valve body is made of high-strength, corrosion-resistant material and features a swing-type structure with fast and safe sealing performance, ensuring a long service life.

The matching flexible, dedicated sealing pressure joint effectively reduces pipe vibration, operates more quietly, and provides better sealing. The drainage pin can be manually lifted to raise the valve core, allowing for the drainage pipe to be emptied when needed.



## Multiple sealing structure design

The motor is equipped with a separate sealed oil chamber, filled with 150ml of food-grade mineral oil, allowing the operating components to be immersed in oil for lubrication and cooling. The motor features a double-end mechanical seal and a lip-type shaft seal for enhanced sealing performance, ensuring longer service life and safer, more stable operation.



Utilizing 50mm large diameter vortex pumps facilitates the efficient discharge of various impurities in bathrooms, mitigating blockage issues.









#### CHARACTERISTIC

- S1 standard motor, which can work continuously.
- External 50mm large-channel vortex pump to prevent blockage.
- Oil cooled 304 stainless steel motor which have low operation noise and longer service life.
- Intelligent controller -IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 60 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve
- Φ75 large diameter liquid level detection sensor to avoid detection failure.
- 360° rotary high-pressure backwashing system (optional).
- Water seepage monitoring alarm and tap water shutoff linkage system (optional).
- Operation temperature max 60°C, it can reach 90°C in a short time.
- Inlets: 4×Φ110, 5×Φ50 Vent: φ50

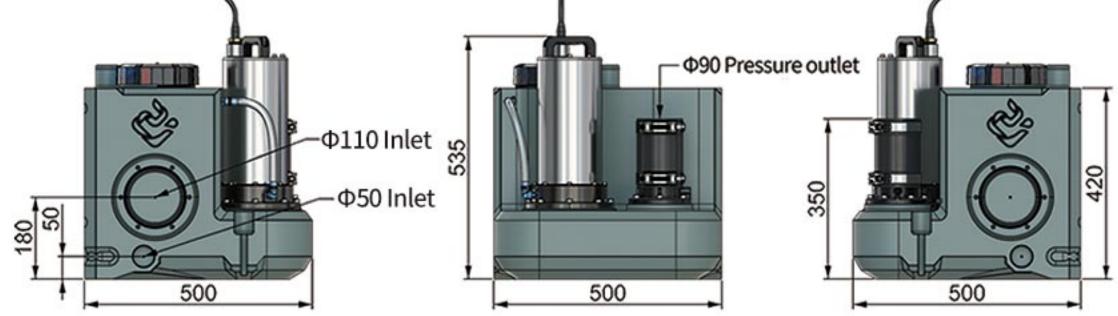
## APPLICATION

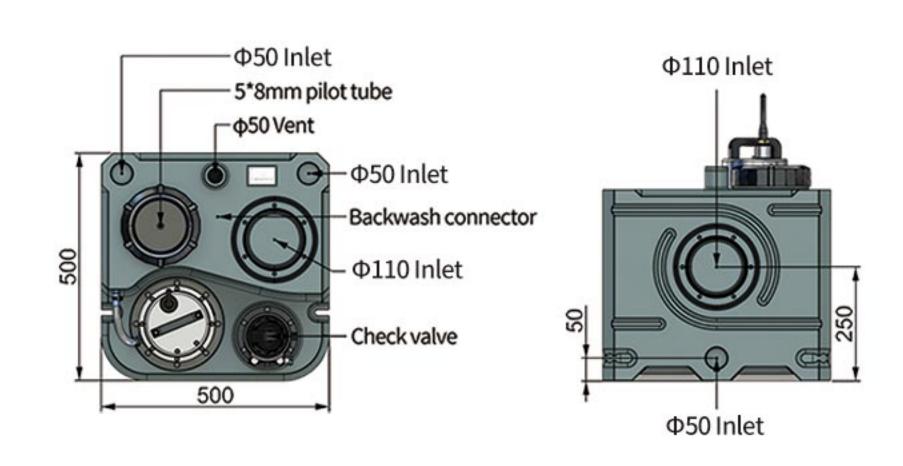
- Sewage discharge from private basement's bathrooms and kitchens in villas and large flat layer.
- Sewage lifting and discharge for restrooms and operational areas in new and renovated small-scale commercial facilities.

## TECHNICAL PARAMETERS

Туре	NO.	P(KW)	U(V)	I(A)	rpm	Qmax (m³/h)	H(m)	Solids Handling (mm)	Weight(Kg)			
AIZL - 1100W	11031	1.1	220	7.9	2800	27	13	50	41			
AIZL - 1500W	11025	1.5	220	9.5	2800	33	14	50	43.5			
AIZL - 1100D	11047	1.1	380	2.2	2800	27	13	50	41			
AIZL - 1500D	11049	1.5	380	3	2800	33	14	50	43.5			
AIZL-FX	13001	Special back	kwash kit fo	r sewage	lifting units, ir	ncluding spec	ial backwash	head, special control va	alve and connectors			
AIZL-SS	13002	Water seep	age detecti	ion kit, inc	luding 3.5m	long electro	de wire and n	nonitoring probe				
AIZL-LS	13003	Water leak	Water leakage detection kit, including 3.5m long electrode wire,monitoring probe and special control valve									

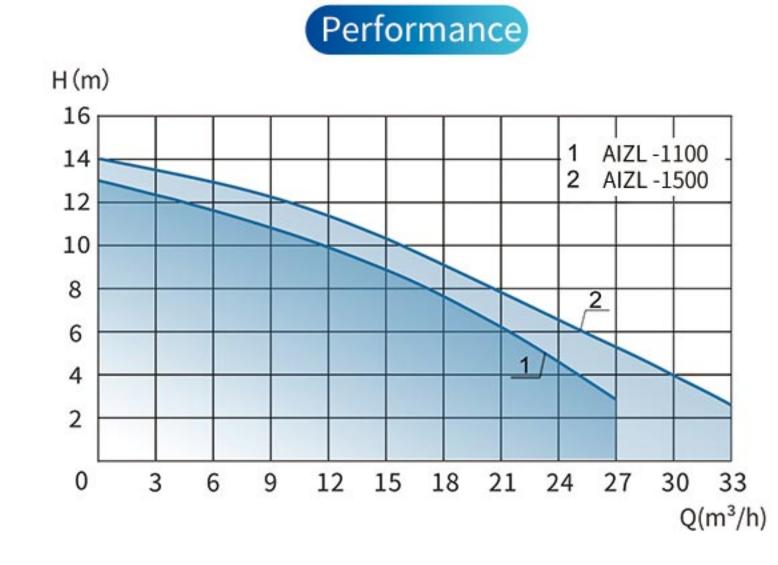
## / OVERALL DIMENSIONS − Ф90 Pressure outlet 11





## SCOPE OF SUPPLY

- PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5mcable, flexible inlet connectors and fasteners, pressurized outlet pipe kit, vents flexible connectors and fasteners and air pres sure sensing tube.
- Intelligent controller.







