

Series SX3000/5000 Base Mounted Manifold Stacking Type DIN Rail Mounted Individual Wiring

Type **45**

How to Order Manifold

SS5X **3** - 45 - [] [] [] []

Series	Valve stations
3	SX3000
5	SX5000

Symbol	Mounting position	Applicable stations
02	U side	2 stations
⋮	⋮	⋮
20	D side	20 stations

SUP/EXH block assembly mounting position

Symbol	Mounting position	Applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 20 stations
M	Special specifications	

* For special specifications, indicate separately by the manifold specification sheet.

A, B port size (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for $\phi 4$	SX3000
C6	One-touch fitting for $\phi 6$	
M	Mixed	SX5000
C4	One-touch fitting for $\phi 4$	
C6	One-touch fitting for $\phi 6$	
C8	One-touch fitting for $\phi 8$	
M	Mixed	

(Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for $\phi 5/32$ "	SX3000
N7	One-touch fitting for $\phi 1/4$ "	
M	Mixed	SX5000
N3	One-touch fitting for $\phi 5/32$ "	
N7	One-touch fitting for $\phi 1/4$ "	
N9	One-touch fitting for $\phi 5/16$ "	
M	Mixed	

* In the case of mixed specifications (M), indicate separately on the manifold specification sheet.

Option

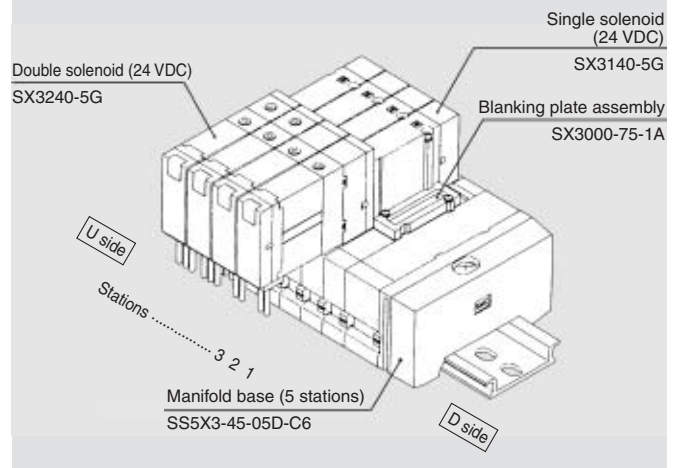
When a longer DIN rail is desired than the specified stations, specify the station number to be required. (20 stations at maximum)



- Connector assembly for L and M types.....Refer to page 1-6-8.
- Common connector assembly for manifold.....Refer to page 1-6-9.

How to Order Valve Manifold Assembly

Ordering example



SS5X3-45-05D-C6 1 set (Type 45, 5-station manifold base part no.)
 *SX3000-75-1A 1 set (Blanking plate assembly part no.)
 *SX3140-5G 2 sets (Single solenoid part no.)
 *SX3240-5G 2 sets (Double solenoid part no.)

* The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

The valve arrangement is numbered as the 1st. station from D side regardless of the mounting position of SUP/EXH block assembly. In ordering, specify the part nos. in the order from the 1st. station on D side. Besides, when the arrangement will be complicated, fill out the Manifold Specification Sheet to instruct us.

How to Order Valves

SX **5** **2** **40** — **5** **N** **L**

● **Series**

3	SX3000
5	SX5000

● **Type of actuation**

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

● **Rated voltage**

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

● **Common specifications**

Nil	Positive common
N	Negative common

🔍 Note) Put nothing for single grommet style and single without indicator light and surge voltage suppresser.

● **Manual override**

Nil	Non-locking push type
D	Push-turn locking slotted type

● **Light/Surge voltage suppressor**

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

● **Electrical entry**

Grommet	L plug connector	M plug connector
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)
H: Lead wire length 600 mm	LN: Without lead wire	MN: Without lead wire
	LO: Without connector	MO: Without connector

🔍 * The LN or MN option includes 2 sockets for single solenoid valves and 3 sockets for double solenoid valves.

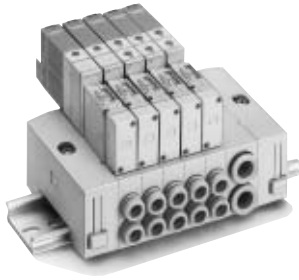
SV

SZ

SY

SYJ

SX



Manifold Specifications

Model		SS5X3-45	SS5X5-45
Applicable valve		SX3□40	SX5□40
Manifold type		Stacking type/DIN rail mounted	
P(SUP), R(EXH)		Common SUP/Common EXH	
Valve stations ^{Note)}		2 to 20 stations	
A, B port specifications	Location	Base	
	Direction	Side	
Port size	P, R port	C8 (One-touch fitting for ø8)	C10 (One-touch fitting for ø10)
	A, B port	C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6) C8 (One-touch fitting for ø8)
Manifold base weight W (g) n: Stations		2 to 10 stations: W = 22n + 118 11 to 20 stations: W = 22n + 140	2 to 10 stations: W = 47n + 156 11 to 20 stations: W = 47n + 190



Note) For more than 11 stations, supply pressure to P port on both sides and exhaust from R port on both sides.

