Non Plug-in

Compact 5-Port Solenoid Valve New

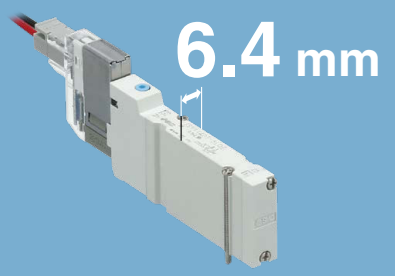
Size reduction possible thanks to a flow increase

RoHS

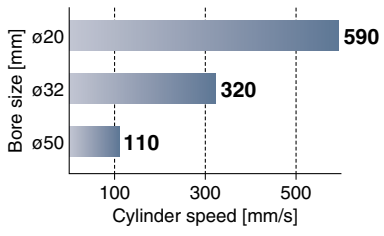
This leads to space saving, weight reduction, and a large flow rate.

Possible to drive Ø32*1 bore cylinders

JSY1000

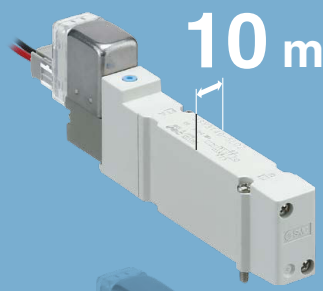


A, B port size: ø2, ø4, ø6

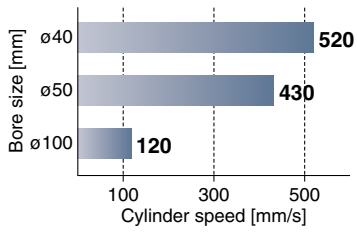


Possible to drive Ø50*1 bore cylinders

JSY3000

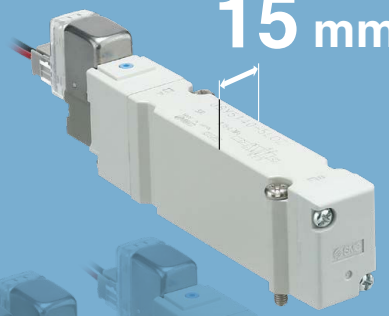


A, B port size: ø6, ø8



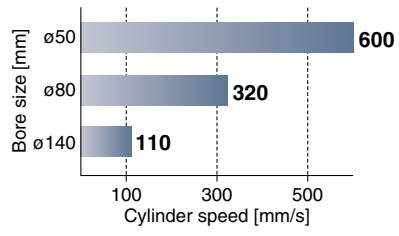
Possible to drive Ø80*1 bore cylinders

JSY5000

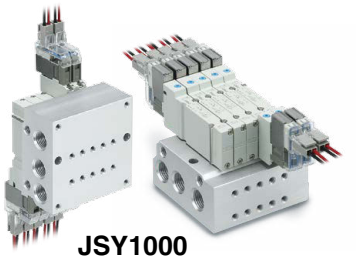


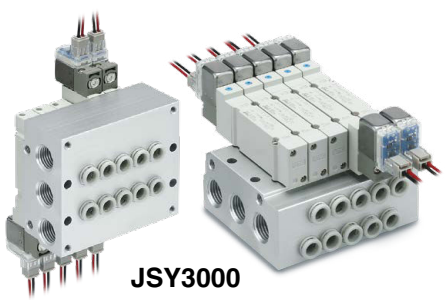
A, B port size: ø8, ø10, ø12

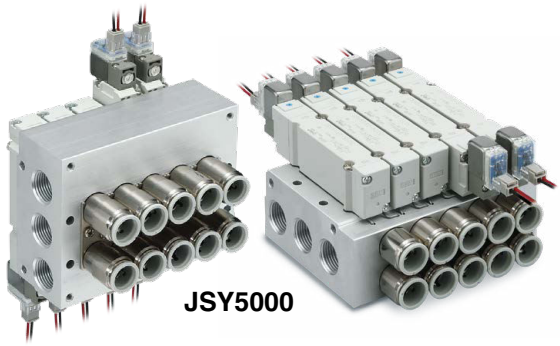
*1 The cylinder speed is 300 mm/s



Refer to pages 5 to 8 for detailed conditions regarding the above cylinder speed.


JSY1000


JSY3000

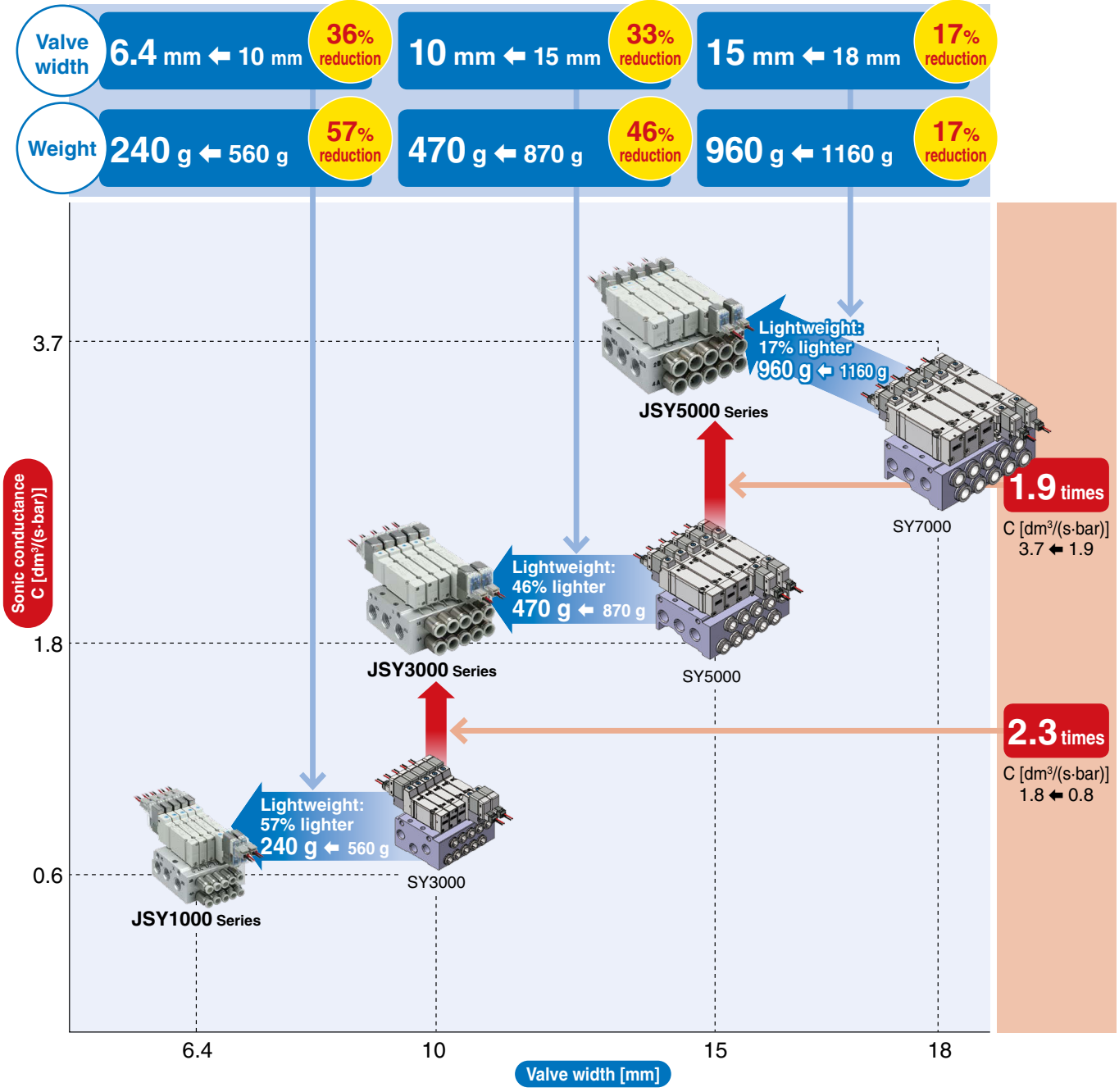

JSY5000

JSY1000/3000/5000 Series

SMC

CAT.ES11-113A

Series Map



Power Saving

Power Consumption

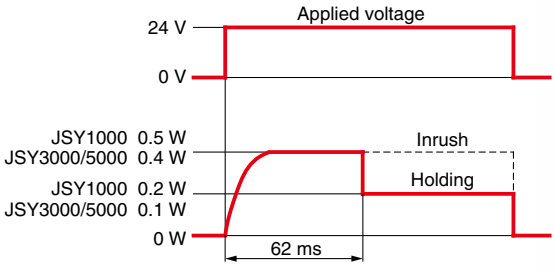
0.1 W *1 (With power saving circuit)

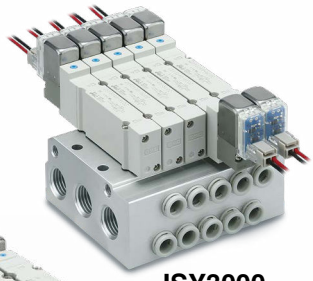
0.4 W *1 (Without power saving circuit)

*1 JSY3000/5000

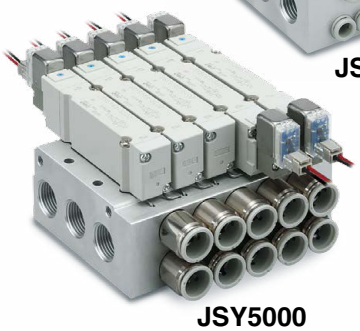
Power consumption is reduced by power saving circuit.

Power consumption is decreased by approx. 1/3 by reducing the wattage required to hold the valve in an energized state.
(Effective energizing time is over 62 ms at 24 VDC.) Refer to the electrical power waveform as shown on the right.





JSY3000

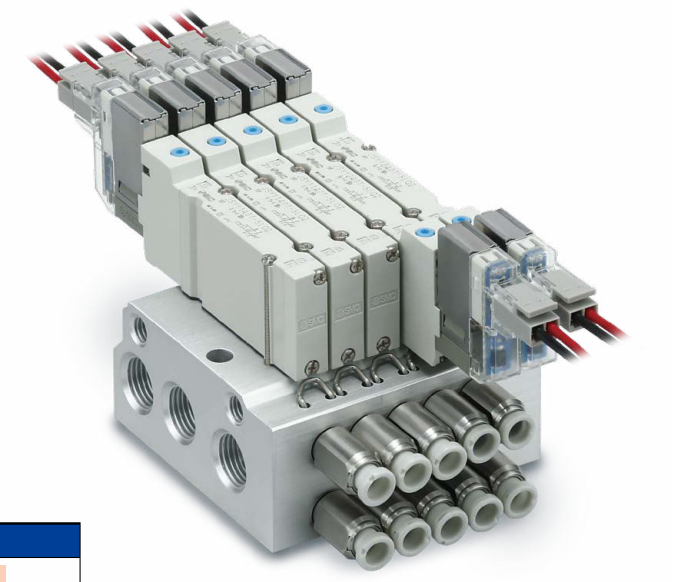


JSY5000

Space Saving

Volume Max. **36% reduction**

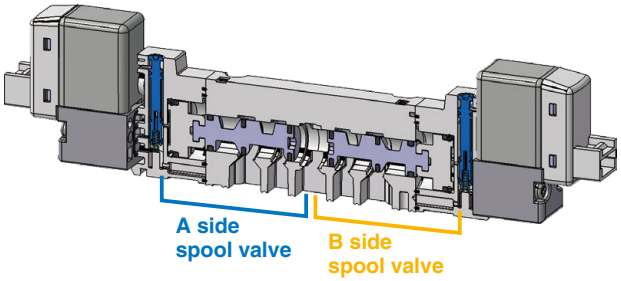
Weight Max. **57% reduction**



	Volume [cm³]	Weight [g]
JSY1000	**210** — 36% reduction	**240** — 57% reduction
SY3000	330	560
JSY3000	**460** — 28% reduction	**470** — 46% reduction
SY5000	640	870
JSY5000	**850** — 14% reduction	**960** — 17% reduction
SY7000	990	1160

4-Position Dual 3-Port Valve Available

• Two 3-port valves built into one body

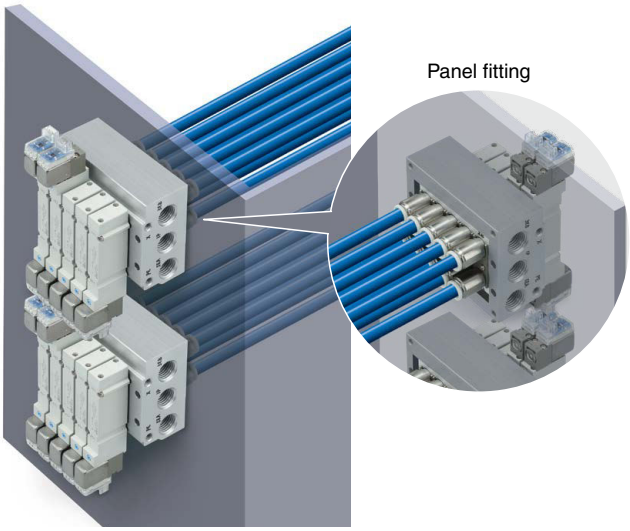


- 3-port valves on the A and B sides can operate independently.
- When used as a 3-port valve, only half the number of stations is required.
- Can also be used as a 4-position, 5-port valve

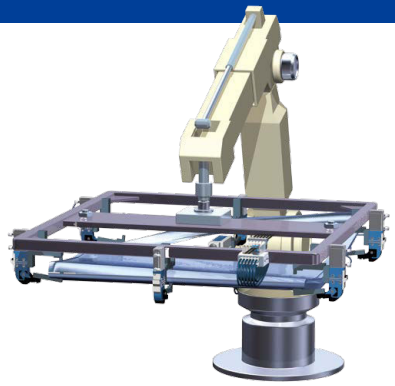
• Combination examples

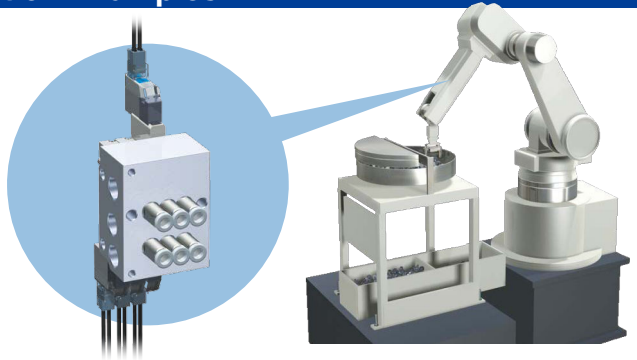
Model	A side	B side
JSY□A4□	N.C. valve	N.C. valve
JSY□B4□	N.O. valve	N.O. valve
JSY□C4□	N.C. valve	N.O. valve

Bottom ported is prepared (A, B port).

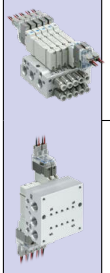
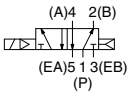
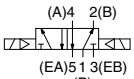
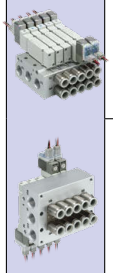
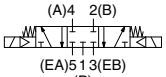
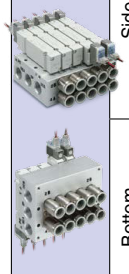
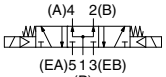
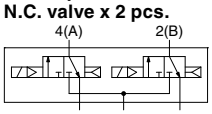
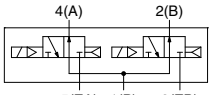
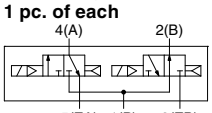


Application Examples





Series Variations

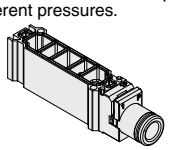
	Piping direction	Sonic conductance C [dm³/(s·bar)] 4/2→5/3 (A/B→EA/EB)	4 (A), 2 (B) port	Type of actuation	Rated voltage	Port size: A, B port: Thread piping: M3	M5	1/8	1/4	One-touch fitting: ø2	ø4	ø6	ø8	ø10	ø12	P, E port	Manifold Options: Blanking plate	Individual SUP spacer	Individual EXH spacer	Valve Options: Vacuum/Low pressure specification	Different pressures	Reverse pressure	Mixed fitting sizes
JSY 1000 	Side	ø6	0.63	**2-position single** 	24 VDC	●	●	—	—	●	●	●	—	—	—	1/8	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●
	Bottom	ø6	0.75	**2-position double** 	24 VDC	●	●	—	—	●	●	●	—	—	—	1/8	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●
JSY 3000 	Side	ø8	1.81	**3-position closed center** 	24 VDC	—	●	●	—	—	—	●	●	—	—	1/4	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●
	Bottom	ø8	2.13	**3-position exhaust center** 	24 VDC	—	●	●	—	—	—	●	●	—	—	1/4	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●
JSY 5000 	Side	ø12	3.72	**3-position pressure center** 	24 VDC	—	—	●	●	—	—	—	●	●	●	3/8	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●
	Bottom	ø12	4.47	**4-position dual 3-port valve N.C. valve x 2 pcs.**  **N.O. valve x 2 pcs.**  **N.C. valve, N.O. valve 1 pc. of each** 	24 VDC	—	—	●	●	—	—	—	●	●	●	3/8	○ p. 38	○ p. 38	○ p. 38	▲ External pilot	○ Individual SUP	▲ External pilot	●

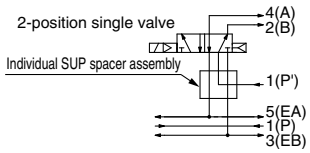
● Standard ○ Option ▲ Made to Order (Refer to page 40.)

Manifold Options

Individual SUP spacer p. 38

When the same manifold is used for different pressures, an individual SUP spacer is used as a supply port for different pressures.



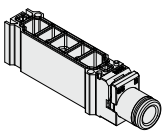


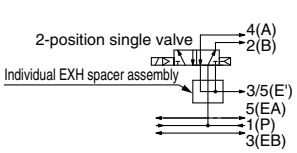
Circuit diagram

(Mounting example of a 2-position single valve)

Individual EXH spacer p. 38

When valve exhaust affects other stations due to the circuit configuration, this spacer is used for individual valve exhaust.



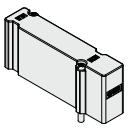


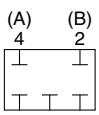
Circuit diagram

(Mounting example of a 2-position single valve)

Blanking plate p. 38

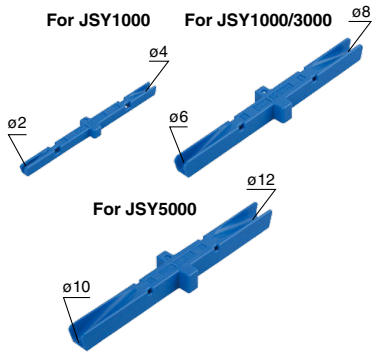
Used when valve additions are expected or for maintenance.





Tube Releasing Tool

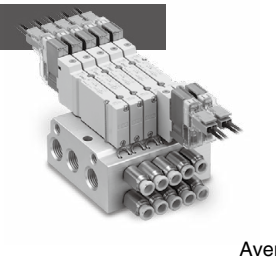
This tool is used for removing the tube from port A and B. p. 36

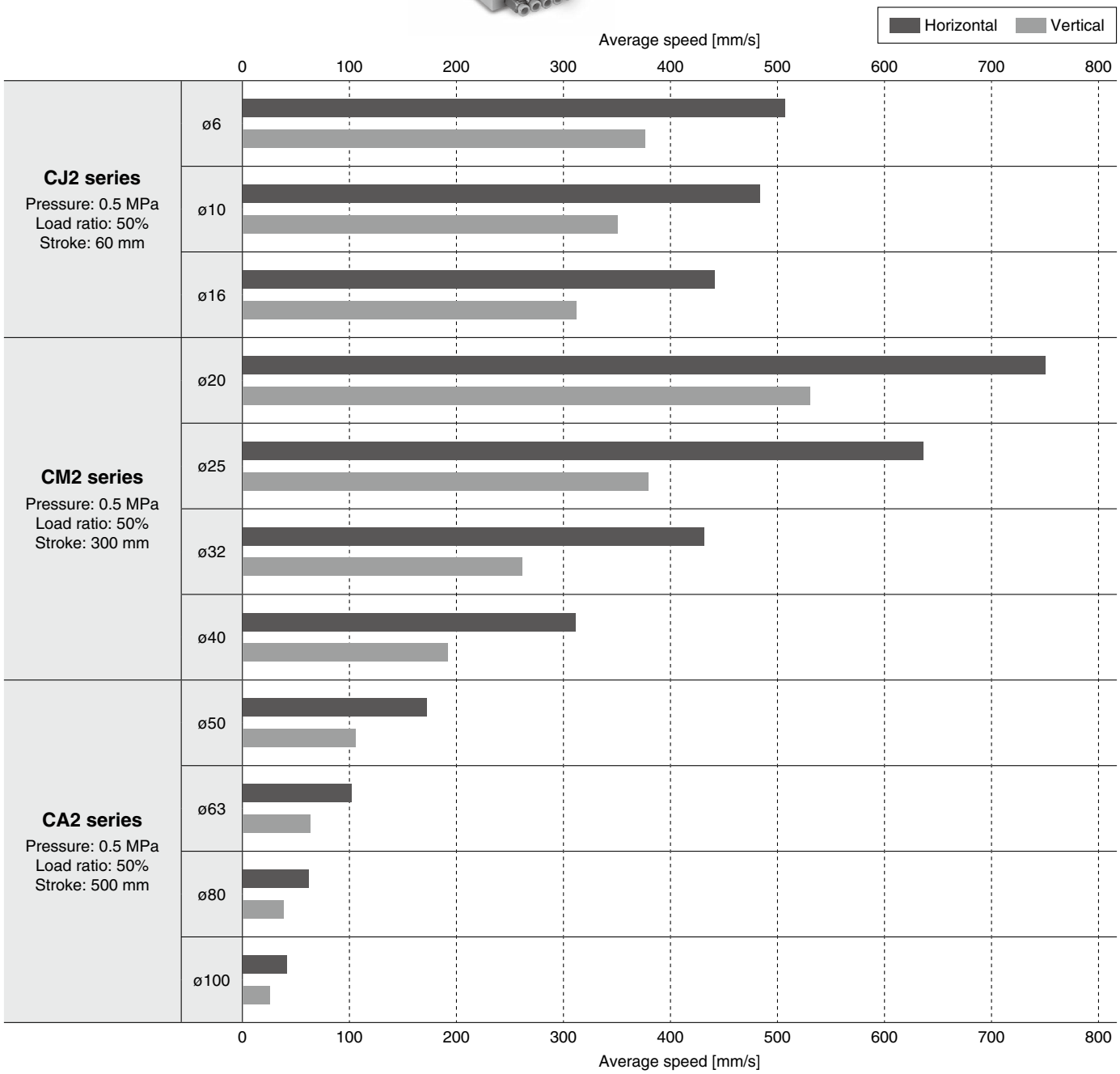


CONTENTS

Optimum Actuation Size Chart of Air Cylinder

For JSY1000, A, B port: ø4

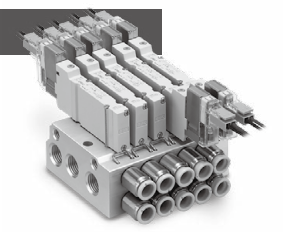


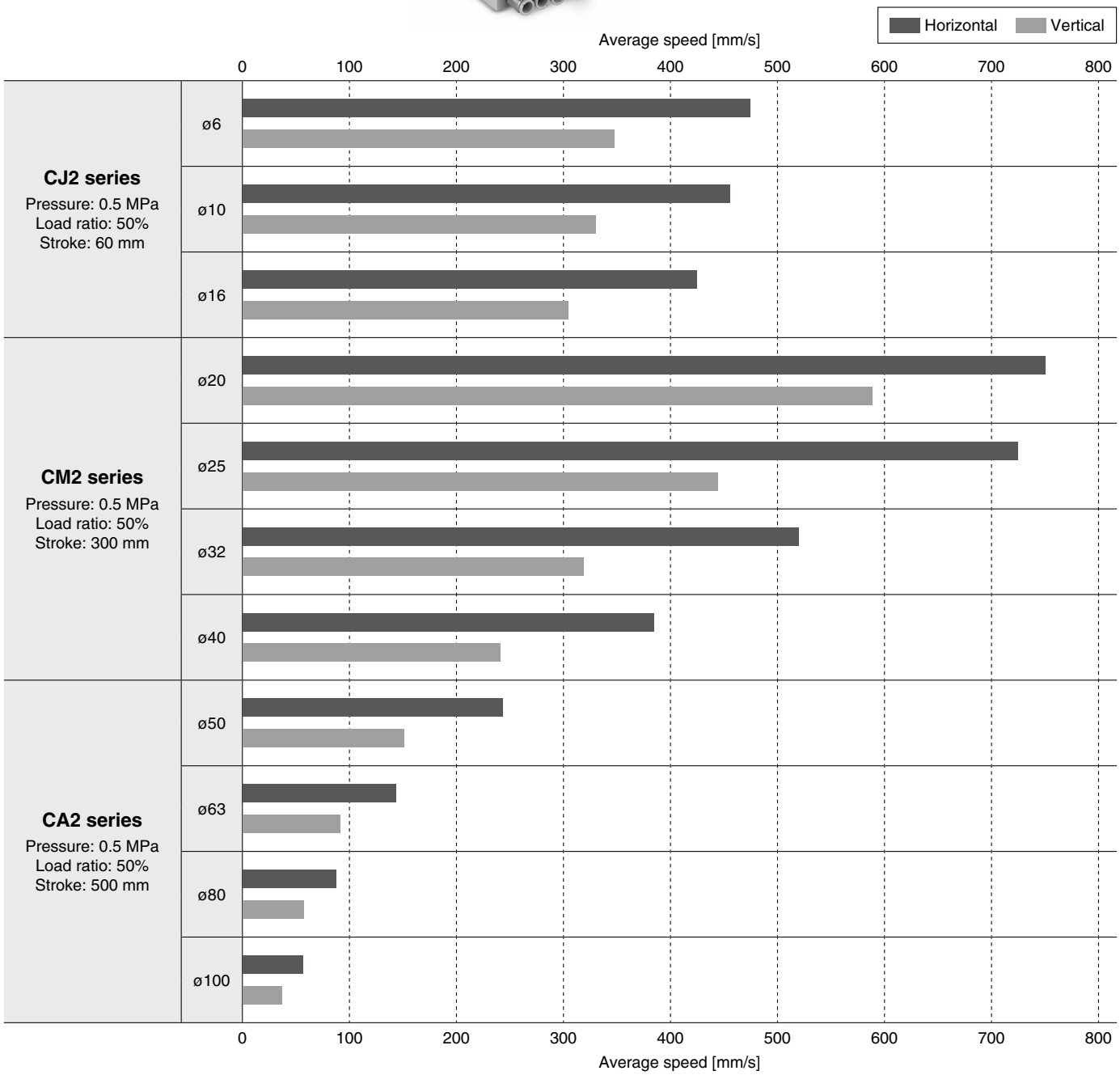


* Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.
* The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.
* Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 100%
* Cylinder for horizontal use are based on the coefficient of rolling friction 0.1.
* Operating piston speed is different depending on the applicable cylinder. Refer to the cylinder catalog for details.

