



# INSTALLATION INSTRUCTIONS

## MID-POSITION VALVE VAL322MP VAL328MP

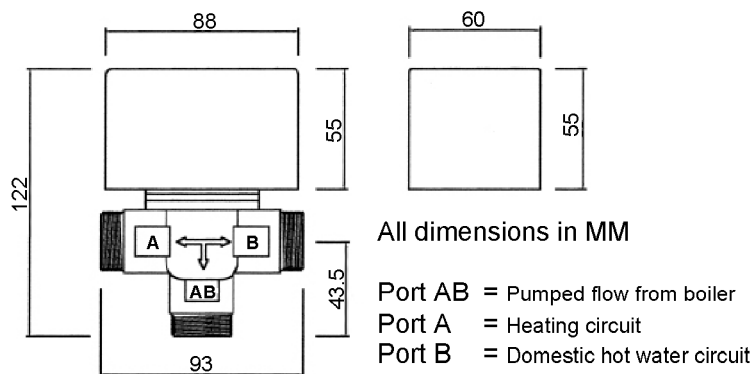
**VAL322MP** and **VAL328MP** are 3 port spring return mid-position valves with 22mm and 28mm compression fittings and switched output. These are for use on fully pumped systems which when correctly wired with an appropriate room thermostat, cylinder thermostat and programmer will control the water flow from the boiler to either to hot water only, heating only, or to both simultaneously.

### SPECIFICATIONS

- Supply voltage 240V. AC 50Hz
- Power consumption: 6W
- Operating temperature range: +5 to +88 °C
- Cable length one metre
- Max. differential pressure for 22mm = 1Bar
- Max. static pressure 10.0 Bar
- Max. ambient temperature 52 °C

### INSTALLATION

Before fitting the valve, read through the plumbing and wiring instructions. When replacing the valve actuator only, set the Auto/Manual lever to the "Manual Open" position before removal. On the replacement actuator set the Auto/Manual lever to "Manual Open" position before fitting.



### WIRING

All wiring should be carried out to IEE Regulations

- |                |  |
|----------------|--|
| White          | - Room Thermostat Call / Heating on          |
| Grey           | - Cylinder Thermostat Sat / Hot water off    |
| Orange         | - Cylinder Thermostat Call / Boiler and Pump |
| Blue           | - Neutral                                    |
| Green & Yellow | - Earth                                      |

### PLUMBING

When connecting to pipe work do not use the actuator for leverage. Valves should be held by wrench flats on body. Place the AUTO/MAN lever in the MAN position when filling, venting or draining the system.

### TAKE CARE NOT TO OVERTIGHTEN

### MOUNTING OPTIONS

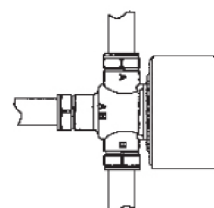
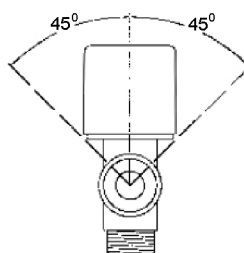
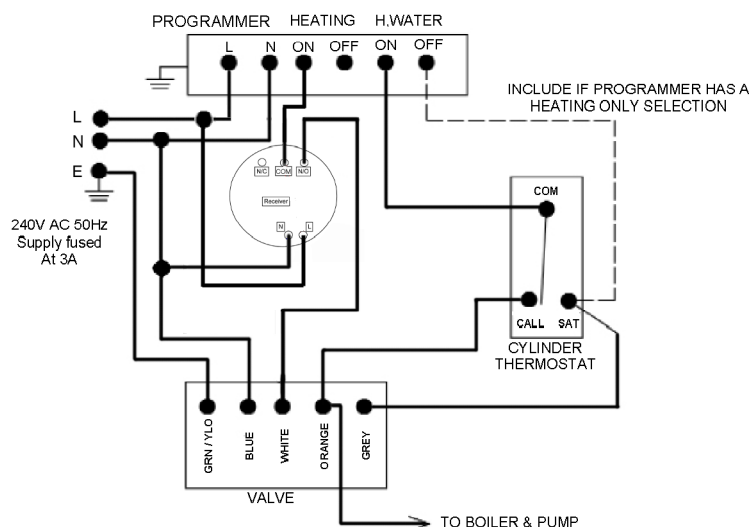
Valves may be mounted vertically, or horizontally within the limits shown in the diagram.

### WARNING

All controls must be earthed. All valves should have a means of disconnection from electrical mains supply which incorporates a contact separation of at least 3mm in all Poles.

