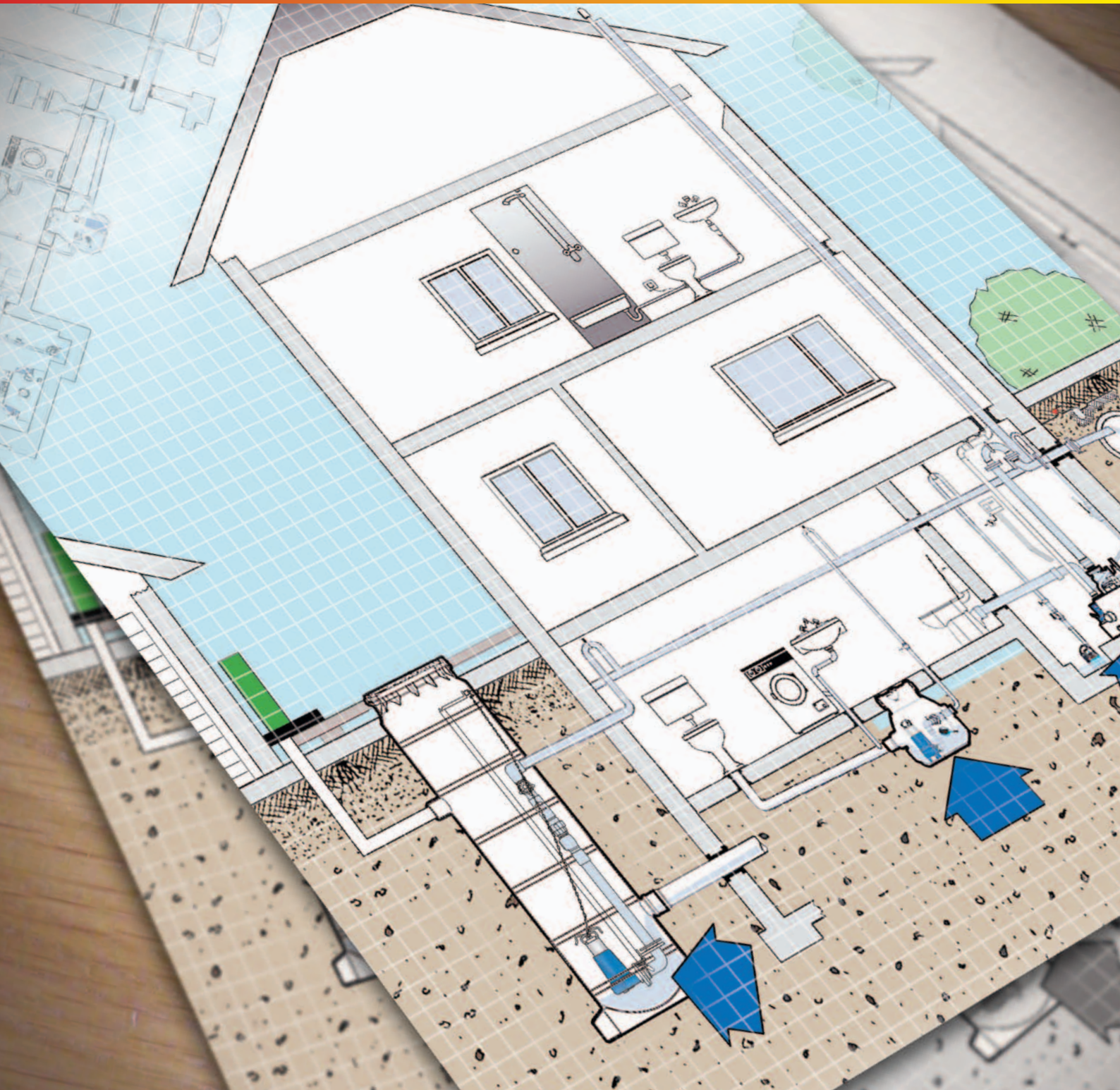


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| Uniclass: L7316 |
| CI/SfB: |
| (52.9) X |

