

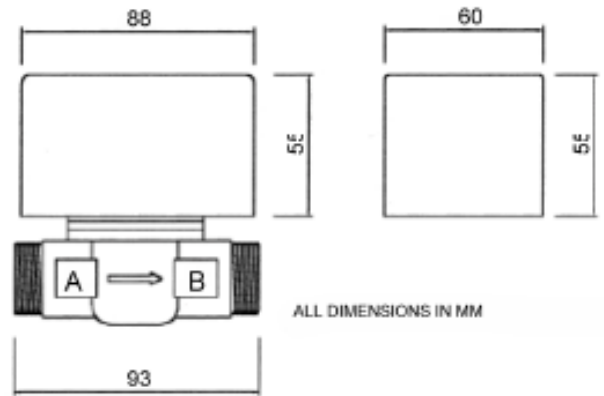
# OPTIMUM INSTALLATION INSTRUCTIONS

## Code: OP-2PORT / OP-2PORT28

The OP-2PORT and OP-2PORT28 are 2 port spring return valves with 22mm/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 from the boiler to hot water and from the boiler to central heating.

### Specifications:

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



### Installation:

Before fitting the valve, read through the plumbing and wiring instructions below. 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 the "Manual Open" position before fitting.

### 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**

### Wiring:



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

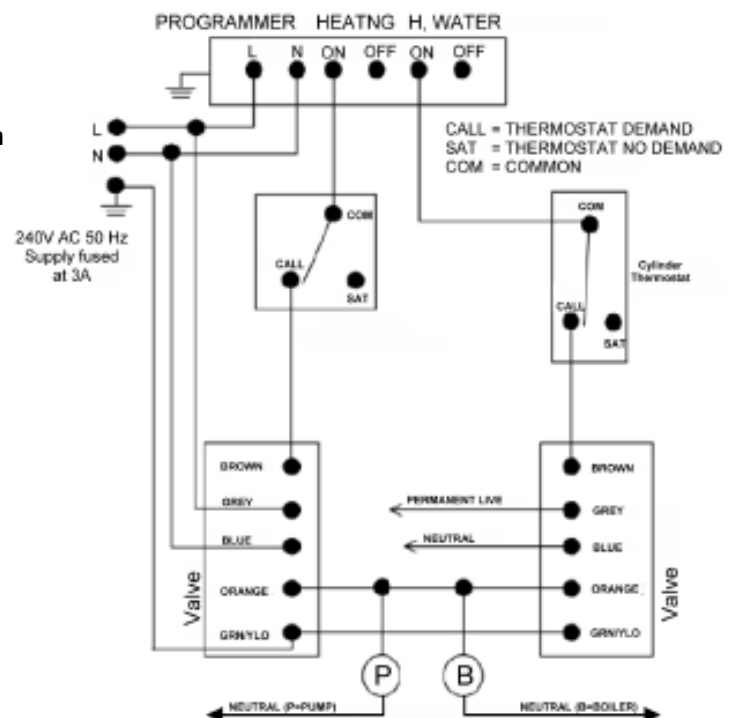


**All controls must be earthed. All valves should have a means of disconnection from electrical mains supply which incorporates a contact separation of at least 3mm in all Poles.**

All wiring should be carried out to IEE Regulations;

Brown	- Live
Orange	- End switch Out
Grey	- End switch In
Blue	- Neutral
Green & Yellow	- Earth

Typical wiring circuit using two zone valves, programmer, room thermostat and cylinder thermostat



# OPTIMUM

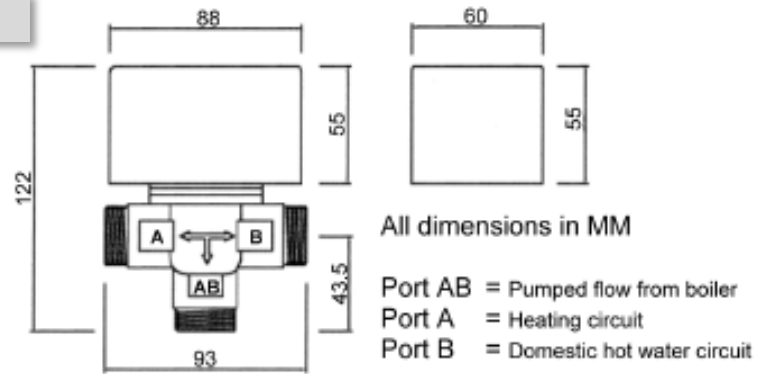
## INSTALLATION INSTRUCTIONS

### Code: OP-MID / OP-MID28

The OP-MID and OP-MID28 are 3 port spring return mid position valves with 22mm/28mm compression fittings and a 230V AC switched output. This is for use on fully pumped systems which, when correctly wired with an appropriate room thermostat, cylinder thermostat and programmer will control the hot water from the boiler to hot water to either hot water only, heating only, or both simultaneously.

#### Specifications:

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



#### Installation:

Before fitting the valve, read through the plumbing and wiring instructions below. 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 the "Manual Open" position before fitting.

#### 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**

#### Wiring:



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



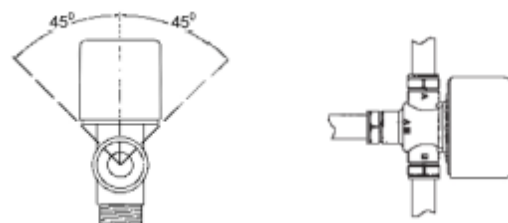
**All controls must be earthed. All valves should have a means of disconnection from electrical mains supply which incorporates a contact separation of at least 3mm in all Poles.**

All wiring should be carried out to IEE Regulations;

- White - Room thermostat Call / Heating On
- Grey - Cylinder thermostat satisfied / Hot water off
- Orange - Cylinder thermostat Call / Boiler & Pump
- Blue - Neutral
- Green & Yellow - Earth

#### Mounting Options:

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



Typical wiring circuit using mid position valve, programmer, room thermostat and cylinder thermostat

