Product No. GWT800PL



Jets™ Grey Water Interface Unit consists of a tank fitted with a level switch and a discharge valve. Grey water is led to the tank by gravity and interfaced with the vacuum system via the valve. The valve is activated by the water level inside the tank.

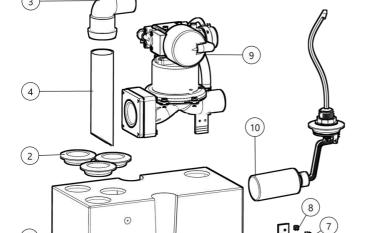
# **Technical Data**



Tank Type	Interface Unit/Buffer Tank Assembly
Outside Dimensions	400 x 200 x 473 mm (LxWxH)
Weight	Approx. 4 kg
Generic Material	PE
Color Range	White
Tank Volume	12 Litres
Discharge Volume	
Inlet	Diameter - Ø50mm
Discharge Valve Outlet	Outside diameter Ø 50 mm
Note:Values may var	ry depending on selected components

# **Disclaimer**

Note: Our products and services are offered and sold subject to Jets Vacuum AS' General Sales Conditions, copies of which will be furnished upon request. Information provided herein is solely for information purposes, does not constitute any warranty or representation of any kind and is subject to change without notice. We strive to reproduce product colors reasonably accurate. Without prior written approval, this document or any part of may not be reproduced in any form. Jets™, Vacuumarator™, Helivac™, VC™, VOD™, CVS™ and Softsound™ are trademarks and/or registered trademarks of Jets. © Jets AS. All rights reserved.



# Components

1	Grey Water Tank 12L, plastic	080500026*
2	Tank/Pipe Seal, ø50mm	034505310*
3	Pipe Bend, ø50mm 90dg	034512584*
4	Suction Pipe	034512700*
5	Bracket	010100750*
6	Screw, 4x20	036515607*
7	Screw, M5x10	036531600*
8	Nut, M5	036304802*
9	VD Valve, Piston Complete	054100955*
10	Level Switch	see product selection

\* Component/s avaliable as replacement parts.

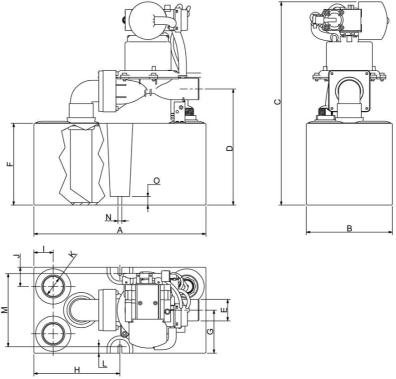
# **Accessories**

Construction Characteristics

Rubber Elbow, ø50 w/Hose Clip	034505450
Rubber Sleeve, ø50 w/Hose Clip	034505550
Air/Overflow Valve, Complete	035202511
Level Switch	032803900
Rubber Elbow, ø50/ø60 w/Hose Clip	.034512802
Rubber Sleeve, ø50/ø60 w/Hose Clip	034512902

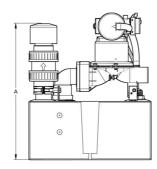
Product No. GWT800PL

# **Dimension Drawings**



400mm	A	
200mm	В	
473mm	C	
270mr	D	
Ø50	E	
190mr		
100mm		

H	200mm
I	45mm
J	45mm
	Ø50
L	15mm
M	170mm
N	9mm
O	20mm



A 470mm

Note: Installation is to occur within the water barrier in line with local/industry requirements and in compliance with all local, state and federal wet room requirements.

Note: the Air/Overflow Valve shown in the dimension drawing may not be included in the tank delivery, but may be purchased as an accessory.