DELTA MEMBRANE SYSTEMS LTD

packaged **pump** solutions



Packaged Pump Stations

DELTA MEMBRANE SYSTEMS LIMITED

DELTA HOUSE, MERLIN WAY, NORTH WEALD, EPPING, ESSEX, CM16 6HR

t: 01992 523523 e: pumps@deltamembranes.com www.deltamembranes.com

SINGLE V3 PUMP STATION (DMS 047 & DMS 107)

Overview

The Single V3 (DMS 047) packaged pump station designed to collect ground water from a cavity membrane system through the clear opening to the top of the chamber. This pump station would be selected where no running water is present or expected and therefore is for protection only.

The Single V3 sump with inlets (DMS 107) allows for one or two 110mm pipes to be connected into the side of the chamber, we recommend advice from one of our technical support engineers before selecting this product.

The Single V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from HDPE and able to withstand hydrostatic forces encountered in applications with high water tables.

The pump station is delivered as a complete package including chamber, all internal pipe work and one powerful V3 pump. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing and electrical skills.



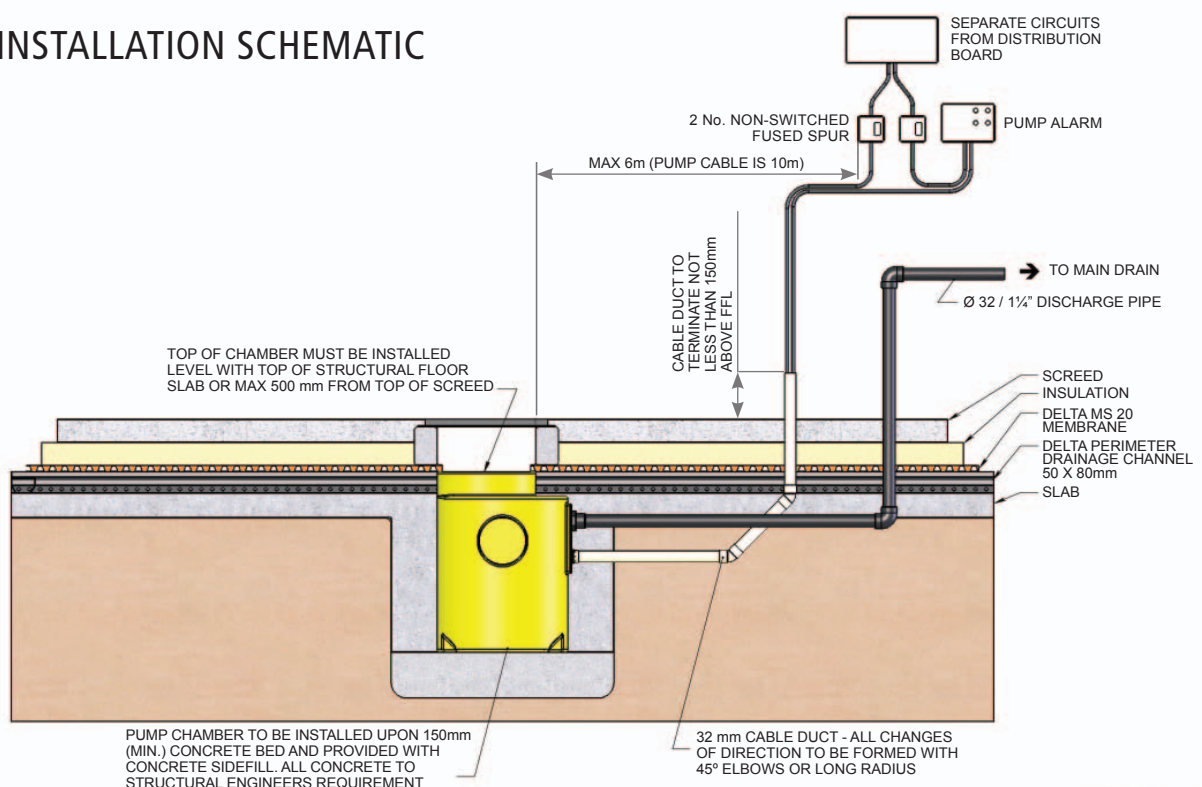
Installation

The Single V3 sump sits on a concrete base. Standard 110mm inlet pipes (DMS 107 only) are connected using a 110mm coupler.

