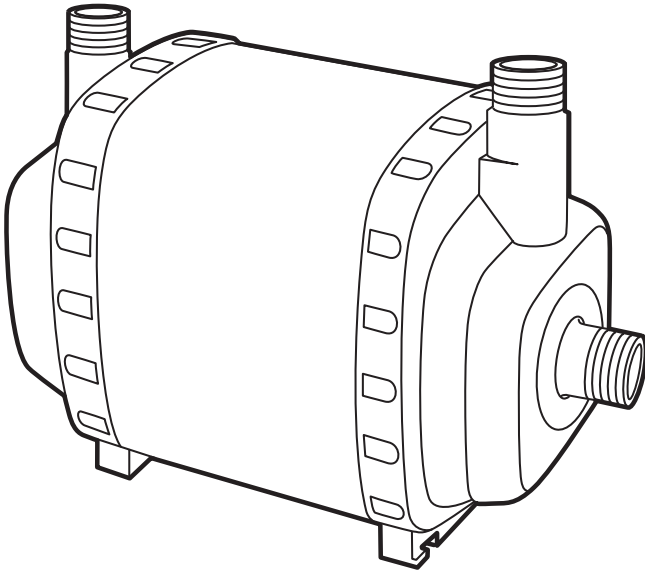


SHOWER PUMPS

1.5 bar and 2.0 bar

Twin and single ended pumps designed specifically for gravity feed or stored water systems where the hot water is fed from a hot water cylinder and the cold from a cold water storage tank.



Installation Manual

Please retain for future reference

GUARANTEE

The manufacturer warrants this product to be free from defects in material and/or workmanship for a period of one year after purchase by the customer. During this one year warranty period the manufacturer will at its option, and at no charge to the customer, repair or replace this product, if found defective, with a new or reconditioned product, but not to include costs of removal or installation or consequential loss or damage of any kind.

INSTALLATION INSTRUCTIONS AND SAFETY INFORMATION

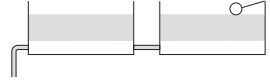
PLEASE FOLLOW THESE INSTALLATION INSTRUCTIONS CAREFULLY. FAILURE TO INSTALL YOUR PUMP IN ACCORDANCE WITH THESE INSTRUCTIONS WILL INVALIDATE YOUR WARRANTY.

- **NEVER FIT THE PUMP DIRECTLY TO THE COLD MAINS**
- **THE STORED HOT WATER TEMPERATURE MUST NOT EXCEED 65°C.**
- **ENSURE THAT THE HOT SUPPLY TO THE PUMP IS VIA AN APPROVED METHOD (SEE POINT 8 ON THIS PAGE).**
- **JOINTING COMPOUNDS, BOSS WHITE, HEMP AND STEEL WOOL, MUST NOT BE USED. SOLDER FLUXES MUST NOT COME INTO CONTACT WITH THE PUMP OR HOSE CONNECTIONS.**
- **THE HOSES CONNECTIONS MUST NOT BE TWISTED OR BENT.**

It is essential to make sure that:

- 1 The cold stored water capacity is adequate for ALL THE HOUSEHOLD REQUIREMENTS. (Minimum 50 gallons per bathroom, 80 gallons for one (1) bathroom plus an en suite shower room).
- 2 The cold supplies to the hot water cylinder and to the pump are taken from the opposite side of the cold tank to the cold mains inlet. The bottom of the cold tank MUST ALSO be checked and cleared of debris.
- 3 In systems where there are two (2) or more bathrooms, the cold supply to the cylinder MUST BE in 28mm pipework.

- 4 Multiple Cold Water Storage (CWS) Tanks MUST BE linked in 28mm pipework with the bottoms of the tanks at the same level.



- 5 NEVER put a non return valve; inverted loop; restrictive balofix or an air vent on the supply pipework to a pump.

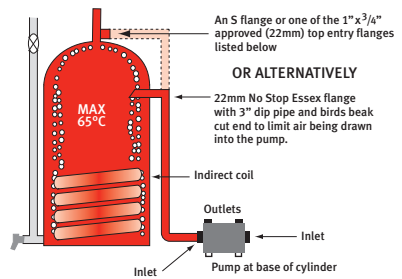


FIGURE 1

- 6 The best possible position for the pump is at or near the base of the hot water cylinder at least 600mm below the bottom of the cold water storage tank.
- 7 The area around the pump MUST BE sufficient to allow air flow for cooling of the motor.

- 8 The hot water connection from the cylinder MUST BE either;

- **A 3/4" NO STOP ESSEX FLANGE**
- **An S FLANGE**
- **A YORK FLANGE (may only be used in systems where the hot water requirement is less than 20l/min)**
- **A WARIX FLANGE as long as the following criteria is met;**

- i. The vent connection must be from the side.
- ii. The supply connection to the pump MUST BE FROM THE TOP of the Warix flange via a 22mm compression elbow to avoid inverted loops.

INSTALLATION INSTRUCTIONS AND SAFETY INFORMATION

9 The hot supply pipework to the pump is a maximum of 5 metres in 22mm (HOT AND COLD SUPPLIES NOT MORE THAN 2 metres in 15mm).

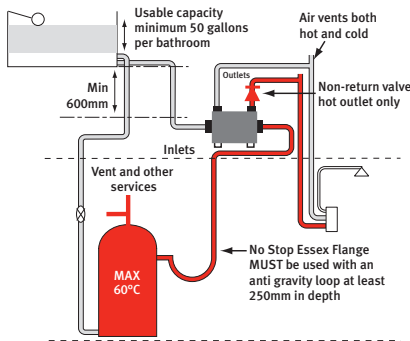
10 This pump is shower specific.

