3 Port Solenoid Valve

**Power Consumption**
0.1 W
With Power Saving Circuit

**Series** SYJ300/500/700

- **Improved pilot valve**
  Pilot valve cover is stronger using stainless steel.
  Mounting thread is also reinforced from size M1.7 to M2.

**Flow Characteristics**

<table>
<thead>
<tr>
<th>Series</th>
<th>Flow characteristics</th>
<th>b</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYJ300</td>
<td>0.36</td>
<td>0.31</td>
<td>0.089</td>
</tr>
<tr>
<td>SYJ500</td>
<td>1.2</td>
<td>0.41</td>
<td>0.32</td>
</tr>
<tr>
<td>SYJ700</td>
<td>2.7</td>
<td>0.38</td>
<td>0.72</td>
</tr>
</tbody>
</table>
# Rubber Seal
## 3 Port Solenoid Valve
### Series **SYJ300/500/700**

#### Variations

<table>
<thead>
<tr>
<th>Series</th>
<th>Port size</th>
<th>Sonic conductance ( C ) ([\text{dm}^3/\text{s}\cdot\text{bar}])</th>
<th>Type of actuation</th>
<th>Voltage</th>
<th>Electrical entry</th>
<th>Option</th>
<th>Manual override</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SYJ300</strong></td>
<td>M3 x 0.5</td>
<td>( 0.9 \text{ mm}^2 ) ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SYJ500</strong></td>
<td>M5 x 0.8</td>
<td>0.66 ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SYJ700</strong></td>
<td>1/8</td>
<td>2.5 ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td>For DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SYJ300</strong></td>
<td>M5 x 0.8</td>
<td>0.36 ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td>For AC</td>
<td></td>
<td>With light/surge voltage suppressor</td>
<td></td>
</tr>
<tr>
<td><strong>SYJ500</strong></td>
<td>1/8</td>
<td>1.2 ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td>For AC</td>
<td>With surge voltage suppressor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SYJ700</strong></td>
<td>1/8, 1/4</td>
<td>2.7 ( \frac{2\pi}{3} \ \square \ \frac{1}{2} \ ) ( \frac{1}{R \ R} \ )</td>
<td></td>
<td>For AC</td>
<td>With light/surge voltage suppressor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All AC voltage models have built-in surge voltage suppressor.

### Features

- **Grommet**
- **L plug connector**
- **M plug connector**
- **DIN terminal**
- **M8 connector**

- **Non-locking push type**
- **Push-turn locking slotted type**
- **Push-turn locking lever type**

---

Note) All AC voltage models have built-in surge voltage suppressor.
## Manifold Variations

<table>
<thead>
<tr>
<th>Valve series</th>
<th>A port location</th>
<th>P, R ports size</th>
<th>M3</th>
<th>M5</th>
<th>1/8</th>
<th>A port size</th>
<th>With one-touch fitting</th>
<th>Applicable tubing O.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ø4</td>
</tr>
<tr>
<td><strong>SYJ300</strong></td>
<td>Top</td>
<td>M5 x 0.8</td>
<td>N3</td>
<td>N7</td>
<td>N9</td>
<td>Ø4</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Top</td>
<td>1/8</td>
<td>N3</td>
<td>N7</td>
<td>N9</td>
<td>Ø6</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td><strong>SYJ500</strong></td>
<td>Top</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Top</td>
<td>1/4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td><strong>SYJ700</strong></td>
<td>Top</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Side</td>
<td>M5 x 0.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Side</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td><strong>SYJ300</strong></td>
<td>Bottom</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Bottom</td>
<td>1/4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td><strong>SYJ500</strong></td>
<td>Bottom</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Side</td>
<td>M5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Side</td>
<td>1/8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
</tbody>
</table>

**Note 1)** Only for internal pilot  
**Note 2)** Only for external pilot

---

**Series SYJ300**  
**Series SYJ500**  
**Series SYJ700**  

---

**Features 2**
Rubber Seal
3 Port Pilot Solenoid Valve
Series SYJ300

Specifications

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating pressure range MPa</td>
<td>Internal pilot</td>
</tr>
<tr>
<td>Air</td>
<td>0.15 to 0.7</td>
</tr>
</tbody>
</table>

| Ambient and fluid temperature (°C) | –10 to 50 (No freezing. Refer to page 60.) |
| Response time ms (at 0.5 MPa) [Note 1] | 15 or less |
| Max. operating frequency (Hz) | 10 |
| Manual override (Manual operation) | Non-locking push type, push-turn locking slotted type, push-turn locking lever type |
| Pilot exhaust method | Individual exhaust for the pilot valve, common exhaust for the pilot and main valve |
| Lubrication | Not required |
| Mounting orientation | Unrestricted |
| Shock/Vibration resistance (m/s²) [Note 2] | 150/30 |
| Enclosure | Dust proof (* M8 connector conforms to IP65.) |

