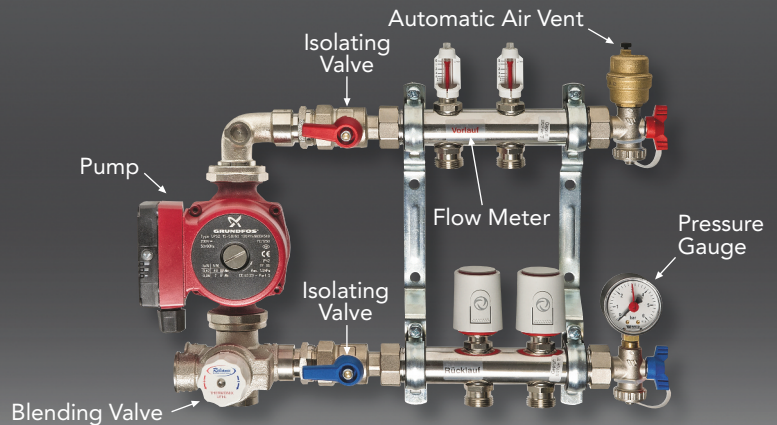


MYSON FLOORTEC Underfloor Heating

Controls.



MYSON FLOORTEC Manifold

Control Systems

Underfloor heating requires water flow temperatures of approximately 35°C to 55°C dependent upon the design, heat loading and type of the system used. The system should be balanced to achieve an approximate temperature differential of between 8°C and 10°C measured between the flow and return pipes.

Constant Temperature Systems

The **MYSON FLOORTEC** underfloor heating system mixes return water from the underfloor heating with flow water from the primary pipework. The mixed temperature is controlled at a constant temperature and the proportions of flow and return water are varied accordingly. Mixing is undertaken in a three port mixing valve, incorporating a thermo-electrical valve controller.

Programming

All **MYSON FLOORTEC** underfloor heating systems are supplied with the comprehensive timing options. This ranges from the traditional MEP1C programmer to the sophisticated MPRT programmable room thermostat.

Smart Start Technology

This varies the start-up times of the underfloor heating system on a room by room basis to ensure that each room in the building achieves the desired temperature by the required time.

The Smart Start system is continually learning the temperature rise requirement of each room, delaying the start up of the system, therefore saving energy during milder weather. Smart Start technology is available with both the **MYSON FLOORTEC** MPRT, MPRT RF and **MYSON TOUCH** programmable touch screen room thermostats.

Night Set Back Temperatures

Depending on the specific requirements of the user, it may be preferable to operate the system with a night or unoccupied set back temperature. This allows each room to

maintain an individually programmed minimum background level of heat during an 'OFF' period. This facility is available with both the **MYSON FLOORTEC** MPRT, MPRT RF and **MYSON TOUCH** programmable touch screen room thermostats.

Set back has two distinct advantages when used with underfloor heating. It maintains the building fabric at a temperature, avoiding large swings in temperature and freezing, and it reduces the heat up period when the system is started after an off period.

Set back temperatures will normally be approximately 15°C dependent upon the building usage and occupants requirements.

Individual Room Control

Individual rooms fed from the same manifold are controlled by means of room thermostats and **MYSON FLOORTEC** thermoelectric actuators. **MYSON FLOORTEC** thermoelectric actuators can be supplied in 230 volt and 24 volt options and are designed for simple snap fitting to the regulating valves on the return header of the manifold. They operate by means of wax filled bellows with a heating element. When there is a call for heat the heating element is energised, heating the wax, which expands, causing the valve to open.

- **Wired** - The room thermostats are normally wired through a **MYSON FLOORTEC** 24V wiring centre. This has the advantage of providing a boiler and pump demand as well as connections for time channel input.
- **Wireless** - If it is impractical to install hard wired thermostats, **MYSON FLOORTEC** offer a range of wireless thermostats that use a radio frequency (RF) signal to communicate between the room thermostat and the wiring centre. Basic analogue (wireless) or digital programmable (MPRT RF) units are available.

Option 1

MRTE - Electronic Room Thermostat

- Upmarket electronic thermostat
- Attractive slimline design
- Clear, accurate LCD display
- No neutral, two wire connection
- Displays actual temperature

24V - Wiring Centre

- 24V Supply
- 24V to room stats and actuators
- Can control up to 10 heating thermostats
- Can control up to 12 actuators

Option 2

Wireless Thermostat

- No external wiring connections
- 30 metre spherical transmission range
- Ambient temperature 0-50°C
- One thermostat can control several loops
- Temperature scale 10-30°C +/- 2K
- Battery service life - minimum 5 years.

Wireless Base Unit

- 230V Supply
- Can control up to 20 actuators and 6 room thermostats
- Units can be joined for larger applications


MEP1C Programmer

Supplied as standard for options 1 & 2

- Can be set for 24hr, 5/2 day or 7 day operation
- Easy to read, backlit screen
- Pre-set clock
- Automatic summer/winter time change
- Memory saver - programmer and clock will not require resetting in the event of power loss
- Advanced and up to 3 hour extend features

Option 3

MPRT - Programmable Room Thermostat

- Smart Start technology (saves fuel by delaying heating 'start up' on warm days)
- Easy to program with three adjustable temperature settings
- 2 in 1 programmable thermostat 24 hour or 7 day (installer set up option)
- Backlit display with easy to follow instructions
- One hour high temperature boost button
- All 24 hour temperature settings shown on display
- Volt free 2 wire connection, ideal for combination boilers
- Service required (installer set up option)
- Holiday override 1-99 days

24V - Wiring Centre

- 24V Supply
- 24V to room stats and actuators
- Can control up to 10 heating thermostats
- Can control up to 12 actuators

Option 4

MPRT RF - Programmable Room Thermostat

- Smart Start technology (saves fuel by delaying heating 'start up' on warm days)
- Easy to program with three adjustable temperature settings
- 2 in 1 programmable thermostat 24 hour or 7 day (installer set up option)
- Backlit display with easy to follow instructions
- One hour high temperature boost button
- All 24 hour high temperature settings shown on display
- Volt free 2 wire connection, ideal for combination boilers
- Service required (installer set up option)
- Holiday override 1-99 days
- Wireless, radio frequency connection
- Stand - program from your armchair and locate thermostat wherever you wish

24V - Wiring Centre

- 24V Supply
- 24V to room stats and actuators
- Can control up to 10 heating thermostats
- Can control up to 12 actuators

Option 5

MYSON TOUCH Programmable Touch Screen Room Thermostat

- Smart Start technology
- Clear, easy to use touch screen display
- 24hr programming, 5/2 day programming or 7 day programming
- Up to 4 time and temperature settings per day
- Remote sensor model available
- 230V Supply
- **MYSON TOUCH** is suitable to be classified as a "Delayed Start" thermostat as defined in SAP 2005
- Load Compensation technology (saves fuel by delaying heating 'start up' on warm days).