11 Inlets are horizontal, outlets are vertical.

PUMPS POSITIONED (above the hot outlet)
See Figure 2.

An anti gravity loop (AGL) off a NO STOP ESSEX flange MUST BE fitted to all systems where the pump is mounted above the hot outlet from the cylinder.

All up and over pipe work must be vented at the highest point on the outlet of the pump, and a non-return valve (NRV) fitted to the hot outlet only. LOFT MOUNTED PUMPS MUST BE PROTECTED AGAINST FROST DAMAGE.



8 **FIGURE 2**

In positive head systems, allow for increased resistance of long pipe runs with multiple bends. The natural flow from the shower head or other outlets MUST be at least 1ltr in 30 sec per side or 2ltr in 30 sec mixed to activate the pump.

Plumbing

The installation must comply with the relevant requirements or local bye-laws.

The pump MUST be mounted upright (shaft horizontal – not screwed down). Pump must be adequately vented, protected from frost, with access provided for servicing.

Jointing compounds, Boss White, Hemp and Steel Wool, MUST NOT BE USED. SOLDER FLUXES MUST NOT COME INTO CONTACT WITH THE PUMP OR HOSE CONNECTORS (THIS WILL INVALIDATE YOUR WARRANTY).

All associated pipework MUST be thoroughly flushed before making final connections to the pump. Fill the pump with water before connecting to the discharge pipework.

The in-line filters must be fitted into the hose connections on the hot and cold inlet supplies to the pump.

MAXIMUM STATIC HEAD – 10 METRES.

In ALL pump systems it is essential to ensure that the hot and cold stored water capacity is sufficient to meet the household requirements.

Hose connections (do not bend)

Fitted with 3/4" BSP x 15mm Push Fit couplers.

- The coupler nuts need only be finger tight plus one quarter turn. Mechanical tools must not be used to tighten coupler nuts as this may cause damage which will **invalidate your warranty**.

The hoses are supplied – two each angled and straight with each pump.

This arrangement of couplers facilitates the connection of the supply pipework from any direction.

Electrical

The pump must be connected to the electrical supply using the mains cable with the attached plug. This plug must be connected to an accessible socket that has been installed in compliance with current national electrical regulations.

The plug must be accessible at all times.

The pump must not be installed in a bathroom unless it is installed in a space, accessible only with the use of a tool.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.

Higher rated fuses **MUST NOT** be used.

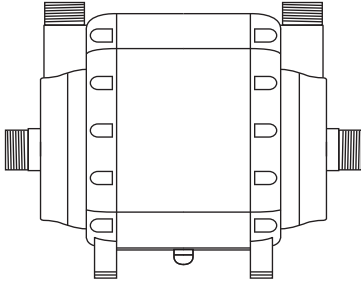
Cooling and ventilation

The pump should be placed in a position where there is an adequate air flow to cool the motor and separated from any other appliances that generate heat. It should be installed in a clear space allowing 100mm additional space at each side, end and top of the pump.

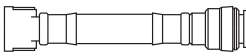
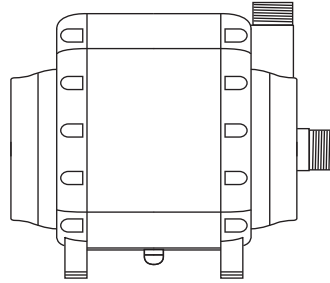
TECHNICAL DATA

Before you start, check you have all the parts

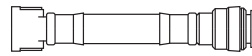
1.5 bar Twin 1 x Pump



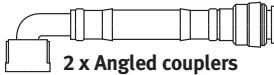
or 2.0 Single 1 x Pump



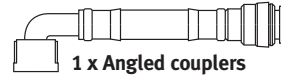
2 x Straight couplers



1 x Straight couplers



2 x Angled couplers



1 x Angled couplers



2 x Filter washers



1 x Filter washers

Product specification

- 1.5 bar max – 1.2 bar @ 10 litres/min – 1.0 bar @ 20 litres/min
- 2.0 bar max – 1.6 bar @ 10 litres/min – 1.3 bar @ 20 litres/min
- Supply voltage 230v 50Hz
- Motor speed – 5,000 to 8,000 rpm
- Operational current draw 0.8 – 1.2 amps
- 190w (1.5 bar)/240w (2.0 bar) input power
- Pack size – estimate –25 x 20 x 15cm
- Weight – Approx 1.7 kg (pump only)
- IPX4 ingress protection rating
- Continuous rating at 10 litres per minute

OPERATING INSTRUCTIONS

Before you finish

Commissioning

- First flush inlet pipework and carefully fill pump with water by discharging water from the outlet flexible hose into a container
- Fit pump inlet filters
- Connect discharge pipework
- Check that all the pump isolating valves are open
- Fill system. Check for leaks
- DO NOT RUN PUMP DRY – to do so will cause irreparable damage to your pump and will **invalidate your warranty**
- Open shower mixer valve/system outlets to maximum hot and cold to check the natural flow (unpumped) flow of at least 1 litre per minute – positive head systems.

It is **CRITICAL** to discharge water through the pump into a container before connecting the pump to outlet pipework in order to ensure the air has been discharged from inlet pipework and pump chambers. This will not happen if the outlet pipework is connected to the pump.

DISPOSAL INSTRUCTIONS

Your appliance contains valuable materials which could be recovered or recycled. At the end of the products useful life please dispose of it at an appropriate civic waste collection point.

SERVICE SUPPORT

This product is supported by **Pumpwise** for technical help and advice telephone 0191 516 2002

