

WHY VETUS WASTE WATER SYSTEMS?

An odourless waste water system is possible, however, you do need to follow some guidelines to keep your waste water free from unwanted odours. Below we highlight a few tips. You can also download the VETUS guide from the VETUS website with more suggestions to keep your waste water system free of odours.

Tips for an odour-free waste water system

1. Hoses: Make sure the outlet hoses are properly installed with a constant fall towards the holding tank. Flush the hoses thoroughly with sufficient fresh water every time the toilet is used.
2. Flushing: Flush your hoses sufficiently. Installing a VETUS electric toilet also helps. These toilets have a powerful macerator pump that ensures all waste water is pumped through the hoses at high pressure, and less water is needed to flush them.
3. Holding tank: Use VETUS holding tanks. The thick walls of our synthetic tanks make them completely odour proof. The hose connection kit and fittings with watertight seals ensure that no leaks can occur. Empty and rinse the tank regularly. All VETUS waste water tanks are certified according ISO 8099.
4. Ventilation: Proper ventilation is the main requirement for an odourless system. It is very important that the tank is well ventilated. Use large diameter fittings and VETUS hoses for ventilation. Make sure that the hoses are not clogged! As an option you can install a No-Smell filter in the ventilation hoses.
5. TankFresh: A concentrate of completely organic bacteria that break down faeces in the waste water system without emitting any odour. Any well-designed waste water system can function virtually without odour just by using TankFresh.

Why you should choose a VETUS waste water system

VETUS WWS waste water system

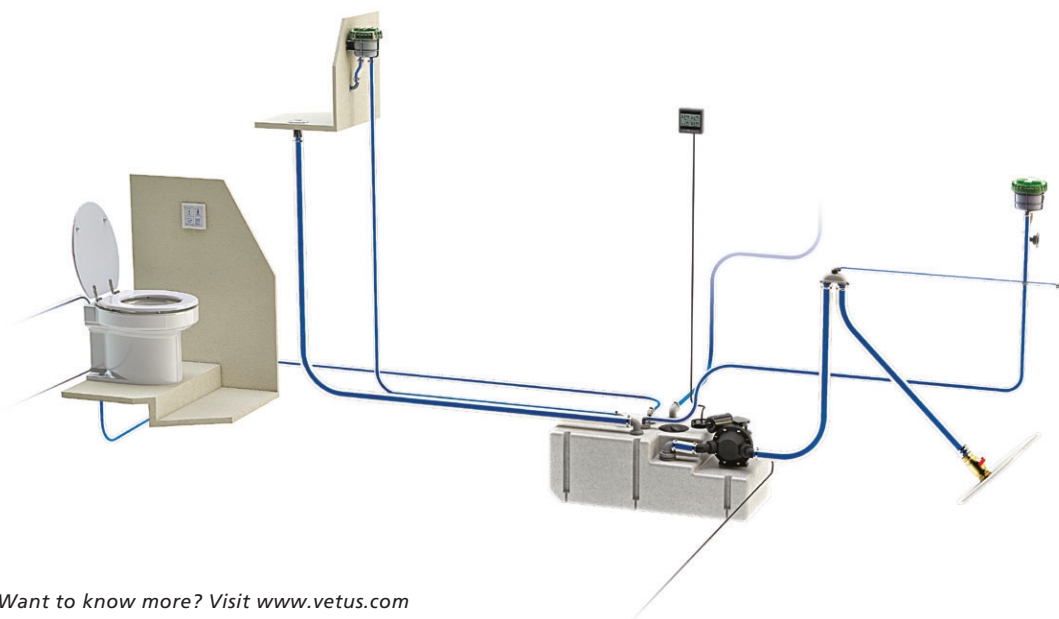
- Is easy to install, low maintenance and space-saving
- Comes pre-fitted with pump, discharge pipe, breather, inspection lid and ultrasonic sensor
- Is robust and corrosion-free and available in capacities of 42, 61, 88 and 120 litres

VETUS EMP 140 waste water pump

- Is a powerful diaphragm pump equipped with 'duck bill' valves
- Produces very low noise levels, is self-priming and low maintenance
- Comes complete with rotatable connectors allowing hose connections from any angle
- Has a large capacity of 27 litres/minute, suction height 3 metres, discharge height 5 metres

VETUS electric toilets

- Come with high quality seat and cover and operate at the touch of a button
- Low maintenance and low water consumption (ECO flush)
- Feature a very low noise macerator and pump and require only a 19 mm diameter outlet pipe
- Equipped with stainless steel (AISI 316) macerator blades, a waterlock and non-return valve
- VETUS electric marine toilets meet the EMC requirements



ELECTRIC MARINE TOILETS

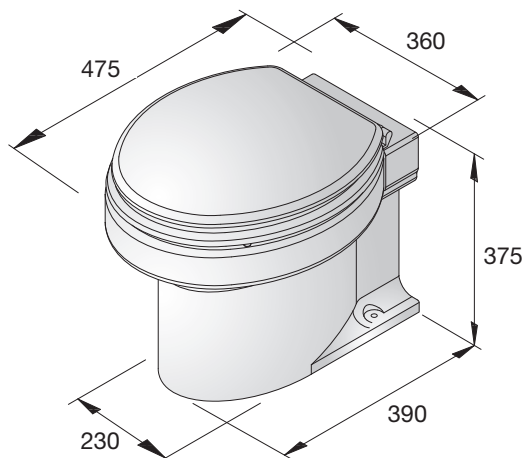
Soft close toilet type TMWQ

Compact dimensions without sacrificing comfort

Very competitively priced and comfortable toilet. A welcome alternative to manually operated hand-pumped toilet. Operated by a simple rocker switch or control panel which must be ordered separately (see page 156).

