COMBI pressure compensating valve
Aeration and ventilation

012605

Brief description
Pressure compensating valves are used in the food and beverages industry. They are used as protection against underpressure/overpressure in tanks and other closed systems. They do not meet the criteria for a safety valve according to the pressure equipment directive (PED).

The pressure compensating valve is the combination (COMBI) of an aeration and a ventilation valve.
• The aeration valve is activated at an underpressure of 3-6 mbar. In the event of increasing underpressure, incoming ambient air leads to pressure compensation inside the system.
• The overpressure valve is activated at 7-10 mbar. In the event of increasing pressure, outgoing air/gas leads to a pressure release inside the system.

The venting or blow-off area is separated from the spring chamber (hygienic design). Any soiling/microbial contamination due to escaping liquid can be cleaned quite easily.

Valve types

<table>
<thead>
<tr>
<th>Type</th>
<th>Valve DN</th>
<th>Connection DN</th>
<th>Function</th>
<th>Installation position</th>
</tr>
</thead>
<tbody>
<tr>
<td>12605</td>
<td>50</td>
<td>65</td>
<td>Spring tension</td>
<td>Vertical</td>
</tr>
</tbody>
</table>

Technical Data

Product range
- Materials: Stainless steel 1.4307
- Seals: EPDM
- Surface: ≤ 0.8 µm

Other parts
- Materials: Stainless steel 1.4301
- Seals: EPDM
- Surface: Bright metal

Production
- Operating pressure: Low pressure range 5 - 10 mbar, Special pressures up to 200 mbar possible
- Temperature: Up to 95°C
- Fluids (nontoxic): Air/Gases (Group II per PED)
Valve design

1  Valve housing
2  Upper body of valve
3  Valve inlet
4  Valve outlet
5  Pressure spring (overpressure)
6  Pressure spring (underpressure)
7  Valve disk (overpressure)
8  Valve disk (underpressure)

Output curve

Air

Unterdruck/Überdruck [mbar]

Leistungsvolumen [Nm³/h]

Unterdruck  

Überdruck  

0  2  4  6  8  10  12  14  16  18  20  22  24

0  20  40  60  80  100  120  140  160  180  200  220  240  260  280

Unterdruck  

Überdruck  

2015-09-04  

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