

Water Waste and Fuel



Marine Sanitation Holding Tank Layouts

For Tanks
ABOVE
Waterline

Layout Headings

- 1. Gravity Discharge with Charcoal Vent and Deck Pumpout
- 2. Gravity Discharge with Charcoal Vent and Diverter Valve
- 3. Gravity Discharge with Charcoal Vent, Deck Pumpout and Diverter Valve
- 4. Gravity Discharge with Charcoal Vent
- 5. Manual Pump with Charcoal Vent, Deck Pumpout and Ball Valve
- 6. Manual Pump with Charcoal Vent, Deck Pumpout and Dip-Pipe Outlet
- 7. Manual Pump with Charcoal Vent, Diverter Valve and Ball Valve
- 8. Manual Pump with Charcoal Vent, Diverter Valve and Dip-Pipe Outlet
- 9. Manual Pump with Charcoal Vent and Ball Valve
- 10. Manual Pump with Charcoal Vent and Dip-Pipe Outlet
- 11. Manual Pump with Charcoal Vent, Diverter Valve, Deck Pumpout and Ball Valve
- 12. Manual Pump with Charcoal Vent, Diverter Valve, Deck Pumpout and Dip-Pipe Outlet





The following pages show various diagrams for tanks positioned above 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!

The gravity discharge systems work well with 2" outlet hose but this is not always possible because existing seacocks are normally 1 ½". Changing seacocks is not a desirable job so we suggest trying the system with the 1 ½" hose and accepting the fact that a pump may have to be fitted at a later date if there are problems. If your boat is out of the water and you want a gravity discharge system that works well, then changing the seacock to 2" is a must.

We have shown a manual pump on the installations but an electric pump can be used. Please remember that no pump will stop the waste totally from discharging when the tank is in use and so the seacock should be closed whilst there is waste in the tank and opened when discharging. An 1½" ball valve is also recommended so as waste does not sit in the pump and distort the valves.

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. Please see our other guide for tanks and toilets 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.

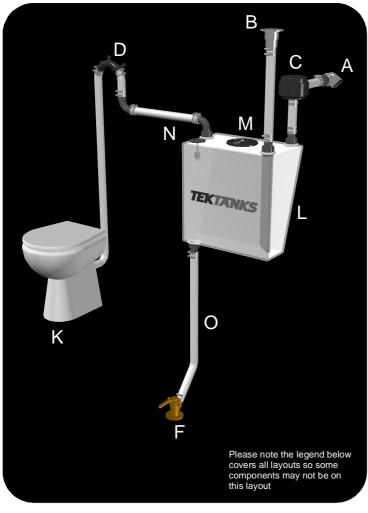
Sanitation hose has roughly a 200mm bend radius before collapsing, should you require a tighter bend then we can supply either swept or 90 degree 1 ½" elbows to get around those tight corners.

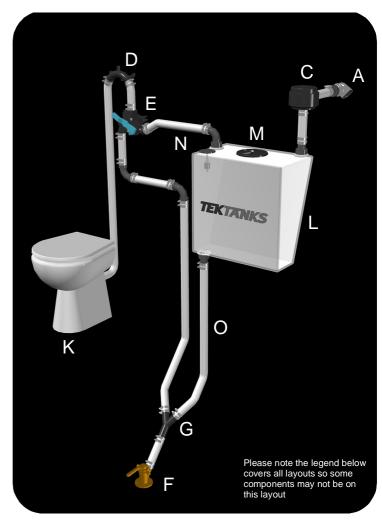
Deck pumpouts should be positioned above the discharge pipe for ease of rodding through from the deck pumpout fitting. Our diagrams do not show this because it would have made the renderings unclear.

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 for your installation please visit our online catalogue which can be found at www.tek-tanks.com







1. Gravity Discharge with Charcoal Vent and Deck Pumpout

Part Number

FLB

TLM/02

Various Options

01028

Description

N Tank Minder

2. Gravity Discharge with Charcoal Vent and Diverter Valve

A Shell Vent 2-74405 B Deck Pump Out Fitting 2-76801 **MICROVENT** C Microvent D Anti Syphon Loop 3-80755 E Jabsco Diverter 45490-1000 F 1 1/2" Sea Cock 2-71165 G Y Piece YP6114 H Manual Diaphragm Pump **BP0527** I 12v Electric Macerator 18590-2092 J 12v Electric Diaphragm Pump 50890-1000 K Toilet Various Options L Tank **Various Options**

M Wema FLB Inspection Hatch

O 1 1/2" Sanitation Hose

1 1/2" Ball Valve

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.



