

# We have achieved “Miniaturization” and “Low Power 3-port valves for high value-added new generation

## *New Valves for the New Century* Solenoid Valves JA Series

### Thin and compact

- Valve width of only 10.5 mm [0.41in.] achieves a thin and compact size valve, enabling space saving in equipment design.
- Effective area : 3.5mm<sup>2</sup> [Cv: 0.19]  
Suitable for operating up to  $\phi$  40 [1 1/2in.] bore size cylinders.

### Low power consumption

- Standard: 0.5W (21mA at DC24V, 42mA at DC12V)
- Low current type: 0.25W (10.5mA current at DC24V) <sup>Note</sup>  
Note: When using power saving circuit  
(Starting current is 21mA.)

### Negative common is available

- Positive or negative common is selectable on connector side using the same valve type.  
(Excluding serial transmission type)



Photo shows split type manifold plug-in type with flat cable and 20-pin connector with built-in muffler on exhaust port in the piping block.

### Wide Product Range

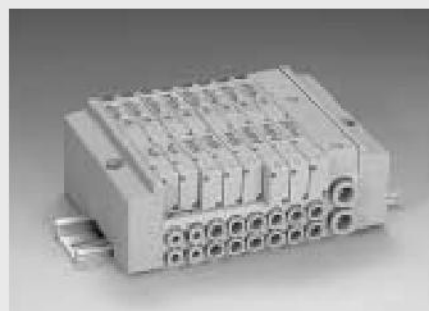
Select from a choice of five types for customers' applications.



Sub-base



Monoblock Manifold Type



Split Manifold Non-Plug-in Type



Split Manifold Plug-in Type



Serial Transmission Type

# Consumption” as well as the addition of Tandem valves.

## Tandem 3-port, 4-position valve

- Two 3-port valve functions in one valve body.
- The same 3-port valve operation with half the number of the current valves. Two 3-port valves can be operated independently in the same valve.
- 3 valve types are available.
  - JA10□AA : Normally closed & Normally closed type
  - JA10□AB : Normally open & Normally open type
  - JA10□AC : Normally closed & Normally open type
- The same valve operation is possible as 3-position valve.
  - JA10□AA works as exhaust center valve
  - JA10□AB works as pressure center valve

| Model   | 4(A) side            | 2(B) side            | Symbol |
|---------|----------------------|----------------------|--------|
| JA10□AA | Normally closed (NC) | Normally closed (NC) |        |
| JA10□AB | Normally open (NO)   | Normally open (NO)   |        |
| JA10□AC | Normally closed (NC) | Normally open (NO)   |        |

## Wire saving is possible

- Common terminal pre-wired type (available for monoblock manifold and split manifold non-plug-in type)
- Flat cable connector and D-sub connector (available for split manifold plug-in type)
- Conforming to serial transmission (Conforming to CC-Link, DeviceNet, and CompoBus/S)



Common terminal pre-wired plug connector



Flat cable connector on top surface



Flat cable connector on side surface



D-sub connector on top surface



D-sub connector on side surface

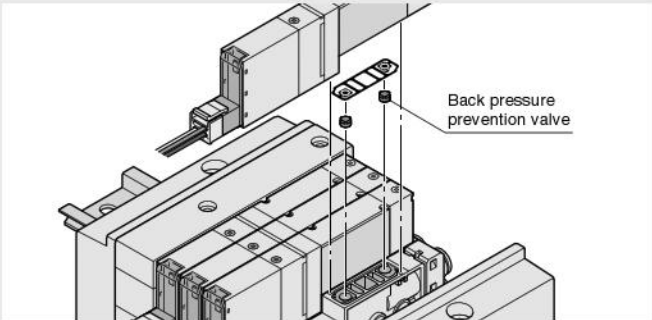


Serial transmission type

Note: Connector mounting direction can be changed. But in the -D370U, D-sub connector on top surface is only available.

## Back pressure prevention valve (optional)

This prevents erratic operation occurring from back pressure, in such as single acting cylinder applications.



## Supply and exhaust piping block

You can select either quick fitting type or built-in muffler type for exhaust port except for monoblock type manifold.



With  $\phi$  8mm quick fitting type  
With 1/4 inch quick fitting type  
With 3/8 inch quick fitting type



Built-in muffler type

## Individual air supply spacer (optional)

By installing dedicated air supply spacer between the manifold and the valve, individual air supply is possible.



Individual air supply spacer

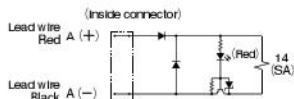


## Solenoid

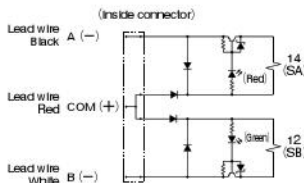
### Internal circuit

#### ●Positive common (DC24V, DC12V)

##### Single solenoid

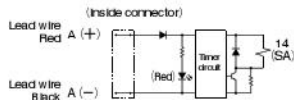


##### Double solenoid

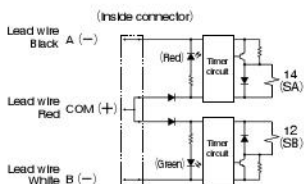


#### <Low current type> (DC24V)

##### Single solenoid

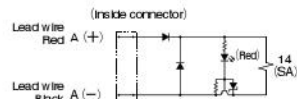


##### Double solenoid

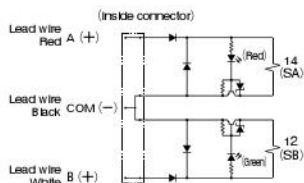


#### ●Negative common (DC24V, DC12V)

##### Single solenoid

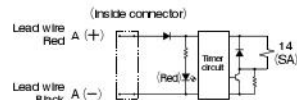


##### Double solenoid

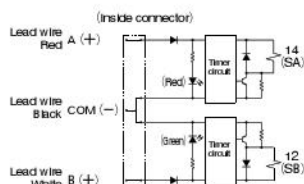


#### <Low current type> (DC24V)

##### Single solenoid



##### Double solenoid

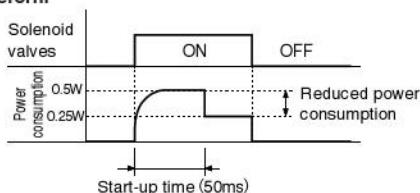


- Cautions:**
1. Do not apply megger between the pins.
  2. Leakage current inside the circuit could result in failure of the solenoid valve to return to the rest position or in other erratic operation. Always use it at less than the allowable leakage current shown in the solenoid specifications on p.213. If circuit conditions, etc. cause the leakage current to exceed the maximum allowable leakage current, consult us.
  3. For the double solenoid specification, avoid energizing both solenoids simultaneously. (Excluding the tandem 3-port valve)
  4. The standard housing type is colored blue, while the low current type is light blue.
  5. The low current type will not activate if the power supply voltage is raised slowly. Always apply the appropriate voltage.

### Operating principles of low current type

The low current type uses a timer circuit, as shown above, that achieves power savings by switching to holding operations mode after a certain period of time to operate at about 1/2 of the starting power consumption.

#### ●Power waveform

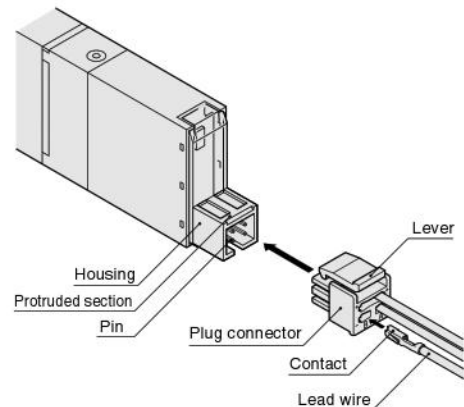


### Wiring instructions (When using as a single unit or non-plug-in type manifold)

#### 1. Attaching and removing plug connector

Use fingers to insert the connector into the pin, push it in until the lever claw latches onto the protruded section of the connector housing, and complete the connection.

To remove the connector, squeeze the lever along with the connector, lift the lever claw up from the protruded section of the connector housing, and pull it out.



**Caution:** When removing the connector, confirm that the lever claw is completely disengaged from the protruded section before pulling out. The housing may be damaged if it is pulled out while engaging with the protruded section.

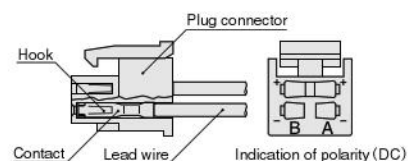
#### 2. Attaching and removing plug connector and contact

##### ●Attaching

Insert the contact with lead wire into a plug connector □ hole until the contact hook latches on and is secured to the plug connector. Confirm that the lead wire cannot be easily pulled out. (See below)

##### ●Removing

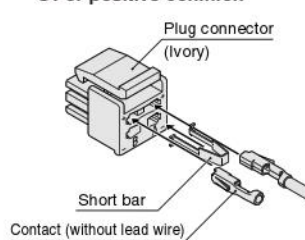
To remove it, insert a tool with a fine tip (such as a small screwdriver) into the rectangular hole on the side of the plug connector to push up on the hook, and then pull out the lead wire. When re-using the contacts, restore the hook back so that they spread outward.



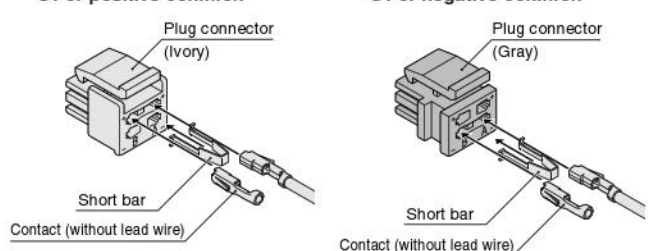
#### 3. Common terminal and short bar

A short bar is attached to the plug connector to ensure that the wiring of solenoid A and B become positive common or negative common. Do not remove the short bar.

##### ●For positive common



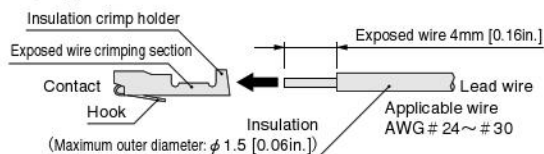
##### ●For negative common



**Caution:** The plug connectors for positive common and negative common differ in shape.

#### 4. Crimping of connecting lead wire and contact

To crimp lead wires into contacts, strip off 4mm [0.16in.] of the insulation from the end of the lead wire, insert it into the contact, and crimp it. Be sure to avoid catching the insulation on the exposed wire crimping section.



**Cautions:** 1. Do not pull the lead wire too hard.

2. Always use a dedicated tool for crimping of connecting lead wire and contact.

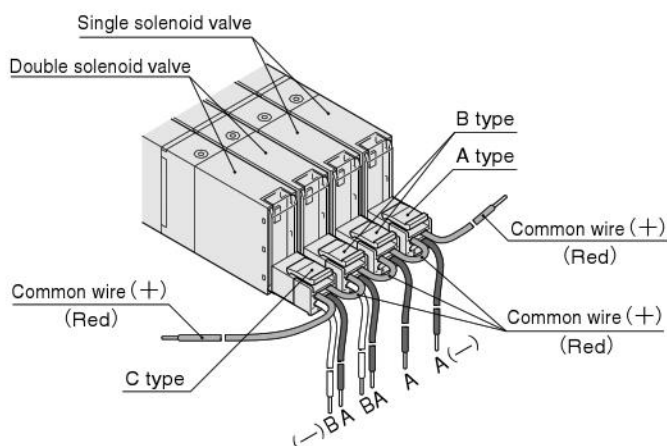
Contact: Model 706312-2MK Manufactured by Sumiko Tech, Inc.  
Crimping tool: Model F1 (For 706312-2MK) Manufactured by Sumiko Tech, Inc.

#### 5. Common connector assembly for manifold

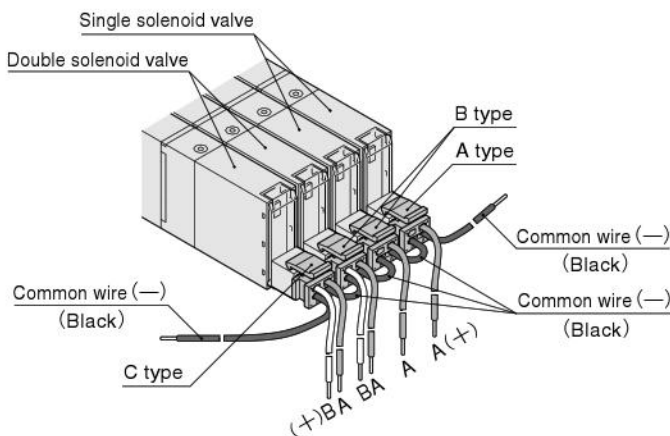
Using common connector assembly for the solenoid valve for manifold provides common wiring for all solenoid valves and greatly reduces wiring work.

The common connector types are determined by the location viewed from the lead wire side, the right end one is A type, the left end one is C type, and all others are B type. (See below)

##### ●For positive common



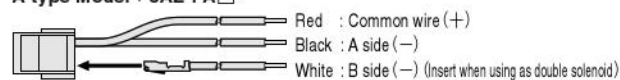
##### ●For negative common



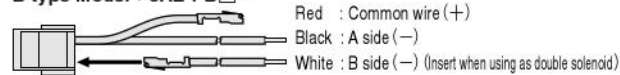
For common connector assembly, order the common connector assemblies listed below.

##### ●For positive common

**A type Model : JAZ-PA□※**



**B type Model : JAZ-PB□※**



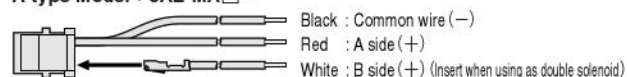
**C type Model : JAZ-PC□※**



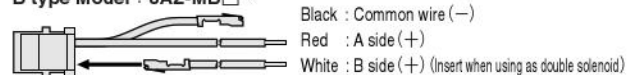
※Lead wire length **Blank** : 300mm[11.8in.]  
**3** : 3000mm[118in.]

##### ●For negative common

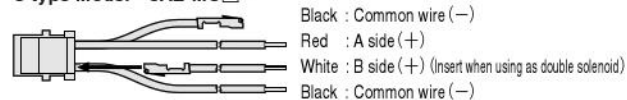
**A type Model : JAZ-MA□※**



**B type Model : JAZ-MB□※**



**C type Model : JAZ-MC□※**



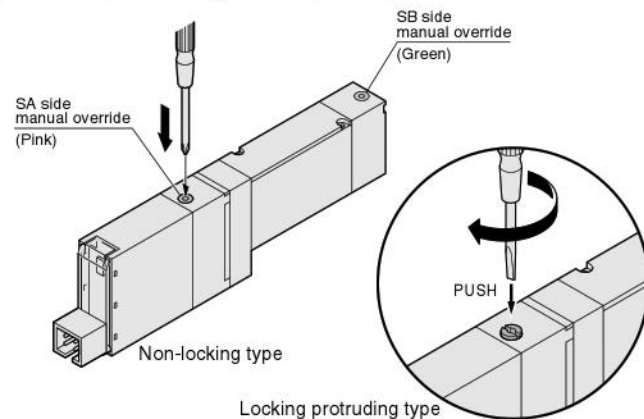
※Lead wire length **Blank** : 300mm[11.8in.]  
**3** : 3000mm[118in.]



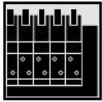
#### Manual override

**Manual override (Blank: Non-locking type, -83: Locking protruding type)**

To lock the locking protruding type, use a small screwdriver to push down on the manual override all the way and turn it clockwise 90 degrees. When locked, turning the manual override 90 degrees in the counterclockwise direction releases a spring on the manual override, returns it to the original position, and releases the lock. When the manual override is not turned, this type acts just like the non-locking type, like the valve energizing status as long as the manual override is pushed down, and returning to the rest position upon release.



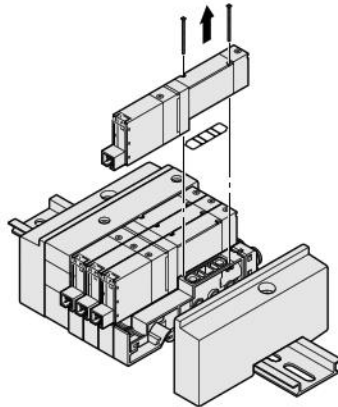
**Cautions:** 1. The JA series valves are pilot type solenoid valves. As a result, the manual override cannot switch the main valve without air supplied from the 1(P) port.  
2. Always release the lock on the locking protruding type manual overrides before commencing normal operation.  
3. Do not attempt to operate the manual override with a pin or other object having an extremely fine tip. It could damage the manual override button.



## Manifold

### Installing and removing valves

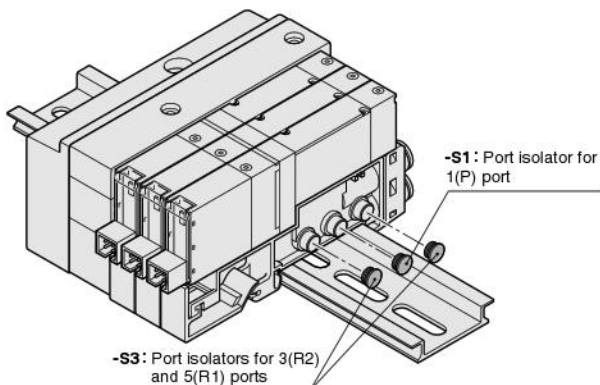
To remove the valve body from the sub-base or manifold, loosen the valve mounting screws (2 places), and pull the valve straight out in the direction of the arrow (see illustration to the right). For mounting, perform the same procedure in reverse. The recommended tightening torque for the valve mounting screw is 17.6N·cm {1.8kgf·cm} [1.56in·lbf].



### Port isolator

In the split manifold, inserting port isolators into the 1(P), 3(R2), and 5(R1) ports between each of the stations isolates the air path between stations equipped with port isolators and stations with smaller station numbers. Care should be taken, however, that a piping block must be placed on both ends.

- Port isolator for 1(P) port ————— Can supply two different pressures.  
(Model: **JAZ-S1**)
- Port isolator for 3(R2) and 5(R1) ports — Can isolate exhaust air.  
(Model: **JAZ-S3**) (prevents exhaust interference)
- Port isolator for 1(P), 3(R2) and 5(R1) ports — Can supply two different pressures,  
(Model: **JAZ-SA**) and can isolate exhaust air.  
(prevents exhaust interference)

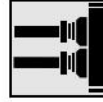
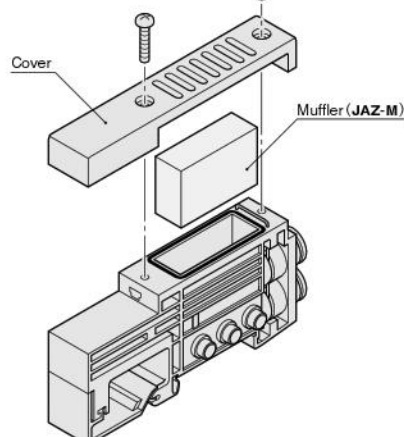


**Caution:** Mounting port isolators requires disassembly and re-assembly of manifolds. See the disassembly diagram, unit adding procedure, and cautions on p.181 ~183.

### Replacement of muffler

When using a piping block with built-in muffler, follow the below procedure to replace the muffler. (Muffler single unit model: **JAZ-M**)

- ① Remove the mounting screws (2 pcs.) holding the cover on top of the piping block.
  - ② Remove the muffler to be replaced.
  - ③ Insert the new muffler so that it reaches the bottom of the groove.
  - ④ Reinstall the cover, and tighten the mounting screws.
- Tightening torque: 49N·cm {5kgf·cm} [4.3in·lbf]



## Fittings

### Replacement of fittings

#### 1. Replacement of delivery port fittings for monoblock manifolds

Remove the fitting to be replaced, attach a gasket to the new fitting, and tighten.

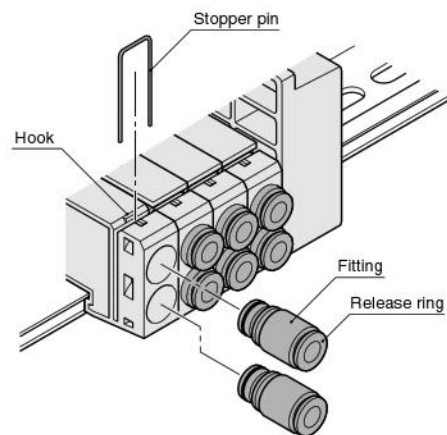
Tightening torque: 196N·cm [20kgf·cm] [17.3in·lbf] (Fitting single unit model: **JAZ-J4K, JAZ-J6K**)

#### 2. Replacement of delivery port fittings for split manifolds

- ① Loosen the mounting screws of the valve for the fitting to be replaced, and remove the valve.
- ② Use a flatblade screwdriver (blade width 2mm [0.08in.]) to remove the stopper pin holding the fitting to the valve base from the valve base hook, and pull it out.
- ③ Remove the fitting to be replaced, and push in and attach the new fitting as far as it will go.
- ④ Push in the stopper pin until it hooks onto the valve base.
- ⑤ Mount the valve back into place.

Note: Ensure that the fitting and the stopper pin mounting in place are firmly secured.

(Fitting single unit model: **JAZ-J4, JAZ-J6, JAZ-J1/8, JAZ-J1/4**)



## Tube

### 1. Attaching and removing tubes

For tube connection, insert an appropriate size tube until it comes into contact with the tube stopper, and lightly pull it to check the connection.

For tube removal, push the tube against the tube stopper, then push the release ring and at the same time pull the tube out.

### 2. Either a nylon tube or urethane tube can be used.

Use tubes with an outer diameter tolerance within  $\pm 0.1\text{mm}$  [ $\pm 0.004\text{in.}$ ] of the nominal diameter, and ensure the ovalness (difference between large diameter and small diameter) is 0.2mm [0.008in.] or less.

(Using a Koganei tube is recommended.)

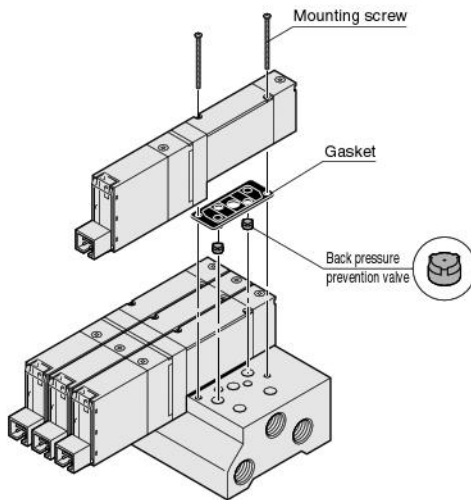
- Cautions:**
1. Do not use extra-soft tubes since their pull-out strength is significantly reduced.
  2. Only use tubes without scratches on the outer surfaces. If a scratch occurs during repeated use, cut off the scratched section.
  3. Do not bend the tube excessively near the fittings. The minimum bending radius for nylon tubes is as shown in the table below.
  4. When attaching or removing tubes, always stop the air supply. In addition, always confirm that air has been completely exhausted from the manifold.

| mm [in.]            |                        |
|---------------------|------------------------|
| Tube size           | Minimum bending radius |
| $\phi 4$ [0.157in.] | 20 [0.8]               |
| $\phi 6$ [0.236in.] | 30 [1.2]               |
| $\phi 8$ [0.315in.] | 50 [2.0]               |
| 1/8 in.             | 20 [0.8]               |
| 1/4 in.             | 30 [1.2]               |
| 3/8 in.             | 50 [2.0]               |

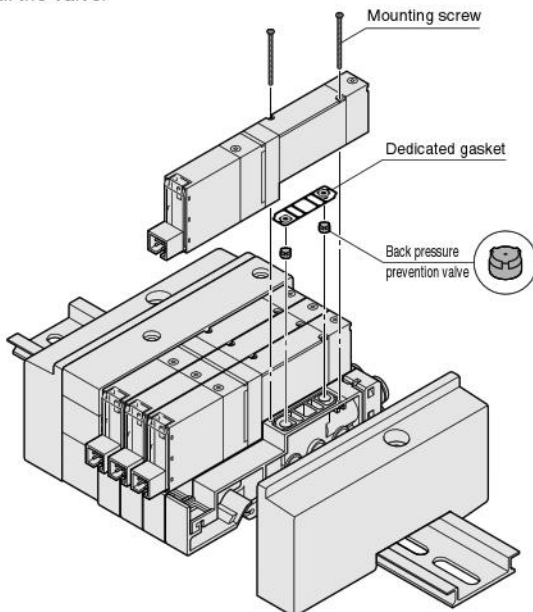
### Precautions for use of back pressure prevention valve

Mounting the back pressure prevention valve on the manifold enables users to prevent erratic cylinder operation due to exhaust from other valves. This is particularly effective when using single acting cylinders or exhaust center valves. Care should be taken, however, that the effective OUT-EXH area is reduced to 2.5mm<sup>2</sup> [Cv:0.14] when using the back pressure prevention valve. In addition, do not let the manifold's exhaust port throttle the exhaust air, since the back pressure prevention valve allows leaks in back pressure. When mounting additional back pressure prevention valves to existing units, observe the following items:

- ① Loosen the valve mounting screws used to install the back pressure prevention valve, and remove the valve.
- ② For the monoblock manifold, temporarily remove the gasket from between the valve and manifold, insert the back pressure prevention valve into the exhaust port, place the gasket, and then mount the valve.



For the split type manifold, remove the gasket from between the valve and manifold, insert the back pressure prevention valve into the exhaust port, mount the dedicated gasket provided, and then install the valve.



Tightening torque of mounting screw : 17.6N·cm {1.8kgf·cm}  
[1.56in·lbf]  
[Back pressure prevention valve single unit model: **JAZ-E1** (for monoblock type), **JAZ-E2** (for split type)]

### Precautions for use of individual air supply spacer

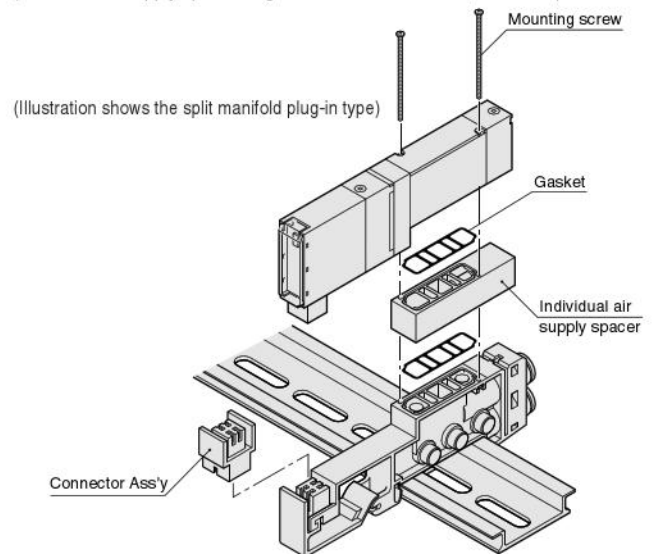
By mounting an individual air supply spacer on the manifold, air supply can be provided individually on the unit. Care should be taken that when spacers are used, the effective area is reduced by about 20%. When mounting additional spacers to existing units, observe the following items.

#### ● Procedure for mounting spacers

- ① Loosen the valve mounting screws for the added individual air supply spacer, and remove the valve.
- ② Install the gaskets provided with the individual air supply spacer, and use the mounting screws provided to mount the valve and spacer on the manifold. (See below)

For plug-in type, also install the provided connector Ass'y. Tightening torque of the mounting screw: 17.6N·cm {1.8kgf·cm} [1.56in·lbf]

(Individual air supply spacer single unit model: **JAZ-NPM**, **JAZ-PPM**)



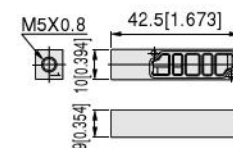
Remark: When attaching fittings to the Individual air supply spacer, use the recommended fittings shown below.

TSH4-M5M, TSH4-M5, TSH6-M5M, TS4-M50, TS4-M5M

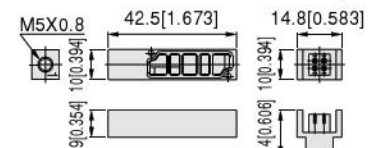
However, only the TSH4-M5M can be attached to JA10A7, A8, and A9 (3-position valve).

