PLATE *FLOW*

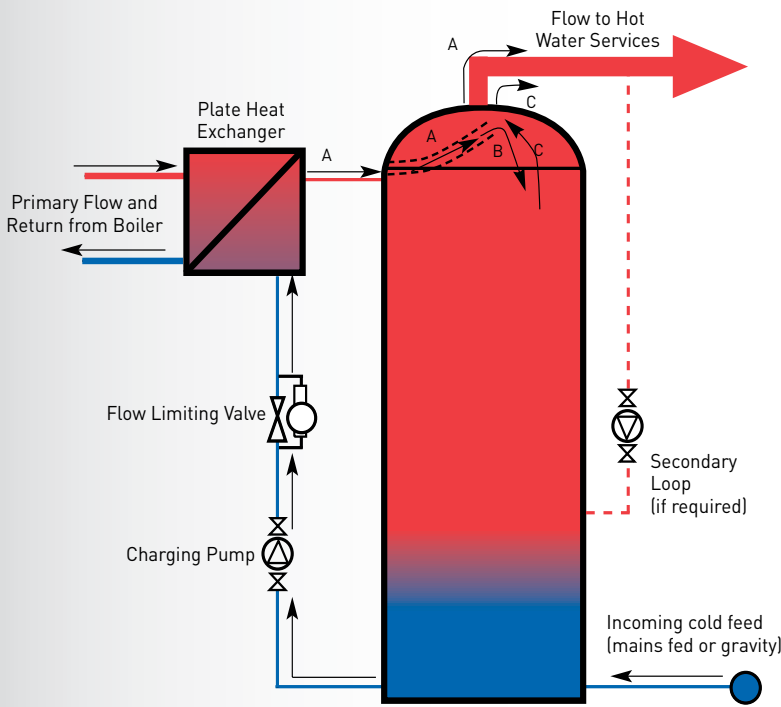## PLATE HEAT EXCHANGER WITH BUFFER VESSEL

McDonald Water Storage

Hot Water Storage Solutions

PLATE*FLOW*

The **PLATE***flow* system comprises a Brazed Plate Heat Exchanger (PHE), prepiped and mounted on a Buffer Vessel. It is designed to supply hot water in situations where demand can vary over the course of a day, e.g. hotels, hospitals, factories etc. The **PLATE***flow* system effectively decreases the amount of stored hot water required, while still delivering peak flow rates as demanded.

Supplied pre-assembled to your own specification, the **PLATE***flow* significantly reduces installation and commissioning time. It can be supplied as either a vented, tank fed unit, or suitable for unvented applications when fed from the mains or a boosted cold water supply.

Advantages of PLATE*flow*

- **Instant and Constant Hot Water**
- **Reassurance Of Buffer Vessel Storage**
- **Compact Installation**
- **Less Storage And Space Required**
- **Shell Manufactured to BS 853**
- **Wide Range Of Options Available**

The Advantages Of A Copper Store

- **The Best Anti-Bacterial Properties**
- **Tried and Tested Material**
- **Long Lasting**
- **Sustainable - 100% recyclable, which benefits the environment**

OPERATION

At times when less than the steady flow rate is required, all the hot water requirement is generated instantly by the PHE (A), with any excess recharging the buffer vessel (B). Only when demand exceeds the steady flow rate of the PHE, is water from the buffer vessel used (C).

Even when the buffer is depleted, the steady flow rate is always available.

SIZING

Buffer vessels are sized to cope with the demand during peak periods and vary in size as required. Once we know the flow rates required we can advise the kW input needed to achieve it. Full dimensional data will be provided once the system requirements are calculated.

Diagram

Plate Heat Exchanger

Primary Flow and Return from Boiler

Flow Limiting Valve

Charging Pump

Flow to Hot Water Services

Secondary Loop (if required)

Incoming cold feed (mains fed or gravity)

Flow rates of up to 4.5 Litres/second (1000kw) are available.

SPECIFICATION:

How to specify: let us know the following information and we will return a specification for a suitable unit.

1.	Steady flow rate (l/s)	
2.	Peak flow rate (l/s)	
3.	Peak flow time (mins)	
4.	Boiler flow and return temps. (ºC)	
5.	kW input if known	
6.	Secondary system pressure or working head (bar)	

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