Check Valve, Poppet Type, Pilot to Open, Modular

2RJV1-06/M
Size 06 (D03) • Q\textsubscript{max} 60 l/min (16 GPM) • p\textsubscript{max} 320 bar (4600 PSI)

Technical Features

› Pilot to open check valve, poppet type with subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 03)
› Sandwich plate design for use in vertical stacking assemblies
› Sharp-edged steel seats for dirt-tolerant performance
› Leak-free closing, suitable for fast cycling with long life
› High flow capacity
› Optional bias spring ranges for back-pressure control
› Three pilot ratios available
› 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

The valve allows flow to pass from port A(B)1 to A(B)2 while normally closing flow from A(B)2 to A(B)1 with load. When pressure is applied at pilot port. The flow passes from port 2 to 1. The valve has three pilot ratios option. This requires at least one-third (ratio 3:1), one-sixth (ratio 6:1) or one-ninth (ratio 9:1) of the load pressure to be applied at the opposite port to open the valve. The check valve is spring closed to secure the holding position in static conditions and without load. The valve is offered with optional bias spring ranges for back-pressure control.

Technical Data

Valve size 06 (D03)
Max. flow l/min (GPM) 60 (15.9)
Max. operating pressure bar (PSI) 320 (4640)
Cracking pressure bar (PSI) 3 (43.5)  4 (58)  5 (72.5)  8 (116)  12 (174)
Fluid temperature range (NBR) °C (°F) -30 .... +100 (-22 ... +212)
Fluid temperature range (FPM) °C (°F) -20 .... +120 (-4 ... +248)
Pilot ratio 3 : 1 / 6 : 1 / 9 : 1
Weight kg (Ibs) 0.8 (1.76)

Datasheet Type
General information GI_0060 Products and operating conditions
Mounting interface SMT_0019 Size 06
Spare parts SP_8010

Pressure drop related to flow rate

Pilot ratio 3 : 1

Pilot ratio 6 : 1

Characteristics measured at v = 32 mm/s (156 SUS)
Model MC

![Diagram of Model MC]

Model MA

![Diagram of Model MA]

Model MB

![Diagram of Model MB]

Functional symbols

<table>
<thead>
<tr>
<th>2RJV1-06/MA</th>
<th>2RJV1-06/MB</th>
<th>2RJV1-06/MC</th>
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</thead>
<tbody>
<tr>
<td>![Diagram of 2RJV1-06/MA]</td>
<td>![Diagram of 2RJV1-06/MB]</td>
<td>![Diagram of 2RJV1-06/MC]</td>
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</tbody>
</table>

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

Ordering Code

Check valve, pilot to open, poppet type, modular

Valve size

Modular sandwich plate design

Functional symbols

<table>
<thead>
<tr>
<th>check valve in line A</th>
<th>check valve in line B</th>
<th>check valve in line A and B</th>
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<tr>
<td>A</td>
<td>B</td>
<td>C</td>
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</table>

Pilot ratio

- 3 : 1 (for all cracking pressures except 2 bar)
- 6 : 1 (only for cracking pressure 2 bar)
- 9 : 1 (only for cracking pressure 0 bar and 3 bar)

2RJV1-06/M

Surface treatment

- 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

- no spring
- 2 bar (29.0 PSI)
- 3 bar (43.5 PSI)
- 4 bar (58.0 PSI)
- 5 bar (72.5 PSI)
- 8 bar (116 PSI)
- 12 bar (174 PSI)

*Preferred type for pilot ratio 3 : 1 respective 9 : 1