#### ● Dimensions mm [in.]

For non-plug-in type  
**JAZ-NPM**

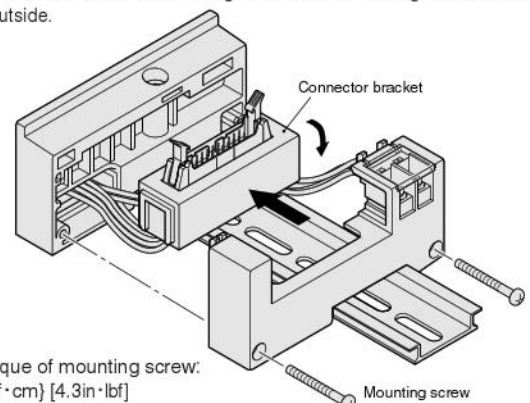


For plug-in type  
**JAZ-PPM**



#### Changing the direction of the connector bracket

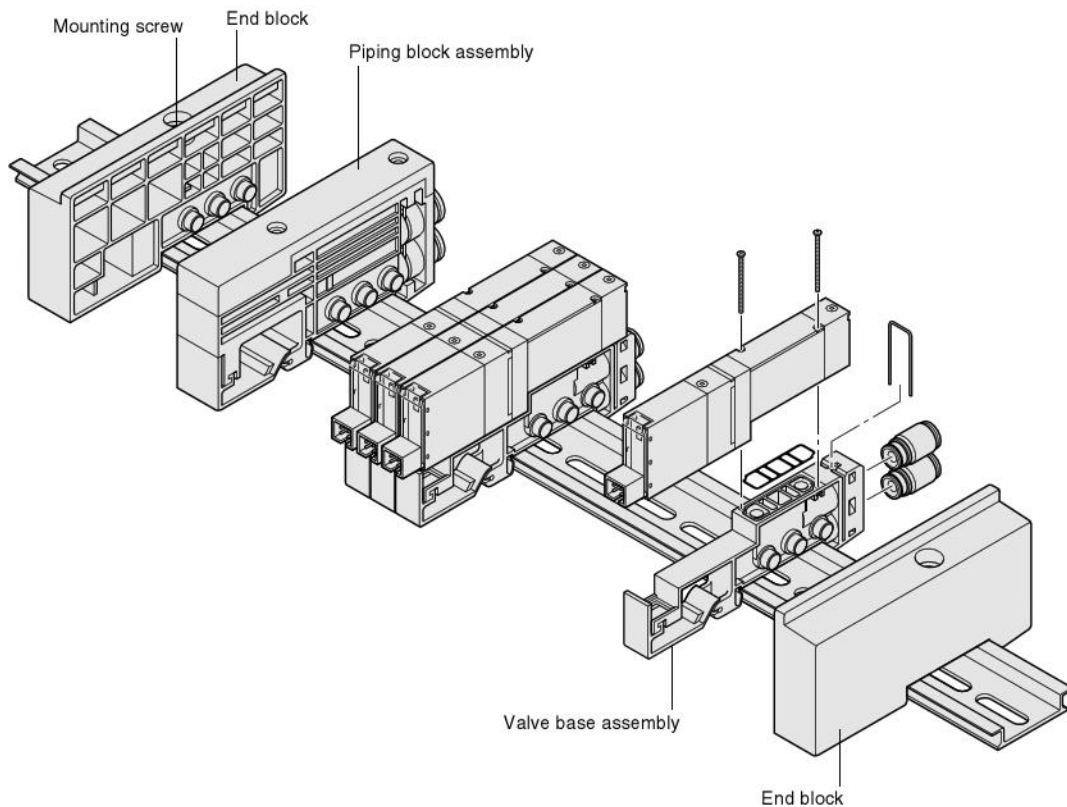
Change the connector from upward facing to side facing by removing the wiring block mounting screws, setting the connector bracket in the position shown in the illustration, and then turning the connector 90 degrees so that it faces to the outside.



Tightening torque of mounting screw:  
49N·cm {5kgf·cm} [4.3in·lbf]

**Caution:** The direction of the -D370U connector cannot be changed, D-sub on top is the only option.

**Figure 1**



## Manifold Unit Adding Procedure (JA Series Non-Plug-in Type)

### ■ Adding valve base unit

Use the valve base assembly for adding valve base units.

- ① Loosen the mounting screw on the end block until it can slide (see Fig.1).
- ② Disconnect the link between the valve base assembly's bases where the new unit is to be added.
- ③ Mount the valve base assembly to be added on the DIN rail shown in Fig. 2.
- ④ Press the bases together from both sides to ensure that there is no gap between them, and then tighten the end block mounting screws, and install the units in place on the DIN rail (see Fig. 3).  
Tightening torque: 147N·cm {15kgf·cm} [13in·lbf]

Note: Confirm that the DIN rail mounting bracket hooks secure the DIN rail (see Fig. 3).

### 【 Caution 】

- Always cut off the power and air supply before working. In addition, always confirm that air has been completely exhausted from the manifold.
- Care should be exercised not to become trapped or lose gaskets.
- Before supplying air to the manifold, always confirm that the bases are connected and the end block mounting screws are tightened, etc. Supplying air when either of the end blocks is not securing the DIN rail could result in air leaks or separate manifold bases.
- When there are a large number of valves simultaneously delivering air to the secondary side, or when there is a large number of valves overall, we recommend using two air supplies and exhausts (on each side).

Adding units of the piping block assembly is performed in the same way as adding units of the valve base assembly.

**Figure 2**

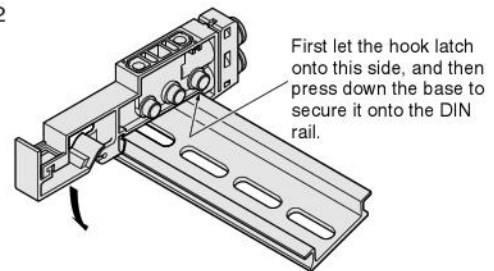


**Figure 3**

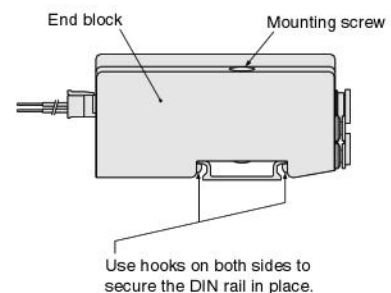
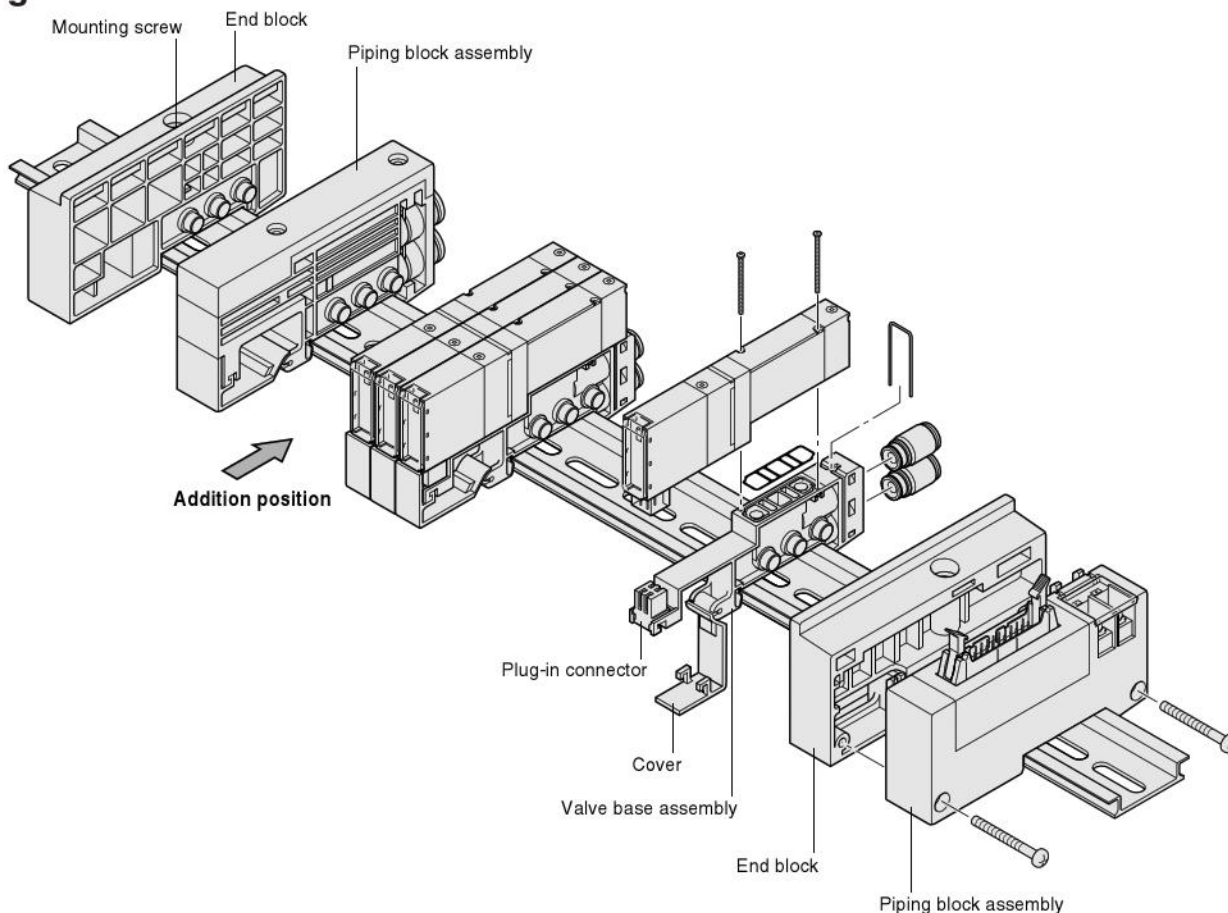


**Figure 1**



## Manifold Unit Adding Procedure (JA Series Plug-in Type)

### ■ Adding valve base unit

Use the valve base assembly for adding manifold units.

- ① Loosen the mounting screw on the end block until it can slide (see Fig.1).
- ② Add units on the side shown in Fig. 1 (with the solenoid on top and the right). Disconnect the link between the bases where the new unit is to be added.
- ③ Mount the valve base assembly to be added on the DIN rail shown in Fig. 2.
- ④ Press the bases together from both sides to ensure that there is no gap between them, and then tighten the end block mounting screws, and install the units in place on the DIN rail (see Fig. 3).  
Tightening torque: 147N·cm {15kgf·cm} [13in·lbf].

Note: Confirm that the DIN rail mounting bracket hooks secure the DIN rail (see Fig. 3).

**Figure 2**

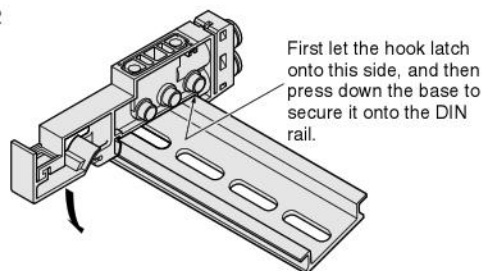
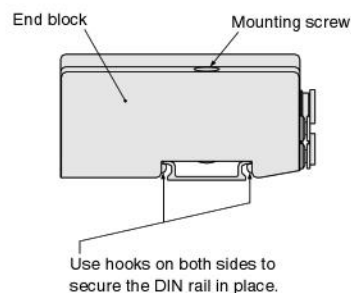


**Figure 3**



## ■ Wiring Procedure (for positive common)

- ① Press down the upper part of the cover, and open it. Loosen the mounting screws of the valves next to the valve base assemblies to be added, remove the valves, and remove the plug-in connector (see Fig. 4).
- ② The end terminal lead wire (short, red wire) is inserted into the pin insert section (No.4) of the plug-in connectors that were removed in step ① (see Fig. 5).  
(When shipping, the end terminal lead wire is inserted into the plug-in connector of the end unit valve.) Remove this end terminal lead wire, and insert it into the insertion section (No. 4) of the plug-in connector of the valve base assembly to be added. Afterward, insert the common wire (red) of this plug-in connector into the insertion section (No.4) of the removed plug-in connector.  
Note: When inserting the lead wire, confirm that the short bar of the plug-in connector's common wire insertion section has been attached.
- ③ Install each of the wired plug-in connectors in step ② to the valve base, and mount the valve.
- ④ Remove the wiring block mounting screws and place them in the positions shown in Fig. 7, then connect the lead wire (white) of the added valve base after confirming the pin location (For details, see the detailed diagram of the wiring block internal connections on p.184).
- ⑤ Return the connector brackets to their original position, and tighten the wiring block mounting screws in place, then install the cover while exercising caution that the lead wires are not trapped by the cover.

## ■ Wiring Procedure (for negative common)

- ① Press down the upper part of the cover, and open it. Loosen the mounting screws of the valves next to the valve base assemblies to be added, remove the valves, and remove the plug-in connectors (see Fig. 4).
- ② The end terminal lead wire (short, black wire) is inserted into the pin insert section (No.3) of the plug-in connectors that were removed in step ① (see Fig. 6).  
(When shipping, the end terminal lead wire is inserted into the plug-in connector of the end unit valve.) Remove this end terminal lead wire, and insert it into the insertion section (No.3) of the plug-in connector for the valve base assembly to be added. Afterward, insert the common wire (black) of this plug-in connector into the insertion section (No.3) of the removed plug-in connector.  
Note: When inserting the lead wire, confirm that the short bar of the plug-in connector's common wire insertion section has been attached.
- ③ Install each of the wired plug-in connectors in step ② to the valve base, and mount the valve.
- ④ Remove the wiring block mounting screws and place them in the positions shown in Fig. 7, then connect the lead wire (white) of the added valve base after confirming the pin location (For details, see the detailed diagram of the wiring block internal connections on p.184).
- ⑤ Return the connector brackets to their original position, and tighten the wiring block mounting screws in place, then install the cover while exercising caution that the lead wires are not trapped by the cover.

## [ Caution ]

- Always cut off the power and air supply before working. In addition, always confirm that air has been completely exhausted from the manifold.
- When removing lead wires from the plug-in connector, use a tool with a fine tip (such as a small screwdriver) to press lightly on the contact hook from a hole on the side of the plug-in connector, and pull out the lead wire. When re-inserting the lead wire to the connector, spread the contact hooks so that they face outward, and then insert into the plug-in connector. At this time, pull the lead wire lightly to confirm that it is securely inserted.
- Always connect the end terminal lead wire. (see Figs. 5 and 6)
- Care should be taken not to become trapped or lose gaskets.
- Before supplying air to the manifold, always confirm that the bases are connected, and that the end block mounting screws are tightened, etc.  
Supplying air when either of the end blocks do not secure the DIN rail could result in air leaks or separate manifold bases.
- Be aware that the number of valve units that can be added is limited in the manifold, by the wiring specifications and wiring connection type, etc.
- When there are large number of valves simultaneously delivering air to the secondary side, or when there is a large number of valves overall, we recommend using two air supplies and exhausts (on each side).

Adding units of the piping block assembly is performed in the same way as adding units of the valve base assembly.

- When the wiring specification is -D370U and adding units is required, consult us.

Figure 4

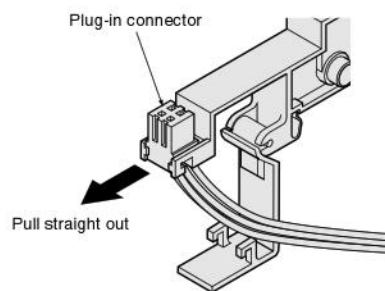
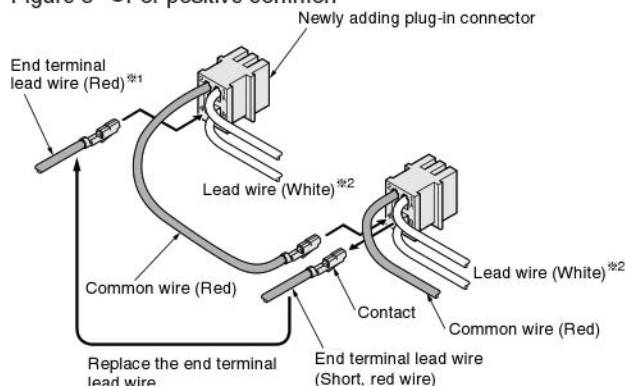


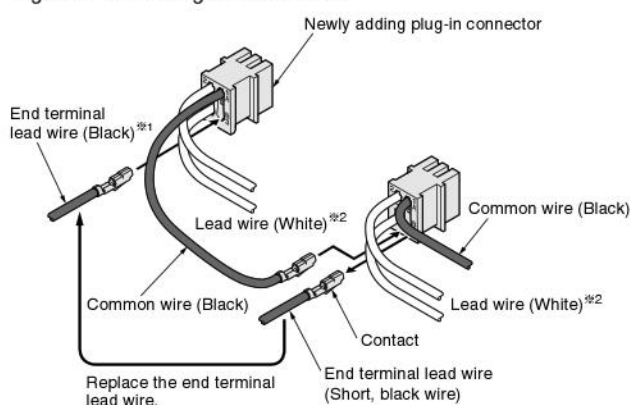
Figure 5 ●For positive common



※1: Always insert the end terminal lead wire.

※2: Shows when both A and B are used.

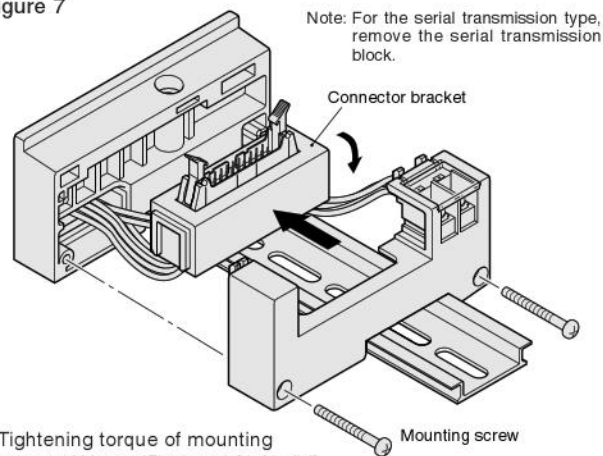
Figure 6 ●For negative common



※1: Always insert the end terminal lead wire.

※2: Shows when both A and B are used.

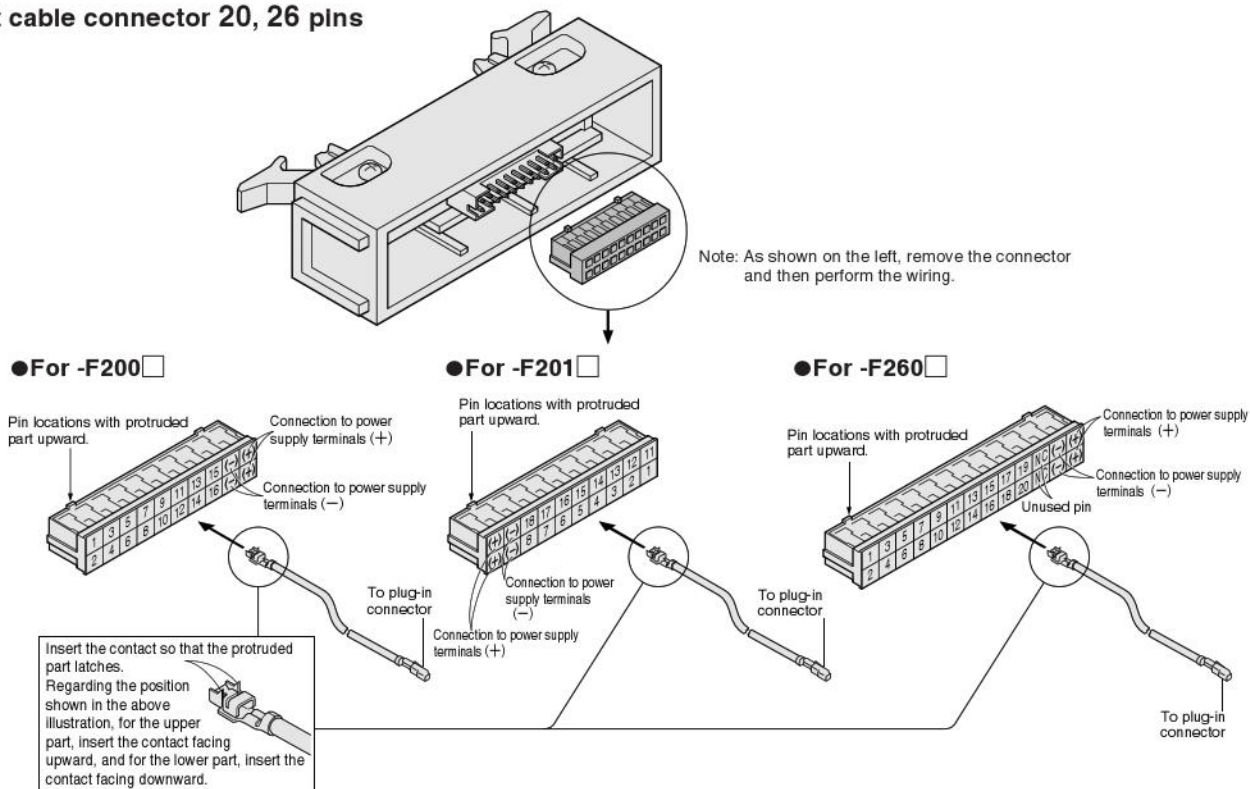
Figure 7



See "Detailed Diagram of Wiring Block Internal Connections" on p.184.

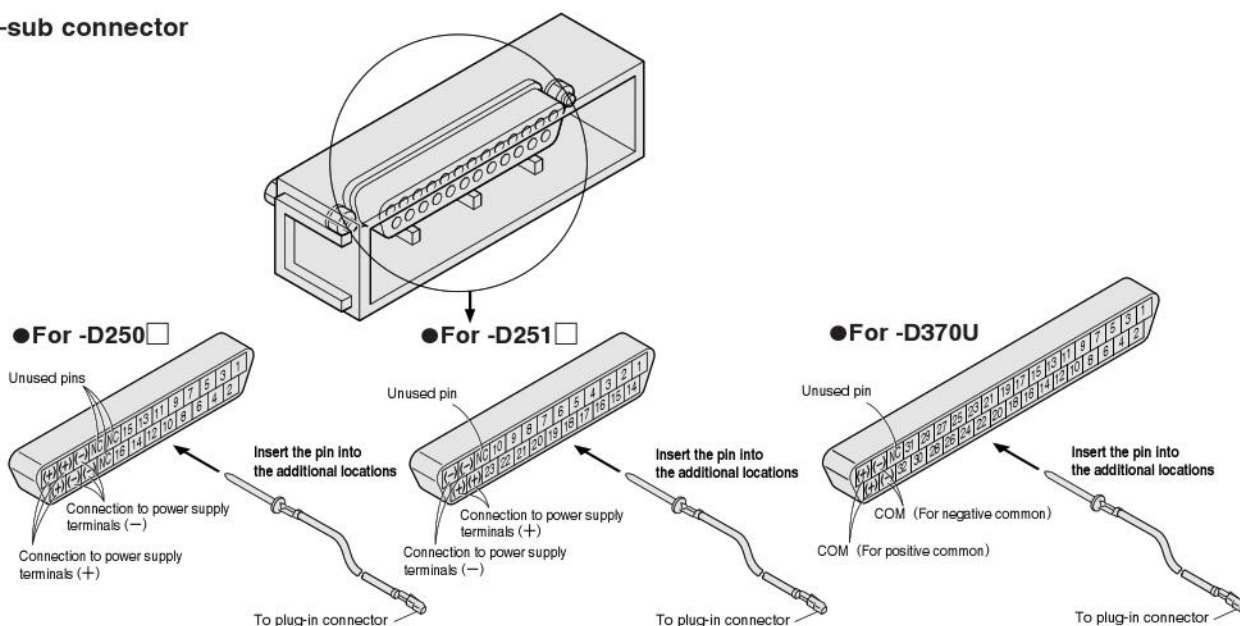
## Detailed Diagram of Wiring Block Internal Connections

### Flat cable connector 20, 26 pins

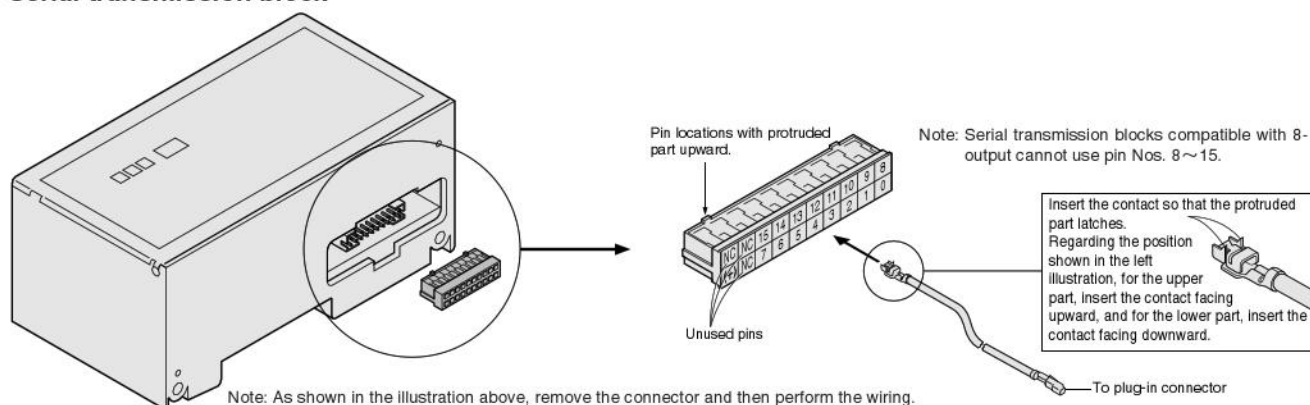


SOLENOID VALVES JA SERIES

### D-sub connector



### Serial transmission block



## Serial Transmission Block Specifications

### General Specifications

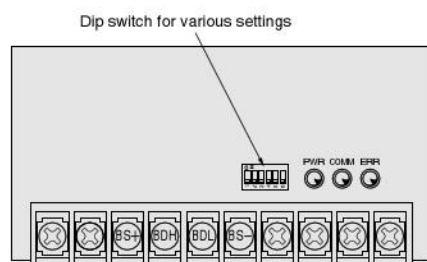
|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| Voltage                     | DC24V $\pm 10\%$                                      |
| Operating temperature range | 5~50°C [41~122°F]                                     |
| Vibration resistance        | 49.0m/s <sup>2</sup> {5.0G} (Conforms to JIS C 0911)  |
| Shock resistance            | 98.1m/s <sup>2</sup> {10.0G} (Conforms to JIS C 0912) |

● For details of specifications, see the user's manual. (See below)

### Serial Transmission Block and Terminal Block (LED) Part Names

#### ● For OMRON CompoBus/S

Transmission block specification: -A1 (16 outputs), -A2 (8 outputs)



#### LED indicator

| Indicator | State     | color  | Description                               |
|-----------|-----------|--------|-------------------------------------------|
| PWR       | Lights up | Green  | • During power supply                     |
|           | Shut off  |        | • Power is not supplied                   |
| COMM      | Lights up | Yellow | • During normal communication             |
|           | Shut off  |        | • Communication fault, or standby         |
| ERR       | Lights up | Red    | • Communication fault occurred            |
|           | Shut off  |        | • During normal communication, or standby |

#### Remarks

※ For details about CompoBus/S, see the OMRON catalog, user's manual, etc.

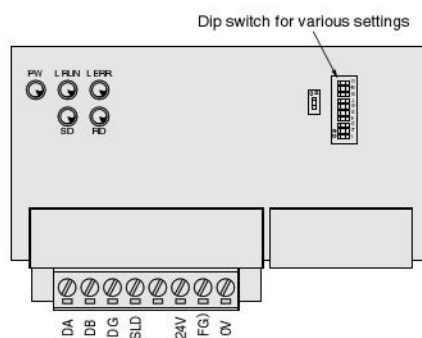
#### ● Number of outputs per block

- 16 solenoids (transmission block specification: -A1)
- 8 solenoids (transmission block specification: -A2)

#### ● Related materials: User's manual, document No.HV030

#### ● For Mitsubishi Electric CC-Link

Transmission block specification: -B1



#### LED indicator

| Indicator | Description                                                                                                                                                  |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PW        | • Lights up when power is turned on                                                                                                                          |
| L RUN     | • Lights up when normal data is received from a master station                                                                                               |
| SD        | • Lights up during sending data                                                                                                                              |
| RD        | • Lights up during receiving data                                                                                                                            |
| L ERR.    | • Lights up during transmission errors, and shuts off when time is over. Lights up during a station number setting error or transmission speed setting error |

#### Remarks

※ For details about CC-Link, see the Mitsubishi Electric catalog, user's manual, etc.