## Intelligent Sewage Lifting Units -External single vortex pump ○ ● AIZL-1100 Pro AIZL-1500 Pro



#### CHARACTERISTIC

- S1 standard motor, which can work continuously.
- External 50mm large-diameter vortex pump to prevent blockage.
- Oil cooled 304 stainless steel motor which have low operation noise and longer service life.
- Intelligent controller IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 60 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve.
- Φ75 large channel liquid level detection sensor to avoid detection failure.
- 360 ° rotary high-pressure backwashing system (optional).
- Water seepage monitoring alarm and tap water shutoff linkage system (optional).
- Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 4×Ф110,5×Ф50
- Vent: φ50

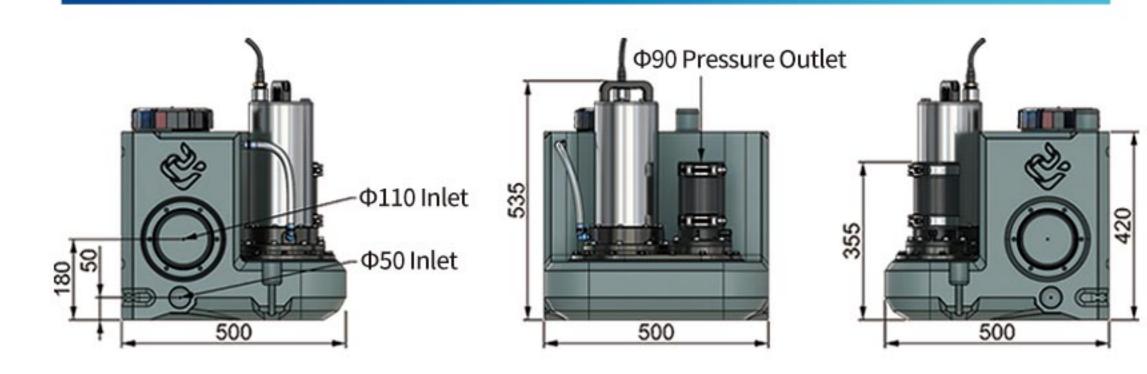
#### APPLICATION

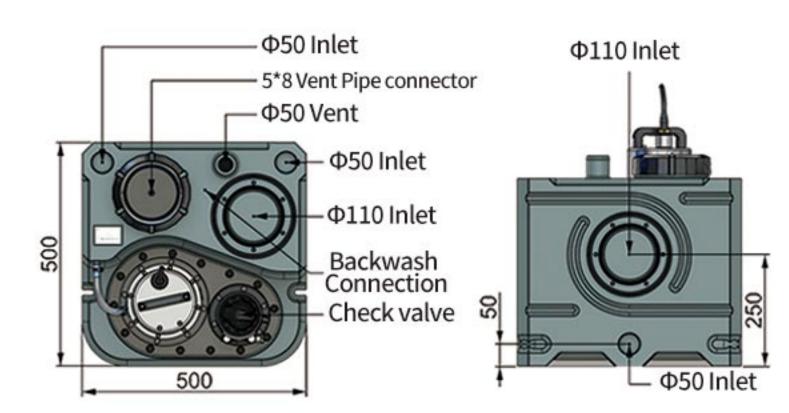
- Sewage discharge from private basement's bathrooms and kitchens in villas and large flat layer.
- Sewage lifting and discharge for restrooms and operational areas in new and renovated small-scale commercial facilities..

#### TECHNICAL PARAMETERS

Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids Handling(mm)	Weight(Kg)
AIZL - 1100W Pro	11029	1.1	220	7.9	2800	33	13	50	49
AIZL - 1500W Pro	11033	1.5	220	9.5	2800	36	14.5	50	51.5
AIZL - 1100D Pro	11051	1.1	380	2.2	2800	33	13	50	49
AIZL - 1500D Pro	11053	1.5	380	3	2800	36	14.5	50	51.5
AIZL-FX	13001	Special bac	kwash kit for	sewage liftir	ng units, includ	ling special bad	ckwash head	, special control valve &	connectors
AIZL-SS	13002	Water seep	age detectio	n kit, includ	ling 3.5m long	electrode wire	e and monito	oring probe	
AIZL-LS	13003	Water leak	age detection	n kit, includi	ng 3.5m long	electrode wire	,monitoring	probe and special cont	trol valve

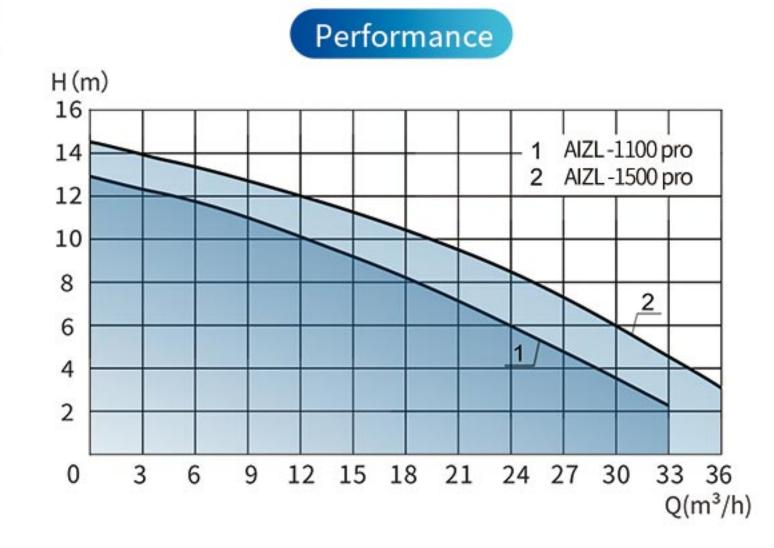
## / OVERALL DIMENSIONS





#### SCOPE OF SUPPLY

- PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5M cable, flexible inlet connectors and fasteners, pressurized outlet pipe kit, vents flexible connectors and fasteners and air pressure sensing tube.
- Intelligent controller





## Intelligent Sewage Lifting Units -External double vortex pump O AIZL-750W Double AIZL-1100W Double



#### CHARACTERISTIC

- S1 Duty motor, which can work continuously.
- 2 sets of external large-diameter vortex pumps to prevent blockage.
- Oil cooled 304 stainless steel motor which has low operation noise and longer service life.
- Intelligent AIZL-ICM controller IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 105 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve.
- Ф75 large diameter liquid level detection sensor to avoid detection failure.
- 360 ° rotary high-pressure backwashing system (optional).
- Water seepage monitoring alarm and tap water shutoff linkage system (optional).
- Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 3 ×Φ110 , 3 ×φ50 , 1 ×Φ50/110 Vent: Φ50