**All wiring must be carried out by a competent Electrician.**

Mid - position Valve  
Typical circuit showing Programmer, Room and Cylinder Thermostats as control elements



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# INSTALLATION INSTRUCTIONS

## 2 PORT ZONE VALVE VAL222MV VAL228MV

VAL222MV and VAL228MV are 2 port spring return zone valves with 22mm and 28mm compression fittings and an auxiliary switch. This is for general purpose flow control applications or central heating systems. When correctly wired with an appropriate room thermostat, cylinder thermostat and programmer the valve will control the water flow from the boiler to hot water and from boiler to central heating.

### SPECIFICATIONS

- Supply voltage 240V. AC 50Hz
- Power consumption: 6W
- Operating temperature range: +5 to +88 °C
- Cable length one metre
- Max. differential pressure for 22mm = 1Bar
- Max. static pressure 10.0 Bar
- Max. fluid temperature 100 °C
- Max. ambient temperature 52 °C

### INSTALLATION

Before fitting the valve, read through the plumbing and wiring instructions. When replacing the valve actuator only, set the Auto/Manual lever to the "Manual Open" position before removal. On the replacement actuator set the Auto/Manual lever to "Manual Open" position before fitting.

### WIRING

All wiring should be carried out to IEE Regulations

- |                |                  |
|----------------|------------------|
| Brown          | - live           |
| Orange         | - end switch out |
| Grey           | - end switch in  |
| Blue           | - neutral        |
| Green & Yellow | - earth          |

### PLUMBING

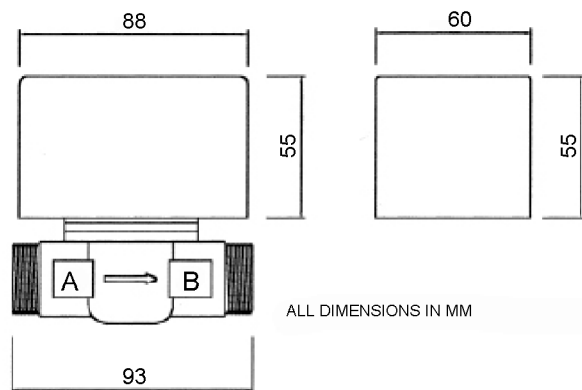
When connecting to pipe work do not use the actuator for leverage. Valves should be held by wrench flats on body. Place the AUTO/MAN lever in the MAN position when filling, venting or draining the system

**TAKE CARE NOT TO OVERTIGHTEN**

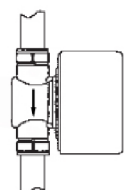
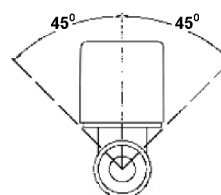
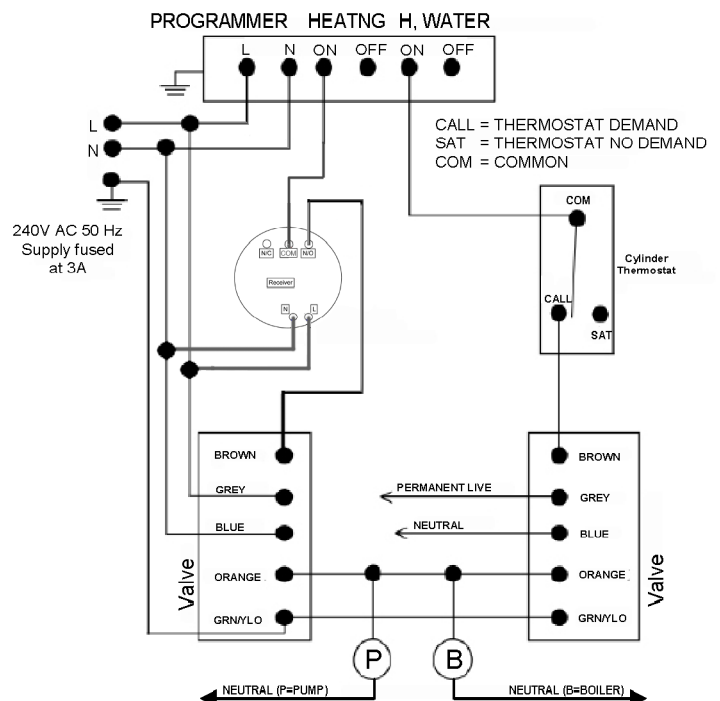
### WARNING

All controls must be earthed. All valves should have a means of disconnection from electrical mains supply which incorporates a contact separation of at least 3mm in all Poles.

**All wiring must be carried out by a competent electrician.**



Typical circuit using two zone Valves (VAL222MV)  
Programmer, Room Thermostat and Cylinder Thermostat



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