


Plug-in

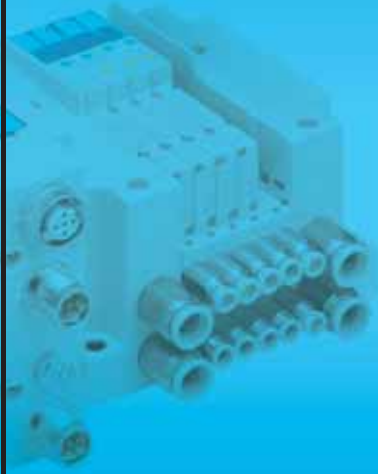
Compact 5-Port Solenoid Valve **New**

Size reduction possible thanks to a flow increase  
This leads to space saving, weight reduction,
and a large flow rate.

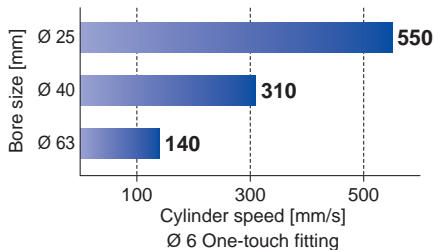
Possible to drive $\varnothing 40^{*1}$ bore cylinders

JSY1000

6.4 mm



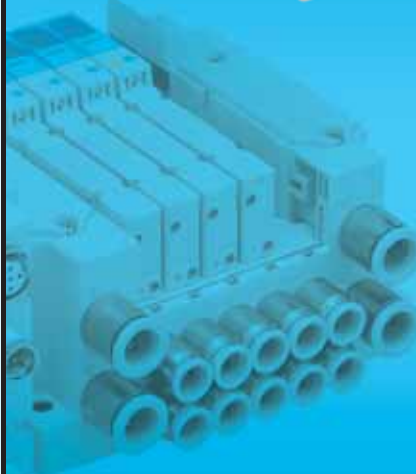
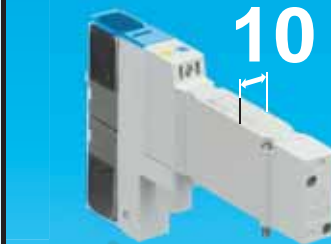
A, B port size: $\varnothing 2, \varnothing 4, \varnothing 6$



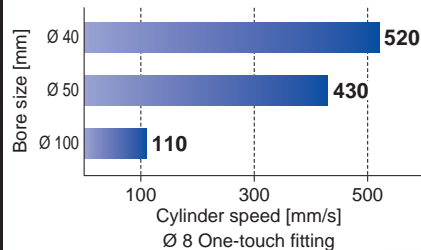
Possible to drive $\varnothing 50^{*1}$ bore cylinders

JSY3000

10 mm



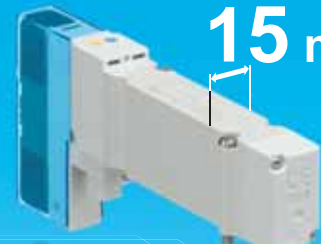
A, B port size: $\varnothing 6, \varnothing 8$



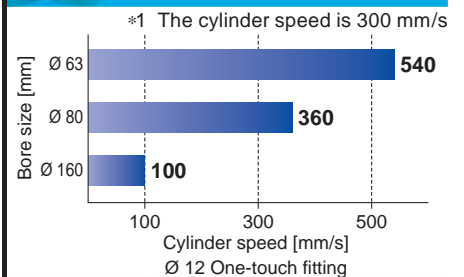
Possible to drive $\varnothing 80^{*1}$ bore cylinders

JSY5000

15 mm



A, B port size: $\varnothing 10, \varnothing 12$



Refer to pages 7 to 10 for detailed conditions regarding the above cylinder speed.



JSY1000



JSY3000



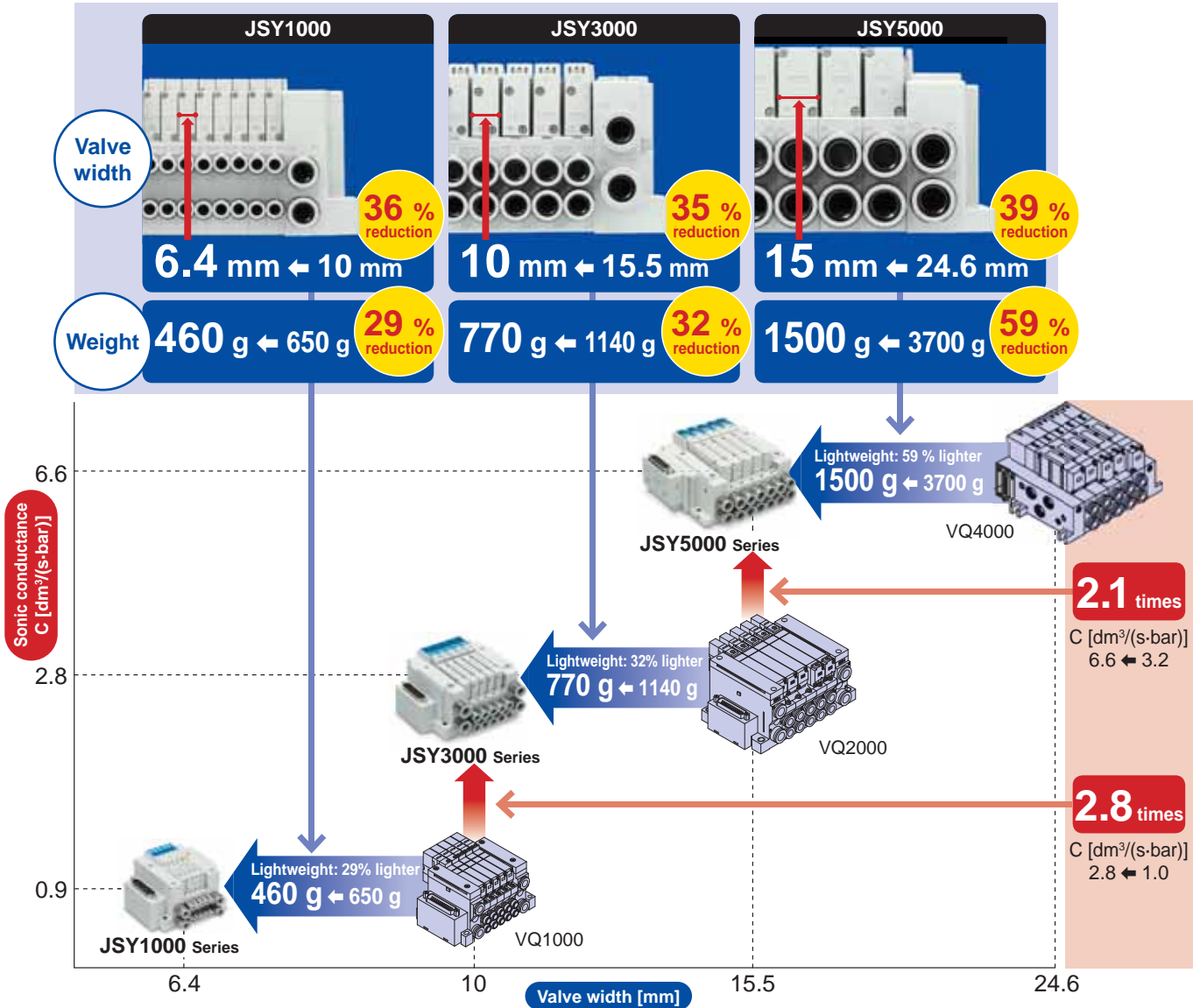
JSY5000

JSY1000/3000/5000 Series



CAT.EUS11-110A-UK

Series Map

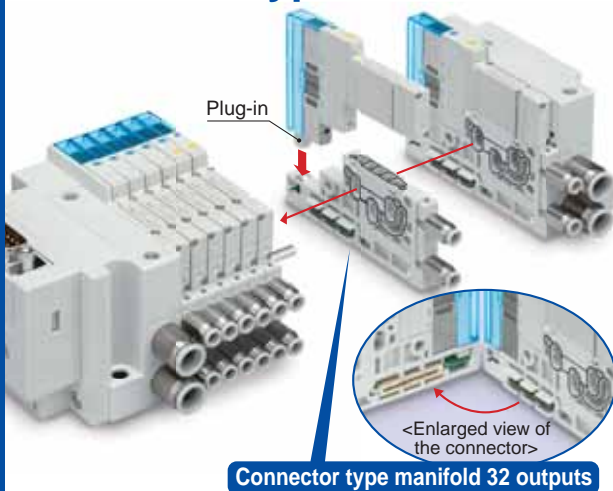


Power Consumption

Configuration	JSY3000/5000 ^{*1}	JSY1000	Standard	JSY3000/5000 ^{*2}
With power saving circuit	0.1 W	0.2 W		0.4 W

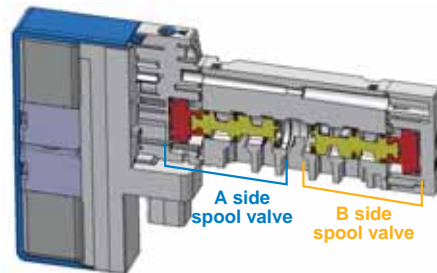
*1 Made to Order *2 JSY1000 series available as power saving type only.

Connector Type Manifold



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□A0□	N.C. valve	N.C. valve
JSY□B0□	N.O. valve	N.O. valve
JSY□C0□	N.C. valve	N.O. valve

Wiring

D-sub Connector

IP20
Compact type
FC type

p. 19



IP40
Connector entry
direction adjustable
F type

p. 19

Lateral

Upward



IP67
FW type

p. 19



Flat Ribbon Cable

Compact type
PC/PGC/PHC type

p. 19



Connector entry
direction
adjustable
P/PG/PH type

p. 19

Lateral

Upward



Terminal Block Box

Spring type
TC type

p. 41



T type

p. 41



Lead Wire

p. 53



	JSY1000	JSY3000	JSY5000
IP20 Compact type FC type	●	●	
IP40 Connector entry direction adjustable F type	●	●	●
IP67 FW type		●	●
Compact type PC/PGC/PHC type	●	●	
Connector entry direction adjustable P/PG/PH type	●	●	●
Spring type TC type	●	●	●
T type	●	●	●
Lead Wire	●	●	●

Serial Transmission Compatible Protocols

Integrated Type
(For Input/Output)
Serial Transmission System
(Fieldbus System)

EX600

p. 61



DeviceNet™
PROFIBUS DP
CC-Link
EtherNet/IP™
EtherCAT
PROFINET

EtherNet/IP™ compatible wireless base
PROFINET compatible wireless base

Integrated Type (For Output)
Serial Transmission System

EX260

p. 77



DeviceNet™
PROFIBUS DP
CC-Link
EtherNet/IP™
EtherCAT
PROFINET
Ethernet POWERLINK
IO-Link

Integrated Type (For Input/Output)
Serial Transmission System

EX250

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DeviceNet™
PROFIBUS DP
EtherNet/IP™
CANopen
AS-Interface

Integrated Type (For Output)
Serial Transmission System

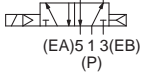
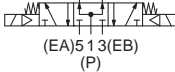
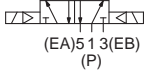
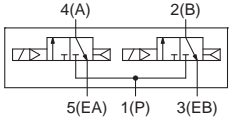

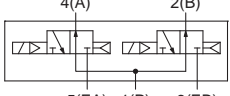

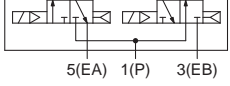
EX120

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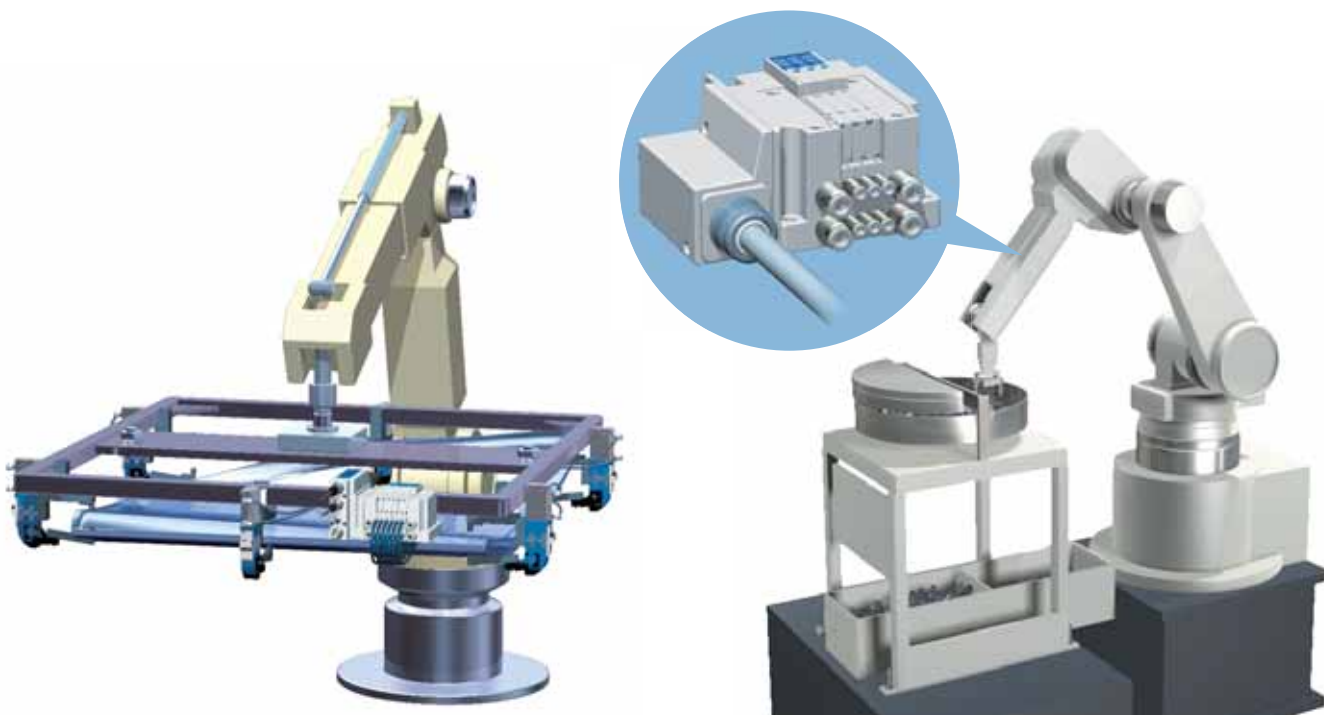
DeviceNet™
CC-Link
OMRON CompoBus/S
CompoNet™

Series Variations

	Sonic conductance C [dm ³ /(s·bar)] { 4/2→5/3 (A/B→EA/EB) }		Type of actuation		Rated voltage	Port size						
	4(A), 2(B) port					4(A), 2(B) port				1(P), 3/5(E) port		
	Ø 4	Ø 6				Ø 2	Ø 4	Ø 6	Ø 8		Ø 10	Ø 12
JSY1000	Ø 4	0.87	2-position single (A)4 2(B)  (EA)5 1 3(E)B (P)	3-position pressure centre (A)4 2(B)  (EA)5 1 3(E)B (P)	24 VDC	●	●					Ø 8
	Ø 6	0.91	2-position double (A)4 2(B)  (EA)5 1 3(E)B (P)	4-position dual 3-port valve N.C. valve x 2 pcs.  4(A) 2(B) 5(EA) 1(P) 3(EB)				●				
JSY3000	Ø 8	2.77	3-position closed centre (A)4 2(B)  (EA)5 1 3(E)B (P)	N.O. valve x 2 pcs.  4(A) 2(B) 5(EA) 1(P) 3(EB)				●	●			Ø 10
JSY5000	Ø 12	6.59	3-position exhaust centre (A)4 2(B)  (EA)5 1 3(E)B (P)	N.C. valve, N.O. valve 1 pc. of each  4(A) 2(B) 5(EA) 1(P) 3(EB)						●	●	

● Standard ○ Option ▲ Made to Order

Application Examples



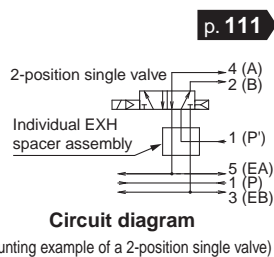
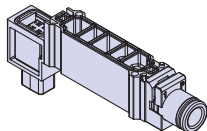
Pitch width [mm]	Wiring		Manifold Options							Valve Options				
	Common specifications		Blanking plate	Individual SUP spacer	Individual EXH spacer	SUP/EXH blocking disk	Label for blocking disk	Silencer (One-touch fitting connection type)	Built-in silencer	Vacuum/Low pressure specification	Different pressures	Reverse pressure	Mixed fitting sizes	Enclosure IP67*1
	Positive common	Negative common												
6.5														
9	●	●	○	○	○	○	○	○	●	▲	○	▲	●	—
11.5			p. 111	p. 111	p. 111	p. 112	p. 112	p. 112		External pilot	Individual SUP	External pilot		●
16														●

*1 Refer to the "Manifold Specifications" on pages 15 and 16 for details on IP67.

Manifold Options

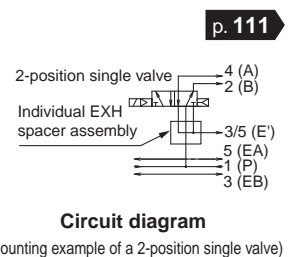
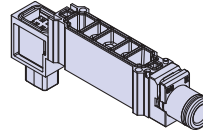
Individual SUP spacer

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



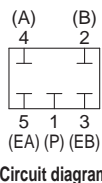
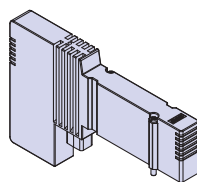
Individual EXH spacer

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



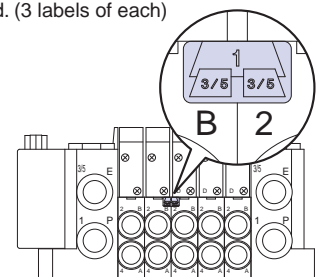
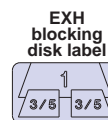
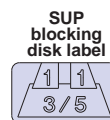
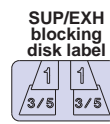
Blanking plate

Used when valve additions are expected or for maintenance.



Label for blocking disk

Label to indicate and confirm on the manifold where the SUP/EXH blocking disk assemblies were inserted. (3 labels of each)



SUP/EXH blocking disk

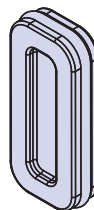
(For connector type manifold, Type 10)

[SUP blocking disk]

By inserting the SUP blocking disk in the pressure supply passage of the manifold valve, can provide two different high and low pressure in one manifold.

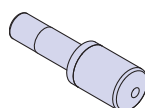
[EXH blocking disk]

By inserting the EXH blocking disk in the exhaust passage of the manifold valve, can separate the exhaust from the valve so it does not affect the other valves. It can also be used for the manifold for the positive pressure and vacuum mixed manifold. (2 pieces are required to block EA/EB both sides of the EXH.)



Silencer (One-touch fitting connection type)

This silencer can be mounted to the 3/5 (E: EXH) port of the manifold in one step.

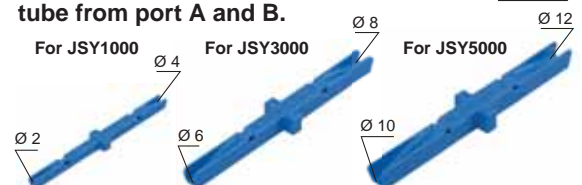


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Tube Releasing Tool

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

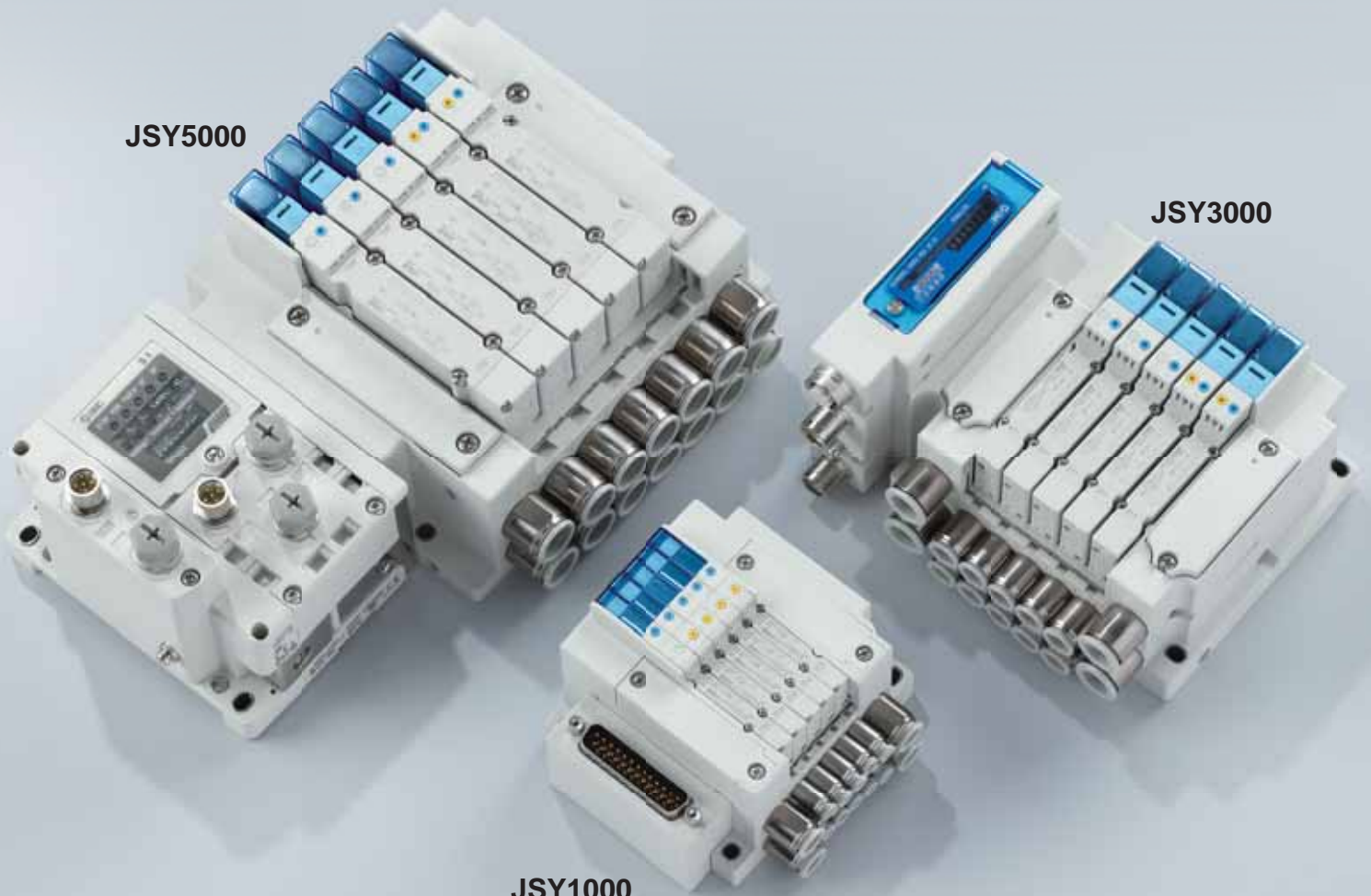
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JSY5000

JSY3000

JSY1000

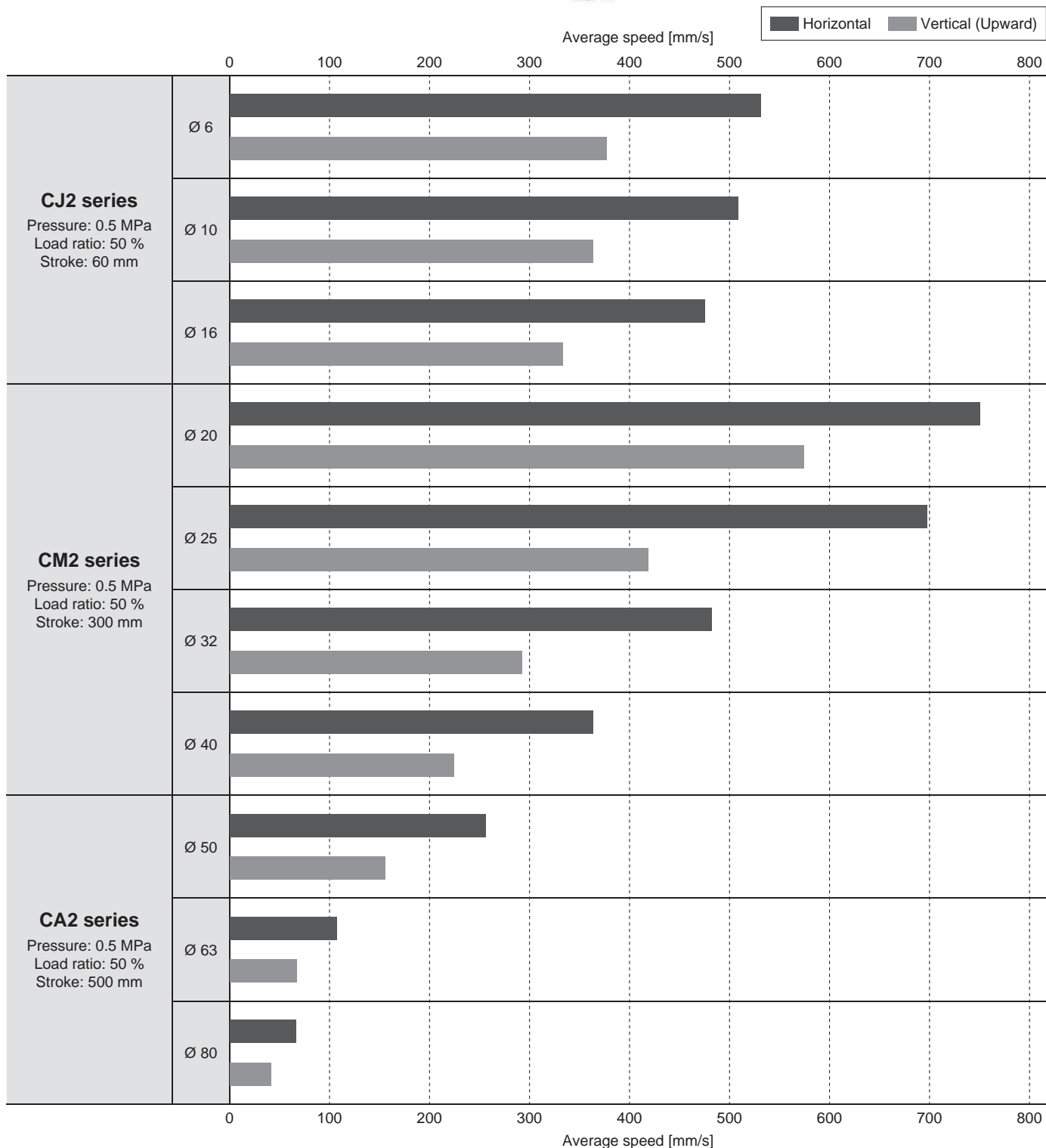


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Optimum Actuation Size Chart of Air Cylinder

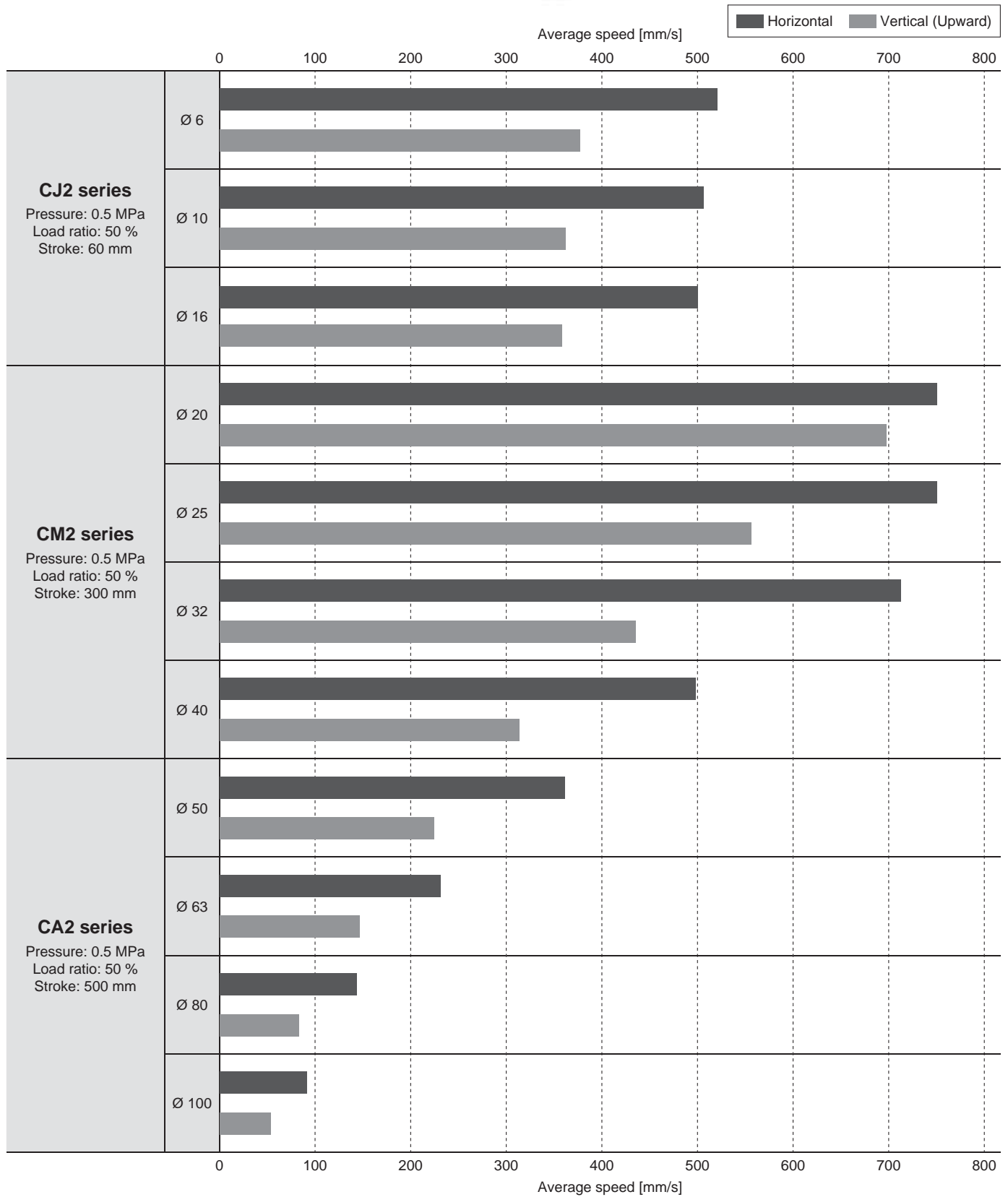
For JSY1000, A, B port: Ø 4



- * 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: $\text{Load ratio} = ((\text{Load mass} \times 9.8) / \text{Theoretical output}) \times 100 \%$
- * 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 catalogue for details.

Optimum Actuation Size Chart of Air Cylinder

For JSY1000, A, B port: Ø 6

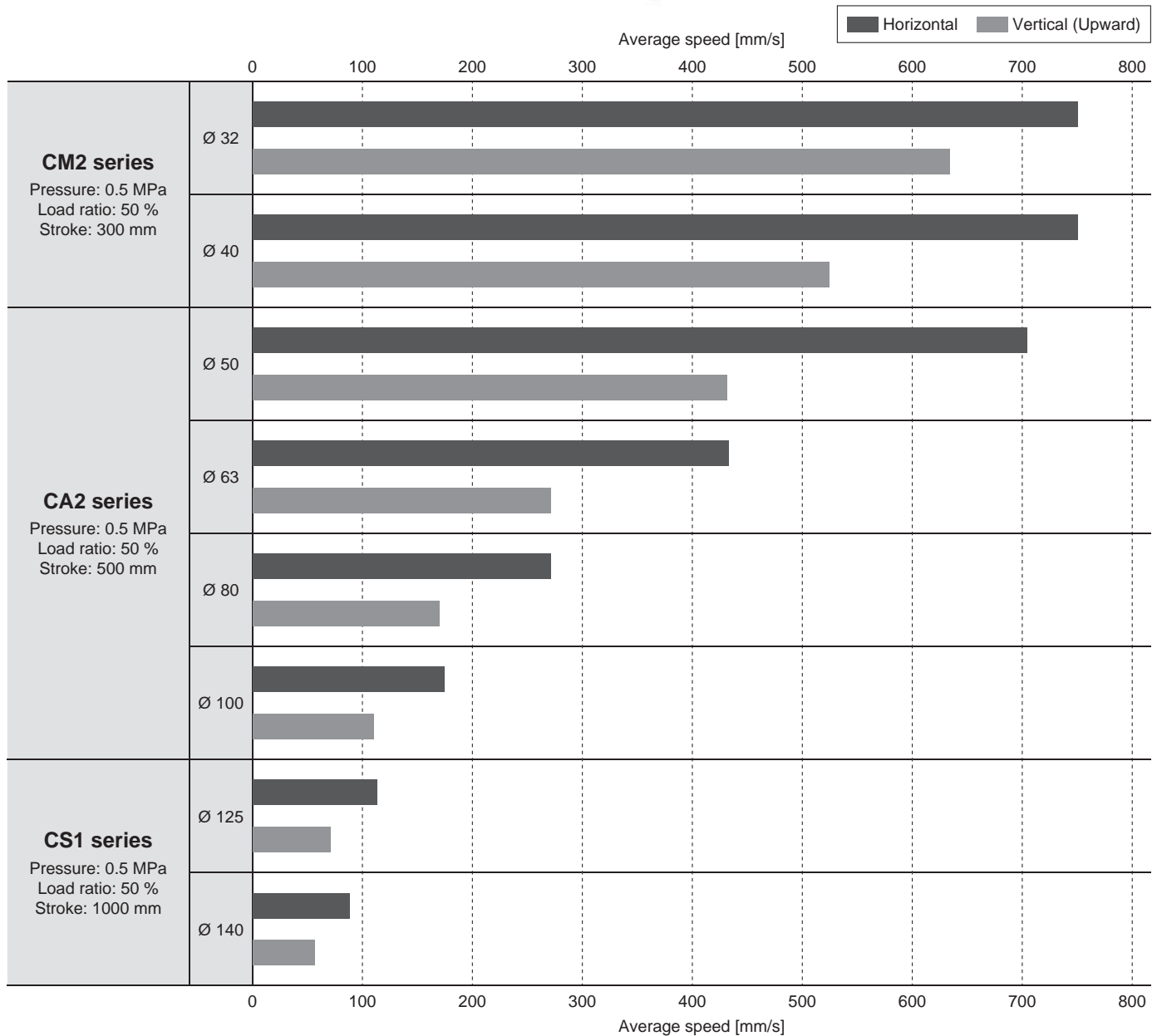


* Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.
 * The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.
 * Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 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 catalogue for details.

- Chart
- Valve
- Connector
- Plug-in
- Connecting Base
- D.sub
- Flat Ribbon
- Terminal Block
- Lead wire
- EX600
- EX250
- EX260
- EX120
- Common Dimensions
- Manifold
- Exploded View
- Fittings, Replacement Parts, Tools
- Manifold Options
- Made to Order
- Specific Product Precautions

Optimum Actuation Size Chart of Air Cylinder

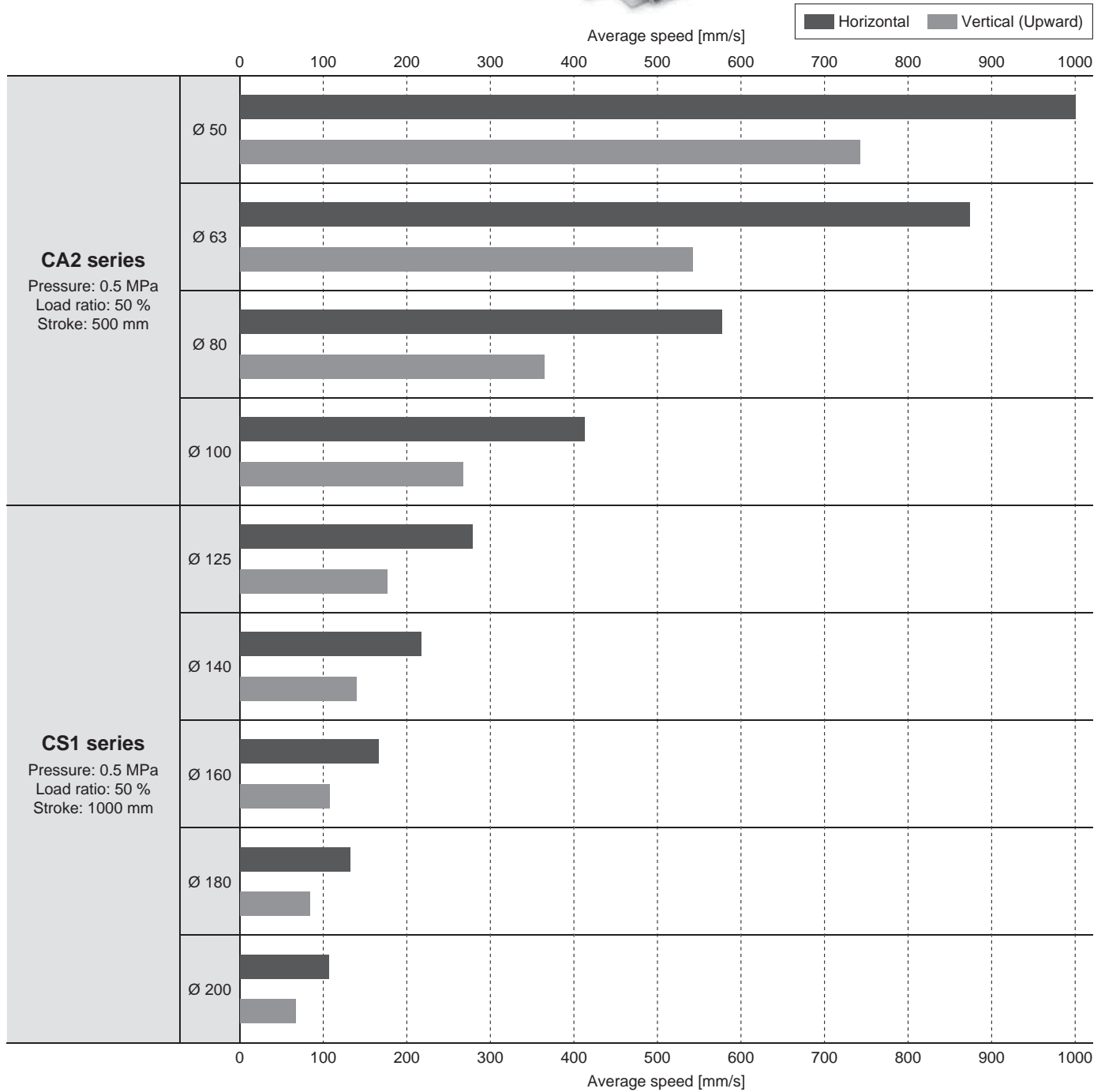
For JSY3000, A, B port: Ø 8



* 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 catalogue for details.

Optimum Actuation Size Chart of Air Cylinder

For JSY5000, A, B port: Ø 12



- * 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: $\text{Load ratio} = ((\text{Load mass} \times 9.8) / \text{Theoretical output}) \times 100 \%$
- * 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 catalogue for details.

- Chart
- Valve
- Connector
- Plug-in
- Connecting Base
- D.sub
- Flat Ribbon
- Terminal Block
- Lead wire
- EX600
- EX250
- EX260
- EX120
- Common Dimensions
- Manifold Exploded View
- Fittings, Replacement Parts, Tools
- Manifold Options
- Made to Order
- Specific Product Precautions

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 (Made to Order) operating pressure range [MPa]	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	
	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*1
Pilot exhaust type	Internal pilot External pilot (Made to Order)	Individual exhaust	
Lubrication			Not required
Mounting orientation*2			Unrestricted
Impact/Vibration resistance*2 [m/s ²]			150/30
Enclosure			JSY1000: IP40 JSY3000/5000: IP67 (Based on IEC60529)
Coil rated voltage [DC]			24 V
Allowable voltage fluctuation [V]			±10 % of the rated voltage
Power consumption [W]	Standard	JSY3000/5000	0.4
	With power saving circuit	JSY1000	0.2*3 [Inrush 0.5, Holding 0.2]
		JSY3000/5000 (Made to Order)	0.1*4 [Inrush 0.4, Holding 0.1]
Surge voltage suppressor			Diode (Varistor for non-polar type)
Indicator light			LED

*1 Not available for the JSY1000 series

*2 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 energised and de-energised 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 energised and de-energised states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)
Refer to page 118 for the fixation of DIN rail mounting type manifold.

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

*4 For details, refer to page 116.

Response Time

Series	Model	Type of actuation	Response time [ms] ^{*1}	
			With light/surge voltage suppressor	
			Z type	U type
JSY1000	JSY1100	2-position single	15	—
	JSY1200	2-position double	7	
	JSY13/4/500	3-position	16	
	JSY1A/B/C00	4-position dual 3-port valve	19	
JSY3000	JSY3100	2-position single	27	18
	JSY3200	2-position double	13	12
	JSY33/4/500	3-position	27	24
	JSY3A/B/C00	4-position dual 3-port valve	23	23
JSY5000	JSY5100	2-position single	35	25
	JSY5200	2-position double	19	17
	JSY53/4/500	3-position	41	37
	JSY5A/B/C00	4-position dual 3-port valve	37	37

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

Valve Weight

JSY1000 Series

Valve model	Type of actuation	Weight [g]	
JSY1□00	2-position	Single	24
		Double	27
	3-position	Closed centre	30
		Exhaust centre	
		Pressure centre	
	4-position	Dual 3-port valve	27

JSY5000 Series

Valve model	Type of actuation	Weight [g]	
JSY5□00	2-position	Single	91
		Double	100
	3-position	Closed centre	110
		Exhaust centre	
		Pressure centre	
	4-position	Dual 3-port valve	96

JSY3000 Series

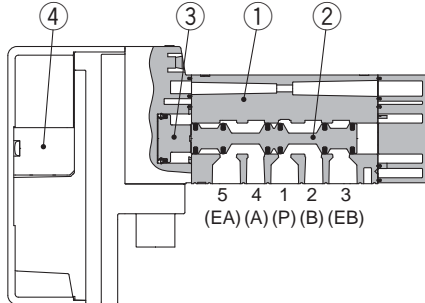
Valve model	Type of actuation	Weight [g]	
JSY3□00	2-position	Single	54
		Double	63
	3-position	Closed centre	67
		Exhaust centre	
		Pressure centre	
	4-position	Dual 3-port valve	63

- Chart
- Valve
- Connector
- Plug-in
- D.sub
- Terminal
- Lead wire
- EX600
- EX250
- EX260
- EX120
- Common Dimensions
- Manifold Exploded View
- Fittings, Replacement Parts, Tools
- Manifold Options
- Made to Order
- Specific Product Precautions

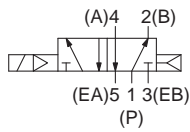
JSY1000/3000/5000 Series Valve Construction

Rubber Seal

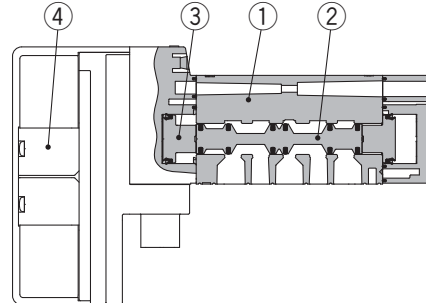
2-position single



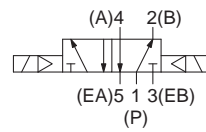
2-position single



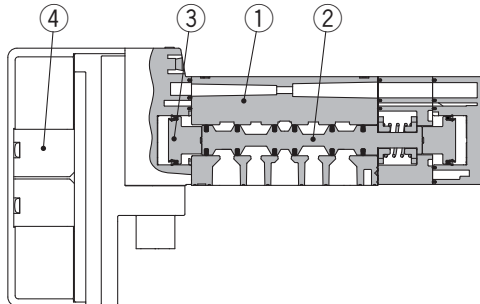
2-position double



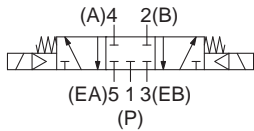
2-position double



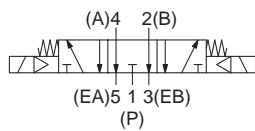
3-position closed centre/exhaust centre/pressure centre



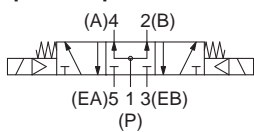
3-position closed centre



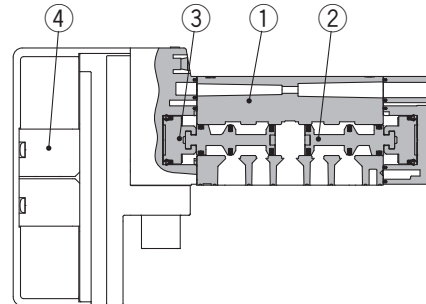
3-position exhaust centre



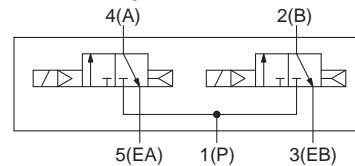
3-position pressure centre



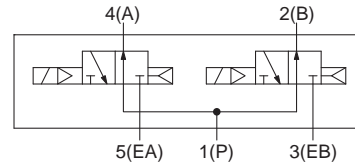
4-position dual 3-port valve



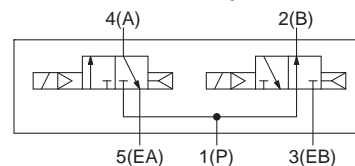
4-position dual 3-port valve N.C. valve x 2 pcs.



N.O. valve x 2 pcs.



N.C. valve, N.O. valve 1 pc. of each



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	—

JSY3000/5000 Series

Valve Replacement Parts: Pilot Valve

How to Order Pilot Valves (With a gasket and two mounting screws)^{*3}

V112 - 5 A

Coil type

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

Rated voltage

5	24 VDC
---	--------

Caution

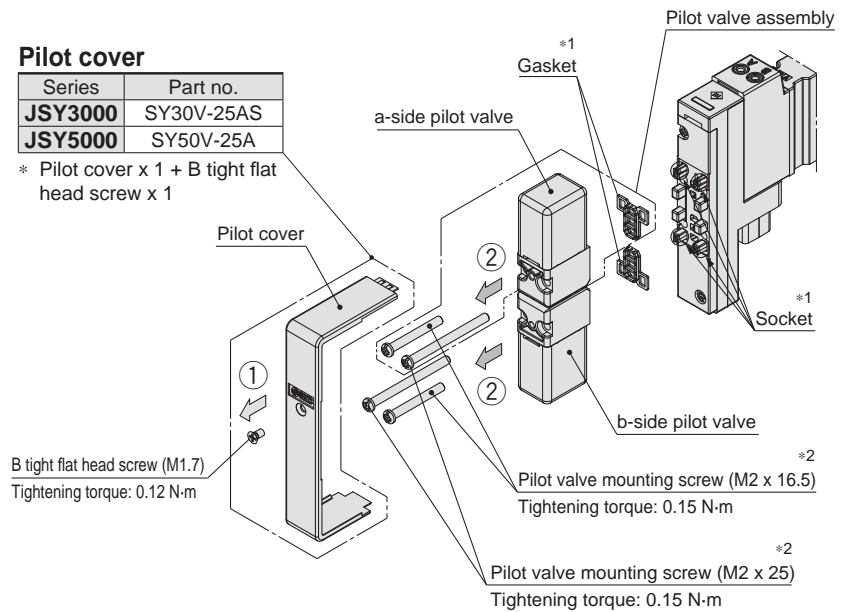
1. The coil specification and voltage (including light/surge voltage suppressor) cannot be changed by changing the pilot valve assembly.
2. When selecting the standard coil type, it is not possible to change to the power saving circuit type.
3. Replacement pilot valve for the JSY3000/5000

How to replace pilot valves

Pilot cover

Series	Part no.
JSY3000	SY30V-25AS
JSY5000	SY50V-25A

* Pilot cover x 1 + B tight flat head screw x 1



- Loosen B tight flat head screw to remove the pilot cover in the direction indicated by the arrow ①.
- Remove the pilot valve mounting screws.
- Remove the pilot valve in the direction indicated by the arrow ②.

* Assemble by following the removal procedure in reverse.

*1 Ensure the gasket is mounted, and take care not to bend the socket.

*2 Be noted for mounting that there are two types of lengths for the pilot valve mounting screws.

*3 **The pilot valve of the JSY1000 cannot be removed. This is irreplaceable.**

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

Specific Product
Precautions

JSY1000/3000/5000 Series **Type 10**

Plug-in Connector Connecting Base

Manifold Specifications

Model	D-sub connector			Flat ribbon cable					
	F type	FW type*1	FC type*2	P type	PG type	PH type	PC type*2	PGC type*2	PHC type*2
Manifold type	Plug-in connector connecting base								
SUP/EXH port type	Common SUP/EXH (Common for 3/5 port)								
Valve stations	2 to 24 stations			2 to 18 stations	2 to 8 stations	2 to 24 stations	2 to 18 stations	2 to 8 stations	
Applicable connector	D-sub connector conforming to MIL-C-24308 (Refer to page 37.)	Dedicated connector (Refer to page 37.)	D-sub connector conforming to MIL-C-24308 (Refer to page 37.)	Flat ribbon cable connector conforming to MIL-C-83503 (Refer to page 39.)					
				Socket: 26 pins MIL type	Socket: 20 pins MIL type	Socket: 10 pins MIL type	Socket: 26 pins MIL type	Socket: 20 pins MIL type	Socket: 10 pins MIL type
Internal wiring	Positive common, Negative common								
Port size	1(P), 3/5(E) port	JSY1000	Ø 8 One-touch fitting						
		JSY3000	Ø 10 One-touch fitting						
		JSY5000	Ø 12 One-touch fitting						
	4(A), 2(B) port	JSY1000	Ø 2 One-touch fitting, Ø 4 One-touch fitting, Ø 6 One-touch fitting						
		JSY3000	Ø 6 One-touch fitting, Ø 8 One-touch fitting						
		JSY5000	Ø 10 One-touch fitting, Ø 12 One-touch fitting						
Enclosure (Based on IEC60529)	JSY1000	IP40	—	IP20	IP40	IP20			
	JSY3000		IP67						
	JSY5000		—						

*1 FW type is not available for JSY1000. Protection class for the JSY1000 is IP20 or IP40.

*2 FC, PC, PGC, PHC types are not available for the JSY5000.

Manifold Weight

Model	① Per station	② Wiring									
		D-sub connector			Flat ribbon cable						
		F type	FW type*2	FC type*3	P type	PG type	PH type	PC type*3	PGC type*3	PHC type*3	
JSY1000	for Ø 4	21.3	308	—	233	306	304	298	233	231	225
	for Ø 6	26.9	319	—	244	317	315	309	244	242	236
JSY3000	for Ø 8	42.7	332	330	287	330	328	322	257	255	249
JSY5000	for Ø 12	104	509	507	—	507	505	499	—	—	—

Formula for manifold weight*1

$$W = ① \times n + ② \quad (n: \text{stations})$$

JSY3000 series, D-sub connector, F type, 5 stations: $(42.7 \times 5) + 332 = 545.5$ (g)

Manifold Flow Rate Characteristics

Model	Port size		Valve flow rate characteristics					
	1, 3/5 (P, E)	4, 2 (A, B)	1→4/2 (P→A/B)			4/2→3/5 (A/B→E)		
			C [dm ³ /(s·bar)]	b	Q [l/min (ANR)]*2	C [dm ³ /(s·bar)]	b	Q [l/min (ANR)]*2
JJ5SY1-10 (Side ported)	C8	C4	0.63	0.46	179	0.87	0.47	250
		C6	0.96	0.30	244	0.91	0.48	263
JJ5SY3-10 (Side ported)	C10	C8	2.23	0.30	567	2.77	0.27	691
JJ5SY5-10 (Side ported)	C12	C12	6.40	0.22	1551	6.59	0.22	1597

* Calculation of effective area S and sonic conductance C: $S = 5.0 \times C$

*1 Values measured in accordance with ISO 6358:1989, JIS B 8390:2000

*2 These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with and inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.



Terminal block box		Lead wire		Serial wiring			
T type	TC type	L type	S6□ type (EX600)	S□ type (EX250)	S□ type (EX260)	S3□ type (EX120)	
Plug-in connector connecting base							
Common SUP/EXH (Common for 3/5 port)							
2 to 20 stations		2 to 24 stations				2 to 16 stations	
—							
Positive common, Negative common							
Ø 8 One-touch fitting							
Ø 10 One-touch fitting							
Ø 12 One-touch fitting							
Ø 2 One-touch fitting, Ø 4 One-touch fitting, Ø 6 One-touch fitting							
Ø 6 One-touch fitting, Ø 8 One-touch fitting							
Ø 10 One-touch fitting, Ø 12 One-touch fitting							
IP40				IP20			
IP67		IP67 (I/O unit: partially IP40)		IP67		IP67 (D-sub communication connector: IP40)	

Unit: g

② Wiring									
Terminal block box		Lead wire			Serial wiring				
T type	TC type	L type (0.6 m)	L type (1.5 m)	L type (3 m)	S6□ type (EX600)*4	S□ type (EX250)*4	S□ type (EX260)	S3□ type (EX120)	
680	471	404	514	698	829	520	448	367	
689	480	413	523	707	838	529	457	367	
709	500	433	543	727	858	549	477	391	
914	705	638	748	932	1063	754	682	568	

*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 12 for the appropriate number of stations.

*2 FW type is not available for the JSY1000.

*3 FC, PC, PGC, PHC types are not available for the JSY5000.

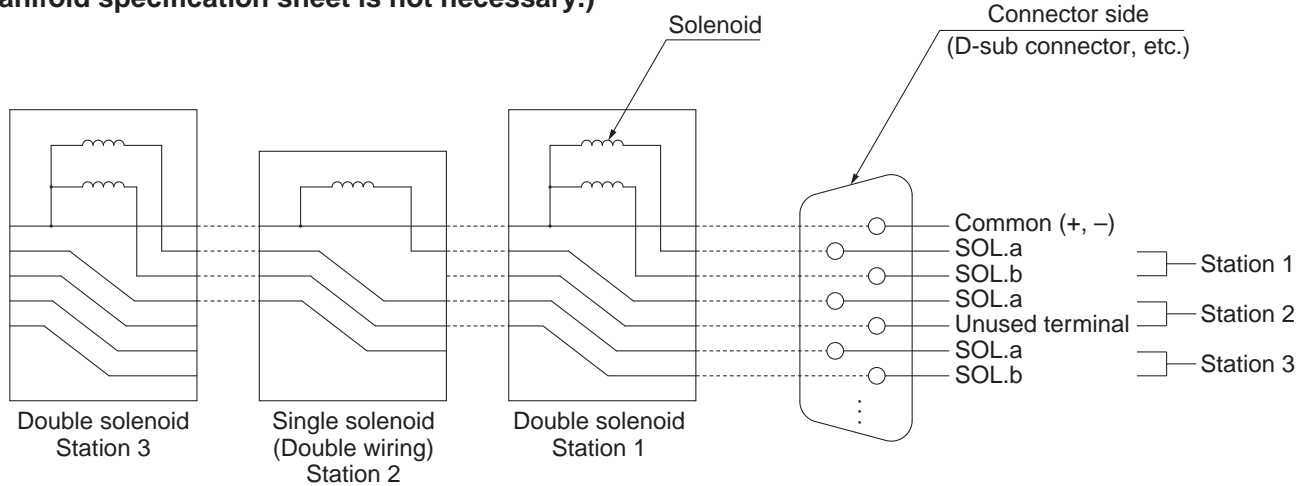
*4 Serial unit weight is included, but I/O unit is not included. Add the weight for calculation when I/O unit is added.

JSY1000/3000/5000 Series

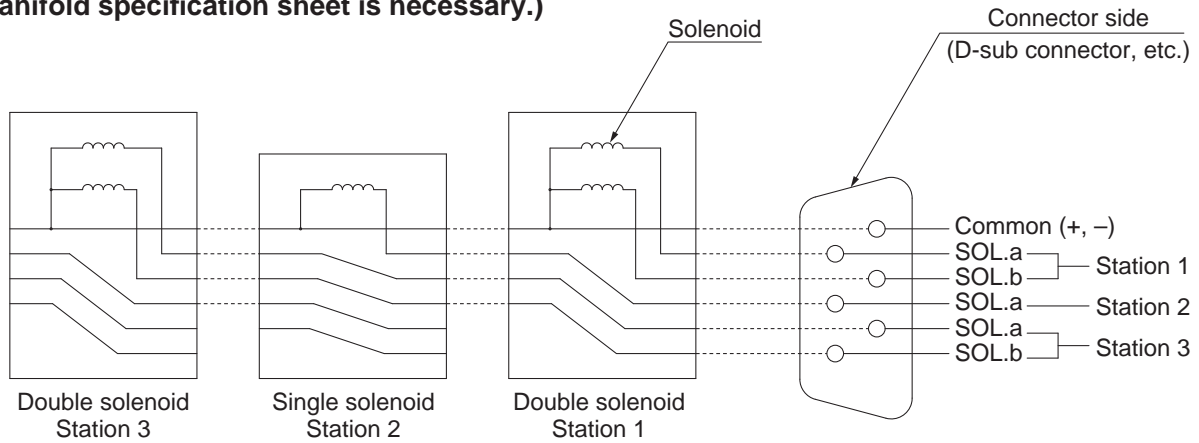
Connector Wiring Layout

For both serial and parallel wiring, additional valves are sequentially assigned pins on the connector. This makes it completely unnecessary to disassemble the connector unit.

■ Single solenoid valve is installed to all double wiring. (in the case of all double wiring) (Manifold specification sheet is not necessary.)



■ Single/double wiring are mixed. (Manifold specification sheet is necessary.)



* These diagrams are for the purpose of explanation, and differ from the actual connector wiring.