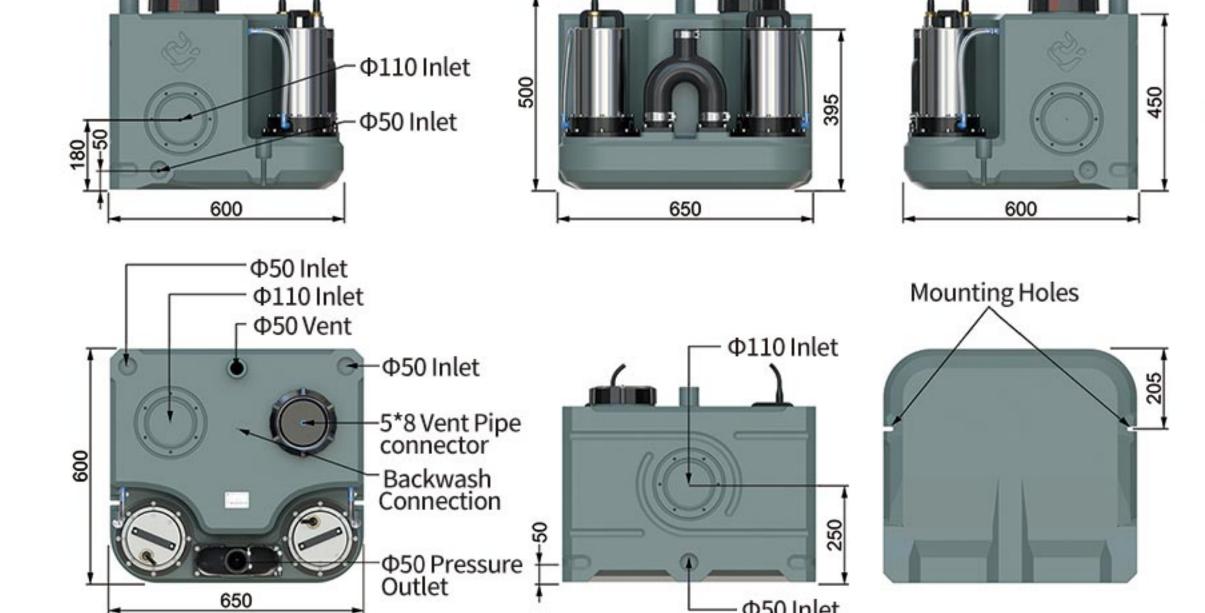
#### APPLICATION

- Sewage lifting and discharge from private basement's bathrooms and kitchens in villas and large flat layer.
- Sewage lifting and discharge for restrooms and operational areas in new and renovated small-scale commercial facilities.

### TECHNICAL PARAMETERS

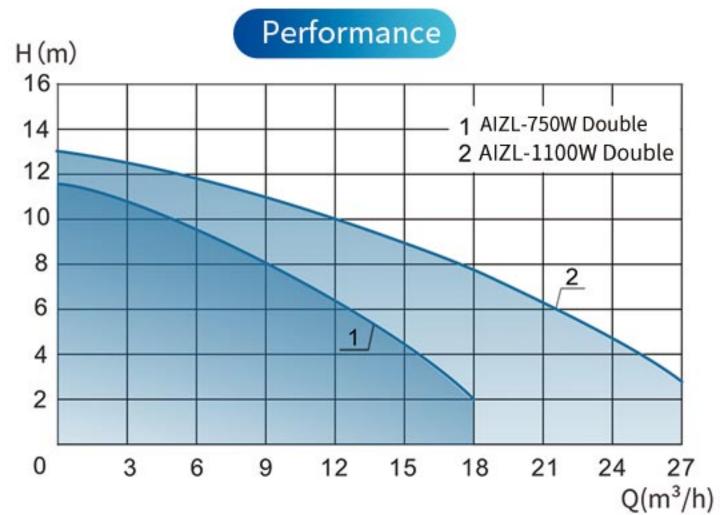
Туре	NO.	P(KW)	U(V)	I(A)	rpm	Qmax (m³/h)	H(m)	Solids Handling (mm)	Weight(Kg)
AIZL- 750W Double	11020	0.75	220	6	2800	18	11.5	40	56.5
AIZL- 1100W Double	11022	1.1	220	7.9	2800	27	13	40	62.5
AIZL-FX	13001	Special back	wash kit for	sewage lift	ting units, inc	cluding special	backwash l	head, special control v	alve &connector
AIZL-SS	13002 \	Nater seepa	ige detectio	n kit, inclu	ding 3.5m l	ong electrode	wire and m	onitoring probe	
AIZL-LS	13003	Water leaka	ge detection	kit, includ	ding 3.5m lo	ng electrode v	vire,monito	ring probe and specia	al control valve

## / OVERALL DIMENSIONS



### SCOPE OF SUPPLY

- PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors and fasteners, Y-type pressurized outlet pipe, flexible vents connectors and fasteners and air pressure sensing tube.
- Intelligent controller.



## Intelligent Sewage Lifting Units -External double vortex pump

## ● AIZL-1500 Double



#### CHARACTERISTIC

- S1 Duty motor, which can work continuously.
- 2 sets external large-channel vortex pump to prevent blockage.
- Oil cooled 304 stainless steel motor which have low operation noise and longer service life.
- Intelligent controller, which can realize networking, remote control, debugging and alarming.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 210 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve...
- Φ75 large channel liquid level detection sensor to avoid detection failure.
- 360 ° rotary high-pressure backwashing system (optional).
- Water seepage monitoring alarm and tap water closing linkage system (optional).
- Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 3 ×Φ110 , 3 ×Φ50 , 1 ×Φ50/110
  Vent: Φ75

