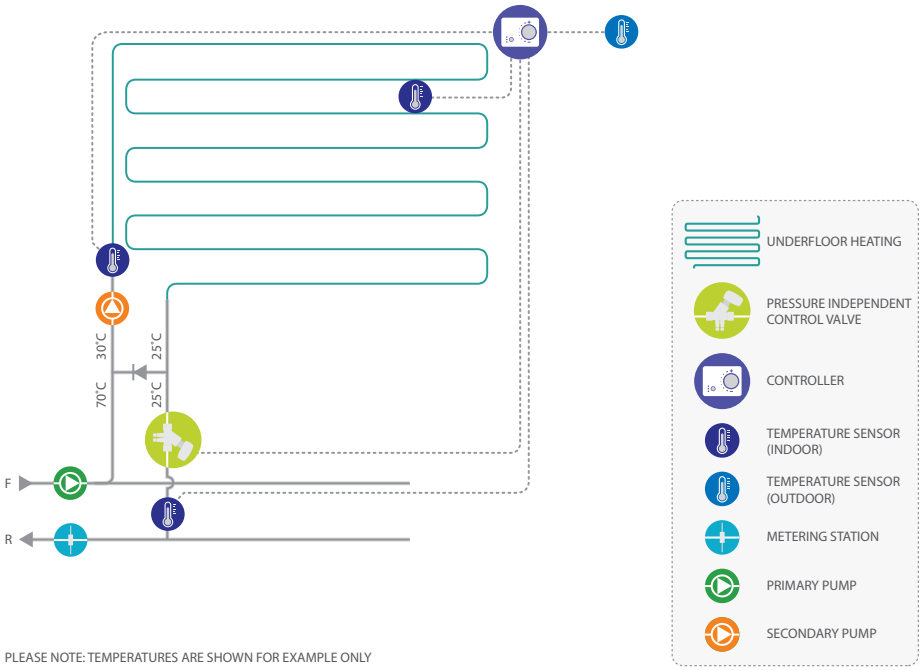
Underfloor Heating with PICV control - single circuit



PLEASE NOTE: TEMPERATURES ARE SHOWN FOR EXAMPLE ONLY

Function

The room temperature is controlled by a room thermostat connected to the PICV actuator. The temperature from the primary circuit is lowered by a heat injection circuit down to a maximum of 30°C.

Due to the slow response time of an underfloor heating system, it is normally controlled by a weather compensated room controller with an outside sensor.

The control characteristic will normally be linear.

Benefits

- The PICV ensures balancing of the flow and eliminates the use of both static balancing valves and differential pressure control valves.
- Simple installation as only the PICV is required with no need for additional pressure or flow balancing valves.
- Low total pressure loss in the system due to simple design.
- The flow can be set directly on the PICV without the need of a manometer or a commissioning unit.

Considerations

- Minimum differential pressure required for the PICV must be available at design flow.
- A metering station can be installed if additional flow verification is required by the witnessing authority.

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