* Based on IEC529
Note 1) Based on dynamic performance test, JIS B 8374-1981. (Coil temperature: 20°C, at rated voltage, without surge voltage suppressor.)
Note 2) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Value in the initial state)
Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. 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 state)

Solenoid Specifications

<table>
<thead>
<tr>
<th>Electrical entry</th>
<th>Grommet (G), (H), L plug connector (L), M plug connector (M), M8 connector (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil rated voltage (V)</td>
<td>DC</td>
</tr>
<tr>
<td></td>
<td>24, 12, 6, 5, 3 (AC 50/60 Hz) 100, 110, 200, 220</td>
</tr>
<tr>
<td>Allowable voltage fluctuation</td>
<td>±10% of rated voltage</td>
</tr>
<tr>
<td>Power consumption (W)</td>
<td>DC</td>
</tr>
<tr>
<td></td>
<td>Standard 0.35 (With light: 0.4) With power saving circuit 0.1 (With light only)</td>
</tr>
<tr>
<td>Apparent power (VA)</td>
<td>AC</td>
</tr>
<tr>
<td></td>
<td>100 V 1.4 (With light: 1.5)</td>
</tr>
<tr>
<td></td>
<td>110 V [115 V] 1.6 (With light: 1.7) [1.7 (With light: 1.8)]</td>
</tr>
<tr>
<td></td>
<td>200 V 2.3 (With light: 2.4)</td>
</tr>
<tr>
<td></td>
<td>220 V [230 V] 2.5 (With light: 2.6) [2.7 (With light: 2.8)]</td>
</tr>
<tr>
<td>Surge voltage suppressor</td>
<td>Diode (varistor when non-polar types)</td>
</tr>
<tr>
<td>Indicator light</td>
<td>LED</td>
</tr>
</tbody>
</table>

* In common between 110 VAC and 115 VAC, and between 220 VAC and 230 VAC.
* For 115 VAC and 230 VAC, the allowable voltage is –15% to +5% of rated voltage.

JIS Symbol

Internal pilot
SYJ31 R²
SYJ32 R²

External pilot
SYJ311 R
SYJ32 R²

Made to Order
(For details, refer to pages 57 through 58.)
External Pilot

**SYJ300R**

Pilot valve pressure is supplied separately from the main valve pressure through the use of a separate supply port. It can be used in the vacuum (up to –100 kPa) or low pressure line with 0.15 MPa or less.

**Specifications**

<table>
<thead>
<tr>
<th>Operating pressure range</th>
<th>Base mounted (SYJ314R, SYJ324R)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MPa</strong></td>
<td><strong>Main pressure</strong></td>
</tr>
<tr>
<td></td>
<td>–100 kPa to 0.7</td>
</tr>
<tr>
<td></td>
<td><strong>External pilot pressure</strong></td>
</tr>
<tr>
<td></td>
<td>0.15 to 0.7</td>
</tr>
</tbody>
</table>

Note 1) For manifold base, refer to page 7.
Note 2) External pilot type body ported valves (SYJ3□2R) can only be used on the manifold.
Series SYJ300

How to Order

3 port

Type of actuation
1 Normally closed
2 Normally open

Rated voltage
DC
5 24 VDC
6 12 VDC
V 6 VDC
5 5 VDC
R 3 VDC
AC (50/60 Hz)
1 100 VAC
2 200 VAC
3 110 VAC [115 VAC]
4 220 VAC [230 VAC]

Light/surge voltage suppressor
Nil: Without light/surge voltage suppressor
S: With surge voltage suppressor
Z: With light/surge voltage suppressor
R: With surge voltage suppressor (Non-polar type)
U: With light/surge voltage suppressor (Non-polar type)

For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
* For type R, U, DC voltage is only available.
* Power saving circuit is only available in the "Z" type.

Bracket
Nil: Without bracket
F: With bracket

Bracket is mounted. External pilot type is not available.

Body option
Nil: Individual pilot exhaust style
R: Common exhaust for the pilot and main valve
M: External pilot style

Body ported
SYJ3 1 2 5 M M3

Base mounted
SYJ3 1 4 5 M

Coil specifications
Nil: Standard
T: With power saving circuit (24, 12 VDC only)

Power saving circuit is not available in the case of W□ type.

