The structure of Swing check valve

1. Summary

Swing check valve based on the flow of medium itself open and close automatically to prevent the flow backward. It is only allow one side direction to flow.
2. The structure of Swing check valve and their names:

![Diagram of Swing check valve]

**Features:**
- Pipe thread in accordance: NPT, BSPT, DIN259, DIN2999, ISO228 Class A
- Class 200 W.O.G.
- Investment casting body
- Swing type disc
- INTEGRAK seat
- Material: SUS316 / ASTM A351
- CF8M / DIN1.4408

**Materials List:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Name</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>CF8M</td>
</tr>
<tr>
<td>2</td>
<td>Cap</td>
<td>CF8M</td>
</tr>
<tr>
<td>3</td>
<td>Gasket</td>
<td>PTFE</td>
</tr>
<tr>
<td>4</td>
<td>Plug</td>
<td>SUS316</td>
</tr>
<tr>
<td>5</td>
<td>Disc</td>
<td>CF8M</td>
</tr>
<tr>
<td>6</td>
<td>Gasket</td>
<td>PTFE</td>
</tr>
<tr>
<td>7</td>
<td>Bolt</td>
<td>SUS304</td>
</tr>
</tbody>
</table>

**Dimensions:**

<table>
<thead>
<tr>
<th>Size</th>
<th>DN</th>
<th>1/4</th>
<th>3/8</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>11/4</th>
<th>11/2</th>
<th>2</th>
<th>21/2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
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<td>10</td>
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<td>20</td>
<td>25</td>
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<td>40</td>
<td>50</td>
<td>65</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>80</td>
<td>89</td>
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<td>120</td>
<td>138</td>
<td>181</td>
<td>200</td>
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<td>A</td>
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<td>46.5</td>
<td>46.5</td>
<td>51.5</td>
<td>56</td>
<td>64</td>
<td>74.5</td>
<td>84.0</td>
<td>103.5</td>
<td>152</td>
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<tr>
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<td>1.66</td>
<td>2.06</td>
<td>2.65</td>
<td>3.07</td>
<td>4.02</td>
<td>4.50</td>
<td>5.27</td>
<td>7.7</td>
<td></td>
</tr>
</tbody>
</table>

The name of the various component of Swing Check valve (B)

3. The details instruction

3-1 The basic Knowledge

Direction: The flow of the medium based on the arrowhead on the valve body.

3-2 The maintenance when it works

The leakage on the connection between body and bonnet

Cause: After cycle of using, the preload between body and bonnet was
reduced. As result of the pressure on gasket was reduced, there will be leakage.

Approach: Select a suitable wrench lock the bolts between body and bonnet, and then the pressure on gasket was increased, the sealed effected between body and bonnet was well to prevent the leakage.

The approach can carry on termly.

4. Repair

After a cycle of use, there still be leakage after above approach, it should be repaired.

4-1 The leakage on the connection between body and bonnet

Method: Change the gasket

4-1-1 Teardown
- Take cap 2 (BONNET) between body & bonnet down.
- Take the gasket 3 (GASKET) out.

4-1-2 Fixing
- Put a new gasket 3 (GASKET) into body smoothly.
- Put the cap on and tight it.

5. The leakage check

After repaired, should carry on the leakage check, if any leakage, it should be carry on the maintain as above(B).

~THE END~