Pressure-independent flow limiter valve PIFLV

The PIFLV is a pressure-independent flow limiter valve that is specially designed for ON/OFF cooling zone applications.

The valve provides numerous benefits:

- automatic and permanent hydronic balancing
- large flow capacity also for small diameters
- clog-resistant design
- tight-closing ball valve minimises energy loss
- minimum power consumption in operating and standby modes
- short running time
Energy efficiency for zone applications.

Innovative flow limiter design

The unique innovative design combines an ultra-slim flow limiter with a 2-way ball valve to supply a specific flow regardless of system pressure fluctuations. It ensures a permanent hydronic balancing.

The new design provides much greater flow capacity since the flow rate is no longer bound by complex flow limiting valves. Furthermore, the clog-resistant inner structure ensures a reliable, maintenance-free operation.

Brushless DC motor

Thanks to our patented motor control the actuator’s power consumption when running is only 0.3 W (0.2 W when holding). This also allows for more units to be powered by a single transformer. In addition, the brushless DC motor helps eliminate failures due to stalled motors and prolongs actuator life.

Belimo motorized actuators have a standard 75 s / 90 s running time. Fast running models 15 s / 35 s are also available. Quick actuation means energy efficiency and more room comfort.

Ball valve technology

The Belimo ball valve design offers tight closing which eliminates energy loss.

Unlike short stroke globe valves, the self-cleaning ball prevents clogging. This ensures reliable closing and avoids energy losses.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Cold water</th>
<th>Permissible pressure ps</th>
<th>Closing pressure Δps</th>
<th>Nominal flow V_{nom}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>Cold water</td>
<td>1600 kPa</td>
<td>520 kPa</td>
<td>DN 15: 290, 470, 650, 940, 1300 l/h</td>
</tr>
<tr>
<td>Medium temperature</td>
<td>2...60 °C</td>
<td></td>
<td></td>
<td>DN 20: 1200, 1500, 1900, 2350, 2900 l/h</td>
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<tr>
<td>Pressure value</td>
<td>20...280 kPa</td>
<td></td>
<td></td>
<td>DN 25: 2650, 3600 l/h</td>
</tr>
<tr>
<td>Pressure stability</td>
<td>±5% (with pressure value of 100...280 kPa)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leakage rate</td>
<td>A, tight (0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body pressure rating</td>
<td>PN 25</td>
<td></td>
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</tbody>
</table>