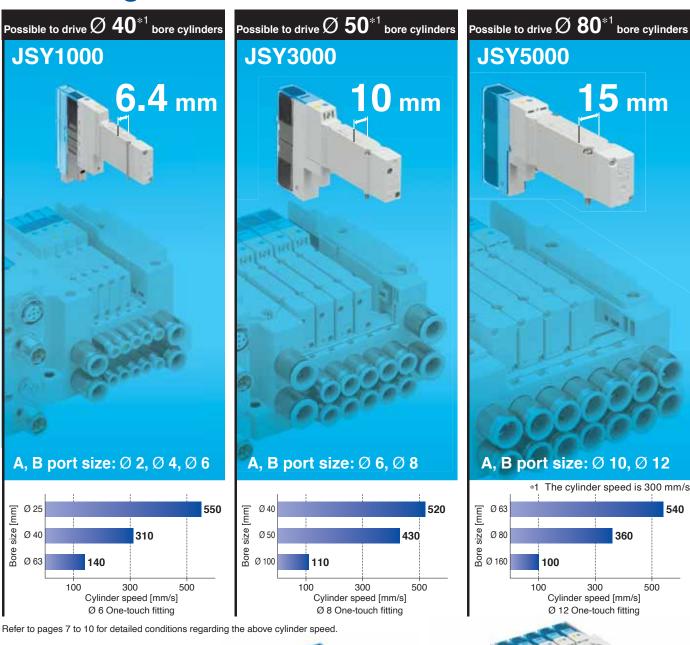
Plug-in

Compact 5-Port Solenoid Valve New

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



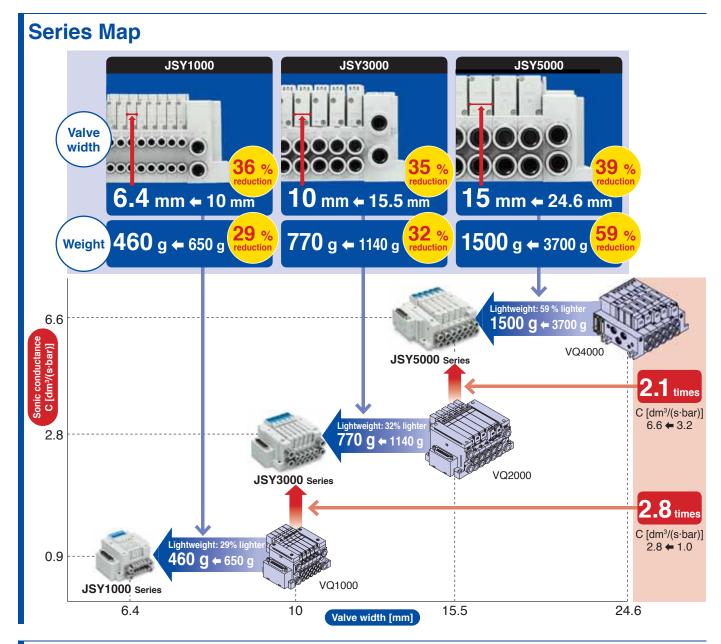






JSY1000/3000/5000 Series





Power Consumption

With power saving circuit

JSY3000/5000 *

*1 Made to Order

0.2 W

Standard

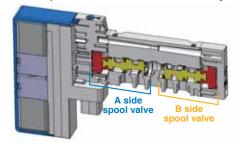
JSY3000/5000 *2 **0.4** W

*2 JSY1000 series available as power saving type only.

Connector Type Manifold Plug-in Enlarged view of the connector> Connector type manifold 32 outputs

4-Position Dual 3-Port Valve Available

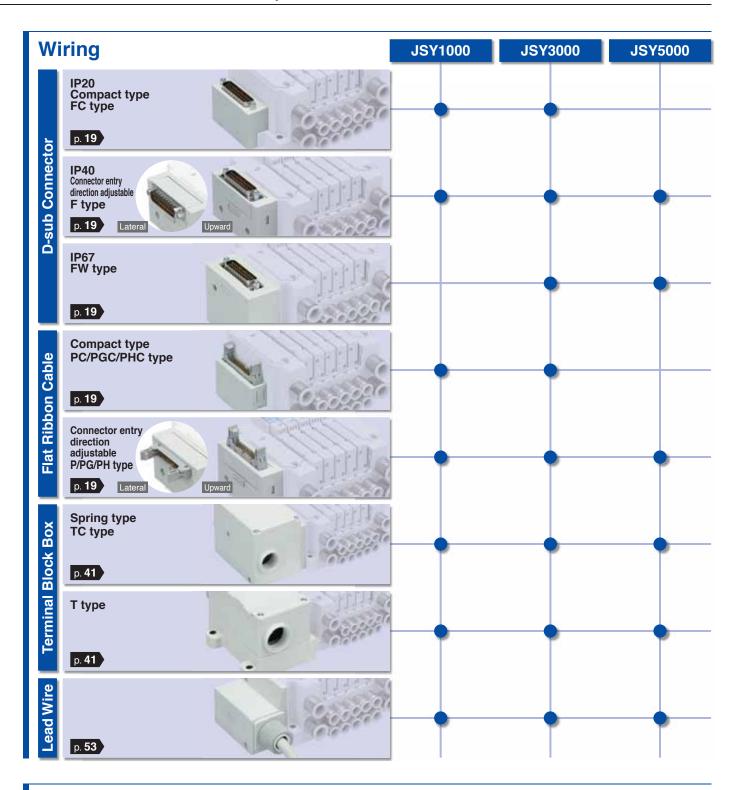
• Two 3-port valves built into one body



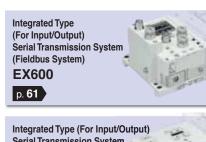
- 3 -port valves on the A and B sides can operate independently.
- When used as a 3 -port valve, only half the number of stations is required.
- Can also be used as a 4-position,
 5-port valve
- Combination examples

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





Serial Transmission Compatible Protocols



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**

p. **83**



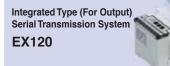
DeviceNet™
PROFIBUS DP
CC-Link
EtherNet/IP™
EtherCAT
PROFINET
Ethernet POWERLINK
IO-Link

Integrated Type (For Input/Output)
Serial Transmission System

EX250

p. 71

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



DeviceNet™ CC-Link OMRON CompoBus/S CompoNet™

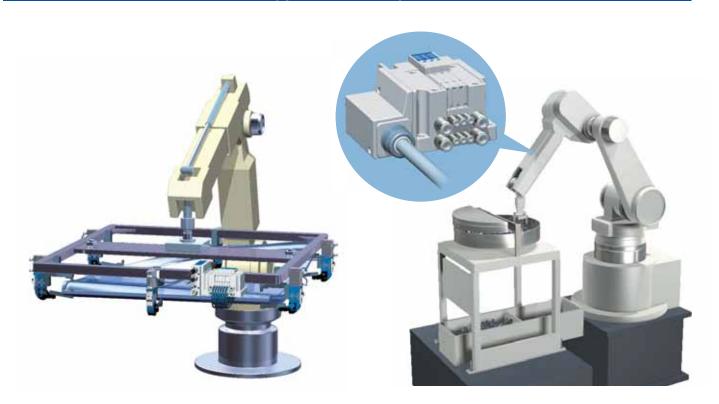


Series Variations

	Sonic cond								Port s				
	$\begin{cases} 4/2 \rightarrow 3 \\ (A/B \rightarrow E) \end{cases}$ $4(A), 2(B)$	C [dm³/(s·bar)] { 4/2→5/3 (A/B→EA/EB)} Type of actuation 4(A), 2(B) port		Rated voltage	Ø 2		(A), 2 Ø 6			Ø 12	1(P), 3/5(E) port		
JSY1000	Ø 4	0.87	2-position single (A)4 2(B) (EA)5 1 3(EB) (P)	3-position pressure centre (A)4 2(B) (EA)5 1 3(EB) (P)		•	•					<i>α</i> ο	
JSY	Ø 6	0.91	2-position double (A)4 2(B) (EA)513(EB) (P)	4-position dual 3-port valve N.C. valve x 2 pcs.	24 VDC			•				Ø8	
JSY3000	Ø 8	2.77	3-position closed centre (A)4 2(B) (B)5 13(EB) (P)	5(EA) 1(P) 3(EB) N.O. valve x 2 pcs. 4(A) 2(B) 5(EA) 1(P) 3(EB)	24 VDC			•	•			Ø 10	
JSY5000	Ø 12	6.59	3-position exhaust centre (A)4 2(B) (EA)5 1 3(EB) (P)	N.C. valve, N.O. valve 1 pc. of each 4(A) 2(B) 5(EA) 1(P) 3(EB)						•	•	Ø 12	

● Standard ○ Option ▲ Made to Order

Application Examples



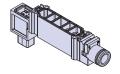
	Wir	ing		Manifold Options							Valve Options				
Pitch width [mm]	Positive common	Negative common	Blanking plate	Individual SUP spacer	Individual EXH spacer	SUP/EXH blocking disk	Label for blocking disk	Silencer (Onetouch fitting connection type)	Built-in silencer	Vacuum/Low pressure specification	Different pressures	Reverse pressure	Mixed fitting sizes	Enclosure IP67*1	
6.5	•														
9		•	0	0	0	0	0	0	•	•	0	A	•	_	
11.5			p. 111	p. 111	p. 111	p. 112	p. 112	p. 112		External pilot	Individual SUP	External pilot		•	
16														•	

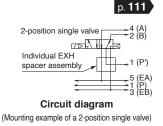
*1 Refer to the "Manifold Specifications" on pages 15 and 16 for details on IP67.

Manifold Options

Individual SUP spacer

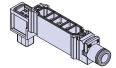
When the same manifold is used for different pressures, an individual SUP spacer is used as a supply port for different pressures.

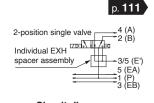




Individual EXH spacer

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



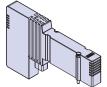


p. **112**

Circuit diagram (Mounting example of a 2-position single valve)

Blanking plate

Used when valve additions are expected or for maintenance.





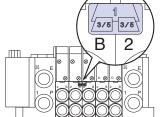
Label for blocking disk p. 111

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



3/5





(For connector type manifold, Type 10) [SUP blocking disk]

■ SUP/EXH 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.)



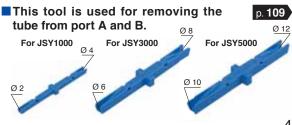
p. **112**

Silencer (One-touch fitting connection type)

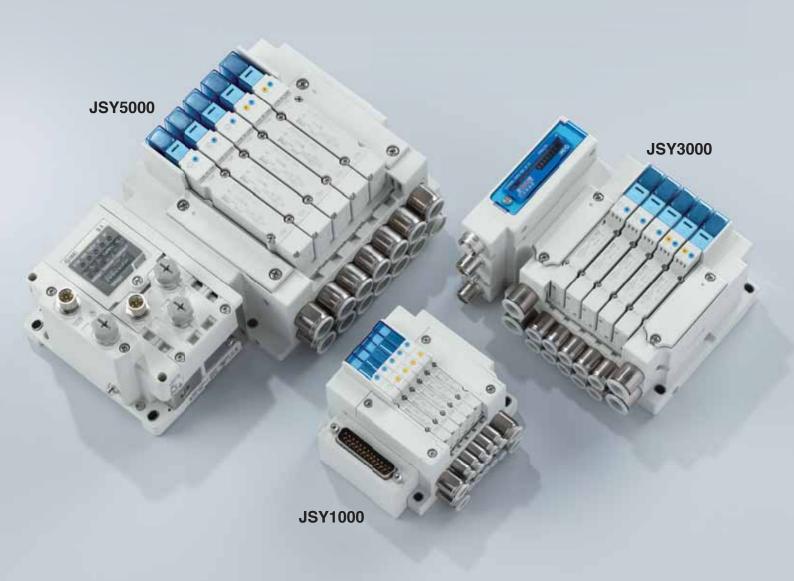
This silencer can be mounted to the 3/5 (E: EXH) port of the manifold in one step.



Tube Releasing Tool









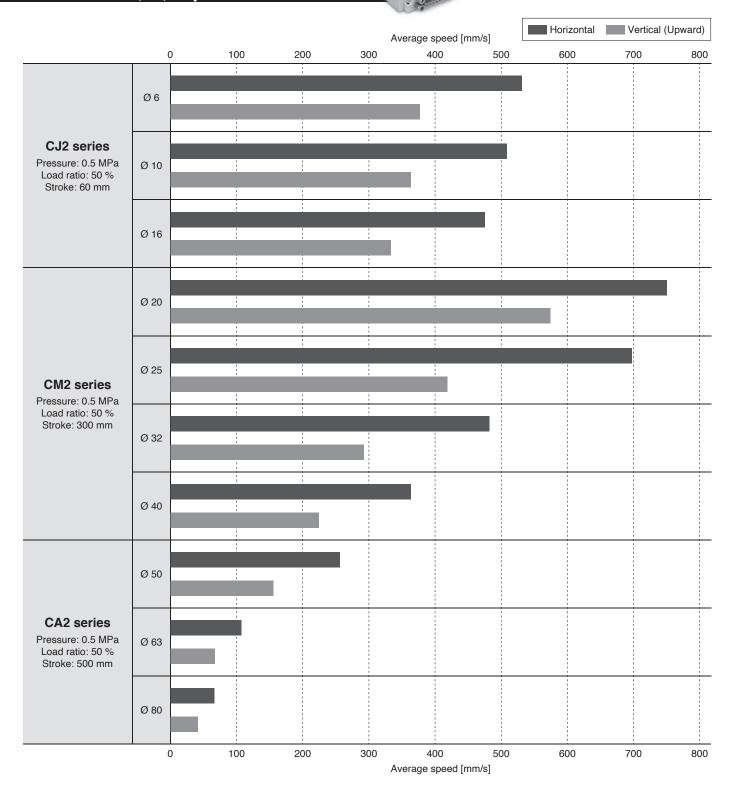
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Optimum Actuation Size Chart of Air Cylinder

For JSY1000, A, B port: \emptyset 4



^{*} Operating piston speed is different depending on the applicable cylinder. Refer to the cylinder catalogue for details.



^{*} Values at extension of a directly coupled cylinder when meter-out speed controllers are used with the needle full open.

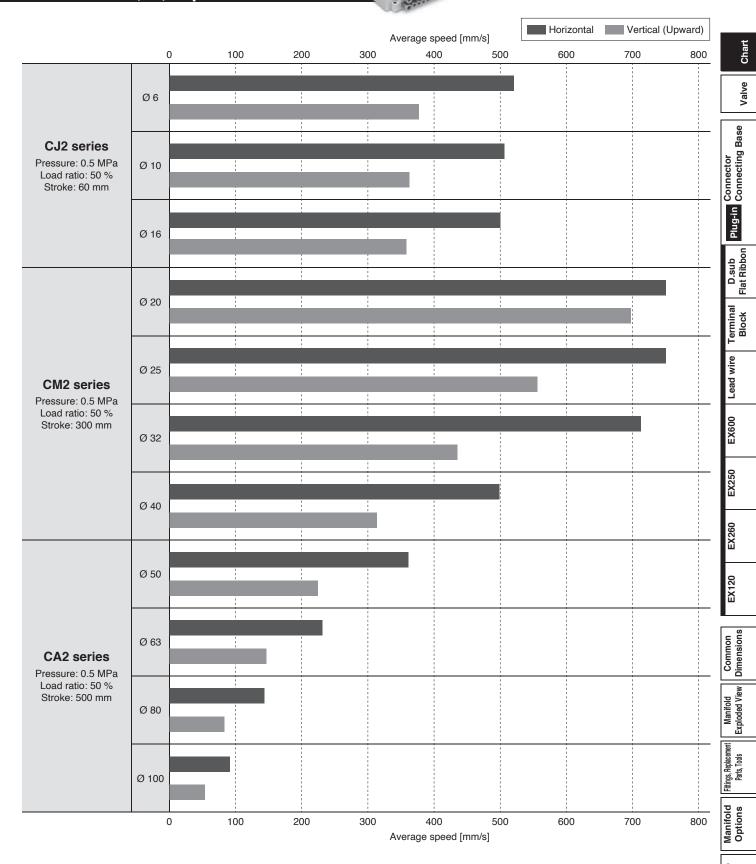
^{*} The average speed of the cylinder is obtained by dividing the stroke by the total stroke time.

^{*} 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.

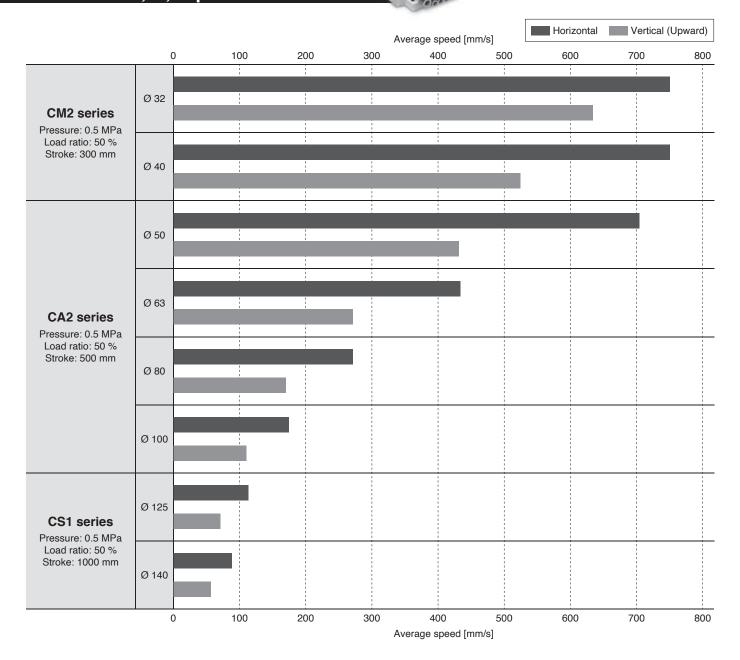
Optimum Actuation Size Chart of Air Cylinder

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 %
- Formula for load ratio: Load ratio = ((Load mass x 9.8)/ I neoretical output) x 10t
 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 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.

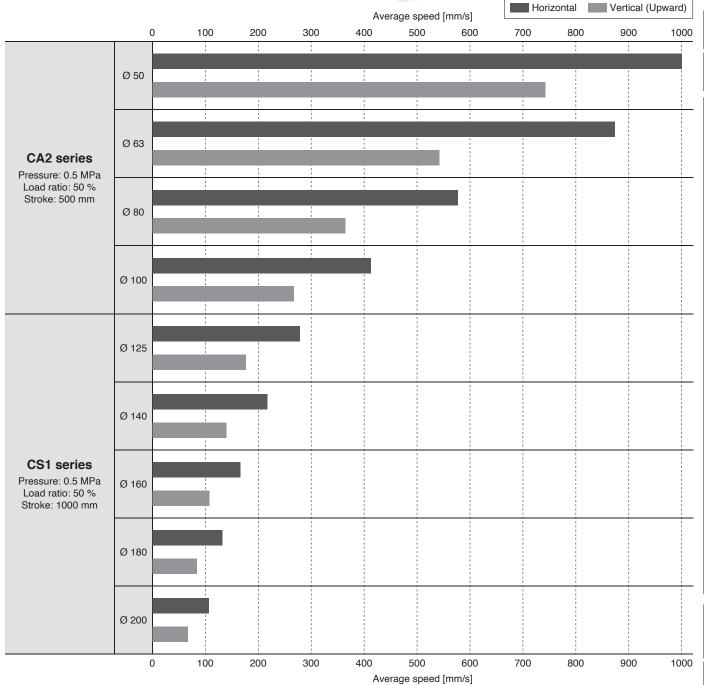
^{*} Formula for load ratio: Load ratio = ((Load mass x 9.8)/Theoretical output) x 100 %

^{*} 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: 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.



es es

Chart

Plug-in Connecting Base

Terminal D.sub Plu Block Flat Ribbon

EX600 Lead wire Terminal Block F

EX120 EX260 EX250

Common View Dimensions

acement Manifold
bols Exploded View

Fittings, Replacemen Parts, Tools

Manifold Options

Made to Order

JSY1000/3000/5000 Series Valve Specifications

Valve Specifications

Valve type			Rubber seal				
Fluid			Air				
	2-position sing	gle	0.15 to 0.7				
Internal pilot operating	2-position dou	ble	0.1 to 0.7				
pressure range [MPa]	3-position		0.2 to 0.7				
[wi a]	4-position dua	l 3-port valve	0.15 to 0.7				
External pilot	Operating pres	ssure range	-100 kPa to 0.7				
(Made to Order)	Pilot	2-position single					
operating pressure range	pressure	2-position double	0.25 to 0.7				
[MPa]	range	3-position					
Ambient and fluid temperatures [°C]			-10 to 50 (No freezing)				
		2-position single/double	r				
	JSY1000/3000	4-position dual 3-port valve	5				
Max. operating frequency		3-position	3				
[Hz]	JSY5000	2-position single/double	5				
		4-position dual 3-port valve	3				
		3-position	3				
			Non-locking push type				
Manual override			Push-turn locking slotted type				
			Push-turn locking lever type*1				
Dilat avhaust type	Internal pilot		Individual exhaust				
Pilot exhaust type	External pilot	(Made to Order)	muividuai exitausi				
Lubrication			Not required				
Mounting orientation*2			Unrestricted				
Impact/Vibration resistance	e*2 [m/s²]		150/30				
Enclosure			JSY1000: IP40 JSY3000/5000: IP67 (Based on IEC60529)				
Coil rated voltage [DC]			24 V				
Allowable voltage fluctuati	on [V]		±10 % of the rated voltage				
	Standard	JSY3000/5000	0.4				
Downey consumption DAG		JSY1000	0.2*3 [Inrush 0.5, Holding 0.2]				
Power consumption [W]	With power saving circuit	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				
d. Net evellele few the IOV46							

^{*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.

Valve Specifications JSY1000/3000/5000 Series

Response Time

			Response time [ms]*1 With light/surge voltage suppressor				
Series	Model	Type of actuation					
	Type of actuation		Z type	U type			
	JSY1100	2-position single	15				
ICV4000	JSY1200	2-position double	7				
JSY1000	JSY13/4/500	3-position	16	_			
	JSY1A/B/C00	4-position dual 3-port valve	19				
	JSY3100	2-position single	27	18			
ICV2000	JSY3200	2-position double	13	12			
JSY3000	JSY33/4/500	3-position	27	24			
	JSY3A/B/C00	4-position dual 3-port valve	23	23			
	JSY5100	2-position single	35	25			
ICVEDOD	JSY5200	2-position double	19	17			
JSY5000	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	Т	Type of actuation					
	2 position	Single	24				
	2-position	Double	27				
JSY1⊓00		Closed centre					
JS1 100	3-position	Exhaust centre	30				
		Pressure centre					
	4-position	Dual 3-port valve	27				

JSY5000 Series

Valve model	Т	Type of actuation					
	2-position	Single	91				
	z-position	Double	100				
JSY5□00		Closed centre					
J313_00	3-position	Exhaust centre	110				
		Pressure centre	1				
	4-position	Dual 3-port valve	96				

JSY3000 Series

Valve model	Т	Weight [g]			
	O nonition	Single	54		
	2-position	Double	63		
JSY3□00		Closed centre			
J513L00	3-position	Exhaust centre	67		
		Pressure centre	1		
	4-position	Dual 3-port valve	63		

Manifold Exploded View

Specific Product Precautions



Plug-in Connector

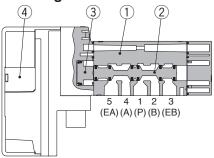
Lead wire

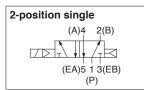
EX120

JSY1000/3000/5000 Series Valve Construction

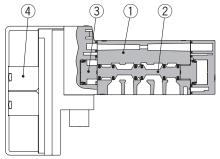
Rubber Seal

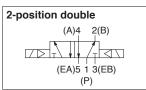
2-position single



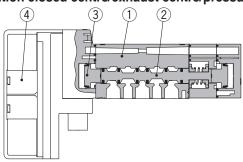


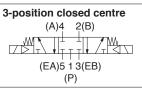
2-position double

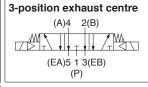


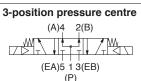


3-position closed centre/exhaust centre/pressure centre

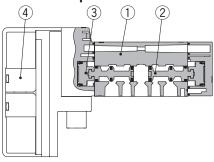


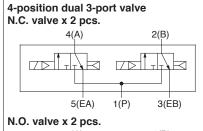


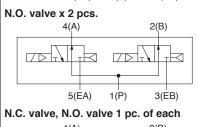


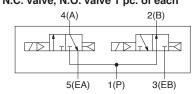


4-position dual 3-port valve







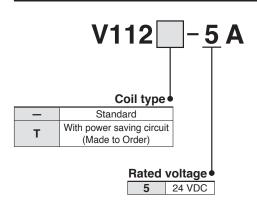


Component Parts

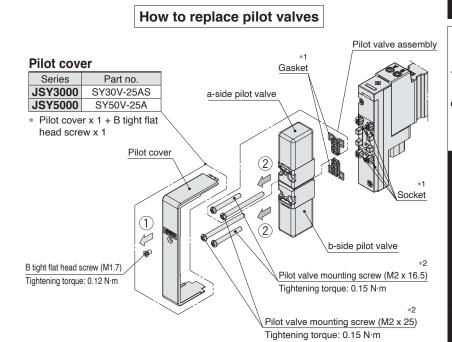
00111	ponont i arto	
No.	Description	Material
1	Body	Aluminum die-casted
2	Spool valve	Aluminum/HNBR (4-position solenoid valve: Resin/HNBR
3	Piston	Resin
4	Pilot valve assembly	_

JSY3000/5000 Series Valve Replacement Parts: Pilot Valve

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



- 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



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

Plug-in Connecting Base Connector

D.sub Flat Ribbon

Lead wire

EX120

Exploded View



JSY1000/3000/5000 Series Type 10 Plug-in Connector Connecting Base

Manifold Specifications

			D	-sub connect	or			Flat ribb	on cable				
	Model		F type	FW type*1	FC type*2	P type	PG type	PH type	PC type*2	PGC type*2	PHC type*2		
Manifo	ld type					Plug-in co	nnector conne	ecting base			•		
SUP/E	XH port type				C	ommon SUP	/EXH (Comm	on for 3/5 por	rt)				
Valve s	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							
Amalia			D-sub connector conforming to	Dedicated connector	D-sub connector conforming to				able connecto 3503 (Refer to	-			
Applicable connector			MIL-C-24308 (Refer to page 37.)	(Refer to page 37.)	MIL-C-24308 (Refer to page 37.)	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		
Interna	l wiring			Positive common, Negative common									
	1(B) 0(E(E)	JSY1000	Ø 8 One-touch fitting										
	1(P), 3/5(E) port	JSY3000		Ø 10 One-touch fitting									
Port	port	JSY5000				Ø 12 One-touch fitting							
size	4(A) 0(D)	JSY1000		Ø 2 One-touch fitting, Ø 4 One-touch fitting, Ø 6 One-touch fitting									
	4(A), 2(B) port	JSY3000			Ø	6 One-touch	fitting, Ø 8 O	ne-touch fittir	ng				
	port	JSY5000			Ø.	10 One-touch	fitting, Ø 12	One-touch fitt	ting				
	JSY			_	IP20					IP20			
Enclos (Based	ure I on IEC60529)	JSY3000	IP40	IP67	11 20		IP40		11 20				
		JSY5000		IF0/	_				_				

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

Manifold Weight

											Unit: g	
				② Wiring								
N.4	adal	1 Per station	D.	-sub connect	tor	Flat ribbon cable						
Model		Ter station	F type	FW type*2	FC type*3	P type	PG type	PH type	PH type PC type*3 PGC type*3 PHC typ			
ICV1000	for Ø 4	21.3	308	_	233	306	304	298	233	231	225	
JSY1000	for Ø 6	26.9	319	_	244	317	315	309	244	242	236	
JSY3000	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

 $W = 1 \times n + 2$ (n: stations)

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

Manifold Flow Rate Characteristics

	Port size		Valve flow rate characteristics					
Model	1, 3/5	4, 2	1→4/2 (P→A/B)			4/2→3/5 (A/B→E)		
	(P, E)	(A, B)	C [dm ³ /(s·bar)]	b	Q [l/min (ANR)]*2	C [dm ³ /(s·bar)]	b	Q [l/min (ANR)]*2
JJ5SY1-10	C8	C4	0.63	0.46	179	0.87	0.47	250
(Side ported)		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 x C

^{*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.