B

TEKTANKS

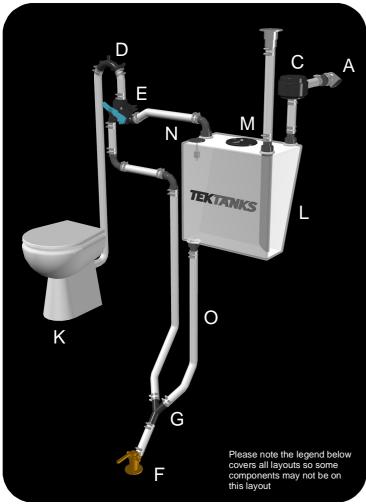
O

Please note the legend below

covers all layouts so some

components may not be on

this layout





Description Part Number A Shell Vent 2-74405 B Deck Pump Out Fitting 2-76801 **MICROVENT** C Microvent D Anti Syphon Loop 3-80755 E Jabsco Diverter 45490-1000 F 1 1/2" Sea Cock 2-71165 G Y Piece YP6114 H Manual Diaphragm Pump **BP0527** I 12v Electric Macerator 18590-2092 J 12v Electric Diaphragm Pump 50890-1000 K Toilet Various Options L Tank **Various Options** M Wema FLB Inspection Hatch **FLB** N Tank Minder **TLM/02** O 1 1/2" Sanitation Hose 01028

1 1/2" Ball Valve

Notes

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

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

hosetail (3-80425)

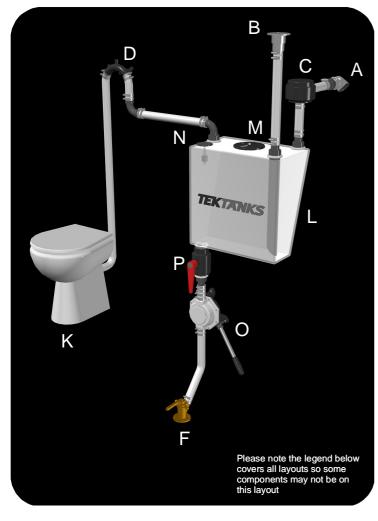
The manual diaphragm pump is shown as bulkhead mounted. Behind bulkhead is available (BP0535)

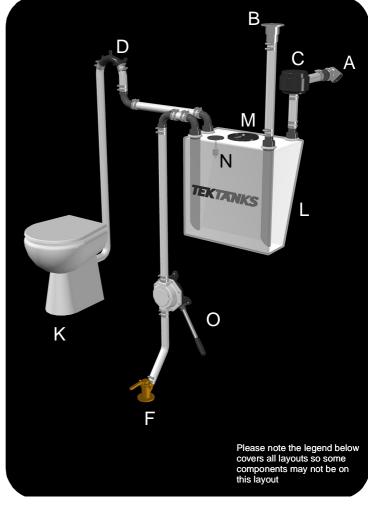
Other hatches are available. Please see our Waste and Water Tank Design Guide for more options.

Tel: 01420 520830 Fax: 01420 520840 Email: sales@tek-tanks.com Tek-Tanks Ltd - The Old Stables - West End Farm - Upper Froyle - Alton - Hampshire - GU34 4JR

Various Options







5. Manual Pump with Charcoal Vent, Deck Pumpout and Ball Valve

M Wema FLB Inspection Hatch

1 ½" Sanitation Hose

1 1/2" Ball Valve

Description

N Tank Minder

0

6. Manual Pump with Charcoal Vent, Deck Pumpout and Dip-Pipe Outlet

A Shell Vent	2-74405
B Deck Pump Out Fitting	2-76801
C Microvent	MICROVENT
D Anti Syphon Loop	3-80755
E Jabsco Diverter	45490-1000
F 1 ½" Sea Cock	2-71165
G Y Piece	YP6114
H Manual Diaphragm Pump	BP0527
I 12v Electric Macerator	18590-2092
J 12v Electric Diaphragm Pump	50890-1000
K Toilet	Various Options
L Tank	Various Options

Part Number

FLB

TLM/02

Various Options

01028

Notes

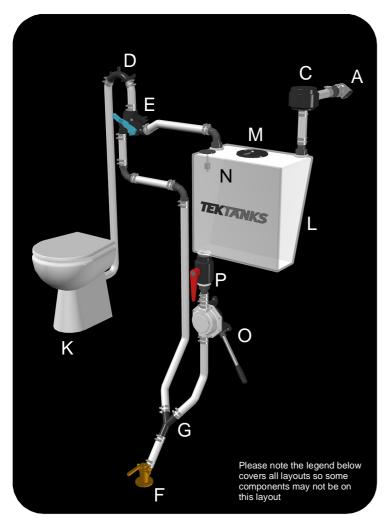
Shell vent can be supplied with either a straight hosetail (1-72450) or an elbow hosetail (3-80425)