Specifications

- Soft close and quick release seat / lid
- Easy to clean porcelain bowl / simple maintenance
- Powerful macerator with full stainless steel (AISI 316) blades and high capacity discharge pump (60dB)
- Comes with 3 discharge hose adapters Ø 19, 25 and 38 mm and a 700 mm long water inlet hose
- Very low water consumption



TMWQ

Type	Voltage (V)	Power consumption (A)	Type of control	External Ø discharge (mm)	Water inlet connection
TMW12Q	12	25	Of choice	19, 25 or 38	Female G ³ / ₄
TMW24Q	24	12.5	Of choice	19, 25 or 38	Female G ³ / ₄



ELECTRIC MARINE TOILETS

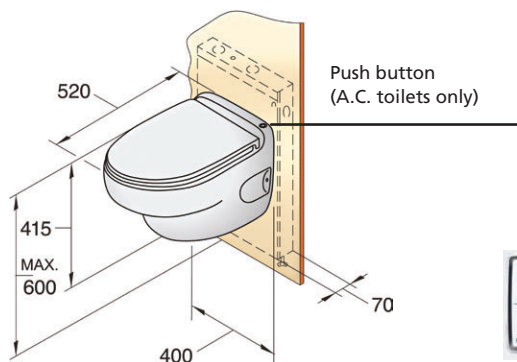
Hanging toilet type HATO

Creating more floor space

A practical wall mounted toilet without connection to the floor to simplify cleaning. This toilet has a porcelain bowl and a comfortable sized seat. The waste connection is in the back wall, which can be an advantage.

Specifications

- Easy to install and maintain
- Super quiet macerator (60dB (A)) with full stainless steel (AISI 316) blades and large capacity discharge pump
- Comes with a waterproof electronic operating panel or a pneumatic push button
- Very low water consumption
- Available for DC or AC power supply



HATO212B

HATO224B



HATO

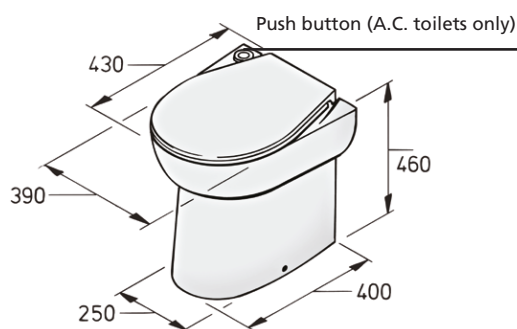
Toilet type WCS

Floor standing comfort

Comfortable floor standing toilet with porcelain bowl and a normal sized seat and lid.

Specifications

- Easy to install and maintain
- Super quiet macerator with full stainless steel (AISI 316) blades and large capacity discharge pump (60dB (A))
- Comes with a waterproof electronic operating panel or pneumatic push button
- Very low water consumption
- Available for DC or AC power supply



WCS12S2

WCS24S2



WCS

Type	Voltage (V)	Power consumption (A)	Type of control	External Ø discharge (mm)	Water inlet connection
HATO212B	12 V (DC)	25	Panel	19	Female G ³ / ₄
HATO224B	24 V (DC)	12.5	Panel	19	Female G ³ / ₄
HATO110	110 V (60 Hz)	5	Push button	19	Female G ³ / ₄
HATO220	230 V (50 Hz)	2.5	Push button	19	Female G ³ / ₄
WC12S2	12 V (DC)	25	Panel	19	Female G ³ / ₄
WC24S2	24 V (DC)	12.5	Panel	19	Female G ³ / ₄
WC110S	110 V (60 Hz)	5	Push button	19	Female G ³ / ₄
WC220S	230 V (50 Hz)	2.5	Push button	19	Female G ³ / ₄

ELECTRIC MARINE TOILETS

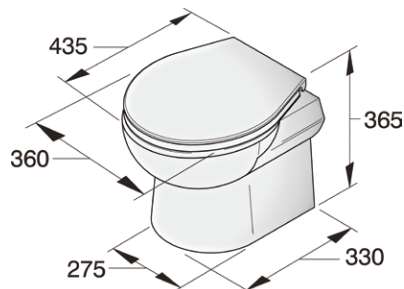
Toilet type SMT0

Small size, big performance

This is one of the smallest and lightest electric toilets on the market. A high-quality solid floor standing model, with a porcelain bowl and comfortable seat and lid.

Specifications

- Easy to install and maintain
- Super quiet macerator with full stainless steel (AISI 316) blades and large capacity discharge pump (60dB (A))
- Comes with a waterproof electronic operating panel (type SMT02) or rocker switch (type SMT02S)
- Very low water consumption



SMT0

SMT02



SMT02S



Compact toilet type WCP

Small footprint, big performance

This toilet has a very small footprint because the electronic control box is mounted outside the toilet.

Specifications

- Easy to install and maintain
- Super quiet macerator with full stainless steel (AISI 316) blades and large capacity discharge pump (60dB (A))
- Comes with a waterproof electronic operating panel (type WCP) or rocker switch (type WCP5)
- Very low water consumption



WCP

WCP



WCP5



Type	Voltage (V)	Power consumption (A)	Type of control	External Ø discharge (mm)	Water inlet connection
SMT0212	12	25	Panel	19	Female G ³ / ₄
SMT0224	24	12.5	Panel	19	Female G ³ / ₄
SMT02S12	12	25	Switch	19	Female G ³ / ₄
SMT02S24	24	12.5	Switch	19	Female G ³ / ₄
WCP12	12	25	Panel	19	Female G ³ / ₄
WCP24	24	12.5	Panel	19	Female G ³ / ₄
WCP512	12	25	Switch	19	Female G ³ / ₄
WCP524	24	12.5	Switch	19	Female G ³ / ₄



ELECTRIC TOILET CONTROL PANELS

Control panel for TMW toilet

Pre-programmed comfort

The panel is easy to operate with just 4 functions. It has an eco ($\pm 1,2$ ltr) and normal flush ($\pm 2,2$ ltr) button and a fill or empty bowl button. Using a marine toilet was never this easy, just touch the button!

