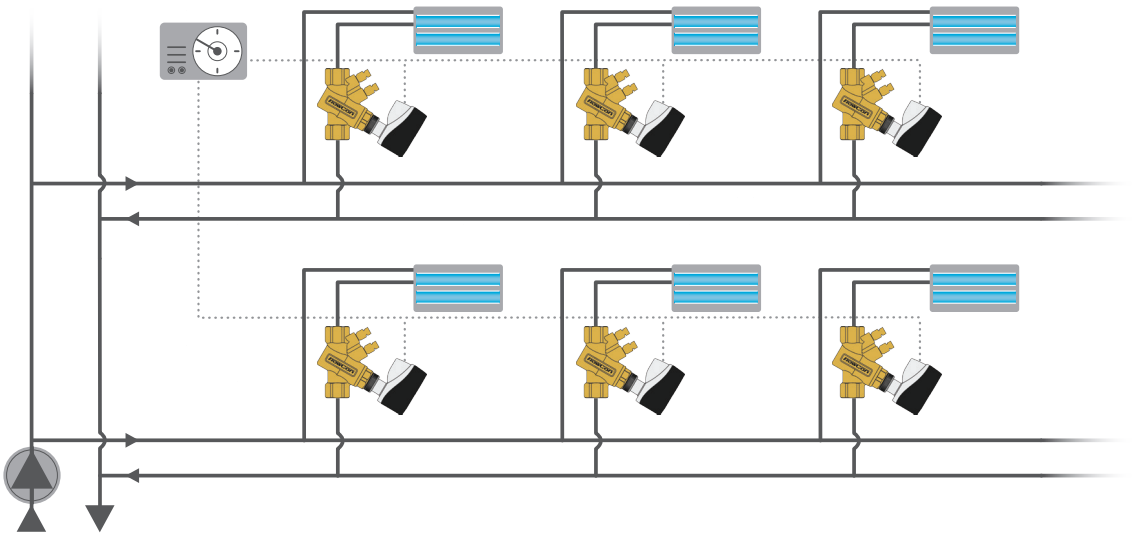
FlowCon international

A Griswold Controls LLC./FlowCon International Company

Chilled Beams/Ceilings

with Pressure Independent Control (PICV)



System Functionality:

Chilled beams and chilled ceilings are both ceiling-based cooling devices and alternatives to FCUs. Chilled water is piped to the unit and provides convective cooling. As warm air rises it is cooled by the chilled beam/ceiling; once it is cooled, the air falls back to the floor and the cycle starts over. Without proper balance and control, flow rates will fluctuate as pressure fluctuates due to variating system load resulting in inaccurate room temperature, dissatisfied users and increased energy consumption. This can be prevented by installing a PICV on every chilled beam or chilled ceiling. PICVs will help maintain correct flow rate at any time of operation and significantly reduce energy consumption.

Requirements:

The PICV will react to system pressure changes and regulated the chilled water flow to required flow by adjusting the actuator position. This helps the unit to be accurately controlled even with pressure changes and at reduced loads.

Solutions:

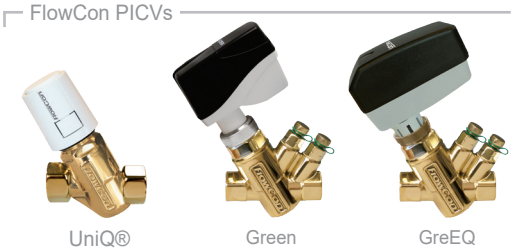
The solution is to mount a PICV on every single unit and FlowCon offers:

- FlowCon Green / GreEQ (adjustable insert)
- FlowCon UniQ® (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 (UniQ®)
- Flexible solution with minimum 41 different max. flow settings
- Electrical actuators with 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.

FlowCon PICVs



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