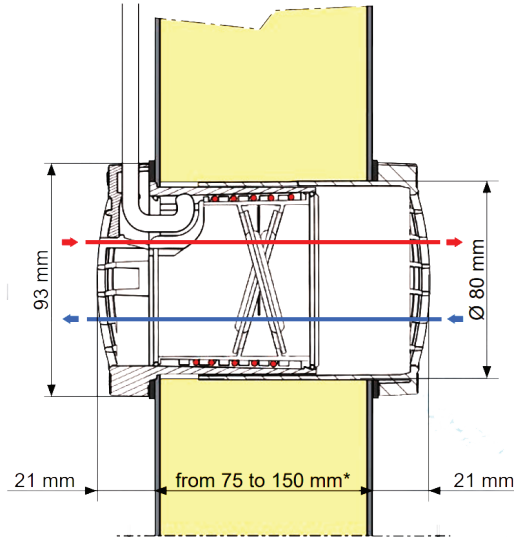


The walls of a cold room are constantly subject to strains caused by pressure variations, either from inside or outside of the room. It is important to equalise the pressure when necessary otherwise the walls & ceiling are at risk of blowing out or in causing damage or possible injury.



The F2227 Valve makes it possible to balance internal & external pressures through venting. It's mechanically operated valves (one intake and the other exhaust) has two watertight mobile flaps. This means that when not required the cold room is still sealed without precious cold air leaking out of the room and causing machinery to run more often. When pressure builds up the valves open and allow equalisation.

The valve is fitted with an 8w heater which runs continuously and prevents the flaps from freezing. It is important to note that the F2227 Valve is designed for **negative** temperature cold rooms. If used for positive temperature cold room equalisation the heater should Not be connected to power.

Ensure to read the information in the Installation Instructions.

Draws 0.035 AMPs per Valve.

This product replaces CRH-500 & F2220TN Models

**Stock Code:** F2227

**Colour:** Surfmist white

**Material:** Chemically resistant & corrosion proof composite

**Heater:** Sw heating element

**Wall or ceiling thickness:** Expandable for 75mm - 150mm panel thickness



## How to determine number of valves required

The following formula determines number of valves needed for a given case:

**V** = Volume of the room in m<sup>3</sup>

**T** = Time variation in minute for 1°C

**273 / 4,5 / 5,5** = Constant values

**t** = Temperature of the room in °C

- According to DTU 45.1 (Norm NF P75-401-1), for a maximum evenly distributed pressure of **200 Pa** (20 kg/m<sup>2</sup>):

$$\text{Number of valves} = \frac{5,5 V}{T(273 + t)}$$

Example :  $V = 120\text{m}^3 / T = 3 \text{ minutes for } 1^\circ\text{C} / t = -25^\circ\text{C}$

$$\text{Number of valves} = \frac{5,5 \times 120}{3(273-25)} = 0,89 = \sim 1 \text{ valve}$$

- As an indication, for a maximum evenly distributed pressure of **300 Pa** (30 kg/m<sup>2</sup>):

$$\text{Number of valves} = \frac{4,5 V}{T(273 + t)}$$

Example :  $V = 75\text{m}^3 / T = 1,5 \text{ minutes for } 1^\circ\text{C} / t = -25^\circ\text{C}$

$$\text{Number of valves} = \frac{4,5 \times 75}{1,5(273-25)} = 0,91 = \sim 1 \text{ valve}$$

If the data used for calculation are exactly observed our valves ensure that the maximum evenly distributed pressure is not exceeded (The application and the result of the formulas are dependent on the initial data being correct.)

### To ensure correct operation of valves

Valves must not be installed in the direct airflow of the evaporator. We recommend installing valves at right angles to the airflow and as far away as possible from the evaporator. The optimal height for installation is a height equal to 2/3 of the room in an unobstructed location.

### Retro Fit Sleeve Cover for Fermod 2227 Series Pressure Relief Valve

The F2227 Retro Fit Sleeve cover allows the new Fermod F2227 Valve to be fitted using the same wall penetration as the older CRH-500 Valves or retro-fit installations where the penetration is larger than 80mm

**Stock Code:** F2227-RFS

**Color:** Surfmist White

**Material:** Composite