Specifications

- Panel dimensions 110x110 mm
- Build-in depth 50 mm
- Complete installation package including 3 mtr cable
- Suitable for 12 or 24 Volt
- Waterproof IP65



TMWBP

Control switch for TMW toilet

Full control over the flush

A simple and effective 2 functions switch to fill or empty the bowl.

Specifications

- Switch dimensions 78x47 mm
- Build-in depth 40 mm
- Complete installation package including 3 mtr cable
- Suitable for 12 or 24 Volt
- Waterproof IP65



TMWBS

Marine toilet control panel

(Supplied with toilet types WCP, WCS, HATO and SMTO)

This pre-programmed 3 functions panel has an eco and normal flush and bowl evacuation.

Specifications

- Panel dimensions 72x72 mm
- Build-in depth 21 mm
- Complete installation package including 1,5 mtr cable
- Suitable for 12 or 24 Volt
- Waterproof IP65



Marine toilet rocker switch

(Supplied with toilet types SMTOS and WCPS)

Rocker switch with 2 functions to fill or flush the bowl.

Specifications

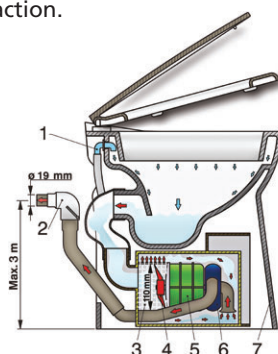
- Switch dimensions 45x75 mm
- Build-in depth 40 mm
- Complete installation package including 3 mtr cable
- Suitable for 12 or 24 Volt
- Waterproof IP65



Note

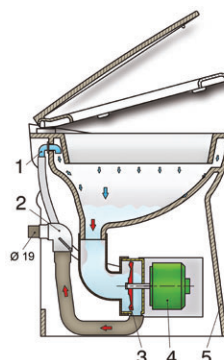
Toilet models WCP, WCS, HATO and SMTO are supplied with a control panel or rocker switch and do not need to be ordered separately.

All VETUS toilets are equipped with an electric pump with powerful macerator to ensure proper evacuation of contents in one single action.



120/230 Volt models

1. Flushing water inlet
2. Discharge of waste water
3. Protective grille
4. Stainless steel (AISI 316) blades
5. Macerator motor
6. Discharge pump
7. Porcelain toilet bowl



12/24 Volt models

1. Flushing water inlet
2. Discharge of waste water
3. Stainless steel (AISI 316) blades
4. Macerator motor
5. Porcelain toilet bowl

SANI-PROCESSOR

Compact Sani-Processor for black and grey water

The comfort and style of home

On larger boats owners want to have the comfort and looks of their toilet at home. Therefore VETUS has developed the Sani-Processor with an electric macerator and a powerful pump in order to use an ordinary gravity flow, domestic toilet on board. When flushing the toilet, the Sani-Processor collects the contents, macerates and pumps the slurry into a holding tank. The whole process takes only 10 to 30 seconds and is very quiet. The unit can be easily cleaned by removing the inspection lid. We recommend using the VETUS sanitary connecting hoses, type SAHOSE, to ensure an odour-tight process.

Specifications

- Processor dimensions l 420 x w 120 x h 360 mm
- Holding tank placement max. 4 mtr higher than Sani-Processor
- Macerator diameter 98 mm
- Weight 4,8 kg
- Pump capacity approx. 50 ltr/min at 4 mtr head
- Power consumption approx. 370W (12V), 435W (24V), 580W (110V), 400W (230V)
- Available for 12 or 24 Volt DC, 230 Volt/50Hz or 120 Volt/60Hz
- Maximum permissible water temperature 35°C

Connections

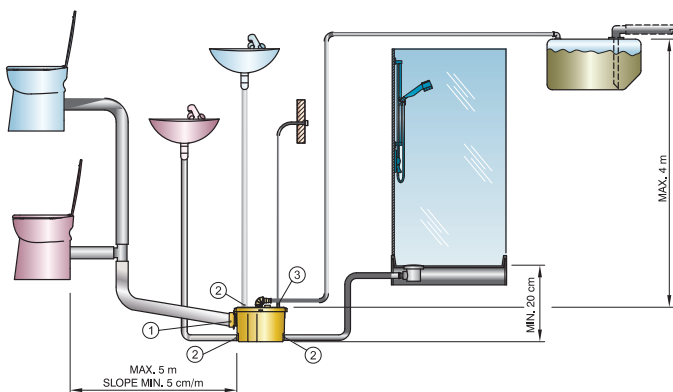
- Hose from toilet to Sani-Processor: Ø 102 mm, max. length 4 mtr
- Hose from Sani-Processor to holding tanks: Ø 19 mm, max. length 20 mtr
- Washbasin/bidet connections: Ø 40 mm



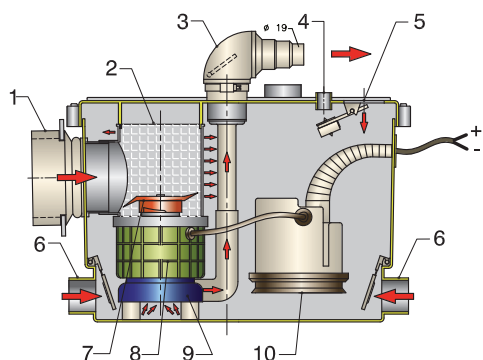
SAPRO



Type	Voltage
SAPRO12	12 Volt DC
SAPRO24	24 Volt DC
SAPRO220	230 Volt / 50 Hz
SAPRO110	120 Volt / 60 Hz



