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## SINGLE PUMP COLD WATER PRESSURE BOOSTER SET

SUITABLE FOR CAT 5 USE, INCORPORATING 65LTR (NOM) BREAK TANK WITH 'AB' AIR GAP

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'MC5'



Pressure Equipment Directive Compliant  
Water Supply (Water Fittings) Regulations 1999 CAT5 Compliant

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SUITABLE FOR CAT 5 USE, INCORPORATING 65LTR (NOM) BREAK TANK WITH 'AB' AIR GAP

## GENERAL

The MC5 unit is a complete, all-in-one unit, incorporating pump, motor, diaphragm tank, pressure sensor, controller, non-return valve, 65 Litre (nom) break tank with pre-insulation and supplied with ½" float valve. The internal controller ensures that the variable speed pump starts automatically when water is consumed and stops automatically when the consumption ceases. In addition, the controller protects the pump in case of faults. Low water protection is fitted to prevent pump running dry in the event of a mains water interruption.

## INSTALLATION

Due to its compact design, the unit is easy to install. The unit is supplied fully assembled and tested. End user needs only to connect pump outlet to the system and connect a suitable mains electrical supply.

## SIMPLE OPERATION

The pump features a user-friendly control panel display with two indicator lights for operational state of the pump. Built-in protective functions if exposed to dry running or excessive temperature, for example in case of seizure or overload, the pump will stop automatically, thus preventing a motor burnout. Motor speed LED indication light is also provided.

## PRESSURE CONTROL VESSEL

The built-in pressure tank reduces the number of starts and stops in case of leakages in the pipe system, causing less wear on the pump.

## BREAK TANK

WRAS approved Break tank fitted with an 'AB' air gap complying to Water Supply (Water Fittings) Regulations 1999 for fluid category 5 use.

## PUMPED LIQUIDS

Potable water, rainwater or other clean, thin, non-aggressive liquids not containing solid particles or fibres.

## PUMP

Horizontal Multistage with integral variable speed high efficiency inverter motor all internal wetted parts in 304 stainless steel. WRAS approved. Thanks to its hydraulic design and internal cooling, the pump is extremely low-noise, 66 db(A) at 1 meter.

Motor: 1.1 kW

Rated current: 8.2 amps

Rated Speed: 430-3400 rpm

Enclosure class (IEC 34-5): 55

Insulation class (IEC 85): F

Mains voltage: 1 x 220-240 V, 50 Hz.

Voltage tolerances: -10%/+6%.

Sound pressure level: 60.1 dB(A).

Marking: CE.

## OPERATING CONDITIONS

Maximum ambient temperature: 40°C

Maximum operating pressure: 10 bar

Max pressure at stated temp: 10 bar / 40°C

Pumped liquid: Water

Water temperature: 20°C

Water density: 998.2 kg/m<sup>3</sup>

Kinematic viscosity: 1 mm<sup>2</sup>/s

## APPROVALS

Pump materials in contact with the liquid have been approved by WRAS according to BS6920 for use in drinking water. All pipework & fittings are suitable for potable water.

