

4 Port Solenoid Valve Common Specifications

Series SJ2000/3000



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 [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(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 [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(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.

**Non-plug-in
Individual Wiring Manifold**

Series SJ2000/3000

P.52 Individual Wiring



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 <small>Note 1)</small>
M	Mixed mounting <small>Note 2)</small>

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.

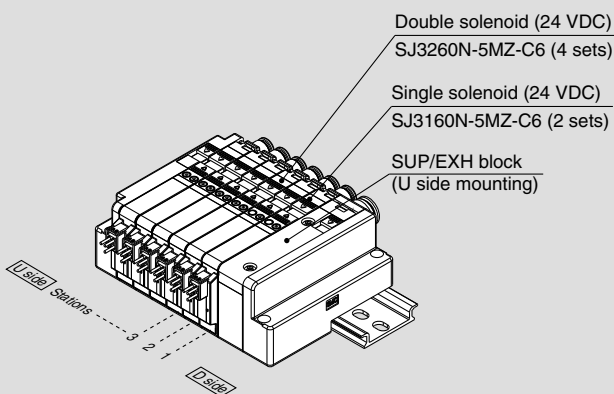
SUP/EXH block mounting position

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.)

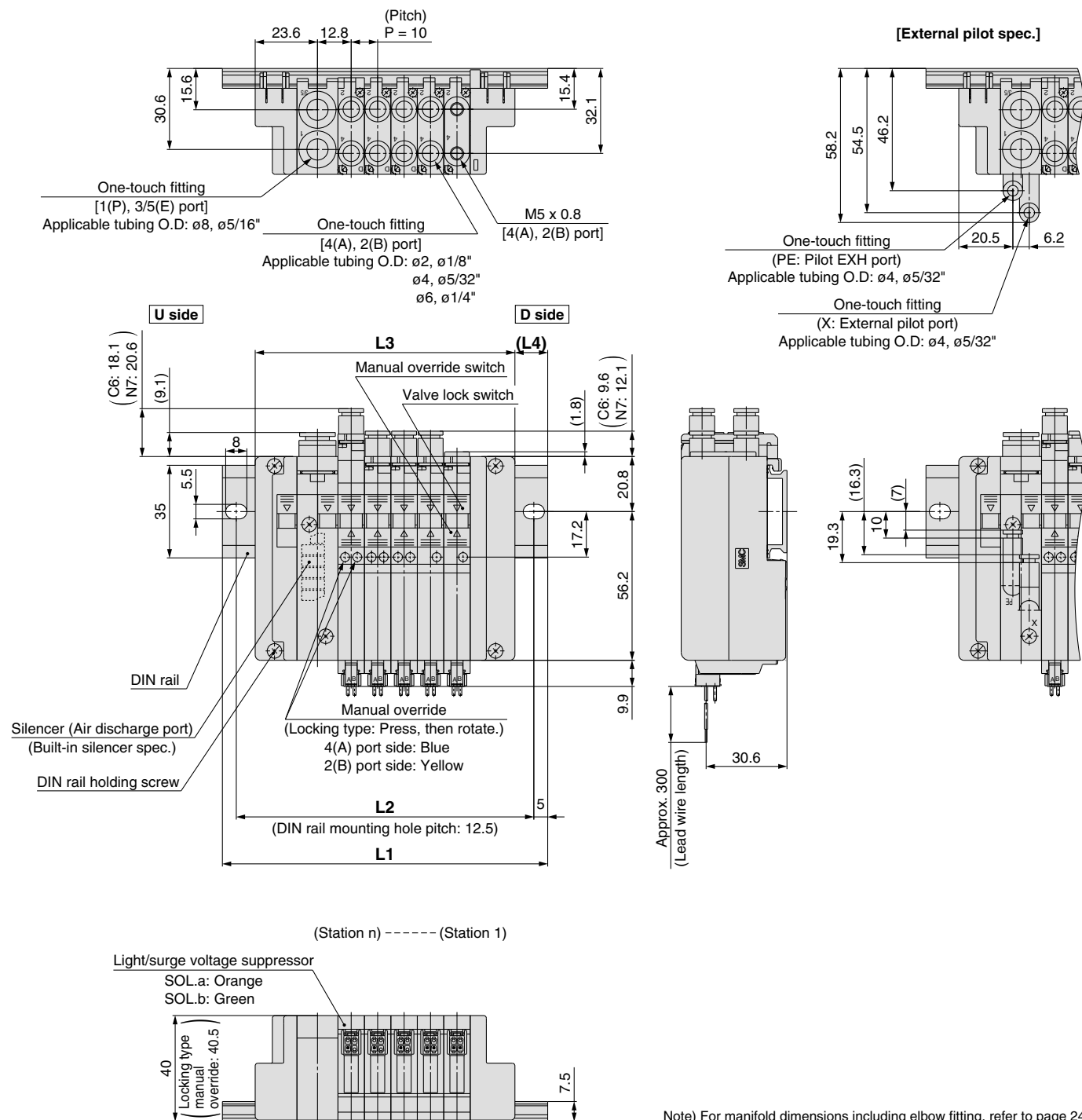
↳ The asterisk denotes the symbol for assembly.
 Prefix to the part no. of the solenoid valve, etc.