Product No. GWT800PL

# **Function and Principle**

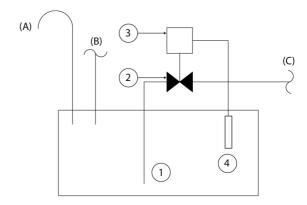
# **Function and Principle**

- ① Suction Pipe
- 2 Valve
- 3 Controller
- 4 Level Sensor

# **Normal Position: Closed Valve**

- Valve 2 CLOSED
- Suction Pipe ① EMPTY
- Controller ③ DEACTIVATED
- Level Sensor ④ DEACTIVATED

- (A) Air/Overflow
- (B) Inlet
- (C) Outlet

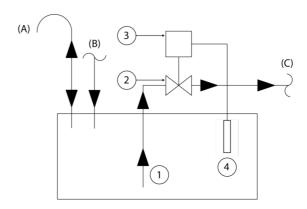


# **Emptying Sequence**

- 1. Level Sensor ④ ACTIVATES
- 2. Controller 3 ACTIVATES
- 3. Valve 2 OPENS
- 4. Suction Pipe ① FILLS
- 5. Outlet (C) FLOWS

# **Closing Sequence**

- 1. Level Sensor ④ DEACTIVATES
- 2. Controller ③ DEACTIVATES
- 3. Valve ② CLOSES
- 4. Suction Pipe ① EMPTIES
- 5. Outlet (C) FLOW STOPS



Result: Grey water enters the tank until the determined level is reached. Grey water is sucked from the tank to the outlet.

# **Chemicals and Detergents**

The following information is for Grey Water Interface Units which have washing machines, kitchen sinks, showers etc. connected to the vacuum pipelines.

Chemical detergents, when used excessively, may result in foaming in discharges.

Chlorine content in detergents may also have a negative effect on the process in any connected sewage treatment plant, as chlorine will kill the bacteria required in the process.

Tel. +47 70 03 91 00 www.jetsgroup.com

Doc. Rev.: 2 (2019-06-17)

Product No. GWT800PL

# Important Health and Safety Information

Installation, operation and maintenance must be carried out in strict accordance with this guide and with all applicable regulations. For your own protection and the protection of others, it is necessary to familiarize yourself with, and always follow, the contained safety and environmental precautions for our products.

This manual is an integral part of the product/delivery. Always keep it in a safe place for future reference. It is entirely the owner's responsibility to ensure that all safety and environmental measures, in accordance with local, state and federal laws are followed. Jets Vacuum AS assumes no responsibility for equipment damage, personal injury or death and/or delays that result from a lack of respect for the instructions for installation and/or use as stated in this documentation. Disregarding these instructions may invalidate all warranties.

Safety information references are in accordance with Jets Vacuum AS documentation system. If you do not understand the warnings, stop work immediately and contact Jets Vacuum AS (citing the safety reference number) for further clarification.

For further information about the included warnings or any other safety concerns please contact Jets Vacuum AS.

# Important Health and Safety Warnings



# 1.1 Warning

Jets Vacuum AS recommend qualified person(s) in accordance with all applicable codes and standards to carry out all installation work, electrical wiring, plumbing and operate this product. Equipment damage, injury to personnel or death could result from improper installation/use.



#### 1.4 Caution

Safety equipment (PPE) necessary for the prevention of accidents at the installation and operating site must be provided in accordance with local regulations.



#### 1.9 Personal Protective Equipment - Gloves

Wear suitable protective gloves at all times when working with equipment.



# 9.1 Danger

Gas Hazards: Putrefied organic matter will produce disagreeable odors and an oxygen deficient atmosphere. During service of tanks, sufficient exterior air must ventilate the tank to counteract the oxygen deficient environment prior to service being carried out. Under no circumstances should a person service the tank without a second person standing by that can render aid if needed. If extended periods of time are required for tank inspections/repairs, appropriate respiratory equipment (PPE) should be utilized.



# 9.8 Warning

Avoid breathing in dust from grey water



# 12.7 Notice

Additional and replacement parts should only be obtained from the manufacturer or distributor.



# 10.5 Notice

10.5 Notice
Chemical detergents, when used excessively, may result in foaming in discharge from the Vacuumarator™ pump.



# **Delivery, Receipt of Goods and Transportation**

Goods to be protected against shock and damage. Suitable adequately dimensioned transporting equipment is to be used. Note that the equipment may contain components that are easily damaged as a result of inappropriate handling. Jets Vacuum AS is not responsible for or liable for delivery delays resulting from occurrences outside of Jets Vacuum AS' immediate control. On receipt of goods, check for visual damage. Any damage detected after dispatch should be reported immediately to Jets Vacuum AS. Damages and/or discrepancies must be reported in writing no later than eight (8) days after receipt of goods. Commissioning must be postponed until the equipment has been inspected. Do not dispose of damaged items. Your direct supplier will advise you of the procedure to follow.