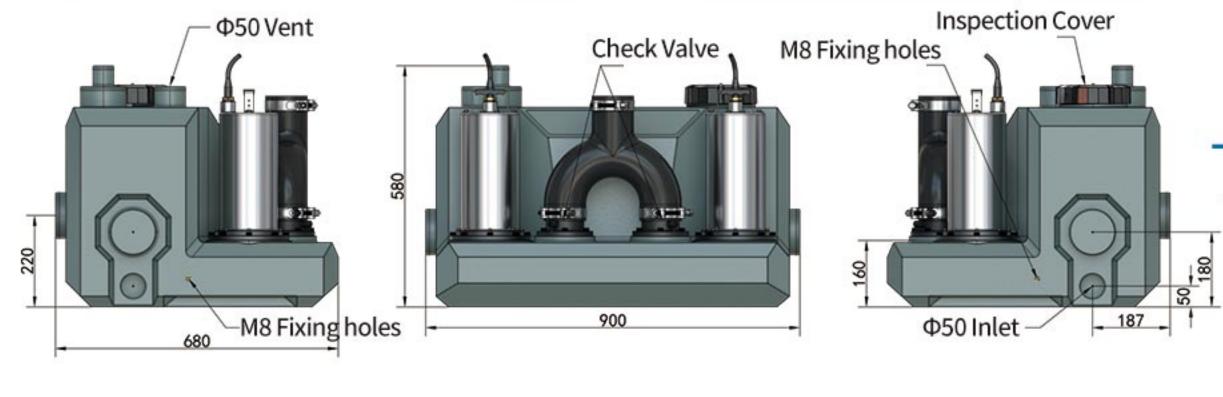
#### **APPLICATION**

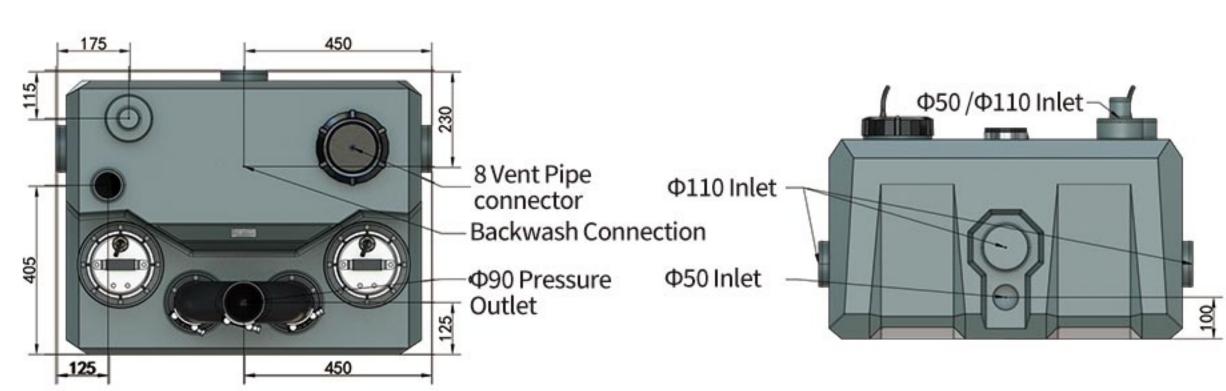
- Sewage lifting and discharge from private basement's bathrooms and kitchens in villas and large flat layer.
- Sewage lifting and discharge in toilets and operation rooms of newly built and renovated medium and large commercial places.

### TECHNICAL PARAMETERS

Туре	NO.	P(Kw)	U(V)	I(A)	rpm	Qmax (m³/h)	H(m)	Solids Handling (mm)	Weight(Kg)
AIZL - 1500W Double	11012	1.5	220	9.5	2800	30	13	50	99
AIZL - 1500D Double	11014	1.5	380	3	2800	30	13	50	99
AIZL - FX	13001	Special back	wash kit fo	r sewage lit	fting units, inc	cluding special	backwash	head, special control va	alve & connectors
AIZL - SS	13002	Water seepa	age detecti	on kit, inclu	uding 3.5m lo	ong electrode	wire and m	nonitoring probe	
AIZL - LS	13003	Water leaka	ge detectio	n kit, inclu	ding 3.5m lo	ng electrode w	rire, monito	oring probe and specia	l control valve

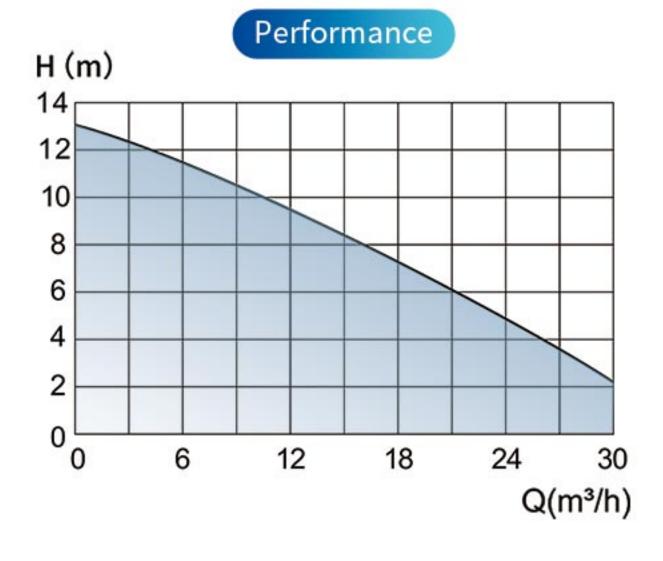
## OVERALL DIMENSIONS





### SCOPE OF SUPPLY

PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors and fasteners, Y-type pressurized outlet pipe, flexible vents connectors and fasteners and air pressure sensing tube.
 Intelligent controller.



Intelligent Sewage Lifting Units -External single smashing cutter pump





#### CHARACTERISTIC

- S1 Duty motor, which can work continuously.
- External smashing cutter pump to prevent blockage.
- Oil cooled 304 stainless steel motor which has low operation noise and longer service life.
- Magnetic pneumatic valve, closed when not in use to prevent anti- odor.
- Intelligent AIZL-ICM controller- IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 21 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve.
- Φ75 large diameter liquid level detection sensor to avoid detection failure.
- Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 3 ×Ф110, 5 ×Ф50
- Vent: Ф50

#### APPLICATION

- Sewage discharge from private basement's bathrooms and kitchens in villas and large flat layer.

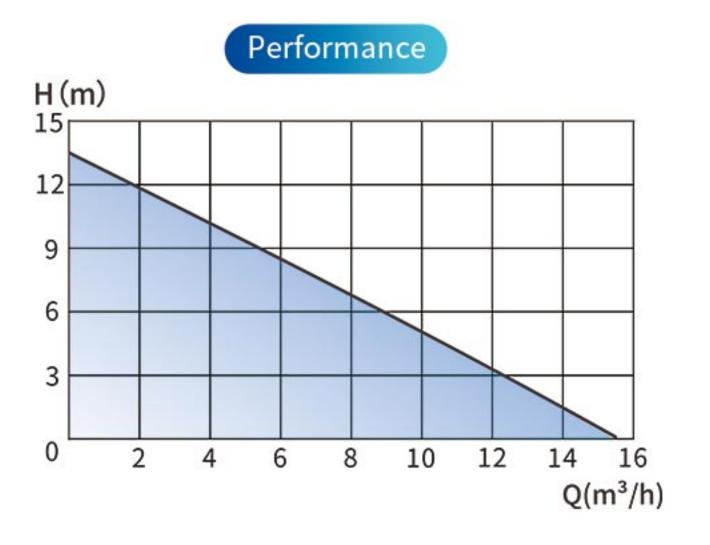
## **TECHNICAL PARAMETERS**

Туре	NO.	P(Kw)	U(V)	I(A)	rpm	Qmax (m³/h)	H(m)	Weight(Kg)
AIZL-SC750W	12003	0.75	220	6	2800	15.5	13.5	32



## SCOPE OF SUPPLY

- PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors and fasteners, Y-type pressurized outlet pipe, flexible vents connectors and fasteners and air pressure sensing tube.
- Intelligent controller.