Optimum Actuation Size Chart of Air Cylinder

For JSY1000, A, B port: ø6

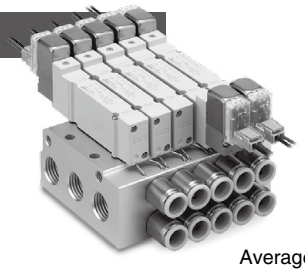


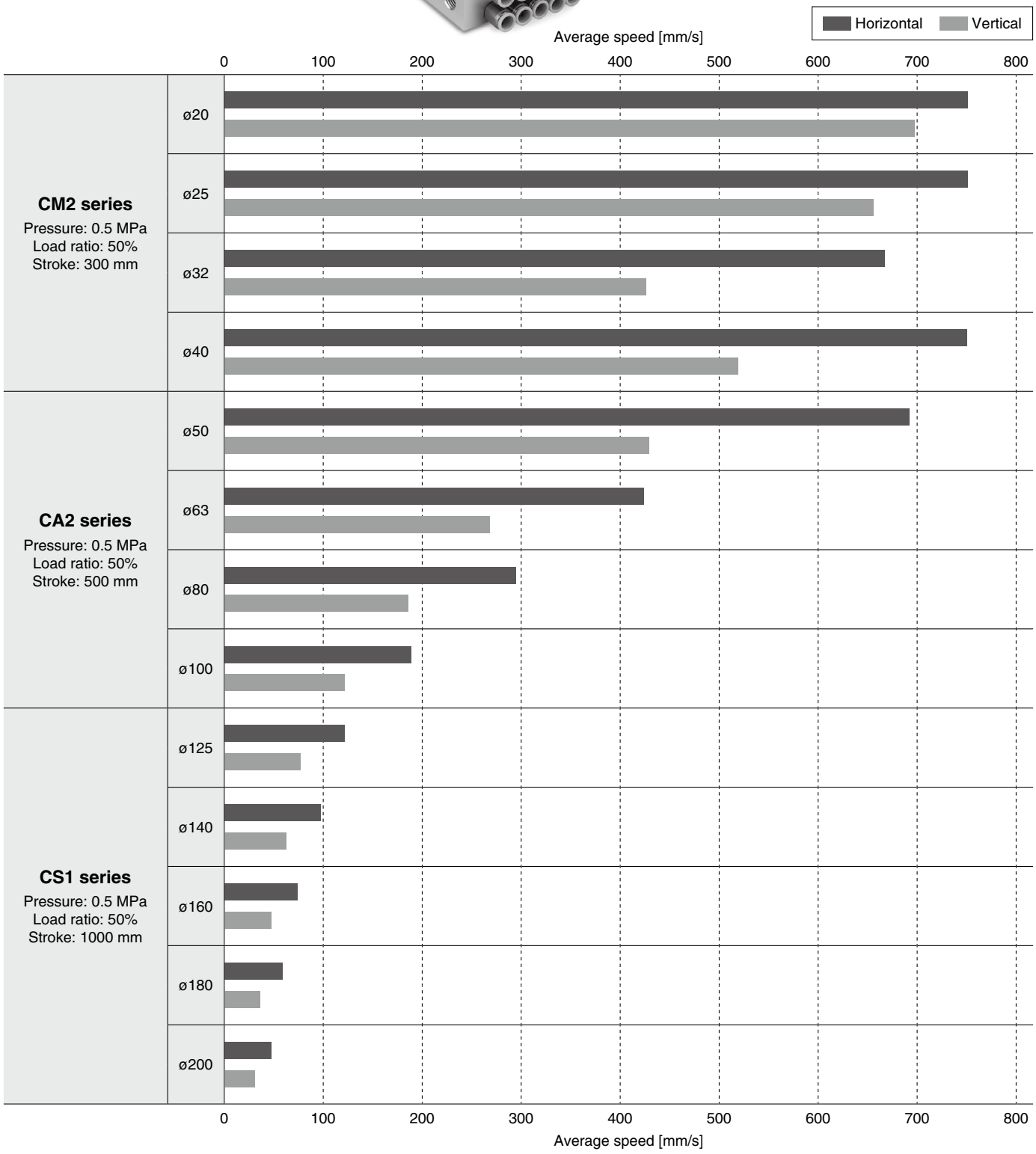


* Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.
* The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.
* Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 100%
* Cylinder for horizontal use are based on the coefficient of rolling friction 0.1.
* Operating piston speed is different depending on the applicable cylinder. Refer to the cylinder catalog for details.

Optimum Actuation Size Chart of Air Cylinder

For JSY3000, A, B port: ø8

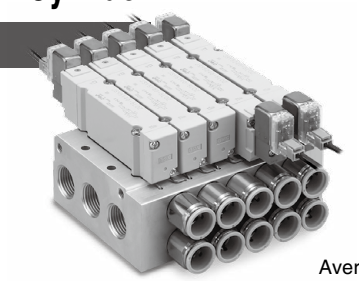


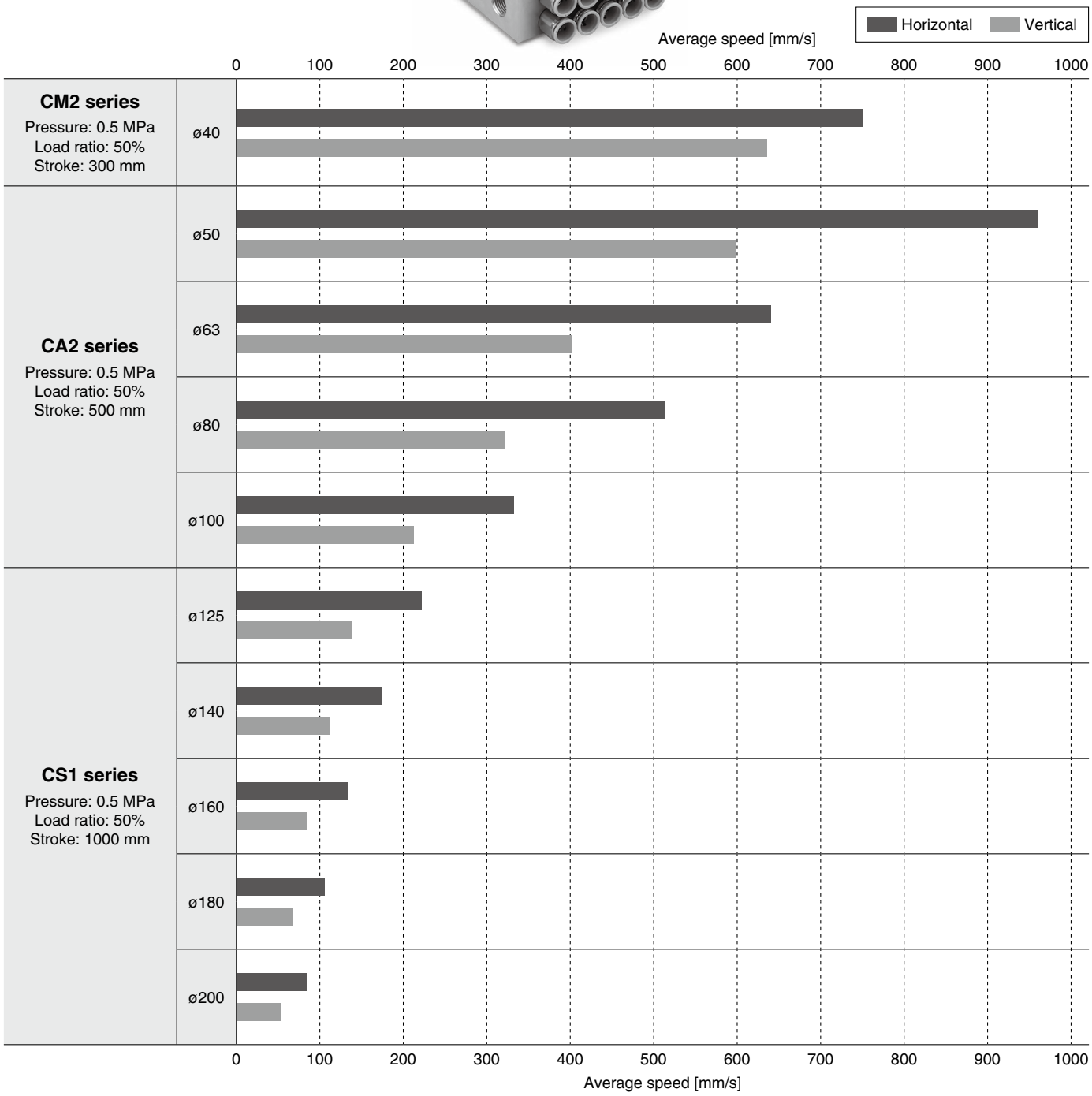


* Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.
* The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.
* Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 100%
* Cylinder for horizontal use are based on the coefficient of rolling friction 0.1.
* Operating piston speed is different depending on the applicable cylinder. Refer to the cylinder catalog for details.

Optimum Actuation Size Chart of Air Cylinder

For JSY5000, A, B port: ø12





* Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.
* The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.
* Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 100%
* Cylinder for horizontal use are based on the coefficient of rolling friction 0.1.
* Operating piston speed is different depending on the applicable cylinder. Refer to the cylinder catalog for details.

JSY1000/3000/5000 Series
Valve Specifications

Valve Specifications

Valve type				Rubber seal
Fluid				Air
Internal pilot operating pressure range [MPa]	**2-position single**			0.15 to 0.7
	2-position double			0.1 to 0.7
	3-position			0.2 to 0.7
	4-position dual 3-port valve			0.15 to 0.7
External pilot operating pressure range [MPa] (Made to Order)	**Operating pressure range**			–100 kPa to 0.7
	Pilot pressure range	**2-position single**		0.25 to 0.7
		2-position double		
		3-position		
Ambient and fluid temperatures [°C]				–10 to 50 (No freezing)
Max. operating frequency [Hz]	**JSY1000/3000**	**2-position single/double**		5
		4-position dual 3-port valve		
		3-position		3
	JSY5000	**2-position single/double**		5
		4-position dual 3-port valve		3
		3-position		3
Manual override				Non-locking push type
				Push-turn locking slotted type
				Push-turn locking lever type
Pilot exhaust type	**Internal pilot**			Individual exhaust
	External pilot (Made to Order)			
Lubrication				Not required
Mounting orientation∗1				Unrestricted
Impact/Vibration resistance∗1 **[m/s²]**				150/30
Enclosure				IP40
Electrical entry				L plug connector (L), M plug connector (M)
Coil rated voltage [V]				24 VDC
Allowable voltage fluctuation			**JSY1000**	–7% to +10% of the rated voltage (24 VDC)
			JSY3000/5000	±10% of the 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∗3 [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. 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)
Refer to page 45 for the fixation of DIN rail mounting type manifold.

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

∗3 For details, refer to page 43.

Response Time/Valve Weight

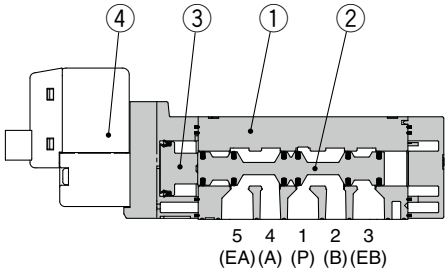
Series	Seal type	Model	Type of actuation	Response time [ms] (at 0.5 MPa)*1	Weight [g]
				Standard	
				With light/surge voltage suppressor	
				Z type	
JSY1000	Rubber seal	**JSY1140T**	2-position single	15	17
		JSY1240T	2-position double	5	24
		JSY1(3/4/5)40T	3-position	13	25
		JSY1(A/B/C)40T	4-position dual 3-port valve	14	24
JSY3000		**JSY3140**	2-position single	27	34
		JSY3240	2-position double	10	49
		JSY3(3/4/5)40	3-position	30	52
		JSY3(A/B/C)40	4-position dual 3-port valve	27	48
JSY5000		**JSY5140**	2-position single	42	66
		JSY5240	2-position double	13	83
		JSY5(3/4/5)40	3-position	40	93
		JSY5(A/B/C)40	4-position dual 3-port valve	41	80

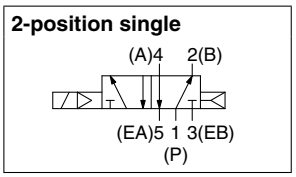
*1 Based on dynamic performance test, JIS B 8419-2010. (Coil temperature: 20°C, at rated voltage)

JSY1000/3000/5000 Series
Valve Construction

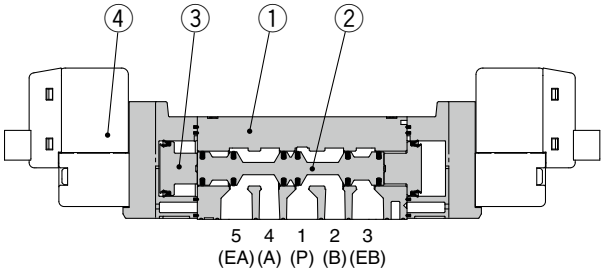
Rubber Seal

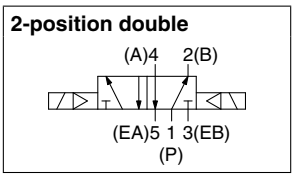
2-position single



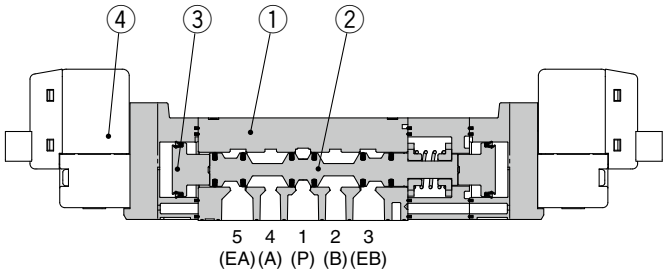


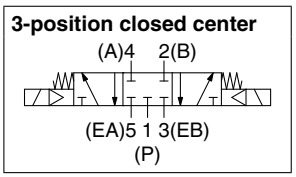
2-position double

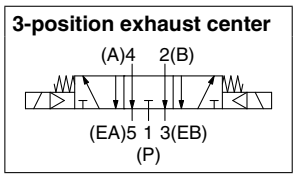


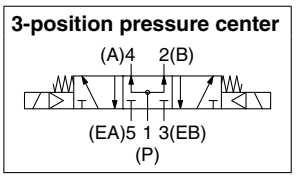


3-position closed center/exhaust center/pressure center

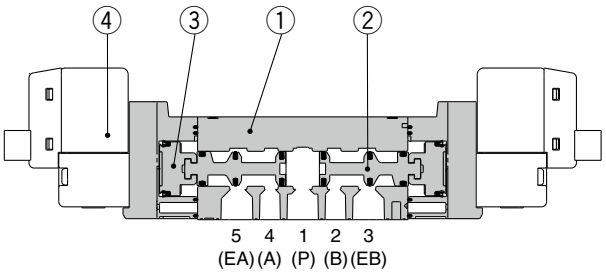


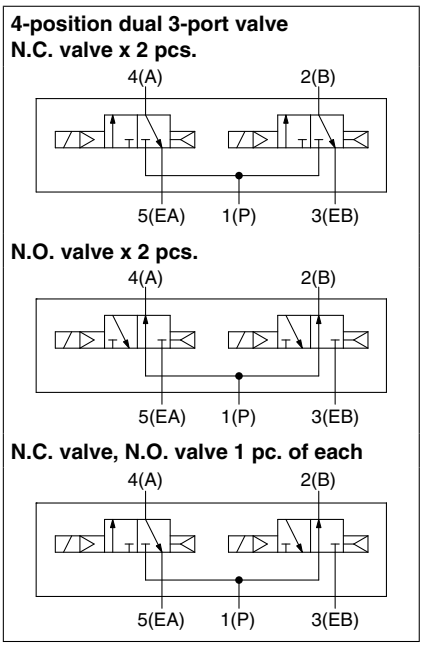






4-position dual 3-port valve





Component Parts

No.	Description	Material
1	**Body**	Aluminum die-casted
2	**Spool valve**	Aluminum/HNBR (4-position solenoid valve: Resin/HNBR)
3	**Piston**	Resin
4	**Pilot valve assembly**	—

JSY1000/3000/5000 Series
Valve Replacement Parts

How to Order Pilot Valves

For JSY1000

V050 T – 5 ☐ Z

Coil type

T	With power saving circuit

Rated voltage

5	24 VDC

Electrical entry

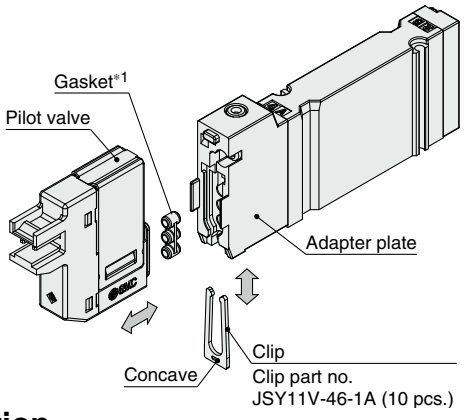
L	L plug connector with lead wire
LO	L plug connector without connector
M	M plug connector with lead wire
MO	M plug connector without connector

Light/surge voltage suppressor

Z	With light/surge voltage suppressor

∗ Clip is not included in the pilot valve.

How to replace pilot valves



⚠ Caution

Removal

1) Remove the clip from the adapter plate by using a flat head screwdriver on the concave of the clip.
2) Remove the pilot valve in the direction of the arrow. (Remove also the gasket together.)

Mounting

1) Mount the pilot valve on the adapter plate.
2) Insert the clip into the adapter plate so that the clip will not protrude from the end of the adapter plate.

∗1 Confirm that the gasket is mounted on the pilot valve.

For JSY3000/5000

V111 ☐ – 5 ☐ Z

Coil type

Nil	Standard
T	With power saving circuit (Made to Order)

Light/surge voltage suppressor

Z	With light/surge voltage suppressor

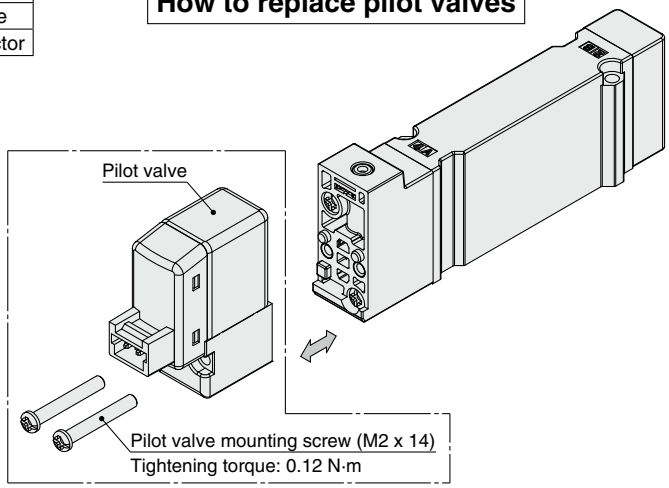
Rated voltage

5	24 VDC

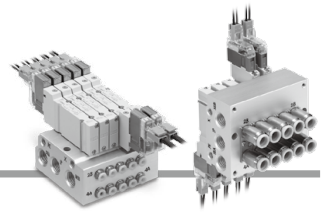
Electrical entry

L	L plug connector	With lead wire
LO		Without connector
M	M plug connector	With lead wire
MO		Without connector

How to replace pilot valves



Non Plug-in Metal Base



Manifold Specifications

Manifold type			Non plug-in metal base
SUP/EXH port type			Common SUP/EXH
Valve stations			2 to 20 stations
Port size	**1(P), 3/5(E) port**	**JSY1000**	1/8
		JSY3000	1/4
		JSY5000	3/8
	4(A), 2(B) port	**JSY1000**	M3 x 0.5, M5 x 0.8 ø2 One-touch fitting, ø4 One-touch fitting, ø6 One-touch fitting
		JSY3000	M5 x 0.8, 1/8 ø6 One-touch fitting, ø8 One-touch fitting
		JSY5000	1/8, 1/4 ø8 One-touch fitting, ø10 One-touch fitting, ø12 One-touch fitting

Manifold Flow Rate Characteristics/Manifold Weight

Model	Port size		Valve flow rate characteristics				Weight: W [g]*1 (n: stations)	
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	1 → 4/2 (P → A/B)		4/2 → 5/3 (A/B → E)			
			C [dm³/(s·bar)]	b	C [dm³/(s·bar)]	b	Fixed: C□	Replaceable: KC□
JJ5SY1-40 (Side ported)	1/8	KC6	0.62	0.34	0.63	0.28	20.1n + 38	30.5n + 35
JJ5SY1-41 (Bottom ported)	1/8	KC6	0.74	0.46	0.75	0.36	20.8n + 38	33.8n + 35
JJ5SY3-40 (Side ported)	1/4	KC8	1.86	0.36	1.81	0.27	38.0n + 84	54.4n + 86
JJ5SY3-41 (Bottom ported)	1/4	KC8	2.31	0.43	2.13	0.31	41.2n + 84	59.6n + 80
JJ5SY5-40 (Side ported)	3/8	KC12	3.61	0.30	3.72	0.18	90.1n + 148	121.5n + 144
JJ5SY5-41 (Bottom ported)	3/8	KC12	4.28	0.40	4.47	0.25	95.8n + 133	140.1n + 122

*1 Weight: W is the value of the internal pilot, and maximum manifold size with tube fitting type. Valve is not included. To obtain the weight with valves attached, add the valve weights given on page 10 for the appropriate number of stations.

* Calculation of effective area S and sonic conductance C: S = 5.0 x C
* The value is for manifold base with 5 stations and individually operated 2-position type.
* Bottom port is available only for 4, 2 (A, B) port.

Type 40
Side Ported

Type 41
Bottom Ported

Non Plug-in Metal Base
JSY1000/3000/5000 Series

CE RoHS

Internal Pilot

How to Order Manifolds

JJ5SY 3 – 40 – 05 D – C6 ❶ ❷ ❸ ❹ ❺ ❻ ❼

Made to Order
(Refer to page 40 for details.)

