



# Flypass

## Multifunctional Connection Set

# Flypass

## Get connected



### YOUR ADVANTAGES WITH FLYPASS

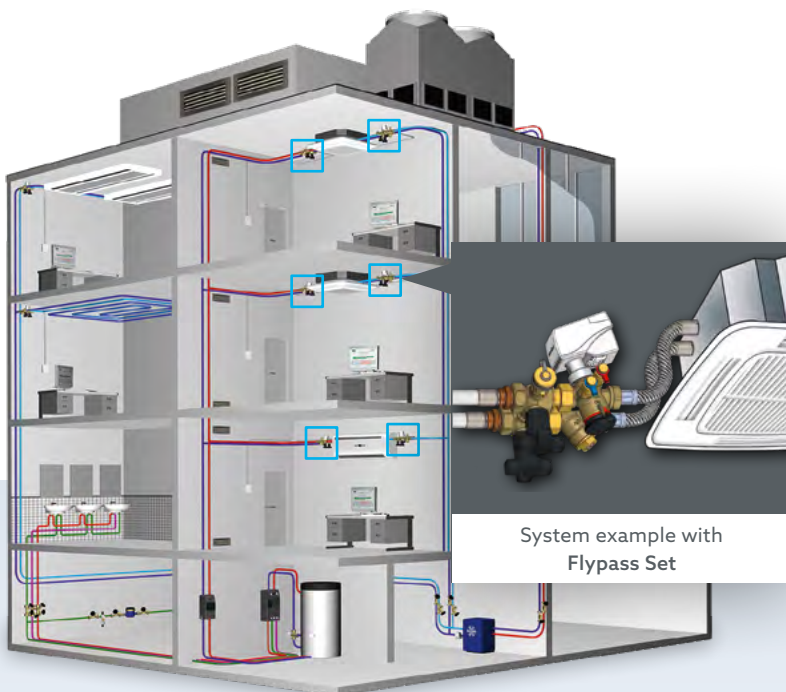
- + **Simple conversion to bypass** mode for initial flushing without involving the terminal units
- + **Easy drain and fill** for terminal units maintenance
- + **Quick installation** which saves labor costs
- + Combine with **Cocon QTZ pressure independent control valve** – the solution for automatic hydronic balancing
- + The set is delivered **completely preassembled, function and pressure tested**
- + **Less components to install**, less connections, less leakage risk
- + The **Cocon QTZ** provides **precise control of the flow**, as part of our pioneering modular systems for hydronic balancing
- + **Easy to read** ball valve positions and flow directions from the hand wheel
- + **Thermal insulation shells** available as accessories connections available



# Versatile and variable Flypass Set

The Oventrop Flypass Set consists of a connection unit, a strainer and a Cocon QTZ pressure independent control valve (PICV). It offers functions to *facilitate installation, commissioning and pressure independent flow control* of terminal units in hydronic systems.

- + Before installation, the bypass function enables to *flush, fill and also operate* the supply system.
- + Enables *quick and easy installation and connection* between supply and terminal unit.
- + For commissioning, provides functions to *flush, fill and vent* either supply or terminal unit.
- + Equipped with a Cocon QTZ PICV for *pressure independent flow control*.
- + Can also be supplied with a *low-flow Cocon QTZ PICV* (flow rates between 0.13 and 0.92 GPM).

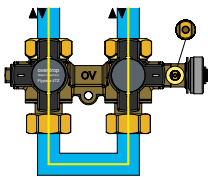


System example with  
Flypass Set

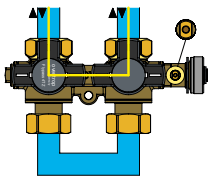


# Functions

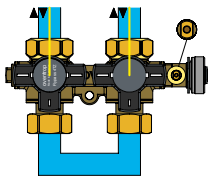
## FUNCTIONS WITH ACCESSORIES



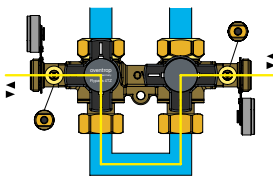
Normal operation



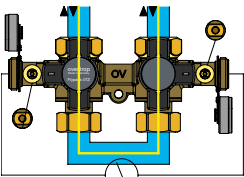
Bypass operation



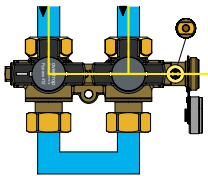
Shutoff



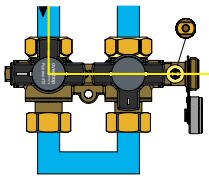
Top up, vent and flush terminal unit with second drain valve



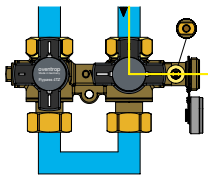
Measure  $\Delta P$ , for example with OV DMC3 measuring system



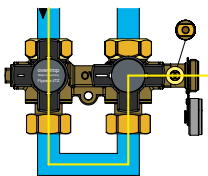
Fill and vent supply



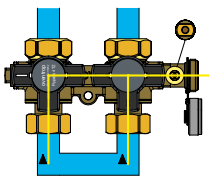
Drain supply and terminal unit  
Vent and flush supply



