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4 Port Solenoid Valve
Common Specifications
Series SJ2000/3000

CE

Manifold Specifications

Model			D-sub connector	Flat ribbon cable			Serial wiring		Individual wiring
			Type 60F	Type 60P	Type 60PG Type 60J Type 60G	Type 60PH	Type 60S□ (EX180)	Type 60S6B (EX510)	Type 60
Manifold type			Plug-in, Connector type						Non-plug-in
1(P: SUP), 3/5(E: EXH)			Common SUP, EXH						
Valve stations			2 to 24 stations		2 to 18 stations (Type PG) 2 to 16 stations (Type J, Type G)	2 to 8 stations	2 to 32 stations	2 to 16 stations	2 to 20 stations
Applicable connector			D-sub connector Conforming to MIL-C-24308 JIS-X-5101	Flat ribbon cable connector Socket: 26 pins MIL type with strain relief Conforming to MIL-C-83503	Flat ribbon cable connector Socket: 20 pins MIL type with strain relief Conforming to MIL-C-83503	Flat ribbon cable connector Socket: 10 pins MIL type with strain relief Conforming to MIL- C-83503	—	—	—
Internal wiring			Non-polar, +COM						
4(A), 2(B) port piping spec.		**Location**	Valve						
		Direction	Horizontal, Upward, Downward (Using elbow fittings for upward or downward)						
Port size	**1(P), 3/5(E) port**		C6, C8, N7, N9 (Inch size elbow fitting is not available.)						
	4(A), 2(B) port	**SJ2000**	C2, C4, N1, N3, M3						
		SJ3000	C2, C4, C6, N1, N3, N7, M5						
Weight W (g) Note 2) **n: Number of SUP/EXH blocks** **m: Weight of DIN rail**			W = 51n + m + 133						

Note 1) When many valves are operated simultaneously, use B type (SUP/EXH both sides), applying pressure to the 1(P) ports on both sides and exhaust from the 3/5(E) ports on both sides.

Note 2) The weight W is the value for the D-sub connector manifold only with internal pilot, SUP/EXH block straight fittings specifications. To obtain the weight with solenoid valves attached, add the solenoid valve weights given on page 3 for the appropriate number of stations. Refer to page 61 for the weight of DIN rail. (Please contact SMC for the weight of external pilot specifications, elbow fittings.)

Flow Characteristics

SJ2000

Port size		Flow characteristics					
1(P) 3/5(E)	4, 2 (A, B)	1→2/4 (P→A/B)			4/2→3/5 (A/B→E)		
		C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
C8	C2	0.13	0.55	0.04	0.13	0.50	0.04
	C4	0.33	0.16	0.08	0.36	0.13	0.08
	M3	0.18	0.52	0.06	0.20	0.29	0.06

SJ3000

Port size		Flow characteristics					
1(P) 3/5(E)	4, 2 (A, B)	1→2/4 (P→A/B)			4/2→3/5 (A/B→E)		
		C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
C8	C2	0.13	0.56	0.04	0.14	0.51	0.04
	C4	0.42	0.17	0.11	0.45	0.16	0.11
	C6	0.55	0.10	0.12	0.56	0.11	0.12
	M5	0.40	0.28	0.11	0.45	0.15	0.11

Note) The value is for manifold base with 5 stations and individually operated 2 position type.
Please contact SMC for 4 position dual 3 port valves.

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Series SJ2000/3000



D-sub connector



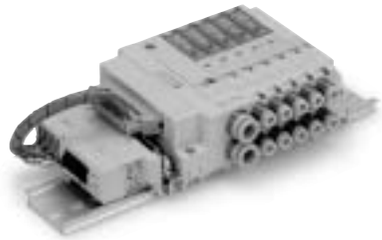
Flat ribbon cable



PC wiring



Serial wiring: EX180



Gateway system
Serial transmission system: EX510



Individual wiring

Solenoid Valve Specifications

Fluid			Air
Internal pilot operating pressure range (MPa)	**2 position single**		0.15 to 0.7
	4 position dual 3 port valve		
	2 position double		0.1 to 0.7
	3 position		0.2 to 0.7
External pilot operating pressure range (MPa)	**Operating pressure range**		–100 kPa to 0.7
	Pilot pressure range	**2 position single**	0.25 to 0.7
		2 position double	
		3 position	
Ambient and fluid temperature (°C)			–10 to 50 (No freezing)
Maximum operating frequency (Hz)	**2 position single, double**		10
	4 position dual 3 port valve		
	3 position		3
Manual override (Manual operation)			Non-locking push type
			Push-turn locking slotted type
Pilot exhaust method	**Internal pilot**		Main and pilot valve common exhaust
	External pilot		Pilot valve individual exhaust
Lubrication			Not required
Mounting orientation			Unrestricted
Shock/Vibration resistance (m/s²)			150/30
Enclosure			Dustproof

Note) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Value in the initial state)
Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000Hz. Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)

Solenoid Specifications

Coil rated voltage		24 VDC, 12 VDC	
Allowable voltage fluctuation		±10% of rated voltage*	
Power consumption (W)	**Standard**	SJ2000	0.55
		SJ3000	0.4
	With power saving circuit (Continuous duty type)	SJ2000	0.23
		SJ3000	0.15
Surge voltage suppressor		Diode	
Indicator light		LED	

* For the allowable voltage fluctuation for Z and T types (with power saving circuit), please observe the following range because they have voltage drop due to internal circuit.
Z type 24 VDC: –7% to +10%
12 VDC: –4% to +10%
T type 24 VDC: –5% to +10%
12 VDC: –6% to +10%

Response Time

Type of actuation	Response time ms (at 0.5 MPa)	
	SJ2000	SJ3000
2 position single	16 or less	16 or less
2 position double	10 or less	10 or less
3 position	34 or less	22 or less
4 position dual 3 port valve	30 or less	30 or less

Note) Based on dynamic performance test, JIS B 8375-1981. (Coil temperature: 20°C, at rated voltage)

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Weight

Model/SJ2000

Valve model	Type of actuation		Port size 4(A), 2(B)	Weight (g)
SJ2□60-C2	2 position	Single	C2 (ø2 one-touch fitting)	43
		Double		46
	3 position	Closed center		50
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		46
SJ2□60-C4	2 position	Single	C4 (ø4 one-touch fitting)	41
		Double		44
	3 position	Closed center		48
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		44
SJ2□60-M3	2 position	Single	M3 x 0.5	39
		Double		42
	3 position	Closed center		46
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		42

Note) Please contact SMC for the weight of elbow fittings.

Model/SJ3000

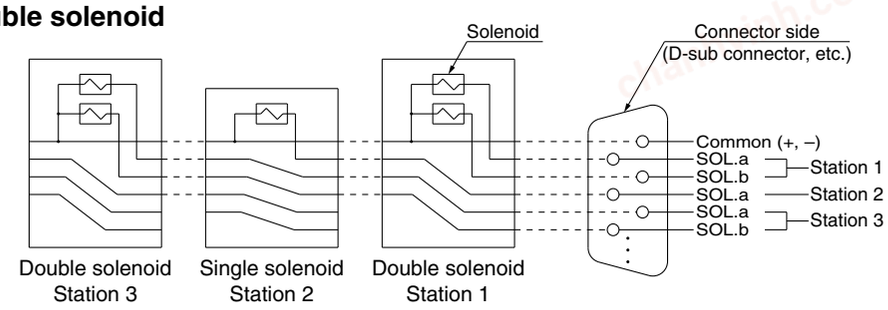
Valve model	Type of actuation		Port size 4(A), 2(B)	Weight (g)
SJ3□60-C2	2 position	Single	C2 (ø2 one-touch fitting)	63
		Double		71
	3 position	Closed center		75
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		71
SJ3□60-C4	2 position	Single	C4 (ø4 one-touch fitting)	65
		Double		73
	3 position	Closed center		77
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		73
SJ3□60-C6	2 position	Single	C6 (ø6 one-touch fitting)	61
		Double		69
	3 position	Closed center		73
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		69
SJ3□60-M5	2 position	Single	M5 x 0.8	57
		Double		65
	3 position	Closed center		69
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		65

Note) Please contact SMC for the weight of elbow fittings.

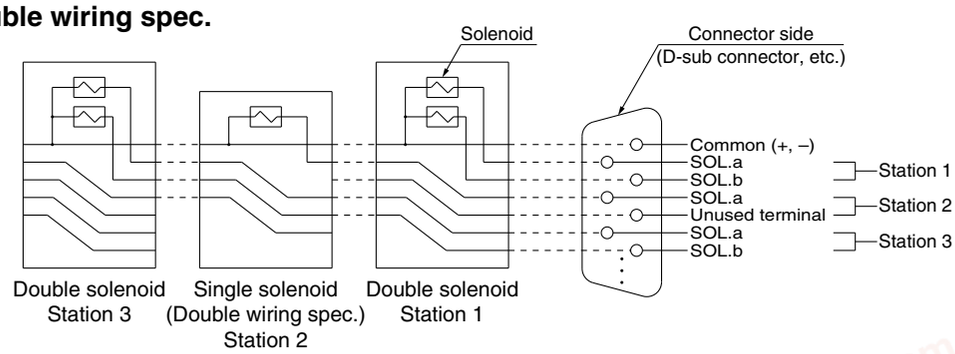
Connector Wiring Diagram

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.

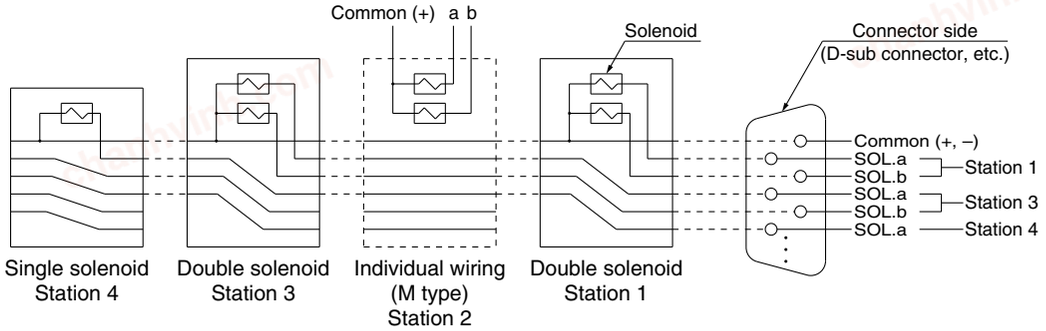
■ Single solenoid and double solenoid



■ Single solenoid with double wiring spec.



■ Mounting a valve with individual wiring



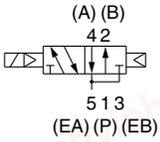
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Series SJ2000/3000

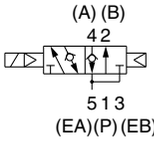
Construction: SJ3000

JIS symbol

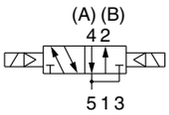
2 position single



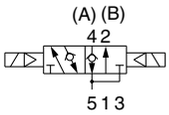
2 position single with back pressure check valve



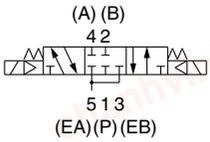
2 position double



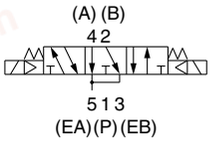
2 position double with back pressure check valve



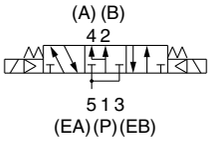
3 position closed center



3 position exhaust center



3 position pressure center



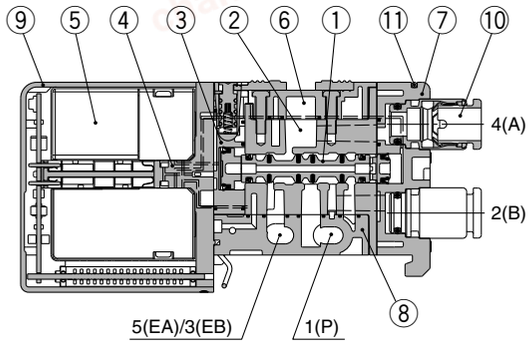
Component Parts

No.	Description	Material	Note
1	**Spool valve assembly**	Resin/H-NBR (3 position solenoid valve: Aluminum/H-NBR)	—
2	**Body**	Zinc die-cast	—
3	**Adaptor plate**	Resin	White
4	**Pilot adaptor**	Resin	White
5	**Pilot valve assembly**	—	—
6	**Body cover**	Resin	White
7	**Port block**	Resin	White
8	**Bottom cover**	Resin	White
9	**Light cover**	Resin	Light blue

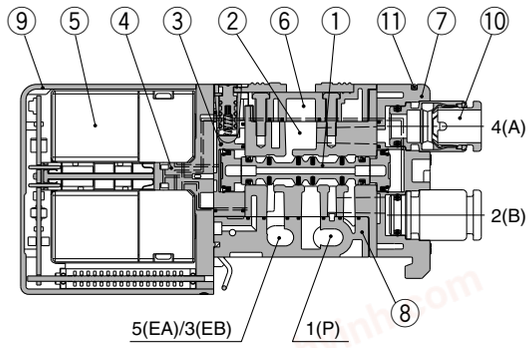
Replacement Parts

No.	Description	Part no.
10	**One-touch fitting**	Refer to the one-touch fitting part no. on back page 6.
11	**Clip**	SJ3000-CL-1 (10 pcs.)

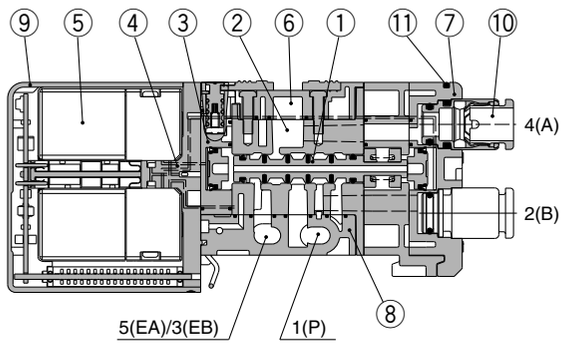
2 position single



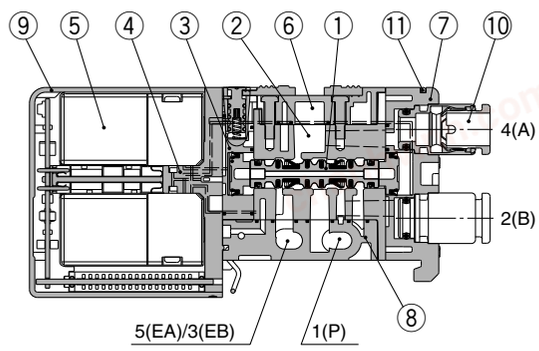
2 position double



3 position closed center/exhaust center/pressure center



SJ3260K with back pressure check valve

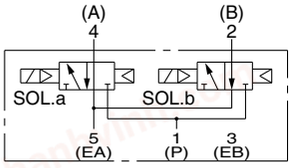


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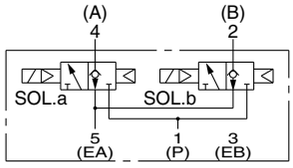
Construction: SJ3000

JIS symbol

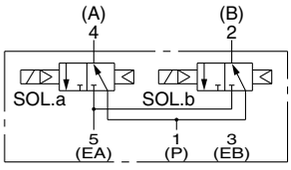
4 position dual 3 port valve
SJ3A60 [N.C. valve x 2]



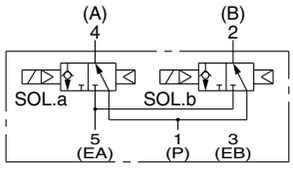
SJ3A60K with back pressure check valve



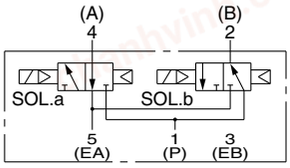
SJ3B60 [N.O. valve x 2]



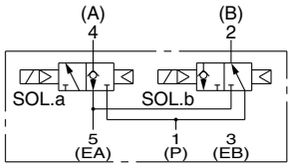
SJ3B60K with back pressure check valve



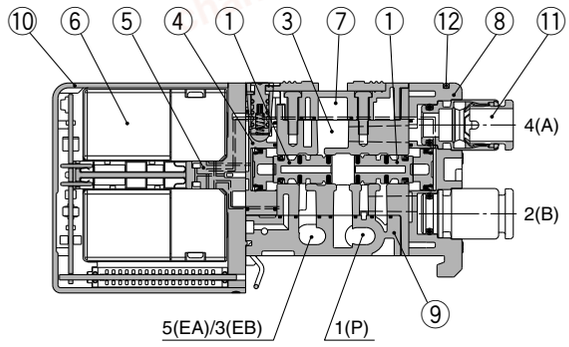
SJ3C60 [N.C., N.O. valve x 1 (each)]



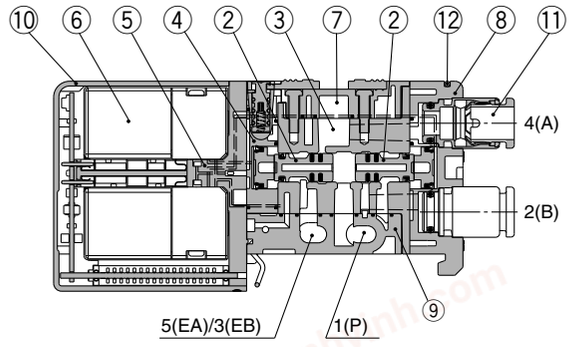
SJ3C60K with back pressure check valve



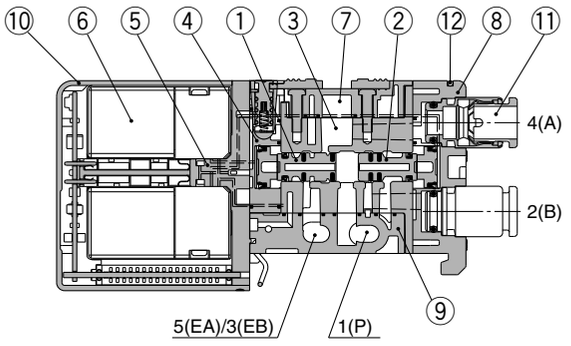
SJ3A60 [N.C. valve x 2]



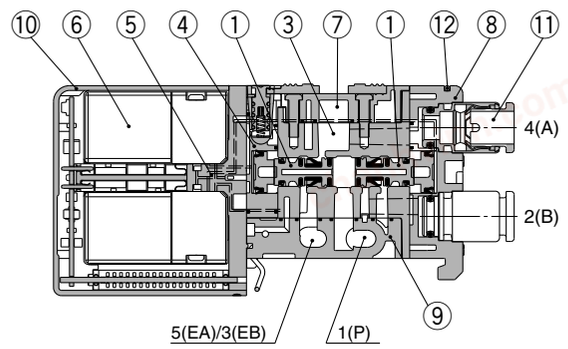
SJ3B60 [N.O. valve x 2]



SJ3C60 [N.C. valve, N.O. valve x 1 (each)]



SJ3A60K with back pressure check valve



Component Parts

No.	Description	Material	Note
1	**Spool valve assembly**	Resin/H-NBR	N.C. (Normally closed)
2	**Spool valve assembly**	Resin/H-NBR	N.O. (Normally open)
3	**Body**	Zinc die-cast	—
4	**Adaptor plate**	Resin	White
5	**Pilot adaptor**	Resin	White
6	**Pilot valve assembly**	—	—
7	**Body cover**	Resin	White
8	**Port block**	Resin	White
9	**Bottom cover**	Resin	White
10	**Light cover**	Resin	Light blue

Replacement Parts

No.	Description	Part no.
11	**One-touch fitting**	Refer to the one-touch fitting part no. on back page 6.
12	**Clip**	SJ3000-CL-1 (10 pcs.)

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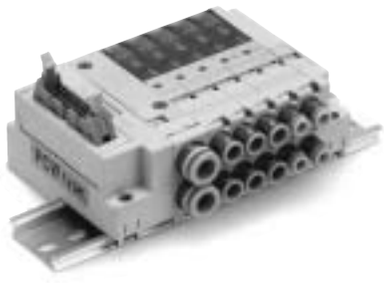
Plug-in
Connecter Type Manifold

Series SJ2000/3000

P.10 D-sub Connector / Flat Ribbon Cable / PC Wiring

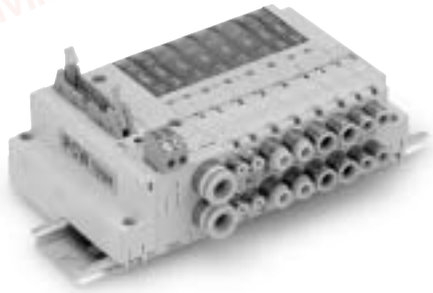






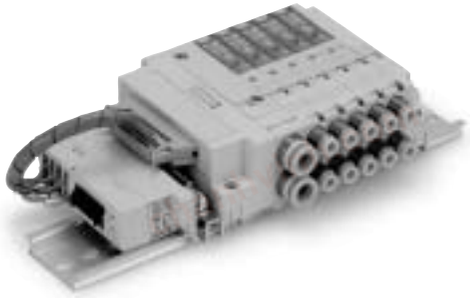
P.26 PC Wiring System with Power Supply Terminal

P.34 Serial Wiring: EX180





P.42 Gateway System
Serial Transmission System: EX510



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Plug-in Connector Type
D-sub Connector / Flat Ribbon Cable / PC Wiring
Series SJ2000/3000

CE

How to Order

● **Connector type manifold**

SS5J 3 – □ 60 F D 1 – 05 U □ □ □

Series

2	SJ2000
3	SJ3000 (SJ2000/3000 mixed)

Mixed mounting type

Nil	Standard Note 1)
M	Mixed mounting Note 2)

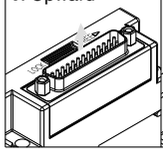
Note 1) There is no need to enter anything when you operate either the SJ2000 or SJ3000 series alone.
Note 2) Enter "M" when the SJ2000 or SJ3000 series will be mounted on the same manifold base together.