Specification
External pilot

❶ Series

1	JSY1000
3	JSY3000
5	JSY5000

❷ Type

40	Side ported
41	Bottom ported

∗ The external pilot specification should be ordered as Made to Order. For details, refer to page 40.

❸ Valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

❹ P, E port entry

U	U side∗1
D	D side∗1
B	Both sides

∗1 Plugs are mounted on the opposite side of the selected ports.

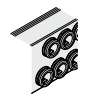
❺ A, B port size

Thread piping

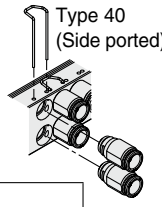
Symbol	A, B port	JSY1000	JSY3000	JSY5000
M3	M3 x 0.5	●	—	—
M5	M5 x 0.8	●	●	—
01	1/8	—	●	●
02	1/4	—	—	●

One-touch fitting (Metric)

	Symbol	A, B port	JSY1000	JSY3000	JSY5000
Fixed	**C2**	ø2	●	—	—
	C4	ø4	●	—	—
	C6	ø6	—	●	—
	C8	ø8	—	—	●
Replaceable	**KC2**	ø2	●	—	—
	KC4	ø4	●	—	—
	KC6	ø6	●	●	—
	KC8	ø8	—	●	—
	KC10	ø10	—	—	●
	KC12	ø12	—	—	●
	M∗1	A, B ports mixed	●∗2	●	●
P, E port size (Thread piping)			1/8	1/4	3/8



Type 40 (Side ported)



Type 41 (Bottom ported)

❻ Thread type

Nil	Rc
F	G
N	NPT

❼ Mounting

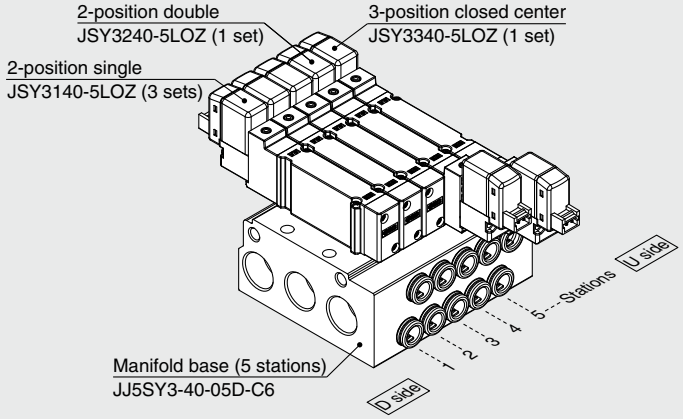
Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
D20	For 20 stations	

∗ Only direct mounting is available for Type 41 (Bottom ported).
∗ Refer to page 45 for the fixation of DIN rail mounting type manifold.

∗1 When ports are mixed sizes, indicate the piping specifications on the manifold specification sheet.
∗2 In case of replacement of JSY1000 One-touch fitting, A and B port can only be mixed on the manifold base for KC2 and KC4.

How to Order Manifold Assembly

Example (JJ5SY3-40-□)



JJ5SY3-40-05D-C6··1 set (Type 40 5-station manifold base part no.)
∗ JSY3140-5LOZ·····3 sets (2-position single part no.)
∗ JSY3240-5LOZ·····1 set (2-position double part no.)
∗ JSY3340-5LOZ·····1 set (3-position closed center part no.)
→The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

· The valve arrangement is numbered as the 1st station from the D side.
· Under the manifold part number, state the valves to be mounted in order from the 1st station as shown in the figure. If the arrangement becomes complicated, specify on a manifold specification sheet.

Internal Pilot

How to Order Valves (With two mounting screws)

JSY1000 Series

JSY3000/5000 Series

JSY 1 1 4 0 T – 5 L Z ❶ ❷ ❸ ❹ ❺ ❻ ❼

JSY 3 1 4 0 – 5 L Z ❶ ❷ ❸ ❹ ❺ ❻ ❼

● **With power saving circuit**

Made to Order
(Refer to page 40 for details.)

Specification
With power saving circuit (Continuous duty type): 0.1 W (JSY3000/5000)
External pilot

❶ Series

1	JSY1000
3	JSY3000
5	JSY5000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	Dual 3-port (N.C./N.C.)
B	Dual 3-port (N.O./N.O.)
C	Dual 3-port (N.C./N.O.)

❸ Pilot valve exhaust method

0	Pilot valve individual exhaust

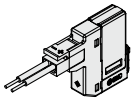
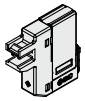
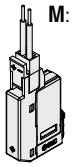
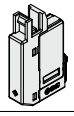
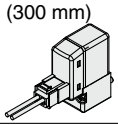
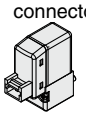
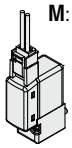
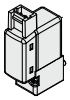
❹ Rated voltage

5	24 VDC

❻ Light/surge voltage suppressor

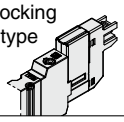
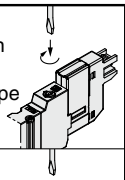
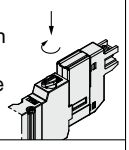
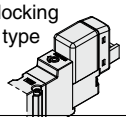
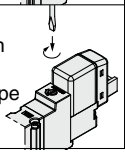
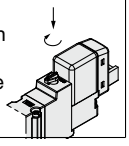
Z	With light/surge voltage suppressor

❺ Electrical entry

	L plug connector		M plug connector	
	L	**LO**	**M**	**MO**
JSY1000	**L**: With lead wire (300 mm) 	**LO**: Without connector 	**M**: With lead wire (300 mm) 	**MO**: Without connector 
JSY3000/5000	**L**: With lead wire (300 mm) 	**LO**: Without connector 	**M**: With lead wire (300 mm) 	**MO**: Without connector 

∗ Refer to page 43 for the lead wire length of L and M plug connectors.

❼ Manual override

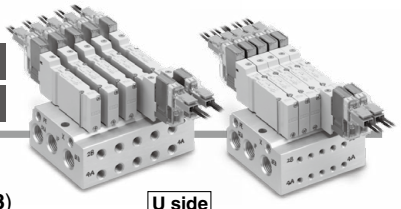
JSY1000	**Nil**: Non-locking push type 	**D**: Push-turn locking slotted type 	**E**: Push-turn locking lever type 
JSY3000/5000	**Nil**: Non-locking push type 	**D**: Push-turn locking slotted type 	**E**: Push-turn locking lever type 

⚠ Caution

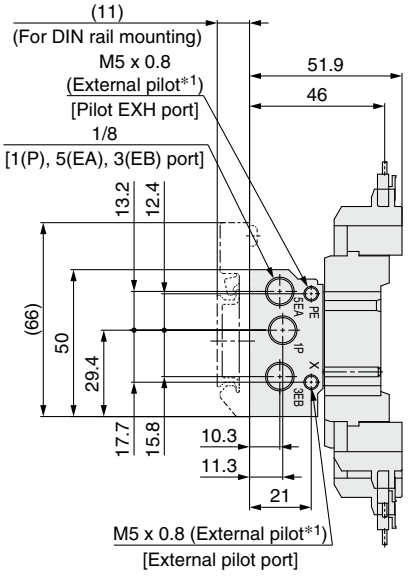
If the JSY3000/5000 series will be continuously energized, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 40.
Additionally, when it is used at the energizing rate over 50%, please select the product with power saving circuit.
For the JSY1000 series only the power saving circuit is available.

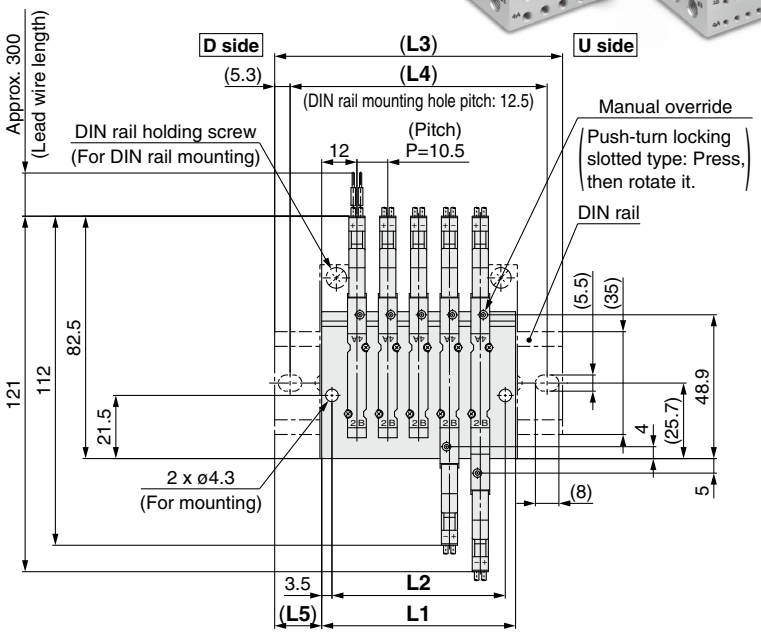
Dimensions: JSY1000 Series

Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: M3, M5**

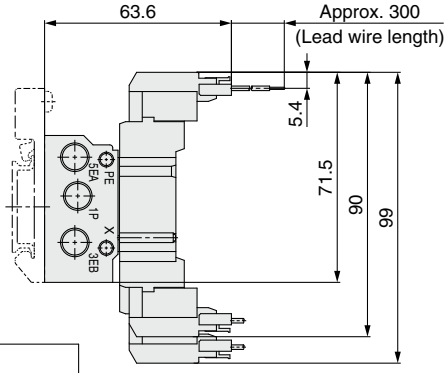


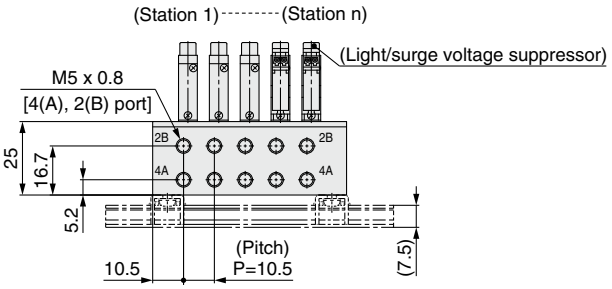
JJ5SY1-40(R)-Stations U/D/B-M3/M5□(D)



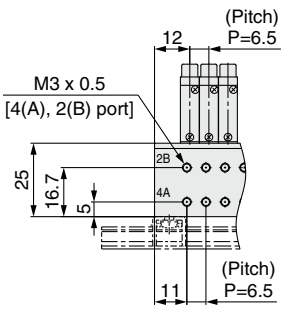


M plug connector (M)

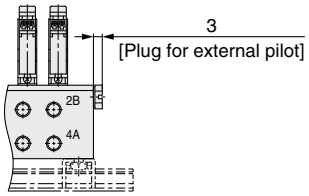




Port size M3



40R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY1-40-05B-M5."

L Dimensions: Port Size M5

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L2	27.5	38.0	48.5	59.0	69.5	80.0	90.5	101.0	111.5	122.0	132.5	143.0	153.5	164.0	174.5	185.0	195.5	206.0	216.5
L3	60.5	73.0	85.5	98.0	110.5	123.0	123.0	135.5	148.0	160.5	173.0	185.5	198.0	198.0	210.5	223.0	235.5	248.0	260.5
L4	50.0	62.5	75.0	87.5	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	187.5	187.5	200.0	212.5	225.0	237.5	250.0
L5	13.0	14.0	15.0	16.0	17.0	18.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	13.5	14.5	15.5	16.5	17.5	18.5

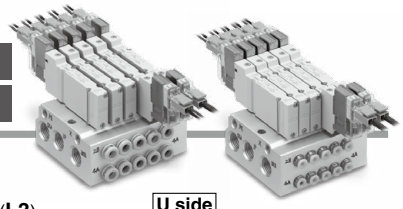
L Dimensions: Port Size M3

n: Stations

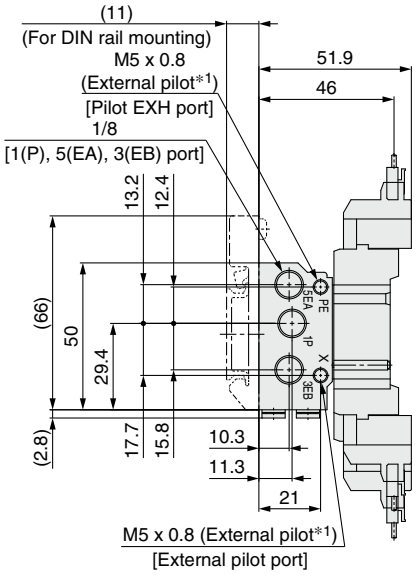
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	30.5	37.0	43.5	50.0	56.5	63.0	69.5	76.0	82.5	89.0	95.5	102.0	108.5	115.0	121.5	128.0	134.5	141.0	147.5
L2	23.5	30.0	36.5	43.0	49.5	56.0	62.5	69.0	75.5	82.0	88.5	95.0	101.5	108.0	114.5	121.0	127.5	134.0	140.5
L3	60.5	73.0	73.0	85.5	85.5	98.0	98.0	110.5	110.5	123.0	123.0	135.5	135.5	148.0	148.0	160.5	160.5	173.0	173.0
L4	50.0	62.5	62.5	75.0	75.0	87.5	87.5	100.0	100.0	112.5	112.5	125.0	125.0	137.5	137.5	150.0	150.0	162.5	162.5
L5	15.0	18.0	15.0	18.0	14.5	17.5	14.5	17.5	14.0	17.0	14.0	17.0	13.5	16.5	13.5	16.5	13.0	16.0	13.0

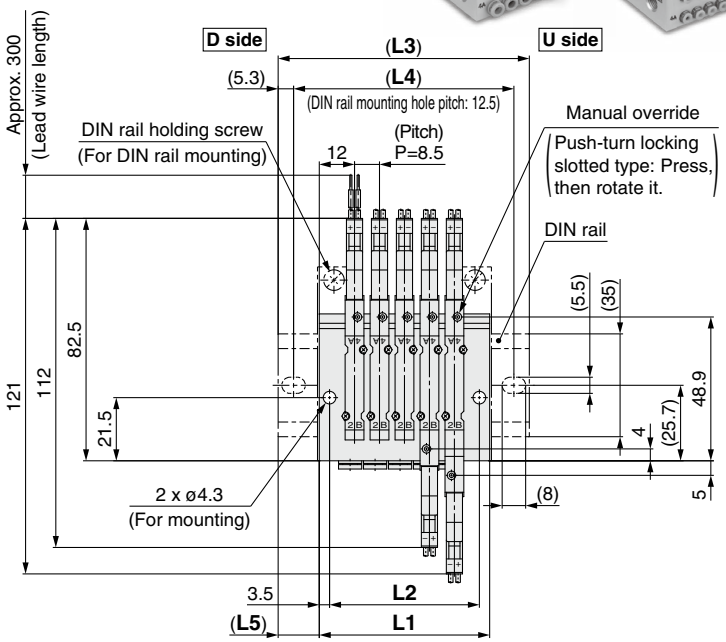
Dimensions: JSY1000 Series

Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: ø2, ø4/Fixed**

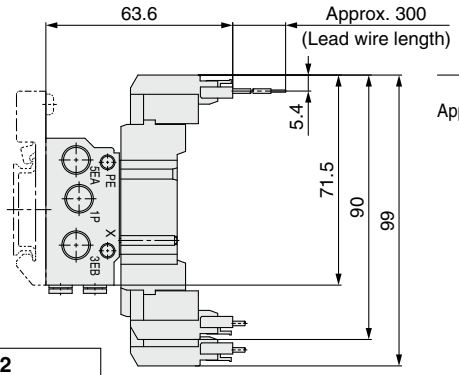


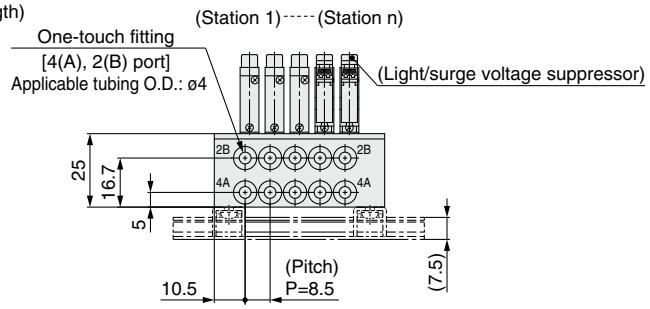
JJ5SY1-40(R)-Stations U/D/B-C2/C4□(D)



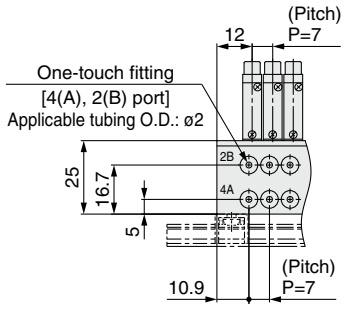


M plug connector (M)

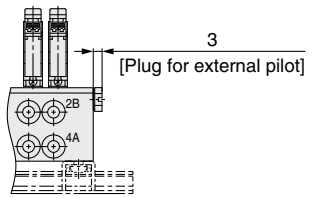




One-touch fitting ø2



40R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY1-40-05B-C4."

L Dimensions: Port Size C4

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	32.5	41.0	49.5	58.0	66.5	75.0	83.5	92.0	100.5	109.0	117.5	126.0	134.5	143.0	151.5	160.0	168.5	177.0	185.5
L2	25.5	34.0	42.5	51.0	59.5	68.0	76.5	85.0	93.5	102.0	110.5	119.0	127.5	136.0	144.5	153.0	161.5	170.0	178.5
L3	60.5	73.0	85.5	85.5	98.0	110.5	110.5	123.0	135.5	135.5	148.0	160.5	160.5	173.0	185.5	185.5	198.0	210.5	223.0
L4	50.0	62.5	75.0	75.0	87.5	100.0	100.0	112.5	125.0	125.0	137.5	150.0	150.0	162.5	175.0	175.0	187.5	200.0	212.5
L5	14.0	16.0	18.0	14.0	16.0	18.0	13.5	15.5	17.5	13.5	15.5	17.5	13.0	15.0	17.0	13.0	15.0	17.0	19.0

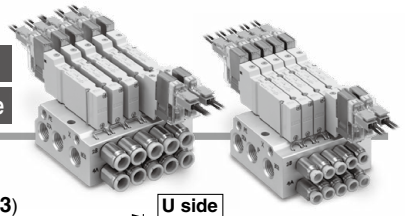
L Dimensions: Port Size C2

n: Stations

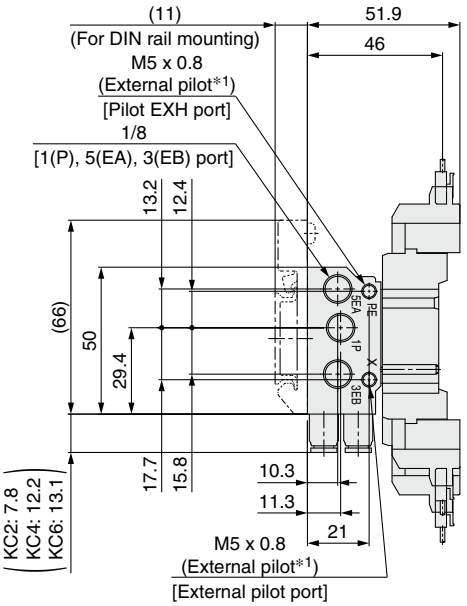
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0	157.0
L2	24.0	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0
L3	60.5	73.0	73.0	85.5	85.5	98.0	110.5	110.5	123.0	123.0	135.5	135.5	148.0	148.0	160.5	173.0	173.0	185.5	185.5
L4	50.0	62.5	62.5	75.0	75.0	87.5	100.0	100.0	112.5	112.5	125.0	125.0	137.5	137.5	150.0	162.5	162.5	175.0	175.0
L5	15.0	17.5	14.0	17.0	13.5	16.0	19.0	15.5	18.0	14.5	17.5	14.0	16.5	13.0	16.0	18.5	15.0	18.0	14.5

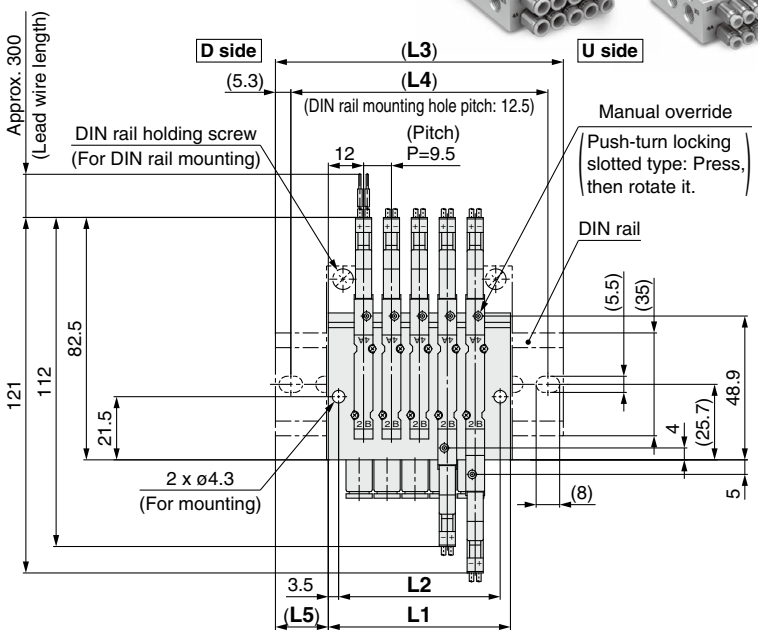
Dimensions: JSY1000 Series

Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: ø2, ø4, ø6/Replaceable**

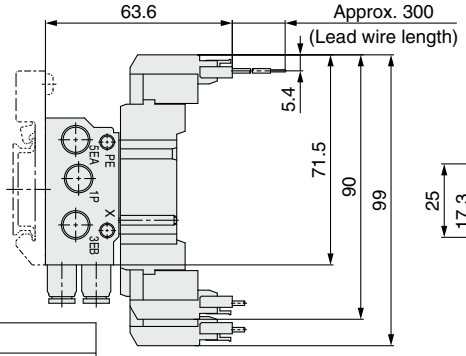


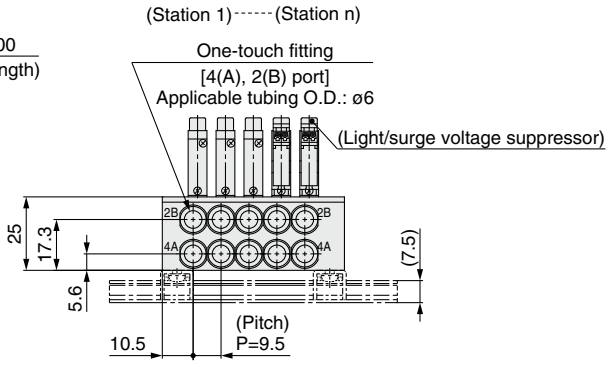
JJ5SY1-40(R)-Stations U/D/B - KC2/KC4/KC6 □(D)



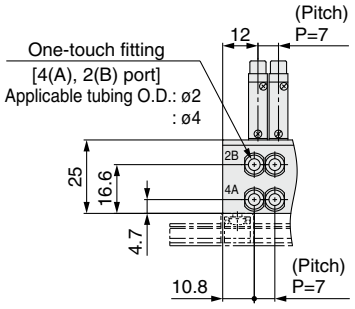


M plug connector (M)

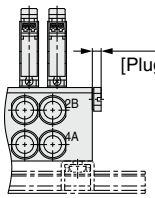




One-touch fitting KC2/KC4



40R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY1-40-05B-KC6."