Port size
Nil: Without sub-plate
MS: M5 port

M5: With sub-plate

Electrical entry
G: Lead wire length 300 mm
L: With lead wire (Length 300 mm)
M: With lead wire (Length 300 mm)
MN: Without lead wire
MN: Without lead wire
WO: Without connector cable

Manual override
Nil: Non-locking push type
D: Push-turn locking slotted type
E: Push-turn locking lever type

Note) When placing an order for body ported solenoid valve as a single unit, mounting bolt for manifold and gasket are not attached. Order them separately, if necessary. (For details, refer to page 8.)
### Construction

![Diagram of N.C. and N.O. connections](image)

### Component parts

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Material</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>Zinc die-casted</td>
<td>White</td>
</tr>
<tr>
<td>2</td>
<td>Piston plate</td>
<td>Resin</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>End cover</td>
<td>Resin</td>
<td>White</td>
</tr>
<tr>
<td>4</td>
<td>Piston</td>
<td>Resin</td>
<td>–</td>
</tr>
<tr>
<td>5</td>
<td>Spool valve assembly</td>
<td>Aluminum, H-NBR</td>
<td>–</td>
</tr>
</tbody>
</table>

### Replacement parts

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>No.</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Sub-plate</td>
<td>SYJ300-9-1</td>
<td>Zinc die-casted</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pilot valve</td>
<td>V111(T)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### How to Order Pilot Valve Assembly

**V111**

- **Coil specifications**
  - **N**: Standard DC specifications
  - **A**: Standard AC specifications
  - **T**: With power saving circuit (24, 12 VDC only)

- **Rated voltage**
  - S: 24 VDC
  - 6: 12 VDC
  - V: 6 VDC
  - S: 5 VDC
  - R: 3 VDC
  - 1: 100 VAC 50/60 Hz
  - 2: 200 VAC 50/60 Hz
  - 3: 110 VAC 50/60 Hz [115 VAC 50/60 Hz]
  - 4: 220 VAC 50/60 Hz [230 VAC 50/60 Hz]

- **Light/surge voltage suppressor**
  - **N**: Without light/surge voltage suppressor
  - **S**: With surge voltage suppressor
  - **Z**: With surge voltage suppressor (Non-polar type)
  - **U**: With light/surge voltage suppressor (Non-polar type)

- **Electrical entry**
  - L: L plug connector
  - N: N plug connector
  - M: M plug connector

- **Grommet**
  - G: Grommet, 300 mm lead wire
  - H: Grommet, 600 mm lead wire
  - L: L plug connector
  - LN: L plug connector
  - LO: L plug connector
  - M: M plug connector
  - MN: M plug connector

- **For connector cable of M8 connector**, refer to page 67.

### How to Order Connector Assembly for L and M Plug Connector

- **For DC**: SY100-30-4A-
- **For 100 VAC**: SY100-30-1A-
- **For 200 VAC**: SY100-30-2A-
- **For other voltages of AC**: SY100-30-A

**For other voltages of AC**: SY100-30-A

- **Lead wire length**
  - 300 mm
  - 600 mm
  - 1000 mm
  - 1500 mm
  - 2000 mm
  - 2500 mm
  - 3000 mm
  - 5000 mm

### How to Order M8 Connector Cable

**V100-49-1-**

- **Cable length**
  - 300 mm
  - 500 mm
  - 1000 mm
  - 2000 mm
  - 5000 mm
Series SYJ300

Body Ported

Grommet (G), (H): SYJ3□□2-□□□□□□□□-□□□□-M3

With bracket:
SYJ3□□2-□□□□□□□□-□□□□-M3-F

L plug connector (L):
SYJ3□□2-□□□□□□□□-□□□□-M3

M plug connector (M):
SYJ3□□2-□□□□□□□□-□□□□-M3

M8 connector (W0):
SYJ3□□2-□□□□□□□□-□□□□-M3

Refer to the page 68 for dimensions with connector cable.
Base Mounted (With Sub-plate)

Grommet (G), (H): SYJ3□4-□ □□□□-M5

M5 x 0.8
(A port)

2-ø3.2
(For mounting)

Manual override

G: Approx. 300
H: Approx. 600
(Lead wire length)

(Light/surge voltage suppressor)

M5 x 0.8
(P, R port)

M5 x 0.8
(X port)