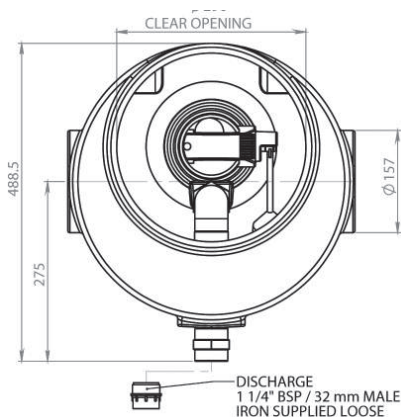
A 1 1/4" / 32mm discharge pipe is run from the chamber to a drain and 1 1/4" / 32mm duct installed with draw cord. The chamber is filled with water to prevent floatation and back filled with concrete to 'lock into structure.'

For full installation instructions see 'Single V3 sump - Installation instructions & Technical Details'.

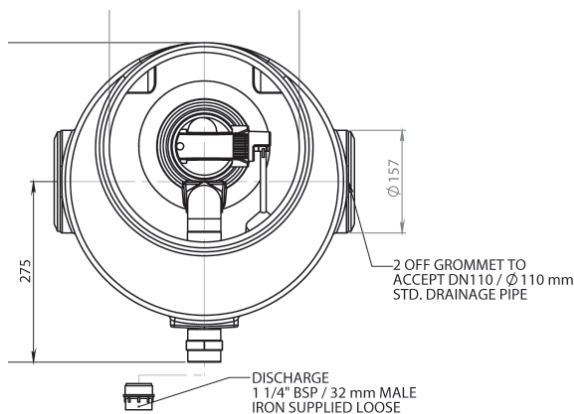
TYPICAL INSTALLATION SCHEMATIC



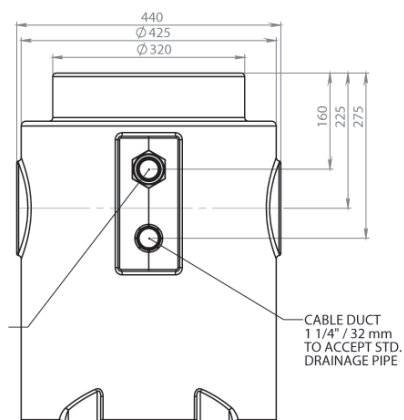
DELTA MEMBRANE SYSTEMS LTD.



DMS 047

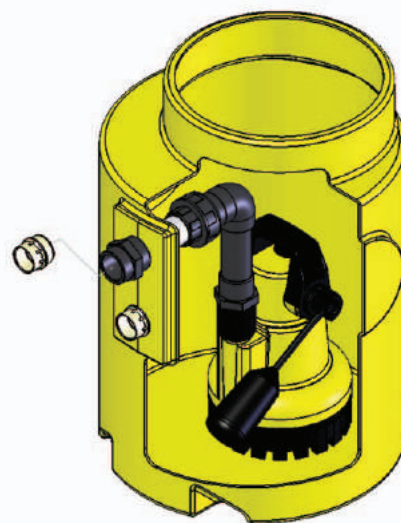


DMS 107



| | |
|-------------------------------|-----------------|
| Pump Model | V3P |
| Voltage | 230 V |
| KW rating (P1 / P2) | 0.43/0.18KW |
| Full Load Current | 1.9 A |
| Fuse Rating spur | 13 A |
| Typical Duty | 2.2 L/S 3m Head |
| Chamber Storage Volume | 80 litres |

For full technical & performance information please refer to 'Drainage & Sewage Pumps - Technical Overview'



Accessories

Battery Back up



High Level Alarm



Telemetry System



Pipe Work



Delta Membrane Systems Limited

Delta House, Merlin Way, North Weald, Essex, CM16 6HR

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DUAL V3 SUMP (DMS 164)

Overview

A packaged pump station designed to collect ground water via perimeter channel or 110mm pipes (129 detail) and / or clear opening to the top of the chamber. This chamber can also collect grey water from showers, washing machines, dish washers and wash hand basins, but not foul from a WC. (See Foul V3 sump DMS 165).