Connector mounting position

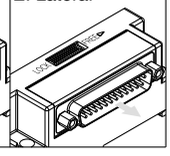
Symbol	Mounting position
D	D side

Connector entry direction

1: Upward

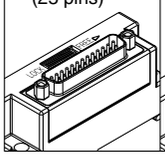


2: Lateral

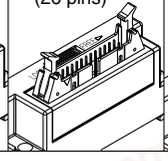


Connector type

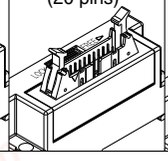
F: D-sub connector (25 pins)



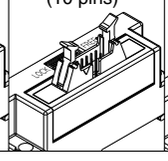
P: Flat ribbon cable (26 pins)



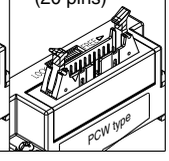
PG: Flat ribbon cable (20 pins)



PH: Flat ribbon cable (10 pins)



J: PC wiring (20 pins)

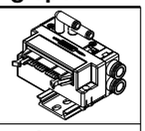
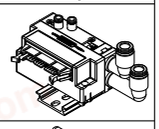
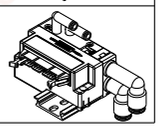


DIN rail length specified

Nil	Standard length	
3	3 stations	Specify a longer rail than the standard length.
⋮	⋮	
24	24 stations	

∗ Specify the valve stations not exceeding the maximum stations.

SUP/EXH block fitting spec.

Nil	Straight fitting With external pilot spec. X, PE port	
L	Elbow fitting (Upward) With external pilot spec. X, PE port	
B	Elbow fitting (Downward) With external pilot spec. X, PE port	

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

Pilot spec.

Nil	Internal pilot
S	Internal pilot / Built-in silencer
R	External pilot
RS	External pilot / Built-in silencer

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.
∗ For built-in silencers, the 3/5(E) ports are plugged.

SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)
M∗	Special specifications

∗ Specify the required specifications (including port sizes other than ø8) by means of the manifold specification sheet.

Valve stations

F: D-sub connector

Symbol	Stations	Note
02	2 stations	Up to 24 solenoids possible.
⋮	⋮	
24	24 stations	

P: Flat ribbon cable (26 pins)

Symbol	Stations	Note
02	2 stations	Up to 24 solenoids possible.
⋮	⋮	
24	24 stations	

PG: Flat ribbon cable (20 pins)

Symbol	Stations	Note
02	2 stations	Up to 18 solenoids possible.
⋮	⋮	
18	18 stations	

PH: Flat ribbon cable (10 pins)

Symbol	Stations	Note
02	2 stations	Up to 8 solenoids possible.
⋮	⋮	
08	8 stations	

J: PC wiring (20 pins)

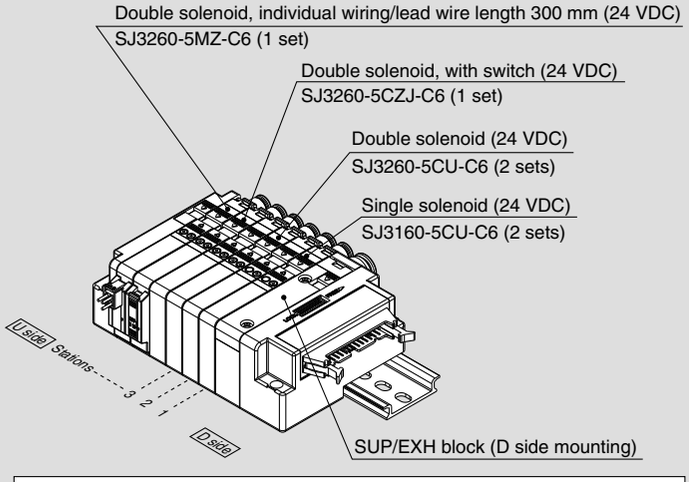
Symbol	Stations	Note
02	2 stations	Up to 16 solenoids possible.
⋮	⋮	
16	16 stations	

∗ The number of the blanking block assembly is also included. Since single and double wiring are available with the blanking block assembly, select a model compatible with the valve wiring spec. planned for the future. (Refer to page 61.)

∗ Refer to page 26 through to 33 for PCW type with power supply terminal.

How to Order Valve Manifold Assembly

Ordering example (SS5J3-60PD2-□)



SS5J3-60PD2-06D ····1 set (Manifold part no.)
∗ **SJ3160-5CU-C6 ·····2 sets (Single solenoid part no.)**
∗ **SJ3260-5CU-C6 ·····2 sets (Double solenoid part no.)**
∗ **SJ3260-5CZJ-C6 ·····1 set (Double solenoid, with switch part no.)**
∗ **SJ3260-5MZ-C6 ·····1 set (Double solenoid, individual wiring/lead wire length 300 mm part no.)**

The asterisk denotes the symbol for assembly. Prefix to the part no. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing. In the case of complex arrangement, specify them in the manifold specification sheet.

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How to Order Solenoid Valves

Standard SJ 3 1 60 □ □ □ – 5 C U □ – C6 – □

With switch SJ 3 1 60 □ □ – 5 C Z J □ – C6 – □

Individual wiring [For plug-in mixed mounting] Note 1) SJ 3 1 60 □ □ □ – 5 M Z □ – C6

Note) Refer to pages 52 and 53 for the dedicated non-plug-in individual wiring.

Series

2	SJ2000
3	SJ3000

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	Dual 3 port valve: N.C./N.C.
B	Dual 3 port valve: N.O./N.O.
C	Dual 3 port valve: N.C./N.O.

∗ Refer to pages 4 through to 7 for the JIS symbol.

Pilot spec.

Nil	Internal pilot
R	External pilot

∗ External pilot spec. is not applicable for 4 position dual 3 port valves.

Back pressure check valve

Nil	None
K	Built-in

∗ Back pressure check valve is not applicable for 3 position valve.

Coil spec.

Nil	Standard
T	With power saving circuit (Continuous duty type)

∗ Be sure to select “with power saving circuit” when the solenoid valve will be energized continuously for long period.

Rated voltage

5	24 VDC
6	12 VDC

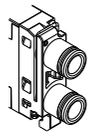
Single solenoid wiring spec.

Nil	Single wiring
D	Double wiring

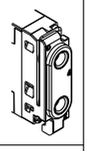
∗ There is no need to enter anything for 2 position double, 3 position and 4 position solenoid valves. Select this when the unused numbers to wiring are set. Refer to page 3 for details.

A, B port size

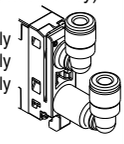
Straight
(Metric size)
C2: ø2 one-touch fitting
C4: ø4 one-touch fitting
C6: ø6 one-touch fitting (SJ3000 only)
(Inch size)
N1: ø1/8" one-touch fitting
N3: ø5/32" one-touch fitting
N7: ø1/4" one-touch fitting (SJ3000 only)



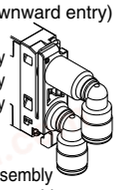
M3: M3 x 0.5 (SJ2000 only)
M5: M5 x 0.8 (SJ3000 only)



Elbow fitting assembly (Upward entry)
(Metric size)
L2: ø2 elbow fitting assembly
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
LN1: ø1/8" elbow fitting assembly
LN3: ø5/32" elbow fitting assembly
LN7: ø1/4" elbow fitting assembly (SJ3000 only)



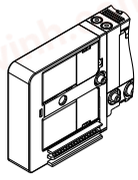
Elbow fitting assembly (Downward entry)
(Metric size)
B2: ø2 elbow fitting assembly
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
BN1: ø1/8" elbow fitting assembly
BN3: ø5/32" elbow fitting assembly
BN7: ø1/4" elbow fitting assembly (SJ3000 only)



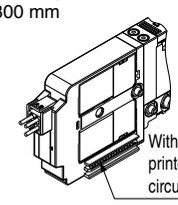
Note 2) The electrical connection to the manifold will be +COM. spec. when light/surge voltage suppressor is “Z” (Polar type).

Connector entry

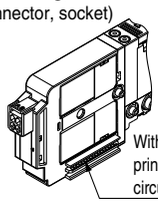
C: Dedicated for centralized wiring



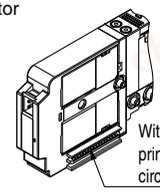
M: Individual wiring, With lead wire Length 300 mm



MN: Individual wiring, Without lead wire (With connector, socket)



MO: Individual wiring, Without connector



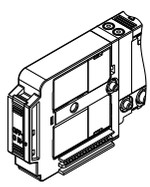
∗ Connector entries with the symbol “M□” can not use the switch signal from the common wiring on the manifold. For details, refer to “Connector Wiring Diagram” on page 3.
∗ When ordering a connector assembly separately, refer to back page 8.

Light/surge voltage suppressor

U	With light/surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Polar type)

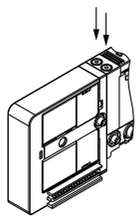
∗ When the types with power saving circuit, with switches, and individual wiring are used, the non-polar type cannot be selected.
∗ “Z” is +COM. spec.

With switch

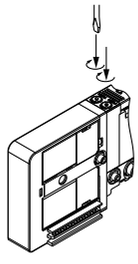


Manual override

Nil: Non-locking push type



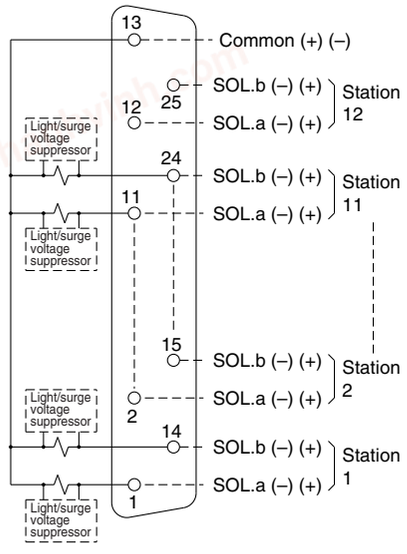
D: Push-turn locking slotted type



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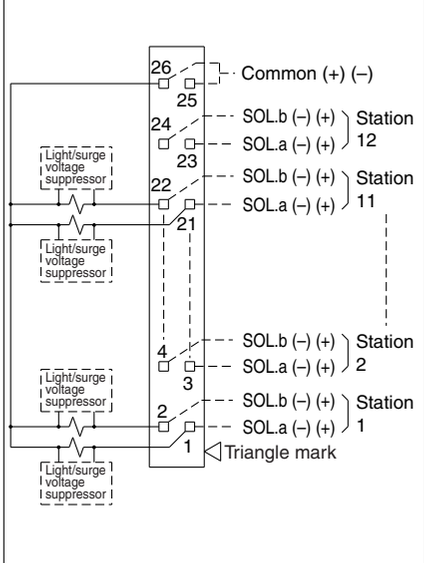
Manifold Electrical Wiring (Non-polar type)

Type 60F: D-sub connector (25 pins)



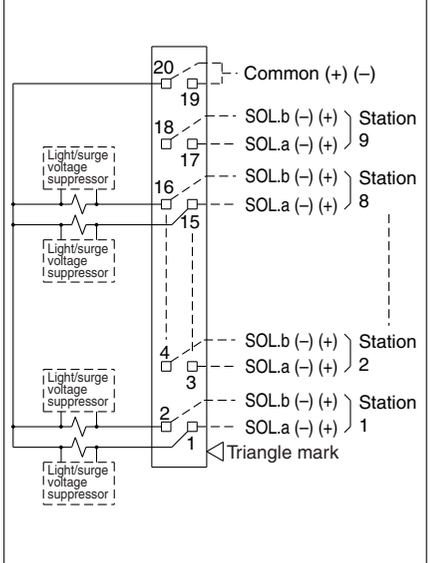
Note) This circuits are for the specifications with up to 12 stations of 2 position double, 3 position and 4 position dual 3 port valve. There should be wired in order 1→14→2→15 without skipping or leaving any connectors remaining.

Type 60P: Flat ribbon cable (26 pins)



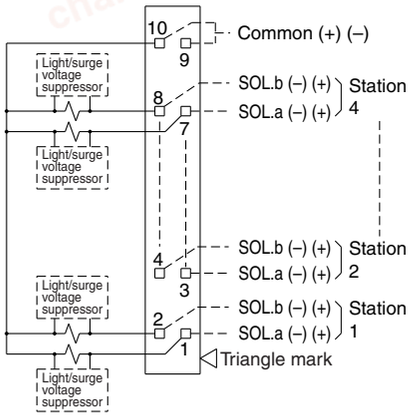
Note) This circuits are for the specifications with up to 12 stations of 2 position double, 3 position and 4 position dual 3 port valve. There should be wired in order 1→2→3→4 without skipping or leaving any connectors remaining.

Type 60PG: Flat ribbon cable (20 pins)



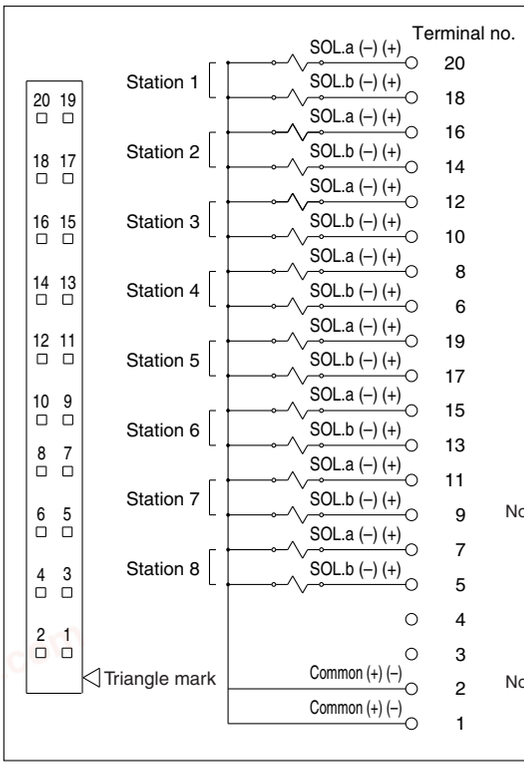
Note) This circuits are for the specifications with up to 9 stations of 2 position double, 3 position and 4 position dual 3 port valve. There should be wired in order 1→2→3→4 without skipping or leaving any connectors remaining.

Type 60PH: Flat ribbon cable (10 pins)



Note) This circuits are for the specifications with up to 4 stations of 2 position double, 3 position and 4 position dual 3 port valve. There should be wired in order 1→2→3→4 without skipping or leaving any connectors remaining.

Type 60J: Flat ribbon cable (20 pins, PC wiring)



Note 1) This circuits are for the specifications with up to 8 stations of 2 position double, 3 position and 4 position dual 3 port valve. There should be wired in order 20→18→16→14 without skipping or leaving any connectors remaining.

Note 2) For details on PC wiring system, refer to “PC Wiring System” catalog (CAT.ES02-20B).

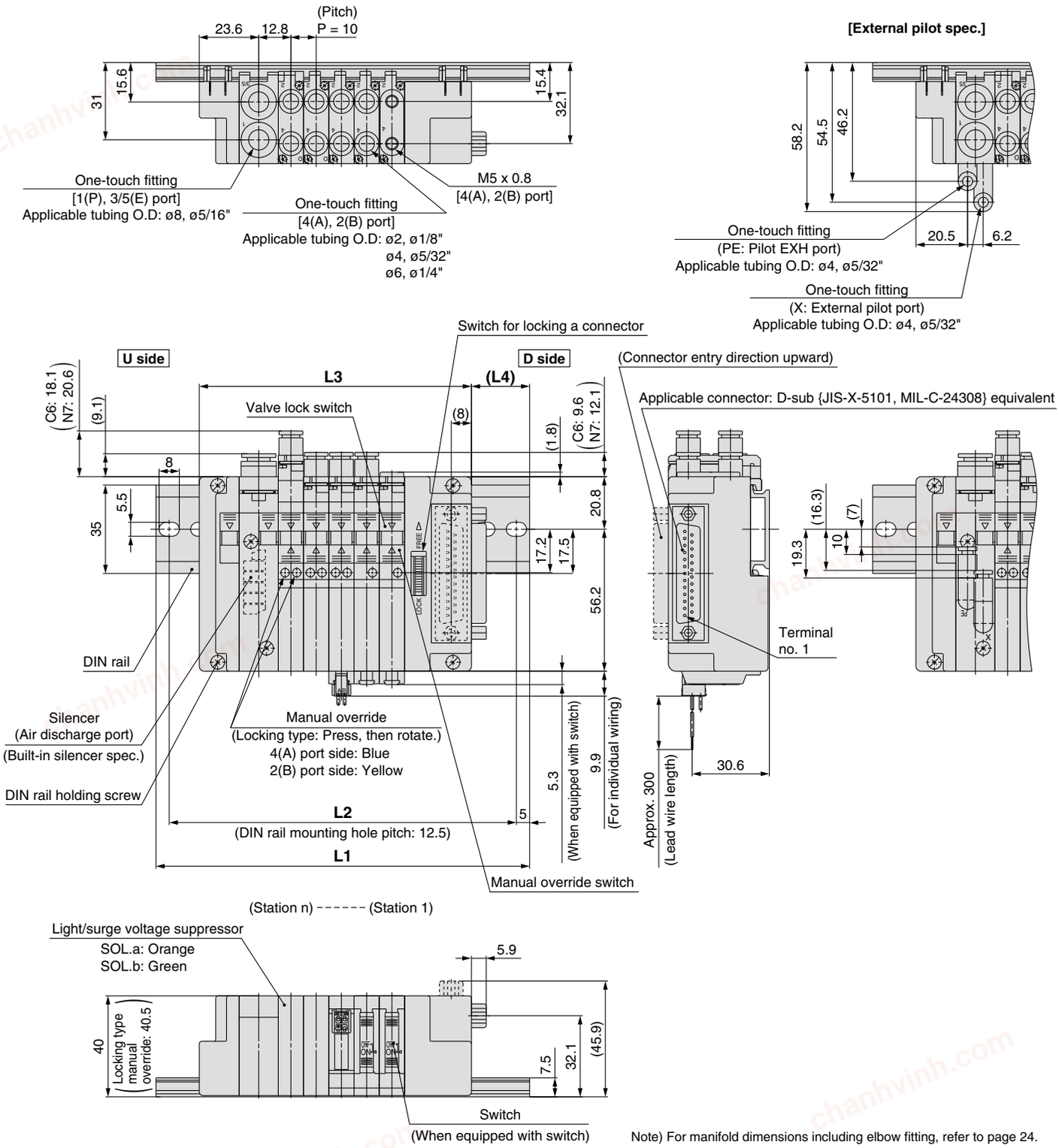
⚠Caution

When the non-polar U type valves are used, either negative COM or positive COM wiring of the manifold is possible. However, the valve does not switch with negative COM if a Z type is used. Be sure to use positive COM.