L plug connector (L):
SYJ3□4-□□□□-M5

M plug connector (M):
SYJ3□4-□□□□-M5

M8 connector (W0):
SYJ3□4-□□□□-M5

* Refer to the page 68 for dimensions with connector cable.
Manifold Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>For internal pilot</th>
<th>Type 20</th>
<th>Type 41, S41</th>
<th>Type 42, S42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifold type</td>
<td></td>
<td>Single base/B mount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (SUP), R (EXH)</td>
<td></td>
<td>Common SUP/Common EXH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valve stations</td>
<td></td>
<td>2 to 20 stations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Porting specifications

<table>
<thead>
<tr>
<th>Port size</th>
<th>Location</th>
<th>Valve</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>P, R port</td>
<td>M5 x 0.8</td>
<td>M5 x 0.8</td>
<td>1/8</td>
</tr>
<tr>
<td>A port</td>
<td>M3 x 0.5</td>
<td>M3 x 0.5</td>
<td>C4 (One-touch fitting ø4)</td>
</tr>
<tr>
<td>X port No(1)</td>
<td>M5 x 0.8</td>
<td>—</td>
<td>M5 x 0.8</td>
</tr>
</tbody>
</table>

Note) Only for external pilot

Flow Characteristics

<table>
<thead>
<tr>
<th>Manifold</th>
<th>Port size</th>
<th>Flow characteristics</th>
<th>Effective area (mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type SS3YJ3-20</td>
<td>M5 x 0.8</td>
<td>M3 x 0.5</td>
<td>b</td>
</tr>
<tr>
<td>Type SS3YJ3-41</td>
<td>M5 x 0.8</td>
<td>M3 x 0.5</td>
<td>—</td>
</tr>
<tr>
<td>Type SS3YJ3-42-M5</td>
<td>1/8</td>
<td>M5 x 0.8</td>
<td>0.31</td>
</tr>
<tr>
<td>Type SS3YJ3-42-C4</td>
<td>1/8</td>
<td>M5 x 0.8</td>
<td>0.33</td>
</tr>
<tr>
<td>Type SS3YJ3-42R-M5</td>
<td>1/8</td>
<td>M5 x 0.8</td>
<td>0.32</td>
</tr>
<tr>
<td>Type SS3YJ3-42R-C4</td>
<td>1/8</td>
<td>M5 x 0.8</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Note) Value at manifold base mounted, 2 position single acting

How to Order Manifold (Example)

Instruct by specifying the valves and blanking plate assembly to be mounted on the manifold along with the manifold base model no.

(Example)

SS3YJ3-20-03 — 1 set (manifold base)  SS3YJ3-42R-03-C4 — 1 set (manifold base)
SYJ312-5LZ-M3 — 2 sets (valve) SYJ314R-5G — 2 sets (valve)
SYJ300-10-1A — 1 set (blanking plate assembly) SYJ300-10-2A — 1 set (blanking plate assembly)

The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.
Combinations of Solenoid Valve, Manifold Gasket and Manifold Base

<table>
<thead>
<tr>
<th>Body ported</th>
<th>Base mounted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type SYJ3-2(R)</td>
<td>Type SYJ3-4(R)</td>
</tr>
</tbody>
</table>

Applicable base
- SS3YJ3-20
- SS3YJ3-20R

Applicable base
- SS3YJ3-41
- SS3YJ3-42
- SS3YJ3-41
- SS3YJ3-42R
- SS3YJ3-S42R

Manifold gasket
- SYJ300-5-6
- SYJ300-5-4

Blanking Plate Assembly

Model no.: SYJ300-10-1A

- Round head combination screw
  - SY100-33-3
  - (M1.7 x 17, Matt nickel plated)

Model no.: SYJ300-10-2A

- Round head combination screw
  - SY100-33-2
  - (M1.7 x 7, Matt nickel plated)

Applicable base
- SS3YJ3-20
- SS3YJ3-20R
- SS3YJ3-41
- SS3YJ3-S41
- SS3YJ3-42
- SS3YJ3-S42
- SS3YJ3-42R
- SS3YJ3-S42R

Manifold base

Caution

Mounting screw tightening torques

- M1.7: 0.12 N·m

Use caution to the assembly orientation for solenoid valves, gasket, and optional parts.
Series SYJ300