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

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



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 fo	or 3/5 port)		
2 to 20 stations			2 to 24 stations			2 to 16 stations
_						
		Positive	e common, Negative co	ommon		
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-to	ouch fitting, Ø 8 One-to	ouch fitting		
Ø 10 One-touch fitting, Ø 12 One-touch fitting						
IP40						
	IP67		IP67 (I/O unit: partially IP40)	IP67	IP67 D-sub communication connector: IP40	IP20

									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	
	01/	705	638	7/10	033	1063	754	683	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.

Chart

Valve

Plug-in Connector

Lead wire

Manifold Common Exploded View Dimensions

Manifold Fittings, Replacement Options Parts, Tools

Made to Order



^{*2} FW type is not available for the JSY1000.

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

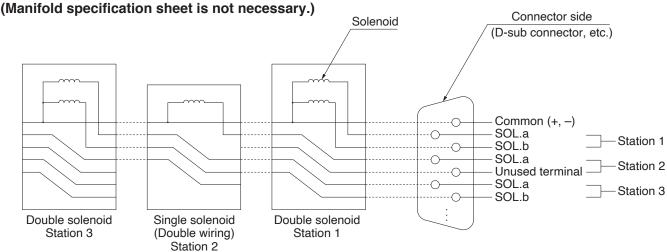
^{*4} Serial unit weight is included, but I/O unit is not included. Add the weight for calculation when I/O unit is added.

Connector Wiring Layout

Station 3

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)



■ Single/double wiring are mixed. (Manifold specification sheet is necessary.) Connector side Solenoid (D-sub connector, etc.) Common (+, -) SOL.a -0-Station 1 -----SOL.b--0-SOL.a-Station 2 SOL.a-····· Station 3 $\cdot \bigcirc$ SOL.b_ Double solenoid Single solenoid Double solenoid

Station 1

Station 2

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

Plug-in Connector Connecting Base

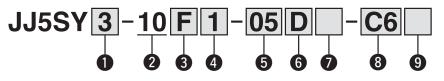
D-sub Connector Flat Ribbon Cable

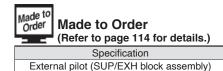
Type 10 Side Ported

JSY1000/3000/5000 Series

Internal Pilot

How to Order Manifolds



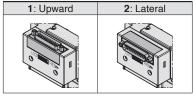


Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Typ	pe
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)
В	Both sides (2 to 24 stations)

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

(Metric/One-touch fitting)

Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2	•	_	_	1
C4		Ø 4	•	_	_	
C6	물	Ø6	•	•	_	
C8	raight	Ø8	_	•	_	
C10	쟔	Ø 10	_	_	•	0
C12		Ø 12	_	_	•	00
CM*1]	Straight port, mixed sizes	•			- Or how
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

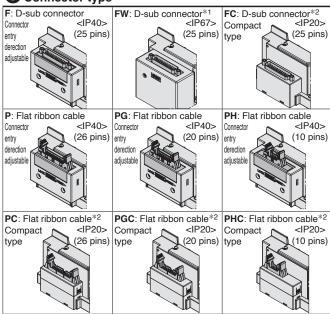
O mounting and option					
Symbol	Mounting				
_	Direct mounting				
D□	DIN rail mounting				

DIN Rail Option

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

- * Enter the number of stations inside \square 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)

Symbol	Stations	Note
02	2 stations	
	:	Double wiring*1
12	12 stations	
02	2 stations	Specified layout*2
	:	(Up to 24
24	24 stations	solenoids available)

	= 1 010110110					
PG/PGC: Flat ribbon cable (20 pins)						
Symbol	Stations	Note				
02	2 stations					
:	:	Double wiring*1				
09	9 stations					
02	2 stations	Specified layout*2				
	:	(Up to 18				
18	18 stations	solenoids available)				

P/PC: Flat ribbon cable (26 pins)

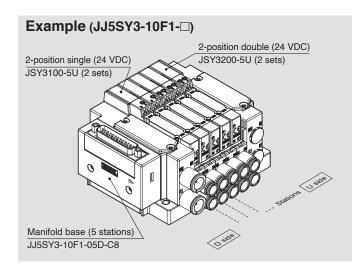
. / . `). I lat	ribbori cabic (20 piris)							
Symbol	Stations	Note							
02	2 stations								
:	:	Double wiring*1							
12	12 stations								
02	2 stations	Specified layout*2							
1	:	(Up to 24							
24	24 stations	solenoids available)							

PH/PHC: Flat ribbon cable (10 pins)

,	1 11/1	110.11	at hibbori cable (10 pins)
	Symbol	Stations	Note
	02	2 stations	
		÷	Double wiring*1
	04	4 stations	
	02	2 stations	Specified layout*2
		:	(Up to 8
	08	8 stations	solenoids available)

- *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



- 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 extended denotes the sample for the example.
 - →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.

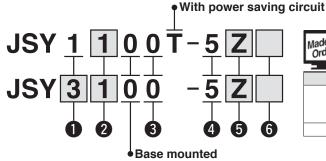
Internal Pilot

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

	ou ronago
5	24 VDC

2 Type of actuation

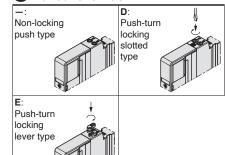
1	O position	Single					
2	2-position	Double					
3		Closed centre					
4	3-position	Exhaust centre					
5		Pressure centre					
Α	4	N.C./N.C.					
В	4-position dual 3-port	N.O./N.O.					
С	duai 5-port	N.C./N.O.					

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 5 0 %, please select the product with power saving circuit.

For the JSY 1000 series only the power saving circuit is available.

Protective class class III (Mark: (III))

Plug-in Connecting Base

Chart

Valve

lock Fla

Lead wire T

1 009X

K250

EA200

EX120

Manifold Common Exploded View Dimensions

ings, Replacement Parts, Tools

Manifold Options

> ade to Order

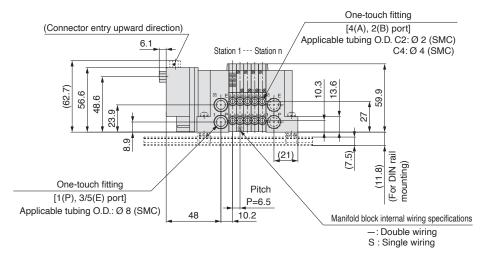
Type 10/Side Ported (Applicable to \emptyset 2 and \emptyset 4 fittings)

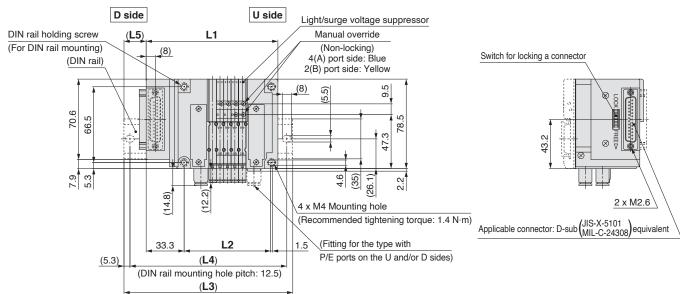
Dimensions: JSY1000 Series

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

JJ5SY1-10 F_2^1 -Stations $\stackrel{\text{U}}{p}$ - $\stackrel{\text{C2}}{c4}$ (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

Ln	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

	17	18	19	20	21	22	23	24
L1	193.5	200	206.5	213	219.5	226	232.5	239
L2	153.9	153.9 160.4 1		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



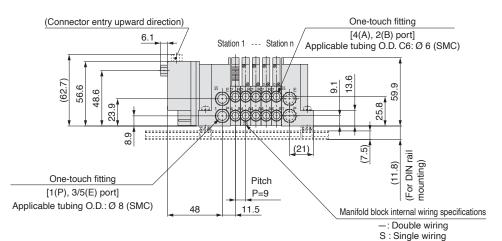
Type 10/Side Ported (Applicable to Ø 6 fittings)

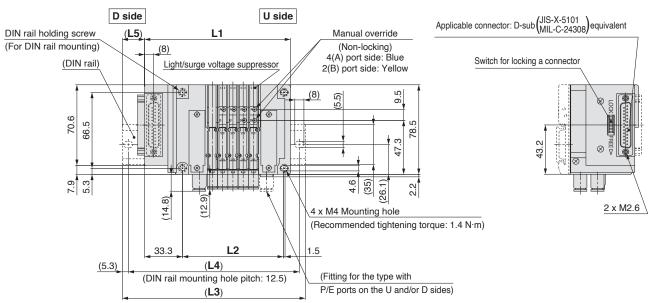
D-sub Connector (IP40/Connector Entry Direction Adjustable)

Dimensions: JSY1000 Series

JJ5SY1-10F₂¹-Stations B-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

_ 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	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	241.4 250.4	
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



Plug-in Connecting Base

Chart

Valve

Flat Ribbon

Block

600 Lead wire

EAZOU

EX120 EX

Common Dimensions

Exploded View

ttings, Replacement Parts, Tools

Manifold Options

Made to Order

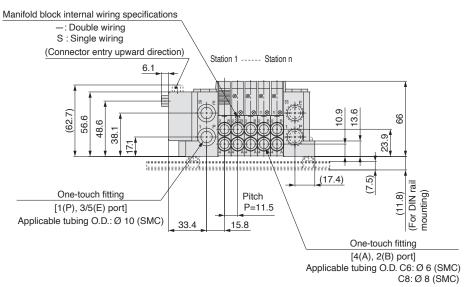
Type 10/Side Ported

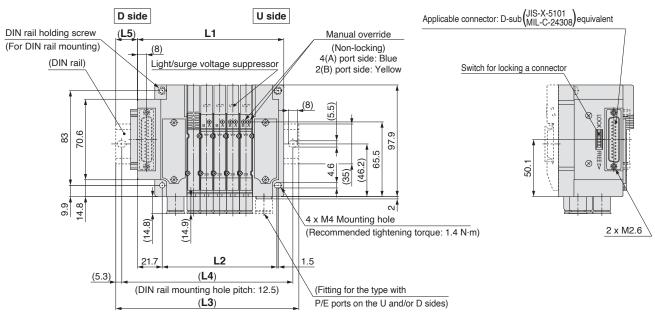
Dimensions: **JSY3000** Series

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

JJ5SY3-10F₂¹-Stations D-C6 (D)







- * 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. D	E. Difficilities														
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

	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

23

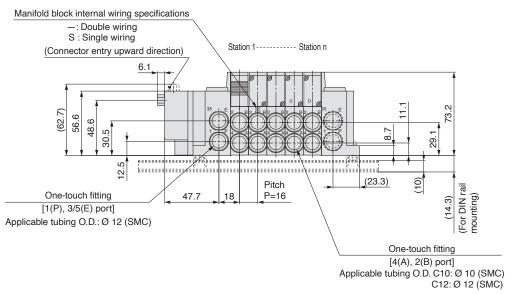


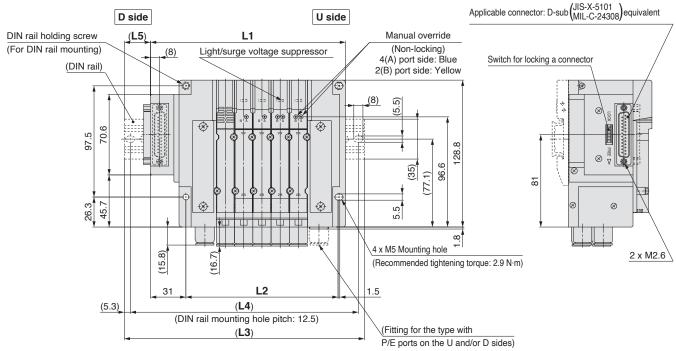
Type 10/Side Ported

Dimensions: JSY5000 Series

JJ5SY5-10 F_2^1 -Stations $\stackrel{\text{U}}{P}$ - $\stackrel{\text{C10}}{\text{C12}}$ (D)

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





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

 Din		-:-		
 ııım	10n	CIA	ne	

n: Stations

L. D															. Otations
L	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	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

Plug-in Connector

Lead wire

EX120 Common Dimensions

Exploded View

Manifold Options

Made to Order

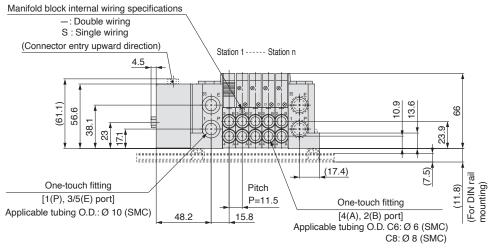
Type 10/Side Ported

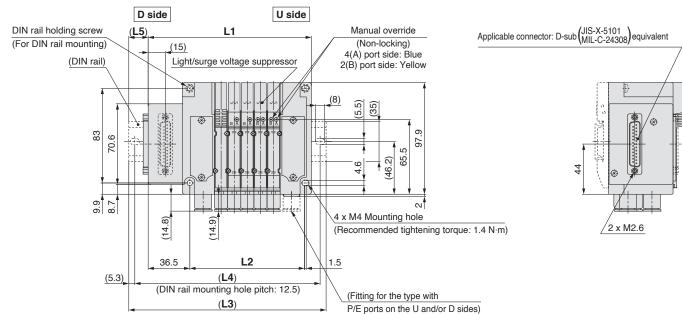
Dimensions: **JSY3000** Series

D-sub Connector (IP67)

JJ5SY3-10FW $_2^1$ -Stations $_{\rm p}^{\rm U}$ - $_{\rm C8}^{\rm C6}$ (D)







- * 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	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

	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

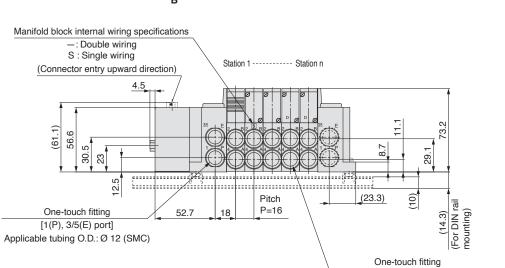


Type 10/Side Ported

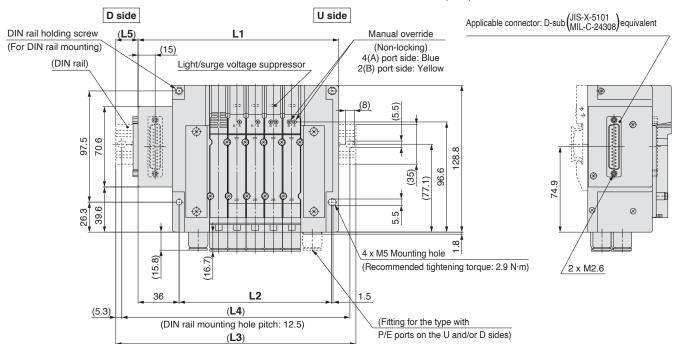
Dimensions: **JSY5000** Series

D-sub Connector (IP67)

JJ5SY5-10FW $_2^1$ -Stations $\stackrel{\text{U}}{\mathbb{R}}$ - $\stackrel{\text{C10}}{\text{C12}}$ (D)



[4(A), 2(B) port] Applicable tubing O.D. C10: Ø 10 (SMC) C12: Ø 12 (SMC)



- * These figures show the "JJ5SY5-10FW2-05D-C12."
- * Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

 Dimensions	

n: Stations L: Dimensions <u>___n</u> 3 4 5 8 9 10 12 13 2 6 7 11 14 15 16 L1 240 128 144 160 176 192 208 224 256 272 288 304 320 336 352 L2 101.5 197.5 245.5 261.5 293.5 85.5 117.5 133.5 149.5 165.5 181.5 213.5 229.5 277.5 309.5 L3 335.5 160.5 173 198 210.5 223 248 260.5 273 285.5 310.5 323 348 373 385.5 L4 312.5 362.5 150 162.5 187.5 200 212.5 237.5 250 262.5 275 300 325 337.5 375 L5 18.5 17 21.5 19.5 22.5 20.5 17 21.5 20 16.5 21 19 18 19 18

L	17	18	19	20	21	22	23	24
L1	368	384	400	416	432	448	464	480
L2	325.5	341.5	357.5	373.5	389.5	405.5	421.5	437.5
L3	398	423	435.5	448	460.5	485.5	498	510.5
L4	387.5	412.5	425	437.5	450	475	487.5	500
L5	17.5	22	20	18.5	16.5	21	19.5	17.5



Chart

Valve

Plug-in Connector Connecting Base

Flat Ribbon

Block

EX600 Lead wire

EA230

EX120 EX260

d Common /iew Dimensions

teplacement Manifold St. Tools Exploded View

Manifold Fittings, Options Par

Made to Order

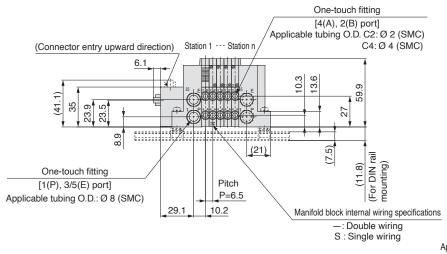
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

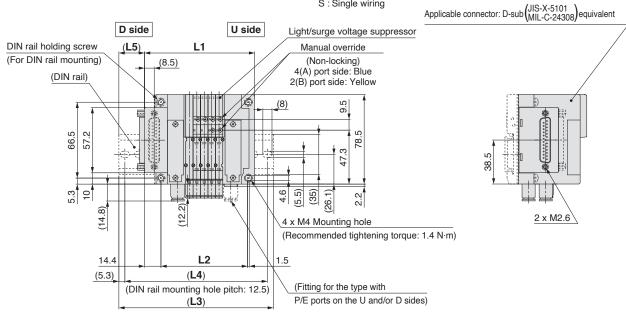
Dimensions: JSY1000 Series

D-sub Connector (IP20/Compact Type)

JJ5SY1-10FC $_2^1$ -Stations $_B^U$ - $_{C4}^{C2}$ (D)







- * 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

	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



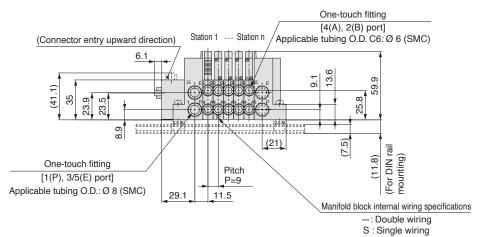
Type 10/Side Ported (Applicable to Ø 6 fittings)

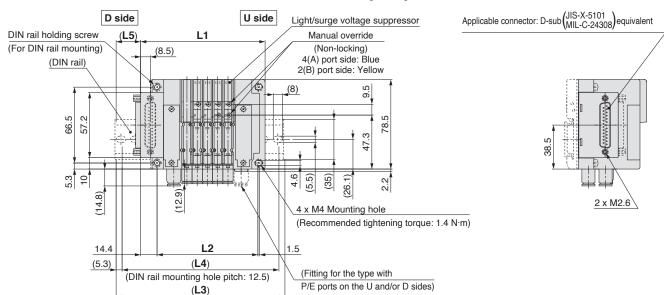
D-sub Connector (IP20/Compact Type)

Dimensions: JSY1000 Series

JJ5SY1-10FC $_2^1$ -Stations $_{B}^{U}$ -C6(D)







- * These figures show the "JJ5SY1-10FC2-05D-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	82.1	91.1	100.1	109.1	118.1	127.1	136.1	145.1	154.1	163.1	172.1	181.1	190.1	199.1	208.1
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	23.5	19	21	22.5	18	20	21.5	23.5	19	20.5	22.5	18	19.5	21.5	23

L	17	18	19	20	21	22	23	24
L1	217.1	226.1	235.1	244.1	253.1	262.1	271.1	280.1
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	18.5	20.5	22	24	19.5	21	23	18.5



Chart

Valve

Plug-in Connector Connecting Base

Flat Ribbon

Block

300 Lead wire

EA230

EX120 EX260

Common Dimensions

Exploded View

ttings, Replacement
Parts, Tools

Manifold Options

Made to Order

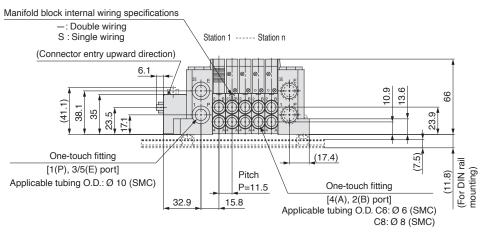
Type 10/Side Ported

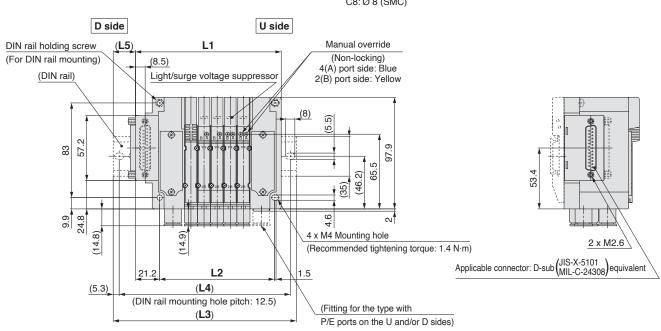
Dimensions: **JSY3000** Series

D-sub Connector (IP20/Compact Type)

JJ5SY3-10FC $_2^1$ -Stations $_{\rm B}^{\rm U}$ - $_{\rm C8}^{\rm C6}$ (D)







- * 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	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

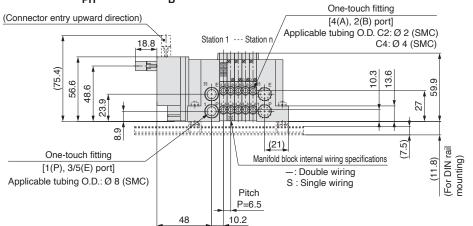
	17	18	19	20	21	22	23	24
L1	265.8	277.3	288.8	300.3	311.8	323.3	334.8	346.3
L2	238.6	250.1	261.6	273.1	284.6	296.1	307.6	319.1
L3	298	310.5	323	335.5	348	360.5	373	385.5
L4	287.5	300	312.5	325	337.5	350	362.5	375
L5	19	19.5	20	20.5	21	21.5	22	22.5

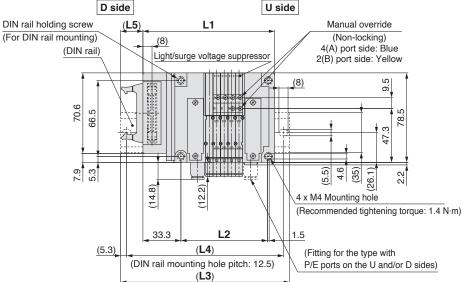


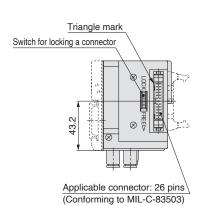
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Dimensions: JSY1000 Series

Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)







- 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.

10PG (20 pins)	10Ph (10 pins)
Triangle mark	Triangle mark
100K I MEET N	
Applicable connector: 20 pins MIL type (Conforming to MIL-C-83503)	Applicable connector: 10 pins MIL type (Conforming to MIL-C-83503)

L: DIIII	: Differisions														
L	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	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

Plug-in Connector

Lead wire

EX600

EX120

Common Dimensions

Exploded View

Manifold Options

Made to Order

specific Product

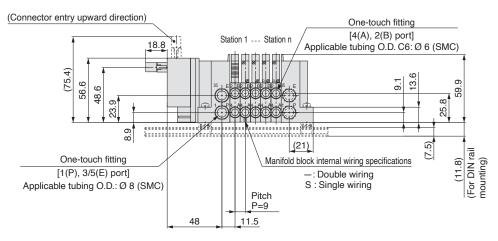
Type 10/Side Ported (Applicable to Ø 6 fittings)

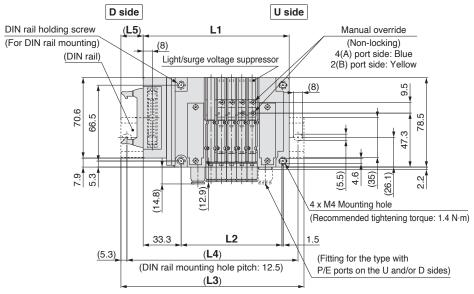
Dimensions: JSY1000 Series

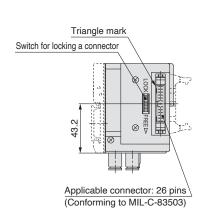
Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

JJ5SY1-10 PG 2-Stations B-C6(D)

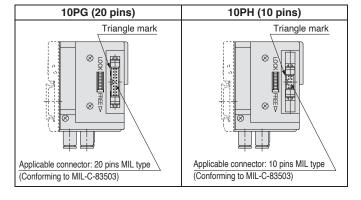








- * These figures show the "JJ5SY1-10P2-05D-C6."
- Refer to page 89 for dimensions of external pilot (Made to Order) and silencer.
- Only connectors are different for 10PG and 10PH. L1 to L5 dimensions are the same as 10P type.
- When CM is selected for mixed A, B port size, refer to page 92 for dimensions.