## MECHANICAL CONNECTIONS

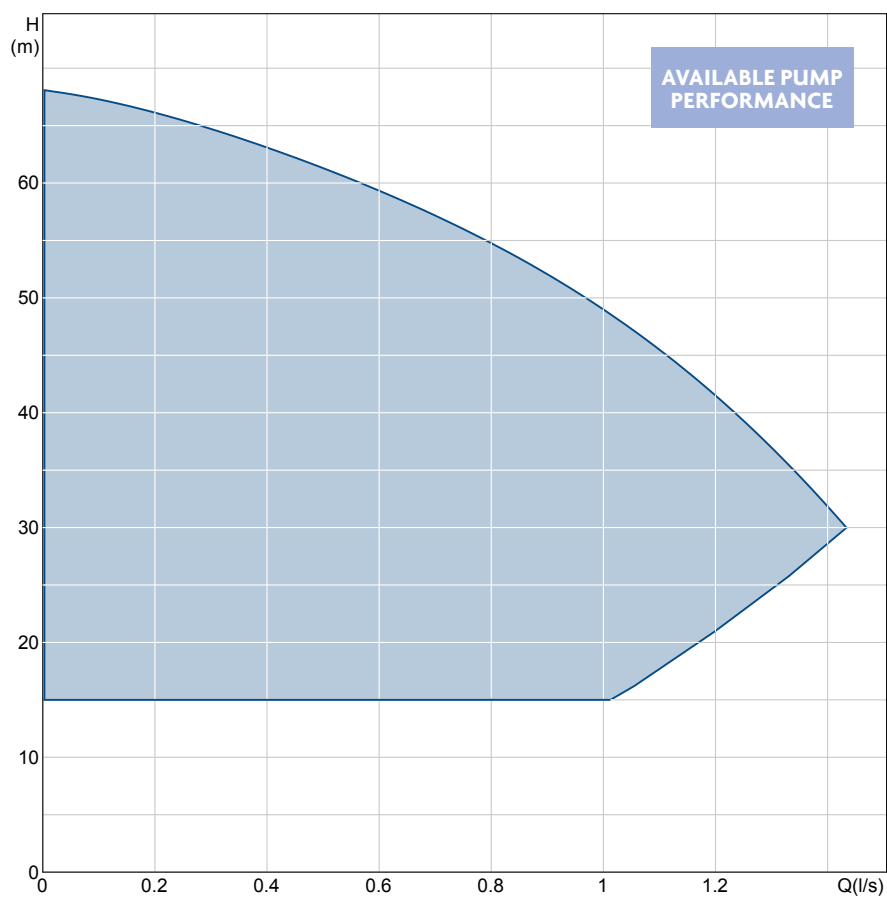
Inlet (Float Valve) ½" BSP male

Outlet to system (Pump Discharge) 1" BSP male

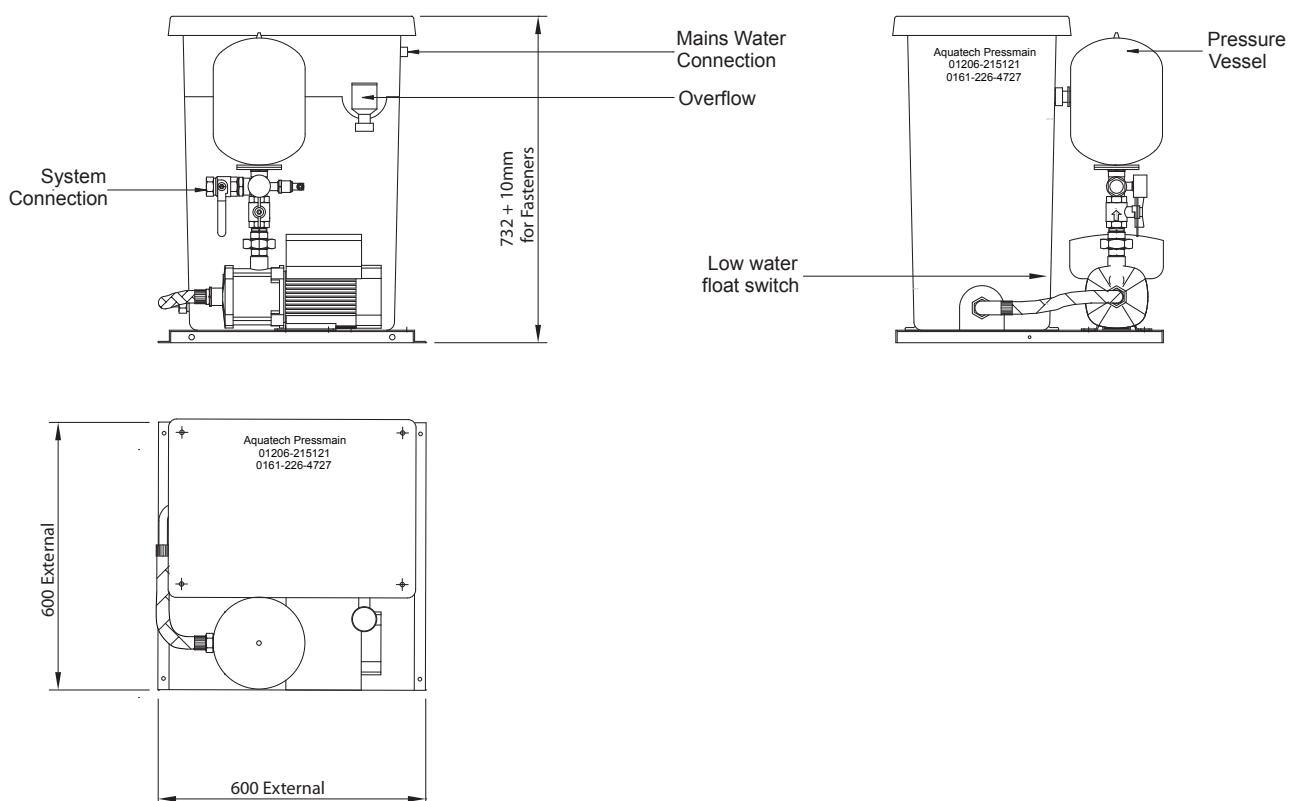
## ELECTRICAL CONNECTIONS

240 volt, single phase, 50hz.

