Cone valve K5 and K6 for bulk materials

Pneumatically operated cone valve for closing of pressure vessels. Sealing is carried out by means of a conical seal which is pressed against a seat ring by means of a pneumatic rotary drive. The overpressure in the pressure vessel also backs up the sealing process. The abrasion on the sealing surfaces is automatically counterbalanced to a certain degree by means of the closing device. Both the conical seal and the seat ring can be replaced individually.

The cone valve has a much longer service life than a butterfly valve when used with abrasive products.

**Areas of application:**
- Inlet closure for pneumatic pressure vessel conveyor
- Shut-off valve
- Particularly suitable for abrasive bulk materials, e.g. cement, fly ash, sand, aluminium oxide etc.
- Replacement of conventional butterfly valve for a longer service life

**Advantages:**
- Optimised product flow thanks to steep angle of the cone
- Compact design
- Closes against full product flow (depending on product)
- High throughput (depending on product):
  - DN 200: 15 – 50 m³/h
  - DN 300: 40 – 120 m³/h
  - DN 400: 70 – 210 m³/h
- Minor wear
- Adjustable opening
- Compact dimensions
- Self-cleaning sealing surface
- Installation possible at a later date
Specifications

Standard design:
- Housing in ductile iron (cone valve K5)
- Very robust design
- Application range up to maximum 10 bar(g) vessel pressure
- In- and outlet flange DN 200, DN 300 and DN 400 PN10
- Pneumatically operated double-acting quarter turn actuator as drive
- Control pressure min. 5 bar
- Shaft sealing by means of V-ring
- For fluids in group 2 according to PED 97/23/EC

Special design:
- Product temperature max. 200 °C
- Design in stainless steel (cone valve K6)
- ATEX for zone 20 inside, 22 outside
- For fluids in group 1 according to PED 97/23/EC
- Customised outlet connections
- Inlet protection

- Wear of sealing surfaces is automatically counterbalanced by the closing device
- Sealing made of abrasion-resistant elastomer
- Product temperature max. 100 °C
- Replaceable sealing
- Replaceable seat ring
- Position monitoring by means of limit switch
- Sealing effect is backed up by vessel pressure

Dimensions K5/K6:

<table>
<thead>
<tr>
<th>Type</th>
<th>A</th>
<th>B</th>
<th>C max</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H min</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 200</td>
<td>411</td>
<td>395</td>
<td>486</td>
<td>DN200 PN10</td>
<td>204</td>
<td>290</td>
<td>203</td>
<td>130</td>
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<tr>
<td>DN 300</td>
<td>485</td>
<td>418</td>
<td>568</td>
<td>DN300 PN10</td>
<td>307</td>
<td>300</td>
<td>279</td>
<td>130</td>
</tr>
<tr>
<td>DN 400</td>
<td>525</td>
<td>456</td>
<td>648</td>
<td>DN400 PN10</td>
<td>400</td>
<td>300</td>
<td>321</td>
<td>170</td>
</tr>
</tbody>
</table>

* Minimal space required for assembly/disassembly

A + 100 mm at product temperature above 100 °C

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