

Pumps & Drainage

- Sumps, pumps and drainage channels for cavity drained waterproofing systems (BS 8102 2009 Type C)
- Battery back up pumps
- Control panels and alarms



About Triton

The company holds British Board of Agreement approvals and is a BS EN ISO 9001 Quality Assured Company. Triton was represented on the technical committee responsible for drafting British Standard BS 8102 (2009) – the Code of Practice for protection of below ground structures against water from the ground – and supplies systems and products to meet the requirements of all three methods of waterproofing as defined by the Standard.

Triton also supplies associated products including anti-condensation products, ground gas barriers, flood resilience and remediation systems, cavity wall ties, damp proofing and timber preservation systems.

Triton was the first company in the waterproofing industry to offer architects and specifiers the opportunity to download BIM objects from the NBS National BIM Library. To further support architects, surveyors and contractors, a full programme of training courses has been created including RIBA approved CPD seminars on basement waterproofing, concrete waterproofing and green roof construction. More details can be found at tritonsystems.co.uk/training



Channel installation

Pumps and Drainage

The products and systems described in this brochure provide effective mechanical drainage solutions. They are installed in conjunction with cavity drained waterproofing systems in new build and renovation projects. The systems are designed to be fully maintainable, as is a requirement of Type C drained protection in accordance with BS 8102 (2009) - the Code of Practice for protection of below ground structures against water from the ground.

Available for download at tritonsystems.co.uk

- Technical drawings
- Installation guides
- Product data sheets
- Typical pump maintenance schedules
- CAD details
- BIM objects



Aqua Pump XL

Pumps and Pump Kits

TRITON AQUA PUMP PRO

- Quick and easy to install
- Maximum head 7m
- Pump capacity 132 litres/minute

Primarily developed for the new build specification market, the Aqua Pump Pro range is designed to remove ground water from basement cavity drain systems. The Aqua Pump Pro kit comprises a polyethylene sump which features flanges to key in to the placed concrete, a galvanized, locking access cover and one mains powered, submersible sump. The system is highly versatile and enables installers to locate inlets to suit on-site requirements.

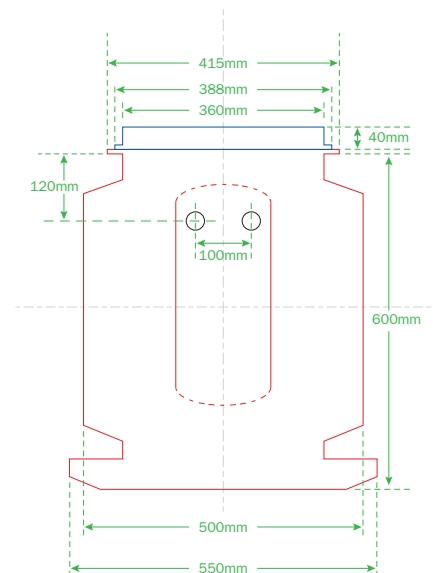
Technical Data (Aqua Pump Pro)

Power supply	230V
Rated current	1.9A
Motor rating	180W
Frequency	50Hz
Revolutions/minute	2800 rpm
Vertical output	7M
Maximum flow rate	168 litres/minute
Maximum liquid temperature	<40°C
Discharge size	1¼"
Cable length	5M
Weight	9kg
Cable size	1.5mm
Cable	3-core

TRITON AQUA PUMP PRO PLUS

This kit is identical to the Aqua Pump Pro above but is supplied with two mains powered pumps. These can be plumbed to either a single discharge outlet or to two separate outlets from the sump. The second mains powered pump is located on the raised foot within the chamber and provides back up to the primary pump and additional capacity to the system if required.

NBS Specification: R18



TRITON AQUA PUMP PRO BATTERY BACK UP

The Aqua Pump Pro Battery Back Up (BBPS) is specially designed for the removal of ground water from basement cavity drain membrane systems and comprises a polyethylene sump, galvanized locking access cover, one mains powered pump and one 24V back up pump. The system is highly versatile enabling installers to locate inlets to suit on-site requirements.

Technical Data

Power supply	230V
Number of pumps	2 (1 x 24V)
Rated current	1.9A
Motor rating	180W
Frequency	50Hz
Revolutions/minute	2800 rpm
Vertical output	7M
Maximum flow rate	168 litres/minute
Maximum liquid temperature	<40°C
Discharge size	1¼"
Cable length	5M
Weight	20kg
Cable size	1.5mm
Cable	3-core