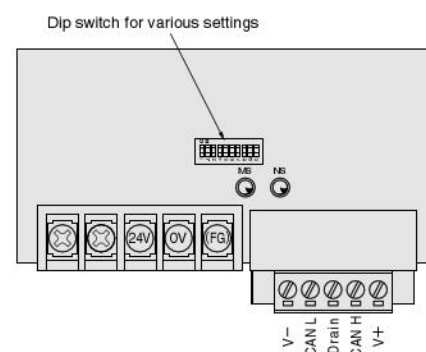
#### ● Number of outputs per block

- 16 solenoids (transmission block specification: -B1)
- ※ Since the block occupies one station, if the block is entirely composed of remote I/O stations, a maximum of 64 units can be connected to one master station.

#### ● Related materials: User's manual, document No.HV031

#### ● For DeviceNet (OMRON CompoBus/D)

Transmission block specification: -D1



#### LED indicator

| Indicator | State     | color | Description                         |
|-----------|-----------|-------|-------------------------------------|
| MS        | Lights up | Green | • Normal status                     |
|           | Flashing  |       | • No setting status                 |
|           | Lights up | Red   | • Serious breakdown                 |
|           | Flashing  |       | • Minor breakdown                   |
|           | Shut off  | —     | • No power supply                   |
| NS        | Lights up | Green | • Communication connection achieved |
|           | Flashing  |       | • No communication connection       |
|           | Lights up | Red   | • Serious communication fault       |
|           | Flashing  |       | • Minor communication fault         |
|           | Shut off  | —     | • No power supply                   |

#### Remarks

※ Conforms to DeviceNet (CompoBus/D)

#### ● Number of outputs per block

Maximum of 16 solenoids

#### ● Related materials: User's manual, document No.HV032

■ For details about specifications and handling, see the above-listed user's manuals (Document No. HV030~HV032).

### Application Examples for Serial Transmission Block of General Purpose Type

If manifolds with flat cable connectors released previously have F201 wiring specifications (with positive common specifications only), the serial transmission blocks (general purpose type with F201 compatible flat cable) **YS5□U** can be connected to the manifold to convert it into a serial transmission-compatible manifold.



#### ● Connectable Manifolds

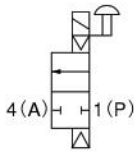
- FM-SOLID MANIFOLD X80M, X88M Series
- Koganei Solenoid Valves F series
- Koganei Solenoid Valves JA series

※ Voltage should meet DC24V specifications.

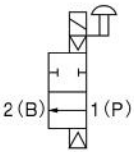
(Flat cable length approximately 90mm [3.5in.], DIN rail length 75mm [3in.])

2-port

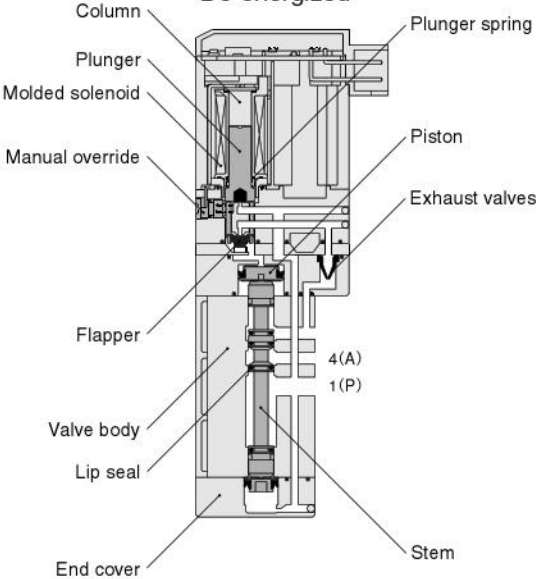
Normally closed (NC)



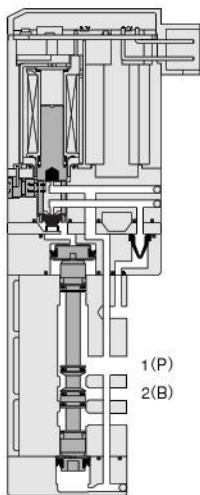
Normally open (NO)



**JA10A1**  
De-energized



**JA10A2**  
De-energized

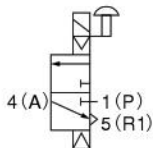


Major Parts and Materials

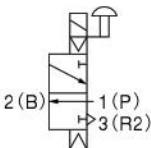
| Parts    |                 | Materials                           |
|----------|-----------------|-------------------------------------|
| Valve    | Body            | Aluminum alloy (anodized)           |
|          | Stem            | Aluminum alloy                      |
|          | Exhaust valve   | Synthetic rubber                    |
|          | Lip seal        |                                     |
|          | Flapper         | Aluminum alloy (anodized)           |
|          | Sub-base        |                                     |
|          | Plunger         | Magnetic stainless steel            |
|          | Column          | Plastic                             |
|          | End cover       |                                     |
| Manifold | Body            | Monoblock Aluminum alloy (anodized) |
|          | Split type      | Plastic                             |
|          | Block-off plate | Mild steel (nickel plated)          |
|          | Seal            | Synthetic rubber                    |

3-port

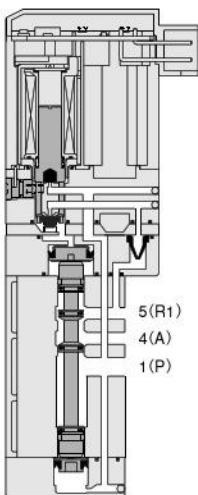
Normally closed (NC)



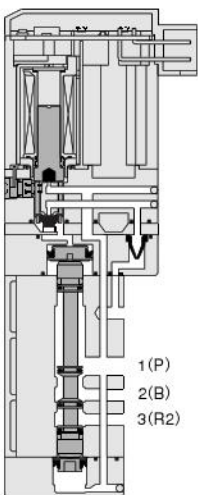
Normally open (NO)



**JA10A3**  
De-energized

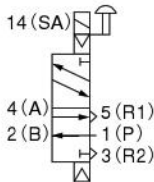


**JA10A4**  
De-energized

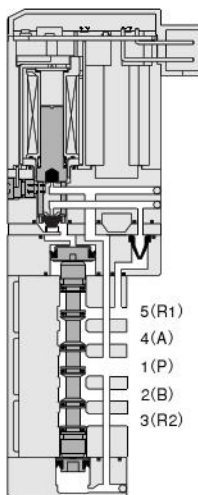


5-port, 2-position

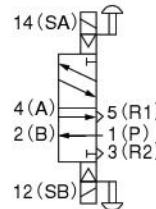
Single solenoid



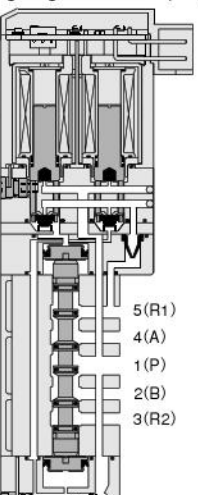
**JA10A5**  
De-energized



Double solenoid



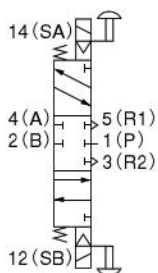
**JA10A6**  
De-energized condition after energizing solenoid 12(SB)



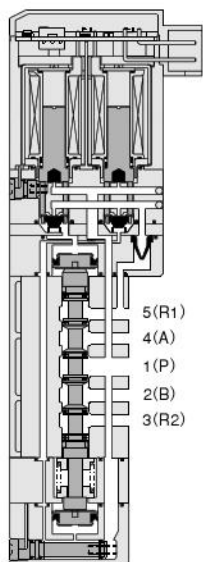
## 5-port, 3-position

[Both 14 (SA) and 12 (SB) are de-energized]

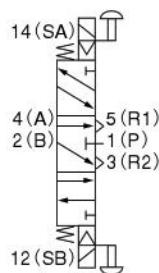
**Closed center**



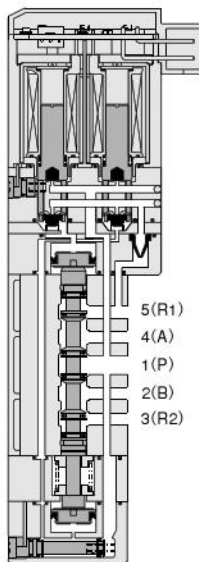
**JA10A7**



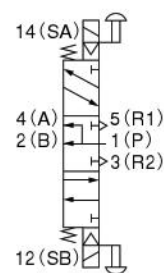
**Exhaust center**



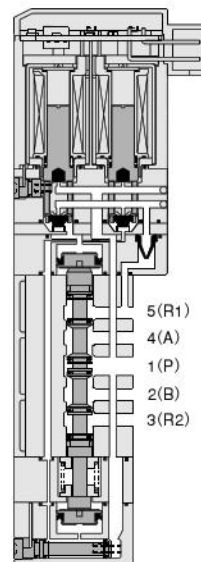
**JA10A8**



**Pressure center**



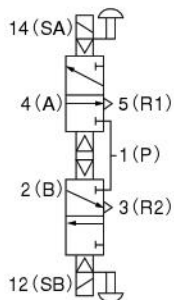
**JA10A9**



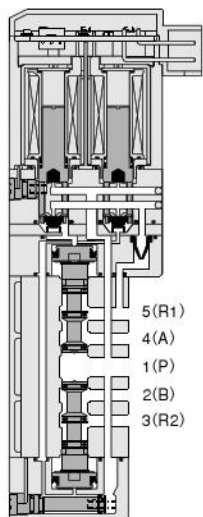
## Tandem 3-port, 4-position

[Both 14 (SA) and 12 (SB) are de-energized]

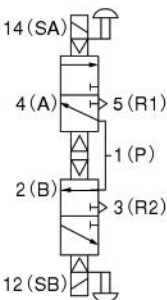
**Normally closed (NC),  
Normally closed (NC)**



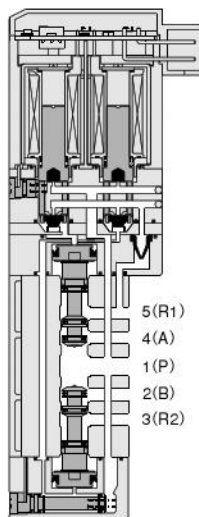
**JA10AA**



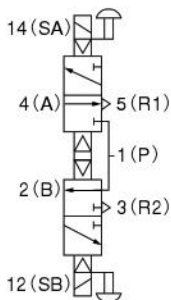
**Normally open (NO),  
Normally open (NO)**



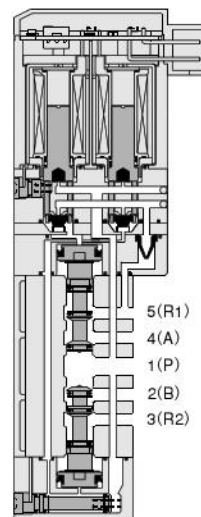
**JA10AB**



**Normally closed (NC),  
Normally open (NO)**



**JA10AC**



# JA Series Order Codes

The Solenoid Valves JA series order codes are classified into the following 5 categories.  
For details of order codes, see the designated pages.

**JA10A** ☐ : Single valve unit



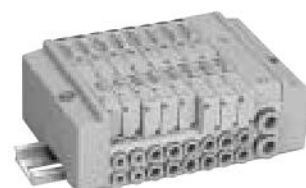
p. 189

**JAM** ☐ **AJ** : Monoblock manifold



p. 191

**JAM** ☐ **NJ** : Split manifold non-plug-in type



p. 193

**JAM** ☐ **PJ** : Split manifold plug-in type



p. 197

**JAM** ☐ **SJ** : Serial transmission type



p. 201

# Single Valve Unit Order Codes



## Model

**JA10**

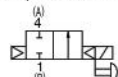
Standard type

**JA10L**

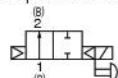
Low current type

## Valve specification

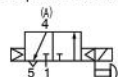
**A1**: 2-port normally closed



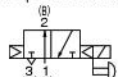
**A2**: 2-port normally open



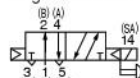
**A3**: 3-port normally closed



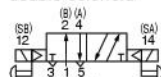
**A4**: 3-port normally open



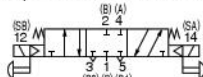
**A5**: 5-port 2-position, single solenoid



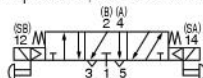
**A6**: 5-port 2-position, double solenoid



**A7**: 3-position, closed center



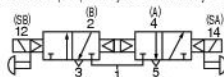
**A8**: 3-position, exhaust center



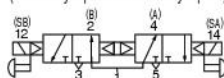
**A9**: 3-position, pressure center



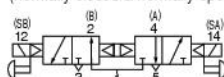
**AA**: Tandem 3-port (normally closed & normally closed)



**AB**: Tandem 3-port (normally open & normally open)



**AC**: Tandem 3-port (normally closed & normally open)



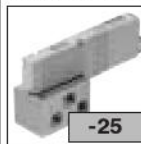
## Sub-base

Without sub-base<sup>Note1</sup>



**Blank**

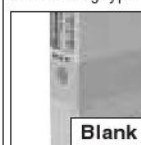
With sub-base<sup>Note2</sup>



**-25**

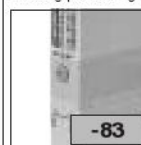
## Manual override

Non-locking type



**Blank**

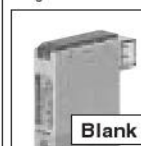
Locking protruding type



**-83**

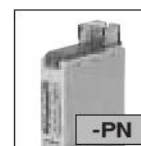
## Wiring specification

Plug-in



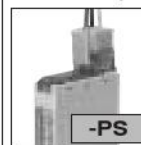
**Blank**

S type plug connector  
Without connector and leads



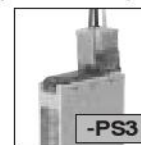
**-PN**

Positive common  
S type plug connector  
Lead wire 300mm [11.8in.]



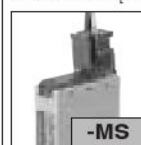
**-PS**

Positive common  
S type plug connector  
Lead wire 3000mm [118in.]



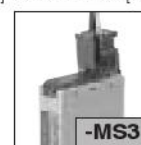
**-PS3**

Negative common  
S type plug connector  
Lead wire 300mm [11.8in.]



**-MS**

Negative common  
S type plug connector  
Lead wire 3000mm [118in.]



**-MS3**

## Voltage

**-D4**

DC24V

**-D5**

DC12V

<sup>Note3</sup>

| Model         | Valve specification                                                  | Sub-base                      | Manual override | Wiring specification                                        | Voltage                     |
|---------------|----------------------------------------------------------------------|-------------------------------|-----------------|-------------------------------------------------------------|-----------------------------|
| JA10<br>JA10L | A1<br>A2<br>A3<br>A4<br>A5<br>A6<br>A7<br>A8<br>A9<br>AA<br>AB<br>AC | Blank<br>-25 <sup>Note2</sup> | Blank<br>-83    | Blank <sup>Note2</sup><br>-PN<br>-PS<br>-PS3<br>-MS<br>-MS3 | -D4<br>-D5 <sup>Note3</sup> |

Notes: 1. Cannot be used as a single valve unit. Two manifold mounting screws are provided.

2. When ordering with a sub-base, the "Blank (plug-in)" cannot be selected as the wiring specification. Select from among -PN, -PS, -PS3, -MS or -MS3.

3. -D5(DC12V) is not available in the low current type.

## Additional Parts Order Codes for Single Valve Unit

### Parts for single valve unit

JAZ -

#### Parts content

**25** : Sub-base (sub-base and gasket)<sup>Note 1</sup>

**GS1** : Gasket<sup>Note 2</sup>

Notes: 1. Valve mounting screws are not included.

2. Care should be taken that this gasket is different from the **GS2** gasket for the split manifolds.

### Connector-related

JAZ -

#### Connector specification

**CP** : Positive common plug connector, lead wire length 300mm [11.8in.]

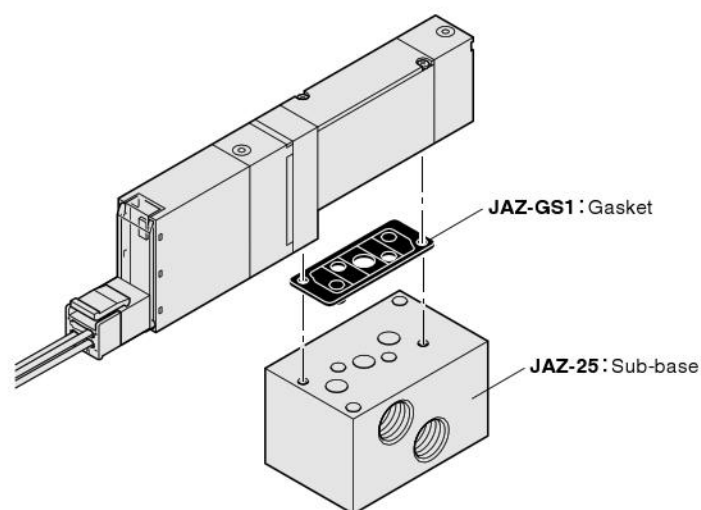
**CP3** : Positive common plug connector, lead wire length 3000mm [118in.]

**CPN** : Positive common plug connector, without lead wire (short bar and contacts included)

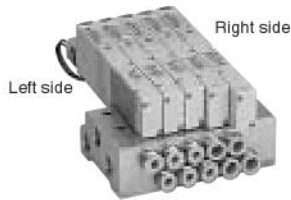
**CM** : Negative common plug connector, lead wire length 300mm [11.8in.]

**CM3** : Negative common plug connector, lead wire length 3000mm [118in.]

**CMN** : Negative common plug connector, without lead wire (short bar and contacts included)



# Monoblock Manifold Order Codes



## Model

**JA10**

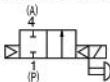
Standard type

**JA10L**

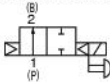
Low current type

## Valve specification

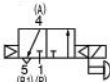
**A1: 2-port normally closed**



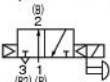
**A2: 2-port normally open**



**A3: 3-port normally closed**



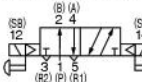
**A4: 3-port normally open**



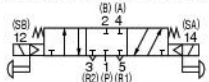
**A5: 5-port 2-position, single sol. AB: Tandem 3-port (normally open & normally open)**



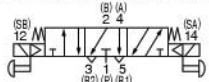
**A6: 5-port 2-position, double sol. AC: Tandem 3-port (normally closed & normally open)**



**A7: 3-position, closed center**



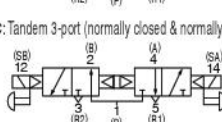
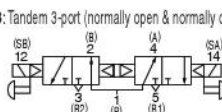
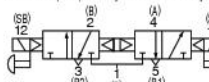
**A8: 3-position, exhaust center**



**A9: 3-position, pressure center**

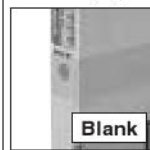


**AA: Tandem 3-port (normally closed & normally closed)**

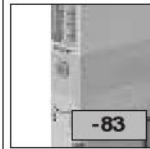


## Manual override

Non-locking type

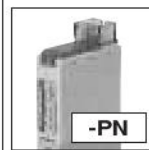


Locking protruding type

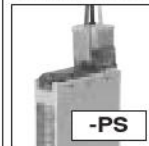


## Wiring specification

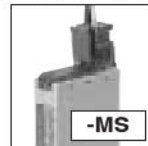
S type plug connector  
Without connector and leads



Positive common  
S type plug connector  
Lead wire 300mm [11.8in.]



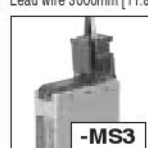
Negative common  
S type plug connector  
Lead wire 300mm [11.8in.]



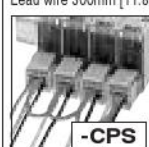
Positive common  
S type plug connector  
Lead wire 3000mm [118in.]



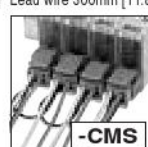
Negative common  
S type plug connector  
Lead wire 3000mm [118in.]



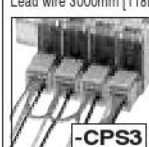
Positive common pre-wired terminal  
S type plug connector  
Lead wire 300mm [11.8in.]



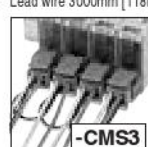
Negative common pre-wired terminal  
S type plug connector  
Lead wire 300mm [11.8in.]



Positive common pre-wired terminal  
S type plug connector  
Lead wire 3000mm [118in.]

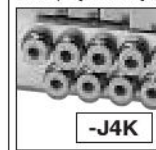


Negative common pre-wired terminal  
S type plug connector  
Lead wire 3000mm [118in.]

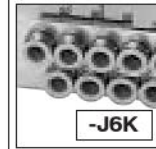


## Manifold fitting specification

With  $\phi 4$ [0.157in.] fittings

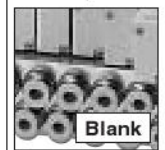


With  $\phi 6$ [0.236in.] fittings



## Individual air supply spacer

Without spacer



With individual air supply spacer



## Back pressure prevention valve

**Blank**

Without back pressure prevention valve

**-E1**

With back pressure prevention valve

## Voltage

**-D4**

DC24V

**-D5**

DC12V

Note2

| Model                      | Number of units | Station | Model                                                 | Valve specification | Manual override | Wiring specification                                                | Manifold fitting specification | Back pressure prevention valve | Individual air supply spacer | Voltage                     |
|----------------------------|-----------------|---------|-------------------------------------------------------|---------------------|-----------------|---------------------------------------------------------------------|--------------------------------|--------------------------------|------------------------------|-----------------------------|
| Manifold model             |                 |         | Mounting valve model                                  |                     |                 |                                                                     |                                |                                |                              |                             |
| JAM                        | 2<br>:<br>20    | AJ      | stn. 1<br>:<br>stn. <input type="checkbox"/><br>Note1 | JA10<br>JA10L       | Blank<br>-83    | -PN<br>-PS<br>-PS3<br>-CPS<br>-CPS3<br>-MS<br>-MS3<br>-CMS<br>-CMS3 | -J4K<br>-J6K                   | Blank<br>-E1                   | Blank<br>-NPM                | -D4<br>-D5 <sup>Note2</sup> |
| JABP (for block-off plate) |                 |         |                                                       |                     |                 |                                                                     |                                |                                |                              |                             |

Notes: 1. Valve mounting location is from the left, with the solenoid on top, and the 4(A) and 2(B) ports in front.  
2. -D5 (DC12V) is not available in the low current type.

## Additional Parts Order Codes for Monoblock Manifold

### Manifold parts

**JAZ** -

#### Parts description

**GS1** : Gasket

**E1** : Back pressure prevention valve (2 pcs. for monoblock type)

**J4K** :  $\phi$  4 fitting (2 pcs. for monoblock type, and 1 pc. gasket)

**J6K** :  $\phi$  6 fitting (2 pcs. for monoblock type, and 1 pc. gasket)

**NPM** : Individual air supply spacer

(Spacer body, gasket and 2 mounting screws)

Block-off plate (block-off plate and 2 mounting screws)

**JABP**

### Connector-related

**JAZ** -

#### Connector specification

**CP** : Positive common plug connector, lead wire length 300mm [11.8in.]

**CP3** : Positive common plug connector, lead wire length 3000mm [118in.]

**CPN** : Positive common plug connector, without lead wire (short bar and contacts included)

**PA** : Positive common A type, plug connector lead wire length 300mm\* [11.8in.]

**PA3** : Positive common A type, plug connector lead wire length 3000mm\* [118in.]

**PB** : Positive common B type, plug connector lead wire length 300mm\* [11.8in.]

**PB3** : Positive common B type, plug connector lead wire length 3000mm\* [118in.]

**PC** : Positive common C type, plug connector lead wire length 300mm\* [11.8in.]

**PC3** : Positive common C type, plug connector lead wire length 3000mm\* [118in.]

**CM** : Negative common plug connector, lead wire length 300mm [11.8in.]

**CM3** : Negative common plug connector, lead wire length 3000mm [118in.]

**CMN** : Negative common plug connector, without lead wire (short bar and contacts included)

**MA** : Negative common A type, plug connector lead wire length 300mm\* [11.8in.]

**MA3** : Negative common A type, plug connector lead wire length 3000mm\* [118in.]

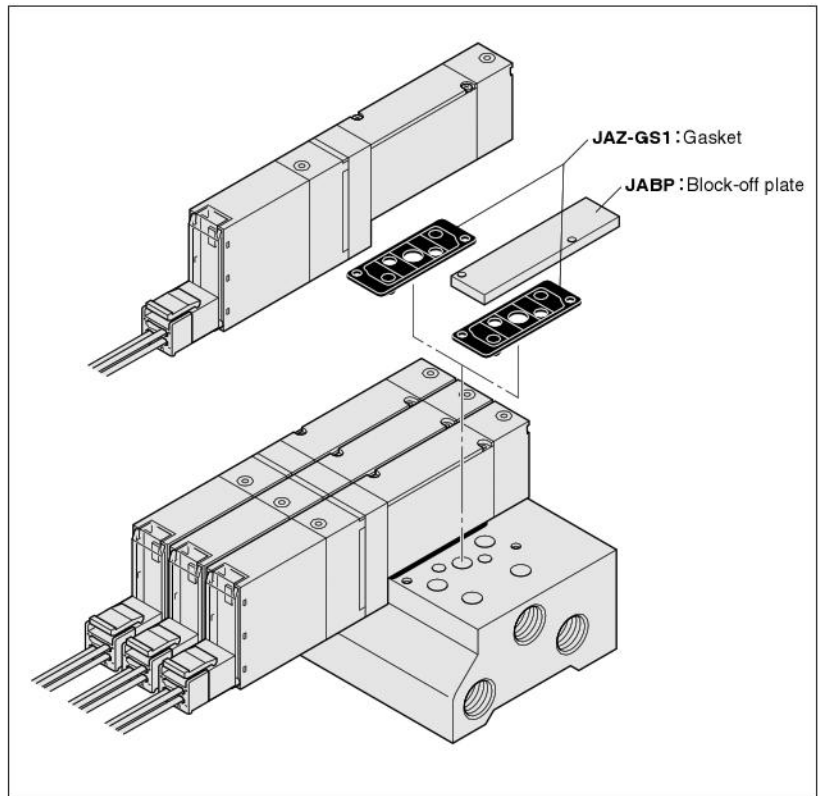
**MB** : Negative common B type, plug connector lead wire length 300mm\* [11.8in.]

**MB3** : Negative common B type, plug connector lead wire length 3000mm\* [118in.]

**MC** : Negative common C type, plug connector lead wire length 300mm\* [11.8in.]

**MC3** : Negative common C type, plug connector lead wire length 3000mm\* [118in.]

※For details, see p.178.



SOLENOID VALVES JA SERIES

### Manifold Order Code Example (6 units of JA series)

#### JAM6AJ

stn.1~2 JA10A5-PS-J4K-D4

stn.3~5 JA10A6-PS-J6K-D4

stn.6 JABP-J6K

Note: This order code example has no relation to the illustration above.

### Precautions for Order Codes

#### ● Order for valves only

Place orders by "Single Valve Unit Order Codes" on p.189.

For common terminal wiring connections, order separately the common connector assemblies listed above.

# Split Manifold Non-Plug-in Type Order Codes



## Piping block specification (air supply and exhaust)

- ~JR** : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting right-side mounting
- ~JL** : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting left-side mounting
- ~JD** : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting both-side mounting
- ~JR1/4** : 1(P) and 3, 5(R) ports 1/4 inch fitting right-side mounting
- ~JL1/4** : 1(P) and 3, 5(R) ports 1/4 inch fitting left-side mounting
- ~JD1/4** : 1(P) and 3, 5(R) ports 1/4 inch fitting both-side mounting
- ~JR3/8** : 1(P) and 3, 5(R) ports 3/8 inch fitting right-side mounting
- ~JL3/8** : 1(P) and 3, 5(R) ports 3/8 inch fitting left-side mounting
- ~JD3/8** : 1(P) and 3, 5(R) ports 3/8 inch fitting both-side mounting



The photo shows the **~JR** type.

- MR** : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML** : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD** : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler both-side mounting



The photo shows the **-MR** type.

