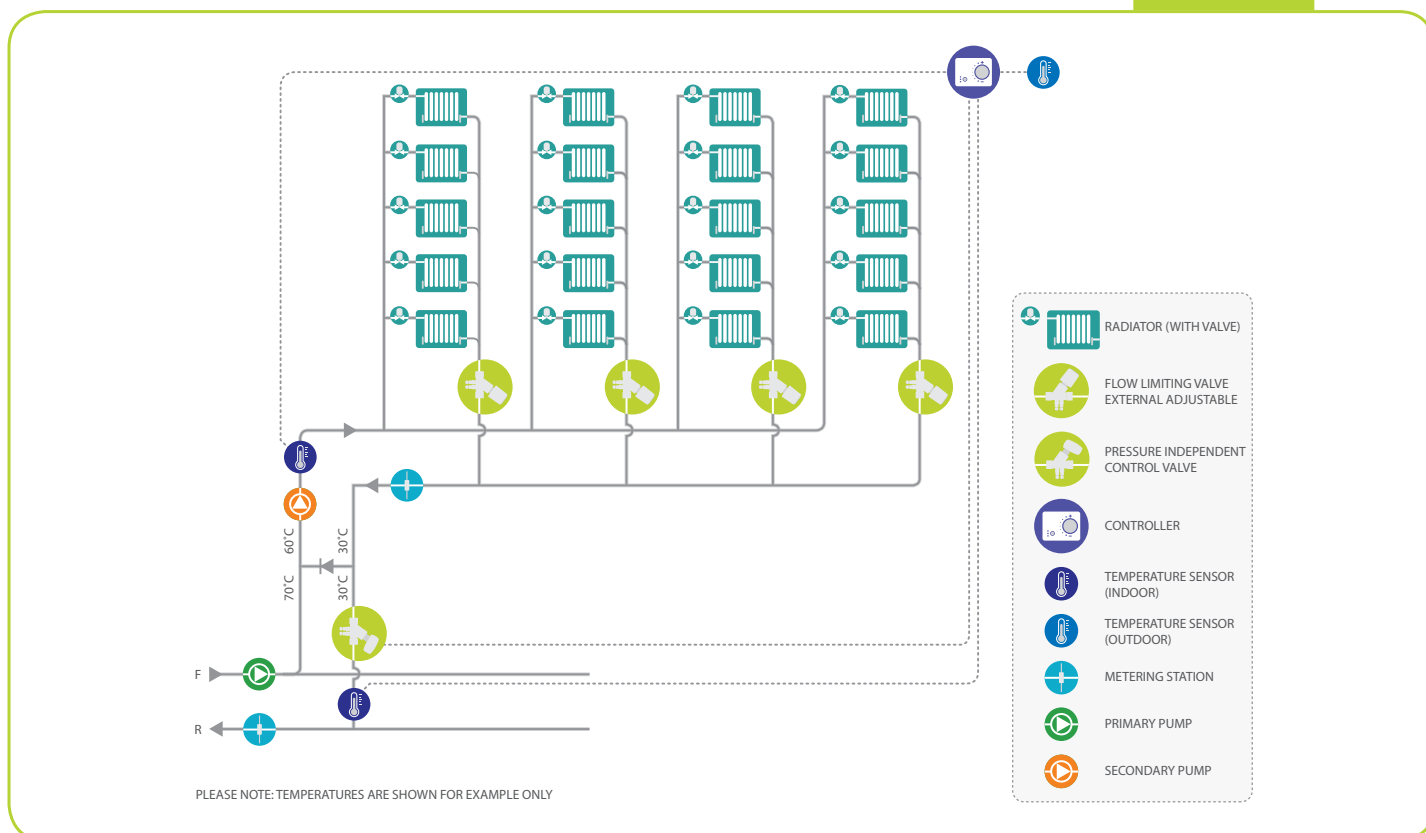


# Radiator System with dynamic balancing



## Function

The room temperature is controlled by the radiator valve on each radiator.

The balance of the system is handled by a dynamic balancing valve on each riser/branch controlling the flow rate through this section of the system. The dynamic balancing valve can also be installed at each apartment for a more localised balancing

The dynamic balancing valve is a flow limiter that prevents overflow in the part of the system controlled by the valve. This will ensure that the design flow is always available in every part of the system.

The temperature from the primary circuit is lowered to an optimal inlet temperature at the secondary side, with a PICV injection circuit connected to a controller.

[www.frese.eu/hvac](http://www.frese.eu/hvac)

## Benefits

- The flow rate through the dynamic balancing valve is independent of the differential pressure across it.
- The flow can be set without the use of a manometer/ commissioning device.
- Only 1 dynamic balancing valve in series.
- If the system is expanded, it will not need to be rebalanced.
- No straight lengths of pipe before or after the dynamic balancing valve are required.

## Considerations

- Minimum differential pressure required for the dynamic balancing valve must be available at design flow.
- The differential pressure in the different sections of the system cannot be controlled.

