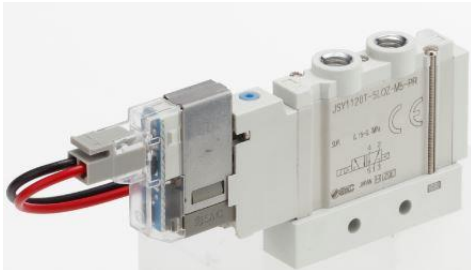


# 5 Port Solenoid Valve

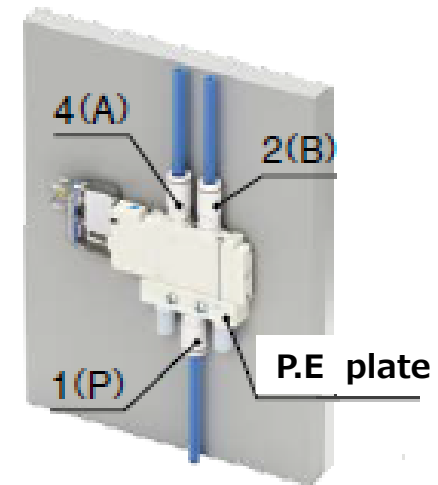
## Series JSY1000/JSY3000/JSY5000

*Body ported type/Single unit*



# 1. Features(1)

- **Body ported type / Single unit**
- **Flow characteristics are the same for JSY Base mounted type. (It is already released.)**
- **Wight reduction and Space saving**  
(Among the 5 port solenoid valve, JSY1000 has the minimum width in the world.)



# 1. Features(2)

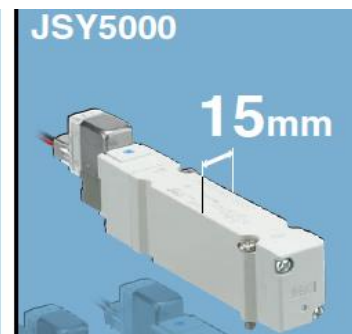
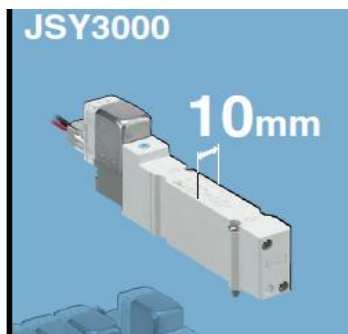
## Body ported type / Single unit (Non plug-in type only)

- Body ported type enable top piping.
- Single unit enable use by itself.

### Body ported type/Single unit



### Base mounted type (It is already released.)



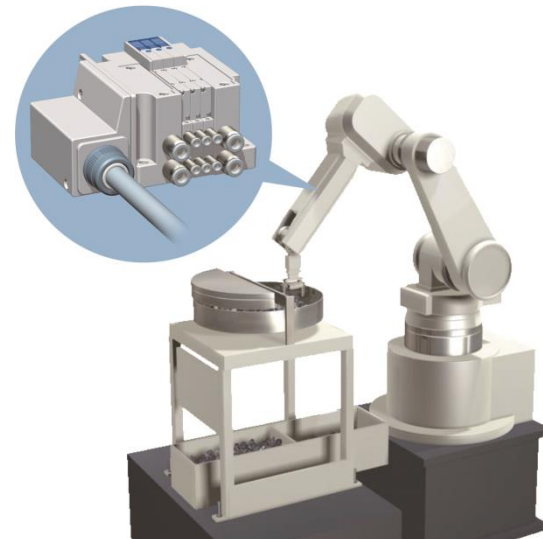
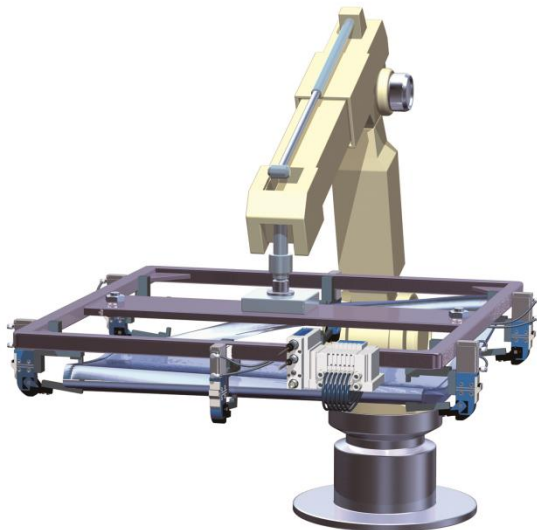
## 2. Application example

### Space saving




- Possible to install in limited space and to reduce installation space.

### Weight reduction

- Reducing inertial load of moving parts enables **High speed response**
- Reducing weight of moving parts including valve realized reducing control current value. It leads to **Saves energy.**



# 3. Specifications(1)

Series	JSY1000	JSY3000	JSY5000
Specifications			
Appearance shape			
Valve width 【When mounting PE plate】	6.4mm 【8.6mm】	10mm 【13.5mm】	15mm 【20mm】
Cv factor	0.17	0.56	1.48
Type of actuation	2-position single and double		
P,EA,EB port size	M5	1/16"	1/8"
A,B port size	M5/M3		
Applicable connector	Individual wiring		
Enclosure	IP40		

# 3. Specifications(2)

## JSY1000/3000/5000 Series

### Valve specifications

Seal type		Rubber seal	
Fluid		Air	
Internal pilot	2-position single	0.15 to 0.7	
Set pressure range [Mpa]	2-position double	0.1 to 0.7	
Ambient and fluid temperature [°C]		-10 to 50 (No freezing)	
Max. operating frequency [Hz]	2-position single and double		5
Manual		Non-locking push	
		Push-turn locking(slotted)	
		Push-turn locking(manual)	
Pilot exhaust type	Internal pilot	Individual exhaust	
Lubrication		Not required	
Mounting orientation *1		Unrestricted	
Impact/Vibration resistance *1 m/s <sup>2</sup>		150/30	
Enclosure		IP40	
Electrical entry		L-type plug connector (L), M-type plug connector (M)	
Coil rated voltage [V]		DC24V	
Allowable voltage fluctuation [V]	JSY1000	-7%~+10% of rated voltage	
	JSY3000/5000	±10% of rated voltage	
Power consumption [W]	DC	Standard	JSY3000/5000 0.4
		With power saving circuit	JSY1000 0.2 *2 [Inrush 0.5,Holding 0.2]
			JSY3000/5000 (Made to order) 0.1 [Inrush 0.4,Holding 0.1]
Surge voltage suppressor		Diode	
Indicator light		LED	

\*1 Impact resistance : No malfunction occurred when it is tested in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. The test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

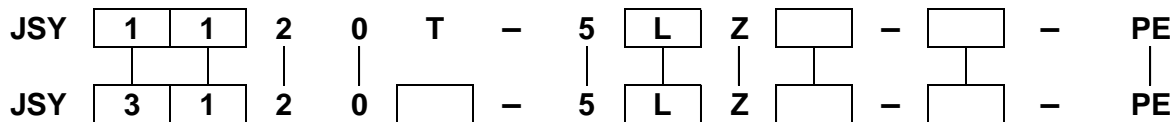
\*2 JSY1000 series available as power saving type only. Standard type (without power saving circuit) cannot be selected.

