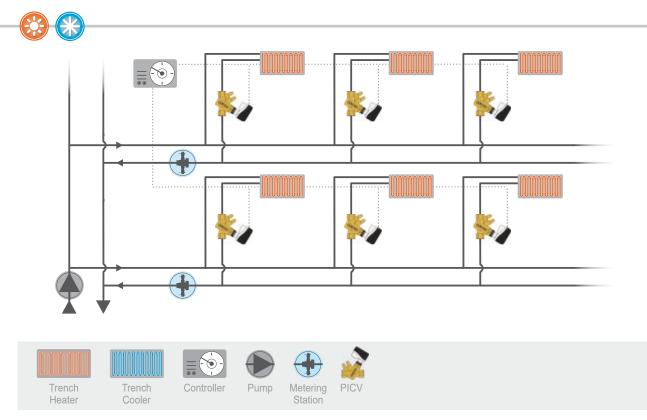


Trench Heaters/Coolers

with Pressure Independent Control (PICV)



System Functionality:

Trench heaters an underfloor-based heating devices and a less space consuming alternative to radiators. Hot water is piped to the unit and provides convective heating. As the warm air rises it will heat the room and the cooled air will fall back down and the cycle restarts. With proper balance and control, flow rates will be maintained despite pressure fluctuates with the result of appropriate room temperature and increased energy savings. This can be obtained by installing a PICV on every trench heater.

Requirements:

Trench heaters an underfloor-based heating devices and a less space consuming alternative to radiators. Hot water is piped to the unit and provides convective heating. As the warm air rises it will heat the room and the cooled air will fall back down and the cycle restarts. With proper balance and control, flow rates will be maintained despite pressure fluctuates with the result of appropriate room temperature and increased energy savings. This can be obtained by installing a PICV on every trench heater.

Solutions:

The solution is to mount a PICV on every unit and FlowCon offers:

- FlowCon Green / GreEQ (adjustable insert)
- FlowCon Essentia (built-in regulation unit).

Benefits:

- Assures correct flow for each unit automatically also at partial loads securing optimal comfort
- Serviceable insert-design solution (Green / GreEQ)
- Energy efficiency with regulation starting at only 10 kPaD (Essentia)
- Flexible solution with stepless setting to minimum 41 defined max. flows
- Electrical actuators w. selectable control mode, linear or equal% or alternatively thermal ON/OFF actuators
- Cost savings due to reduced commissioning time
- True PICVs 100% authority and pressure independency at all flow rates with accurate actuator control.