1. Hose connection Ø 102 mm (SLVBR100K)
2. Hose connection Ø 40 mm (SLVBR40K or HA3060)
3. Hose connection HA1338



1. Toilet connection, Ø 102 mm
2. Protective grille
3. Waste discharge connections: male Ø 19 mm o.d. and female Ø 25 / 28 / 32 mm i.d
4. Breather connection, Ø 19 mm
5. Washbasin / bidet connection, Ø 40 mm
6. Washbasin or shower connection, Ø 40 mm
7. Stainless steel (AISI 316) blades
8. Electric macerator motor
9. Discharge pump
10. Float switch

SANI-PROCESSOR

Discharge system to transport waste water into holding tank

Pumping water automatically from the shower tray or wash basin into a waste water tank is possible with the VETUS grey water discharge system (GWDS). It has a watertight housing with a low noise discharge pump, automatic flow switch and a non-return valve in the discharge line. You can easily pump the water into the holding tank.

Specifications

- Dimensions tank
l 300 x w 165 x h 145 mm
- Waste water tank location up to 4mtr above GWDS unit or up to 20mtr away from it
- Bottom of GWDS unit must be placed at least 6 cm below shower tray or washbasin
- Weight 3,5 kg
- Pump output approx. 44 ltr/min
- Power consumption approx. 340 W (12 V), 350 W (24 V), 600 W (120 V), 250 W (230 V)
- Available for 12 or 24 Volt DC, 230 Volt / 50Hz or 120 Volt / 60Hz
- Maximum permissible water temperature 35°C

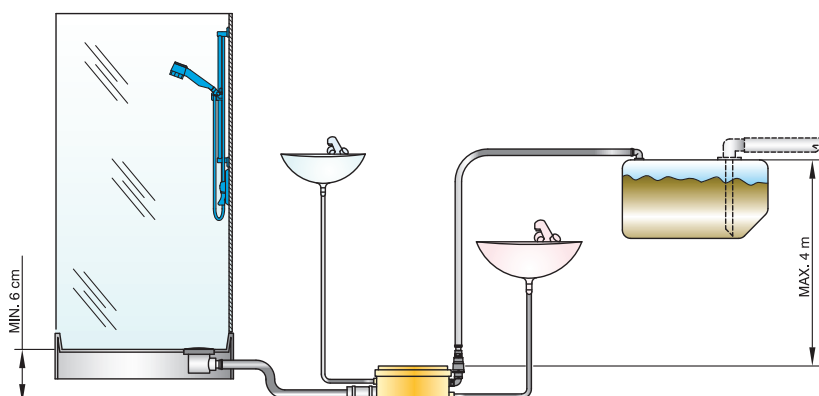
Connections

- Outlet discharge to holding tank: Ø 19 mm
- Inlet connections from shower or wash basin: Ø 32 or 40 mm

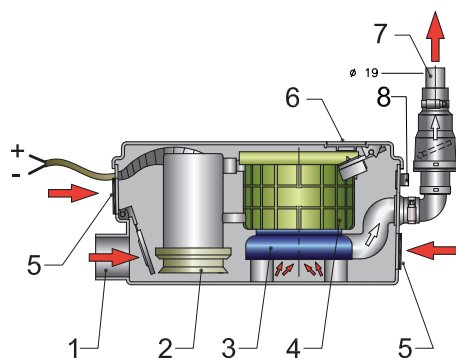


GWDS

Type	Voltage
GWDS12	12 Volt DC
GWDS24	24 Volt DC
GWDS220	230 Volt / 50 Hz
GWDS110	120 Volt / 60 Hz



Hose connectors (1) HA1338 and (2) HA3060 are shown on page 165.



1. Shower or wash basin connection Ø 40 mm
2. Float switch
3. Discharge pump
4. Electric motor
5. Washbasin connection, Ø 32 or 40 mm
6. Breather
7. Waste water discharge connection: male Ø 19 mm o.d
8. Air conditioner connection, Ø 12 mm

RIGID TANKS FOR WASTE WATER

Basic tank type ATANK

Multi-purpose tank ideal for waste water, drinking water and diesel

These tanks are made of thick walled high-grade polyethylene which is both rust free and less prone to condensation compared to metal tanks. Due to the seamless construction of the tanks, leakage is impossible. Fittings can be installed wherever you choose and can be ordered separately.

Tanks are supplied with diesel, fresh water and waste water labels.

For specifications and dimensions see page 129.

ATANK



Basic tank including connectors type BTANKC

These tanks will save considerable installation time!

These tanks are made of odour impermeable synthetic see-through material so the content level can be seen from the outside. The centre point for a SAE flange gauge sender has already been provided in the moulding, together with 5 bolt holes (except BTANK25C). This will save you considerable installation time. The tanks are supplied with connectors, a screw down inspection lid and 2 securing straps. The inlet fitting (type RT..B) should be ordered separately matching the inlet hose diameter.

