

Undersink Sullage Chamber

Installation, operation, and maintenance manual

June 2023 v1.0





Revision History

VER	DATE	DESCRIPTION OF CHANGES	PREPARED	CHECKED	APPROVED
1.0	14.07.2023	ISSUED FOR USE	YF	JD	JD



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1 Safety

1.1 Warnings

These instructions must be carefully studied before installation is carried out.

The Unit must be connected to a standard 10 amp socket with earth. A residual Current Device should also be fitted with a tripping current >30mA.

The pump is fitted with a built-in thermal-overload protection to stop the pump if the internal temperature is too high. When the motor has cooled, the pump will start without warning.

Any repair work must be carried out by a suitably qualified electrician.

2 System Description

The Undersink Sullage Chamber (USC) is a compact and packaged pump unit specifically designed to efficiently pump wastewater to sewer drains in situations where gravity drainage is not possible. It finds applications in various settings including domestic and commercial environments, such as sinks, washing machines, and dishwashers.

The tank of the USC is equipped with a level controller that includes an audible alarm. This integrated alarm system ensures that any potential issues or overflows are promptly detected and signalled audibly. The tank itself is constructed from durable polyethylene material, providing a robust housing for the pump, float control mechanism, and the audible alarm.

Its compact design, coupled with the integrated level controller and audible alarm, makes it a convenient and efficient choice for a wide range of domestic and commercial applications.

3 Installation

To ensure proper installation of the Undersink Sullage Chamber, it is essential to engage a qualified tradesperson who complies with AS/NZS 3500 and relevant local building guidelines. Follow the steps below for a successful installation:

1. Maintain a minimum distance of 10 mm between the unit and adjacent walls to prevent the transmission of noise or vibration.
2. Position the unit in a way that allows sufficient space for easy lifting of the cover and removal of the pump for servicing, if needed. Alternatively, consider incorporating easy-break joints to the vent, inlet, and discharge connections, enabling the complete unit to be removed if required.
3. Connect the 50 mm vent to an existing vent or directly to the atmosphere.
4. Mount the controller in a readily accessible location. If space is limited, you can use double-sided adhesive tape to affix the controller to the lid of the unit.
5. Plug the unit into a nearby power outlet.
6. If the discharge pipework run is susceptible to airlocks or siphoning, it may be necessary to install an air admittance or relief valve at the highest point to prevent such issues.

4 Operations

4.1 Commissioning and starting up

Before using the unit for the first time, it is important to follow the below procedures:

1. Ensure all pipe connections are securely tightened.
2. Verify that the gate valve is open.
3. Switch off the unit at the power point and proceed to fill it with water.
4. Turn on the unit. The high-level fault alarm should be activated. If it fails to activate, check if the water level is above the high-level float switch.
5. The pump will start operating, and the high-level fault alarm will deactivate once the water level in the chamber drops below the high-level float switch.
6. Verify the correct functioning of the pump float switch.
 - a. Confirm that the pump float switch activates the pump before the high-level alarm is triggered.
 - b. Ensure that the pump float switch deactivates the pump before the water level falls below 100 mm to prevent the pump from operating without water ("running dry").

NOTE: You can gently move the pump float switch by hand to verify its proper operation.

7. Adjust the float switches if necessary to ensure accurate and reliable performance.

4.2 Troubleshooting

FAULT	CAUSE	REMEDY
Pump does not start.	a) No electricity supply.	Connect the electricity.
	b) Pump switched off by level switch.	Adjust/replace/clean the pump float switch.
	c) Pump thermal overload has tripped out.	Wait until the pump cools down and the thermal overload resets. WARNING: The motor will restart automatically.
	d) Impeller blocked by impurities.	Call service electrician.
	e) Short circuit in the cable or motor.	Call service electrician.
Motor thermal overload trips out after short time of operation.	a) Temperature of pumped liquid too high.	Reduce temperature of liquid.
	b) Impeller blocked or partly by impurities.	Clean the pump.
	c) Voltage too low.	Call an electrician.
Pump runs constantly or gives insufficient water.	a) Pump partly blocked by impurities.	Clean the pump.
	b) Discharge pipe or valve partly blocked by impurities.	Clean the discharge pipe.
	c) Incorrect setting of level switch.	Adjust the pump float switch.
	d) Pump too small for the application.	Check pump selection.
	e) Impeller worn.	Replace the impeller.
Pump runs but pumps no water.	a) Pump blocked by impurities.	Clean the pump.
	b) Discharge pipe or non-return valve blocked by impurities.	Clean the discharge pipe.
	c) Air in pump.	Vent the pump and the discharge pipe.
	d) Liquid level too low. The suction strainer is not completely submerged in the pumped liquid.	Adjust the pump float switch.
“Hammering” noise after the pump stops running.	a) Discharge pipe design creating airlock/siphoning.	Fit air admittance/relief valve to the high point in the discharge pipework.