The Dual V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from HDPE and able to withstand hydrostatic forces encountered in applications with high water tables.

The pump station is delivered as a complete package including chamber, all internal pipe work and two powerful V3 pumps. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing and electrical skills.



- Specifically designed for ground water applications.
- Simple to install
- Quiet in operation

Installation

The Dual V3 sump sits on a concrete base. Standard 110mm inlet pipes (if applicable) are connected using a 110mm coupler.

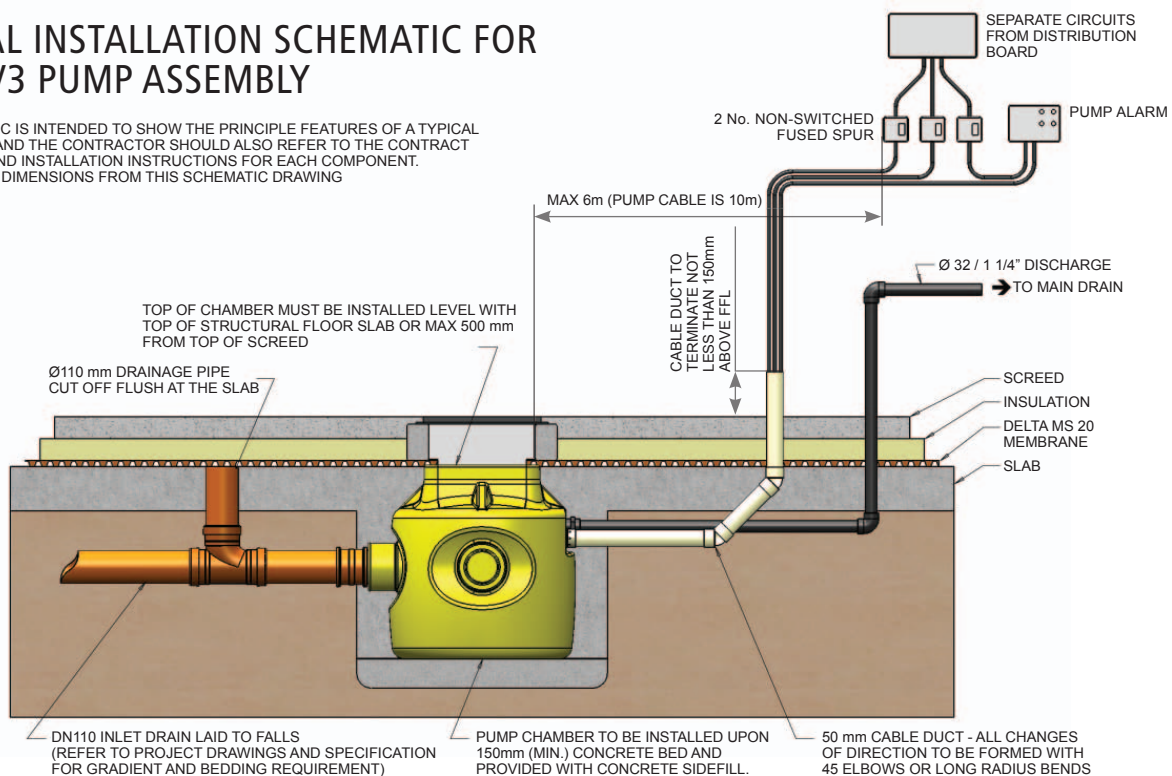
A 1 1/4" / 32mm discharge pipe is run from the chamber to a drain and cable 50mm cable duct installed with draw cord. The chamber is filled with water to prevent floatation and back filled with concrete to 'lock into structure.'

