**Features**

1. This modular valve is a check valve that prevents reverse-flow.
2. The 01, 03, 04 sizes include types that can also be used as suction and differential circuits.
3. Maximum Operating Pressure: 25, 35MPa (255, 357kgf/cm²)

**Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Nominal Diameter (Size)</th>
<th>Maximum Working Pressure MPa/kgf/cm²</th>
<th>Maximum Flow Rate ℓ/min</th>
<th>Cracking pressure MPa/kgf/cm²</th>
<th>Weight kg</th>
<th>Gasket Surface Dimensions</th>
</tr>
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<tbody>
<tr>
<td>OC-G01-P1-21</td>
<td>1/8</td>
<td>25 (255)</td>
<td>50</td>
<td>0.04 (0.4)</td>
<td>1.0</td>
<td>ISO 4401-03-02-0-05</td>
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<tr>
<td>P2</td>
<td></td>
<td></td>
<td></td>
<td>0.35 (3.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3</td>
<td></td>
<td></td>
<td></td>
<td>0.50 (5.1)</td>
<td></td>
<td></td>
</tr>
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<td>OC-G01-T1-21</td>
<td>T2</td>
<td>25 (255)</td>
<td>50</td>
<td>0.04 (0.4)</td>
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<td>ISO 4401-03-02-0-05</td>
</tr>
<tr>
<td>T3</td>
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<tr>
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<tr>
<td>OCV-G01-W-20</td>
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<tr>
<td>OC-G03-T1-J50</td>
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<tr>
<td>T3</td>
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<td>35 (357)</td>
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<tr>
<td>P3</td>
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<td>0.50 (5.1)</td>
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<tr>
<td>OCH-G04-T1-10</td>
<td>T2</td>
<td>1/2</td>
<td>35 (357)</td>
<td>300</td>
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<tr>
<td>T3</td>
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<tr>
<td>OCH-G04-A1-10</td>
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<td>1/2</td>
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<td>300</td>
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<td>OCH-G04-AP1-10</td>
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<td>1/2</td>
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<tr>
<td>AP3</td>
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<td>0.01 (0.1)</td>
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</tbody>
</table>

**Handling**

1. Differential circuit can be easily configured at P → B by attaching OC-G**-A* above the OC-G**-AP* on the subplate. (See the figure to the right.)
2. Note that a sub plate and installation bolts are not included. See pages D-90 through D-95 if these items are required.
3. 04 series modular valves do not have an L (DR2) drain port, so they cannot be used in combination with pressure center type solenoid valves (D).
### Explanation of model No. 01, 03 size

**OC (OCV) – G 03 – P 1 – J50**
- **Design number**  
  - Note: For 03 size, relationship between mounting bolts and design number is indicated as J50: M6, 50 : M8.
- **Cracking pressure** 1, 2, 3
- **Control port**  
  - P: P port  
  - T: T port  
  - W: A, B ports (01, 03 vacuum check)
- **Nominal diameter (Size)** 01, 03  
  - G: Gasket type
- **Vacuum check modular valve** (01, 03 size)
- **Check modular valve** (01, 03 size)

### Explanation of model No. 04 size

**OCH (OVH) – G 04 – P 1 – 10**
- **Design number**
- **Cracking pressure** 1, 2, 3
- **Control port**  
  - P: P port  
  - T: T port  
  - W: A, B ports (vacuum check)
- **Nominal diameter (Size)** 04  
  - G: Gasket type
- **M35 Series vacuum check modular valve**
- **M35 Series check modular valve**
Installation Dimension Drawings

OC-G01-AP-20
OC-G01-P*-21
OC-G01-A*-21
OCV-G01-W-20

Note) Dimensions in the parentheses are for the OC-G01-T*-20.