L Dimensions: Port Size KC6

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	33.5	43.0	52.5	62.0	71.5	81.0	90.5	100.0	109.5	119.0	128.5	138.0	147.5	157.0	166.5	176.0	185.5	195.0	204.5
L2	26.5	36.0	45.5	55.0	64.5	74.0	83.5	93.0	102.5	112.0	121.5	131.0	140.5	150.0	159.5	169.0	178.5	188.0	197.5
L3	60.5	73.0	85.5	98.0	98.0	110.5	123.0	135.5	135.5	148.0	160.5	173.0	173.0	185.5	198.0	210.5	223.0	223.0	235.5
L4	50.0	62.5	75.0	87.5	87.5	100.0	112.5	125.0	125.0	137.5	150.0	162.5	162.5	175.0	187.5	200.0	212.5	212.5	225.0
L5	13.5	15.0	16.5	18.0	13.5	15.0	16.5	18.0	13.0	14.5	16.0	17.5	13.0	14.5	16.0	17.5	19.0	14.0	15.5

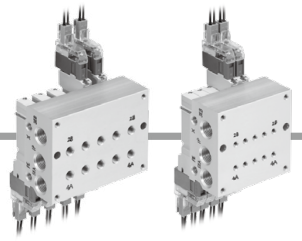
L Dimensions: Port Sizes KC2, KC4

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0	157.0
L2	24.0	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0
L3	60.5	73.0	73.0	85.5	85.5	98.0	110.5	110.5	123.0	123.0	135.5	135.5	148.0	148.0	160.5	173.0	173.0	185.5	185.5
L4	50.0	62.5	62.5	75.0	75.0	87.5	100.0	100.0	112.5	112.5	125.0	125.0	137.5	137.5	150.0	162.5	162.5	175.0	175.0
L5	15.0	17.5	14.0	17.0	13.5	16.0	19.0	15.5	18.0	14.5	17.5	14.0	16.5	13.0	16.0	18.5	15.0	18.0	14.5

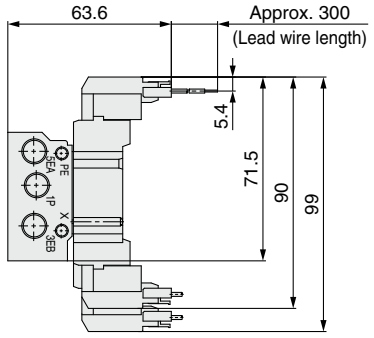
Dimensions: JSY1000 Series

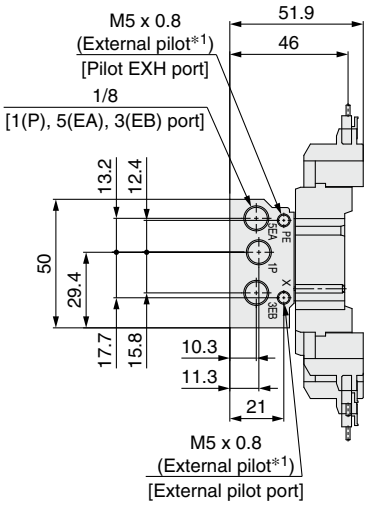
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: M3, M5**

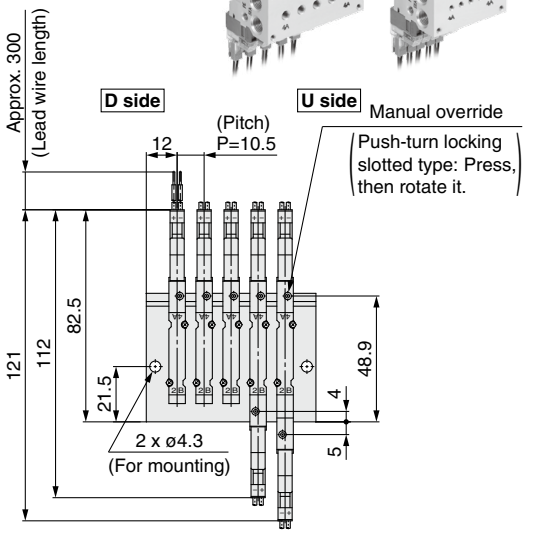


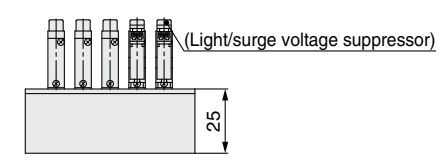
JJ5SY1-41(R)-Stations U/D-M3/M5□

M plug connector (M)

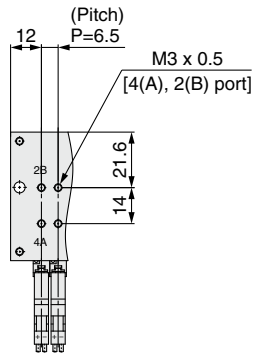


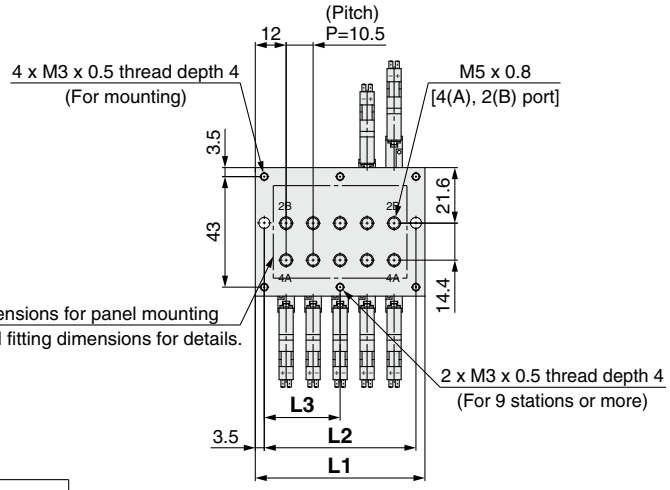




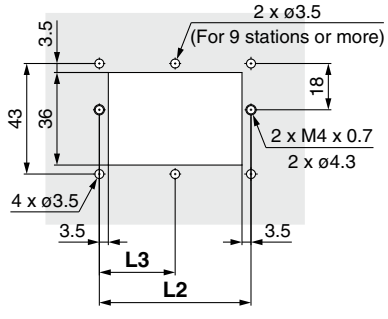


Port size M3

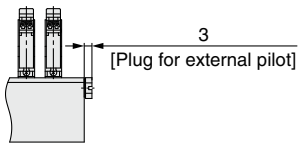




Panel fitting dimensions



41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY1-41-05B-M5."

L Dimensions: Port Size M5

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L2	27.5	38.0	48.5	59.0	69.5	80.0	90.5	101.0	111.5	122.0	132.5	143.0	153.5	164.0	174.5	185.0	195.5	206.0	216.5
L3	—	—	—	—	—	—	—	50.5	55.8	61.0	66.3	71.5	76.8	82.0	87.3	92.5	97.8	103.0	108.3

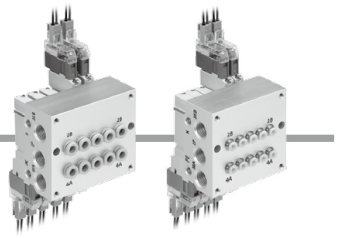
L Dimensions: Port Size M3

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	30.5	37.0	43.5	50.0	56.5	63.0	69.5	76.0	82.5	89.0	95.5	102.0	108.5	115.0	121.5	128.0	134.5	141.0	147.5
L2	23.5	30.0	36.5	43.0	49.5	56.0	62.5	69.0	75.5	82.0	88.5	95.0	101.5	108.0	114.5	121.0	127.5	134.0	140.5
L3	—	—	—	—	—	—	—	34.5	37.8	41.0	44.3	47.5	50.8	54.0	57.3	60.5	63.8	67.0	70.3

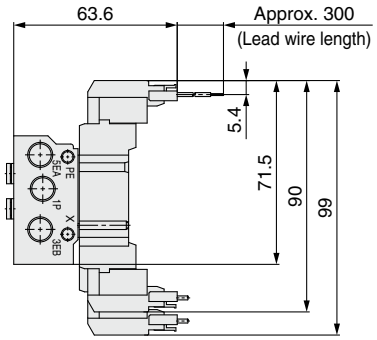
Dimensions: JSY1000 Series

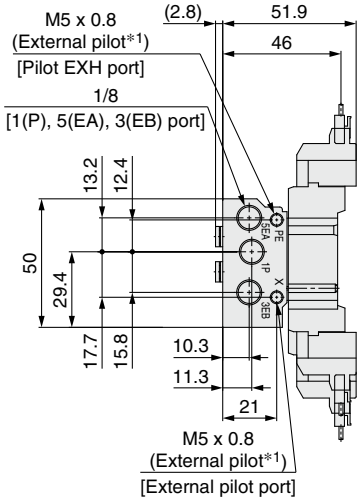
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: ø2, ø4/Fixed**

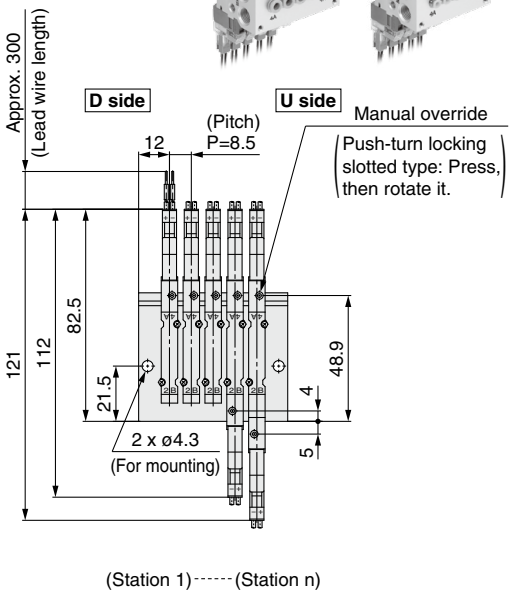


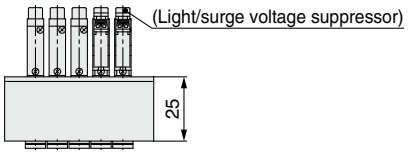
JJ5SY1-41(R)- Stations $\begin{matrix}U\\D\\B\end{matrix}$ - $\begin{matrix}C2\\C4\end{matrix}$ □

M plug connector (M)

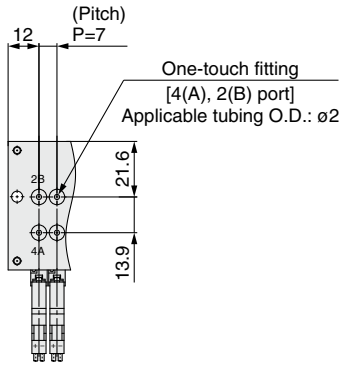


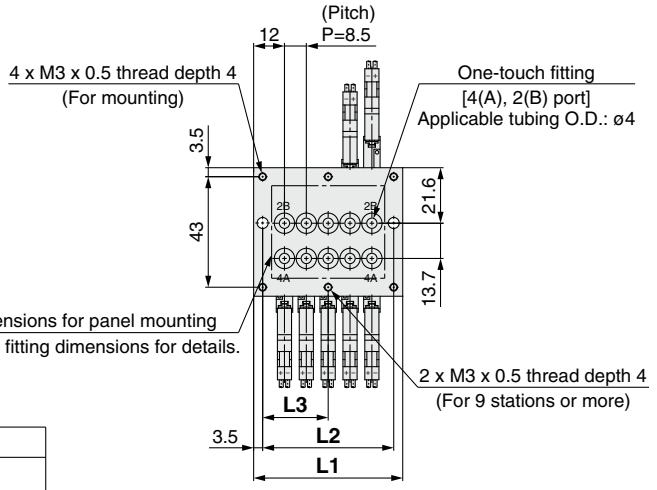




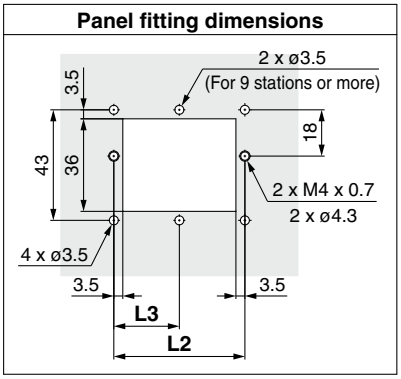


One-touch fitting ø2

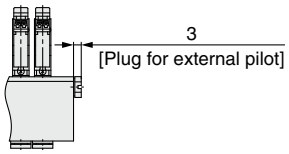




Panel fitting dimensions



41R- Stations $\begin{matrix}U\\D\end{matrix}$*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.

* These figures show the "JJ5SY1-41-05B-C4."

L Dimensions: Port Size C4

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	32.5	41.0	49.5	58.0	66.5	75.0	83.5	92.0	100.5	109.0	117.5	126.0	134.5	143.0	151.5	160.0	168.5	177.0	185.5
L2	25.5	34.0	42.5	51.0	59.5	68.0	76.5	85.0	93.5	102.0	110.5	119.0	127.5	136.0	144.5	153.0	161.5	170.0	178.5
L3	—	—	—	—	—	—	—	42.5	46.8	51.0	55.3	59.5	63.8	68.0	72.3	76.5	80.8	85.0	89.3

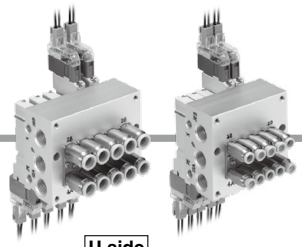
L Dimensions: Port Size C2

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0	157.0
L2	24.0	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0
L3	—	—	—	—	—	—	—	36.5	40.0	43.5	47.0	50.5	54.0	57.5	61.0	64.5	68.0	71.5	75.0

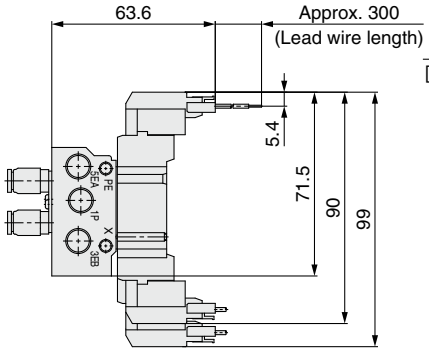
Dimensions: JSY1000 Series

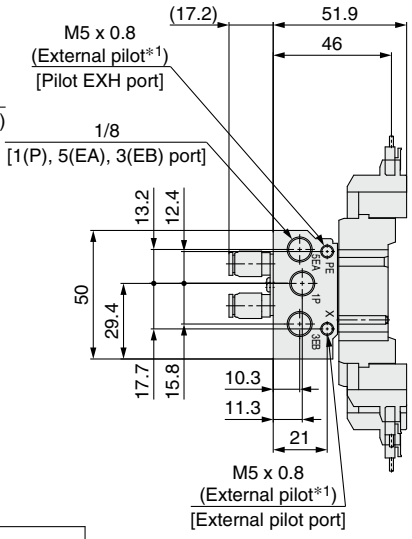
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: ø2, ø4, ø6/Replaceable**

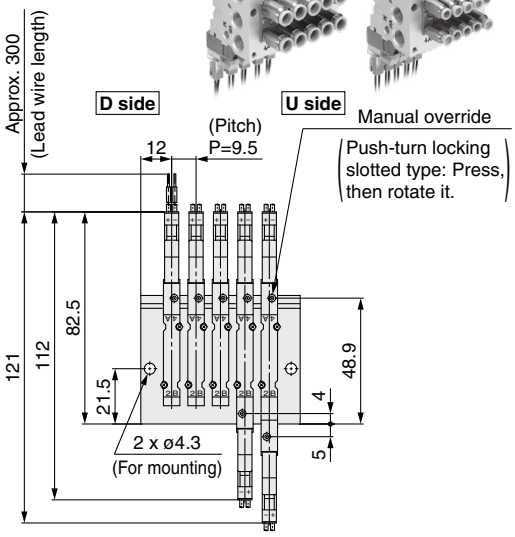


JJ5SY1-41(R)- Stations U/D/B - KC2/KC4/KC6 □

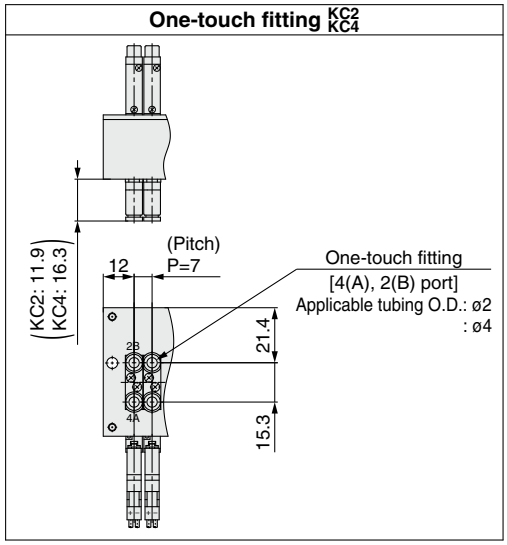
M plug connector (M)

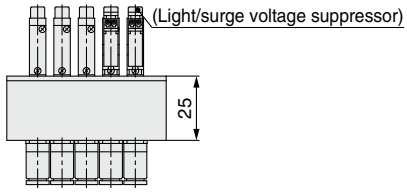


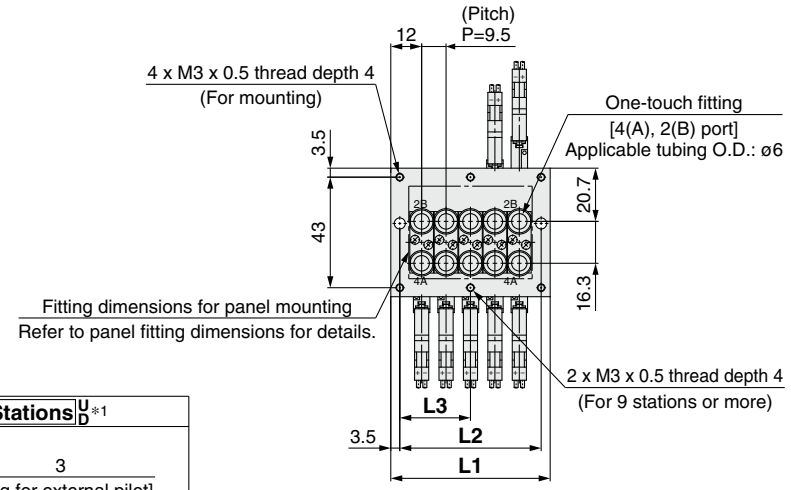




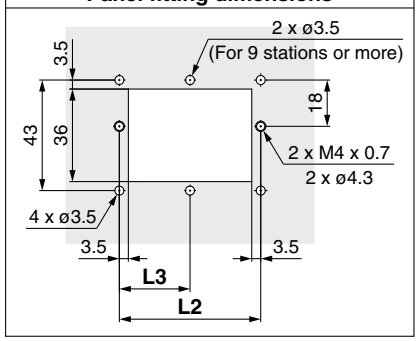
One-touch fitting KC2/KC4



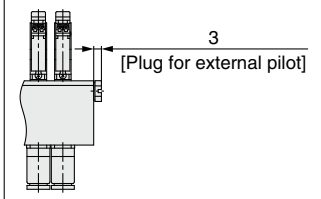




Panel fitting dimensions



41R- Stations U/D *1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY1-41-05B-KC6."

L Dimensions: Port Size KC6

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	33.5	43.0	52.5	62.0	71.5	81.0	90.5	100.0	109.5	119.0	128.5	138.0	147.5	157.0	166.5	176.0	185.5	195.0	204.5
L2	26.5	36.0	45.5	55.0	64.5	74.0	83.5	93.0	102.5	112.0	121.5	131.0	140.5	150.0	159.5	169.0	178.5	188.0	197.5
L3	—	—	—	—	—	—	—	46.5	51.3	56.0	60.8	65.5	70.3	75.0	79.8	84.5	89.3	94.0	98.8

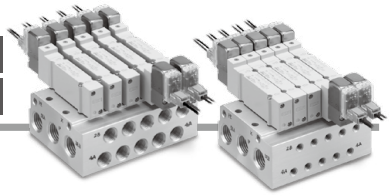
L Dimensions: Port Sizes KC2, KC4

n: Stations

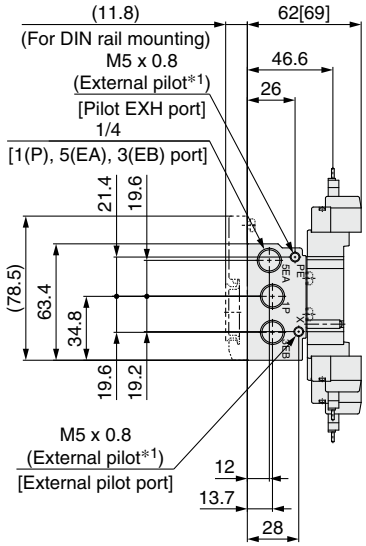
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0	157.0
L2	24.0	31.0	38.0	45.0	52.0	59.0	66.0	73.0	80.0	87.0	94.0	101.0	108.0	115.0	122.0	129.0	136.0	143.0	150.0
L3	—	—	—	—	—	—	—	36.5	40.0	43.5	47.0	50.5	54.0	57.5	61.0	64.5	68.0	71.5	75.0

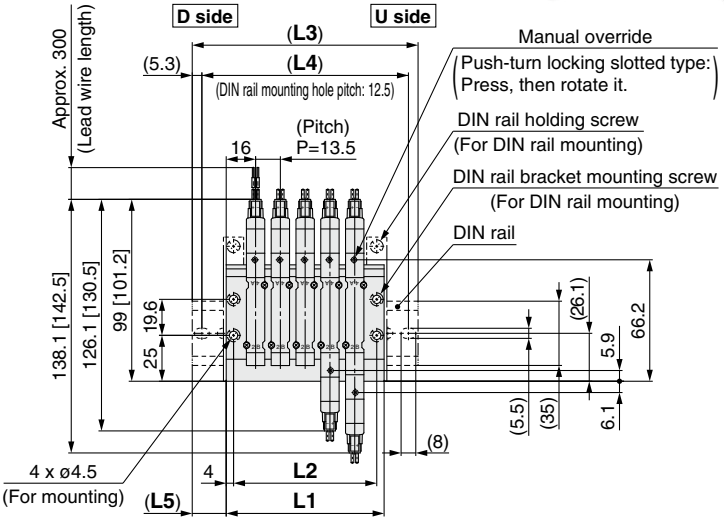
Dimensions: JSY3000 Series

Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: M5, 1/8**

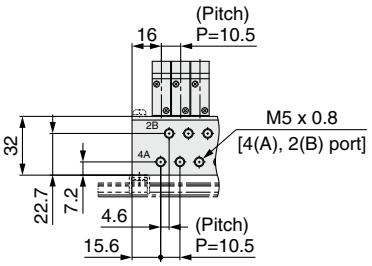


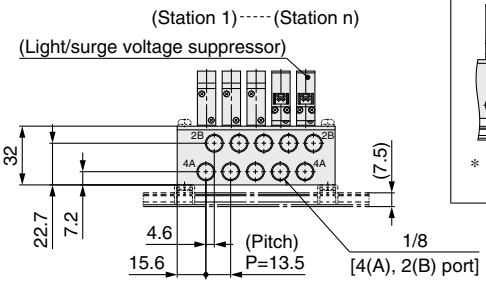
JJ5SY3-40(R)-Stations U/D/B - M5/01 □(D)



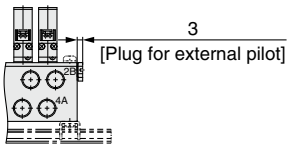


Port size M5





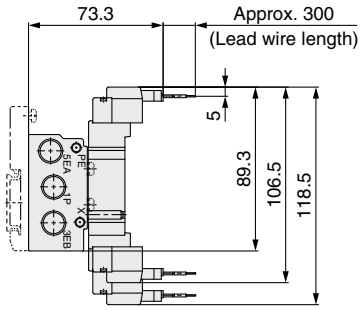
40R-Stations U*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY3-40-05-01."