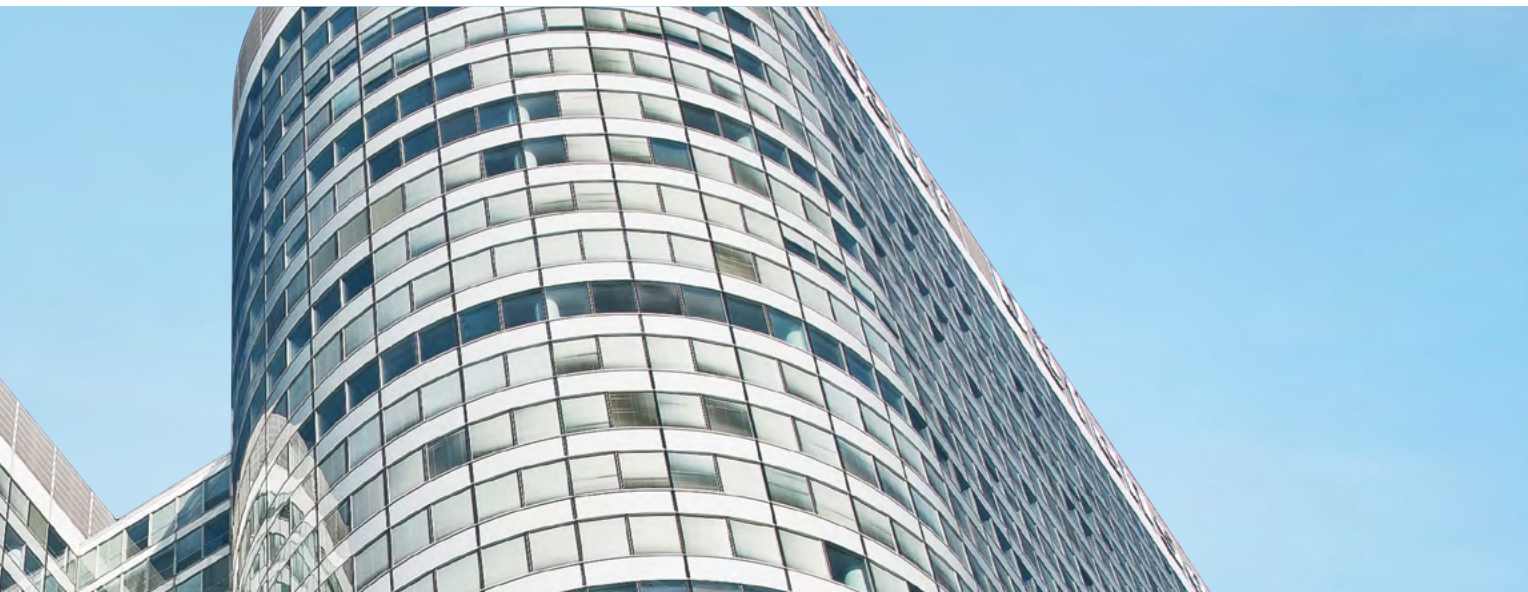
Drain, vent and flush supply



Fill and flush terminal unit



Drain terminal unit



## Versions

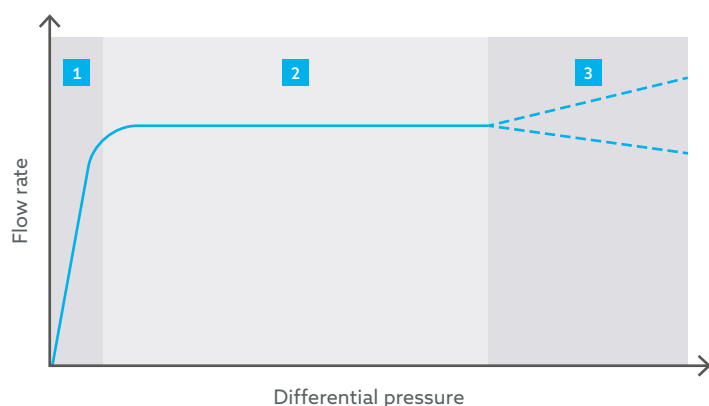


| Size | Control range        | Item No. |
|------|----------------------|----------|
| 1/2" | 0.9 up to 5.7 US gpm | 1679552  |
| 3/4" | 1.1 up to 7.9 US gpm | 1679553  |



| Type                                | Suitable for                    | Item No. |
|-------------------------------------|---------------------------------|----------|
| 1/2" externally threaded connection | Unit connection on Flypass 1/2" | 1981472  |
| 3/4" externally threaded connection | Unit connection on Flypass 3/4" | 1981473  |

### FLOW RATE CURVE



### REMAINS BALANCED UNDER PRESSURE: COCON QTZ

**Pressure independent flow control:** the desired flow is set at the Cocon QTZ control valve which then limits the flow into the terminal unit regardless of the differential pressure. Flow setting is *easily done* with a handwheel with US gpm markings. No reference tables needed to find the right flow setting.

- Below the control range:** The flow rate increases to the kvs characteristic line (max. control setting, fully open). The flow rate can be calculated using the kv formula.
- Within the control range:** The flow rate is constantly adjusted to the set value.
- Above the control range:** The flow rate remains approx. at the set value. There is a risk of noise development and / or fluctuations.



The PICV can be equipped with a *modulating, floating or on / off actuator* for linear or equal percentage operation.

The unit is protected against dirt by a strainer on the inlet. The Flypass Set is delivered *completely pre-assembled, function and pressure tested.*



Established as a foundry of brass fixtures in 1851, Oventrop has since evolved into a global manufacturer of balancing valves and thermostatic radiator valves for the building industry and is the partner for efficient heating and cooling. Its modular systems and services offer pioneering solutions for all HVAC experts, easy and flexible – from planning to installation, from industry to trade. Oventrop accompanies all its partners over many years – competently and personally.

As a family business with a history of over 170 years, Oventrop is rooted in the Sauerland region in the Northwestern part of Germany, but also has a strong international presence with eight subsidiaries and numerous sales agencies worldwide. From its U.S. based facility located in East Granby, Connecticut Oventrop serves its customers in the Americas sales region.