L: Dimensions n: Stations

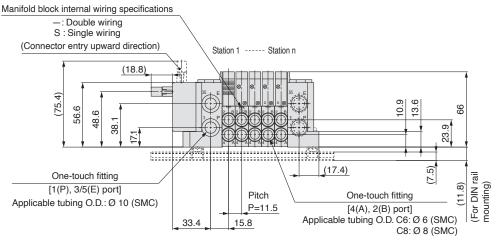
L	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	101	110	119	128	137	146	155	164	173	182	191	200	209	218	227	236	245	254	263	272	281	290	299
L2	61.4	70.4	79.4	88.4	97.4	106.4	115.4	124.4	133.4	142.4	151.4	160.4	169.4	178.4	187.4	196.4	205.4	214.4	223.4	232.4	241.4	250.4	259.4
L3	135.5	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

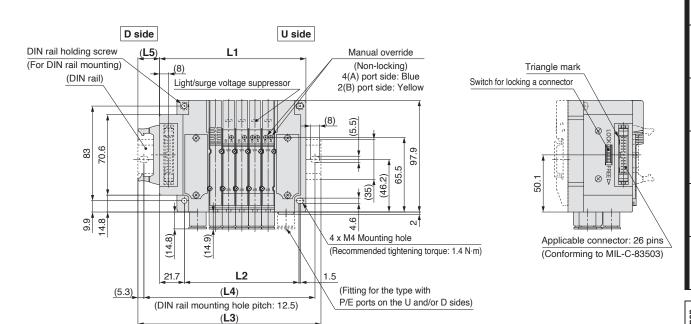
Type 10/Side Ported

Dimensions: **JSY3000** Series

JJ5SY3-10 PG 1- Stations D-C6 (D)

Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)





- * 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.

10PG (20 pins)	10PH (10 pins)
Triangle mark	Triangle mark
Applicable connector: 20 pins MIL type (Conforming to MIL-C-83503)	Applicable connector: 10 pins MIL type (Conforming to MIL-C-83503)
_	n: Stations

L: Dimensions

L: DIN	L: Dimensions n: Stations																						
L	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

Valve

Chart

Plug-in Connecting Base

lock Flat Rik

Lead wire

EAESO

EX120 EX260

Common Dimensions

Exploded View

Fittings, Replacement
Parts, Tools

Manifold Options

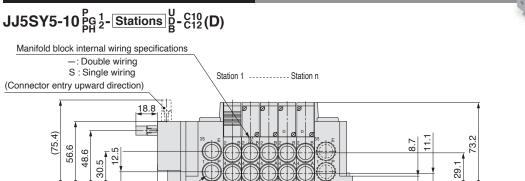
Made to Order

Type 10/Side Ported

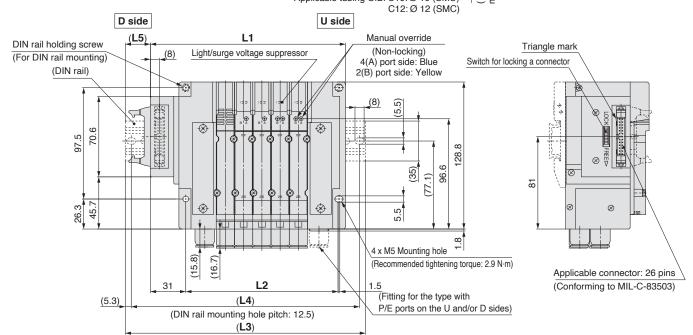
Dimensions: **JSY5000** Series

Flat Ribbon Cable (IP40/Connector Entry Direction Adjustable)

29.



........... One-touch fitting (23.3)[1(P), 3/5(E) port] Pitch (For DIN ra mounting) One-touch fitting Applicable tubing O.D.: Ø 12 (SMC) P=16 [4(A), 2(B) port] Applicable tubing O.D. C10: Ø 10 (SMC)



- * 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.

10PG (20 pins)	10PH (10 pins)
Triangle mark	Triangle mark
NOW THREE NOW AND ADDRESS OF THE PARTY OF TH	NOW THE TOTAL STATE OF THE PARTY OF THE PART
Applicable connector: 20 pins MIL type	Applicable connector: 10 pins MIL type
(Conforming to MIL-C-83503)	(Conforming to MIL-C-83503)

.: Dimensions

	I. Diffictions															tationio							
L	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

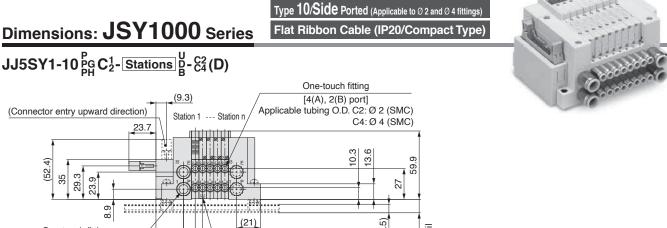
(For DIN rail mounting)

(11.8)

One-touch fitting

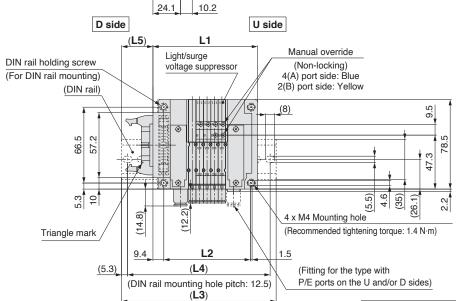
[1(P), 3/5(E) port]

Applicable tubing O.D.: Ø 8 (SMC)

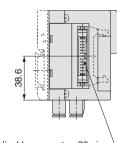


Manifold block internal wiring specifications

-: Double wiring S : Single wiring



Pitch P=6.5



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.

42.4	48.7
Applicable connector: 20 pins (Conforming to MIL-C-83503) Triangle mark	Applicable connector: 10 pins (Conforming to MIL-C-83503) Triangle mark

L: DIIII	n: Stations														
L	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

L	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

Plug-in Connector

Lead wire

EX600

EX120

Dimensions

Exploded View

Made to Order

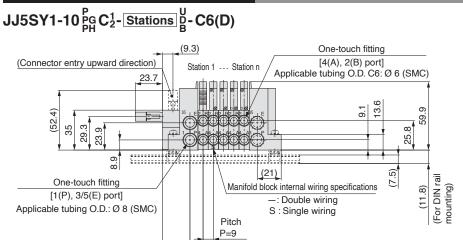
specific Product

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

Dimensions: JSY1000 Series

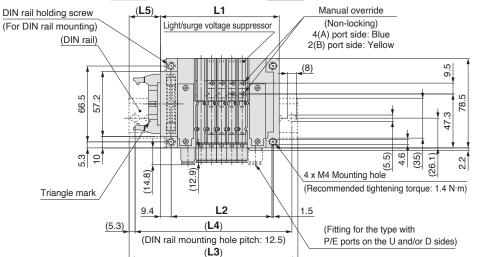
D side

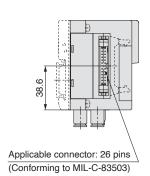
Flat Ribbon Cable (IP20/Compact Type)



11.5

U side





- * 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.

10PGC (20 pins)	10PHC (10 pins)
Applicable connector: 20 pins (Conforming to MIL-C-83503) Triangle mark	Applicable connector: 10 pins (Conforming to MIL-C-83503) Triangle mark

L: Dimensions n: Stations

L	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	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

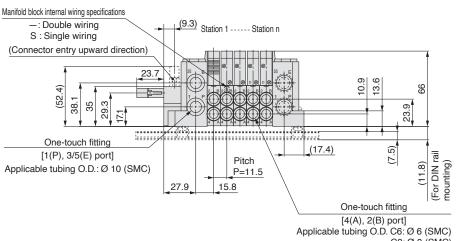


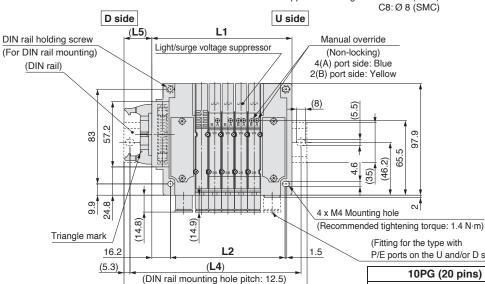
Type 10/Side Ported

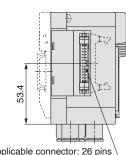
Dimensions: JSY3000 Series

Flat Ribbon Cable (IP20/Compact Type)

JJ5SY3-10 PG C2-Stations U-C6 (D)







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

P/E ports on the U and/or D sides)

* These figures show the "JJ5SY3-10PC2-05D-C8." * Refer to page 90 for dimensions of external pilot (Made to Order) and silencer.	57.2	A
* Only connectors are different for 10PGC and 10PHC. L1 to	<u>, , , , , , , , , , , , , , , , , , , </u>	

(L3)

Refe Ord Onl L5 dimensions are the same as 10PC type.

10PG (20 pins) 10PH (10 pins) Applicable connector: 10 pins Applicable connector: 20 pins (Conforming to MIL-C-83503) (Conforming to MIL-C-83503) Triangle mark Triangle mark

L: Dim	ension	IS												r	n: Stations
L	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	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

Plug-in Connector

Lead wire

EX600

EX120

Common Dimensions

Exploded View Manifold

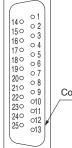
Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

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.

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

Positive

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 madeinconformity with DIN47100.

Connector Cable [IP20/IP40]

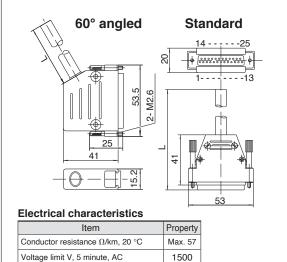
GVVZS3000-21A-□

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	Shieled
3 m	GVVZS3000-21A-2S	Shieled
5 m	GVVZS3000-21A-3S	Shieled
8 m	GVVZS3000-21A-4S	Shieled
20 m	GVVZS3000-21A-5S	Mode to order



20

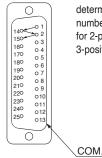
Connector Cable [IP67]

Insulation resistance M Ω /km, 20 °C

Specified Layout

Negative common

(25 pins)

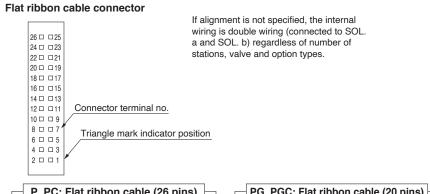


Mixed wiring of single and double wiring can be specified on the manifold specification sheet. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 24 or less. 1 solenoid is required for 2-position single, and 2 solenoids for 2-position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

SY30M-DS25-030 [IP67] 050 D-sub connector cable Cable 0.3 mm² x 25 cores O.D. Ø 1.4 Cable Assembly part no. Note length (L SY30M-DS25-015 1.5 m Cable SY30M-DS25-030 0.3 mm² x 25 3 m cores Approx. Ø 8 5 m SY30M-DS25-050 Be sure to use the connector cable in Seal the table, to satisfy enclosure IP67. (Length) Cannot be used for movable wiring. Connector hood 2 x M2.6 x 0.45 8 Connector JBZ-25S-3 made by J.S.T. Mfg. Co.,Ltd. 25 Socket side Terminal no. 47.04



Electrical Wiring Specifications



P, PC:	Flat ribbon	cabl	e (26	pins)	ŀ
	<double< th=""><th>wirin</th><th>g></th><th></th><th>•</th></double<>	wirin	g>		•
		Term	ninal no.	Polarity	
Station 1 { Station 2 { Station 3 { Station 5 { Station 6 { Station 6 { Station 8 { Station 9 { Station 11 { Station 11 { Station 12 {	SOL a SOL b SOL b		_	Polarity (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	
	COM.	25 26	(+) (+)	(-) (-)	
	v	-	ositive	` '	

PG, PGC: Flat ribbo	on cable (20 pins) 🗀
<double< th=""><th>wiring></th></double<>	wiring>
	Terminal no. Polarity
CSOL. a	1 (-) (+)
Station 1 { SOL. b	2 (-) (+)
SOL. a	3 (-) (+)
Station 2 { SOL. b	4 (-) (+)
L.m.SOL. a	5 (-) (+)
Station 3 { SOL. b	6 (-) (+)
SOL. a	7 (-) (+)
Station 4 {SOL. b	8 (-) (+)
SOL. a	9 (-) (+)
Station 5 { SOL. b	10 (-) (+)
L.m.SOL. a	11 (-) (+)
Station 6 {SOL. b	12 (-) (+)
SOL. a	13 (-) (+)
Station 7 SOL. b	14 (-) (+)
SOL. a	15 (-) (+)
Station 8 SOL. b	16 (-) (+)
SOL. a	17 (-) (+)
Station 9 SOL. b	18 (-) (+)
COM.	10 (-) (+)
COM	19 (+) (–)
COIVI.	20 (+) (-)
	Positive Negative common

<double th="" v<=""><th>virin</th><th>g></th><th></th></double>	virin	g>	
Station 1 {	1 2 3 4 5 6	(-) (-) (-) (-) (-) (-) (-) (-) (-)	Polarity (+) (+) (+) (+) (+) (+) (+) (+) (-)
COM.	10 F	(+) (+) Positive ommon	(–) Negative

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

Chart

Valve

Plug-in Connector

Lead wire

EX600

Common Dimensions

EX120

Manifold Exploded View

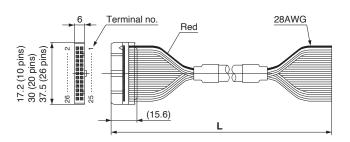
Manifold Options

Made to Order



Flat Ribbon Cable Connector

AXT100-FC 20-2 26 3



Flat ribbon cable connector

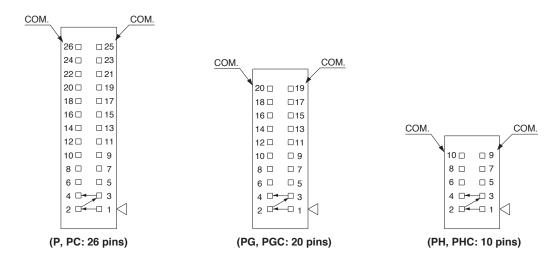
Cable		Assembly part no.	
length (L)	26 pins	20 pins	10 pins
1.5 m	AXT100-FC26-1	AXT100-FC20-1	AXT100-FC10-1
3 m	AXT100-FC26-2	AXT100-FC20-2	AXT100-FC10-2
5 m	AXT100-FC26-3	AXT100-FC20-3	AXT100-FC10-3

- * 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



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.



Plug-in Connector Connecting Base

Spring Type Terminal Block Box Terminal Block Box

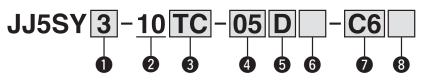
Type 10 Side Ported

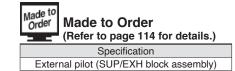
JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds





1 Ser	ies
1	JS'
3	JS'

U Sei	ies
1	JSY1000
3	JSY3000
5	JSY5000

2 Typ	oe e
10	Side ported

Wiring

	<u> </u>
TC	Spring type terminal block box
Т	Terminal block box

4 Valve stations

TC : Spring type terminal block box				T: Terminal block box			
Symbol	Stations	Note	ſ	Symbol	Stations	Note	

Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations		02	2 stations	
:	:	Double wiring*1	:		Double wiring*1
16	16 stations		10	10 stations	_
02	2 stations	Specified layout*2	02	2 stations	Specified layout*2
	:	(Up to 32 solenoids		:	(Up to 20 solenoids
24	24 stations	available)	20	20 stations	available)
_					

- *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.

P. E port entry

	. ,
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	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.

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

Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2	•	_	_	~/2
C4		Ø 4	•	_	_	
C6	턽	Ø6	•	•	_	
C8	Straight	Ø8	_		_	
C10	ŝ	Ø 10	_	_	•	
C12		Ø 12	_	_		00
CM*1		Straight port, mixed sizes			•	O Joseph
P, E port size (One-touch fittings)			Ø 8	Ø 10	Ø 12	



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

8 Mounting and Option

Symbol	Mounting
_	Direct mounting
D□	DIN rail mounting

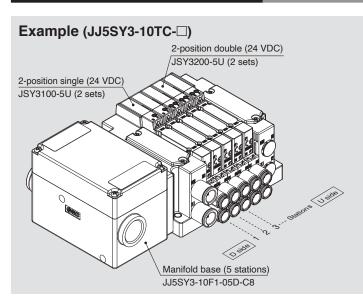
- * Enter the number of stations inside \square when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

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



How to Order Manifold Assembly



- 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 1 st station as shown in the figure. If the arrangement becomes complicated, specify on a manifold specification sheet.

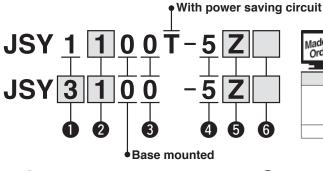
Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JSY3000/5000 Series



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

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

External pilot

Series

1	JSY1000
3	JSY3000
5	JSY5000

Pilot valve exhaust method

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

Rated voltage

5	24 VDC

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 savina circuit.

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

Type of actuation

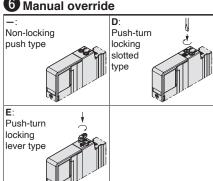
1	2-position	Single						
2	z-position	Double						
3		Closed centre						
4	3-position	Exhaust centre						
5		Pressure centre						
Α	4	N.C./N.C.						
В	4-position dual 3-port	N.O./N.O.						
С	duai 5-port	N.C./N.O.						

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.

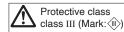
6 Manual override



- 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.



Chart

Valve

Plug-in Connector

D.sub Flat Ribbon

Lead wire

EX600

EX120

Dimensions Common

Exploded View

Options

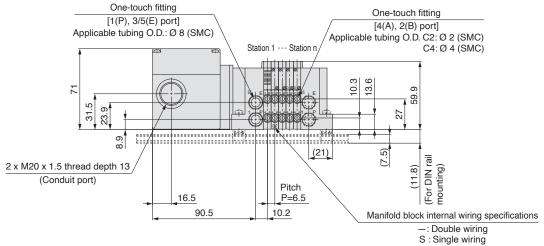
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

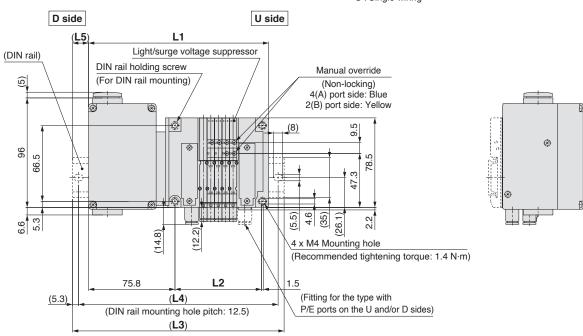
Dimensions: JSY1000 Series

Spring Type Terminal Block Box

JJ5SY1-10TC-Stations $\stackrel{\text{U}}{\text{P}}$ - $\stackrel{\text{C2}}{\text{C4}}$ (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	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	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



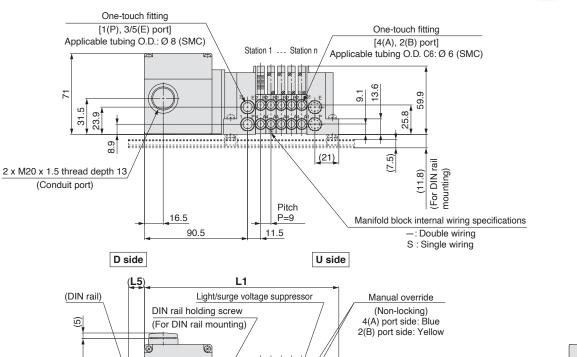
Type 10/Side Ported (Applicable to Ø 6 fittings)

Dimensions: **JSY1000** Series

JJ5SY1-10TC-Stations D-C6(D)







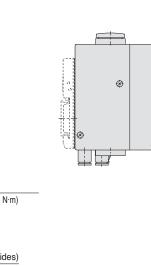
12.9)

(**L4**)

(L3)

14.8)

75.8



4 x M4 Mounting hole (Recommended tightening torque: 1.4 N·m) (Fitting for the type with (DIN rail mounting hole pitch: 12.5) P/E ports on the U and/or D sides)

(32)

(8)

- 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

96 66.5

9.9 5.3

(5.3)

n: Stations

L. D	L. Difficilions														. Otations
L	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	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

Plug-in Connector

Lead wire

EX120

Common Dimensions

Exploded View

Options

Made to Order

Type 10/Side Ported

Dimensions: JSY3000 Series Spring Typ

Spring Type Terminal Block Box

JJ5SY3-10TC-Stations P-C6 (D)

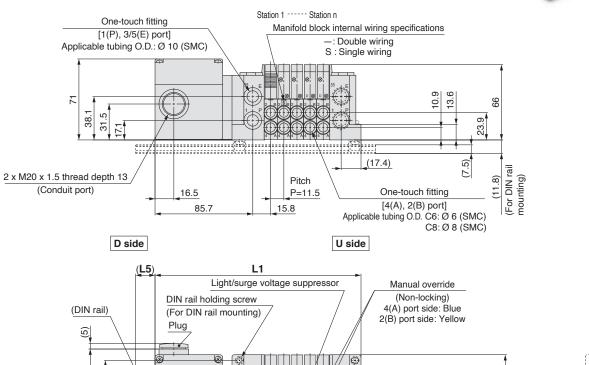
102.9

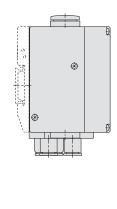
45

6.6

(5.3)







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

P/E ports on the U and/or D sides)

(5.5)

(35) (46.2)

4 x M4 Mounting hole

(Fitting for the type with

.2) 65.5

(Recommended tightening torque: 1.4 N·m)

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

L: Dimensions n: Stations

(8)

L	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

	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

(14.8)

74

(14.9)

(**L4**)

(DIN rail mounting hole pitch: 12.5)

(L3)

L2



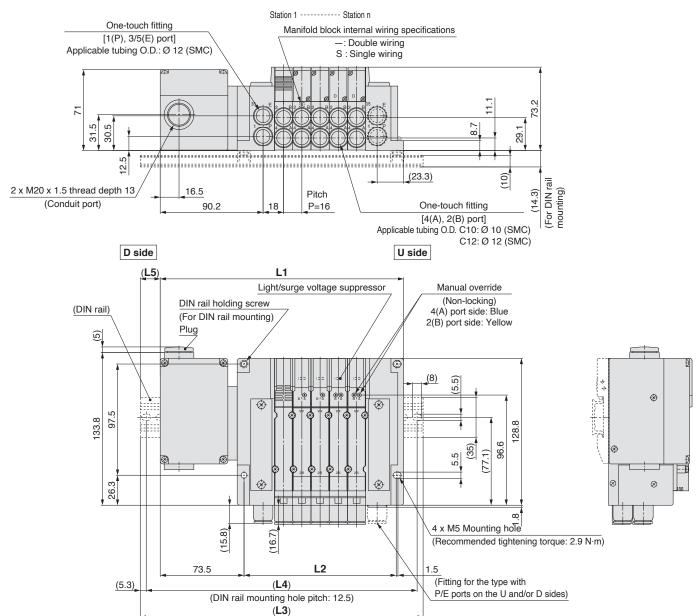
Type 10/Side Ported

Dimensions: **JSY5000** Series

Spring Type Terminal Block Box

JJ5SY5-10TC-Stations P-C10(D)





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

n: Stations

L. D	I. Difficilions														
L	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	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



46

Chart

Base Valve

Plug-in Connecting Base

Slock Flat R

EX600 Lead wire

EAZ30

EX120 E

Manifold Common Exploded View Dimensions

rts, Tools Explod

Manifold Fitting
Options

Made to Order

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

Dimensions: **JSY1000** Series

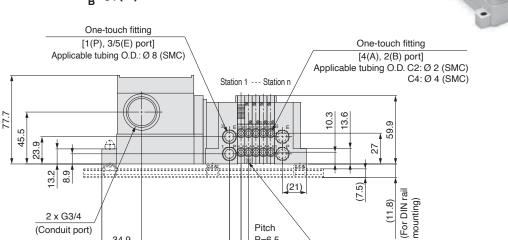
(Conduit port)

34.9

111.8

Terminal Block Box

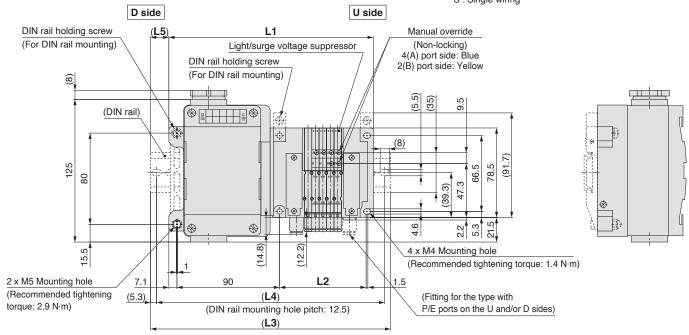
JJ5SY1-10T-Stations $\stackrel{\text{U}}{\text{P}}$ - $\stackrel{\text{C2}}{\text{C4}}$ (D)



P=6.5

10.2

Manifold block internal wiring specifications -: Double wiring S : Single wiring



- * 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	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	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

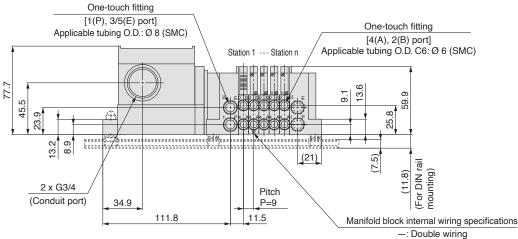


Type 10/Side Ported (Applicable to Ø 6 fittings) Terminal Block Box

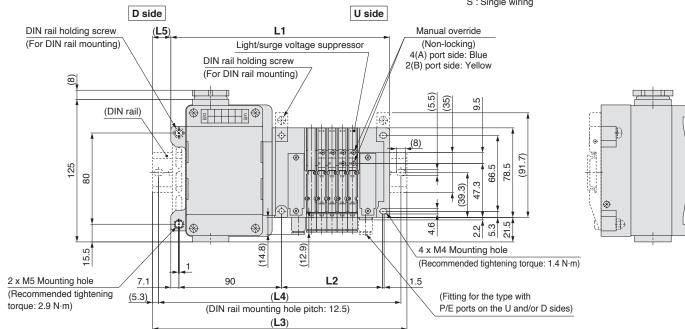
Dimensions: JSY1000 Series

JJ5SY1-10T-Stations B-C6(D)





S : Single wiring



- * 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

11.	Stations	

L. Dill	Diffictions 11. 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	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		



Made to Order

Valve

Chart

Plug-in Connector

Lead wire

EX120 Common Dimensions

Manifold Exploded View

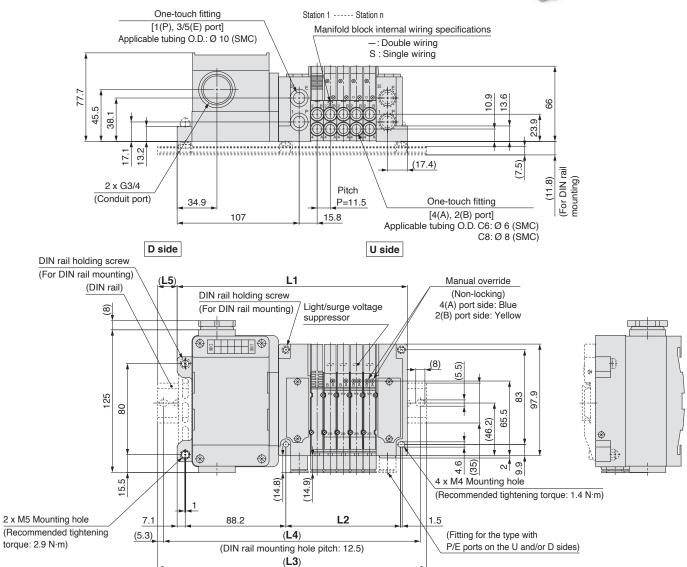
Type 10/Side Ported

Dimensions: **JSY3000** Series

Terminal Block Box

JJ5SY3-10T-Stations 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	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	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		



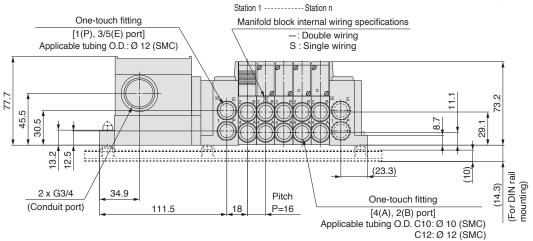
Type 10/Side Ported

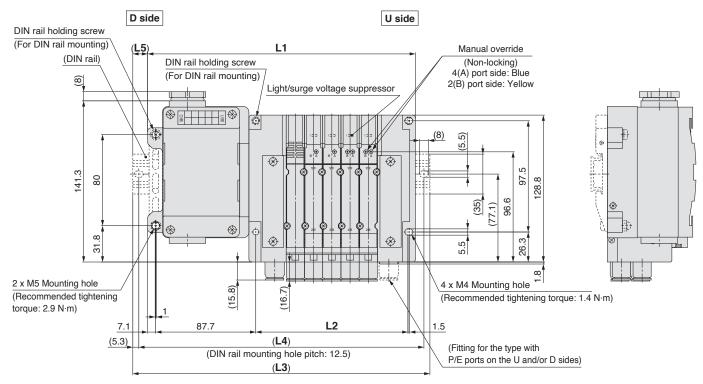
Dimensions: **JSY5000** Series

Terminal Block Box

JJ5SY5-10T-Stations 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	L:	Din	nens	SÌO	ns
---------------	----	-----	------	-----	----

n. Stations

L. Dill	Diffictions 11. 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

	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

Plug-in Connector D.sub Flat Ribbon

Lead wire

EX120

Common Dimensions

Exploded View

Manifold Options

Made to Order

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. Mounting screw (M3) Drip proof plug (SY30M-133-1) is mounted Tightening torque: 0.8 N·m

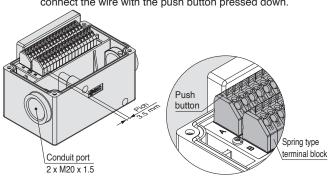
Step 3. Mount the terminal block cover.