For full installation instructions see 'Dual V3 sump - Installation instructions & Technical Details'.

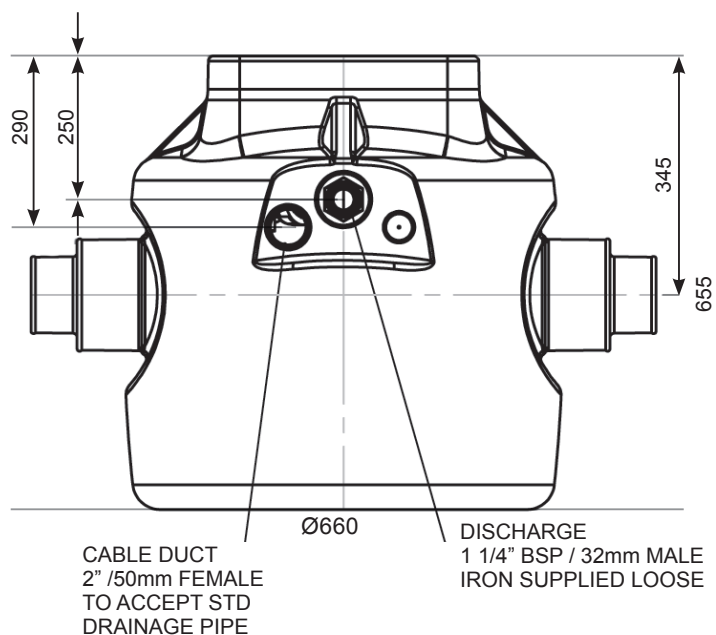
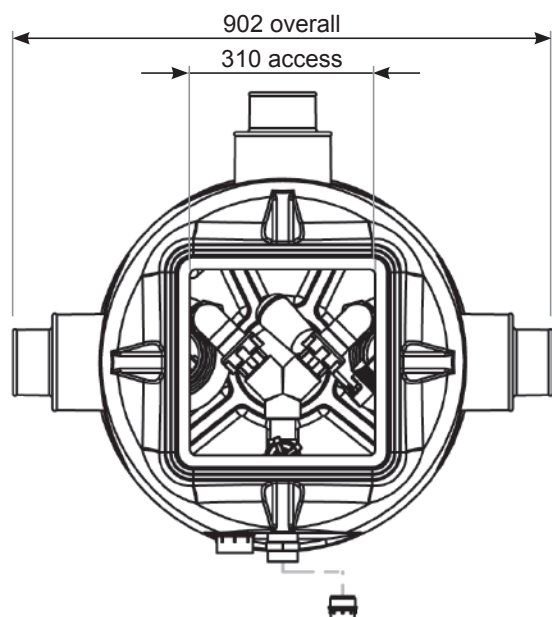
Typically a double sealed man hole cover is fitted in the final screed, this can be a tray type cover to accept the final floor finish, ie tiles or wood.

TYPICAL INSTALLATION SCHEMATIC FOR DUAL V3 PUMP ASSEMBLY

NOTE:
THIS SCHEMATIC IS INTENDED TO SHOW THE PRINCIPLE FEATURES OF A TYPICAL INSTALLATION AND THE CONTRACTOR SHOULD ALSO REFER TO THE CONTRACT DOCUMENTS AND INSTALLATION INSTRUCTIONS FOR EACH COMPONENT.
DO NOT SCALE DIMENSIONS FROM THIS SCHEMATIC DRAWING