M plug connector (M)



L Dimensions: Port Size 01 (1/8)

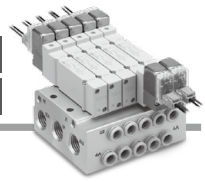
n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	45.5	59.0	72.5	86.0	99.5	113.0	126.5	140.0	153.5	167.0	180.5	194.0	207.5	221.0	234.5	248.0	261.5	275.0	288.5
L2	37.5	51.0	64.5	78.0	91.5	105.0	118.5	132.0	145.5	159.0	172.5	186.0	199.5	213.0	226.5	240.0	253.5	267.0	280.5
L3	73.0	85.5	110.5	123.0	135.5	148.0	160.5	173.0	185.5	198.0	210.5	223.0	235.5	248.0	273.0	285.5	298.0	310.5	323.0
L4	62.5	75.0	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	262.5	275.0	287.5	300.0	312.5
L5	14.0	13.5	19.0	18.5	18.0	17.5	17.0	16.5	16.0	15.5	15.0	14.5	14.0	13.5	19.5	19.0	18.5	18.0	17.5

L Dimensions: Port Size M5

n: Stations

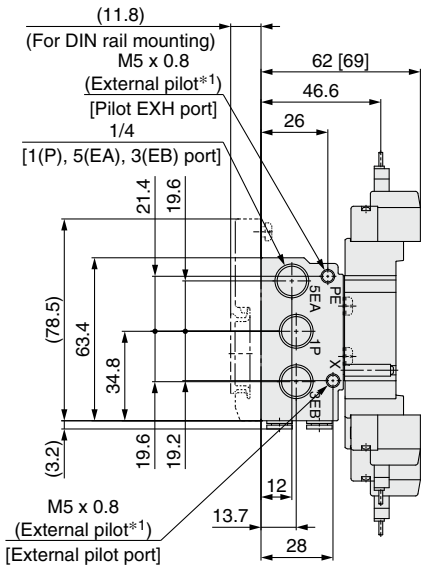
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	42.5	53.0	63.5	74.0	84.5	95.0	105.5	116.0	126.5	137.0	147.5	158.0	168.5	179.0	189.5	200.0	210.5	221.0	231.5
L2	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L3	73.0	85.5	98.0	110.5	123.0	123.0	135.5	148.0	160.5	173.0	185.5	185.5	198.0	210.5	223.0	235.5	248.0	248.0	260.5
L4	62.5	75.0	87.5	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5	250.0
L5	15.5	16.5	17.5	18.5	19.5	14.0	15.0	16.0	17.0	18.0	19.0	14.0	15.0	16.0	17.0	18.0	19.0	13.5	14.5

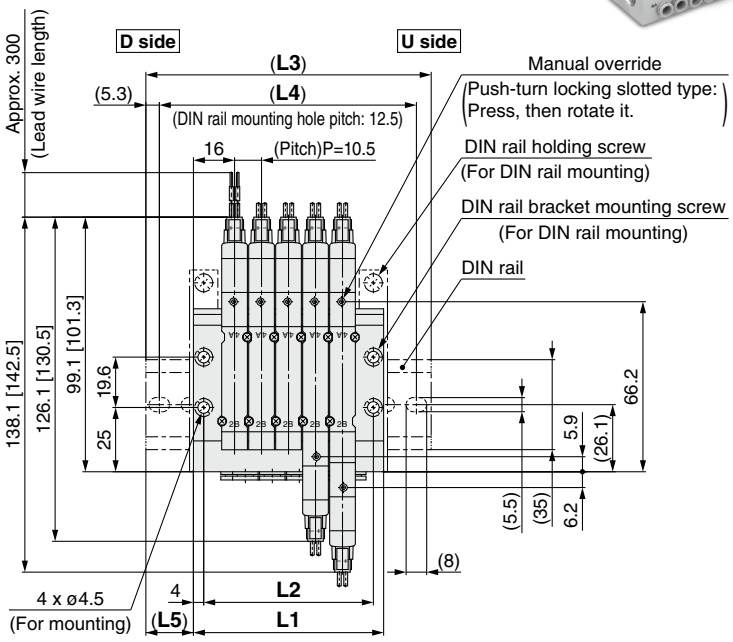


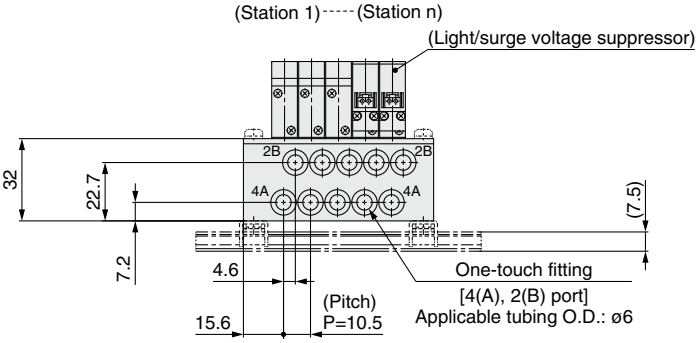
Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: ø6/Fixed**

Dimensions: JSY3000 Series

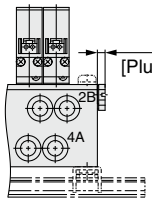
JJ5SY3-40(R)-Stations U/D-C6□(D)







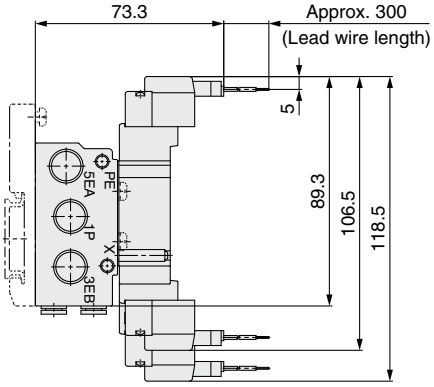
40R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY3-40-05-C6."

M plug connector (M)

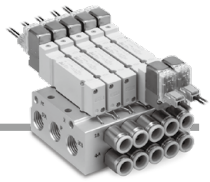


L Dimensions: Port Size C6

n: Stations

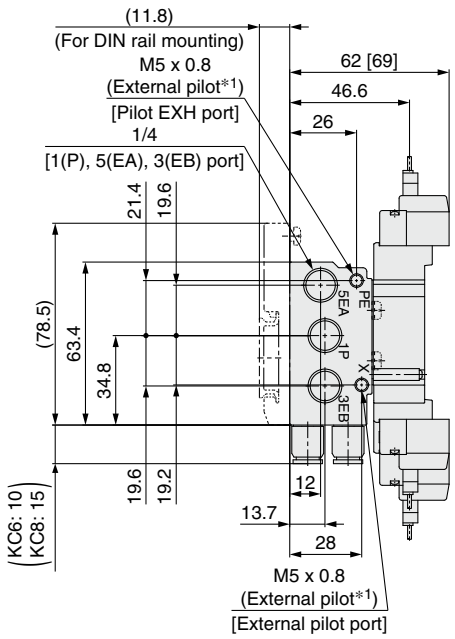
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	42.5	53.0	63.5	74.0	84.5	95.0	105.5	116.0	126.5	137.0	147.5	158.0	168.5	179.0	189.5	200.0	210.5	221.0	231.5
L2	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L3	73.0	85.5	98.0	110.5	123.0	123.0	135.5	148.0	160.5	173.0	185.5	185.5	198.0	210.5	223.0	235.5	248.0	248.0	260.5
L4	62.5	75.0	87.5	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5	250.0
L5	15.5	16.5	17.5	18.5	19.5	14.0	15.0	16.0	17.0	18.0	19.0	14.0	15.0	16.0	17.0	18.0	19.0	13.5	14.5

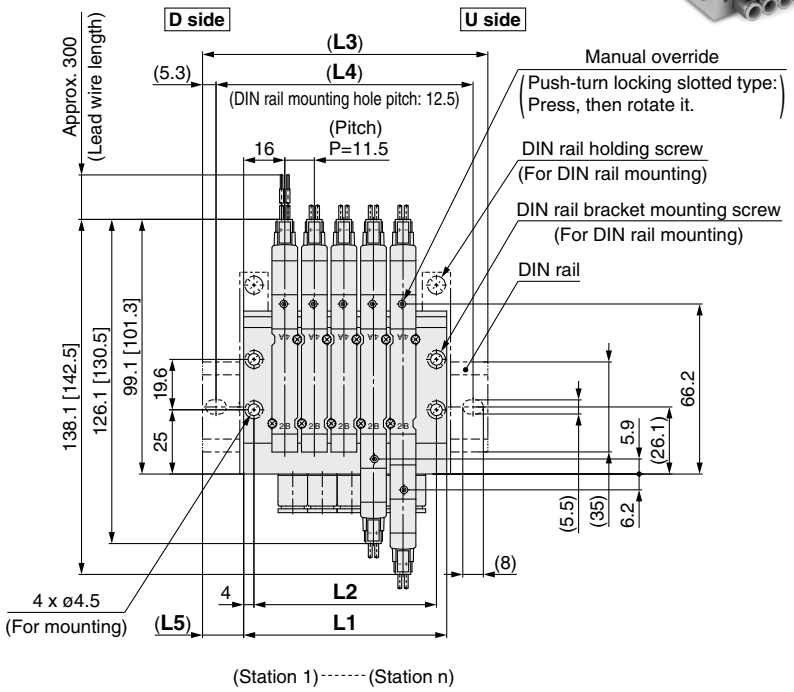
Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: ø6, ø8/Replaceable**

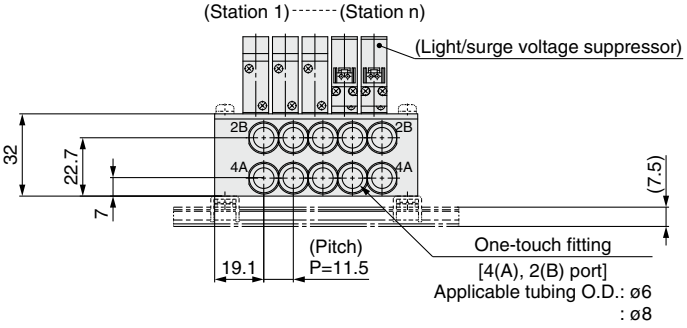


Dimensions: JSY3000 Series

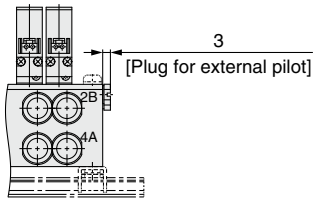
JJ5SY3-40(R)-Stations U/D/B-KC6/KC8□(D)







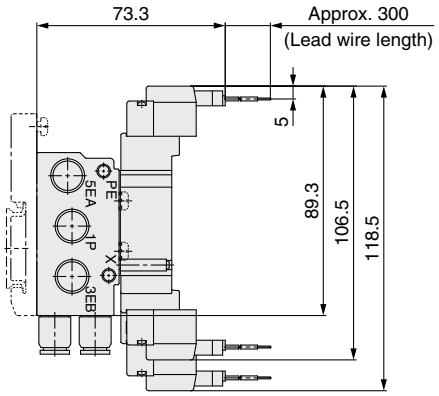
40R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY3-40-05-KC8."

M plug connector (M)



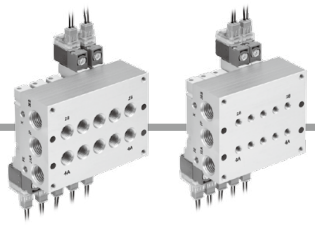
L Dimensions: Port Sizes KC6, KC8

n: Stations

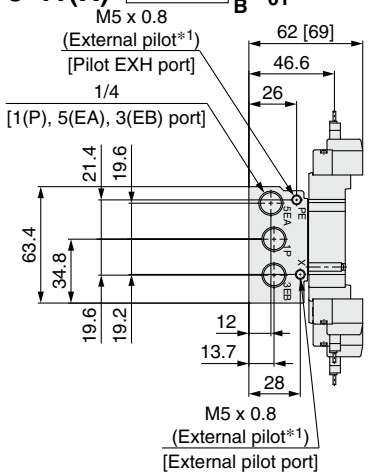
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	44.5	56.0	67.5	79.0	90.5	102.0	113.5	125.0	136.5	148.0	159.5	171.0	182.5	194.0	205.5	217.0	228.5	240.0	251.5
L2	36.5	48.0	59.5	71.0	82.5	94.0	105.5	117.0	128.5	140.0	151.5	163.0	174.5	186.0	197.5	209.0	220.5	232.0	243.5
L3	73.0	85.5	98.0	110.5	123.0	135.5	148.0	160.5	173.0	185.5	198.0	198.0	210.5	223.0	235.5	248.0	260.5	273.0	285.5
L4	62.5	75.0	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0
L5	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0

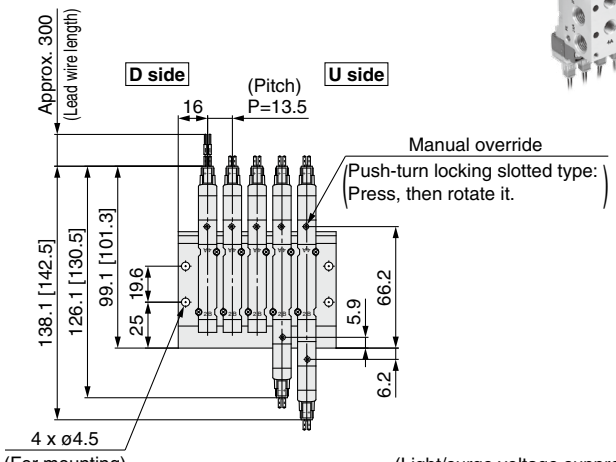
Dimensions: JSY3000 Series

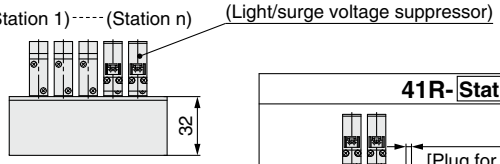
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: M5, 1/8**



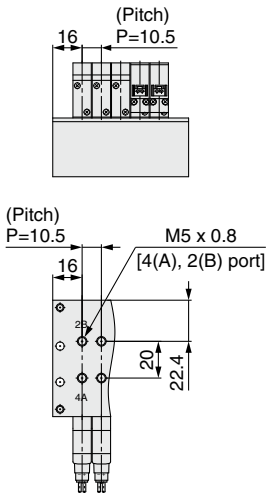
JJ5SY3-41(R)-Stations U/D - M5 01 □

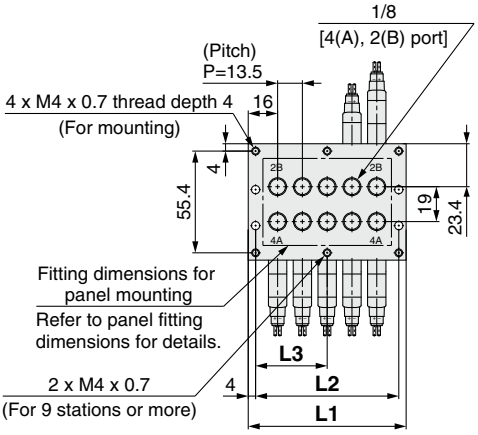




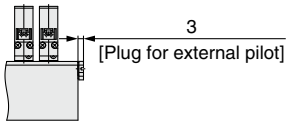


Port size M5



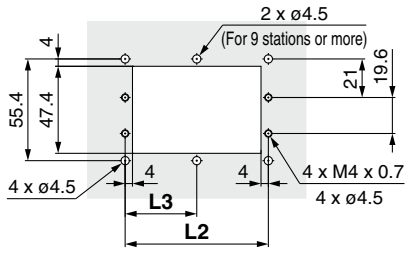


41R-Stations U/D*1



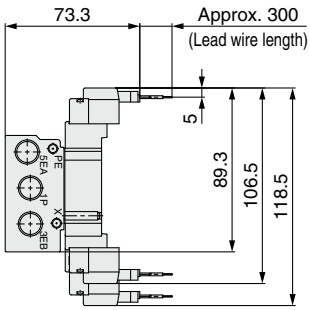
* The drawing above shows when P, E port entry is D.

Panel fitting dimensions



*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY3-41-05-01."

M plug connector (M)



L Dimensions: Port Size 01 (1/8)

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	45.5	59.0	72.5	86.0	99.5	113.0	126.5	140.0	153.5	167.0	180.5	194.0	207.5	221.0	234.5	248.0	261.5	275.0	288.5
L2	37.5	51.0	64.5	78.0	91.5	105.0	118.5	132.0	145.5	159.0	172.5	186.0	199.5	213.0	226.5	240.0	253.5	267.0	280.5
L3	—	—	—	—	—	—	—	66.0	72.8	79.5	86.3	93.0	99.8	106.5	113.3	120.0	126.8	133.5	140.3

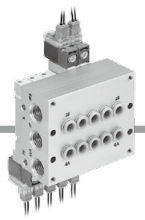
L Dimensions: Port Size M5

n: Stations

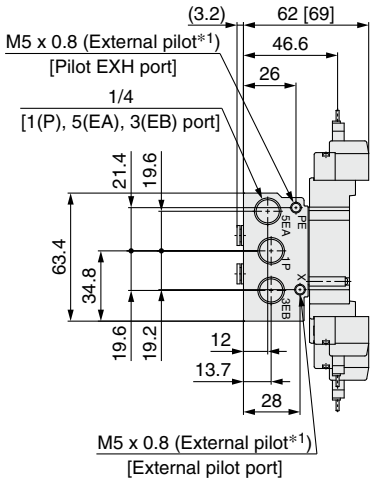
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	42.5	53.0	63.5	74.0	84.5	95.0	105.5	116.0	126.5	137.0	147.5	158.0	168.5	179.0	189.5	200.0	210.5	221.0	231.5
L2	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L3	—	—	—	—	—	—	—	54.0	59.3	64.5	69.8	75.0	80.3	85.5	90.8	96.0	101.3	106.5	111.8

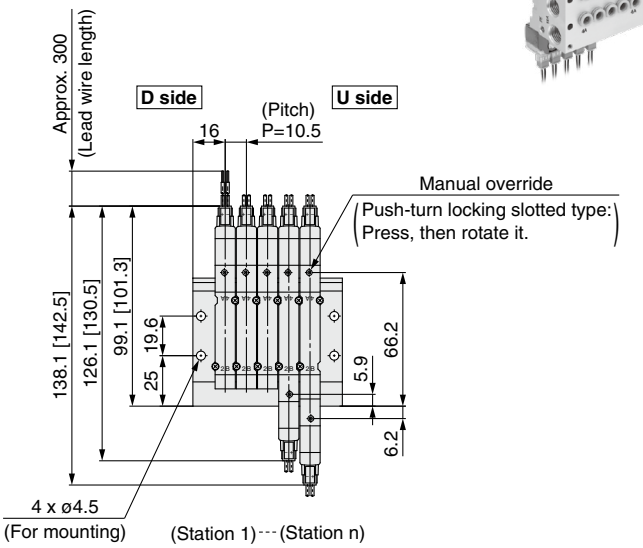
Dimensions: JSY3000 Series

Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: ø6/Fixed**

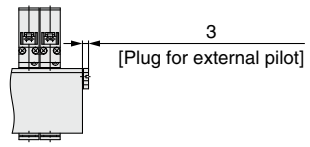


JJ5SY3-41(R)-Stations U/D/B-C6□



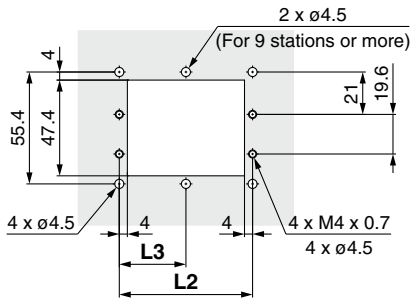


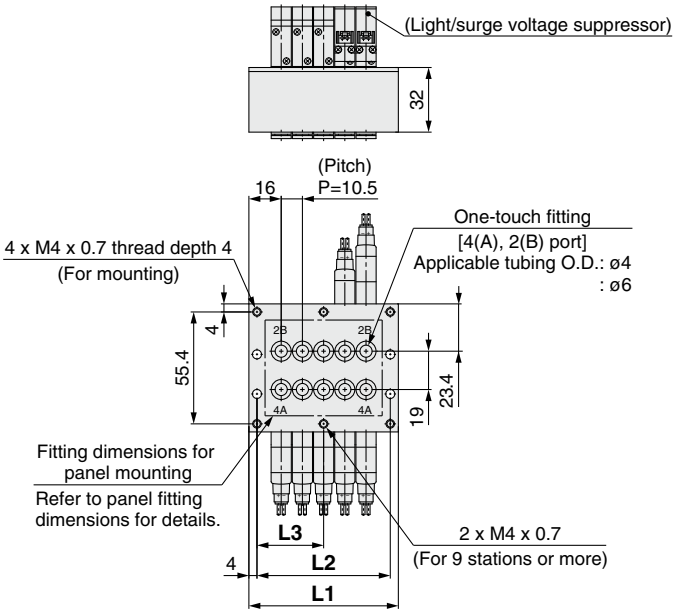
41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

Panel fitting dimensions

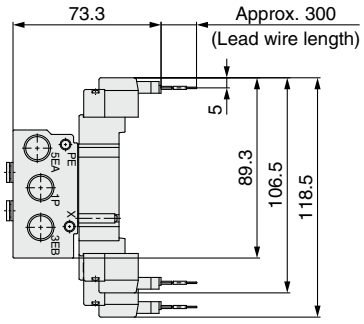




*1 The external pilot (R) should be ordered as Made to Order.

* These figures show the "JJ5SY3-41-05-C6."

M plug connector (M)



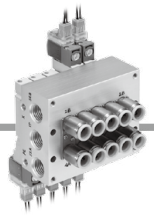
L Dimensions: Port Size C6

n: Stations

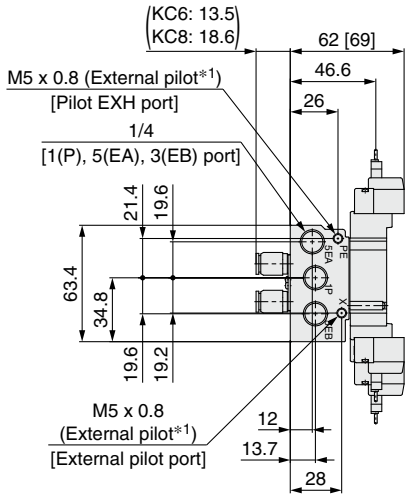
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	42.5	53.0	63.5	74.0	84.5	95.0	105.5	116.0	126.5	137.0	147.5	158.0	168.5	179.0	189.5	200.0	210.5	221.0	231.5
L2	34.5	45.0	55.5	66.0	76.5	87.0	97.5	108.0	118.5	129.0	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0	223.5
L3	—	—	—	—	—	—	—	54.0	59.3	64.5	69.8	75.0	80.3	85.5	90.8	96.0	101.3	106.5	111.8

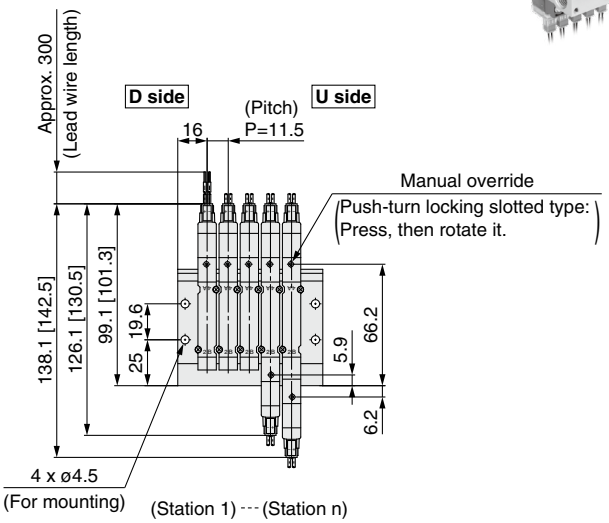
Dimensions: JSY3000 Series

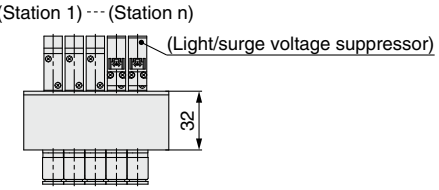
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: ø6, ø8/Replaceable**



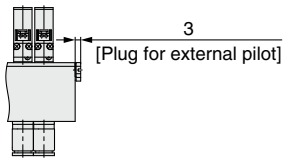
JJ5SY3-41(R)-Stations U/D/B - KC6/KC8 □





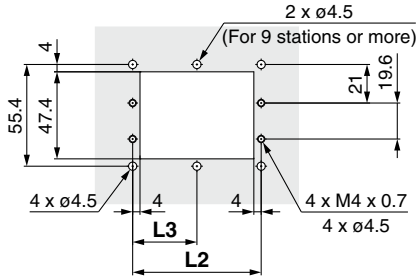


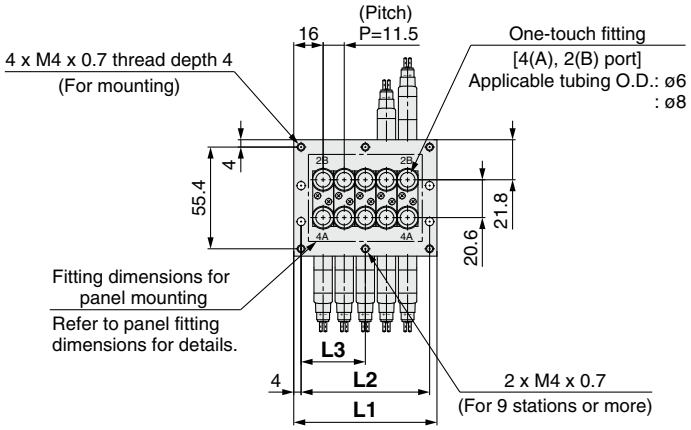
41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

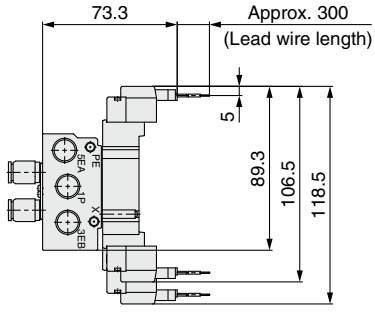
Panel fitting dimensions





*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY3-41-05-KC8."