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

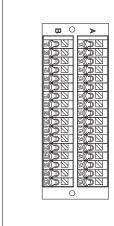
Step 2. The diagram below shows the terminal block wiring. All stations are provided with double wiring regardless of the mounted valves.

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 Ø 0.5 to Ø 1.2 mm, Stranded wire AWG24 to 16

Electrical Wiring Specifications (IP67 compliant)



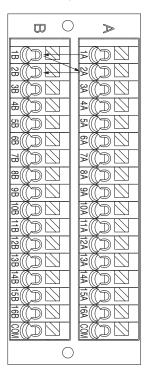
If alignment is not specified, the internal wiring will be double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve types, and option types.

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

	minal no	o. Po	larity	
SOL. a	1A	(-)	(+)	
Station 1 SOL. b	1B	(-)	(+)	
SOL. a	2A	(-)	(+)	
Station 2 SOL. b	2B	(-)	(+)	
SOL. a	ЗА	(-)	(+)	
Station 3 SOL. b	3B	(-)	(+)	
SOL. a	4A	(-)	(+)	
Station 4 SOL. b	4B	(-)	(+)	
SOL. a	5A	(-)	(+)	
Station 5 Sol. b	5B	(-)	(+)	
Station 6 SOL a	6A	(-)	(+)	
(~~~ 00 0 0	6B	(-)	(+)	
SOL. a	7A	(-)	(+)	
Station 7 SOL. b	7B	(-)	(+)	
Station 8 SOL a	8A	(-)	(+)	
(~~~ ~~~ 0	8B	(-)	(+)	
Station 9 SOL. a	9A	(-)	(+)	
(+~~~~o===o	9B	(-)	(+)	
Station 10 SOL a	10A	(-)	(+)	
(+~~~~o===o	10B	(-)	(+)	
Station 11 SOL a	11A	(-)	(+)	
(+~~~oo=0	11B	(-)	(+)	
Station 12 SOL a	12A	(-)	(+)	
(L ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	12B	(-)	(+)	
Station 13 SOL a	13A	(-)	(+)	
(+~~~oo==o	13B	(-)	(+)	
Station 14 SOL a	14A	(-)	(+)	
(L ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	14B	(-)	(+)	
Station 15 SOL a	15A	(-)	(+)	
(L ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	15B	(-)	(+)	
Station 16 SOL a	16A	(-)	(+)	
Station 16 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.

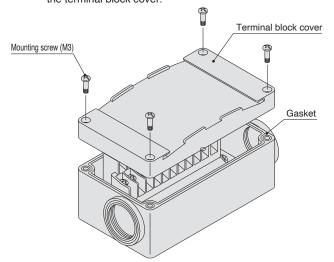




Terminal Block "T" Connection

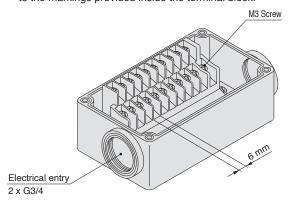
Step 1. Remove the terminal block cover.

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



Step 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.



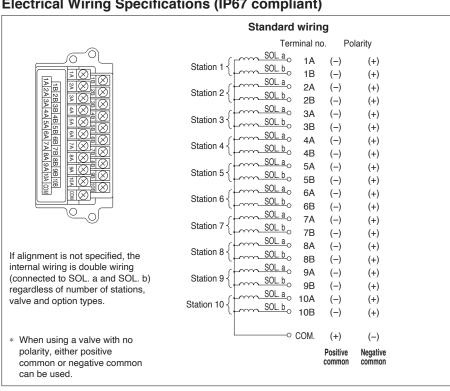
Step 3. Mount the terminal block cover.

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

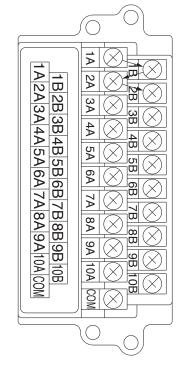
- Applicable crimped terminal: 1.25-3S, 1.25Y-3, 1.25Y-3N, 1.25Y-3.5
- · Name plate: VVQ5000-N-T
- · Drip proof plug assembly (for G3/4): AXT100-B06A

Electrical Wiring Specifications (IP67 compliant)



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.



Valve

Connecting Base Plug-in

D.sub Flat Ribbon

Lead wire

EX120

Dimensions Common

Exploded View



Plug-in Connector Connecting Base

Lead Wire

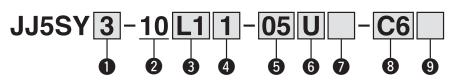
Type 10 Side Ported

JSY1000/3000/5000 Series

(E RoHS

Internal Pilot

How to Order Manifolds



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

Specification

External pilot (SUP/EXH block assembly)

A	Sorios
w	Series

O C 01100							
1	JSY1000						
3	JSY3000						
5	JSY5000						



10	Side ported

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

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)

					<u>J</u> ,	
Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2		_	_	~ (2)
C4		Ø 4	•	_	_	
C6	턽	Ø6	•	•	_	
C8	Straight	Ø8	_	•	_	
C10	쟔	Ø 10	_	_	•	
C12		Ø 12	_	_	•	00
CM*1		Straight port, mixed sizes	•	•	•	O House
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.

5 Valve stations

<u> </u>					
	L1 □: 34 cores				
	Symbol	Stations	Note	Syl	
	02	2 stations		C	
	:	:	Double wiring*1		
	16	16 stations		C	
	02	2 stations	Specified layout*2	C	
	:	:	(Up to 32		
	24	24 stations	solenoids available)	1	

L2 □: 17 cores				
Symbol	Stations	Note		
02	2 stations			
1	:	Double wiring*1		
08	8 stations			
02	2 stations	Specified layout*2		
1	:	(Up to 16		
16	16 stations	solenoids available)		

L3□: 9 cores

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

- *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.

Mounting and Option

Symbol	Mounting
_	Direct mounting
D□	DIN rail mounting

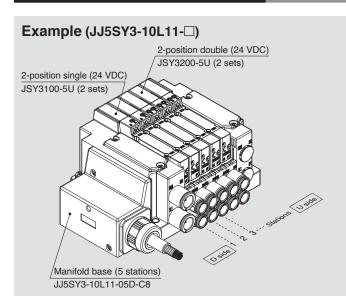
- Enter the number of stations inside ☐ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to page 118 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

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



How to Order Manifold Assembly



- 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.
- \cdot 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.

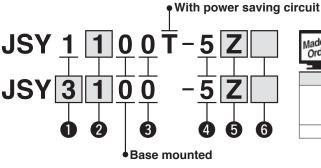
Internal Pilot

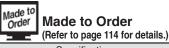
How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JSY3000/5000 Series





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

External pilot

Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

_	
0	Pilot valve individual exhaust

4 Rated voltage

5 24 VDC

⚠ 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.

2 Type of actuation

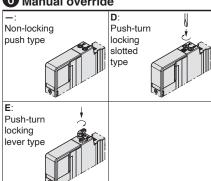
1	O position	Single						
2	2-position	Double						
3		Closed centre						
4	3-position	Exhaust centre						
5		Pressure centre						
Α	4	N.C./N.C.						
В	4-position dual 3-port	N.O./N.O.						
С	dual 5-port	N.C./N.O.						

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.

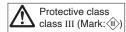
6 Manual override



- * 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.





Plug-in

Chart

Valve

Connecting Base

nal D.sub k Flat Ribbon

> e lermi Bloc

009

X250

EX 260

EX120

Common

Manifold Exploded View

tings, Replacement Parts, Tools

Manifold Options

> Nade to Order

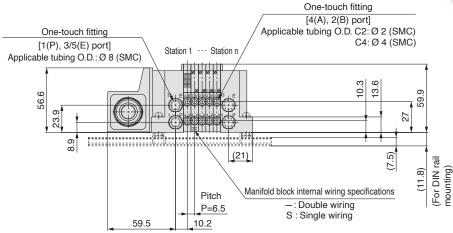
Dimensions: JSY1000 Series

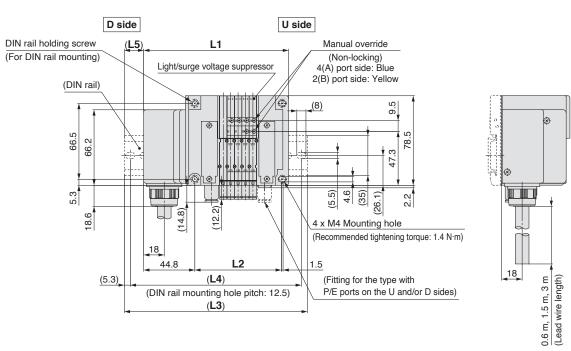
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

Lead Wire

JJ5SY1-10L $_{3}^{1}$ - Stations $_{B}^{U}$ - $_{C4}^{2}$ (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

	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



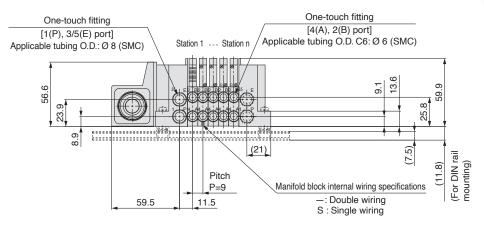
Type 10/Side Ported (Applicable to Ø 6 fittings)

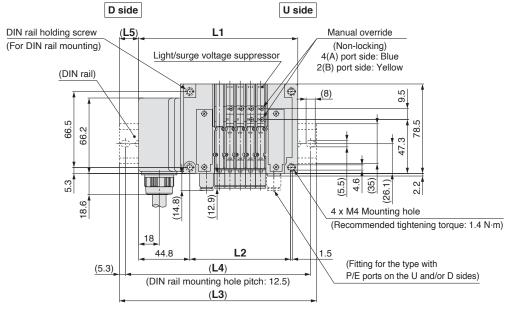
Dimensions: JSY1000 Series

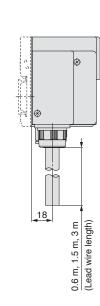
Lead Wire

JJ5SY1-10L¹₃ - Stations B-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. D															. Otations
L	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	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

Plug-in Connector Connecting Base

I D.sub Flat Ribbon

Block

EXPON

00 EA230

EX120 EX2

Common Dimensions

Exploded View

ittings, Replacement Parts, Tools

Manifold Options

Made to Order

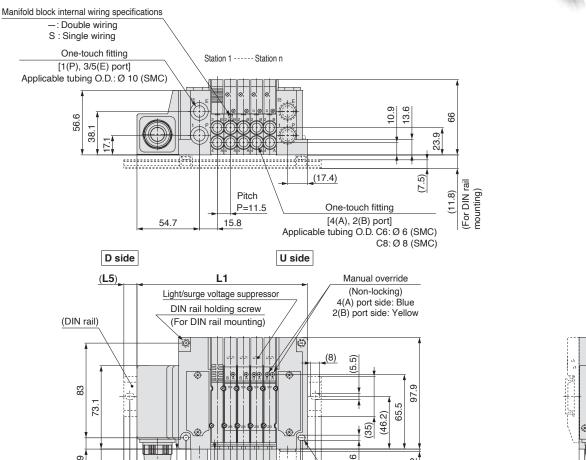
Type 10/Side Ported

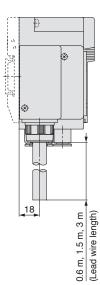
Dimensions: JSY3000 Series

Lead Wire

JJ5SY3-10L $_{3}^{1}$ - Stations $_{B}^{U}$ - $_{C8}^{6}$ (D)







- * 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

4 x M4 Mounting hole

(Fitting for the type with

(Recommended tightening torque: 1.4 N·m)

P/E ports on the U and/or D sides)

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

	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

(14.8)

L2

(L4)

(DIN rail mounting hole pitch: 12.5) (L3)

18 43

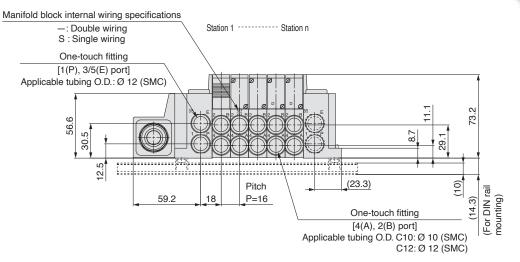
(5.3)

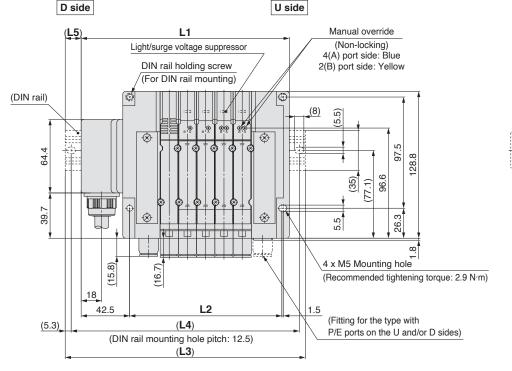


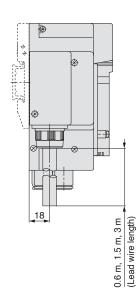
Type 10/Side Ported
Lead Wire

Dimensions: JSY5000 Series

JJ5SY5-10L $\frac{1}{3}$ \square - Stations $\stackrel{\mathsf{U}}{\mathsf{B}}$ - $\stackrel{\mathsf{C}10}{\mathsf{C}12}$ (D)







* These figures show the "JJ5SY5-10L1 \square -05D-C12."

* Refer to page 91 for dimensions of external pilot (Made to Order) and silencer.

 _,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	 ions

 	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	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

SMC

Chart

Valve

Plug-in Connector

I D.sub Flat Ribbon

Block

EXPON

EAZ6U EAZ5

Common EX120 Dimensions

Exploded View Dim

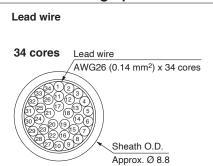
Fittings, Replacement Parts, Tools

n: Stations

Manifold F Options

Made to Order

Electrical Wiring Specifications



	Lead wire	no.	Polarity
Station 1	SOL. a 0 1	(-)	(+)
Station 1	SOL. b 2	(-)	(+)
Station 2	SOL. a 3	(-)	(+)
Oldion E	SOL. b 4	(-)	(+)
Station 3	SOL. a 5	(-)	(+)
	SOL. b 6	(-)	(+)
Station 4	SOL. a 7	(-)	(+)
0.0		(-)	(+)
Station 5	SOL a 9	(-)	(+)
0.00.00	SOL. a 0 11	(-)	(+)
Station 6	SOL. b 0 12	(-)	(+)
	901.2	(-)	(+)
Station 7	901 h	(-)	(+)
(901 2 17	(-)	(+)
Station 8	SOL h	(-)	(+)
Ć.	901 2	(-)	(+)
Station 9	SOL h	(-)	(+)
(201.0	(-)	(+)
Station 10	901 h	(-)	(+)
(901 3	(-)	(+)
Station 11	901 h	(-)	(+)
	901 2	(-)	(+)
Station 12	001 6	(-)	(+)
(901 2	(-)	(+)
Station 13	901 h	(-)	(+)
(901 20	(-)	(+)
Station 14	SOL. b o 28	(-) (-)	(+) (+)
	SOL. a 29	. ,	(+)
Station 15	SOL. b 30	(-) (-)	(+)
	SOL. a 31	(-)	(+)
Station 16	SOL. b 32	(-)	(+)
Ć.	COM. 33	(+)	(+)
	COM. 34	(+)	(-)
		Positiv	. ,

Colour Type Colour Orange - Red Black Light grey - Red Black White - Red Black Yellow - Red Black Pink - Red Black Corange - Red Black White - Red Black White - Red Black Yellow - Red Black Black Red Black Black Red Black Black Red Black White - Red Black Yellow - Red Black Yellow - Red Black Yellow - Red Black Pink - Red Black Pink - Red Black Red Black	Lead wire	Printed mark (Both sides)		
Orange - Red Black Black Red Black Red Black Red Black Red Black Blac		_		
Orange - Black Red Black	Coloui	туре		
Light grey - Red Black Black Red	Orange	_		
grey Black White - Red Black Pink - Red Black Pink - Red Black Orange - Red Black Light grey - Red Black White - Red Black Yellow - Red Black Pink - Red Black Black Red Black Black White - Red Black White - Red Black Yellow - Red Black Pink - Red Black Black Red Black				
White - Red Black Bed Black Red		_		
White - Black Ped Black Red Black Red Black Red Black Red Black Black Corange - Red Black Red	grey		Black	
Yellow - Black Pink - Red Black Black Black Red Black Black Red Black Black Red Black Black Pink Red Black Black Black Red Black Black White Red Black Red	White	_	Red	
Yellow - Black Red Black Red Black Red Black Red Black Red Black Corange Red Black Red	VVIIIC		Black	
Pink - Black Black Black Black Black Orange Red Black Bl	Vollow		Red	
Pink — Black Orange — Red Black Red Black Red Black Red Black Red Black Pink — Red Black Red Black Orange — Red Black Black Red White — Red Black Red Black Yellow — Red Black Red Black Corange — Red Black Red Black Red Black Red	Tellow		Black	
Orange Black Light grey Red Black Black White Red Black Black Ped Black Black Red Black Black Black Red Black Black White Red Black Black Yellow Red Black Red Black Pink Red Black Red Black Crange Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black	Dinle		Red	
Orange Black Light grey Red Black White Red Black Yellow Red Black Pink Red Black Orange Red Black White Red Black Yellow Red Black Yellow Red Black Pink Red Black Orange Red Black Black Red Black Black Red Black Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black	PIIIK	_	Black	
Black Red Red	0		Red	
grey Black White Red Black Red Black Pink Red Black Black Red Orange Red Black Black Red White Red Black Black Red Yellow Red Black Red Black Corange Red Black Red Black Red Black Red Blac	Orange		Black	
grey Black White Red Black Yellow Red Black Pink Red Black Orange Red Black Light grey Red Black White Red Black Yellow Red Black Pink Red Black Orange Black Red Black Red Black Red Light Red Black	Light		Red	
White Black Yellow Red Black Red Black Corange Red Black Black Red White Black Yellow Red Black Red Black Pink Red Orange Black Light Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red	_		Black	
Yellow Black Black Black Black Pink Red Black Black Black Orange Red Black Black Black Black Black Black Black Yellow Red Black			Red	
Yellow Black Pink Red Black Red Black Light grey Red Black Red Black Yellow Red Pink Red Orange Black Light Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red Black Red	White		Black	
Pink Black Black Black Black Orange Red Black Black Black Light grey Red Black B			Red	
Pink Black Orange Red Black Black White Red Black Black Yellow Red Black Red Black Orange Red Light Red Red	Yellow		Black	
Orange Black Black Black Black Black Black Black White Red Black Black Black Black Black Red Black Black Black Red Black Red Black Red Black Red Black Red Black Red	D: 1		Red	
Orange Black Light grey Red Black White Red Black Yellow Black Pink Red Black Orange Black Light Red Black Red Black Red	Pink		Black	
Light grey Red Black White Red Black Yellow Red Black Pink Red Black Orange Red Black Light Red Red	_		Red	
grey Black White Red Black Black Yellow Red Black Black Pink Red Black Black Orange Red Light Red	Orange		Black	
grey Black White Red Black Red Black Pink Red Black Black Orange Black Light Red	Light		Red	
White Red Black Red Black Yellow Red Black Red Black Pink Red Black Red Black Orange Red Black Red	_		Black	
Yellow Red Black Pink Red Black Orange Red Black Light Red Red			Red	
Yellow Black Pink Red Black Red Orange Black Light Red	White		Black	
Yellow Black Pink Red Black Red Orange Black Light Red			Red	
Pink Red Black Orange Black Light Red Red	Yellow			
Pink Black Orange Black Light Red				
Orange Red Black Light Red	Pink			
Orange Black Light Red				
Light Red	Orange			
	Light			
	grey		Black	

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.

Specified Layout

common

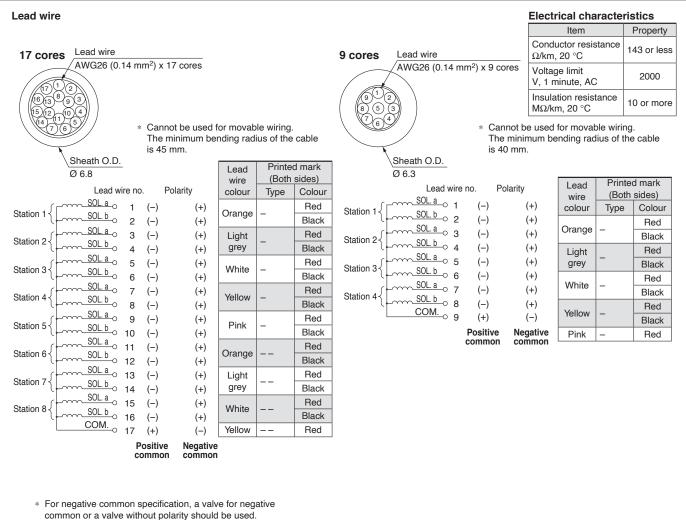
common

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.



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





Chart

Valve

in Connecting Base

ub ibbon

inal D.sub ck Flat Ribbon

Terminal Block

EX600 Le

EX250

EX120

Manifold Common Exploded View Dimensions

ngs, Replacement Rxp
Parts, Tools Exp

Manifold Options

Made to Order



Plug-in Connector Connecting Base

EX600

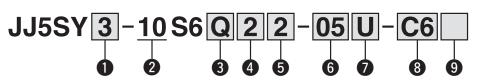
Type 10 Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10 Side ported

3 SI unit

Q N	Without SI unit DeviceNet™ (Version A)		
	, ,		
N	DDOCIDUO DD (V · A)		
	PROFIBUS DP (Version A)		
V	CC-Link		
ZE	EtherNet/IP™ (1 port)		
EA	EtherNet/IP™ (2 ports)		
D	EtherCAT		
F	PROFINET		
WE Eth	EtherNet/IP™ compatible wireless base*1		
WF P	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	M12 power supply	7/8 inch	M12 power supply connector IN/OUT, A-coded		
polarity	connector B-coded (EX600-ED2)	power supply connector (EX600-ED3)	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.

Made to Order

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				
	1 1		Double wiring*1			
	16	16 stations				
	02	2 stations	Considered lawww.4*2			
	:	:	Specified layout*2 (Up to 32 solenoids available)			
	24	24 stations	(Op to 32 sole lolds available)			

- *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.

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	С
D side (2 to 10 stations)	D	E
Both sides (2 to 24 stations)	В	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)

<u> </u>						
Symbol	A, B port		JSY1000	JSY3000	JSY5000	
C2		Ø2	•	_	_	~ (2)
C4		Ø 4	•	_	_	
C6	ᆂ	Ø6	•	•	_	
C8	Straigl	Ø8	_	•	_	
C10	St	Ø 10	_	_	•	
C12		Ø 12	_	_		00
CM*1		Straight port, mixed sizes	•	•		O Hear
	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

• mounting until opinion				
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 n	nounting (With DIN rail)
0	DIN rail n	nounting (Without DIN rail)
3	For 3 stations	Consider a lawrence well there
:	:	Specify a longer rail than the standard length.
24	For 24 stations	the standard length.