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Dimensions: SJ3000 for D-sub Connector

SS5J3-60FD$^{1}_{2}$-[Stations] U (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

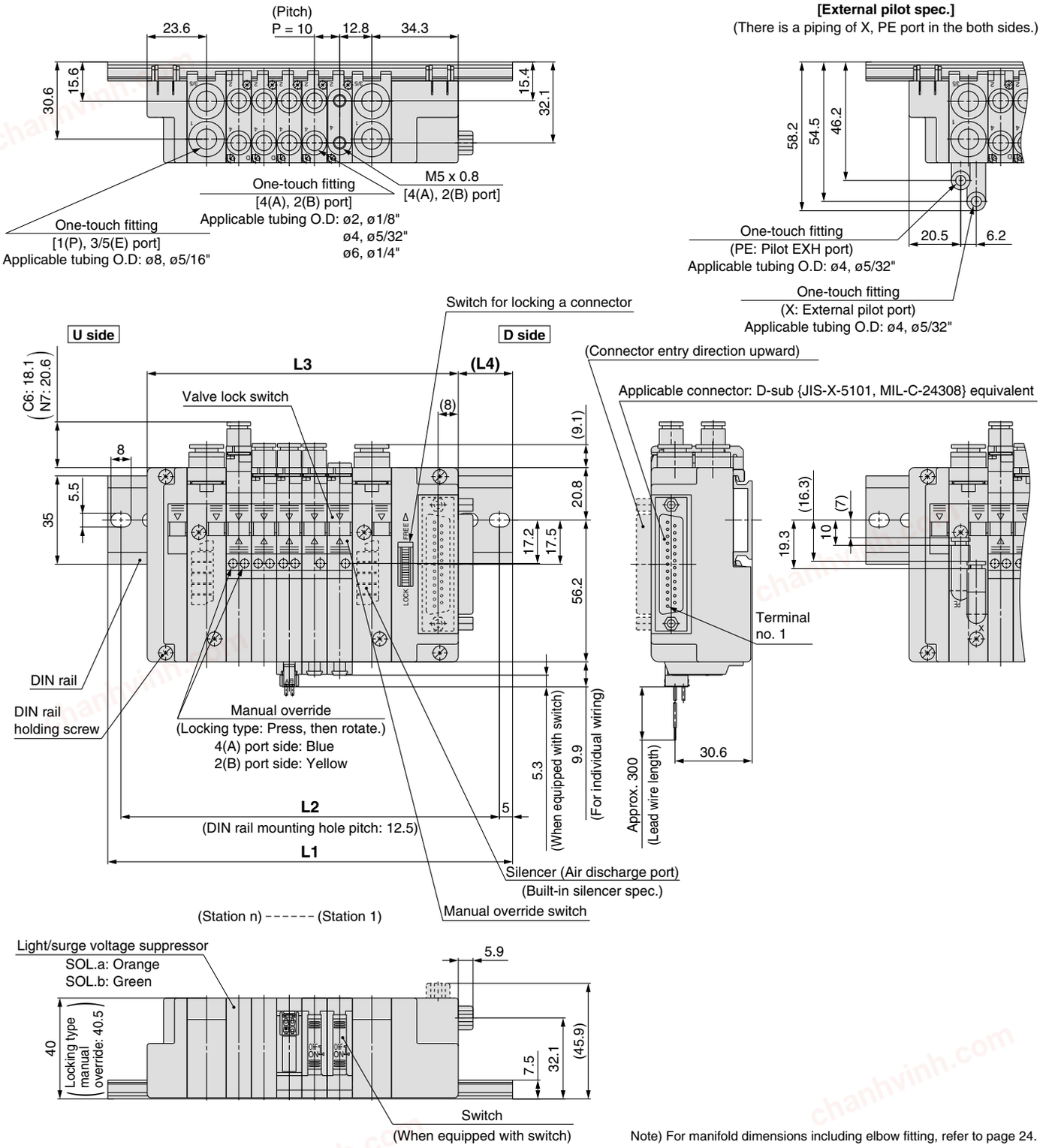
L: Dimensions n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	148	148	160.5	173	185.5	198
L2	100	112.5	125	137.5	137.5	150	162.5	175	187.5
L3	77.8	87.8	97.8	107.8	117.8	127.8	137.8	147.8	157.8
L4	19	20.5	21.5	22.5	17.5	18.5	20	21	22

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Dimensions: SJ3000 for D-sub Connector

SS5J3-60FD$^{1}_{2}$- Stations B (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

L: Dimensions

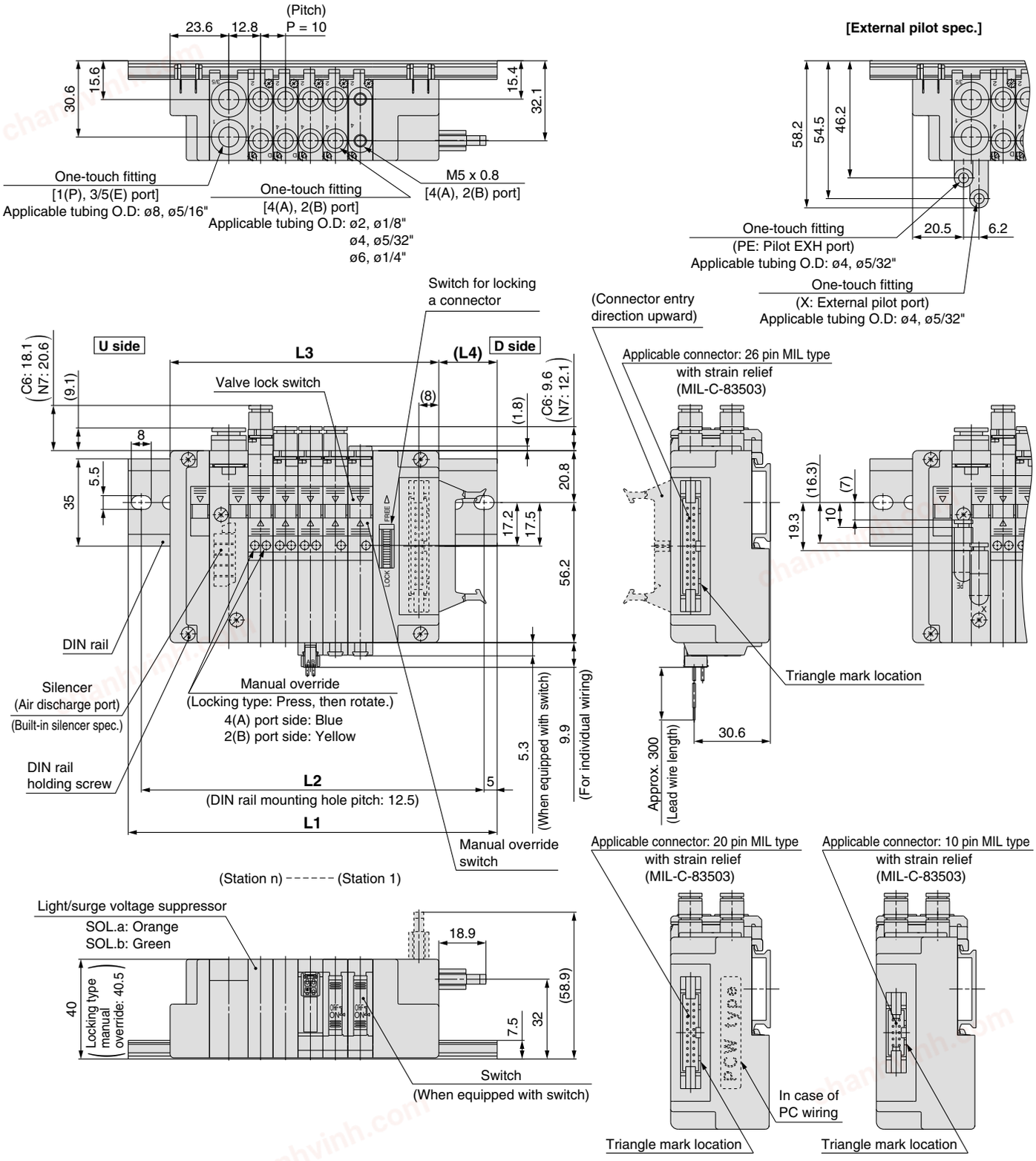
n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	123	135.5	148	160.5	173	185.5	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	298	310.5	323	335.5	348	348
L2	112.5	125	137.5	150	162.5	175	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	287.5	300	312.5	325	337.5	337.5
L3	93.3	103.3	113.3	123.3	133.3	143.3	153.3	163.3	173.3	183.3	193.3	203.3	213.3	223.3	233.3	243.3	253.3	263.3	273.3	283.3	293.3	303.3	313.3
L4	17.5	19	20	21	22	23.5	18.5	19.5	20.5	21.5	23	18	19	20	21	22.5	23.5	18.5	19.5	20.5	22	23	18

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Dimensions: SJ3000 for Flat Ribbon Cable / PC Wiring

SS5J3-60$^{P}_{J}$D$^{1}_{2}$- Stations U (S, R, RS)



L: Dimensions n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	148	160.5	160.5	173	185.5	198
L2	100	112.5	125	137.5	150	150	162.5	175	187.5
L3	77.8	87.8	97.8	107.8	117.8	127.8	137.8	147.8	157.8
L4	19.5	20.5	22	23	24	19	20	21.5	22.5

In case of 60$^{PG}_{J}$ (20 pins) **In case of 60PH (10 pins)**

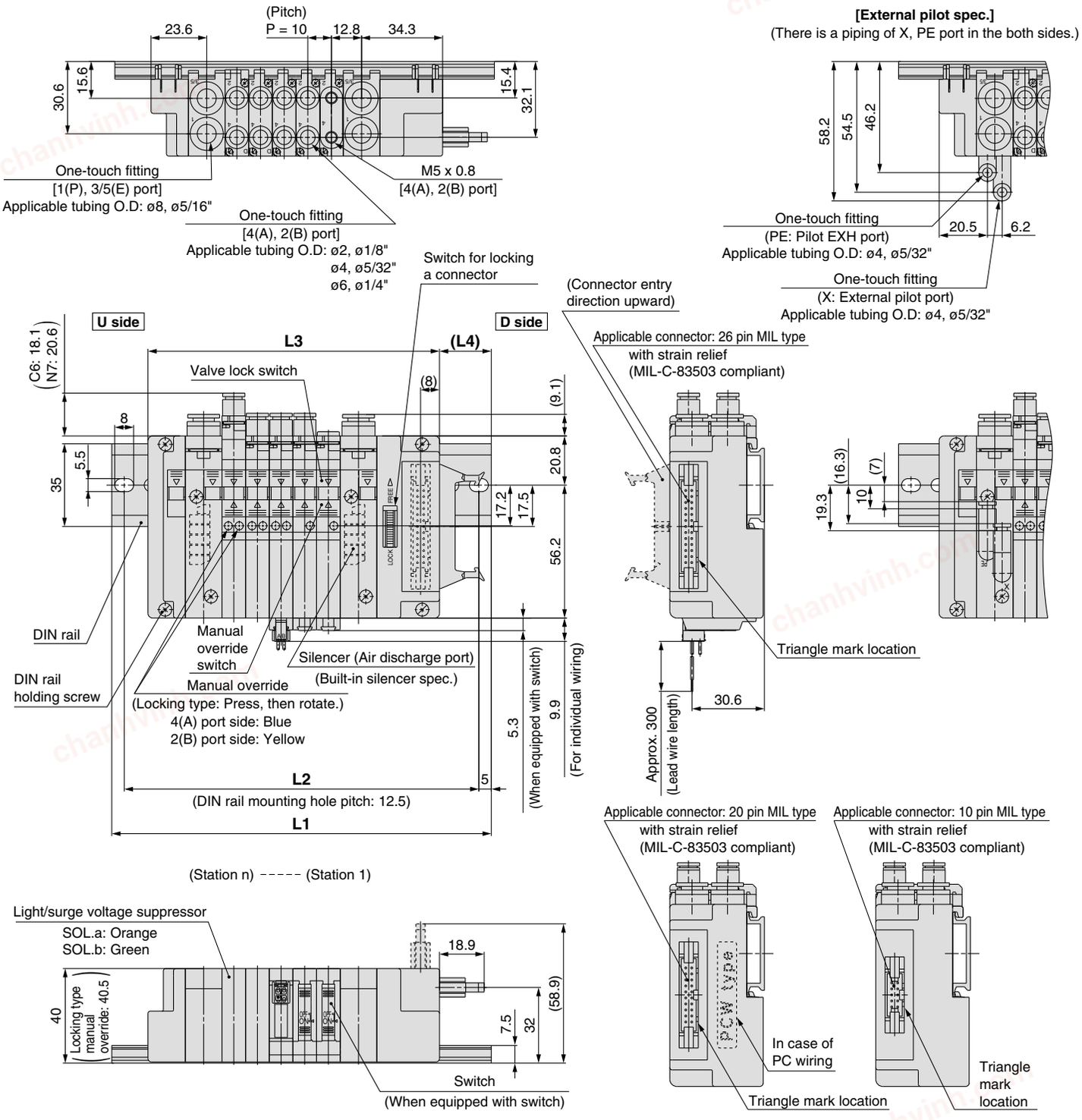
Note 1) Type 60PG, 60PH and 60J differ only in their connectors, and the L1 through L4 dimensions are the same as type 60P.

Note 2) For manifold dimensions including elbow fitting, refer to page 24.

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Dimensions: SJ3000 for Flat Ribbon Cable / PC Wiring

SS5J3-60$^{P}_{J}$D$^{1}_{2}$- Stations B (S, R, RS)



Note 1) Type 60PG, 60PH and 60J differ only in their connectors, and the L1 through L4 dimensions are the same as type 60P.
Note 2) For manifold dimensions including elbow fitting, refer to page 24.

L: Dimensions

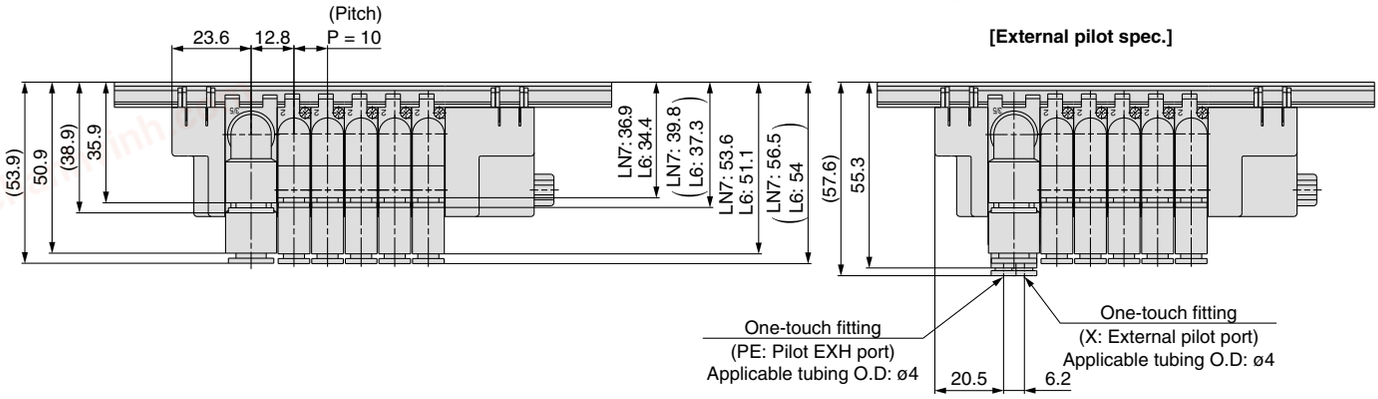
n: Stations

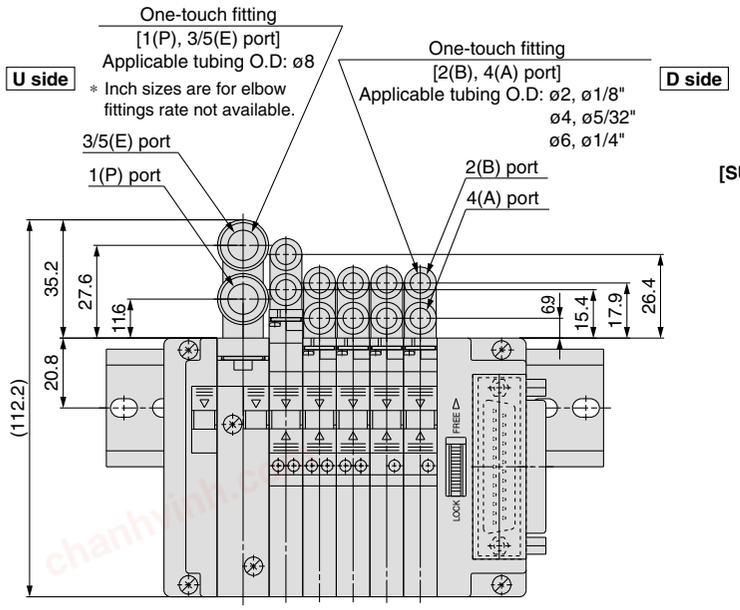
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	135.5	135.5	148	160.5	173	185.5	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	298	310.5	323	335.5	348	348
L2	125	125	137.5	150	162.5	175	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	287.5	300	312.5	325	337.5	337.5
L3	93.3	103.3	113.3	123.3	133.3	143.3	153.3	163.3	173.3	183.3	193.3	203.3	213.3	223.3	233.3	243.3	253.3	263.3	273.3	283.3	293.3	303.3	313.3
L4	24	19	20.5	21.5	22.5	23.5	18.5	20	21	22	23	24.5	19.5	20.5	21.5	22.5	24	19	20	21	22	23.5	18.5

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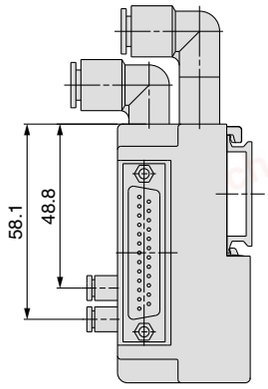
Dimensions: SJ3000 with Elbow Fittings

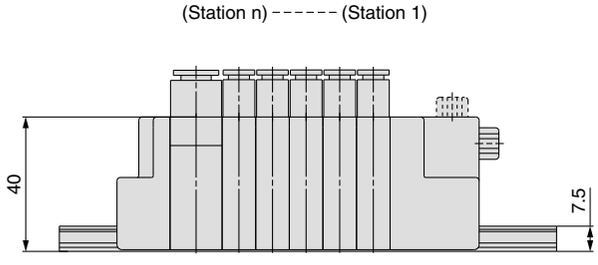
SS5J3-60FD$^{1}_{2}$- Stations U^{L}_{B}

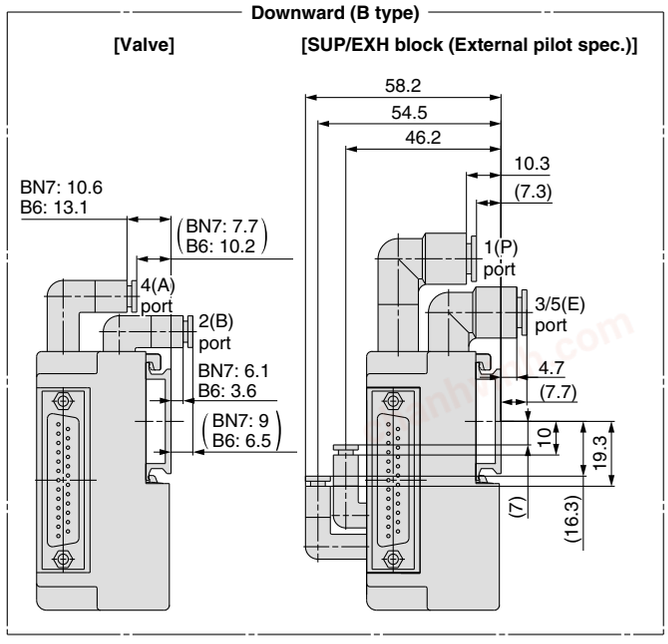




[SUP/EXH block (External pilot spec.)]







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Plug-in Connector Type
PC Wiring System with Power Supply Terminal
Series SJ2000/3000

How to Order

● **Connector type manifold**

SS5J 3 – □ 60 G D – 05 U □ □ □ □

Series

2	SJ2000
3	SJ3000 (SJ2000/3000 mixed)

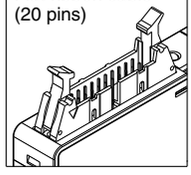
Mixed mounting type

Nil	Standard Note 1)
M	Mixed mounting Note 2)

Note 1) There is no need to enter anything when you operate either the SJ2000 or SJ3000 series alone.
Note 2) Enter "M" when the SJ2000 or SJ3000 series will be mounted on the same manifold base together.

Connector type

Flat ribbon cable (20 pins)



Connector mounting position

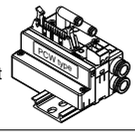
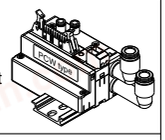
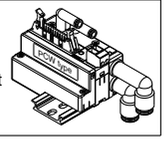
Symbol	Mounting position
D	D side

DIN rail length specified

Nil	Standard length	
3	3 stations	Specify a longer rail than the standard length.
⋮	⋮	
16	16 stations	

∗ Specify the valve stations not exceeding the maximum stations.

SUP/EXH block fitting spec.

Nil	Straight fitting With external pilot spec. X, PE port	
L	Elbow fitting (Upward) With external pilot spec. X, PE port	
B	Elbow fitting (Downward) With external pilot spec. X, PE port	

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

Pilot spec.

Nil	Internal pilot
S	Internal pilot / Built-in silencer
R	External pilot
RS	External pilot / Built-in silencer

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.
∗ For built-in silencers, the 3/5(E) ports are plugged.

SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)
M*	Special specifications

∗ Specify the required specifications (including port sizes other than ø8) by means of the manifold specification sheet.

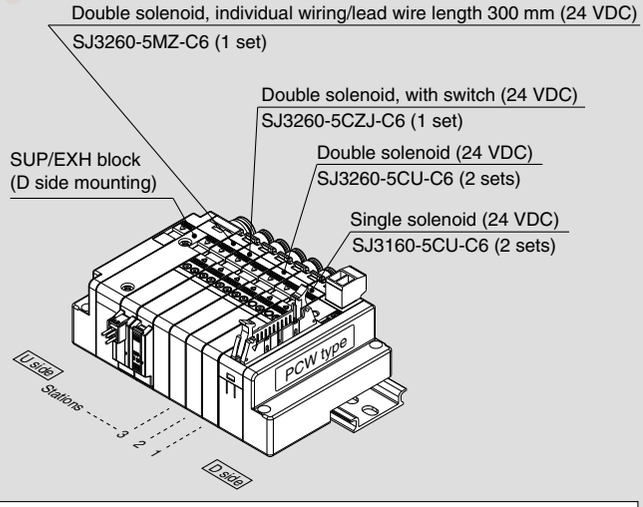
Valve stations

Symbol	Stations	Note
02	2 stations	Up to 16 solenoids possible.
⋮	⋮	
16	16 stations	

∗ The number of the blanking block assembly is also included. Since single and double wiring are available with the blanking block assembly, select a model compatible with the valve wiring spec. planned for the future. (Refer to page 61.)