Specific Product Precautions	Made to Order	Manifold Options	Fittings, Replacement Parts, Tools	Manifold Exploded View	Common Dimensions	EX120	EX260	EX250	EX600	Lead wire	Terminal Block	D.sub Flat Ribbon	Plug-in	Connector Connecting Base	Valve	Chart
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Plug-in Connector Connecting Base

D-sub Connector Flat Ribbon Cable

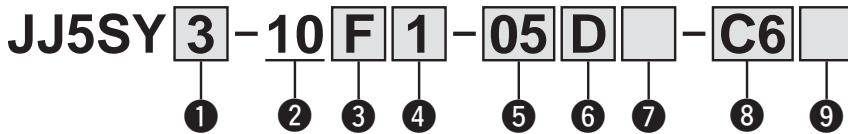
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification
External pilot (SUP/EXH block assembly)

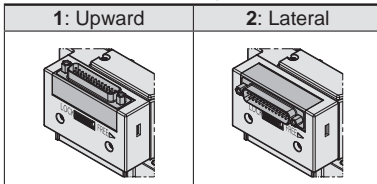
1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

4 Connector entry direction



* The connector entry direction for connector types "FW," "FC," and "P□C" cannot be rotated. If it is necessary to change, order connector block assembly and SUP/EXH block assembly (pages 96 and 97) separately.

6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

7 SUP/EXH block assembly

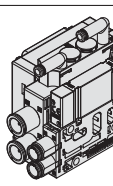
—	Internal pilot
S	Internal pilot, Built-in silencer

* 3 / 5 (E) port is plugged for the built-in silencer type.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000	
C2 C4 C6 C8 C10 C12	Straight	∅ 2	●	—	
		∅ 4	●	—	
		∅ 6	●	●	
		∅ 8	—	●	
		∅ 10	—	—	●
		∅ 12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●	
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12	



*1 Indicate the sizes on the manifold specification sheet in the case of "CM."
* The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

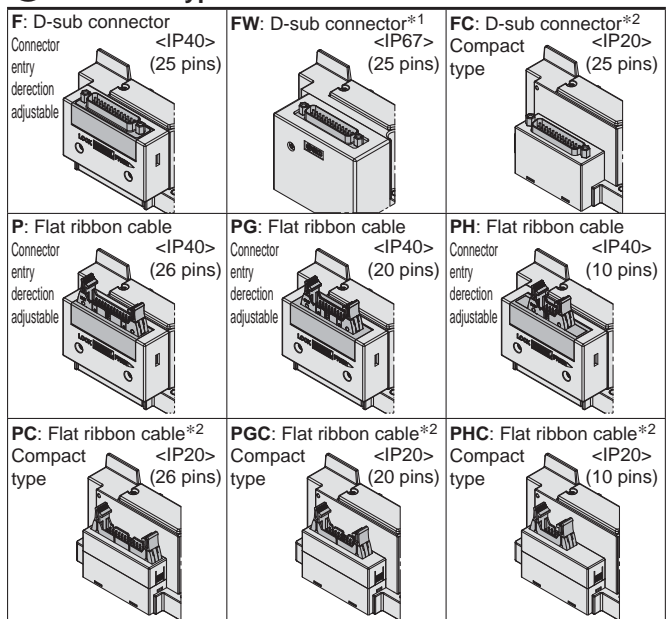
DIN Rail Option

—	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
⋮	⋮
24	For 24 stations

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown on the left.)

* Refer to page 118 for the fixation of DIN rail mounting type manifold.

3 Connector type



*1 FW is not available for the JSY1000.

*2 Compact type is not available for the JSY5000.

5 Valve stations

F/FW/FC: D-sub connector (25 pins)			P/P/C: Flat ribbon cable (26 pins)		
Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations	Double wiring*1	02	2 stations	Double wiring*1
⋮	⋮		⋮	⋮	
12	12 stations		⋮	⋮	
02	2 stations	Specified layout*2 (Up to 24 solenoids available)	02	2 stations	Specified layout*2 (Up to 24 solenoids available)
⋮	⋮		⋮	⋮	
24	24 stations		⋮	⋮	
PG/PGC: Flat ribbon cable (20 pins)			PH/PHC: Flat ribbon cable (10 pins)		
Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations	Double wiring*1	02	2 stations	Double wiring*1
⋮	⋮		⋮	⋮	
09	9 stations		⋮	04	
02	2 stations	Specified layout*2 (Up to 18 solenoids available)	02	2 stations	Specified layout*2 (Up to 8 solenoids available)
⋮	⋮		⋮	⋮	
18	18 stations		⋮	08	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

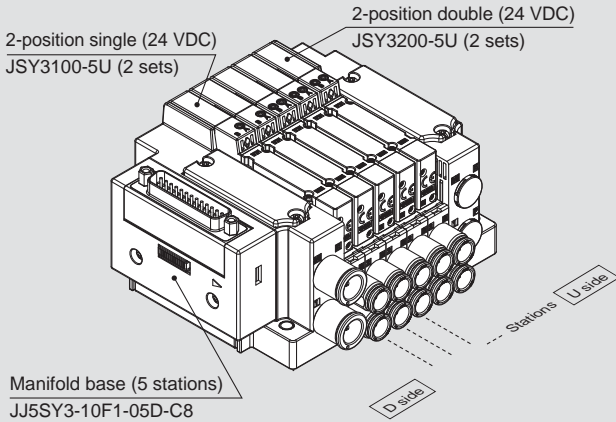
Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* This also includes the number of blanking plates.

How to Order Manifold Assembly

Example (JJ5SY3-10F1-□)



JJ5SY3-10F1-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double 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.

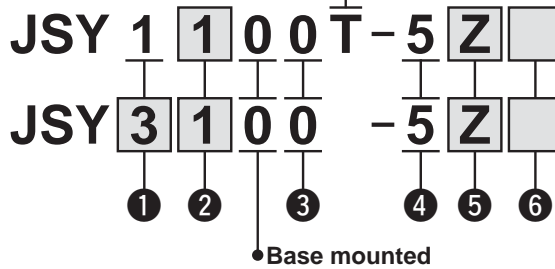
Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JSY3000/5000 Series



Made to Order
 (Refer to page 114 for details.)

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

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

2 Type of actuation

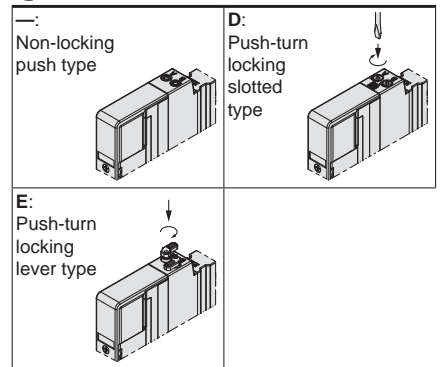
1	2-position	Single
2		Double
3		Closed centre
4	3-position	Exhaust centre
5		Pressure centre
A	4-position	N.C./N.C.
B	dual 3-port	N.O./N.O.
C		N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

- * Only "Z" and "NZ" types are available for the JSY1000 series.
- * When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

6 Manual override



* Push-turn locking lever type "E" is not available for the JSY1000.

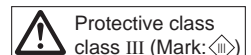
* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.

Refer to page 107 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50%, please select the product with power saving circuit. For the JSY1000 series only the power saving circuit is available.



Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

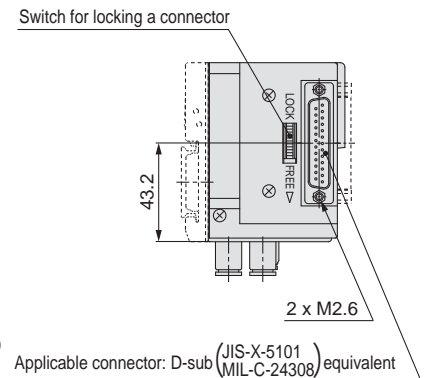
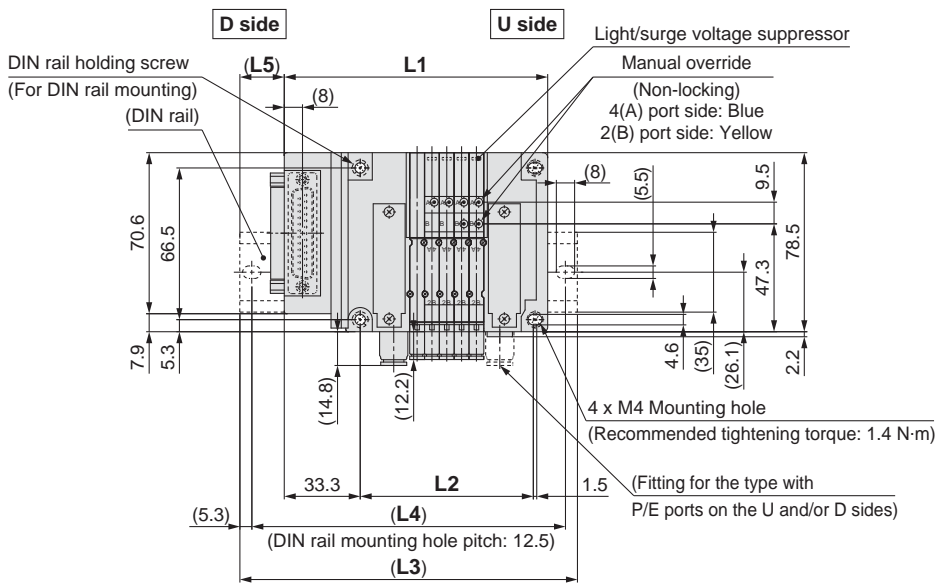
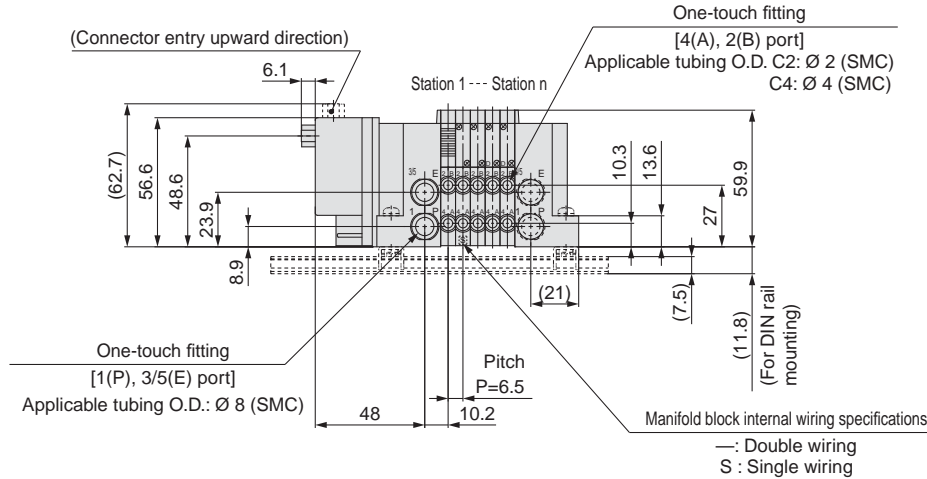
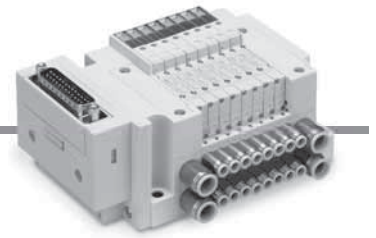
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

D-sub Connector (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY1000 Series

JJ5SY1-10F₂-Stations $\frac{U}{D}$ -C₂(D)



- * These figures show the "JJ5SY1-10F2-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

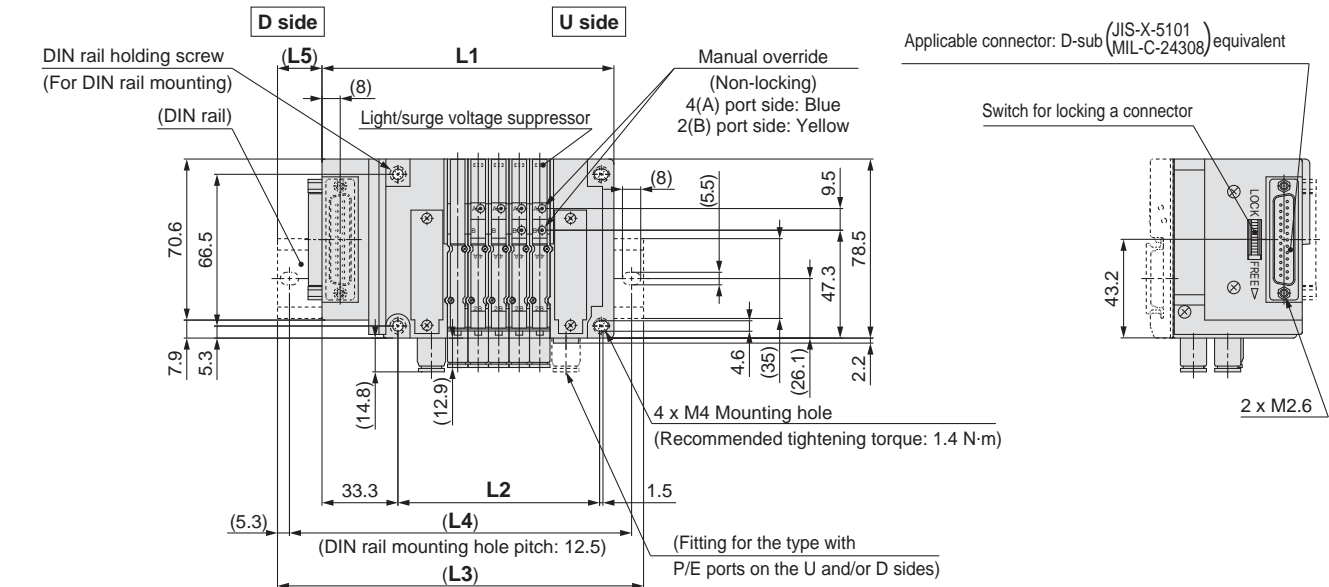
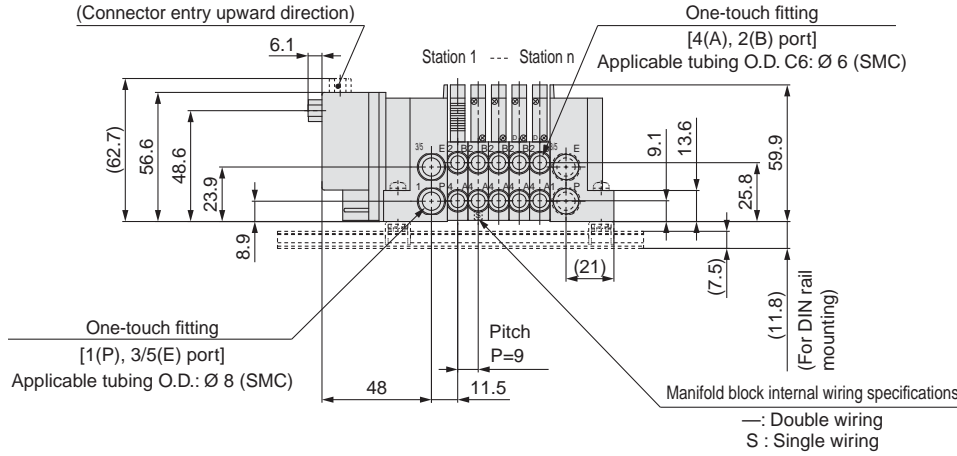
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	96	102.5	109	115.5	122	128.5	135	141.5	148	154.5	161	167.5	174	180.5	187
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	135.5	135.5	148	148	160.5	160.5	173	173	185.5	185.5	198	198	210.5	210.5	223
L4	125	125	137.5	137.5	150	150	162.5	162.5	175	175	187.5	187.5	200	200	212.5
L5	23	19.5	22.5	19.5	22.5	19	22	19	22	18.5	21.5	18.5	21.5	18	21

L \ n	17	18	19	20	21	22	23	24
L1	193.5	200	206.5	213	219.5	226	232.5	239
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	223	235.5	248	248	260.5	260.5	273	273
L4	212.5	225	237.5	237.5	250	250	262.5	262.5
L5	18	21	24	20.5	23.5	20.5	23.5	20

Type 10/Side Ported (Applicable to Ø 6 fittings)
D-sub Connector (IP40/Connector Entry Direction Adjustable)

Dimensions: **JSY1000 Series**

JJ5SY1-10F₂-Stations^U_D-C6(D)



- * These figures show the "JJ5SY1-10F2-05D-C6."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	101	110	119	128	137	146	155	164	173	182	191	200	209	218	227
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	135.5	148	160.5	160.5	173	185.5	185.5	198	210.5	223	223	235.5	248	248	260.5
L4	125	137.5	150	150	162.5	175	175	187.5	200	212.5	212.5	225	237.5	237.5	250
L5	20.5	22	24	19.5	21	23	18.5	20	22	23.5	19	21	22.5	18	20

L \ n	17	18	19	20	21	22	23	24
L1	236	245	254	263	272	281	290	299
L2	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	273	285.5	285.5	298	310.5	310.5	323	335.5
L4	262.5	275	275	287.5	300	300	312.5	325
L5	21.5	23.5	19	20.5	22.5	18	19.5	21.5

Chart

Valve

Connector Connecting Base

Plug-in

D-sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

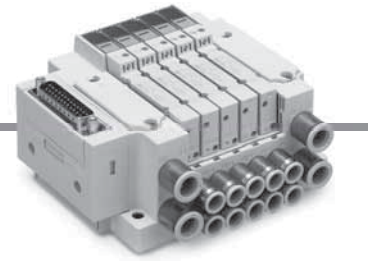
JSY1000/3000/5000 Series

Type 10/Side Ported

Dimensions: JSY3000 Series

D-sub Connector (IP40/Connector Entry Direction Adjustable)

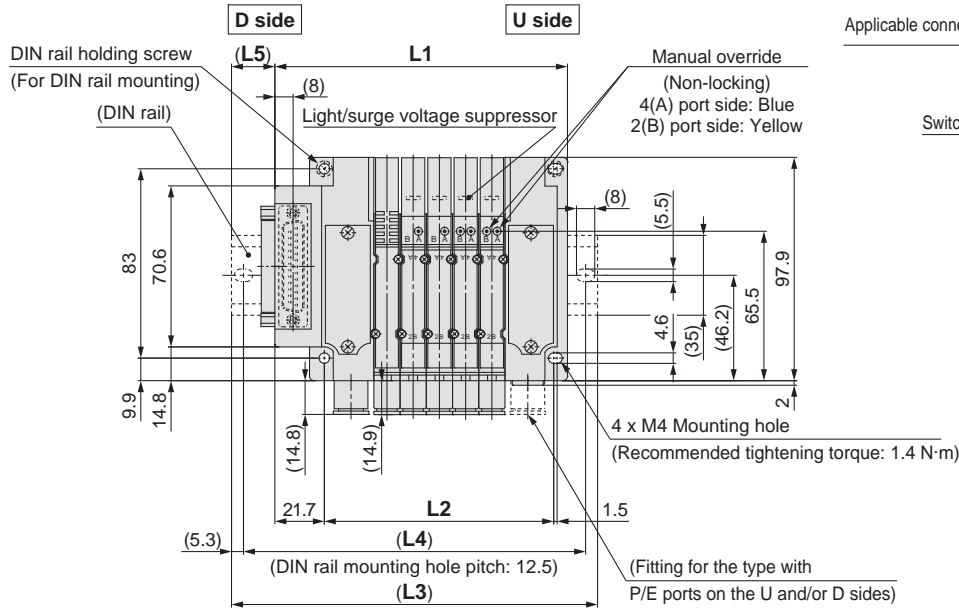
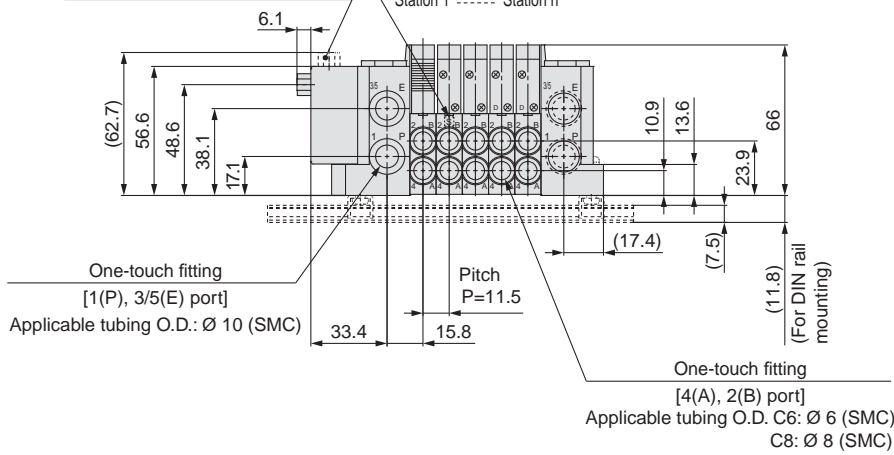
JJ5SY3-10F₂- Stations $\frac{U}{D}$ -C₆/C₈(D)



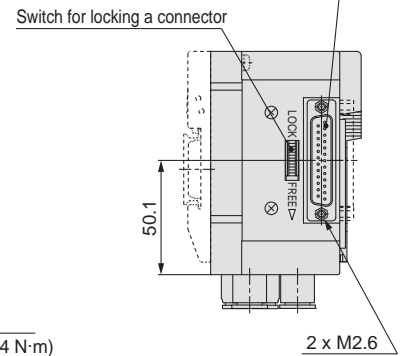
Manifold block internal wiring specifications

—: Double wiring
S: Single wiring

(Connector entry upward direction)



Applicable connector: D-sub (JIS-X-5101 / MIL-C-24308) equivalent



* These figures show the "JJ5SY3-10F2-05D-C8."

* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	93.8	105.3	116.8	128.3	139.8	151.3	162.8	174.3	185.8	197.3	208.8	220.3	231.8	243.3	254.8
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	273	285.5
L4	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	262.5	275
L5	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	18	18.5

L \ n	17	18	19	20	21	22	23	24
L1	266.3	277.8	289.3	300.8	312.3	323.8	335.3	346.8
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	298	310.5	323	335.5	348	360.5	373	385.5
L4	287.5	300	312.5	325	337.5	350	362.5	375
L5	19	19.5	20	20.5	21	21.5	22	22.5

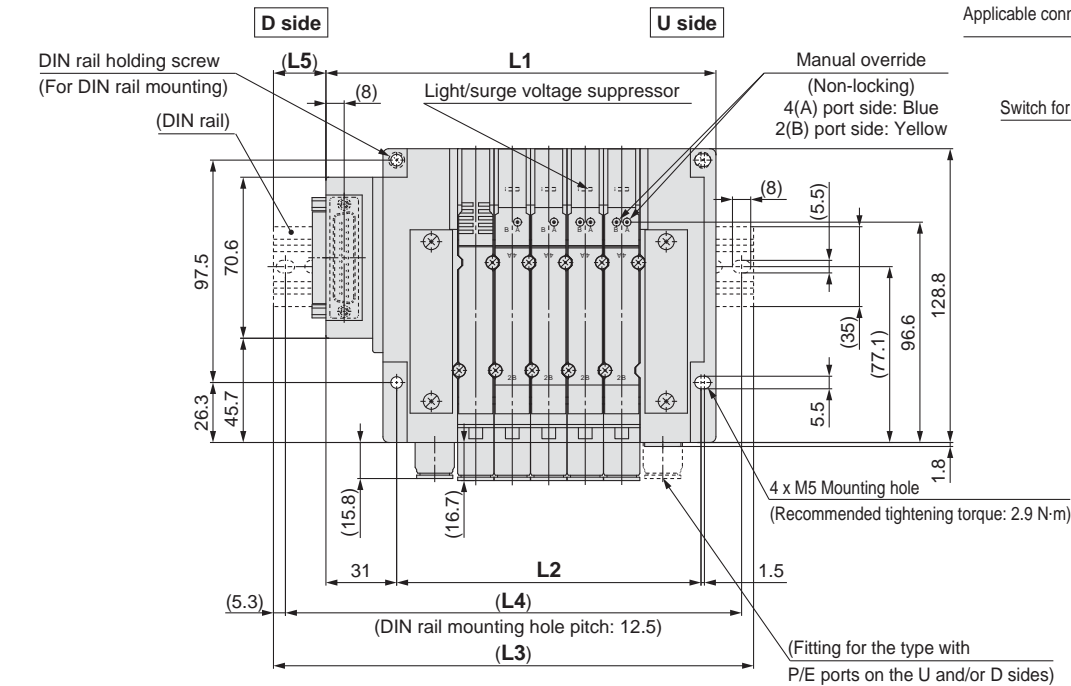
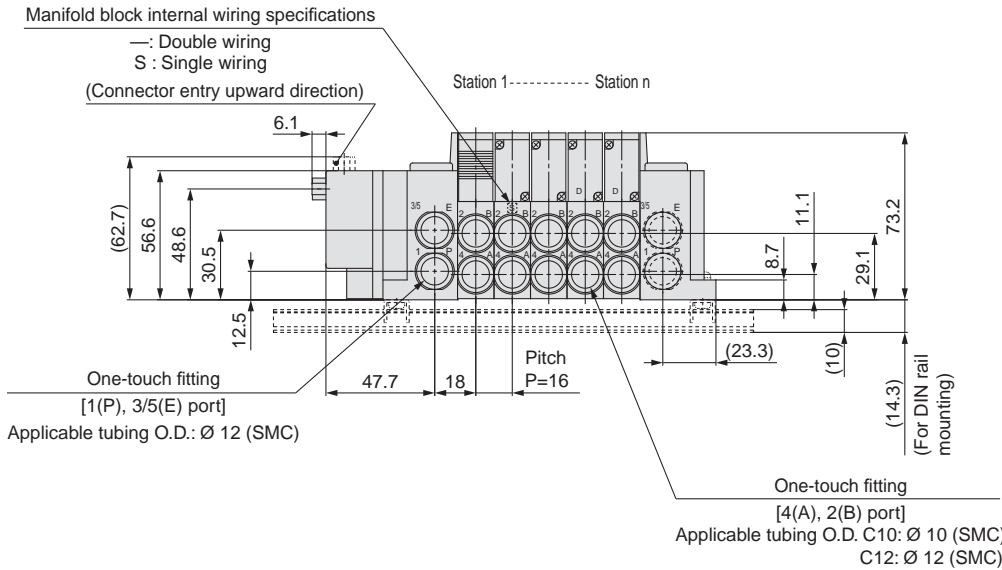
Type 10/Side Ported

D-sub Connector (IP40/Connector Entry Direction Adjustable)



Dimensions: **JSY5000 Series**

JJ5SY5-10F₂-Stations $\frac{U}{D}$ -C₁₀¹⁰-C₁₂¹²(D)



* These figures show the "JJ5SY5-10F2-05D-C12."
 * Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	160.5	173	185.5	210.5	223	235.5	260.5	273	285.5	298	323	335.5	348	360.5	385.5
L4	150	162.5	175	200	212.5	225	250	262.5	275	287.5	312.5	325	337.5	350	375
L5	22	20	18.5	23	21	19.5	24	22	20.5	18.5	23	21.5	19.5	18	22.5

L \ n	17	18	19	20	21	22	23	24
L1	363	379	395	411	427	443	459	475
L2	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	398	410.5	435.5	448	460.5	473	498	510.5
L4	387.5	400	425	437.5	450	462.5	487.5	500
L5	20.5	19	23.5	21.5	20	18	22.5	21

Chart

Valve

Connector Connecting Base

Plug-in

D-sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

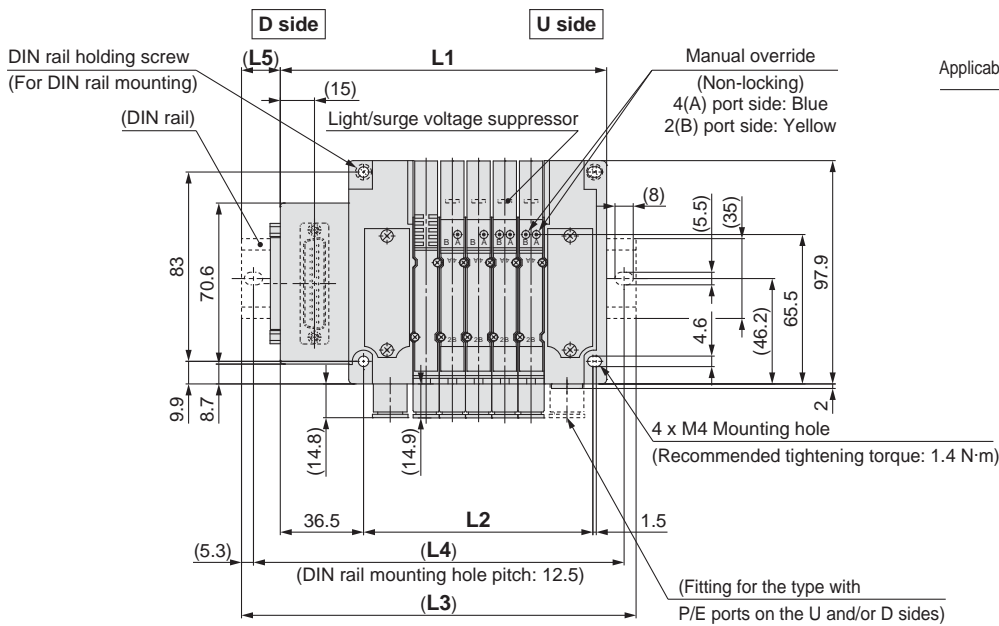
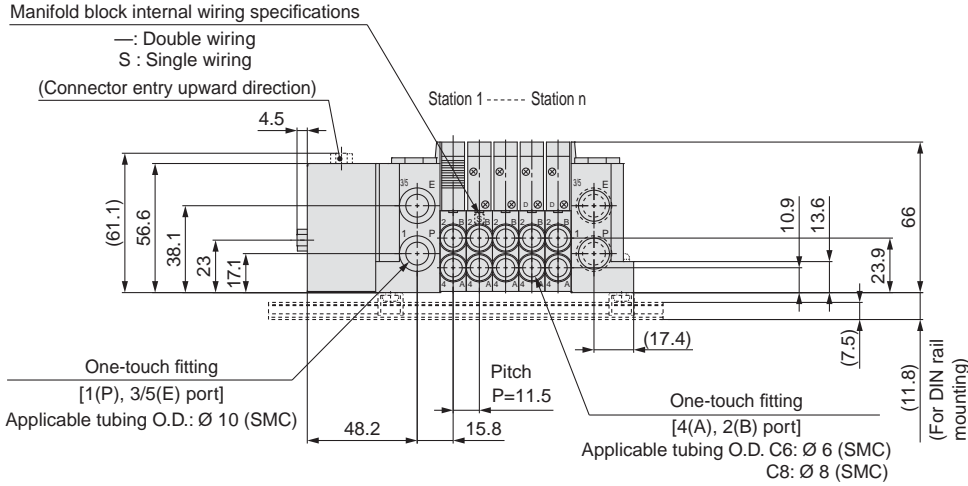
JSY1000/3000/5000 Series

Type 10/Side Ported

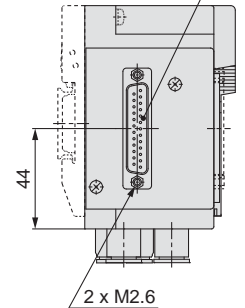
D-sub Connector (IP67)

Dimensions: JSY3000 Series

JJ5SY3-10FW₂-Stations $\frac{U}{D}$ -C₆^{C₈}(D)



Applicable connector: D-sub (JIS-X-5101 / MIL-C-24308) equivalent



* These figures show the "JJ5SY3-10FW2-05D-C8."
* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	108.6	120.1	131.6	143.1	154.6	166.1	177.6	189.1	200.6	212.1	223.6	235.1	246.6	258.1	269.6
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	148	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	298
L4	137.5	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	287.5
L5	22	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	16.5

L \ n	17	18	19	20	21	22	23	24
L1	281.1	292.6	304.1	315.6	327.1	338.6	350.1	361.6
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	310.5	323	335.5	348	360.5	373	385.5	398
L4	300	312.5	325	337.5	350	362.5	375	387.5
L5	17	17.5	18	18.5	19	19.5	20	20.5

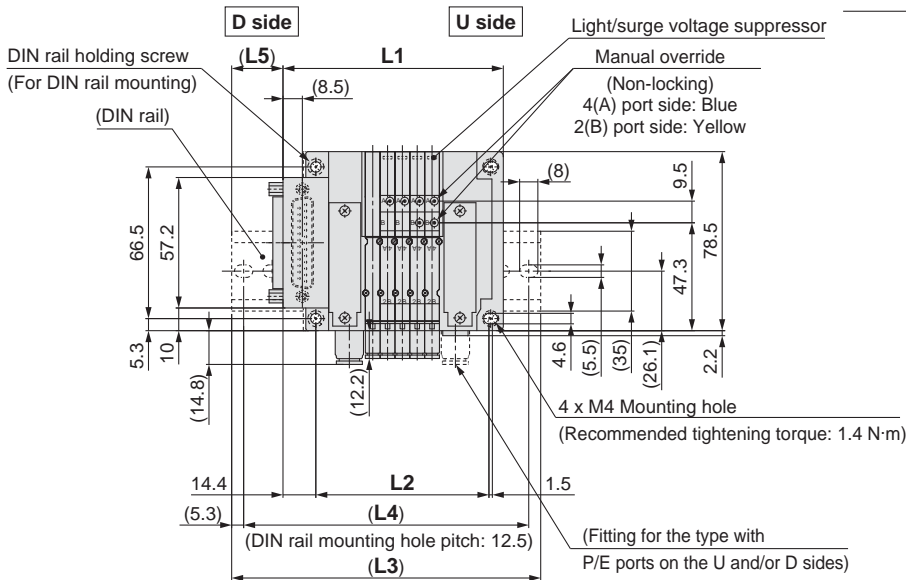
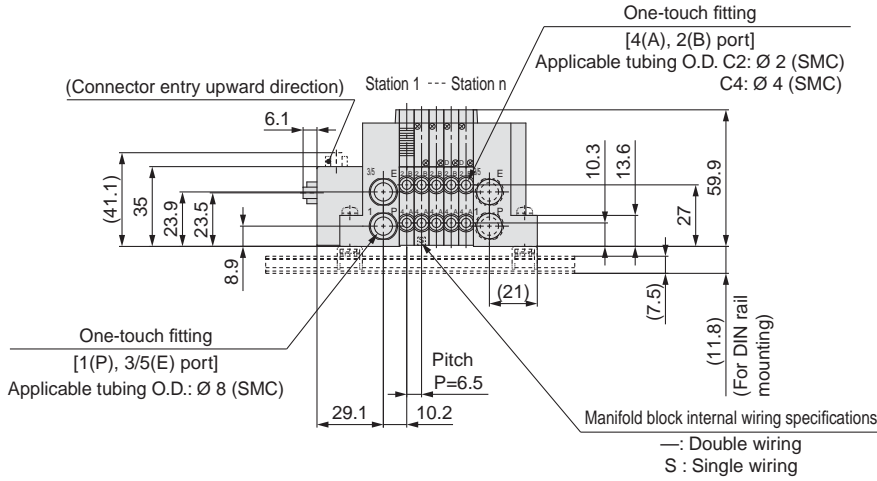
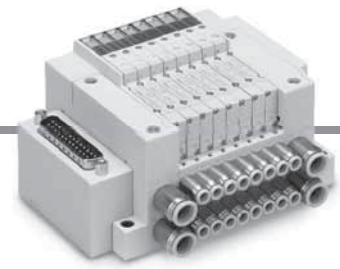
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to $\varnothing 2$ and $\varnothing 4$ fittings)

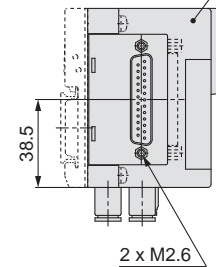
Dimensions: **JSY1000 Series**

D-sub Connector (IP20/Compact Type)

JJ5SY1-10FC₂^U-Stations_D-C₄²(D)



Applicable connector: D-sub (JIS-X-5101 / MIL-C-24308) equivalent



- * These figures show the "JJ5SY1-10FC2-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	77.1	83.6	90.1	96.6	103.1	109.6	116.1	122.6	129.1	135.6	142.1	148.6	155.1	161.6	168.1
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	110.5	123	123	135.5	135.5	148	148	160.5	160.5	173	173	185.5	185.5	198	198
L4	100	112.5	112.5	125	125	137.5	137.5	150	150	162.5	162.5	175	175	187.5	187.5
L5	20	23	19.5	22.5	19.5	22.5	19	22	19	22	18.5	21.5	18.5	21.5	18

L \ n	17	18	19	20	21	22	23	24
L1	174.6	181.1	187.6	194.1	200.6	207.1	213.6	220.1
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	210.5	210.5	223	235.5	235.5	248	248	260.5
L4	200	200	212.5	225	225	237.5	237.5	250
L5	21	18	21	24	20.5	23.5	20.5	23.5

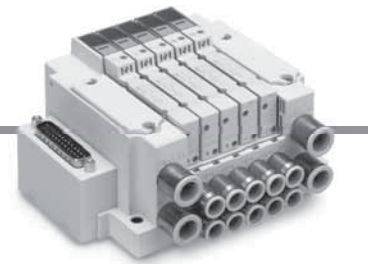
JSY1000/3000/5000 Series

Type 10/Side Ported

Dimensions: JSY3000 Series

D-sub Connector (IP20/Compact Type)

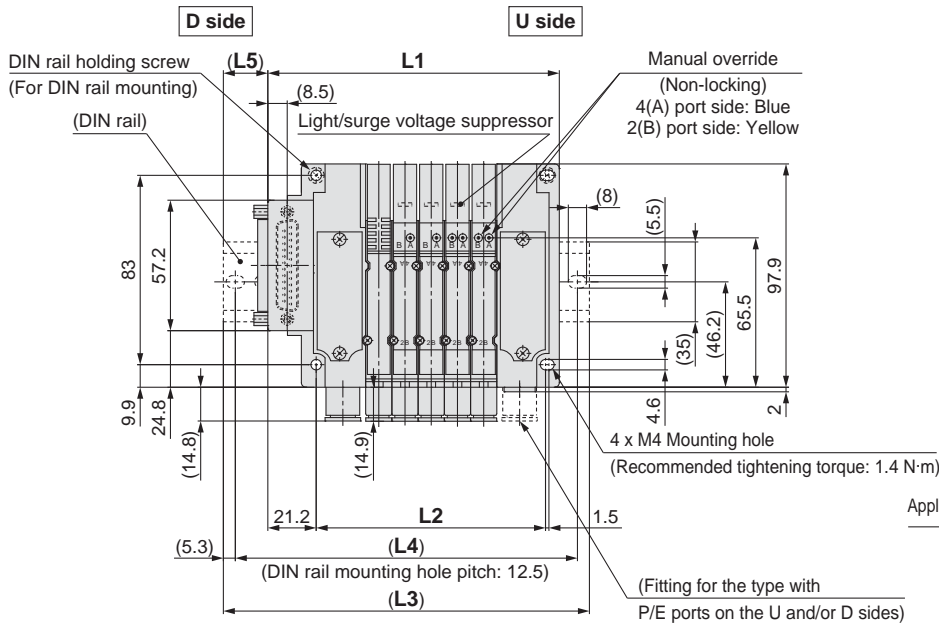
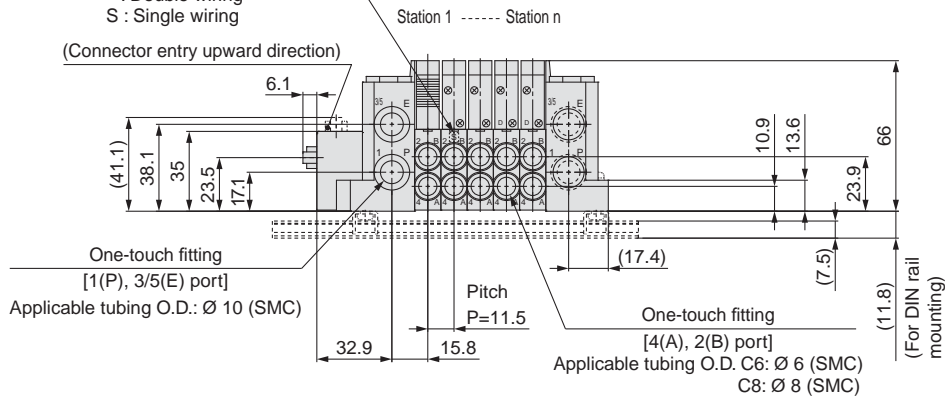
JJ5SY3-10FC₂¹-Stations_D^U-C₆⁸(D)



Manifold block internal wiring specifications

—: Double wiring
S: Single wiring

(Connector entry upward direction)



* These figures show the "JJ5SY3-10FC2-05D-C8."

* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

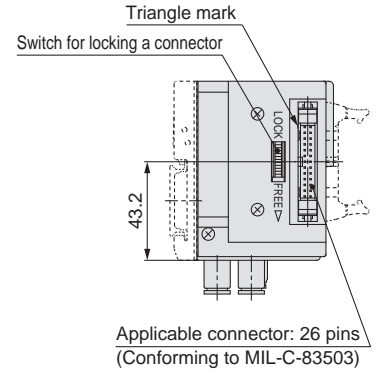
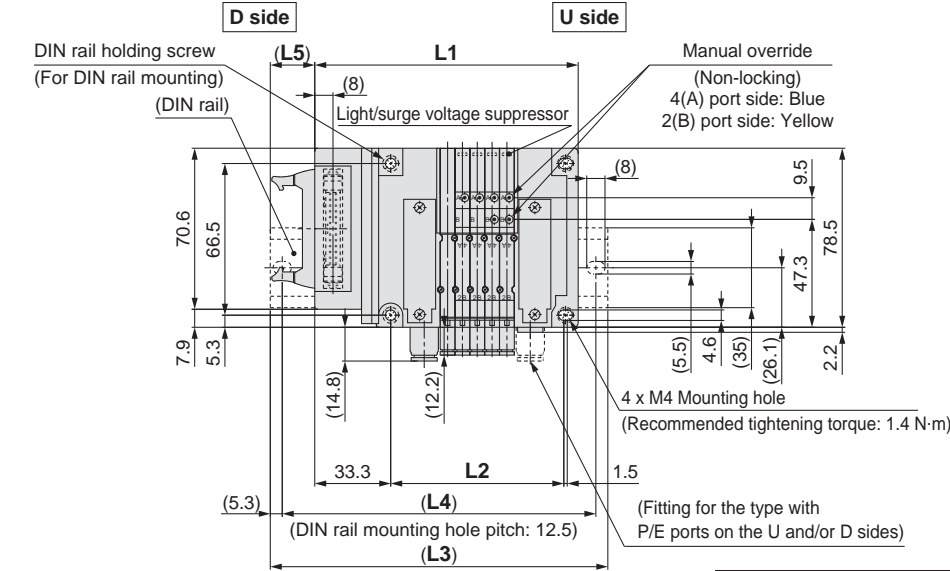
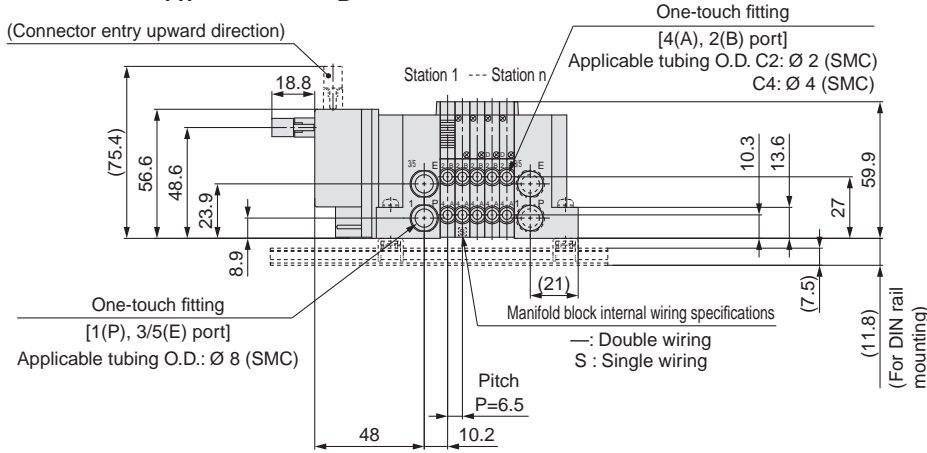
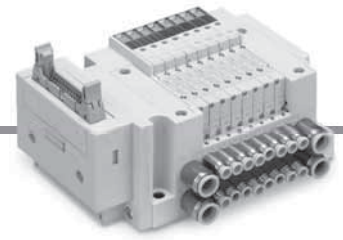
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	93.3	104.8	116.3	127.8	139.3	150.8	162.3	173.8	185.3	196.8	208.3	219.8	231.3	242.8	254.3
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	260.5	273	285.5
L4	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	250	262.5	275
L5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	17.5	18	18.5

L \ n	17	18	19	20	21	22	23	24
L1	265.8	277.3	288.8	300.3	311.8	323.3	334.8	346.3
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	298	310.5	323	335.5	348	360.5	373	385.5
L4	287.5	300	312.5	325	337.5	350	362.5	375
L5	19	19.5	20	20.5	21	21.5	22	22.5

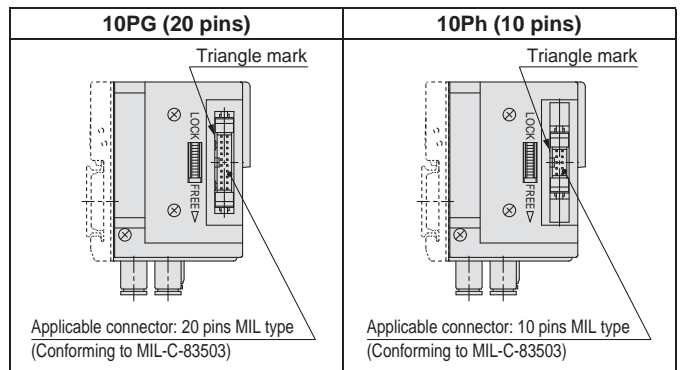
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)
 Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY1000 Series

JJ5SY1-10PG_{PH} 1- Stations_U C₂(D)



- * These figures show the "JJ5SY1-10P2-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PG and 10PH. L1 to L5 dimensions are the same as 10P type.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.



L: Dimensions

		n: Stations															
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
L1	96	102.5	109	115.5	122	128.5	135	141.5	148	154.5	161	167.5	174	180.5	187		
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4		
L3	135.5	135.5	148	148	160.5	160.5	173	173	185.5	185.5	198	198	210.5	210.5	223		
L4	125	125	137.5	137.5	150	150	162.5	162.5	175	175	187.5	187.5	200	200	212.5		
L5	23	19.5	22.5	19.5	22.5	19	22	19	22	18.5	21.5	18.5	21.5	18	21		

L \ n	17	18	19	20	21	22	23	24
L1	193.5	200	206.5	213	219.5	226	232.5	239
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	223	235.5	248	248	260.5	260.5	273	273
L4	212.5	225	237.5	237.5	250	250	262.5	262.5
L5	18	21	24	20.5	23.5	20.5	23.5	20

Chart

Valve

Connector Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

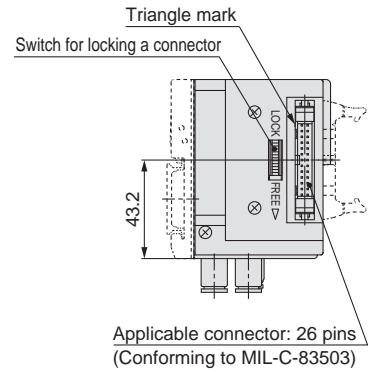
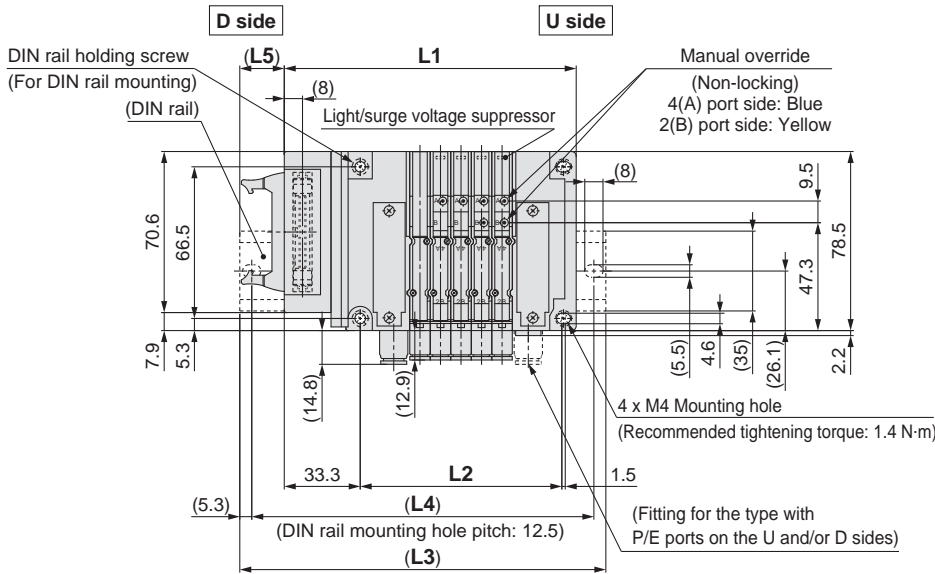
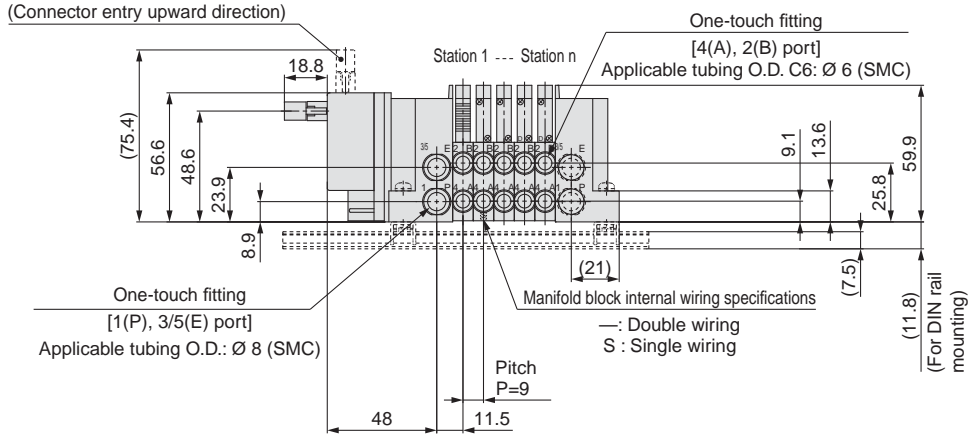
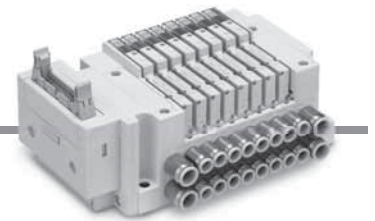
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 6 fittings)

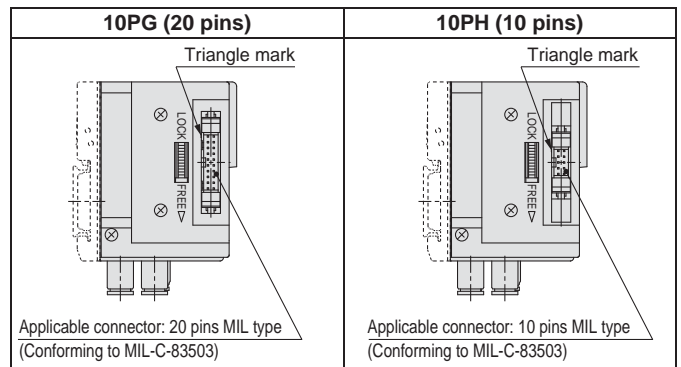
Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY1000 Series

JJ5SY1-10 $\frac{P}{PH}$ $\frac{1}{2}$ - Stations $\frac{U}{D}$ - C6(D)



- * These figures show the "JJ5SY1-10P2-05D-C6."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PG and 10PH. L1 to L5 dimensions are the same as 10P type.
- * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.



L: Dimensions

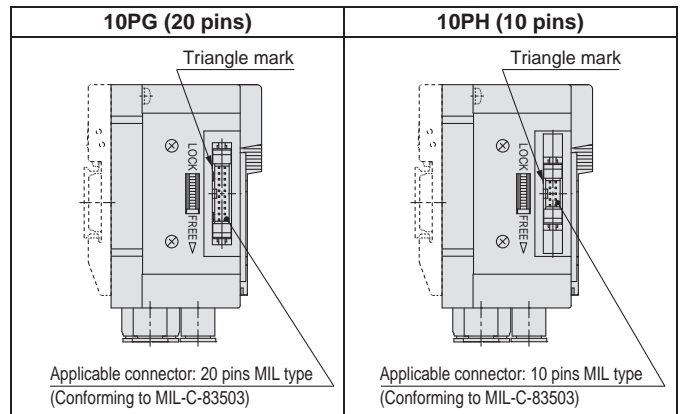
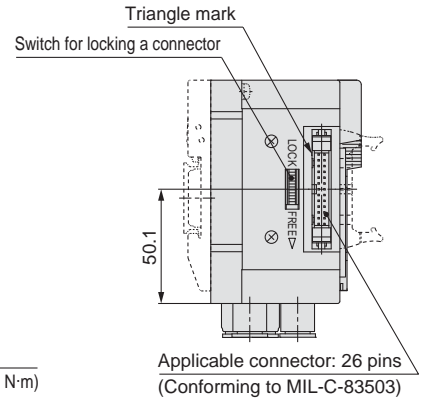
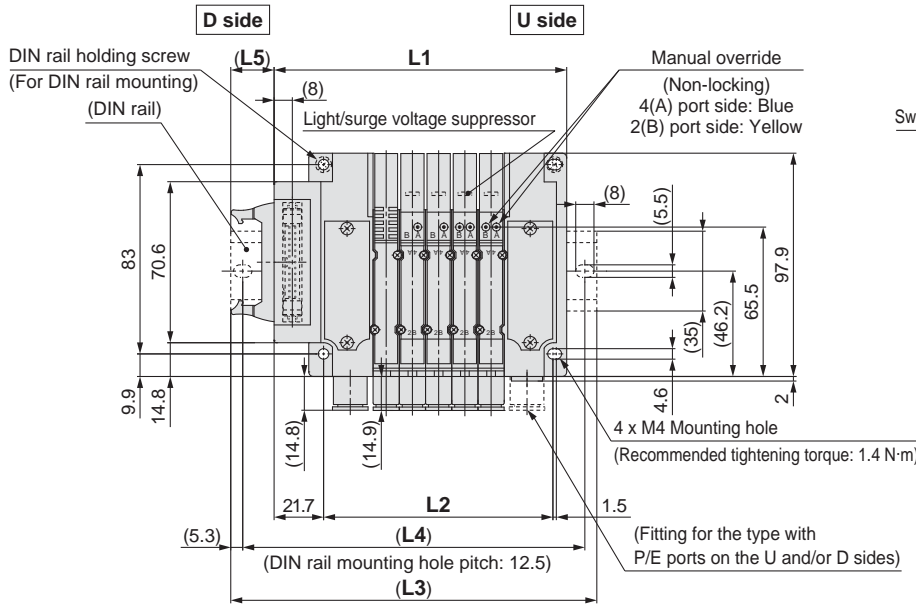
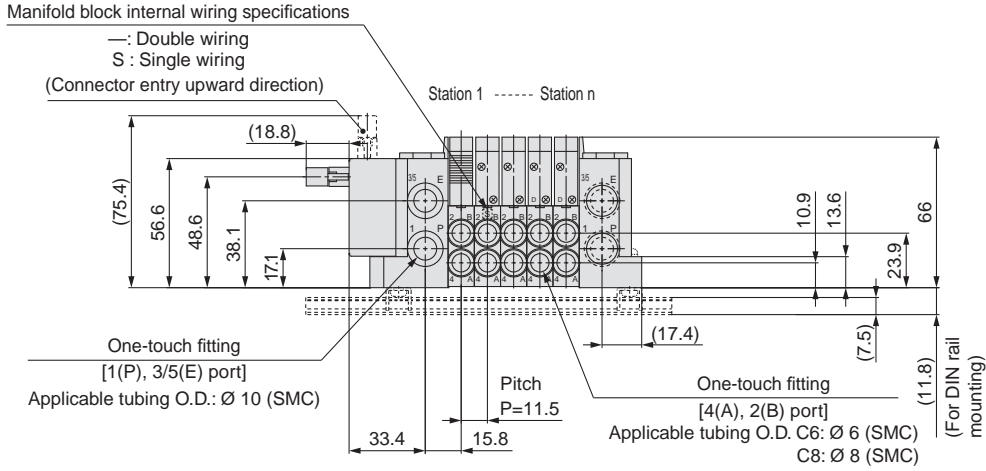
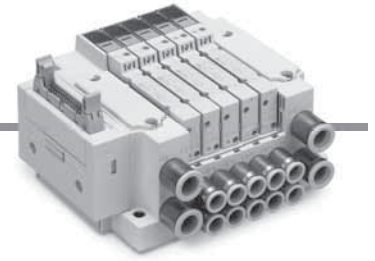
n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	101	110	119	128	137	146	155	164	173	182	191	200	209	218	227	236	245	254	263	272	281	290	299
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	135.5	148	160.5	160.5	173	185.5	185.5	198	210.5	223	223	235.5	248	248	260.5	273	285.5	285.5	298	310.5	310.5	323	335.5
L4	125	137.5	150	150	162.5	175	175	187.5	200	212.5	212.5	225	237.5	237.5	250	262.5	275	275	287.5	300	300	312.5	325
L5	20.5	22	24	19.5	21	23	18.5	20	22	23.5	19	21	22.5	18	20	21.5	23.5	19	20.5	22.5	18	19.5	21.5

Type 10/Side Ported
Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY3000 Series

JJ5SY3-10 ^PPG 1- ^UStations ^DC6 (D)



- * These figures show the "JJ5SY3-10P2-05D-C8."
- * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PG and 10PH. L1 to L5 dimensions are the same as 10P type.