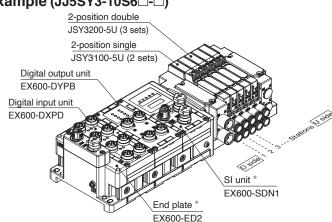
If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 110 for the DIN rail part number.)

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.)
- * JSY3200-5U------3 sets (2-position double part no.)

 * EX600-DXPD ------1 set I/O unit part number (Station 1)
- * EX600-DYPB1 set 1/0 unit part number (Station 1)
 - ──►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.

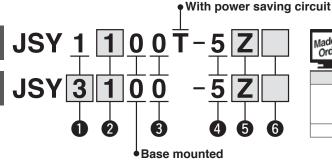
Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 11 for valve specifications.

JSY1000 Series

JS Y3000/5000 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

	Dille Anna broading all of about a code accord
0	Pilot valve individual exhaust

4 Rated voltage

5	24 VDC

Type of actuation

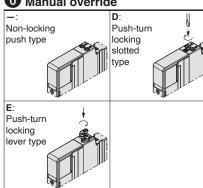
	2-position	Sirigle
2	z-position	Double
3		Closed centre
4	3-position	Exhaust centre
5		Pressure centre
Α	4	N.C./N.C.
В	4-position dual 3-port	N.O./N.O.
С	duai o-port	N.C./N.O.

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.

Protective class class III (Mark: (III))

SMC

in Connecting Base

Chart

Valve

D.sub Plug-in

Block

Lead wire

EX600

EX250

EX260

EX120

Common Dimensions

Manifold Exploded View

ys, Replacement Parts, Tools

Manifold Fi

le to

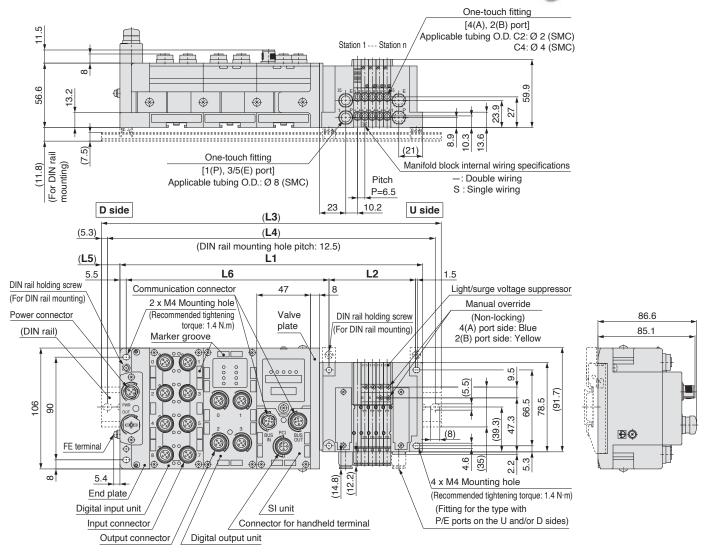
Dimensions: JSY1000 Series

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

EX600 (M12 Connector)

JJ5SY1-10S6 $\square_{\frac{6}{7}}^{\frac{4}{7}}\square$ -Stations \square_{p}^{U} - \square_{c4}^{c2} (D)





 $L1 = 6.5 \times n1 + 139 + 47 \times n2$

 $L2 = 6.5 \times n1 + 43.4$

L4 = L3 - 10.5L5 = (L3 - L1) / 2

 $L6 = 47 \times n2 + 83.8$

n1: Valve stations n2: I/O unit stations

- * These figures show the "JJ5SY1-10S6Q22-05D-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.

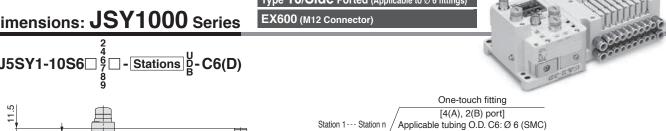
L3: DIN Rail Overall Length

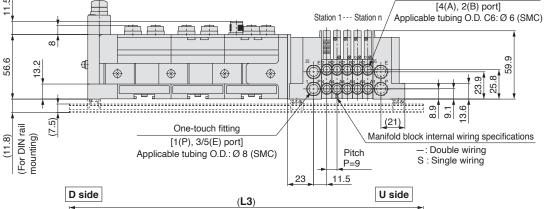
				9	•																		
Valve stations (n1) I/O unit stations (n2)		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	185.5	185.5	198	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	298	298	310.5	310.5	323	323
1	223	235.5	235.5	248	260.5	260.5	273	273	285.5	285.5	298	298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

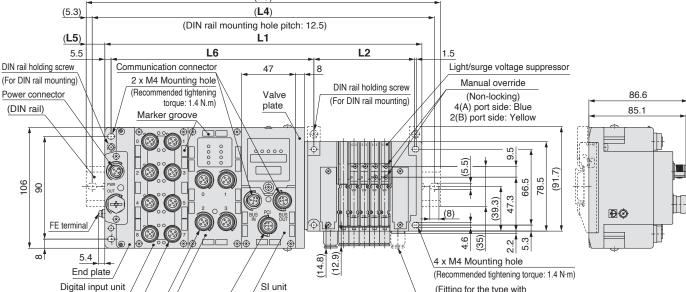
Type 10/Side Ported (Applicable to Ø 6 fittings)

Dimensions: JSY1000 Series

JJ5SY1-10S6 - Stations -C6(D)







Connector for handheld terminal

 $L1 = 9 \times n1 + 139 + 47 \times n2$ $L2 = 9 \times n1 + 43.4$ L4 = L3 - 10.5L5 = (L3 - L1) / 2 $L6 = 47 \times n2 + 83.8$

n1: Valve stations n2: I/O unit stations

- * These figures show the "JJ5SY1-10S6Q22-05D-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.

(Fitting for the type with P/E ports on the U and/or D sides)

L3: DIN Rail Overall Length

Input connector

Output connector,

Digital output unit

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	235.5	248	248	260.5	273	273	285.5	298	310.5	310.5	323	335.5	335.5	348	360.5	373	373	385.5	398	410.5	410.5	423	435.5
2	285.5	285.5	298	310.5	310.5	323	335.5	348	348	360.5	373	385.5	385.5	398	410.5	410.5	423	435.5	448	448	460.5	473	473
3	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	498	510.5	510.5	523
4	373	385.5	398	398	410.5	423	423	435.5	448	460.5	460.5	473	485.5	485.5	498	510.5	523	523	535.5	548	560.5	560.5	573
5	423	435.5	435.5	448	460.5	460.5	473	485.5	498	498	510.5	523	535.5	535.5	548	560.5	560.5	573	585.5	598	598	610.5	623
6	473	473	485.5	498	510.5	510.5	523	535.5	535.5	548	560.5	573	573	585.5	598	598	610.5	623	635.5	635.5	648	660.5	660.5
7	510.5	523	535.5	548	548	560.5	573	573	585.5	598	610.5	610.5	623	635.5	635.5	648	660.5	673	673	685.5	698	710.5	710.5
8	560.5	573	585.5	585.5	598	610.5	610.5	623	635.5	648	648	660.5	673	685.5	685.5	698	710.5	710.5	723	735.5	748	748	760.5
9	610.5	623	623	635.5	648	660.5	660.5	673	685.5	685.5	698	710.5	723	723	735.5	748	748	760.5	773	785.5	785.5	798	810.5

Chart

Valve

Connecting Base Plug-in

D.sub Flat Ribbon

Lead wire

EX120

Common Dimensions

Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to

specific Product

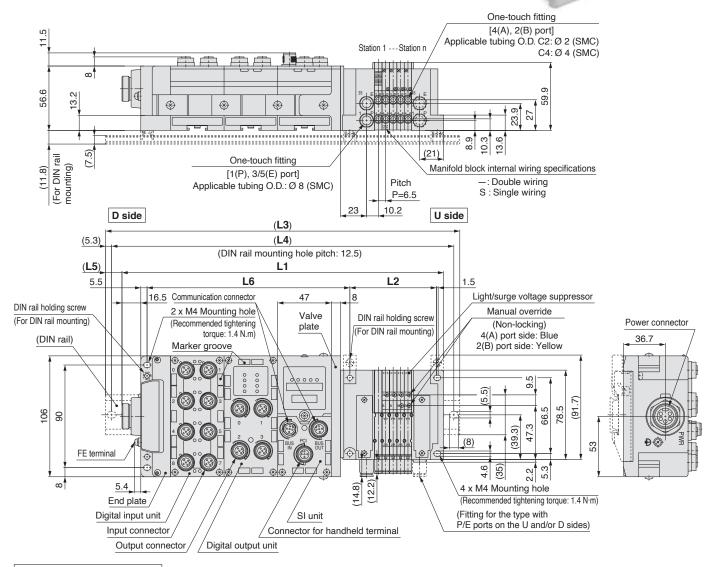
Dimensions: JSY1000 Series

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

EX600 (7/8 Inch Connector)

JJ5SY1-10S6 $\square_5^3\square$ -Stations $\stackrel{\text{U}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}$





L1 = 6.5 x n1 + 155.5 + 47 x n2 L2 = 6.5 x 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

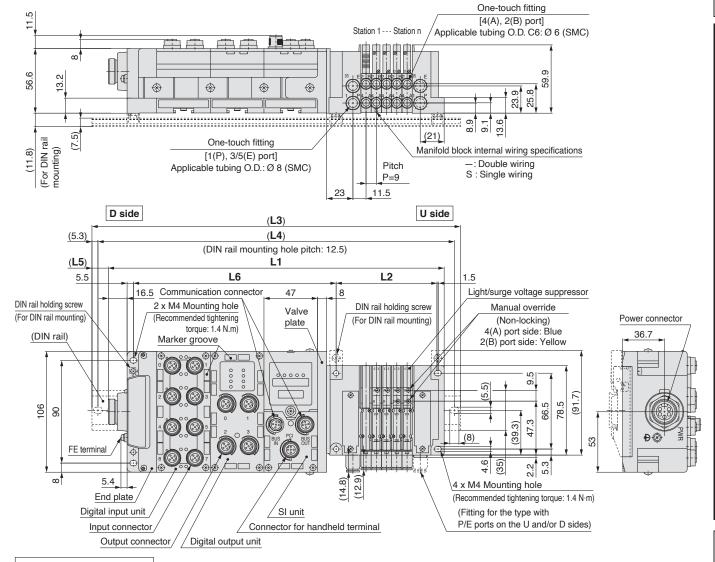
Valve stations (n1)				_		_																	
I/O unit stations (n2)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	310.5	323	323	335.5	335.5
1	248	248	260.5	260.5	273	273	285.5	285.5	298	298	310.5	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)

Dimensions: JSY1000 Series

JJ5SY1-10S6 3 - Stations C - 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	585.5	598	610.5	623	623	635.5
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

Connecting Base Plug-in

D.sub Flat Ribbon

Lead wire

EX120

Common Dimensions

Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to

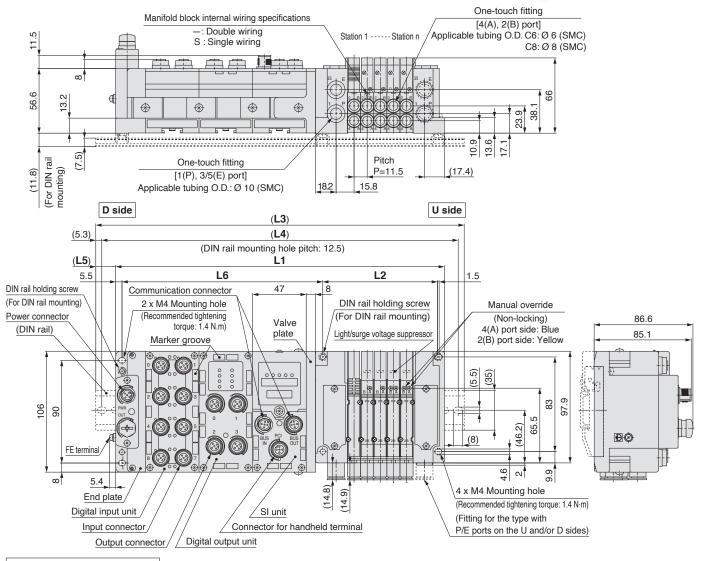
Type 10/Side Ported

Dimensions: JSY3000 Series

EX600 (M12 Connector)

JJ5SY3-10S6 - Stations B-C8 (D)





L1 = 11.5 x n1 + 136.6 + 47 x n2

L2 = 11.5 x 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

<u> </u>		71010	411 E	<i>,,,</i> 9,,																			
Valve stations (n1) I/O unit stations (n2)		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	235.5	248	260.5	273	285.5	298	310.5	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	460.5	473	485.5
2	285.5	298	310.5	323	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	473	485.5	498	510.5	523	535.5
3	335.5	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	485.5	498	510.5	523	535.5	548	560.5	573	585.5
4	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	498	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5
5	423	435.5	448	460.5	473	485.5	498	510.5	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	648	660.5	673
6	473	485.5	498	510.5	523	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	660.5	673	685.5	698	710.5	723
7	523	535.5	535.5	548	560.5	573	585.5	598	610.5	623	635.5	648	660.5	673	673	685.5	698	710.5	723	735.5	748	760.5	773
8	560.5	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798	810.5	823
9	610.5	623	635.5	648	660.5	673	685.5	698	698	710.5	723	735.5	748	760.5	773	785.5	798	810.5	823	835.5	848	848	860.5

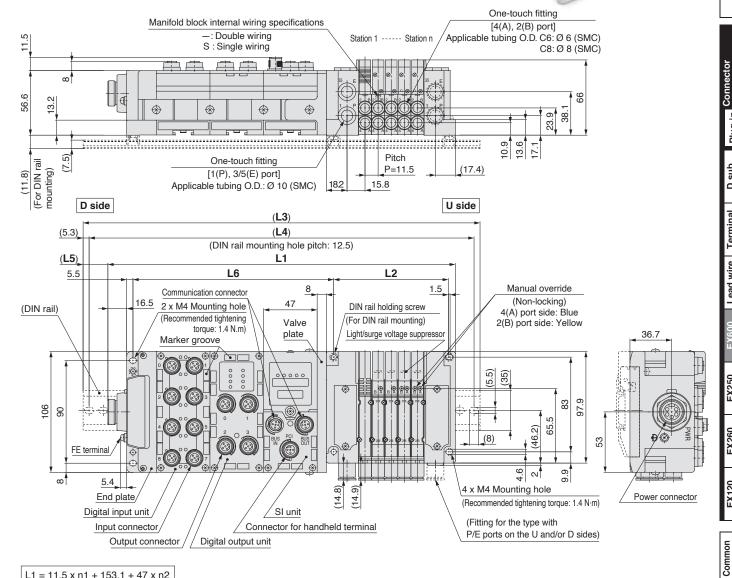
Type 10/Side Ported

Dimensions: JSY3000 Series

EX600 (7/8 Inch Connector)

JJ5SY3-10S6 3 - Stations 2 - 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

LO. DIIT	iuii c	,,,,,	411 E	<i>,,,</i> 9,,																			
Valve stations (n1) I/O unit stations (n2)		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	635.5	648	660.5	673	685.5	698	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

Chart

Valve

Connecting Base Plug-in

D.sub Flat Ribbon

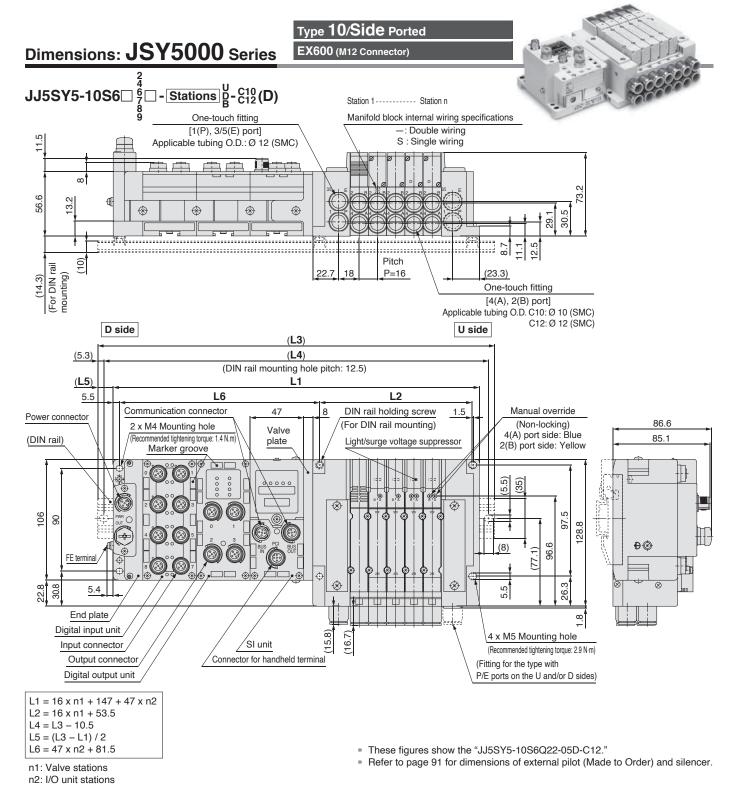
Lead wire

Dimensions

EX120

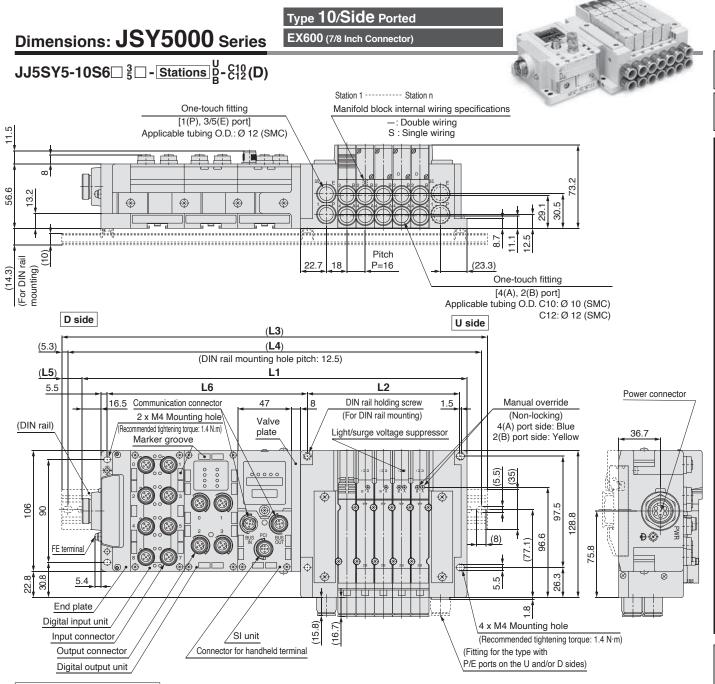
Exploded View

Manifold Options



L3: DIN Rail Overall Length

LJ. DIN I	ian C	VCIO	411 EC	<i>,</i> ,,,																			
Valve stations (n1) I/O unit stations (n2)		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



L1 = 16 x n1 + 163.5 + 47 x n2

 $L2 = 16 \times n1 + 53.5$

L4 = L3 - 10.5

L5 = (L3 – L1) / 2 L6 = 47 x 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

LO. DIII	ian c	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	411 E	<i>,,,,</i>																			
Valve stations (n1) I/O unit stations (n2)		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

Plug-in Connector

nal D.sub k Flat Ribbon

Lead wire Term Blo

DOV-3

EA200

in EX120

Manifold Common Exploded View Dimensions

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Plug-in Connector Connecting Base

EX250

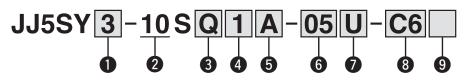
Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



1 Series

1	JSY1000
3	JSY3000
5	JSY5000

SI unit

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

2 Type

- 71	· ·
10	Side ported

4 Input block stations

_	None
1	1 station
:	i:
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	Α	D
M12, 4 inputs	В	E
M8, 4 inputs	С	F

 $\ast\;$ Without SI unit, the symbol is -.

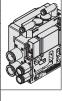
7 P, E port entry, SUP/EXH block assembly

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

		`			<u> </u>	
Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2		_	_	
C4		Ø 4	•	_	_	
C6	其	Ø6			_	ſ
C8	Straight	Ø8	_		_	
C10	St	Ø 10	_	_	•	(
C12		Ø 12	_	_		6
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.

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

Made to Order 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					
02	2 stations	Charified layout*2				
:	:	Specified layout*2 (Up to 32 solenoids available)				
24	24 stations	(Op to 32 soleriolds available)				

- *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.
 - \cdot 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).

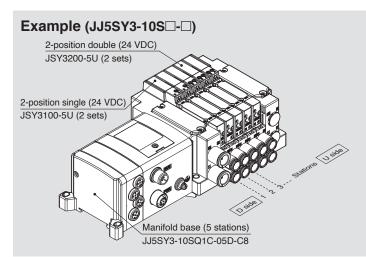
DIN Rail Option

DIN Hall	on nan option							
_	DIN rail mounting (With DIN rail)							
0	DIN rail mounting (Without DIN rail)							
3	For 3 stations	Consider a language wail than						
:	:	Specify a longer rail than the standard length.						
24 For 24 stations		ille stalidald leligill.						

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



How to Order Manifold Assembly



- JJ5SY3-10SQ1C-05D-C8 ··· 1 set (Type 10 5-station manifold base part no.)
- * JSY3100-5U ------3 sets (2-position single part no.) * JSY3200-5U2 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.

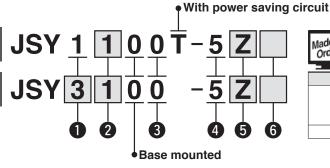
Internal Pilot

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

Series

1	JSY1000
3	JSY3000
5	JSY5000

3 Pilot valve exhaust method

0	Pilot valve individual exhaust

4 Rated voltage

- Hui	ca voltage		
5		24 VDC	

Type of actuation

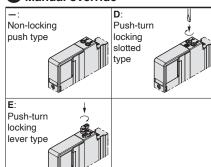
1	2-position	Single							
2	2-position	Double							
3		Closed centre							
4	3-position	Exhaust centre							
5		Pressure centre							
Α	4	N.C./N.C.							
В	4-position dual 3-port	N.O./N.O.							
С	duai 5-port	N.C./N.O.							

5 Light/surge voltage suppressor and common specification

With light		Common specification
		Non-polar
•	•	Positive common
		Negative common
	vvitn light	suppressor

- "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.

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 savina circuit.

For the JSY 1000 series only the power saving circuit is available.