Specifications

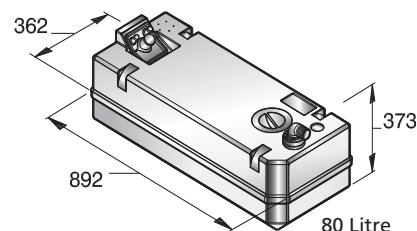
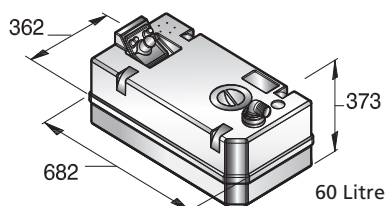
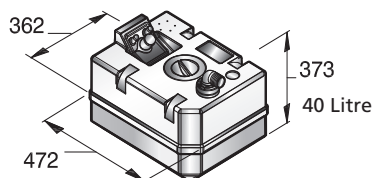
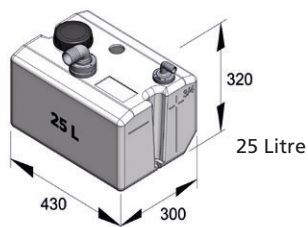
- Tanks are according to the ISO 8099 standard
- Tank capacities of 25, 40, 60 or 80 litres

Connections

- Fixed hose connector Ø 19 mm for breather line, rotating for BTANK25C
- Rotating hose connector Ø 38 mm with pick-up pipe for suction
- Hole for inlet fitting type RT..B

Type	Suitable for	Capacity (Litres)
BTANK25C	Waste water	25
BTANK40C	Waste water	40
BTANK60C	Waste water	60
BTANK80C	Waste water	80

BTANKC



Dimensions: plus or minus 2%. Height dimensions includes connectors



RIGID TANKS FOR WASTE WATER

Bulkhead mounted tank type WW

Can be emptied without a pump

These tanks are made of odour impermeable synthetic translucent material so the content level can be seen from the outside. Available in 4 sizes, horizontal as well as vertical and suitable for mounting under the side decks, above the waterline. The tanks are supplied with inspection cover and connectors. The hole for the inlet fitting RT..B has already been provided. The inlet fitting should be ordered separately.

Specifications

- Tanks are according to the ISO 8099 standard
- Tank capacities of 25, 60 or 80 litres

Connections

- Suction pipe with angled Ø 38 mm hose connector for deck plate connection
- Angled hose connector Ø 38 mm for gravity discharge
- Angled hose connector Ø 19 mm for tank ventilation
- Hole for inlet fitting type RT..B

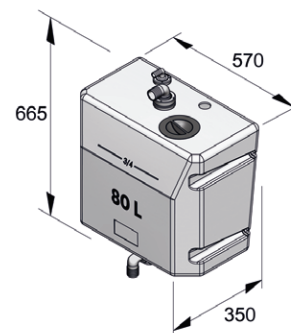
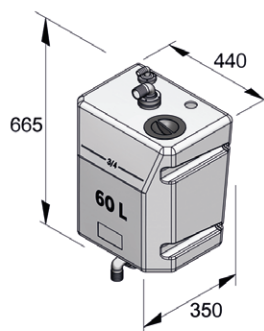
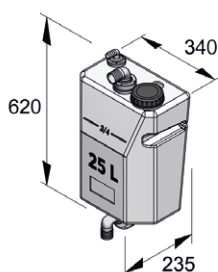
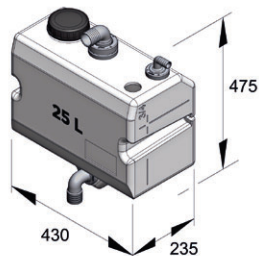
Type	Suitable for	Capacity (Litres)
WW25WH	Waste water (horizontal version)	25
WW25W	Waste water	25
WW60W	Waste water	60
WW80W	Waste water	80



WW25WH



WW..W



Dimensions: plus or minus 2%
Height dimensions includes connectors

RIGID TANKS FOR WASTE WATER

Complete tank type WWS

Ready to go!

These tanks are made of odour impermeable synthetic translucent material, so the content level can be seen from the outside. These complete tanks come with a VETUS waste water pump (type EMP140, see page 163), inspection cover, ultrasonic level sensor, connectors and 2 securing straps. Only the 12 or 24 Volt level gauge and the inlet fitting (type RT..B) must be ordered separately (see page 164).

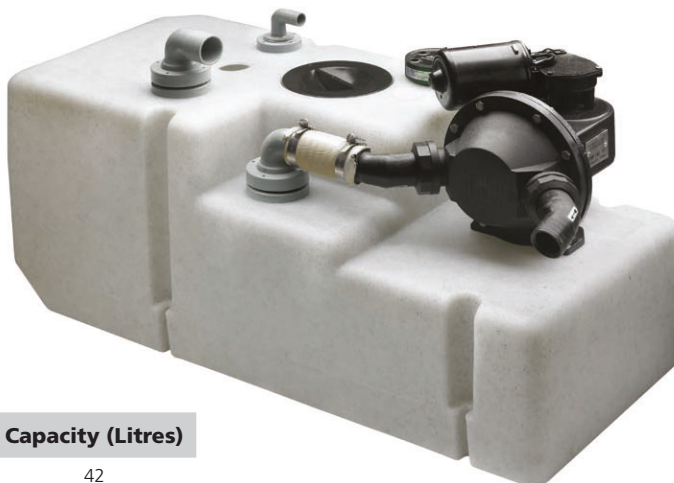
All connections go through the top of the tank. Type WWS is suitable for storing black water as well as grey waste water and is especially designed to save installation time.

Specifications

- Suitable for 12 or 24 Volt
- Tanks are according to the ISO 8099 standard
- Tank capacities of 42, 61, 88 or 120 litres

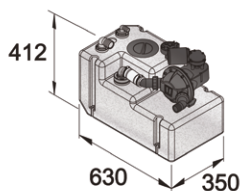
Connections

- Suction pipe with angled hose connector
Ø 38 mm for discharge to onshore holding facility
- Breather connection Ø 19 mm
- Pump-out connection Ø 38 mm
- Hole for inlet fitting type RT..B