L: Dimensions

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	93.8	105.3	116.8	128.3	139.8	151.3	162.8	174.3	185.8	197.3	208.8	220.3	231.8	243.3	254.8	266.3	277.8	289.3	300.8	312.3	323.8	335.3	346.8
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5
L4	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
L5	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5

n: Stations

Chart

Valve

Connector Connecting Base

Plug-in Flat Ribbon

D.sub

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

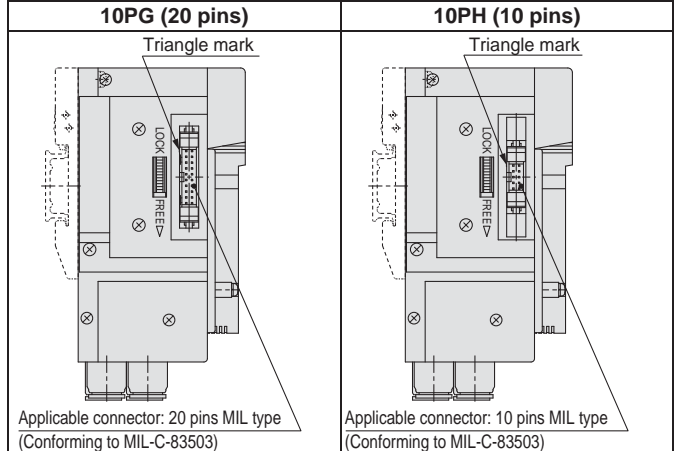
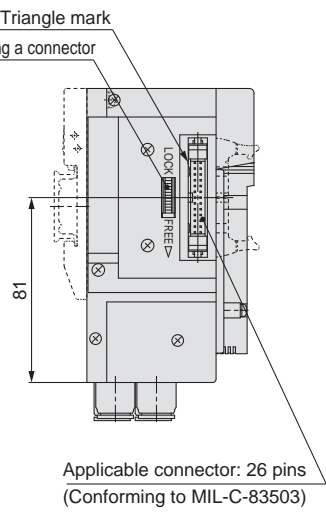
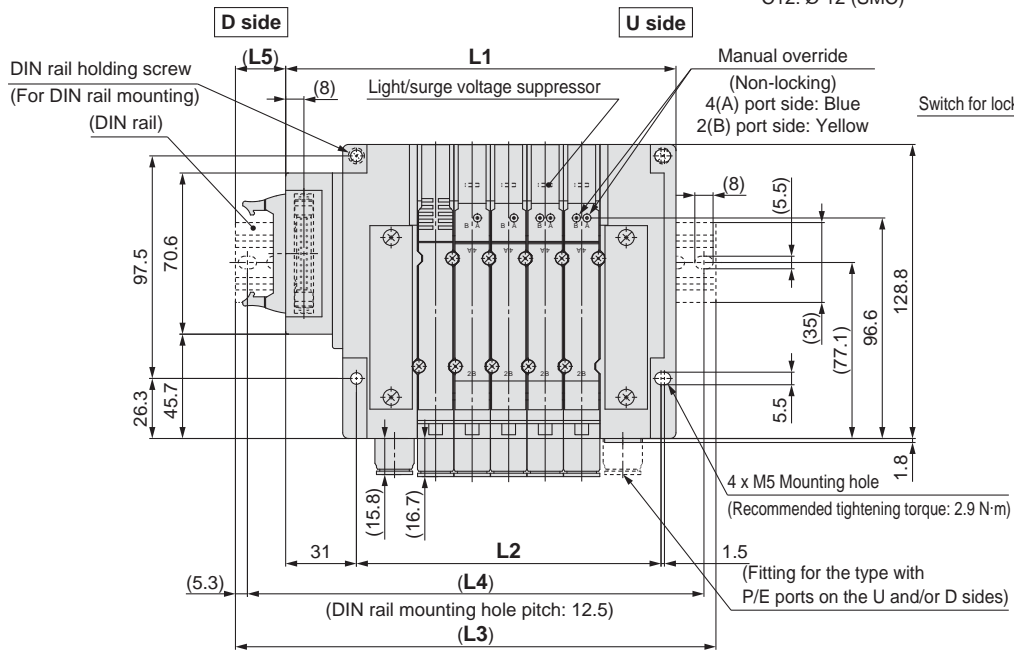
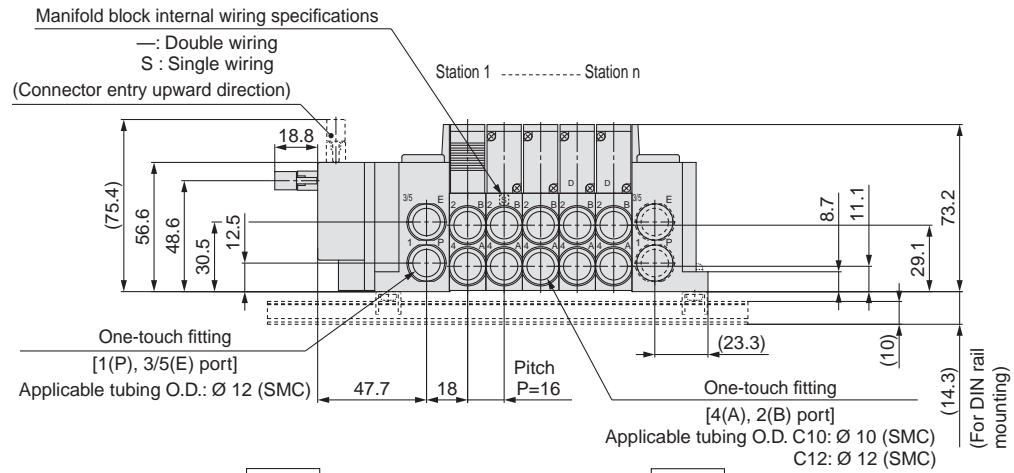
Type 10/Side Ported

Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY5000 Series



JJ5SY5-10 $\frac{P}{PH} \frac{1}{2}$ - Stations $\frac{U}{D}$ - C10 (D)



* These figures show the "JJ5SY5-10P2-05D-C12."
 * Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.
 * Only connectors are different for 10PG and 10PH. L1 to L5 dimensions are the same as 10P type.

L: Dimensions

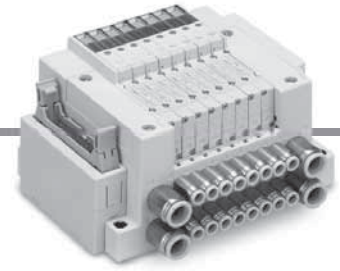
n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347	363	379	395	411	427	443	459	475
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	160.5	173	185.5	210.5	223	235.5	260.5	273	285.5	298	323	335.5	348	360.5	385.5	398	410.5	435.5	448	460.5	473	498	510.5
L4	150	162.5	175	200	212.5	225	250	262.5	275	287.5	312.5	325	337.5	350	375	387.5	400	425	437.5	450	462.5	487.5	500
L5	22	20	18.5	23	21	19.5	24	22	20.5	18.5	23	21.5	19.5	18	22.5	20.5	19	23.5	21.5	20	18	22.5	21

n: Stations

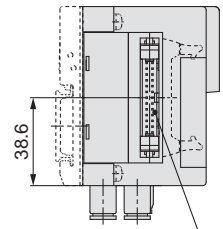
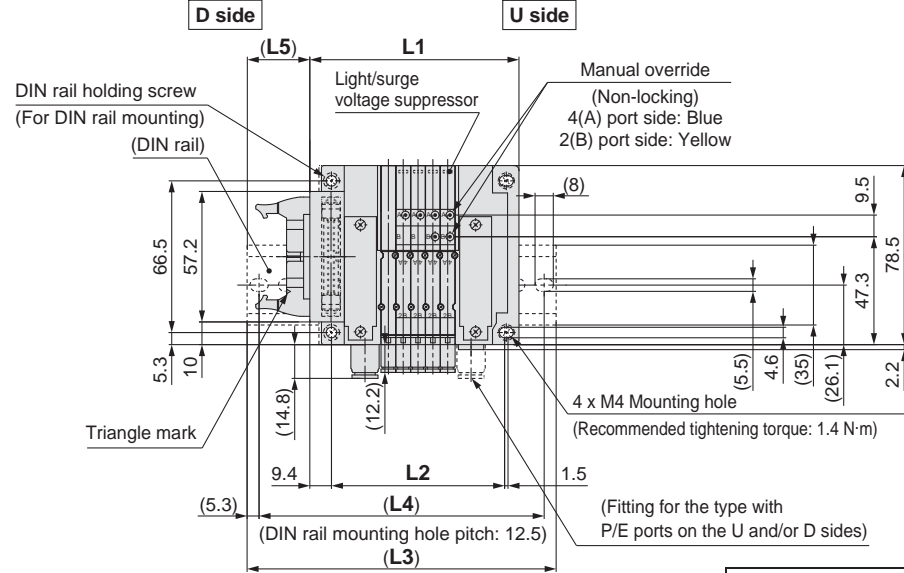
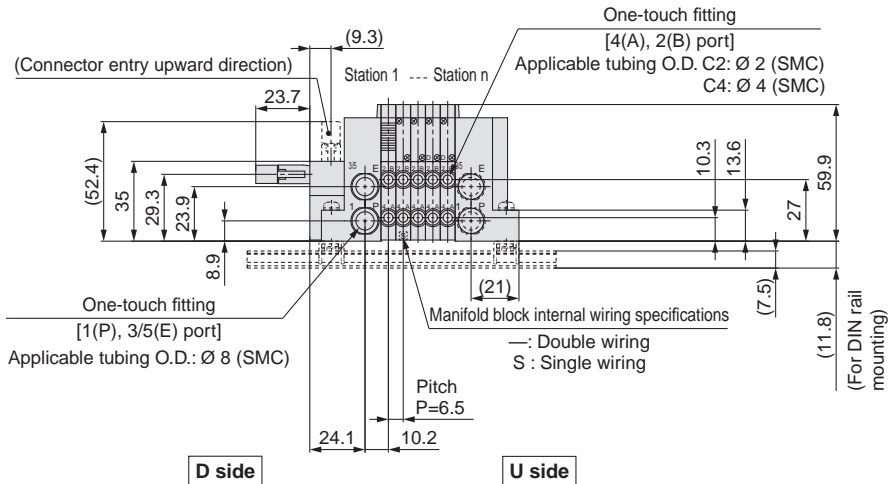


Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)
Flat Ribbon Cable (IP20/Compact Type)

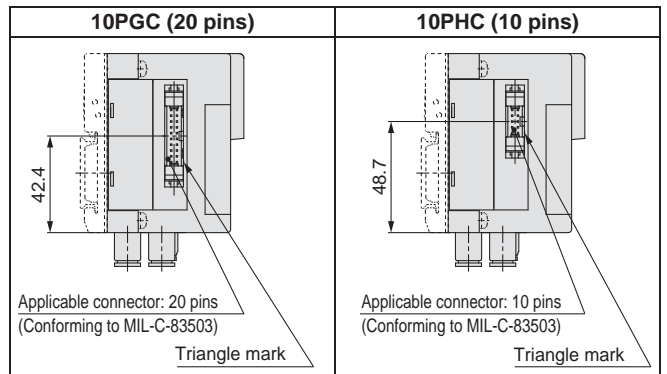
Dimensions: **JSY1000 Series**



JJ5SY1-10^P_{PH} C₂- Stations^U_P-C₄ (D)



Applicable connector: 26 pins
(Conforming to MIL-C-83503)



- * These figures show the "JJ5SY1-10PC2-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PGC and 10PHC. L1 to L5 dimensions are the same as 10PC type.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

		n: Stations															
L \ n	n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
L1		72.1	78.6	85.1	91.6	98.1	104.6	111.1	117.6	124.1	130.6	137.1	143.6	150.1	156.6	163.1	
L2		56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4	
L3		110.5	123	123	135.5	135.5	148	148	160.5	160.5	173	173	185.5	185.5	198	198	
L4		100	112.5	112.5	125	125	137.5	137.5	150	150	162.5	162.5	175	175	187.5	187.5	
L5		25	28	24.5	27.5	24.5	27.5	24	27	24	27	23.5	26.5	23.5	26.5	23	

		n: Stations							
L \ n	n	17	18	19	20	21	22	23	24
L1		169.6	176.1	182.6	189.1	195.6	202.1	208.6	215.1
L2		153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3		210.5	210.5	223	235.5	235.5	248	248	260.5
L4		200	200	212.5	225	225	237.5	237.5	250
L5		26	23	26	29	25.5	28.5	25.5	28.5

Chart

Valve

Connector Connecting Base

Plug-in Flat Ribbon

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

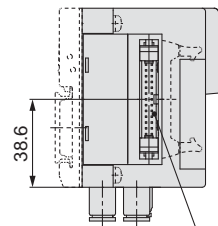
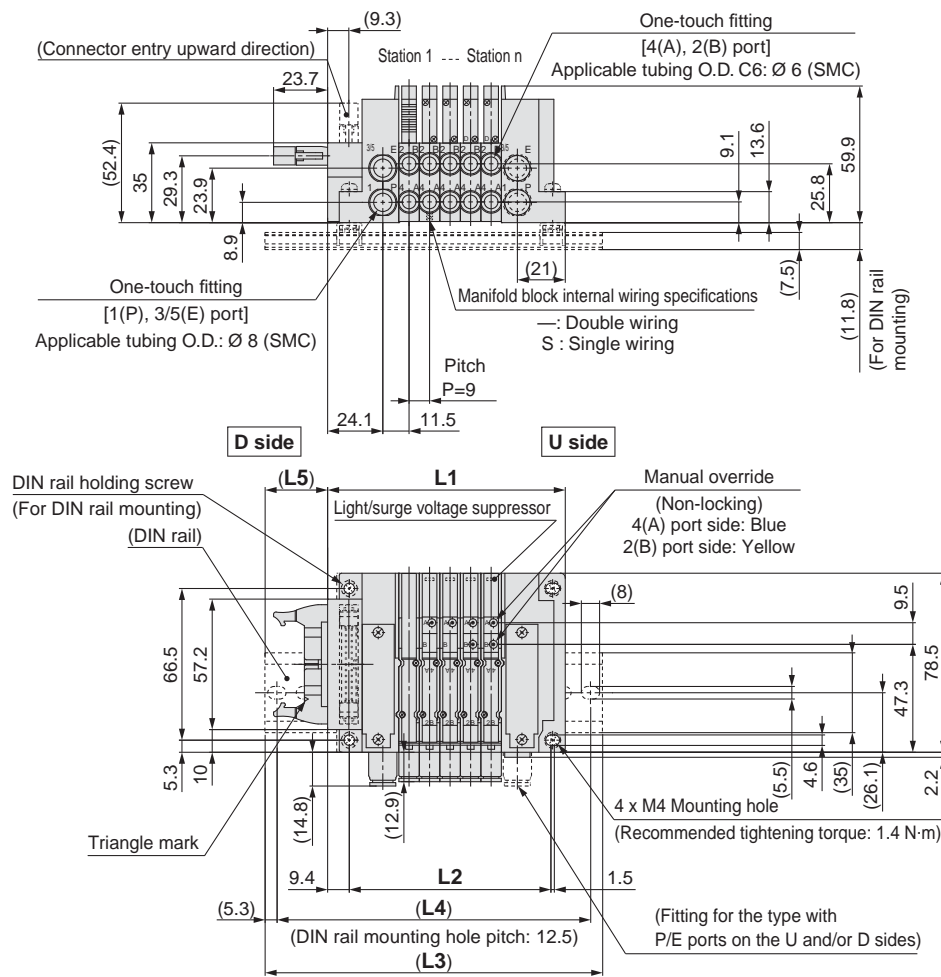
Type 10/Side Ported (Applicable to Ø 6 fittings)

Flat Ribbon Cable (IP20/Compact Type)

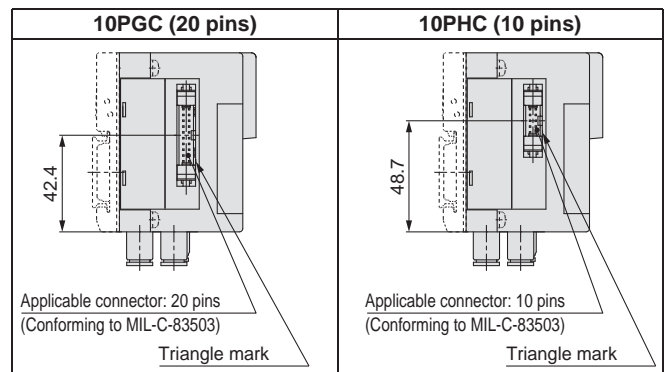


Dimensions: JSY1000 Series

JJ5SY1-10^P_{PH}C₂-Stations^U_B-C6(D)



Applicable connector: 26 pins
(Conforming to MIL-C-83503)



- * These figures show the "JJ5SY1-10PC2-05D-C6."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PGC and 10PHC. L1 to L5 dimensions are the same as 10PC type.
- * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

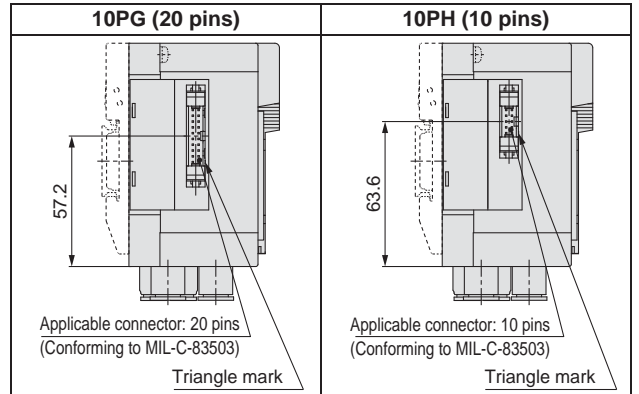
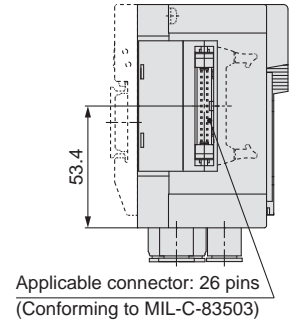
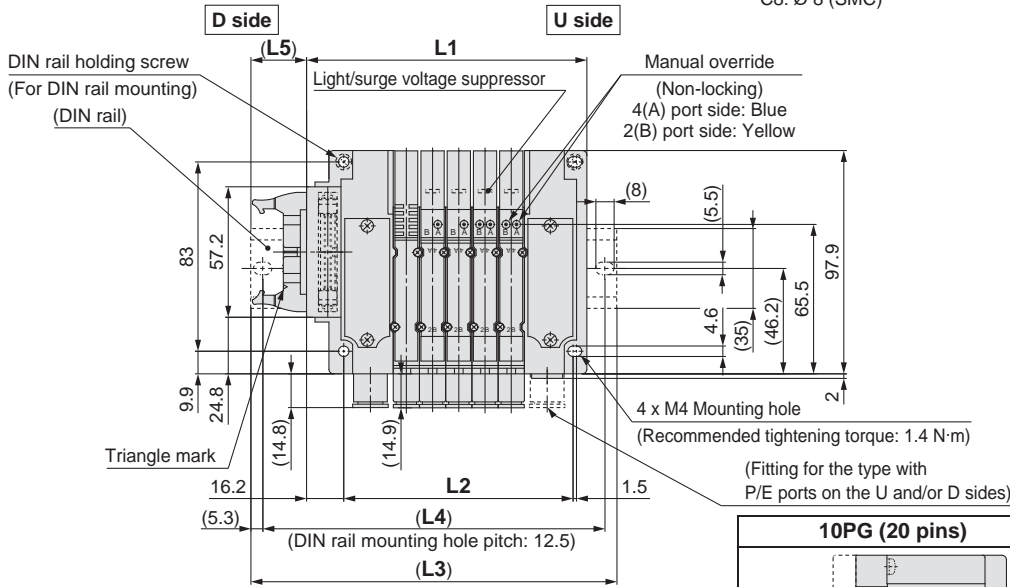
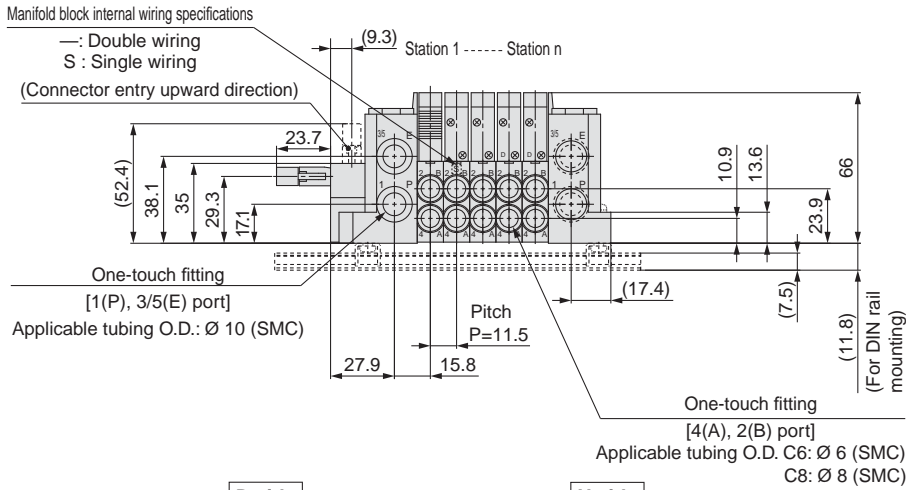
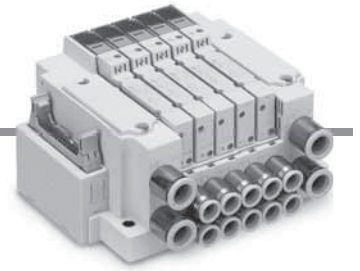
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	77.1	86.1	95.1	104.1	113.1	122.1	131.1	140.1	149.1	158.1	167.1	176.1	185.1	194.1	203.1
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	123	123	135.5	148	148	160.5	173	185.5	185.5	198	210.5	210.5	223	235.5	248
L4	112.5	112.5	125	137.5	137.5	150	162.5	175	175	187.5	200	200	212.5	225	237.5
L5	28.5	24	26	27.5	23	25	26.5	28.5	24	25.5	27.5	23	24.5	26.5	28

L \ n	17	18	19	20	21	22	23	24
L1	212.1	221.1	230.1	239.1	248.1	257.1	266.1	275.1
L2	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	248	260.5	273	285.5	285.5	298	310.5	310.5
L4	237.5	250	262.5	275	275	287.5	300	300
L5	23.5	25.5	27	29	24.5	26	28	23.5

Type 10/Side Ported
Flat Ribbon Cable (IP20/Compact Type)

Dimensions: JSY3000 Series

JJ5SY3-10^P_{PG}C₂-Stations^U_P-C₆(D)_{C8}(D)



- * These figures show the "JJ5SY3-10PC2-05D-C8."
- * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.
- * Only connectors are different for 10PGC and 10PHC. L1 to L5 dimensions are the same as 10PC type.

L: Dimensions

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	88.3	99.8	111.3	122.8	134.3	145.8	157.3	168.8	180.3	191.8	203.3	214.8	226.3	237.8	249.3
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	273	285.5
L4	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	262.5	275
L5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	23	23.5

L \ n	17	18	19	20	21	22	23	24
L1	260.8	272.3	283.8	295.3	306.8	318.3	329.8	341.3
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	298	310.5	323	335.5	348	360.5	373	385.5
L4	287.5	300	312.5	325	337.5	350	362.5	375
L5	24	24.5	25	25.5	26	26.5	27	27.5

Chart

Valve

Connector Connecting Base

Plug-in Flat Ribbon

D.sub

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

Electrical Wiring Specifications

D-sub connector

If alignment is not specified, the internal wiring is double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve and option types.

Connector terminal no.

Station	Lead wire no.	Polarity	Common
Station 1	SOL. a 1	(-)	(+)
	SOL. b 14	(-)	(+)
Station 2	SOL. a 2	(-)	(+)
	SOL. b 15	(-)	(+)
Station 3	SOL. a 3	(-)	(+)
	SOL. b 16	(-)	(+)
Station 4	SOL. a 4	(-)	(+)
	SOL. b 17	(-)	(+)
Station 5	SOL. a 5	(-)	(+)
	SOL. b 18	(-)	(+)
Station 6	SOL. a 6	(-)	(+)
	SOL. b 19	(-)	(+)
Station 7	SOL. a 7	(-)	(+)
	SOL. b 20	(-)	(+)
Station 8	SOL. a 8	(-)	(+)
	SOL. b 21	(-)	(+)
Station 9	SOL. a 9	(-)	(+)
	SOL. b 22	(-)	(+)
Station 10	SOL. a 10	(-)	(+)
	SOL. b 23	(-)	(+)
Station 11	SOL. a 11	(-)	(+)
	SOL. b 24	(-)	(+)
Station 12	SOL. a 12	(-)	(+)
	SOL. b 25	(-)	(+)
COM.	13	(+)	(-)

Positive common Negative common

* When using a valve with no polarity, either positive common or negative common can be used.

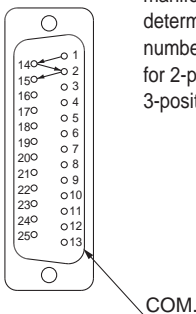
Wire colour table by terminal number of D-sub connector cable assembly

Terminal no.	Lead wire colour	Dot marking
1	Black	None
2	Brown	None
3	Red	None
4	Orange	None
5	Yellow	None
6	Pink	None
7	Blue	None
8	Purple	White
9	Grey	Black
10	White	Black
11	White	Red
12	Yellow	Red
13	Orange	Red
14	Yellow	Black
15	Pink	Black
16	Yellow	White
17	White	None
18	Grey	None
19	Orange	Black
20	Red	White
21	Brown	White
22	Pink	Red
23	Grey	Red
24	Black	White
25	White	None

* Connector made in conformity with DIN47100.

Specified Layout

(25 pins)



Mixed wiring of single and double wiring can be specified on the manifold specification sheet. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 24 or less. 1 solenoid is required for 2-position single, and 2 solenoids for 2-position double, 3-position and 4-position.

Connector Cable [IP20/IP40]

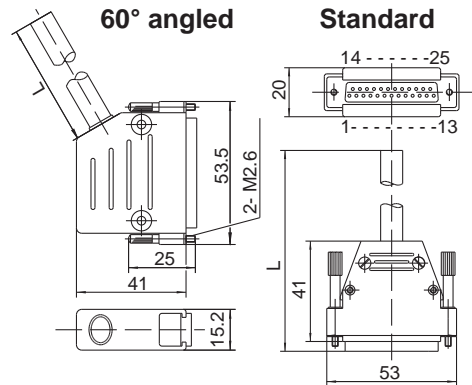
GVVZS3000-21A-□

D-sub connector cable

Cable length (L)	Assembly part no.	Note
1 m	GVVZS3000-21A-160	60°angled
3 m	GVVZS3000-21A-260	60°angled
5 m	GVVZS3000-21A-360	60°angled
8 m	GVVZS3000-21A-460	60°angled
3 m	GVVZS3000-21A-2	Standard
5 m	GVVZS3000-21A-3	Standard
8 m	GVVZS3000-21A-4	Standard

Shielded cable

Cable length (L)	Assembly part no.	Note
1 m	GVVZS3000-21A-1S	Shielded
3 m	GVVZS3000-21A-2S	Shielded
5 m	GVVZS3000-21A-3S	Shielded
8 m	GVVZS3000-21A-4S	Shielded
20 m	GVVZS3000-21A-5S	Mode to order



Electrical characteristics

Item	Property
Conductor resistance Ω/km , 20 °C	Max. 57
Voltage limit V, 5 minute, AC	1500
Insulation resistance $M\Omega/\text{km}$, 20 °C	20

Connector Cable [IP67]

015 SY30M-DS25-030 [IP67] 050

Cable 0.3 mm² x 25 cores O.D. \varnothing 1.4

Cable length (L)	Assembly part no.	Note
1.5 m	SY30M-DS25-015	Cable 0.3 mm ² x 25 cores
3 m	SY30M-DS25-030	
5 m	SY30M-DS25-050	

D-sub connector cable

* Be sure to use the connector cable in the table, to satisfy enclosure IP67.
* Cannot be used for movable wiring.

Approx. \varnothing 8

Seal (Length)

Connector hood

2 x M2.6 x 0.45

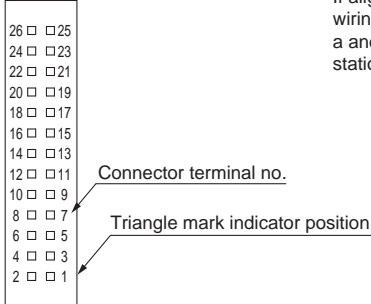
Connector JBZ-25S-3 made by J.S.T. Mfg. Co., Ltd.

Socket side

Terminal no.

Electrical Wiring Specifications

Flat ribbon cable connector



If alignment is not specified, the internal wiring is double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve and option types.

P, PC: Flat ribbon cable (26 pins)

<Double wiring>

Station	Terminal no.	Polarity
Station 1	SOL. a	1 (-) (+)
	SOL. b	2 (-) (+)
Station 2	SOL. a	3 (-) (+)
	SOL. b	4 (-) (+)
Station 3	SOL. a	5 (-) (+)
	SOL. b	6 (-) (+)
Station 4	SOL. a	7 (-) (+)
	SOL. b	8 (-) (+)
Station 5	SOL. a	9 (-) (+)
	SOL. b	10 (-) (+)
Station 6	SOL. a	11 (-) (+)
	SOL. b	12 (-) (+)
Station 7	SOL. a	13 (-) (+)
	SOL. b	14 (-) (+)
Station 8	SOL. a	15 (-) (+)
	SOL. b	16 (-) (+)
Station 9	SOL. a	17 (-) (+)
	SOL. b	18 (-) (+)
Station 10	SOL. a	19 (-) (+)
	SOL. b	20 (-) (+)
Station 11	SOL. a	21 (-) (+)
	SOL. b	22 (-) (+)
Station 12	SOL. a	23 (-) (+)
	SOL. b	24 (-) (+)
COM.	25 (+) (-)	
COM.	26 (+) (-)	

Positive Negative
common common

PG, PGC: Flat ribbon cable (20 pins)

<Double wiring>

Station	Terminal no.	Polarity
Station 1	SOL. a	1 (-) (+)
	SOL. b	2 (-) (+)
Station 2	SOL. a	3 (-) (+)
	SOL. b	4 (-) (+)
Station 3	SOL. a	5 (-) (+)
	SOL. b	6 (-) (+)
Station 4	SOL. a	7 (-) (+)
	SOL. b	8 (-) (+)
Station 5	SOL. a	9 (-) (+)
	SOL. b	10 (-) (+)
Station 6	SOL. a	11 (-) (+)
	SOL. b	12 (-) (+)
Station 7	SOL. a	13 (-) (+)
	SOL. b	14 (-) (+)
Station 8	SOL. a	15 (-) (+)
	SOL. b	16 (-) (+)
Station 9	SOL. a	17 (-) (+)
	SOL. b	18 (-) (+)
COM.	19 (+) (-)	
COM.	20 (+) (-)	

Positive Negative
common common

PH, PHC: Flat ribbon cable (10 pins)

<Double wiring>

Station	Terminal no.	Polarity
Station 1	SOL. a	1 (-) (+)
	SOL. b	2 (-) (+)
Station 2	SOL. a	3 (-) (+)
	SOL. b	4 (-) (+)
Station 3	SOL. a	5 (-) (+)
	SOL. b	6 (-) (+)
Station 4	SOL. a	7 (-) (+)
	SOL. b	8 (-) (+)
COM.	9 (+) (-)	
COM.	10 (+) (-)	

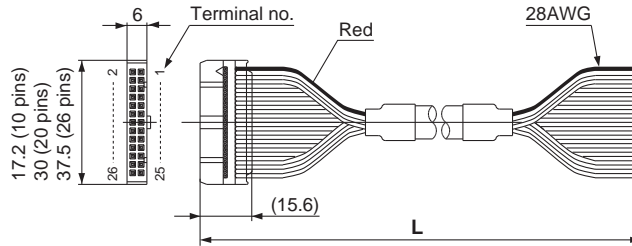
Positive Negative
common common

* When using a valve with no polarity, either positive common or negative common can be used.

JSY1000/3000/5000 Series

Flat Ribbon Cable Connector

AXT100-FC ^{10 1}
²⁰⁻²
^{26 3}



Flat ribbon cable connector

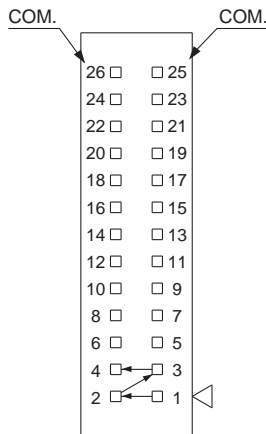
Cable length (L)	Assembly part no.		
	26 pins	20 pins	10 pins
1.5 m	AXT100-FC26-1	AXT100-FC20-1	AXT100-FC10-1
3 m	AXT100-FC26-2	AXT100-FC20-2	AXT100-FC10-2
5 m	AXT100-FC26-3	AXT100-FC20-3	AXT100-FC10-3

- * When using a standard commercial connector, use a 26-pin, 20-pin or 10-pin type connector conforming to MIL-C-83503 with strain relief.
- * Cannot be used for movable wiring.
- * Lengths other than the above are also available. Please contact SMC for details.

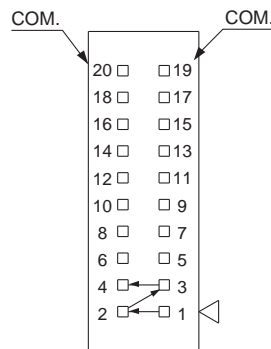
Connector Manufacturers' Example

- HIROSE ELECTRIC CO., LTD.
- 3M Japan Limited
- Fujitsu Limited
- Japan Aviation Electronics Industry, Limited
- J.S.T. Mfg. Co., Ltd.
- Oki Electric Cable Co., Ltd.

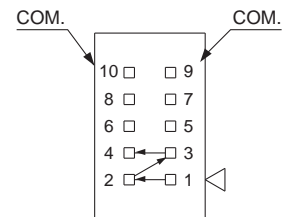
Specified Layout



(P, PC: 26 pins)



(PG, PGC: 20 pins)



(PH, PHC: 10 pins)

Mixed wiring of single and double wiring can be specified on the manifold specification. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 24 or less for P and PC, 18 or less for PG and PGC, and 8 or less for PH and PHC. 1 solenoid is required for 2-position single, and 2 solenoids for 2-position double, 3-position and 4-position.

Specific Product Precautions	Made to Order	Manifold Options	Fittings, Replacement Parts, Tools	Manifold Exploded View	Common Dimensions	EX120	EX260	EX250	EX600	Lead wire	Terminal Block	D.sub Flat Ribbon	Plug-in	Connector Connecting Base	Valve	Chart
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Plug-in Connector Connecting Base

Spring Type Terminal Block Box

Terminal Block Box

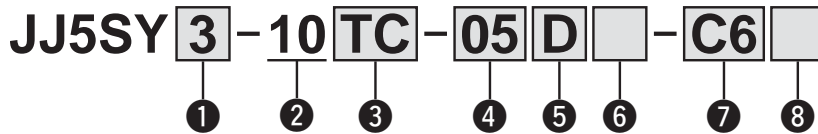
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 Wiring

TC	Spring type terminal block box
T	Terminal block box

4 Valve stations

TC: Spring type terminal block box			T: Terminal block box		
Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations	Double wiring*1	02	2 stations	Double wiring*1
⋮	⋮		⋮	⋮	
16	16 stations	Specified layout*2 (Up to 32 solenoids available)	10	10 stations	Specified layout*2 (Up to 20 solenoids available)
02	2 stations		02	2 stations	
⋮	⋮		⋮	⋮	
24	24 stations		20	20 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

*3 This also includes the number of blanking plates.

5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

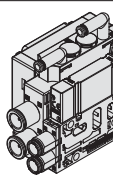
6 SUP/EXH block assembly

—	Internal pilot
S	Internal pilot, Built-in silencer

- * 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

7 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	∅ 2	●	—	—
C4	∅ 4	●	—	—
C6	∅ 6	●	●	—
C8	∅ 8	—	●	—
C10	∅ 10	—	—	●
C12	∅ 12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

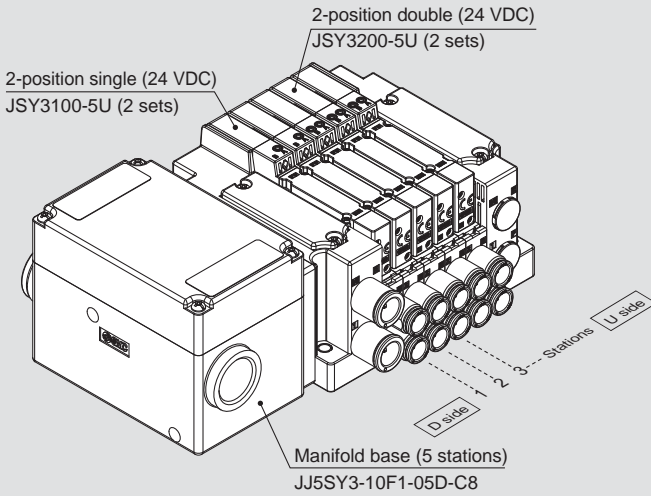
- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

—	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
24	For 24 stations	

How to Order Manifold Assembly

Example (JJ5SY3-10TC-□)



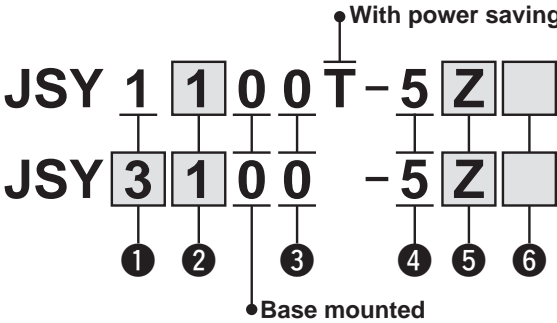
JJ5SY3-10TC-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)
 * **JSY3100-5U** 2 sets (2-position single part no.)
 * **JSY3200-5U** 3 sets (2-position double part no.)
 ↳ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

- 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 mounting screw) Refer to page 11 for valve specifications.

JSY1000 Series
JSY3000/5000 Series



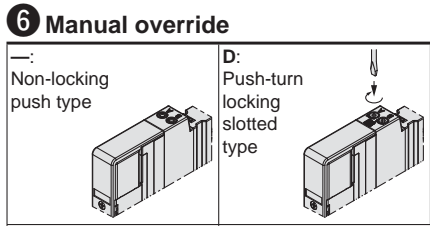
Made to Order
Made to Order
 (Refer to page 114 for details.)
 Specification
 With power saving circuit
 (Continuous duty type):
 0.1 W (JSY3000/5000)
 External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.



3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

- * Only "Z" and "NZ" types are available for the JSY1000 series.
- * When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

E: Push-turn locking lever type
 * Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**
 Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.
 Refer to page 107 for base gasket and mounting screw part numbers.

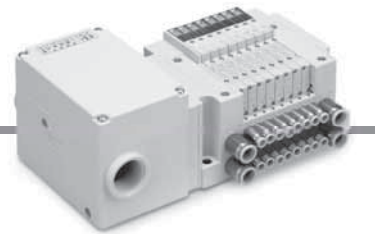
Caution
 If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50 %, please select the product with power saving circuit.
 For the JSY1000 series only the power saving circuit is available.

Protective class class III (Mark: ⚡)

Chart
 Valve
 Connector
 Plug-in
 Connecting Base
 D.sub
 Flat Ribbon
 Terminal
 Block
 Lead wire
 EX600
 EX250
 EX260
 EX120
 Common
 Dimensions
 Manifold
 Exploded View
 Fittings, Replacement
 Parts, Tools
 Manifold
 Options
 Made to
 Order
 Specific Product
 Precautions

JSY1000/3000/5000 Series

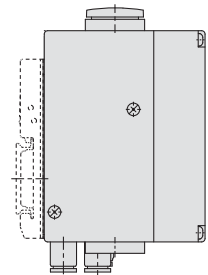
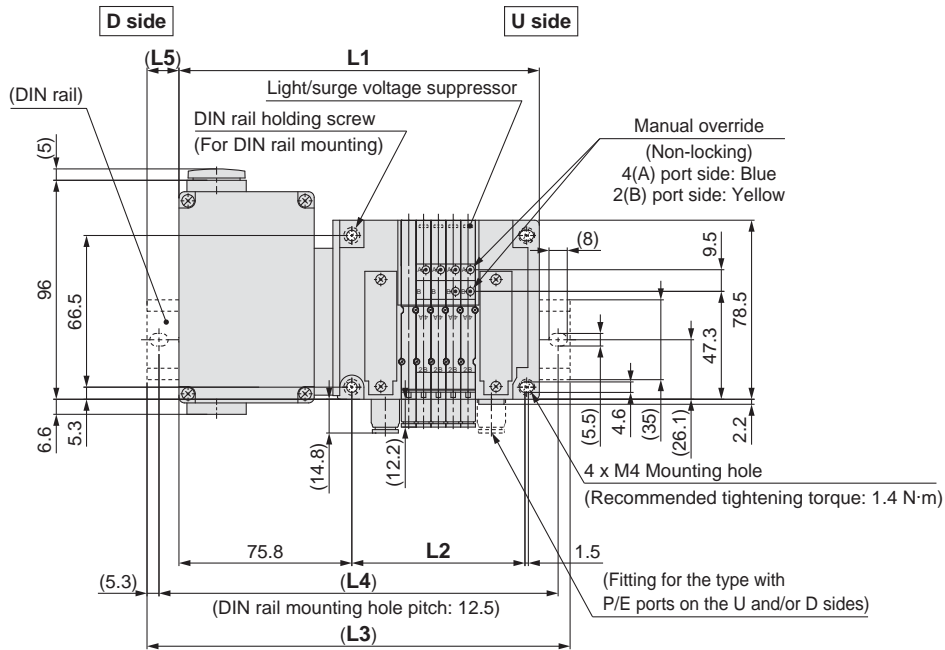
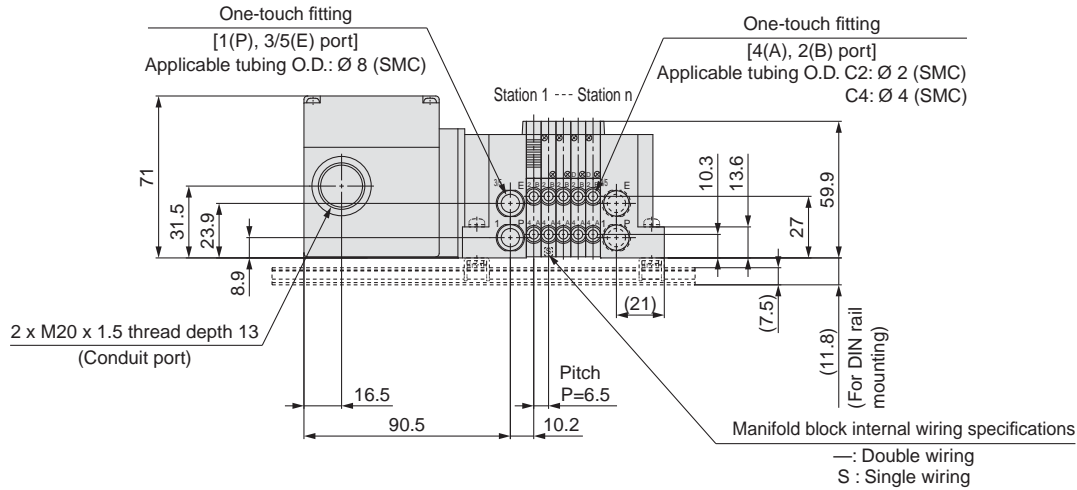
Type 10/Side Ported (Applicable to $\varnothing 2$ and $\varnothing 4$ fittings)



Dimensions: JSY1000 Series

Spring Type Terminal Block Box

JJ5SY1-10TC-Stations U P - C₂ (D)



- * These figures show the "JJ5SY1-10TC-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	138.5	145	151.5	158	164.5	171	177.5	184	190.5	197	203.5	210	216.5	223	229.5
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	173	173	185.5	185.5	198	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5
L4	162.5	162.5	175	175	187.5	187.5	200	200	212.5	212.5	225	225	237.5	237.5	250
L5	17.5	14	17	14	17	13.5	16.5	13.5	16.5	13	16	13	16	12.5	15.5

L \ n	17	18	19	20	21	22	23	24
L1	236	242.5	249	255.5	262	268.5	275	281.5
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	260.5	273	273	285.5	285.5	298	310.5	310.5
L4	250	262.5	262.5	275	275	287.5	300	300
L5	12.5	15.5	12	15	12	15	18	14.5

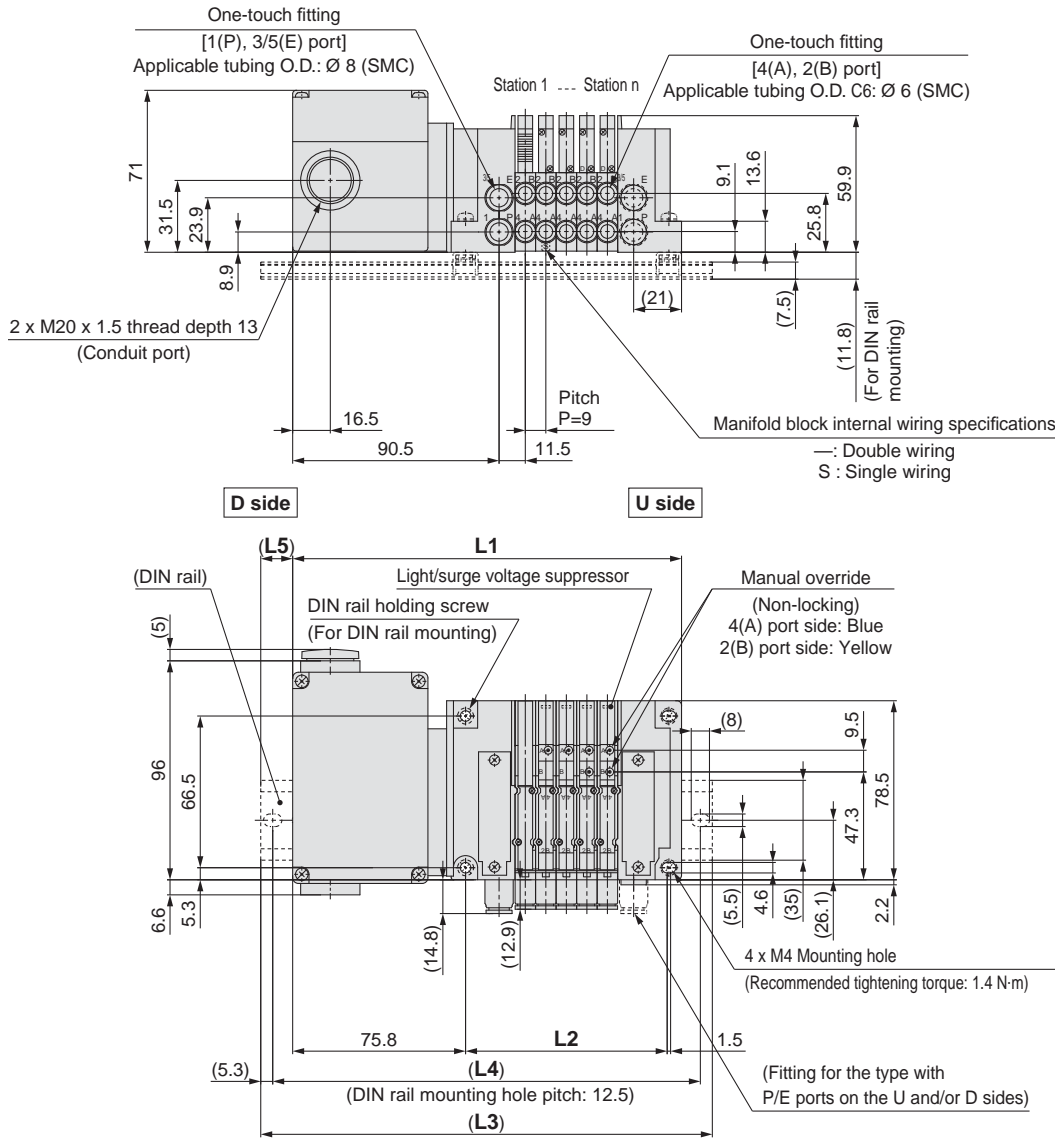
Type 10/Side Ported (Applicable to Ø 6 fittings)

Spring Type Terminal Block Box



Dimensions: **JSY1000 Series**

JJ5SY1-10TC-**Stations** $\frac{U}{P}$ -C6(D)



- * These figures show the "JJ5SY1-10TC-05D-C6."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	143.5	152.5	161.5	170.5	179.5	188.5	197.5	206.5	215.5	224.5	233.5	242.5	251.5	260.5	269.5
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	173	185.5	185.5	198	210.5	223	223	235.5	248	248	260.5	273	285.5	285.5	298
L4	162.5	175	175	187.5	200	212.5	212.5	225	237.5	237.5	250	262.5	275	275	287.5
L5	15	16.5	12	14	15.5	17.5	13	14.5	16.5	12	13.5	15.5	17	12.5	14.5

L \ n	17	18	19	20	21	22	23	24
L1	278.5	287.5	296.5	305.5	314.5	323.5	332.5	341.5
L2	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	310.5	323	323	335.5	348	348	360.5	373
L4	300	312.5	312.5	325	337.5	337.5	350	362.5
L5	16	18	13.5	15	17	12.5	14	16

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

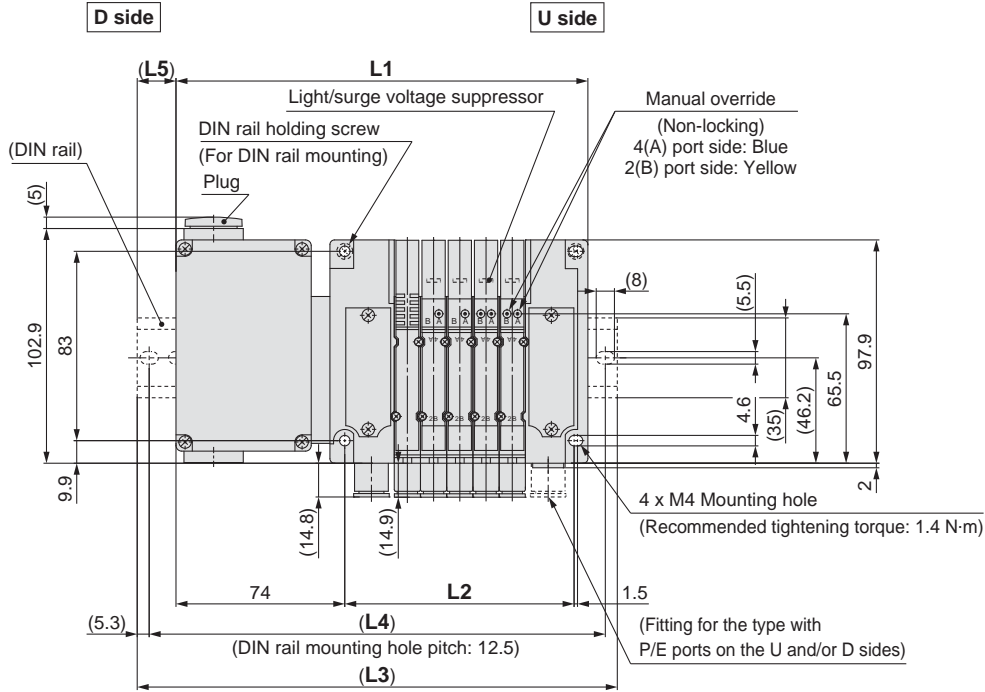
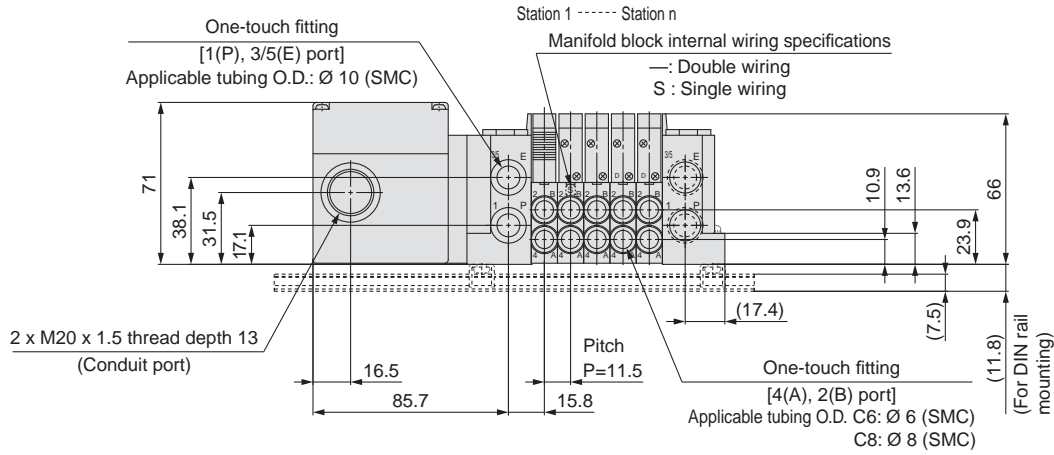
Type 10/Side Ported

Spring Type Terminal Block Box



Dimensions: **JSY3000 Series**

JJ5SY3-10TC-Stations $\frac{U}{D}$ - C₆ (D)



* These figures show the "JJ5SY3-10TC-05D-C8."
 * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	146.1	157.6	169.1	180.6	192.1	203.6	215.1	226.6	238.1	249.6	261.1	272.6	284.1	295.6	307.1
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	173	185.5	198	210.5	223	235.5	248	260.5	273	273	285.5	298	310.5	323	335.5
L4	162.5	175	187.5	200	212.5	225	237.5	250	262.5	262.5	275	287.5	300	312.5	325
L5	13.5	14	14.5	15	15.5	16	16.5	17	17.5	11.5	12	12.5	13	13.5	14

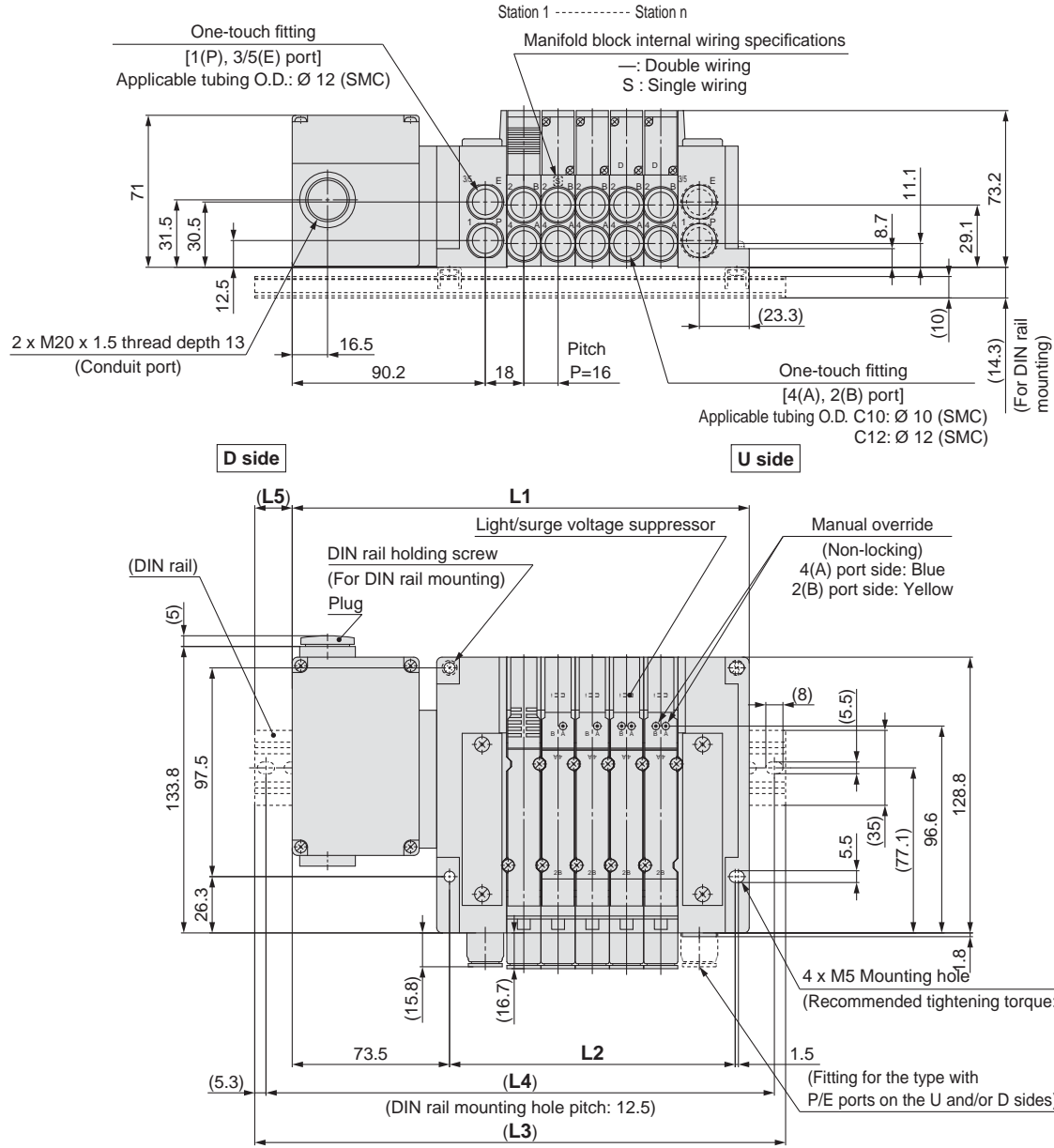
L \ n	17	18	19	20	21	22	23	24
L1	318.6	330.1	341.6	353.1	364.6	376.1	387.6	399.1
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	348	360.5	373	385.5	398	410.5	423	423
L4	337.5	350	362.5	375	387.5	400	412.5	412.5
L5	14.5	15	15.5	16	16.5	17	17.5	12

Type 10/Side Ported
Spring Type Terminal Block Box



Dimensions: **JSY5000 Series**

JJ5SY5-10TC- Stations $\frac{U}{D}$ - C10 - C12 (D)



* These figures show the "JJ5SY5-10TC-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5	325.5	341.5	357.5	373.5	389.5
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	198	210.5	223	248	260.5	273	285.5	310.5	323	335.5	360.5	373	385.5	398	423
L4	187.5	200	212.5	237.5	250	262.5	275	300	312.5	325	350	362.5	375	387.5	412.5
L5	16.5	14.5	13	17.5	15.5	14	12	16.5	15	13	17.5	16	14	12.5	17

L \ n	17	18	19	20	21	22	23	24
L1	405.5	421.5	437.5	453.5	469.5	485.5	501.5	517.5
L2	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	435.5	448	473	485.5	498	510.5	535.5	548
L4	425	437.5	462.5	475	487.5	500	525	537.5
L5	15	13.5	18	16	14.5	12.5	17	15.5

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

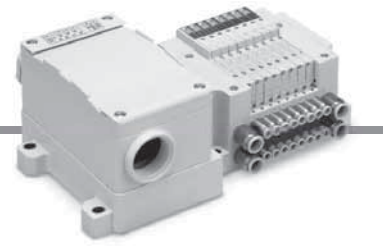
Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

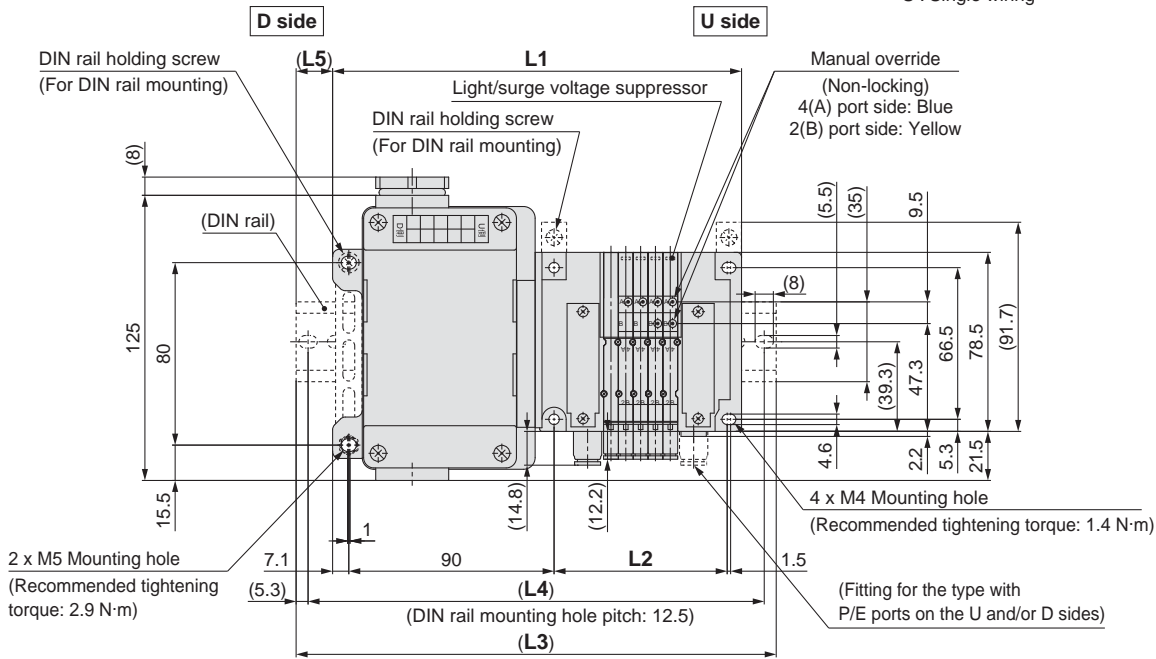
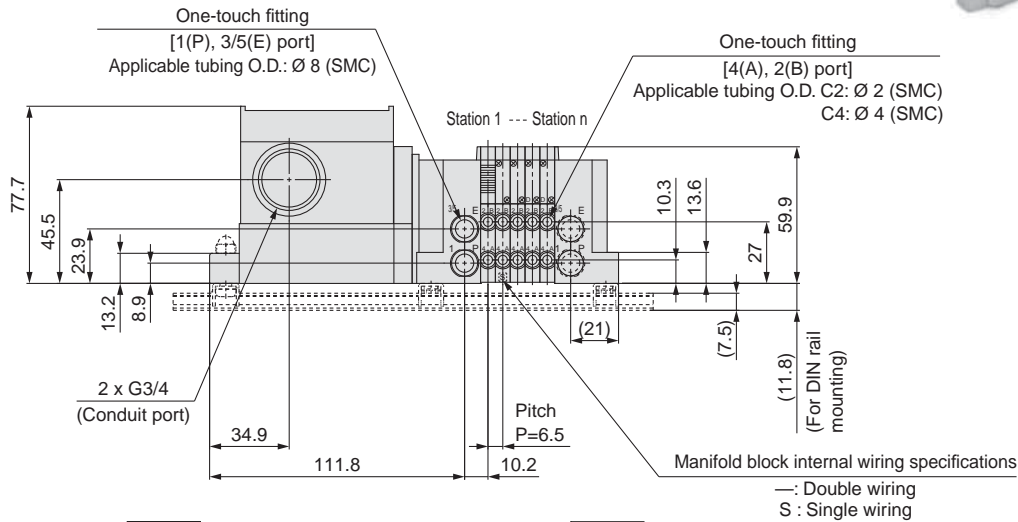
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)



Dimensions: JSY1000 Series

Terminal Block Box

JJ5SY1-10T- Stations $\frac{U}{D}$ - C₂/C₄(D)



* These figures show the "JJ5SY1-10T-05D-C4."

* Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.

* When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

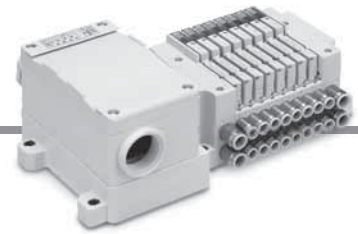
n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	159.8	166.3	172.8	179.3	185.8	192.3	198.8	205.3	211.8	218.3	224.8	231.3	237.8	244.3	250.8
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	185.5	198	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	273	273	285.5
L4	175	187.5	187.5	200	200	212.5	212.5	225	225	237.5	237.5	250	262.5	262.5	275
L5	13	16	13	16	13	16	12	15	12	15	12	15	18	15	18

L \ n	17	18	19	20
L1	257.3	263.8	270.3	276.8
L2	153.9	160.4	166.9	173.4
L3	285.5	298	298	310.5
L4	275	287.5	287.5	300
L5	14	17	14	17

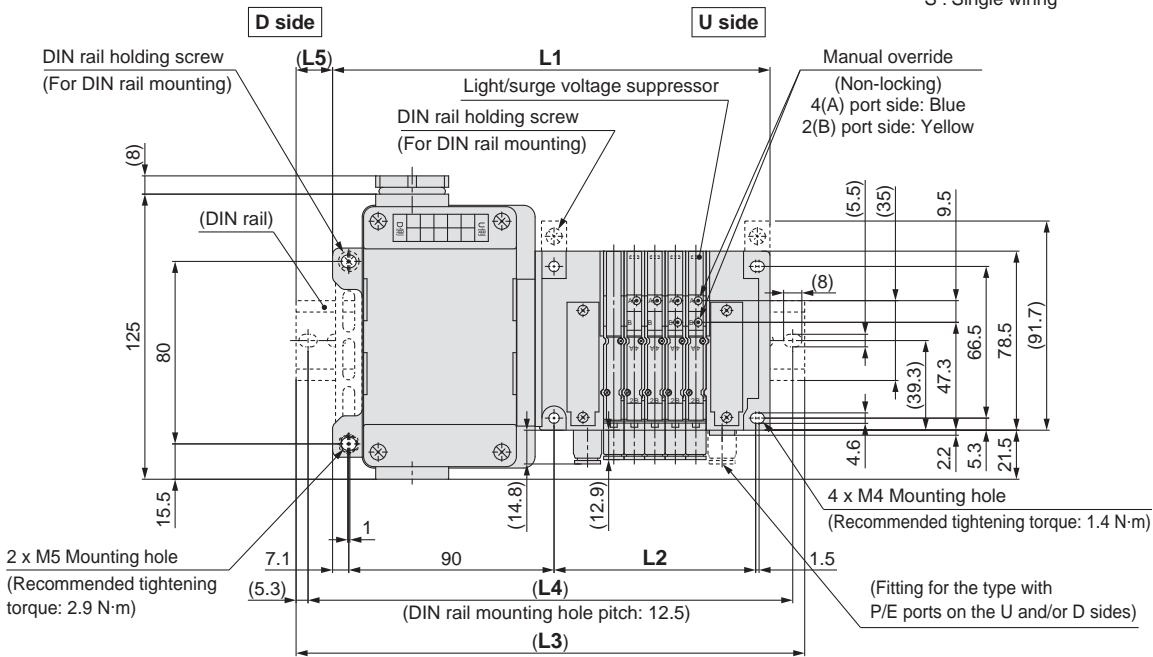
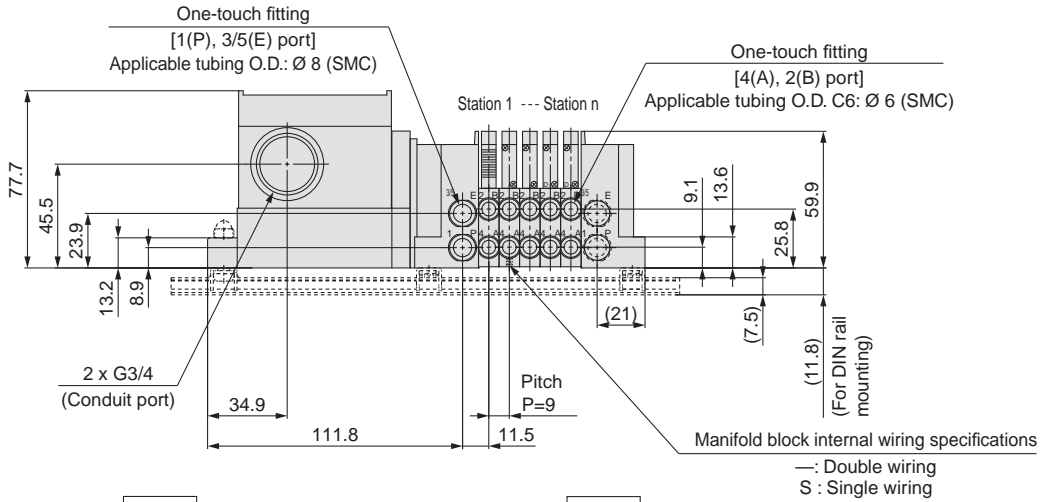
Type 10/Side Ported (Applicable to Ø 6 fittings)

Terminal Block Box



Dimensions: **JSY1000 Series**

JJ5SY1-10T- Stations $\frac{U}{D}$ - C6(D)



* These figures show the "JJ5SY1-10T-05D-C6."
 * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
 * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	164.8	173.8	182.8	191.8	200.8	209.8	218.8	227.8	236.8	245.8	254.8	263.8	272.8	281.8	290.8
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	198	198	210.5	223	235.5	235.5	248	260.5	260.5	273	285.5	298	298	310.5	323
L4	187.5	187.5	200	212.5	225	225	237.5	250	250	262.5	275	287.5	287.5	300	312.5
L5	17	12	14	16	18	13	15	17	12	14	16	17	13	15	16

L \ n	17	18	19	20
L1	299.8	308.8	317.8	326.8
L2	196.4	205.4	214.4	223.4
L3	323	335.5	348	360.5
L4	312.5	325	337.5	350
L5	12	14	15	17

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

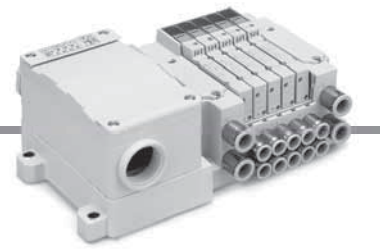
Specific Product Precautions

JSY1000/3000/5000 Series

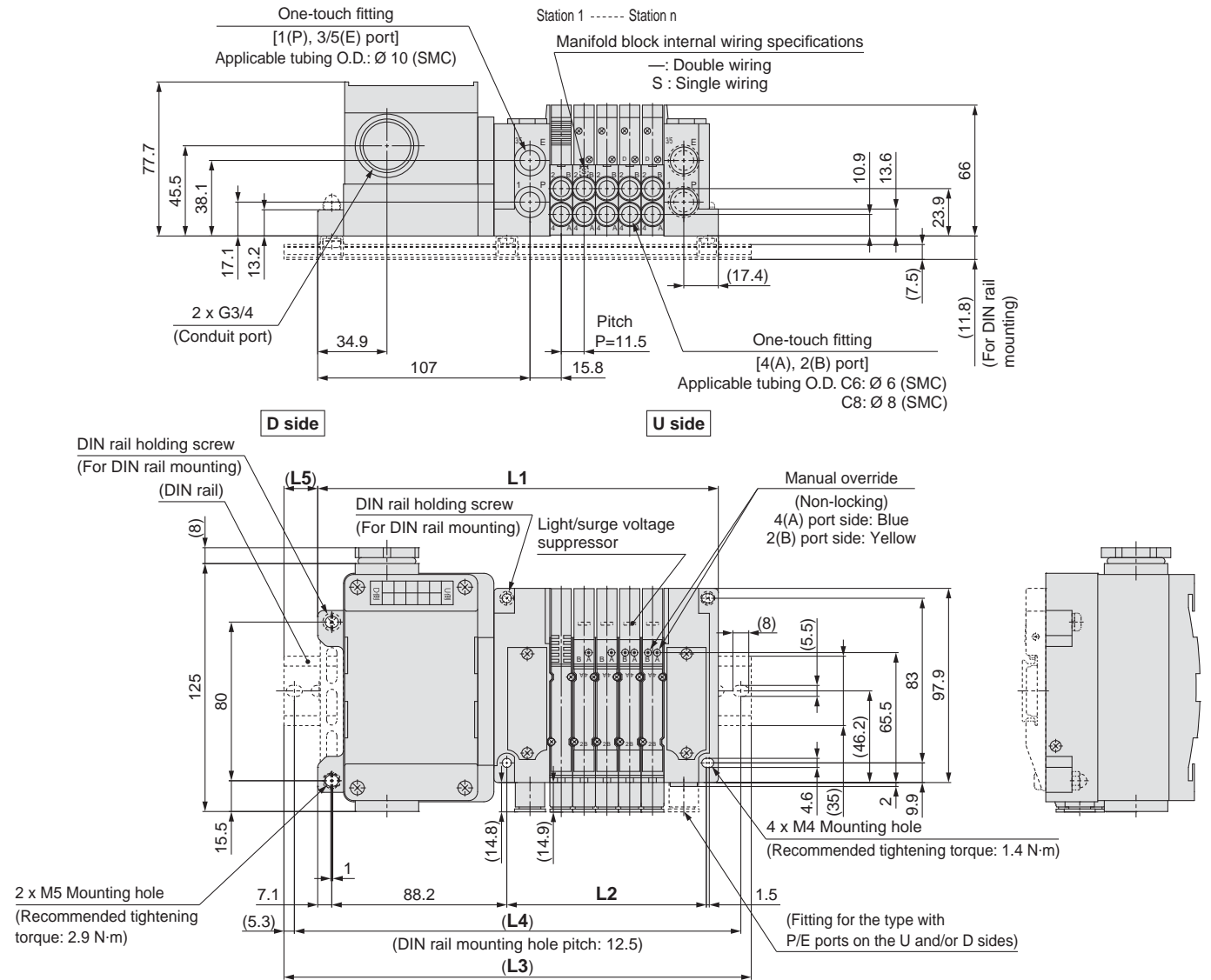
Type 10/Side Ported

Dimensions: JSY3000 Series

Terminal Block Box



JJ5SY3-10T - Stations $\frac{U}{D}$ - C6 (D)



* These figures show the "JJ5SY3-10T-05D-C8."

* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	167.4	178.9	190.4	201.9	213.4	224.9	236.4	247.9	259.4	270.9	282.4	293.9	305.4	316.9	328.4
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5
L4	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350
L5	16	16	17	17	18	12	12	13	13	14	14	15	15	16	16

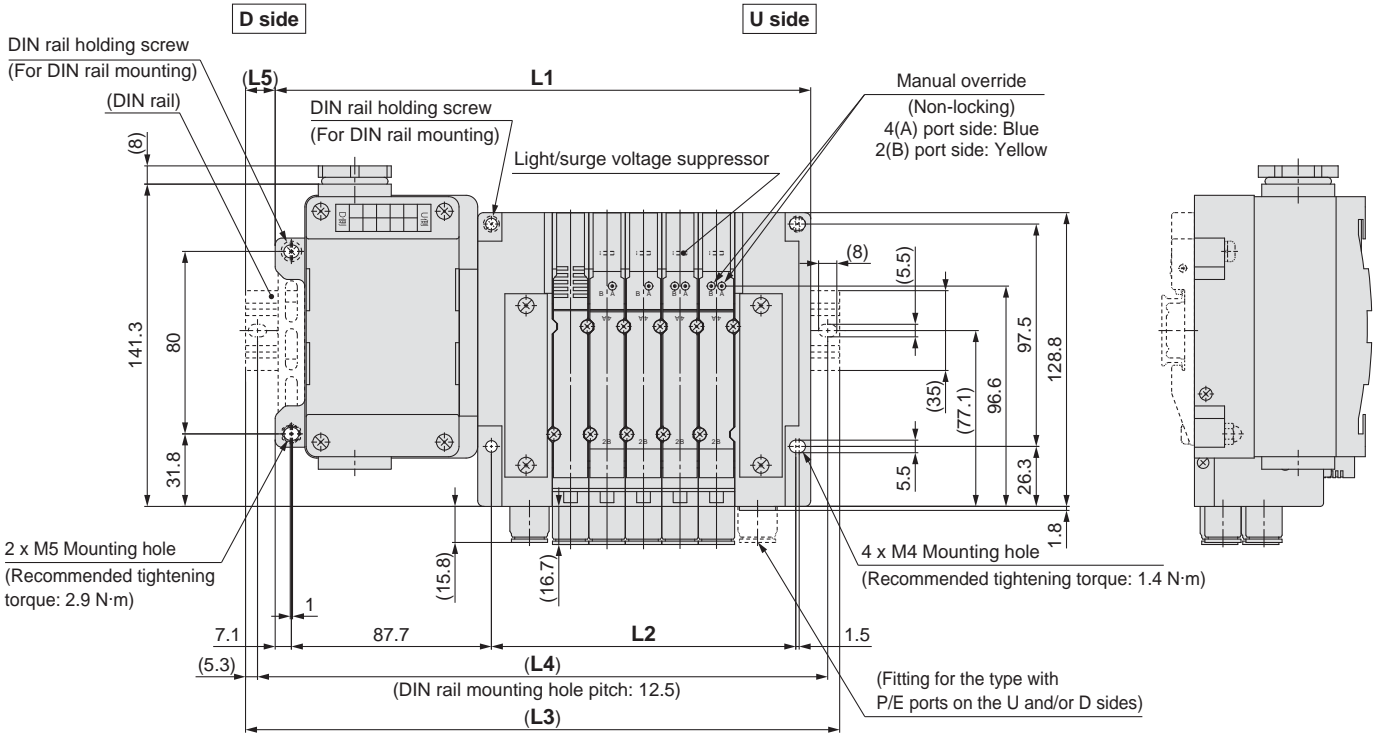
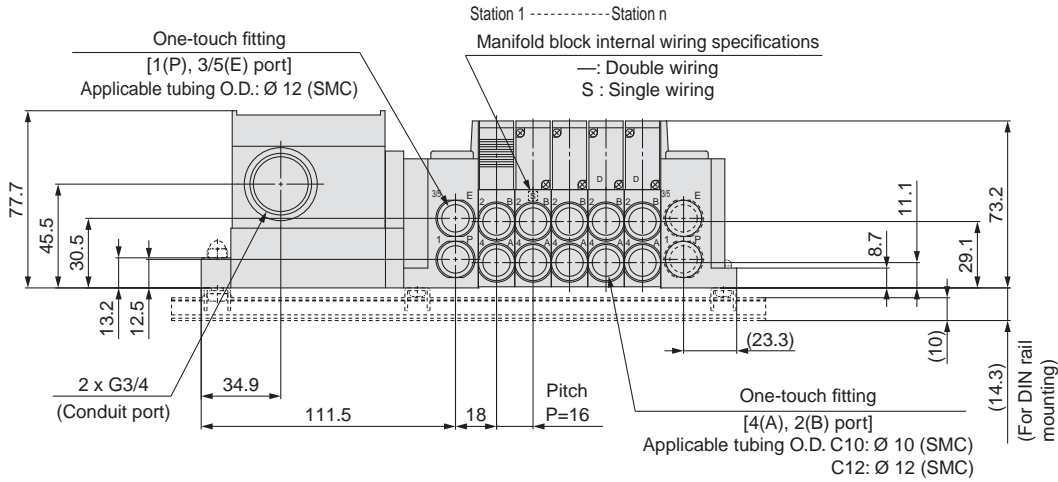
L \ n	17	18	19	20
L1	339.9	351.4	362.9	374.4
L2	238.6	250.1	261.6	273.1
L3	373	385.5	398	398
L4	362.5	375	387.5	387.5
L5	17	17	18	12

Type 10/Side Ported
Terminal Block Box



Dimensions: **JSY5000 Series**

JJ5SY5-10T - Stations $\frac{U}{D}$ - C10(D)



* These figures show the "JJ5SY5-10T-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	186.8	202.8	218.8	234.8	250.8	266.8	282.8	298.8	314.8	330.8	346.8	362.8	378.8	394.8	410.8
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	210.5	235.5	248	260.5	285.5	298	310.5	323	348	360.5	373	398	410.5	423	435.5
L4	200	225	237.5	250	275	287.5	300	312.5	337.5	350	362.5	387.5	400	412.5	425
L5	12	16.5	14.5	13	17.5	15.5	14	12	16.5	15	13	17.5	16	14	12.5

L \ n	17	18	19	20
L1	426.8	442.8	458.8	474.8
L2	325.5	341.5	357.5	373.5
L3	460.5	473	485.5	498
L4	450	462.5	475	487.5
L5	17	15	13.5	11.5

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

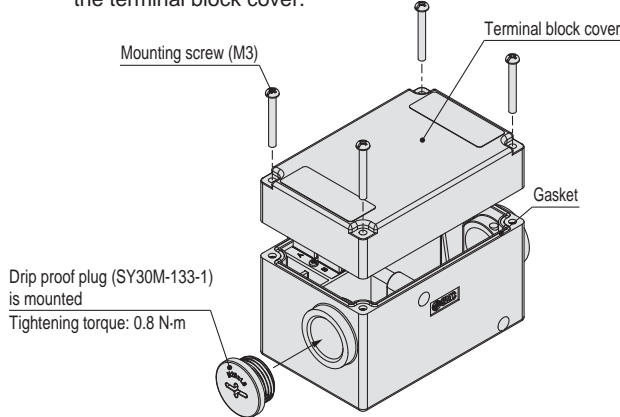
Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

Spring Type Terminal Block "TC" Connection

Step 1. Remove the terminal block cover.
Loosen the 4 mounting screws (M3) to remove the terminal block cover.

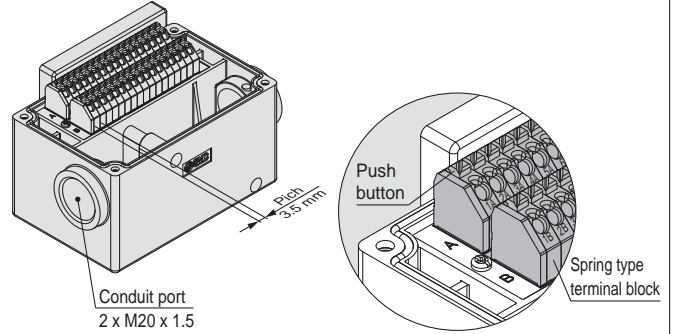


Step 3. Mount the terminal block cover.
Securely tighten the mounting screws (M3) to the torque shown below only after confirming that the gasket is installed correctly.

Proper tightening torque [N·m]
0.54 to 0.66

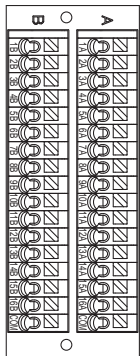
Step 2. The diagram below shows the terminal block wiring.
All stations are provided with double wiring regardless of the mounted valves.

Connect each wire to the power supply side, according to the markings provided inside the terminal block. Be sure to connect the wire with the push button pressed down.



• Applicable wire range: Conductor diameter \varnothing 0.5 to \varnothing 1.2 mm, Stranded wire AWG24 to 16

Electrical Wiring Specifications (IP67 compliant)



If alignment is not specified, the internal wiring will be double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve types, and option types.

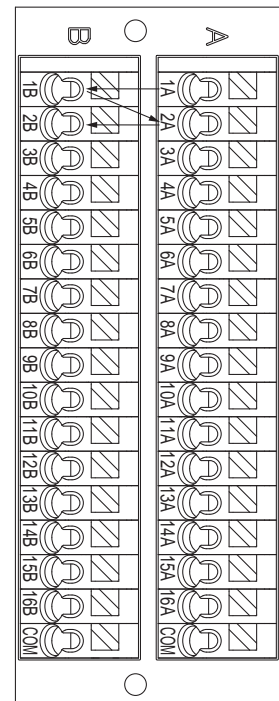
* When using a valve with no polarity, either positive common or negative common can be used.

	Terminal no.	Polarity	
Station 1	SOL. a 1A	(-)	(+)
	SOL. b 1B	(-)	(+)
Station 2	SOL. a 2A	(-)	(+)
	SOL. b 2B	(-)	(+)
Station 3	SOL. a 3A	(-)	(+)
	SOL. b 3B	(-)	(+)
Station 4	SOL. a 4A	(-)	(+)
	SOL. b 4B	(-)	(+)
Station 5	SOL. a 5A	(-)	(+)
	SOL. b 5B	(-)	(+)
Station 6	SOL. a 6A	(-)	(+)
	SOL. b 6B	(-)	(+)
Station 7	SOL. a 7A	(-)	(+)
	SOL. b 7B	(-)	(+)
Station 8	SOL. a 8A	(-)	(+)
	SOL. b 8B	(-)	(+)
Station 9	SOL. a 9A	(-)	(+)
	SOL. b 9B	(-)	(+)
Station 10	SOL. a 10A	(-)	(+)
	SOL. b 10B	(-)	(+)
Station 11	SOL. a 11A	(-)	(+)
	SOL. b 11B	(-)	(+)
Station 12	SOL. a 12A	(-)	(+)
	SOL. b 12B	(-)	(+)
Station 13	SOL. a 13A	(-)	(+)
	SOL. b 13B	(-)	(+)
Station 14	SOL. a 14A	(-)	(+)
	SOL. b 14B	(-)	(+)
Station 15	SOL. a 15A	(-)	(+)
	SOL. b 15B	(-)	(+)
Station 16	SOL. a 16A	(-)	(+)
	SOL. b 16B	(-)	(+)
	COM.	(+)	(-)
	COM.	(+)	(-)

Positive common Negative common

Specified Layout

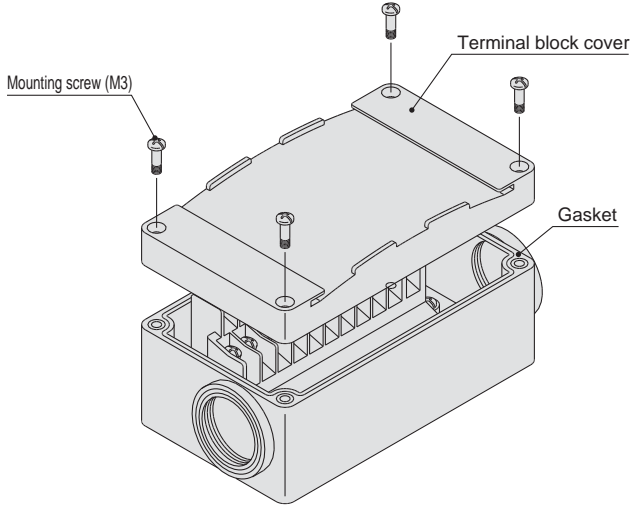
A mixture of single and double wiring can be specified on the manifold specification sheet. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 32 or less. 1 solenoid is required for the 2-position single, and 2 solenoids for the 2-position double, 3-position, and 4-position.



Terminal Block "T" Connection

Step 1. Remove the terminal block cover.

Loosen the 4 mounting screws (M4) to remove the terminal block cover.



Step 3. Mount the terminal block cover.

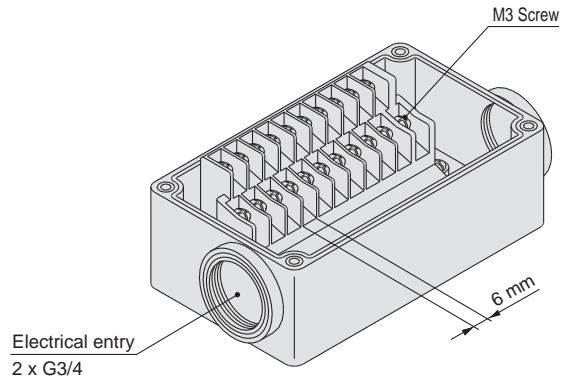
Securely tighten the screws to the torque shown below only after confirming that the gasket is installed correctly.

Proper tightening torque [N·m]
0.7 to 1.2

Step 2. The diagram below shows the terminal block wiring.

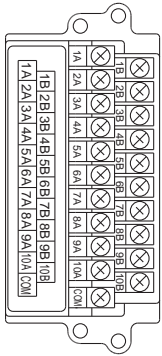
All stations are provided with double wiring regardless of the mounted valves.

Connect each wire to the power supply side, according to the markings provided inside the terminal block.



- Applicable crimped terminal: 1.25-3S, 1.25Y-3, 1.25Y-3N, 1.25Y-3.5
- Name plate: VVQ5000-N-T
- Drip proof plug assembly (for G3/4): AXT100-B06A

Electrical Wiring Specifications (IP67 compliant)



If alignment is not specified, the internal wiring is double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve and option types.

* When using a valve with no polarity, either positive common or negative common can be used.

	Terminal no.	Polarity
Station 1	SOL. a	1A (-) (+)
	SOL. b	1B (-) (+)
Station 2	SOL. a	2A (-) (+)
	SOL. b	2B (-) (+)
Station 3	SOL. a	3A (-) (+)
	SOL. b	3B (-) (+)
Station 4	SOL. a	4A (-) (+)
	SOL. b	4B (-) (+)
Station 5	SOL. a	5A (-) (+)
	SOL. b	5B (-) (+)
Station 6	SOL. a	6A (-) (+)
	SOL. b	6B (-) (+)
Station 7	SOL. a	7A (-) (+)
	SOL. b	7B (-) (+)
Station 8	SOL. a	8A (-) (+)
	SOL. b	8B (-) (+)
Station 9	SOL. a	9A (-) (+)
	SOL. b	9B (-) (+)
Station 10	SOL. a	10A (-) (+)
	SOL. b	10B (-) (+)
	COM.	(+) (-)

Positive common Negative common

Specified Layout

Mixed wiring of single and double wiring can be specified on the manifold specification sheet. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 20 or less. 1 solenoid is required for 2-position single, and 2 solenoids for 2-position double, 3-position and 4-position.

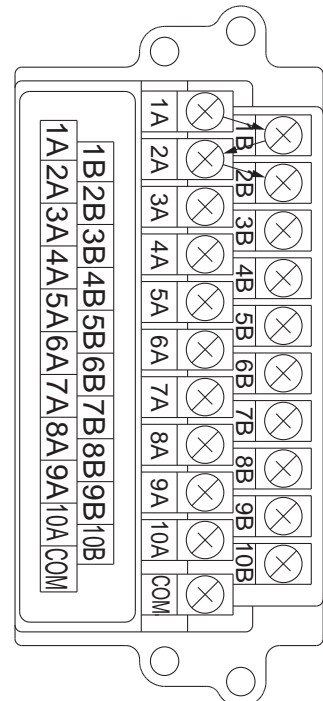


Chart
Valve
Connector Plug-in Connecting Base
D.sub Flat Ribbon
Terminal Block
Lead wire
EX600
EX250
EX260
EX120
Common Dimensions
Manifold Exploded View
Fittings, Replacement Parts, Tools
Manifold Options
Made to Order
Specific Product Precautions

Plug-in Connector Connecting Base

Lead Wire

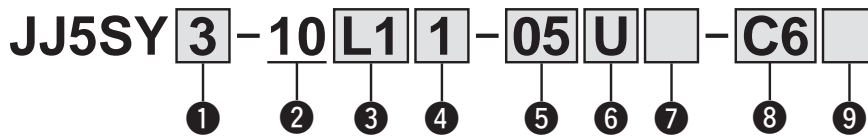
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

4 Lead wire length

1	0.6 m
2	1.5 m
3	3 m

6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

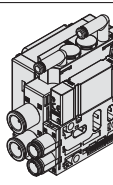
7 SUP/EXH block assembly

—	Internal pilot
S	Internal pilot, Built-in silencer

- * 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000	
C2 C4 C6 C8 C10 C12	Straight	∅ 2	●	—	—
		∅ 4	●	—	—
		∅ 6	●	●	—
		∅ 8	—	●	—
		∅ 10	—	—	●
		∅ 12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●	
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12	



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

5 Valve stations

L1□: 34 cores

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	Specified layout*2 (Up to 32 solenoids available)
02	2 stations	
⋮	⋮	
24	24 stations	

L2□: 17 cores

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	Specified layout*2 (Up to 16 solenoids available)
02	2 stations	
⋮	⋮	
16	16 stations	

L3□: 9 cores

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
4	4 stations	Specified layout*2 (Up to 8 solenoids available)
02	2 stations	
⋮	⋮	
08	8 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- *3 This also includes the number of blanking plates.

9 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

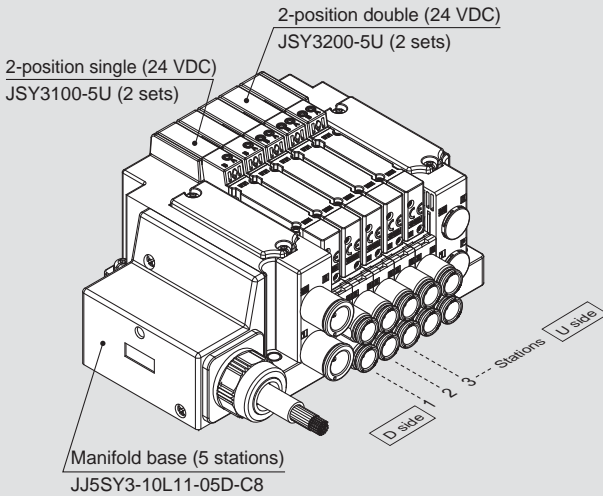
- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

—	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
24	For 24 stations	

How to Order Manifold Assembly

Example (JJ5SY3-10L11-□)



JJ5SY3-10L11-05D-C8 1 set (Type 10 5-station manifold base part no.)

* **JSY3100-5U** 2 sets (2-position single part no.)

* **JSY3200-5U** 3 sets (2-position double 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.

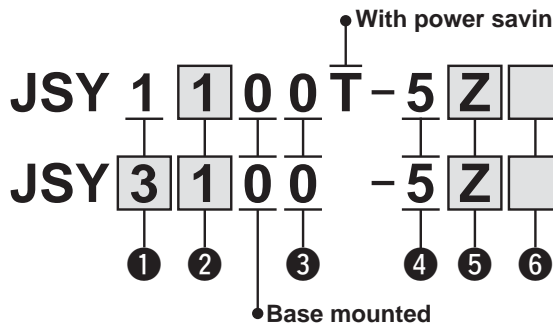
Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JSY3000/5000 Series



Made to Order
(Refer to page 114 for details.)

Specification

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

External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

2 Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

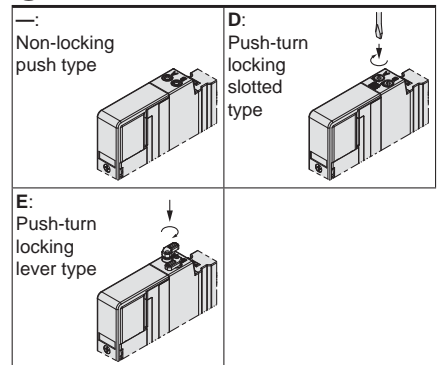
5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

* Only "Z" and "NZ" types are available for the JSY1000 series.

* When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

6 Manual override



* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

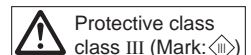
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.

Refer to page 107 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50 %, please select the product with power saving circuit.

For the JSY1000 series only the power saving circuit is available.



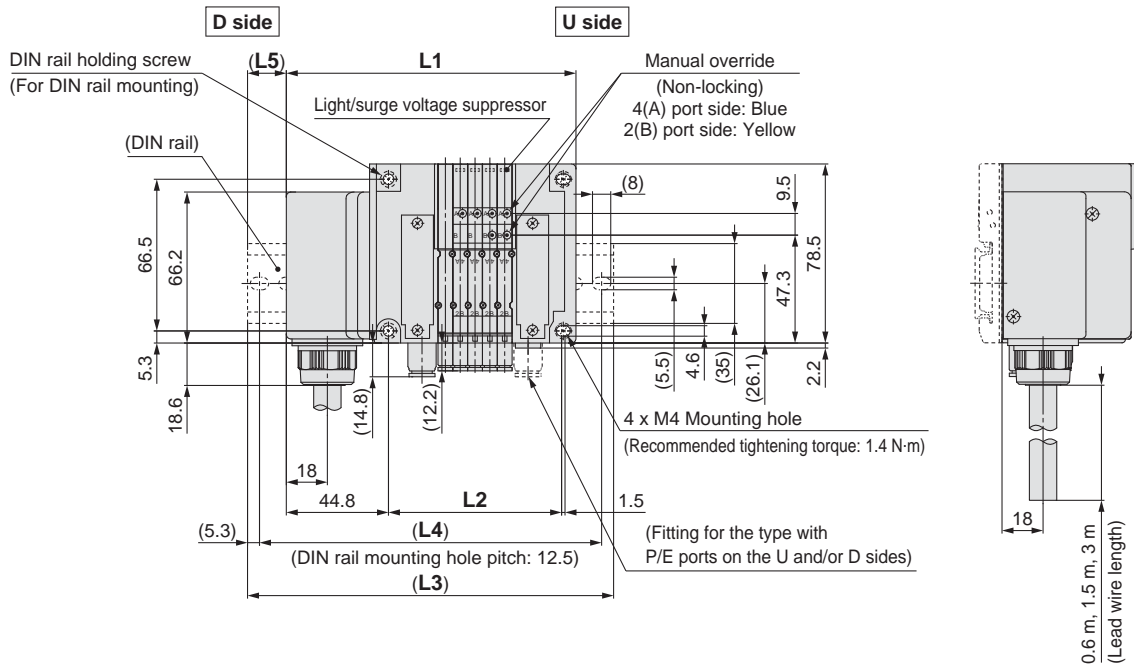
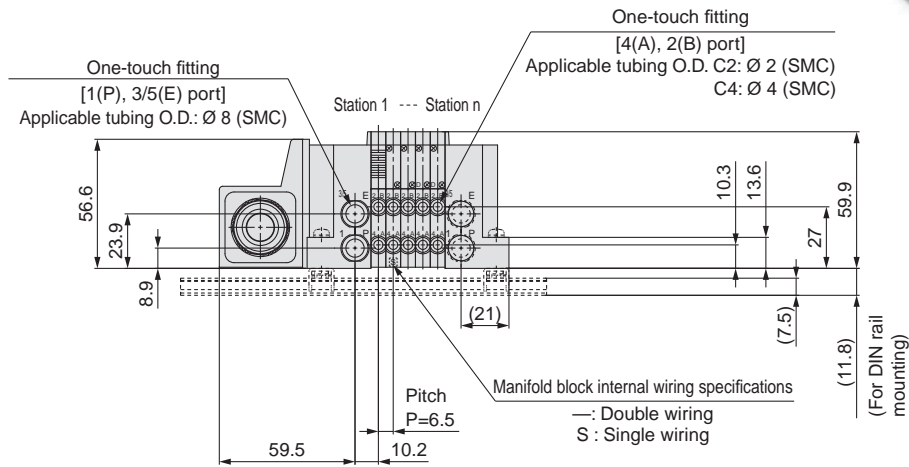
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Dimensions: **JSY1000 Series**

Lead Wire

JJ5SY1-10L $\frac{1}{2}$ □ - Stations $\frac{U}{D}$ - C₂(D)



- * These figures show the "JJ5SY1-10L1□-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

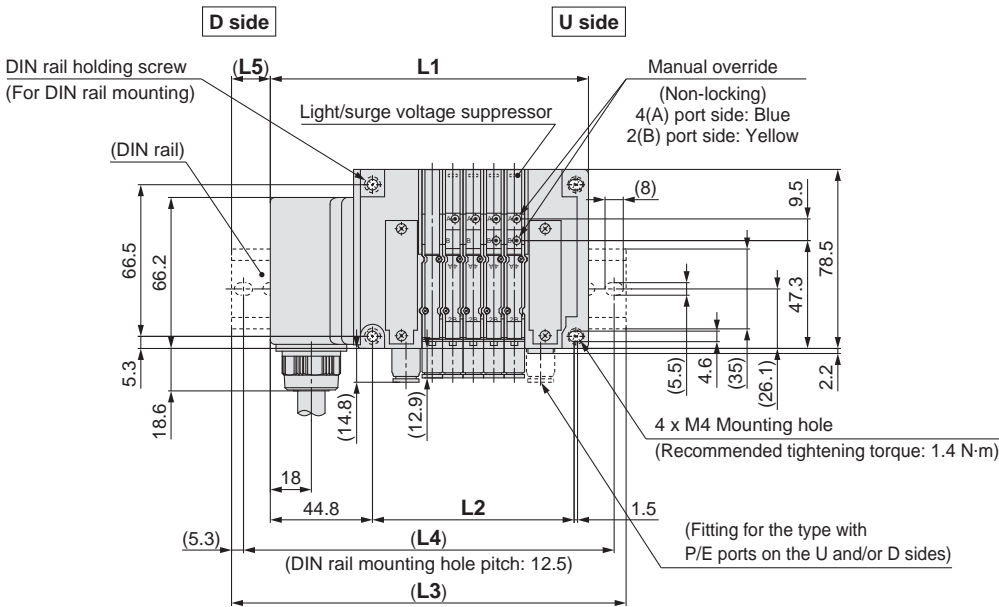
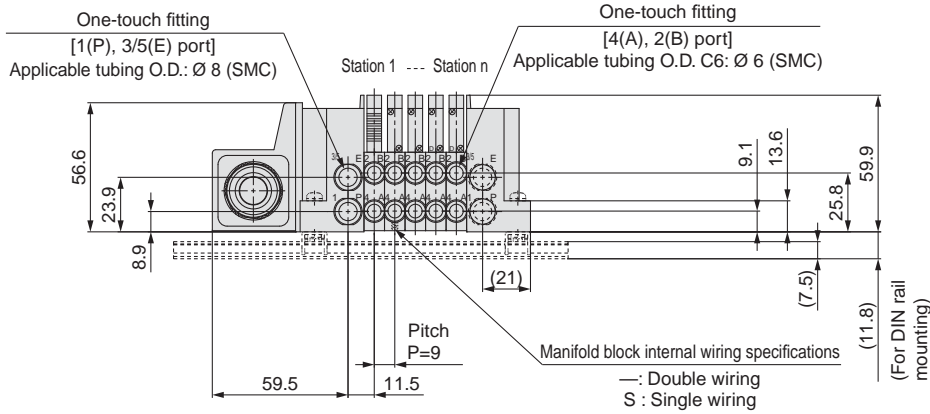
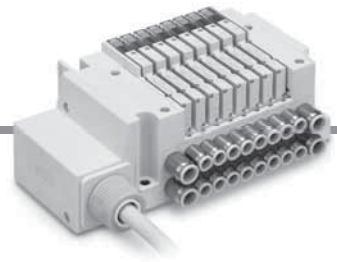
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	107.5	114	120.5	127	133.5	140	146.5	153	159.5	166	172.5	179	185.5	192	198.5
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	135.5	148	148	160.5	160.5	173	173	185.5	185.5	198	198	210.5	210.5	223	223
L4	125	137.5	137.5	150	150	162.5	162.5	175	175	187.5	187.5	200	200	212.5	212.5
L5	14	17	14	17	13.5	16.5	13.5	16.5	13	16	13	16	12.5	15.5	12.5

L \ n	17	18	19	20	21	22	23	24
L1	205	211.5	218	224.5	231	237.5	244	250.5
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	235.5	235.5	248	248	260.5	273	273	285.5
L4	225	225	237.5	237.5	250	262.5	262.5	275
L5	15.5	12	15	12	15	18	14.5	17.5

Type 10/Side Ported (Applicable to Ø 6 fittings)
Lead Wire

Dimensions: **JSY1000 Series**

JJ5SY1-10L $\frac{1}{2}$ □ - Stations $\frac{U}{D}$ - C6(D)



* These figures show the "JJ5SY1-10L1□-05D-C6."
 * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
 * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	112.5	121.5	130.5	139.5	148.5	157.5	166.5	175.5	184.5	193.5	202.5	211.5	220.5	229.5	238.5
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	148	148	160.5	173	173	185.5	198	210.5	210.5	223	235.5	235.5	248	260.5	273
L4	137.5	137.5	150	162.5	162.5	175	187.5	200	200	212.5	225	225	237.5	250	262.5
L5	18	13.5	15	17	12.5	14	16	17.5	13	15	16.5	12	14	15.5	17.5

L \ n	17	18	19	20	21	22	23	24
L1	247.5	256.5	265.5	274.5	283.5	292.5	301.5	310.5
L2	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	273	285.5	298	298	310.5	323	335.5	335.5
L4	262.5	275	287.5	287.5	300	312.5	325	325
L5	13	14.5	16.5	12	13.5	15.5	17	12.5

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

Type 10/Side Ported

Lead Wire

Dimensions: JSY3000 Series

JJ5SY3-10L $\frac{1}{2}$ □ - Stations $\frac{U}{D}$ - C $\frac{6}{8}$ (D)



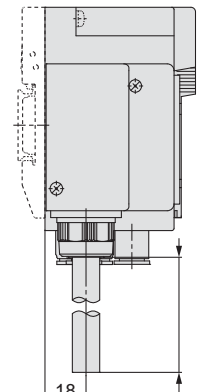
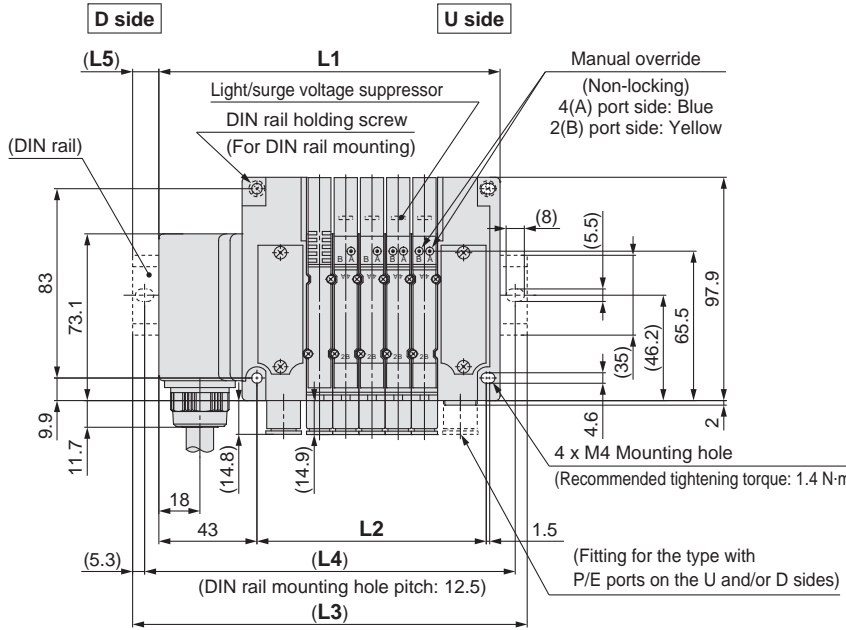
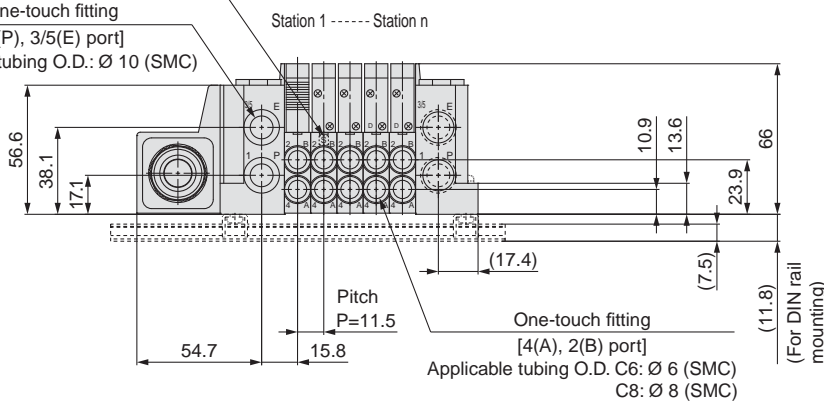
Manifold block internal wiring specifications

—: Double wiring
S: Single wiring

One-touch fitting

[1(P), 3/5(E) port]

Applicable tubing O.D.: Ø 10 (SMC)



* These figures show the "JJ5SY3-10L1□-05D-C8."

* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	115.1	126.6	138.1	149.6	161.1	172.6	184.1	195.6	207.1	218.6	230.1	241.6	253.1	264.6	276.1
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	148	160.5	173	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5
L4	137.5	150	162.5	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300
L5	16.5	17	17.5	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17

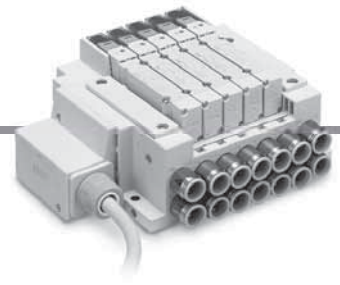
L \ n	17	18	19	20	21	22	23	24
L1	287.6	299.1	310.6	322.1	333.6	345.1	356.6	368.1
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	323	323	335.5	348	360.5	373	385.5	398
L4	312.5	312.5	325	337.5	350	362.5	375	387.5
L5	17.5	12	12.5	13	13.5	14	14.5	15

Type 10/Side Ported

Lead Wire

Dimensions: **JSY5000 Series**

JJ5SY5-10L $\frac{1}{2}$ □ - Stations $\frac{U}{D}$ - C $\frac{10}{12}$ (D)

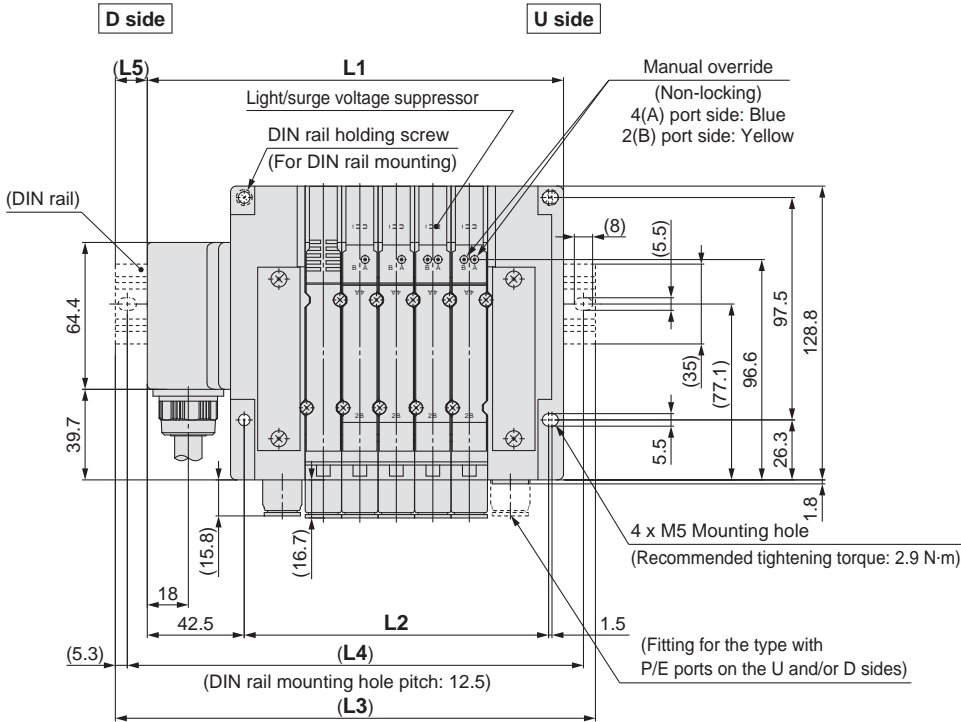
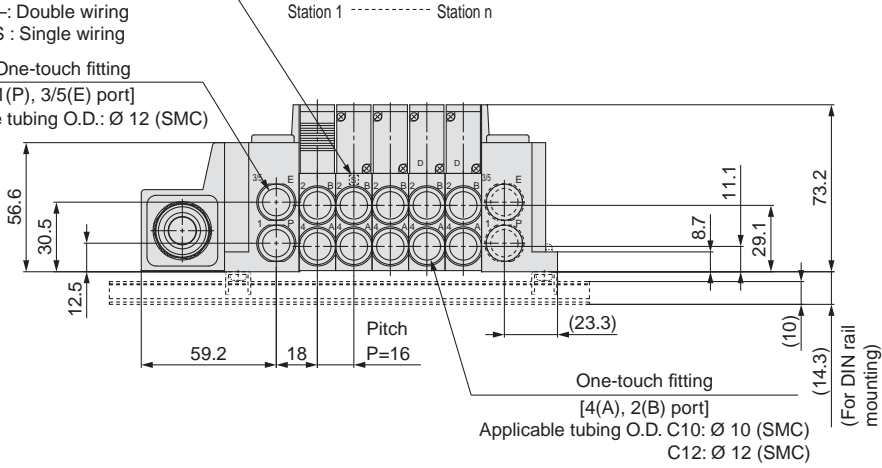


Manifold block internal wiring specifications

—: Double wiring
S: Single wiring

One-touch fitting
[1(P), 3/5(E) port]

Applicable tubing O.D.: Ø 12 (SMC)



* These figures show the "JJ5SY5-10L1□-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	134.5	150.5	166.5	182.5	198.5	214.5	230.5	246.5	262.5	278.5	294.5	310.5	326.5	342.5	358.5
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	173	185.5	198	210.5	235.5	248	260.5	285.5	298	310.5	323	348	360.5	373	398
L4	162.5	175	187.5	200	225	237.5	250	275	287.5	300	312.5	337.5	350	362.5	387.5
L5	19.5	17.5	16	14	18.5	17	15	19.5	18	16	14.5	19	17	15.5	20

L \ n	17	18	19	20	21	22	23	24
L1	374.5	390.5	406.5	422.5	438.5	454.5	470.5	486.5
L2	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	410.5	423	435.5	460.5	473	485.5	510.5	523
L4	400	412.5	425	450	462.5	475	500	512.5
L5	18	16.5	14.5	19	17.5	15.5	20	18.5

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

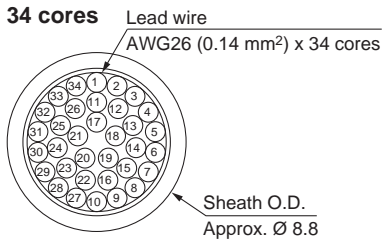
Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

Electrical Wiring Specifications

Lead wire



Electrical characteristics

Item	Property
Conductor resistance Ω/km, 20 °C	143 or less
Voltage limit V, 1 minute, AC	2000
Insulation resistance MΩ/km, 20 °C	10 or more

* Cannot be used for movable wiring.
The minimum bending radius of the cable is 55 mm.

Station	Lead wire no.	Polarity	Lead wire colour	Printed mark (Both sides)	
				Type	Colour
Station 1	SOL. a 1	(-)	Orange	-	Red
	SOL. b 2	(+)		-	Black
Station 2	SOL. a 3	(-)	Light grey	-	Red
	SOL. b 4	(+)		-	Black
Station 3	SOL. a 5	(-)	White	-	Red
	SOL. b 6	(+)		-	Black
Station 4	SOL. a 7	(-)	Yellow	-	Red
	SOL. b 8	(+)		-	Black
Station 5	SOL. a 9	(-)	Pink	-	Red
	SOL. b 10	(+)		-	Black
Station 6	SOL. a 11	(-)	Orange	--	Red
	SOL. b 12	(+)		--	Black
Station 7	SOL. a 13	(-)	Light grey	--	Red
	SOL. b 14	(+)		--	Black
Station 8	SOL. a 15	(-)	White	--	Red
	SOL. b 16	(+)		--	Black
Station 9	SOL. a 17	(-)	Yellow	--	Red
	SOL. b 18	(+)		--	Black
Station 10	SOL. a 19	(-)	Pink	--	Red
	SOL. b 20	(+)		--	Black
Station 11	SOL. a 21	(-)	Orange	---	Red
	SOL. b 22	(+)		---	Black
Station 12	SOL. a 23	(-)	Light grey	---	Red
	SOL. b 24	(+)		---	Black
Station 13	SOL. a 25	(-)	White	---	Red
	SOL. b 26	(+)		---	Black
Station 14	SOL. a 27	(-)	Yellow	---	Red
	SOL. b 28	(+)		---	Black
Station 15	SOL. a 29	(-)	Pink	---	Red
	SOL. b 30	(+)		---	Black
Station 16	SOL. a 31	(-)	Orange	----	Red
	SOL. b 32	(+)		----	Black
	COM. 33	(+)	Light grey	----	Red
	COM. 34	(-)		----	Black

Positive common Negative common

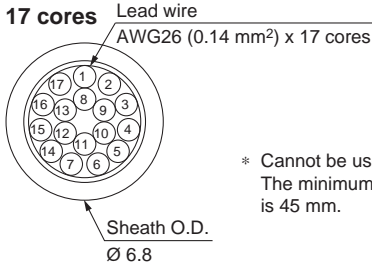
* For negative common specification, a valve for negative common or a valve without polarity should be used.

Specified Layout

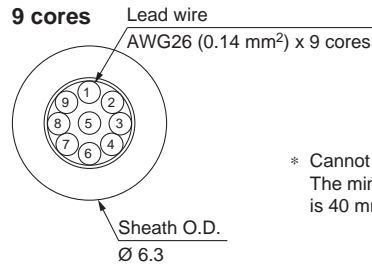
Mixed wiring of single and double wiring can be specified on the manifold specification. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 32 or less. 1 solenoid is required for 2-position single, and 2 solenoids for 2-position double, 3-position and 4-position.

Electrical Wiring Specifications

Lead wire



* Cannot be used for movable wiring.
The minimum bending radius of the cable is 45 mm.



* Cannot be used for movable wiring.
The minimum bending radius of the cable is 40 mm.

