

1/Valving Requirements for a closed loop system

When a closed circuit system is created the following are required

- A suitably sized expansion vessel
- A pressure relief valve
- A pressure gauge
- A filling point (using a detachable flexi hose)
- A circulating pump with isolating valves for maintenance
- An air relief valve at the highest point on the loop

2/ Extracting Heating from a DHW Cylinder

Closed circuit systems can be used to extract and circulate heat from a cylinder as shown here though this is not a system we advocate.

Where a cylinder's primary use is DHW, the load you place on the cylinder coil should be carefully considered, as should the heat capacity of the appliance heating the cylinder. There is no point attempting to extract heat if the appliance can't support the demand

Extracting from DHW cylinders should only be done where the cylinder has been designed and sized for this purpose.

Note: A coil rated to input a given KW for input will not give the same KW output when used to extract heat.

If you are extracting from a DHW cylinder the extraction coil should usually be just below the centre of the cylinder and the cylinder is large enough to ensure you are not restricting the supply of DHW. Using an adjustable differential thermostat with the ability to control over up to 10 degrees switching differential to govern the circulation is essential for good performance.



Typical sealed circuit valve requirements