## Model

**JA10**

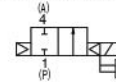
Standard type

**JA10L**

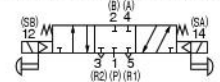
Low current type

## Valve specification

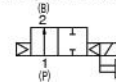
**A1**: 2-port normally closed



**A7**: 3-position, closed center



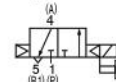
**A2**: 2-port normally open



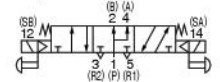
**A8**: 3-position, exhaust center



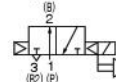
**A3**: 3-port normally closed



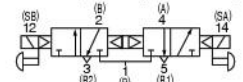
**A9**: 3-position, pressure center



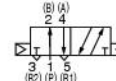
**A4**: 3-port normally open



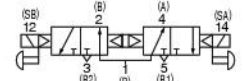
**AA**: Tandem 3-port (normally closed & normally closed)



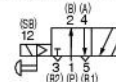
**A5**: 5-port 2-position, single sol.



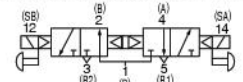
**AB**: Tandem 3-port (normally open & normally open)



**A6**: 5-port 2-position, double sol.



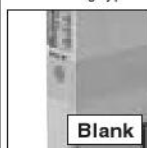
**AC**: Tandem 3-port (normally closed & normally open)



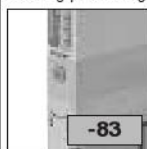
| Model          | Valve units  | Piping block specification (air supply and exhaust)                                                                                                                                                                                                              |
|----------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manifold model |              |                                                                                                                                                                                                                                                                  |
| JAM            | 2<br>:<br>20 | NJ                                                                                                                                                                                                                                                               |
|                |              | <ul style="list-style-type: none"> <li>-JR      -MR</li> <li>-JL      -ML</li> <li>-JD      -MD</li> <li>-JR1/4   -MR1/4</li> <li>-JL1/4   -ML1/4</li> <li>-JD1/4   -MD1/4</li> <li>-JR3/8   -MR3/8</li> <li>-JL3/8   -ML3/8</li> <li>-JD3/8   -MD3/8</li> </ul> |

## Manual override

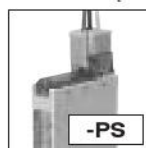
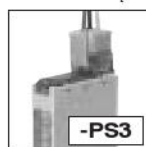
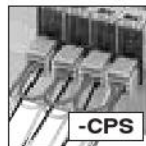
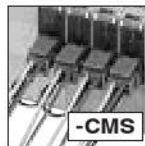
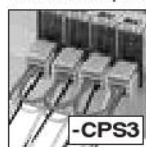
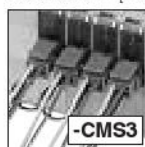
Non-locking type



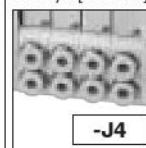
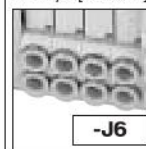
Locking protruding type



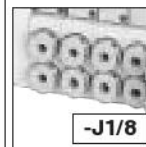
## Wiring specification

S type plug connector  
Without connector ass'yPositive common  
S type plug connector  
Lead wire 300mm [11.8in.]Negative common  
S type plug connector  
Lead wire 300mm [11.8in.]Positive common  
S type plug connector  
Lead wire 3000mm [118in.]Negative common  
S type plug connector  
Lead wire 3000mm [118in.]Positive common  
pre-wired terminal  
S type plug connector  
Lead wire 300mm [11.8in.]Negative common  
pre-wired terminal  
S type plug connector  
Lead wire 300mm [11.8in.]Positive common  
pre-wired terminal  
S type plug connector  
Lead wire 3000mm [118in.]Negative common  
pre-wired terminal  
S type plug connector  
Lead wire 3000mm [118in.]

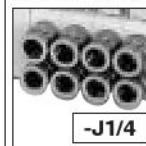
## Manifold fitting specification

With  $\phi 4$ [0.157in.] fittingsWith  $\phi 6$ [0.236in.] fittings

With 1/8 inch fittings



With 1/4 inch fittings



## Back pressure prevention valve

Blank

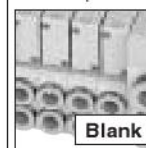
Without back pressure prevention valve

-E2

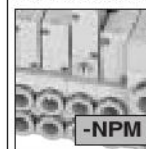
With back pressure prevention valve

## Individual air supply spacer

Without spacer



With individual air supply spacer



## Port Isolator

Blank : Without port isolator

-S1 : For 1(P) port

-S3 : For 3(R2) and 5(R1) ports

-SA : For 1(P), 3(R2) and 5(R1) ports

## Voltage

-D4

DC24V

-D5

DC12V

Note3

| Station                                               | Model         | Valve specification                                                  | Manual override | Wiring specification                                                | Manifold fitting specification | Back pressure prevention valve | Individual air supply spacer | Port isolator                                                                 | Voltage                     |
|-------------------------------------------------------|---------------|----------------------------------------------------------------------|-----------------|---------------------------------------------------------------------|--------------------------------|--------------------------------|------------------------------|-------------------------------------------------------------------------------|-----------------------------|
| Mounting valve model                                  |               |                                                                      |                 |                                                                     |                                |                                |                              |                                                                               |                             |
| stn. 1<br>:<br>stn. <input type="checkbox"/><br>Note1 | JA10<br>JA10L | A1<br>A2<br>A3<br>A4<br>A5<br>A6<br>A7<br>A8<br>A9<br>AA<br>AB<br>AC | Blank<br>-83    | -PN<br>-PS<br>-PS3<br>-CPS<br>-CPS3<br>-MS<br>-MS3<br>-CMS<br>-CMS3 | -J4<br>-J6<br>-J1/8<br>-J1/4   | Blank<br>-E2                   | Blank<br>-NPM                | Blank<br>-S1 <sup>Note2</sup><br>-S3 <sup>Note2</sup><br>-SA <sup>Note2</sup> | -D4<br>-D5 <sup>Note3</sup> |
| JABP (for block-off plate)                            |               |                                                                      |                 |                                                                     |                                |                                |                              |                                                                               |                             |

Notes: 1. Valve mounting location is from the left, with the solenoid on top, and the 4(A) and 2(B) ports in front.

2. Port isolators can be installed only when piping blocks are mounted on both sides. In addition, only one location for each port isolator can be installed in one manifold for -SA, or one each port isolator for -S1 and -S3 for a total of two locations. When shipping, the designated port isolators are installed between the designated station and the station to its immediate left (the next smaller stn. No.).

3. -D5 (DC12V) is not available in the low current type.

## Additional Parts Order Codes for Split Manifold Non-Plug-in Type

### Manifold parts

JAZ -

#### Parts description

**GS2** : Gasket (for split type)  
**E2** : Back pressure prevention valve (2 pcs. for split type and 1 pc. gasket)  
**J4** : 2 pcs.  $\phi$  4 fittings, and 1 pc. stopper pin  
**J6** : 2 pcs.  $\phi$  6 fittings, and 1 pc. stopper pin  
**J8** : 2 pcs.  $\phi$  8 fittings, and 1 pc. stopper pin  
**J1/8** : 2 pcs. 1/8 inch fittings, and 1 pc. stopper pin  
**J1/4** : 2 pcs. 1/4 inch fittings, and 1 pc. stopper pin  
**J1/4P** : 2 pcs. 1/4 inch fittings for 1(P) and 3, 5(R) ports, and 1 pc. stopper pin  
**J3/8** : 2 pcs. 3/8 inch fittings, and 1 pc. stopper pin  
**M** : Muffler for piping block  
**NPM** : Individual air supply spacer (spacer body, gasket and 2 mounting screws)  
**S1** : Port isolator for 1(P) port  
**S3** : Port isolator for 3(R2) and 5(R1) ports  
**SA** : Port isolator for 1(P) port, 3(R2) and 5(R1) ports

### Block-off plate (block-off plate and 2 mounting screws)

JABP

### Piping block assembly

JAZ -

#### Piping specification

**PJ** : 1(P) and 3, 5(R) ports  $\phi$  8 fittings  
**PJ1/4** : 1(P) and 3, 5(R) ports 1/4 inch fittings  
**PJ3/8** : 1(P) and 3, 5(R) ports 3/8 inch fittings  
**PM** : 1(P) port  $\phi$  8 fitting, 3, 5(R) ports built-in mufflers  
**PM1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in mufflers  
**PM3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in mufflers

### End blocks (one set of left and right)

JAZ - E

### Connector-related

JAZ -

#### Connector specification

**CP** : Positive common plug connector, lead wire length 300mm [11.8in.]  
**CP3** : Positive common plug connector, lead wire length 3000mm [118in.]  
**CPN** : Positive common plug connector, without lead wire (short bar and contacts included)  
**PA** : Positive common A type, plug connector lead wire length 300mm\* [11.8in.]  
**PA3** : Positive common A type, plug connector lead wire length 3000mm\* [118in.]  
**PB** : Positive common B type, plug connector lead wire length 300mm\* [11.8in.]  
**PB3** : Positive common B type, plug connector lead wire length 3000mm\* [118in.]  
**PC** : Positive common C type, plug connector lead wire length 300mm\* [11.8in.]  
**PC3** : Positive common C type, plug connector lead wire length 3000mm\* [118in.]  
**CM** : Negative common plug connector, lead wire length 300mm [11.8in.]  
**CM3** : Negative common plug connector, lead wire length 3000mm [118in.]  
**CMN** : Negative common plug connector, without lead wire (short bar and contacts included)  
**MA** : Negative common A type, plug connector lead wire length 300mm\* [11.8in.]  
**MA3** : Negative common A type, plug connector lead wire length 3000mm\* [118in.]  
**MB** : Negative common B type, plug connector lead wire length 300mm\* [11.8in.]  
**MB3** : Negative common B type, plug connector lead wire length 3000mm\* [118in.]  
**MC** : Negative common C type, plug connector lead wire length 300mm\* [11.8in.]  
**MC3** : Negative common C type, plug connector lead wire length 3000mm\* [118in.]

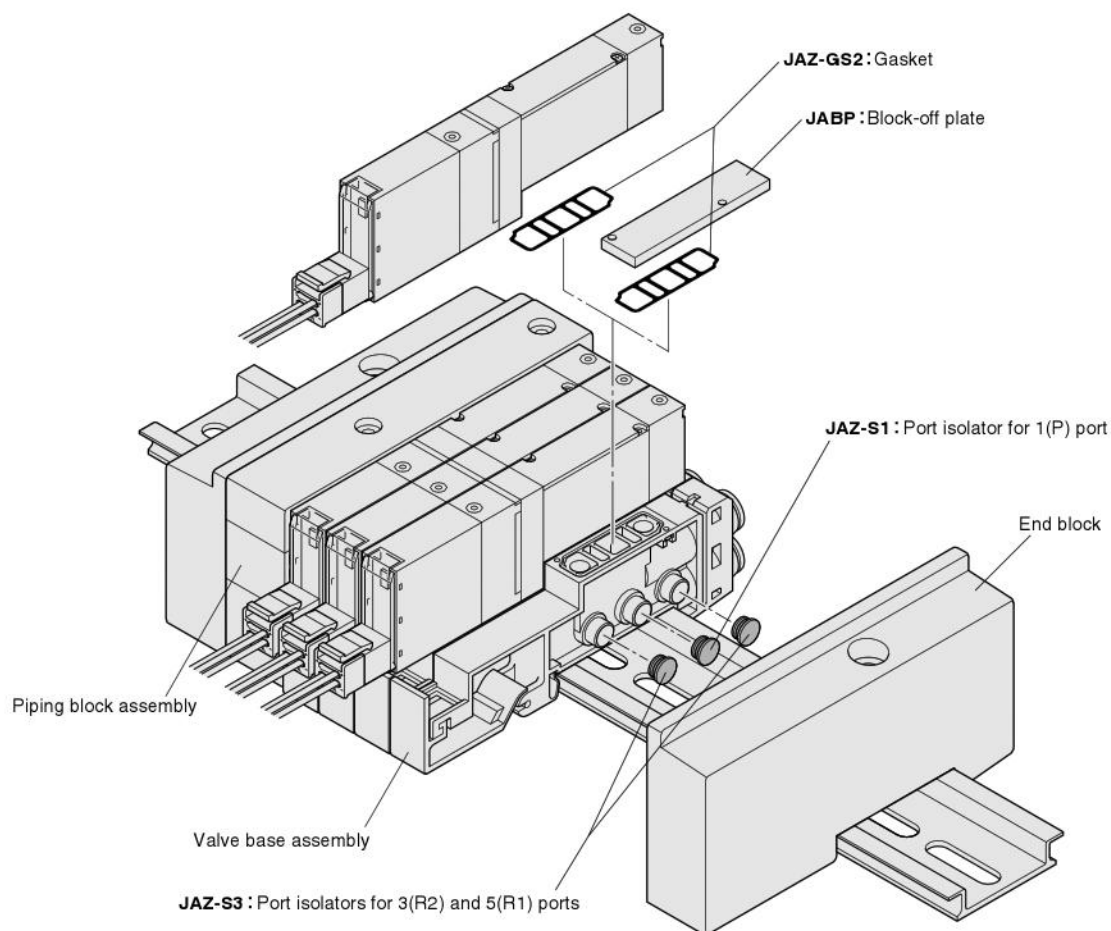
※For details, see p.178.

### Valve base assembly (valve base and gasket)

JAZ -

#### Piping specification

**VJ4** : With  $\phi$  4 fitting  
**VJ6** : With  $\phi$  6 fitting  
**VJ1/8** : With 1/8 inch fitting  
**VJ1/4** : With 1/4 inch fitting



#### Manifold Order Code Example (6 units of JA series)

##### JAM6NJ-JR

stn.1~2 JA10A5-PS-J4-D4

stn.3~5 JA10A6-PS-J6-D4

stn.6 JABP-J6

Note: This order code example has no relation to the illustration above.

#### Precautions for Order Codes

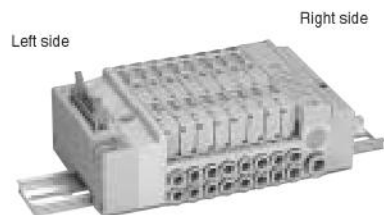
##### ● Order for valves only

Place orders by "Single Valve Unit Order Codes" on p.189.

For wiring specifications, **Blank** (plug-in type valve) cannot be selected.

For common terminal wiring connections, order separately the common connector assemblies listed to the left.

# Split Manifold Plug-in Type Order Codes



## Piping block specification (air supply and exhaust)

- JR :1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting right-side mounting
- JL :1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting left-side mounting
- JD :1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting both-side mounting
- JR1/4 :1(P) and 3, 5(R) ports 1/4 inch fitting right-side mounting
- JL1/4 :1(P) and 3, 5(R) ports 1/4 inch fitting left-side mounting
- JD1/4 :1(P) and 3, 5(R) ports 1/4 inch fitting both-side mounting
- JR3/8 :1(P) and 3, 5(R) ports 3/8 inch fitting right-side mounting
- JL3/8 :1(P) and 3, 5(R) ports 3/8 inch fitting left-side mounting
- JD3/8 :1(P) and 3, 5(R) ports 3/8 inch fitting both-side mounting



The photo shows the -JR type.

- MR :1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML :1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD :1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR1/4 :1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML1/4 :1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD1/4 :1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR3/8 :1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML3/8 :1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD3/8 :1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler both-side mounting



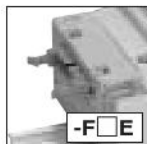
The photo shows the -MR type.

## Wiring specification (wiring block)

Flat cable connector (with socket and strain relief)



- F200 : 20-pin (connector on upper side)
- F201 : 20-pin (connector on upper side)
- F260 : 26-pin (connector on upper side)



- F200E : 20-pin (connector on side)
- F201E : 20-pin (connector on side)
- F260E : 26-pin (connector on side)

D-sub connector



- D250 : 25-pin (connector on upper side) (M2.6 mounting screws)
- D251 : 25-pin (connector on upper side) (M2.6 mounting screws)
- D250U : 25-pin (connector on upper side) (4-40UNC mounting screws)
- D251U : 25-pin (connector on upper side) (4-40UNC mounting screws)

※ For details of wiring specification, see p.205.

D-sub connector



- D250E : 25-pin (connector on side) (M2.6 mounting screws)
- D251E : 25-pin (connector on side) (M2.6 mounting screws)
- D250EU : 25-pin (connector on side) (4-40UNC mounting screws)
- D251EU : 25-pin (connector on side) (4-40UNC mounting screws)



- D370U : 37-pin (connector on upper side) (4-40UNC mounting screws)

## Wiring connection specification

### Blank

Packed wiring : Wiring is made in accordance with the mounted valve specifications.<sup>Note</sup>

### -D

Double wiring : Wiring is always the one for the double solenoid, regardless of the specifications of the mounted valve.<sup>Note</sup>

Note: The wiring for the block-off plate is normally the one for the double solenoid. However, when -S is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

### Pre-wired common

#### Blank

Positive common

#### -CM

Negative common

### Voltage

#### -D4

DC24V

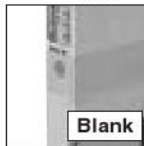
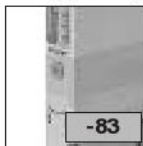
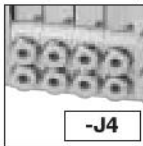
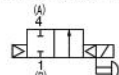
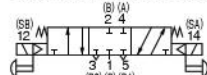
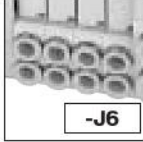
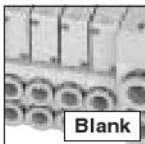
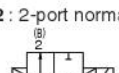
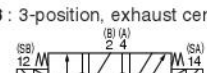
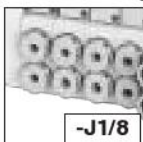
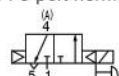
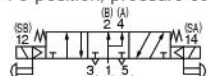
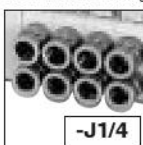
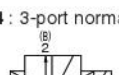
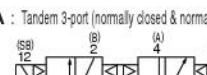
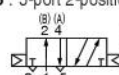
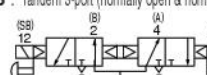
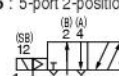
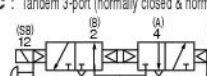
#### -D5

DC12V

Note4

| Model          | Valve units               |    | Piping block specification<br>(air supply and exhaust)                                                                              | Wiring specification                                                                                                                            | Wiring connection<br>specification | pre-wired common | Voltage                     |
|----------------|---------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------|-----------------------------|
| Manifold model |                           |    |                                                                                                                                     |                                                                                                                                                 |                                    |                  |                             |
| JAM            | 2<br>:<br>:<br>□<br>Note1 | PJ | -JR -MR<br>-JL -ML<br>-JD -MD<br>-JR1/4 -MR1/4<br>-JL1/4 -ML1/4<br>-JD1/4 -MD1/4<br>-JR3/8 -MR3/8<br>-JL3/8 -ML3/8<br>-JD3/8 -MD3/8 | -F200<br>-F201<br>-F260<br>-F200E<br>-F201E<br>-F260E<br>-D250<br>-D251<br>-D250U<br>-D251U<br>-D250E<br>-D251E<br>-D250EU<br>-D251EU<br>-D370U | Blank<br>-D                        | Blank<br>-CM     | -D4<br>-D5 <sup>Note4</sup> |

Notes: 1. For the maximum number of units, see the table for the maximum number of valve units by wiring specification, on p.199.

| Model                                                                                                                             | Manual override                                                                                       |                                                                                                                                                    | Manifold fitting specification                                                                                         | Back pressure prevention valve                                                                                         |                                                   | Block-off plate wiring specification                                                                                                                                                 |                                                                                           |                                      |         |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------|---------|
| <b>JA10</b><br>Standard type                                                                                                      | Non-locking type<br> | Locking protruding type<br>                                       | With $\phi 4$ [0.157in.] fittings<br> | <b>Blank</b><br>Without back pressure prevention valve                                                                 | <b>-E2</b><br>With back pressure prevention valve | <b>Blank</b><br>Wiring is always the one for the double solenoid.                                                                                                                    |                                                                                           |                                      |         |
| <b>JA10L</b><br>Low current type                                                                                                  |                                                                                                       |                                                                                                                                                    |                                                                                                                        |                                                                                                                        |                                                   | <b>-S</b><br>When <b>-S</b> is designated, the block-off plate wiring of the station is changed to the single solenoid.                                                              |                                                                                           |                                      |         |
| <b>Valve specification</b>                                                                                                        |                                                                                                       |                                                                                                                                                    |                                                                                                                        |                                                                                                                        |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| <b>A1</b> : 2-port normally closed<br>           |                                                                                                       | <b>A7</b> : 3-position, closed center<br>                         |                                                                                                                        | With $\phi 6$ [0.236in.] fittings<br> |                                                   | <b>Individual air supply spacer</b><br>Without spacer<br>                                         |                                                                                           |                                      |         |
| <b>A2</b> : 2-port normally open<br>             |                                                                                                       | <b>A8</b> : 3-position, exhaust center<br>                        |                                                                                                                        | With 1/8 inch fittings<br>            |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| <b>A3</b> : 3-port normally closed<br>           |                                                                                                       | <b>A9</b> : 3-position, pressure center<br>                       |                                                                                                                        | With 1/4 inch fittings<br>            |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| <b>A4</b> : 3-port normally open<br>             |                                                                                                       | <b>AA</b> : Tandem 3-port (normally closed & normally closed)<br> |                                                                                                                        |                                                                                                                        |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| <b>A5</b> : 5-port 2-position, single sol.<br>  |                                                                                                       | <b>AB</b> : Tandem 3-port (normally open & normally open)<br>    |                                                                                                                        |                                                                                                                        |                                                   | <b>Port Isolator</b><br><b>Blank</b> : Without port isolator<br><b>-S1</b> : For 1(P) port<br><b>-S3</b> : For 3(R2) and 5(R1) ports<br><b>-SA</b> : For 1(P), 3(R2) and 5(R1) ports |                                                                                           |                                      |         |
| <b>A6</b> : 5-port 2-position, double sol.<br> |                                                                                                       | <b>AC</b> : Tandem 3-port (normally closed & normally open)<br> |                                                                                                                        |                                                                                                                        |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| Station                                                                                                                           | Model                                                                                                 | Valve specification                                                                                                                                | Manual override                                                                                                        | Manifold fitting specification                                                                                         | Back pressure prevention valve                    | Individual air supply spacer                                                                                                                                                         | Port Isolator                                                                             | Block-off plate wiring specification | Voltage |
| Mounting valve model                                                                                                              |                                                                                                       |                                                                                                                                                    |                                                                                                                        |                                                                                                                        |                                                   |                                                                                                                                                                                      |                                                                                           |                                      |         |
| stn. 1<br>:<br>stn. <input type="checkbox"/><br><small>Note2</small>                                                              | JA10<br>JA10L                                                                                         | A1<br>A2<br>A3<br>A4<br>A5<br>A6<br>A7<br>A8<br>A9<br>AA<br>AB<br>AC                                                                               | Blank<br>-83                                                                                                           | -J4<br>-J6<br>-J1/8<br>-J1/4                                                                                           | Blank<br>-E2                                      | Blank<br>-PPM                                                                                                                                                                        | Blank<br>-S1 <small>Note3</small><br>-S3 <small>Note3</small><br>-SA <small>Note3</small> | -D4<br>-D5 <small>Note4</small>      |         |
|                                                                                                                                   |                                                                                                       | JABPP (for block-off plate)                                                                                                                        |                                                                                                                        |                                                                                                                        |                                                   |                                                                                                                                                                                      |                                                                                           | Blank<br>-S                          |         |

Notes: 2. Valve mounting location is from the left, with the solenoid on top, and the 4(A) and 2(B) ports in front.

3. Port isolators can be installed only when piping blocks are mounted on both sides. In addition, only one location of each port isolator can be installed in one manifold for **-SA**, or one each port isolator for **-S1** and **-S3**, for a total of two locations. When shipping, the designated port isolators are installed between the designated station and the station to its immediate left (the next smaller stn. No.).

4. **-D5** (DC12V) is not available in the low current type.

## Additional Parts Order Codes for Split Manifold Plug-in Type

### Manifold parts

JAZ -

#### Parts description

**GS2** : Gasket (for split type)  
**E2** : Back pressure prevention valve (2 pcs. for split type, and 1 pc. gasket)  
**J4** : 2 pcs.  $\phi$  4 fittings, and 1 pc. stopper pin  
**J6** : 2 pcs.  $\phi$  6 fittings, and 1 pc. stopper pin  
**J8** : 2 pcs.  $\phi$  8 fittings, and 1 pc. stopper pin  
**J1/8** : 2 pcs. 1/8 inch fittings, and 1 pc. stopper pin  
**J1/4** : 2 pcs. 1/4 inch fittings, and 1 pc. stopper pin  
**J1/4P** : 2 pcs. 1/4 inch fittings for 1(P) and 3, 5(R) ports, and 1 pc. stopper pin  
**J3/8** : 2 pcs. 3/8 inch fittings, and 1 pc. stopper pin  
**M** : Muffler for piping block  
**PPM** : Individual air supply spacer (spacer body, gasket, 2 mounting screws, and connector Ass'y)  
**S1** : Port isolator for 1(P) port  
**S3** : Port isolator for 3(R2) and 5(R1) ports  
**SA** : Port isolator for 1(P) port, 3(R2) and 5(R1) ports

### Block-off plate (block-off plate, 2 mounting screws, and plug)

JABPP

### Piping block assembly

JAZ -

#### Piping specification

**PJ** : 1(P) and 3, 5(R) ports  $\phi$  8 fittings  
**PJ1/4** : 1(P) and 3, 5(R) ports 1/4 inch fittings  
**PJ3/8** : 1(P) and 3, 5(R) ports 3/8 inch fittings  
**PM** : 1(P) port  $\phi$  8 fitting, 3, 5(R) ports built-in mufflers  
**PM1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in mufflers  
**PM3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in mufflers

### Wiring block assembly (one set)

JAZ -  -  -

**Voltage**  
**D4** : DC24V  
**D5** : DC12V

**Pre-wired common**  
**Blank** : Positive common  
**CM** : Negative common

#### Wiring specification

**F200** : Flat cable connector  
**F201** : Flat cable connector  
**F260** : Flat cable connector  
**D250** : D-sub connector with M2.6 mounting screws  
**D251** : D-sub connector with M2.6 mounting screws  
**D250U** : D-sub connector with 4-40 UNC mounting screws  
**D251U** : D-sub connector with 4-40 UNC mounting screws  
**D370U** : D-sub connector with 4-40 UNC mounting screws

### End blocks (one set of left and right)

JAZ - EP

### Valve base assembly (valve base, gasket, lead wire and plug-in connector)

JAZ -  -  -

**Pre-wired common**  
**Blank** : Positive common  
**CM** : Negative common

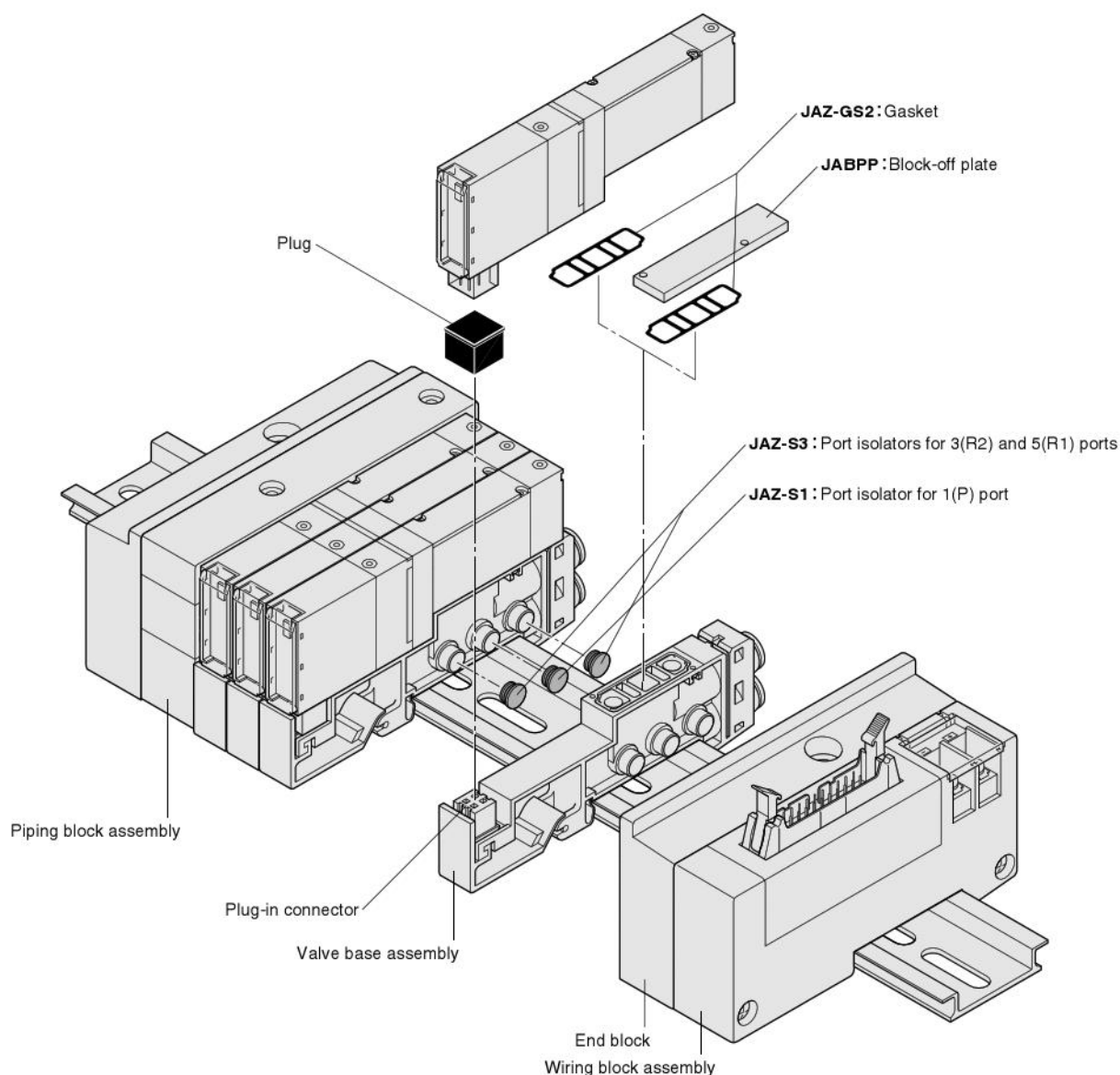
**Wiring specification**  
**D** : For D-sub connector  
**F** : For flat cable connector

#### Piping specification

**VJ4** : With  $\phi$  4 fitting  
**VJ6** : With  $\phi$  6 fitting  
**VJ1/8** : With 1/8 inch fitting  
**VJ1/4** : With 1/4 inch fitting

■ Table for maximum number of valve units by wiring specification

|                                                         |              | Maximum number of units                                                                                                                                                                                                |                             |
|---------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|                                                         |              | Wiring specification                                                                                                                                                                                                   |                             |
| Wiring specification                                    | Max. outputs | Packed wiring ( <b>Blank</b> )                                                                                                                                                                                         | Double wiring ( <b>-D</b> ) |
| <b>F200</b> <input type="text"/> Flat cable (20P)       | 16           | Varies depending on the mounted number of single solenoids, double solenoids and block-off plates.<br>The number of controllable solenoids should be the maximum number of outputs or less.<br>Max. 20 units possible. | 8 units                     |
| <b>F201</b> <input type="text"/> Flat cable (20P)       | 16           |                                                                                                                                                                                                                        | 8 units                     |
| <b>F260</b> <input type="text"/> Flat cable (26P)       | 20           |                                                                                                                                                                                                                        | 10 units                    |
| <b>D250</b> <input type="text"/> D-sub connector (25P)  | 16           |                                                                                                                                                                                                                        | 8 units                     |
| <b>D251</b> <input type="text"/> D-sub connector (25P)  | 20           |                                                                                                                                                                                                                        | 10 units                    |
| <b>D370U</b> <input type="text"/> D-sub connector (37P) | 32           |                                                                                                                                                                                                                        | 16 units                    |



### Manifold Order Code Example (8 units of JA series)

#### JAM8PJ-JR-F201-D4

stn.1~4 JA10A5-J4-D4

stn.5~7 JA10A6-J6-D4

stn.8 JABPP-J6

Note: This order code example has no relation to the illustration above.

