Check Valve, Poppet-type, Modular

MVJ3-06

Size 06 (D03) • Q\textsubscript{max} 50 l/min (13 GPM) • p\textsubscript{max} 350 bar (5100 PSI)

**Technical Features**

› Poppet-type check valve with subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 03)
› Sandwich plate design for use in vertical stacking assemblies
› Leak-free closing in one or two service ports, suitable for fast cycling with long life
› Sharp-edged steel seats for dirt-tolerant performance
› High flow capacity
› Optional bias spring ranges for back-pressure control
› In the standard version, the valve housing is phosphated and steel parts are zinc-coated for 240 h protection acc. to ISO 9227

**Functional Description**

These check valves in sandwich plate design allow flow in one and prevent flow in the other direction. The sandwich design enables vertical stacking with other components of the same size. The check valves can be built into one or two channels, the other passages are unobstructed. The cracking pressure depends on the selected bias spring.

**Technical Data**

| Characteristics measured at \( v = 32 \text{ mm/s} (156 \text{ SUS}) \) |

| Pressure drop related to flow rate |

<table>
<thead>
<tr>
<th>Flow Q ( [l/min \text{ (GPM)}] )</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure drop ( \Delta p ) [bar (PSI)]</td>
<td>(2.6)</td>
<td>(5.3)</td>
<td>(7.9)</td>
<td>(10.6)</td>
<td>(13.2)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Valve size</th>
<th>06 (D03)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. flow</td>
<td>( l/min \text{ (GPM)} )</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>bar (PSI)</td>
</tr>
<tr>
<td>Cracking pressure</td>
<td>bar (PSI)</td>
</tr>
<tr>
<td>Fluid temperature range (NBR)</td>
<td>°C (°F)</td>
</tr>
<tr>
<td>Fluid temperature range (FPM)</td>
<td>°C (°F)</td>
</tr>
<tr>
<td>Mass</td>
<td>kg (lbs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Datasheet</th>
<th>Type</th>
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<tbody>
<tr>
<td>General information</td>
<td>GI_0060</td>
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<tr>
<td>Mounting interface / Tolerances</td>
<td>SMT_0019</td>
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<tr>
<td>Spare parts</td>
<td>SP_8010</td>
</tr>
</tbody>
</table>

Subject to change • MVJ3-06_5018_1en_02/2016
### Functional Symbols

#### P

A1 P1 T1 B1     A2 P2 T2 B2

#### A

A1 P1 T1 B1     A2 P2 T2 B2

#### B

A1 P1 T1 B1     A2 P2 T2 B2

#### T

A1 P1 T1 B1     A2 P2 T2 B2

1. valve side

2. subplate or manifold side

#### C

A1 P1 T1 B1     A2 P2 T2 B2

#### D

A1 P1 T1 B1     A2 P2 T2 B2

#### AB

A1 P1 T1 B1     A2 P2 T2 B2

#### PT

A1 P1 T1 B1     A2 P2 T2 B2

**Note:** The orientation of the symbol on the name plate corresponds with the valve function.

### Ordering Code

**Check Valve, poppet-type, modular**

Valve size

#### Functional symbols

- check valve in line P
- check valve in line A
- check valve in line B
- check valve in line T
- check valve in line A, inverted
- check valve in line B, inverted
- check valve in line A and B
- check valve in line P and T

<table>
<thead>
<tr>
<th>P</th>
<th>A</th>
<th>B</th>
<th>T</th>
<th>C</th>
<th>D</th>
<th>AB</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>005</td>
<td>015</td>
<td>030</td>
<td>050</td>
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</tbody>
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**Surface treatment**

- No designation
- body phosphated, steel parts
- zinc-coated (ZnCr-3), ISO 9227 (240 h)
- zinc-coated (ZnNi), ISO 9227 (520 h)

**Seals**

- NBR
- FPM (Viton)

**Cracking pressure**

- 0.5 bar (7.3 PSI)
- 1.5 bar (21.8 PSI)
- 3.0 bar (43.5 PSI)
- 5.0 bar (72.5 PSI)