Intelligent Sewage Lifting Units -External double smashing cutter pump

◆ AIZL-SC750W Double AIZL-SC1100W Double

#### CHARACTERISTIC

- S1 Duty motor, which can work continuously.
- External smashing cutter pump to prevent blockage.
- Oil cooled 304 stainless steel motor which has low operation noise and longer service life.
- Magnetic pneumatic valve, closed when not in use to prevent anti-odor.
- Intelligent controller IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 100 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve.
- Φ75 large diameter liquid level detection sensor to avoid detection failure.
- Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 4×Ф110,5×Ф50
- Vent: Ф50

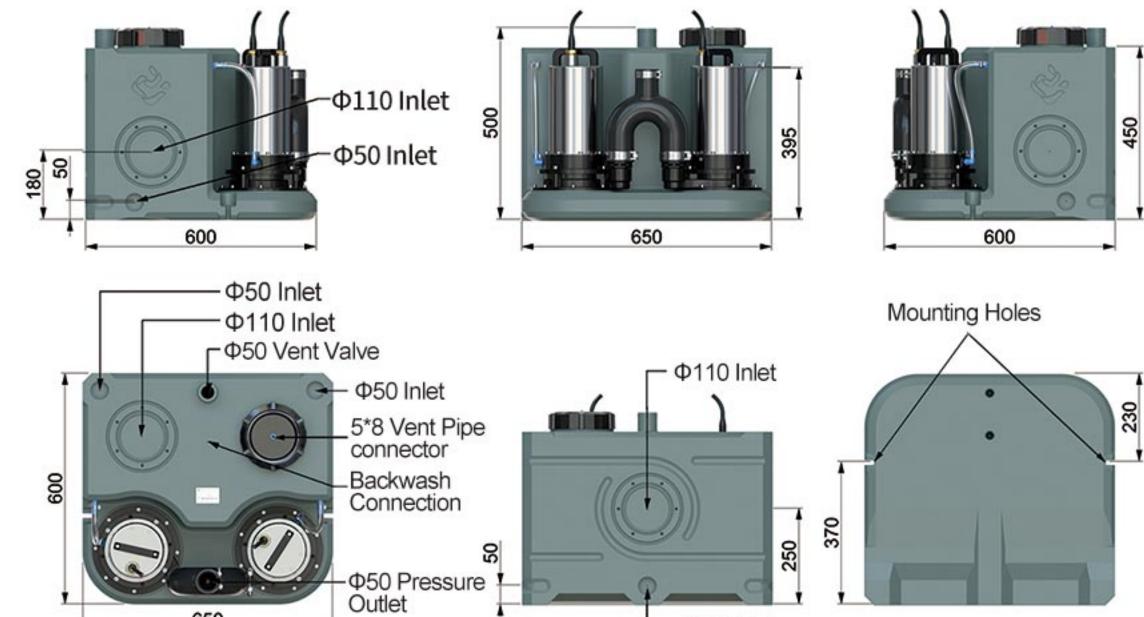
#### APPLICATION

- Sewage discharge from private basement's bathrooms and kitchens in villas and large flat layer.
- Sewage lifting and discharge for restrooms and operational areas in new and renovated small-scale commercial facilities.

#### TECHNICAL PARAMETERS

Туре	NO.	P(Kw)	U(V)	I(A)	rpm	Qmax (m³/h)	H(m)	Weight(Kg)
AIZL-SC750W Double	12020	0.75	220	6	2800	15.5	13.5	64
AIZL-SC1100W Double	12022	1.1	220	7.9	2800	18	17.5	70.5
AIZL-FX	13001	Special backwasl	h kit for sewage	e lifting units, ir	ncluding specia	al backwash hea	d, special cont	rol valve & connectors
AIZL-SS	13002	Water seepage d	etection kit, inc	luding 3.5m lo	ng electrode w	rire and monitorir	ng probe	
AIZL-LS	13003	Water leakage de	etection kit, inclu	uding 3.5m lor	ng electrode wi	re, monitoring pr	obe and speci	al control valve

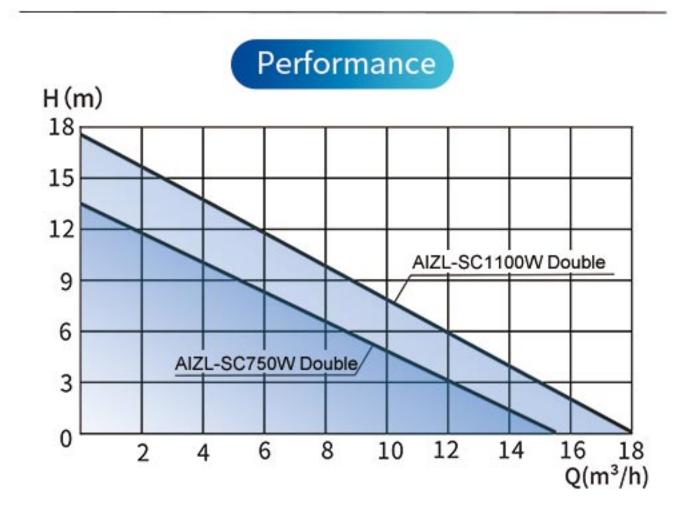
# / OVERALL DIMENSIONS



## SCOPE OF SUPPLY

 PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors and fasteners, Y-type pressurized outlet pipe, flexible vents connectors and fasteners and air pressure sensing tube.

- Intelligent controller.





## Intelligent Sewage Lifting Units - External single smashing cutter pump

## • AIZL-SC1100 SC1500

#### CHARACTERISTIC

- S1 Duty motor, which can work continuously.
  External smashing cutter pump to prevent blockage.
- Oil cooled 304 stainless steel motor which has low operation noise and longer service life.
- Magnetic pneumatic valve, closed when not in use to prevent anti-odor.
- Intelligent controller, IoT Function, remote control, debugging, and push notifications.
- HD touch screen makes display and control more convenient.
- Precise electronic pressure sensor, which can monitor accurate liquid level and avoid winding.
- Adopt double-end mechanical seal and 150ml oil chamber seal.
- Fully enclosed HDPE container with 65 liters capacity.
- The protection grade is IP68-fully immersed (except for the controller).
- Flexibly-Connected Silent Swing Flap Check Valve.
- Φ75 large diameter liquid level detection sensor to avoid detection failure.
  Operation temperature max 60 °C, it can reach 90 °C in a short time.
- Inlets: 4 ×Ф110, 5 ×Ф50 Vent: Ф50

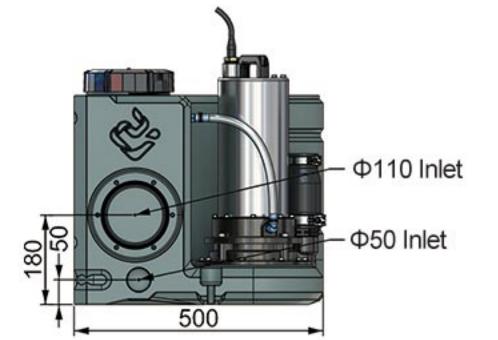
#### **APPLICATION**

 Sewage discharge from private basement' bathrooms and kitchens in villas and large flat layer.