Protective class class III (Mark: (III))

多SMC

72

Chart Valve

Connecting Base Plug-in

D.sub Flat Ribbon

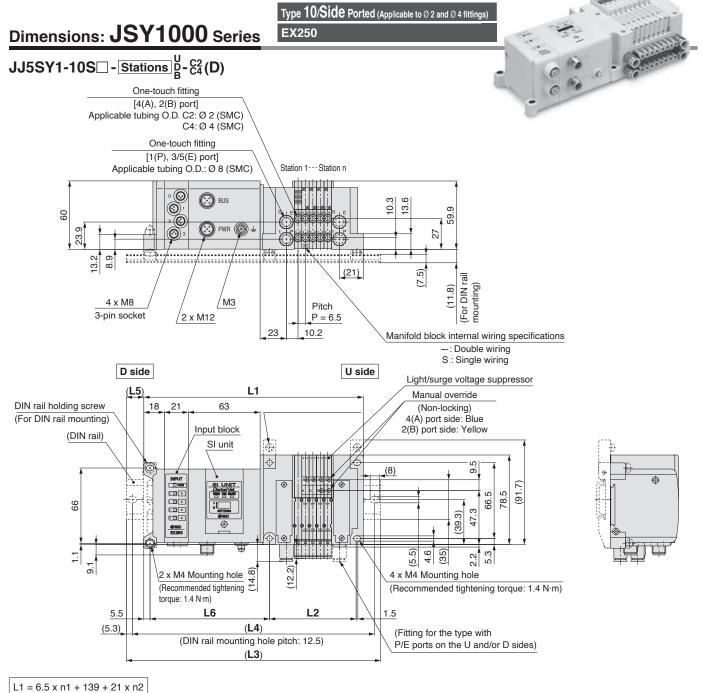
Lead wire

EX120

Dimensions Common

Exploded View

Options



L2 = 6.5 x 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

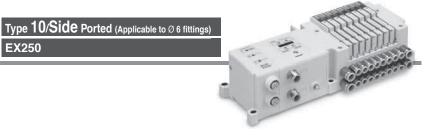
Valve stations (n1) I/O unit stations (n2)		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	185.5	185.5	198	198	210.5	210.5	223	223	235.5	235.5	248	248	260.5	260.5	273	273	285.5	298	298	310.5	310.5	323	323
1	198	210.5	210.5	223	223	235.5	235.5	248	260.5	260.5	273	273	285.5	285.5	298	298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

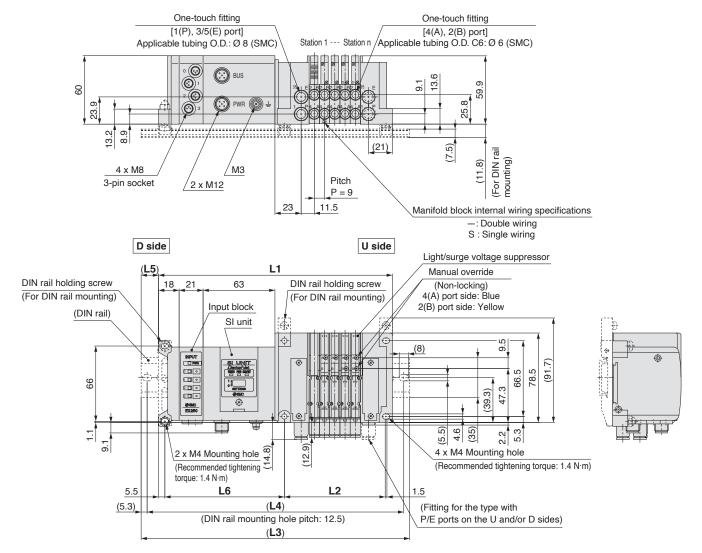
Pugin Connector Connecting Base JSY1000/3000/5000 Series

Dimensions: JSY1000 Series

EX250

JJ5SY1-10S - Stations D-C6(D)





L1 = 9 x n1 + 139 + 21 x 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)		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	373	385.5	398	410.5	410.5	423	435.5	435.5	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

Valve

Chart

Plug-in Connector

D.sub Flat Ribbon

Lead wire

EX120

Common Dimensions

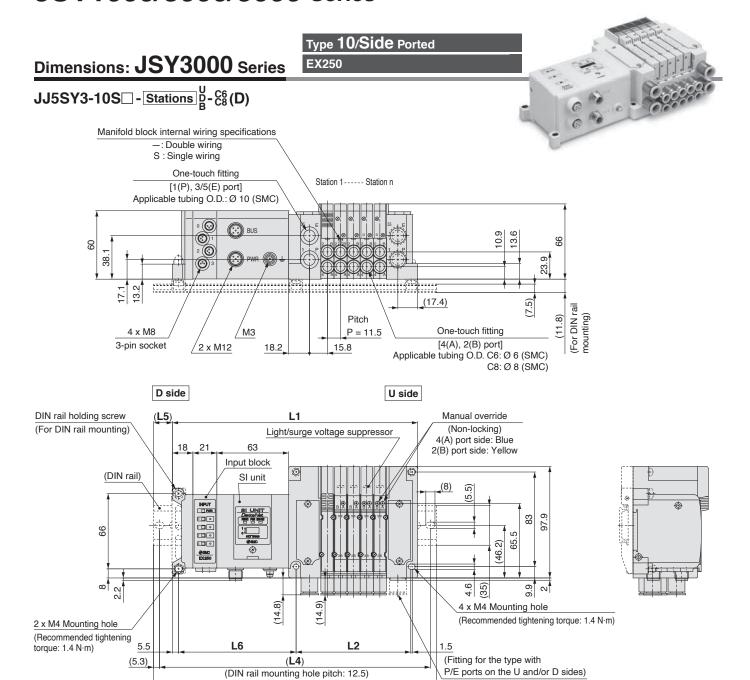
Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

specific Product



L1 = 11.5 x n1 + 136.6 + 21 x 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

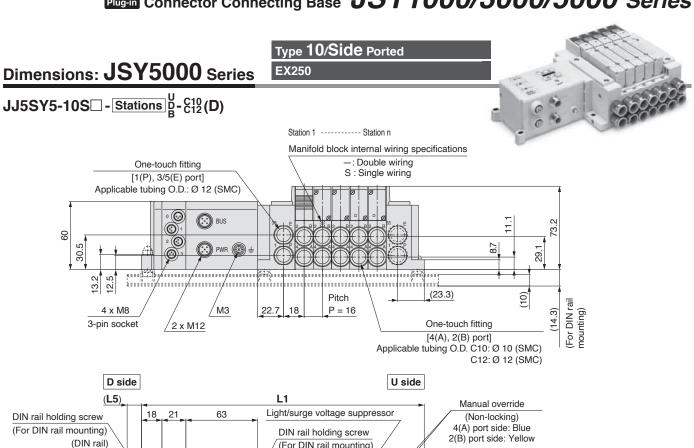
n2: Input block stations

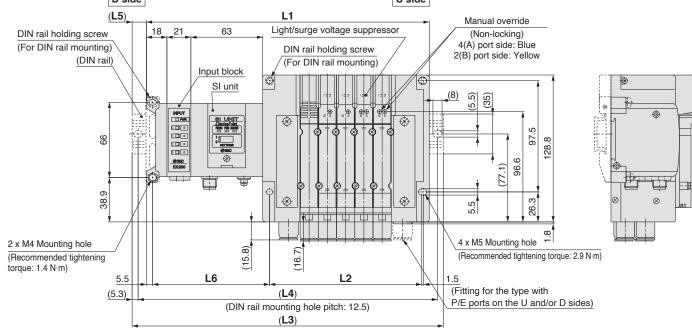
L3: DIN Bail Overall Length

Valve stations (n1) I/O unit stations (n2)		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	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	485.5	498	510.5	523
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
75												r											

(L3)

Pugin Connector Connecting Base JSY1000/3000/5000 Series





 $L1 = 16 \times n1 + 147 + 21 \times n2$ $L2 = 16 \times n1 + 53.5$

L4 = L3 - 10.5

L5 = (L3 - L1) / 2

 $L6 = 21 \times n2 + 81.5$

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



76

Chart

Valve

Plug-in Connector

D.sub Flat Ribbon

Terminal Block Lead wire

EX120

Common Dimensions

Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order Specific Product

Plug-in Connector Connecting Base

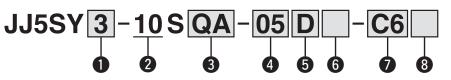
Type 10 Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



Series

1	JSY1000
3	JSY3000
5	JSY5000

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

tput polarity)		Number	Communication		
Negative common (PNP)	Protocol	of outputs	connector		
*1	Without	SI unit			
QAN	DoviceNet™	32	M12		
QBN	Devicemen	16	IVITZ		
NAN		32	M12		
NBN	PROFIBUS	16	IVITZ		
NCN	DP	32	*3 D-sub		
NDN		16	D-8ub		
VAN	CC Link	32	M12		
VBN	OO-LIIK	16	IVITZ		
DAN	EthorCAT	32	M12		
DBN	EllielCAT	16	IVITZ		
FAN	DDOEINET	32	M12		
FBN	FROFINE	16	IVITZ		
EAN	EthorNot/ID™	32	M12		
EBN	LUIGIINEUIF	16	IVITZ		
GAN	Ethernet	32	M12		
GBN	POWERLINK	16	IVIIZ		
KAN	IO-Link	32*4	M12		
	Negative common (PNP) *1 QAN QBN NAN NBN NCN NDN VAN VBN DAN DBN FAN FBN EAN EBN GAN GBN	Negative common (PNP) *1 Without QAN QBN NAN NBN NBN PROFIBUS DP NDN VAN VBN DAN DAN EtherCAT FAN FBN EAN EBN GAN EtherNet/IP™ GAN Ethernet GBN Protocol CC-Link PROFINET	Negative common (PNP)		

- *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.

Type

- 71	
10	Side ported

P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	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.

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

		Specificat	ion	
Exte	rnal pilot	(SUP/EXF	l block assembl	y)

Valve stations

In the case of the 32-output SI unit

		•
Symb	ol Stations	Note
02	2 stations	
:	1	Double wiring*1
16	16 stations	
02	2 stations	Considered laws 4*2
:	1 :	Specified layout*2 (Up to 32 solenoids available)
24	24 stations	(Op to 32 sole lolds available)

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
80	8 stations	
02	2 stations	0
:	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	(Op to 10 solelloids available)

- *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.

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

	- 1				3,	
Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2	•	_	_	
C4		Ø 4	•	_	_	
C6	턽	Ø6			_	
C8	Straight	Ø8	_		_	
C10		Ø 10	_	_		
C12		Ø 12	_	_	•	00
CM*1		Straight port, mixed sizes				-01/4
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.

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



Direct mounting DIN rail mounting

8 Mounting and Option

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

Mounting

- 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

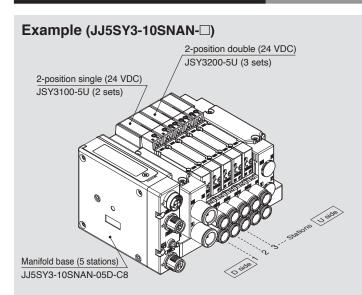
Symbol

_	DIN rail mounting (With DIN rail)				
0	DIN rail mounting (Without DIN rail)				
3	For 3 stations	Consider a lawrent well them			
:	:	Specify a longer rail that the standard length.			
24	For 24 stations	the standard length.			

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



How to Order Manifold Assembly



- 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.

With power saving circuit

 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.

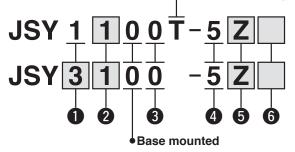
Internal Pilot

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

Pilot valve individual exhaus	st
-------------------------------	----

4 Rated voltage

5	24 VDC

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 1000 series only the power saving circuit is available.

2 Type of actuation

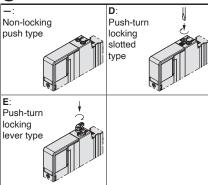
1	2-position	Single	
2	2-position	Double	
3		Closed centre	
4	3-position	Exhaust centre	
5		Pressure centre	
Α	4	N.C./N.C.	
В	4-position dual 3-port	N.O./N.O.	
С		N.C./N.O.	

5 Light/surge voltage suppressor and common specification

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

- 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.

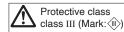
6 Manual override



- * 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.



SMC

78

Valve Chart

Plug-in Connecting Base

I D.sub Flat Ribbon

Terminal Block

Lead wire

EX600

X250

:X260

EX120

Common

Exploded View

tings, Replacement Parts, Tools

Manifold | Options

ade to Order

ific Product

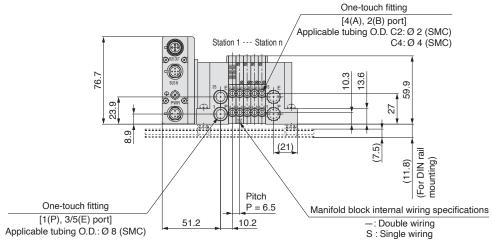
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

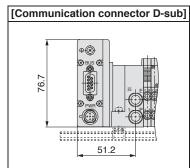
EX260

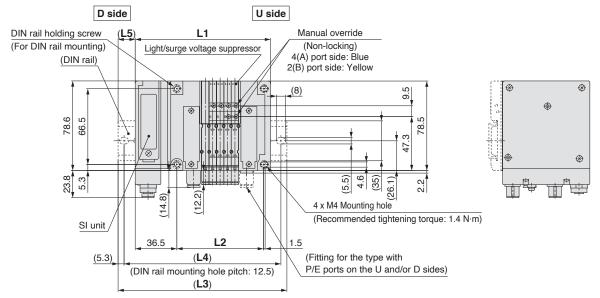
Dimensions: JSY1000 Series

JJ5SY1-10S \square -Stations $\stackrel{\text{U}}{\stackrel{\text{P}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C2}}{\stackrel{\text{C3}}{\stackrel{\text{C4}}{\stackrel{\text{C4}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}{\stackrel{\text{C5}}}{\stackrel{\text{C5}}}}{\stackrel{\text{C5}}}}\stackrel{\text{C5}}{\stackrel{\text{C5}}}}\stackrel{\text{C5}}}\stackrel{\text{C}}}\stackrel{\text{C5}}}\stackrel{\text{C5}}}\stackrel{\text{C5}}}\stackrel{\text{C5}}}\stackrel{\text{C5}}}\stackrel{\text{C5}}}\stackrel{\text{C5}$









- * 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	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	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



Pugin Connector Connecting Base JSY1000/3000/5000 Series

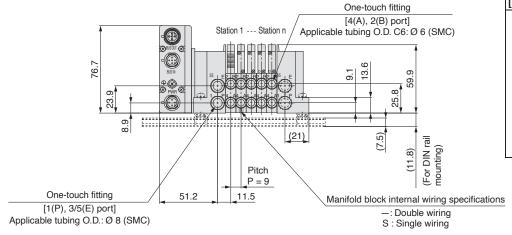
Type 10/Side Ported (Applicable to Ø 6 fittings)

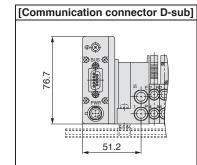
EX260

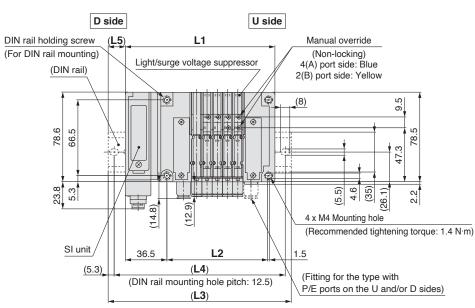
Dimensions: **JSY1000** Series

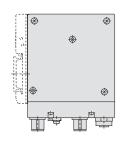
JJ5SY1-10S \square -Stations $\stackrel{\text{U}}{\text{P}}$ -C6(D)











- * 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

L. DIIII	ii. Stations													. Otations	
L	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

	17	18	19	20	21	22	23	24
L1	239.2	248.2	257.2	266.2	275.2	248.2	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

Plug-in Connecting Base

D.sub Flat Ribbon

Block

X600 Lead wire

EYZ30

EX120 EX2

Common Dimensions

Exploded View

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

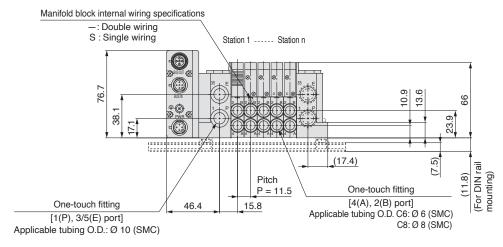
Type 10/Side Ported

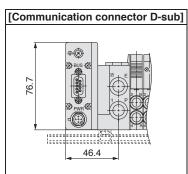
Dimensions: **JSY3000** Series

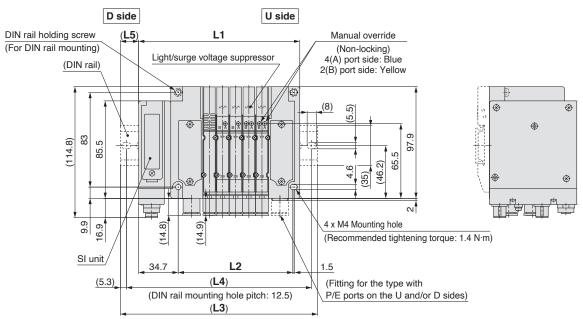
EX260

JJ5SY3-10S \square -Stations $\stackrel{\text{U}}{\stackrel{\text{D}}{\stackrel{\text{C}}}{\stackrel{\text{C}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}{\stackrel{\text{C}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}{\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}{\stackrel{\text{C}}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}\stackrel{\text{C}}}\stackrel{\text{C}}}\stackrel$









- * 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

	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



Pugin Connector Connecting Base JSY1000/3000/5000 Series

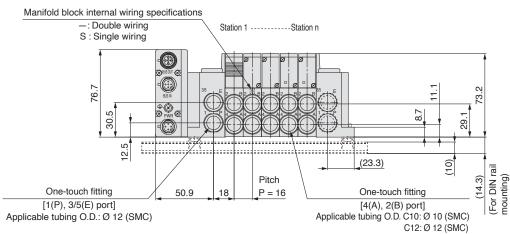
Type 10/Side Ported

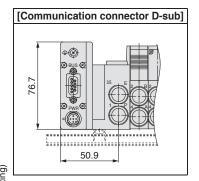
Dimensions: **JSY5000** Series

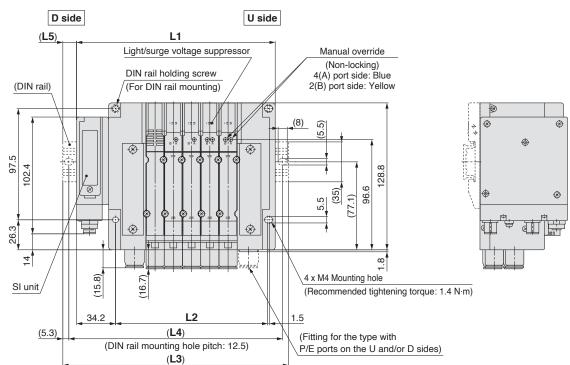
EX260

JJ5SY5-10S \square -Stations $\stackrel{\text{U}}{\text{P}}$ - $\stackrel{\text{C10}}{\text{C12}}$ (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. D	E. Differiolofic														. Otations
L	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

	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

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Valve Chart

Connecting Base

D.sub Plug-in Flat Ribbon

Lead wire Terminal Block

EXPON

Common Dimensions

Exploded View Dime

Fittings, Replacement Parts, Tools

Manifold Options

Made to Order

Specific Product Precautions

Plug-in Connector Connecting Base

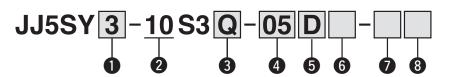
EX120

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds



1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

<u> </u>	
10	Side ported

3 SI unit

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

	_ p						
U side (2 to 10 stations)							
D	D side (2 to 10 stations)						
В	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.

Made to Order

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

Specification
External pilot (SUP/EXH block assembly)

4 Valve stations

		Otationo .
Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	
02	2 stations	Consider described
:	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	(Op to 10 soleriolds available)

- *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.

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

UA,	Р	ort size (ivie	liic/One-	touch hit	urig <i>)</i>	
Symbol		A, B port	JSY1000	JSY3000	JSY5000	
C2		Ø2	•	_	_	~
C4		Ø 4	•	_	_	
C6	aight	Ø6	•	•	_	
C8	aj.	Ø8	_		_	
C10	Str	Ø 10	_	_	•	
C12		Ø 12	_	_		00
CM*1		Straight port, mixed sizes		•	•	O Hear
	P, E port size (One-touch fittings)			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.

8 Mounting and Option

	<u> </u>
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 1 1 8 for the fixation of DIN rail mounting type manifold.

DIN Rail Option

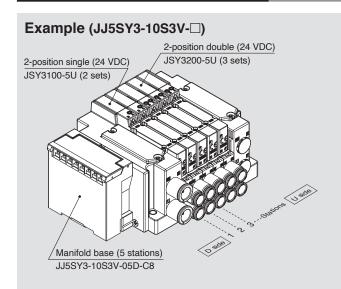
_	DIN ra	DIN rail mounting (With DIN rail)							
0	DIN rail mounting (Without DIN rail)								
3	For 3 stations	Consider a lawrence well them							
	:	Specify a longer rail than the standard length.							
16	For 16 stations	the standard length.							

* 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 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.sm.eu



How to Order Manifold Assembly



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

With power saving circuit

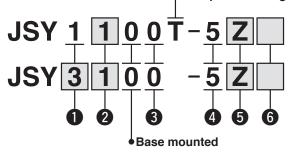
Internal Pilot

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

Pilot valve individual exhau	ust
------------------------------	-----

4 Rated voltage

5	24 VDC

∧ 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.

2 Type of actuation

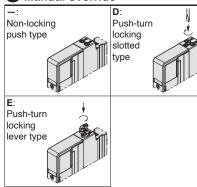
1	O position	Single				
2	2-position	Double				
3		Closed centre				
4	3-position	Exhaust centre				
5		Pressure centre				
Α	4	N.C./N.C.				
В	4-position dual 3-port	N.O./N.O.				
С	duai 5-port	N.C./N.O.				

5 Light/surge voltage suppressor and common specification

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

- * Select a valve from U or Z when the SI unit specification is positive common. Select a valve from U or NZ when the SI unit specification is ZBN (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.

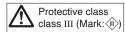
6 Manual override



- 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.





Connecting Base

Chart

Valve

D.sub Plug-in Flat Ribbon

Terminal Block

Lead wire 7

EX600

EX250

EX260

(120

Common Dimensions

Manifold Exploded View

tings, Replacement Parts, Tools

Manifold Options

ade to Order

Specific Product Precautions

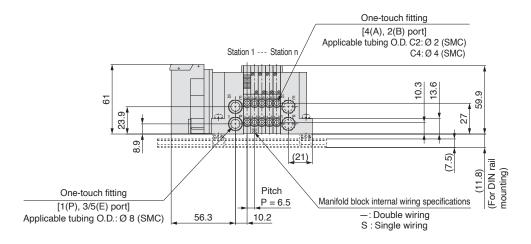
Type 10/Side Ported (Applicable to Ø 2 and Ø 4 fittings)

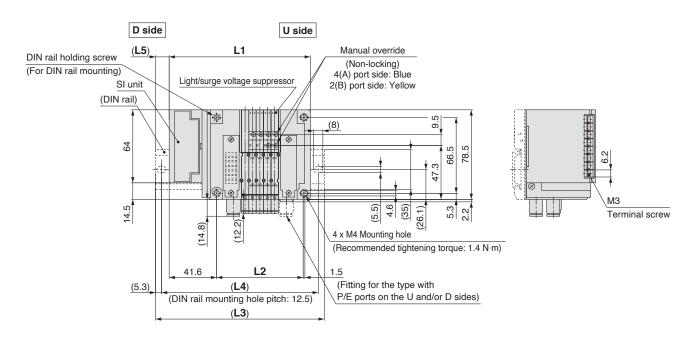
Dimensions: **JSY1000** Series

JJ5SY1-10S3 \square - Stations $\stackrel{\text{U}}{\text{P}}$ - $\stackrel{\text{C2}}{\text{C4}}$ (D)

EX120







- * These figures show the "JJ5SY1-10S3V-05D-C4."
- Refer to page 89 for dimensions of external pilot (Made to Order) and
- 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	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



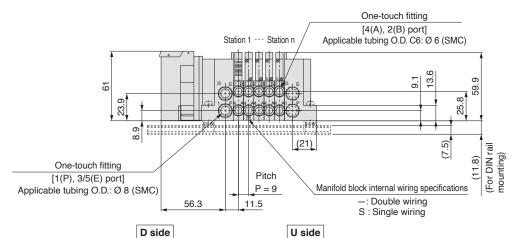
Pugin Connector Connecting Base JSY1000/3000/5000 Series

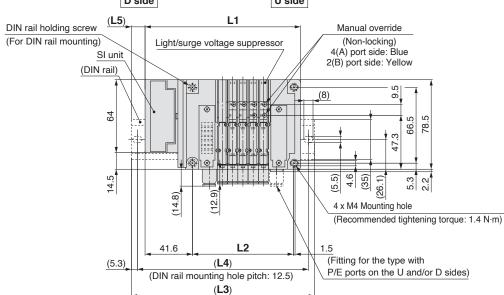
Type 10/Side Ported (Applicable to Ø 6 fittings) EX120

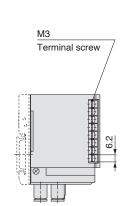
Dimensions: JSY1000 Series

JJ5SY1-10S3 \square - Stations $\stackrel{\text{U}}{\text{P}}$ - 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	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

86

Plug-in Connector

Chart

Valve

D.sub Flat Ribbon

Lead wire

Manifold Common Exploded View Dimensions

Fittings, Replacement Parts, Tools

Manifold Options

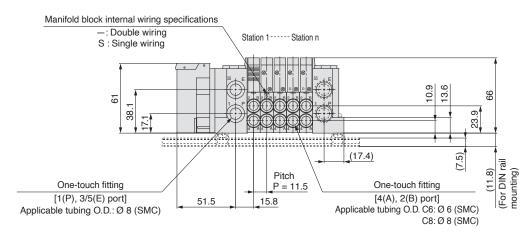
Made to Order

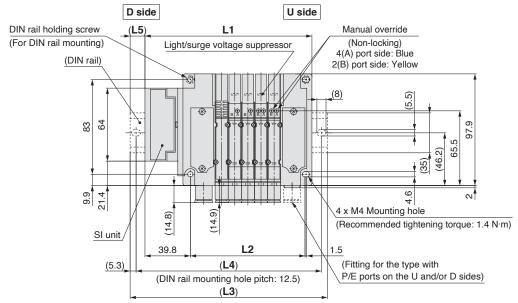
Type 10/Side Ported

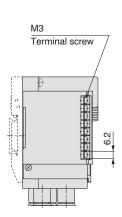
Dimensions: **JSY3000** Series

EX120









- * 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	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

Pugin Connector Connecting Base JSY1000/3000/5000 Series

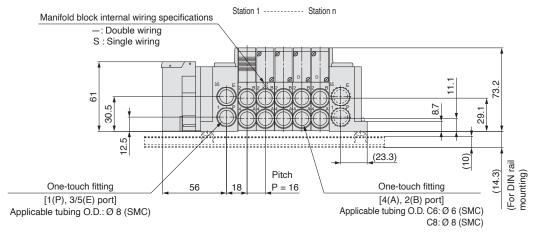
Type 10/Side Ported

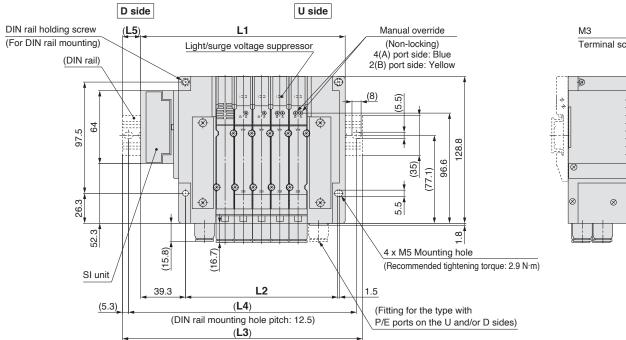
Dimensions: **JSY5000** Series

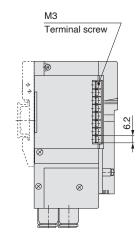
EX120

JJ5SY5-10S3 \square - Stations $\stackrel{\text{U}}{\underset{\text{C}}{\text{C12}}}$ (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	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

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Valve

Chart

Plug-in Connector

D.sub Flat Ribbon

Lead wire

Manifold Exploded View

Fittings, Replacement Parts, Tools

Made to Order

Specific Product Precautions

JSY1000/3000/5000 Series Common Dimensions

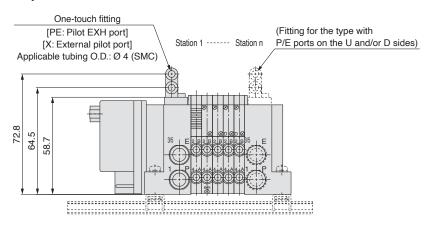
Type 10/Side Ported

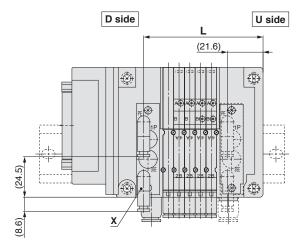
Dimensions: **JSY1000** Series

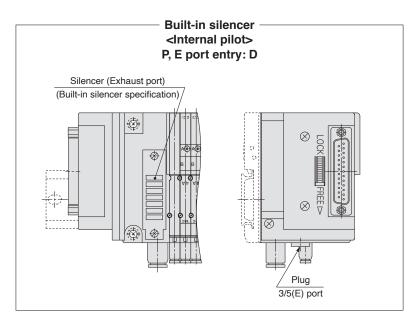
External Pilot, Built-in Silencer

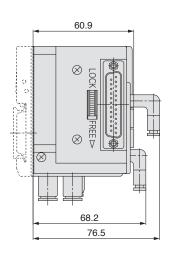
External pilot (Made to Order)

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: Ø 2, Ø 4)
- n2: Number of 9 mm pitch manifold block stations (Applicable fitting: Ø 6)
- * These figures show the "JJ5SY1-10F2-05DR-C4."