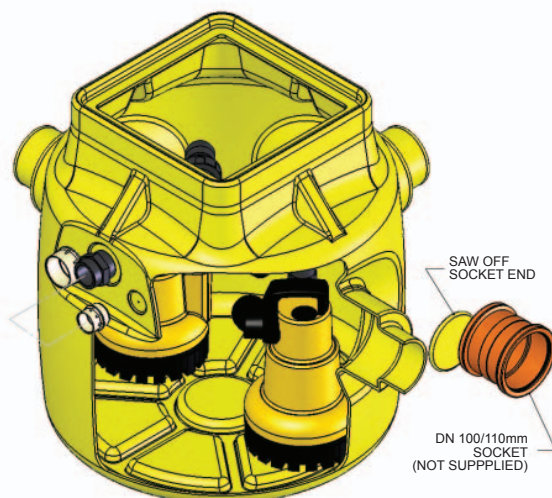


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| | |
|-------------------------------|-----------------|
| Pump Model | V3P |
| Voltage | 230 V |
| KW rating (P1 / P2) | 0.43/0.18KW |
| Full Load Current | 1.9 A |
| Fuse Rating spur | 13 A |
| Typical Duty | 2.2 L/S 3m Head |
| Chamber Storage Volume | 217 litres |
| Storage below Volume | 87 litres |

For full technical & performance information please refer to 'Drainage & Sewage Pumps - Technical Overview'



Accessories

Battery Back up



High Level Alarm



Telemetry System



Pipe Work



Delta Membrane Systems Limited

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FOUL V3 PUMP STATION (DMS 165)

Overview

A packaged pump station designed to collect foul water from basements and ground floor extensions where other facilities in the property discharge via gravity. A typical application would be the collection and discharge of foul water from a basement fitted with a bathroom and utility room. This pump station is not designed to collect ground water from a cavity membrane system (see Dual V3 sump, DMS 164).

The Foul V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from virgin tank grade HDPE and is able to withstand hydrostatic forces encountered in applications with high water tables.

The pump station is delivered as a complete package including all internal pipe work and 612SA foul vortex pump. A high level alarm is a recommended option. It is designed to be installed by contractors with competent building, plumbing & electrical skills.

