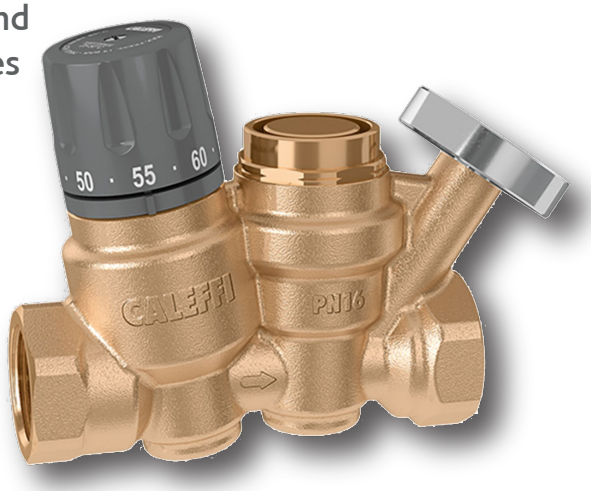
KNOWING THE FACTS

Technical Bulletin
Hot Water Recirculation Networks

Hot Water Recirculation Networks - Knowing the facts

The term "hot water recirculation network" is used more and more now when talking about system design, but what does it actually mean?
In simple terms, it is a loop in the hot water system that allows hot water to constantly circulate at a low flow rate. The reason for this is twofold, firstly to ensure that the users of the hot water network receive water at the desired temperature as quickly as possible, and secondly to benefit from an energy saving which shouldn't be underestimated.



Let's take a look in more detail at both of these factors:

Hot Water Delivery

In systems where centralised hot water systems (i.e. large calorifiers or hot water storage) are used there may not always be a demand for hot water. Over time, this will allow the hot water supply to cool to below the desired temperature, especially in areas furthest away from the hot water source.
The 116 Series and 1164 Series thermostatic regulation valves (also known as thermal balancing valves) automatically maintain the specified water temperature ensuring that hot water will always be available at the furthest point of the system.

Energy Saving

Installing a 116 Series or 1164 Series thermostatic regulation valve also has the added benefit of reducing the running costs of the system.In systems without a thermostatic regulation valve installed, users will open a hot water outlet and run off the dead leg of cold water until such time the desired temperature is achieved. This is not only a waste of water but is also increasing the demand of the pumps as they are moving more water than is required.

t: +44 (0)1785 218 200
e: technical@altecnic.co.uk
w: www.altecnic.co.uk

altecnic
CALEFFI group