Unless otherwise specified, goods are to be stored in a dry environment between -30°C and +40°C prior to installation. The storage location must be dust free, low humidity (≤95%) and be free from moisture. Keep clear of foreign objects.

# Installation to End Use

Site to be a dry environment between +0°C and +60°C. Use in environments below 0°C requires use of antifreeze in liquids. The site location is to be low vibration Vrms <0.2 mm/s) with vibration resistance to acceleration up to 0.7g. The site is to be dust free and protected from grinding and welding. Goods are to be stored as per the instructions for delivery, storage and transport. A visual inspection is to carried out on receipt of goods as well as at the time of installation to ensure that storage and transport conditions after receipt have not compromised the quality of the product/s.



# 1.2 Warning

Be thoroughly familiar with the controls and the proper use of the equipment prior to installing, starting or using the equipment. Know the equipment application limitations and potential hazards.



#### 1.5 Personal Protective Equipment - Goggles

Wear safety glasses with side shields at all times when working with equipment.



#### 2.6 Notice

Place the equipment in an area that is easily accessible for maintenance.



# 9.2 Danger

Disease Hazards: Effluent is a common mode of transmission for parasitic organisms. Some of these may be pathogenic, meaning that they may have the capability of causing serious communicable disease. Good personal hygiene, use of disinfectant soap and avoidance of hand to mouth transfer are necessary for all working in contact with the equipment. Skin abrasions, punctures or wounds of any other nature require immediate and proper medical attention.



#### 12.5 Notice

Use this equipment only in the manner intended by Jets Vacuum AS. If you have questions after reading these instructions contact Jets Vacuum AS directly.



# 2.13 Caution

Installation, service and maintenance are to be carried out with due care. Shock, innapropriate handling, incorrect use of tools and general mishandling of the product may result in damage to components.

Product No. GWT800PL

# **Pre-Installation**

# Standards and Regulations

To install a Jets™ Interface Unit it is first required that the room be prepared according to all local, state and federal standards and requirements. Industry specific standards must also be met. Considerations that must be made include but are not limited to:

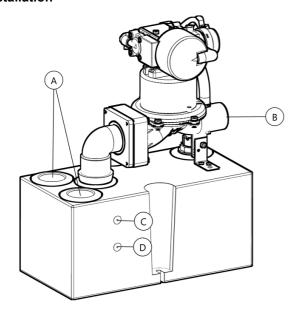
- Appropriate proportioned drain pipes.
- Water barriers/membrane.

Australian and New Zealand installations required to meet AS/NZS 3500 series of Standards must adhere to AS/NZS 3500.2 Sanitary Plumbing and Drainage.

# **Tools and Training**

No special tools other than those used in standard plumbing installations are required. No special training is required to install this product.

# Installation



- A) Interchangable connection for the:
  - Inlet (gravity inlet from the source)
  - Air/Overflow

Note that an air/overflow valve is required. A suitable valve is available in Jets  $^{\text{TM}}$  product range. Alternatively, the tank may be vented, for example, above roof height.

B) Outlet

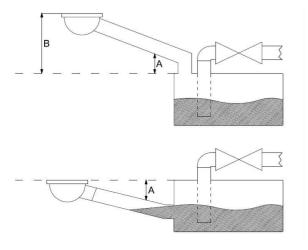
Optional:

- C) For installations with LAH (Level Alarm High).
- D) For installations with a VTS-VIP Controller.

Refer to the tanks technical information for placement.

- 1. Connect the piping between the grey water source and the inlet (A).
- 2. Connect the outlet pipe from the valve (B) to the vacuum installation.
- 3. Connect an air/overflow valve or a ventilation pipe to the tank connection (A).
- 4. Turn on the vacuum and ensure pipe connections are sealed.
- 5. Test the tank by filling with water to activate discharge.

# Slope



# Slope from gravity inlet:

- A The slope between the drain and tank must not be less than 1/100 and the height of the drain point must not be lower than the top of the tank.
- B The height of the drain point must not exceed 3 meters above the tank.