Manifold for Internal Pilot Type

**Type 20**
- A port: M3 x 0.5
- R port: M5 x 0.8
- P port: M5 x 0.8

**How to Order**

<table>
<thead>
<tr>
<th>Stations</th>
<th>Brackets</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2 stations</td>
</tr>
<tr>
<td>20</td>
<td>20 stations</td>
</tr>
</tbody>
</table>

**Type 41**
- A port: M3 x 0.5
- R port: M5 x 0.8
- P port: M5 x 0.8

**How to Order**

<table>
<thead>
<tr>
<th>Stations</th>
<th>Brackets</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2 stations</td>
</tr>
<tr>
<td>20</td>
<td>20 stations</td>
</tr>
</tbody>
</table>

**Type 42**
- A port: M3 x 0.5, 0.8
- R port: 1/8
- P port: 1/8

**How to Order**

<table>
<thead>
<tr>
<th>Stations</th>
<th>Brackets</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2 stations</td>
</tr>
<tr>
<td>20</td>
<td>20 stations</td>
</tr>
</tbody>
</table>

**Manifold for External Pilot Type**

Pilot valve pressure is supplied separately from the main valve pressure through the use of a separate supply port. It can be used in the vacuum (up to –100 kPa) or low pressure line with 0.15 MPa or less.

**Type 20R**
- A port: M3 x 0.5
- X port: M5 x 0.8

**How to Order**

<table>
<thead>
<tr>
<th>Stations</th>
<th>P, R, P thread type</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Ni</td>
</tr>
<tr>
<td>20</td>
<td>Ni</td>
</tr>
</tbody>
</table>

**Type 42R**
- A port: M3 x 0.5, 0.8
- X port: M5 x 0.8

**How to Order**

<table>
<thead>
<tr>
<th>Stations</th>
<th>P, R, P thread type</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Ni</td>
</tr>
<tr>
<td>20</td>
<td>Ni</td>
</tr>
</tbody>
</table>

**Applicable solenoid valve**

- SYJ312-XXXX-M3
- SYJ312M-XXXX-M3
- SYJ322-XXXX-M3
- SYJ322M-XXXX-M3

**Applicable blanking plate assembly**

- SYJ300-10-1A
- SYJ300-10-2A

**Applicable solenoid valve**

- SYJ314-XXXX-M3
- SYJ314M-XXXX-M3
- SYJ324-XXXX-M3
- SYJ324M-XXXX-M3

**Applicable blanking plate assembly**

- SYJ300-10-2A

Note: For more than 10 stations, supply air to both sides of P port and exhaust air from both sides of R port.
## Type 20 Manifold: Top Ported/SS3YJ3-20-[Stations]-00\[\text{-F}\]

### Grommet (G)

![Diagram of Grommet (G)]

- **M3 x 0.5** (Bracket mounting screw)
- **2-ø3.5** (For mounting)
- **M3 x 0.5** (A port)
- **M5 x 0.8** (P, R port)
- **26.4** (Pitch)
- **21.9** (Station n) - **21.8** (Station 1)
- **48.6 [50.8]** (Light/surge voltage suppressor)
- **Approx. 300** (Lead wire length)
- **1.9**

### L plug connector (L)

- **68.5 [60.7]**
- **26.1**
- **41.5 [48.5]** (Lead wire length)

### M plug connector (M)

- **48.7 [50.9]**
- **52.6 [59.6]** (Lead wire length)

### M8 connector (W0)

- **M8 x 1**
- **28.5**

### Dimensions

<table>
<thead>
<tr>
<th>Station</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>35.5</td>
<td>46</td>
<td>56.5</td>
<td>67</td>
<td>77.5</td>
<td>88</td>
<td>98.5</td>
<td>109</td>
<td>119.5</td>
<td>130</td>
<td>140.5</td>
<td>151</td>
<td>161.5</td>
<td>172</td>
<td>182.5</td>
<td>193</td>
<td>203.5</td>
<td>214</td>
<td>224.5</td>
</tr>
<tr>
<td>L2</td>
<td>28.5</td>
<td>39</td>
<td>49.5</td>
<td>60</td>
<td>70.5</td>
<td>81</td>
<td>91.5</td>
<td>102</td>
<td>112.5</td>
<td>123</td>
<td>133.5</td>
<td>144</td>
<td>154.5</td>
<td>165</td>
<td>175.5</td>
<td>186</td>
<td>196.5</td>
<td>207</td>
<td>217.5</td>
</tr>
</tbody>
</table>

* Refer to the page 68 for dimensions with connector cable.
Type 41 Manifold: Side Ported/SS3YJ3-41-Stations-M3

Grommet (G)