- 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.

Series SJ2000/3000

Dimensions

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



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

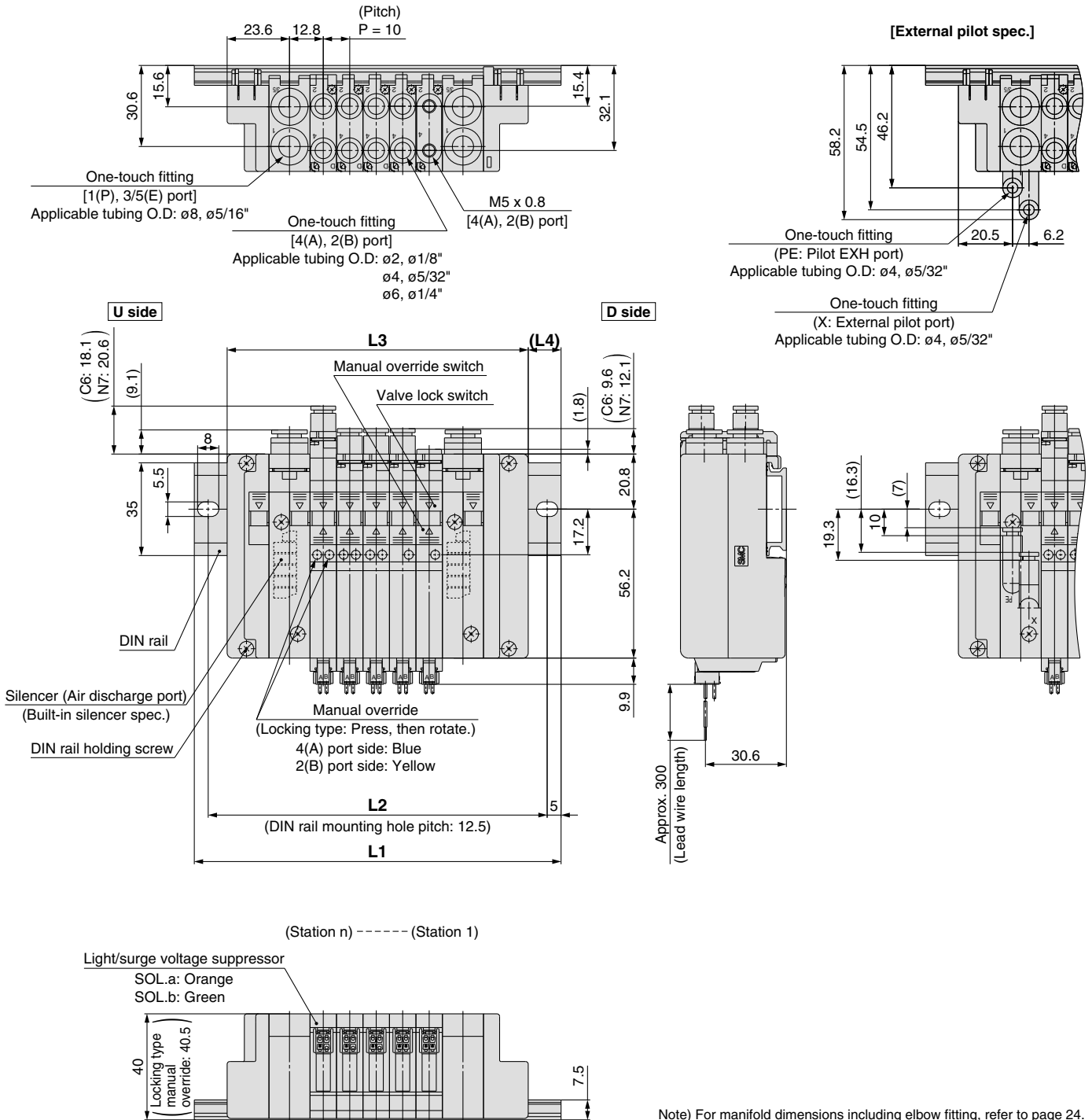
L: Dimensions

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

Dimensions

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