### Precautions for Order Codes

#### ● Order for valves only

Place orders by "Single Valve Unit Order Codes" on p.189.

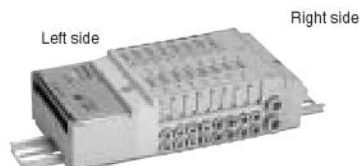
The wiring specification, however, is compatible with the **Blank** (plug-in type) only.

#### ● Wiring connection specification

**Blank** (packed wiring) : Wiring is made in accordance with the mounted valve specifications.

**-D** (double wiring) : Wiring is always for the double solenoid, regardless of the mounted valve specifications.

Note: The wiring for the block-off plate is normally the one for the double solenoid. However, when **-S** is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.



## Piping block specification (air supply and exhaust)

- JR : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting right-side mounting
- JL : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting left-side mounting
- JD : 1(P) and 3, 5(R) ports  $\phi$  8 [0.315in.] fitting both-side mounting
- JR1/4 : 1(P) and 3, 5(R) ports 1/4 inch fitting right-side mounting
- JL1/4 : 1(P) and 3, 5(R) ports 1/4 inch fitting left-side mounting
- JD1/4 : 1(P) and 3, 5(R) ports 1/4 inch fitting both-side mounting
- JR3/8 : 1(P) and 3, 5(R) ports 3/8 inch fitting right-side mounting
- JL3/8 : 1(P) and 3, 5(R) ports 3/8 inch fitting left-side mounting
- JD3/8 : 1(P) and 3, 5(R) ports 3/8 inch fitting both-side mounting



The photo shows the -JR type.

- MR : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD : 1(P) port  $\phi$  8 [0.315in.] fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR1/4 : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML1/4 : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD1/4 : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in muffler both-side mounting
- MR3/8 : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler right-side mounting
- ML3/8 : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler left-side mounting
- MD3/8 : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in muffler both-side mounting



The photo shows the -MR type.

## Serial transmission block specification

※ These are serial transmission block specifications compatible with each system.



For details, see p.185.

- A1 : For Omron CompoBus/S (16 outputs)
- A2 : For Omron CompoBus/S (8 outputs)
- B1 : For Mitsubishi Electric CC-Link
- D1 : For DeviceNet (CompoBus/D)

## Wiring connection specification

### Blank

**Packed wiring** : Wiring is made in accordance with the mounted valve specifications.<sup>Note</sup>

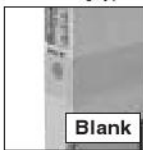
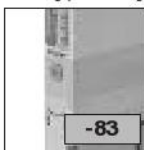
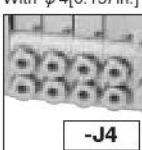
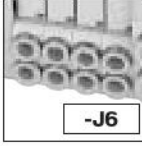
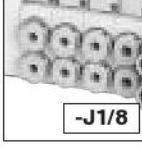
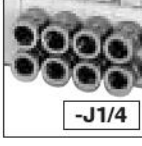
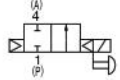
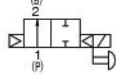
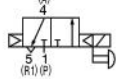
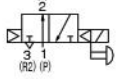
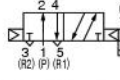
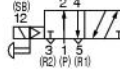
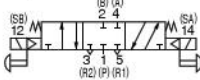
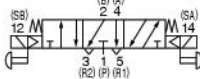
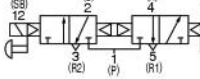
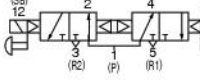
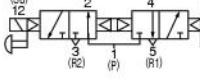
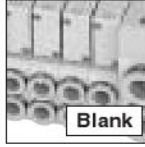
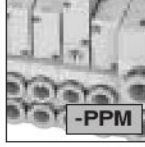
### -D

**Double wiring** : Wiring is always the one for the double solenoid, regardless of the specifications of the mounted valve.<sup>Note</sup>

**Note**: The wiring for the block-off plate is normally the one for the double solenoid. However, when -S is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

| Model          | Valve units                |    | Piping block specification<br>(air supply and exhaust)                                                                              | Serial transmission block<br>specification | Wiring connection<br>specification |
|----------------|----------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------|
| Manifold model |                            |    |                                                                                                                                     |                                            |                                    |
| JAM            | 2<br>:<br>:<br>□<br>Note 1 | SJ | -JR -MR<br>-JL -ML<br>-JD -MD<br>-JR1/4 -MR1/4<br>-JL1/4 -ML1/4<br>-JD1/4 -MD1/4<br>-JR3/8 -MR3/8<br>-JL3/8 -ML3/8<br>-JD3/8 -MD3/8 | -A1<br>-A2<br>-B1<br>-D1                   | Blank<br>-D                        |

Notes: 1. For the maximum number of units, see the table for the maximum number of valve units by serial transmission block specification, on p.203.

| Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Manual override                                                                                                                                                                                                                                                                          | Manifold fitting specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Back pressure prevention valve                                                                                                   | Block-off plate wiring specification                                                                                                                                                                       |                                |                              |                                                                                           |                                      |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------|---------|
| <div>JA10</div> <div>Standard type</div> <div>JA10L</div> <div>Low current type</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <div>Non-locking type</div> <div></div> <div>Blank</div> <div>Locking protruding type</div> <div></div> <div>-83</div> | <div>With <math>\phi 4[0.157\text{in.}]</math> fittings</div> <div></div> <div>-J4</div> <div>With <math>\phi 6[0.236\text{in.}]</math> fittings</div> <div></div> <div>-J6</div> <div>With 1/8 inch fittings</div> <div></div> <div>-J1/8</div> <div>With 1/4 inch fittings</div> <div></div> <div>-J1/4</div> | <div>Blank</div> <div>Without back pressure prevention valve</div> <div>-E2</div> <div>With back pressure prevention valve</div> | <div>Blank</div> <div>Wiring is always the one for the double solenoid.</div> <div>-S</div> <div>When -S is designated, the block-off plate wiring of the station is changed to the single solenoid.</div> |                                |                              |                                                                                           |                                      |         |
| Valve specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| <div>A1 : 2-port normally closed</div> <div></div> <div>A2 : 2-port normally open</div> <div></div> <div>A3 : 3-port normally closed</div> <div></div> <div>A4 : 3-port normally open</div> <div></div> <div>A5 : 5-port 2-position, single sol.</div> <div></div> <div>A6 : 5-port 2-position, double sol.</div> <div></div> <div>A7 : 3-position, closed center</div> <div></div> <div>A8 : 3-position, exhaust center</div> <div></div> <div>A9 : 3-position, pressure center</div> <div></div> <div>AA : Tandem 3-port (normally closed &amp; normally closed)</div> <div></div> <div>AB : Tandem 3-port (normally open &amp; normally open)</div> <div></div> <div>AC : Tandem 3-port (normally closed &amp; normally open)</div> <div></div> |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| Individual air supply spacer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| <div>Without spacer</div> <div></div> <div>Blank</div> <div>With individual air supply spacer</div> <div></div> <div>-PPM</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| Port Isolator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| <div>Blank : Without port isolator</div> <div>-S1 : For 1(P) port</div> <div>-S3 : For 3(R2) and 5(R1) ports</div> <div>-SA : For 1(P), 3(R2) and 5(R1)ports</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| <div>-D4</div> <div>DC24V</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| Station                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Model                                                                                                                                                                                                                                                                                    | Valve specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Manual override                                                                                                                  | Manifold fitting specification                                                                                                                                                                             | Back pressure prevention valve | Individual air supply spacer | Port Isolator                                                                             | Block-off plate wiring specification | Voltage |
| Mounting valve model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
| stn. 1<br>⋮<br>stn. <input type="checkbox"/><br><small>Note2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | JA10<br>JA10L                                                                                                                                                                                                                                                                            | A1<br>A2<br>A3<br>A4<br>A5<br>A6<br>A7<br>A8<br>A9<br>AA<br>AB<br>AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Blank<br>-83                                                                                                                     | -J4<br>-J6<br>-J1/8<br>-J1/4                                                                                                                                                                               | Blank<br>-E2                   | Blank<br>-PPM                | Blank<br>-S1 <small>Note3</small><br>-S3 <small>Note3</small><br>-SA <small>Note3</small> | -D4                                  |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           |                                      |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                          | JABPP (for block-off plate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                  |                                                                                                                                                                                                            |                                |                              |                                                                                           | Blank<br>-S                          |         |

Notes: 2. Valve mounting location is from the left, with the solenoid on top, and the 4(A) and 2(B) ports in front.

3. Port isolators can be installed only when piping blocks are mounted on both sides. In addition, only one location of each port isolator can be installed in one manifold for -SA, or one each port isolator for -S1 and -S3, for a total of two locations. When shipping, the designated port isolators are installed between the designated station and the station to its immediate left (the next smaller stn. No.).

## Additional Parts Order Codes for Serial Transmission Type

### Manifold parts

JAZ -

#### Parts description

**GS2** : Gasket (for split type)  
**E2** : Back pressure prevention valve (2 pcs. for split type, and 1 pc. gasket)  
**J4** : 2 pcs.  $\phi$  4 fittings, and 1 pc. stopper pin  
**J6** : 2 pcs.  $\phi$  6 fittings, and 1 pc. stopper pin  
**J8** : 2 pcs.  $\phi$  8 fittings, and 1 pc. stopper pin  
**J1/8** : 2 pcs. 1/8 inch fittings, and 1 pc. stopper pin  
**J1/4** : 2 pcs. 1/4 inch fittings, and 1 pc. stopper pin  
**J1/4P** : 2 pcs. 1/4 inch fittings for 1(P) and 3, 5(R) ports, and 1 pc. stopper pin  
**J3/8** : 2 pcs. 3/8 inch fittings, and 1 pc. stopper pin  
**M** : Muffler for piping block  
**PPM** : Individual air supply spacer (spacer body, gasket, 2 mounting screws, and connector Ass'y)  
**S1** : Port isolator for 1(P) port  
**S3** : Port isolator for (R2) and 5(R1) ports  
**SA** : Port isolator for 1(P) port, 3(R2) and 5(R1) ports

### Block-off plate (block-off plate, 2 mounting screws, and plug)

JABPP

### End blocks (one set of left and right)

JAZ - EP

### Valve base assembly (valve base, gasket, lead wire and plug-in connector)

JAZ -  - F

#### Piping specification

**VJ4** : With  $\phi$  4 fitting  
**VJ6** : With  $\phi$  6 fitting  
**VJ1/8** : With 1/8 inch fitting  
**VJ1/4** : With 1/4 inch fitting

### Serial transmission block (single unit)

YS5

#### Options

**Blank**: For replacement of JA Series serial transmission block  
**U** : With flat cable (general purpose type) <sup>Note</sup> compatible with F201  
 Note: For general purpose type, see p.185.

#### Serial transmission block specification

**A1**: For Omron CompoBus/S (16 outputs)  
**A2**: For Omron CompoBus/S (8 outputs)  
**B1**: For Mitsubishi Electric CC-Link  
**D1**: For DeviceNet (CompoBus/D)

### Piping block assembly

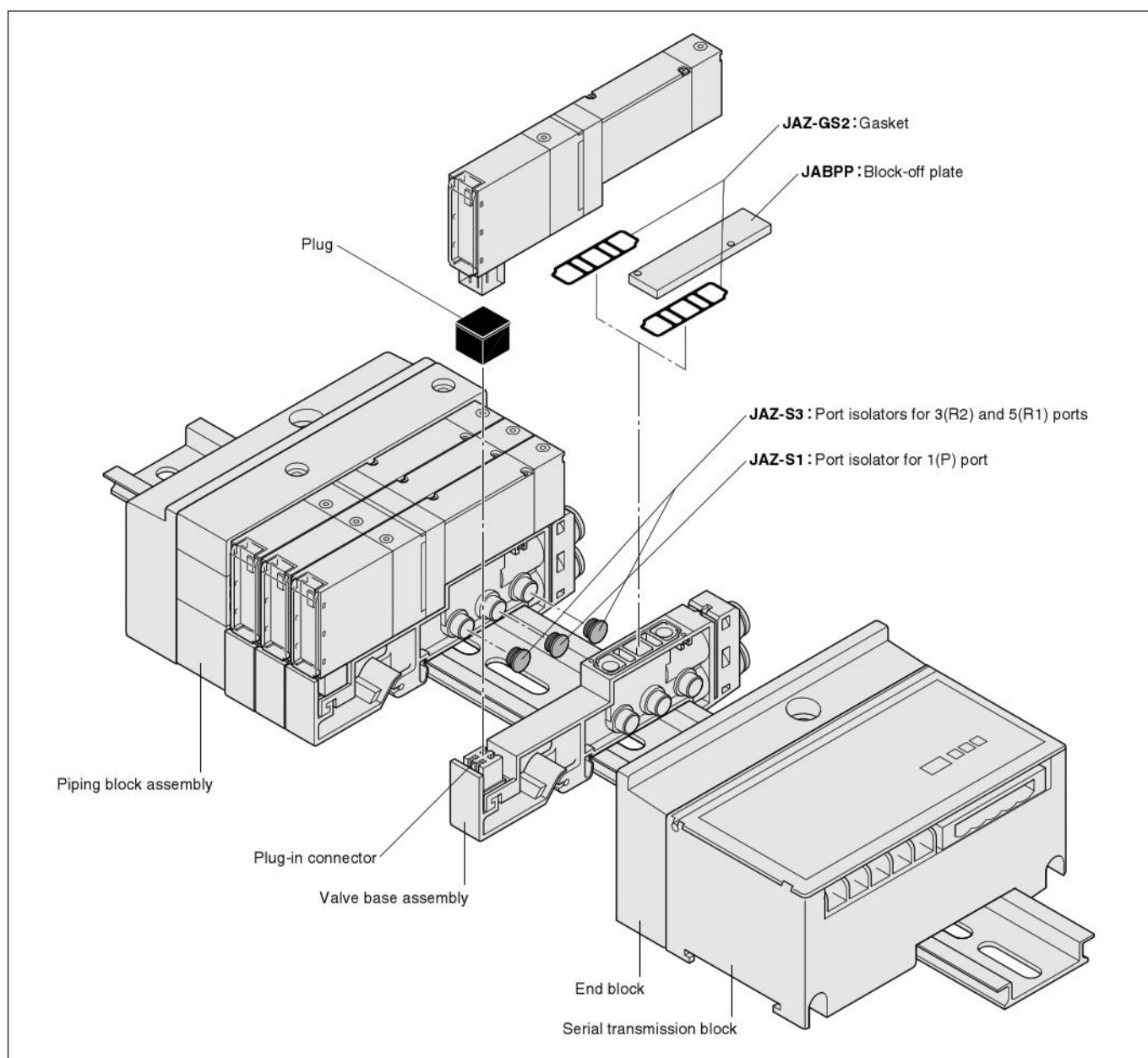
JAZ -

#### Piping specification

**PJ** : 1(P) and 3, 5(R) ports  $\phi$  8 fittings  
**PJ1/4** : 1(P) and 3, 5(R) ports 1/4 inch fittings  
**PJ3/8** : 1(P) and 3, 5(R) ports 3/8 inch fittings  
**PM** : 1(P) port  $\phi$  8 fitting, 3, 5(R) ports built-in mufflers  
**PM1/4** : 1(P) port 1/4 inch fitting, 3, 5(R) ports built-in mufflers  
**PM3/8** : 1(P) port 3/8 inch fitting, 3, 5(R) ports built-in mufflers

■ Table for maximum number of valve units by serial transmission block specification

|                                                |              | Maximum number of units                                                                                                                                                                  |                             |
|------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|                                                |              | Wiring specification                                                                                                                                                                     |                             |
| Transmission block specification               | Max. outputs | Packed wiring ( <b>Blank</b> )                                                                                                                                                           | Double wiring ( <b>-D</b> ) |
| <b>-A1</b> : For Omron CompoBus/S (16 outputs) | 16           | Varies depending on the mounted number of single solenoids, double solenoids and block-off plates. The number of controllable solenoids should be the maximum number of outputs or less. | 8 units                     |
| <b>-A2</b> : For Omron CompoBus/S (8 outputs)  | 8            |                                                                                                                                                                                          | 4 units                     |
| <b>-B1</b> : For Mitsubishi Electric CC-Link   | 16           |                                                                                                                                                                                          | 8 units                     |
| <b>-D1</b> : For DeviceNet (CompoBus/D)        | 16           |                                                                                                                                                                                          | 8 units                     |



### Manifold Order Code Example (8 units of JA series)

#### JAM8SJ-JR-A1

stn.1~4 JA10A5-J4-D4

stn.5~7 JA10A6-J6-D4

stn.8 JABPP-J6

Note: This order code example has no relation to the illustration above.

### Precautions for Order Codes

#### ● Order for valves only

Place orders by "Single Valve Unit Order Codes" on p.189.

The wiring specification, however, is compatible with the **Blank** (plug-in type) only.

#### ● Wiring connection specification

**Blank** (packed wiring) : Wiring is made in accordance with the mounted valve specifications.

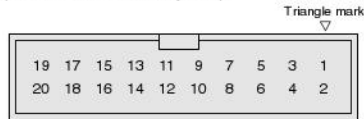
**-D** (double wiring) : Wiring is always for the double solenoid, regardless of the mounted valve specifications.

Note: The wiring for the block-off plate is normally the one for the double solenoid. However, when **-S** is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

## Split Manifold Plug-in Type Pin Locations by Wiring Specification (TOP VIEW)

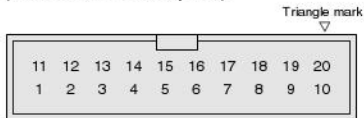
### Flat cable connector (20-pin)

#### ●-F200□ (Maximum 16 outputs)



1~16 : Control pin  
17, 18 : (−) pin (Short-circuited within the wiring block)  
19, 20 : (+) pin (Short-circuited within the wiring block)

#### ●-F201□ (Maximum 16 outputs)



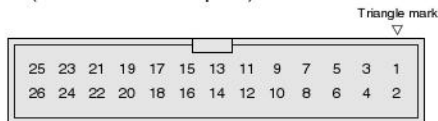
1~8 : Control pin  
11~18 : Control pin  
9, 19 : (−) pin (Short-circuited within the wiring block)  
10, 20 : (+) pin (Short-circuited within the wiring block)

**Caution:** The above pin numbers are assigned for the sake of convenience. Use the ▽ mark as a reference.

**Remark :** The -F201 corresponds Koganei's pin locations for the PC wiring system (wire-saving unit). For details, see Catalog No.V3124 PC Wiring Systems.

### Flat cable connector (26-pin)

#### ●-F260□ (Maximum 20 outputs)

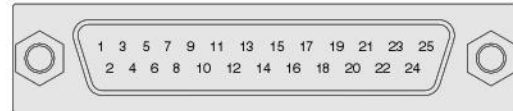


1~20 : Control pin  
23, 24 : (−) pin (Short-circuited within the wiring block)  
25, 26 : (+) pin (Short-circuited within the wiring block)

※For the relationship between the pin No. (terminal No.) and the corresponding solenoid, see p.208~211.

### D-sub connector (25-pin)

#### ●-D250□ (Maximum 16 outputs)



1~16 : Control pin  
20, 21, 22 : (−) pin (Short-circuited within the wiring block)  
23, 24, 25 : (+) pin (Short-circuited within the wiring block)

**Caution:** For the sake of convenience, the connector pins are assigned based on the solenoid valve wiring sequence, which differs from the pin locations and pin numbers (marked) prescribed in JIS-X5101 for the data circuit-terminating equipment (DCE).

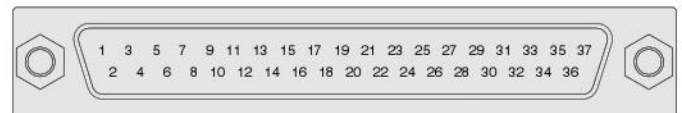
#### ●-D251□ Pin locations based on JIS (Maximum 20 outputs)



1~10, 14~23 : Control pin  
12, 13 : (−) pin (Short-circuited within the wiring block)  
24, 25 : (+) pin (Short-circuited within the wiring block)

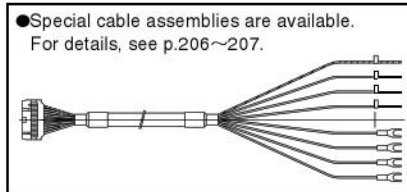
### D-sub connector (37-pin)

#### ●-D370U (Maximum 32 outputs)



1~32 : Control pin  
34, 35 : Common pin (For negative common)  
36, 37 : Common pin (For positive common)

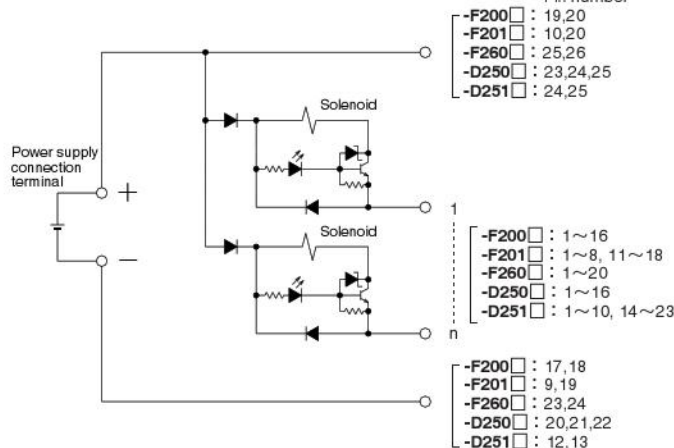
**Caution:** For the sake of convenience, the connector pins are assigned based on the solenoid valve wiring sequence, which differs from the pin locations and pin numbers (marked) prescribed in JIS-X5103 for the data circuit-terminating equipment (DCE).



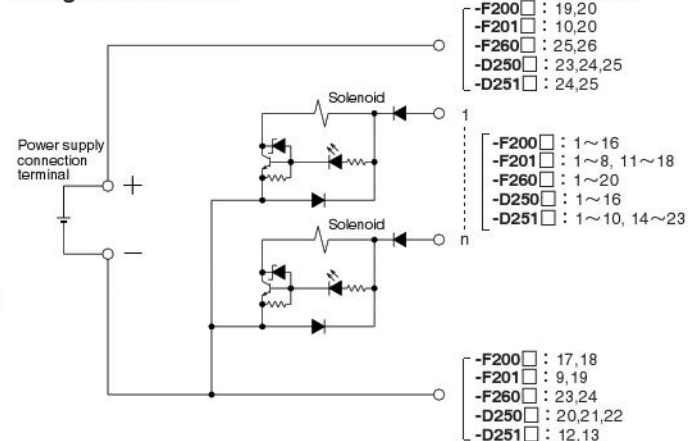
## Detailed Diagram of Wiring System

### Flat cable connector and D-sub connector (DC24V, DC12V)

#### ●Positive common



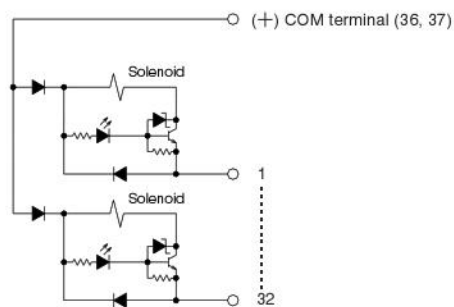
#### ●Negative common



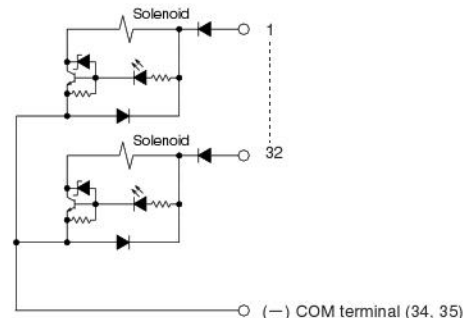
## Detailed Diagram of Wiring System

### D-sub connector -D370U

#### ●Positive common



#### ●Negative common



## JA Series Split Manifold Plug-in Type Cable Assemblies by Wiring Specification mm [In.]

Special cable assemblies are individually available for every wiring specification.