# 4. How to order

Refer to the Specific Product Precautions [One-touch Fittings] for part numbers of One-touch fittings .

Single unit (When mounting P.E plate)

•How to order



Series

1	JSY1000
3	JSY3000
5	JSY5000

Type of actuation

1	2-position single
2	2-position double

Body ported type

Option

0	Individual pilot exhaust
---	--------------------------

Coil type

Nil	-
T	With power saving circuit (Made to order)

Rated voltage

5	DC24V
---	-------

Electrical entry

L	L plug connector With lead wire(300mm)
LO	L plug connector Without connector
M	M plug connector With lead wire(300mm)
MO	M plug connector Without connector

Light/surge voltage suppressor and common specification

Z	With Light/surge voltage suppressor
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With P.E plate

Symbol	Thread piping	JSY1000	JSY3000	JSY5000
PE	M5X0.8	●		
	Rc1/16		●	
	Rc1/8			●

4(A)/2(B) port size Thread piping

Symbol	Thread piping	JSY1000	JSY3000	JSY5000
M3	M3X0.5	●		
M5	M5X0.8	●		
R1	Rc1/16		●	
01	Rc1/8			●

Manual

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

# 5. Characteristics

Valve specification **JSY1000/3000/5000 Series**

## Single unit Response time and Valve weight

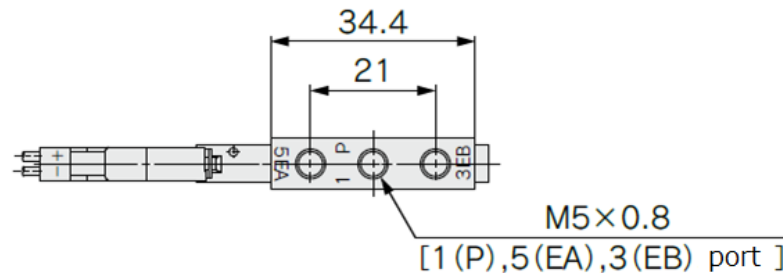
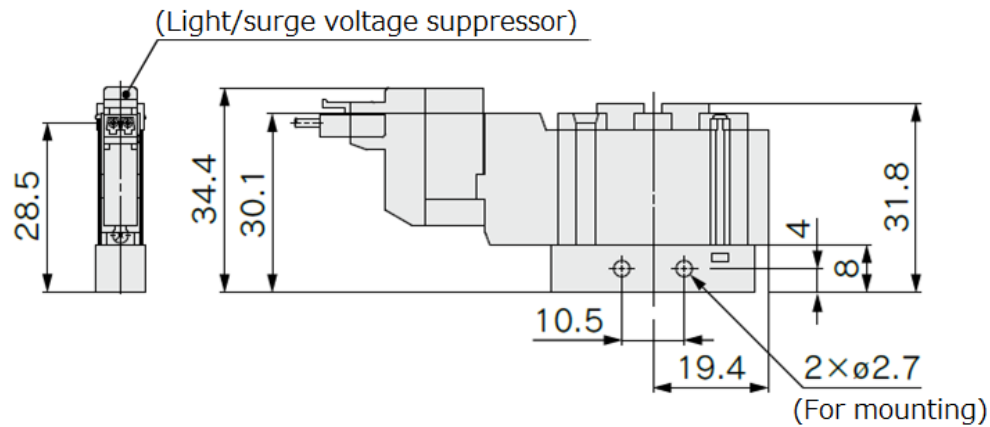
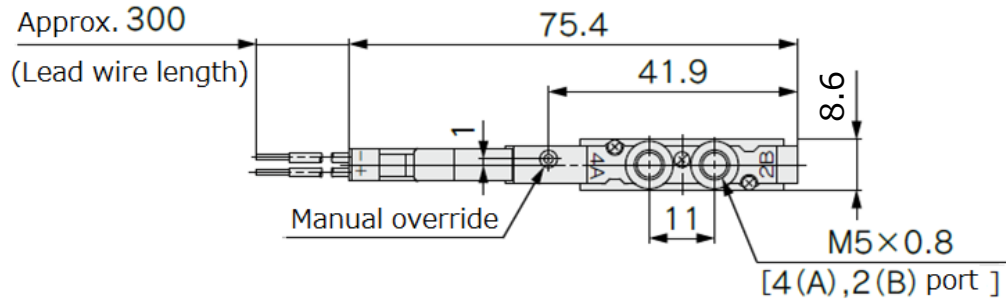
Series	Seal type	Type	Type of actuation	Response time [ms] (0.5MPa) *		Weight [g]
				Standard		
				With light/surge voltage suppressor		
				Z type		
JSY1000	Rubber seal	JSY1120T	2-position single	15		21
		JSY1220T	2-position double	5		28
JSY3000		JSY3120	2-position single	27		48
		JSY3220	2-position double	10		63
JSY5000		JSY5120	2-position single	42		97
		JSY5220	2-position double	13		113

\*Based on dynamic performance test, JIS B 8419-2010 (Coil temperature: 20°C, at rated voltage)