M plug connector (M)

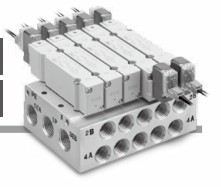


L Dimensions: Port Sizes KC6, KC8

n: Stations

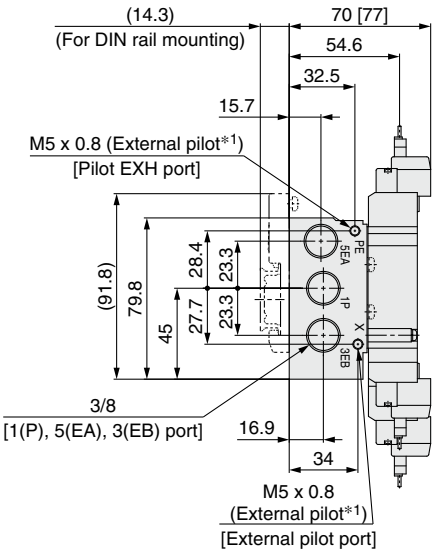
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	43.5	55.0	66.5	78.0	89.5	101.0	112.5	124.0	135.5	147.0	158.5	170.0	181.5	193.0	204.5	216.0	227.5	239.0	250.5
L2	35.5	47.0	58.5	70.0	81.5	93.0	104.5	116.0	127.5	139.0	150.5	162.0	173.5	185.0	196.5	208.0	219.5	231.0	242.5
L3	—	—	—	—	—	—	—	58.0	63.8	69.5	75.3	81.0	86.8	92.5	98.3	104.0	109.8	115.5	121.3

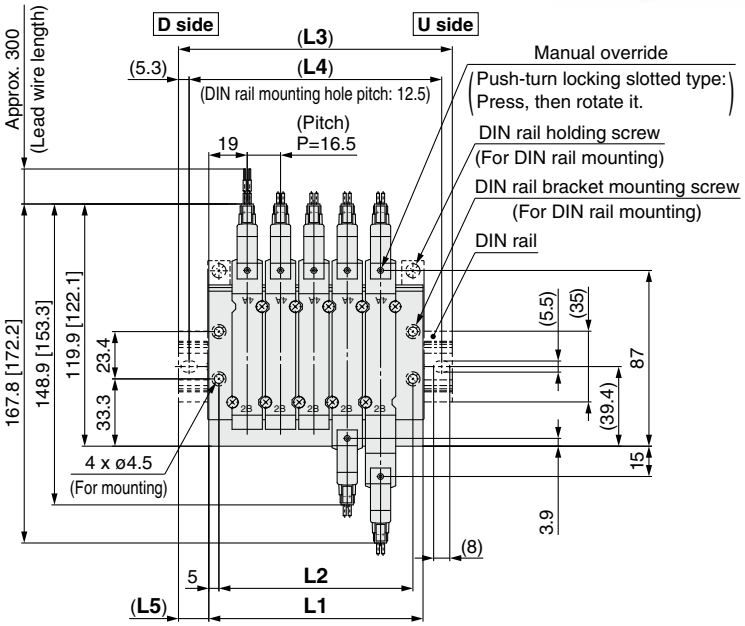
Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: 1/8, 1/4**



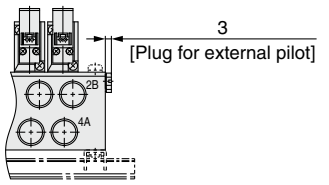
Dimensions: JSY5000 Series

JJ5SY5-40(R)-Stations U/D/B-01/02□(D)

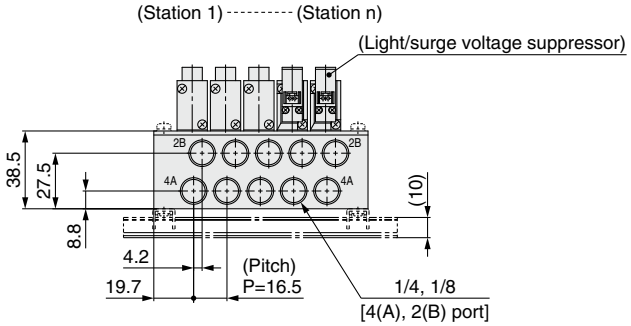




40R-Stations U/D*1

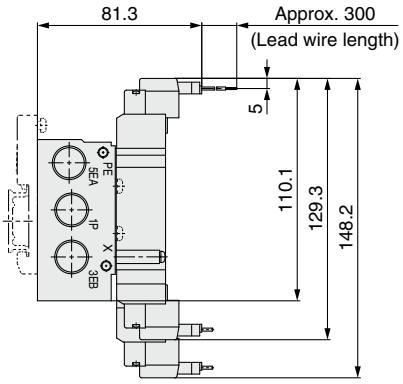


* The drawing above shows when P, E port entry is D.



*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-40-05B-02."

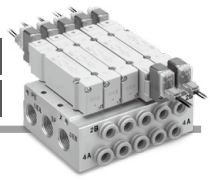
M plug connector (M)



L Dimensions: Port Sizes 01 (1/8), 02 (1/4)

n: Stations

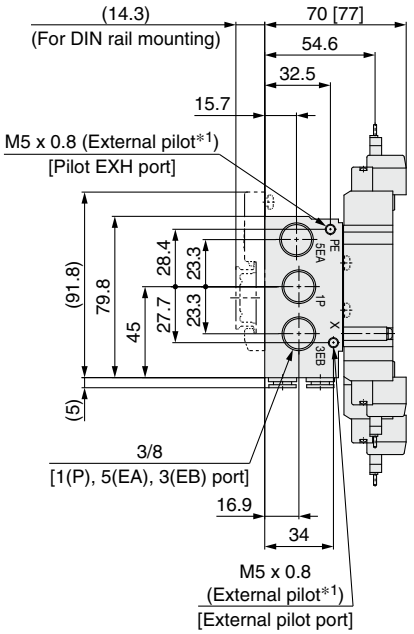
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	56.5	73.0	89.5	106.0	122.5	139.0	155.5	172.0	188.5	205.0	221.5	238.0	254.5	271.0	287.5	304.0	320.5	337.0	353.5
L2	46.5	63.0	79.5	96.0	112.5	129.0	145.5	162.0	178.5	195.0	211.5	228.0	244.5	261.0	277.5	294.0	310.5	327.0	343.5
L3	85.5	98.0	123.0	135.5	148.0	173.0	185.5	198.0	223.0	235.5	248.0	273.0	285.5	298.0	323.0	335.5	348.0	373.0	385.5
L4	75.0	87.5	112.5	125.0	137.5	162.5	175.0	187.5	212.5	225.0	237.5	262.5	275.0	287.5	312.5	325.0	337.5	362.5	375.0
L5	14.5	12.5	17.0	15.0	13.0	17.0	15.0	13.0	17.5	15.5	13.5	17.5	15.5	13.5	18.0	16.0	14.0	18.0	16.0

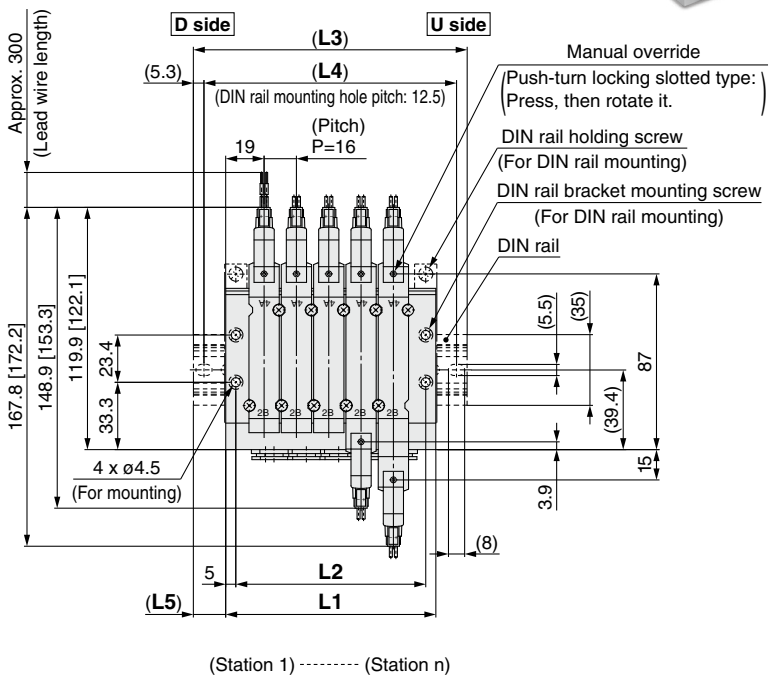


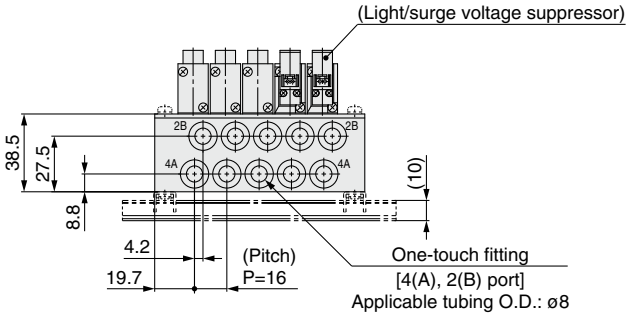
Non Plug-in Metal Base | Type 40/Side Ported | Port Size: ø8/Fixed

Dimensions: JSY5000 Series

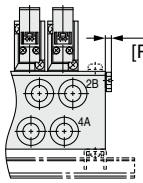
JJ5SY5-40(R)-[Stations][U/D]-C8□(D)







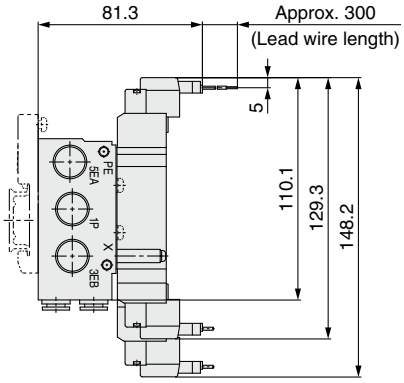
40R-[Stations][U/D]*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-40-05B-C8."

M plug connector (M)

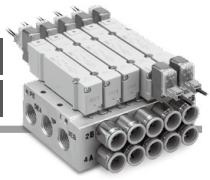


L Dimensions: Port Size C8

n: Stations

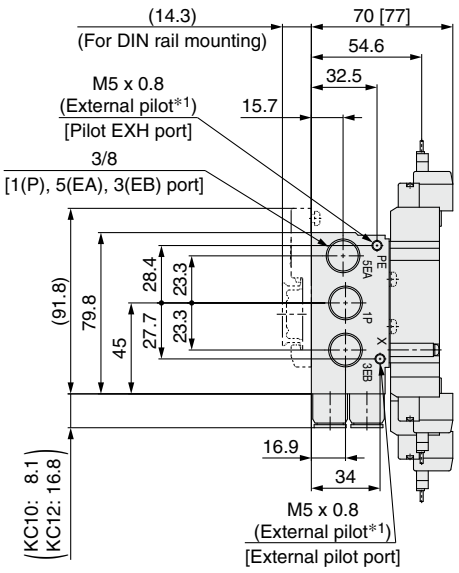
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	56.0	72.0	88.0	104.0	120.0	136.0	152.0	168.0	184.0	200.0	216.0	232.0	248.0	264.0	280.0	296.0	312.0	328.0	344.0
L2	46.0	62.0	78.0	94.0	110.0	126.0	142.0	158.0	174.0	190.0	206.0	222.0	238.0	254.0	270.0	286.0	302.0	318.0	334.0
L3	85.5	98.0	123.0	135.5	148.0	160.5	185.5	198.0	210.5	223.0	248.0	260.5	273.0	298.0	310.5	323.0	348.0	360.5	373.0
L4	75.0	87.5	112.5	125.0	137.5	150.0	175.0	187.5	200.0	212.5	237.5	250.0	262.5	287.5	300.0	312.5	337.5	350.0	362.5
L5	15.0	13.0	17.5	16.0	14.0	12.5	17.0	15.0	13.5	11.5	16.0	14.5	12.5	17.0	15.5	13.5	18.0	16.5	14.5

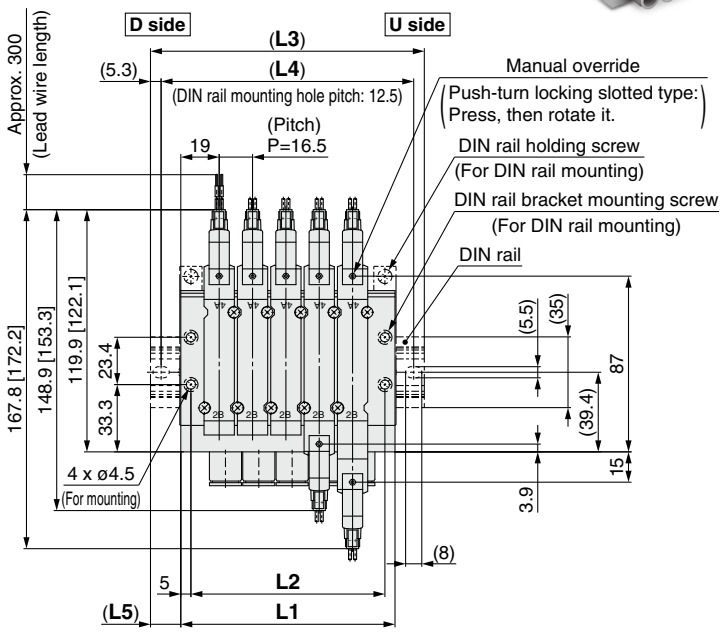
Non Plug-in Metal Base | **Type 40/Side Ported** | **Port Size: ø10, ø12/Replaceable**

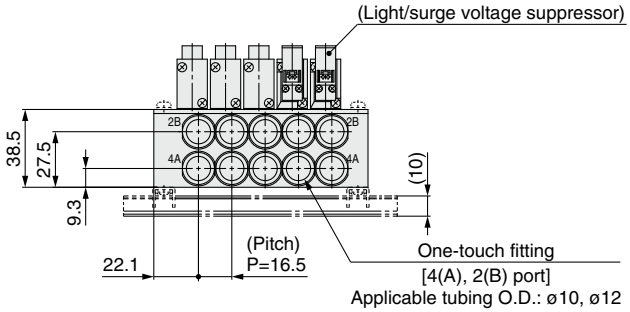


Dimensions: JSY5000 Series

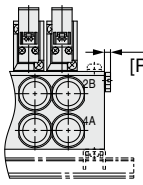
JJ5SY5-40(R)-[Stations][U/D]-[KC10/KC12]□(D)







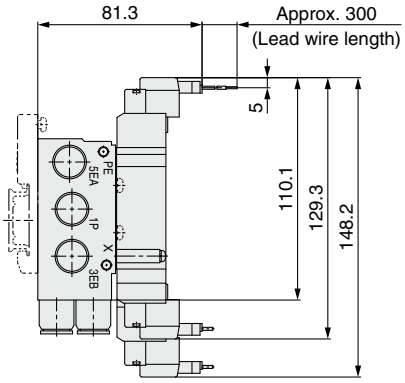
40R-[Stations][U/D]*1



* The drawing above shows when P, E port entry is D.

*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-40-05B-KC12."

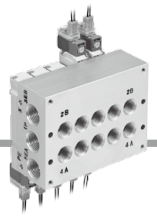
M plug connector (M)



L Dimensions: Port Sizes KC10, KC12

n: Stations

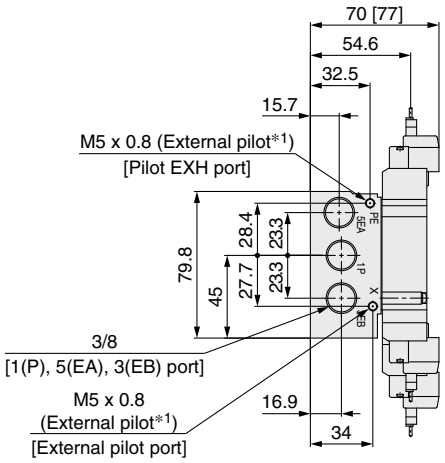
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	56.5	73.0	89.5	106.0	122.5	139.0	155.5	172.0	188.5	205.0	221.5	238.0	254.5	271.0	287.5	304.0	320.5	337.0	353.5
L2	46.5	63.0	79.5	96.0	112.5	129.0	145.5	162.0	178.5	195.0	211.5	228.0	244.5	261.0	277.5	294.0	310.5	327.0	343.5
L3	85.5	98.0	123.0	135.5	148.0	173.0	185.5	198.0	223.0	235.5	248.0	273.0	285.5	298.0	323.0	335.5	348.0	373.0	385.5
L4	75.0	87.5	112.5	125.0	137.5	162.5	175.0	187.5	212.5	225.0	237.5	262.5	275.0	287.5	312.5	325.0	337.5	362.5	375.0
L5	14.5	12.5	17.0	15.0	13.0	17.0	15.0	13.0	17.5	15.5	13.5	17.5	15.5	13.5	18.0	16.0	14.0	18.0	16.0

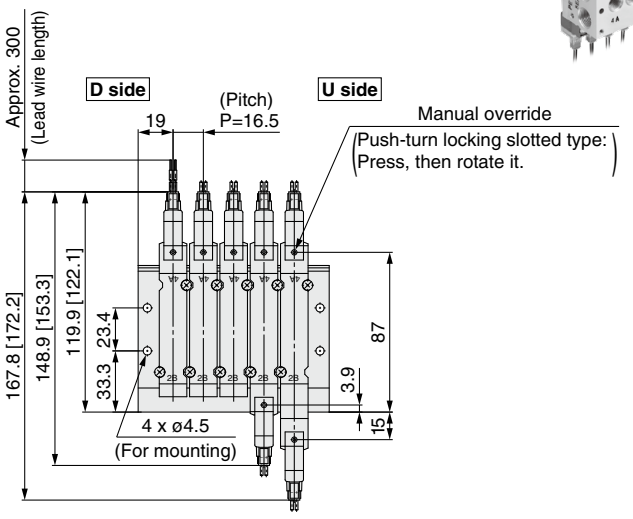


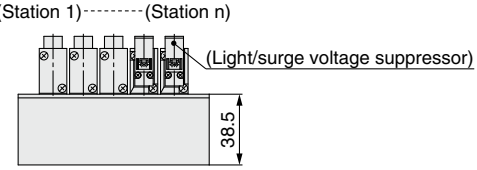
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: 1/8, 1/4**

Dimensions: JSY5000 Series

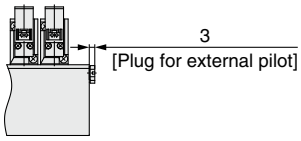
JJ5SY5-41(R)-Stations U/D/B-01/02□





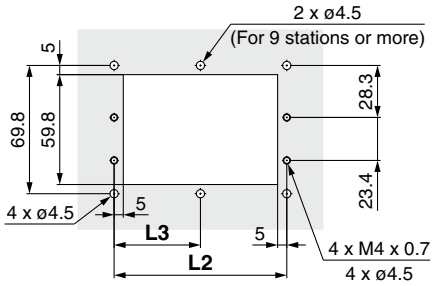


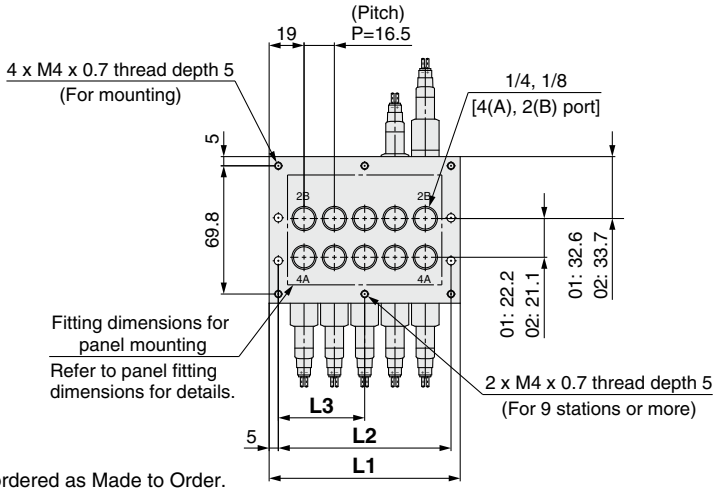
41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

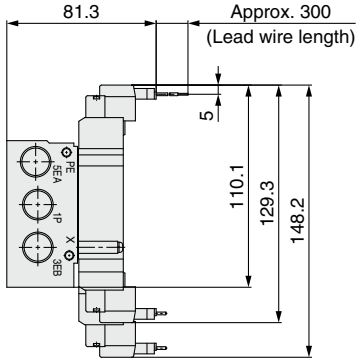
Panel fitting dimensions





*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-41-05B-02."

M plug connector (M)

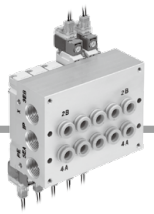


L Dimensions: Port Sizes 01 (1/8), 02 (1/4)

n: Stations

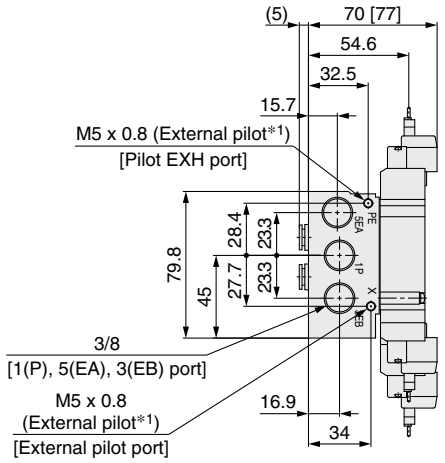
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	54.5	71.0	87.5	104.0	120.5	137.0	153.5	170.0	186.5	203.0	219.5	236.0	252.5	269.0	285.5	302.0	318.5	335.0	351.5
L2	44.5	61.0	77.5	94.0	110.5	127.0	143.0	160.0	176.5	193.0	209.5	226.0	242.5	259.0	275.5	292.0	308.5	325.0	341.5
L3	—	—	—	—	—	—	—	80.0	88.3	96.5	104.8	113.0	121.3	129.5	137.8	146.0	154.3	162.5	170.8

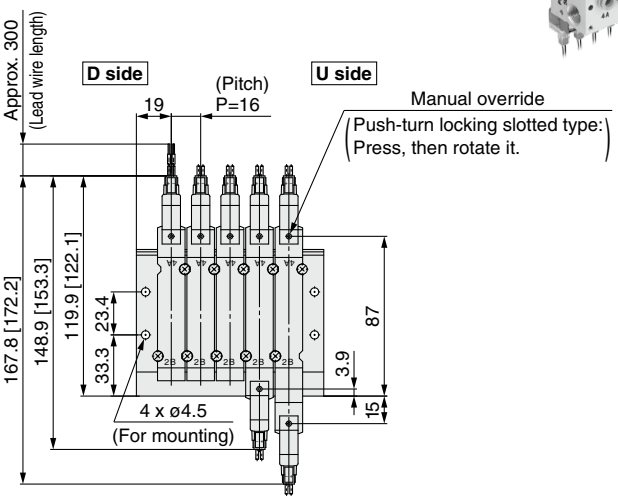
Non Plug-in Metal Base | **Type 41/Bottom Ported** | **Port Size: ø8/Fixed**

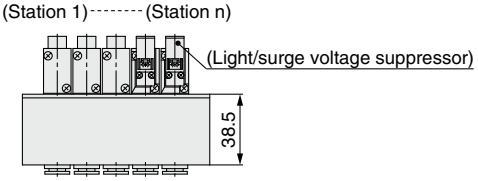


Dimensions: JSY5000 Series

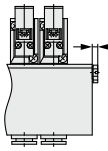
JJ5SY5-41(R)-Stations U/D-C8□





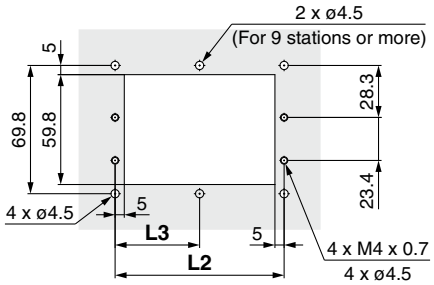


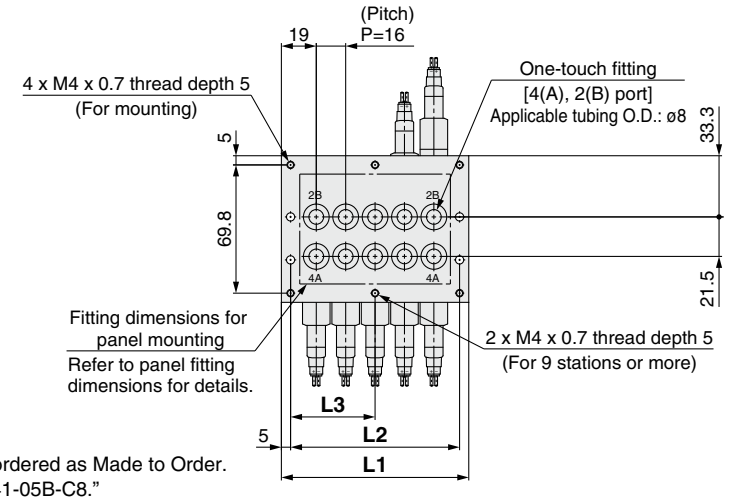
41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

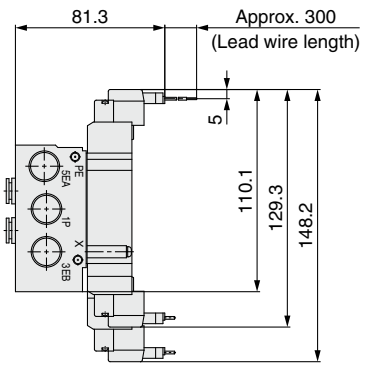
Panel fitting dimensions





*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-41-05B-C8."