### ■Order Code

FMA -  -  -

#### Types of special cables

- 200W : -F200□ special cable assembly
- 201W : -F201□ special cable assembly
- 260W : -F260□ special cable assembly
- 250W : -D250□ special cable assembly
- 251W : -D251□ special cable assembly

#### Lead wire end processing

Blank: w/o processed lead wire end  
(with special label/No. indication)

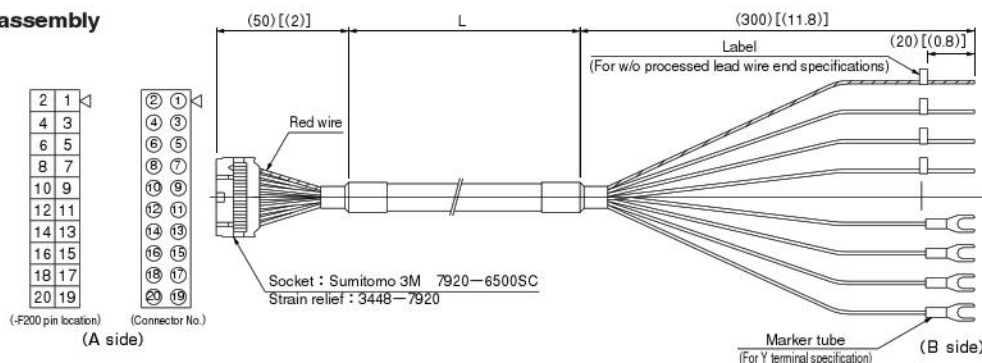
Y : Y terminal (M3.5) (with marker tube/No. indication)

Cable length (m): 0.5~5.0 [20~197in.]  
(Enter with 0.5m [20in.] pitch).  
\*Used cable: UL STYLE NO.20266 150V 80°C  
AWG28 (7/0.127 [cables/mm])

**Note:** Always perform wiring correctly by confirming the pin locations, connector numbers, label numbers, marker tube numbers, etc.

### ●-F200□ special cable assembly

FMA-200W-□-□

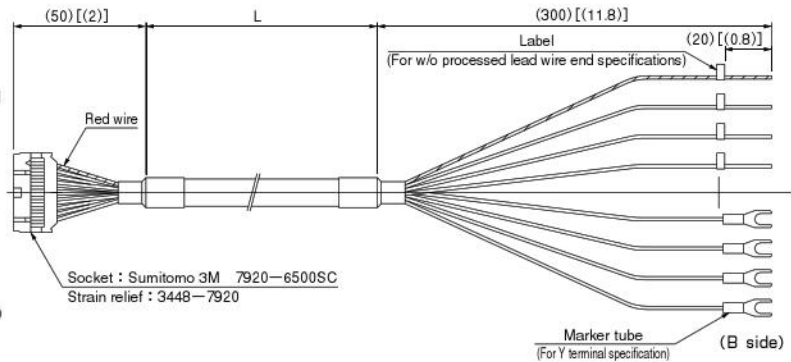
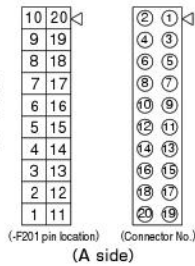


| A side | -F200 pin location        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------|---------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
|        | Connector No.             | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩  | ⑪  | ⑫  | ⑬  | ⑭  | ⑮  | ⑯  | ⑰  | ⑱  | ⑲  | ⑲  |
| B side | Label and marker tube No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | —  | —  | +  | +  |

●-F201 special cable assembly

FMA-201W-□-□

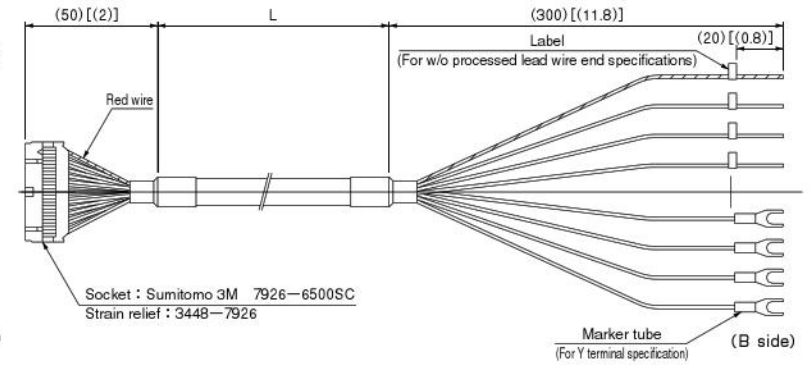
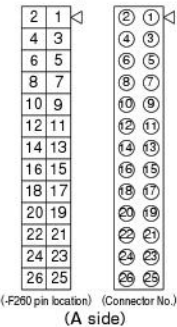
Note: Caution should be exercised that there are differences between the pin location numbers and connector numbers.



|        |                           |    |    |    |    |    |    |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|--------|---------------------------|----|----|----|----|----|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| A side | -F201 pin location        | 1  | 2  | 3  | 4  | 5  | 6  | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|        | Connector No.             | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2  | 19 | 17 | 15 | 13 | 11 | 9  | 7  | 5  | 3  | 1  |
| B side | Label and marker tube No. | 1  | 2  | 3  | 4  | 5  | 6  | 7 | 8 | — | +  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | —  | +  |

●-F260 special cable assembly

FMA-260W-□-□

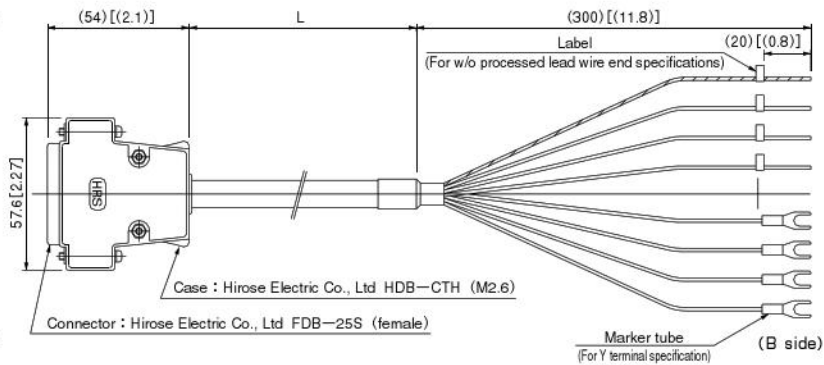
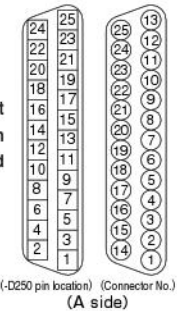


|        |                           |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------|---------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| A side | -F260 pin location        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|        | Connector No.             | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩  | ⑪  | ⑫  | ⑬  | ⑭  | ⑮  | ⑯  | ⑰  | ⑱  | ⑲  | ⑳  | ㉑  | ㉒  | ㉓  | ㉔  | ㉕  | ㉖  |
| B side | Label and marker tube No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | —  | —  | —  | —  | +  | +  |

●-D250, -D250E special cable assembly

FMA-250W-□-□

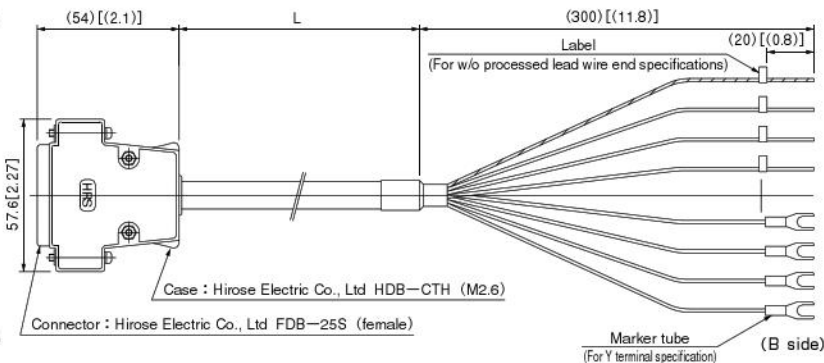
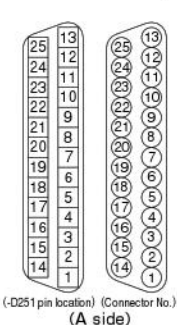
Note: Caution should be exercised that there are differences between the pin location numbers and connector numbers.



|        |                           |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------|---------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| A side | -D250 pin location        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|        | Connector No.             | ① | ⑭ | ② | ⑮ | ③ | ⑯ | ④ | ⑰ | ⑤ | ⑱  | ⑥  | ⑲  | ⑦  | ⑳  | ⑧  | ㉑  | ⑨  | ㉒  | ⑩  | ㉓  | ⑪  | ㉔  | ⑫  | ㉕  | ⑬  |
| B side | Label and marker tube No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | —  | —  | —  | —  | —  | —  | —  | +  | +  |

●-D251, -D251E special cable assembly

FMA-251W-□-□



|        |                           |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------|---------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| A side | -D251 pin location        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|        | Connector No.             | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩  | ⑪  | ⑫  | ⑬  | ⑭  | ⑮  | ⑯  | ⑰  | ⑱  | ⑲  | ㉑  | ㉒  | ㉓  | ㉔  | ㉕  |    |
| B side | Label and marker tube No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | —  | —  | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | +  | +  |    |

## Pin Numbers and Corresponding Solenoids (For Split Manifold Plug-in Type)

The examples below show the relationship between the split manifold pin numbers and the corresponding solenoids.  
The installation examples show the maximum numbers of outputs in use.

### Flat cable connector (20-pin)

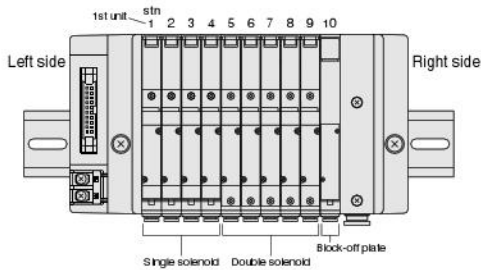
Wiring specification **-F200** (Maximum 16 outputs)

#### Example 1

**JAM10PJ-JR-F200-D4** stn. 1~4 JA10A5-J4-D4

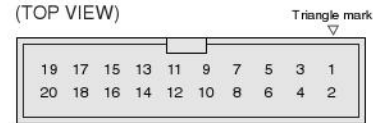
stn. 5~9 JA10A6-J4-D4

stn. 10 JABPP-J4



Number of units : 10 units  
Wiring specification : **-F200**  
Wiring connection specification :  
**Blank** (packed wiring)

(TOP VIEW)



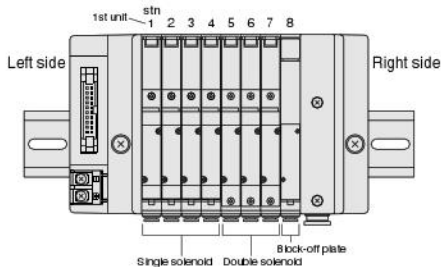
| Pin No.   | 19 | 17 | 15  | 13 | 11 | 9  | 7  | 5  | 3  | 1  |
|-----------|----|----|-----|----|----|----|----|----|----|----|
| Valve No. | +  | -  | 10A | 9A | 8A | 7A | 6A | 5A | 3A | 1A |
| Pin No.   | 20 | 18 | 16  | 14 | 12 | 10 | 8  | 6  | 4  | 2  |
| Valve No. | +  | -  | 10B | 9B | 8B | 7B | 6B | 5B | 4A | 2A |

#### Example 2

**JAM8PJ-JR-F200-D-D4** stn. 1~4 JA10A5-J4-D4

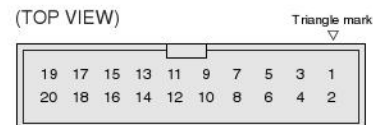
stn. 5~7 JA10A6-J4-D4

stn. 8 JABPP-J4



Number of units : 8 units  
Wiring specification : **-F200**  
Wiring connection specification :  
**-D** (double wiring)

(TOP VIEW)



| Pin No.   | 19 | 17 | 15 | 13 | 11 | 9  | 7  | 5  | 3  | 1  |
|-----------|----|----|----|----|----|----|----|----|----|----|
| Valve No. | +  | -  | 8A | 7A | 6A | 5A | 4A | 3A | 2A | 1A |
| Pin No.   | 20 | 18 | 16 | 14 | 12 | 10 | 8  | 6  | 4  | 2  |
| Valve No. | +  | -  | 8B | 7B | 6B | 5B | 4B | 3B | 2B | 1B |

### Flat cable connector (20-pin)

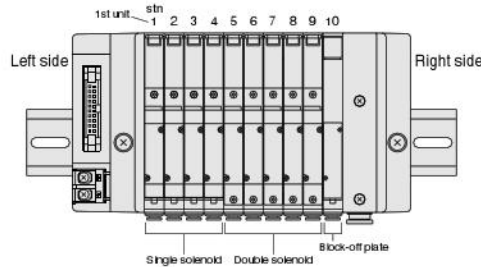
Wiring specification **-F201** (Maximum 16 outputs)

#### Example 1

**JAM10PJ-JR-F201-D4** stn. 1~4 JA10A5-J4-D4

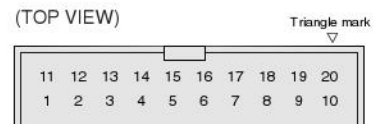
stn. 5~9 JA10A6-J4-D4

stn. 10 JABPP-J4



Number of units : 10 units  
Wiring specification : **-F201**  
Wiring connection specification :  
**Blank** (packed wiring)

(TOP VIEW)



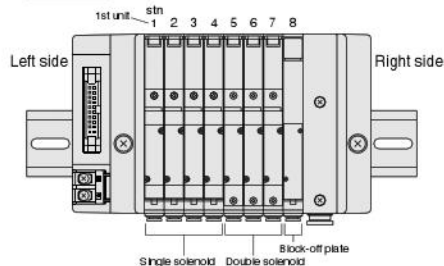
| Pin No.   | 11 | 12 | 13 | 14 | 15 | 16 | 17  | 18  | 19 | 20 |
|-----------|----|----|----|----|----|----|-----|-----|----|----|
| Valve No. | 7A | 7B | 8A | 8B | 9A | 9B | 10A | 10B | -  | +  |
| Pin No.   | 1  | 2  | 3  | 4  | 5  | 6  | 7   | 8   | 9  | 10 |
| Valve No. | 1A | 2A | 3A | 4A | 5A | 5B | 6A  | 6B  | -  | +  |

#### Example 2

**JAM8PJ-JR-F201-D-D4** stn. 1~4 JA10A5-J4-D4

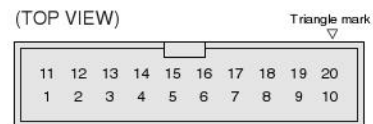
stn. 5~7 JA10A6-J4-D4

stn. 8 JABPP-J4



Number of units : 8 units  
Wiring specification : **-F201**  
Wiring connection specification :  
**-D** (double wiring)

(TOP VIEW)



| Pin No.   | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|-----------|----|----|----|----|----|----|----|----|----|----|
| Valve No. | 5A | 5B | 6A | 6B | 7A | 7B | 8A | 8B | -  | +  |
| Pin No.   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
| Valve No. | 1A | 1B | 2A | 2B | 3A | 3B | 4A | 4B | -  | +  |

Caution: Connector pin numbers are assigned for the sake of convenience. Use the ▽ mark as a reference.

- Notes: 1. In the figures, the valve numbers 1A, 1B, 2A, 2B... show the stn. numbers, while the letters A and B show the A or B side of the solenoid.  
2. The stn. numbers are counted from the left, 1, 2..., with the solenoid on top and the valve outlet ports in front.  
3. When selecting wiring connection specification **-D**, all wiring is double wiring, regardless of valve specifications.  
4. The wiring for the block-off plate is normally assigned as double wiring (2 pins to 1 unit), regardless of the wiring specifications. However, when **-S** is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.  
5. Connector pin numbers are assigned for the sake of convenience. Use the ▽ mark as a reference.

## Pin Numbers and Corresponding Solenoids (For Split Manifold Plug-in Type)

The examples below show the relationship between the split manifold pin numbers and the corresponding solenoids.  
The installation examples show the maximum numbers of outputs in use.

### Flat cable connector (26-pin)

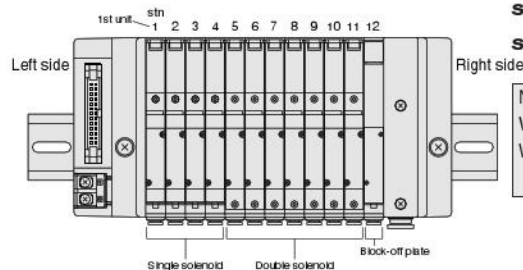
●Wiring specification **-F260** (Maximum 20 outputs)

#### Example 1

**JAM12PJ-JR-F260-D4** stn. 1~4 JA10A5-J4-D4

stn. 5~11 JA10A6-J4-D4

stn. 12 JABPP-J4



Number of units : 12 units  
Wiring specification : **-F260**  
Wiring connection specification :  
**Blank** (packed wiring)

(TOP VIEW)

Triangle mark  
▽

|    |    |    |    |    |    |    |    |    |   |   |   |   |
|----|----|----|----|----|----|----|----|----|---|---|---|---|
| 25 | 23 | 21 | 19 | 17 | 15 | 13 | 11 | 9  | 7 | 5 | 3 | 1 |
| 26 | 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 |

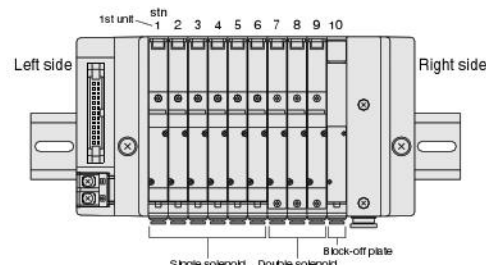
| Pin No.   | 25 | 23 | 21 | 19  | 17  | 15  | 13 | 11 | 9  | 7  | 5  | 3  | 1  |
|-----------|----|----|----|-----|-----|-----|----|----|----|----|----|----|----|
| Valve No. | +  | -  |    | 12A | 11A | 10A | 9A | 8A | 7A | 6A | 5A | 3A | 1A |
| Pin No.   | 26 | 24 | 22 | 20  | 18  | 16  | 14 | 12 | 10 | 8  | 6  | 4  | 2  |
| Valve No. | +  | -  |    | 12B | 11B | 10B | 9B | 8B | 7B | 6B | 5B | 4A | 2A |

#### Example 2

**JAM10PJ-JR-F260-D-D4** stn. 1~6 JA10A5-J4-D4

stn. 7~9 JA10A6-J4-D4

stn. 10 JABPP-J4



Number of units : 10 units  
Wiring specification : **-F260**  
Wiring connection specification :  
**-D** (double wiring)

(TOP VIEW)

Triangle mark  
▽

|    |    |    |    |    |    |    |    |    |   |   |   |   |
|----|----|----|----|----|----|----|----|----|---|---|---|---|
| 25 | 23 | 21 | 19 | 17 | 15 | 13 | 11 | 9  | 7 | 5 | 3 | 1 |
| 26 | 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 |

| Pin No.   | 25 | 23 | 21 | 19  | 17 | 15 | 13 | 11 | 9  | 7  | 5  | 3  | 1  |
|-----------|----|----|----|-----|----|----|----|----|----|----|----|----|----|
| Valve No. | +  | -  |    | 10A | 9A | 8A | 7A | 6A | 5A | 4A | 3A | 2A | 1A |
| Pin No.   | 26 | 24 | 22 | 20  | 18 | 16 | 14 | 12 | 10 | 8  | 6  | 4  | 2  |
| Valve No. | +  | -  |    | 10B | 9B | 8B | 7B | 6B | 5B | 4B | 3B | 2B | 1B |

Notes: 1. In the figures, the valve numbers 1A, 1B, 2A, 2B... show the stn. numbers, while the letters A and B show the A or B side of the solenoid.

2. The stn. numbers are counted from the left, 1, 2..., with the solenoid on top and the valve outlet ports in front.

3. When selecting wiring connection specification **-D**, all wiring is double wiring, regardless of valve specifications.

4. The wiring for the block-off plate is normally assigned as double wiring (2 pins to 1 unit), regardless of the wiring specifications. However, when **-S** is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

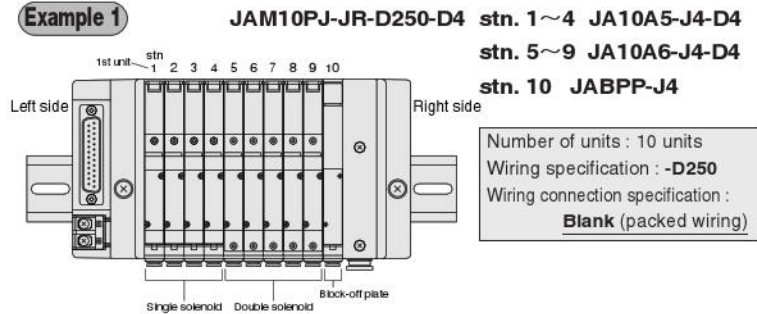
5. Connector pin numbers are assigned for the sake of convenience. Use the ▽ mark as a reference.

The examples below show the relationship between the split manifold pin numbers and the corresponding solenoids.  
The installation examples show the maximum numbers of outputs in use.

## D-sub connector (25-pin)

### ●Wiring specification -D250□ (Maximum 16 outputs)

#### Example 1



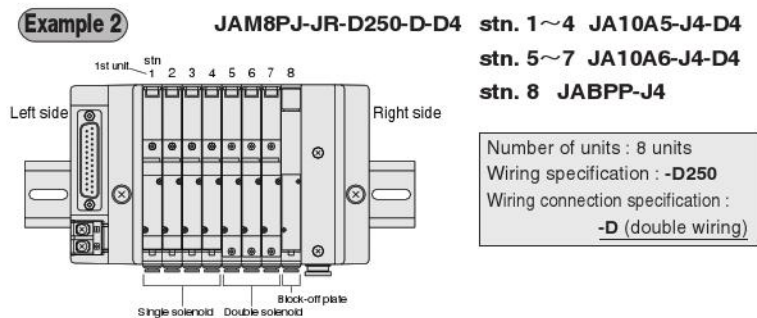
**Caution:** For the sake of convenience, the connector pins are assigned based on the solenoid valve wiring sequence, which differs from the pin locations and pin numbers (marked) prescribed in JIS-X5101 for the data circuit-terminating equipment (DCE).

(TOP VIEW)



| Pin No.   | 1  | 3  | 5  | 7  | 9  | 11 | 13 | 15  | 17 | 19 | 21 | 23 | 25 |
|-----------|----|----|----|----|----|----|----|-----|----|----|----|----|----|
| Valve No. | 1A | 3A | 5A | 6A | 7A | 8A | 9A | 10A |    |    | -  | +  | +  |
| Pin No.   | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16  | 18 | 20 | 22 | 24 |    |
| Valve No. | 2A | 4A | 5B | 6B | 7B | 8B | 9B | 10B |    | -  | -  | +  |    |

#### Example 2



(TOP VIEW)

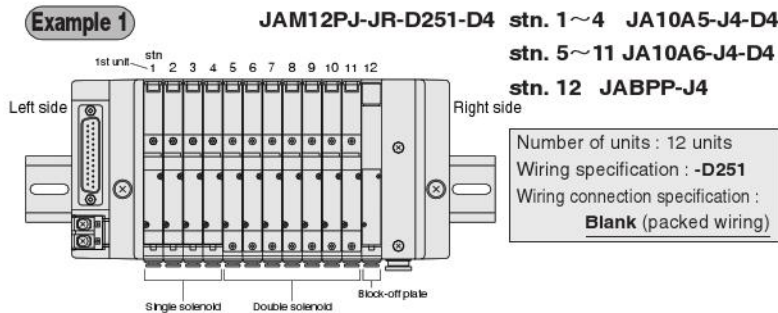


| Pin No.   | 1  | 3  | 5  | 7  | 9  | 11 | 13 | 15 | 17 | 19 | 21 | 23 | 25 |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Valve No. | 1A | 2A | 3A | 4A | 5A | 6A | 7A | 8A |    |    | -  | +  | +  |
| Pin No.   | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |    |
| Valve No. | 1B | 2B | 3B | 4B | 5B | 6B | 7B | 8B |    | -  | -  | +  |    |

## D-sub connector (25-pin)

### ●Wiring specification -D251□ Pin locations based on JIS specification (Maximum 20 outputs)

#### Example 1

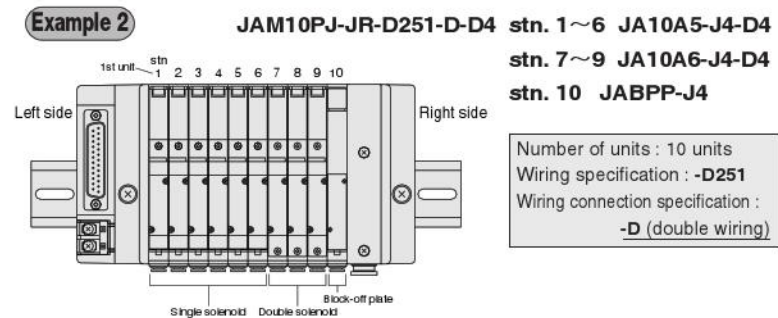


(TOP VIEW)

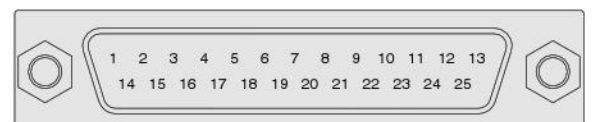


| Pin No.   | 1  | 2  | 3  | 4  | 5   | 6   | 7   | 8   | 9   | 10  | 11 | 12 | 13 |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|----|----|----|
| Valve No. | 1A | 2A | 3A | 4A | 5A  | 5B  | 6A  | 6B  | 7A  | 7B  |    | -  | -  |
| Pin No.   | 14 | 15 | 16 | 17 | 18  | 19  | 20  | 21  | 22  | 23  | 24 | 25 |    |
| Valve No. | 8A | 8B | 9A | 9B | 10A | 10B | 11A | 11B | 12A | 12B | +  | +  |    |

#### Example 2



(TOP VIEW)



| Pin No.   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9   | 10  | 11 | 12 | 13 |
|-----------|----|----|----|----|----|----|----|----|-----|-----|----|----|----|
| Valve No. | 1A | 1B | 2A | 2B | 3A | 3B | 4A | 4B | 5A  | 5B  |    | -  | -  |
| Pin No.   | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22  | 23  | 24 | 25 |    |
| Valve No. | 6A | 6B | 7A | 7B | 8A | 8B | 9A | 9B | 10A | 10B | +  | +  |    |

Notes: 1. In the figures, the valve numbers 1A, 1B, 2A, 2B... show the stn. numbers, while the letters A and B show the A or B side of the solenoid.

2. The stn. numbers are counted from the left, 1, 2..., with the solenoid on top and the valve outlet ports in front.

3. When selecting wiring connection specification -D, all wiring is double wiring, regardless of valve specifications.

4. The wiring for the block-off plate is normally assigned as double wiring (2 pins to 1 unit), regardless of the wiring specifications. However, when -S is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

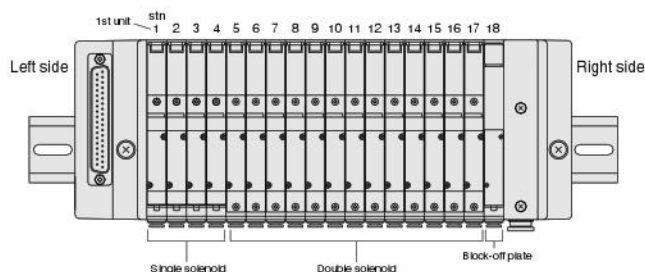
## Pin Numbers and Corresponding Solenoids (For Split Manifold Plug-in Type)

The examples below show the relationship between the split manifold pin numbers and the corresponding solenoids.  
The installation examples show the maximum numbers of outputs in use.