Electrical characteristics

Item	Property
Conductor resistance Ω/km, 20 °C	143 or less
Voltage limit V, 1 minute, AC	2000
Insulation resistance MΩ/km, 20 °C	10 or more

Station	Lead wire no.	Polarity	Lead wire colour	Printed mark (Both sides)	
				Type	Colour
Station 1	SOL.a 1	(-) (+)	Orange	-	Red
	SOL.b 2	(-) (+)			Black
Station 2	SOL.a 3	(-) (+)	Light grey	-	Red
	SOL.b 4	(-) (+)			Black
Station 3	SOL.a 5	(-) (+)	White	-	Red
	SOL.b 6	(-) (+)			Black
Station 4	SOL.a 7	(-) (+)	Yellow	-	Red
	SOL.b 8	(-) (+)			Black
Station 5	SOL.a 9	(-) (+)	Pink	-	Red
	SOL.b 10	(-) (+)			Black
Station 6	SOL.a 11	(-) (+)	Orange	--	Red
	SOL.b 12	(-) (+)			Black
Station 7	SOL.a 13	(-) (+)	Light grey	--	Red
	SOL.b 14	(-) (+)			Black
Station 8	SOL.a 15	(-) (+)	White	--	Red
	SOL.b 16	(-) (+)			Black
	COM. 17	(+) (-)	Yellow	--	Red

Positive common
Negative common

Station	Lead wire no.	Polarity	Lead wire colour	Printed mark (Both sides)	
				Type	Colour
Station 1	SOL.a 1	(-) (+)			
	SOL.b 2	(-) (+)			
Station 2	SOL.a 3	(-) (+)			
	SOL.b 4	(-) (+)			
Station 3	SOL.a 5	(-) (+)			
	SOL.b 6	(-) (+)			
Station 4	SOL.a 7	(-) (+)			
	SOL.b 8	(-) (+)			
	COM. 9	(+) (-)			

Positive common
Negative common

* For negative common specification, a valve for negative common or a valve without polarity should be used.

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

Plug-in Connector Connecting Base

EX600

Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds

JJ5SY **3** - 10 S6 **Q** **2** **2** - 05 **U** - **C6**

1 2 3 4 5 6 7 8 9



Made to Order
(Refer to page 114 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 SI unit

0	Without SI unit
Q	DeviceNet™ (Version A)
N	PROFIBUS DP (Version A)
V	CC-Link
ZE	EtherNet/IP™ (1 port)
EA	EtherNet/IP™ (2 ports)
D	EtherCAT
F	PROFINET
WE	EtherNet/IP™ compatible wireless base*1
WF	PROFINET compatible wireless base*1
WS	Wireless remote*1

- *1 The wireless system is suitable for use only in a country where it is in accordance with the Radio Act and regulations of that country.
- * I/O unit cannot be mounted without SI unit.
- * Valve plate which connects manifold and SI unit is included, but it is not mounted to a valve without SI unit. Refer to the EX600 (page 101) for mounting.

4 SI unit output polarity, End plate type (Part no.)

SI unit output polarity	M12 power supply connector B-coded (EX600-ED2)		7/8 inch power supply connector (EX600-ED3)		M12 power supply connector IN/OUT, A-coded	
					Pin arrangement 1 (EX600-ED4)	Pin arrangement 2 (EX600-ED5)
Without SI unit	—					
SI unit positive common	2	3	6	8		
SI unit negative common	4	5	7	9		

- * Ensure a match with the common specification of the valve to be used.
- * Without SI unit, the symbol is —.

5 I/O unit stations

—	None
1	1 station
⋮	⋮
9	9 stations

- * Without SI unit, the symbol is —.
- * SI unit is not included in I/O unit stations.
- * When I/O unit is selected, it is shipped separately, and assembled by users. Refer to the attached operation manual for mounting.

6 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	Specified layout*2 (Up to 32 solenoids available)
02	2 stations	
⋮	⋮	
24	24 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.

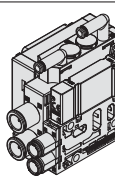
7 P, E port entry, SUP/EXH block assembly

P, E port entry	Internal pilot	Internal pilot, Built-in silencer
U side (2 to 10 stations)	U	C
D side (2 to 10 stations)	D	E
Both sides (2 to 24 stations)	B	F

- * 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	Straight	●	—	—
C4		●	—	—
C6		●	●	—
C8		—	●	—
C10		—	—	●
C12		—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		Ø 8	Ø 10	Ø 12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

—	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
⋮	⋮
24	For 24 stations

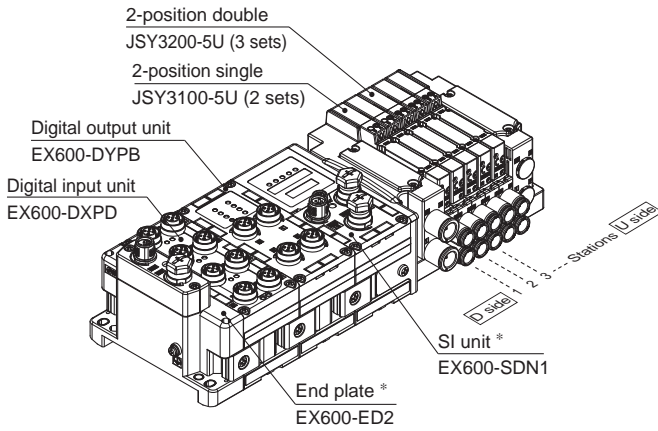
Specify a longer rail than the standard length.

- * If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 110 for the DIN rail part number.)

For details about the EX600 Integrated Type (For Input/Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For details about part numbers of SI units to be mounted, refer to pages 101 and 102. (IP40 specifications may be required according to the I/O unit to be selected.) Please download the Operation Manual via SMC website, <https://www.smc.eu>

How to Order Manifold Assembly

Example (JJ5SY3-10S6□-□)



JJ5SY3-10S6Q42-05B-C8 --1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 * EX600-DXPD 1 set I/O unit part number (Station 1)
 * EX600-DYPB 1 set I/O unit part number (Station 2)
 → 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, then the I/O units in order from the 1st station as shown in the figure.
 If the arrangement becomes complicated, specify on a manifold specification sheet.

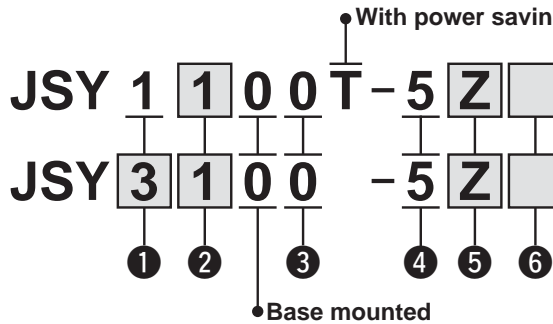
*1 Do not enter the SI unit part number and the end plate part number together.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series
JSY3000/5000 Series



Made to Order
 (Refer to page 114 for details.)
 Specification
 With power saving circuit
 (Continuous duty type):
 0.1 W (JSY3000/5000)
 External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

2 Type of actuation

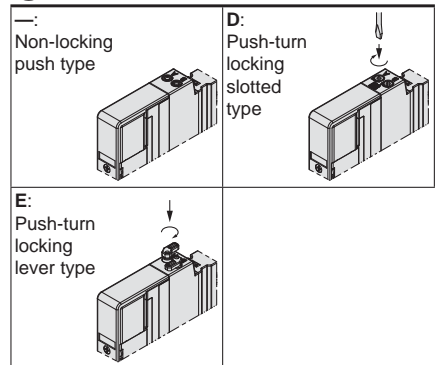
1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

- * Select a valve from U or Z when the SI unit polarity is positive common. Select a valve from U or NZ when the SI unit output polarity is negative common.
- * Only "Z" and "NZ" types are available for the JSY1000 series.
- * When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

6 Manual override



* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.

Refer to page 107 for base gasket and mounting screw part numbers.

Caution

If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50 %, please select the product with power saving circuit. For the JSY1000 series only the power saving circuit is available.

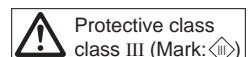


Chart
 Valve
 Connector
 Plug-in
 Connecting Base
 D.sub
 Flat Ribbon
 Terminal
 Block
 Lead wire
 EX600
 EX250
 EX260
 EX120
 Common
 Dimensions
 Manifold
 Exploded View
 Fittings, Replacement
 Parts, Tools
 Manifold
 Options
 Made to
 Order
 Specific Product
 Precautions

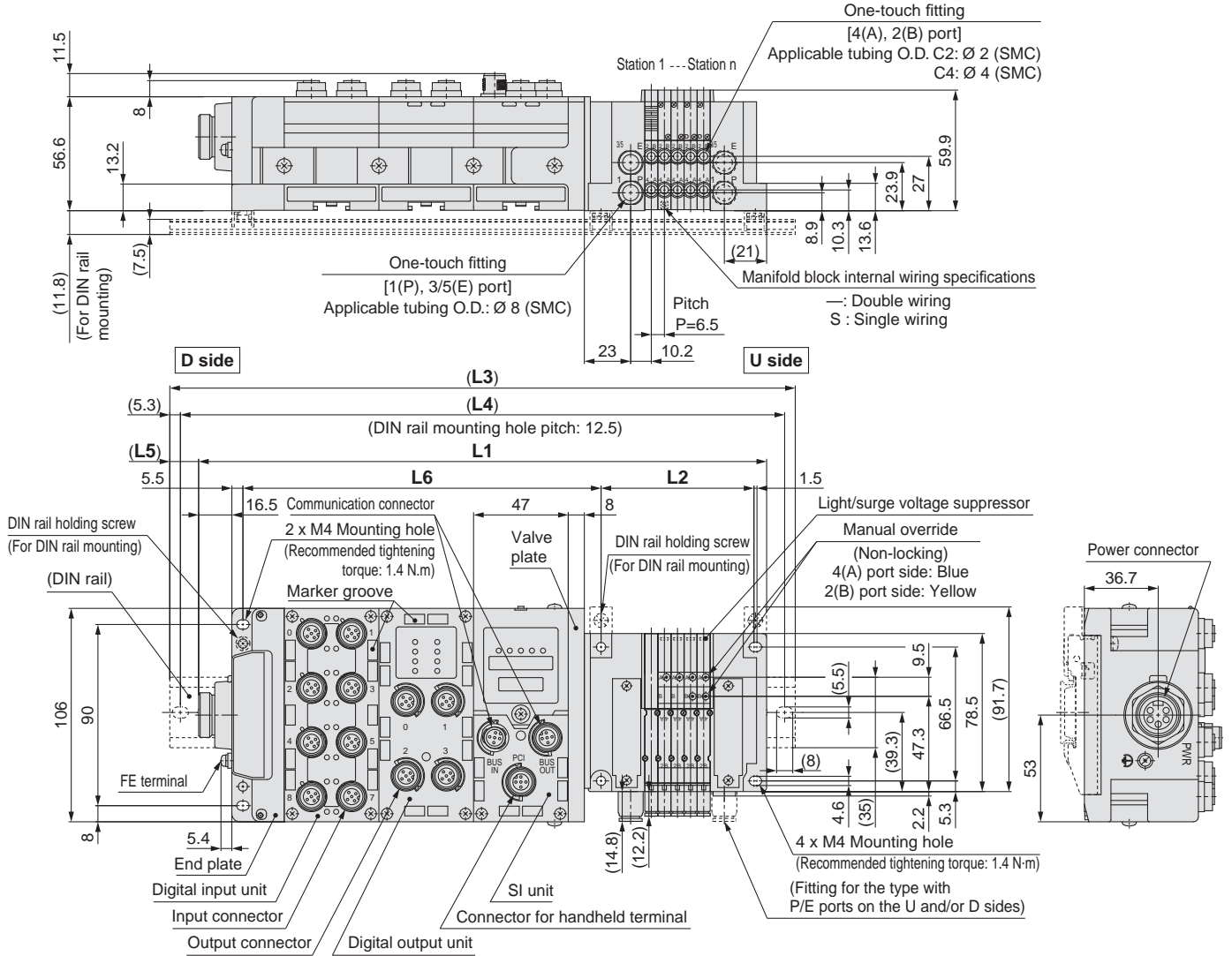
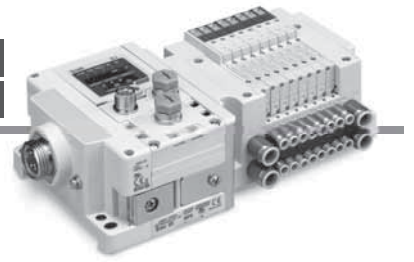
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Dimensions: **JSY1000 Series**

EX600 (7/8 Inch Connector)

JJ5SY1-10S6□₃□ - Stations_U_D - C₂(D)



$$L1 = 6.5 \times n1 + 155.5 + 47 \times n2$$

$$L2 = 6.5 \times n1 + 43.4$$

$$L4 = L3 - 10.5$$

$$L5 = (L3 - L1) / 2$$

$$L6 = 47 \times n2 + 83.8$$

n1: Valve stations
n2: I/O unit stations

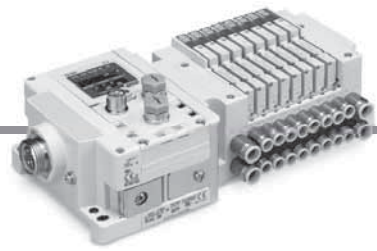
- * These figures show the "JJ5SY1-10S6Q32-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	323	335.5	335.5
1	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	335.5	335.5	348	348	360.5	360.5	373	373	385.5	385.5
2	298	298	310.5	310.5	323	323	335.5	335.5	348	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	410.5	423	423	435.5
3	335.5	348	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	423	423	435.5	435.5	448	448	460.5	460.5	473	473	485.5
4	385.5	398	398	410.5	410.5	423	423	435.5	435.5	448	448	460.5	460.5	473	473	485.5	485.5	498	498	510.5	510.5	523	523
5	435.5	435.5	448	448	460.5	460.5	473	473	485.5	485.5	498	510.5	510.5	523	523	535.5	535.5	548	548	560.5	560.5	573	573
6	485.5	485.5	498	498	510.5	510.5	523	523	535.5	535.5	548	548	560.5	560.5	573	573	585.5	585.5	598	598	610.5	610.5	623
7	523	535.5	535.5	548	548	560.5	560.5	573	573	585.5	598	598	610.5	610.5	623	623	635.5	635.5	648	648	660.5	660.5	673
8	573	585.5	585.5	598	598	610.5	610.5	623	623	635.5	635.5	648	648	660.5	660.5	673	673	685.5	685.5	698	698	710.5	723
9	623	623	635.5	635.5	648	648	660.5	660.5	673	685.5	685.5	698	698	710.5	710.5	723	723	735.5	735.5	748	748	760.5	760.5

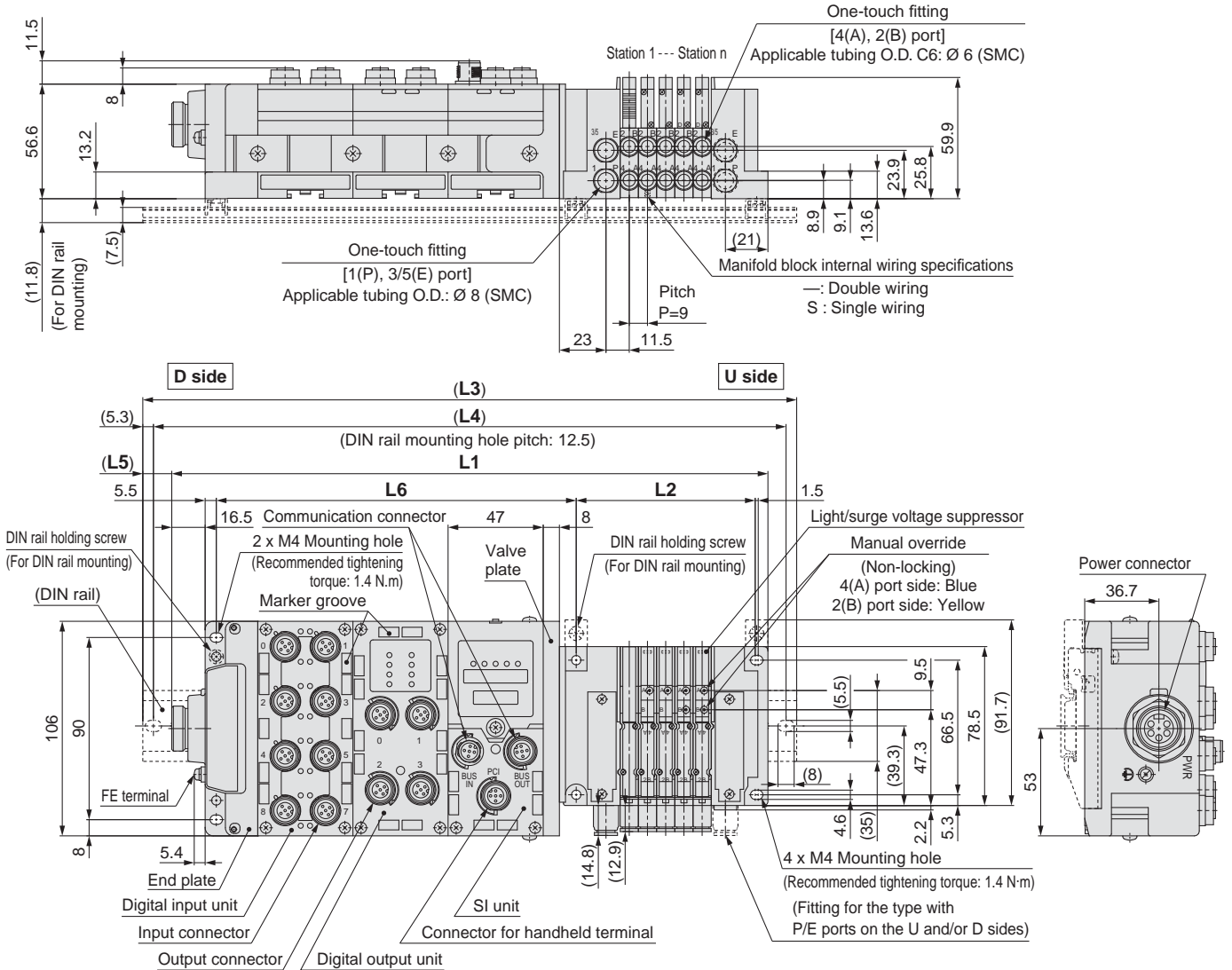
Type 10/Side Ported (Applicable to Ø 6 fittings)

EX600 (7/8 Inch Connector)



Dimensions: **JSY1000 Series**

JJ5SY1-10S6□₃□ - Stations $\frac{U}{D}$ - C6(D)



$L1 = 9 \times n1 + 155.5 + 47 \times n2$
 $L2 = 9 \times n1 + 43.4$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 47 \times n2 + 83.8$

n1: Valve stations
n2: I/O unit stations

* These figures show the "JJ5SY1-10S6Q32-05D-C6."
* Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
* When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	198	210.5	223	235.5	235.5	248	260.5	260.5	273	285.5	298	298	310.5	323	323	335.5	348	360.5	360.5	373	385.5	398	398
1	248	260.5	273	273	285.5	298	298	310.5	323	335.5	335.5	348	360.5	373	373	385.5	398	398	410.5	423	435.5	435.5	448
2	298	310.5	310.5	323	335.5	348	348	360.5	373	373	385.5	398	410.5	410.5	423	435.5	435.5	448	460.5	473	473	485.5	498
3	348	348	360.5	373	385.5	385.5	398	410.5	410.5	423	435.5	448	448	460.5	473	473	485.5	498	510.5	510.5	523	535.5	548
4	385.5	398	410.5	423	423	435.5	448	448	460.5	473	485.5	485.5	498	510.5	523	523	535.5	548	548	560.5	573	585.5	585.5
5	435.5	448	460.5	460.5	473	485.5	498	498	510.5	523	523	535.5	548	560.5	560.5	573	585.5	598	610.5	623	623	635.5	648
6	485.5	498	498	510.5	523	535.5	535.5	548	560.5	560.5	573	585.5	598	598	610.5	623	623	635.5	648	660.5	660.5	673	685.5
7	535.5	535.5	548	560.5	573	573	585.5	598	598	610.5	623	635.5	635.5	648	660.5	673	673	685.5	698	698	710.5	723	735.5
8	573	585.5	598	610.5	610.5	623	635.5	648	648	660.5	673	673	685.5	698	710.5	710.5	723	735.5	735.5	748	760.5	773	773
9	623	635.5	648	648	660.5	673	685.5	685.5	698	710.5	710.5	723	735.5	748	748	760.5	773	773	785.5	798	810.5	810.5	823

Chart

Valve

Connector Connecting Base

Plug-in

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

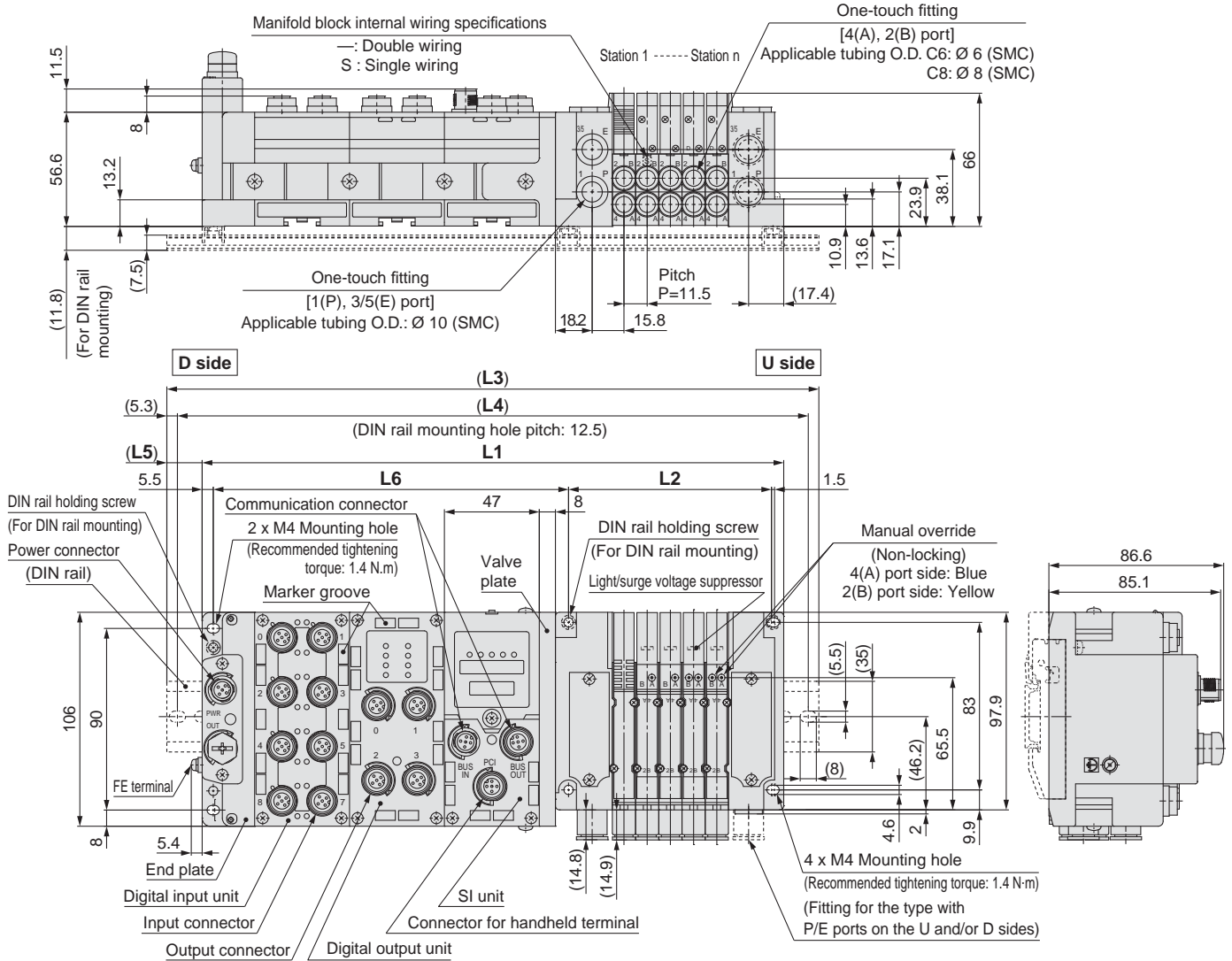
Type 10/Side Ported

Dimensions: JSY3000 Series

EX600 (M12 Connector)



JJ5SY3-10S6 \square \square \square - Stations $\frac{U}{D}$ - C6 (D)
 2
4
6
7
8
9



$L1 = 11.5 \times n1 + 136.6 + 47 \times n2$
 $L2 = 11.5 \times n1 + 43.1$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 47 \times n2 + 82$

n1: Valve stations
 n2: I/O unit stations

* These figures show the "JJ5SY3-10S6Q22-05D-C8."
 * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	
1	235.5	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523
2	285.5	298	310.5	323	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	573
3	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	573	585.5	598	610.5	623
4	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5
5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5
6	473	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5
7	523	535.5	548	560.5	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	810.5
8	560.5	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	810.5	823	835.5	848
9	610.5	623	635.5	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798	810.5	823	835.5	848	860.5	873	885.5	898



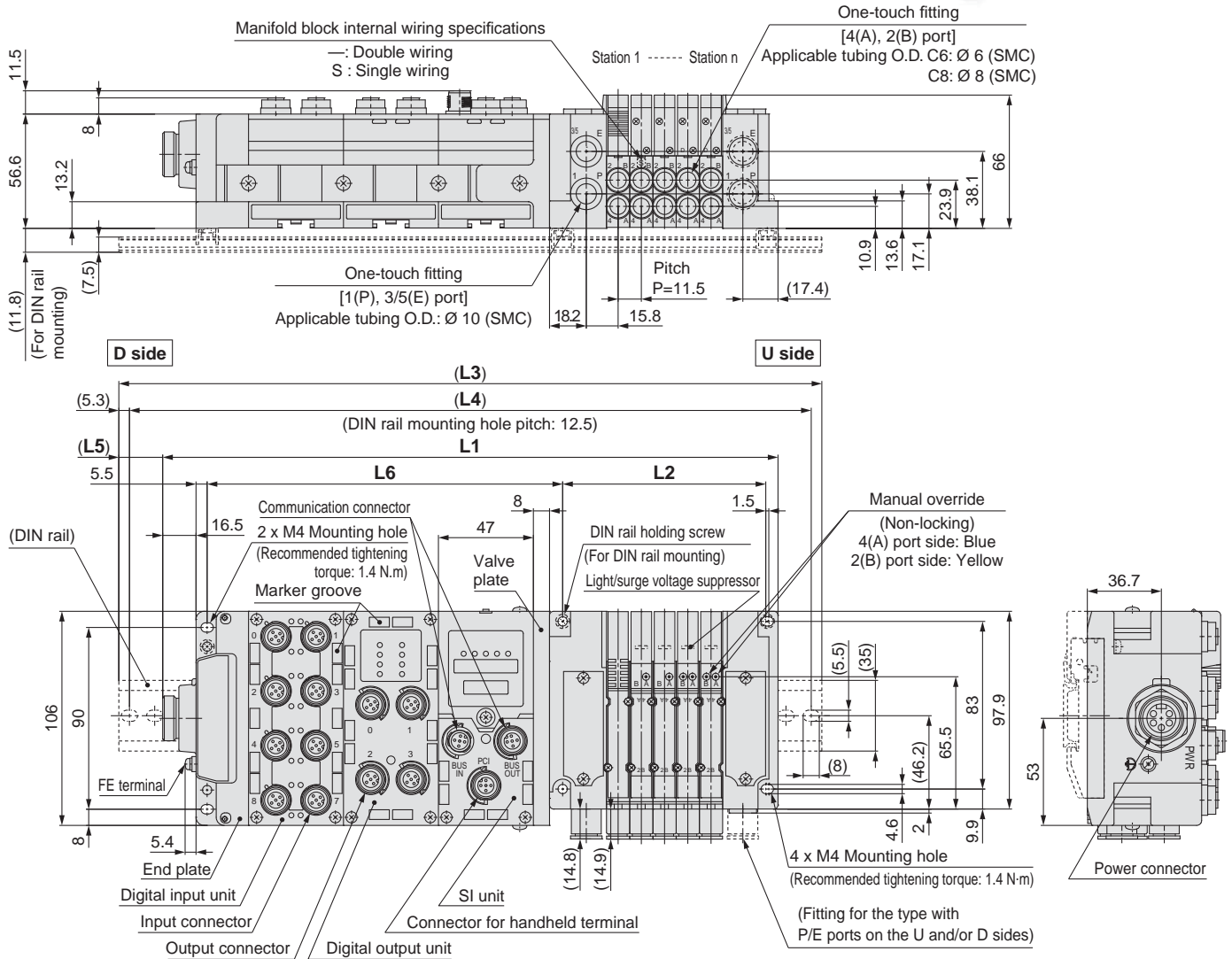
Type 10/Side Ported

EX600 (7/8 Inch Connector)



Dimensions: JSY3000 Series

JJ5SY3-10S6□ $\frac{3}{5}$ □ - Stations $\frac{U}{D}$ - C₆(D)



$L1 = 11.5 \times n1 + 153.1 + 47 \times n2$
 $L2 = 11.5 \times n1 + 43.1$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 47 \times n2 + 82$

n1: Valve stations
n2: I/O unit stations

* These figures show the "JJ5SY3-10S6Q32-05D-C8."
* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L3: DIN Rail Overall Length

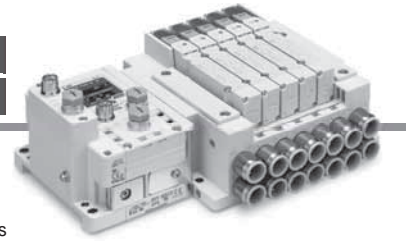
Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	223	235.5	248	260.5	273	285.5	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	423	435.5	448	460.5	473
1	273	285.5	298	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	435.5	448	460.5	473	485.5	498	510.5	523
2	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5	573
3	360.5	373	385.5	398	410.5	423	435.5	448	460.5	460.5	473	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	610.5
4	410.5	423	435.5	448	460.5	473	473	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	623	635.5	648	660.5
5	460.5	473	485.5	485.5	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5	710.5
6	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5
7	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798	798
8	598	610.5	623	635.5	648	660.5	673	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798	810.5	810.5	823	835.5	848
9	648	660.5	673	685.5	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798	810.5	823	823	835.5	848	860.5	873	885.5	898

JSY1000/3000/5000 Series

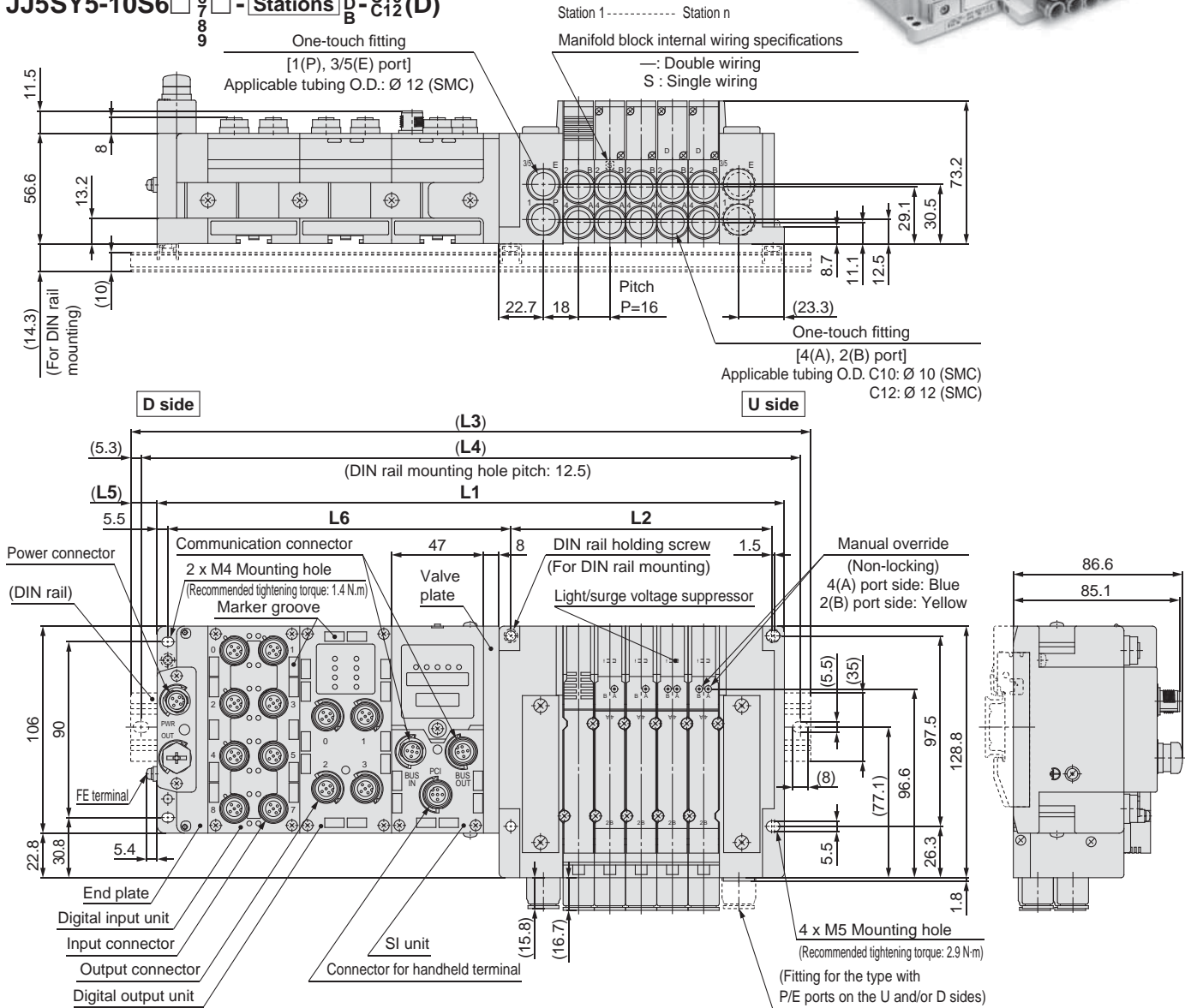
Type 10/Side Ported

Dimensions: JSY5000 Series

EX600 (M12 Connector)



JJ5SY5-10S6 □ □ - Stations $\frac{U}{D} - \frac{C10}{C12}(D)$



$L1 = 16 \times n1 + 147 + 47 \times n2$
 $L2 = 16 \times n1 + 53.5$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 47 \times n2 + 81.5$

n1: Valve stations
n2: I/O unit stations

* These figures show the "JJ5SY5-10S6Q22-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	210.5	223	235.5	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	485.5	498	510.5	523	548	560.5
1	260.5	273	285.5	298	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	485.5	498	510.5	523	548	560.5	573	585.5	610.5
2	298	323	335.5	348	360.5	385.5	398	410.5	435.5	448	460.5	473	498	510.5	523	548	560.5	573	585.5	610.5	623	635.5	660.5
3	348	360.5	385.5	398	410.5	435.5	448	460.5	473	498	510.5	523	535.5	560.5	573	585.5	610.5	623	635.5	648	673	685.5	698
4	398	410.5	423	448	460.5	473	498	510.5	523	535.5	560.5	573	585.5	610.5	623	635.5	648	673	685.5	698	710.5	735.5	748
5	448	460.5	473	485.5	510.5	523	535.5	560.5	573	585.5	598	623	635.5	648	673	685.5	698	710.5	735.5	748	760.5	785.5	798
6	485.5	510.5	523	535.5	560.5	573	585.5	598	623	635.5	648	660.5	685.5	698	710.5	735.5	748	760.5	773	798	810.5	823	848
7	535.5	548	573	585.5	598	623	635.5	648	660.5	685.5	698	710.5	735.5	748	760.5	773	798	810.5	823	835.5	860.5	873	885.5
8	585.5	598	610.5	635.5	648	660.5	685.5	698	710.5	723	748	760.5	773	798	810.5	823	835.5	860.5	873	885.5	910.5	923	935.5
9	635.5	648	660.5	685.5	698	710.5	723	748	760.5	773	785.5	810.5	823	835.5	860.5	873	885.5	898	923	935.5	948	973	985.5

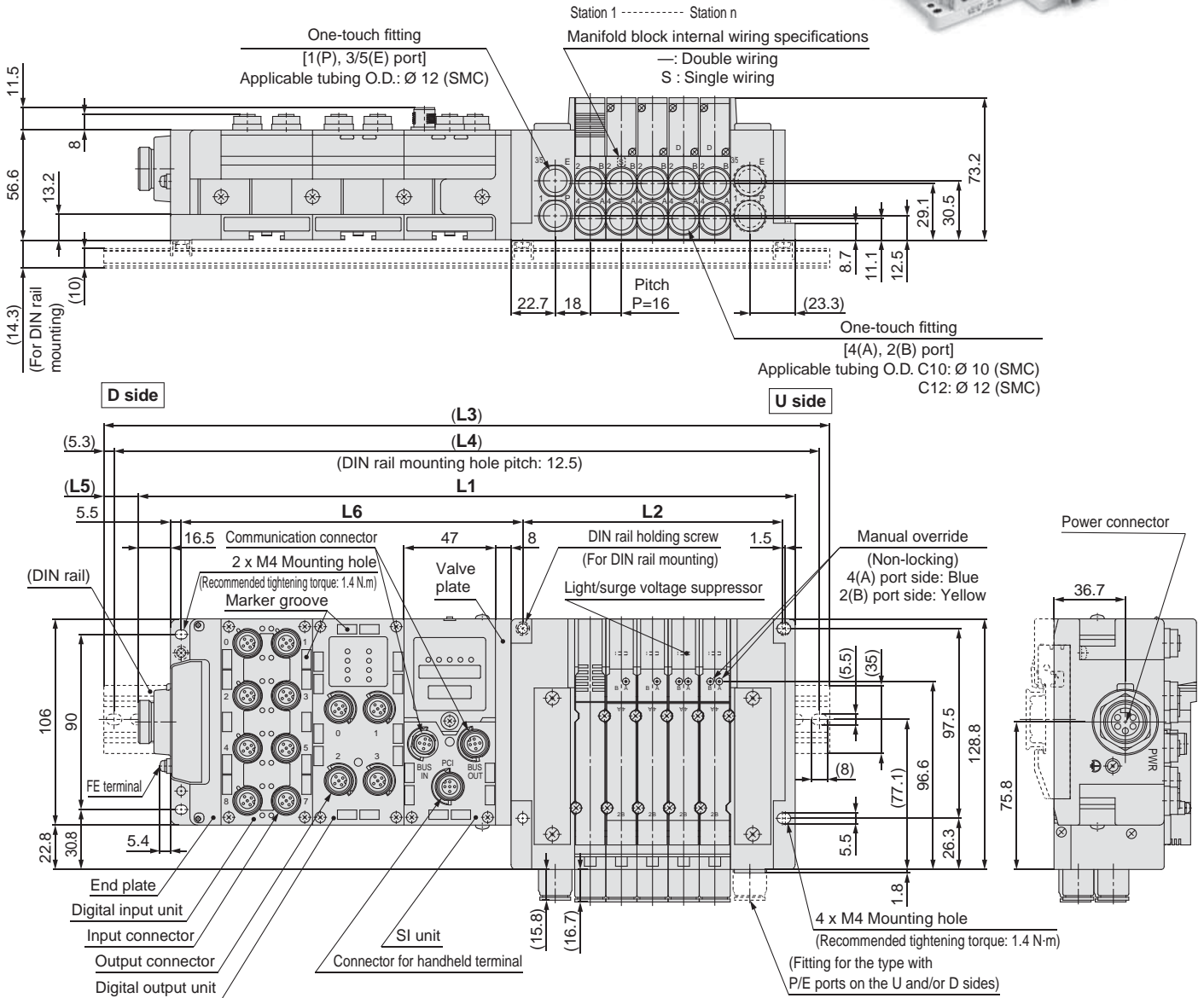
Type 10/Side Ported

EX600 (7/8 Inch Connector)



Dimensions: **JSY5000 Series**

JJ5SY5-10S6 □ $\frac{3}{5}$ □ - Stations $\frac{U}{D}$ - C10(D)



$L1 = 16 \times n1 + 163.5 + 47 \times n2$
 $L2 = 16 \times n1 + 53.5$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 47 \times n2 + 81.5$

n1: Valve stations
n2: I/O unit stations

* These figures show the "JJ5SY5-10S6Q32-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	223	235.5	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	423	435.5	448	460.5	485.5	498	510.5	523	548	560.5	573
1	273	285.5	298	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	485.5	498	510.5	523	548	560.5	573	598	610.5	623
2	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	473	498	510.5	523	548	560.5	573	585.5	610.5	623	635.5	660.5	673
3	360.5	385.5	398	410.5	435.5	448	460.5	473	498	510.5	523	548	560.5	573	585.5	610.5	623	635.5	648	673	685.5	698	723
4	410.5	423	448	460.5	473	498	510.5	523	535.5	560.5	573	585.5	610.5	623	635.5	648	673	685.5	698	723	735.5	748	760.5
5	460.5	473	498	510.5	523	535.5	560.5	573	585.5	598	623	635.5	648	673	685.5	698	710.5	735.5	748	760.5	785.5	798	810.5
6	510.5	523	535.5	560.5	573	585.5	598	623	635.5	648	673	685.5	698	710.5	735.5	748	760.5	773	798	810.5	823	848	860.5
7	548	573	585.5	598	623	635.5	648	660.5	685.5	698	710.5	735.5	748	760.5	773	798	810.5	823	848	860.5	873	885.5	910.5
8	598	623	635.5	648	660.5	685.5	698	710.5	723	748	760.5	773	798	810.5	823	835.5	860.5	873	885.5	910.5	923	935.5	948
9	648	660.5	685.5	698	710.5	723	748	760.5	773	798	810.5	823	835.5	860.5	873	885.5	898	923	935.5	948	973	985.5	—

Chart

Valve

Connector Connecting Base

Plug-in

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

Plug-in Connector Connecting Base

EX250

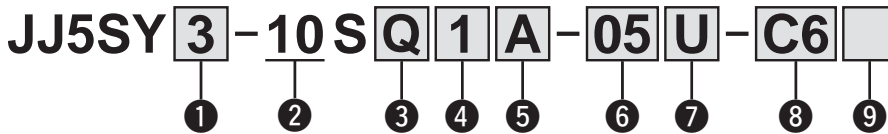
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification	
External pilot (SUP/EXH block assembly)	

6 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	Specified layout*2 (Up to 32 solenoids available)
02	2 stations	
⋮	⋮	
24	24 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.) When determining the number of valve stations, note that the maximum number of solenoids for the AS-Interface applicable SI unit specification is as follows.
 - 8 in/8 out specification: Max. 8 solenoids
 - 4 in/4 out specification: Max. 4 solenoids
- * This also includes the number of blanking plates.
- * For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

9 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 118 for the fixation of DIN rail mounting type manifold.
- * DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

—		DIN rail mounting (With DIN rail)
0		DIN rail mounting (Without DIN rail)
3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
24	For 24 stations	

- * Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 110 for the DIN rail part number.)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 SI unit

0	Without SI unit	
Q	DeviceNet™ (Negative common)	
N	PROFIBUS DP (Negative common)	
TA	AS-Interface (Negative common)	2 isolated common type
TB		8 in/8 out, 31 slave modes
TC		4 in/4 out, 31 slave modes
TD		1 common type
Y	8 in/8 out, 31 slave modes	
ZE	4 in/4 out, 31 slave modes	
Y	CANopen (Negative common)	
ZE	EtherNet/IP™ (Negative common)	

- * Ensure a match with the common specification of the valve to be used.
- * Input block cannot be mounted without SI unit.
- * The supply current from the SI unit of AS-Interface applicable 1 power supply system specification to the input block and valve is limited.

4 Input block stations

—	None
1	1 station
⋮	⋮
8	8 stations

- * Without SI unit, the symbol is —.
- The maximum number of stations is limited for the AS-Interface applicable SI unit.

5 Input block type

	PNP sensor input	NPN sensor input
Without input block	—	
M12, 2 inputs	A	D
M12, 4 inputs	B	E
M8, 4 inputs	C	F

- * Without SI unit, the symbol is —.

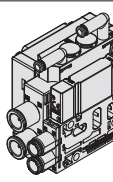
7 P, E port entry, SUP/EXH block assembly

P, E port entry	Internal pilot	Internal pilot, Built-in silencer
U side (2 to 10 stations)	U	C
D side (2 to 10 stations)	D	E
Both sides (2 to 24 stations)	B	F

- * 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	Straight	●	—	—
C4		●	—	—
C6		●	●	—
C8		—	●	—
C10		—	—	●
C12		—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12

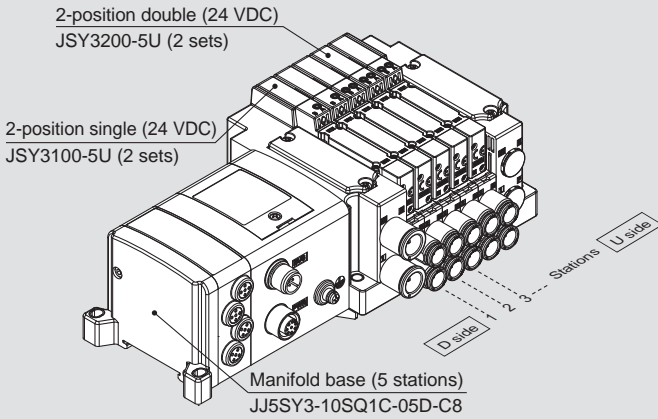


- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

For details about the EX250 Integrated Type (For Input/Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 103. Please download the Operation Manual via SMC website, <https://www.smc.eu>

How to Order Manifold Assembly

Example (JJ5SY3-10S□-□)



JJ5SY3-10SQ1C-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 3 sets (2-position single part no.)
 * JSY3200-5U 2 sets (2-position double 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.

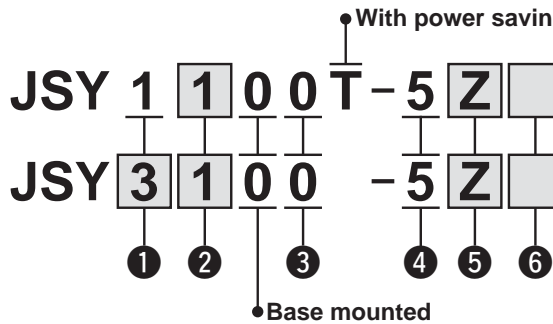
Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JSY3000/5000 Series



Made to Order
 (Refer to page 114 for details.)

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

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

2 Type of actuation

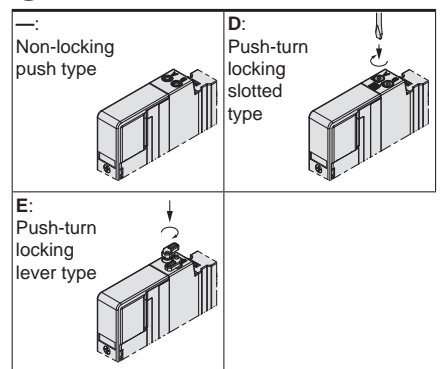
1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U	●	●	Non-polar
Z			Positive common
NZ			Negative common

- * "U" is applicable for every SI unit. However, "Z" can be used only for CC-Link applicable unit and "NZ" is for units which are not CC-Link applicable.
- * Only "Z" and "NZ" types are available for the JSY1000 series.
- * When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

6 Manual override

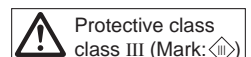


* Push-turn locking lever type "E" is not available for the JSY1000.

- * **When ordering a valve individually, the base gasket is not included.** Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service. Refer to page 107 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50%, please select the product with power saving circuit. For the JSY1000 series only the power saving circuit is available.



JSY1000/3000/5000 Series

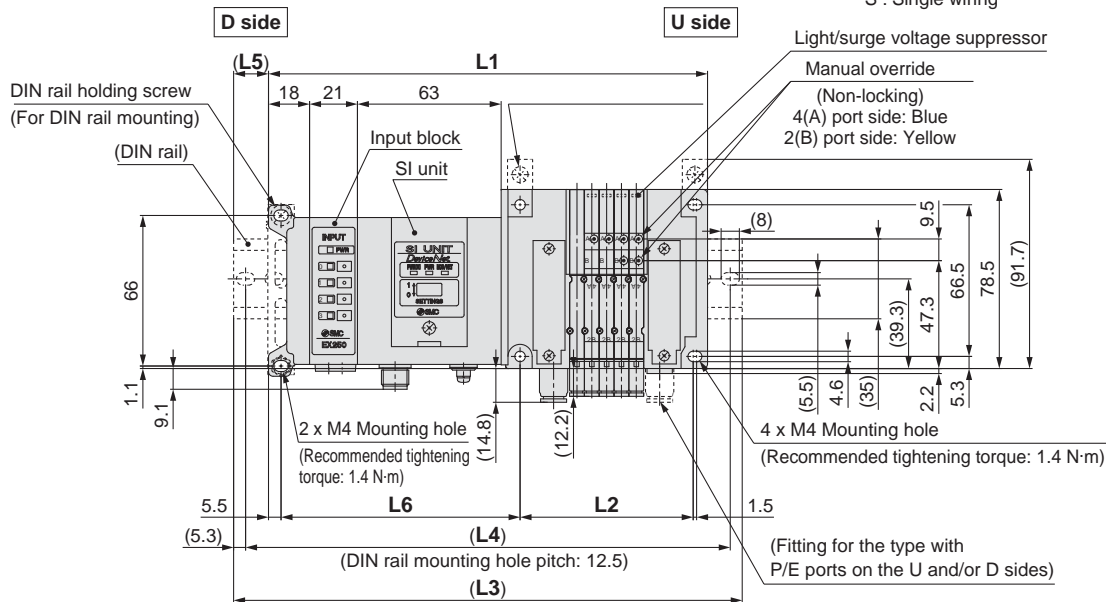
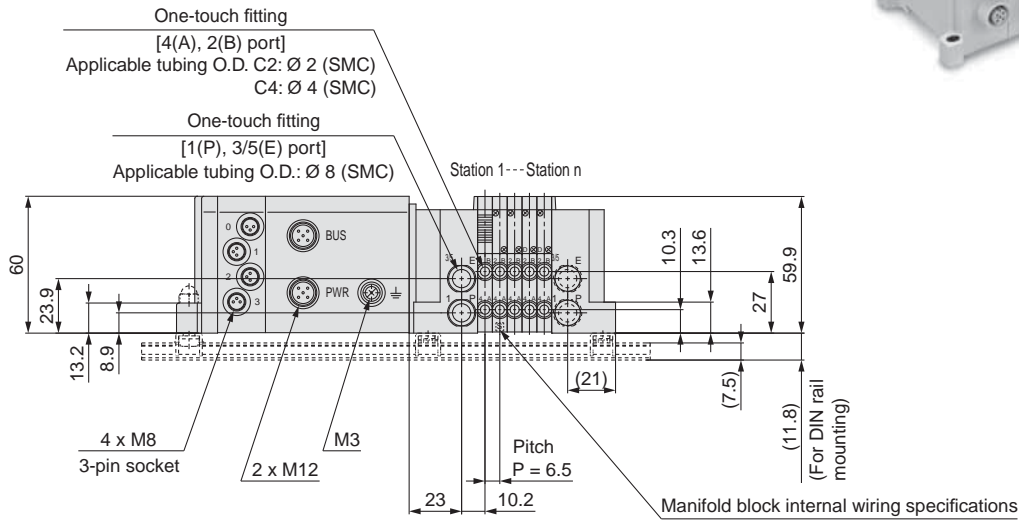
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

EX250



Dimensions: JSY1000 Series

JJ5SY1-10S□ - Stations $\frac{U}{D}$ - C₂4(D)



$$L1 = 6.5 \times n1 + 139 + 21 \times n2$$

$$L2 = 6.5 \times n1 + 43.4$$

$$L4 = L3 - 10.5$$

$$L5 = (L3 - L1) / 2$$

$$L6 = 21 \times n2 + 83.8$$

n1: Number of valve stations of the JSY1000
n2: Input block stations

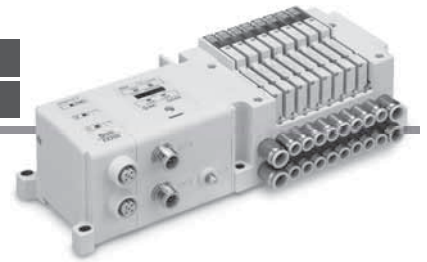
- * These figures show the "JJ5SY1-10SQ1A-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	185.5	185.5	198	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	298	298	310.5	310.5	323	323
1	198	210.5	210.5	223	223	235.5	235.5	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	323	335.5	335.5	348
2	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	323	335.5	335.5	348	348	360.5	360.5
3	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	323	335.5	348	348	360.5	360.5	373	373	385.5	385.5
4	260.5	273	273	285.5	285.5	298	310.5	310.5	323	323	335.5	335.5	348	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5
5	285.5	298	298	310.5	310.5	323	323	335.5	335.5	348	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	410.5	423	423
6	310.5	310.5	323	323	335.5	335.5	348	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	410.5	423	423	435.5	435.5	448
7	323	335.5	335.5	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	410.5	423	423	435.5	435.5	448	448	460.5	460.5	473
8	348	360.5	360.5	373	373	385.5	385.5	398	398	410.5	410.5	423	423	435.5	435.5	448	448	460.5	460.5	473	485.5	485.5	498

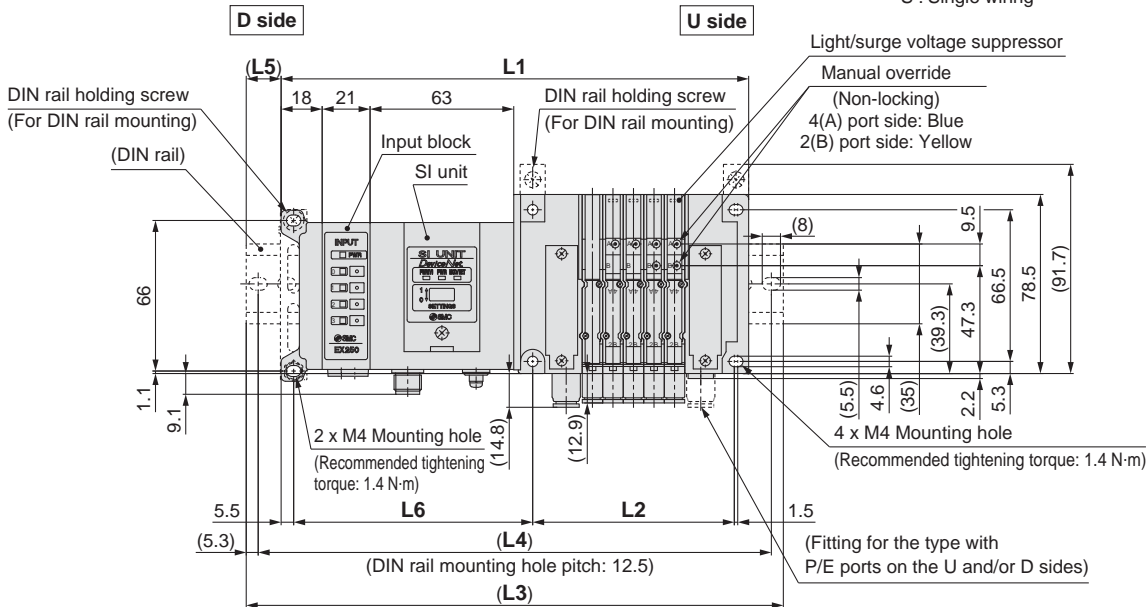
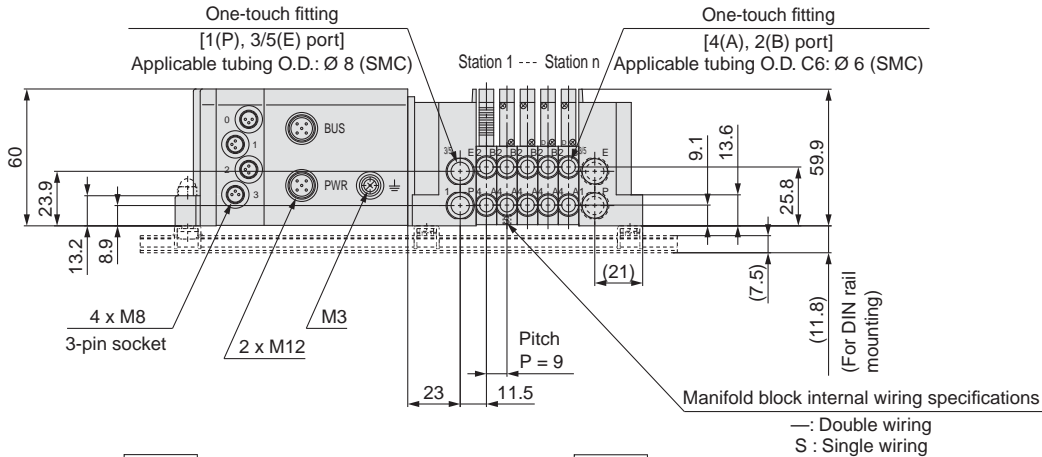
Type 10/Side Ported (Applicable to Ø 6 fittings)

EX250



Dimensions: **JSY1000 Series**

JJ5SY1-10S□ - Stations $\frac{U}{D}$ - C6(D)



$L1 = 9 \times n1 + 139 + 21 \times n2$
 $L2 = 9 \times n1 + 43.4$
 $L4 = L3 - 10.5$
 $L5 = (L3 - L1) / 2$
 $L6 = 21 \times n2 + 83.8$

n1: Number of valve stations of the JSY1000
 n2: Input block stations

* These figures show the "JJ5SY1-10SQ1A-05D-C6."
 * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
 * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	185.5	198	210.5	210.5	223	235.5	235.5	248	260.5	273	273	285.5	298	298	310.5	323	335.5	335.5	348	360.5	360.5	373	385.5
1	210.5	210.5	223	235.5	248	248	260.5	273	285.5	285.5	298	310.5	310.5	323	335.5	348	348	360.5	373	373	385.5	398	410.5
2	223	235.5	248	260.5	260.5	273	285.5	285.5	298	310.5	323	323	335.5	348	360.5	360.5	373	385.5	385.5	398	410.5	423	423
3	248	260.5	273	273	285.5	298	298	310.5	323	335.5	335.5	348	360.5	360.5	373	385.5	398	398	410.5	423	435.5	435.5	448
4	273	285.5	285.5	298	310.5	310.5	323	335.5	348	348	360.5	373	385.5	398	410.5	410.5	423	423	435.5	448	448	460.5	473
5	285.5	298	310.5	323	323	335.5	348	360.5	360.5	373	385.5	385.5	398	410.5	423	423	435.5	448	448	460.5	473	485.5	485.5
6	310.5	323	335.5	335.5	348	360.5	360.5	373	385.5	398	398	410.5	423	435.5	435.5	448	460.5	460.5	473	485.5	498	498	510.5
7	335.5	348	348	360.5	373	373	385.5	398	410.5	410.5	423	435.5	435.5	448	460.5	473	473	485.5	498	510.5	510.5	523	535.5
8	360.5	360.5	373	385.5	385.5	398	410.5	423	423	435.5	448	448	460.5	473	485.5	485.5	498	510.5	510.5	523	535.5	548	548