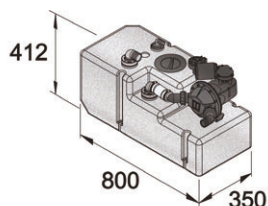


WWS

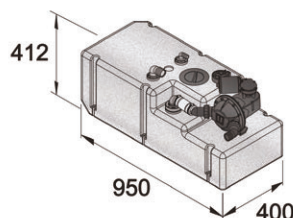
Type	Suitable for	Capacity (Litres)
WWS4212B	"Black" and "grey" waste water incl. 12 Volt pump	42
WWS4224B	"Black" and "grey" waste water incl. 24 Volt pump	42
WWS6112B	"Black" and "grey" waste water incl. 12 Volt pump	61
WWS6124B	"Black" and "grey" waste water incl. 24 Volt pump	61
WWS8812B	"Black" and "grey" waste water incl. 12 Volt pump	88
WWS8824B	"Black" and "grey" waste water incl. 24 Volt pump	88
WWS12012B	"Black" and "grey" waste water incl. 12 Volt pump	120
WWS12024B	"Black" and "grey" waste water incl. 24 Volt pump	120



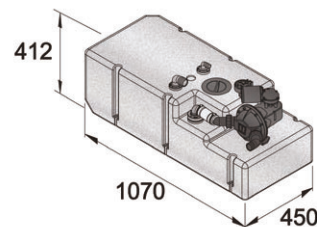
42 Litre



61 Litre



88 Litre



120 Litre

Height dimensions includes connectors

APT100 - One tank for all purposes

Fresh water, waste water or diesel: this tank can handle it

A new series of all-purpose tanks is introduced by VETUS: meet the APT100. Made from high-grade polyethylene, this large capacity tank handles almost any liquid you would like to store on your boat. It features an inspection lid and is ready for the appropriate ILT connection kit. On the bottom is a 38 mm connection that can be drilled out for interconnection purpose or draining. The robust appearance and the all-new design make this the tank to have.

For specifications and dimensions see page 140.



APT100



FLEXIBLE TANKS FOR TOILET AND WASTE WATER

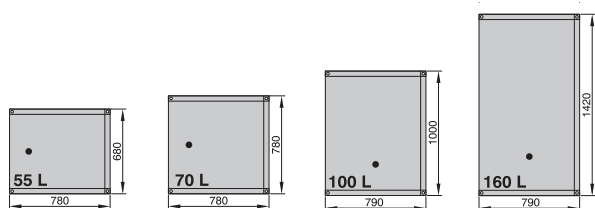
VETUS flexible tank type TANKV

Short term waste water storage

These flexible tanks are constructed in the same robust way as the flexible drinking water tanks (see page 141). However, the material used is suitable to store waste water. These tanks should be pumped and flushed after a day's boating. Available in several dimensions and capacities.

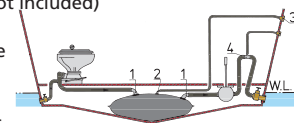
A repair kit is available (REPSETOT).

Type	Capacity (appr.) (Litres)	Dimensions (appr.) (mm)	Height filled (appr.) (mm)
TANKV55	55	680 x 780	250
TANKV70	70	780 x 780	270
TANKV100	100	790 x 1000	270
TANKV160	160	790 x 1420	270



TANKV

- 2 Angled hose connectors Ø 38 mm (supplied with each tank)
- Angled breather nipple Ø 16 mm, already fitted
- Breather nipple Ø 16 mm (not included)
- Air vent for anti-siphoning, see page 96. When discharge of the tank through a deck plate is required, a Ø 38 mm tank connector type FT38B is available as an option, see the price-list



NO-SMELL FILTERS

Filter types NSF and NSFS

Fresh air

Allowing fresh air into a waste tank reduces anaerobic growth and the build up of gas. However, unpleasant odours can also escape through this air breather line. This can be prevented by the installation of a VETUS no-smell filter. The no-smell filter is easy to install and contains activated carbon material to absorb odours. Add the VETUS waste water breather hose made of reinforced PVC for a proper operating system.

Please note

The filter element is replaceable and should be renewed once a year.

Type	Description	L x W x H (mm)	Hose Ø (mm)
NSF16S	Small no-smell filter	107 x 111 x 111	16
NSF16	Large no-smell filter	148 x 150 x 162	16
NSF19	Large no-smell filter	148 x 150 x 162	19
NSF25	Large no-smell filter	148 x 150 x 162	25
NSF38	Large no-smell filter	148 x 150 x 162	38



NSF

NSFS

Type	Description
NSF16FES	Spare filter element for small no-smell filters
NSF16FE	Spare filter element for large no-smell filters

No-smell filters element type NSFCAN

Revolutionary dual function

For specifications and dimensions see page 133.

NSFCAN

NSFCANS



TankFresh

Odour-free tank guaranteed

This VETUS product is an organic concentrate of bacteria which cause the faeces in the waste water system to break down without emitting any odour, unlike other chemical products that often only mask the smell. When using just one bottle of TankFresh periodically, your waste water system can function virtually without odour for an entire boating season.

Specifications

- Comes in a convenient 500 ml dosage bottle
- Consists of nature's own ingredients only
- Proven reduction of odours in the tank

Type	Description
TFRESH05	500 ml bottle



TFRESH

ACCESSORIES FOR WASTE WATER TANKS

Ultrasonic level sensor type SENSORA

Easy measurement

This VETUS ultrasonic level sensor is contactless and will easily measure the fluid level in the tank.

Type	Description
SENSORA	Ultrasonic level sensor

SENSORA



For more information and available level sensors see page 109.

Waste water control panel type WWCP

Integrated tank level monitoring

This easy-to-use control panel with security lock can be used manually or automatically to control the full tank pump-out and manage the complete waste water system. The WWCP panel is connected to a VETUS level sensor (type WSENSORA or SENSORA) and indicates the content level in the tank using LED's it will ignore brief maximum level peaks caused by boat movements. A motorised ball valve can also be connected to the panel. In either manual or automatic mode, the valve will open before the pump starts. Once the tank is empty, the pump will switch off and the valve will close automatically. A switched outlet on the panel, connected to a relay in the toilet power supply, makes it possible to prevent the toilet(s) from being flushed if the tank is full.