How to Order Valve Manifold Assembly

Ordering example (SJ3000)



SS5J3-60GD-06U ·····**1 set (Manifold part no.)**
∗ **SJ3160-5CU-C6** ·····**2 sets (Single solenoid part no.)**
∗ **SJ3260-5CU-C6** ·····**2 sets (Double solenoid part no.)**
∗ **SJ3260-5CZJ-C6** ·····**1 set (Double solenoid, with switch part no.)**
∗ **SJ3260-5MZ-C6** ·····**1 set (Double solenoid, individual wiring/lead wire length 300 mm part no.)**

The asterisk denotes the symbol for assembly. Prefix to the part no. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing. In the case of complex arrangement, specify them in the manifold specification sheet.

For the wiring to power supply terminal, refer to back page 9.

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How to Order Solenoid Valves

Standard SJ 3 1 60 □ □ □ – 5 C U □ – C6 – □

With switch SJ 3 1 60 □ □ – 5 C Z J □ – C6 – □

Individual wiring [For plug-in mixed mounting] Note 1) SJ 3 1 60 □ □ □ – 5 M Z □ – C6

Note) Refer to pages 52 and 53 for the dedicated non-plug-in individual wiring.

Series

2	SJ2000
3	SJ3000

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	Dual 3 port valve: N.C./N.C.
B	Dual 3 port valve: N.O./N.O.
C	Dual 3 port valve: N.C./N.O.

∗ Refer to pages 4 through to 7 for the JIS symbol.

Pilot spec.

Nil	Internal pilot
R	External pilot

∗ External pilot spec. is not applicable for 4 position dual 3 port valves.

Back pressure check valve

Nil	None
K	Built-in

∗ Back pressure check valve is not applicable for 3 position valve.

Coil spec.

Nil	Standard
T	With power saving circuit (Continuous duty type)

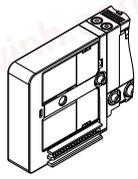
∗ Be sure to select "with power saving circuit" when the solenoid valve will be energized continuously for long period.

Rated voltage

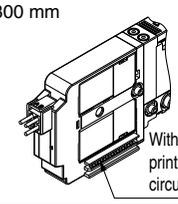
5	24 VDC

Connector entry

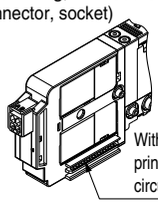
C: Dedicated for centralized wiring



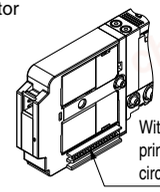
M: Individual wiring, With lead wire Length 300 mm



MN: Individual wiring, Without lead wire (With connector, socket)



MO: Individual wiring, Without connector



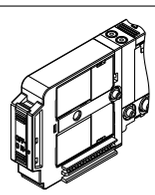
∗ Connector entries with the symbol "M□" can not use the switch signal from the common wiring on the manifold. For details, refer to "Connector Wiring Diagram" on page 3.
∗ When ordering a connector assembly separately, refer to back page 8.

Light/surge voltage suppressor

U	With light/surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Polar type)

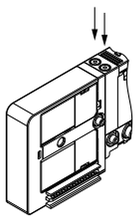
∗ When the types with power saving circuit, with switches, and/or individual wiring are used, the non-polar type cannot be selected.
∗ "Z" is +COM. spec.

With switch

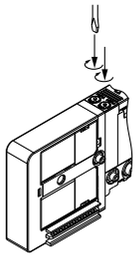


Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type



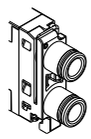
Single solenoid wiring spec.

Nil	Single wiring
D	Double wiring

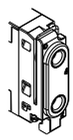
∗ There is no need to enter anything for 2 position double, 3 position and 4 position solenoid valves. Select this when the unused numbers to wiring are set. Refer to page 3 for details.

A, B port size

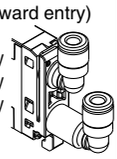
Straight
(Metric size)
C2: ø2 one-touch fitting
C4: ø4 one-touch fitting
C6: ø6 one-touch fitting (SJ3000 only)
(Inch size)
N1: ø1/8" one-touch fitting
N3: ø5/32" one-touch fitting
N7: ø1/4" one-touch fitting (SJ3000 only)



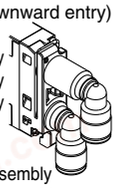
M3: M3 x 0.5 (SJ2000 only)
M5: M5 x 0.8 (SJ3000 only)



Elbow fitting assembly (Upward entry)
(Metric size)
L2: ø2 elbow fitting assembly
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
LN1: ø1/8" elbow fitting assembly
LN3: ø5/32" elbow fitting assembly
LN7: ø1/4" elbow fitting assembly (SJ3000 only)



Elbow fitting assembly (Downward entry)
(Metric size)
B2: ø2 elbow fitting assembly
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
BN1: ø1/8" elbow fitting assembly
BN3: ø5/32" elbow fitting assembly
BN7: ø1/4" elbow fitting assembly (SJ3000 only)

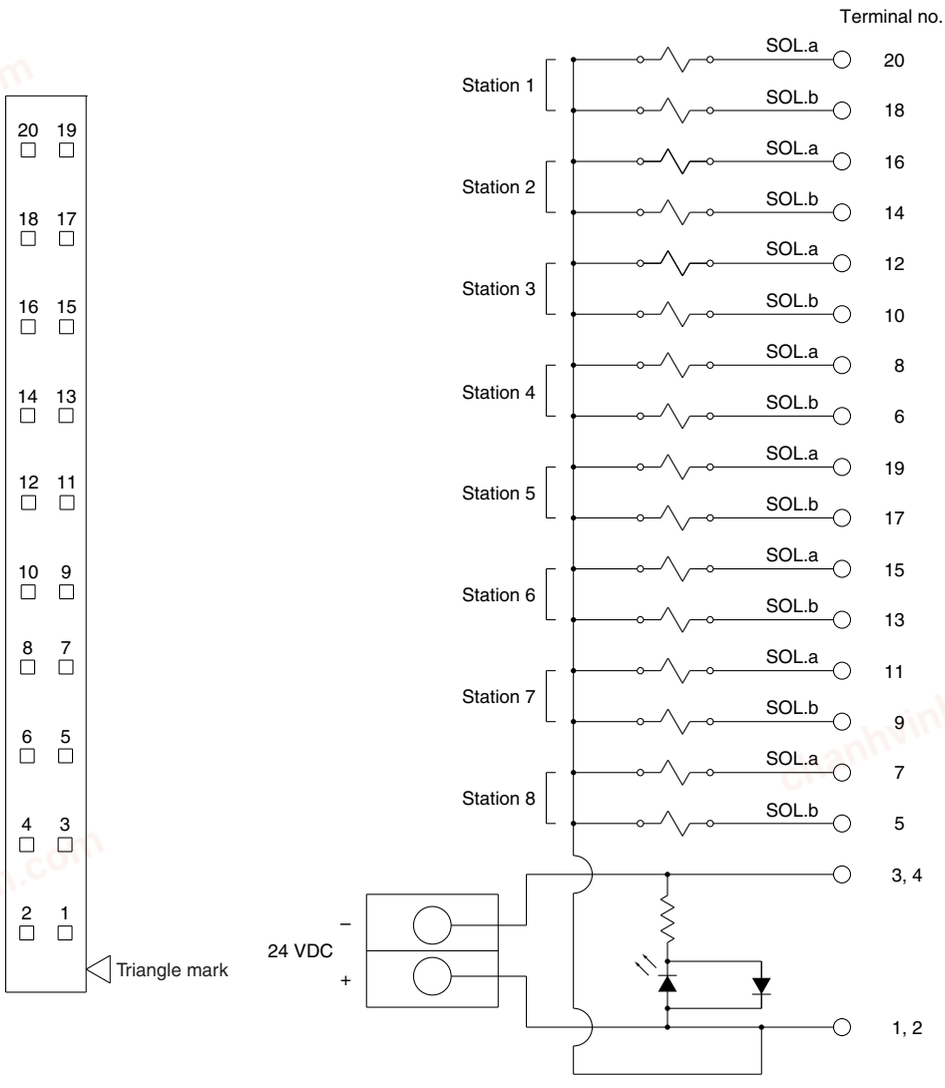


Note 2) The electrical connection to the manifold will be +COM. spec. when light/surge voltage suppressor is "Z" (Polar type).

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Manifold Electrical Wiring

Type 60G: Flat ribbon cable (20 pins, PC wiring with power supply terminal)

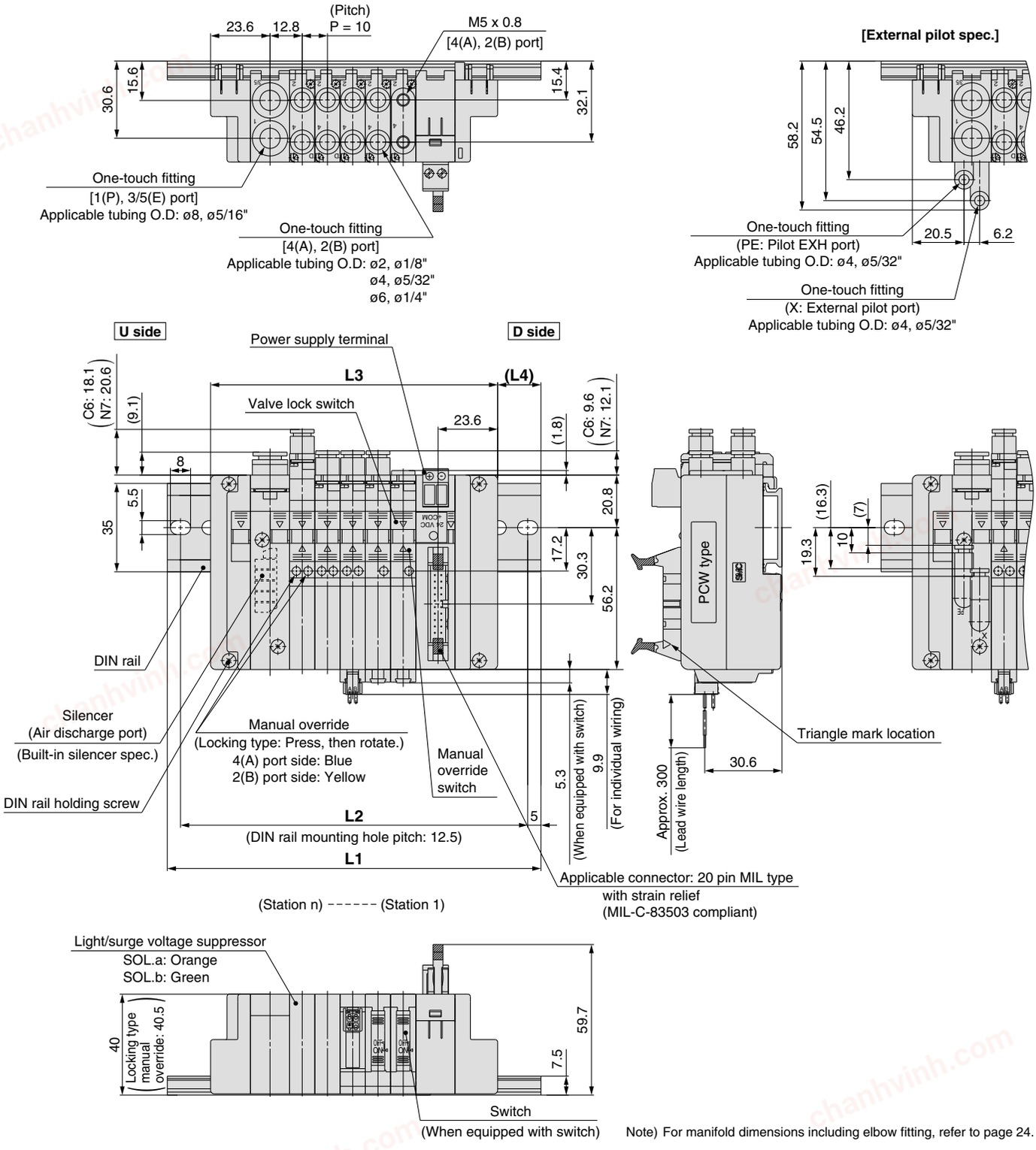


Note 1) This circuits are for the specifications with up to 8 stations of 2 position double, 3 position and 4 position dual 3 port valves. These should be wired in order 20→18→16→14 without skipping or leaving any connectors remaining.
Note 2) For details on PC wiring systems, refer to “PC Wiring System” catalog (CAT.ES02-20B).

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Dimensions

SS5J3-60GD- Stations U (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

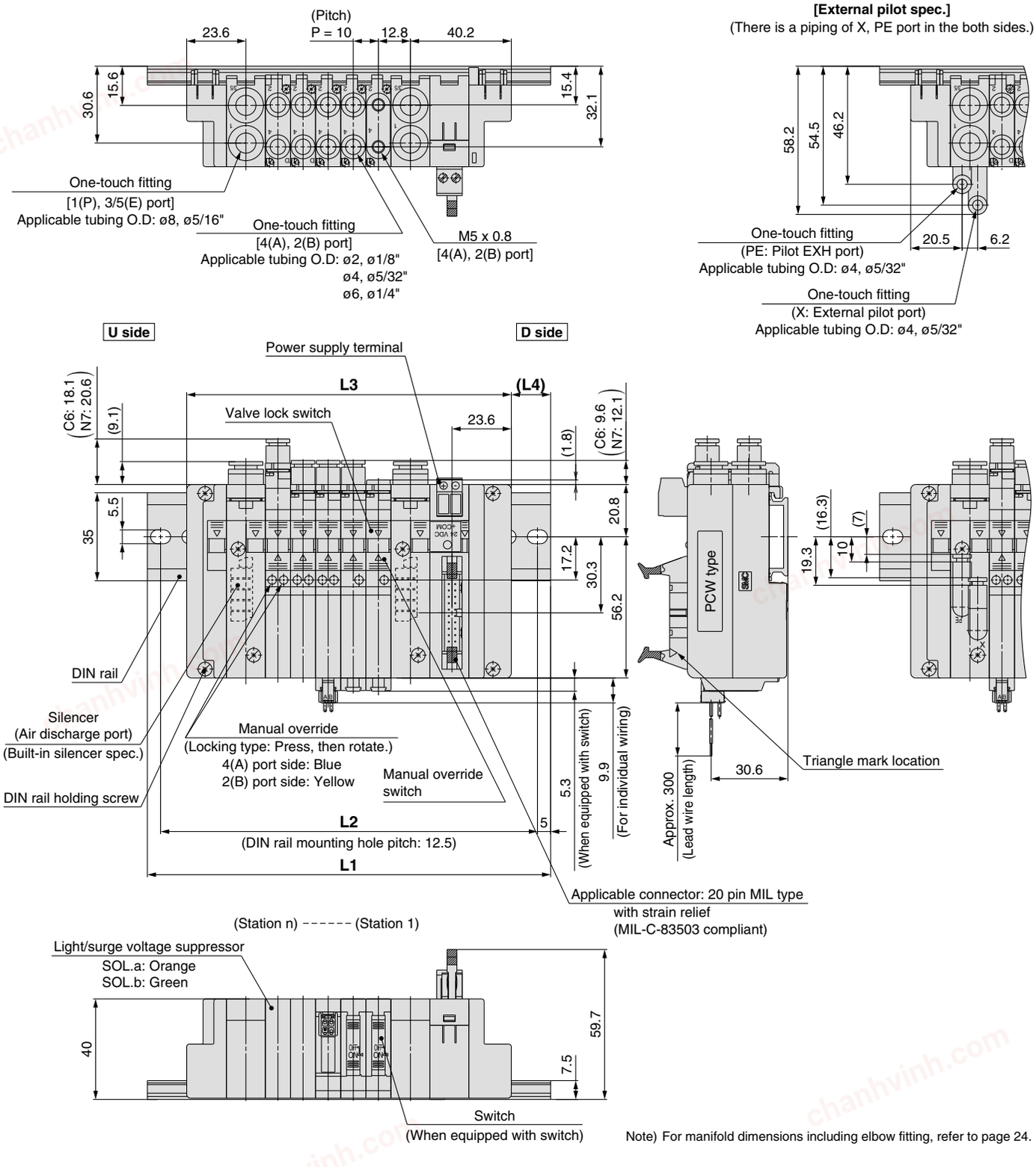
L: Dimensions n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	148	148	160.5	173	185.5	198
L2	100	112.5	125	137.5	137.5	150	162.5	175	187.5
L3	83.7	93.7	103.7	113.7	123.7	133.7	143.7	153.7	163.7
L4	13	14.5	15.5	16.5	11.5	12.5	14	15	16

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Dimensions

SS5J3-60GD-Stations B (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

L: Dimensions n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	123	135.5	148	160.5	173	185.5	185.5	198	210.5	223	235.5	235.5	248	260.5	273
L2	112.5	125	137.5	150	162.5	175	175	187.5	200	212.5	225	225	237.5	250	262.5
L3	99.2	109.2	119.2	129.2	139.2	149.2	159.2	169.2	179.2	189.2	199.2	209.2	219.2	229.2	239.2
L4	11.5	13	14	15	16.5	17.5	12.5	13.5	14.5	16	17	12	13	14	15.5

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Plug-in Connector Type
EX180 Serial Wiring

Type 60S□

Series SJ2000/3000

How to Order

SS5J 3 – □ 60S V □ – 05 U □ □ □

Series

2	SJ2000
3	SJ3000 (SJ2000/3000 mixed)

Mixed mounting type

Nil	Standard Note 1)
M	Mixed mounting Note 2)

Note 1) There is no need to enter anything when you operate either the SJ2000 or SJ3000 series alone.
Note 2) Enter "M" when the SJ2000 or SJ3000 series will be mounted on the same manifold base together.

Component module

0	Without SI unit
V	Mitsubishi Electric Corporation: CC-Link compliant (32 points)
Q	DeviceNet compliant (32 points)
Q1	DeviceNet compliant (16 points)

∗ Please contact SMC for a specification of the SI unit.

Communication connector spec.

Nil	T-branch type
A	Straight type

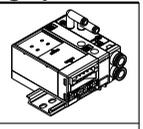
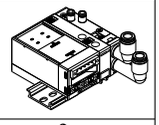
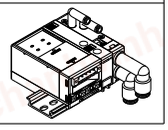
∗ Communication connector, power connector are shipped together with manifold. Power connector is available of straight type only.

DIN rail length specified

Nil	Standard length	
3	3 stations	Specify a longer rail than the standard length.
⋮	⋮	
32	32 stations	

∗ Specify the valve stations not exceeding the maximum stations.

SUP/EXH block fitting spec.

Nil	Straight fitting	
L	Elbow fitting (Upward)	
B	Elbow fitting (Downward)	

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

Pilot spec.

Nil	Internal pilot
S	Internal pilot / Built-in silencer
R	External pilot
RS	External pilot / Built-in silencer

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.
∗ For built-in silencers, the 3/5(E) ports are plugged.

SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 32 stations)
M∗	Special specifications

∗ Specify the required specifications (including port sizes other than ø8) by means of the manifold specification sheet.

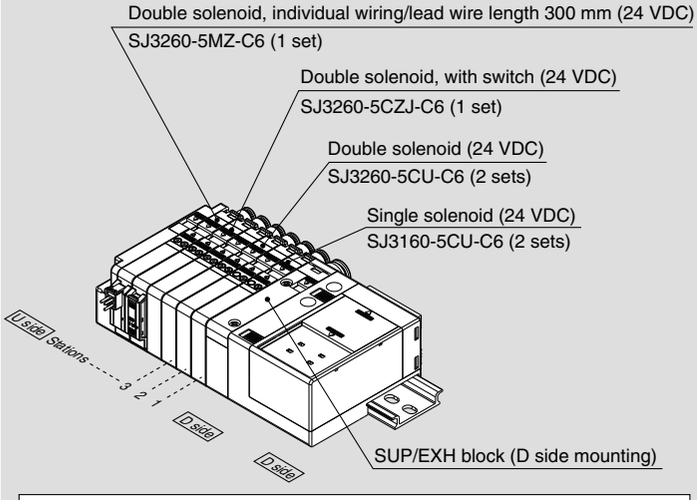
Valve stations

Symbol	Stations	Note
02	2 stations	Up to 32 solenoids possible.
⋮	⋮	
32	32 stations	

∗ The number of the blanking block assembly is also included. Since single and double wiring are available with the blanking block assembly, select a model compatible with the valve wiring spec. planned for the future. (Refer to page 61.)

How to Order Valve Manifold Assembly

Ordering example (SS5J3-60SV□-□)



SS5J3-60SV-06D ·····**1 set (Manifold part no.)**
∗ **SJ3160-5CU-C6** ·····**2 sets (Single solenoid part no.)**
∗ **SJ3260-5CU-C6** ·····**2 sets (Double solenoid part no.)**
∗ **SJ3260-5CZJ-C6** ·····**1 set (Double solenoid, with switch part no.)**
∗ **SJ3260-5MZ-C6** ·····**1 set (Double solenoid, individual wiring/lead wire length 300 mm part no.)**

The asterisk denotes the symbol for assembly. Prefix to the part no. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing. In the case of complex arrangement, specify them in the manifold specification sheet.

SI Unit Part No.

