4/5 Port Air Operated Valve
Series SYJA3000

Model

<table>
<thead>
<tr>
<th>Valve model</th>
<th>Configuration</th>
<th>Port size</th>
<th>Effective area (mm²) (N/min)</th>
<th>Pilot port size</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYJA3120-M3</td>
<td>2 position single</td>
<td>M3</td>
<td>0.9 (49)</td>
<td>M3</td>
<td>22</td>
</tr>
<tr>
<td>SYJA3220-M3</td>
<td>2 position double</td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>SYJA3320-M3</td>
<td>3 position closed centre</td>
<td>M3</td>
<td>1.8 (98)</td>
<td>M3</td>
<td>48 (22)</td>
</tr>
<tr>
<td>SYJA3420-M3</td>
<td>3 position exhaust centre</td>
<td>M3</td>
<td>3 position pressure centre</td>
<td></td>
<td>51 (25)</td>
</tr>
<tr>
<td>SYJA3520-M3</td>
<td>3 position pressure centre</td>
<td>M3</td>
<td></td>
<td></td>
<td>54 (28)</td>
</tr>
<tr>
<td>SYJA3140-M5</td>
<td>2 position single</td>
<td>M5</td>
<td>1.2 (63)</td>
<td>M5</td>
<td>22</td>
</tr>
<tr>
<td>SYJA3240-M5</td>
<td>2 position double</td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>SYJA3340-M5</td>
<td>3 position exhaust centre</td>
<td>M5</td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>SYJA3440-M5</td>
<td>3 position exhaust centre</td>
<td>M5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYJA3540-M5</td>
<td>3 position pressure centre</td>
<td>M5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Body mounted

- 2 position single
- 2 position double
- 3 position closed centre
- 3 position exhaust centre
- 3 position pressure centre

Base mounted

- 2 position single
- 2 position double
- 3 position exhaust centre
- 3 position pressure centre

Fluid Specifications

- Operating pressure range (MPa)
  - 2 position single: 0.15 to 0.7
  - 2 position double: 0.1 to 0.7
  - 3 position: 0.2 to 0.7
- Pilot pressure range (MPa)
  - 2 position single: Operating pressure to 0.7
  - 2 position single: 0.1 to 0.7
  - 3 position: 0.2 to 0.7
- Ambient and fluid temperature (°C): Max. 60
- Lubrication: Not required
- Mounting position: Free
- Impact/Vibration resistance (m/s²)
  - 300/50

Caution

Be sure to read before handing. Refer to p.0-33 to 0-36 for Safety Instructions and common precautions.

With Bracket

Air operated valve part No.: SYJA320-M3-F

The mounting bracket for the 2 position double solenoid and 3 position is supplied unattached.

Specifications

- Air
  - Pilot pressure range: Operating pressure to 0.7
- Fluid
  - Operating pressure to 0.7
- Vibration resistance: No malfunction occurred in one sweep test between 8.3 and 2000Hz. Test was performed to axis and right angle directions of the main valve and armature when pilot signal is ON and OFF. (Value in the initial stage)

Note 1) Impact resistance: No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve and armature, when pilot signal is ON and OFF. (Value in the initial stage)

How to Order Manifold Base

Uses the same manifold bases as the SYJ3000 series.

SS5YJA3—The remainder part number is called out the same as an SS5YJ3.

* Specify the part numbers for the valve(s), blank plate assembly and manifold base.

Example:

- SSSYJA3-41-03-M5——1 pc.
- SYJA3140—1 pc.
- SYJA3240—1 pc.
- SYJ3000-21-2A—1 pc.
### Body Ported

**2 position single:** SYJA3120-M3(-F)

![Diagram](image1)

**2 position double:** SYJA3220-M3(-F)

![Diagram](image2)

**3 position closed centre/exhaust centre/pressure centre:** SYJA320-M3(-F)

![Diagram](image3)

### Base Mounted

**2 position single:** SYJA3140-M5

![Diagram](image4)

**2 position double:** SYJA3240-M5

![Diagram](image5)

**3 position closed centre/exhaust centre/pressure centre:** SYJA340-M5

![Diagram](image6)
4/5 Port Air Operated Valve
Series SYJA5000

Model

<table>
<thead>
<tr>
<th>Valve model</th>
<th>Configuration</th>
<th>Port size</th>
<th>Effective area (1)</th>
<th>Pilot port size</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYJA5120-M5</td>
<td>2 position single</td>
<td>M5</td>
<td>3.6 (196)</td>
<td>M5</td>
<td>45</td>
</tr>
<tr>
<td>SYJA5220-M5</td>
<td>2 position double</td>
<td>M5</td>
<td>3.6 (196)</td>
<td>M5</td>
<td>60</td>
</tr>
<tr>
<td>SYJA5320-M5</td>
<td>3 position closed</td>
<td>M5</td>
<td>3.2 (176)</td>
<td>M5</td>
<td>70</td>
</tr>
<tr>
<td>SYJA5420-M5</td>
<td>3 position exhaust</td>
<td>M5</td>
<td>3.6 (196) [2.7 (147)]</td>
<td>M5</td>
<td>104 (70)</td>
</tr>
<tr>
<td>SYJA5520-M5</td>
<td>3 position pressure</td>
<td>M5</td>
<td>4.5 (245) [2.7 (147)]</td>
<td>M5</td>
<td>104 (70)</td>
</tr>
</tbody>
</table>

With Bracket

<table>
<thead>
<tr>
<th>Air operated valve part No.</th>
<th>SYJA5140-01F</th>
<th>SYJA5240-01F</th>
<th>SYJA5340-01F</th>
<th>SYJA5440-01F</th>
<th>SYJA5540-01F</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mounting bracket is supplied unattached.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Operating pressure range (MPa)</th>
<th>Pilot pressure range (MPa)</th>
<th>Ambient and fluid temperature (°C)</th>
<th>Lubrication</th>
<th>Mounting position</th>
<th>Impact/Vibration resistance (m/s²) (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 position single</td>
<td>0.15 to 0.7</td>
<td>Max. 60</td>
<td>Not required</td>
<td>Free</td>
<td>300/50</td>
</tr>
<tr>
<td></td>
<td>2 position double</td>
<td>0.1 to 0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 position</td>
<td>0.15 to 0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.4 X P+0.1) to 0.7 P: Operating pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 position double</td>
<td>0.1 to 0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 position</td>
<td>0.15 to 0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pilot Pressure Range (Single pilot)

How to Order Manifold Base

Uses the same manifold bases as the SYJ5000 series.