M plug connector (M)

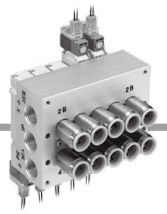


L Dimensions: Port Size C8

n: Stations

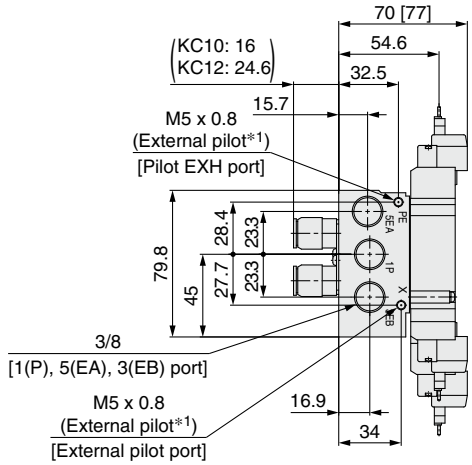
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L2	44.0	60.0	76.0	92.0	108.0	124.0	140.0	156.0	172.0	188.0	204.0	220.0	236.0	252.0	268.0	284.0	300.0	316.0	332.0
L3	—	—	—	—	—	—	—	78.0	86.0	94.0	102.0	110.0	118.0	126.0	134.0	142.0	150.0	158.0	166.0

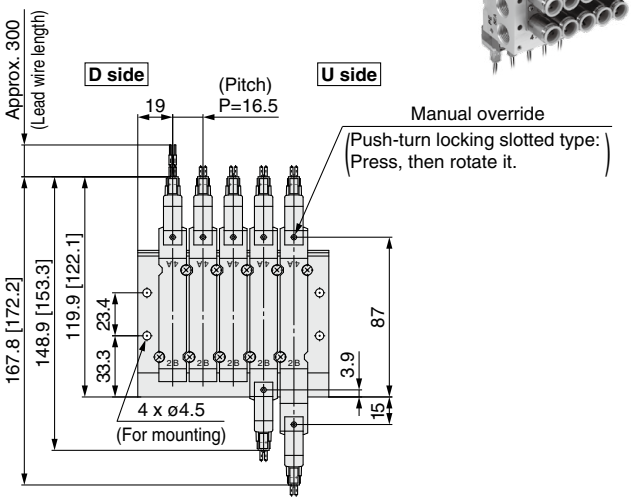
Non Plug-in Metal Base | Type 41/Bottom Ported | Port Size: ø10, ø12/Replaceable

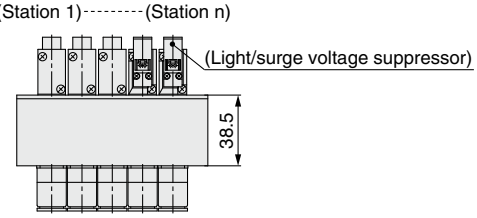


Dimensions: JSY5000 Series

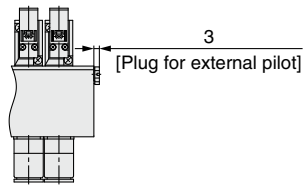
JJ5SY5-41(R)-Stations U/D/B - KC10/KC12 □





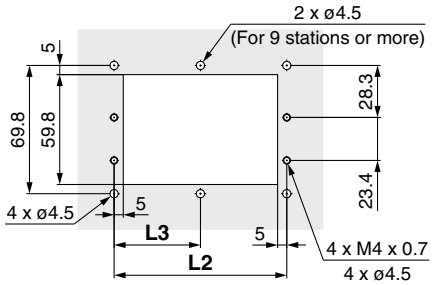


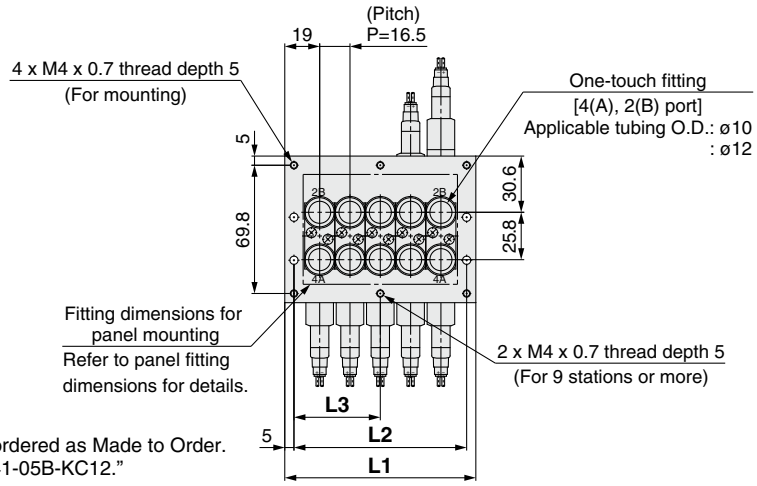
41R-Stations U/D*1



* The drawing above shows when P, E port entry is D.

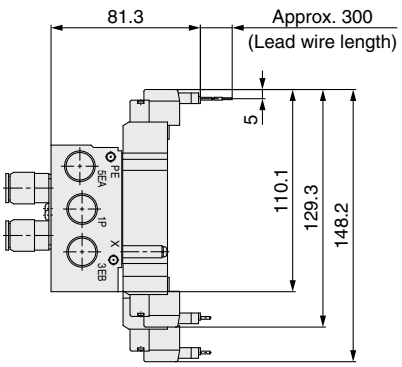
Panel fitting dimensions





*1 The external pilot (R) should be ordered as Made to Order.
* These figures show the "JJ5SY5-41-05B-KC12."

M plug connector (M)



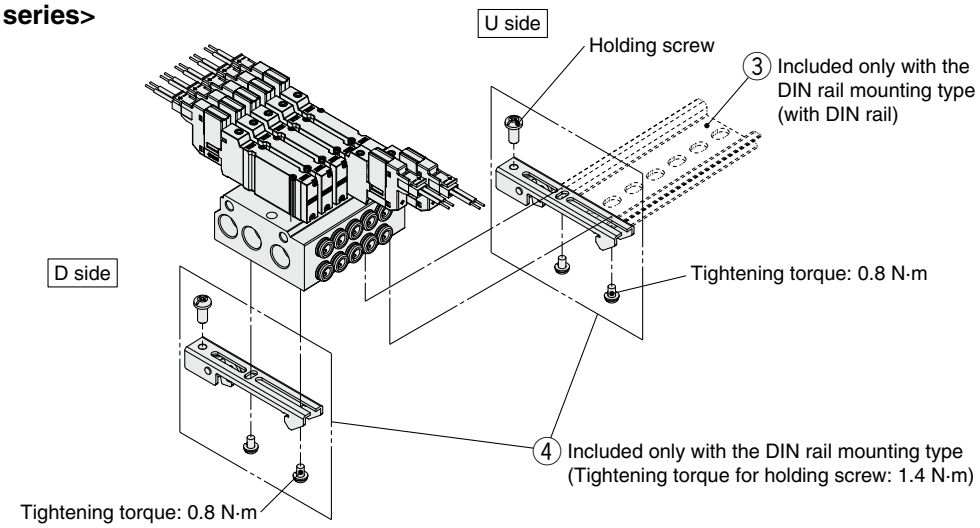
L Dimensions: Port Sizes KC10, KC12

n: Stations

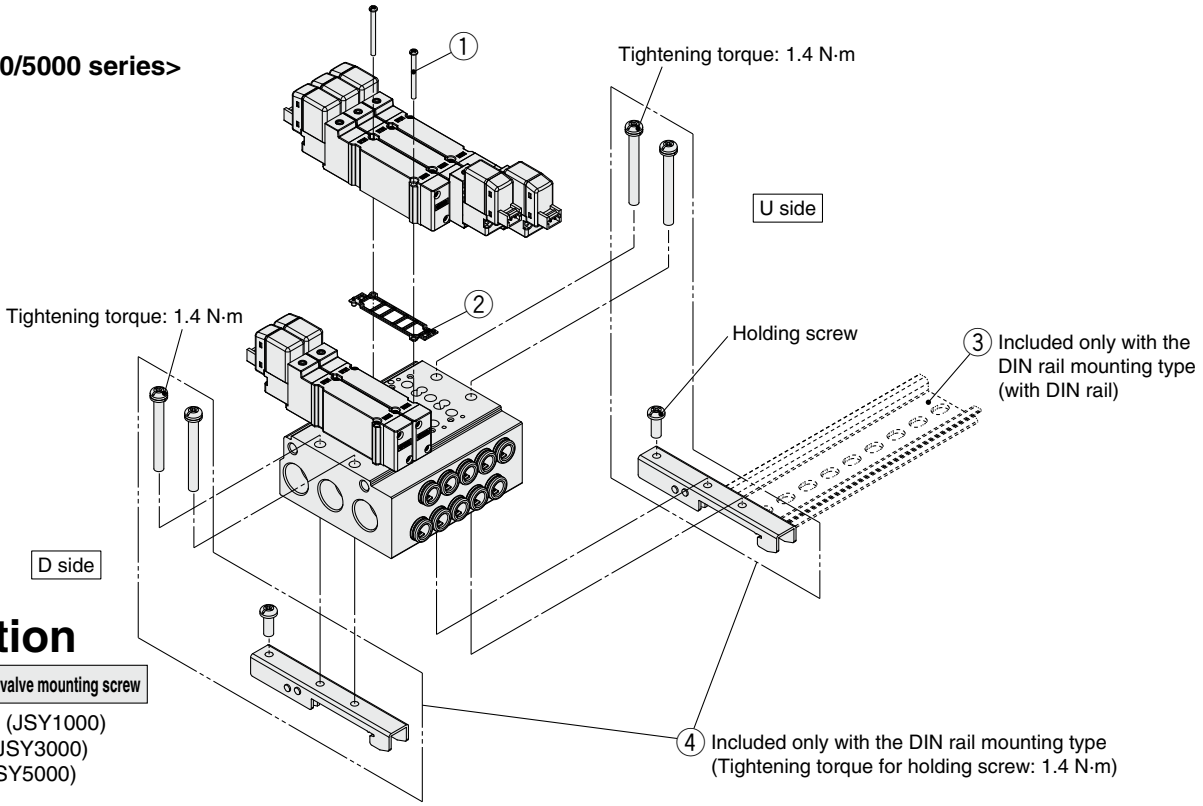
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	54.5	71.0	87.5	104.0	120.5	137.0	153.5	170.0	186.5	203.0	219.5	236.0	252.5	269.0	285.5	302.0	318.5	335.0	351.5
L2	44.5	61.0	77.5	94.0	110.5	127.0	143.5	160.0	176.5	193.0	209.5	226.0	242.5	259.0	275.5	292.0	308.5	325.0	341.5
L3	—	—	—	—	—	—	—	80.0	88.3	96.5	104.8	113.0	121.3	129.5	137.8	146.0	154.3	162.5	170.8

Non Plug-in Metal Base Manifold Exploded View

<JSY1000 series>



<JSY3000/5000 series>



⚠ Caution

Tightening torque for valve mounting screw

M1.4: 0.06 N·m (JSY1000)
M2: 0.16 N·m (JSY3000)
M3: 0.8 N·m (JSY5000)

Manifold Parts Nos.

No.	Description	Part number			Note
		JSY1000	**JSY3000**	**JSY5000**	
①	**Valve mounting screw**	**JSY11V-23-1A** (M1.4 x 21.5)	**JSY31V-23-4A** (M2 x 22)	**JSY51V-23-4A** (M3 x 27)	Part numbers shown on the left are for 10 valves. (20 pcs.)
②	**Base gasket**	**JSY11M-11-1A**	**JSY31M-11-1A**	**JSY51M-11-1A**	Part numbers shown on the left are for 10 valves. (10 pcs.)
③	**DIN rail**	**VZ1000-11-1-□**	**VZ1000-11-1-□**	**VZ1000-11-4-□**	Refer to page 37.
④	**Clamp bracket**	**JSY11M-15-1A**	**JSY31M-15-1A**	**JSY51M-15-1A**	Part numbers shown on the left are for one manifold. (2 sets of clamp brackets)

JSY1000/3000/5000 Series
One-touch Fittings, Clip, Port Plate, Tube Releasing Tool

Refer to “How to Replace One-touch Fittings” on page 44 for the replacement method.

■ One-touch Fittings

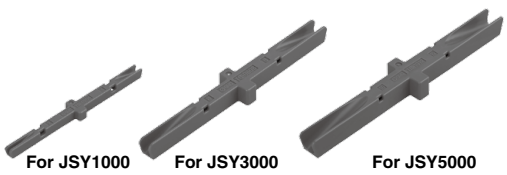
Port size		JSY1000	JSY3000	JSY5000	Note
A, B port	ø2	KQSY10-C2	—	—	Part number is for one piece.
	ø4	KQSY10-C4-X1336	KQSY30-C4	—	
	ø6	KQSY11-C6-X1336	KQSY30-C6	KQSY50-C6	
	ø8	—	KQSY30-C8-X1336	KQSY50-C8	
	ø10	—	—	KQSY50-C10	
	ø12	—	—	KQSY50-C12-X1336	

■ Clip, Port Plate

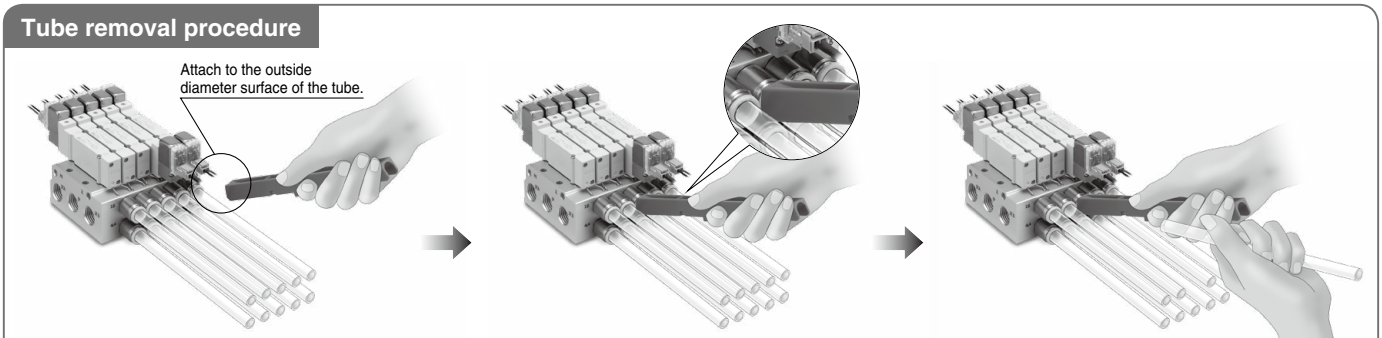
	JSY1000		JSY3000	JSY5000	Note
	For A, B port C2/C4 fittings	For A, B port C6 fittings			
Clip	JSY11M-19-4A	JSY11M-19-3A	JSY31M-19-3A	JSY51M-19-3A	Part number is for 10 pieces.
Port plate	JSY11M-10-4A	JSY11M-10-3A	JSY31M-10-3A	JSY51M-10-3A	Part number is for 10 pieces.

■ Tube Releasing Tool (This tool is used for removing the tube from port A and B.)

Series	For JSY1000 (6.5 mm pitch)	For JSY1000 (9 mm pitch) For JSY3000	For JSY5000
Releasing tool part no.	TG-0204	TG-0608	TG-1012
Applicable tubing O.D.	ø2/ø4	ø6/ø8	ø10/ø12



Tube removal procedure



(1) Set the release tool to the outside diameter surface.

(2) Push the fitting release bushing using the release tool.

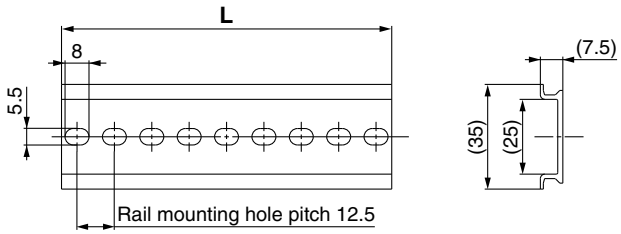
(3) Remove the tube.

Manifold Options

■DIN rail dimensions/weight for the JSY1000/3000 Non Plug-in metal base

VZ1000-11-1-□

∗ After confirming the L3 dimension in the dimensions table of each series, refer to the DIN rail dimensions table below and specify the number in the box □.



No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323
Weight [g]	17.6	19.9	22.1	24.4	26.6	28.9	31.1	33.4	35.6	37.9	40.1	42.4	44.6	46.9	49.1	51.4	53.6	55.9	58.1

No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
L dimension	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5
Weight [g]	60.4	62.5	64.9	67.1	69.4	71.6	73.9	76.1	78.4	80.6	82.9	85.1	87.4	89.6	91.9	94.1	96.4	98.6	100.9

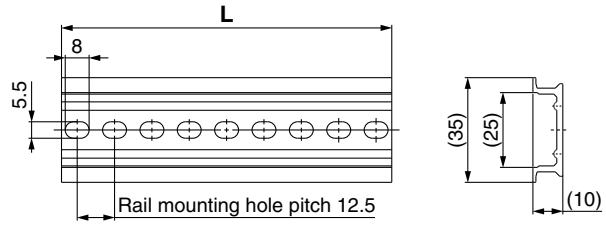
No.	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
L dimension	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798
Weight [g]	103.1	105.4	107.6	109.9	112.1	114.4	116.6	118.9	121.1	123.4	125.6	127.9	130.1	132.4	134.6	136.9	139.1	141.4	143.6

No.	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
L dimension	810.5	823	835.5	848	860.5	873	885.5	898	910.5	923	935.5	948	960.5	973	985.5
Weight [g]	145.9	148.1	150.4	152.6	154.9	157.1	159.4	161.6	163.9	166.1	168.4	170.6	172.9	175.1	177.4

■DIN rail dimensions/weight for the JSY5000 Non Plug-in metal base

VZ1000-11-4-□

∗ After confirming the L3 dimension in the dimensions table of each series, refer to the DIN rail dimensions table below and specify the number in the box □.



No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323
Weight [g]	24.8	28	31.1	34.3	37.4	40.6	43.8	46.9	50.1	53.3	56.4	59.6	62.7	65.9	69.1	72.2	75.4	78.6	81.7

No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
L dimension	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5
Weight [g]	84.9	88	91.2	94.4	97.5	100.7	103.9	107	110.2	113.3	116.5	119.7	122.8	126	129.2	132.3	135.5	138.6	141.8

No.	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
L dimension	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798
Weight [g]	145	148.1	151.3	154.5	157.6	160.8	163.9	167.1	170.3	173.4	176.6	179.8	182.9	186.1	189.2	192.4	195.6	198.7	201.9

No.	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
L dimension	810.5	823	835.5	848	860.5	873	885.5	898	910.5	923	935.5	948	960.5	973	985.5
Weight [g]	205.1	208.2	211.4	214.5	217.7	220.9	224	227.2	230.4	233.5	236.7	239.8	243	246.2	249.3

⚠Caution

Tightening torque for mounting screw
M1.4: 0.06 N·m (JSY1000)
M2: 0.16 N·m (JSY3000)
M3: 0.8 N·m (JSY5000)

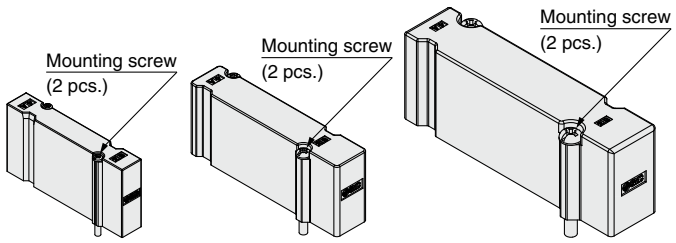
Manifold Options

* Refer to page 39 for dimensions.

■Blanking plate

[With two mounting screws]

Used when valve additions are expected or for maintenance.



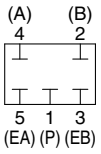
JSY11M-26-1A **JSY31M-26-1A** **JSY51M-26-1A**

How to Order Blanking Plates

JSY 3 1M – 26 – 1A

Series

1	JSY1000
3	JSY3000
5	JSY5000

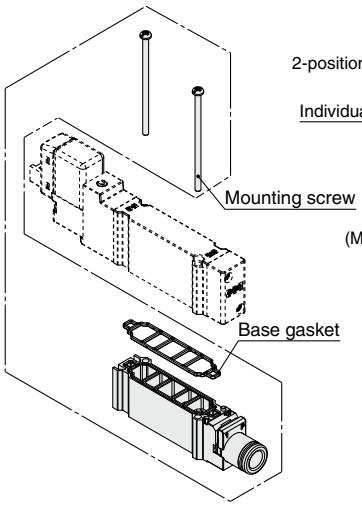


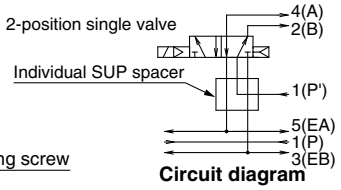
Circuit diagram

■Individual SUP spacer

[With a base gasket and two mounting screws]

When the same manifold is used for different pressures, an individual SUP spacer is used as a supply port for different pressures.





Circuit diagram

(Mounting example of a 2-position single valve)

Part numbers of mounting screw (For repairs)

JSY1000: JSY11V-23-2A (2 pcs.)
JSY3000: JSY31V-23-5A (2 pcs.)
JSY5000: JSY51V-23-5A (2 pcs.)

How to Order Individual SUP/EXH Spacers

JSY 3 1M – 38 – 1A – C6

Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

Series

1	JSY1000
3	JSY3000
5	JSY5000

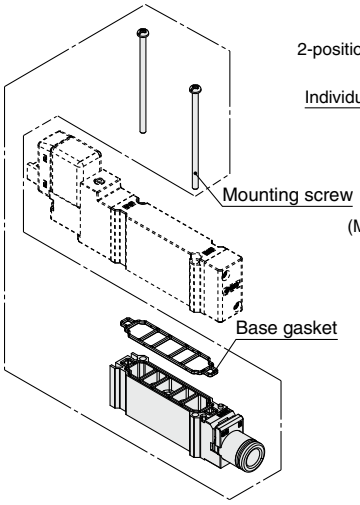
Port size (One-touch fittings)

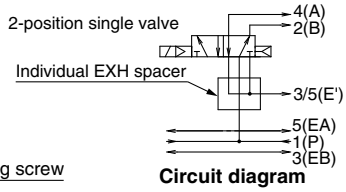
Symbol	P, E port	JSY1000	JSY3000	JSY5000
C4	ø4 One-touch fitting	●	—	—
C6	ø6 One-touch fitting	—	●	—
C8	ø8 One-touch fitting	—	—	●
C10	ø10 One-touch fitting	—	—	●
C12	ø12 One-touch fitting	—	—	●

■Individual EXH spacer

[With a base gasket and two mounting screws]

When valve exhaust affects other stations due to the circuit configuration, this spacer is used for individual valve exhaust.