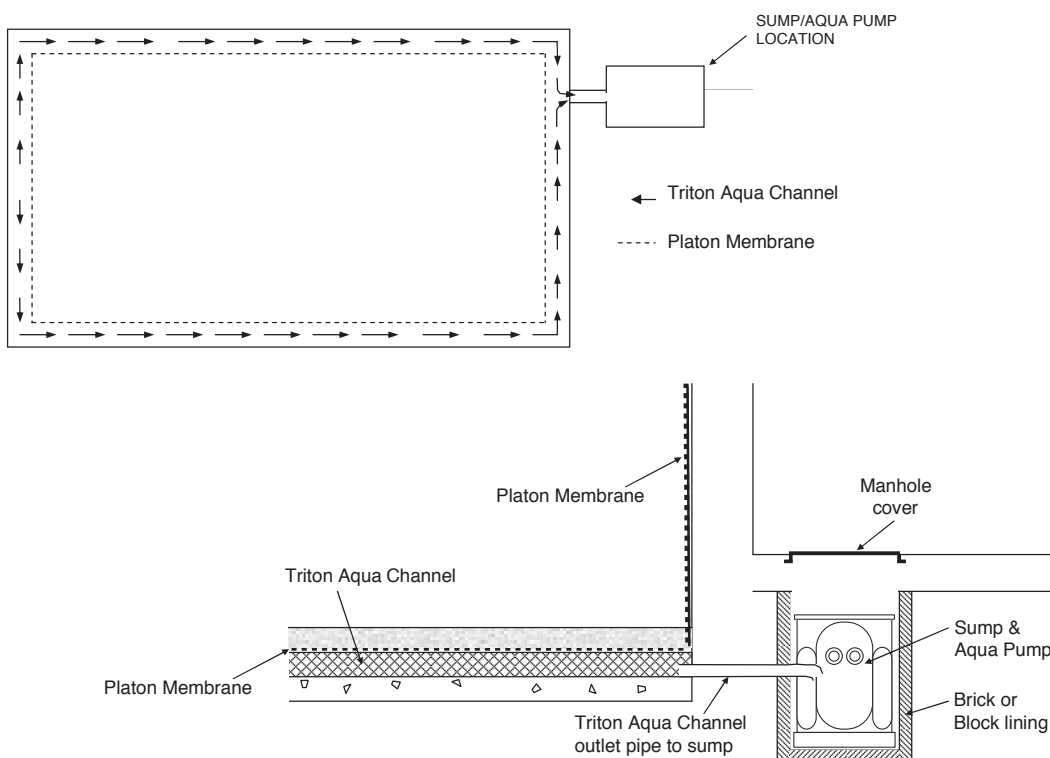
Aqua Pump Pro Range Sump Dimensions:

Sump: 550mm diameter x 600mm high
Cover: 400mm x 400mm x 40mm

NBS Specification: R18



TYPICAL AQUACHANNEL TO EXTERNAL AQUAPUMP DETAIL



TRITON AQUA PUMP XL

The Triton Aqua Pump XL kit can be specified for where a greater ingress of water is anticipated, where there is a greater depth to the basement or to enable the number of pumps to be reduced. The kit can be supplied in either single or dual pump configuration with a choice of three pump types which should be specified depending on the pump performance (flow and head) required. The sump features a large 450 x 450mm opening for ease of maintenance/installation, locking access cover, two pre-moulded anchor points and a split level base to provide pump height differential in dual pump configuration. The system is very versatile enabling the installer to locate inlets, discharge and cable/vent ducts to suit on-site requirements.

Auto and manual versions of the kit can be supplied. The manual version includes a single or dual assist control panel and independent float switches that fully operate the pump/s and monitor their usage.

Technical Data

XL Pump type	301	303	RS55
Power supply	230V AC	230V AC	230V AC
Rated current	1.9A	4.9A	5.0A
Motor rating	180W	380W	550W
Frequency	50Hz	50Hz	50Hz
Revolutions/minute	2800rpm	2800rpm	2900rpm
Maximum vertical output	7M	12M	14M
Maximum flow rate	168L/minute	228M/minute	300L/minute
Maximum liquid temperature	<40°C	<40°C	<40°C
Discharge size	1 ¼"	1 ¼"	2.0"
Cable length	5M	5M	10M
Weight	29kg	30kg	45kg
Cable size	1.5mm	1.5mm	1.5mm
Cable	3-core	3-core	3-core

NBS Specification: R18

Triton Aqua Pump XL Sump Dimensions:

Sump: 750mm diameter x 1000mm high

Cover: 450mm x 450mm



Triton Aqua Pump XL Sump



Triton Aqua Pump XL Sump – single pump configuration



Triton Aqua Pump XL Sump – dual pump configuration



The powerful RS55 Pump has a 550W motor and offers a 14M maximum vertical output. Shown here with Single Pump Control Panel.



Control Panels and Alarms

Triton offers a range of mains and battery powered high level water alarms as well as control and monitoring panels for all configurations of pump kit. Please speak to your local Triton technical representative to discuss your specific requirements.

SINGLE PUMP CONTROL PANEL

This unit has an integral high level audible/visual mains alarm, which is activated by the pump's float mechanism within the sump. It also records each activation of the pump and length of run time, which is ideal where unknown levels of water ingress occur and also to monitor changes in levels of ingress between service intervals.