Symbol	Component module/Communication connector specifications	For SS5J□-60S
V	Mitsubishi Electric Corp. CC-LINK compliant (32 points), T-branch type	EX180-SMJ1
VA	Mitsubishi Electric Corp. CC-LINK compliant (32 points), Straight type	EX180-SMJ1A
Q	DeviceNet compliant (32 points), T-branch type	EX180-SDN1
QA	DeviceNet compliant (32 points), Straight type	EX180-SDN1A
Q1	DeviceNet compliant (16 points), T-branch type	EX180-SDN2
Q1A	DeviceNet compliant (16 points), Straight type	EX180-SDN2A

Item		Specifications
Power source for driving valve	Non-polar	24 VDC + 10%/–5%
	With energy saving circuit (Continuous duty)	24 VDC + 10%/0%

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How to Order Solenoid Valves

Standard SJ 3 1 60 ☐☐☐ – 5 C U ☐ – C6 – ☐

With switch SJ 3 1 60 ☐☐ – 5 C Z J ☐ – C6 – ☐

Individual wiring [For plug-in mixed mounting] Note 1) SJ 3 1 60 ☐☐☐ – 5 M Z ☐ – C6

Note) Refer to pages 52 and 53 for the dedicated non-plug-in individual wiring.

Series

2	SJ2000
3	SJ3000

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	Dual 3 port valve: N.C./N.C.
B	Dual 3 port valve: N.O./N.O.
C	Dual 3 port valve: N.C./N.O.

∗ Refer to pages 4 through to 7 for the JIS symbol.

Pilot spec.

Nil	Internal pilot
R	External pilot

∗ External pilot spec. is not applicable for 4 position dual 3 port valves.

Back pressure check valve

Nil	None
K	Built-in

∗ Back pressure check valve is not applicable for 3 position valve.

Coil spec.

Nil	Standard
T	With power saving circuit (Continuous duty type)

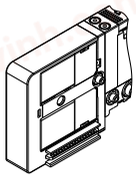
∗ Be sure to select "with power saving circuit" when the solenoid valve will be energized continuously for long period.

Rated voltage

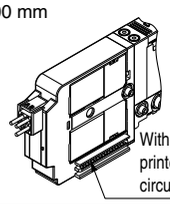
5	24 VDC

Connector entry

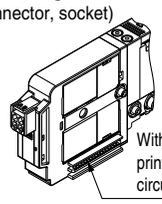
C: Dedicated for centralized wiring



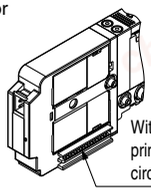
M: Individual wiring, With lead wire Length 300 mm



MN: Individual wiring, Without lead wire (With connector, socket)



MO: Individual wiring, Without connector



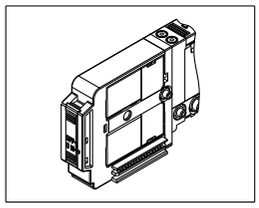
∗ Connector entries with the symbol "M☐" can not use the switch signal from the common wiring on the manifold. For details, refer to "Connector Wiring Diagram" on page 3.
∗ When ordering a connector assembly separately, refer to back page 8.

Light/surge voltage suppressor

U	With light/surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Polar type)

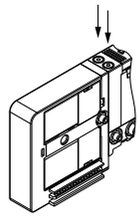
∗ When the types with power saving circuit, with switches, and/or individual wiring are used, the non-polar type cannot be selected.
∗ "Z" is +COM. spec.

With switch

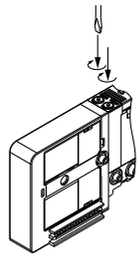


Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type



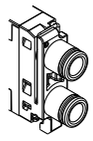
Single solenoid wiring spec.

Nil	Single wiring
D	Double wiring

∗ There is no need to enter anything for 2 position double, 3 position and 4 position solenoid valves. Select this when the unused numbers to wiring are set. Refer to page 3 for details.

A, B port size

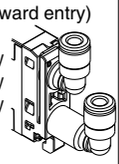
Straight
(Metric size)
C2: ø2 one-touch fitting
C4: ø4 one-touch fitting
C6: ø6 one-touch fitting (SJ3000 only)
(Inch size)
N1: ø1/8" one-touch fitting
N3: ø5/32" one-touch fitting
N7: ø1/4" one-touch fitting (SJ3000 only)



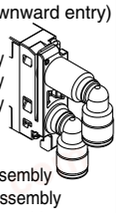
M3: M3 x 0.5 (SJ2000 only)
M5: M5 x 0.8 (SJ3000 only)



Elbow fitting assembly (Upward entry)
(Metric size)
L2: ø2 elbow fitting assembly
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
LN1: ø1/8" elbow fitting assembly
LN3: ø5/32" elbow fitting assembly
LN7: ø1/4" elbow fitting assembly (SJ3000 only)



Elbow fitting assembly (Downward entry)
(Metric size)
B2: ø2 elbow fitting assembly
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
BN1: ø1/8" elbow fitting assembly
BN3: ø5/32" elbow fitting assembly
BN7: ø1/4" elbow fitting assembly (SJ3000 only)

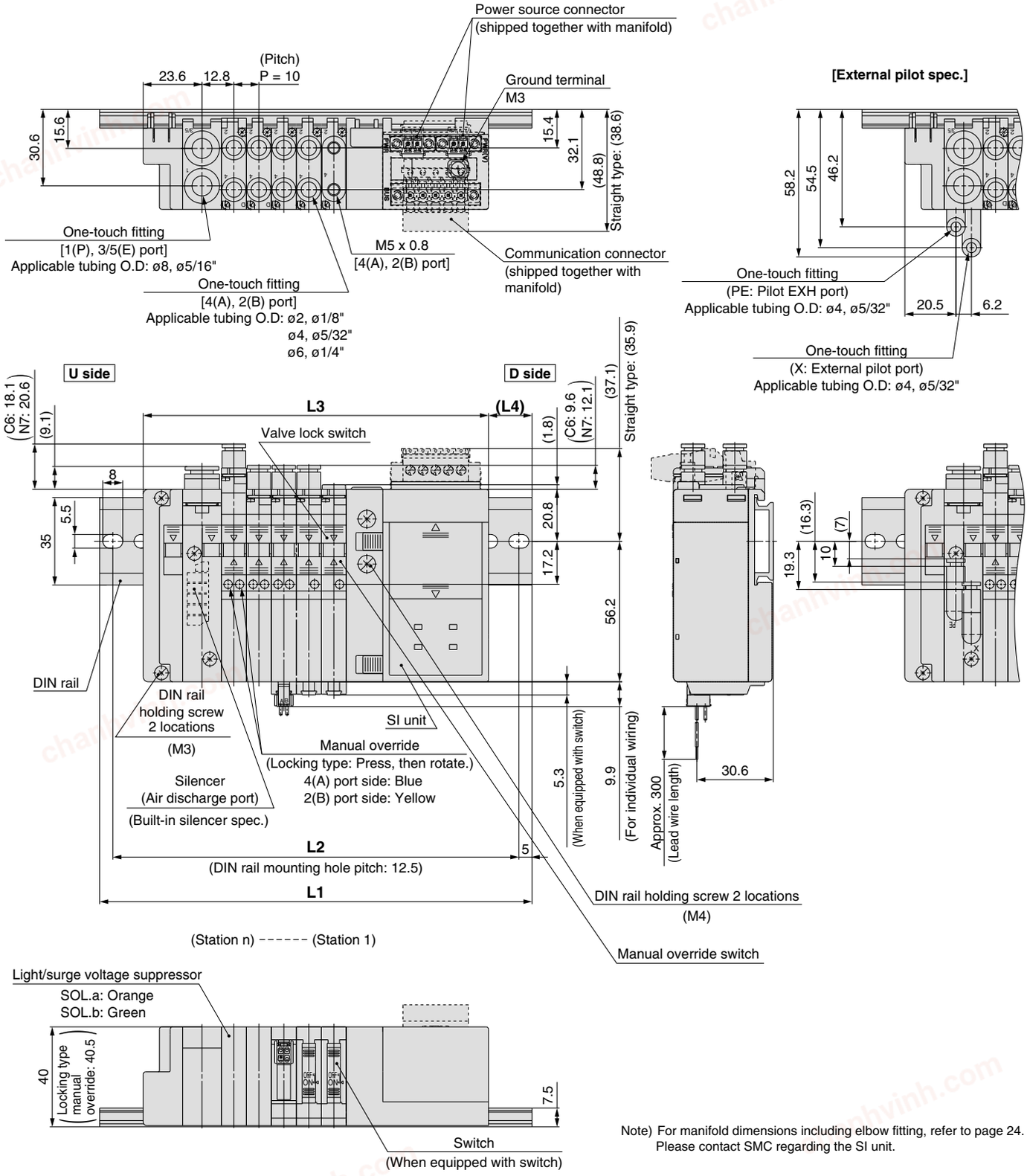


Note 2) The electrical connection to the manifold will be +COM. spec. when light/surge voltage suppressor is "Z" (Polar type).

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Dimensions: SJ3000 for EX180 Serial Wiring

SS5J3-60S□□-Stations U (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.
Please contact SMC regarding the SI unit.

L: Dimensions

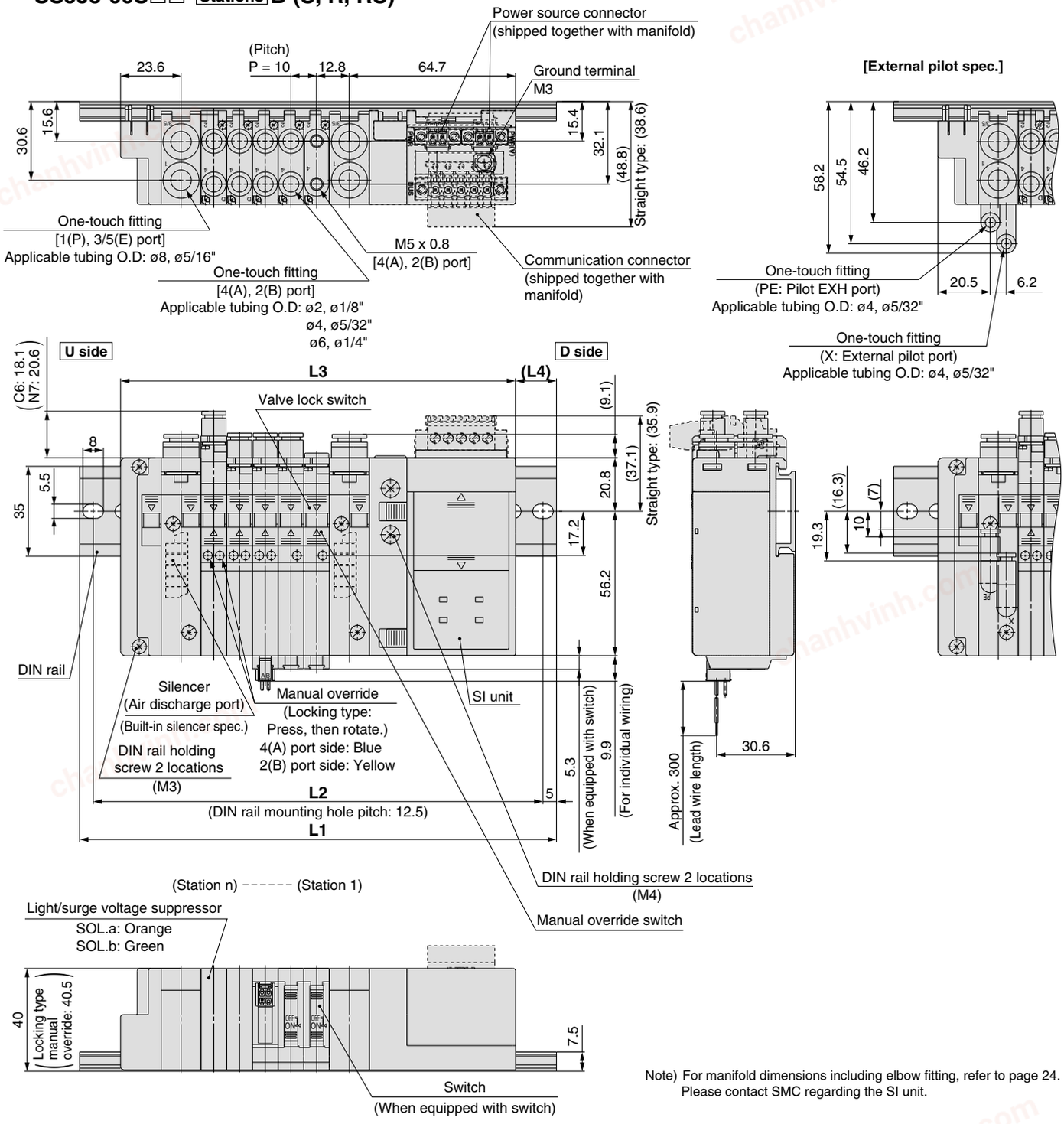
n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	173	173	185.5	198	210.5	223
L2	125	137.5	150	162.5	162.5	175	187.5	200	212.5
L3	108.2	118.2	128.2	138.2	148.2	158.2	168.2	178.2	188.2
L4	13.5	14.5	16	17	12	13	14	15.5	16.5

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Dimensions: SJ3000 for EX180 Serial Wiring

SS5J3-60S□□-Stations B (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.
Please contact SMC regarding the SI unit.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
L1	148	160.5	173	185.5	198	210.5	210.5	223	235.5	248	260.5	260.5	273	285.5	298	310.5
L2	137.5	150	162.5	175	187.5	200	200	212.5	225	237.5	250	250	262.5	275	287.5	300
L3	123.7	133.7	143.7	153.7	163.7	173.7	183.7	193.7	203.7	213.7	223.7	233.7	243.7	253.7	263.7	273.7
L4	12	13	14.5	15.5	16.5	17.5	12.5	14	15	16	17	12	13.5	14.5	15.5	16.5

L \ n	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
L1	310.5	323	335.5	348	360.5	373	373	385.5	398	410.5	423	423	435.5	448	460.5
L2	300	312.5	325	337.5	350	362.5	362.5	375	387.5	400	412.5	412.5	425	437.5	450
L3	283.7	293.7	303.7	313.7	323.7	333.7	343.7	353.7	363.7	373.7	383.7	393.7	403.7	413.7	423.7
L4	11.5	13	14	15	16	17.5	12.5	13.5	14.5	15.5	17	12	13	14	15

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Type 60S6B

Plug-in Connector Type
EX510 Gateway System
Serial Transmission System
Series SJ2000/3000

CE

How to Order Manifold

SS5J 3 – □ 60S6B □ D – 05 D □ □ □

Manifold series

2	SJ2000
3	SJ3000 (SJ2000/3000 mixed)

Mixed mounting type

Nil	Standard Note 1)
M	Mixed mounting Note 2)

Note 1) There is no need to enter anything when you operate either the SJ2000 or SJ3000 series alone.

Note 2) Enter "M" when the SJ2000 or SJ3000 series will be mounted on the same manifold base together.

SI unit COM. spec.

Nil	+COM.
N	–COM.

Unit mounting position

D	D side

Valve stations

Symbol	No. of stations	Note
02	2 stations	Up to 16 solenoids possible.
⋮	⋮	
16	16 stations	

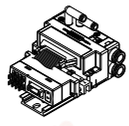
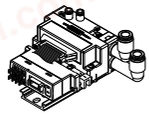
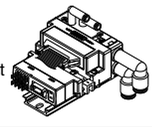
∗ The number of the blanking block assembly is also included. Since single and double wiring are available with the blanking block assembly, select a model compatible with the valve wiring spec. planned for the future.

DIN rail length specified

Nil	Standard length	
3	3 stations	Specify a longer rail than the standard length.
⋮	⋮	
16	16 stations	

∗ Specify the valve stations not exceeding the maximum stations.

SUP/EXH block fitting spec.

Nil	Straight fitting With external pilot spec. X, PE port	
L	Elbow fitting (Upward) With external pilot spec. X, PE port	
B	Elbow fitting (Downward) With external pilot spec. X, PE port	

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

Pilot spec.

Nil	Internal pilot
S	Internal pilot / Built-in silencer
R	External pilot
RS	External pilot / Built-in silencer

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

∗ For built-in silencers, the 3/5(E) ports are plugged.

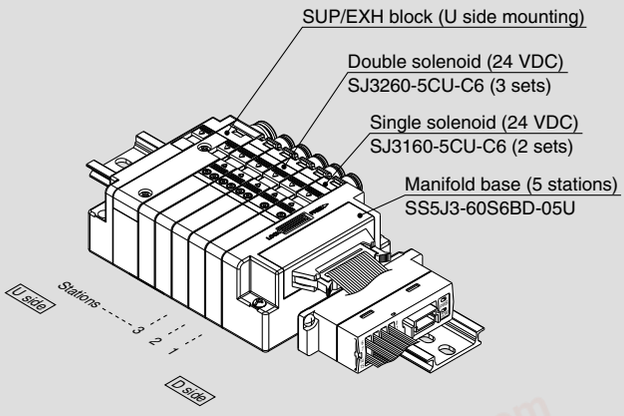
SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)
M*	Special specifications

∗ Specify the required specifications (including port sizes other than ø8) by means of the manifold specification sheet.

How to Order Valve Manifold Assembly

Ordering example (SS5J3-60S6BD-□)



SS5J3-60S6BD-05U ····· **1 set (Type 60S6B, 5 station manifold base part no.)**
∗ **SJ3160-5CU-C6** ····· **2 sets (Single solenoid part no.)**
∗ **SJ3260-5CU-C6** ····· **3 sets (Double solenoid part no.)**

The asterisk denotes the symbol for assembly. Prefix to the part no. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing. In the case of complex arrangement, specify them in the manifold specification sheet.

For details on "Gateway System Serial Transmission System Series EX510," refer to CAT.E02-22B catalog.

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How to Order Solenoid Valves

Standard SJ 3 1 60 ☐☐☐ – 5 C U ☐☐ – C6 – ☐

With switch SJ 3 1 60 ☐☐ – 5 C Z J ☐☐ – C6 – ☐

Individual wiring [For plug-in mixed mounting] Note 1) SJ 3 1 60 ☐☐☐ – 5 M Z ☐☐ – C6

Note) Refer to pages 52 and 53 for the dedicated non-plug-in individual wiring.

Series

2	SJ2000
3	SJ3000

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	Dual 3 port valve: N.C./N.C.
B	Dual 3 port valve: N.O./N.O.
C	Dual 3 port valve: N.C./N.O.

∗ Refer to pages 4 through to 7 for the JIS symbol.

Pilot spec.

Nil	Internal pilot
R	External pilot

∗ External pilot spec. is not applicable for 4 position dual 3 port valves.

Back pressure check valve

Nil	None
K	Built-in

∗ Back pressure check valve is not applicable for 3 position valve.

Coil spec.

Nil	Standard
T	With power saving circuit (Continuous duty type)

∗ Be sure to select "with power saving circuit" when the solenoid valve will be energized continuously for long period.

Rated voltage

5	24 VDC

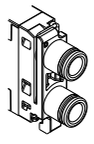
Single solenoid wiring spec.

Nil	Single wiring
D	Double wiring

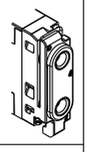
∗ There is no need to enter anything for 2 position double, 3 position and 4 position solenoid valves. Select this when the unused numbers to wiring are set. Refer to page 3 for details.

A, B port size

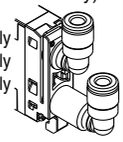
Straight
(Metric size)
C2: ø2 one-touch fitting
C4: ø4 one-touch fitting
C6: ø6 one-touch fitting (SJ3000 only)
(Inch size)
N1: ø1/8" one-touch fitting
N3: ø5/32" one-touch fitting
N7: ø1/4" one-touch fitting (SJ3000 only)



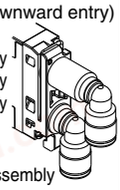
M3: M3 x 0.5 (SJ2000 only)
M5: M5 x 0.8 (SJ3000 only)



Elbow fitting assembly (Upward entry)
(Metric size)
L2: ø2 elbow fitting assembly
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
LN1: ø1/8" elbow fitting assembly
LN3: ø5/32" elbow fitting assembly
LN7: ø1/4" elbow fitting assembly (SJ3000 only)



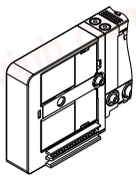
Elbow fitting assembly (Downward entry)
(Metric size)
B2: ø2 elbow fitting assembly
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
BN1: ø1/8" elbow fitting assembly
BN3: ø5/32" elbow fitting assembly
BN7: ø1/4" elbow fitting assembly (SJ3000 only)



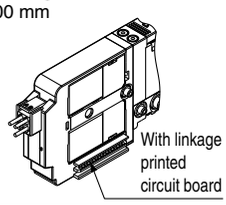
Note 2) The electrical connection to the manifold will be +COM. spec. when light/surge voltage suppressor is "Z" (Polar type).

Connector entry

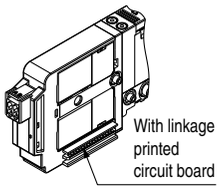
C: Dedicated for centralized wiring



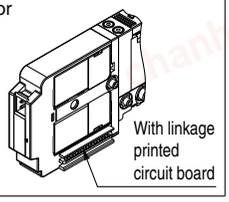
M: Individual wiring, With lead wire Length 300 mm



MN: Individual wiring, Without lead wire



MO: Individual wiring, Without connector



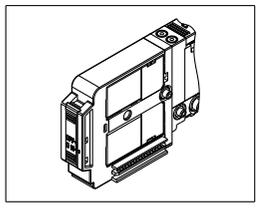
∗ Connector entries with the symbol "M☐" can not use the switch signal from the common wiring on the manifold. For details, refer to "Connector Wiring Diagram" on page 3.
∗ When ordering a connector assembly separately, refer to back page 8.