Chart

Valve

Connector Plug-in Connecting Base

D.sub Flat Ribbon Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

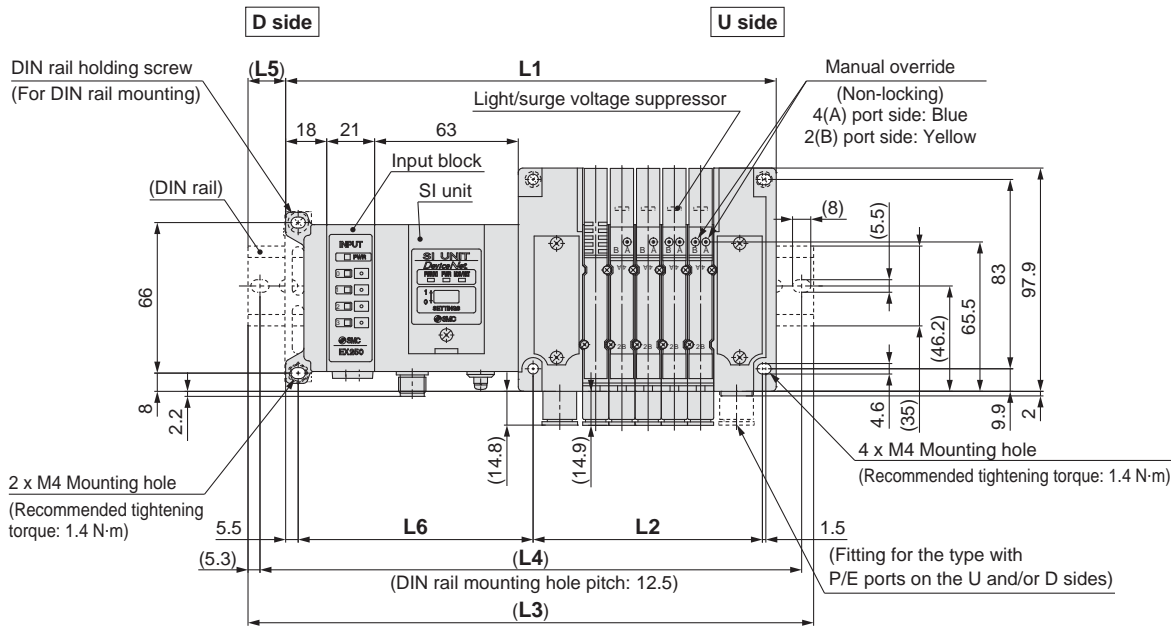
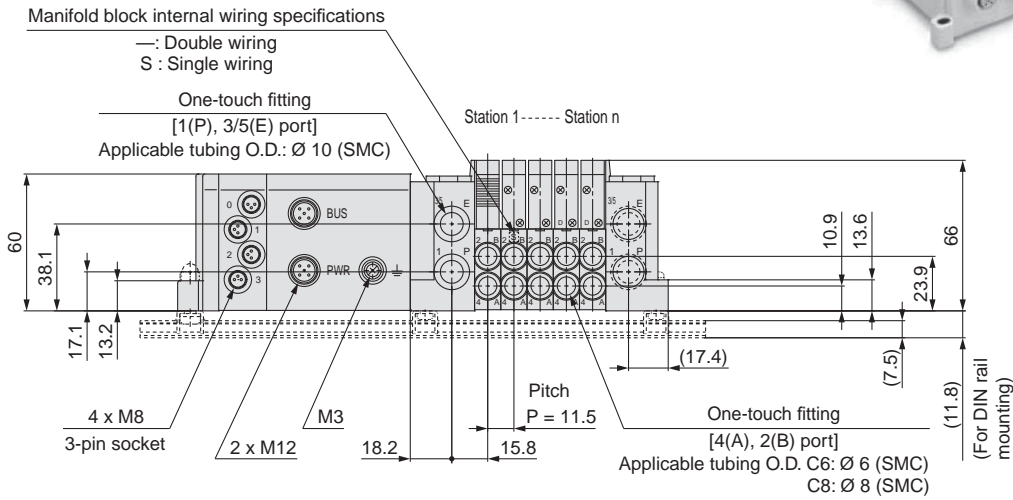
Type 10/Side Ported

Dimensions: JSY3000 Series

EX250



JJ5SY3-10S□ - Stations $\frac{U}{D}$ - C₆ - C₈ (D)



$$L1 = 11.5 \times n1 + 136.6 + 21 \times n2$$

$$L2 = 11.5 \times n1 + 43.1$$

$$L4 = L3 - 10.5$$

$$L5 = (L3 - L1) / 2$$

$$L6 = 21 \times n2 + 82$$

* These figures show the "JJ5SY3-10SQ1A-05D-C8."
* Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

n1: Number of valve stations of the JSY3000
n2: Input block stations

L3: DIN Rail Overall Length

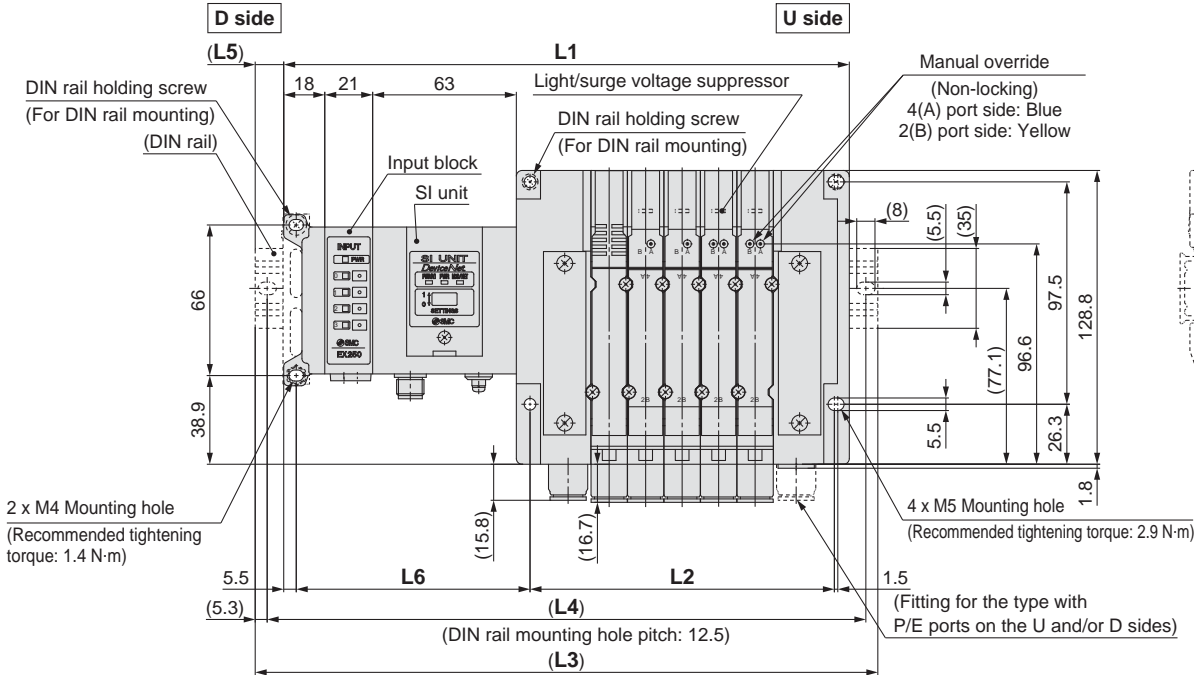
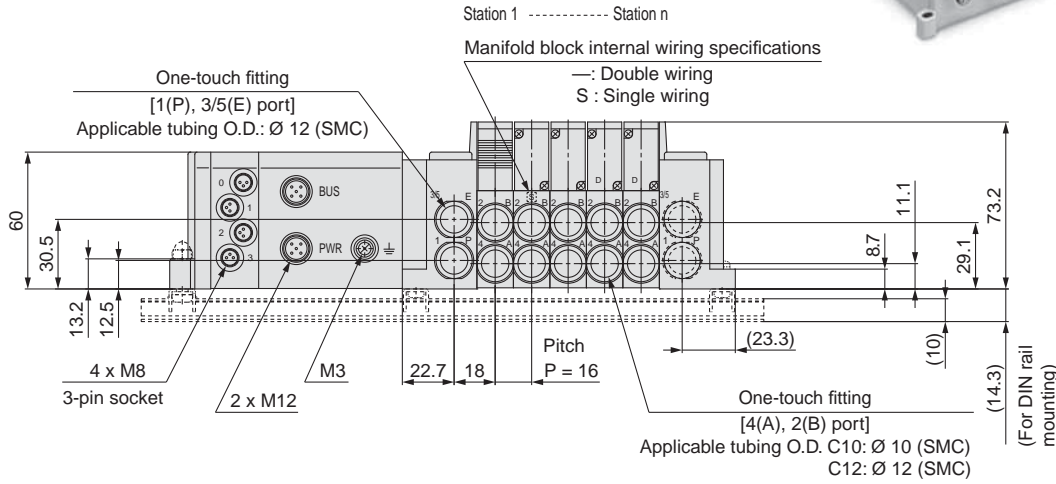
Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448
1	210.5	223	235.5	248	260.5	273	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	423	435.5	448	460.5
2	235.5	248	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	398	410.5	423	435.5	448	460.5	473	485.5
3	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5	373	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5
4	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5
5	298	310.5	323	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	460.5	473	485.5	498	510.5	523	535.5	548
6	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5	573
7	335.5	348	360.5	373	385.5	398	410.5	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5	560.5	573	585.5
8	360.5	373	385.5	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	535.5	548	560.5	573	585.5	598	610.5

Type 10/Side Ported
EX250



Dimensions: JSY5000 Series

JJ5SY5-10S□ - Stations $\frac{U}{D}$ - C10 (D)
C12 (D)



L1 = 16 x n1 + 147 + 21 x n2
L2 = 16 x n1 + 53.5
L4 = L3 - 10.5
L5 = (L3 - L1) / 2
L6 = 21 x n2 + 81.5

n1: Number of valve stations of the JSY5000
n2: Input block stations

* These figures show the "JJ5SY5-10SQ1A-05D-C12."
* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L3: DIN Rail Overall Length

Valve stations (n1) / I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	210.5	223	235.5	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	485.5	498	510.5	523	548	560.5
1	235.5	248	260.5	273	298	310.5	323	335.5	360.5	373	385.5	410.5	423	435.5	448	473	485.5	498	523	535.5	548	560.5	585.5
2	248	260.5	285.5	298	310.5	335.5	348	360.5	373	398	410.5	423	448	460.5	473	485.5	510.5	523	535.5	560.5	573	585.5	598
3	273	285.5	298	323	335.5	348	373	385.5	398	410.5	435.5	448	460.5	485.5	498	510.5	523	548	560.5	573	585.5	610.5	623
4	298	310.5	323	335.5	360.5	373	385.5	410.5	423	435.5	448	473	485.5	498	510.5	535.5	548	560.5	585.5	598	610.5	623	648
5	310.5	335.5	348	360.5	373	398	410.5	423	435.5	460.5	473	485.5	510.5	523	535.5	548	573	585.5	598	623	635.5	648	660.5
6	335.5	348	360.5	385.5	398	410.5	435.5	448	460.5	473	498	510.5	523	548	560.5	573	585.5	610.5	623	635.5	660.5	673	685.5
7	360.5	373	385.5	398	423	435.5	448	473	485.5	498	510.5	535.5	548	560.5	585.5	598	610.5	623	648	660.5	673	685.5	710.5
8	373	398	410.5	423	435.5	460.5	473	485.5	510.5	523	535.5	548	573	585.5	598	610.5	635.5	648	660.5	685.5	698	710.5	723

Chart
Valve
Connector Plug-in Connecting Base
D.sub Flat Ribbon
Terminal Block
Lead wire
EX600
EX250
EX260
EX120
Common Dimensions
Manifold Exploded View
Fittings, Replacement Parts, Tools
Manifold Options
Made to Order
Specific Product Precautions

Plug-in Connector Connecting Base

EX260

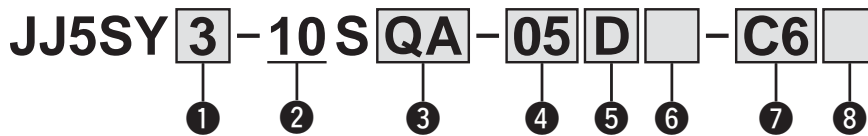
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification
External pilot (SUP/EXH block assembly)

4 Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.
- * For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

8 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 118 for the fixation of DIN rail mounting type manifold.
- * DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

—	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
24	For 24 stations	

- * Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 110 for the DIN rail part number.)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

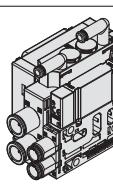
3 SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)		Protocol	Number of outputs	Communication connector
Positive common (NPN)	Negative common (PNP)			
0*1 Without SI unit				
QA	QAN	DeviceNet™	32	M12
QB	QBN		16	
NA	NAN	PROFIBUS DP	32	M12
NB	NBN		16	
NC	NCN		32	
ND	NDN		16	
VA	VAN	CC-Link	32	M12
VB	VBN		16	
DA	DAN	EtherCAT	32	M12
DB	DBN		16	
FA	FAN	PROFINET	32	M12
FB	FBN		16	
EA	EAN	EtherNet/IP™	32	M12
EB	EBN		16	
—*2	GAN	Ethernet POWERLINK	32	M12
—*2	GBN		16	
—*2	KAN	IO-Link	32*4	M12

- *1 Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- *2 Positive common (NPN) type is not available.
- *3 IP40 for the D-sub applicable communication connector specification.
- * DIN rail cannot be mounted without SI unit.
- *4 Only the 32 outputs type is available.

7 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	∅ 2	●	—	—
C4	∅ 4	●	—	—
C6	∅ 6	●	●	—
C8	∅ 8	—	●	—
C10	∅ 10	—	—	●
C12	∅ 12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12

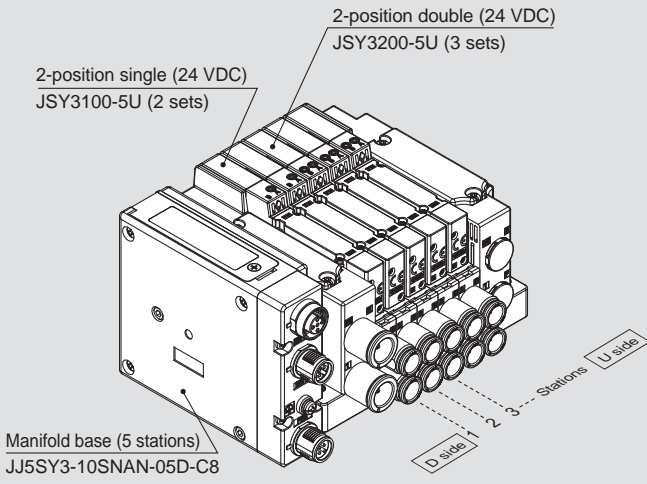


- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

For details about the EX260 Integrated Type (For Input/Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 104. Please download the Operation Manual via SMC website, <https://www.smc.eu>

How to Order Manifold Assembly

Example (JJ5SY3-10SNAN-□)



JJ5SY3-10SNAN-05D-C8 -- 1 set (Type 10 5-station manifold base part no.)
 * **JSY3100-5U**..... 2 sets (2-position single part no.)
 * **JSY3200-5U**..... 3 sets (2-position double part no.)
 ↳ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

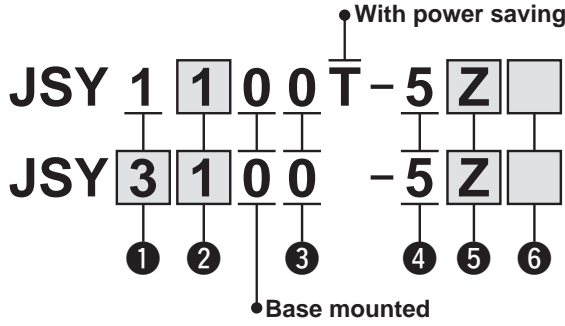
- The valve arrangement is numbered as the 1st station from the D side.
- Under the manifold part number, state the valves to be mounted in order from the 1st station as shown in the figure. If the arrangement becomes complicated, specify on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series
JSY3000/5000 Series



Made to Order
 (Refer to page 114 for details.)

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

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	Single
2	2-position Double
3	Closed centre
4	3-position Exhaust centre
5	Pressure centre
A	4-position N.C./N.C.
B	dual 3-port N.O./N.O.
C	N.C./N.O.

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

⚠ Caution
 If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 5 0 %, please select the product with power saving circuit.
 For the JSY 1 0 0 0 series only the power saving circuit is available.

- * Select a valve from U or Z when the SI unit output polarity is — (positive common). Select a valve from U or NZ when the SI unit output polarity is N (negative common).
- * Only "Z" and "NZ" types are available for the JSY1000 series.
- * When non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 117.

6 Manual override

—: Non-locking push type 	D: Push-turn locking slotted type
E: Push-turn locking lever type 	

* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.** Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service. Refer to page 107 for base gasket and mounting screw part numbers.

⚠ Protective class class III (Mark: ⚡)

Chart
 Valve
 Connector Plug-in Connecting Base
 D.sub Flat Ribbon
 Terminal Block
 Lead wire
 EX600
 EX250
 EX260
 EX120
 Common Dimensions
 Manifold Exploded View
 Fittings, Replacement Parts, Tools
 Manifold Options
 Made to Order
 Specific Product Precautions

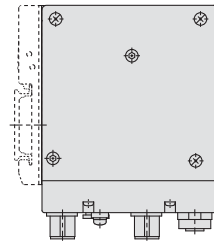
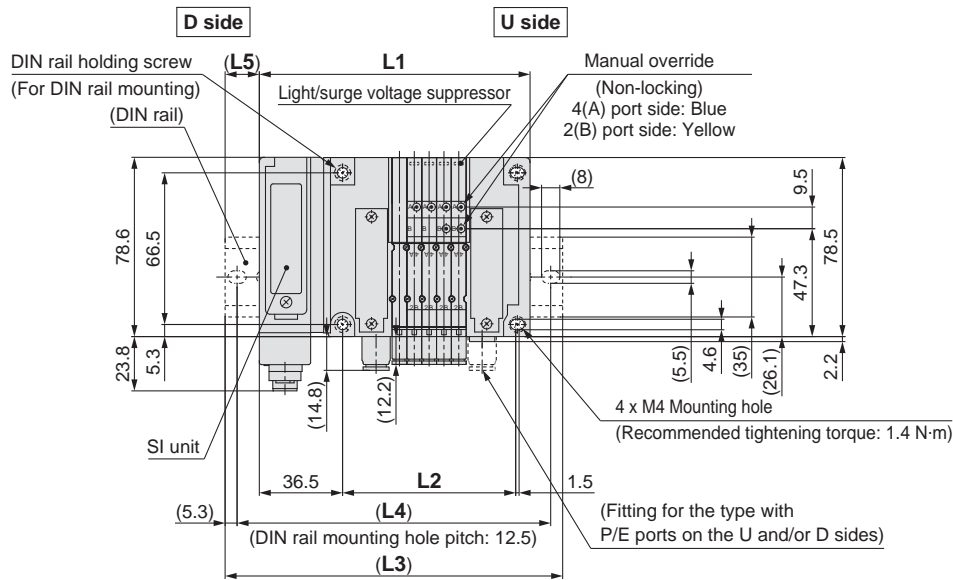
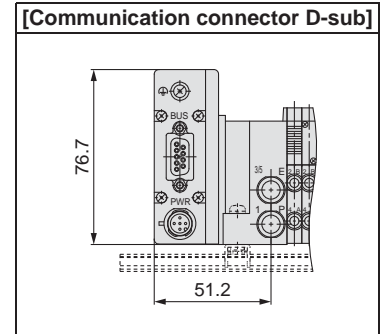
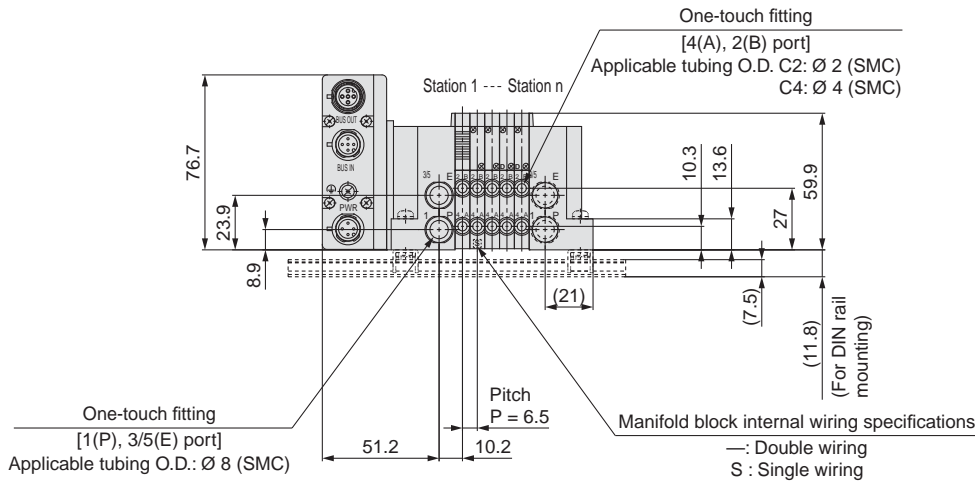
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Dimensions: **JSY1000 Series**

EX260

JJ5SY1-10S□ - Stations $\frac{U}{D}$ - C₂(D)



- * These figures show the "JJ5SY1-10SQA-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	99.2	105.7	112.2	118.7	125.2	131.7	138.2	144.7	151.2	157.7	164.2	170.7	177.2	183.7	190.2
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	123	135.5	135.5	148	160.5	160.5	173	173	185.5	185.5	198	198	210.5	210.5	223
L4	112.5	125	125	137.5	150	150	162.5	162.5	175	175	187.5	187.5	200	200	212.5
L5	12	15	12	15	18	15	18	14	17	14	17	14	17	14	17

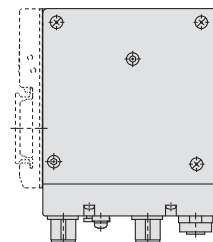
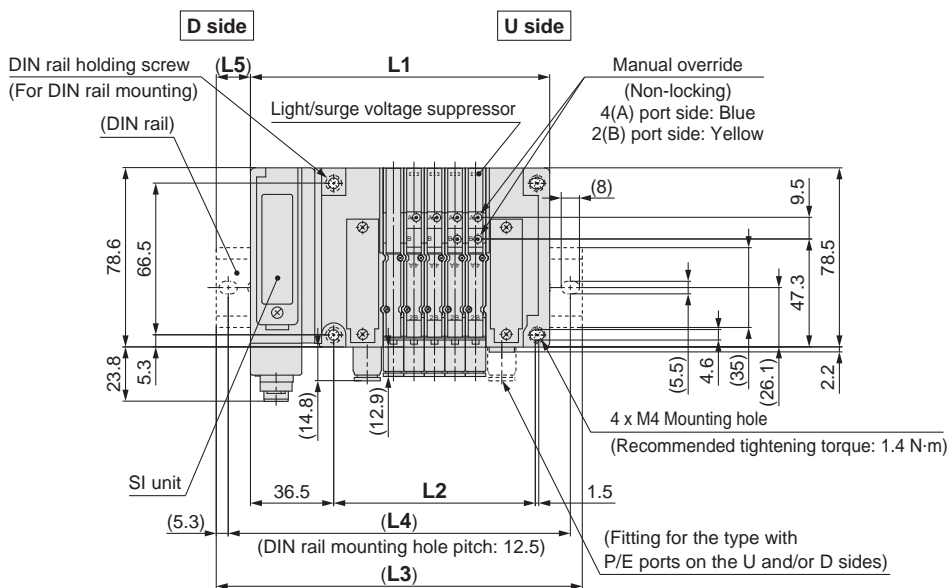
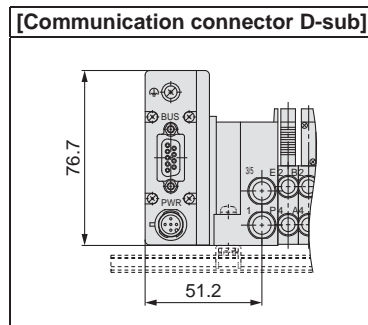
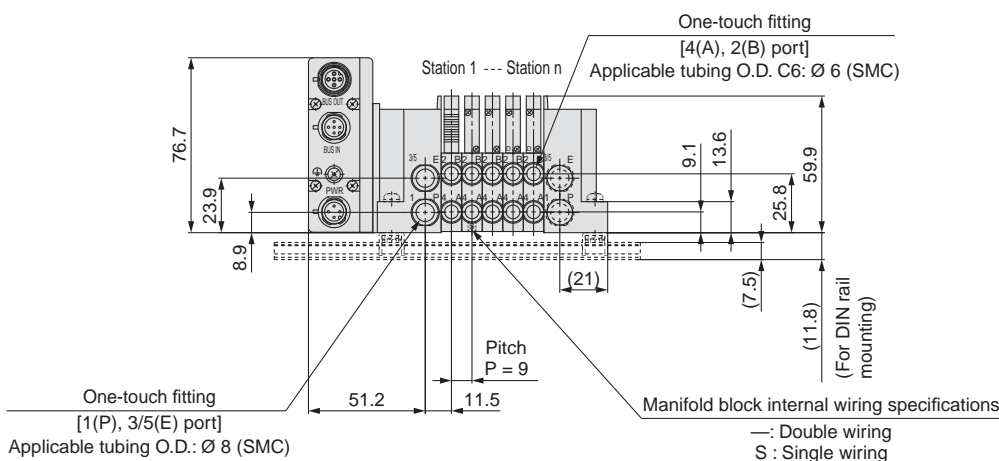
L \ n	17	18	19	20	21	22	23	24
L1	196.7	203.2	209.7	216.2	222.7	229.2	235.7	242.2
L2	153.9	160.4	166.9	173.4	179.9	186.4	192.9	199.4
L3	223	235.5	235.5	248	248	260.5	260.5	273
L4	212.5	225	225	237.5	237.5	250	250	262.5
L5	13	16	13	16	13	16	13	16

Type 10/Side Ported (Applicable to Ø 6 fittings)

EX260

Dimensions: JSY1000 Series

JJ5SY1-10S□ - Stations $\frac{U}{D}$ - C6(D)



- * These figures show the "JJ5SY1-10SQA-05D-C6."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	104.2	113.2	122.2	131.2	140.2	149.2	158.2	167.2	176.2	185.2	194.2	203.2	212.2	221.2	230.2
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	135.5	148	148	160.5	173	173	185.5	198	210.5	210.5	223	235.5	235.5	248	260.5
L4	125	137.5	137.5	150	162.5	162.5	175	187.5	200	200	212.5	225	225	237.5	250
L5	16	18	13	15	17	12	14	16	17	13	15	16	12	14	15

L \ n	17	18	19	20	21	22	23	24
L1	239.2	248.2	257.2	266.2	275.2	284.2	293.2	302.2
L2	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	273	273	285.5	298	310.5	310.5	323	335.5
L4	262.5	262.5	275	287.5	300	300	312.5	325
L5	17	13	14	16	18	13	15	17

Chart
Valve
Connector Connecting Base
Plug-in
D.sub Flat Ribbon
Terminal Block
Lead wire
EX600
EX250
EX260
EX120
Common Dimensions
Manifold Exploded View
Fittings, Replacement Parts, Tools
Manifold Options
Made to Order
Specific Product Precautions

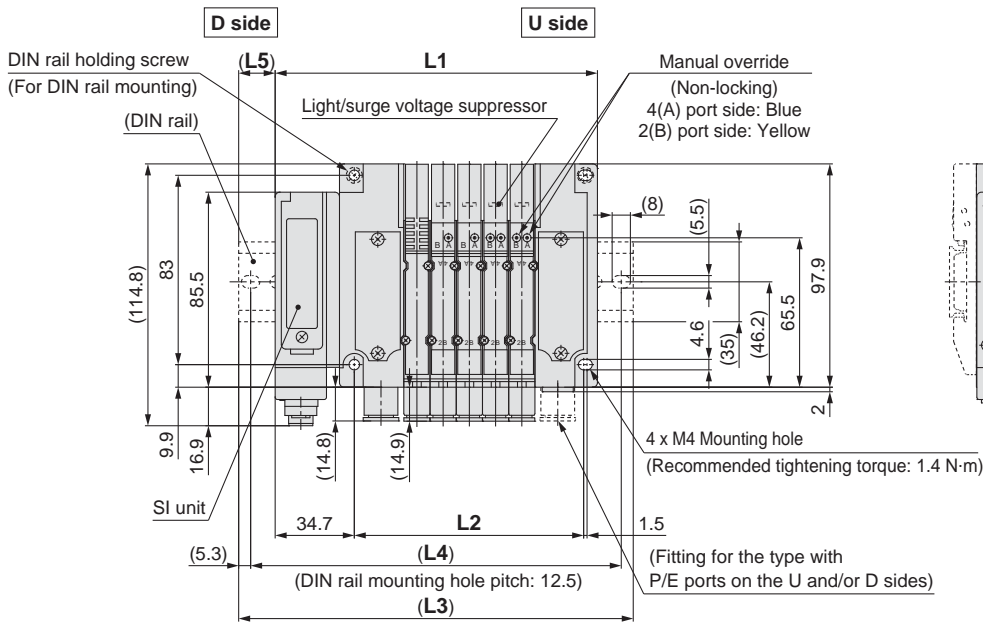
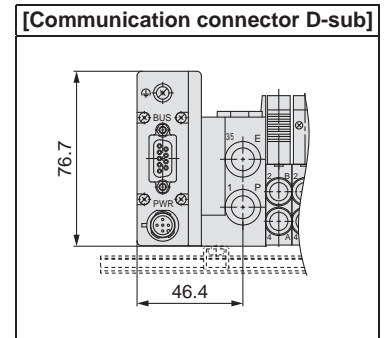
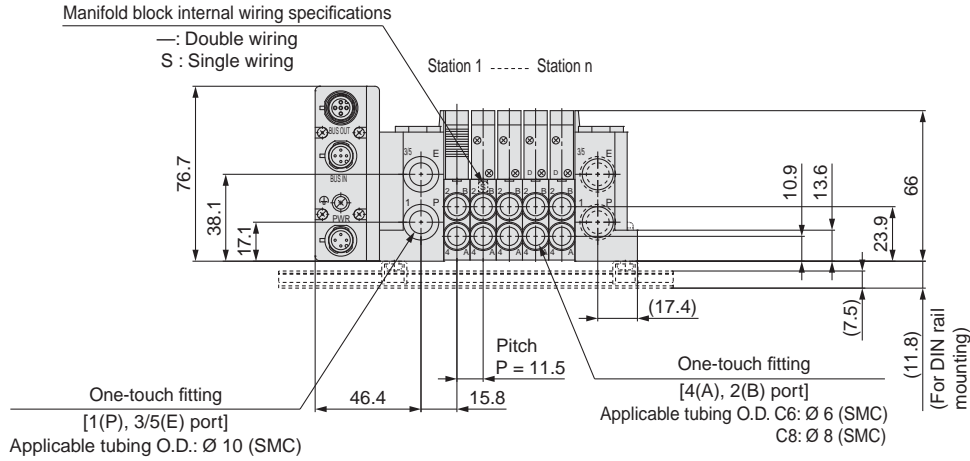
JSY1000/3000/5000 Series

Type 10/Side Ported

EX260

Dimensions: JSY3000 Series

JJ5SY3-10S□ - Stations $\frac{U}{D}$ - C₆/C₈(D)



* These figures show the "JJ5SY3-10SQA-05D-C8."
 * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	106.8	118.3	129.8	141.3	152.8	164.3	175.8	187.3	198.8	210.3	221.8	233.3	244.8	256.3	267.8
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	135.5	148	160.5	173	185.5	198	210.5	210.5	223	235.5	248	260.5	273	285.5	298
L4	125	137.5	150	162.5	175	187.5	200	200	212.5	225	237.5	250	262.5	275	287.5
L5	15	15	16	16	17	17	18	12	12	13	13	14	14	15	15

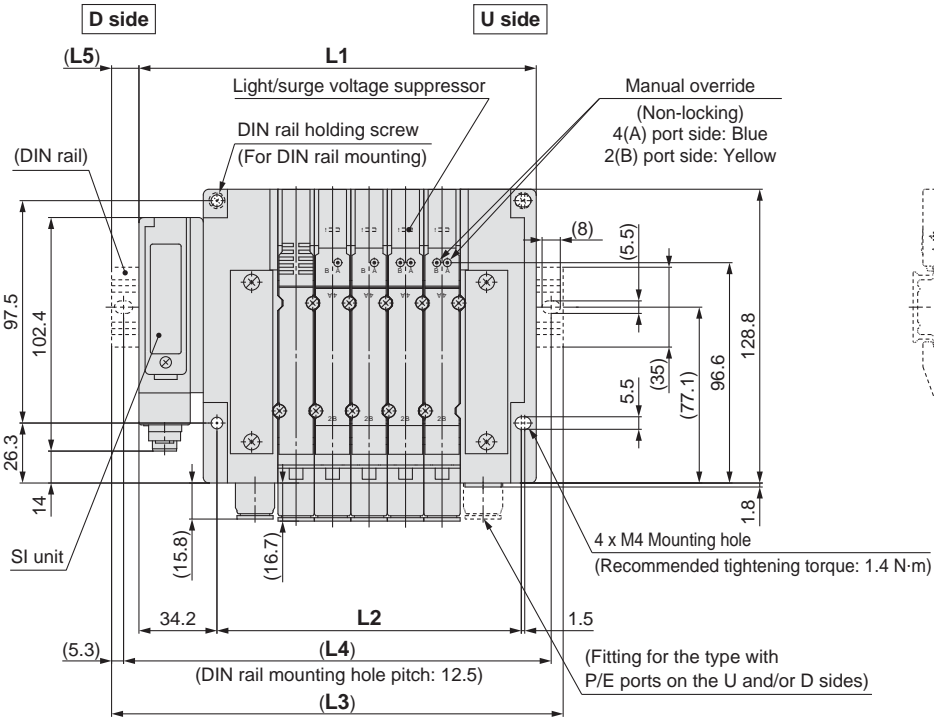
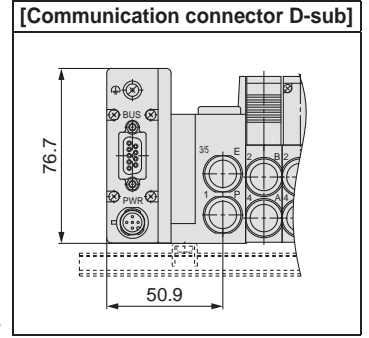
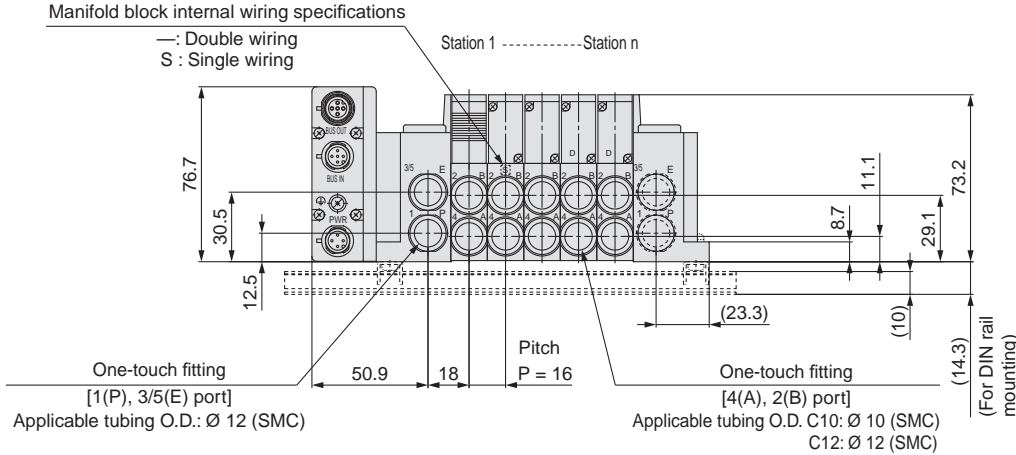
L \ n	17	18	19	20	21	22	23	24
L1	279.3	290.8	302.3	313.8	325.3	336.8	348.3	359.8
L2	238.6	250.1	261.1	273.1	284.6	296.1	307.6	319.1
L3	310.5	323	335.5	348	360.5	360.5	373	385.5
L4	300	312.5	325	337.5	350	350	362.5	375
L5	16	16	17	17	18	12	13	13

Type 10/Side Ported

EX260

Dimensions: **JSY5000 Series**

JJ5SY5-10S□ - Stations $\frac{U}{D}$ - C10 (D)



* These figures show the "JJ5SY5-10SQA-05D-C12."
 * Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	126.2	142.2	158.2	174.2	190.2	206.2	222.2	238.2	254.2	270.2	286.2	302.2	318.2	334.2	350.2
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	160.5	173	185.5	198	223	235.5	248	273	285.5	298	310.5	335.5	348	360.5	385.5
L4	150	162.5	175	187.5	212.5	225	237.5	262.5	275	287.5	300	325	337.5	350	375
L5	17	16	14	12	17	15	13	18	16	14	12	17	15	13	18

L \ n	17	18	19	20	21	22	23	24
L1	366.2	382.2	398.2	414.2	430.2	446.2	462.2	478.2
L2	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	398	410.5	423	448	460.5	473	485.5	510.5
L4	387.5	400	412.5	437.5	450	462.5	475	500
L5	16	14	13	17	15	14	12	16

Chart

Valve

Connector Connecting Base

Plug-in

D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

Plug-in Connector Connecting Base

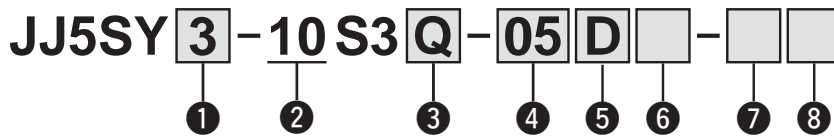
EX120

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Made to Order
(Refer to page 114 for details.)

Specification	
External pilot (SUP/EXH block assembly)	

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 SI unit

0	Without SI unit	
Q	DeviceNet™ (Positive common NPN)	
R1	OMRON CompoBus/S	16 outputs
R2	(Positive common NPN)	8 outputs
V	CC-Link (Positive common NPN)	
ZB*1	CompoNet™	Positive common NPN
ZBN*1		Negative common PNP

*1 The communication connector (for the opposite side) is not provided. Please order it separately.

* Ensure a match with the common specification of the valve to be used.

5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

6 SUP/EXH block

—	Internal pilot
S	Internal pilot, Built-in silencer

* 3/5(E) port is plugged for the built-in silencer type.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 114.

4 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	Specified layout*2 (Up to 16 solenoids available)
02	2 stations	
⋮	⋮	
16	16 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

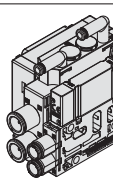
*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* This also includes the number of blanking plates.

* Since R2 type SI unit has 8 outputs, note that up to 8 solenoids can be accommodated.

7 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000	
C2	Straight	∅ 2	●	—	
C4		∅ 4	●	—	
C6		∅ 6	●	●	
C8		∅ 8	—	●	
C10		∅ 10	—	—	●
C12		∅ 12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●	
P, E port size (One-touch fittings)		∅ 8	∅ 10	∅ 12	



*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

* The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting
—	Direct mounting
D□	DIN rail mounting

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)

* Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

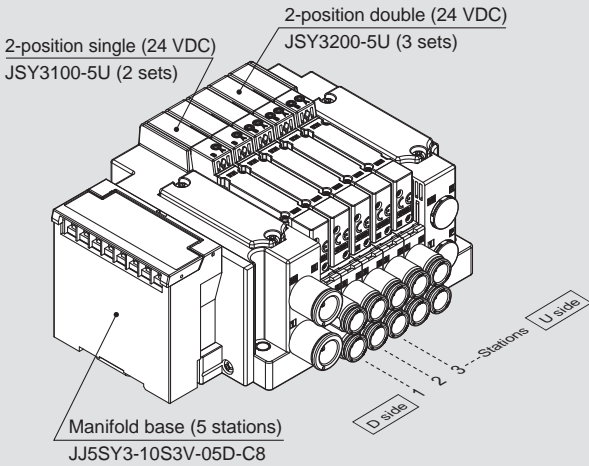
—	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
16	For 16 stations	

* If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 110 for the DIN rail part number.)

For details about the EX120 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 105. Please download the Operation Manual via SMC website, <https://www.smc.eu>

How to Order Manifold Assembly

Example (JJ5SY3-10S3V-□)



JJ5SY3-10S3V-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 ↳ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

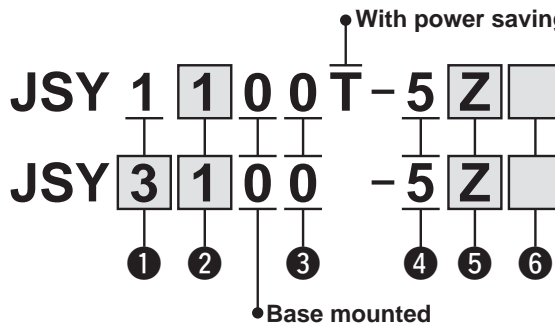
- The valve arrangement is numbered as the 1st station from the D side.
- Under the manifold part number, state the valves to be mounted in order from the 1st station as shown in the figure. If the arrangement becomes complicated, specify on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series
JSY3000/5000 Series



Made to Order
 (Refer to page 114 for details.)

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

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust
---	--------------------------------

4 Rated voltage

5	24 VDC
---	--------

2 Type of actuation

1	Single
2	2-position Double
3	Closed centre
4	3-position Exhaust centre
5	Pressure centre
A	4-position N.C./N.C.
B	dual 3-port N.O./N.O.
C	N.C./N.O.

5 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
U			Non-polar
Z	●	●	Positive common
NZ			Negative common

6 Manual override

<p>Non-locking push type</p>	<p>D: Push-turn locking slotted type</p>
<p>E: Push-turn locking lever type</p>	

* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.** Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service. Refer to page 107 for base gasket and mounting screw part numbers.

Caution
 If the JSY3000/5000 series will be continuously energised, please be sure to use the power saving circuit (continuous duty type). Refer to Made to Order on page 114. Additionally, when it is used at the energising rate over 50 %, please select the product with power saving circuit. For the JSY1000 series only the power saving circuit is available.

Protective class class III (Mark: ⚡)

Chart
 Valve
 Connector Plug-in Connecting Base
 D.sub Flat Ribbon
 Terminal Block
 Lead wire
 EX600
 EX250
 EX260
 EX120
 Common Dimensions
 Manifold Exploded View
 Fittings, Replacement Parts, Tools
 Manifold Options
 Made to Order
 Specific Product Precautions

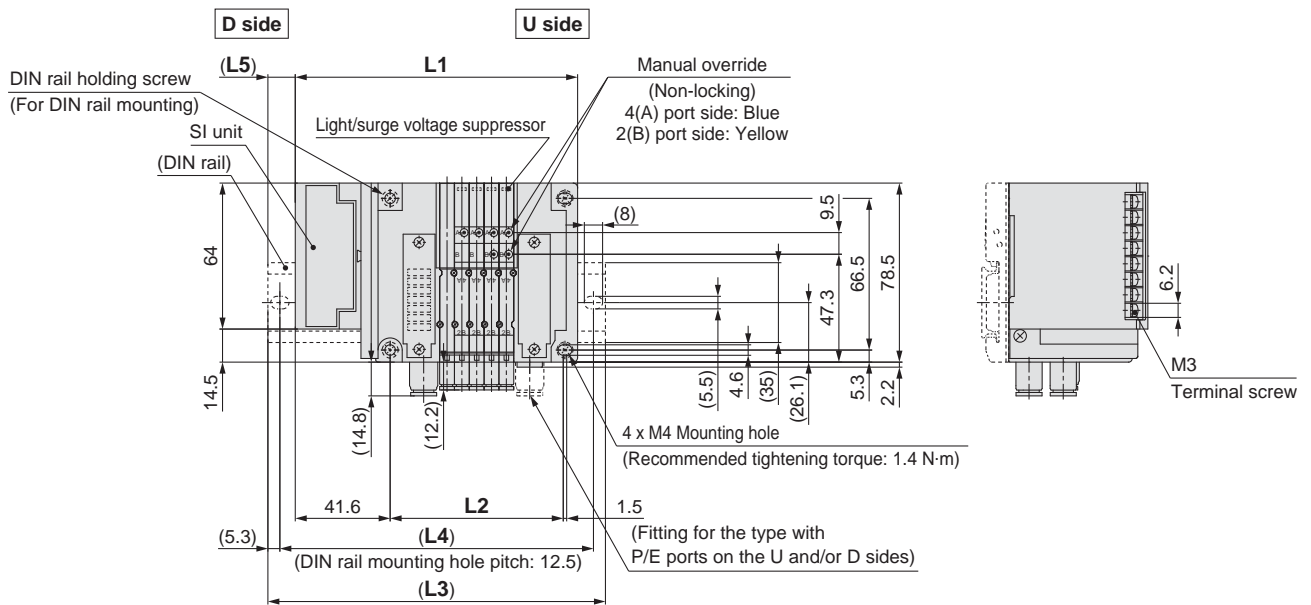
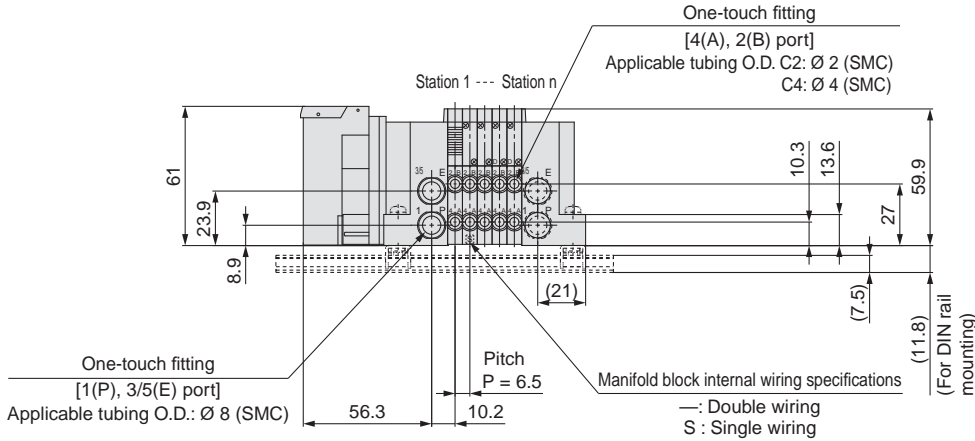
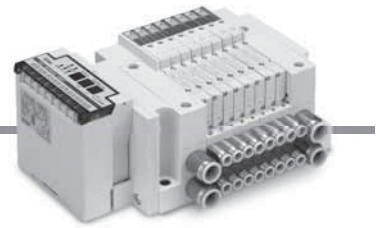
JSY1000/3000/5000 Series

Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Dimensions: **JSY1000 Series**

EX120

JJ5SY1-10S3□ - Stations $\frac{U}{D}$ - C₂(D)



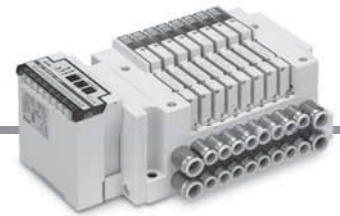
- * These figures show the "JJ5SY1-10S3V-05D-C4."
- * Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- * When CM is selected for mixed A, B port size and C6 (9 mm pitch) is included, refer to page 92 for dimensions.

L: Dimensions

n: Stations

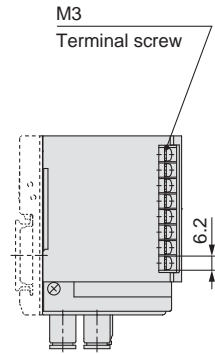
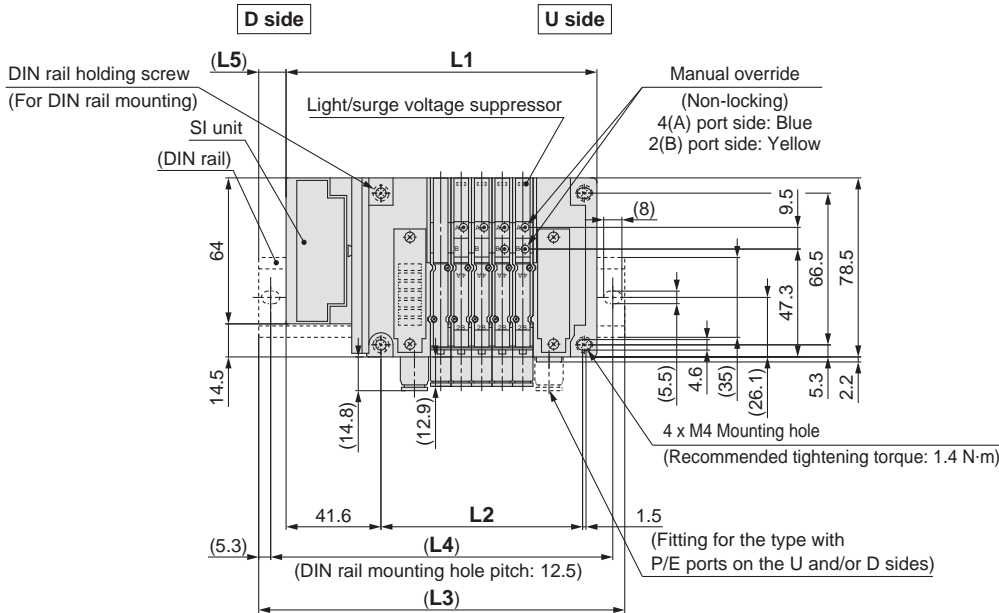
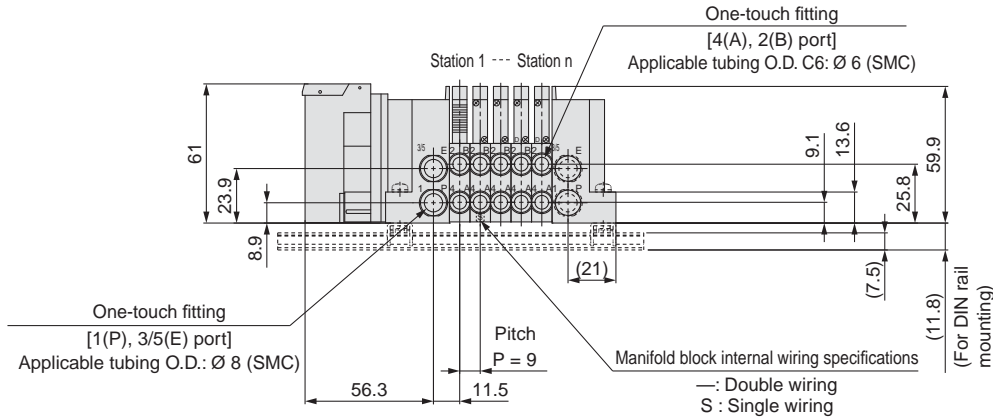
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	104.3	110.8	117.3	123.8	130.3	136.8	143.3	149.8	156.3	162.8	169.3	175.8	182.3	188.8	195.3
L2	56.4	62.9	69.4	75.9	82.4	88.9	95.4	101.9	108.4	114.9	121.4	127.9	134.4	140.9	147.4
L3	135.5	135.5	148	148	160.5	160.5	173	173	185.5	198	198	210.5	210.5	223	223
L4	125	125	137.5	137.5	150	150	162.5	162.5	175	187.5	187.5	200	200	212.5	212.5
L5	16	12	15	12	15	12	15	12	15	18	14	17	14	17	14

Type 10/Side Ported (Applicable to Ø 6 fittings)
EX120



Dimensions: **JSY1000 Series**

JJ5SY1-10S3□ - Stations $\frac{U}{D}$ - C6(D)



* These figures show the "JJ5SY1-10S3V-05D-C6."
* Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
* When CM is selected for mixed A, B port size, refer to page 92 for dimensions.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	109.3	118.3	127.3	136.3	145.3	154.3	163.3	172.3	181.3	190.3	199.3	208.3	217.3	226.3	235.3
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4
L3	135.5	148	160.5	160.5	173	185.5	198	198	210.5	223	223	235.5	248	260.5	260.5
L4	125	137.5	150	150	162.5	175	187.5	187.5	200	212.5	212.5	225	237.5	250	250
L5	13	15	17	12	14	16	17	13	15	16	12	14	15	17	13

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

Specific Product
Precautions

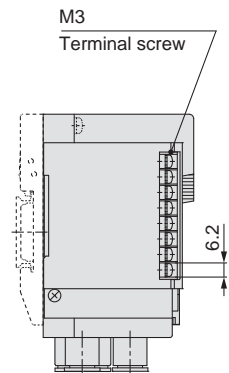
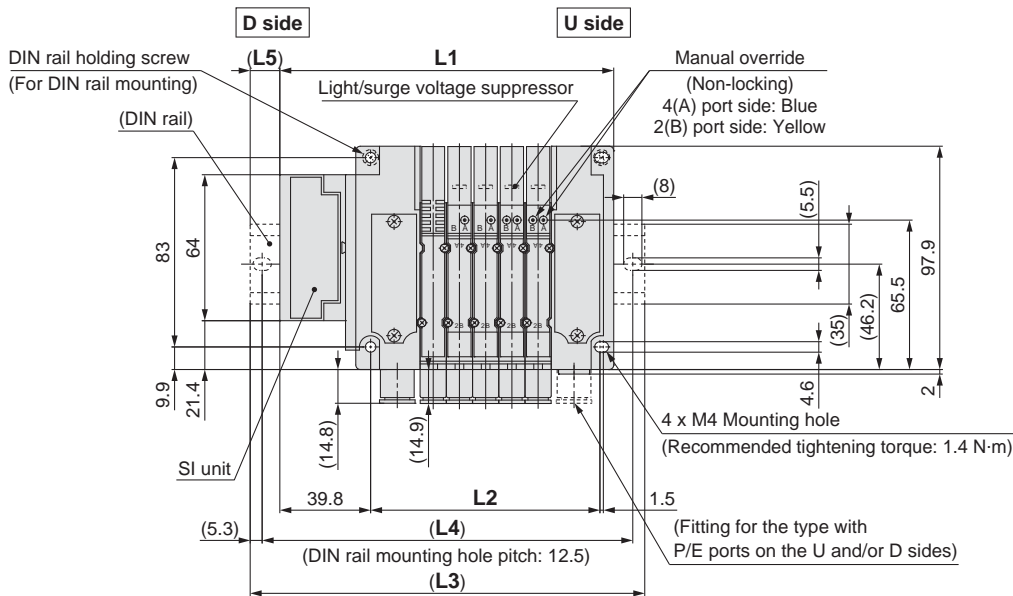
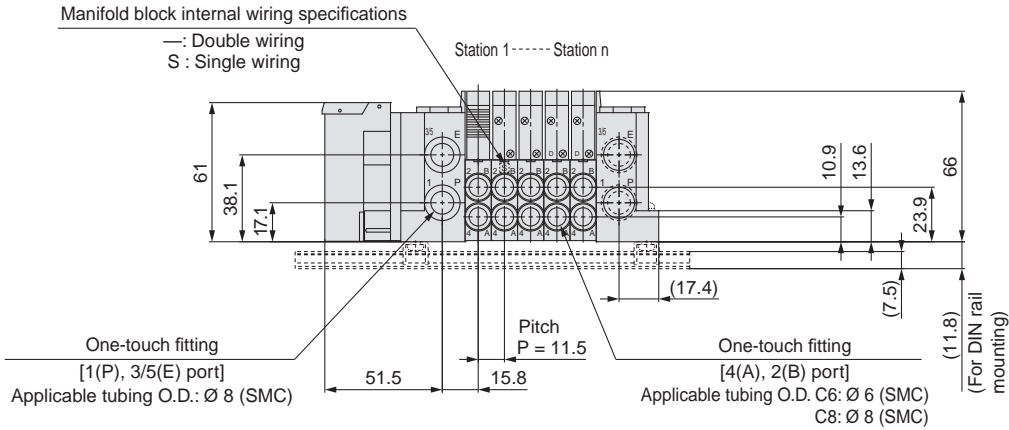
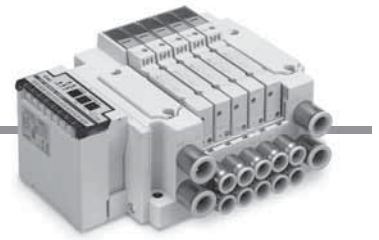
JSY1000/3000/5000 Series

Type 10/Side Ported

Dimensions: JSY3000 Series

EX120

JJ5SY3-10S3□ - Stations $\frac{U}{D}$ - C6/C8 (D)



* These figures show the "JJ5SY3-10S3V-05D-C8."
 * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