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

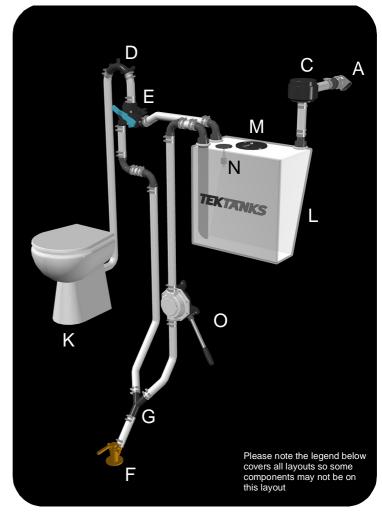
The manual diaphragm pump is shown as bulkhead mounted. Behind bulkhead is available (BP0535)

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





7. Manual Pump with Charcoal Vent, Diverter Valve and Ball Valve Tap



8. Manual Pump with Charcoal Vent, Diverter Valve and Dip-Pipe Outlet

DescriptionA 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

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 ½" Sanitation Hose

P 1½" Ball Valve

18590-2092 50890-1000 Various Opti

Various Options
Various Options

Part Number

MICROVENT

45490-1000

2-74405

2-76801

3-80755

2-71165

YP6114

BP0527

FLB TLM/02 01028

Various Options

Notes

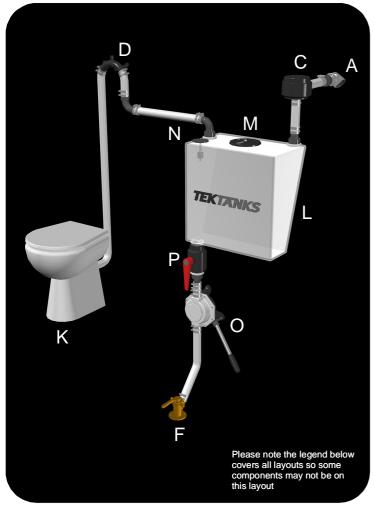
Shell vent can be supplied with either a straight hosetail (1-72450) or an elbow hosetail (3-80425)

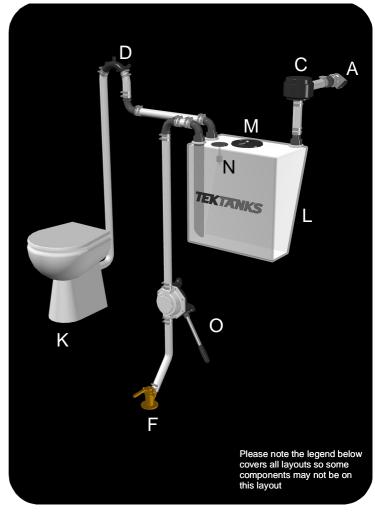
Electric pumps can be supplied as 24v if required, 12v are standard stock items.

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.







9. Manual Pump with Charcoal Vent and Ball Valve Tap

10. Manual Pump with Charcoal Vent and Dip-Pipe Outlet

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 1 ½" Ball Valve

Part Number

2-74405

2-76801

MICROVENT

3-80755

45490-1000

2-71165

Z-7 1103

YP6114

BP0527

18590-2092

50890-1000

Various Options Various Options

FLB

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Various Options

Notes

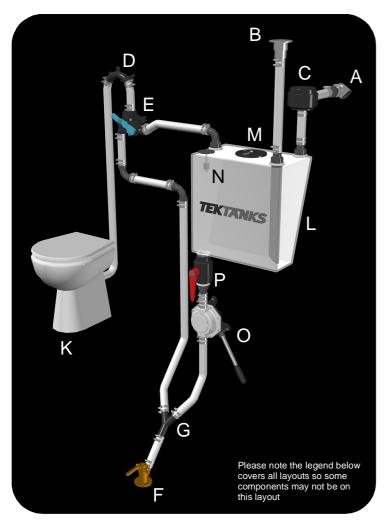
Shell vent can be supplied with either a straight hosetail (1-72450) or an elbow hosetail (3-80425)

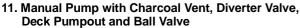
Electric pumps can be supplied as 24v if required, 12v are standard stock items.

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.







TEKTANKS K Please note the legend below covers all layouts so some components may not be on this layout

12. Manual Pump with Charcoal Vent, Diverter Valve, **Deck Pumpout and Dip-Pipe Outlet**

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

1 1/2" 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

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.



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