Common Dimensions JSY1000/3000/5000 Series

Type 10/Side Ported

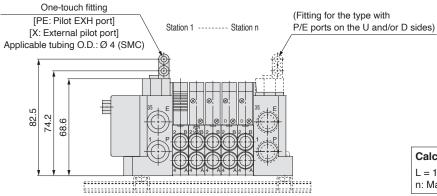
Dimensions: **JSY3000** Series

External Pilot, Built-in Silencer

JJ5SY3-10 \square -Stations $\stackrel{\text{U}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}}{\stackrel{\text{R}}}}\stackrel{\text{R}}{\stackrel{\text{R}}}}{\stackrel{\text{R}}}{\stackrel{\text{R}}}}}\stackrel{\text{R}}{\stackrel{\text{R}}}}\stackrel{\text{R}}}{\stackrel{\text{R}}}}\stackrel{\text{R}}{\stackrel{\text{R}}}}}\stackrel{\text{R}}}{\stackrel{\text{R}}}}\stackrel{\text{R}}{\stackrel{\text{R}}}}\stackrel{\text{R}}{\stackrel{\text{R}}}}}\stackrel{\text{R}}}\stackrel{\text$

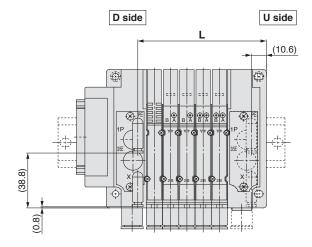
External pilot (Made to Order)

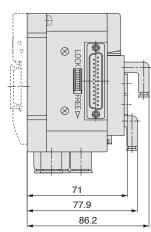
P, E port entry: D

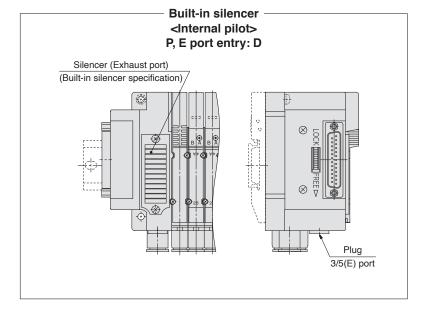


Calculation formula for L dimensions

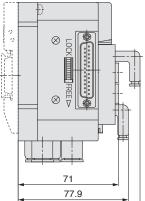
 $L = 11.5 \times n + 33.4$ n: Manifold stations







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



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Chart

Valve

Plug-in Connector

D.sub Flat Ribbon

Lead wire

Exploded View

Manifold Options

Made to

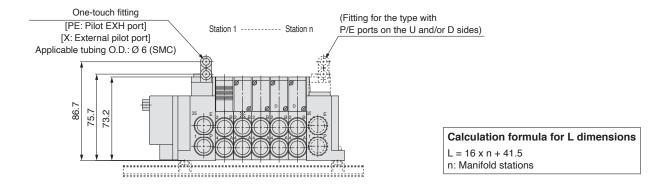
Type 10/Side Ported

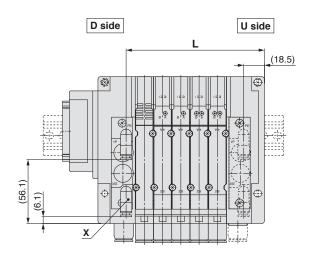
Dimensions: **JSY5000** Series

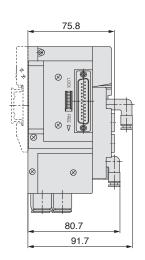
External Pilot, Built-in Silencer

External pilot (Made to Order)

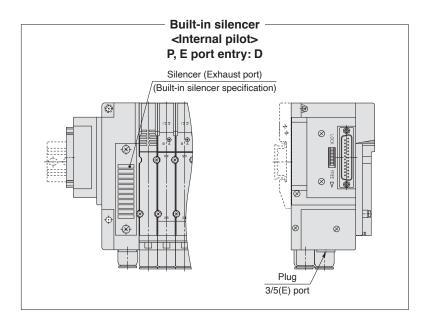
P, E port entry: D







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





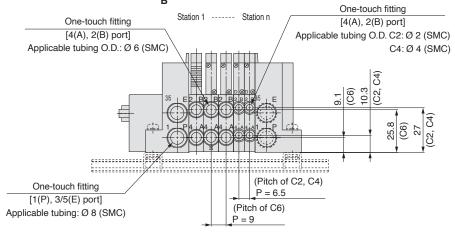
Common Dimensions JSY1000/3000/5000 Series

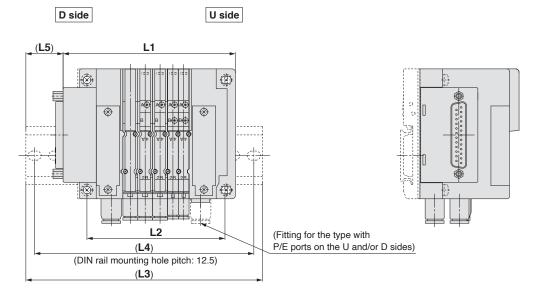
Type 10/Side Ported

Dimensions: **JSY1000** Series

Mixed Size, Straight Port Type

JJ5SY1-10 - Stations P-CM





- * 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

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

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

 $M = \{(L1 + c) / 12.5\} + 1$ 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: Ø 2, Ø 4) n2: Number of 9 mm pitch manifold block stations (Applicable fittings: Ø 6)

n3: Number of I/O units or input block stations

Coefficient	а	b	С	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

Plug-in Connector

Flat Ribbon

Lead wire Termin Block

EXPOO

00 EA230

X120 EX

mensions

Manifold Exploded View

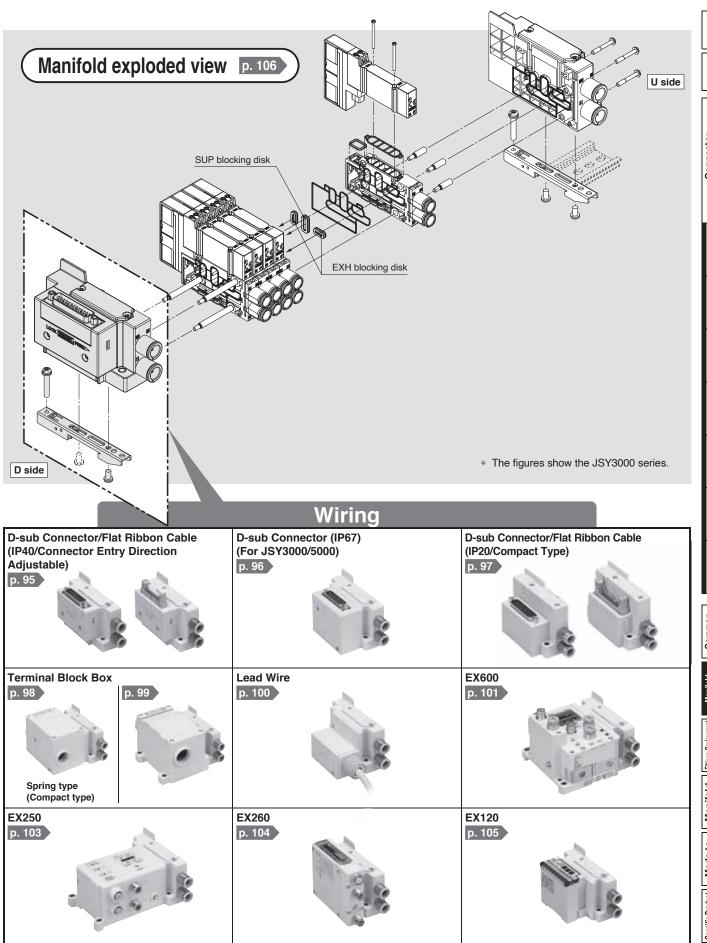
ittings, Replacement
Parts, Tools

Manifold Options

Made to Order

pecific Product Precautions

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



Chart

Valve

Plug-in Connector

D.sub Plug-i t Ribbon

Block Flat

EX600 Lead wire

) !

V | C

Dimensions

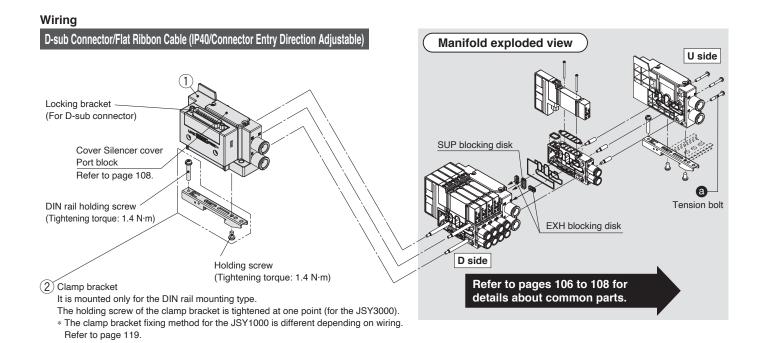
Exploded View

rıtıngs, kepiacement Parts, Tools

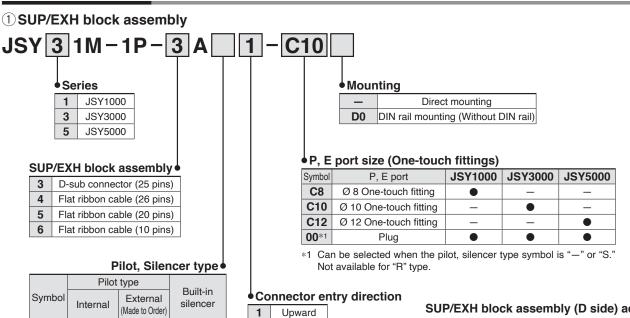
Manifold

Made to Order

pecific Product Precautions



Manifold Parts Nos.



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

S

R

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



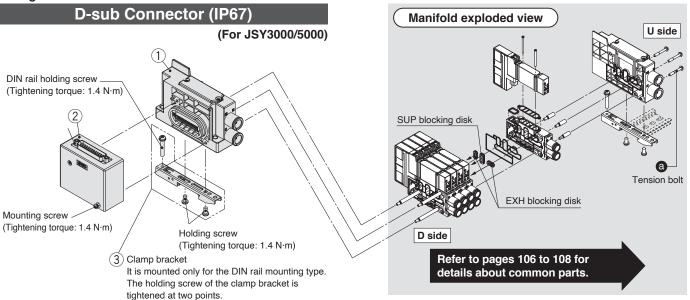
^{* 3/5(}E) port is plugged for the built-in silencer type.

^{*} Part number is for one piece.

Туре 10

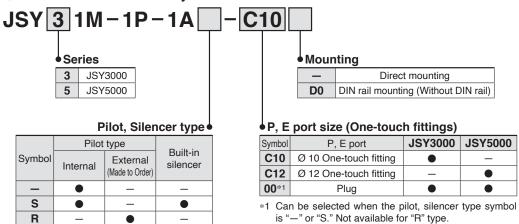
Connector Connecting Base Manifold Exploded View JSY3000/5000 Series





Manifold Parts Nos.





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

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

<u> </u>							
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
3013333	

^{*} Part number is for one piece.

Valve Chart

Plug-in Connector

D.sub Flat Ribbon

Terminal Block F

Lead wire Te

EX600

7500 EA23U

ns EX120

Common Dimensions

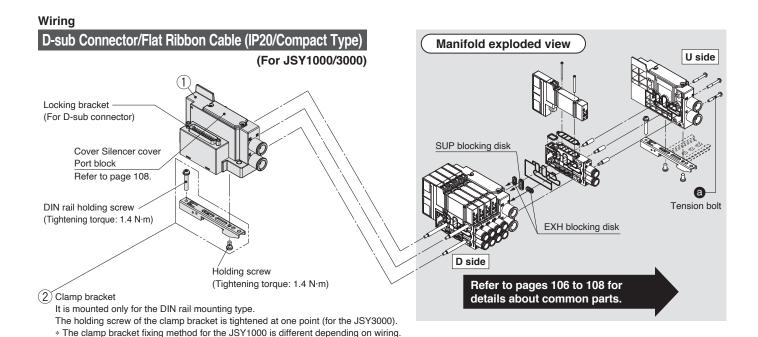
s, Replacement arts, Tools

Manifold Fittings
Options P

Made to Order

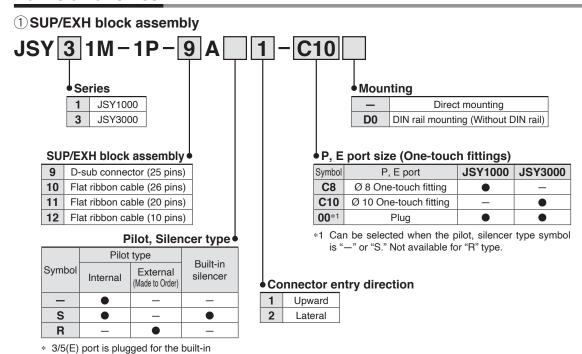
Specific Product Precautions





Manifold Parts Nos.

Refer to page 119.



2 Clamp bracket

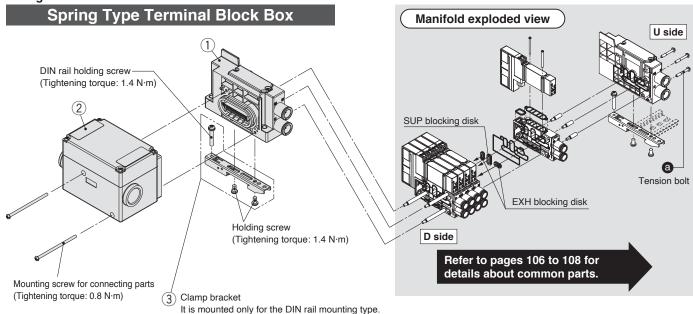
silencer type.

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

^{*} Part number is for one piece.





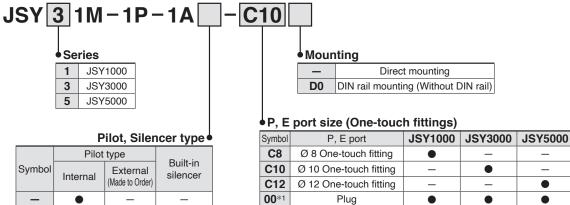


The holding screw of the clamp bracket is tightened at two points.

* The clamp bracket fixing method for the JSY1000 is different depending on wiring. Refer to page 119.

Manifold Parts Nos.





S
 —
 —

 R
 —
 —

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

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

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

st1 Since the nuts are embedded in the SUP/EXH block.

2 Terminal block assembly

silencer type.

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.

Char

Valve

Plug-in Connector

D.sub Flat Ribbon

Terminal Block

EX600

Lead wire

EAZSU

EX120 E

Common Dimensions

> Manifold Exploded View

ings, Replacement Parts, Tools

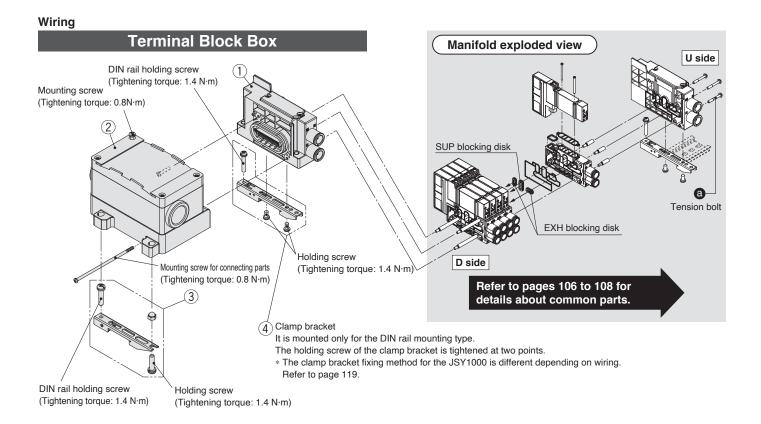
Manifold Options

Made to Order

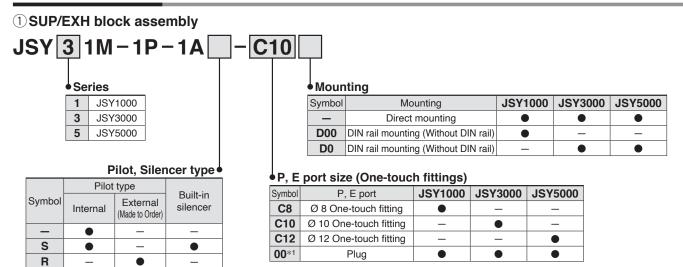
Precautions



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



Manifold Parts Nos.



 ^{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
a 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

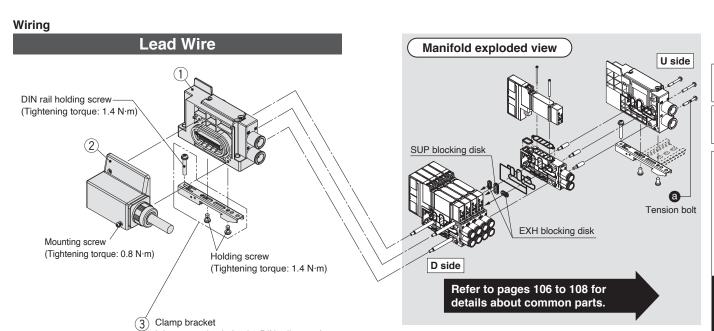
(4) Clamp bracket

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

^{*} Part number is for one piece.



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

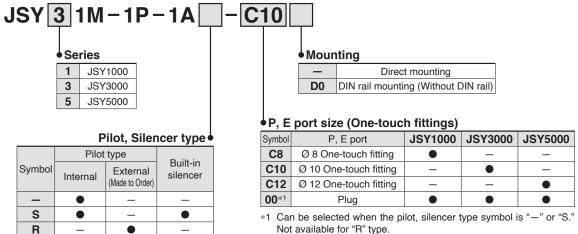


It is mounted only for the DIN rail mounting type. The holding screw of the clamp bracket is tightened at two points.

* The clamp bracket fixing method for the JSY1000 is different depending on wiring. Refer to page 119.

Manifold Parts Nos.





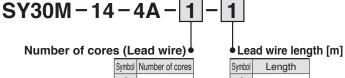
^{3/5(}E) port is plugged for the built-in silencer type.

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.





!!	s (Le	ead wire)		Lea	ad wire
	Symbol	Number of cores		Symbol	Lengt
	1	34] [1	0.6
	2	17] [2	1.5
	2	0	1 1	2	2

3 Clamp bracket

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

Part number is for one piece.

Valve

Plug-in Connecting Base

D.sub Flat Ribbon

Terminal Block

Lead wire EX600

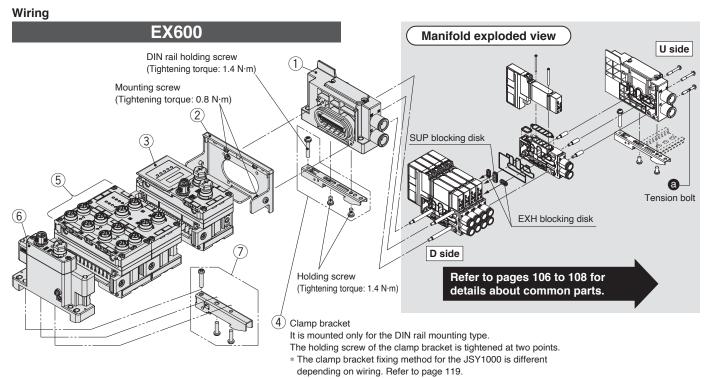
EX120

Dimensions

Manifold Options

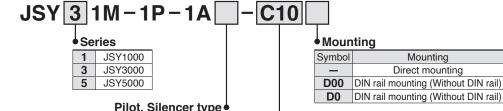
Made to





Manifold Parts Nos.

1) SUP/EXH block assembly



	i not, onencer type			
	Pilot type		D. illa in	
Symbol		External (Made to Order)	Built-in silencer	
_	•	_	_	
S	•	_	•	
R	_	•	_	

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

- 2 Valve plate

EX600 - ZMV2

EX600-S PR

Description

PROFIBUS DP

DeviceNet™

EtherCAT*1

PROFINET*1

communicated with

the FX600-HT1-

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

Protocol •

③ EX600 SI unit

Part no.
JSY11M-15P-2A
SY30M-15-1A
SY50M-15-1A

Part number is for one piece.

Description

When MJ. EN. EC.

or PN is selected When PR or DN is selected

4 Clamp bracket

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

◆P, E port size (One-touch fittings)

P, E port

Ø 8 One-touch fitting

Ø 10 One-touch fitting Ø 12 One-touch fitting

Plug *1 Can be selected when the pilot,

silencer type symbol is "-" or

"S." Not available for "R" type.

C8

C10

C12 00*1

_		

CC-Link EtherNet/IP™*1

Version

Symbol

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)

accessories and the number of accessories

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

JSY1000/3000

None*1

SUP/EXH block assembly (D side)

JSY1000 JSY3000

JSY1000 JSY3000 JSY5000

Accessories Tension bolt

EX600 - W EN 1

Protocol •

JSY5000

JSY5000

3 pcs

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

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



Symbol

PR

DN

MJ

ΕN

EC

*1 Cannot be

Manifold Parts Nos.

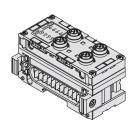
5 EX600 Digital input unit

EX600-DX P B

Number of inputs, Open-circuit detection, and Connector

ol	Description	Symbol	Number of
	PNP	В	8
	NPN	С	8
		C1	8

Symbol	Symbol Number of inputs Open-circuit detection		Connector	
В	8	No	M12 connector (5 pins) 4 pcs.	
С	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

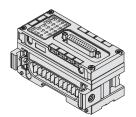
EX600-DY P B

Output type

Number of outputs and Connector

Symbol	Description
Р	PNP
N	NPN

Symbol	Number of outputs	Connector
В	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



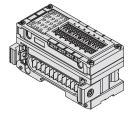
5 EX600 Digital input/output unit

EX600-DM|P||E

Input/Output type • Number of inputs/outputs and Connector

Symbol	Description
P	PNP
N	NPN

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

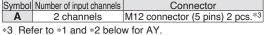


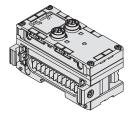
5 EX600 Analogue input/output unit

EX600-AX

ilalogue ilipuroutpu			
	Symbol	Description	
	AX	Analogue input	

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





5 EX600 Analogue input/output unit

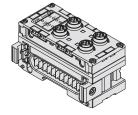
EX600-AMB

Analogue output

Analogue input/output

Number of input/output channels and Connector

• Number of inpuroutput chamiles an				3 and Connector
Symbol Number of input channels		Number of input channels	Number of output channels	Connector
	В	2 channels	2 channels	M12 connector (5 pins)



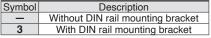
6 EX600 End plate

EX600-ED

♦ Mounting

	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,
4	A-coded, Pin arrangement 1
5	M12 power supply connector IN/OUT,
3	A-coded, Pin arrangement 2

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



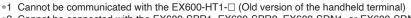
* The pin layout for "4" and "5" pin connector is different.

Oclamp 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.



*2 Cannot be connected with the EX600-SPR1, EX600-SPR2, EX600-SDN1, or EX600-SDN2

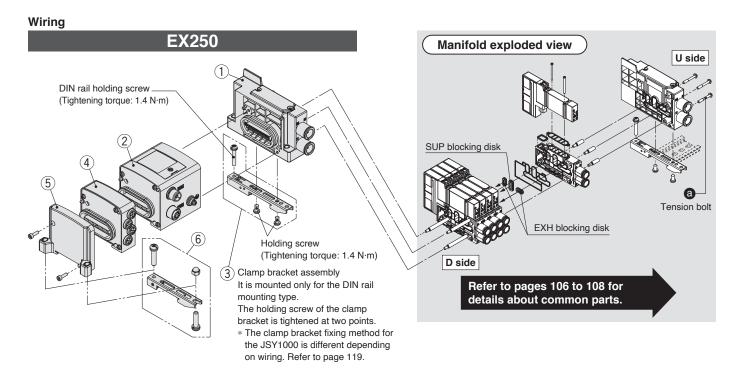


Plug-in Connection Base

Valve

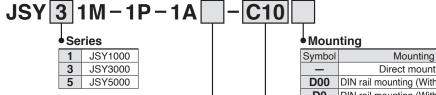
Lead wire

EX120



Manifold Parts Nos.

1) SUP/EXH block assembly



	Р	ilot, Siler	cer type
	Pilot	type	Duille in
Symbol	Internal	External (Made to Order)	Built-in silencer
_	•	_	_
S		_	•
D			

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

 Direct mounting 								
	D00 DIN rail mounting (Without DIN rail) ■							
	D0	DIN rail mounting (Without DIN rail)	_	•	•			
D. F. nort size (One touch fittings)								

P, E port size (One-touch fittings)

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

JSY1000 JSY3000 JSY5000

Accessories	JSY1000 JSY3000	JSY5000
a 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

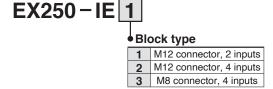
DN1	DeviceNet [™] (Negative common)				
PR1	PROFIBUS DP (Negative common)				
AS3	AS-Interface (8 in/8 out, 31 slave modes, 2 isolated common type) (Negative common)				
AS5	AS-Interface (4 in/4 out, 31 slave modes, 2 isolated common type) (Negative common)				
AS7	AS-Interface (8 in/8 out, 31 slave 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



5 EX250 End plate assembly

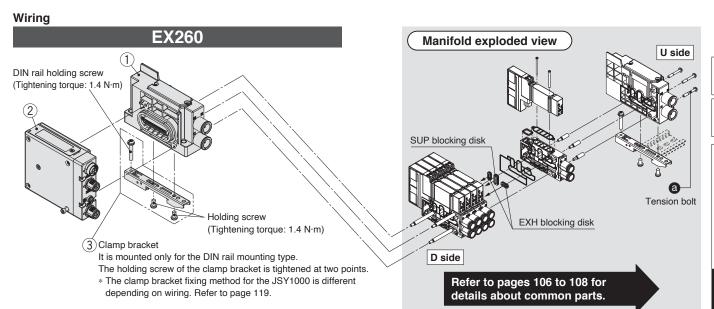
EX250 - EA1

- * With mounting screws (2 pcs. of M3 x 10)
- 6 Clamp bracket assembly for EX250

SY30M-15-3A

* Part number is for one assembly.





Manifold Parts Nos.