### D-sub connector (37-pin)

#### ●Wiring specification -D370U (Maximum 32 outputs)

##### Example 1



JAM18PJ-JR-D370U-D4

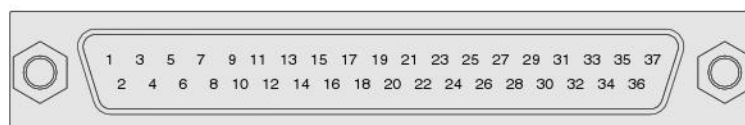
stn.1~4 JA10A5-J4-D4

stn.5~17 JA10A6-J4-D4

stn.18 JABPP-J4

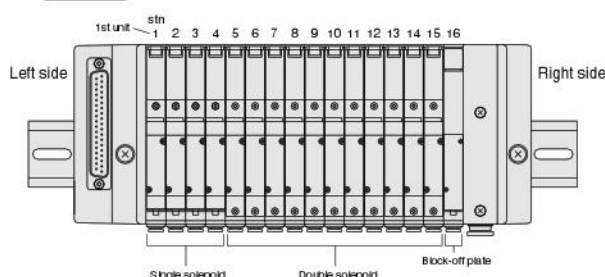
Number of units : 18 units  
Wiring specification : -D370U  
Wiring connection specification :  
**Blank** (packed wiring)

(TOP VIEW)



| Pin No.   | 1  | 3  | 5  | 7  | 9  | 11 | 13 | 15  | 17  | 19  | 21  | 23  | 25  | 27  | 29  | 31  | 33 | 35 | 37 |
|-----------|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| Valve No. | 1A | 3A | 5A | 6A | 7A | 8A | 9A | 10A | 11A | 12A | 13A | 14A | 15A | 16A | 17A | 18A |    |    | +  |
| Pin No.   | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34 | 36 |    |
| Valve No. | 2A | 4A | 5B | 6B | 7B | 8B | 9B | 10B | 11B | 12B | 13B | 14B | 15B | 16B | 17B | 18B |    |    | +  |

##### Example 2



JAM16PJ-JR-D370U-D-D4

stn.1~4 JA10A5-J4-D4

stn.5~15 JA10A6-J4-D4

stn.16 JABPP-J4

Number of units : 16 units  
Wiring specification : -D370U  
Wiring connection specification :  
**-D** (double wiring)

(TOP VIEW)



| Pin No.   | 1  | 3  | 5  | 7  | 9  | 11 | 13 | 15 | 17 | 19  | 21  | 23  | 25  | 27  | 29  | 31  | 33 | 35 | 37 |
|-----------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| Valve No. | 1A | 2A | 3A | 4A | 5A | 6A | 7A | 8A | 9A | 10A | 11A | 12A | 13A | 14A | 15A | 16A |    |    | +  |
| Pin No.   | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34 | 36 |    |
| Valve No. | 1B | 2B | 3B | 4B | 5B | 6B | 7B | 8B | 9B | 10B | 11B | 12B | 13B | 14B | 15B | 16B |    |    | +  |

Notes: 1. In the figures, the valve numbers 1A, 1B, 2A, 2B... show the stn. numbers, while the letters A and B show the A or B side of the solenoid.

2. The stn. numbers are counted from the left, 1, 2..., with the solenoid on top and the valve outlet ports in front.

3. When selecting wiring connection specification -D, all wiring is double wiring, regardless of valve specifications.

4. The wiring for the block-off plate is normally assigned as double wiring (2 pins to 1 unit), regardless of the wiring specifications. However, when -S is designated as the block-off plate wiring specification, the block-off plate wiring of the station is changed to the single solenoid.

# Solenoid Valves JA Series

## Specifications and Dimensions

|                                           |     |
|-------------------------------------------|-----|
| Specifcations                             | 213 |
| Dimensions of Single Valve Unit           | 216 |
| Dimensions of Monoblock Manifold          | 218 |
| Dimensions of Split Manifold              |     |
| Non-Plug-In Type                          | 219 |
| Dimensions of Split Manifold Plug-In Type | 220 |
| Dimensions of Serial Transmission Type    | 227 |

# JA SERIES SPECIFICATIONS

## Specifications

### Basic Models and Functions

| Item \ Basic model  | JA10□A1<br>JA10□A2<br>JA10□A3<br>JA10□A4 | JA10□A5         | JA10□A6         | JA10□A7<br>JA10□A8<br>JA10□A9                  | JA10□AA<br>JA10□AB<br>JA10□AC |
|---------------------|------------------------------------------|-----------------|-----------------|------------------------------------------------|-------------------------------|
| Number of positions | 2 positions                              |                 |                 | 3 positions                                    | 4 positions                   |
| Number of ports     | 2, 3 ports                               | 5 ports         |                 |                                                | Tandem 3 ports                |
| Valve function      | Single solenoid NC, NO                   | Single solenoid | Double solenoid | Closed center, Exhaust center, Pressure center | NC/NC, NO/NO, NC/NO           |

Remark: For the optional specifications and order codes, see p.188.

### Specifications

| Basic model                                                   | JA10□A1<br>JA10□A2<br>JA10□A3<br>JA10□A4       | JA10□A5 | JA10□A6          | JA10□A7<br>JA10□A8<br>JA10□A9 | JA10□AA<br>JA10□AB<br>JA10□AC |
|---------------------------------------------------------------|------------------------------------------------|---------|------------------|-------------------------------|-------------------------------|
| Item                                                          |                                                |         |                  |                               |                               |
| Media                                                         | Air                                            |         |                  |                               |                               |
| Operation type                                                | Internal pilot type                            |         |                  |                               |                               |
| Effective area [Cv] <sup>Note1</sup> mm <sup>2</sup>          | 3.5 [0.19]                                     |         |                  | 3.4 [0.19]                    | 3.5 [0.19]                    |
| Port size <sup>Note2</sup>                                    | φ 4, φ 6 fitting, 1/8, 1/4 inch fitting, Rc1/8 |         |                  |                               |                               |
| Lubrication                                                   | Not required                                   |         |                  |                               |                               |
| Operating pressure range MPa {kgf/cm <sup>2</sup> } [psi.]    | 0.2~0.7 {2~7.1} [29~102]                       |         |                  |                               |                               |
| Proof pressure MPa {kgf/cm <sup>2</sup> } [psi.]              | 1.05 {10.7} [152]                              |         |                  |                               |                               |
| Response time (ON/OFF) <sup>Note3</sup> ms                    | 15/15 (15/20) or below                         |         | 15 (20) or below | 15/25 (15/35) or below        | 15/20 (15/30) or below        |
| Maximum operating frequency Hz                                | 5                                              |         |                  |                               |                               |
| Minimum time to energize for self holding <sup>Note4</sup> ms | —                                              |         | 50               | —                             |                               |
| Operating temperature range (atmosphere and media) °C [°F]    | 5~50[41~122]                                   |         |                  |                               |                               |
| Shock resistance m/s <sup>2</sup> {G}                         | 245 {25}                                       |         |                  |                               |                               |
| Mounting direction                                            | Any                                            |         |                  |                               |                               |

Notes: 1. For details, see the effective area on p.214.

2. For details, see the port size on p.214.

3. Values when air pressure is 0.5MPa [73psi.]. Values in parentheses ( ) are for the low-current specification. In addition, the values for the 3-position valves are switching time from neutral position.

4. For double solenoid valve.

## Solenoid Specifications

| Rated voltage                   |                                         | Item     |  | DC24V (Standard specification) | DC24V (low current specification) | DC12V (Standard specification) |                             |
|---------------------------------|-----------------------------------------|----------|--|--------------------------------|-----------------------------------|--------------------------------|-----------------------------|
| Operating voltage range         |                                         |          |  | V                              | 21.6~26.4<br>(24±10%)             | 21.6~26.4<br>(24±10%)          | 10.8~13.2<br>(12±10%)       |
| Standard                        | Current (when rated voltage is applied) |          |  | mA(r.m.s)                      | 21                                | —                              | 42                          |
|                                 | Power consumption                       |          |  | W                              | 0.5                               | —                              | 0.5                         |
| Low current specification       | Current (when rated voltage is applied) | Starting |  | mA                             | —                                 | 21                             | —                           |
|                                 |                                         | Holding  |  | mA                             | —                                 | 10.5                           | —                           |
|                                 | Power consumption                       | Starting |  | W                              | —                                 | 0.5                            | —                           |
|                                 |                                         | Holding  |  | W                              | —                                 | 0.25                           | —                           |
|                                 | Start-up time (standard time)           |          |  | ms                             | —                                 | 50                             | —                           |
| Allowable leakage current       |                                         |          |  | mA                             | 1.0                               |                                |                             |
| Insulation resistance           |                                         |          |  | MΩ                             | Over 100 (value at DC500V megger) |                                |                             |
| Color of LED indicator          |                                         |          |  | 14 (SA) : Red, 12(SB) : Green  |                                   |                                |                             |
| Surge suppression (as standard) |                                         |          |  | Surge absorption transistor    |                                   | Flywheel diode                 | Surge absorption transistor |

## Port Size

| Piping specification \ Port | 2 (B), 4(A)                                                      | 1(P)                                             | 3, 5(R)                                                     |
|-----------------------------|------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------|
| With sub-base               | Rc1/8                                                            | Rc1/8                                            | Rc1/8                                                       |
| Monoblock manifold          | φ 4 [0.157in.] or φ 6 [0.236in.] fitting                         | Rc1/8                                            | Rc1/8                                                       |
| Split manifold              | φ 4 [0.157in.], φ 6 [0.236in.] fitting, or 1/8, 1/4 inch fitting | φ 8 [0.315in.] fitting, or 1/4, 3/8 inch fitting | φ 8 [0.315in.] fitting, or 1/4, 3/8 inch fitting or muffler |

## Effective Area [Cv]

### ●When used as a single unit

| Basic model | Effective area [Cv] | mm <sup>2</sup> |
|-------------|---------------------|-----------------|
| JA10□A1-25  | 3.2 [0.18]          |                 |
| JA10□A2-25  |                     |                 |
| JA10□A3-25  |                     |                 |
| JA10□A4-25  |                     |                 |
| JA10□A5-25  |                     |                 |
| JA10□A6-25  |                     |                 |
| JA10□A7-25  | 3.1 [0.17]          |                 |
| JA10□A8-25  |                     |                 |
| JA10□A9-25  |                     |                 |
| JA10□AA-25  | 3.2 [0.18]          |                 |
| JA10□AB-25  |                     |                 |
| JA10□AC-25  |                     |                 |

### ●When mounted on a manifold

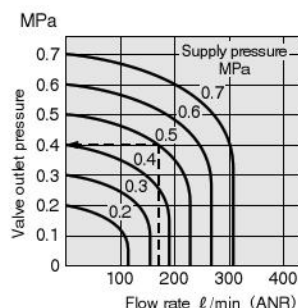
| Valve model                                                    | JAM□AJ                |                       | JAM□N(P)(S)J            |                         | mm <sup>2</sup> [Cv] |
|----------------------------------------------------------------|-----------------------|-----------------------|-------------------------|-------------------------|----------------------|
|                                                                | Outlet port           |                       | Outlet port             |                         |                      |
|                                                                | φ4 [0.157in.] fitting | φ6 [0.236in.] fitting | φ 4 or 1/8 inch fitting | φ 6 or 1/4 inch fitting |                      |
| JA10□A1<br>JA10□A2<br>JA10□A3<br>JA10□A4<br>JA10□A5<br>JA10□A6 | 2.8 [0.16]            | 3.0 [0.17]            | 3.2 [0.18]              | 3.5 [0.19]              |                      |
| JA10□A7<br>JA10□A8<br>JA10□A9                                  | 2.7 [0.15]            | 2.9 [0.16]            | 3.1 [0.17]              | 3.4 [0.19]              |                      |
| JA10□AA<br>JA10□AB<br>JA10□AC                                  | 2.8 [0.16]            | 3.0 [0.17]            | 3.2 [0.18]              | 3.5 [0.19]              |                      |

Notes: 1. When using the back pressure prevention valve, the effective area of OUT-EXH is reduced to 2.5mm<sup>2</sup> [Cv=0.14] regardless of the manifold specifications.

2. When the individual air supply spacer is used, effective area decreases about 20%.

## Flow Rate

### JA10□



1MPa = 145psi., 1 l/min = 0.0353ft<sup>3</sup>/min.

#### How to read the graph

When the supply pressure is 0.5MPa [73psi.] and flow rate is 170 l/min [6ft<sup>3</sup>/min.] (ANR), the valve outlet pressure becomes 0.4MPa [58psi.].

## Mass

### Single Valve Unit Mass

g [oz.]

| Options<br>Valve specification | Wiring specification |           |            | Additional mass    |
|--------------------------------|----------------------|-----------|------------|--------------------|
|                                | Blank<br>PN          | PS<br>MS  | PS3<br>MS3 | 25 (with sub-base) |
| JA10□A1~A4                     | 36 [1.27]            | 40 [1.41] | 61 [2.15]  | 51 [1.80]          |
| JA10□A5                        |                      |           |            | 48 [1.69]          |
| JA10□A6                        | 44 [1.55]            | 49 [1.73] | 81 [2.86]  |                    |
| JA10□A7~A9                     | 46 [1.62]            | 51 [1.80] | 83 [2.93]  |                    |
| JA10□AA~AC                     | 44 [1.55]            | 49 [1.73] | 81 [2.86]  |                    |

### Monoblock Manifold Mass

g [oz.]

| Monoblock manifold            | Mass calculation of each unit (n: number of units) |                     | Additional mass |
|-------------------------------|----------------------------------------------------|---------------------|-----------------|
|                               | Manifold outlet port specification                 |                     |                 |
|                               | -J4K ( ϕ 4 fitting)                                | -J6K ( ϕ 6 fitting) |                 |
| Monoblock Manifold<br>AJ type | (33.5×N) [(1.18×N)]                                | (30.5×N) [(1.08×N)] | 79 [2.79]       |

Block-off plate : 5g [0.18oz.]

### Split Manifold Non-Plug-In Type Mass

g [oz.]

| Split manifold   | Mass calculation of each unit (n: number of units)                         |                     | Additional mass                 |                     |                                 |                     |            |
|------------------|----------------------------------------------------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|------------|
|                  | Manifold outlet port specification                                         |                     | Piping block                    |                     |                                 |                     | End block  |
|                  | -J4 ( φ 4 fitting)<br>-J1/8 (1/8 inch fitting)<br>-J1/4 (1/4 inch fitting) | -J6 ( φ 6 fitting)  | With fitting                    |                     | Built-in muffler                |                     |            |
|                  |                                                                            |                     | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting |            |
| Non-plug-in type | (25.5×n) [(0.90×n)]                                                        | (21.5×n) [(0.76×n)] | 67 [2.36]                       | 98 [3.46]           | 66 [2.33]                       | 83 [2.93]           | 126 [4.44] |

Block-off plate : 5g [0.18oz.]

### Split Manifold Plug-In Type Mass

g [oz.]

| Split manifold | Mass calculation of each unit (n: number of units)                        |                   | Additional mass                 |                     |                                 |                     |              |           |           |            |
|----------------|---------------------------------------------------------------------------|-------------------|---------------------------------|---------------------|---------------------------------|---------------------|--------------|-----------|-----------|------------|
|                | Manifold outlet port specification                                        |                   | Piping block                    |                     |                                 |                     | Wiring block |           |           |            |
|                | -J4 (φ 4 fitting)<br>-J1/8 (1/8 inch fitting)<br>-J1/4 (1/4 inch fitting) | -J6 (φ 6 fitting) | With fitting                    |                     | Built-in muffler                |                     | -F20□        | -F26□     | -D25□     | -D370U     |
|                |                                                                           |                   | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting |              |           |           |            |
| Plug-in type   | (28×n) [(0.99×n)]                                                         | (24×n) [(0.85×n)] | 67 [2.36]                       | 98 [3.46]           | 66 [2.33]                       | 83 [2.93]           | 55 [1.94]    | 56 [1.98] | 58 [2.05] | 155 [5.47] |

Block-off plate : 5.5g [0.19oz.]

### Split Manifold Serial Transmission Type Mass

g [oz.]

| Split manifold           | Mass calculation of each unit (n: number of units)                        |                   | Additional mass                 |                     |                                 |                     |                           |            |            |            |
|--------------------------|---------------------------------------------------------------------------|-------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------|------------|------------|------------|
|                          | Manifold outlet port specification                                        |                   | Piping block                    |                     |                                 |                     | Serial transmission block |            |            |            |
|                          | -J4 (φ 4 fitting)<br>-J1/8 (1/8 inch fitting)<br>-J1/4 (1/4 inch fitting) | -J6 (φ 6 fitting) | With fitting                    |                     | Built-in muffler                |                     | -A□                       | -B1        | -D1        | End block  |
|                          |                                                                           |                   | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting | φ 8 fitting<br>1/4 inch fitting | 3/8 inch<br>fitting |                           |            |            |            |
| Serial transmission type | (28×n) [(0.99×n)]                                                         | (24×n) [(0.85×n)] | 67 [2.36]                       | 98 [3.46]           | 66 [2.33]                       | 83 [2.93]           | 120 [4.23]                | 129 [4.55] | 126 [4.44] | 123 [4.34] |

Block-off plate : 5.5g [0.19oz.]

Calculation example : JAM8SJ-JR-B1

stn.1~8 JA10A6-J6-D4

$(44 \times 8) + (24 \times 8) + 67 + 129 + 123 = 863\text{g}$

$[(1.55 \times 8) + (0.85 \times 8) + 2.36 + 4.55 + 4.34] = 30.45\text{oz.}$

## Dimensions of JA Series Single Valve Unit (mm)

2-, 3-port, single solenoid

**JA10□A1-□-PS**

**JA10□A2-□-PS**

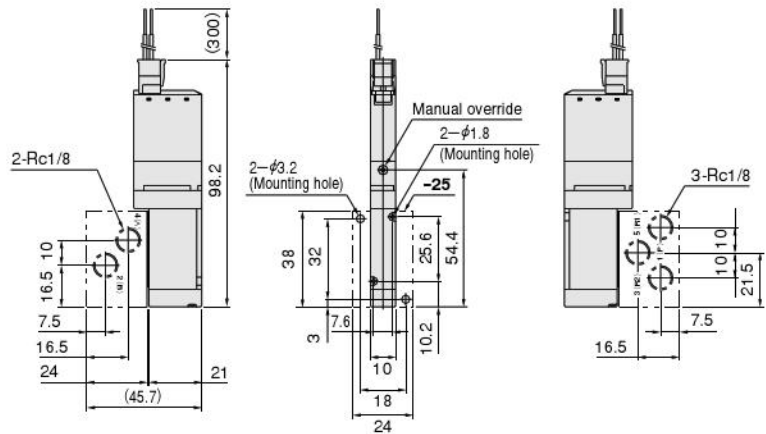
**JA10□A3-□-PS**

**JA10□A4-□-PS**

S type plug connector

### Caution

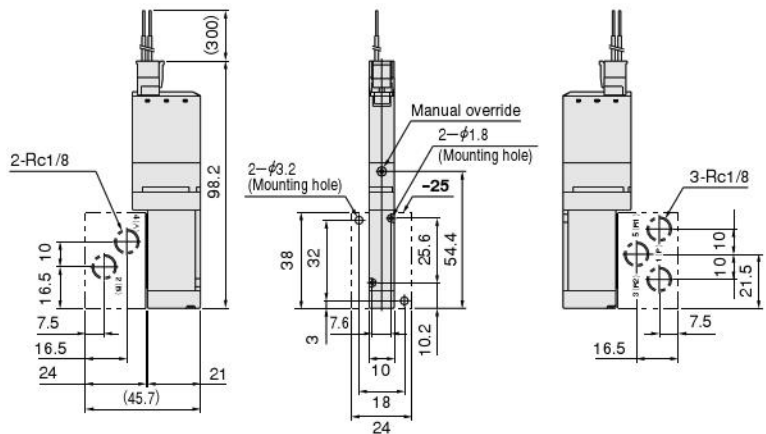
- A1:** 2(B) plugged in 2-port normally closed type
- A2:** 4(A) plugged in 2-port normally open type
- A3:** 2(B) plugged in 3-port normally closed type
- A4:** 4(A) plugged in 3-port normally open type



5-port, single solenoid

**JA10□A5-□-PS**

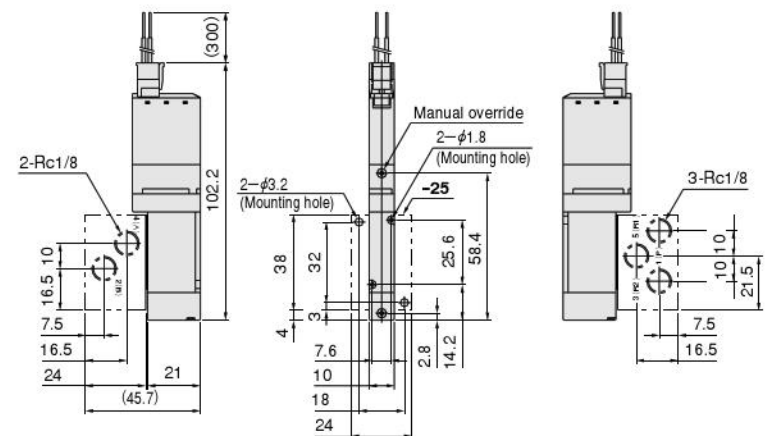
S type plug connector



5-port, double solenoid

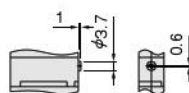
**JA10□A6-□-PS**

S type plug connector

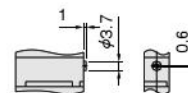


## Options

●Locking protruding type manual override : -83



For single solenoid



For double solenoid

## Dimensions of JA Series Single Valve Unit (mm)

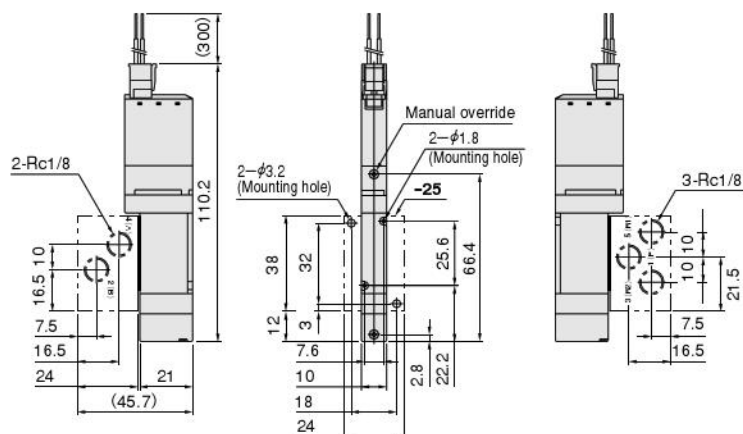
5-port, 3-position

**JA10□A7-□-PS**

**JA10□A8-□-PS**

**JA10□A9-□-PS**

S type plug connector



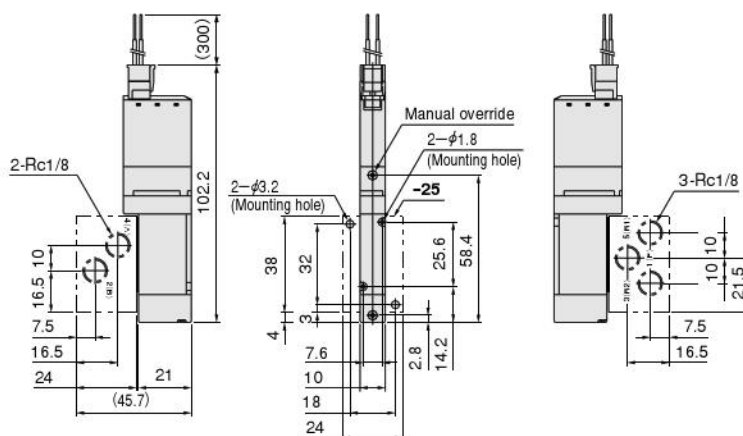
Tandem 3-port, 4-position

**JA10□AA-□-PS**

**JA10□AB-□-PS**

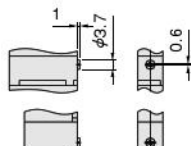
**JA10□AC-□-PS**

S type plug connector

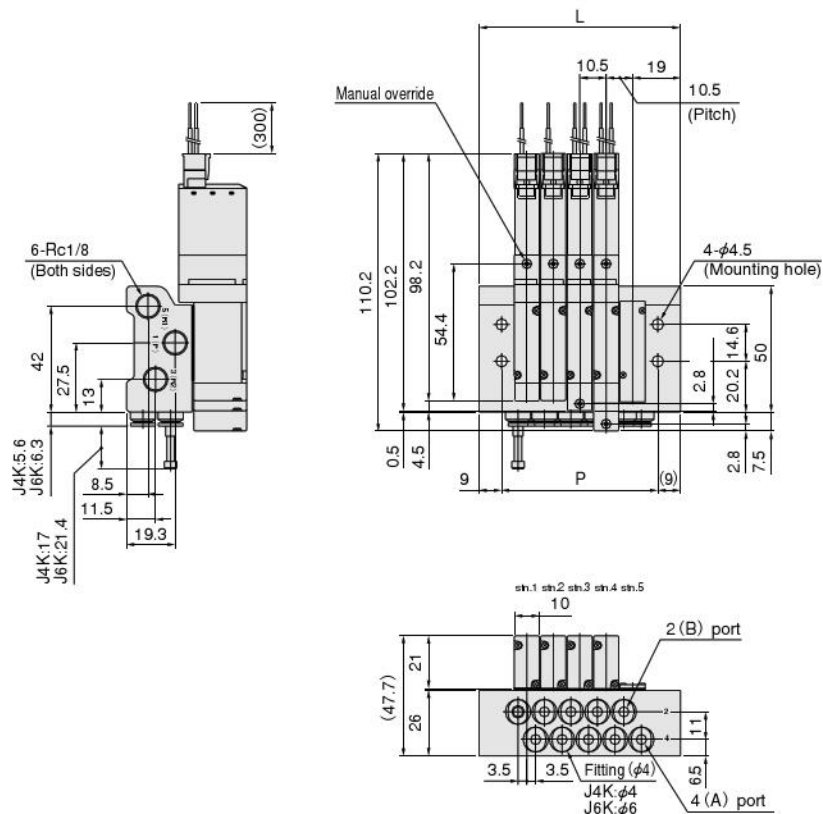


## Option

●Locking protruding type manual override : **-83**



JAM□AJ



[Installation example]

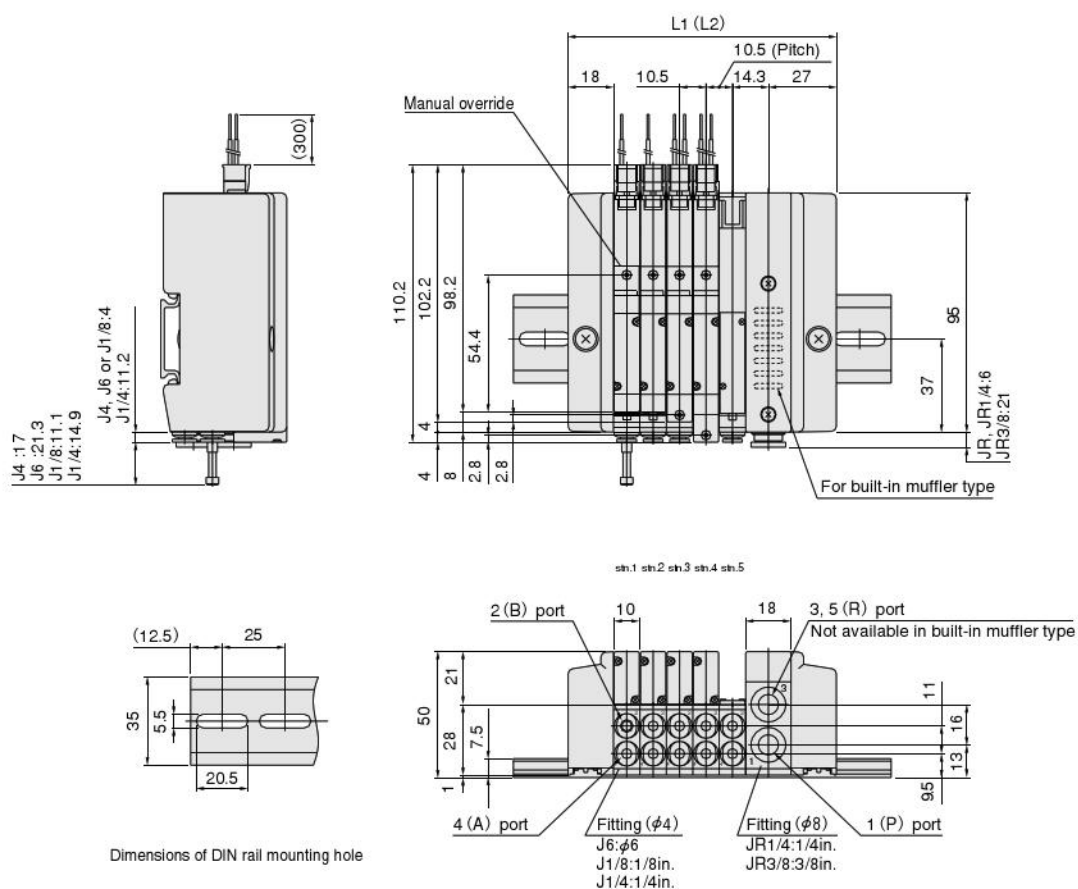
**JAM5AJ**

- stn.1 JA10A1-PS-J4K-D4
- stn.2 JA10A5-PS-J4K-D4
- stn.3 JA10A6-PS-J4K-D4
- stn.4 JA10A7-PS-J4K-D4
- stn.5 JABP-J4K