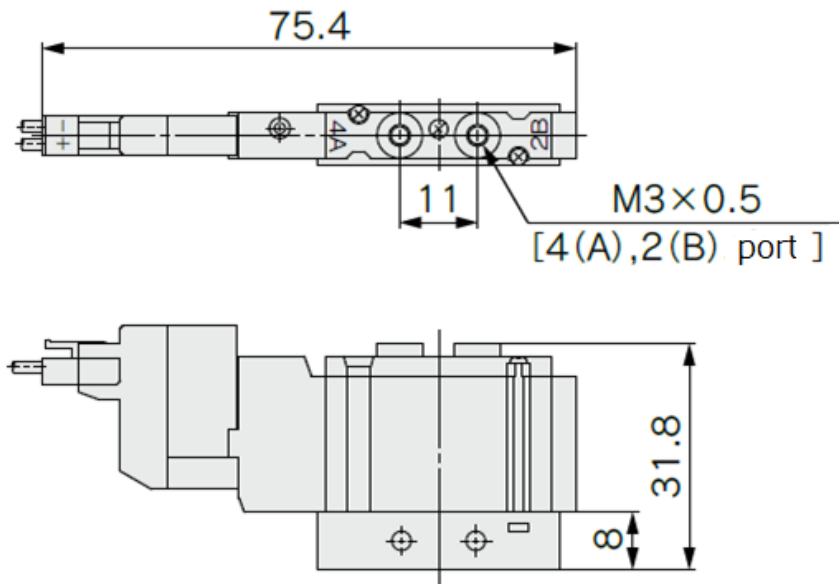
# 6. Dimensions(1)

2-position single L-type plug connector (L)  
 JSY1120T-□LZ□-M5-PE

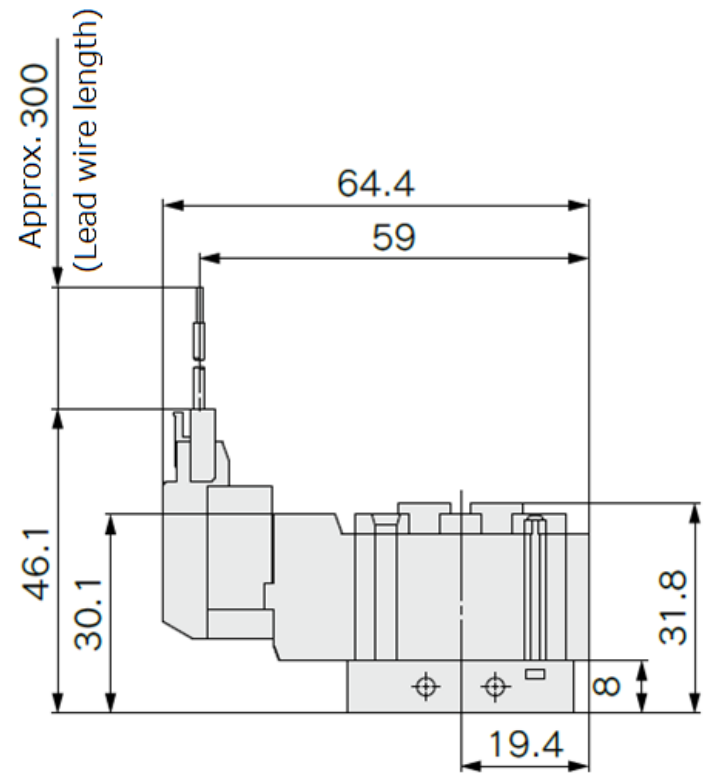


# 6. Dimensions(1)

2-position single L-type plug connector (L)  
 JSY1120T-□LZ□-M3-PE

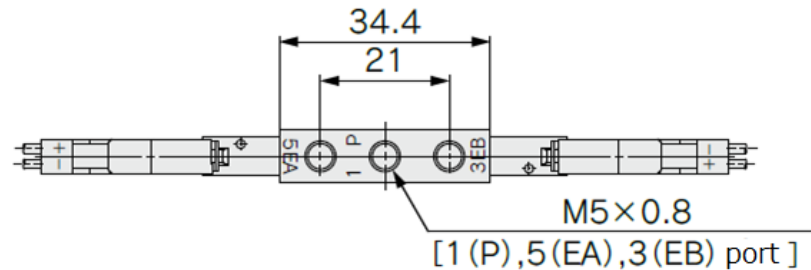
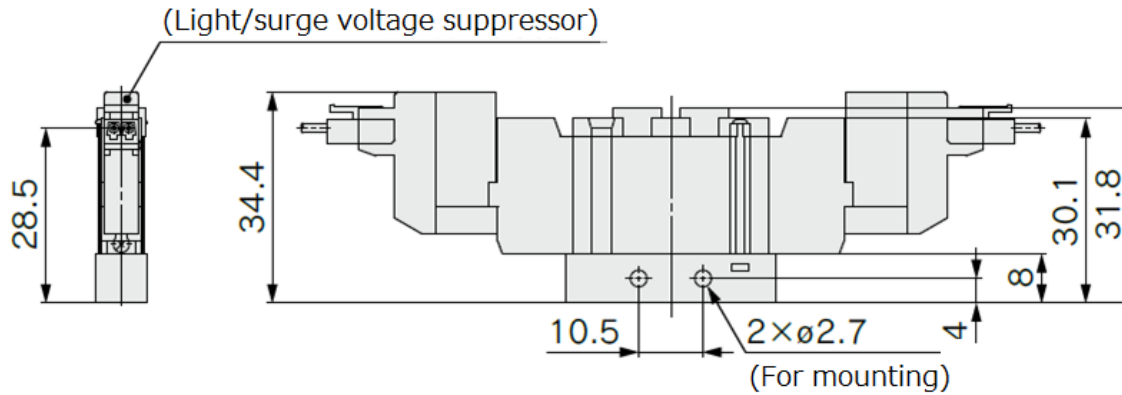
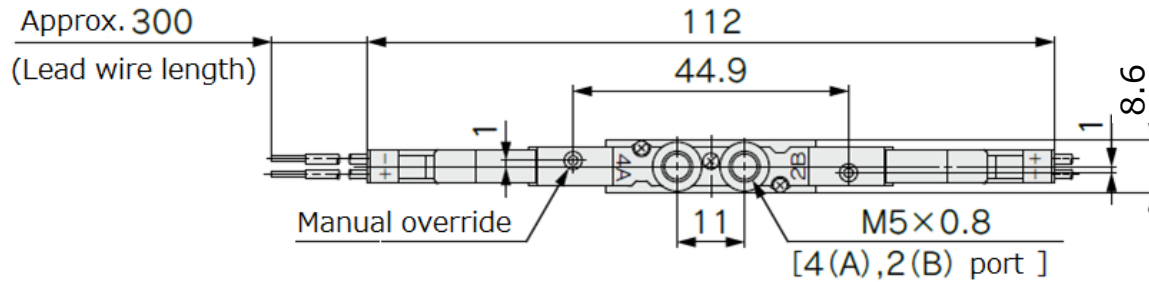