SSSYJA5— The remainder of the manifold part number is called out the same as an SSSYJ5

<Example>

SSSYJA5-42-031-01F—1 pc.
SYJA5140—1 pc.
SYJA5240—1 pc.
SYJ5000-21-1A—1 pc.

Caution

Be sure to read before handling. Refer to p.0-33 to 0-36 for Safety Instructions and common precautions.
3.1-20

Series SYJA7000

4/5 Port Air Operated Valve

<table>
<thead>
<tr>
<th>Model</th>
<th>Configuration</th>
<th>Port size</th>
<th>Effective area ( \text{mm}^2 ) ( \text{Nl/min} )</th>
<th>Pilot port size</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYJA7120-01F</td>
<td>2 position single</td>
<td>1/8</td>
<td>11 (588)</td>
<td>M5</td>
<td>90</td>
</tr>
<tr>
<td>SYJA7220-01F</td>
<td>2 position double</td>
<td>1/8</td>
<td>11 (588)</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>SYJA7320-01F</td>
<td>3 position closed centre</td>
<td></td>
<td>8.5 (461)</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>SYJA7420-01F</td>
<td>3 position exhaust centre</td>
<td></td>
<td>9 (490) [6.5 (355)]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYJA7520-01F</td>
<td>3 position pressure centre</td>
<td></td>
<td>( P \rightarrow A, B; 13.5 \text{ (736)} ) [ A, B \rightarrow R1, R2, 7 (382) ]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYJA71240-01F</td>
<td>2 position single</td>
<td>1/8, 1/4</td>
<td>12.6 (687)</td>
<td>M5</td>
<td>170 (90)</td>
</tr>
<tr>
<td>SYJA7240-01F</td>
<td>2 position double</td>
<td>1/8, 1/4</td>
<td>12.6 (687)</td>
<td></td>
<td>190 (110)</td>
</tr>
<tr>
<td>SYJA7340-01F</td>
<td>3 position closed centre</td>
<td></td>
<td>8.5 (461)</td>
<td></td>
<td>200 (120)</td>
</tr>
<tr>
<td>SYJA7440-01F</td>
<td>3 position exhaust centre</td>
<td></td>
<td>9 (0.5) [6.5 (355)]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYJA7540-01F</td>
<td>3 position pressure centre</td>
<td></td>
<td>( P \rightarrow A, B; 13.5 \text{ (736)} ) [ A, B \rightarrow R1, R2, 7 (382) ]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With Bracket

Air operated valve part No. SYJA7120-01-F
The mounting bracket is supplied unattached.

Specifications

**Fluid**
- Operating pressure range (MPa)
  - 2 position single: 0.15 to 0.7
  - 2 position double: 0.1 to 0.7
  - 3 position: 0.15 to 0.7

**Air**
- Pilot pressure range (MPa)
  - 2 position single: (0.4 X P+0.1) to 0.7 P: Operating pressure
  - 2 position single: 0.1 to 0.7
  - 3 position: 0.15 to 0.7

- Ambient and fluid temperature (°C): Max. 60
- Lubrication: Not required
- Mounting position: Free
- Impact/Vibration resistance (m/s²) \(^{(1)}\): 300/50

**Pilot Pressure Range (Single pilot)**

Be Sure to read before handing. Refer to p.0-33 to 0-36 for Safety Instructions and common precautions.

Note1) Impact resistance: No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve and armature, when pilot signal is ON and OFF. (Value in the initial stage)

Vibration resistance: No malfunction occurred in one sweep test between 8.3 and 2000Hz. Test was performed to axis and right angle directions of the main valve and armature when pilot signal is ON and OFF. (Value in the initial stage)

Note2) \[ \text{[ ] for normal position: Exhaust centre: } A, B \rightarrow R1, R2 \text{, Pressure centre: } P \rightarrow A, B \text{[ ] Without sub-plate } \]

Note3) \( \text{Model No. for 5 port base mounted style without sub-plate is SYJA7□40.} \)

Note4) \( \text{Model No. for 5 port base mounted style without sub-plate is SYJA7□40.} \)

How to Order Manifold Base

Uses the same manifold bases as the SYJ7000 series.

SSSYJ7-□□□□-□□-□□-□□ 1 pc.
SYJA7□□□□-□□-□□-□□-□□-□□ 1 pc.
SYJ7□□□□-□□□□-□□-□□-□□-□□-□□ 1 pc.

Caution:
Be Sure to read before handing. Refer to p.0-33 to 0-36 for Safety Instructions and common precautions.

3.1-20
Series SYJA7000

Body Ported

2 position single: SYJA7120-01F(-F)

Base Mounted

2 position single: SYJA7140-01F(-F)

2 position double: SYJA7220-01F

2 position double: SYJA7240-01F

3 position closed centre/exhaust centre/pressure centre:
SYJA720-01F

3 position closed centre/exhaust centre/pressure centre:
SYJA740-01F-02F