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

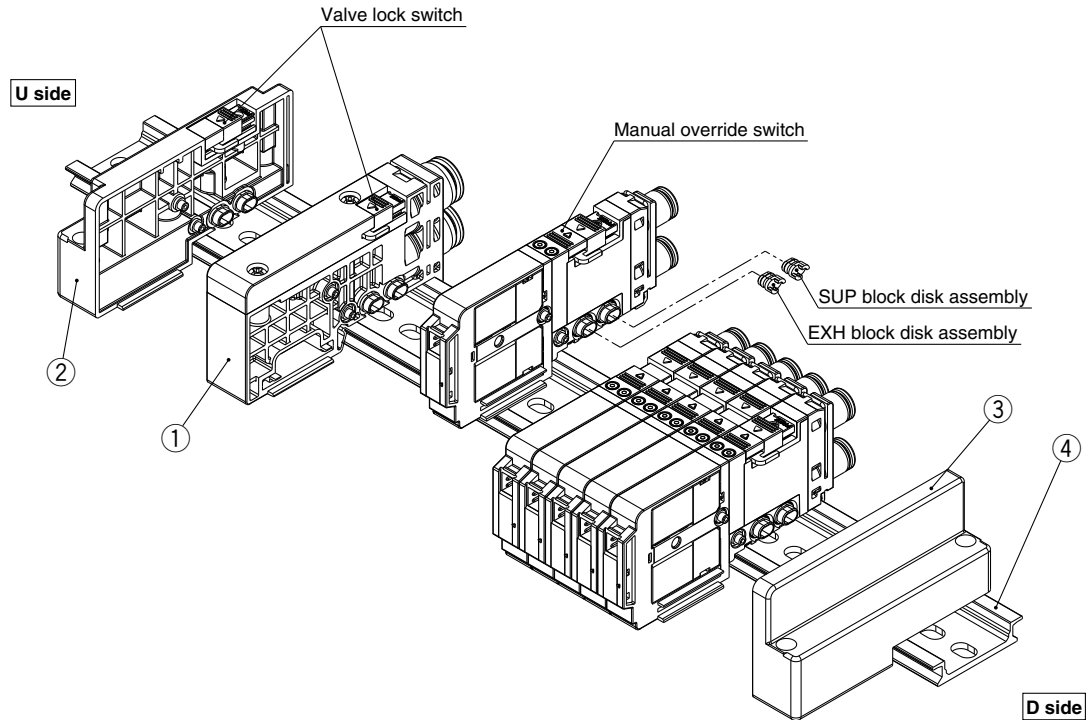
L: Dimensions

		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	

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	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)
	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.