

# **Mini Twin & Maxi Pump Station Installation & Technical Details**



# Mini Twin & Maxi Pump Stations

Single Drainage Sump & Pump

Installation Instructions and Technical Details

## Application

The Mini Twin and Maxi range of package pump stations are designed to collect foul water from an entire property or other building which houses multiple people like commercial offices and other light commercial applications.

## Maintenance

The Mini Twin and Maxi are manufactured using high quality components designed to give a long trouble free life – with any type of mechanical equipment regular preventative maintenance is important to keep the product working efficiently on a day-to-day basis. We recommend this system is serviced yearly by specialist pump engineers.

## Discharge Pipe Work

The Mini Twin and Maxi have been designed to accept 2 ½ ” or 3” standard solvent weld discharge pipe. The tank is terminated in a 2 ½” or 3” BSP male thread. For all pipe work and glue please see accessories page.

## Inlet

The Mini Twin and Maxi are provided with a 110mm inlet seal, this is supplied loose.

A 140mm hole-saw will be needed to fit the seal (please see accessories page). The 110mm inlet seal can be drilled anywhere on the chamber, but no lower than 200mm from the bottom of the chamber; this is to ensure that the pumps can operate correctly. *\*Note larger invert can be supplied on request.*

## Cable Duct Pipe Work

The Mini Twin and Maxi have been designed to accept 110mm standard drainage pipe.

## Electrical Connections

The Mini Twin and Maxi will require a 32Amp type C isolater.



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#### Installation Instructions

It is important to read these instructions which are for guidance only as it is the contractor's responsibility to satisfy himself that the installation procedure is in accordance with the prevailing ground conditions and good building practice, to eliminate any potential damage to the pump station either during or after installation.

Mini Twin and Maxi Pump Stations are manufactured from high density polyethylene and are extremely robust. However as with any pre formed chamber they are susceptible to floatation and hydrostatic pressure exerted in high water table conditions.

1. Select a suitable location for the Mini Twin and Maxi pump station
2. In all instances the pump station must be positioned on a flat, level surface; set on a concrete base of dimensions sufficient to support the base of the chamber. The thickness of the base should be adequate for the ground conditions and of a minimum of 150mm thickness.
3. Carefully position the Mini Twin and Maxi onto the base slab, ensuring that no loose debris is inadvertently knocked onto the base slab under the pump station during this procedure.
4. The Mini Twin and Maxi must be backfilled with a mass concrete mix of a minimum 150mm thickness and must be used in accordance with the ground conditions and be as dry as practicable to prevent additional floatation pressure being exerted on the chamber.  
The Mini Twin and Maxi must be ballasted with water at the same rate as backfilling such that the level difference between the water and backfill does not exceed 300mm at anytime.
5. Where ground water is present in the excavation, de-watering must be undertaken throughout the installation procedure and until the backfill has completely cured.
6. Similarly the ballast water inside the pump station should not be removed until the backfill has fully cured.
7. It is extremely important that once the Mini Twin and Maxi has been installed and all connections made the drainage system is flushed through and all sand, silt, rubble and general debris is removed from the chamber.

**FAILURE TO CARRY OUT THIS OPERATION WILL INVALIDATE THE WARRANTY ON THE PUMP**

8. The control panel must be sited adjacent to the Mini Twin and Maxi with 110mm cable duct (with draw cord) for the cabling. If the control panel is not to be sited adjacent to the Mini Twin and Maxi, we should be advised at order stage so that we can make recommendations as to the cabling requirements.

All electrical connections must be carried out by a qualified electrician.



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## Control Panel Details.

The control panel is mounted adjacent to the pump station, an audible alarm will be heard in the case of pump failure.



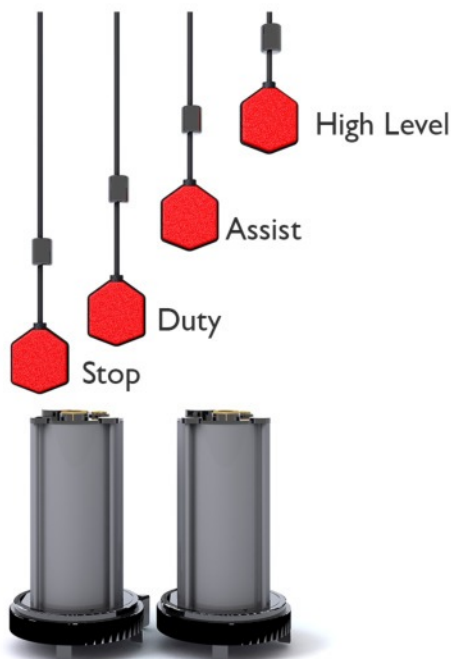
## Specifications

- Door interlocked isolator
- Motor fuse and thermal protection
- Alternate pump duty
- Pump Klaxon connections
- 24V AC central circuit
- Duty standby or assist operation
- Pump running indication X2
- Pump tripped indication X2
- Hand-off-auto sector switch X2
- Pump tripped X2 H/C/A

## Dimensions

**Width:** 300  
**Depth:** 180  
**Height:** 300

## Float Switch Arrangement



Floats should be attached to the float bracket provided at the top of the tank.

The first float (stop) should be located 100mm above the pumps or at the lowest invert.

Once the float is fitted in this capacity the float should then rise 100mm in a vertical motion.

### \*Notes

*Make sure that the weight is fitted 150mm from the float device.*

*When connecting the floats the blue wire is not required.*