

Marine Sanitation Holding Tank Layouts



For Tanks
BELOW
Waterline

Layout Headings

- 1. Macerator Pump with Charcoal Vent, Non-Return Valve, Diverter Valve and Deck Pumpout
- 2. Electric Pump with Charcoal vent, Diverter Valve and Deck Pumpout
- 3. Manual Pump with Charcoal Vent, Diverter Valve and Deck Pumpout
- 4. Manual Pump with Charcoal Vent
- 5. Manual Pump with Charcoal Vent and Deck Pumpout
- 6. Manual Pump with Charcoal Vent and Diverter Valve





Marine Sanitation Holding Tank Layouts

The following pages show various diagrams for tanks positioned below the waterline. They are purely representations of possible layouts and should be treated as guidelines only. There are many more combinations of fittings and pumps etc but you should however find them a useful starting point. We are always on the end of the phone and would be pleased to discuss any variations you can think of!

Because the tank is below the waterline a gravity discharge will not work, therefore some sort of pump has to be introduced into the system. There are many pumps available both manual and electric. Manual pumps can be used on any system but electric are more suited to confined areas and where access is hard. Electric macerator and diaphragm pumps certainly make the job of emptying easier.

1 ½" hose is shown throughout these layouts for all pipework including the vent. Please read our Guide to Marine Sanitation for more information on vent sizes.

The anti-syphon loops shown in the layouts should be a minimum of 10" above the waterline if possible. On a sailing boat this figure applies when the boat is heeled.

If the tank or toilet is either on or below the waterline then the system should be treated as below the waterline.

All connections below the waterline should be double clipped, even those connections above the waterline would benefit from double clipping but are not essential. Try and get the clamping bands opposite each other for best results.

Sanitation hose has roughly a 200mm bend radius before collapsing, should you require a tighter bend then we can supply either swept or 90 degree 1 ½" elbows to get around those tight corners.

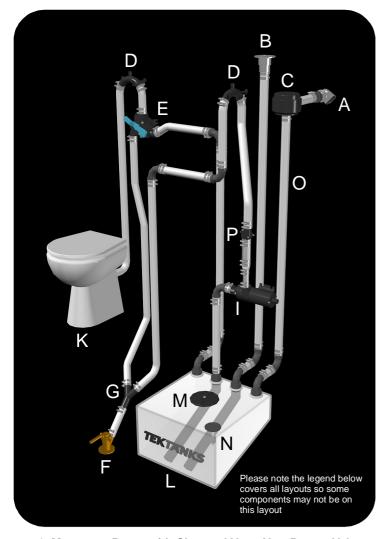
The level indicator shown in all layouts is the Tek-Tanks Tankminder as this meets the minimum requirements for waste tank level indication. Other waste level indicators include the Wema SHS series, the Sealand Tankwatch 4 and the Solo digital display units. All invasive sensors will require some degree of maintenance, however the Gobius 4 non-invasive system is our preferred choice as this reads the level from the outside and requires no maintenance and has no leak potential.

Gobius 4 is also suitable for aluminium and stainless steel holding tanks.

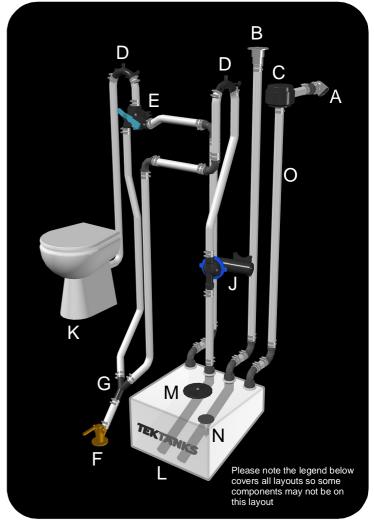
For a complete list of accessories and level indicators for your installation please visit our online catalogue which can be found at www.tek-tanks.com



Marine Sanitation Holding Tank Layouts



1. Macerator Pump with Charcoal Vent, Non-Return Valve, **Diverter Valve and Deck Pumpout**



2. Electric Pump with Charcoal vent, Diverter Valve and Deck Pumpout

Description

A Shell Vent

B Deck Pump Out Fitting

C Microvent

D Anti Syphon Loop E Jabsco Diverter

F 1 1/2" Sea Cock

G Y Piece

H Manual Diaphragm Pump

I 12v Electric Macerator

J 12v Electric Diaphragm Pump

K Toilet Tank

M Wema FLB Inspection Hatch

N Tank Minder

O 1 1/2" Sanitation Hose

1 ½" Non Return Valve

Part Number

2-74405

2-76801

MICROVENT

3-80755

45490-1000

2-71165

YP6114

BP0527

18590-2092

50890-1000

Various Options

Various Options

FLB

TLM/02

01028

9-42151

Notes

Shell vent can be supplied with either a straight hosetail (1-72450) or an elbow hosetail (3-80425)

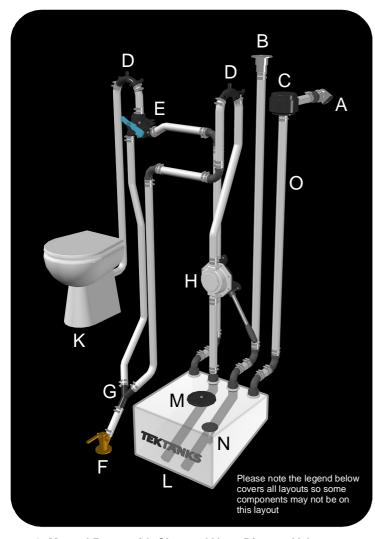
Electric pumps can be supplied as 24v if required, 12v are standard stock items.