### TECHNICAL PARAMETERS

Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Weight(Kg)
AIZL-SC1100W	12023	1.1Kw	220	7.9	2800	18	17.5	46
AIZL-SC1500W	12021	1.5Kw	220	9.5	2800	19.5	19.5	46.5
AIZL-SC1100D	12027	1.1Kw	380	2.2	2800	18	17.5	46
AIZL-SC1500D	12029	1.5Kw	380	3	2800	19.5	19.5	46.5

## / OVERALL DIMENSIONS



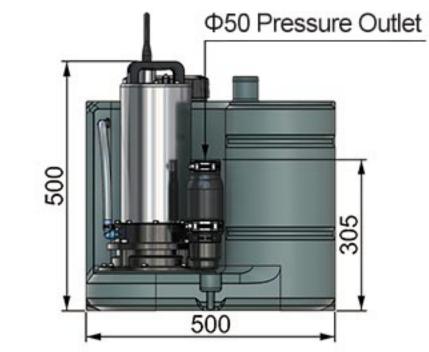
-Ф50 Inlet

-5\*8 Vent Pipe connector

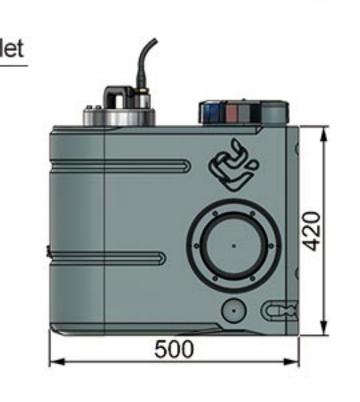
Backwash Connection

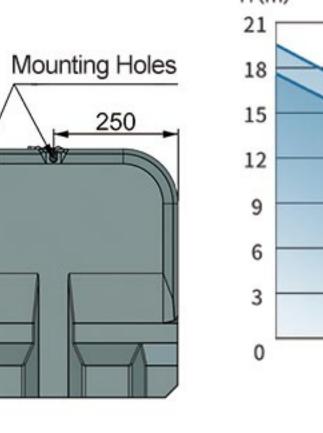
Φ50 Inlet

-Ф50 Vent



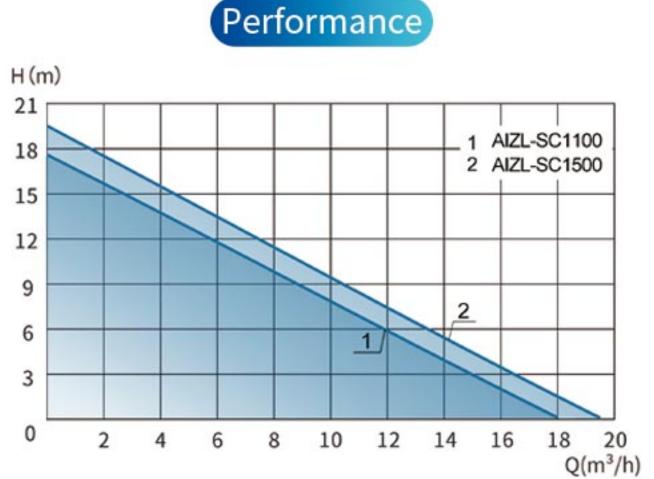
Φ110 Inlet





 PE water collection tank, integrated check valve, stainless steel oil-cooled water pump with 3.5m cable, flexible inlet connectors and fasteners, Y-type pressurized outlet pipe, flexible vents connectors and fasteners and air pressure sensing tube.
 intelligent controller.

SCOPE OF SUPPLY



## AIZL SC series cutting system

External Smashing Cutter Pump

304 stainless steel motor

**IP68 Protection Grade** 

(IP68)

Both the cutter head and cutter plate are made of high-hardness stainless steel, capable of cutting debris in sewage over 400,000 times per minute, effortlessly shredding solids.

SEWAGELIFTINGUNITS

extremely low starting water level, preventing debris from accumulating inside the tank.

AIZL-SC adopts an external cutting pump with a powerful cutting and grinding system. It has the industry-leading S1 Duty continu-

ous-operation oil-cooled 304 stainless steel motor and unique technologies such as internal backwashing with high-pressure running

water, water seepage and leakage monitoring, and WIFI cloud connectivity. AIZL-SC runs with extremely low noise, because IP68 pro-

tection grade it can operate completely submerged in water. The tank bottom is designed with a flow guide slope, combined with an

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**External Smashing Cutter Pump** 

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# UNDERGROUND SEWAGE LIFTING

## Underground sewage lifting units

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#### CHARACTERISTIC

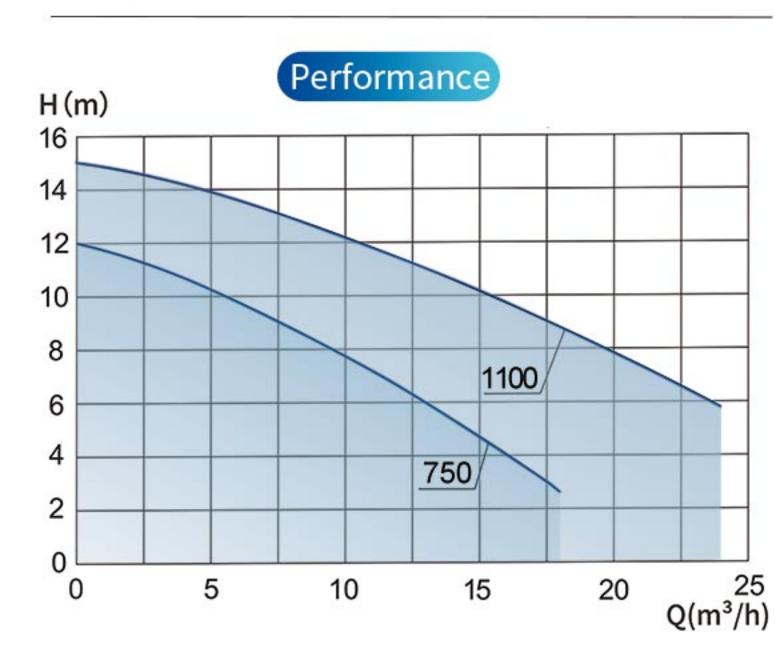
- Built-in two sets of oil-immersed stainless steel submersible pumps, offering quiet operation, stability, and long service life.
- Hidden underground design for a stylish and aesthetic installation (can also be installed on the ground).
- Pre-installed with a 304 stainless steel floor drain, which serves both as a top inlet and for maintenance purposes.
- The floor drain cover can be placed either side up, and when reversed, allows for DIY floor tile customization.
- Equipped with a magnetic check valve-based anti-odor drain core, completely eliminating backflow odors.
- Cylindrical casing with a futuristic appearance that also effectively resists the pressure from underground installation.
- Intelligent AIZL-ICM controller, supporting networking, remote control, debugging, and alarm notifications.
- Utilizes an electronic pressure-sensitive liquid level sensor to ensure precise control, stability, and anti-clogging functionality.
- Anti-floating base design at the bottom.
- -Pressure outlet: φ50mm
- -Inlets: 3×φ110mm, 3×φ50mm、1xTop floor drain entering water
- -Vent: φ50mm
- -Wiring Hole: φ50mm