DUAL ASSIST CONTROL PANEL

Where two mains powered pumps are located within one sump, the Dual Assist Control Panel will alternate their operation and also activate both pumps simultaneously when required. Supplied complete with integral high level water alarm and monitoring counters for each pump which record the number of activations and run times. This unit is designed for high risk areas of potential water ingress.

DIPSTER FLOATS

Dipster Floats are supplied as part of a manual Aqua Pump XL kit and are wired back to the control panel to activate the pump and high level alarm.



Mains Powered High Level Alarm (left) and Mains/Battery Powered High Level Alarm



Single Pump Control Panel



Dual Assist Control Panel

Pump servicing and maintenance

In accordance with BS 8102 (2009), Type C drained protection waterproofing systems should be maintained. The service period, usually every 6 – 12 months, should be agreed at the outset with the installing contractor or a specialist pump servicing company. Triton can provide details of such companies on request. A typical pump service schedule is available for download at tritonsystems.co.uk



Anti Lime Solution

As an aid to maintenance, Triton supplies a ready to use Anti Lime Solution that is designed to remove lime scale and other build up within the drainage system.



Dipster Floats

Triton Aqua Channel

Designed to be used in conjunction with a cavity drained system, Triton Aqua Channel is a PVC drainage conduit which should be fitted around the periphery of an internal floor at the vulnerable wall/floor junction. Any water entering the building through walls or curved soffits is controlled behind the membrane and enters the channel through the pre-drilled 19mm holes before being diverted to the mechanical (sump and pump) or natural drainage point. Standard Aqua Channel is supplied with an upstand that is placed against the wall, however it can be supplied without the upstand if required.



Aqua Channel Accessories

CHANNEL OUTLET

Consists of a 90° PVC bend and a PVC male coupling which is fitted to the base of the Aqua Channel to allow water to be taken from the conduit to the drainage point.



Channel Outlet



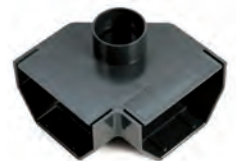
Universal Channel End Outlet

UNIVERSAL CHANNEL END OUTLET

Where gravity fed drainage is to be used, the Universal Channel End Outlet has been designed to convert the pentagonal shape of the conduit into a round aperture. This enables water to be discharged from the conduit into a 'P' trapped gulley or to a soakaway.



Rodding Eye



Aqua Channel Corner Piece

RODDING EYE

It is recommended that one Rodding Eye (cleaning port/jetting eye) should be incorporated into the Aqua Channel for every 10 – 12 linear metre run of conduit installed. They can be inserted at any point along its length and allow for periodic cleaning of the drainage system.

AQUA CHANNEL CORNER PIECE

To be used to join lengths of Aqua Channel conduit at corners. The Corner Piece includes an option for inclusion of a Rodding Eye.



Aqua Channel Connector



Aqua Channel In-Line T Piece

AQUA CHANNEL CONNECTOR

A connector to link two lengths of Aqua Channel conduit.

AQUA CHANNEL IN-LINE T PIECE

Enables teeing off of the conduit to dissect the floor or to discharge to a centrally located sump.

NBS Specification: R18

Servicing and maintenance

All pumps and Aqua Channel installations should be serviced and maintained. For further details please contact Triton on 01322 318830.





Guarantees

Triton approved contractors have access to TUG Insurance Backed Guarantees which are issued for a maximum of 30 years and which cover wall tie replacement, below ground waterproofing and damp and timber treatment. The TUG Insurance Backed Guarantee provides peace of mind to clients by coming into force in the event of the approved contractor ceasing to trade.

Triton also issues its own guarantees to cover the performance of Triton products plus the workmanship of the Triton Approved Contractor. These are designed for contractors who do not issue their own company guarantees. Triton Guarantees are valid for up to 30 years from date of completion of the works (up to 10 years for below ground waterproofing).

Visit www.tug.uk.com to apply for Triton Approved Contractor status and to download the guarantee application forms.



Also available from Triton

- Flooring Systems (gas barriers, waterproofing and damp control)
- Flood Resilience/Restoration
- Replacement Cavity Wall Ties
- Protective Coatings, Structural Repair
- Green Roof Systems
- Radon (ground gas) Barrier Systems
- Waterproofing – Type A Barrier Protection
- Waterproofing – Type B Integral
- Waterproofing – Type C Cavity Drain
- Condensation Control Systems
- Damp Proofing and Replastering Systems
- Timber Preservation and Repair Systems



Triton Systems

Units 3 – 5 Crayford Commercial Centre, Greyhound Way, Crayford, Kent DA1 4HF
Tel: 01322 318830 Fax: 01322 524017 Email: info@tritonsystems.co.uk

Triton Chemical Manufacturing Co Ltd trading as Triton Systems