The manual diaphragm pump is shown as bulkhead mounted. Behind bulkhead is available (BP0535)

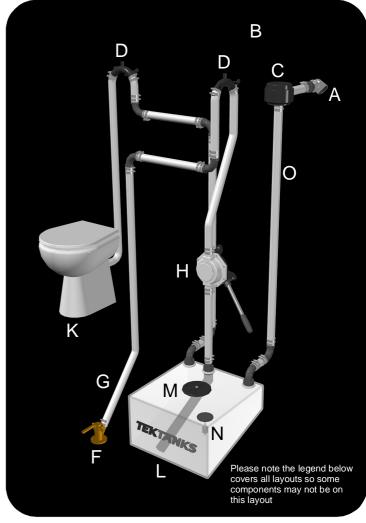
Other hatches are available. Please see our Waste and Water Tank Design Guide for more options.



Marine Sanitation Holding Tank Layouts



3. Manual Pump with Charcoal Vent, Diverter Valve and Deck Pumpout



4. Manual Pump with Charcoal Vent

Description

A Shell Vent

B Deck Pump Out Fitting

C Microvent

D Anti Syphon Loop

E Jabsco Diverter

F 1 1/2" Sea Cock

G Y Piece

H Manual Diaphragm Pump

I 12v Electric Macerator

J 12v Electric Diaphragm Pump

K Toilet

L Tank

M Wema FLB Inspection Hatch

N Tank Minder

O 1 1/2" Sanitation Hose

P 11/2" Ball Valve

Part Number

2-74405

2-76801

MICROVENT

3-80755

45490-1000

2-71165

YP6114

BP0527

18590-2092

50890-1000

Various Options

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01028

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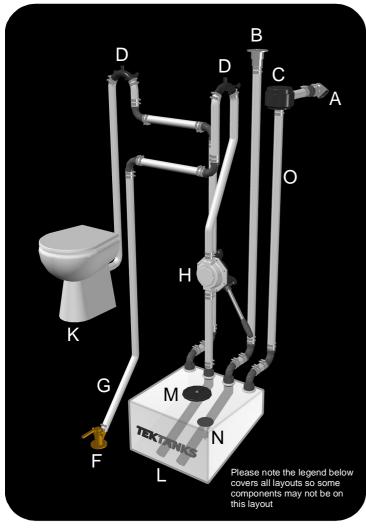
Electric pumps can be supplied as 24v if required, 12v are standard stock items.

The manual diaphragm pump is shown as bulkhead mounted. Behind bulkhead is available (BP0535)

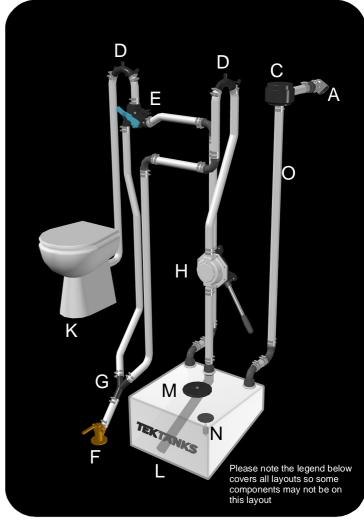
Other hatches are available. Please see our Waste and Water Tank Design Guide for more options.



Marine Sanitation Holding Tank Layouts



5. Manual Pump with Charcoal Vent and Deck Pumpout



6. Manual Pump with Charcoal Vent and Diverter Valve

Description

A Shell Vent

B Deck Pump Out Fitting

C Microvent

D Anti Syphon Loop

E Jabsco Diverter

F 1 1/2" Sea Cock

G Y Piece

H Manual Diaphragm Pump

I 12v Electric Macerator

J 12v Electric Diaphragm Pump

K Toilet

L Tank

M Wema FLB Inspection Hatch

N Tank Minder

O 1 1/2" Sanitation Hose

P 11/2" Ball Valve

Part Number

2-74405

2-76801

MICROVENT

3-80755

45490-1000

2-71165

YP6114

BP0527

18590-2092

50890-1000

Various Options

Various Options

FLB TLM/02

04000

01028

Various Options

Notes

Shell vent can be supplied with either a straight hosetail (1-72450) or an elbow hosetail (3-80425)

Electric pumps can be supplied as 24v if required, 12v are standard stock items.

The manual diaphragm pump is shown as bulkhead mounted. Behind bulkhead is available (BP0535)

Other hatches are available. Please see our Waste and Water Tank Design Guide for more options.



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Equipment Listed in Layouts



Deck Pumpout Fitting 2-76801



Shell Vent 2-74405



Microvent MICROVENT



Anti Syphon Loop 3-80755



Diverter Valve 45490-1000



Y Piece YP6114



Manual Diaphragm Pump BP0527



Wema Inspection Hatch FLB



Tankminder Sensor TLM/02

Equipment not listed here can be found on our website