**Unit dimensions**

| Number of units | L     | P     |
|-----------------|-------|-------|
| 2               | 48.5  | 30.5  |
| 3               | 59.0  | 41.0  |
| 4               | 69.5  | 51.5  |
| 5               | 80.0  | 62.0  |
| 6               | 90.5  | 72.5  |
| 7               | 101.0 | 83.0  |
| 8               | 111.5 | 93.5  |
| 9               | 122.0 | 104.0 |
| 10              | 132.5 | 114.5 |
| 11              | 143.0 | 125.0 |
| 12              | 153.5 | 135.5 |
| 13              | 164.0 | 146.0 |
| 14              | 174.5 | 156.5 |
| 15              | 185.0 | 167.0 |
| 16              | 195.5 | 177.5 |
| 17              | 206.0 | 188.0 |
| 18              | 216.5 | 198.5 |
| 19              | 227.0 | 209.0 |
| 20              | 237.5 | 219.5 |

## JAM□NJ



[Installation example]

### JAM5NJ-JR

stn.1 JA10A1-PS-J4-D4

stn.2 JA10A5-PS-J4-D4

stn.3 JA10A6-PS-J4-D4

stn.4 JA10A7-PS-J4-D4

stn.5 JABP-J4

## Unit dimensions

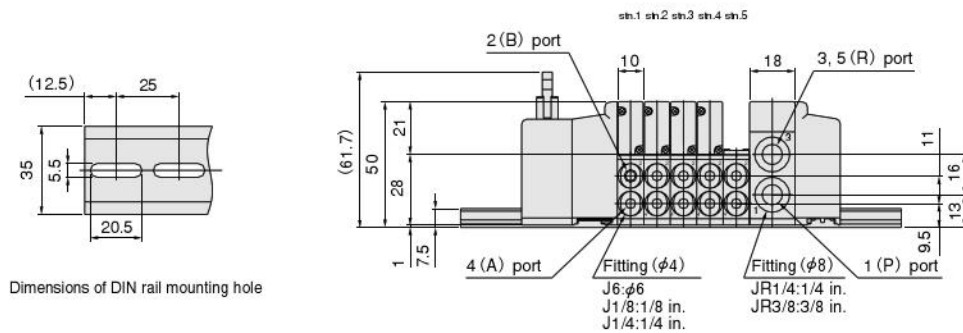
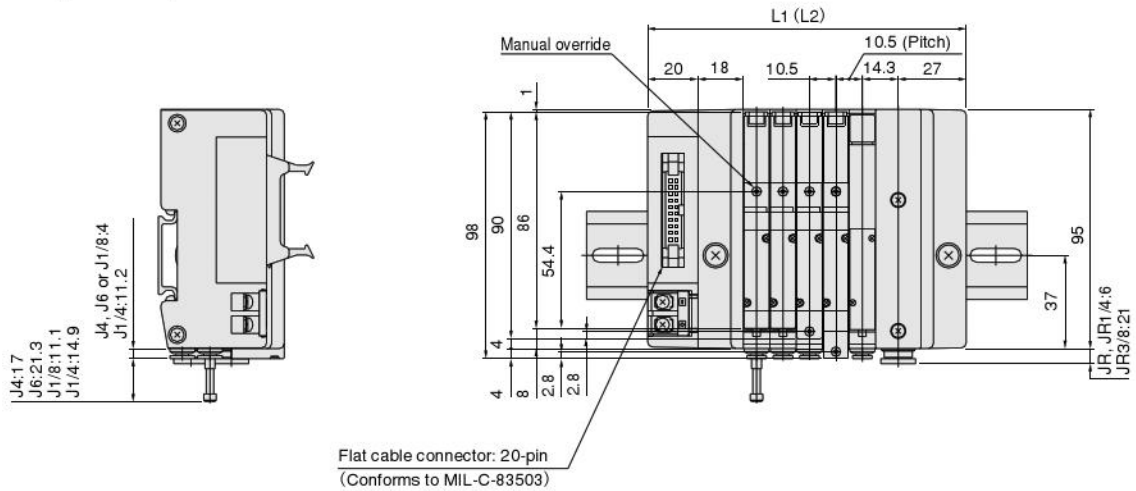
| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 75.0  | 125             | 93.0               | 125                             |
| 3               | 85.5  | 125             | 103.5              | 150                             |
| 4               | 96.0  | 125             | 114.0              | 150                             |
| 5               | 106.5 | 150             | 124.5              | 175                             |
| 6               | 117.0 | 150             | 135.0              | 175                             |
| 7               | 127.5 | 175             | 145.5              | 175                             |
| 8               | 138.0 | 175             | 156.0              | 200                             |
| 9               | 148.5 | 200             | 166.5              | 200                             |
| 10              | 159.0 | 200             | 177.0              | 225                             |
| 11              | 169.5 | 200             | 187.5              | 225                             |
| 12              | 180.0 | 225             | 198.0              | 250                             |
| 13              | 190.5 | 225             | 208.5              | 250                             |
| 14              | 201.0 | 250             | 219.0              | 250                             |
| 15              | 211.5 | 250             | 229.5              | 275                             |
| 16              | 222.0 | 275             | 240.0              | 275                             |
| 17              | 232.5 | 275             | 250.5              | 300                             |
| 18              | 243.0 | 275             | 261.0              | 300                             |
| 19              | 253.5 | 300             | 271.5              | 325                             |
| 20              | 264.0 | 300             | 282.0              | 325                             |

Note : When using two piping blocks.

## JAM□PJ

Flat cable connector 20-pin

Connector on upper side specification



[Installation example]

**JAM5PJ-JR-F20□-D4**

**stn.1 JA10A1-J4-D4**

**stn.2 JA10A5-J4-D4**

**stn.3 JA10A6-J4-D4**

**stn.4 JA10A7-J4-D4**

**stn.5 JABPP-J4**

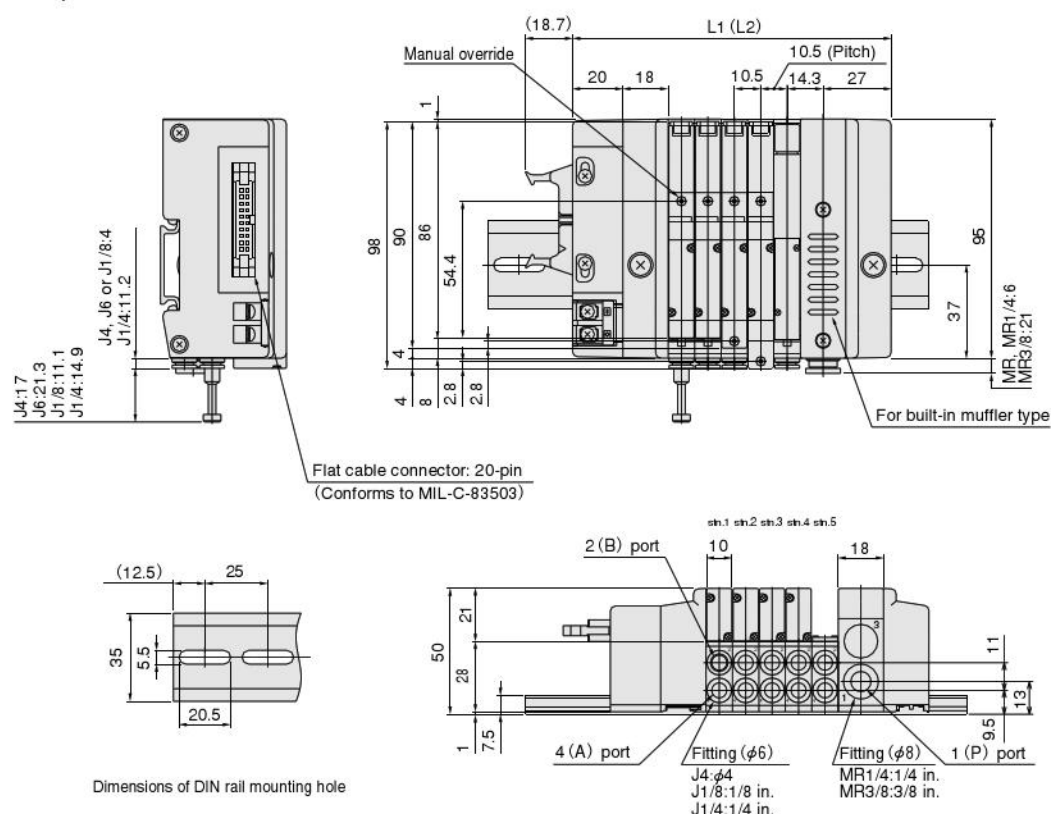
## Unit dimensions

| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |

Note : When using two piping blocks.

## JAM□PJ

Flat cable connector 20-pin  
Connector on side specification



[Installation example]

**JAM5PJ-MR-F20□E-D4**

**stn.1 JA10A1-J6-D4**

**stn.2 JA10A5-J6-D4**

**stn.3 JA10A6-J6-D4**

**stn.4 JA10A7-J6-D4**

**stn.5 JABPP-J6**

## Unit dimensions

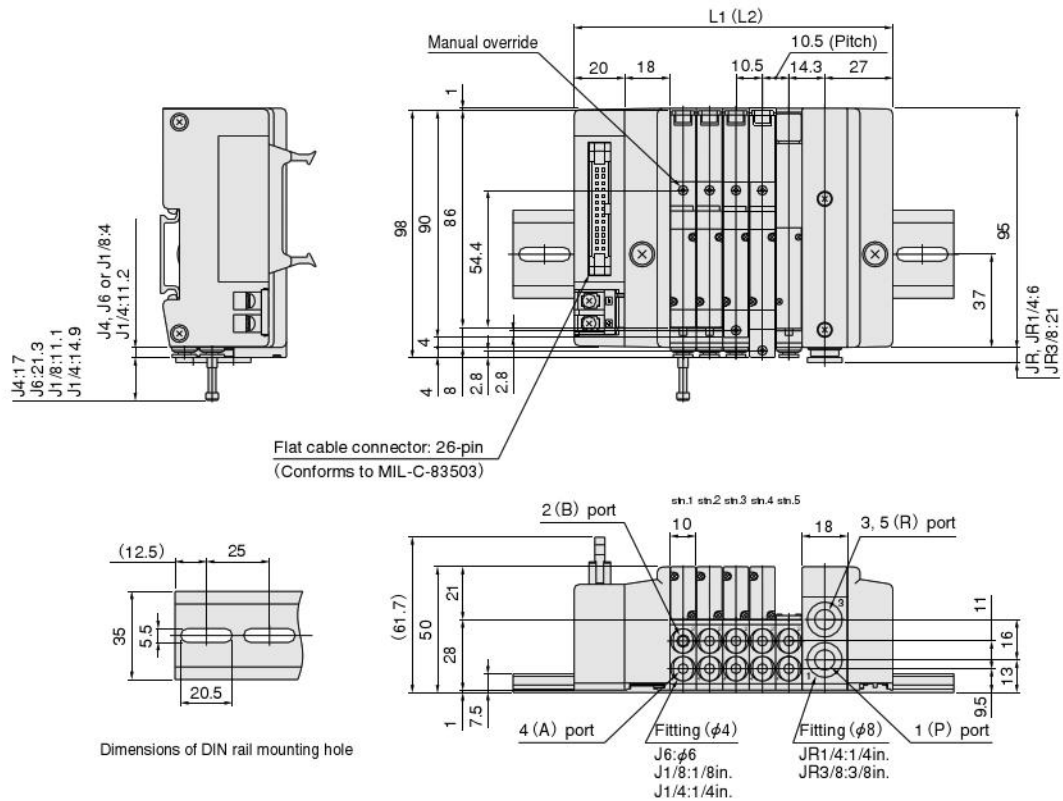
| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |

Note : When using two piping blocks.

# JAM□PJ

Flat cable connector 26-pin

Connector on upper side specification



[Installation example]

**JAM5PJ-JR-F260-D4**

**stn.1 JA10A1-J4-D4**

**stn.2 JA10A5-J4-D4**

**stn.3 JA10A6-J4-D4**

**stn.4 JA10A7-J4-D4**

**stn.5 JABPP-J4**

## Unit dimensions

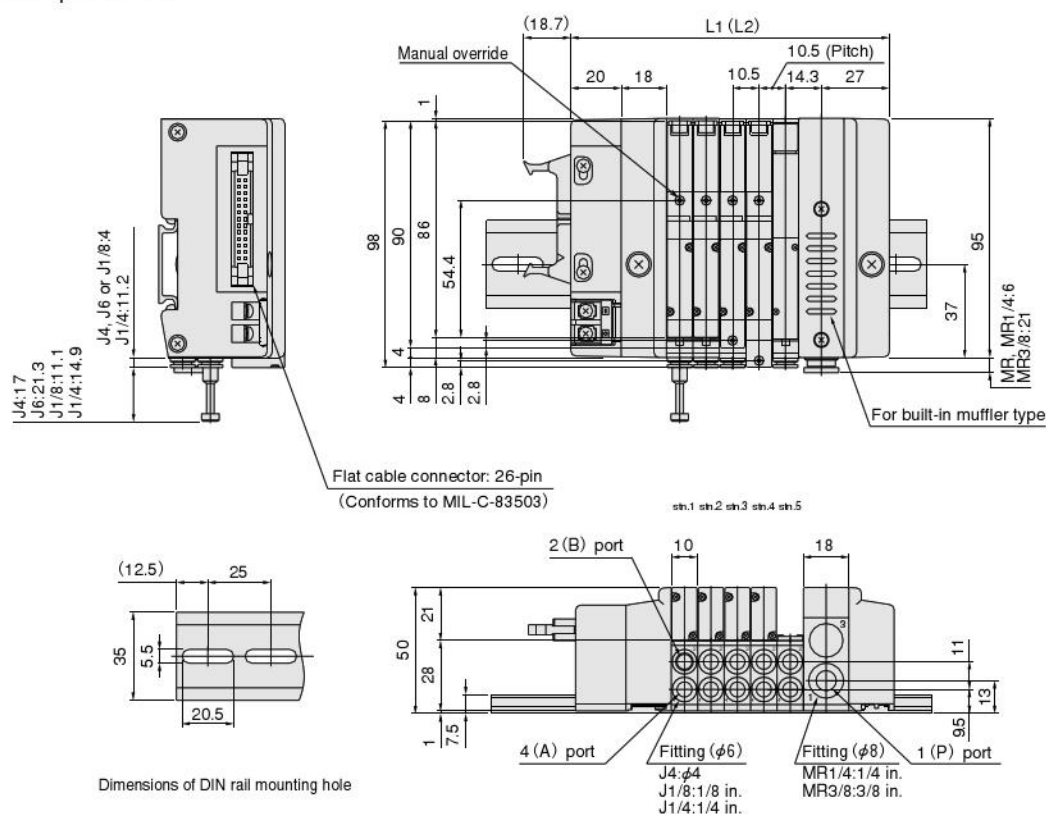
| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |
| 17              | 252.5 | 300             | 270.5              | 325                             |
| 18              | 263.0 | 325             | 281.0              | 350                             |
| 19              | 273.5 | 325             | 291.5              | 350                             |
| 20              | 284.0 | 350             | 302.0              | 350                             |

Note : When using two piping blocks.

## Dimensions of JA Series Split Manifold Plug-in Type (mm)

### JAM□PJ

Flat cable connector 26-pin  
Connector on side specification



[Installation example]

**JAM5PJ-MR-F260E-D4**

**stn.1 JA10A1-J6-D4**

**stn.2 JA10A5-J6-D4**

**stn.3 JA10A6-J6-D4**

**stn.4 JA10A7-J6-D4**

**stn.5 JABPP-J6**

### Unit dimensions

| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |
| 17              | 252.5 | 300             | 270.5              | 325                             |
| 18              | 263.0 | 325             | 281.0              | 350                             |
| 19              | 273.5 | 325             | 291.5              | 350                             |
| 20              | 284.0 | 350             | 302.0              | 350                             |

Note : When using two piping blocks.

D-sub connector 25-pin  
Connector on upper side specification



JAM5PJ-JR-D25□-D4  
 stn.1 JA10A1-J4-D4  
 stn.2 JA10A5-J4-D4  
 stn.3 JA10A6-J4-D4  
 stn.4 JA10A7-J4-D4  
 stn.5 JABPP-J4

| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |
| 17              | 252.5 | 300             | 270.5              | 325                             |
| 18              | 263.0 | 325             | 281.0              | 350                             |
| 19              | 273.5 | 325             | 291.5              | 350                             |
| 20              | 284.0 | 350             | 302.0              | 350                             |

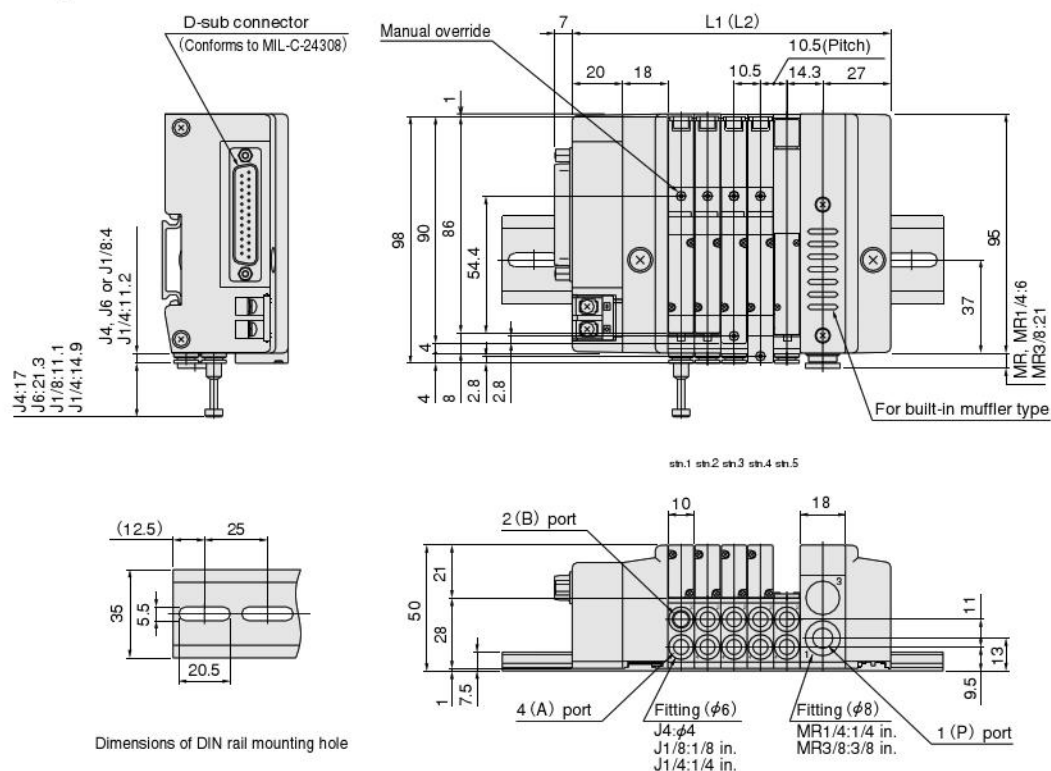
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## Dimensions of JA Series Split Manifold Plug-in Type (mm)

### JAM□PJ

D-sub connector 25-pin

Connector on side specification



[Installation example]

**JAM5PJ-MR-D25□E-D4**

**stn.1 JA10A1-J6-D4**

**stn.2 JA10A5-J6-D4**

**stn.3 JA10A6-J6-D4**

**stn.4 JA10A7-J6-D4**

**stn.5 JABPP-J6**

### Unit dimensions

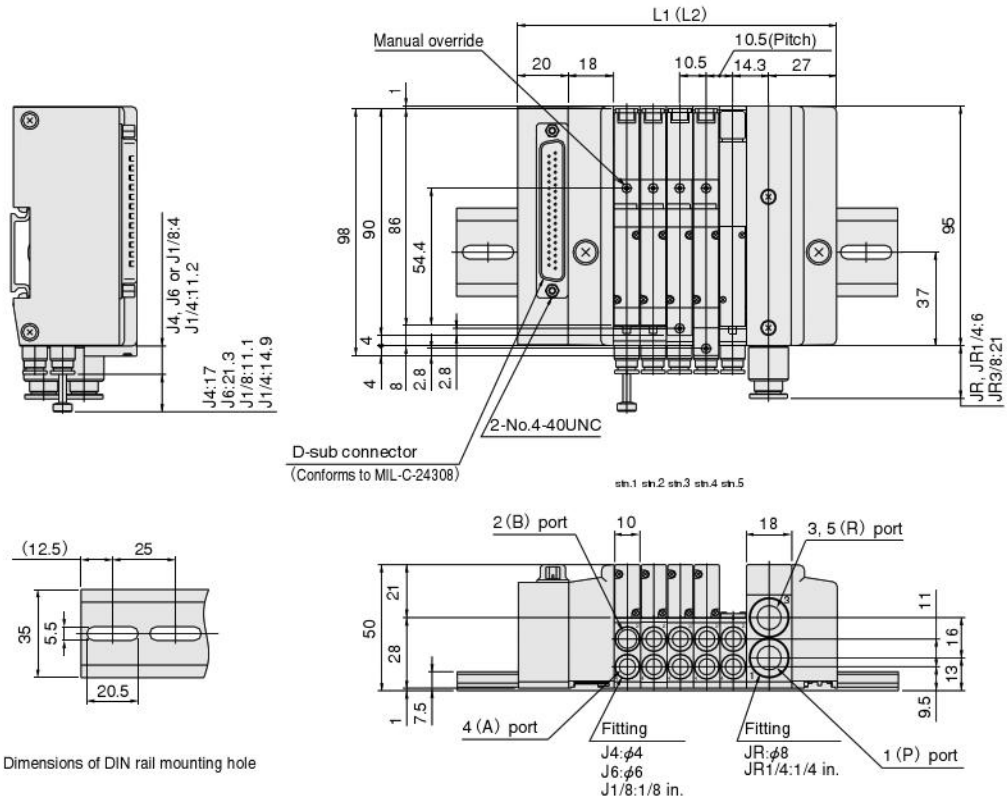
| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |
| 17              | 252.5 | 300             | 270.5              | 325                             |
| 18              | 263.0 | 325             | 281.0              | 350                             |
| 19              | 273.5 | 325             | 291.5              | 350                             |
| 20              | 284.0 | 350             | 302.0              | 350                             |

Note : When using two piping blocks.

# JAM□PJ

D-sub connector 37-pin

Connector on upper side specification



[Installation example]

**JAM5PJ-JR3/8-D370U-D4**

**stn.1 JA10A1-J1/4-D4**

**stn.2 JA10A5-J1/4-D4**

**stn.3 JA10A6-J1/4-D4**

**stn.4 JA10A7-J1/4-D4**

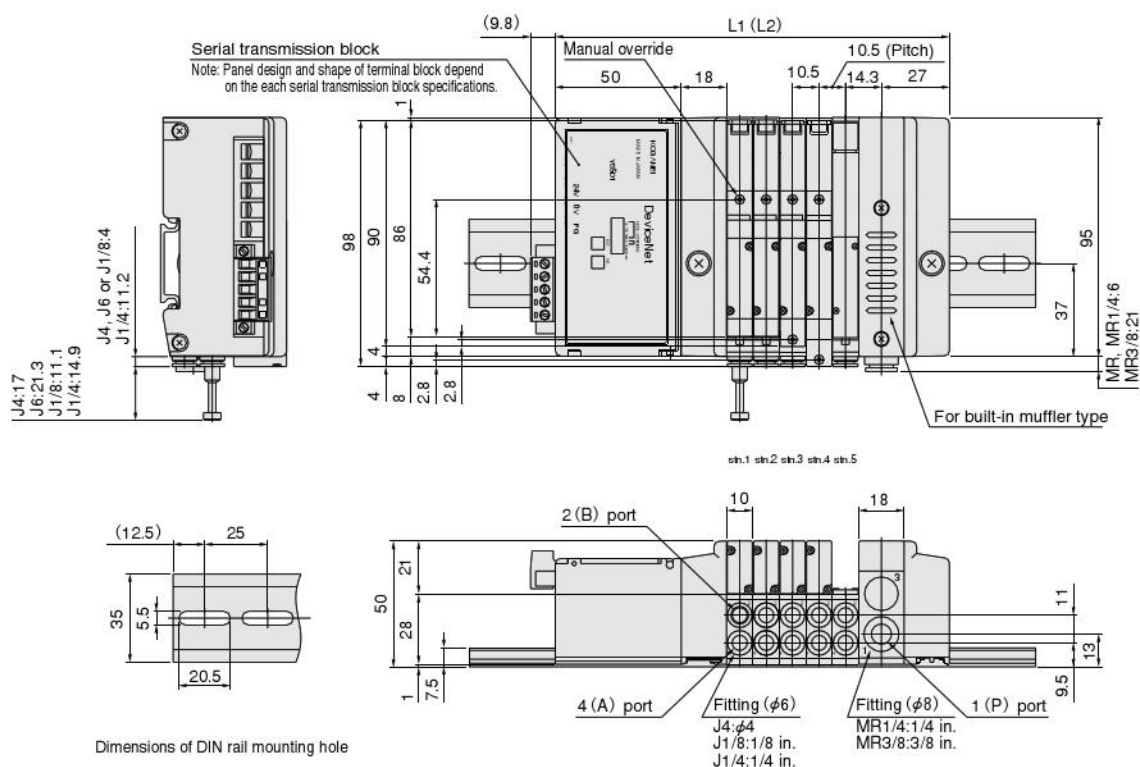
**stn.5 JABPP-J1/4**

## Unit dimensions

| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 95.0  | 150             | 113.0              | 175                             |
| 3               | 105.5 | 175             | 123.5              | 175                             |
| 4               | 116.0 | 175             | 134.0              | 200                             |
| 5               | 126.5 | 175             | 144.5              | 200                             |
| 6               | 137.0 | 200             | 155.0              | 200                             |
| 7               | 147.5 | 200             | 165.5              | 225                             |
| 8               | 158.0 | 225             | 176.0              | 225                             |
| 9               | 168.5 | 225             | 186.5              | 250                             |
| 10              | 179.0 | 225             | 197.0              | 250                             |
| 11              | 189.5 | 250             | 207.5              | 275                             |
| 12              | 200.0 | 250             | 218.0              | 275                             |
| 13              | 210.5 | 275             | 228.5              | 275                             |
| 14              | 221.0 | 275             | 239.0              | 300                             |
| 15              | 231.5 | 300             | 249.5              | 300                             |
| 16              | 242.0 | 300             | 260.0              | 325                             |
| 17              | 252.5 | 300             | 270.5              | 325                             |
| 18              | 263.0 | 325             | 281.0              | 350                             |
| 19              | 273.5 | 325             | 291.5              | 350                             |
| 20              | 284.0 | 350             | 302.0              | 350                             |

Note : When using two piping blocks.

## JAM□SJ



[Installation example]

### JAM5SJ-MR-D1

stn.1 JA10A1-J6-D4

stn.2 JA10A5-J6-D4

stn.3 JA10A6-J6-D4

stn.4 JA10A7-J6-D4

stn.5 JABPP-J6

## Unit dimensions

| Number of units | L1    | DIN rail length | L2 <sup>Note</sup> | DIN rail length <sup>Note</sup> |
|-----------------|-------|-----------------|--------------------|---------------------------------|
| 2               | 125.0 | 175             | 143.0              | 200                             |
| 3               | 135.5 | 200             | 153.5              | 200                             |
| 4               | 146.0 | 200             | 164.0              | 225                             |
| 5               | 156.5 | 225             | 174.5              | 225                             |
| 6               | 167.0 | 225             | 185.0              | 250                             |
| 7               | 177.5 | 225             | 195.5              | 250                             |
| 8               | 188.0 | 250             | 206.0              | 275                             |
| 9               | 198.5 | 250             | 216.5              | 275                             |
| 10              | 209.0 | 275             | 227.0              | 275                             |
| 11              | 219.5 | 275             | 237.5              | 300                             |
| 12              | 230.0 | 275             | 248.0              | 300                             |
| 13              | 240.5 | 300             | 258.5              | 325                             |
| 14              | 251.0 | 300             | 269.0              | 325                             |
| 15              | 261.5 | 325             | 279.5              | 325                             |
| 16              | 272.0 | 325             | 290.0              | 350                             |

Note : When using two piping blocks.