## 'MC5' PERFORMANCE



## 'MC5' DIMENSIONS



## 'MC5' INSTALLATION

### Location:

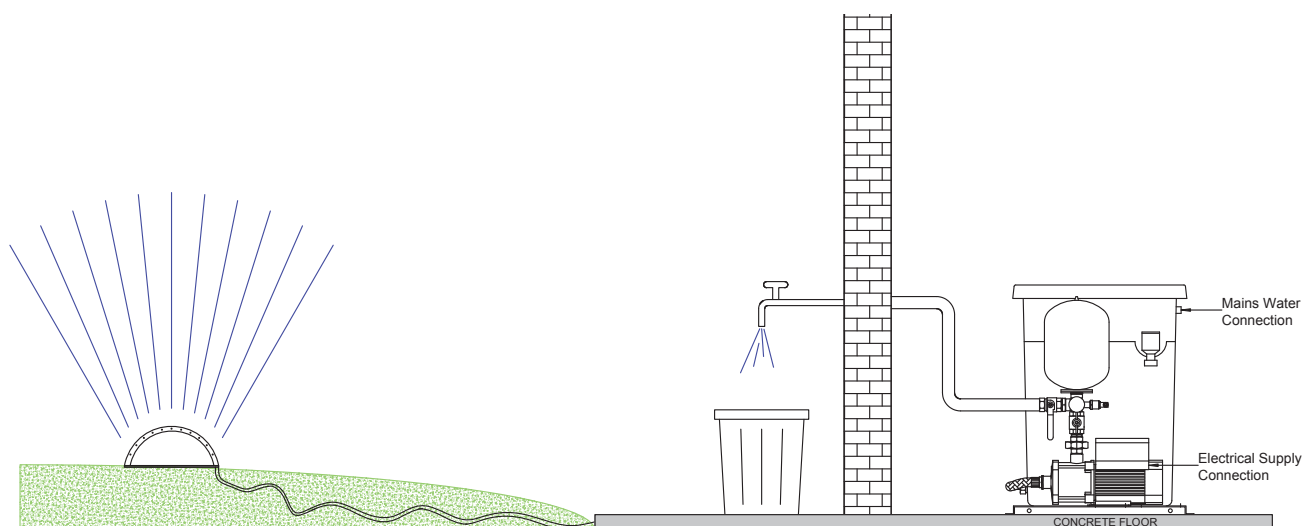
- 1 The unit should be installed indoors in a suitable location, on a flat, level, concrete floor and bolted down.
- 2 The pump used is virtually vibration free however the use of anti-vibration mountings may be considered.

### Electrical

- 1 The standard unit requires a 10A 230VAC 1Ph N+E Power Supply.
- 2 All subsequent wiring should confirm to 17th (or applicable) edition wiring regulations.  
Note: variable speed units have a high earth leakage current, if applicable a non-standard RCD may be required.

### Hydraulic Installation

- 1 Installer to fit isolating valve to incoming supply which requires a pressure of 1.0 Bar or greater.
- 2 Do not fit additional check valves as operation of unit may be impaired.



Typical installation and application

The information in this specification is correct at time of issue; as AquaTech Pressmain design and development programmes are continuous, we reserve the right to make any changes to this specification without prior notice.



#### Head Office

AGM House, London Road, Copford, Colchester CO6 1GT  
T: 01206 215121 F: 01206 215131

#### Manchester Office

Dolphin House, 130 Princess Road, Manchester M16 7BY  
T: 0161 226 4727 F: 0161 226 5848

E: [info@aquatechpressmain.co.uk](mailto:info@aquatechpressmain.co.uk)

W: [www.aquatechpressmain.co.uk](http://www.aquatechpressmain.co.uk)

**Leaders in the design, manufacture and assembly of packaged fluid pumping equipment and control systems.**

Applications: Cold Water Supply; Fire Fighting; Heating & Chilled System Pressurisation; Tank Level Monitoring.