(Light/surge voltage suppressor)

M5 x 0.8 (P, R port)

2-ø3.5 (For mounting)

Manual override

M3 x 0.5 (A port)

PR

PR

L plug connector (L)  M plug connector (M)  M8 connector (W0)

Approx. 300 (Lead wire length)

Approx. 300 (Lead wire length)

Approx. 300 (Lead wire length)

*L Refer to the page 68 for dimensions with connector cable.
### Type 42 Manifold: Side Ported/SS3YJ3-42—Stations—M5, N3

#### Grommet (G)

**For M5**

- (Light/surge voltage suppressor)
- Manual override
- 2-x4.5 (For mounting)

**For C4 N3 (Built-in one-touch fitting)**

- 1/8 (P, R port)
- (Station 1) --- (Station n)

#### L plug connector (L)

Approx. 300

**M plug connector (M)**

Approx. 300

**M8 connector (W0)**

Applicable tubing O.D.:
- ø4, ø5/32"

### Type 42 Manifold: Side Ported (Pilot valve is on the A port side) / SS3YJ3-S42—Stations—M5, N3

#### Grommet (G)

**For M5**

- (Light/surge voltage suppressor)

**For C4 N3 (Built-in one-touch fitting)**

#### Table:

<table>
<thead>
<tr>
<th>Station n</th>
<th>Station 2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>Station 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>41.5</td>
<td>52</td>
<td>62.5</td>
<td>73</td>
<td>83.5</td>
<td>94</td>
<td>104.5</td>
<td>115</td>
<td>125.5</td>
<td>136</td>
<td>146.5</td>
<td>157</td>
<td>167.5</td>
<td>178</td>
<td>188.5</td>
<td>199</td>
<td>209.5</td>
<td>220</td>
<td>230.5</td>
</tr>
<tr>
<td>L2</td>
<td>33.5</td>
<td>44</td>
<td>54.5</td>
<td>65</td>
<td>75.5</td>
<td>86</td>
<td>96.5</td>
<td>107</td>
<td>117.5</td>
<td>128</td>
<td>138.5</td>
<td>149</td>
<td>159.5</td>
<td>170</td>
<td>180.5</td>
<td>191</td>
<td>201.5</td>
<td>212</td>
<td>222.5</td>
</tr>
</tbody>
</table>
Series SYJ300

Type 20R Manifold: Top Ported (External Pilot Type)/SS3YJ3-20R-[Stations]-00

Grommet (G)

L plug connector (L)  M plug connector (M)  M8 connector (W0)

<table>
<thead>
<tr>
<th>Station n</th>
<th>Station 2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>Station 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>47.5</td>
<td>58</td>
<td>68.5</td>
<td>79</td>
<td>89.5</td>
<td>100</td>
<td>110.5</td>
<td>121</td>
<td>131.5</td>
<td>142</td>
<td>152.5</td>
<td>163</td>
<td>173.5</td>
<td>184</td>
<td>194.5</td>
<td>205</td>
<td>215.5</td>
<td>226</td>
<td>236.5</td>
</tr>
<tr>
<td>L2</td>
<td>39.5</td>
<td>50</td>
<td>60.5</td>
<td>71</td>
<td>81.5</td>
<td>92</td>
<td>102.5</td>
<td>113</td>
<td>123.5</td>
<td>134</td>
<td>144.5</td>
<td>155</td>
<td>165.5</td>
<td>176</td>
<td>186.5</td>
<td>197</td>
<td>207.5</td>
<td>218</td>
<td>228.5</td>
</tr>
<tr>
<td>L3</td>
<td>31.5</td>
<td>42</td>
<td>52.5</td>
<td>63</td>
<td>73.5</td>
<td>84</td>
<td>94.5</td>
<td>105</td>
<td>115.5</td>
<td>126</td>
<td>136.5</td>
<td>147</td>
<td>157.5</td>
<td>168</td>
<td>178.5</td>
<td>189</td>
<td>199.5</td>
<td>210</td>
<td>220.5</td>
</tr>
</tbody>
</table>

- Refer to the page 68 for dimensions with connector cable.
Type 42R Manifold: Side Ported (External Pilot Type) / SS3YJ3-42R- Stations - M5, C4

Grommet (G) For M5

For C4 N3 (Built-in one-touch fitting)

L plug connector (L) M plug connector (M) M8 connector (W0)

Type S42R Manifold: Side Ported (Pilot valve is on the A port side) / SS3YJ3-S42R- Stations - M5, C4