OC-G03-AP*-J50
OC-G03-A*-J50
OC-G03-T*-J50

OCV-G03-W-J50

OCH-G04-AP
OCH-G04-T*-10

Modular Valve
Performance Curves

Hydraulic Operating Fluid Kinematic Viscosity 32mm²/s

Pressure Loss Characteristics

OC-G01-P*-21

OCV-G01-W-20

OC-G03-P*-J50

OC-G03-AP*-J50

OC-G03-A*-J50

OC-G03-T*-J50

OCV-G03-W-J50

OCH-G04-P*-10

OCH-G04-T*-10
Cross-sectional Drawings

OC-G01-AP-20

OC-G01-P*-21

OC-G01-A*-21

Part No. | Part Name | Part Number
---|---|---
1 | Body |
2 | Poppet |
3 | Spring seat |
4 | Spring |
5 | Plate |
6 | O-ring |
7 | O-ring |

Part No. | Part Name | Part Number
---|---|---
1 | Body |
2 | Poppet |
3 | Spring seat |
4 | Spring |
5 | Plate |
6 | O-ring |
7 | O-ring |

Part No. | Part Name | Part Number
---|---|---
1 | Body |
2 | Poppet |
3 | Ball |
4 | Seat |
5 | Spring seat |
6 | Spring |
7 | Plate |
8 | O-ring |
9 | O-ring |

Seal Part List (Kit Model Number BDBS-01C*-0A)

Part No. | Part Name | Part Number | Q’ty
---|---|---|---
6 | O-ring | AS568-012(NBR-90) | 4
7 | O-ring | NBR-90 P18 | 1

Note) 1. The materials and hardness of the O-ring conform with JIS B2401.
2. Specify P, T, or AP for the asterisk (*) in the kit model number.

OCV-G01-W-20

Part No. | Part Name | Part Number | Q’ty
---|---|---|---
7 | O-ring | AS568-012(NBR-90) | 4
9 | O-ring | NBR-90 P18 | 2

Note) The materials and hardness of the O-ring conform with JIS B2401.

Seal Part List (Kit Model Number BDBS-01CA-0A)

Part No. | Part Name | Part Number | Q’ty
---|---|---|---
8 | O-ring | AS568-012(NBR-90) | 4
9 | O-ring | NBR-90 P18 | 2

Seal Part List (Kit Model Number BDBS-01CVW)

Part No. | Part Name | Part Number | Q’ty
---|---|---|---
7 | O-ring | AS568-012(NBR-90) | 4
8 | O-ring | NBR-90 P18 | 2

Note) The materials and hardness of the O-ring conform with JIS B2401.
Seal Part List (Kit Model Number BDES-03C*)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Name</th>
<th>Part Number</th>
<th>Q’ty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>O-ring</td>
<td>AS568-014(NBR-90)</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>O-ring</td>
<td>NBR-90 P22</td>
<td>5</td>
</tr>
</tbody>
</table>

Note 1. The materials and hardness of the O-ring conform with JIS B2401.
2. Specify P, T, or A for the asterisk (*) in the kit model number.

Seal Part List (Kit Model Number BDES-03CAP)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Name</th>
<th>Part Number</th>
<th>Q’ty</th>
</tr>
</thead>
<tbody>
<tr>
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<td>NBR-90 P11</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>O-ring</td>
<td>AS568-014(NBR-90)</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>O-ring</td>
<td>NBR-90 P22</td>
<td>1</td>
</tr>
</tbody>
</table>

Note 1. The materials and hardness of the O-ring conform with JIS B2401.
### Seal Part List (Kit Model Number BDKS-04C*)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Name</th>
<th>Part Number</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>O-ring</td>
<td>AS568-012(NBR-90)</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>O-ring</td>
<td>NBR-90 P20</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>O-ring</td>
<td>AS568-118(NBR-90)</td>
<td>4</td>
</tr>
</tbody>
</table>

Note 1. The materials and hardness of the O-ring conform with JIS B2401.
2. Specify P, T, A, or AP for the asterisk (*) in the kit model number.

### Seal Part List (Kit Model Number BDKS-04CVW)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Name</th>
<th>Part Number</th>
<th>Qty</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>O-ring</td>
<td>AS568-012(NBR-90)</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
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<tr>
<td>8</td>
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<td>AS568-118(NBR-90)</td>
<td>4</td>
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</table>

Note) The materials and hardness of the O-ring conform with JIS B2401.