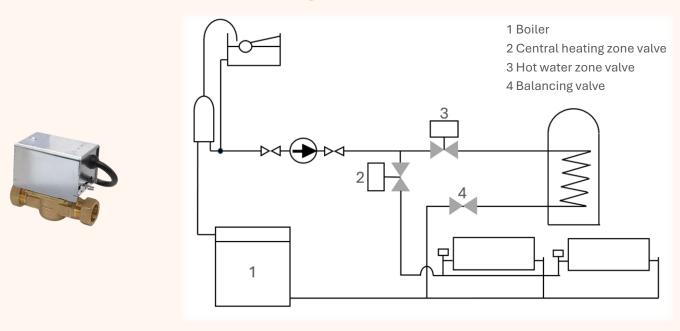


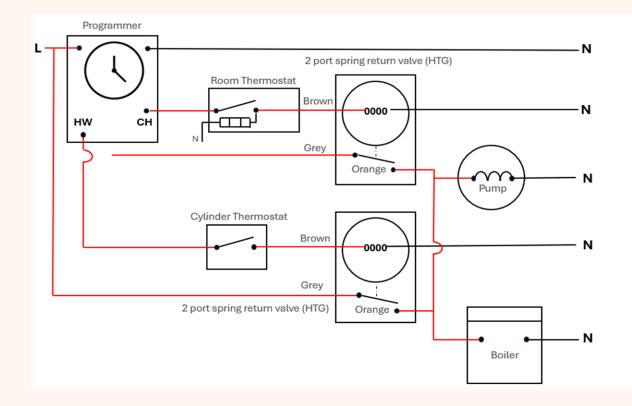
S Plan

Support document



S Plan fully pumped (2 spring return valves)







S Plan fully pumped (2 spring return valves)

Used to control fully pumped heating systems with the use of 2 spring return valves. With this type of system the customer can control demands having:

- Hot water only
- Heating only
- Hot water and heating together

Each demand has its own control/temperature device to maintain customer set timed and temperature requirements, to achieve satisfactory heating conditions.

Valve operation

- With no voltage to the 2 spring return valves (de-energised), the valves rest in the closed port (A) position
- When both demands are required, with cylinder and room thermostats calling for heat, the valves move to open port (B), allowing primary water to flow to both radiator and hot water circuits at the same time
- On either demand with the programmer and room thermostat calling for heat, the valves move to open port (B), the pump and boiler operate and circulate primary water to the heating and hot water circuits
- The S Plan allows independent control of heating or hot water via a 2-programmer channel





Hot water demand

- 230Vac demand from the programmer or clock is sent to the 'common' on the cylinder thermostat
- © Cylinder thermostat calling for heat, the cylinder thermostat 'call' connection will supply the brown wire on the hot water zone valve and move fully to open port (B) and supplying 230Vac to the orange wire of the valve, which in turn feeds the boiler and the pump causing them to operate, giving primary heat to the hot water circuit only
- 230Vac for the orange wire is supplied via a permanent 230Vac on the grey wire

Hot water reaches temperature – when the demand or cylinder thermostat temperature is satisfied, power is removed from the pump and boiler and also the valve which spring returns to its rest position, awaiting a new demand



Heating demand

- 230Vac demand from the programmer or clock is sent to the 'common' on the room thermostat
- Provided there is a demand from the room thermostat, the 'calling' connection of the room thermostat will supply the brown wire on the central heating zone valve which will energize the valve and move fully to open port (B) and supplying 230Vac to the orange wire of the valve, which in turn feeds the boiler and pump causing them to operate, giving primary heat to the central heating circuit only
- 230Vac for the orange wire is supplied by a permanent 230Vac on the grey wire

Heating reaches temperature – when the demand or room thermostat temperature is satisfied, power is removed from the pump and boiler and valve which spring returns to its rest position awaiting a new demand

Hot water & heating demand

As above with demand from programmer for hot water and central heating.