### TECHNICAL PARAMETERS

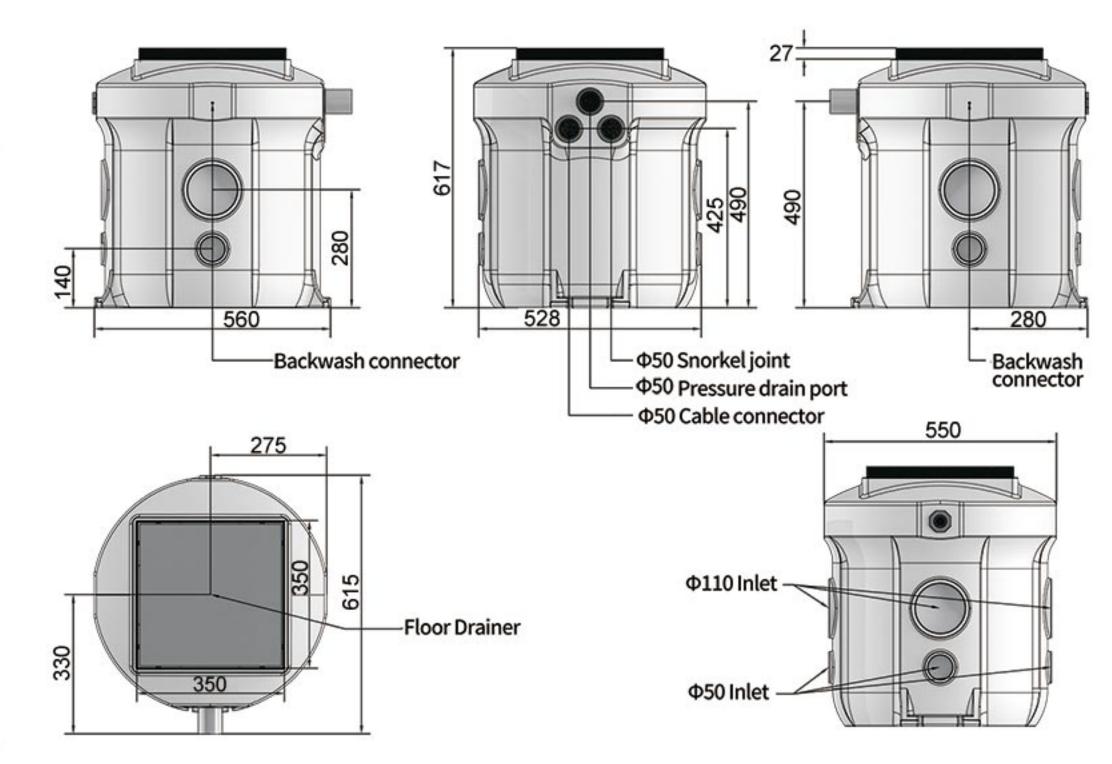
Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids handing (mm)	Weight (Kg)
AIZL-HB750	11090	0.75	220	3.1	2850	18	12	25	63.5
AIZL-HB1100	11094	1.1	220	5.8	2850	24	15	25	68

## / APPLICATION

- Rainwater drainage and lifting in the sunken courtyard and garden of a villa.
- Sewage lifting and discharge for kitchen, laundry room, and spa areas.



## / OVERALL DIMENSIONS



# STAINLESS STEEL SEWAGE PUMP

Stainless steel rainwater pump

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#### CHARACTERISTIC

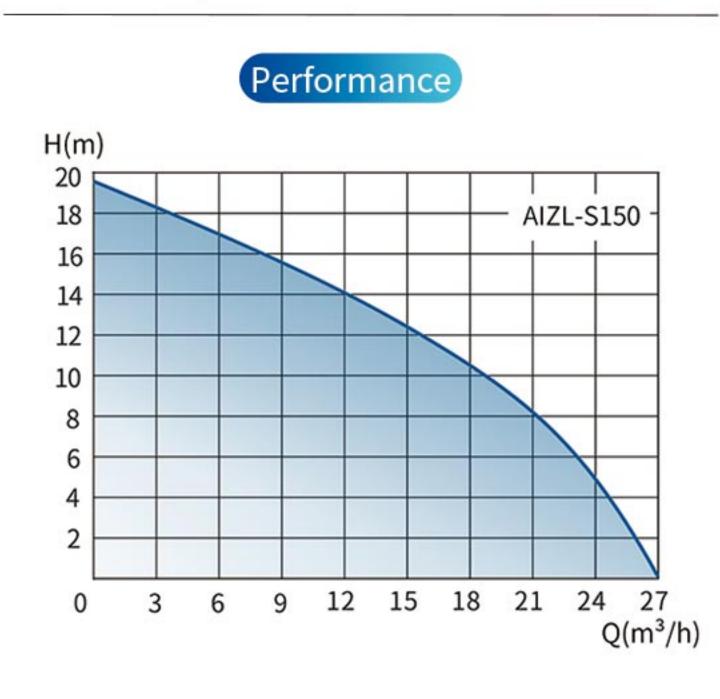
- The pump body, motor housing, motor shaft, and oil cylinder are all made of 304 stainless steel.
- Adopting oil cooled motor.
- Protection grade IP68, maximum diving depth 5m.
- Solids handling: 30mm.
- -Outlet: 11/2".
- Adopting a multiple sealing structure consisting of double end mechanical seals, oil chamber seals, and lip shaped shaft seals.
- Waterproof cable: 8m.
- S1 Duty motor(support continuous operation).
- Built-in winding thermal protection.

## TECHNICAL PARAMETERS

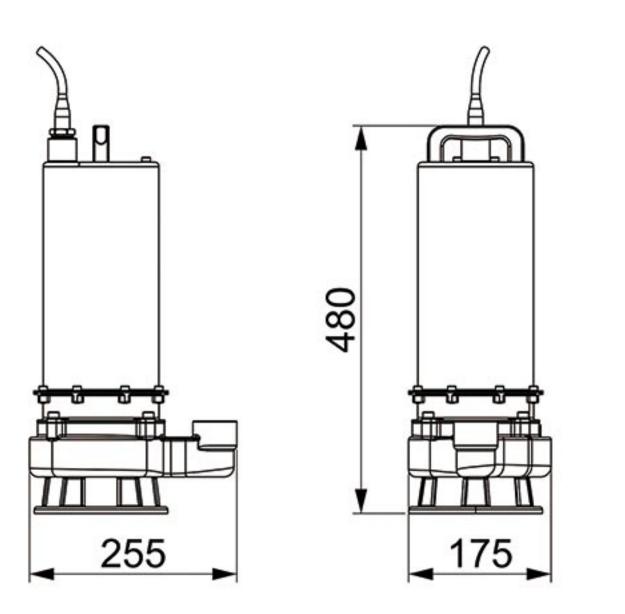
Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids Handling (mm)	Weight (Kg)
AIZL-S150	15024	1.5	220	9.5	2800	27	19.5	30	24
AIZL-S150D	15025	1.5	380	3.0	2800	27	19.5	30	24

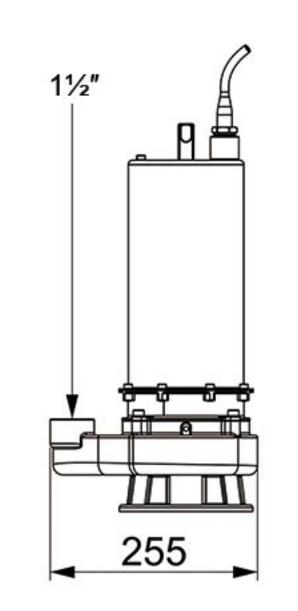
#### / APPLICATION

 Domestic sewage, wastewater, rainwater and surface water discharge.