Specifications

- Panel dimensions 85 x 85 mm
- Build-in depth 40 mm
- Suitable for 12 or 24 Volt
- Usage in stand-by mode 4 mA, electric pump 10 A max, remotely controlled ball valve 5 A max and external alarm 1 A max.
- Valve and level sensor are not included

Type	Description
WWCP	Waste water control panel

WWCP



Vacuum operated vent valve type VRF

Indispensable safety factor

To prevent the possibility of insufficient air entering through the vent line during pump out operations causing the tank to implode, VETUS has developed a valve according to the ISO8099 standard. In case of significantly reduced pressure in the holding tanks, the valve will open automatically to let air into the tank. By using this valve, fitting of a large diameter vent line is no longer necessary. The valve is made from synthetic materials and therefore absolutely corrosion-free. Hole size in the tank is 56 mm.

Type	Description
VRF56A	Vacuum valve for waste water tank

VRF56A



Waste water / bilge pump type EMP140

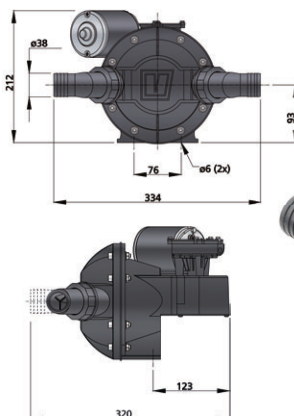
360° Rotating hose connections, less installation time

This reliable pump with a capacity of 27 l/min at zero head, is self-priming, provided with 2 duck-bill valves and suitable for pumping grey and black water. It has rotating hose connections so installation time will be reduced.

Specifications

- Weight 7 kg
- Max suction height 3 mtr
- Max delivery height 5 mtr
- Available in 12 or 24 Volt
- Current at 12 Volt 6 A and at 24 Volt 4 A

Type	Volt	Hose connection (mm)
EMP14012B	12	38
EMP14024B	24	38



EMP140

ACCESSORIES FOR WASTE WATER TANKS

Angled fittings

Synthetic fittings for VETUS flexible tanks (type FT) or rigid tanks (type RT). Suitable for hoses with an internal diameter of Ø 13, 16, 19, 25 or 38 mm. The required hole size for flexible tank is Ø 42 mm and for rigid tanks Ø 43 mm.



RT



FT

Type	Hose Ø (mm)	Angle
RT13B	13	right angle
RT16B	16	right angle
RT19B	19	right angle
RT25B	25	right angle
RT38B	38	right angle

Type	Hose Ø (mm)	Angle
FT13B	13	right angle
FT16B	16	right angle
FT19B	19	right angle
FT25B	25	right angle
FT38B	38	right angle

Installation kit type BTKIT

Consisting of 1 inspection lid with counter-flange and fastenings, 2 securing straps, and 1 wrench for angled fittings.

Specifications

- Overall diameter Ø 156 mm
- Cut out diameter Ø 115 mm



BTKIT

Type	Description
BTKIT	Fitting kit for synthetic waste water tanks

Lockable ball valve type BV1½L

This stainless steel (AISI 316) ball valve with G1½ thread is in some countries a legal requirement to prevent the accidental discharge of black water in port. This valve can be padlocked (padlock itself is not supplied).

BV1½L



Type	Description
BV1½L	Stainless steel (AISI 316) ball valve

ACCESSORIES FOR WASTE WATER TANKS

Synthetic hose adapters type HA

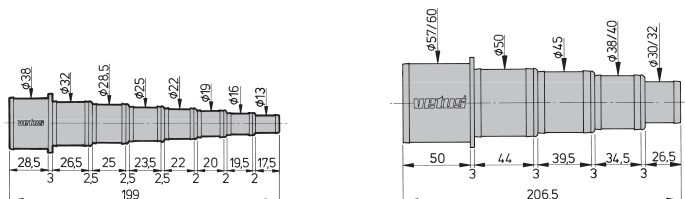
These synthetic hose adapters can be cut to the appropriate hose sizes.

Type	Ø Dim. (mm)
HA1338	13 - 38
HA3060	30 - 60



HA1338

HA3060



Universal inspection port for tanks type ILT120

Innovative inspection port with robust design

The VETUS ILT is an innovative inspection port which facilitates easy opening, inspecting and cleaning the tank, even after being closed for a long time. The inspection port has a counter flange and a rubber seal which are inserted into a Ø 159 mm hole in the tank. All that needs to be done is tighten the 4 supplied bolts which compresses the rubber seal to ensure perfect sealing.

The "clamp and seal" design simplifies installation, making the drilling of a Ø 159 mm hole the hardest part in the installation!
The black blind plate can be replaced by various connection kits.



ILT120

Waste water connection kit ILTCONW

Although not mandatory as with fuel tanks, a large inspection port in a waste water tank will facilitate cleaning. Having all the connections at a single point also makes inspection simpler. The VETUS waste water disc is supplied with everything you need for your waste water tank, it doesn't matter if it's a custom made steel, aluminium or a VETUS thick walled rigid tank.

Connections that come with this interchangeable disc are

- Ø 38 mm connection for discharge (ability to make this a suction connector by mounting a standard Ø 40 mm PVC pipe)
- Ø 38 mm inlet connection
- Ø 25 mm inlet connection
- Ø 19 mm inlet connection
- Ventilation connection Ø 19 mm
- 5 hole SAE flange tank level sensor connection (suitable for SENSORA, SENSORB and WWSensorA)



ILTCONW

Type	Description	Diameter (mm)	Diameter hole (mm)
ILT120	Inspection port with counter flange	120	159
VSAW159	Ø 159 mm hole saw for plastic, G.R.P. or metal tanks		159

ACCESSORIES FOR WASTE WATER TANKS

Remotely controlled ball valves type MV

Simple manual override

These motorised stainless steel (AISI 316) valves with a powder coated aluminium actuator housing enable any skin fitting/through hull to be electrically opened or closed from a remote location. Also suitable for every type of fuel, ignition protected. The G-threading meets the requirements of ISO 228-1 and 9093-1. The valves can be powered fully opened or closed in approximately 12 to 25 seconds. The powerful motors have a maximum torque of 40 or 220Nm.