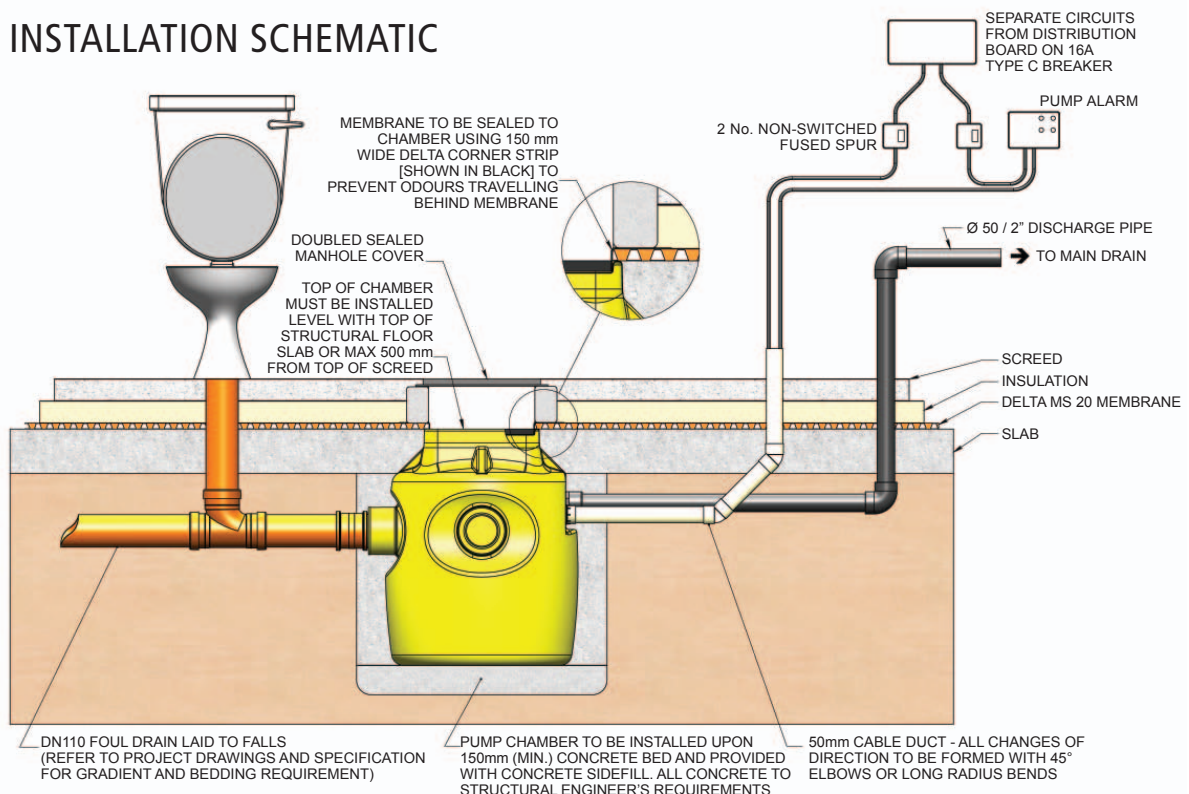


Installation

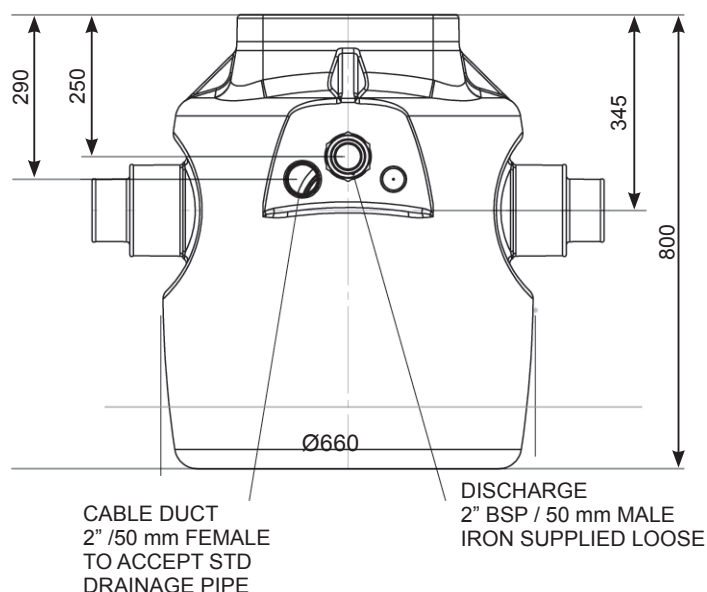
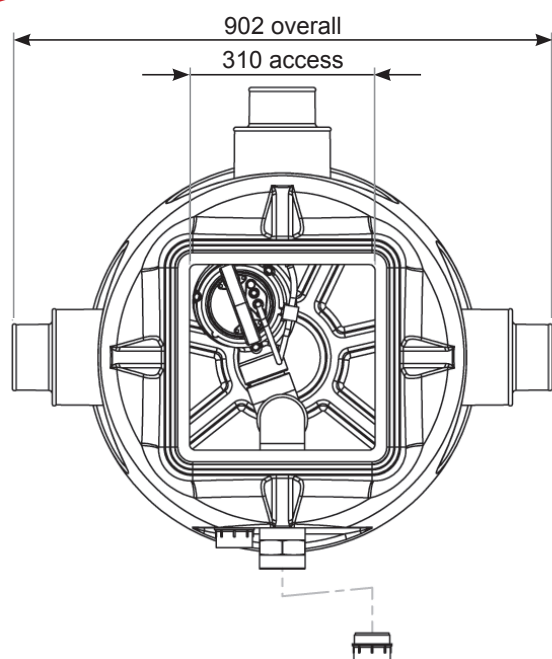
The Foul V3 sump sits on a concrete base. Standard 110mm inlet pipes are connected using a 110mm coupler. A 2" / 50mm discharge pipe is run from the chamber to a drain, 50mm cable duct installed with draw cord and 50mm vent to high level or SVP. The chamber is filled with water to prevent floatation and back filled with concrete to 'lock into structure.'