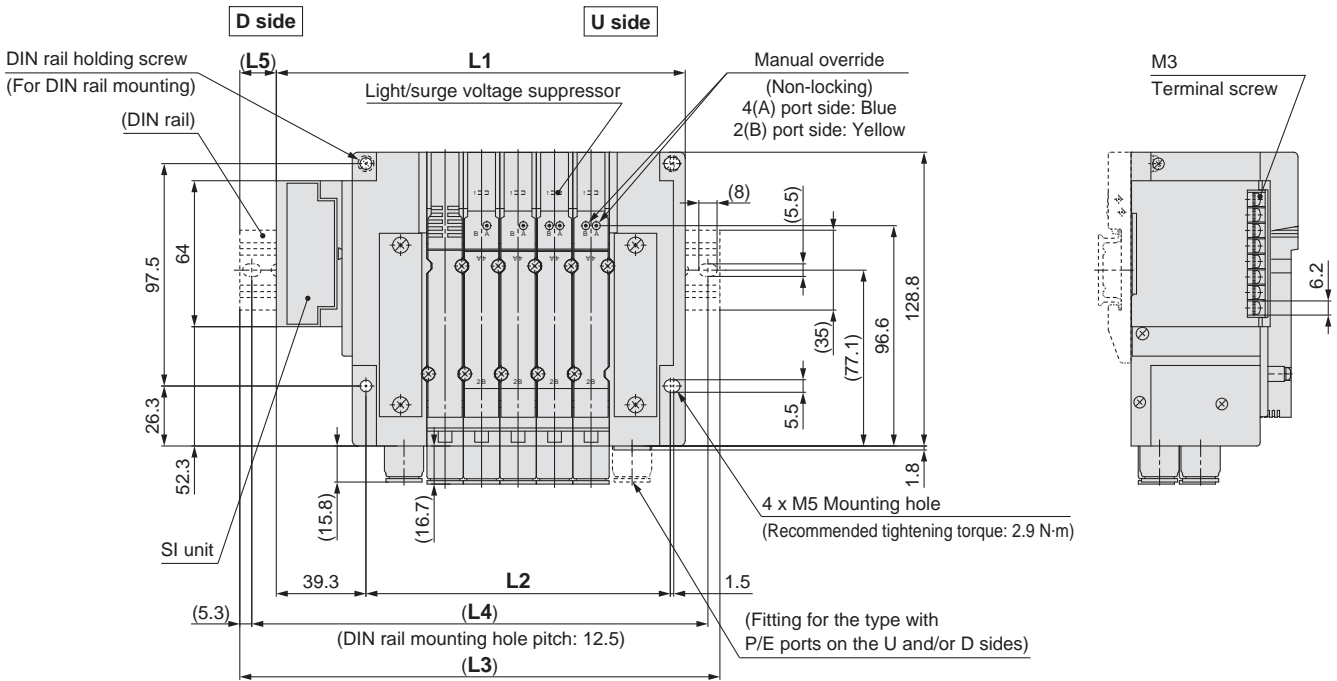
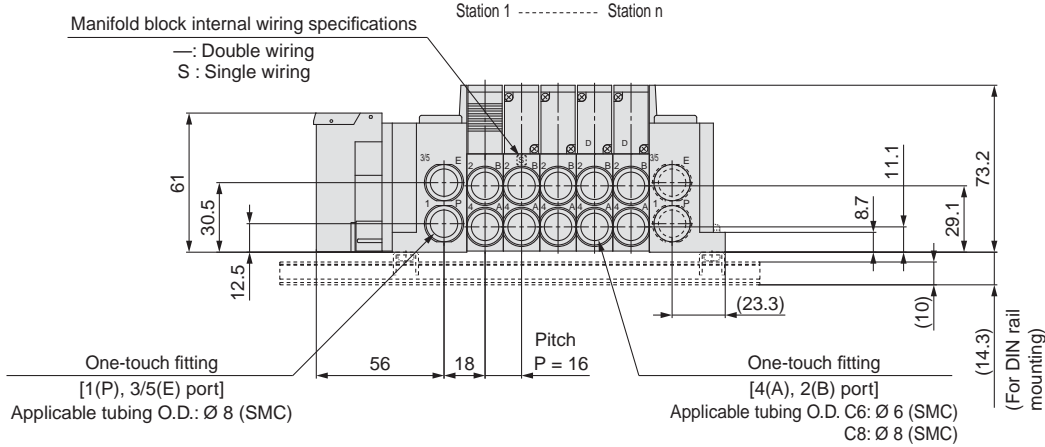
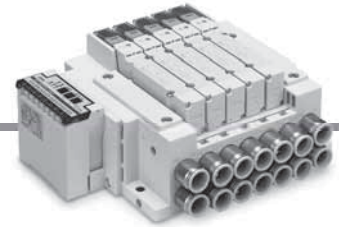
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	111.9	123.4	134.9	146.4	157.9	169.4	180.9	192.4	203.9	215.4	226.9	238.4	249.9	261.4	272.9
L2	66.1	77.6	89.1	100.6	112.1	123.6	135.1	146.6	158.1	169.6	181.1	192.6	204.1	215.6	227.1
L3	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	273	285.5	298
L4	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	262.5	275	287.5
L5	12	12	13	13	14	14	15	15	16	16	17	17	12	12	13

Type 10/Side Ported

EX120

Dimensions: **JSY5000 Series**

JJ5SY5-10S3□ - Stations $\frac{U}{D}$ - C10/C12(D)



* These figures show the "JJ5SY5-10S3V-05D-C12."
 * Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	131.3	147.3	163.3	179.3	195.3	211.3	227.3	243.3	259.3	275.3	291.3	307.3	323.3	339.3	355.3
L2	85.5	101.5	117.5	133.5	149.5	165.5	181.5	197.5	213.5	229.5	245.5	261.5	277.5	293.5	309.5
L3	160.5	173	198	210.5	223	235.5	260.5	273	285.5	310.5	323	335.5	348	373	385.5
L4	150	162.5	187.5	200	212.5	225	250	262.5	275	300	312.5	325	337.5	362.5	375
L5	15	13	17	16	14	12	17	15	13	18	16	14	12	17	15

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

Specific Product
Precautions

JSY1000/3000/5000 Series Common Dimensions

Type 10/Side Ported

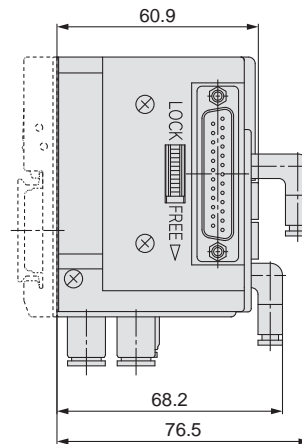
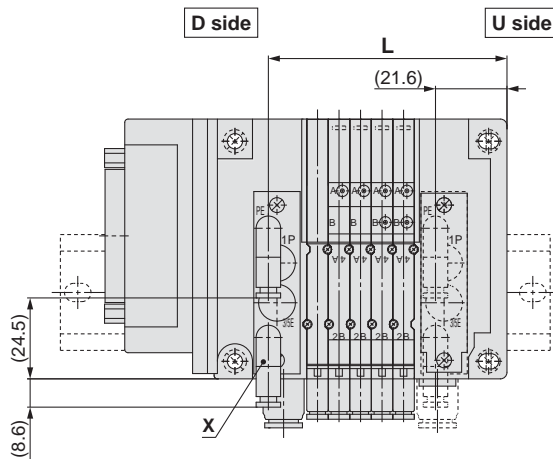
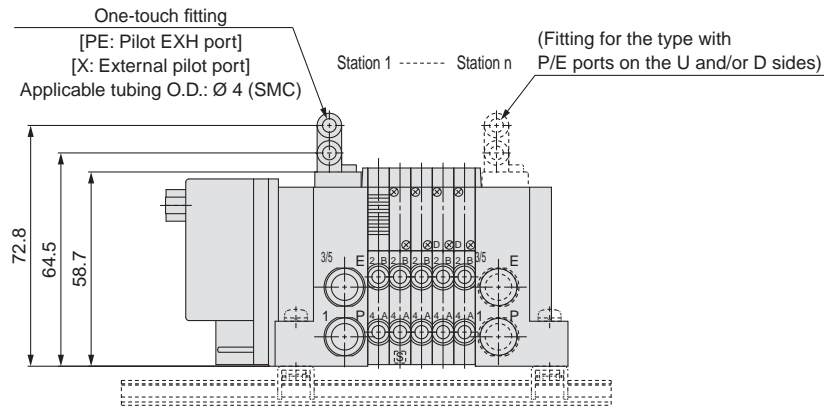
Dimensions: JSY1000 Series

External Pilot, Built-in Silencer

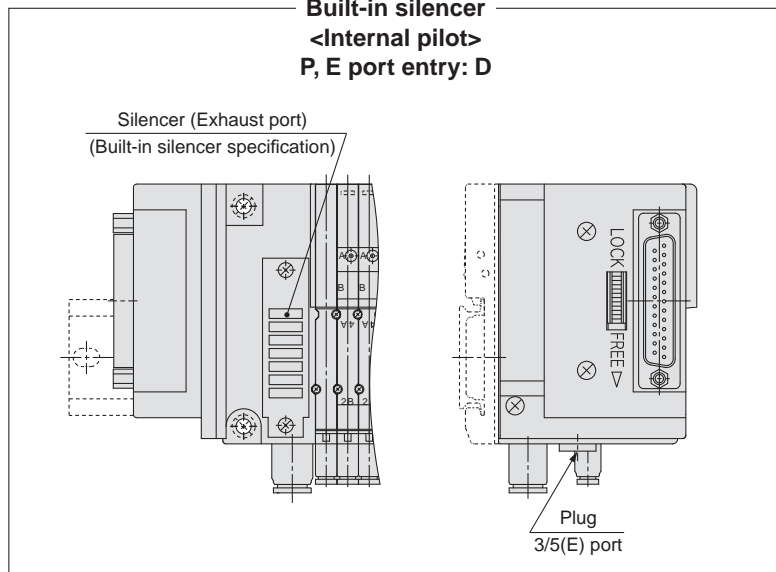
JJ5SY1-10□ - Stations $\frac{U}{D}$ (S, R) - $\frac{C2}{C4/C6}$ (D)

External pilot (Made to Order)

P, E port entry: D



Built-in silencer
<Internal pilot>
P, E port entry: D



Calculation formula for L dimensions

$$L = 6.5 \times n1 + 9 \times n2 + 39.6$$

n1: Number of 6.5 mm pitch manifold block stations
(Applicable fitting: $\varnothing 2$, $\varnothing 4$)

n2: Number of 9 mm pitch manifold block stations
(Applicable fitting: $\varnothing 6$)

* These figures show the "JJ5SY1-10F2-05DR-C4."

Type 10/Side Ported

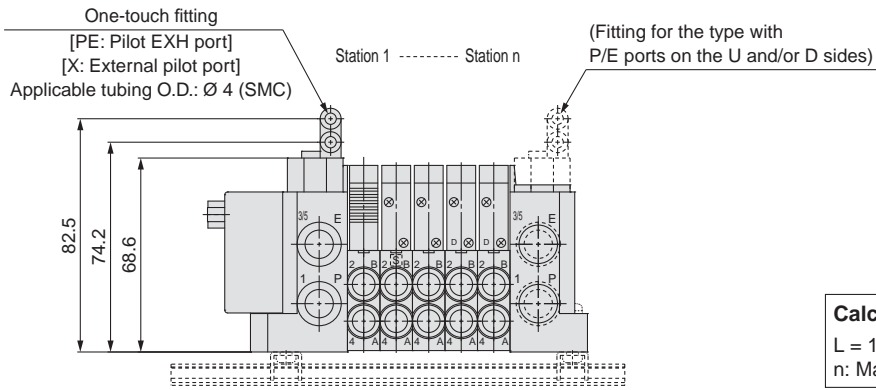
External Pilot, Built-in Silencer

Dimensions: JSY3000 Series

JJ5SY3-10□ - Stations $\frac{U}{D}$ (S, R) - C₈ (D)

External pilot (Made to Order)

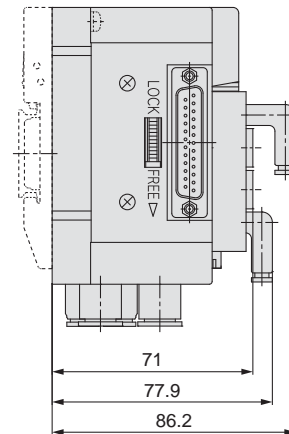
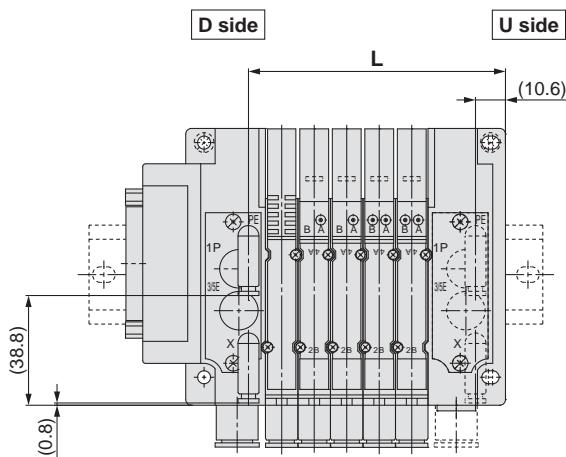
P, E port entry: D



Calculation formula for L dimensions

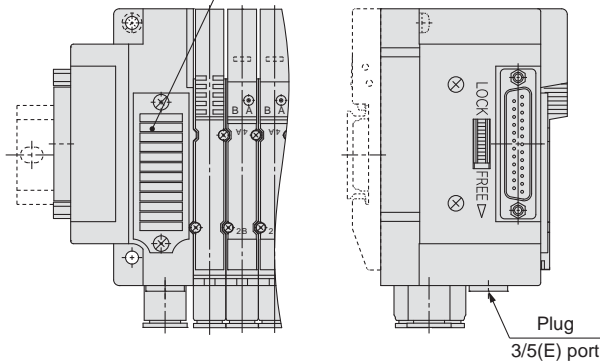
$$L = 11.5 \times n + 33.4$$

n: Manifold stations



Built-in silencer <Internal pilot> P, E port entry: D

Silencer (Exhaust port)
(Built-in silencer specification)



* These figures show the "JJ5SY3-10F2-05DR-C8."

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

Specific Product
Precautions

JSY1000/3000/5000 Series

Type 10/Side Ported

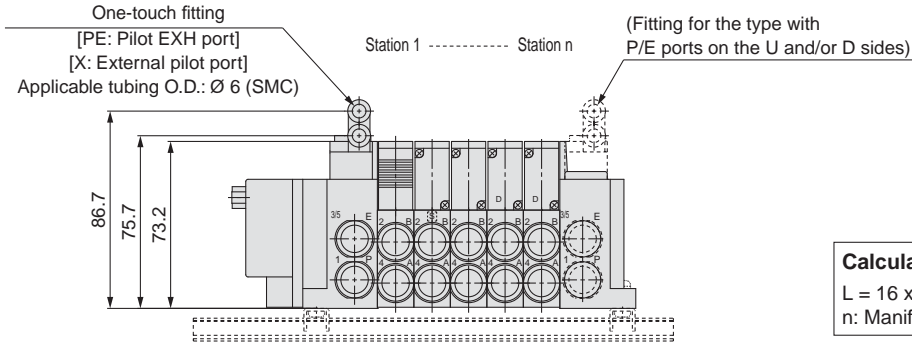
External Pilot, Built-in Silencer

Dimensions: JSY5000 Series

JJ5SY5-10□ - Stations $\frac{U}{D}$ (S, R) - C¹⁰/₁₂(D)

External pilot (Made to Order)

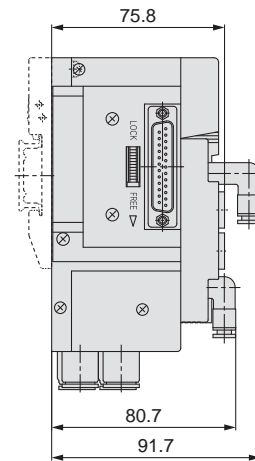
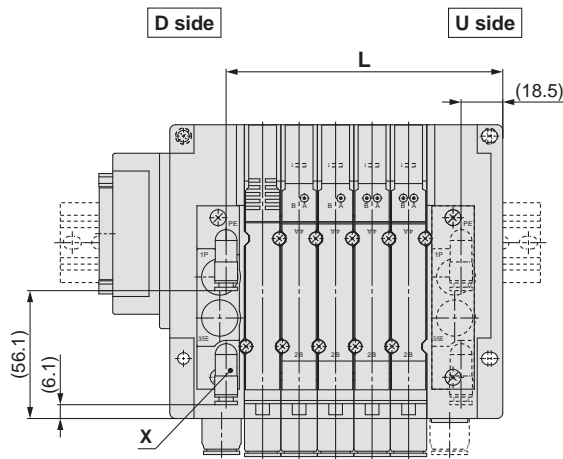
P, E port entry: D



Calculation formula for L dimensions

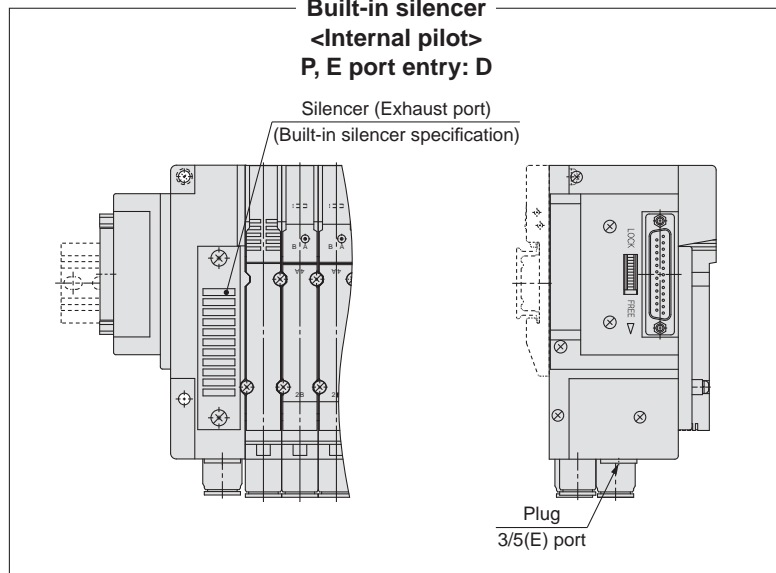
$$L = 16 \times n + 41.5$$

n: Manifold stations



* These figures show the "JJ5SY5-10F2-05DR-C12."

Built-in silencer <Internal pilot> P, E port entry: D

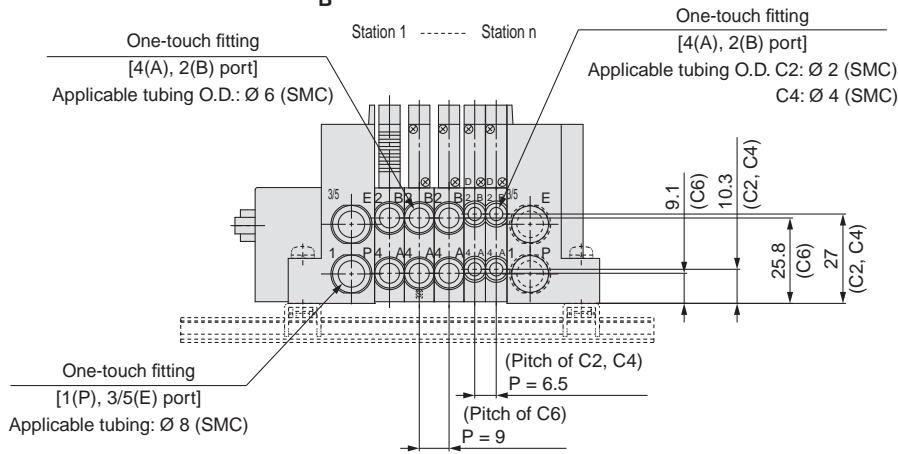


Dimensions: JSY1000 Series

Type 10/Side Ported
Mixed Size, Straight Port Type

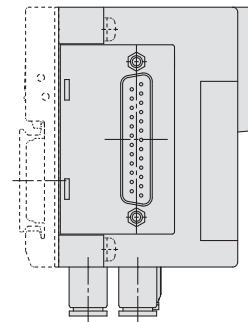
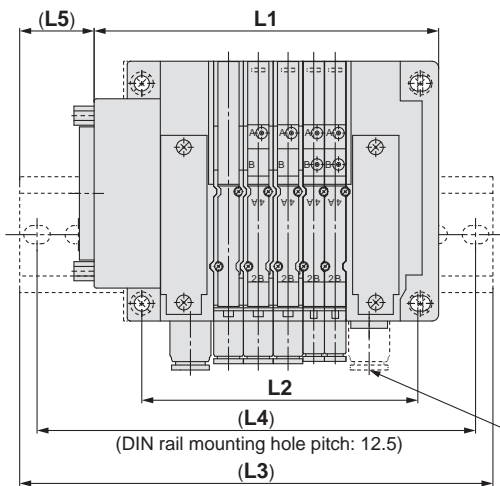


JJ5SY1-10□ - Stations $\frac{U}{D}$ - CM



D side

U side



- * Refer to page 89 for dimensions of external pilot and built-in silencer.
- * Refer to pages 63 to 66, 73, and 74 for dimensions when L6, b, and d are used for the calculation formula.
- * Refer to pages below for dimensions that are not specified in each wiring specification.

- D-sub connector (IP40/Connector entry direction adjustable) : pp. 21, 22
- D-sub connector (IP20/Compact type) : pp. 27, 28
- Flat ribbon cable (IP40/Connector entry direction adjustable) : pp. 30, 31
- Flat ribbon cable (IP20/Compact type) : pp. 34, 35
- Spring type terminal block box : pp. 43, 44
- Terminal block box : pp. 47, 48
- Lead wire : pp. 55, 56
- EX600 : pp. 63 to 66
- EX250 : pp. 73, 74
- EX260 : pp. 79, 80
- EX120 : pp. 85, 86

Calculation formula for dimensions

$$L1 = 6.5 \times n1 + 9 \times n2 + a + b \times n3$$

$$L2 = 6.5 \times n1 + 9 \times n2 + 43.4$$

$$M = \{(L1 + c) / 12.5\} + 1 \text{ Decimal fractions are truncated.}$$

$$L3 = 12.5 \times M + 23$$

$$L4 = L3 - 10.5$$

$$L5 = (L3 - L1 + c) / 2$$

$$L6 = b \times n3 + d$$

- n1: Number of 6.5 mm pitch manifold block stations (Applicable fittings: $\varnothing 2$, $\varnothing 4$)
- n2: Number of 9 mm pitch manifold block stations (Applicable fittings: $\varnothing 6$)
- n3: Number of I/O units or input block stations

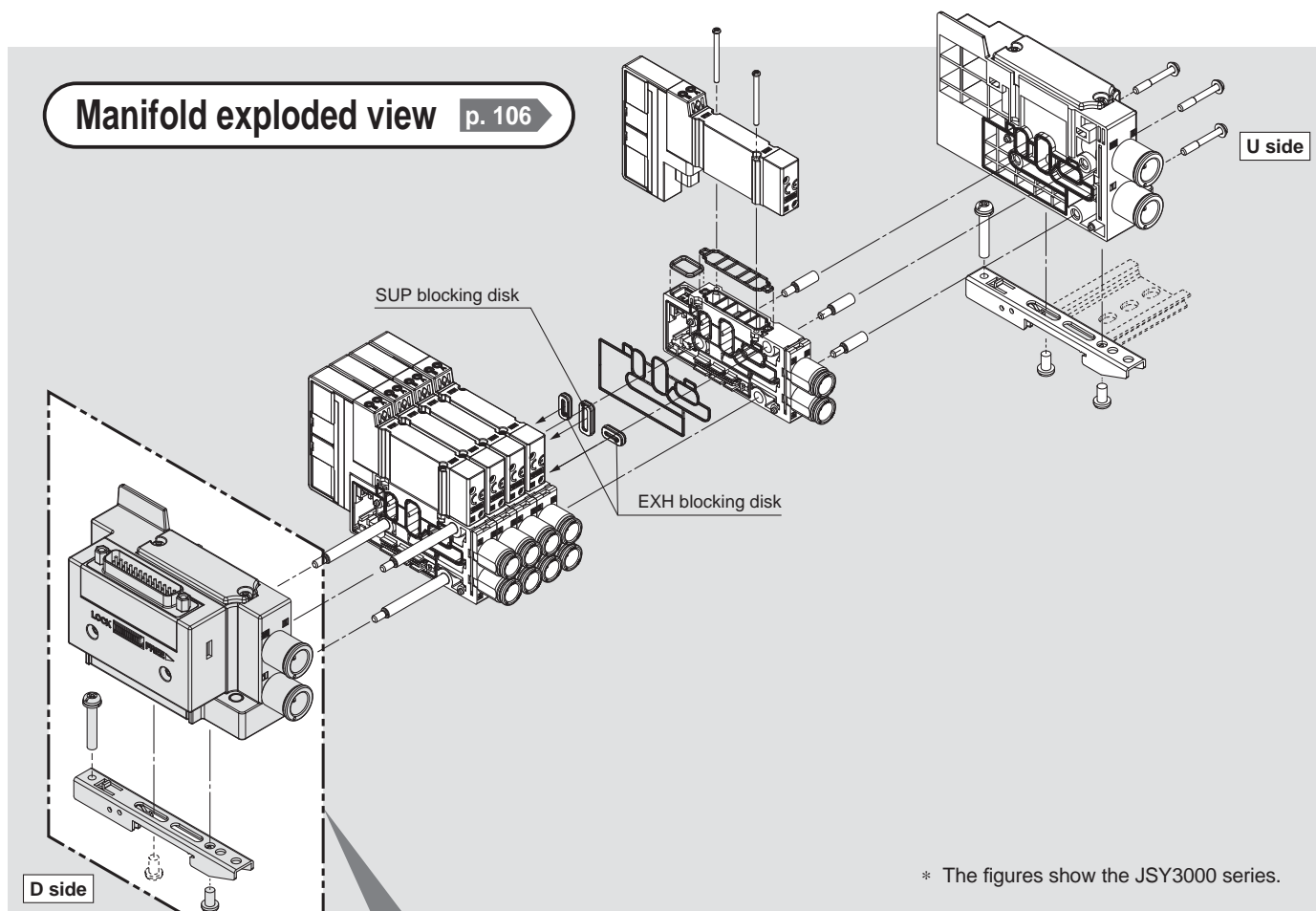
	Coefficient	a	b	c	d
D-sub connector (IP20/Compact type)		64.1	—	6.1	—
D-sub connector/Flat ribbon cable (IP40/Connector entry direction adjustable)		83	—	6.1	—
Flat ribbon cable (IP20/Compact type)		59.1	—	11.2	—
Spring type terminal block box		125.5	—	—	—
Terminal block box		146.8	—	—	—
Lead wire		94.5	—	—	—
Serial transmission: EX600 (M12 connector)		139	47	—	83.8
Serial transmission: EX600 (7/8 inch connector)		155.5	47	—	83.8
Serial transmission: EX250		139	21	—	83.8
Serial transmission: EX260		86.2	—	—	—
Serial transmission: EX120		91.3	—	—	—

* FW [D-sub connector (IP67)] is not available for the JSY1000.

- Chart
- Valve
- Connector Connecting Base
- Plug-in
- D.sub Flat Ribbon
- Terminal Block
- Lead wire
- EX600
- EX250
- EX260
- EX120

- Common Dimensions
- Manifold Exploded View
- Fittings, Replacement Parts, Tools
- Manifold Options
- Made to Order
- Specific Product Precautions

JSY1000/3000/5000 Series Type 10 Connector Connecting Base Manifold Exploded View



Wiring

<p>D-sub Connector/Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable) p. 95</p> 	<p>D-sub Connector (IP67) (For JSY3000/5000) p. 96</p> 	<p>D-sub Connector/Flat Ribbon Cable (IP20/Compact Type) p. 97</p> 	
<p>Terminal Block Box p. 98</p>  <p>Spring type (Compact type)</p>	<p>p. 99</p> 	<p>Lead Wire p. 100</p> 	<p>EX600 p. 101</p> 
<p>EX250 p. 103</p> 	<p>EX260 p. 104</p> 	<p>EX120 p. 105</p> 	

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

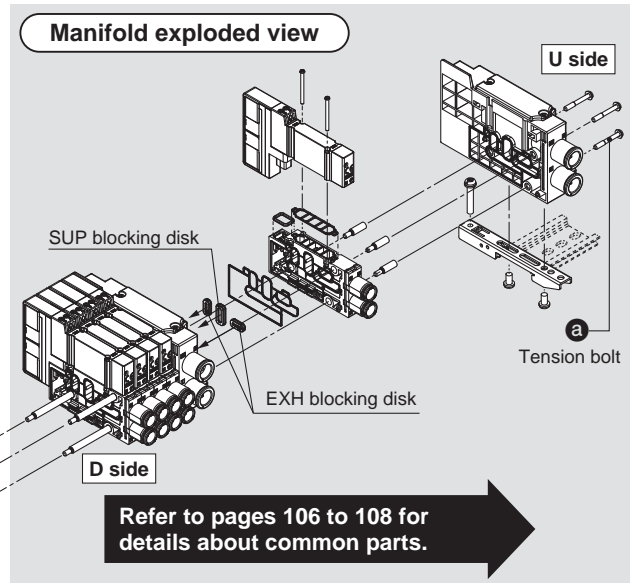
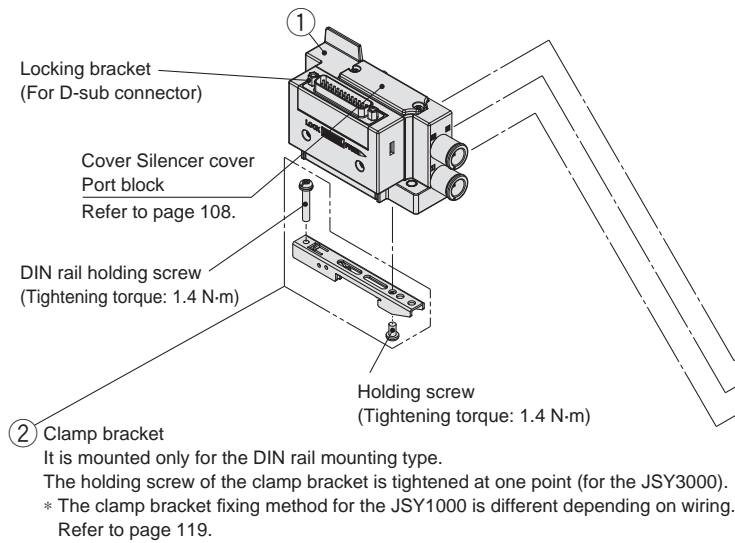
Made to
Order

Specific Product
Precautions

JSY1000/3000/5000 Series

Wiring

D-sub Connector/Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - **3** A **1** - C10

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

SUP/EXH block assembly

3	D-sub connector (25 pins)
4	Flat ribbon cable (26 pins)
5	Flat ribbon cable (20 pins)
6	Flat ribbon cable (10 pins)

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S."
Not available for "R" type.

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

Connector entry direction

1	Upward
2	Lateral

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000 JSY3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block.

② Clamp bracket

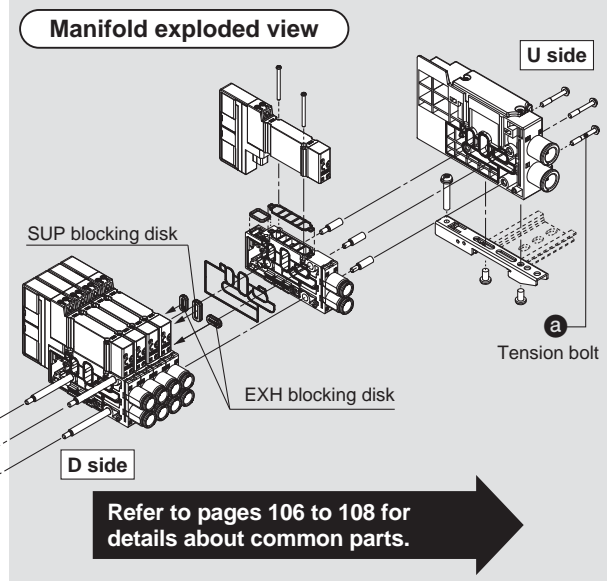
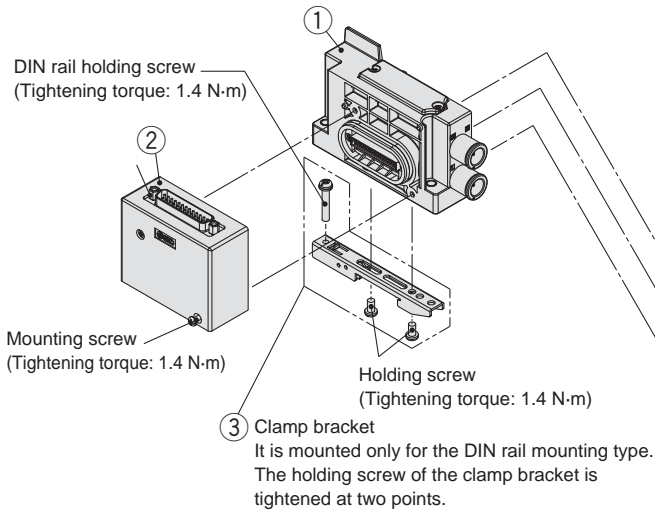
Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

Wiring

D-sub Connector (IP67)

(For JSY3000/5000)



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - 1A **C10**

• Series

3	JSY3000
5	JSY5000

• Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

• Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

• P, E port size (One-touch fittings)

Symbol	P, E port	JSY3000	JSY5000
C10	∅ 10 One-touch fitting	●	—
C12	∅ 12 One-touch fitting	—	●
00*1	Plug	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

* 3/5(E) port is plugged for the built-in silencer type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block.

② D-sub connector block <for IP67>

Part no.	Connector entry direction
SY30M-14-9A1	Upward
SY30M-14-9A2	Lateral

③ Clamp bracket

Series	Part no.
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

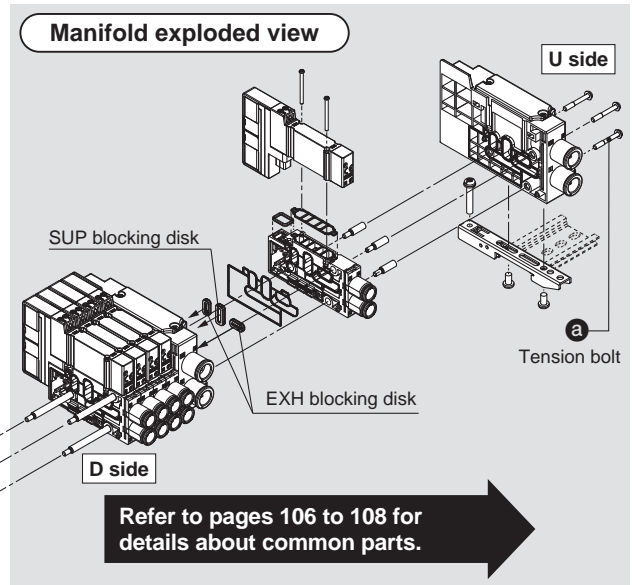
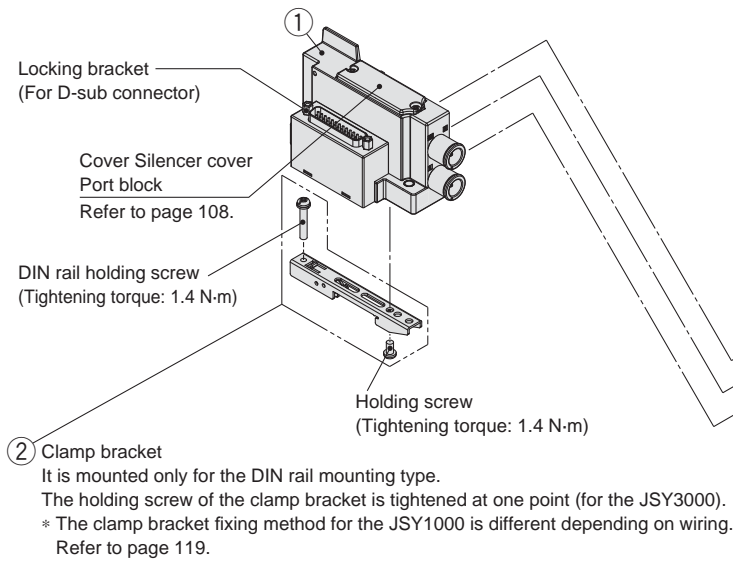
Specific Product
Precautions

JSY1000/3000/5000 Series

Wiring

D-sub Connector/Flat Ribbon Cable (IP20/Compact Type)

(For JSY1000/3000)



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - **9** A **1** - C10

Series

1	JSY1000
3	JSY3000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

SUP/EXH block assembly

9	D-sub connector (25 pins)
10	Flat ribbon cable (26 pins)
11	Flat ribbon cable (20 pins)
12	Flat ribbon cable (10 pins)

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000
C8	Ø 8 One-touch fitting	●	—
C10	Ø 10 One-touch fitting	—	●
00*1	Plug	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

Connector entry direction

1	Upward
2	Lateral

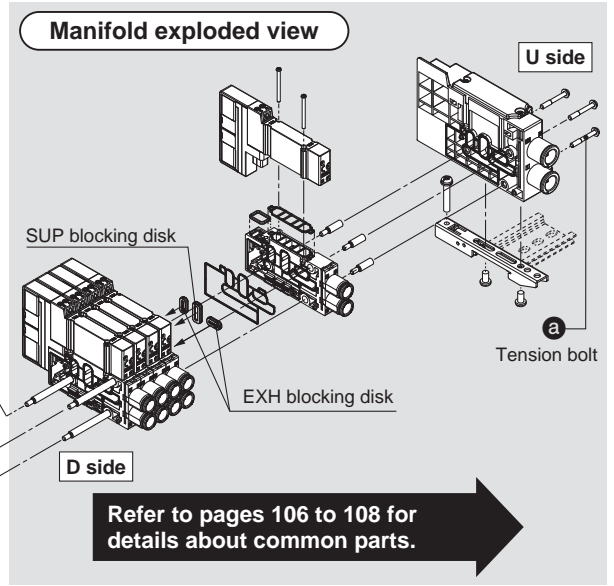
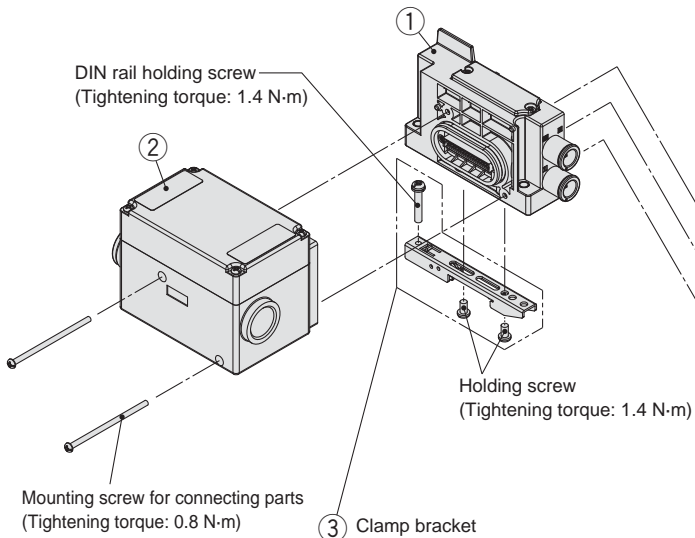
② Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A

* Part number is for one piece.

Wiring

Spring Type Terminal Block Box



③ Clamp bracket
It is mounted only for the DIN rail mounting type.
The holding screw of the clamp bracket is tightened at two points.
* The clamp bracket fixing method for the JSY1000 is different depending on wiring.
Refer to page 119.

Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M-1P-1A **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S."
Not available for "R" type.

* 3/5(E) port is plugged for the built-in silencer type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block.

② Terminal block assembly

SY30M-130-1A

③ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

Chart

Valve

Connector

Plug-in

Connecting Base

D.sub

Flat Ribbon

Terminal Block

Lead wire

EX600

EX250

EX260

EX120

Common

Dimensions

Manifold

Exploded View

Fittings, Replacement

Parts, Tools

Manifold

Options

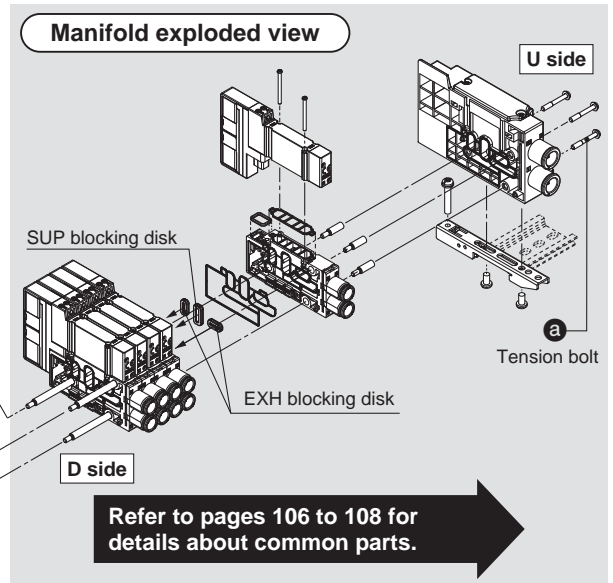
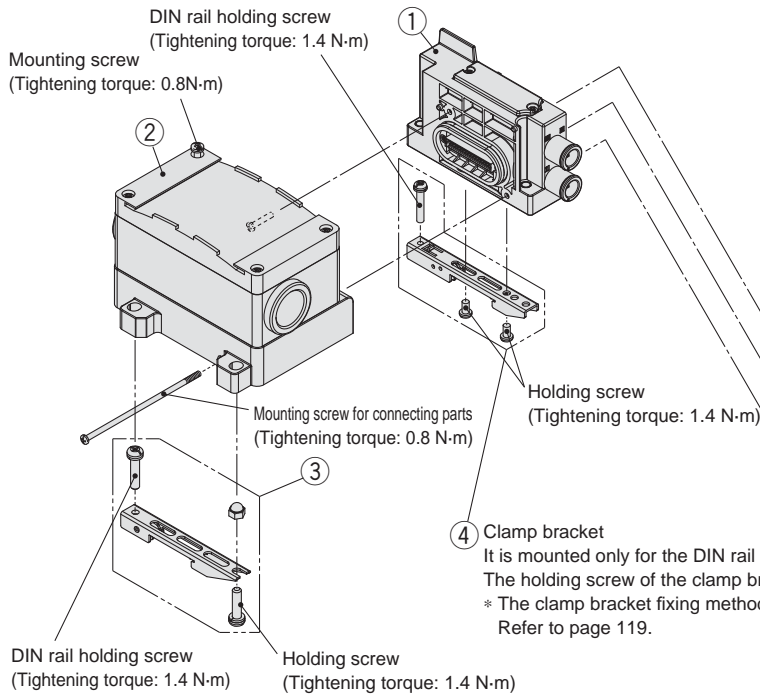
Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series

Wiring

Terminal Block Box



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - 1A **C10**

• Series

1	JSY1000
3	JSY3000
5	JSY5000

• Mounting

Symbol	Mounting	JSY1000	JSY3000	JSY5000
—	Direct mounting	●	●	●
D00	DIN rail mounting (Without DIN rail)	●	—	—
D0	DIN rail mounting (Without DIN rail)	—	●	●

• Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

• P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S."
Not available for "R" type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000 JSY3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block.

② Terminal block box housing assembly

VVQC1000 - T0 - 1

③ Clamp bracket for terminal block box

SY30M - 15 - 4A

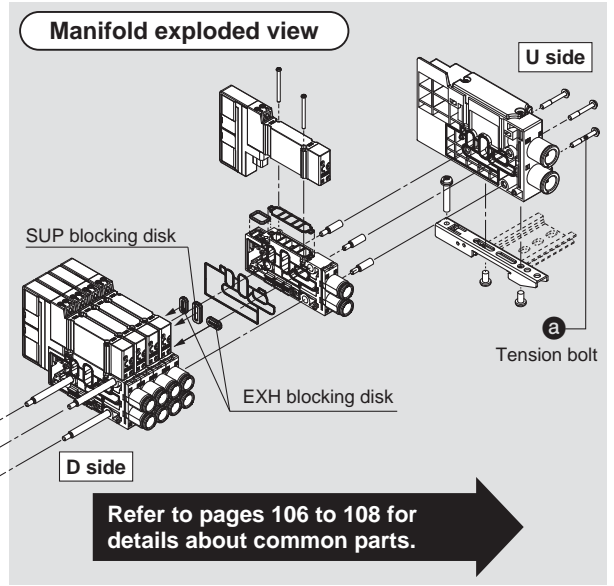
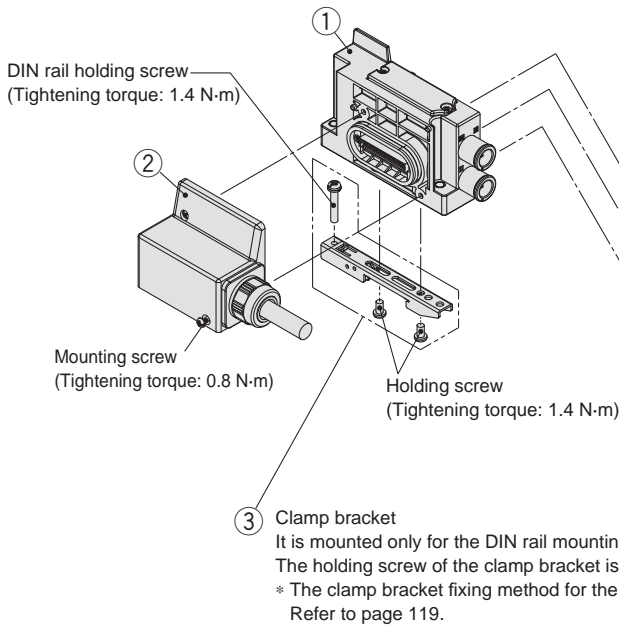
④ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-2A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

Wiring

Lead Wire



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - 1A **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S."
Not available for "R" type.

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000 JSY3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block.

② Lead wire connector block assembly

SY30M - 14 - 4A - **1** - **1**

Number of cores (Lead wire)

Symbol	Number of cores
1	34
2	17
3	9

Lead wire length [m]

Symbol	Length
1	0.6
2	1.5
3	3

③ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

Chart

Valve

Connector
Plug-in
Connecting Base

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

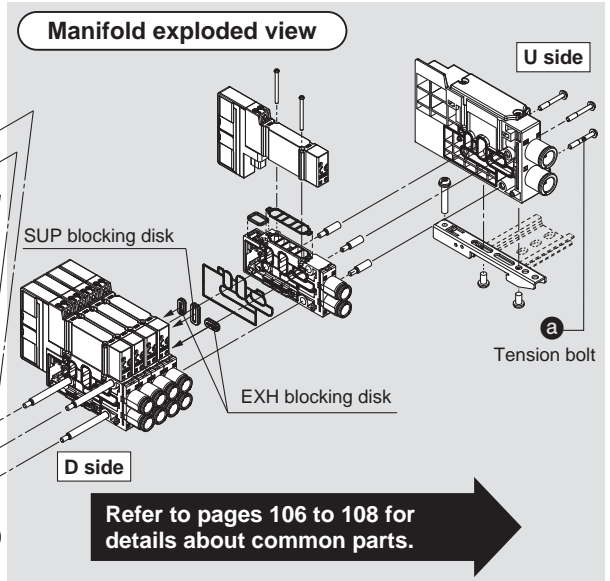
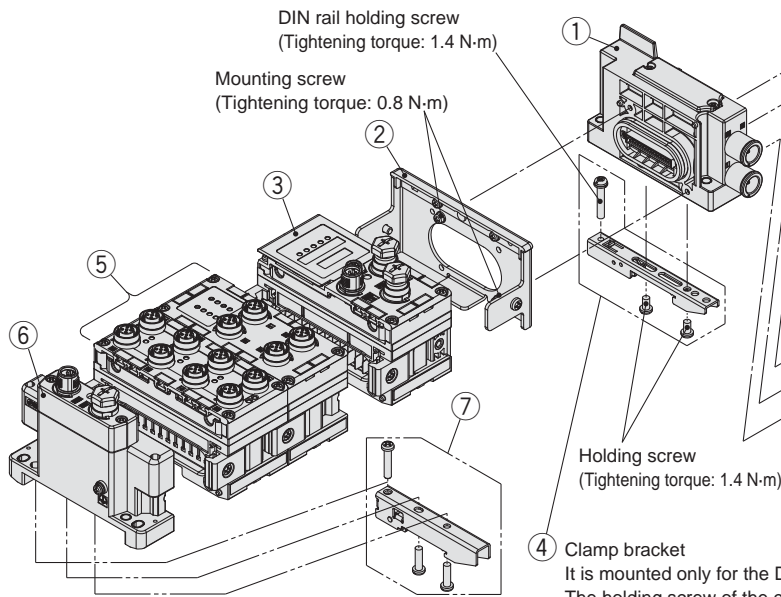
Made to
Order

Specific Product
Precautions

JSY1000/3000/5000 Series

Wiring

EX600



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M-1P-1A **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

Mounting

Symbol	Mounting	JSY1000	JSY3000	JSY5000
—	Direct mounting	●	●	●
D00	DIN rail mounting (Without DIN rail)	●	—	—
D0	DIN rail mounting (Without DIN rail)	—	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	∅ 8 One-touch fitting	●	—	—
C10	∅ 10 One-touch fitting	—	●	—
C12	∅ 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

SUP/EXH block assembly (D side)

accessories and the number of accessories

Accessories	JSY1000/3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block

② Valve plate

EX600-ZMV2

* With mounting screws (2 pcs. of M4 x 6 and 2 pcs. of M3 x 8)

④ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-2A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

③ EX600 SI unit

EX600-S PR 1

Protocol

Symbol	Description
PR	PROFIBUS DP
DN	DeviceNet™
MJ	CC-Link
EN	EtherNet/IP™*1
EC	EtherCAT*1
PN	PROFINET*1

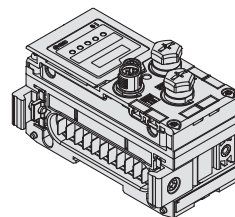
*1 Cannot be communicated with the EX600-HT1-□

Version

Symbol	Description
—	When MJ, EN, EC, or PN is selected
A	When PR or DN is selected

Output type

Symbol	Description	Condition
1	PNP (Negative common)	Can be selected by all protocols
2	NPN (Positive common)	Can be selected by all protocols
3	PNP (Negative common) EtherNet/IP™ (2 ports)	Can be selected in the case of EN
4	NPN (Positive common) EtherNet/IP™ (2 ports)	Can be selected in the case of EN



(Wireless compatible)

EX600-W EN 1

Protocol

Symbol	SI unit type	Description
EN	Wireless base unit	EtherNet/IP™*1
PN	Wireless base unit	PROFINET*1
SV	Wireless remote unit	—*1

*1 Cannot be communicated with the EX600-HT1-□.

* The wireless system is suitable for use only in a country where it is in accordance with the Radio Act and regulations of that country.

Output type

Symbol	Description
1	PNP (Negative common)
2	NPN (Positive common)

Manifold Parts Nos.

⑤ EX600 Digital input unit

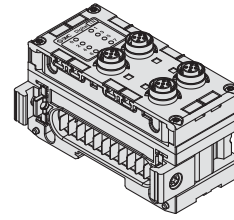
EX600-DX P B

Input type

Symbol	Description
P	PNP
N	NPN

Number of inputs, Open-circuit detection, and Connector

Symbol	Number of inputs	Open-circuit detection	Connector
B	8	No	M12 connector (5 pins) 4 pcs.
C	8	No	M8 connector (3 pins) 8 pcs.
C1	8	Yes	M8 connector (3 pins) 8 pcs.
D	16	No	M12 connector (5 pins) 8 pcs.
E	16	No	D-sub connector (25 pins)*1*2
F	16	No	Spring type terminal block (32 pins)*1*2



⑤ EX600 Digital output unit

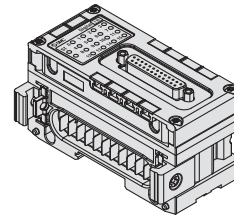
EX600-DY P B

Output type

Symbol	Description
P	PNP
N	NPN

Number of outputs and Connector

Symbol	Number of outputs	Connector
B	8	M12 connector (5 pins) 4 pcs.
E	16	D-sub connector (25 pins)*1*2
F	16	Spring type terminal block (32 pins)*1*2



⑤ EX600 Digital input/output unit

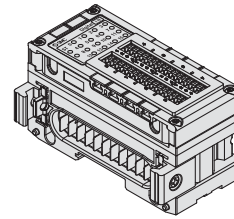
EX600-DM P E

Input/Output type

Symbol	Description
P	PNP
N	NPN

Number of inputs/outputs and Connector

Symbol	Number of inputs	Number of outputs	Connector
E	8	8	D-sub connector (25 pins)*1*2
F	8	8	Spring type terminal block (32 pins)*1*2



⑤ EX600 Analogue input/output unit

EX600-AX A

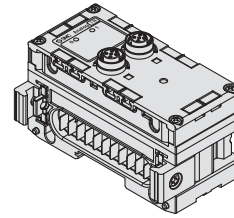
Analogue input/output

Symbol	Description
AX	Analogue input
AY	Analogue output

Number of input channels and Connector

Symbol	Number of input channels	Connector
A	2 channels	M12 connector (5 pins) 2 pcs.*3

*3 Refer to *1 and *2 below for AY.



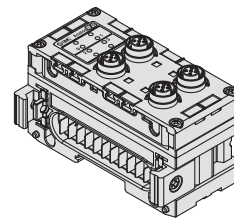
⑤ EX600 Analogue input/output unit

EX600-AM B

Analogue input/output

Number of input/output channels and Connector

Symbol	Number of input channels	Number of output channels	Connector
B	2 channels	2 channels	M12 connector (5 pins) 4 pcs.*1*2



⑥ EX600 End plate

EX600-ED 2

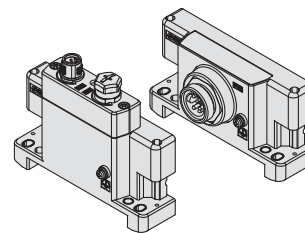
Power connector

Symbol	Connector
2	M12 power supply connector, B-coded
3	7/8 inch power supply connector
4	M12 power supply connector IN/OUT, A-coded, Pin arrangement 1
5	M12 power supply connector IN/OUT, A-coded, Pin arrangement 2

Mounting

Symbol	Description
—	Without DIN rail mounting bracket
3	With DIN rail mounting bracket

* The pin layout for "4" and "5" pin connector is different.

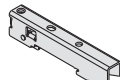


⑦ Clamp bracket for EX600

EX600-ZMA3

Enclosed parts

Round head screw with washer (M4 x 20) 1 pc.
P-tight screw (4 x 14) 2 pcs.



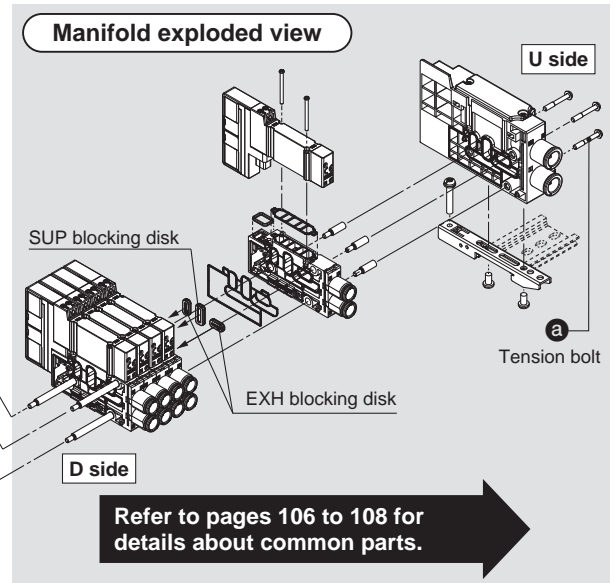
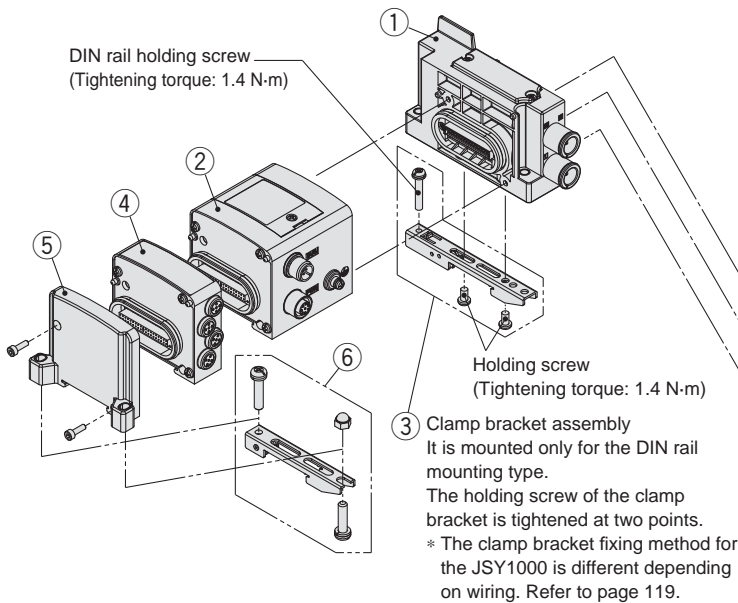
*1 Cannot be communicated with the EX600-HT1-□ (Old version of the handheld terminal)
*2 Cannot be connected with the EX600-SPR1, EX600-SPR2, EX600-SDN1, or EX600-SDN2

Chart
Valve
Connector
Plug-in
Connecting Base
D.sub
Flat Ribbon
Terminal Block
Lead wire
EX600
EX250
EX260
EX120
Common Dimensions
Manifold Exploded View
Fittings, Replacement Parts, Tools
Manifold Options
Made to Order
Specific Product Precautions

JSY1000/3000/5000 Series

Wiring

EX250



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M-1P-1A **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

Mounting

Symbol	Mounting	JSY1000	JSY3000	JSY5000
—	Direct mounting	●	●	●
D00	DIN rail mounting (Without DIN rail)	●	—	—
D0	DIN rail mounting (Without DIN rail)	—	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000 JSY3000	JSY5000
① Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block

② EX250 SI unit

EX250-S **DN1**

Communication protocol

DN1	DeviceNet™ (Negative common)
PR1	PROFIBUS DP (Negative common)
AS3	AS-Interface (8 in/8 out, 31 slave modes, 2 isolated common type) (Negative common)
AS5	AS-Interface (4 in/4 out, 31 slave modes, 2 isolated common type) (Negative common)
AS7	AS-Interface (8 in/8 out, 31 slave modes, 1 common type) (Negative common)
AS9	AS-Interface (4 in/4 out, 31 slave modes, 1 common type) (Negative common)
CA1A	CANopen (Negative common)
EN1	EtherNet/IP™ (Negative common)

③ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-2A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

④ Input block

EX250-IE **1**

Block type

1	M12 connector, 2 inputs
2	M12 connector, 4 inputs
3	M8 connector, 4 inputs

⑤ EX250 End plate assembly

EX250-EA1

* With mounting screws (2 pcs. of M3 x 10)

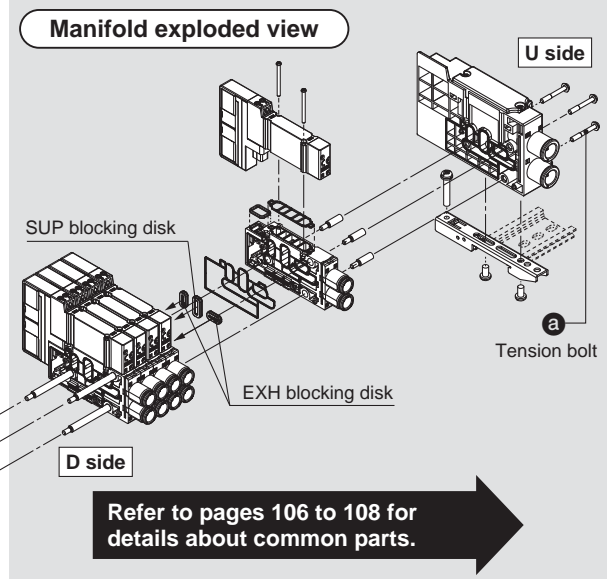
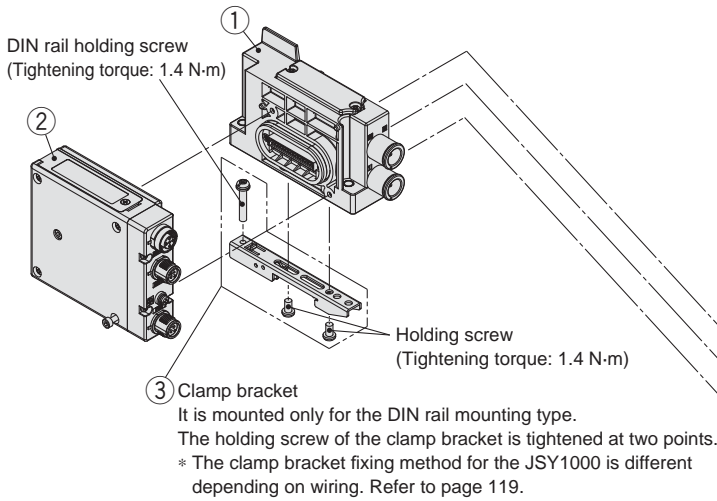
⑥ Clamp bracket assembly for EX250

SY30M-15-3A

* Part number is for one assembly.