1) SUP/EXH block assembly

JSY 3 1M - 1P - 1A - C10 | Mounting | Mounting | D0 | DIN rail mounting (Without DIN rail) |

- P, E port size (One-touch fittings)

	P	ilot, Siler	ncer type 🖢		
	Pilot	type	Built-in		
Symbol	Internal	External (Made to Order)	silencer		
_	- •		•		_
S • R -		_	•		
		•	_		

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

		<u> </u>		
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	Plua			

*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 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		32	Source/PNP (Negative common)		QAN	EC1		32	Source/PNP (Negative common)		DAN
DN ₂	DeviceNet™	32	Sink/NPN (Positive common)	M12	QA	EC2	EtherCAT	32	Sink/NPN (Positive common)	M12	DA
DN3	DN3	16	Source/PNP (Negative common)	IVI I Z	QBN	EC3	ElileiCAI	16	Source/PNP (Negative common)	IVI I Z	DBN
DN4 PR1	10	Sink/NPN (Positive common)		QB	EC4		10	Sink/NPN (Positive common)		DB	
		32 Source/PNP (Negative common) Sink/NPN (Positive common) M12 NAN PN1 PN2 PR6		32	Source/PNP (Negative common)		FAN				
PR2	PR2 PR3 PR4 PR5 PR6 PR7		Sink/NPN (Positive common)	Mao	NA	PN ₂	N2 PROFINET	32	Sink/NPN (Positive common)	M12	FA
PR3		16	Source/PNP (Negative common)	IVIIZ	NBN	8N PN3	FROFINE	16	Source/PNP (Negative common)	IVIIZ	FBN
		10	Sink/NPN (Positive common)		NB			10	Sink/NPN (Positive common)		FB
PR5		32	Source/PNP (Negative common)		NCN	EN1	EN2 EthorNot/ID™	32	Source/PNP (Negative common)		EAN
PR6			Sink/NPN (Positive common)	D-sub*1	NC	IC EN2			Sink/NPN (Positive common)	M12	EA
PR7		16	Source/PNP (Negative common)	D-Sub .	NDN	EN3		16	Source/PNP (Negative common)	IVIIZ	EBN
PR8		10	Sink/NPN (Positive common)		ND	EN4		10	Sink/NPN (Positive common)		EB
MJ1		32	Source/PNP (Negative common)		VAN	PL1	Ethernet	32	Course (DND (Negative common)	M12	GAN
MJ2	MJ2	32	Sink/NPN (Positive common)	M12	VA	PL3	POWERLINK	16	Source/PNP (Negative common)	IVI I Z	GBN
MJ3	CC-Link	16	Source/PNP (Negative common)	IVI I Z	VBN	IL1	IO-Link	32	Source/PNP (Negative common)	M12	KAN
MJ4	10	Sink/NPN (Positive common)		VB							

 $[\]ast 1$ $\,$ Enclosure is IP40 when the communication connector is D-sub.

3 Clamp bracket

Part no.
JSY11M-15P-1A
SY30M-15-1A
SY50M-15-1A

^{*} Part number is for one piece.



Valve C

Plug-in Connecting Base

D.sub Flat Ribbon

> Terminal Block

Lead wire

250 EX60

DE EA230

EX120 EX2

mensions

ls Exploded Vie

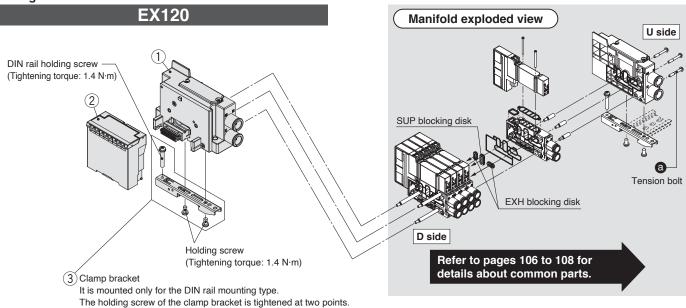
rıtımgs, reptacement Parts, Tools

Manifold Options

Made to Order

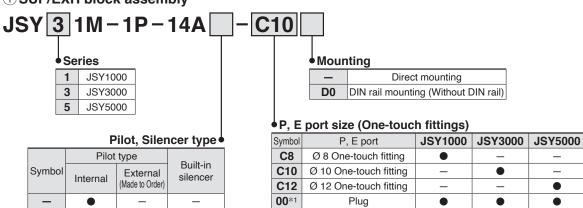
> Specific Product Precautions





Manifold Parts Nos.





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

•

*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

S

R

EX120-S DN1

Communication protocol

* The clamp bracket fixing method for the JSY1000 is different

depending on wiring. Refer to page 119.

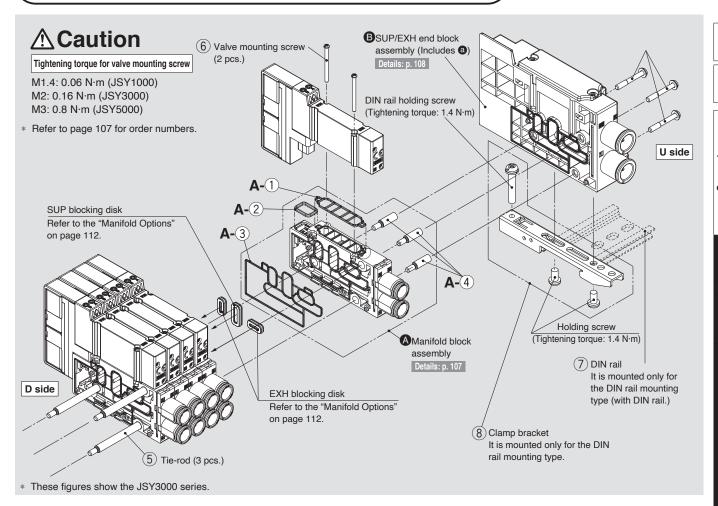
DN1	DeviceNet [™] (Positive common)
CS1	OMRON Corp.: CompoBus/S (16 outputs) (Positive common)
CS2	OMRON Corp.: CompoBus/S (8 outputs) (Positive common)
MJ1	CC-Link (Positive common)
CM1	CompoNet™ NPN (Positive common)
СМЗ	CompoNet [™] PNP (Negative common)

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

Loosen the U-side tension bolt @, and remove the **3** SUP/EXH end block assembly.

Screw in (4) tie-rods for additional stations to the 5 tie-rod of the manifold.

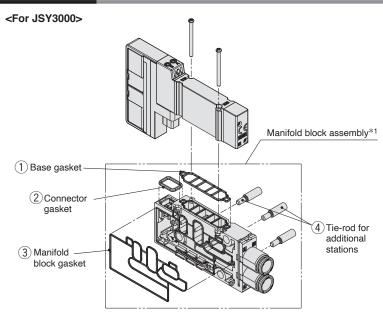
Screw them in until there is no gap between the tie-rods.

3 Connect the A manifold block assembly and B SUP/EXH end block assembly to be added, and tighten the tension bolt @.

Tightening torque for tension bolt (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

inamion 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.



106

Valve

Connecting Base

Flat Ribbon

Lead wire

EX120

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

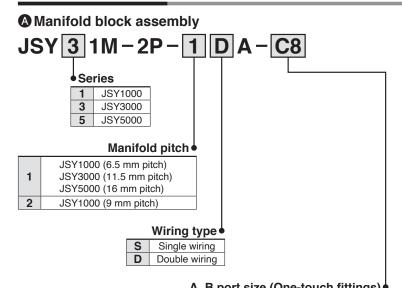
No.	Description		JSY1000		JSY3000	JSY5000	Note
INO.		Description	6.5 mm pitch	9 mm pitch	3513000	J515000	Note
A -①	ock y	Base gasket (for connector connecting base)	JSY11N	1-9P-1A	JSY31M-9P-1A	JSY51M-9P-1A	Part numbers shown on the left are for 10 valves. (10 pcs.)
A- ②	호현	Connector gasket	_	-	SX3000-146-2		Supplied individually
A- ③	Manifold assem	Manifold block gasket	JSY11	M-9P-2	JSY31M-9P-2	JSY51M-9P-2	Supplied individually
A- 4	Mai	Tie-rod for	JSY11M-49P-1-1-A	JSY11M-49P-2-1-A	JSY31M-49P-1-1-A	SV2000-55-2A-A	3 pcs. supplied
A-4	_	additional stations*1	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)	(16 mm pitch)	3 pcs. supplied
(5)	Tie-rod		JSY11M-49P-1-□-A	JSY11M-49P-2-□-A	JSY31M-49P-1-□-A	SV2000-55-1-□-A	☐: Manifold stations (2 to 24
(3)	116-1	ou	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)	(16 mm pitch)	stations) 3 pcs. supplied
(6)	6 Valve mounting screw		JSY11\	/-23-1A	JSY31V-23-1A	JSY51V-23-1A	Part numbers shown on the
valve illouritii		e mounting screw	(M1.4	x 21.5)	(M2 x 25)	(M3 x 29)	left are for 10 valves. (20 pcs.)
7	7 DIN rail			VZ1000-11-1-□		VZ1000-11-4-□	Refer to page 110.
8	8 Clamp bracket*2 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.

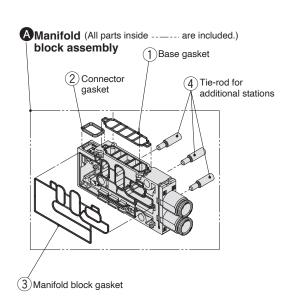
Table. JSY1000 series clamp bracket

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

Manifold Parts Nos.



A, B port size (One-touch intings					i iittiiigs) •
Symbol	A D nort	A, B port JSY1000		JSY3000	JSY5000
Syllibol	А, Б роп	6.5 mm pitch	9 mm pitch	JS 13000	0313000
C2	Ø 2 One-touch fitting	•	_	_	_
C4	Ø 4 One-touch fitting	•	_	_	_
C6	Ø 6 One-touch fitting	_	•	•	_
C8	Ø 8 One-touch fitting	-	_	•	_
C10	Ø 10 One-touch fitting	_	_	_	•
C12	Ø 12 One-touch fitting	_		_	•



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.

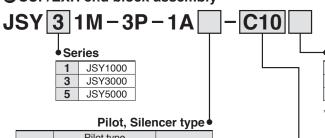
^{*1} Not applicable to the JSY1000 series.



^{*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.

Manifold Parts Nos.





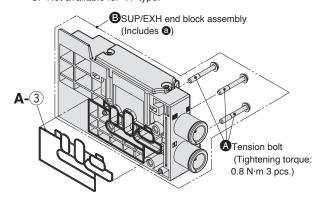
	Pilot	type	Duilt in
Symbol	Internal	External (Made to Order)	Built-in silencer
_	•	_	_
S	•	_	•
R	_	•	_

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.



Mounting

_	Direct mounting
	DIN rail mounting (Without DIN rail)
D00*1	DIN rail mounting (Without DIN rail)

*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

Table	1. 00 1 1000 acrica bliviali illouliting
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
a Tension bolt	3 pcs.
A-③ Manifold block gasket	1 pc.

* Gasket is mounted.

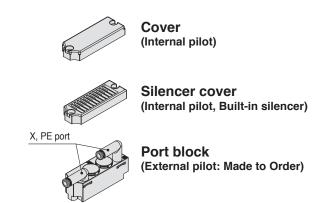
8 Clamp bracket

Series		Part no.			
ICV1000	For D0	JSY11M-15P-1A			
JSY1000	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

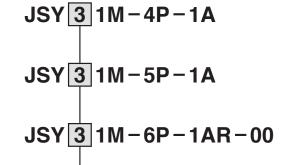
Refer to the Table 1. JSY1000 series DIN rail mounting for selecting a clamp bracket.

■ 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



Series • JSY1000 JSY3000 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.
- . When disassembly and assembly are performed, air leakage may result if the tightening of the cover and port block assemblies are inadequate.

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Valve

Plug-in Connector Connecting Base

D.sub Flat Ribbon

Terminal Block Lead wire

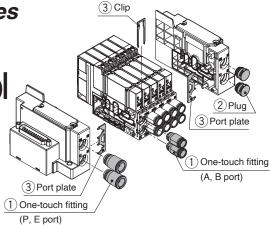
EX120

Manifold Options

Order

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

	Series	JSY	1000	JSY3000	JSY5000	Note		
Port size		6.5 mm pitch	9 mm pitch	0313000	0313000	Note		
	Ø2	KQSY10-C2	_	_	_			
	Ø4	KQSY10-C4-X1336	_	_	_			
A D =====	Ø6	_	KQSY11-C6-X1336	KQSY30-C6	_			
A, B port	Ø8	-	-	KQSY30-C8-X1336	_			
	Ø 10	-	_	_	KQSY50-C10	Part number is for one piece.		
	Ø 12	-	-	_	KQSY50-C12-X1336			
	Ø8	KQSY30-	C8-X1336	_	_			
P, E port	Ø 10	-	_	KQSY31-C10-X1336	_			
	Ø 12	_	_	_				

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

2 Plug

Series Piping port	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

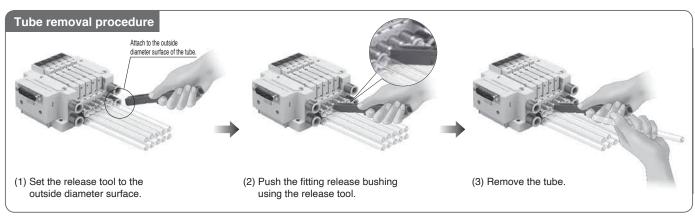
Series	JSY	1000			
Piping port	For A, B port C2/C4 fittings	For A, B port C6 fittings	JSY3000	JSY5000	Note
A, B port (Clip)	SJ1000-CL-1	JSY11M-19P-1A	JSY31M-19P-1A	JSY51M-19P-1A	Part number is for 10 pieces.
P, E port (Port plate)	JSY11N	Л-10P-1	JSY31M-10P-1	JSY51M-10P-1	Part number is for one piece.

st 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 JS	Y1000	For JSY3000	For JSY5000	
Series	6.5 mm pitch	9 mm pitch	FOI 3513000	FOR J 5 1 5 0 0 0	
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	



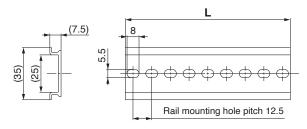


JSY1000/3000/5000 Series Manifold Options

■ DIN rail dimensions/weight for the JSY1000/3000 Plug-in connector connecting base

VZ1000-11-1-□

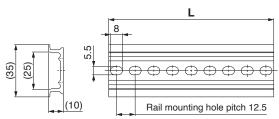
* After confirming the L3 dimension in the dimensions table of each series, refer to the DIN rail dimensions table below and specify the number in the box □.



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 \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		- 10														
140.	30	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	43 635.5	648	45 660.5	46 673	47 685.5	48 698	49 710.5	50 723	51 735.5	52 748	53 760.5	54 773	55 785.5	56 798
	573					_						-		-	-				
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
L dimension Weight [g]	573 145 57	585.5 148.1	598 151.3	610.5 154.5	623 157.6	635.5 160.8	648 163.9	660.5 167.1	673 170.3	685.5 173.4	698 176.6	710.5 179.8	723 182.9	735.5 186.1	748 189.2	760.5	773	785.5	798

Chart

Valve

Plug-in Connector Connecting Base

Flat Ribbon

Terminal

EX600 Lea

EX250

EX120 EX

ensions

Exploded View

riungs, repacement Parts, Tools

Manifold Options

Made to Order

> Specific Product Precautions



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.

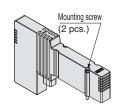
■ Blanking plate

[With two mounting screws]

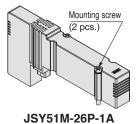
Used when valve additions are expected or for maintenance.

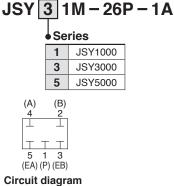


JSY11M-26P-1A



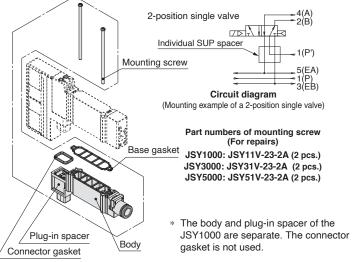
JSY31M-26P-1A

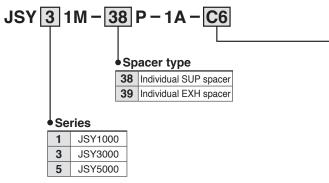




■ Individual SUP spacer

[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.





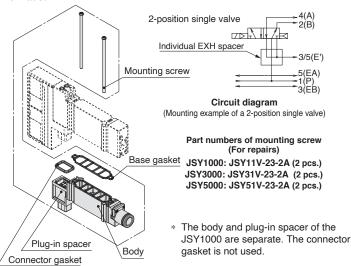
Port size (One-touch fittings)

Symbo	P, E port	JSY1000	JSY3000	JSY5000
C4	Ø 4 One-touch fitting	•	_	_
C6	Ø 6 One-touch fitting	_	•	_
C8	Ø 8 One-touch fitting	_	_	•
C10	Ø 10 One-touch fitting	_	_	•
C12	Ø 12 One-touch fitting	_	_	•

■ Individual EXH spacer

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[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 JSY1000/3000/5000 Series

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

If the blocking disk is ordered using the manifold specification sheet and ordered

at the same time as the manifold, the

■ 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



EXH	B 2	<u>.</u> 7 bc	sition whe serted will			disk is shipped ou	1
g disk label			\otimes	\otimes	\otimes		
5 3/5		3/5 E	8 8		⊗ D ⊗	3/5 E	
		1 P				1 P	

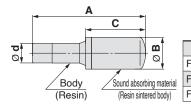
Series	Part no.	
JSY1000		
JSY3000	SJ3000-155-1A	
JSY5000		

■ 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 (Ø d)	Model	Effective area	Α	В	С
For JSY1000 (Ø 8)	AN15-C08	20 mm ²	45	13	20
For JSY3000 (Ø 10)	AN20-C10	30 mm ²	57.5	16.5	30.5
For JSY5000 (Ø 12)	AN30-C12	41 mm ²	71.5	20	43.5

Chart Valve

Base

Connecting Connector

D.sub Flat Ribbon

Lead wire

EX120

Exploded View

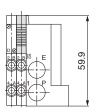


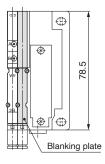
JSY1000/3000/5000 Series

Dimensions: Manifold Options

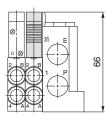
■ Blanking plate

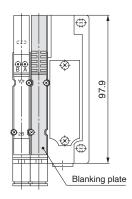
JSY1000 series



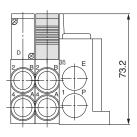


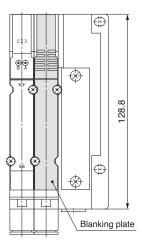
JSY3000 series





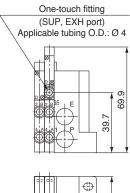
JSY5000 series

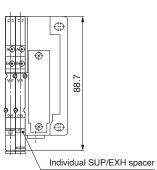




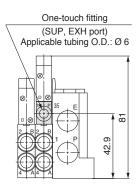
■ Individual SUP/EXH spacer

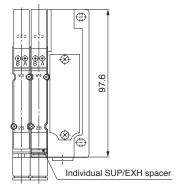
JSY1000 series



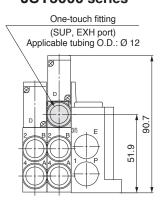


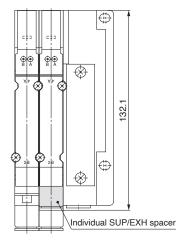
JSY3000 series





JSY5000 series







JSY1000/3000/5000 Series

Made to Order





External Pilot

How to Order Manifolds

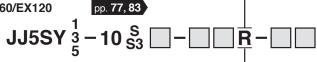
Refer to the How to Order manifolds for each type.

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

For Terminal Block Box p. 41

JJ5SY
$$\frac{3}{5}$$
 - 10 $\frac{7}{10}$ - $\frac{1}{10}$

For EX260/EX120



SUP/EXH block assembly External pilot

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

For EX600/EX250

JJ5SY
$$\frac{1}{3}$$
 - 10 $\frac{56}{5}$ - $\frac{10}{5}$

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)	Н
Both sides (2 to 24 stations)	J

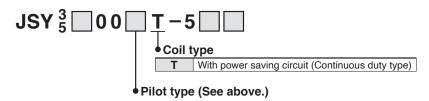
How to Order Valves

- * 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



Chart

Plug-in Connector

Lead wire

EX120

Common Dimensions Exploded View



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

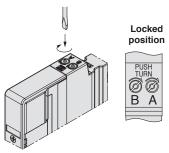
Push down on the manual override button until it stops.



■ 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 $9\,0^\circ$ 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.

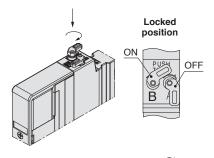


Manual Override

△ 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

Do not apply excessive torque when turning the manual override. [0.1 $\mbox{N$\cdot$m}]$

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.
solenoids	Single	(A)4 2(B) ✓► A 1 3(EB) (P)	(A)4 2(B) ✓► A II
Number of	Double	(A)4 2(B) (EA)5 1 3(EB) (P)	(A)4 2(B) (EA)5 1 3(EB) (P)





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

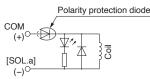
∧ Caution

■ Polar type

Positive common

Single solenoid

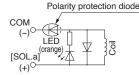
 $Light/surge\ voltage\ suppressor\ (\Box NZ)$



Negative common

Single solenoid

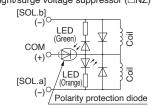
Light/surge voltage suppressor (□NZ)



Positive common

Double solenoid, 3-position, 4-position

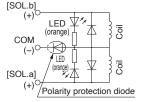
Light/surge voltage suppressor (□NZ)



Negative common

Double solenoid, 3-position, 4-position

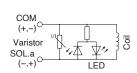
Light/surge voltage suppressor (□NZ) [SOL.b]

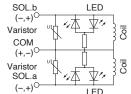


■ Non-polar type

With light/surge voltage suppressor (□U)

Single solenoid





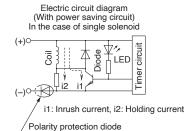
Double solenoid

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

■ With power saving circuit

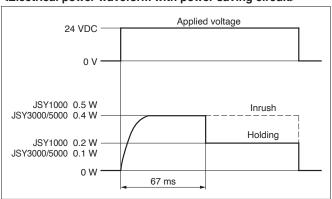
Power consumption is decreased by approx. 1/3 by reducing the wattage required to hold the valve in an energised state. (Effective energizing time is over 67 ms at 24 VDC.)

<Standard>



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.

Connector Connecting Base

Chart

Valve

b Plug-in c

rminal D.sub Block Flat Ribbon

Lead wire Tern Blo

EX600

EX250

EX120 EX

Dimensions

Exploded View

ngs, Replacement Parts, Tools

Manifold Options

Nade to Order

> pecific Product Precautions





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).

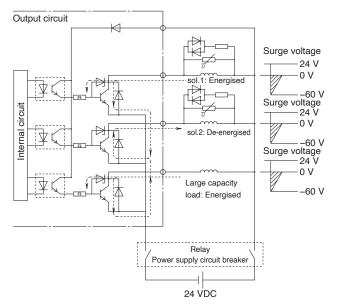


Figure 1. Surge intrusion circuit example (NPN outlet example) (24 VDC)

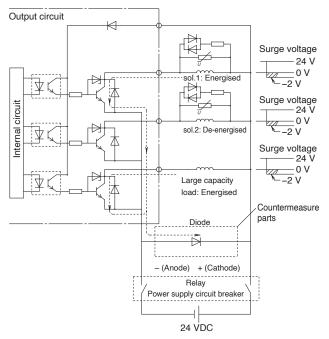


Figure 2. Surge intrusion circuit example (NPN outlet example) (24 VDC)

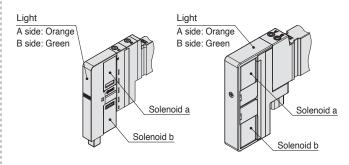
Light Indication

∧ 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>



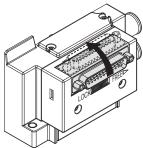
Changing Connector Entry Direction

⚠ 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.





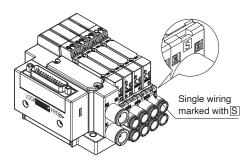
Be sure to read this before handling the products. Refer to the back cover for safety instructions. For 3/4/5-port solenoid valve precautions, refer to the "Operation Manual" on the SMC website: https://www.smc.es

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

- 1. When the manifold is fixed with bolts on a mounting surface etc., it can be operated just by fixing on both ends of the DIN rail if the bottom surface of the DIN rail is entirely in contact with the mounting surface when mounted horizontally. However, if it is used with other mounting or with side or reverse mounting, fix the DIN rail with bolts at regular intervals. As a guide, insert bolts in 2 locations for 2 5 stations, 3 locations for 6 10 stations, 4 locations for 11 15 stations, 5 locations for 16-20 stations and 6 locations for 21-24 stations.
- 2. When using the manifold with DIN rail in an environment where any vibration or impact is applied to it, the DIN rail itself may be broken. In particular, if the installation surface vibrates when mounting the manifold on the wall or if a load is directly applied to the manifold, the DIN rail may be broken, causing the manifold to drop. When any vibration, impact, or load is applied to the manifold, be sure to use the direct mounting manifold.

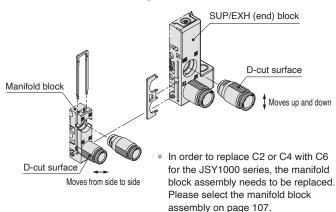
How to Replace One-touch Fittings

⚠ 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



* 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

Plug-in Connecting Base

D.sub Plug Flat Ribbon

erminal Block F

Lead wire Te

EX600

EVEDO

EX120

Common

Exploded View

gs, Replacement Parts, Tools

//anifold Options

lade to Order

Precautions





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

 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

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

- 1. 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.
- 3. When the removed tube is to be used again, cut off the portion which has been chewed before reusing it. If the chewed portion of the tube is used as is, this can cause trouble such as air leakage or difficulty in removing the tube.

Fixing Method of JSY1000 Series Clamp Bracket

∧ Caution

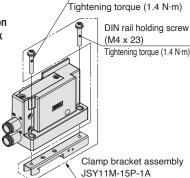
The clamp bracket fixing method for the JSY1000 series is different depending on wiring.

Clamp bracket holding screw

■ 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.

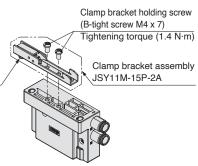


 $(M4 \times 18)$

<For Terminal block box/EX600/EX250>

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

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.

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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 indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate

injury.

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

injury.

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

injury.

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.

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.

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.

- Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.
 - 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.
 - 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.
- Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.
 - 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.
 - 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.
- 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.
- 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

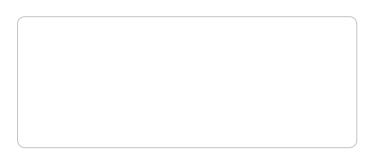
- The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
- The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries 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.



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