

ZTV



Special features – Application

Innovative thermostat supply air disc valve for self-regulating air exchange. The constant supply air volume control with adjustable disc valve for rooms of any kind. Ideally suited for natural (thermal) ventilation and as a supply air element for mechanical ventilation.

Advantages

- ☐ Fully automated, demand-based supply air volume control.
- ☐ Completely maintenance-free and free of operating costs.
- ☐ Individual volume flow adjustment by rotating the disc.
- ☐ Good sound insulation due to built-in silencers in the valve disc.
- ☐ Attractive, functional design.
- ☐ Wide inlet ring covers unsightly dirt marks.
- ☐ Quick and easy installation.

Design

The Helios supply air thermostat valves are made of break-resistant, white plastic. Aerodynamic, elegant and unobtrusive design. Insulating coating of inside of valve disc to prevent condensation.

Installation

ZTV is easy to install in supply ventilation openings. Attachment in duct by press fit using provided rubber seal or with the provided screws in three concealed holes in the frame.

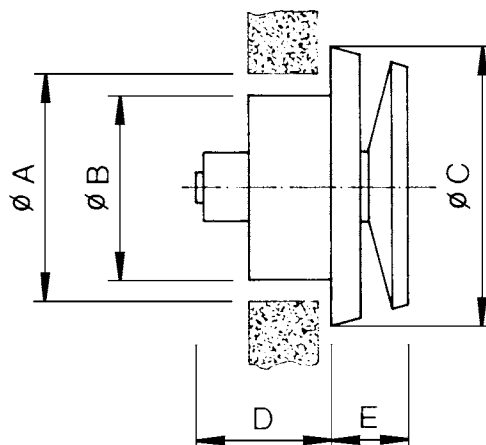
Function

The thermostat sensor automatically responds in a temperature range from -6°C to $+20^{\circ}\text{C}$. There are volume flows between 0 and $30\text{ m}^3/\text{h}$ within this range in compliance with the DIN guidelines. See performance diagram on the right. The valve closes from an outdoor temperature of approx. -4°C in the “basic setting” position. A minimum supply air rate is guaranteed by the 4 mm wide spacer clip. Manual adjustment of the subsequently outdoor temperature-controlled volume flow is possible by rotating the valve disc. One rotation results in a gap change of 4 mm (see blue shaded areas in the diagram).

Number of units

The number of required supply air elements is defined pursuant to DIN 1946-6 depending on the size of the living unit and wind speed (see table on the right).

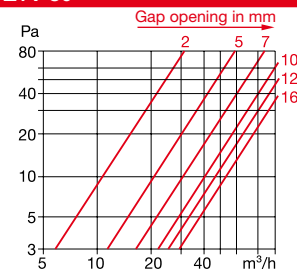
Dimensions ZTV



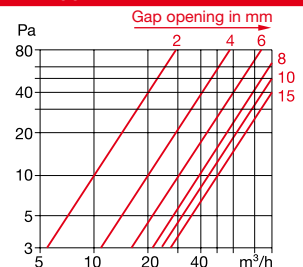
Dim. in mm see table



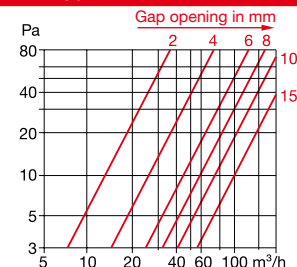
ZTV 80



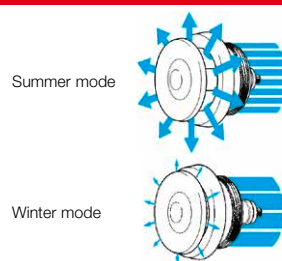
ZTV 100



ZTV 160

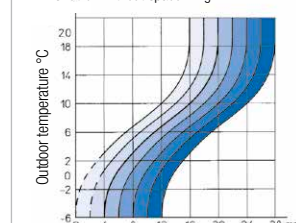


Summer / winter mode



Automatic gap change

Auto. gap change depending on the outdoor temperature. --- Shut-off without spacer ring.



Order data

Type	ZTV 80	ZTV 100	ZTV 160
Ref. no.	00078	00073	00074
Ø A = Duct NW	80	100	160
Ø B	77	95	156
Ø C	147	147	207
D	77	77	77
E	49	49	50
Weight approx. g	230	240	370

Number of units for mechanical demand-controlled ventilation

Living unit size	m²	Number ZLA/ZLE		Fans
		Extract air (8 Pa)*	Supply air (4 Pa)*	Number/unit
Hotel room	25 m²	2	—	1
Suite	25 m²	2 (3) **	—	1
Apartment I	50 m²	2	3 – 4	2
Apartment II	> 50, < 80 m²	3	4	2
Apartment III	> 80 m²	4	5	3
Single fam. house up to 120 m²		4	5	3

* according to DIN 1946-6 tab. 10.

** if a kitchenette is also vented.