Circuit diagram

(Mounting example of a 2-position single valve)

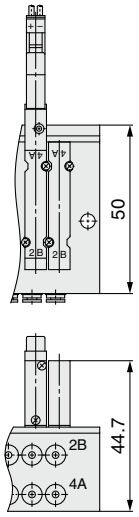
Part numbers of mounting screw (For repairs)

JSY1000: JSY11V-23-2A (2 pcs.)
JSY3000: JSY31V-23-5A (2 pcs.)
JSY5000: JSY51V-23-5A (2 pcs.)

Dimensions: Manifold Options

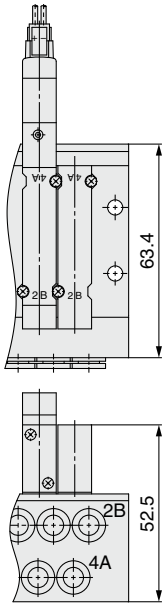
■ Blanking plate

JSY1000 series



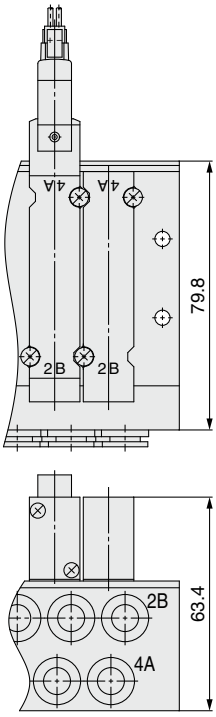
<Type 40>

JSY3000 series



<Type 40>

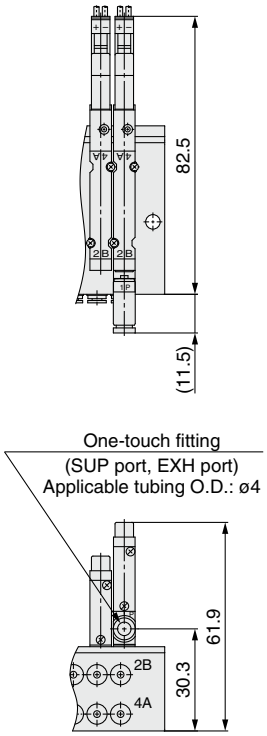
JSY5000 series



<Type 40>

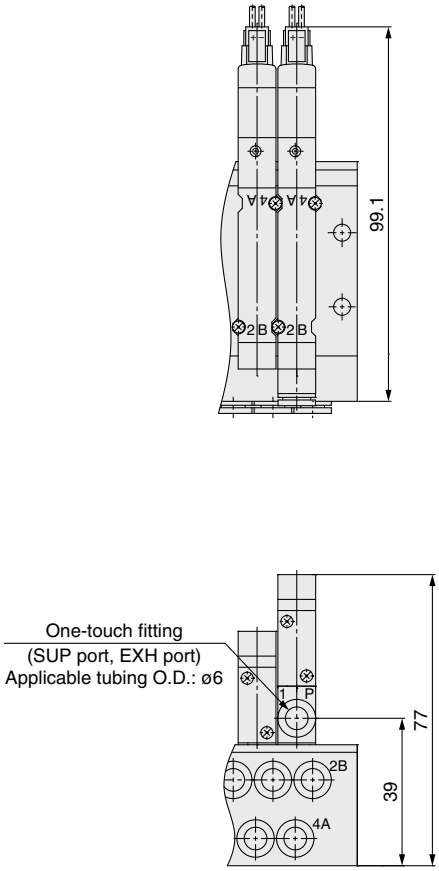
■ Individual SUP/EXH spacer

JSY1000 series



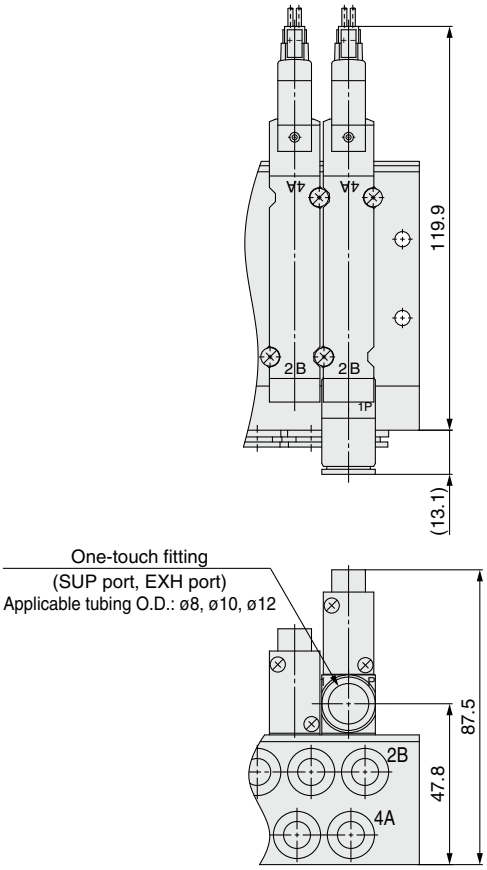
<Type 40>

JSY3000 series



<Type 40>

JSY5000 series



<Type 40>

Made to Order

Please contact SMC for detailed dimensions, specifications, and delivery times.

Made to Order

1 External Pilot

How to Order Manifolds p. 15

JJ5SY 1/3/5 – 40/41 **R** – □□ – □□□

Type

R	External pilot

How to Order Valves p. 16

JSY1□**40R T** – **5**□□

JSY 3/5 □ **40R** □ – **5**□□

Coil type (See below.)

Pilot type

R	External pilot

* External pilot specification is not applicable for 4-position dual 3-port valves.
* When pilot type "R" is selected, select the external pilot type "R" for the manifold model.

2 Coil Type: With Power Saving Circuit (Continuous Duty Type)

Be sure to select the power saving circuit type when the JSY3000/5000 series is continuously energized for long periods of time.
Be careful of the energizing time when the power saving circuit is selected. Refer to page 43 for details.
0.1 W: JSY3000/5000

How to Order Valves

JSY 3/5 □ **40** □ **T** – **5**□□

Coil type

T	With power saving circuit (Continuous duty type)

Pilot type (See above.)

JSY1000/3000/5000 Series
Specific Product Precautions 1

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smcworld.com

Environment

⚠Warning

Do not use valves in atmospheres of corrosive gases, chemicals, sea water, water, water vapor, or where there is direct contact with any of these.

Valve Mounting

⚠Caution

Mount it so that there is no slippage or deformation in gaskets, and tighten with the tightening torque as shown below.

Series	Thread size	Tightening torque
JSY1000	M1.4	0.06 N·m
JSY3000	M2	0.16 N·m
JSY5000	M3	0.8 N·m

Manual Override

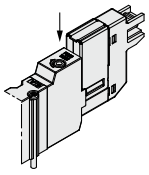
⚠Warning

1. Do not apply excessive torque when turning the manual override. [0.05 N·m]
   When locking the manual override, be sure to push it down before turning. Turning without first pushing it down can cause damage to the manual override and other trouble such as air leakage, etc.
2. Regardless of an electric signal for the valve, the manual override is used for switching the main valve. Connected actuator is started by manual operation. Use the manual override after confirming that there is no danger.

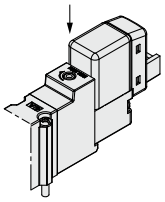
■ Non-locking push type

Push down on the manual override button until it stops.

JSY1000 series



JSY3000/5000 series



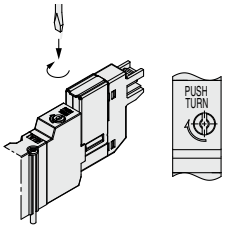
Manual Override

⚠Warning

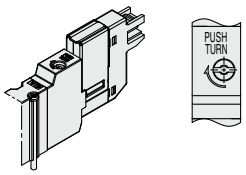
■ Push-turn locking slotted type [D type]

Push down on the manual override with a small flat head screwdriver until it stops, and then turn it 90° clockwise. The manual override is then locked. To release it, turn it counterclockwise.
If it is not turned, it can be operated the same way as the non-locking push type.

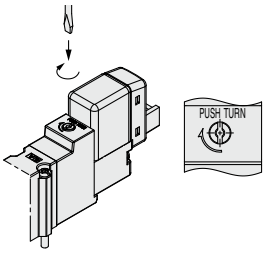
JSY1000 series



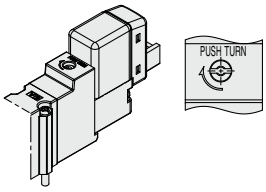
Locked position



JSY3000/5000 series



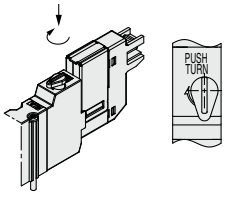
Locked position



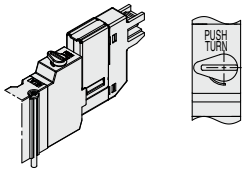
■ Push-turn locking lever type [E type]

Push down on the manual override by finger until it stops, and then turn it 90° clockwise. The manual override is then locked. To release it, turn it counterclockwise.
If it is not turned, it can be operated the same way as the non-locking push type.

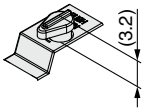
JSY1000 series



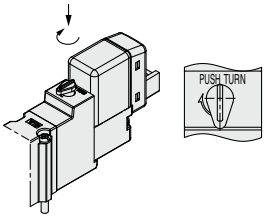
Locked position



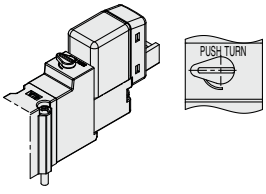
Carefully check the manual override projection amount.
Max. (at OFF): 3.2 mm



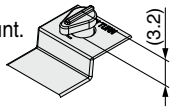
JSY3000/5000 series



Locked position



Carefully check the manual override projection amount.
Max. (at OFF): 3.2 mm



Specific Product Precautions 2

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smcworld.com

Used as a 3-Port Valve

⚠Caution

■In case of using a 5-port valve as a 3-port valve

The JSY1000/3000/5000 series can be used as normally closed (N.C.) or normally open (N.O.) 3-port valves by closing one of the cylinder ports 4(A) or 2(B) with a plug. However, they should be used with the exhaust ports kept open.

Plug position		B port	A port
Type of actuation		N.C.	N.O.
Number of solenoids	Single	(A)4 2(B) (EA)5 1 3(EB) (P)	(A)4 2(B) (EA)5 1 3(EB) (P)
	Double	(A)4 2(B) (EA)5 1 3(EB) (P)	(A)4 2(B) (EA)5 1 3(EB) (P)

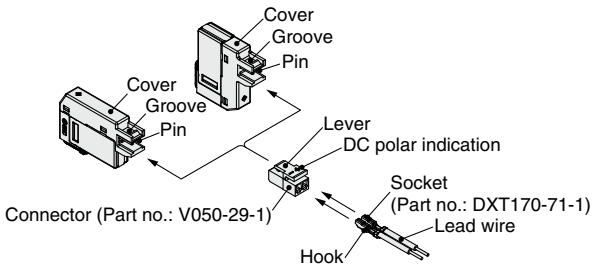
How to Use Plug Connector

⚠Caution

1. Attaching and detaching connectors

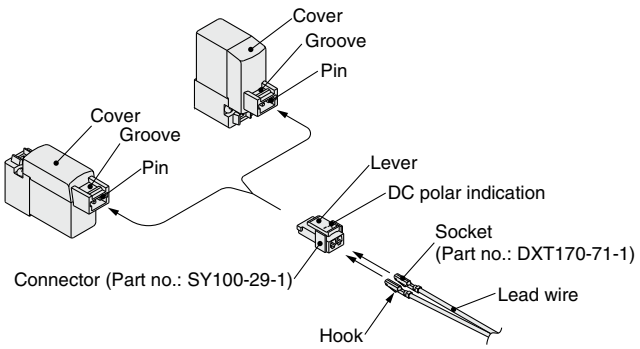
- To attach a connector, hold the lever and connector unit between your fingers and insert straight onto the pins of the solenoid valve so that the lever's pawl is pushed into the groove and locks.
- To detach a connector, remove the pawl from the groove by pushing the lever downward with your thumb, and pull the connector straight out.

For JSY1000



∗ In order not to damage the connector and cover, do not pull the lead wire excessively (with a force of 10 N or more).

For JSY3000/5000



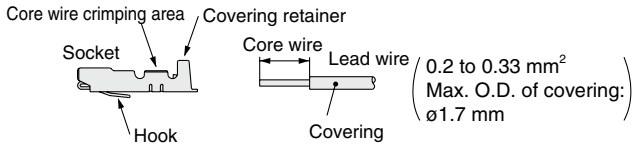
∗ In order not to damage the connector and cover, do not pull the lead wire excessively (with a force of 30 N or more).

How to Use Plug Connector

⚠Caution

2. Crimping connection of lead wire and socket

Strip 3.2 to 3.7 mm at the end of lead wires, insert the end of the core wires evenly into the sockets, and then crimp it by a crimping tool. When this is done, take care that the coverings of the lead wires do not enter the core wire crimping area.
(Please contact SMC for the dedicated crimping tools.)



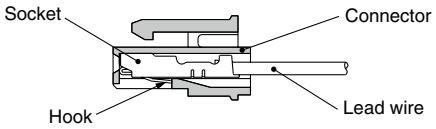
3. Attaching and detaching lead wires with sockets

● Attaching

Insert the sockets into the square holes of the connector (⊕, ⊖ indication), and continue to push the sockets all the way in until they lock by hooking into the seats in the connector.
(When they are pushed in, their hooks open and they are locked automatically.) Then confirm that they are locked by pulling lightly on the lead wires.

● Detaching

To detach a socket from a connector, pull out the lead wire while pressing the socket's hook with a stick having a thin tip (approx. 1 mm).
If the socket will be used again, first spread the hook outward.



JSY1000/3000/5000 Series
Specific Product Precautions 3

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smcworld.com

Plug Connector

How to Order

■ **For JSY1000**

V050-30-□A-□

Rated voltage

Symbol	Rated voltage	Lead wire color
4	DC	Red, Black
Nil	Without lead wire*1	

*1 With connector and 2 of sockets only

Lead wire length

Symbol	Lead wire length
Nil	300 mm
6	600 mm
10	1000 mm
20	2000 mm
30	3000 mm
50	5000 mm

■ **For JSY3000/5000**

SY100-30-□A-□

Rated voltage

Symbol	Rated voltage	Lead wire color
4	DC	Red, Black
Nil	Without lead wire*1	

*1 With connector and 2 of sockets only

Lead wire length

Symbol	Lead wire length
Nil	300 mm
6	600 mm
10	1000 mm
20	2000 mm
30	3000 mm
50	5000 mm

How to Order

Specify the plug connector part number together with the part number for the plug connector type solenoid valve without connector.

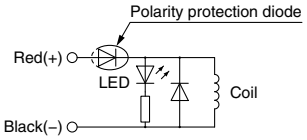
<Example> Lead wire length 2000 mm
For DC
JSY3140-5LOZ
SY100-30-4A-20

Surge Voltage Suppressor

⚠Caution

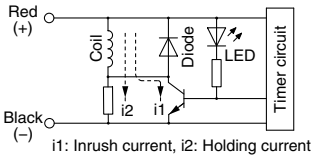
<For DC>
L/M Plug Connector

■ **Polar type (For JSY3000/5000)**
With light/surge voltage suppressor (□Z)



· Connect in accordance with the +, – polarity indication.
· When wiring is done at the factory, positive (+) is red and negative (–) is black.

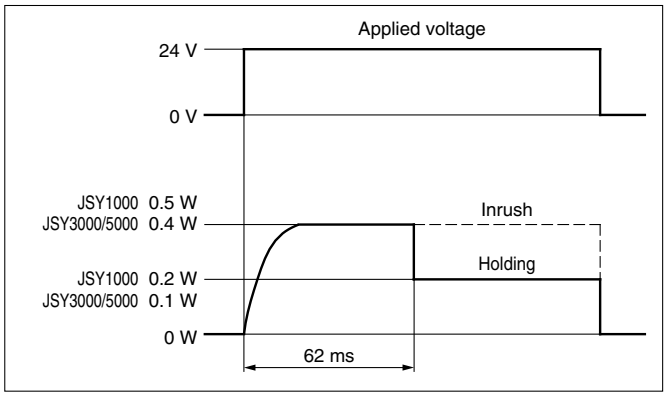
■ **With power saving circuit (JSY3000/5000: Made to Order)**
Power consumption is decreased by approx. 1/4 by reducing the wattage required to hold the valve in an energized state. (Effective energizing time is over 62 ms at 24 VDC.)



i1: Inrush current, i2: Holding current

The circuit shown above reduces the power consumption for holding in order to save energy. Refer to the electrical power waveform as shown below.

<Electrical power waveform with power saving circuit>



· Since the voltage will drop by approx. 0.5 V due to the transistor, pay attention to the allowable voltage fluctuation. (For details, refer to the solenoid specifications of each type of valve.)

Specific Product Precautions 4

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smcworld.com

Continuous Duty

⚠Caution

If a valve is energized continuously for long periods of time, the rise in temperature due to heat-up of the coil assembly may cause a decline in solenoid valve performance, reduce service life, or have adverse effects on peripheral equipment. If the valve is energized continuously for long periods of time, be sure to use a valve with power saving circuit. In particular, if three or more adjacent stations on the manifold are energized simultaneously for extended periods of time or if the valves on A side and B side are energized simultaneously for long periods of time, take special care as the temperature rise will be greater.

Energization of a 2-Position Double Solenoid Valve

⚠Caution

To avoid operation failure, do not energize the A side and B side of 2-position double solenoid valve at the same time.

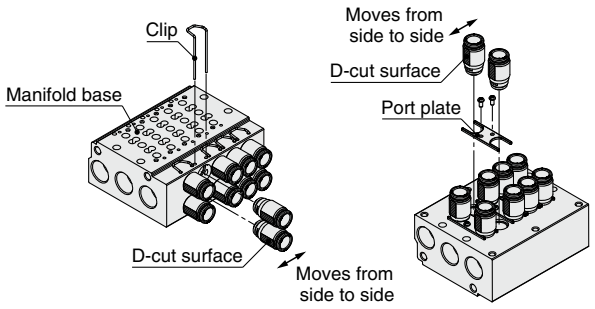
How to Replace One-touch Fittings

⚠Caution

By replacing One-touch fittings of manifold base, it is possible to change the connection diameter of the 4(A), 2(B), 1(P), 3/5(E) ports. When replacing the One-touch fittings, remove the clip or the plate before pulling the One-touch fittings off. Mount the One-touch fittings by following the removal procedure in reverse.
Use caution as it may cause air leakage if the clip and the plate are not inserted securely enough when they are switched. Refer to page 36 for part numbers of One-touch fittings.

Fitting direction is specified when the fittings below are used.
Assemble the fitting so that the D-cut surfaces of the fitting face sideways.
Fitting part no.: KQSY10-C4-X1336 (JSY1000)
KQSY11-C6-X1336 (JSY1000)
KQSY30-C8-X1336 (JSY3000)
KQSY50-C12-X1336 (JSY5000)

■Metal base



* It is not possible to replace C2 or C4 fittings with C6 fittings for the JSY1000 series.
* Refer to page 36 for One-touch fitting, clip, and port plate part numbers.

One-touch Fittings

⚠Caution

■Tube attachment/detachment for One-touch fittings

1) Tube attachment

1. Take a tube having no flaws on its periphery and cut it off at a right angle. When cutting the tube, use tube cutters TK-1, 2 or 3. Do not use pliers, nippers or scissors, etc. If cutting is done with tools other than tube cutters, the tube may be cut diagonally or become flattened, etc., making a secure installation impossible, and causing problems such as the tube pulling out after installation or air leakage. Allow some extra length in the tube.
2. Grasp the tube and push it in slowly, inserting it securely all the way into the fitting.
3. After inserting the tube, pull on it lightly to confirm that it will not come out. If it is not installed securely all the way into the fitting, this can cause problems such as air leakage or the tube pulling out.

2) Tube detachment

1. Push in the release button sufficiently, pushing its collar equally around the circumference.
2. Pull out the tube while holding down the release button so that it does not come out. If the release button is not pressed down sufficiently, there will be increased bite on the tube and it will become more difficult to pull it out.
3. When the removed tube is to be used again, cut off the portion which has been chewed before reusing it. If the chewed portion of the tube is used as is, this can cause trouble such as air leakage or difficulty in removing the tube.

Applicable Fittings: KQ2H, KQ2S, M Series

Series	Model	Piping port	Port size	Fitting	Applicable tubing O.D. ø2	ø4	ø6	ø8	ø10	ø12
JSY1000	JJ5SY1-40/41(R) Manifold base	1P, 5EA 3EB	1/8	KQ2H		●	●			
				KQ2S		●	●	●		
		X, PE	M5	KQ2H	●	●				
				KQ2S		●				
		4A, 2B	M5	KQ2H	●					
				KQ2S		●	●			
			M3	KQ2H	●					
				KQ2S	●					

Series	Model	Piping port	Port size	Fitting	Applicable tubing O.D. ø2	ø4	ø6	ø8	ø10	ø12
JSY3000	JJ5SY3-40/41(R) Manifold base	1P, 5EA 3EB	1/4	KQ2H		●	●			
				KQ2S			●	●		
		X, PE	M5	KQ2H	●	●	●			
				KQ2S		●	●			
		4A, 2B	1/8	KQ2H		●	●			
				KQ2S		●		●		
			M5	KQ2H	●	●	●			
				KQ2S		●	●			

Series	Model	Piping port	Port size	Fitting	Applicable tubing O.D. ø2	ø4	ø6	ø8	ø10	ø12
JSY5000	JJ5SY5-40/41(R) Manifold base	1P, 5EA 3EB	3/8	KQ2H			●	●		
				KQ2S				●		
		X, PE	M5	KQ2H	●	●	●			
				KQ2S		●	●			
		4A, 2B	1/4	KQ2H		●	●			
				KQ2S			●	●		
			1/8	KQ2H		●	●			
				KQ2S		●	●	●		

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smcworld.com

Other Tube Brands

⚠Caution

1. When using other than SMC brand tube, confirm that the following specifications are satisfied with respect to the tube outside diameter tolerance.

1) Nylon tube within ±0.1 mm
2) Soft nylon tube within ±0.1 mm
3) Polyurethane tube within +0.15 mm
within –0.2 mm

Do not use tube which do not meet these outside diameter tolerances. It may not be possible to connect them, or they may cause other trouble, such as air leakage or the tube pulling out after connection.

Fixation of DIN Rail Mounting Type Manifolds

⚠Caution

1. When the manifold is fixed with bolts on a mounting surface etc., it can be operated just by fixing on both ends of the DIN rail if the bottom surface of the DIN rail is entirely in contact with the mounting surface when mounted horizontally. However, if it is used with other mounting or with side or reverse mounting, fix the DIN rail with bolts at regular intervals. As a guide, insert bolts in 2 locations for 2-5 stations, 3 locations for 6-10 stations, 4 locations for 11-15 stations, and 5 locations for 16-20 stations.
2. When using the manifold with DIN rail in an environment where any vibration or impact is applied to it, the DIN rail itself may be broken. In particular, if the installation surface vibrates when mounting the manifold on the wall or if a load is directly applied to the manifold, the DIN rail may be broken, causing the manifold to drop. When any vibration, impact, or load is applied to the manifold, be sure to use the direct mounting manifold.

Installation

⚠Caution

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.

⚠ Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of **"Caution," "Warning"** or **"Danger."** They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)*1), and other safety regulations.

⚠ Caution: **Caution** indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

⚠ Warning: **Warning** indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

⚠ Danger : **Danger** indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

*1) ISO 4414: Pneumatic fluid power – General rules relating to systems.
ISO 4413: Hydraulic fluid power – General rules relating to systems.
IEC 60204-1: Safety of machinery – Electrical equipment of machines.
(Part 1: General requirements)
ISO 10218-1: Manipulating industrial robots – Safety.
etc.

⚠ Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalog.
3. An application which could have negative effects on people, property, or animals requiring special safety analysis.
4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.

⚠ Caution

1. The product is provided for use in manufacturing industries.

The product herein described is basically provided for peaceful use in manufacturing industries.
If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary.
If anything is unclear, contact your nearest sales branch.

Limited warranty and Disclaimer/ Compliance Requirements

The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements".
Read and accept them before using the product.

Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first.*2)
   Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided.
   This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalog for the particular products.

*2) **Vacuum pads are excluded from this 1 year warranty.**
A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.
Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

⚠ Caution

SMC products are not intended for use as instruments for legal metrology.

Measurement instruments that SMC manufactures or sells have not been qualified by type approval tests relevant to the metrology (measurement) laws of each country. Therefore, SMC products cannot be used for business or certification ordained by the metrology (measurement) laws of each country.

⚠ Safety Instructions	Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.