Light/surge voltage suppressor

U	With light/surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Polar type)

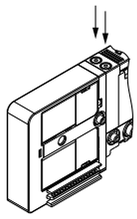
∗ When the types with power saving circuit, with switches, and individual wiring are used, the non-polar type cannot be selected.
∗ "Z" is +COM. spec.
∗ When –COM of SI unit common specifications is used, select the non-polar type.

With switch

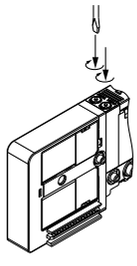


Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type

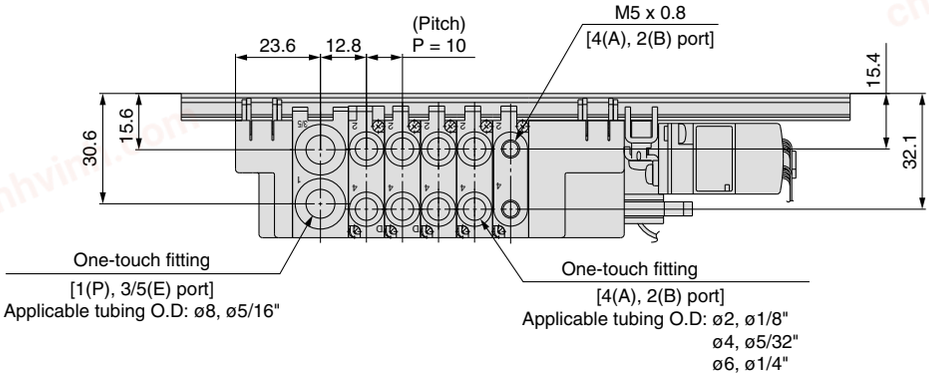


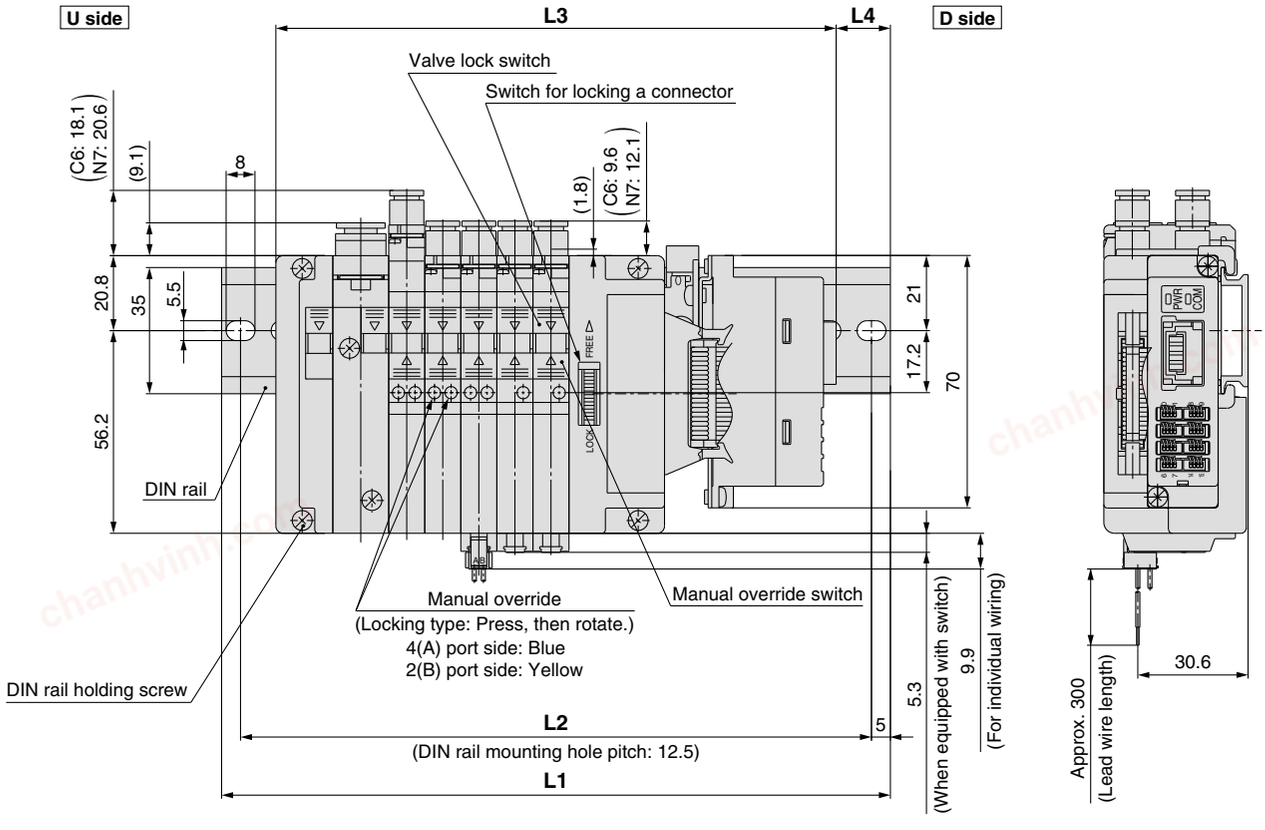
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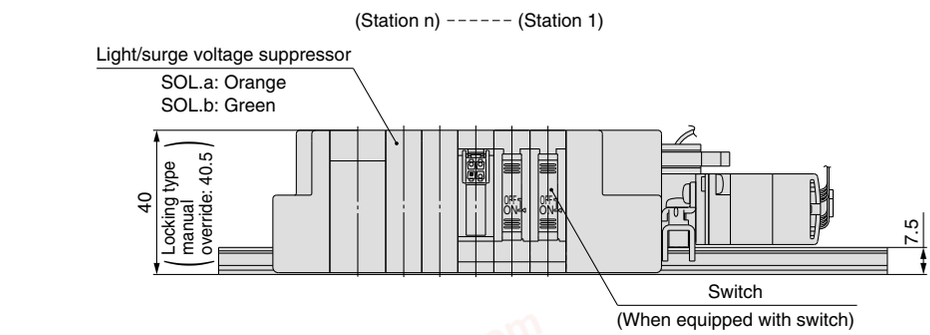
Series SJ2000/3000

Dimensions

SS5J3-60S6B□D-Stations U-□







Note) Refer to page 38 for external pilot spec. and page 24 for elbow fitting manifold dimensions.
Please contact SMC regarding the SI unit.

L: Dimensions

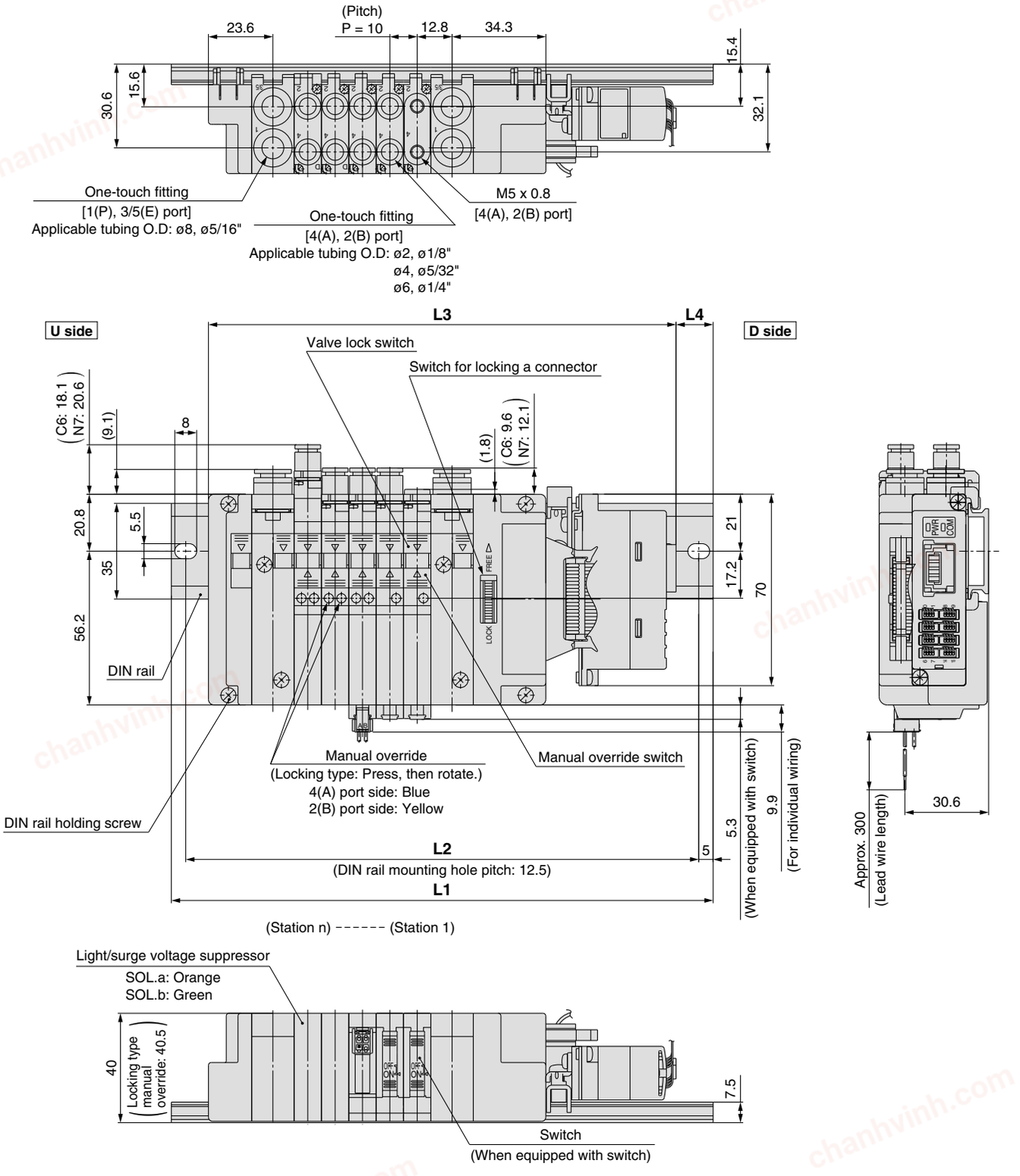
n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	160.5	160.5	173	185.5	198	210.5	210.5	223	235.5
L2	150	150	162.5	175	187.5	200	200	212.5	225
L3	125.4	135.4	145.4	155.4	165.4	175.4	185.4	195.4	205.4
L4	17.5	12.5	14	15	16.5	17.5	12.5	14	15

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Dimensions

SS5J3-60S6B□D-Stations B-□



Note) Refer to page 39 for external pilot spec. and page 24 for elbow fitting manifold dimensions.
Please contact SMC regarding the SI unit.

L: Dimensions

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	173	185.5	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	298	310.5
L2	162.5	175	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	287.5	300
L3	140.9	150.9	160.9	170.9	180.9	190.9	200.9	210.9	220.9	230.9	240.9	250.9	260.9	260.9	280.9
L4	16	17.5	12.5	13.5	15	16	17.5	18.5	13.5	15	16	17.5	18.5	18.5	15

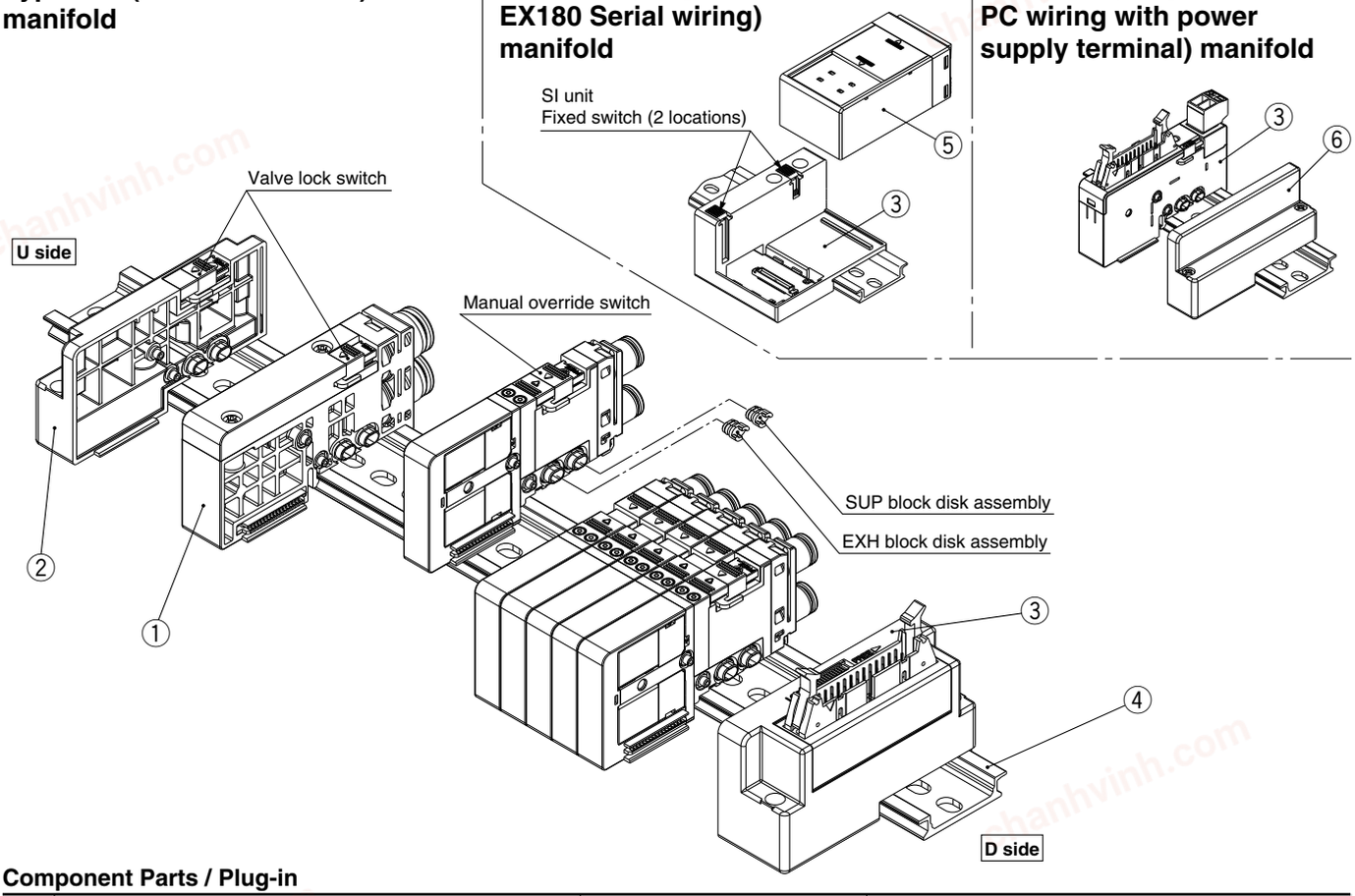
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Manifold Exploded View

Type 60P (Flat ribbon cable) manifold

Type 60S (Plug-in, EX180 Serial wiring) manifold

Type 60G (Plug-in, PC wiring with power supply terminal) manifold



Component Parts / Plug-in

No.	Description		Part no.	Note
1	SUP/EXH block assembly	**Internal pilot**	**SJ3000-50-1A-□□**	(Metric size) C6: With ø6 one-touch fitting (straight) C8: With ø8 one-touch fitting (straight) L6: With ø6 one-touch fitting (elbow upward entry) L8: With ø8 one-touch fitting (elbow upward entry) B6: With ø6 one-touch fitting (elbow downward entry) B8: With ø8 one-touch fitting (elbow downward entry) (Inch size) N7: With 1/4" one-touch fitting (straight) N9: With 5/16" one-touch fitting (straight)
		Internal pilot / Built-in silencer	**SJ3000-50-1AS-□□**	
		External pilot	**SJ3000-50-1AR-□□** (X, PE port: Metric size ø4 Inch size ø5/32")	
		External pilot / Built-in silencer	**SJ3000-50-1ARS-□□** (X port: Metric size ø4 Inch size ø5/32")	
		For different pressures, internal pilot Note 1)	**SJ3000-50-3A-□□**	
		For different pressures Note 1) **Internal pilot / Built-in silencer**	**SJ3000-50-3AS-□□**	
2	**End block assembly**		**SJ3000-53-1A**	For U side
3	**Connector block assembly**		**SJ3000-42-□A-□** **SJ3000-76-2A-□**	Refer to the connector block assembly part no. shown below.
4	**DIN rail**		**VZ1000-11-1-□**	Refer to page 61.
5	**SI unit**		**EX180-□□**	Refer to the SI unit part numbers on page 34.
6	**End block assembly**		**SJ3000-53-2A**	For D side

Note 1) The valves cannot be operated only with the SUP/EXH block assembly for different pressure, select them in combination with the SUP/EXH block assembly for internal/external pilot.

Note 2) Refer to page 60 about the SUP/EXH block disk assembly and method of handling of parts at different pressures.

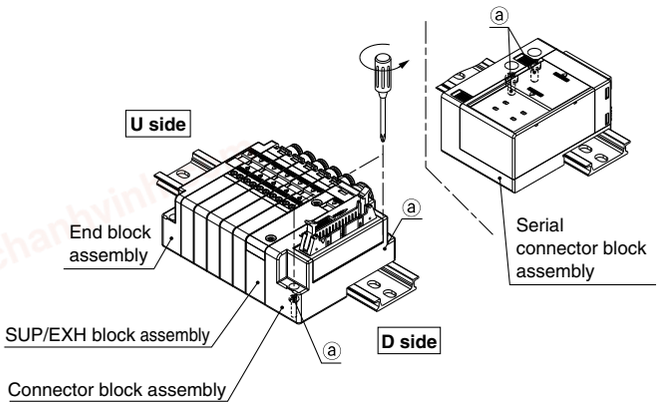
Connector Block Assembly Part No.

Connector specifications	Mounting position	Part no.	Note
For D-sub connector	D side	**SJ3000-42-1A-□**	□: 1 (Connector upward) □: 2 (Connector lateral)
For flat ribbon cable 26 pins		**SJ3000-42-2A-□**	
For flat ribbon cable 20 pins		**SJ3000-42-3A-□**	
For flat ribbon cable 10 pins		**SJ3000-42-4A-□**	
For PC wiring 20 pins		**SJ3000-42-6A-□**	
For EX180 serial wiring Note)		**SJ3000-42-5A**	
For PC wiring 20 pins with power supply terminal		**SJ3000-76-2A-05**	

Note) SI unit is not included.

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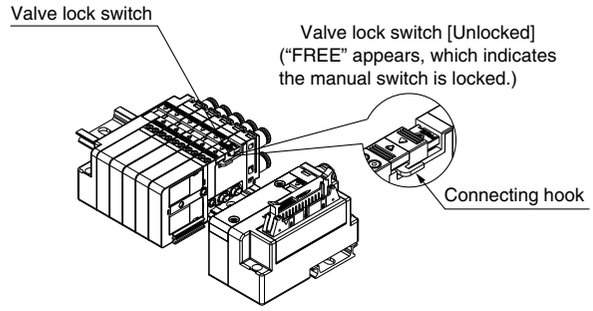
How to Add Manifold Stations



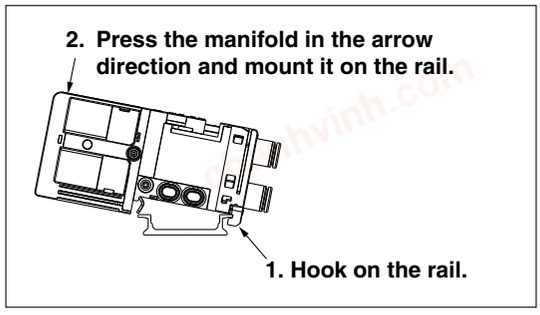
1 **Loosen threads ⓐ, which are fixed onto the DIN rail (two locations on one side).**

2 **In the direction of the coil, slide the valve where the station is desired to add and the valve lock switch on each block.**

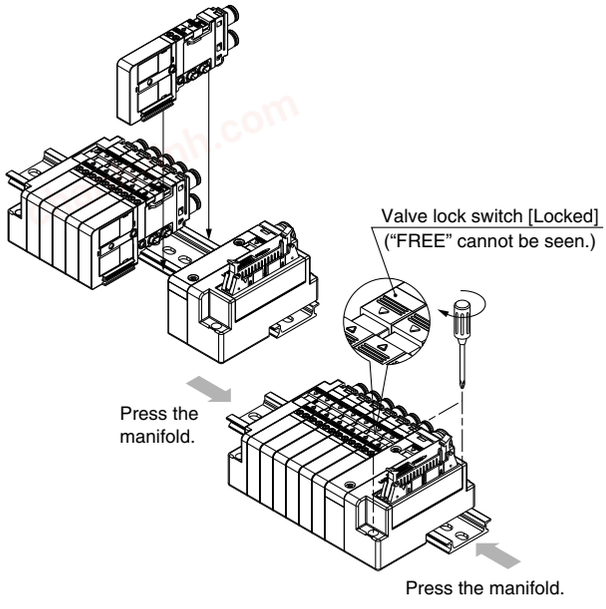
If blocks are removed without completely releasing the valve lock switch, the connection hook of that switch could be damaged or deformed.



3 **Install an additional valve or an SUP/EXH assembly on the DIN rail.**



A manifold equipped with a valve or a block assembly can be mounted on the DIN rail. However, a serial connector block assembly cannot be mounted on the DIN rail when it is connected with another block; the serial connector block must be mounted separately.