Product No. GWT800PL

# **Service and Maintenance**

# **Routine Cleaning**

In order to avoid build up of deposits in the pipeline systems and pumping station, the use of Jets™ toilet cleaning products in the toilet and wash/ shower is recommended. Jets™ has a range of suitable cleaning products/domestic cleaners that dissolve and prevent urinary stone and rings in vacuum tubes and pumps. Frequent use can assist in avoiding periodic concentrated cleaning of the pipes and pumping stations. Jets™ products can be purchased from your local Jets™ supplier.

# Frequency

It is recommended that routine inspection and cleaning (inside and outside of the tank) be carried out a minimum of one time each third year depending on frequency of use.

# Service and Maintenance - Technical Assistance

Jets Vacuum AS provides all customers with 24 hour worldwide technical assistance. For urgent matters please contact Jets Vacuum AS service department directly at +47 70039100. For other matters, please contact your nearest Jets Vacuum AS supplier.

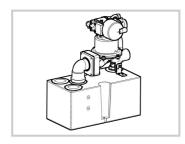
# Service and Maintenance - Disassembly Instructions

1

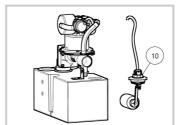
3

5

7

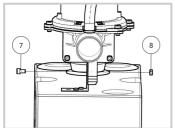


If connected, disconnect the tank to allow for disassembly. Empty the content of the tank prior to disassembly.

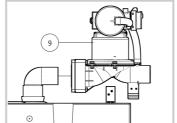


Remove the Level Switch (10).

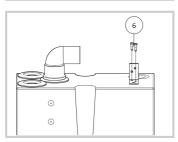
2



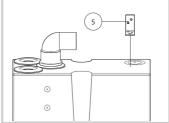
Unscrew the Screw, M5x10 ⑦ and Nut, M5 ⑧.



Remove the valve from the tank



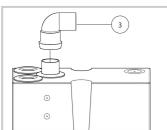
Unscrew the two screws (Screw, 4x20) ⑥ from the Bracket.



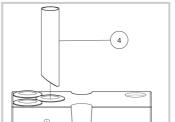
Remove the Bracket ⑤.

6

8

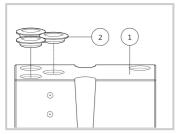


Remove the Pipe Bend, ø50mm 90dg ③.



Pull out and remove the Suction Pipe ④.

Product No. GWT800PL



9

Remove the Tank/Pipe Seals ② from the tank ①.

# **Service and Maintenance - Assembly Instructions**

Assembly is to be performed in the reverse order of the disassembly procedure.

# **Scheduled Maintenance**

Interval	Action	Note
As required.	Check for damage to equipment. Replace or repair damaged equipment and take measures to prevent future damage to the system.	See maintenance routines as described in the technical information for products where it is applicable, i.e. the discharge valve.

# **Troubleshooting**

Jets Vacuum AS provides the following troubleshooting information to assist in resolving issues that may arise with your installation. For more detailed information or assistance, please contact Jets Vacuum AS.

Problem	Cause	Action
Tank content is not discharged.	No vacuum.	Check sufficient vacuum is being generated.
	Discharge time is too short.	Increase the discharge time, up to a Maximum of 2 seconds, after the tank is empty.
	Valve is blocked due to debris.	Remove the debris.
	Defective non-return valve.	Clean or replace the non-return valve.
	Leaks in the vacuum hose(s) on the valve.	Replace the hose(s) or check that hose(s) are fitted correctly.
	The vacuum hose/s on the valve are disconnected.	Reconnect the hose(s).
	Reduced vacuum due to backflow in the piping.	Check the pipe installation.
	Malfunction of the level sensor.	Replace the level sensor if necessary.
	Malfunction of the valve.	Refer to technical information for the valve. Replace the valve if necessary.
Continuous discharge.	Valve is blocked due to debris.	Clean the valve and remove debris. Replace the valve, if needed.
	Malfunction of the level sensor.	Replace the level sensor if necessary.
	Malfunction of the valve.	Refer to technical information for the valve. Replace the valve if necessary.