Type	MV12A	MV24A	MV24B
Power supply range	11-14 V	18-28 V	20-28 V
Operating current @ max. torque	2.2 A ± 10% @ 13.8 V	1.2 A ± 10% @ 27.6 V	4.1 A ± 5% @ 27.6 V
Static current	50±5 mA	25±5 mA	60±5 mA
Opening and closing	✓		
Max. operation Torque	40Nm	220Nm	
Manual over-ride tool	Hex Key	Wrench	
Ambient temp. (Celsius)	-20° to +45°		
ISO8846 certified	Yes		

Control panels*	MV12A	MV24A	MV24B
ELVPAN12	✓	-	-
ELVPAN24	-	✓	✓
WWCP (page 163)	✓	✓	✓

*Ordered separately



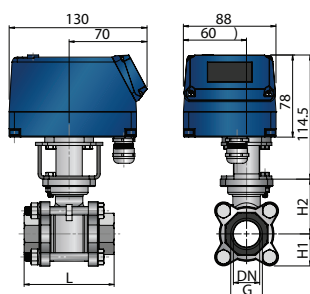
MV



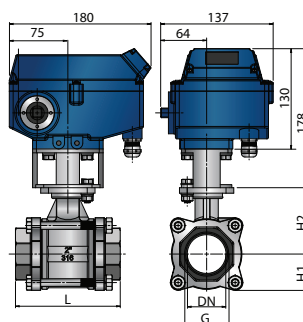
ELVPAN

Type		G (ISO 228)	DN (mm)	H1 (mm)	H2 (mm)	L (mm)	Weight (kg)
MV12A1/2	MV24A1/2	1/2"	15	22.5	42	72	2.2
MV12A3/4	MV24A3/4	3/4"	20	22.5	48	80	2.4
MV12A1	MV24A1	1"	25	30	55	85	2.8
MV12A11/4	MV24A11/4	1 1/4"	32	36.5	60	105	3.4
MV12A11/2	MV24A11/2	1 1/2"	38	40	70	113	4.2
	MV24B2	2"	50	46.5	85	132	7.8

MV..A



MV..B



ACCESSORIES FOR WASTE WATER TANKS

Extraction pipes type WTS for rigid waste water tanks

These extraction pipes are for both grey and black water tanks. They can be used for electrical or manually operated diaphragm pumps, or for direct connection to deck plate.

With the choice between angled or straight connections of Ø 38 mm and with a tube length of 780 mm (can be cut to size).

Type	Length (mm)	Hose nipple Ø (mm)	Angle
WTS78038S	780	38	straight
WTS78038B	780	38	right angle



WTS

Waste water hose type WWHOSEA



WWHOSEA

Impermeable sanitary no-smell hoses type SAHOSE



SAHOSE

For a complete overview of hoses see page 404.

Anti-siphoning air vent

For more information and available types see page 96.



ASD38H

Inspection lid type WTK02

For (waste) water tanks only!

Specifications

- Overall diameter Ø156 mm
- Cut out diameter Ø115 mm
- Not suitable for fuel tanks
- Ideal for metal tanks

Type	Description
WTK02	Inspection lid only, for rigid drinking water tanks



WTK02



ACCESSORIES FOR WASTE WATER TANKS

The waste water connector line-up consists of a three-way valve, a Y connector, a non-return valve and the additional hose connectors. These hose connectors are fully rotatable and are ordered separately to fit your existing hoses. Made entirely from high grade nylon, these products are strong and durable. With connectors variations from 19 mm up to 38 mm, it's plug-and-play on every boat.

This line-up allows you to professionally connect or expand your waste water system. With the three-way valve and the Y connector you can have as many connections as you like, while the duck bill valve keeps contaminated water from flowing back. Hose connectors are sold per piece or per two, so you can mix and match to your needs. The three-way valve can be padlocked in one position (e.g. when harbours want to ensure waste water is directed to the tank instead of discharged overboard). Both the three-way valve and the Y-connector come equipped with a bracket for easy mounting on wall or floor.

Plastic three-way valve

(without hose connections)

Rotatable hose connections should be ordered separately (5 different sizes available).

Type	Description
Y3V	Plastic three-way valve



Y3V

Plastic Y-connector

(without hose connections)

Rotatable hose connections should be ordered separately (5 different sizes available).

Type	Description
Y3C	Plastic Y-connector



Y3C

Plastic in-line non-return valve

(without hose connections)

Rotatable hose connections should be ordered separately (5 different sizes available).

Type	Description
YNRE	Plastic in-line non-return valve (duck bill)



YNRE

Plastic hose connections for Y3V, Y3C and YNRE

Type	Description
YPA38P2	Hose connector 38 mm (2 pcs.)
YPA38P1	Hose connector 38 mm (1 pcs.)
YPA32P2	Hose connector 32 mm (2 pcs.)
YPA32P1	Hose connector 32 mm (1 pcs.)
YPA28P2	Hose connector 28 mm (2 pcs.)
YPA28P1	Hose connector 28 mm (1 pcs.)
YPA25P2	Hose connector 25 mm (2 pcs.)
YPA25P1	Hose connector 25 mm (1 pcs.)
YPA19P2	Hose connector 19 mm (2 pcs.)
YPA19P1	Hose connector 19 mm (1 pcs.)



YPA