Typically a double sealed man hole cover is fitted in the final screed, this can be a tray type cover to accept the final floor finish, ie tiles or wood. For full installation instructions see 'Foul V3 sump - Installation instructions & Technical Details'

TYPICAL INSTALLATION SCHEMATIC

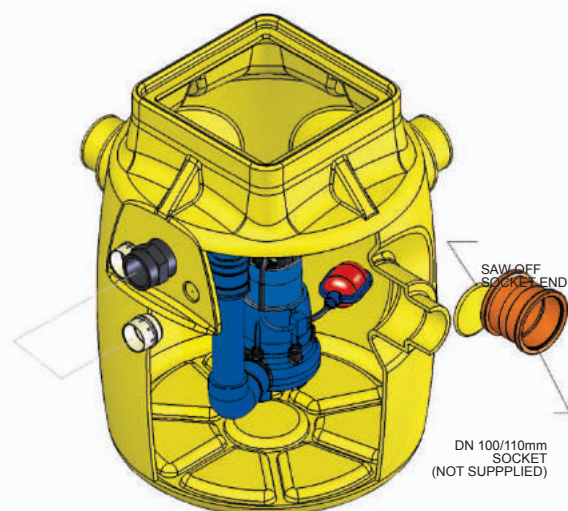


DELTA MEMBRANE SYSTEMS LTD.



| | |
|-------------------------------|------------------|
| Pump Model | 612SA |
| Voltage | 230 V |
| KW rating (P1 / P2) | 1.25KW / 0.75KW |
| Full Load Current | 6.0A |
| Fuse Rating spur | 13A |
| Typical Duty | 5.8L/S @ 4m Head |
| Chamber Storage Volume | 273 litres |
| Storage below Volume | 137 litres |

For full technical & performance information please refer to 'Drainage & Sewage Pumps - Technical Overview'



Accessories

High Level Alarm

Telemetry System

Pipe Work



Delta Membrane Systems Limited

Delta House, North Weald, Essex, CM16 6HR

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PPS
after sales service

PPS
pulsafeum pump systems

Tel: 01279 817570 Fax: 01279 817570
W www.ppsystems.co.uk

Service Agreement

| | |
|---|--|
| INVOICE ADDRESS 15A Chawke Lane London W4 2LR | PROPERTY ADDRESS 15A Chawke Lane London W4 2LR |
|---|--|

CONTACTS:

Additional Information: _____
 Name: _____
 E-mail: _____

EQUIPMENT INSTALLED: Delta dual c/w 2 x 50NFC + alarm
 Delta Dual c/w 2 x 25NFC + alarm

SCOPE OF SERVING

- Pumps kept clean on hand operation
- Carry out minor clear removing all debris and scale from chamber, pumping equipment and associated items
- Clean & check float valve equipment
- Check & adjust impeller/bearings
- Check operation & wear of control panel/variables
- Examine sea water valves operate and replace if necessary
- Check internal pipe work for leaks & block
- Test cut pumps & monitor performance
- Replace or use parts/accessories necessary to bring the pump station on line once authorised
- Test battery backup (if fitted)
- Test low level alarms and replace rechargeable battery
- Reset any defect requiring further action
- Complete inspection report and pass one copy to customer

Frequency of Service: Every 6 months

Next Service Due: December 2012

Call Per Visit £210.00 plus VAT £345.75

Payment Terms: Collection on completion of service via credit/debit card or cheque

We accept this Service Agreement and the Terms of Business (V101)

Sign: _____ Print Name: _____ Date: _____

Approved by Engineer 01/07/12
 Noted and Approved by: Registered Office & Supply Street Station Northolt, near CW22 3JH VAT No: 837 9826 30

Page 1 of 2



- **Fully stocked vans**
- **Emergency breakdown service**
- **Out of hours service**
- **Planned maintenance**
- **Factory trained engineers**