5 Maintenance

The Undersink Sullage Chamber is designed to operate automatically and requires minimal maintenance when used as instructed. However, to ensure optimal performance, it is recommended to perform the following tasks:

1. **Flushing unit:** It is important to flush the unit with clean water on a monthly basis.
2. **Regular maintenance of the chamber:** It is necessary to open the lid periodically and remove any accumulated fat deposits. Fat deposits can disrupt the proper functioning of the floats within the system.
3. **Verify the functionality of the alarm:** It is crucial to test the alarm regularly to confirm its proper functioning. This can be done by turning off the unit's switch and filling the chamber with warm water. When the power is switched on again, you should hear the alarm beeper sound, indicating that the alarm is working correctly.



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5.1 Service Information

SERVICE RECORD			
COMPANY:		DATE COMISSIONED:	
CONTACT		SITE:	
SERVICE TECHNICIAN:		PHONE:	
SIGNATURE:			

SERVICE No. 1

SERVICE DATE:		SITE:	
COMPANY:		PHONE:	
SERVICE TECHNICIAN:			
WORK PERFORMED:			
SIGNATURE:			

SERVICE No. 2

SERVICE DATE:		SITE:	
COMPANY:		PHONE:	
SERVICE TECHNICIAN:			
WORK PERFORMED:			
SIGNATURE:			

SERVICE No. 3

SERVICE DATE:		SITE:	
COMPANY:		PHONE:	
SERVICE TECHNICIAN:			
WORK PERFORMED:			
SIGNATURE:			

SERVICE No. 4

SERVICE DATE:		SITE:	
COMPANY:		PHONE:	
SERVICE TECHNICIAN:			
WORK PERFORMED:			
SIGNATURE:			

6 Warranty

6.1 Product Warranty

The Undersink Sullage Chamber is covered by a warranty that addresses faulty materials and workmanship for a period of 12 months from the date of purchase. However, it is important to note that shipping and labour costs are not included in this warranty coverage.

Please be aware that this unit cannot serve as an equivalent or replacement for gravity sewer or below-ground pump stations, as it has limited capacity.

The warranty provided is a Return to Base Warranty, which means that it does not cover on-site visits. In the event of any defects in materials or workmanship, it is the customer's responsibility to return the product to the nearest Allied Pumps service centre for repair or replacement.

To initiate a warranty claim, the customer must notify Allied Pumps within five (5) working days of discovering the defect and obtain an Equipment Repair ID number from the Allied Pumps customer service team. All shipping or transportation costs associated with returning the product to the designated service centre are the customer's responsibility.

This warranty specifically covers defects in materials or workmanship and does not extend to damage caused by improper installation, operation, maintenance, or modification of the product. It is important to note that blockages caused by foreign debris are not considered warrantable items. The supplier accepts no liability for damage resulting from overflow or malfunction. Additionally, the warranty is subject to the terms and conditions outlined in the product manual or any other documentation provided by Allied Pumps.

6.2 Allied Pumps Warranty policies

Warranty is subject to Allied Pumps Pty Ltd terms and conditions of sale and limited to replacement or repair, at Manufacturer's discretion, of any parts or equipment, excluding and travel, site, removal or reinstallation costs, for a period of twelve months from date of invoice, provided such part of equipment is deemed by the respective manufacturer to be faulty. Any work done on site to inspect or remedy faults that are subsequently not accepted as being under warranty by the manufacturer (e.g. caused by misuse, fair wear or operating procedures) will be charged at rates applicable at the time including parts, labour and travelling time.

Warranty does not provide for circumstances outside Allied Pumps' control including, but not limited to, seismic activity, base or ground movement, mechanical impact, abuse or negligence, or general wear and tear.

Warranty does not cover equipment that is not installed, continuously monitored, and maintained in accordance with the manufacturer's requirements, including, but not limited to, regular servicing, and/or regulatory requirements and applicable Australian Standards. Warranty does not cover damage caused by dry running the pumps.

If Buyer requires our services in respect of site inspection or service outside of what is covered by Manufacturers' warranties, then Buyer should enter into a separate agreement with Allied Pumps in respect to the same. In the event of no such separate agreement, all operations, calibrating, cleaning, and maintenance of plant is the responsibility of the buyer.

Allied Pumps have not acted as a consultant nor charged design fees on this project, and are in no way responsible for, nor guarantee any particular level or performance of the treatment plant supplied or effluent quality unless such guarantee is specially given in writing. Under no circumstances is Allied Pumps liable for any direct or consequential loss or business interruption or damage to persons or properties of any nature due to any cause whatsoever.

Application of warranties is conditional on Allied Pumps having received in cash the total contract price. Furthermore, Allied Pumps reserves the right to withdraw any code compliance, Australian Standard compliance or selection compliance, should the contract not be paid in full.



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