Flow Control Gate PCD (Pneumatic Controlled Digital)

The Claudius Peters Flow Control Gate is used wherever bulk solids have to be discharged from silos and bins, in a metered and controlled manner.

Especially in the cement and building materials industry the Claudius Peters Flow Control Gate Type PCD (Pneumatic Controlled Digital) has been used successfully for many years. This device is also used as dosing and shut-off device for special applications.

The Flow Control Gate PCD is equipped with an electro pneumatic controller with 4 - 20mA input and output signals for position transmission. If required, additional binary in- and output signals can be installed.

To indicate the two final positions, the Flow Control Gate PCD can additionally be equipped with a limit switch unit with micro or proximity switches.

- For highly dynamical process operations (free selectable positions between 0 and 100 % down to 4 seconds)
- For highly accurate processes (e.g. belt weigher, flow meter)
- Controlled discharge for processes with high fluctuations
- Integrated emergency shut-down function
- Various binary in- / output signals available
- The compact modular design with exchangeable cassette-type sealing ensures easy maintenance at low maintenance costs
- High temperature design up to 400°C possible
- Various preventive maintenance features

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Comparison of travel time between motorized and PCD type

<table>
<thead>
<tr>
<th>Type</th>
<th>Flow control gate</th>
<th>MCD 30s</th>
<th>MCD 60s</th>
<th>PCD 4/400s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing time</td>
<td>0-100% [sec]</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Minimum travel time</td>
<td>4 seconds only</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

... extendable up to 400 seconds
Components

By turning the roller inside the housing a flow cross section is released whose size and shape is always adjusted optimally to the corresponding task. To this end the material flow inside the flow control gate is constantly fluidized by the fluidizing bed bottom.

Short opening and closing times make the Claudius Peters Flow Control Gate a safe device for shut-off, metering and controlling.

- Electro-pneumatic controller with 4-20 mA input signal
- Analogue position feedback via 4-20 mA output signal
- High positioning precision of < 0,5%
- Local operation / display
- Binary input can be used as E.S.D (Emergency Shut-Down)
- Suitable for HART
- Diagnosis functions are possible (information on wear and operation)
- Alternatively available as Profibus controller
- Self-optimizing commissioning

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Flow Control Gate PCD (GB) 09/2016 / Issue 1. Due to a policy of continued improvement, we reserve the right to change any specification without prior notice. ERRORS & OMISSIONS EXCEPTED.