M-type plug connector (M)  
 JSY1120T-□MZ□-M5-PE



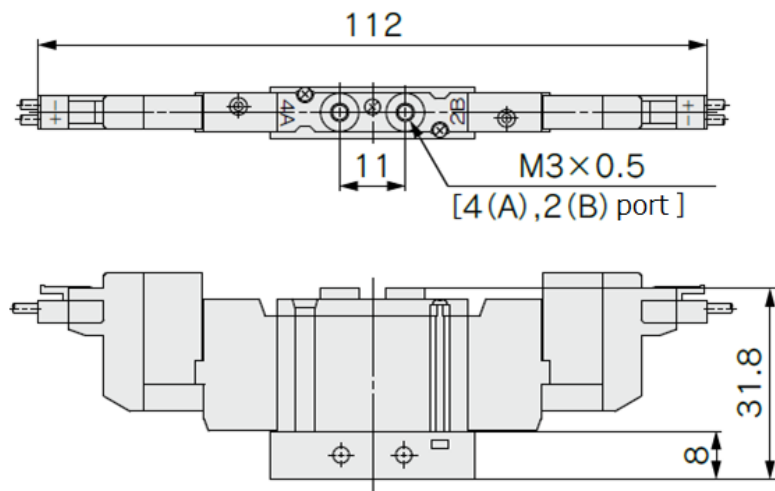
# 6. Dimensions(2)