4 **Press the valves and block assemblies to each other for connection. Press the valve lock switch in the cylinder port direction until it does not go any further. Fasten threads ⓐ onto the DIN rail.**

After fixing the connector block assembly, fasten the threads onto the end block assembly while holding it lightly by hand. This is necessary to improve sealing.

⚠Caution **D-sub, Connector block assembly for flat ribbon cable, End block assembly M3: 0.6 N·m**
Connector block assembly for EX180 serial wiring M4: 1.4 N·m
Mounting bracket for EX510 serial wiring M4: 0.6 N·m

⚠Caution

1. When increasing the number of stations from 10 or below to 11 or above, increase the number of SUP/EXH assemblies as well.
2. Be sure to turn off the power and stop the supply of air before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
3. After assembly and disassembly, air leakage could occur if blocks are not well connected or a thread is not tightly fastened onto the end block assembly. Before supplying air, make sure that no gaps exist in between blocks and that the valve and block are tightly fastened onto the DIN rail. Also, make sure that air is not leaking before use.
4. For the SJ3A6 series manifold with vacuum release valve with restrictor, there is no valve lock switch for connecting, so when mounting, tighten the screws after checking that there are no gaps between valves.

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Non-plug-in
Individual Wiring Manifold

Series SJ2000/3000

P.52 Individual Wiring



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Non-plug-in Individual Wiring

Series SJ2000/3000

How to Order

● Individual wiring manifold

SS5J 3 – □ 60 – 05 U □ □ □

Series

2	SJ2000
3	SJ3000 (SJ2000/3000 mixed)

Mixed mounting type

Nil	Standard Note 1)
M	Mixed mounting Note 2)

Note 1) There is no need to enter anything when you operate either the SJ2000 or SJ3000 series alone.

Note 2) Enter "M" when the SJ2000 or SJ3000 series will be mounted on the same manifold base together.

Valve stations

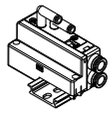
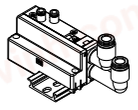
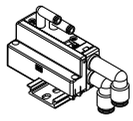
Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

DIN rail length specified

Nil	Standard length	
3	3 stations	Specify a longer rail than the standard length.
⋮	⋮	
20	20 stations	

∗ Specify the valve stations not exceeding the maximum stations.

SUP/EXH block fitting spec.

Nil	Straight fitting With external pilot spec. X, PE port	
L	Elbow fitting (Upward) With external pilot spec. X, PE port	
B	Elbow fitting (Downward) With external pilot spec. X, PE port	

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

Pilot spec.

Nil	Internal pilot
S	Internal pilot / Built-in silencer
R	External pilot
RS	External pilot / Built-in silencer

∗ There is no need to enter anything when the SUP/EXH block mounting position "M" is selected.

∗ For built-in silencers, the 3/5(E) ports are plugged.

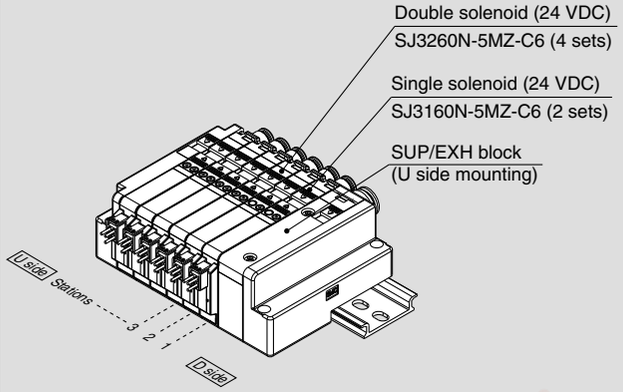
SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)
M∗	Special specifications

∗ Specify the required specifications (including port sizes other than ø8) by means of the manifold specification sheet.

How to Order Valve Manifold Assembly

Ordering example (SS5J3-60-□)



SS5J3-60-06D ····· 1 set (Manifold part no.)
∗ SJ3160N-5MZ-C6 ····· 2 sets (Single solenoid part no.)
∗ SJ3260N-5MZ-C6 ····· 4 sets (Double solenoid part no.)
└→ The asterisk denotes the symbol for assembly. Prefix to the part no. of the solenoid valve, etc.

- The valve arrangement is numbered as the 1st station from D side.
- Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing. In the case of complex arrangement, specify them in the manifold specification sheet.

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How to Order Solenoid Valves

SJ 3 1 60 ☐ ☐ ☐ N – 5 M Z ☐ – C6

Series

2	SJ2000
3	SJ3000

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	Dual 3 port valve: N.C./N.C.
B	Dual 3 port valve: N.O./N.O.
C	Dual 3 port valve: N.C./N.C.

∗ Refer to pages 4 through to 7 for the JIS symbol.

Pilot spec.

Nil	Internal pilot
R	External pilot

∗ External pilot spec. is not applicable for 4 position dual 3 port valves.

Back pressure check valve

Nil	None
K	Built-in

∗ Back pressure check valve is not applicable for 3 position valve.

Coil spec.

Nil	Standard
T	With power saving circuit (Continuous duty type)

∗ Be sure to select "with power saving circuit" when the solenoid valve will be energized continuously for long period.

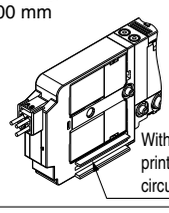
Non-plug-in

Rated voltage

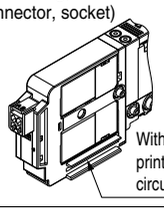
5	24 VDC
6	12 VDC

Connector entry

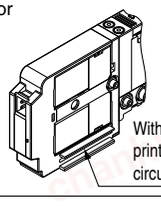
M: Individual wiring, With lead wire Length 300 mm



MN: Individual wiring, Without lead wire (With connector, socket)



MO: Individual wiring, Without connector

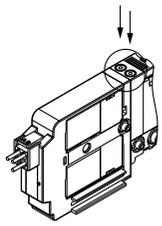


∗ When ordering a connector assembly separately, refer to back page 8.

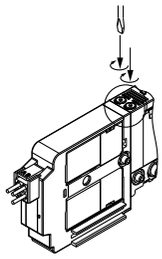
With light/surge voltage suppressor Note)

Manual override

Nil: Non-locking push type

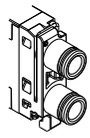


D: Push-turn locking slotted type

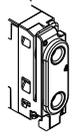


A, B port size

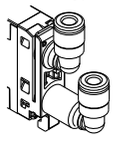
Straight
(Metric size)
C2: ø2 one-touch fitting
C4: ø4 one-touch fitting
C6: ø6 one-touch fitting (SJ3000 only)
(Inch size)
N1: ø1/8" one-touch fitting
N3: ø5/32" one-touch fitting
N7: ø1/4" one-touch fitting (SJ3000 only)



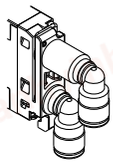
M3: M3 x 0.5 (SJ2000 only)
M5: M5 x 0.8 (SJ3000 only)



Elbow fitting assembly
(Upward entry)
(Metric size)
L2: ø2 elbow fitting assembly
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
LN1: ø1/8" elbow fitting assembly
LN3: ø5/32" elbow fitting assembly
LN7: ø1/4" elbow fitting assembly (SJ3000 only)



Elbow fitting assembly
(Downward entry)
(Metric size)
B2: ø2 elbow fitting assembly
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly (SJ3000 only)
(Inch size)
BN1: ø1/8" elbow fitting assembly
BN3: ø5/32" elbow fitting assembly
BN7: ø1/4" elbow fitting assembly (SJ3000 only)



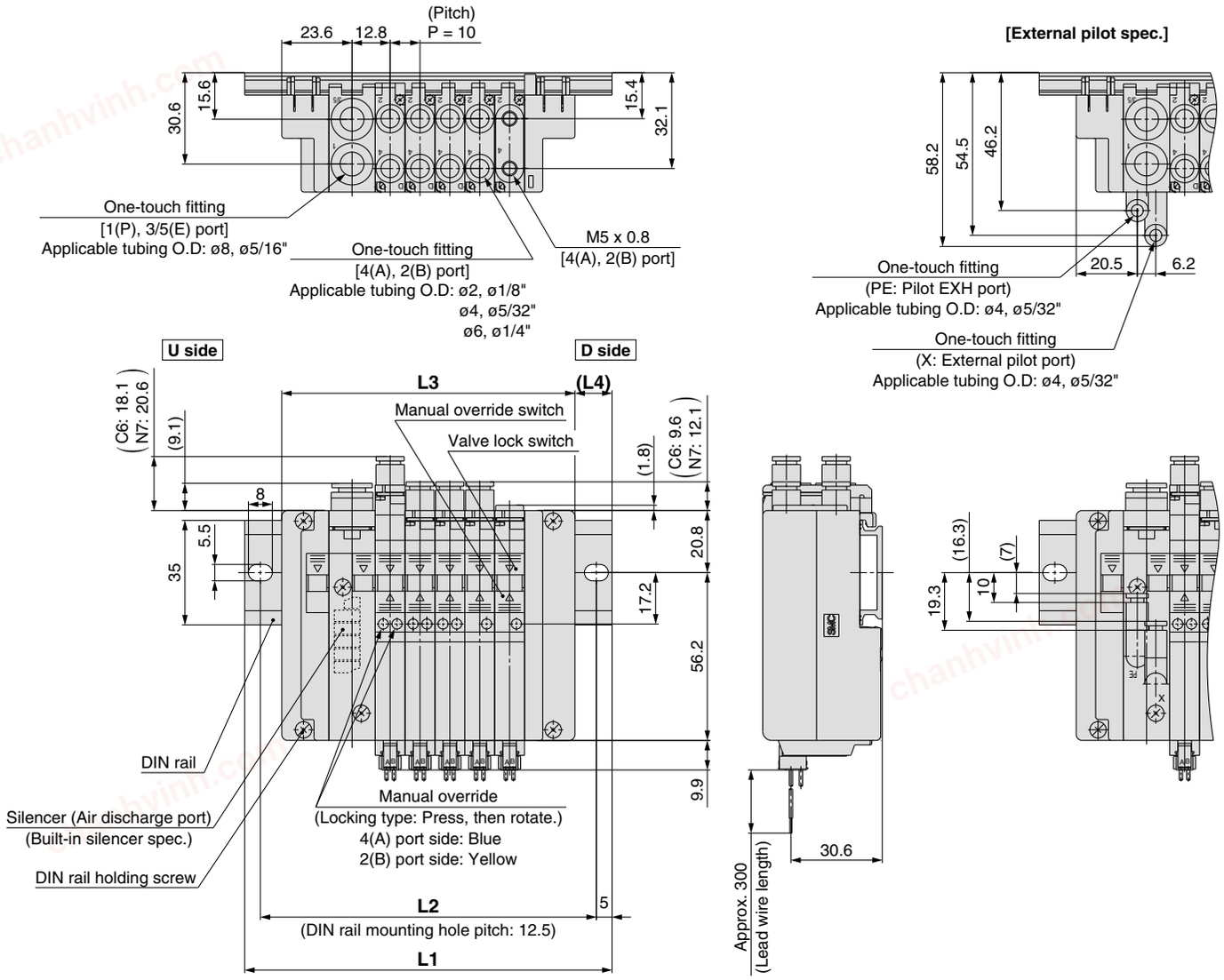
Note) The electrical connection to the manifold will be +COM.

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Series SJ2000/3000

Dimensions

SS5J3-60-Stations U (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

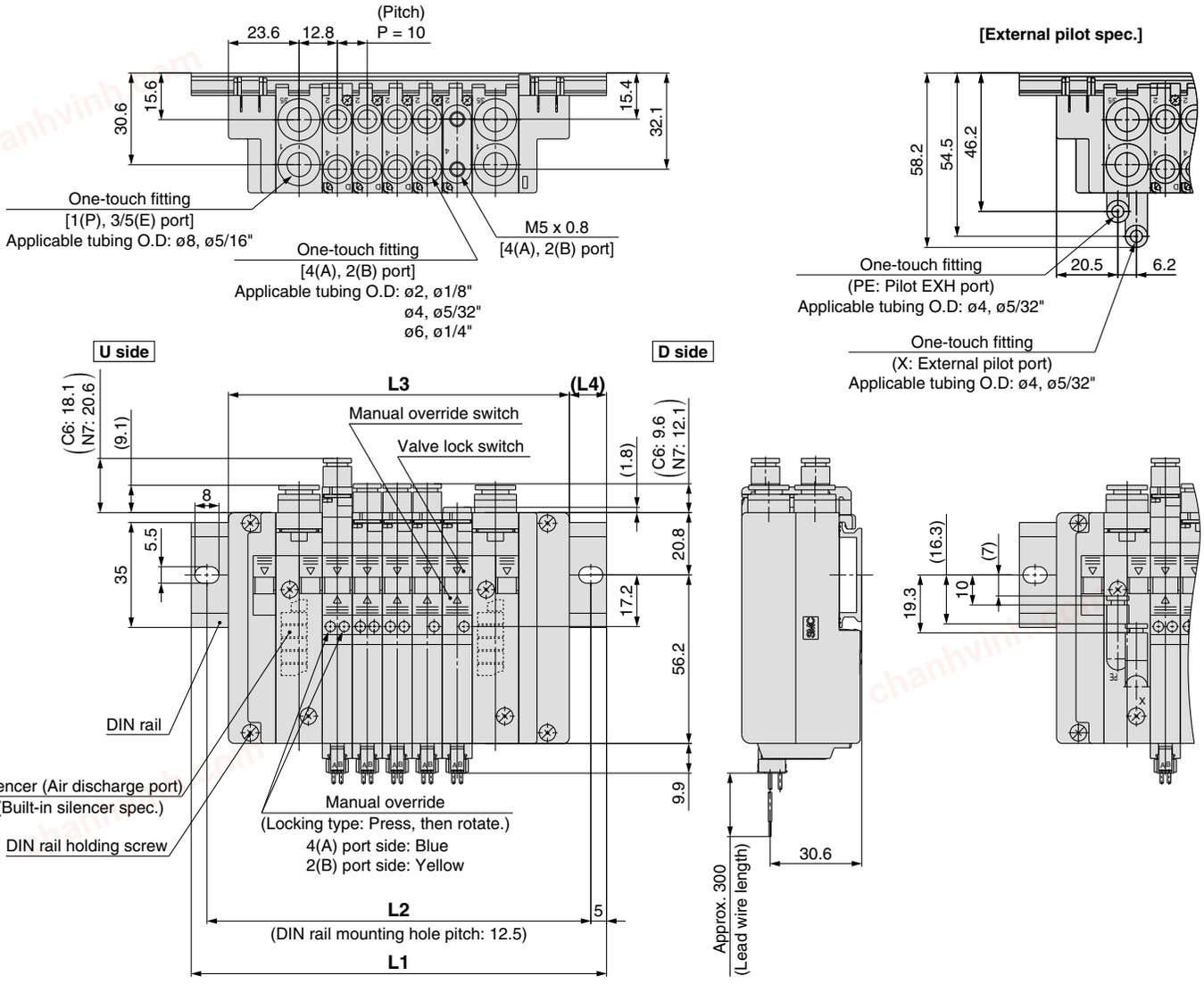
L: Dimensions n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	98	110.5	123	123	135.5	148	160.5	173	185.5
L2	87.5	100	112.5	112.5	125	137.5	150	162.5	175
L3	68.2	78.2	88.2	98.2	108.2	118.2	128.2	138.2	148.2
L4	14.5	16	17	12	13	14	15.5	16.5	17.5

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Dimensions

SS5J3-60-Stations B (S, R, RS)



Note) For manifold dimensions including elbow fitting, refer to page 24.

L: Dimensions

n: Stations

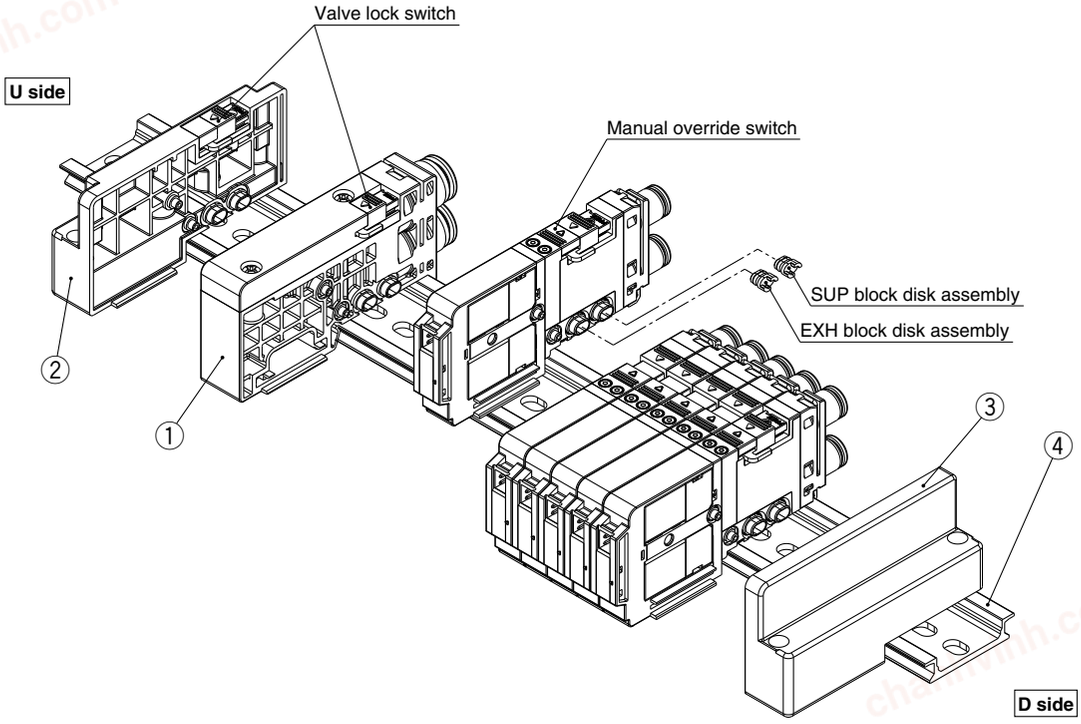
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	110.5	123	135.5	148	148	160.5	173	185.5	198	210.5	210.5	223	235.5	248	260.5	260.5	273	285.5	298
L2	100	112.5	125	137.5	137.5	150	162.5	175	187.5	200	200	212.5	225	237.5	250	250	262.5	275	287.5
L3	83.7	93.7	103.7	113.7	123.7	133.7	143.7	153.7	163.7	173.7	183.7	193.7	203.7	213.7	223.7	233.7	243.7	253.7	263.7
L4	13	14.5	15.5	16.5	11.5	12.5	14	15	16	17.5	12	13.5	14.5	15.5	17	11.5	13	14	15

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Manifold Exploded View

Type 60 (Non-plug-in) manifold

Note) Refer to page 50 for “How to Add Manifold Stations.”



Component Parts / Non-plug-in

No.	Description		Part no.	Note
1	SUP/EXH block assembly	**Internal pilot**	**SJ3000-50-5A-□□**	(Metric size) C6: With ø6 one-touch fitting (straight) C8: With ø8 one-touch fitting (straight) L6: With ø6 one-touch fitting (elbow upward entry) L8: With ø8 one-touch fitting (elbow upward entry) B6: With ø6 one-touch fitting (elbow downward entry) B8: With ø8 one-touch fitting (elbow downward entry) (Inch size) N7: With 1/4" one-touch fitting (straight) N9: With 5/16" one-touch fitting (straight)
		Internal pilot / Built-in silencer	**SJ3000-50-5AS-□□**	
		External pilot	**SJ3000-50-5AR-□□** (X, PE port: Metric size ø4 Inch size ø5/32")	
		External pilot / Built-in silencer	**SJ3000-50-5ARS-□□** (X port: Metric size ø4 Inch size ø5/32")	
		For different pressures, internal pilot Note 1)	**SJ3000-50-6A-□□**	
		For different pressures Note 1) **Internal pilot / Built-in silencer**	**SJ3000-50-6AS-□□**	
2	**End block assembly**		**SJ3000-53-1A**	For U side
3	**End block assembly**		**SJ3000-53-2A**	For D side
4	**DIN rail**		**VZ1000-11-1-□**	Refer to page 61.

Note 1) The valves cannot be operated only with the SUP/EXH block assembly for different pressure, select them in combination with the SUP/EXH block assembly for internal/external pilot.

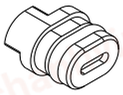
Note 2) Refer to page 60 about the SUP/EXH block disk assembly and method of handling of parts at different pressure.

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Series SJ2000/3000
Manifold Options

■ SUP block disk assembly

By placing a SUP block disk in a manifold valve's pressure supply passage, two different high and low pressures can be supplied to one manifold. When supplying different pressures using the manifold of the internal pilot, fill out a manifold specification sheet to place an order for an SUP/EXH assembly for the internal pilot specifications and another SUP/EXH assembly for the different-pressure internal pilot specifications (Refer to Circuit Diagram 1).