## / OVERALL DIMENSIONS





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## Portable Sewage Pump

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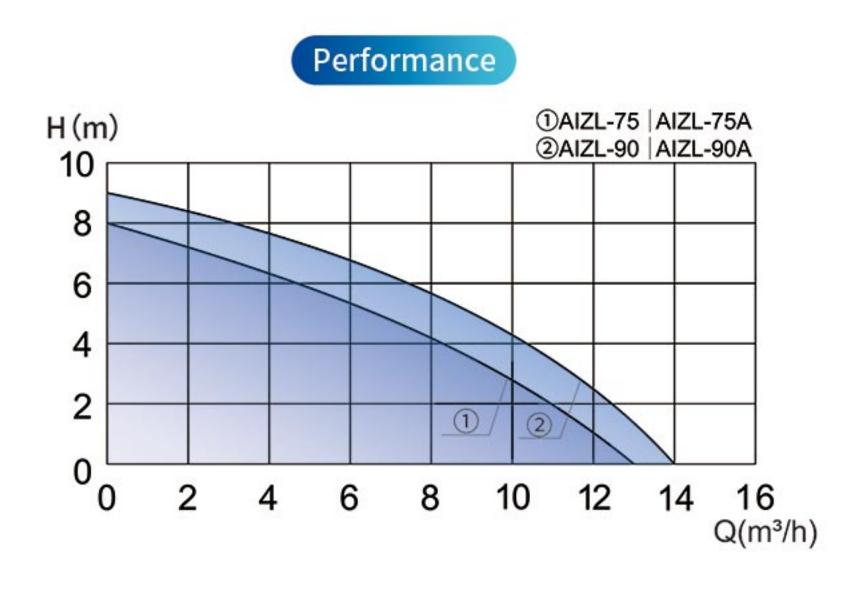
#### /FEATURES

- · Protection grade IP68, can be completely submerged in water
- · Built-in motor winding protection and overload protection
- · Mechanical seal and additional shaft seal
- · The pump, motor shell and motor shaft are all made of 304 stainless steel
- Cooling jacket single-phase motor
- · Solids handing: 35mm
- · 25mm hose or 11/2"AG thread connection
- Match with automatic float switch
- Working temperature max: 40°C
- Waterproof cable: 10m

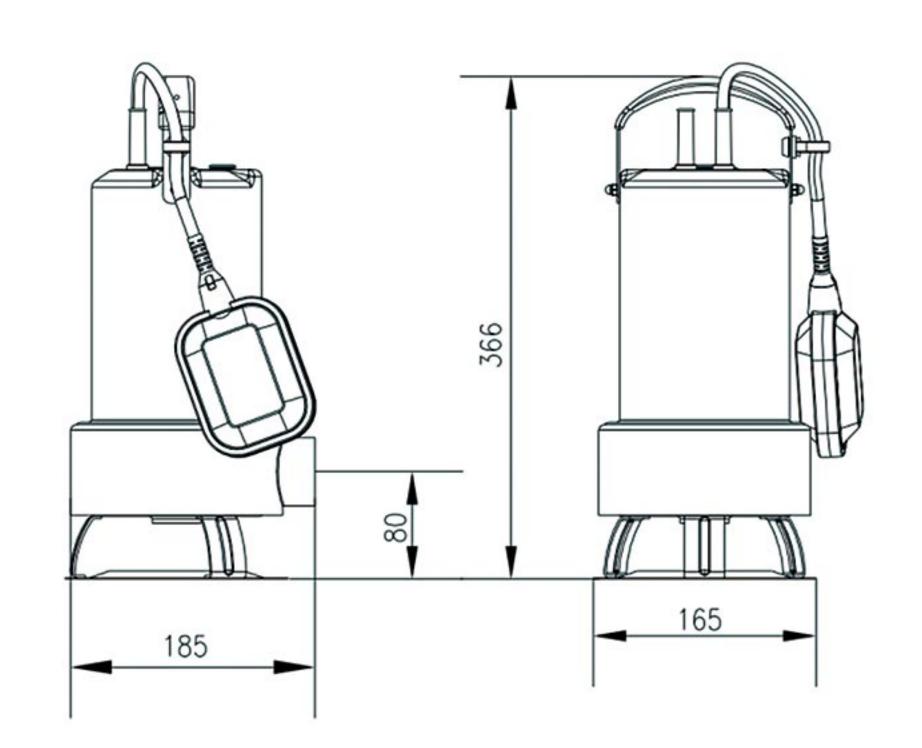
Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids handing (mm)	Weight(Kg)
AIZL -75	15001	0.75	220	6	2800	13	8	35	5.7
AIZL -75A	15002	0.75	220	6	2800	13	8	35	6
AIZL-90	15003	0.9	220	7.2	2800	14	9	35	6.5
AIZL -90A	15004	0.9	220	7.2	2800	14	9	35	6.8

## / APPLICATION

- · Drainage of waste water in pits, basement or wine cellar
- For emergency overflow protection and flood control, as a portable pump for emergency drainage
- Discharge domestic wastewater without feces, such as shower, washing machine, sink wastewater, etc.



## / OVERALL DIMENSIONS



# LOW SUCTION PUMP

## **Low Suction Pump**

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## /FEATURES

- Low-suction pump designed with corrosion-resistant and impact-resistant plastic and stainless steel.
- · Protection grade IP68, can be completely submerged in water.
- · Built-in motor winding protection and overload protection.
- · lip seal and additional shaft seal.
- · Suction up to about 2mm.
- Cooling jacket single-phase motor.
- · Solids handing: 5mm.
- · Support both automatic and manual mode pumping.
- Integrated check valve.
- Working temperature max: 40°C.
- Waterproof cable: 10m
- · 25mm hose or 11/2"AG thread connection

Туре	NO.	P(Kw)	U(V)	I(A)	N (rpm)	Qmax (m³/h)	Hmax (m)	Solids handing (mm)	Weight(Kg)
AIZL-25	15011	0.25	220	2	2800	6	6	5	3.9
AIZL-40	15012	0.40	220	3.2	2800	7	7	5	4.3

/ OVERALL DIMENSIONS

## / APPLICATION

- Discharge of clear water with particles less than 5mm, such as:
  basements, ponds and wells
- Portable water pump for emergency drainage