2-position double L-type plug connector (L)  
 JSY1220T-□LZ□-M5-PE

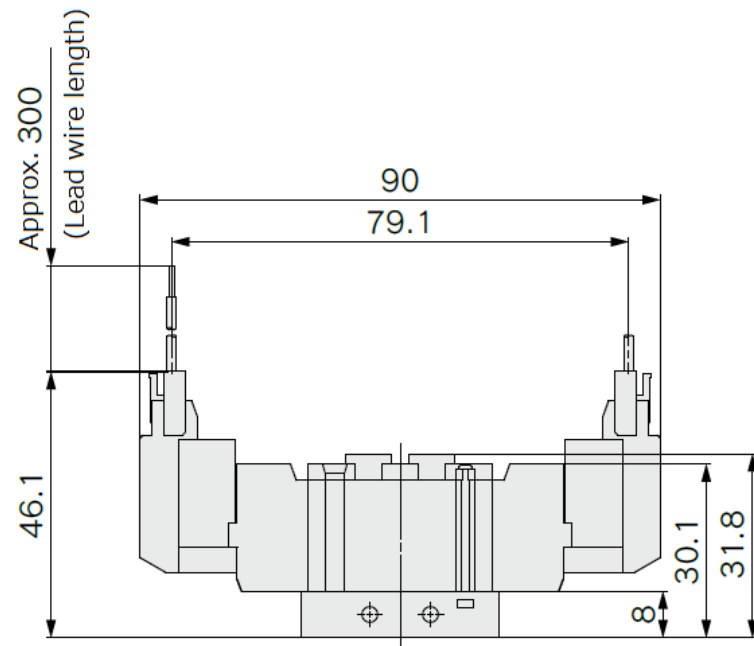


# 6. Dimensions(3)

**2-position double L-type plug connector (L)**  
**JSY1220T-□LZ□-M3-PE**

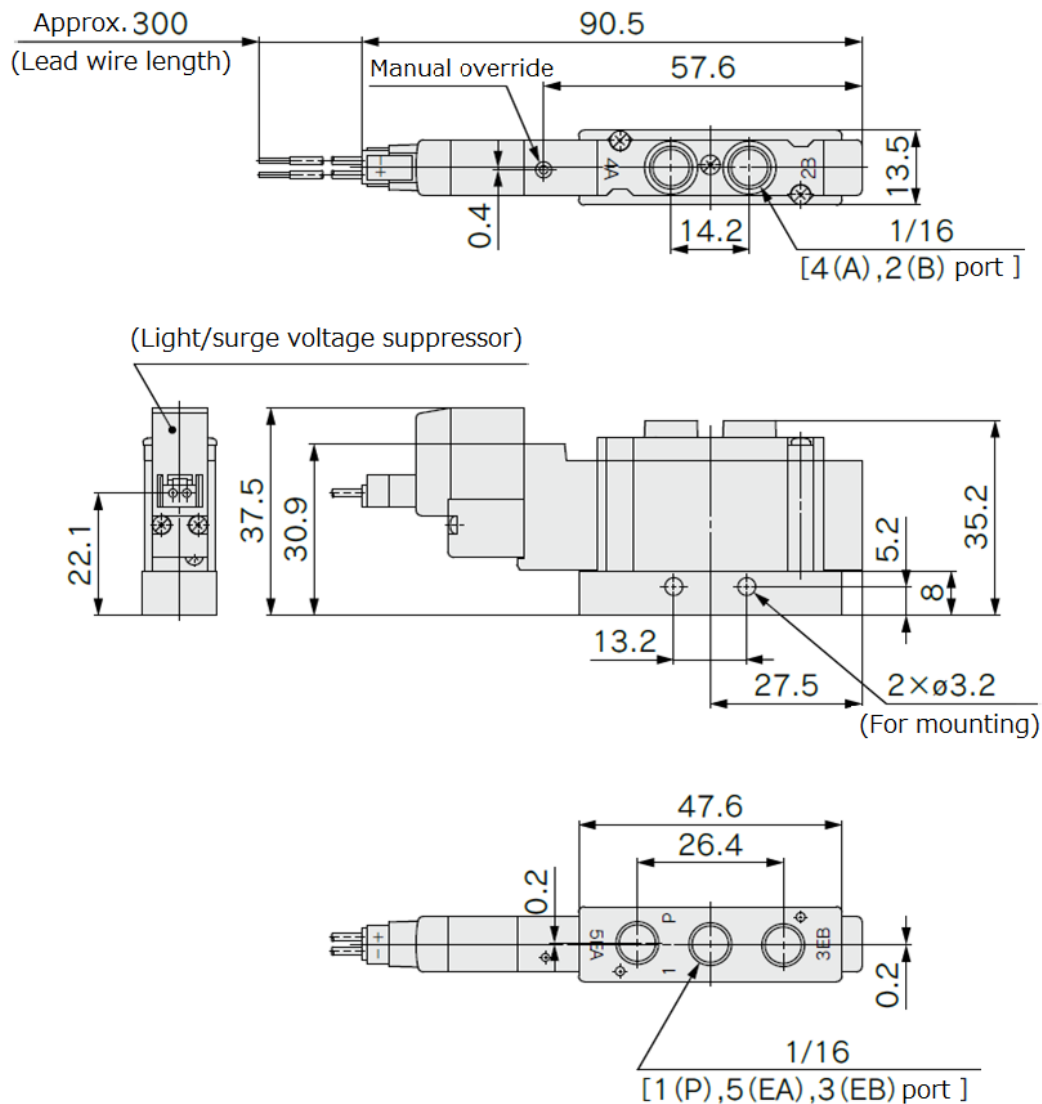


**M-type plug connector (M)**  
**JSY1220T-□MZ□-M5-PE**

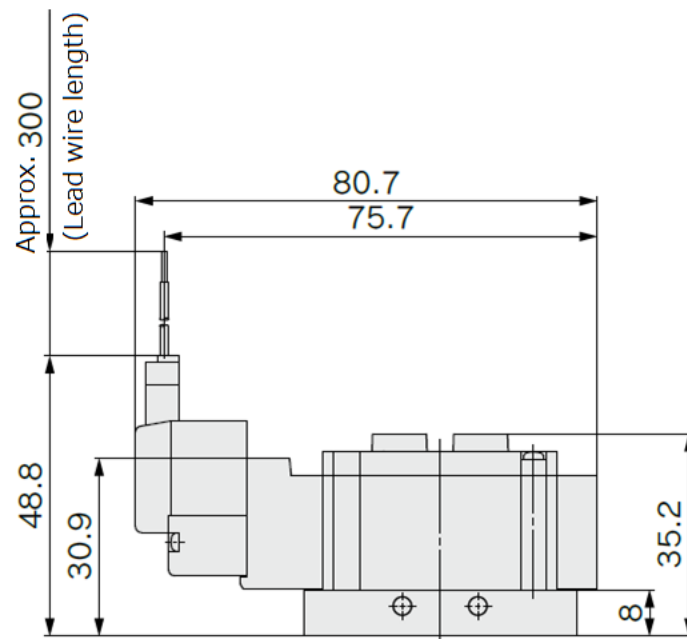


# 6. Dimensions(4)

**2-position single L-type plug connector (L)**  
**JSY3120-□LZ□-R1-PE**

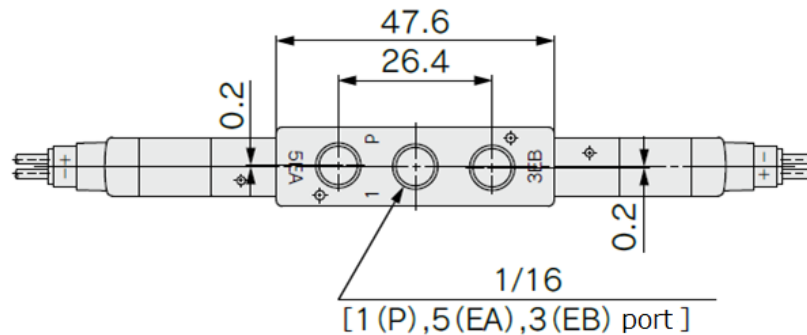
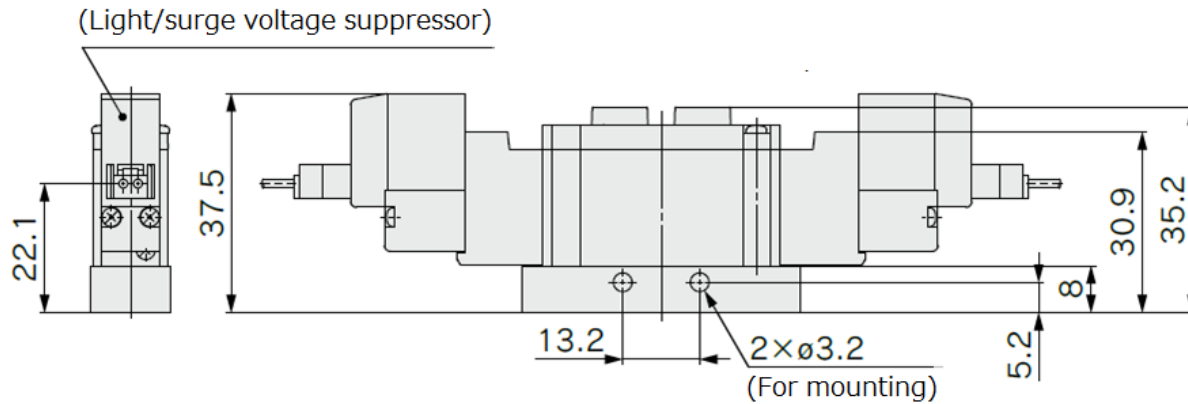
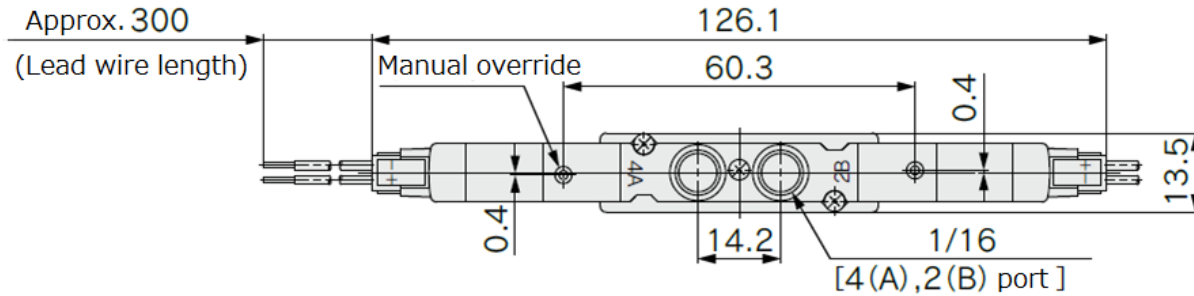