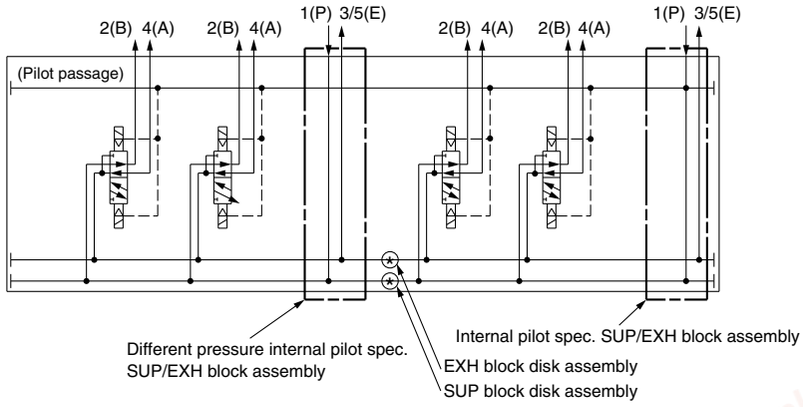


Series	Part no.
SJ2000	**SJ3000-44-1A**
SJ3000	

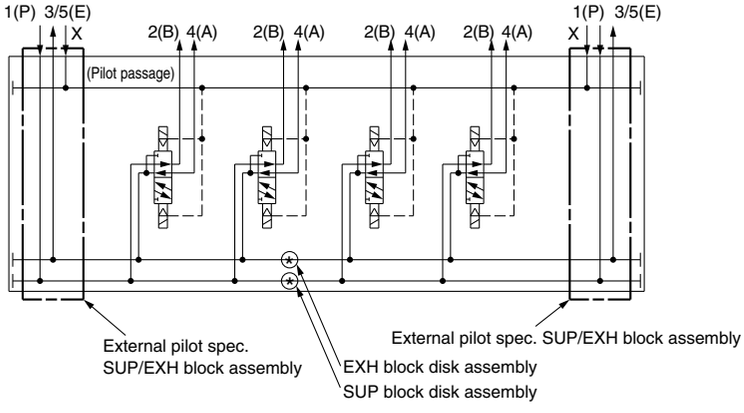
[Different pressure pneumatic circuit diagram]

- The SJ series supplies air to the pilot port of each valve using a 1(P) port of the SUP/EXH block assembly. When using in situations such as where there are different pressures, combine SUP/EXH block assemblies for internal pilot, external pilot and different-pressure by referring to the circuit below.

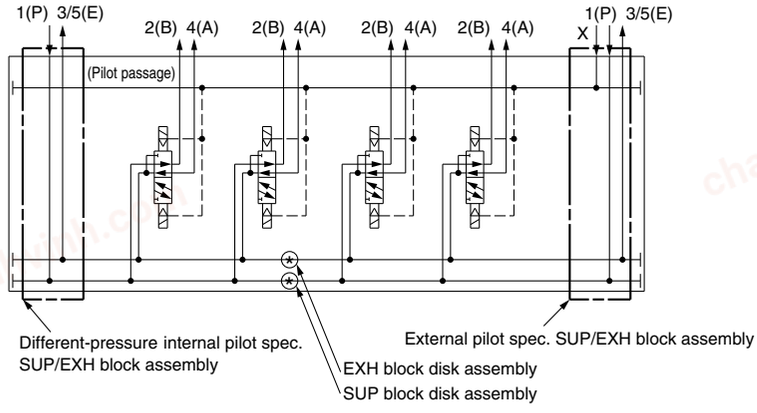
1. Different-pressure spec. using the internal pilot



2. Different-pressure spec. using the external pilot
(For using the SUP/EXH block assembly for external pilot)



3. Different-pressure spec. using the external pilot
(For using the SUP/EXH block assembly for different-pressure internal pilot spec.)

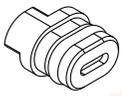


Note 1) When operating under the different-pressure spec., supply the higher pressure to the pilot passage.
Note 2) If there is a need to partition the pilot passage, consult SMC.

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■ EXH block disk assembly

By installing an EXH block disk in a manifold valve's exhaust passage, the valve's exhaust can be separated so that it will not affect other valves.



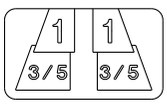
Series	Part no.
SJ2000 SJ3000	**SJ3000-44-1A**

■ Label for block disk

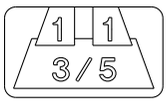
These labels are attached to manifolds in which SUP and EXH block disks have been installed, in order to identify the installed locations. (Three sheets each included.)

SJ3000-155-1A

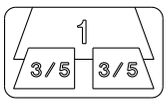
Label for SUP/EXH block disk



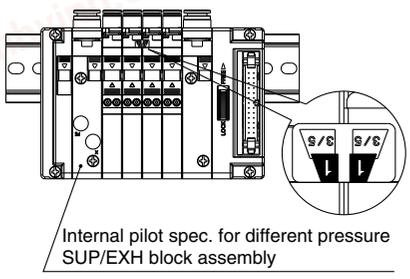
Label for SUP block disk



Label for EXH block disk

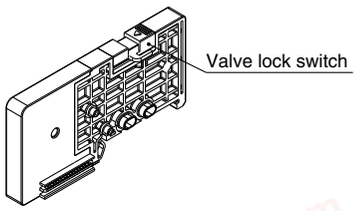


∗ When a block disk is concurrently ordered by specifying on the manifold specification sheet, etc., a label will be stuck on the position where block disk is mounted.



■ Blanking block assembly

These are mounted when later addition of valves is planned, etc.

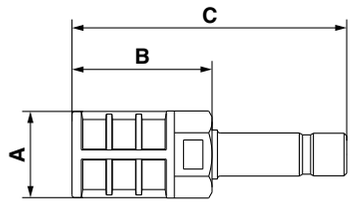


Series	Part no.	Note	Width
SJ2000 SJ3000	**SJ3000-49-1A**	Single wiring	7.5 mm
	SJ3000-49-2A	Double wiring	
SJ3A6	**SJ3000-49-2A-N**	Double wiring Note)	

Note) Valve lock switch is not available for the SJ3A6.

■ Silencer with one-touch fitting

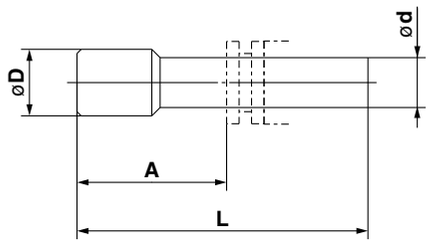
This silencer can be mounted on the manifolds' port 3/5 (E: Exhaust) with a single touch.



Series			Model	Effective area	A	B	C
For	SJ2000 SJ3000	(ø8)	**AN203-KM8**	14 mm²	ø16	26	51

■ Plug

These are inserted in unused cylinder ports and P, E ports.



Dimensions

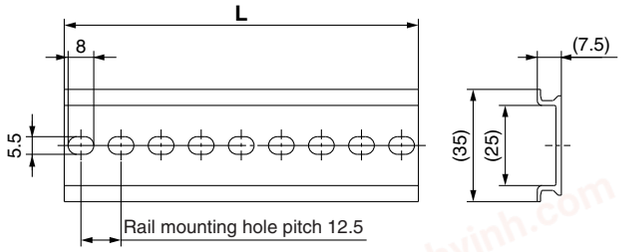
Applicable fitting size ød	Model	A	L	D
2	**KJP-02**	8.2	17	3
4	**KQ2P-04**	16	32	6
6	**KQ2P-06**	18	35	8
8	**KQ2P-08**	20.5	39	10
1/8"	**KQ2P-01**	16	31.5	5
5/32"	**KQ2P-03**	16	32	6
1/4"	**KQ2P-07**	18	35	8.5
5/16"	**KQ2P-09**	20.5	39	10

■ DIN rail

VZ1000−11−1−□

L dimension

∗ Enter a number from the DIN rail dimension table shown below.



No.	0	1	2	3	4	5	6	7	8	9
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5
Weight (g)	17.6	19.9	22.1	24.4	26.6	28.9	31.1	33.4	35.6	37.9

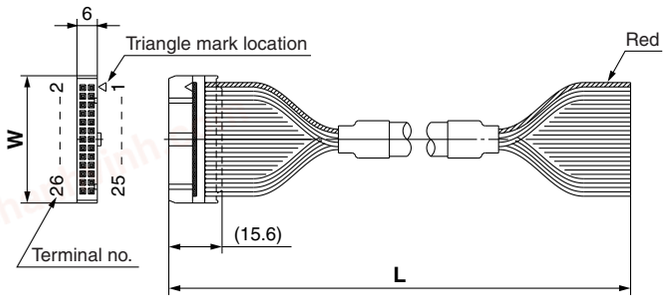
No.	10	11	12	13	14	15	16	17	18	19
L dimension	223	235.5	248	260.5	273	285.5	298	310.5	323	335.5
Weight (g)	40.1	42.4	44.6	46.9	49.1	51.4	53.6	55.9	58.1	60.4

No.	20	21	22	23	24	25	26	27	28	29
L dimension	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5
Weight (g)	62.6	64.9	67.1	69.4	71.6	73.9	76.1	78.4	80.6	82.9

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■ Flat ribbon cable assembly

AXT100 – FC□ – 1 / 2 / 3



Flat Ribbon Cable Assembly

Cable length (**L**)	10 pins	20 pins	26 pins
1.5 m	**AXT100-FC10-1**	**AXT100-FC20-1**	**AXT100-FC26-1**
3 m	**AXT100-FC10-2**	**AXT100-FC20-2**	**AXT100-FC26-2**
5 m	**AXT100-FC10-3**	**AXT100-FC20-3**	**AXT100-FC26-3**
Connector width (**W**)	17.2	30	37.5

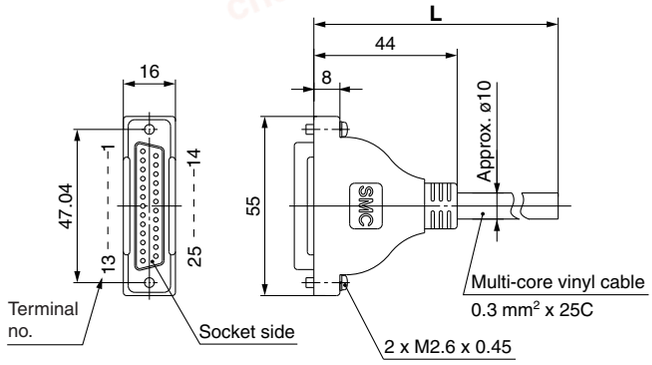
∗ For other commercial connectors, use a type with strain relief that conforms to MIL-C-83503.

Connector manufacturers:

- Hirose Electric Co., Ltd.
- Sumitomo 3M Limited
- Fujitsu Limited
- Japan Aviation Electronics Industry, Ltd.
- J.S.T. Mfg. Co., Ltd.

■ D-sub connector (25 pins)/Cable assembly

AXT100 – DS25 – 015 / 030 / 050



D-sub Connector Cable Assembly
Cable Color List of Each Terminal No.

Terminal no.	Lead wire color	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	Gray	Black
10	White	Black
11	White	Red
12	Yellow	Red
13	Orange	Red
14	Yellow	Black
15	Pink	Black
16	Blue	White
17	Purple	None
18	Gray	None
19	Orange	Black
20	Red	White
21	Brown	White
22	Pink	Red
23	Gray	Red
24	Black	White
25	White	None

D-sub Connector Cable Assembly

Cable length (**L**)	Assembly part no.	Note
1.5 m	**AXT100-DS25-015**	Cable 25 cores x 24AWG
3 m	**AXT100-DS25-030**	
5 m	**AXT100-DS25-050**	

∗ For other commercial connectors, use a 25 pins type with female connector conforming to MIL-C-24308.

Electric Characteristics

Item	Characteristics
Conductor resistance Ω/km, 20°C	65 or less
Withstand pressure V, 1 min, AC	1000
Insulation resistance MΩkm, 20°C	5 or less

Note) The minimum bending radius for D-sub connector cables is 20 mm.

Connector manufacturers:

- Hirose Electric Co., Ltd.
- Fujitsu Limited
- Japan Aviation Electronics Industry, Ltd.
- J.S.T. Mfg. Co., Ltd.

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■ Regulator block

How to Order Regulator Block

This is used to reduce the pressure supplied from the D side inside the manifold.
All valves on the U side are depressurized from the regulator block.

SJ3000 – 00 – P – ☐

Option

00	Pressure gauge, top mounting
01	Pressure gauge, side mounting
M1	Without pressure gauge

Regulating port

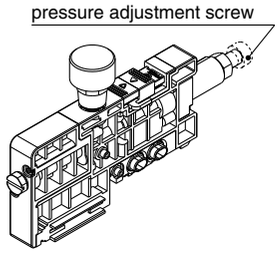
P	P port

Pressure adjustment screw operation

Nil	Slotted locking type
H	Manual

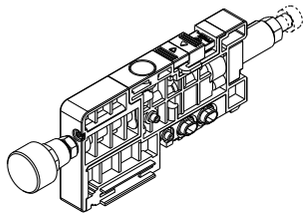
SJ3000-00-P(-H)

With manual operation of pressure adjustment screw



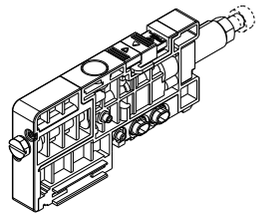
Pressure gauge, top mounting

SJ3000-01-P(-H)



Pressure gauge, side mounting

SJ3000-M1-P(-H)



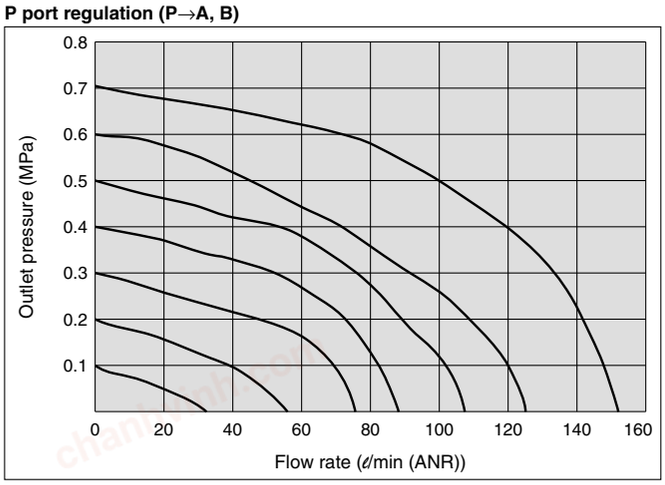
Without pressure gauge

Note) When ordering with a regulator block installed in the manifold, please order using the manifold specification sheet.

Flow Characteristics (Conditions: Inlet pressure 0.7 MPa 2 position solenoid valve mounting)

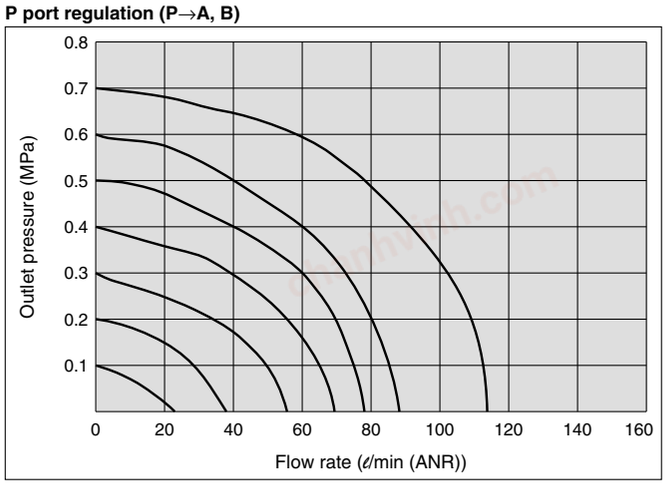
SJ3000

P port regulation (P→A, B)

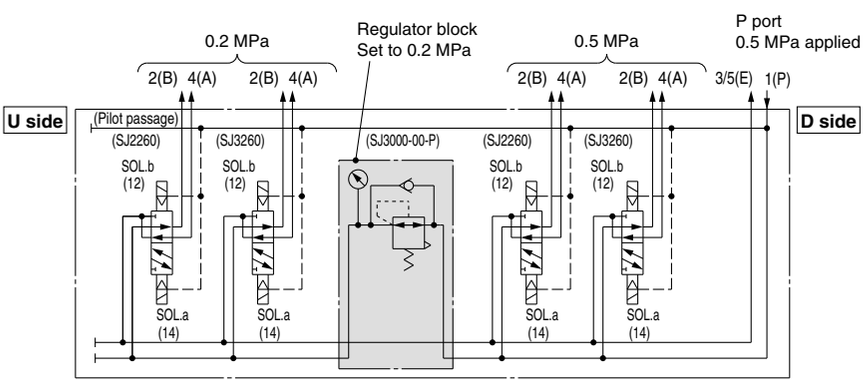


SJ2000

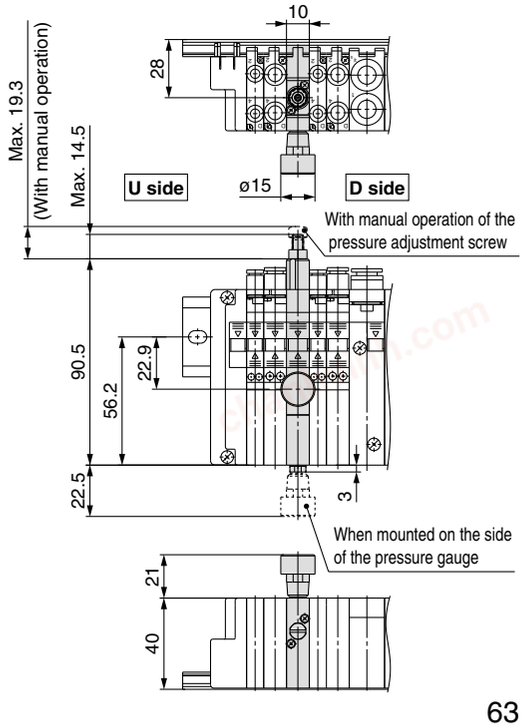
P port regulation (P→A, B)



Pneumatic circuit (Regulator block mounting example)



Note) Reduces supply pressure from the D side of manifold.
Supply pressure from the U side cannot be reduced.

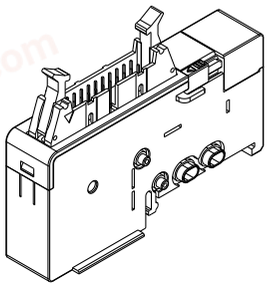


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Series SJ2000/3000

■ Intermediate connector block assembly

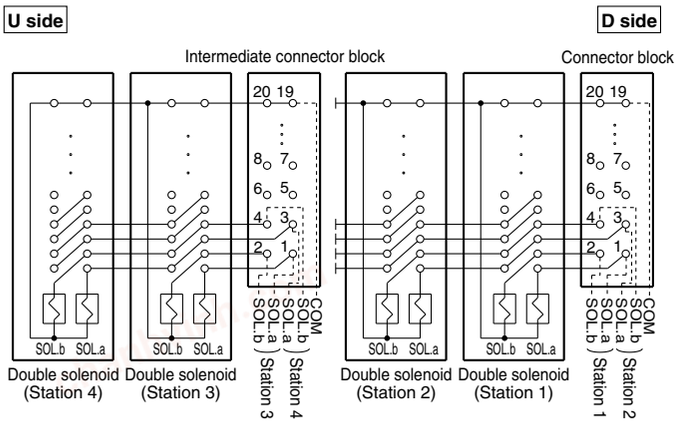
This connector block can be used by inserting it into the middle of the manifold.
This can be used, for example, when you wish to separate electrical control of valves in the same manifold, or when the number of control points is insufficient.



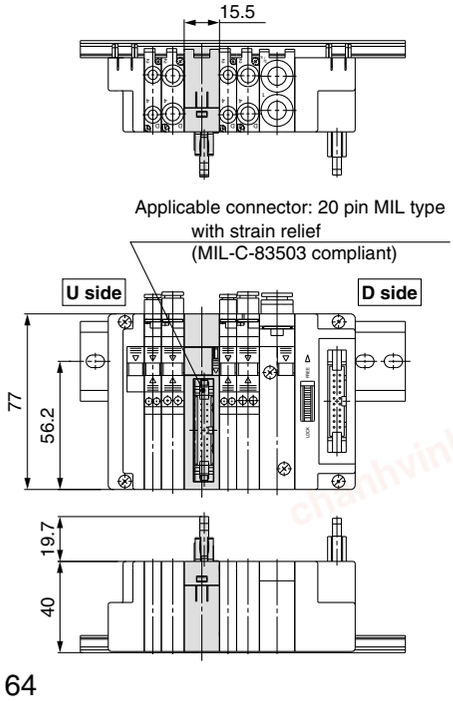
Series	Part no.	Note
SJ2000 SJ3000	**SJ3000-76-1A**	
	SJ3000-76-2A-05	With power supply terminal (for PC wiring)

Note) When ordering with an intermediate connector block assembly installed in the manifold, please order using the manifold specification sheet.

Intermediate connector block assembly wiring example



∗ Enables control of U side solenoid valves from the position where the intermediate connector block assembly is installed.



■ Dual flow fitting (Set for SJ3000 series)

SJ3000 −120 −1A − C8

Port size

C8	ø8
N9	ø5/16"

This is a fitting for cylinder ports which enables simultaneous actuation and increase in flow rate of valves for 2 stations. This is a one-touch fitting with port sizes of ø8 and ø5/16.

∗ When arranging mounted to the valve, arrange the valve part no. using the part no. without the one-touch fitting, and then add the part no. for the dual flow fitting. If the arrangement is complicated, please specify them by means of the manifold specification sheet.

Example) Valve type (without one-touch fitting)

SJ3160-5CU-CO ..... **2 sets**

∗ **SJ3000-120-1A-C8** ..... **1 set**