Wiring

EX260



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - 1A - **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000/3000	JSY5000
Ⓐ Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block

② EX260 SI unit

EX260 - S **PR1**

Communication protocol

Symbol	Protocol	Number of outputs	SI unit output polarity	Communication connector	Manifold symbol	Symbol	Protocol	Number of outputs	SI unit output polarity	Communication connector	Manifold symbol			
DN1	DeviceNet™	32	Source/PNP (Negative common)	M12	QAN	EC1	EtherCAT	32	Source/PNP (Negative common)	M12	DAN			
DN2			Sink/NPN (Positive common)			EC2			Sink/NPN (Positive common)		DA			
DN3			Source/PNP (Negative common)			EC3			Source/PNP (Negative common)		DBN			
DN4			Sink/NPN (Positive common)			EC4			Sink/NPN (Positive common)		DB			
PR1	PROFIBUS DP	32	Source/PNP (Negative common)	M12	NAN	PN1	PROFINET	32	Source/PNP (Negative common)	M12	FAN			
PR2			Sink/NPN (Positive common)			PN2			Sink/NPN (Positive common)		FA			
PR3			Source/PNP (Negative common)			PN3			Source/PNP (Negative common)		FBN			
PR4			Sink/NPN (Positive common)			PN4			Sink/NPN (Positive common)		FB			
PR5		32	Source/PNP (Negative common)	D-sub*1	NCN	EN1	EtherNet/IP™	32	Source/PNP (Negative common)	M12	EAN			
PR6			Sink/NPN (Positive common)			EN2			Sink/NPN (Positive common)		EA			
PR7			Source/PNP (Negative common)			EN3			Source/PNP (Negative common)		EBN			
PR8			Sink/NPN (Positive common)			EN4			Sink/NPN (Positive common)		EB			
MJ1	CC-Link	32	Source/PNP (Negative common)	M12	VAN	PL1	Ethernet POWERLINK	32	Source/PNP (Negative common)	M12	GAN			
MJ2			Sink/NPN (Positive common)			PL3			Sink/NPN (Positive common)		GBN			
MJ3			Source/PNP (Negative common)			IL1			IO-Link		32	Source/PNP (Negative common)	M12	KAN
MJ4			Sink/NPN (Positive common)									VB		

*1 Enclosure is IP40 when the communication connector is D-sub.

③ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

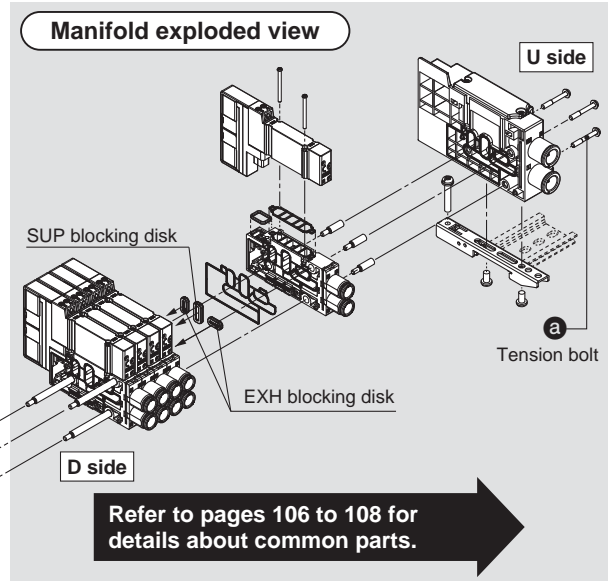
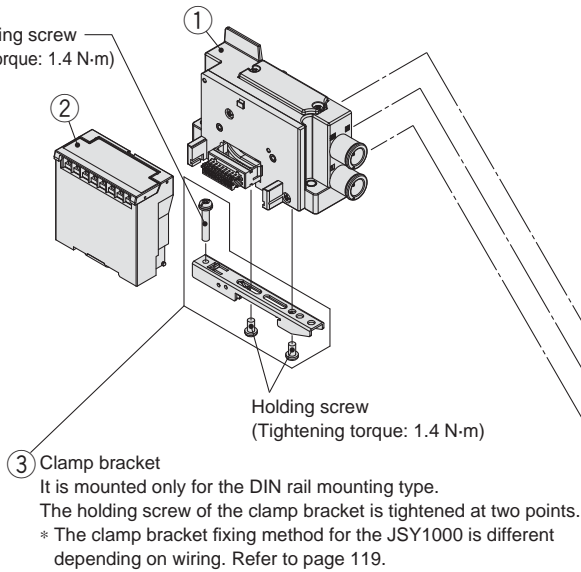
* Part number is for one piece.

JSY1000/3000/5000 Series

Wiring

EX120

DIN rail holding screw
(Tightening torque: 1.4 N·m)



Manifold Parts Nos.

① SUP/EXH block assembly

JSY **3** 1M - 1P - 14A **C10**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)

Pilot, Silencer type

Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is "—" or "S." Not available for "R" type.

SUP/EXH block assembly (D side) accessories and the number of accessories

Accessories	JSY1000/3000	JSY5000
a Tension bolt	None*1	3 pcs.

*1 Since the nuts are embedded in the SUP/EXH block

② EX120 SI unit

EX120 - S **DN1**

Communication protocol

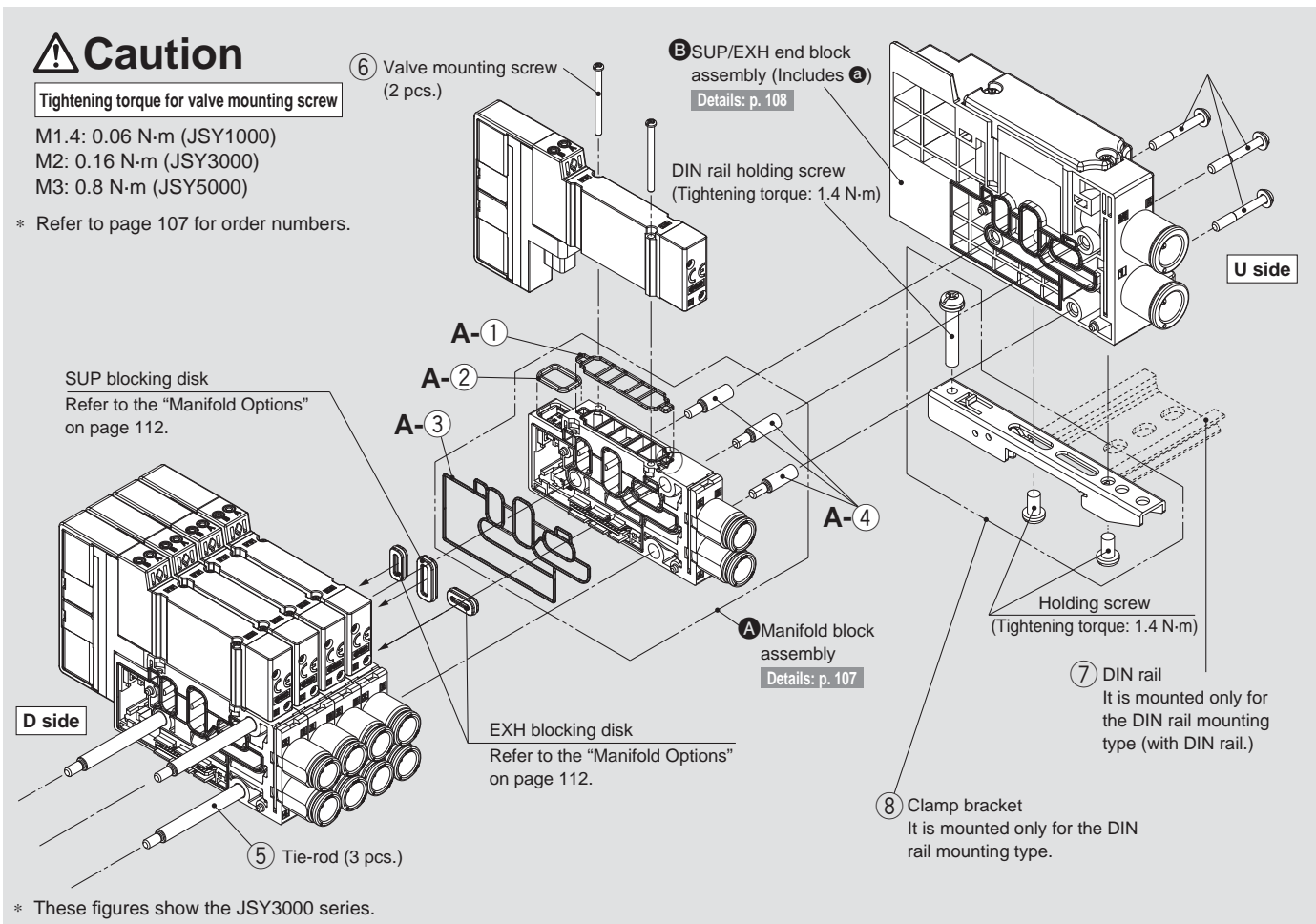
DN1	DeviceNet™ (Positive common)
CS1	OMRON Corp.: CompoBus/S (16 outputs) (Positive common)
CS2	OMRON Corp.: CompoBus/S (8 outputs) (Positive common)
MJ1	CC-Link (Positive common)
CM1	CompoNet™ NPN (Positive common)
CM3	CompoNet™ PNP (Negative common)

③ Clamp bracket

Series	Part no.
JSY1000	JSY11M-15P-1A
JSY3000	SY30M-15-1A
JSY5000	SY50M-15-1A

* Part number is for one piece.

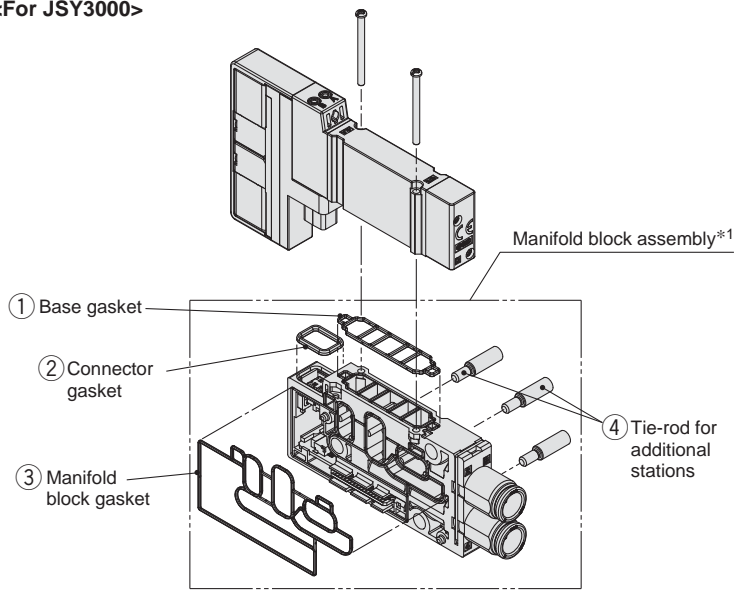
Manifold Exploded View [Common Parts]



Type 10: How to Increase Connector Type Manifolds

- 1 Loosen the U-side tension bolt (a), and remove the (B) SUP/EXH end block assembly.
- 2 Screw in (4) tie-rods for additional stations to the (5) tie-rod of the manifold.
(Screw them in until there is no gap between the tie-rods.)
- 3 Connect the (A) manifold block assembly and (B) SUP/EXH end block assembly to be added, and tighten the tension bolt (a).

<For JSY3000>



Tightening torque for tension bolt (a) (M3): 0.8 N·m

Caution

1. Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
2. When disassembly and assembly are performed, air leakage may result if the tightening of the tension bolt is inadequate.

*1 Manifold block assembly

No.	Description	Quantity	Note
①②③	Gasket	1 pc. of each	For base, connector and manifold block
④	Tie-rod for additional stations	3	

Refer to page 107 for ordering single unit.
* ② Connector gasket is not applicable to the JSY1000.

Chart
Valve
Connector Connecting Base
Plug-in
D.sub Flat Ribbon
Terminal Block
Lead wire
EX600
EX250
EX260
EX120
Common Dimensions
Manifold Exploded View
Fittings, Replacement Parts, Tools
Manifold Options
Made to Order
Specific Product Precautions

JSY1000/3000/5000 Series

For JJ5SY1-10, JJ5SY3-10, JJ5SY5-10

No.	Description	JSY1000		JSY3000	JSY5000	Note	
		6.5 mm pitch	9 mm pitch				
A-①	Manifold block assembly	Base gasket (for connector connecting base)		JSY11M-9P-1A	JSY31M-9P-1A	JSY51M-9P-1A	Part numbers shown on the left are for 10 valves. (10 pcs.)
A-②		Connector gasket		SX3000-146-2		Supplied individually	
A-③		Manifold block gasket		JSY11M-9P-2	JSY31M-9P-2	JSY51M-9P-2	Supplied individually
A-④		Tie-rod for additional stations*1		JSY11M-49P-1-1-A (6.5 mm pitch)	JSY11M-49P-2-1-A (9 mm pitch)	JSY31M-49P-1-1-A (11.5 mm pitch)	SV2000-55-2A-A (16 mm pitch)
⑤	Tie-rod	JSY11M-49P-1-□-A (6.5 mm pitch)	JSY11M-49P-2-□-A (9 mm pitch)	JSY31M-49P-1-□-A (11.5 mm pitch)	SV2000-55-1-□-A (16 mm pitch)	□: Manifold stations (2 to 24 stations) 3 pcs. supplied	
⑥	Valve mounting screw	JSY11V-23-1A (M1.4 x 21.5)		JSY31V-23-1A (M2 x 25)	JSY51V-23-1A (M3 x 29)	Part numbers shown on the left are for 10 valves. (20 pcs.)	
⑦	DIN rail	VZ1000-11-1-□			VZ1000-11-4-□	Refer to page 110.	
⑧	Clamp bracket*2 (for connector connecting base)	JSY11M-15P-1A (Refer to the table below.)*2 JSY11M-15P-2A (Refer to the table below.)		SY30M-15-1A	SY50M-15-1A	Supplied individually	

*1 The manifold of the JSY1000/3000 (JJ5SY1-10/JJ5SY3-10) can be assembled by connecting the tie-rods for number of manifold stations. The manifold of the JSY5000 (JJ5SY5-10) cannot be assembled by connecting the tie-rods for additional stations for the number of manifold. Tie-rod (SV2000-55-1-□-A) is necessary.

*2 Part number of the clamp bracket for the JSY1000 is different depending on the manifold wiring. Refer to the table below. Refer to page 119 for assembly.

Table. JSY1000 series clamp bracket

Wiring (JSY1000 series)		JSY11M-15P-1A	JSY11M-15P-2A
F	D-sub connector	●	—
P□	Flat ribbon cable	●	—
TC	Spring type terminal block box	●	—
T	Terminal block box	—	●
L	Lead wire	●	—
S6	EX600	—	●
S□	EX250	—	●
S□□	EX260	●	—
S3	EX120	●	—

Manifold Parts Nos.

Ⓐ Manifold block assembly

JSY **3** 1M - 2P - **1** D A - C**8**

Series

1	JSY1000
3	JSY3000
5	JSY5000

Manifold pitch

1	JSY1000 (6.5 mm pitch) JSY3000 (11.5 mm pitch) JSY5000 (16 mm pitch)
2	JSY1000 (9 mm pitch)

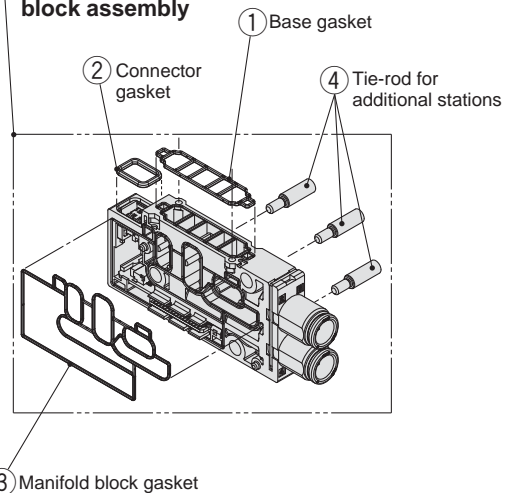
Wiring type

S	Single wiring
D	Double wiring

A, B port size (One-touch fittings)

Symbol	A, B port	JSY1000		JSY3000	JSY5000
		6.5 mm pitch	9 mm pitch		
C2	∅ 2 One-touch fitting	●	—	—	—
C4	∅ 4 One-touch fitting	●	—	—	—
C6	∅ 6 One-touch fitting	—	●	●	—
C8	∅ 8 One-touch fitting	—	—	●	—
C10	∅ 10 One-touch fitting	—	—	—	●
C12	∅ 12 One-touch fitting	—	—	—	●

Ⓐ Manifold (All parts inside ----- are included.) block assembly



Manifold block assembly accessories and the number of accessories

Accessories	Quantity
① Base gasket	1 pc.
② Connector gasket*1	1 pc.
③ Manifold block gasket	1 pc.
④ Tie-rod for additional stations	3 pcs.

*1 Not applicable to the JSY1000 series.

Manifold Parts Nos.

② SUP/EXH end block assembly

JSY 3 1M - 3P - 1A - C10

Series

1	JSY1000
3	JSY3000
5	JSY5000

Mounting

—	Direct mounting
D0	DIN rail mounting (Without DIN rail)
D00*1	DIN rail mounting (Without DIN rail)

Pilot, Silencer type

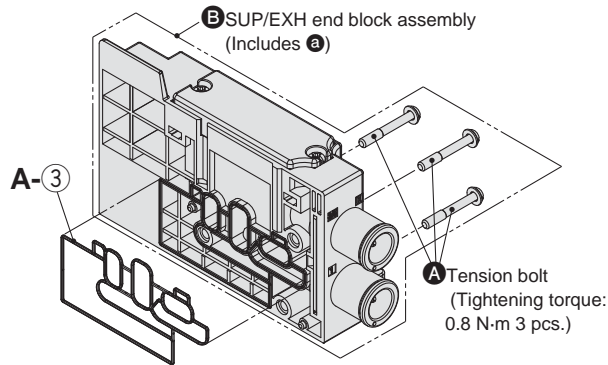
Symbol	Pilot type		Built-in silencer
	Internal	External (Made to Order)	
—	●	—	—
S	●	—	●
R	—	●	—

* 3/5(E) port is plugged for the built-in silencer type.

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C8	Ø 8 One-touch fitting	●	—	—
C10	Ø 10 One-touch fitting	—	●	—
C12	Ø 12 One-touch fitting	—	—	●
00*1	Plug	●	●	●

*1 Can be selected when the pilot, silencer type symbol is “—” or “S.” Not available for “R” type.



*1 Part number only for the JSY1000
Part number is different depending on the wiring. Refer to Table 1.

Table 1. JSY1000 series DIN rail mounting

Symbol	Wiring
D0	D-sub connector (F type)
	Flat ribbon cable (P□ type)
	Spring type terminal block box (TC type)
	Lead wire (L type)
	EX260 (S□□ type) EX120 (S3 type)
D00	Terminal block box (T type)
	EX600 (S6 type)
	EX250 (S□ type)

SUP/EXH end block assembly accessories and the number of accessories

Accessories	Quantity
Ⓐ Tension bolt	3 pcs.
A-3 Manifold block gasket	1 pc.

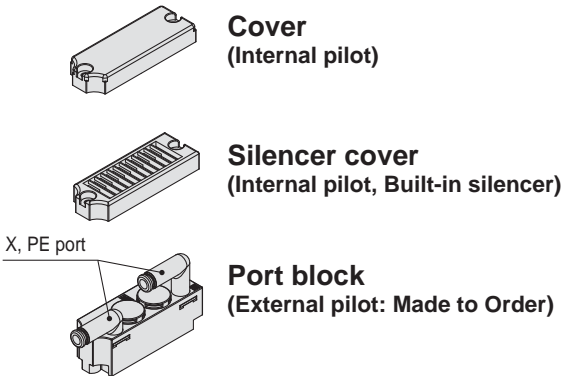
* Gasket is mounted.

⑧ Clamp bracket

Series	Part no.	
	JSY1000	For D0
For D00		JSY11M-15P-2A
JSY3000		SY30M-15-1A
JSY5000		SY50M-15-1A

* Part number is for one piece.
* Part number of the JSY1000 is different depending on the manifold wiring.
Refer to the Table 1. JSY1000 series DIN rail mounting for selecting a clamp bracket.

■ Cover, Silencer cover, Port block for SUP/EXH (end) block assembly



* Cover, silencer cover, and port block are included in the SUP/EXH (end) block assembly, but they need to be ordered for piping specification change.
* Mounting screws (2 pcs.) for SUP/EXH end block assembly are included.

Tightening torque for mounting screw

JSY1000 (M2.5):	0.32 N·m
JSY3000 (M3):	0.8 N·m
JSY5000 (M4):	1.4 N·m

JSY 3 1M - 4P - 1A

JSY 3 1M - 5P - 1A

JSY 3 1M - 6P - 1AR - 00

Series

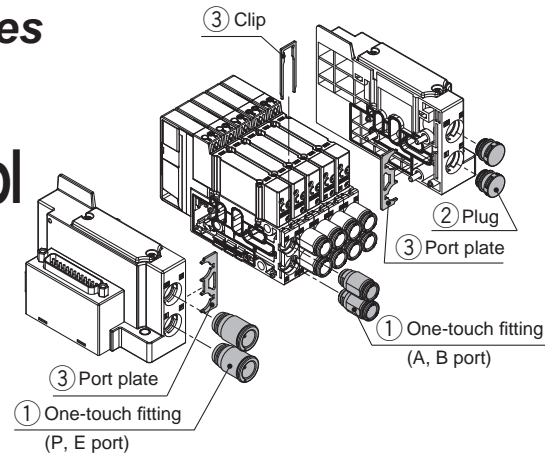
1	JSY1000
3	JSY3000
5	JSY5000

⚠ Caution

1. Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
2. When disassembly and assembly are performed, air leakage may result if the tightening of the cover and port block assemblies are inadequate.

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

Refer to "How to Replace One-touch Fittings" on page 118 for the replacement method.



① One-touch Fittings

Port size		Series	JSY1000		JSY3000	JSY5000	Note
			6.5 mm pitch	9 mm pitch			
A, B port	Ø 2		KQSY10-C2	—	—	—	Part number is for one piece.
	Ø 4		KQSY10-C4-X1336	—	—	—	
	Ø 6		—	KQSY11-C6-X1336	KQSY30-C6	—	
	Ø 8		—	—	KQSY30-C8-X1336	—	
	Ø 10		—	—	—	KQSY50-C10	
	Ø 12		—	—	—	KQSY50-C12-X1336	
P, E port	Ø 8		KQSY30-C8-X1336		—	—	
	Ø 10		—	—	KQSY31-C10-X1336	—	
	Ø 12		—	—	—	KQSY50-C12-X1336	

* Refer to page 118 for assembling when a fitting is replaced.

② Plug

Piping port		Series	JSY1000	JSY3000	JSY5000	Note
P, E port			JSY11M-62P-1A	JSY31M-62P-1A	JSY51M-62P-1A	Part number is for one piece.

* A, B port plug does not exist. Use the KQ2P series.

③ Clip, Port Plate

Piping port		Series	JSY1000		JSY3000	JSY5000	Note
			For A, B port C2/C4 fittings	For A, B port C6 fittings			
A, B port (Clip)			SJ1000-CL-1	JSY11M-19P-1A	JSY31M-19P-1A	JSY51M-19P-1A	Part number is for 10 pieces.
P, E port (Port plate)			JSY11M-10P-1		JSY31M-10P-1	JSY51M-10P-1	Part number is for one piece.

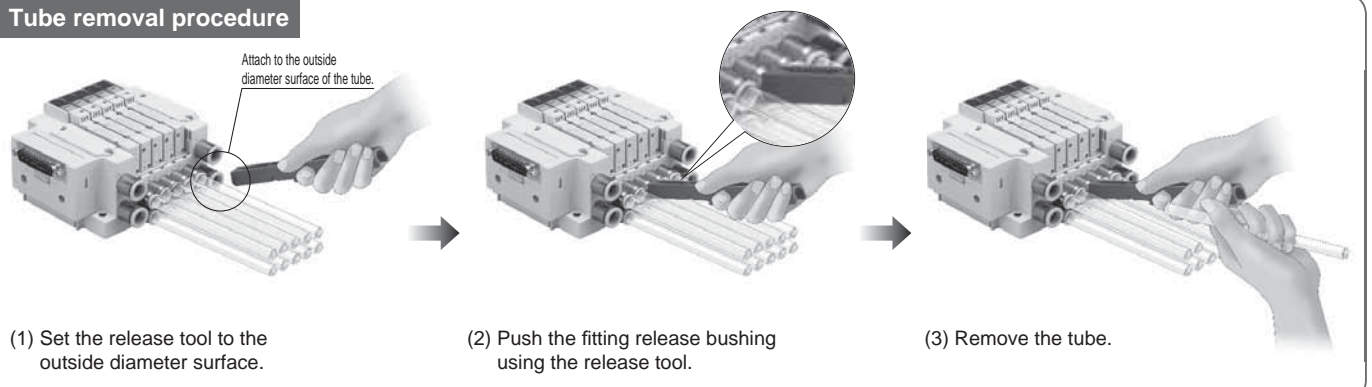
* Refer to page 118 for assembling when a fitting is replaced.

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

Series	For JSY1000		For JSY3000	For JSY5000
	6.5 mm pitch	9 mm pitch		
Part no.	TG-0204	TG-0608	TG-0608	TG-1012
Applicable tubing O.D.	Ø 2/Ø 4	Ø 6	Ø 6/Ø 8	Ø 10/Ø 12



Tube removal procedure

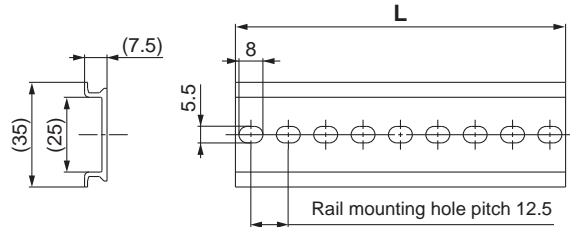


JSY1000/3000/5000 Series Manifold Options

■ DIN rail dimensions/weight for the JSY1000/3000 **Plug-in** connector connecting 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 □.

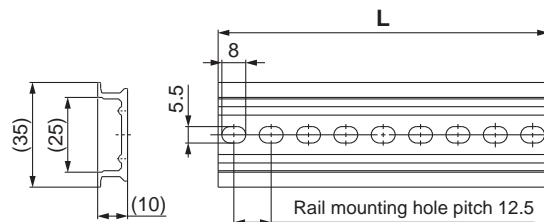


No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323
Weight [g]	17.6	19.9	22.1	24.4	26.6	28.9	31.1	33.4	35.6	37.9	40.1	42.4	44.6	46.9	49.1	51.4	53.6	55.9	58.1
No.	19	20	21	22	23	24	25	26	27	28	29	30	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 **Plug-in** connector connecting 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				

JSY1000/3000/5000 Series

⚠ 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)

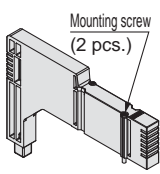
Manifold Options

* Refer to page 113 for dimensions.

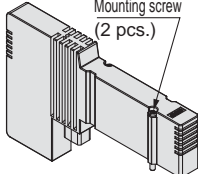
■ Blanking plate

[With two mounting screws]

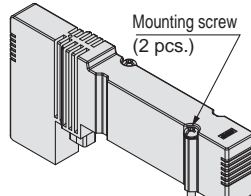
Used when valve additions are expected or for maintenance.



JSY11M-26P-1A



JSY31M-26P-1A

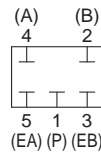


JSY51M-26P-1A

JSY 3 1M - 26P - 1A

● Series

1	JSY1000
3	JSY3000
5	JSY5000

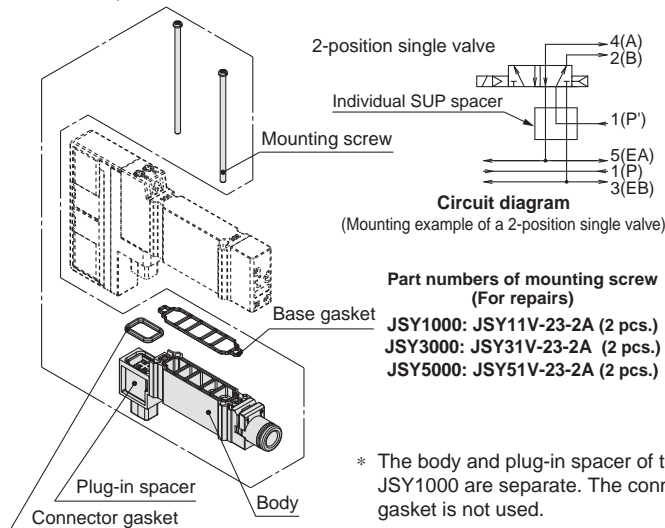


Circuit diagram

■ Individual SUP spacer

[With a connector gasket, a base gasket, and two mounting screws]

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



JSY 3 1M - 38 P - 1A - C6

● Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

● Series

1	JSY1000
3	JSY3000
5	JSY5000

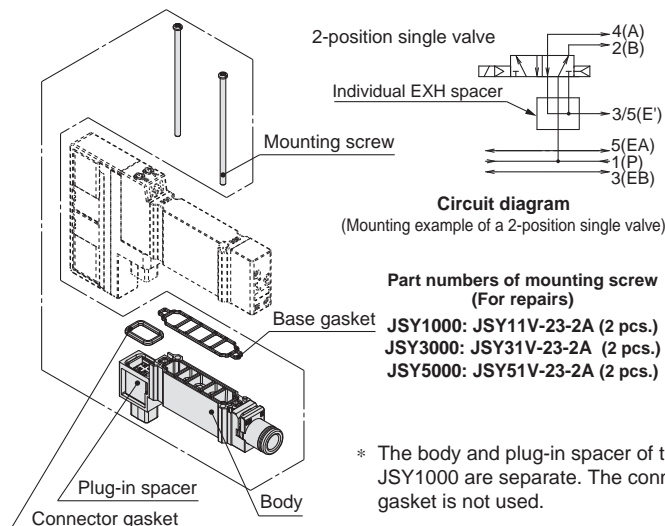
Port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000	JSY5000
C4	∅ 4 One-touch fitting	●	—	—
C6	∅ 6 One-touch fitting	—	●	—
C8	∅ 8 One-touch fitting	—	—	●
C10	∅ 10 One-touch fitting	—	—	●
C12	∅ 12 One-touch fitting	—	—	●

■ Individual EXH spacer

[With a connector gasket, a base gasket, and two mounting screws]

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



Manifold Options

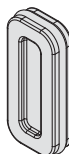
■ SUP/EXH blocking disk

[SUP blocking disk]

By inserting the SUP blocking disk in the pressure supply passage of the manifold valve, can provide two different high and low pressure in one manifold.

[EXH blocking disk]

By inserting the EXH blocking disk in the exhaust passage of the manifold valve, can separate the exhaust from the valve so it does not affect the other valves. It can also be used for the manifold for the positive pressure and vacuum mixed manifold. (2 pieces are required to block EA/EB both sides of the EXH.)

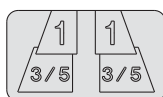


Series	SUP blocking disk	EXH blocking disk
JSY1000	JSY11M-40P-1A	JSY11M-40P-1A
JSY3000	JSY31M-40P-1A	JSY31M-40P-2A
JSY5000	JSY51M-40P-1A	JSY51M-40P-1A

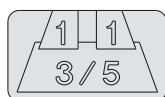
■ Label for blocking disk

Label to indicate and confirm on the manifold where the SUP/EXH blocking disk assemblies were inserted. (3 labels of each)

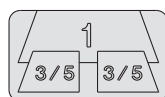
SUP/EXH blocking disk label



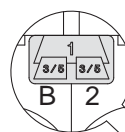
SUP blocking disk label



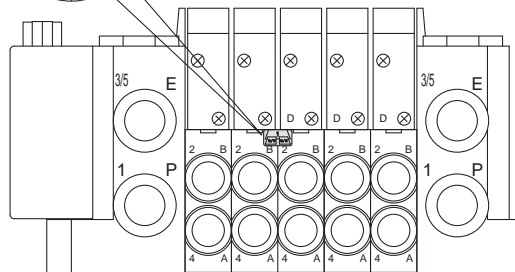
EXH blocking disk label



Series	Part no.
JSY1000	SJ3000-155-1A
JSY3000	
JSY5000	



* If the blocking disk is ordered using the manifold specification sheet and ordered at the same time as the manifold, the position where the blocking disk is inserted will be labeled and shipped out.

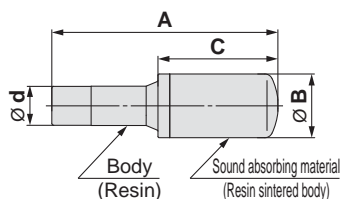


■ Silencer

(One-touch fitting connection type)

This silencer can be mounted to the 3/5 (E: EXH) port of the manifold in one step.

* Shipped together with the product



Series ($\varnothing d$)	Model	Effective area	A	B	C
For JSY1000 ($\varnothing 8$)	AN15-C08	20 mm ²	45	13	20
For JSY3000 ($\varnothing 10$)	AN20-C10	30 mm ²	57.5	16.5	30.5
For JSY5000 ($\varnothing 12$)	AN30-C12	41 mm ²	71.5	20	43.5

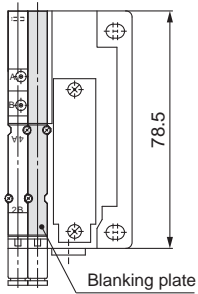
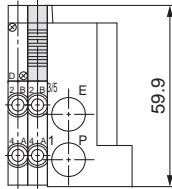
Chart
Valve
Connector
Plug-in
Connecting Base
D.sub
Flat Ribbon
Terminal
Block
Lead wire
EX600
EX250
EX260
EX120
Common
Dimensions
Manifold
Exploded View
Fittings, Replacement
Parts, Tools
Manifold
Options
Made to
Order
Specific Product
Precautions

JSY1000/3000/5000 Series

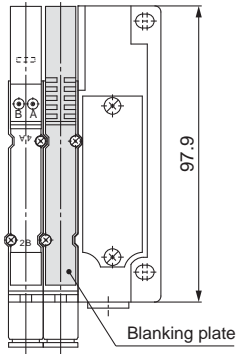
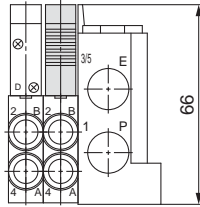
Dimensions: Manifold Options

■ Blanking plate

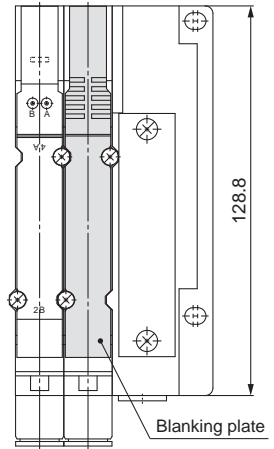
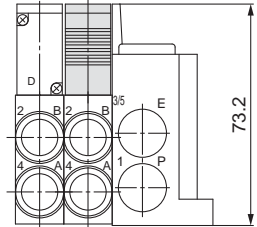
JSY1000 series



JSY3000 series

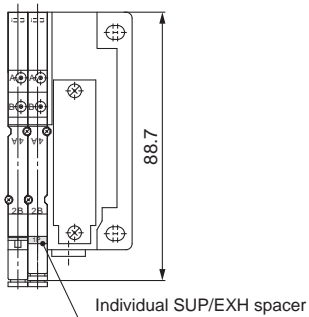
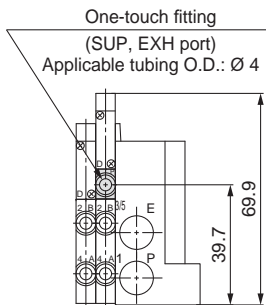


JSY5000 series

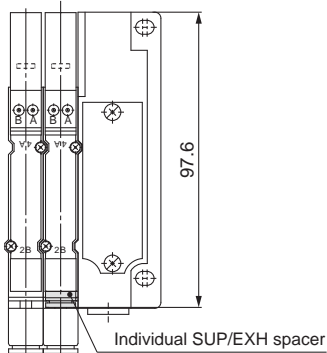
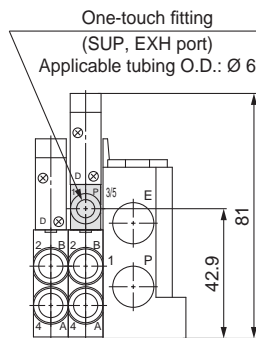


■ Individual SUP/EXH spacer

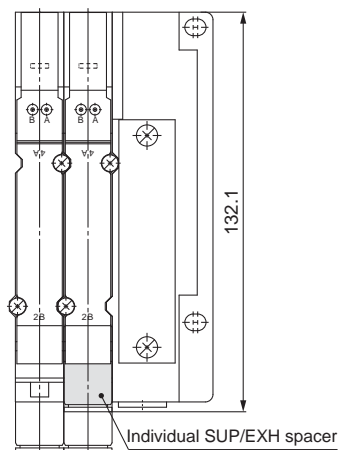
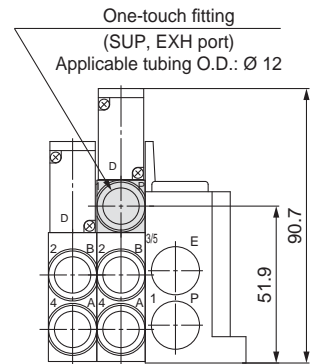
JSY1000 series



JSY3000 series



JSY5000 series



JSY1000/3000/5000 Series

Made to Order

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



1 External Pilot

How to Order Manifolds

Refer to the How to Order manifolds for each type.

For D-sub Connector/Flat Ribbon Cable/Lead Wire **pp. 19, 53**

JJ5SY $\frac{1}{3}$ / $\frac{5}{5}$ - 10 □ □ - □ □ R - □ □

For Terminal Block Box **p. 41**

JJ5SY $\frac{1}{3}$ / $\frac{5}{5}$ - 10 $\frac{T}{TC}$ - □ □ R - □ □

For EX260/EX120 **pp. 77, 83**

JJ5SY $\frac{1}{3}$ / $\frac{5}{5}$ - 10 $\frac{S}{S3}$ □ □ - □ □ R - □ □

● SUP/EXH block assembly

R	External pilot
---	----------------

* The combination of external pilot type "R" and silencer type "S" is not available.

For EX600/EX250 **pp. 61, 71**

JJ5SY $\frac{1}{3}$ / $\frac{5}{5}$ - 10 $\frac{S6}{S}$ □ □ □ - □ □ G - □ □

● P, E port entry, SUP/EXH block assembly

P, E port entry	External pilot
U side (2 to 10 stations)	G
D side (2 to 10 stations)	H
Both sides (2 to 24 stations)	J

How to Order Valves

JSY 1 □ 0 0 R T - 5 □ □

JSY $\frac{3}{5}$ □ 0 0 R □ - 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 SUP/EXH block assembly, and select either of "G/H/J" for the EX600/EX250 manifold.

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 energised for long periods of time.

Be careful of the energising time when the power saving circuit is selected. Refer to page 116 for details.

0.1 W: JSY3000/5000

How to Order Valves

JSY $\frac{3}{5}$ □ 0 0 □ T - 5 □ □

● Coil type

T	With power saving circuit (Continuous duty type)
---	--

● Pilot type (See above.)

Chart

Valve

Connector
Connecting Base
Plug-in

D.sub
Flat Ribbon

Terminal
Block

Lead wire

EX600

EX250

EX260

EX120

EX120

Common
Dimensions

Manifold
Exploded View

Fittings, Replacement
Parts, Tools

Manifold
Options

Made to
Order

Specific Product
Precautions



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 "Operation Manual" on the SMC website: <https://www.smc.es>

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.
- Products compliant with IP67 enclosures (based on IEC60529) are protected against dust and water, however, these products cannot be used in water. If using in an environment that is exposed to water and dust splashes, take measures such as using a protective cover.
- When using built-in silencer type manifold with an IP67 enclosure, keep the exhaust port of the silencer from coming in direct contact with water or other liquids.

Valve Mounting

Caution

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

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

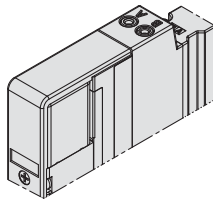
Manual Override

Warning

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

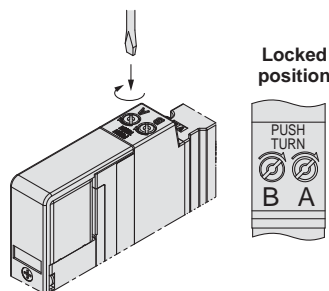
Push down on the manual override button until it stops.



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.

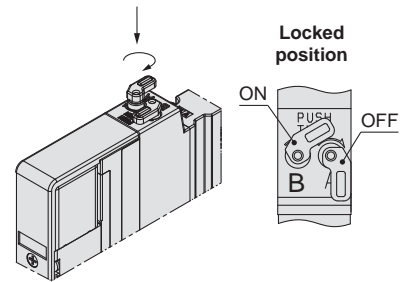


Manual Override

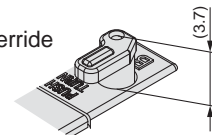
Warning

Push-turn locking lever type [E type] (Only for the JSY3000/5000)

Push down on the manual override by finger until it stops, and then turn it 60° 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.



Carefully check the manual override projection amount.
Max. (at OFF): 3.7 mm



Caution

Do not apply excessive torque when turning the manual override. [0.1 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.

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 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. Use them when a double solenoid type 3-port valve is required.

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)



JSY1000/3000/5000 Series 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 "Operation Manual" on the SMC website:
<https://www.smc.es>

Light/Surge Voltage Suppressor

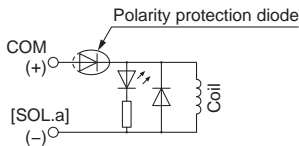
Caution

■ Polar type

Positive common

Single solenoid

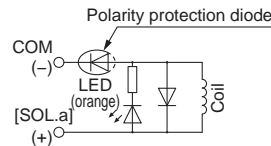
Light/surge voltage suppressor (□NZ)



Negative common

Single solenoid

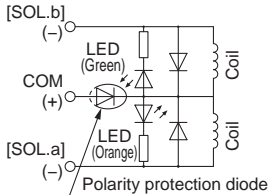
Light/surge voltage suppressor (□NZ)



Positive common

Double solenoid, 3-position, 4-position

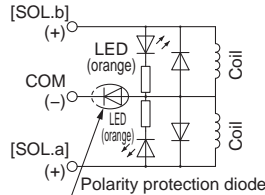
Light/surge voltage suppressor (□NZ)



Negative common

Double solenoid, 3-position, 4-position

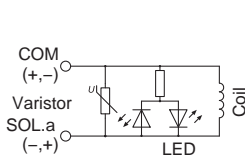
Light/surge voltage suppressor (□NZ)



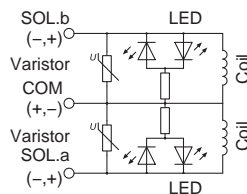
■ Non-polar type

With light/surge voltage suppressor (□U)

Single solenoid



Double solenoid



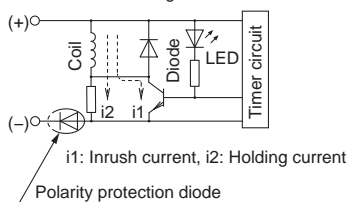
* Non-polar type is not available for the JSY1000.

■ With power saving circuit

Power consumption is decreased by approx. 1/3 by reducing the wattage required to hold the valve in an energised state. (Effective energizing time is over 67 ms at 24 VDC.)

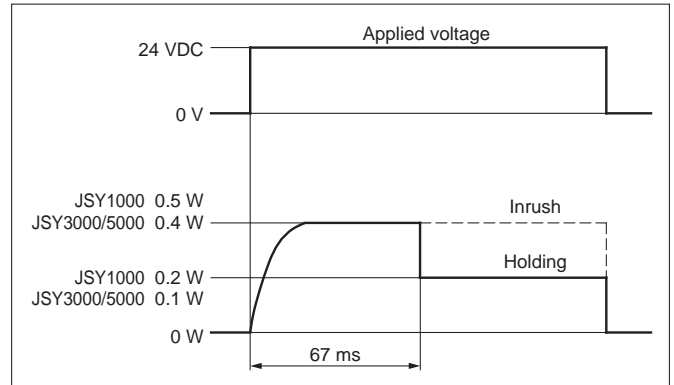
<Standard>

Electric circuit diagram
(With power saving circuit)
In the case of single solenoid



The circuit shown to the left 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.)

Residual voltage of the surge voltage suppressor

* If a varistor or diode surge voltage suppressor is used, there is some residual voltage to the protection element and rated voltage. Therefore, refer to the below table and pay attention to the surge voltage protection on the controller side. Also, since the response time does change, refer to the valve specifications on page 12.

Residual Voltage

Surge voltage suppressor	24 VDC
Z	Approx. 1 V
U	Approx. 47 V

Continuous Duty

Caution

If a valve is energised 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 energised 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 energised simultaneously for extended periods of time or if the valves on A side and B side are energised 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.



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 "Operation Manual" on the SMC website:
<https://www.smc.es>

Countermeasure for Surge Voltage Intrusion

Caution

■ Sneak-in of surge voltage

With non-polar type valves, at times of sudden interruption of the loading power supply, such as emergency shutdown, surge voltage intrusion may be generated from loading equipment with a large capacity (power consumption), and the valve in a de-energised state may switch over (see Figure 1). When installing a breaker circuit for the loading power supply, consider using a valve with polarity (with polarity protection diode), or install a surge absorption diode between the loading equipment COM line and the output equipment COM line (see Figure 2).

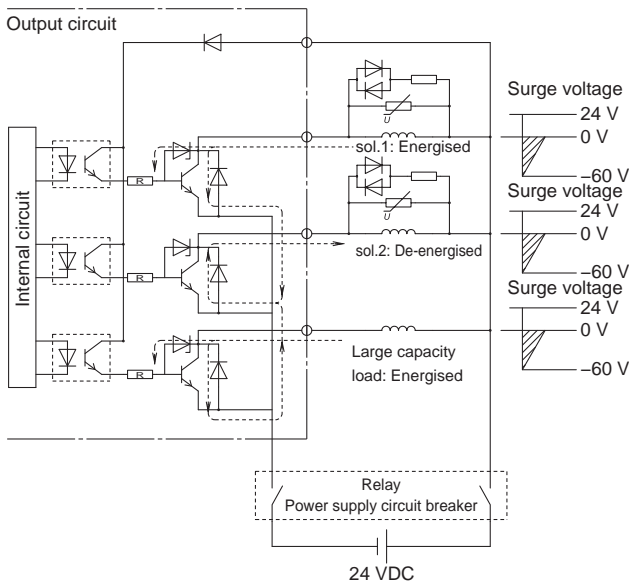


Figure 1. Surge intrusion circuit example (NPN outlet example) (24 VDC)

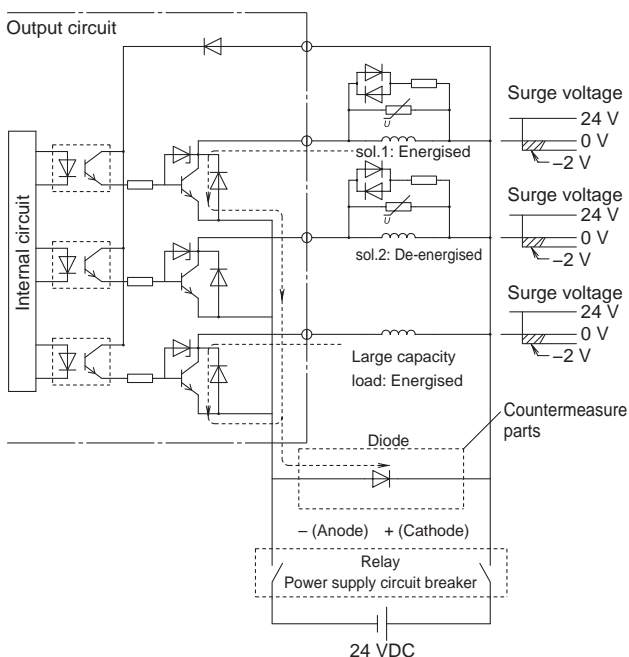


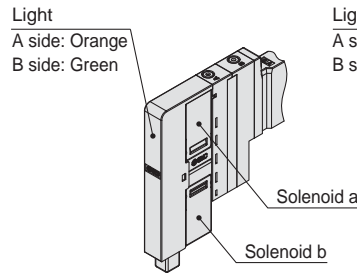
Figure 2. Surge intrusion circuit example (NPN outlet example) (24 VDC)

Light Indication

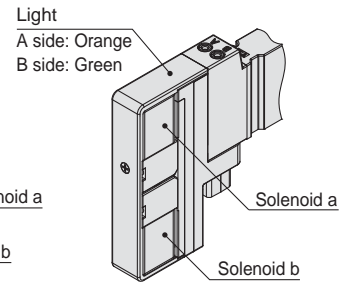
Caution

When equipped with indicator light and surge voltage suppressor, the light window turns orange when solenoid a is energised, and it turns green when solenoid b is energised.

<JSY1000 series>



<JSY3000/5000 series>



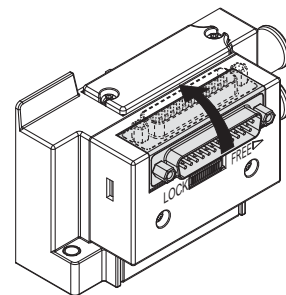
Changing Connector Entry Direction

Caution

Connector direction for electrical entry of D-sub connector and flat ribbon cable <IP 4 0 > can be changed. If the directional change is required, slide the lever on the side of the connector block to the FREE position, and then change the direction as shown in the figure. Also, before connecting the connector, be sure to return the lever to the LOCK position. (If the lever is difficult to slide, move the connector a little bit to make it easier to slide the lever.)

If an excessive force is applied on the connector in the LOCK position, the connector block may be damaged. Also, using in such a way that the connector floats in the FREE position, it may cause the lead wire etc., to break.

* Direction cannot be changed for D-sub connector <IP 6 7 > or compact type.





JSY1000/3000/5000 Series Specific Product Precautions 4

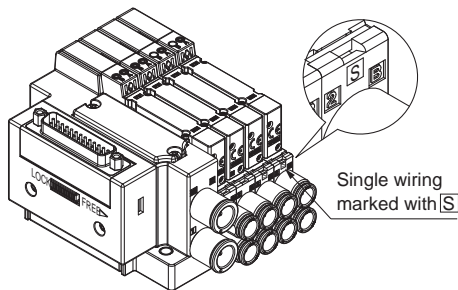
Be sure to read this before handling the products. Refer to the back cover for safety instructions.
For 3/4/5-port solenoid valve precautions, refer to the "Operation Manual" on the SMC website:
<https://www.smc.es>

How to Order Manifolds

⚠ Caution

The letter "S" is indicated on manifold blocks for the JSY series as shown below. This indication refers to the type of substrate (single wiring) inside the manifold blocks. When there is no symbol, double wiring is used.

When the manifold specification sheet does not include a wiring specification, all stations will be double wiring specification. In this case, single and double solenoid valves can be mounted in any position, but when a single valve is used, there will be an unused control signal. To avoid this, indicate positions of manifold blocks for single wiring specification and double wiring specification on a manifold specification sheet. (Note that double, 3-or 4-position valves cannot be used for manifolds blocks with single wiring specification [S].)



Substrate inside Manifolds

⚠ Caution

The substrate inside of manifolds cannot be taken apart. Attempting to do so may damage parts.

Fixation of DIN Rail Mounting Type Manifolds

⚠ Caution

- 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, 5 locations for 16-20 stations and 6 locations for 21-24 stations.
- 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.

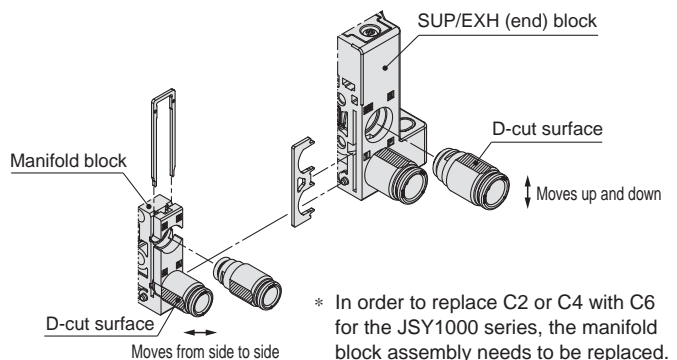
How to Replace One-touch Fittings

⚠ 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 109 for part numbers of One-touch fittings.

■ Connector connecting base



- * In order to replace C2 or C4 with C6 for the JSY1000 series, the manifold block assembly needs to be replaced. Please select the manifold block assembly on page 107.
- * Refer to page 109 for One-touch fitting, clip, and port plate part numbers.

<Assembly method>

• SUP/EXH (end) block

Fitting direction is specified when the fittings below are used. Assemble the fitting so that the D-cut surfaces of the fitting face up and down.

Fitting part no.: KQSY30-C8-X1336 (JSY1000)
KQSY50-C12-X1336 (JSY5000)

• Manifold block

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)

Chart

Valve

Connector
Plug-in
Connecting BaseD.sub
Flat RibbonTerminal
Block

Lead wire

EX600

EX250

EX260

EX120

Common
DimensionsManifold
Exploded ViewFittings, Replacement
Parts, ToolsManifold
OptionsMade to
OrderSpecific Product
Precautions



JSY1000/3000/5000 Series Specific Product Precautions 5

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 "Operation Manual" on the SMC website:
<https://www.smc.es>

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.

One-touch Fittings

⚠ Caution

■ Tube attachment/detachment for One-touch fittings

1) Tube attachment

- 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.
- Grasp the tube and push it in slowly, inserting it securely all the way into the fitting.
- 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

Use the release tool when the removal of tube is difficult due to the tube size. Refer to page 109 for releasing tools.

- Push in the release button sufficiently, pushing its collar equally around the circumference.
- 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.
- 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.

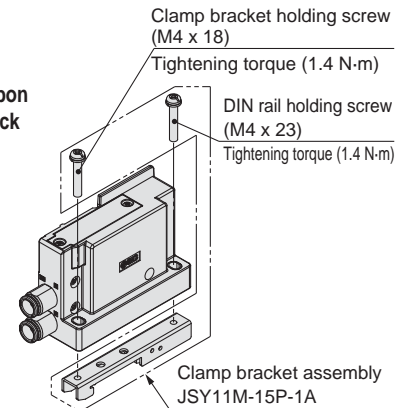
Fixing Method of JSY1000 Series Clamp Bracket

⚠ Caution

The clamp bracket fixing method for the JSY1000 series is different depending on wiring.

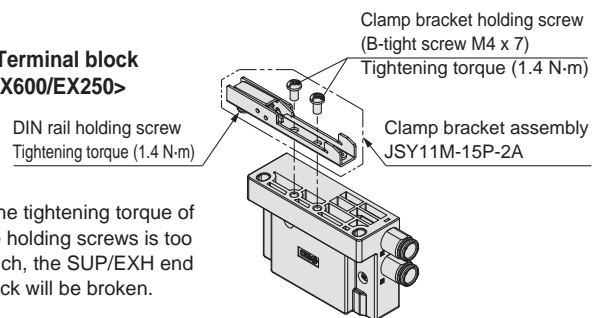
■ Wiring

<For D-sub connector/Flat ribbon cable/Spring type terminal block box/Lead wire/EX260/EX120>



- * When the DIN rail is not accommodated in the clamp bracket, loosen the DIN rail holding screw once and insert the DIN rail.

<For Terminal block box/EX600/EX250>



- * If the tightening torque of the holding screws is too much, the SUP/EXH end block will be broken.

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.

■ Trademark

DeviceNet™ is a trademark of ODVA.

EtherNet/IP™ is a trademark of ODVA.

CompoNet™ is a trademark of ODVA.




EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

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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 catalogue 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 catalogue.
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 catalogue 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 “Handling Precautions for SMC Products” (M-E03-3) before using.

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