**M-type plug connector (M)**  
**JSY3120-□MZ□-R1-PE**



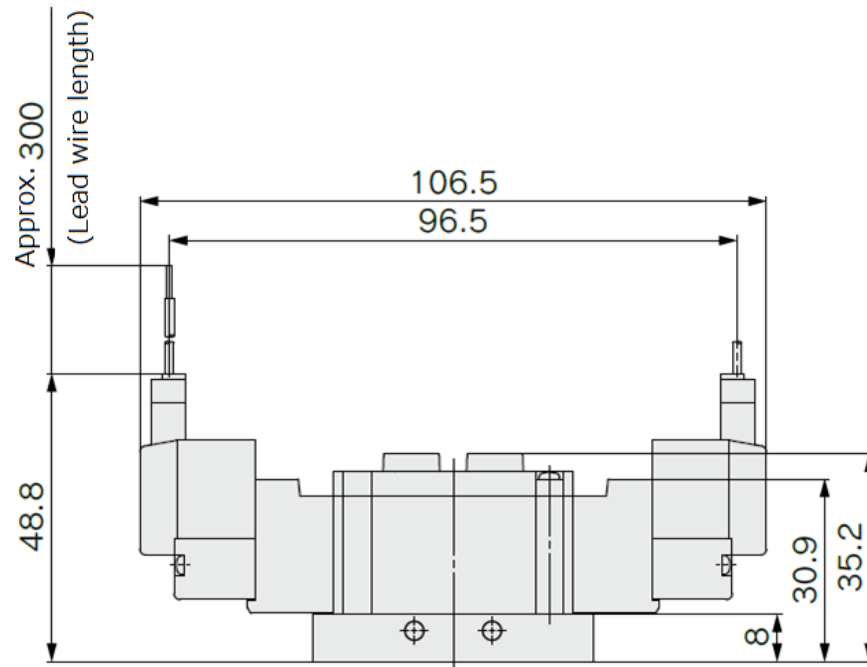
# 6. Dimensions(5)

2-position double L-type plug connector (L)  
 JSY3220-□LZ□-R1-PE



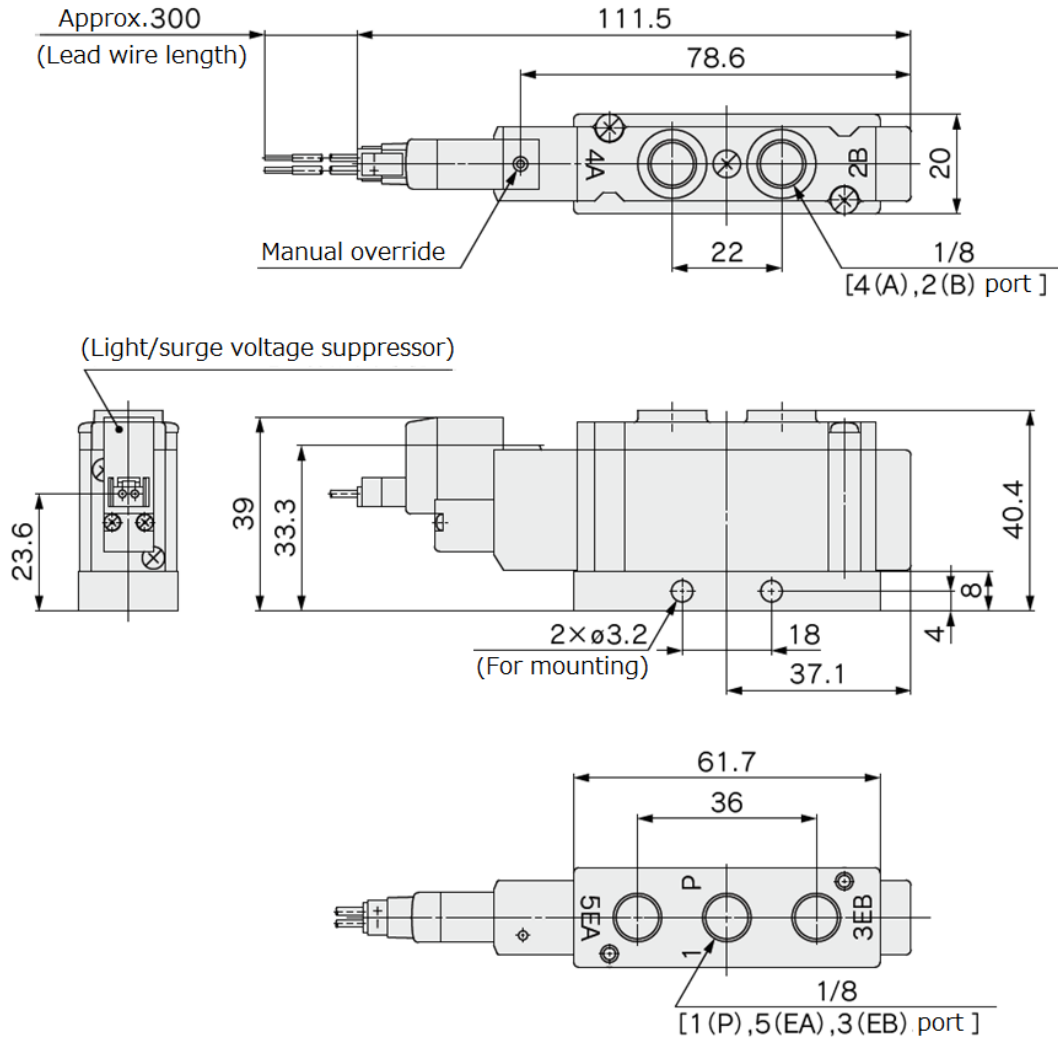
# 6. Dimensions(6)

2-position double M-type plug connector (M)  
JSY3220-□MZ□-R1-PE

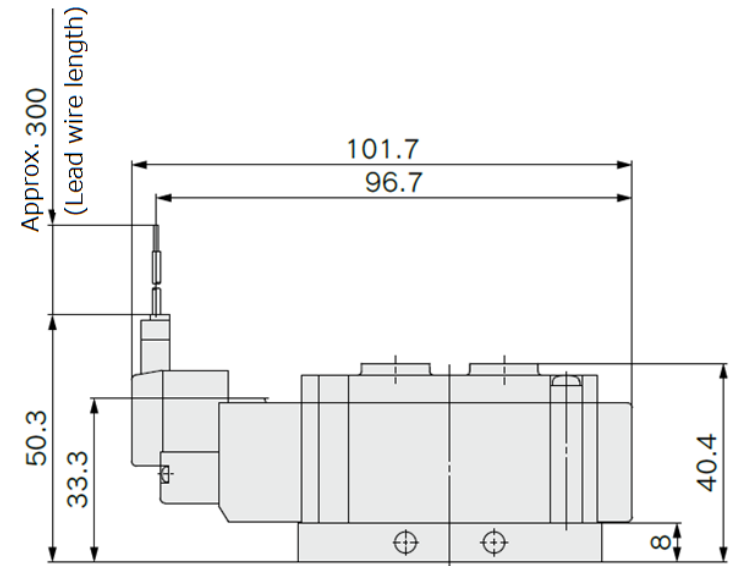


# 6. Dimensions(7)

**2-position single L-type plug connector (L)**  
**JSY5120-□LZ□-01-PE**



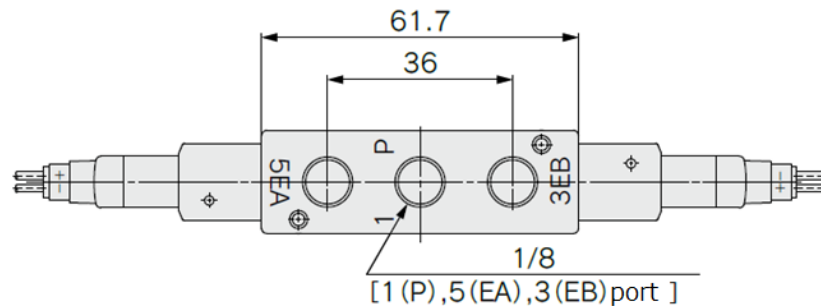
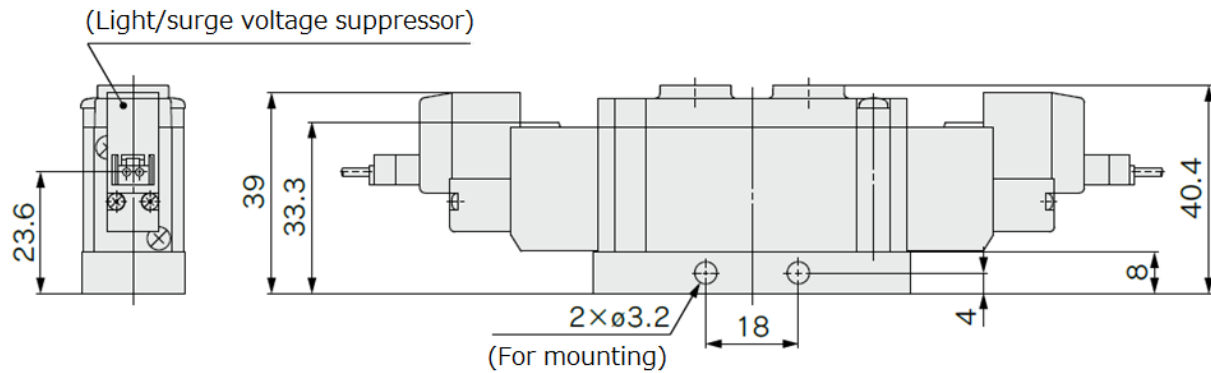
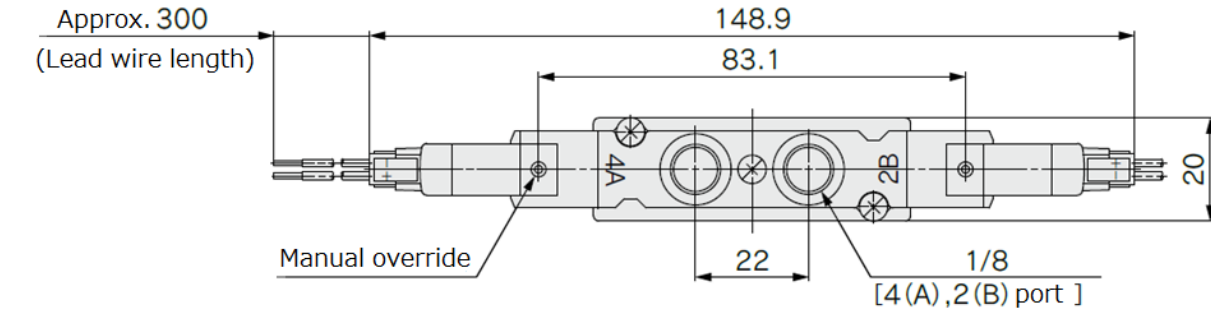
**M-type plug connector (M)**  
**JSY5120-□MZ□-01-PE**





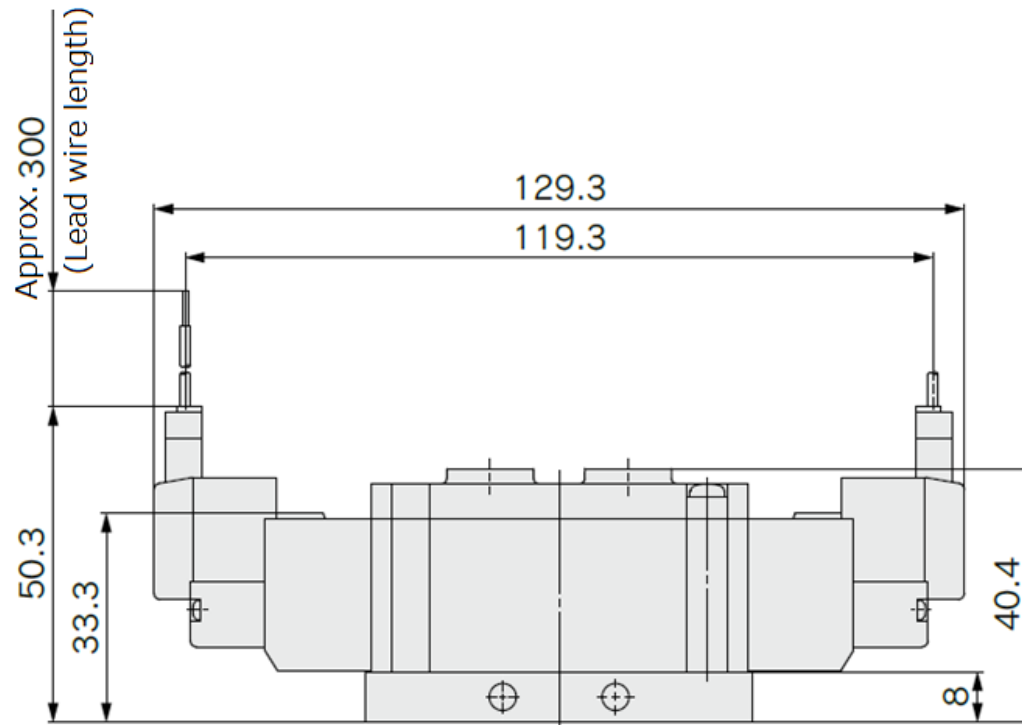
# 6. Dimensions(8)

**2-position double L-type plug connector (L)**  
**JSY5220-□LZ□-01-PE**



# 6. Dimensions(9)

2-position double M-type plug connector (M)  
JSY5220-□MZ□-01-PE



# 7. Exploded view

## Single unit Parts No.

No.	Description	Part number			Note
		JSY1000	JSY3000	JSY5000	
①	Valve mounting screw	JSY11V-23-3A (M1.4X24.5)	JSY31V-23-7A (M2X27)	JSY51V-23-7A (M3X32)	Part numbers shown on the left are for 10 valves. (20 pcs.)
②	Base gasket (For single unit)	JSY11M-9P-1A	JSY31M-9P-1A	JSY51M-9P-1A	Part numbers shown on the left are for 10 valves. (10 pcs.)
③	P.E plate Ass'y	JSY11V-7A-M5 (With square nut ,gasket)	JSY31V-7A-R1 (With gasket)	JSY51V-7A-01 (With gasket)	Supplied individually Refer to below table for details.

### ■ P.E plate

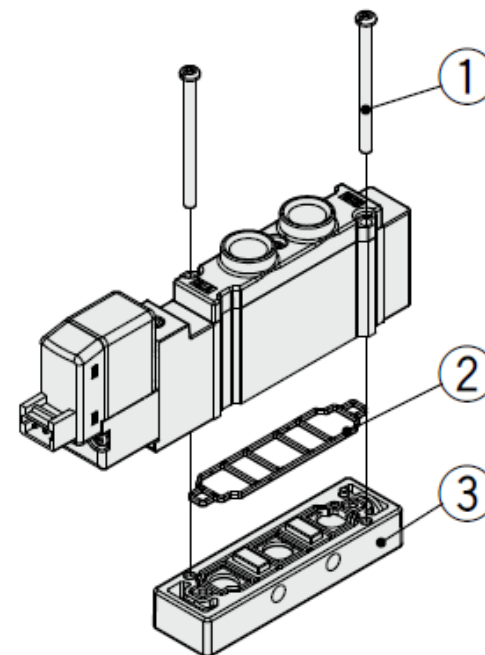
[With square nut\*, base gasket] \*JSY1000 only

JSY **3** 1 V -7 A - **R1**

1	JSY1000
3	JSY3000
5	JSY5000

### Thread piping

Symbol	Thread piping	JSY1000	JSY3000	JSY5000
M5	M5x0.8	●		
R1	Rc1/16		●	
01	Rc1/8			●



# 8. One-touch fitting(1)

One-touch fitting and Silencer for JSY3000 (1/16") are as shown below.

Applicable series	Thread port size	Description	Part number	Note
JSY3000 Body ported type	Rc1/16"	One-touch fitting (Applicable tube size: $\Phi 6$ )	KQ2S06-R1AS-X1517※	Part number is for one piece. (Sales unit:10pcs.)
		One-touch fitting (Applicable tube size: $\Phi 8$ )	KQSY-S08R1S※	Part number is for one piece. (Sales unit:10pcs.)
		Silencer	INA-25-98	Part number is for one piece. (Sales unit:1pcs.)

※Tightening torque for One-touch fittings: 2~3N·m

# 8. One-touch fitting(2)

## JSY1000/3000/5000 Series / Specific Product Precautions

### One-touch Fittings

Applicable fittings : Series KQ2H,KQ2S,KQSY,M

● Single unit [When mounting on the wall]

Series	Model	Piping port	Port size	Fittings	Applicable tube O.D.						
					Φ2	Φ4	Φ6	Φ8	Φ10	Φ12	Φ16
JSY1000	JSY1※20T-5※Z※-M3-PE	1P,5EA,3EB	M5	M series	○	○	○	-	-	-	-
				KQ2H	○	-	-	-	-	-	-
				KQ2S	-	○	-	-	-	-	-
		4A,2B	M3	M series	○	○	-	-	-	-	
				KQ2H	○	-	-	-	-	-	
				KQ2S	○	○	-	-	-	-	
JSY1000	JSY1※20T-5※Z※-M5-PE	1P,5EA,3EB	M5	M series	○	○	○	-	-	-	-
				KQ2H	○	-	-	-	-	-	-
				KQ2S	-	○	-	-	-	-	-
		4A,2B	M5	M series	○	○	○	-	-	-	-
				KQ2H	○	-	-	-	-	-	-
				KQ2S	-	○	-	-	-	-	-
JSY3000	JSY3※20-5※Z※-R1-PE	1P,5EA,3EB	Rc1/16	KQ2H	-	-	○	-	-	-	-
				KQ2S	-	-	○	-	-	-	-
				KQSY	-	-	-	○	-	-	-
		4A,2B	Rc1/16	KQ2H	-	-	○	-	-	-	-
				KQ2S	-	-	○	-	-	-	-
				KQSY	-	-	-	○	-	-	-
JSY5000	JSY5※20-5※Z※-01-PE	1P,5EA,3EB	Rc1/8	KQ2H	-	○	○	○	-	-	-
				KQ2S	-	○	○	○	○	-	-
		4A,2B	Rc1/8	KQ2H	-	○	○	○	○	-	-
				KQ2S	-	○	○	○	○	-	-

# 9. Instructions(1)

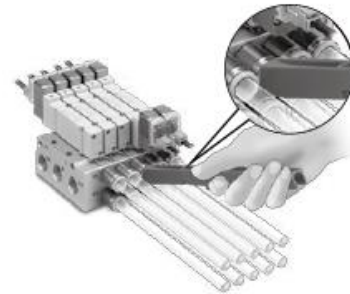
- Only rubber seal type is available for JSY series.  
If Metal seal type is required, please use SY or VQ series.
- Consumption depends on series size.  
Also, JSY1000 series available as power saving type and DC specification only.

Series	Consumption DC(W)	
	Standard	Power saving circuit
JSY1000	With power saving circuit Inrush 0.5 Holding 0.2	/
JSY3000	0.4	Inrush 0.4 Holding 0.1
JSY5000		

- Be sure to select the power saving circuit type when the JSY3000/5000 series is continuously energized for long periods of time.  
For the details of part number, refer to the catalog page “Made to order”.

## 9. Instructions(2)

- In case of electric entry for non plug-in type, L-type and M-type plug connector are available.
- Interval between adjacent fittings is narrow when selecting maximum port size of A and B port. Please use tube releasing tool. (Refer to the catalog.)



- JSY series has compact body and high flow, so even though the inlet pressure is within the operating pressure range, when the piping diameter is restricted due to size reduction of supply port (P), the flow will be insufficient. In this case, the valve does not switch completely and the cylinder may malfunction.