Flow Characteristics

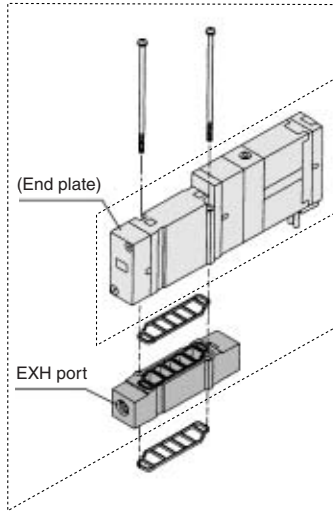
Model	Port size		Flow characteristics					
			1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → EA/EB)		
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	C [dm ³ / (s·bar)]	b	Cv	C [dm ³ / (s·bar)]	b	Cv
SS5X3-45	C8	C6	0.88	0.21	0.22	0.95	0.18	0.22
SS5X5-45	C10	C8	2.2	0.24	0.53	2.5	0.18	0.58



Note) The value is for manifold base with 5 stations and individually operated 2 position type.

Manifold Option

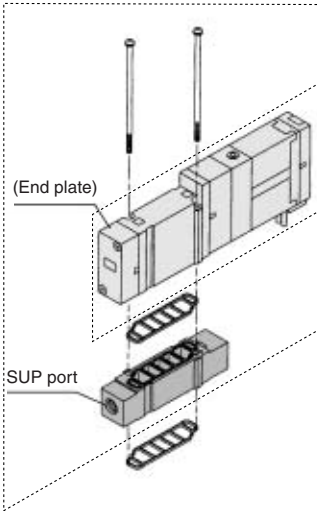
Individual SUP spacer assembly



Series	Assembly part no.	Port size
SX3000	SX3000-38-2A	M5 x 0.8
SX5000	SX5000-38-16□A	1/8

Note) SUP port may be either on the lead wire side or the end plate side. (Factory assembled spacer will be shipped with the orientation shown in the figure.)

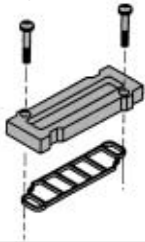
Individual EXH spacer assembly



Series	Assembly part no.	Port size
SX3000	SX3000-39-2A	M5 x 0.8
SX5000	SX5000-39-16□A	1/8

Note) The EXH port may be either on the lead wire side or on the end plate side.

Blanking plate assembly



Series	Assembly part no.
SX3000	SX3000-75-1A
SX5000	SX5000-76-5A

Dimensions/DIN rail

VZ1000-11-1-□

Refer to L dimensions

* Fill in □ with an appropriate no. listed on the table of DIN rail dimensions shown below.



No.	0	1	2	3	4	5	6	7	8	9	10
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223
No.	11	12	13	14	15	16	17	18	19	20	21
L dimension	235.5	248	260.5	273	285.5	298	310.5	323	335.5	348	360.5
No.	22	23	24	25	26	27	28	29	30	31	32
L dimension	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498
No.	33	34	35	36	37	38	39	40	41	42	43
L dimension	510.5	523	535.5	548	560.5	573	585.5	598	610.5	623	635.5
No.	44	45	46	47	48	49	50	51	52	53	54
L dimension	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773
No.	55	56	57	58	59	60	61	62	63	64	65
L dimension	785.5	798	810.5	823	835.5	848	860.5	873	885.5	898	910.5
No.	66	67	68	69	70	71					
L dimension	923	935.5	948	960.5	973	985.5					

SUP block disk

By installing a SUP block disk in the pressure supply passage of a manifold valve, it is possible to supply two or more different high and low pressures to one manifold.



Series	Part no.
SX3000	SX3000-77-1A
SX5000	SX5000-77-1A

EXH block disk

By installing an EXH block disk in the exhaust passage of a manifold valve, it is possible to divide the valve's exhaust so that it does not affect another valve. (Two block disks are needed to divide both exhausts.)



Series	Part no.
SX3000	SX3000-77-1A
SX5000	SX5000-77-1A

Label for block disk

The labels shown below are used on manifold stations containing SUP/EXH block disk(s) to show their location. (3 pcs. each)

VZ3000-123-1A

Label for SUP block disk



Label for EXH block disk



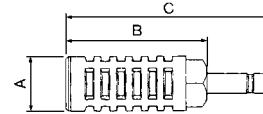
Label for SUP/EXH block disk



Note) 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.

Silencer with One-touch fitting

This silencer can be mounted on the manifold's port R (exhaust) with a single touch.

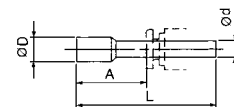


Series	Model	Effective area	A	B	C
SX3000 (ø8)	AN203-KM8	14 mm ²	ø16	26	51
	AN200-KM10	26 mm ²	ø22	53.8	80.8
SX5000 (ø10)	AN300-KM10	30 mm ²	ø25	70	97

Plug

These are inserted in cylinder ports or SUP/EXH ports which are not being used.

Purchasing order is available in units of 10 pieces.



Dimensions

Applicable fittings fitting ød	Model	A	L	D
4	KQ2P-04	16	32	6
6	KQ2P-06	18	35	8
8	KQ2P-08	20.5	39	10
10	KQ2P-10	22	43	12
5/32"	KQ2P-03	16	32	6
1/4"	KQ2P-07	18	35	8.5
5/16"	KQ2P-09	20.5	39	10
3/8"	KQ2P-11	22	43	11.5

Caution

Mounting screw tightening torques

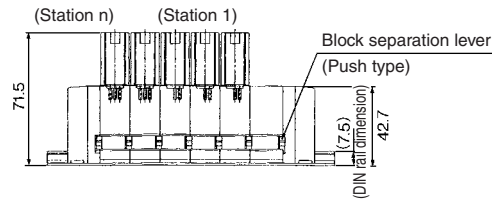
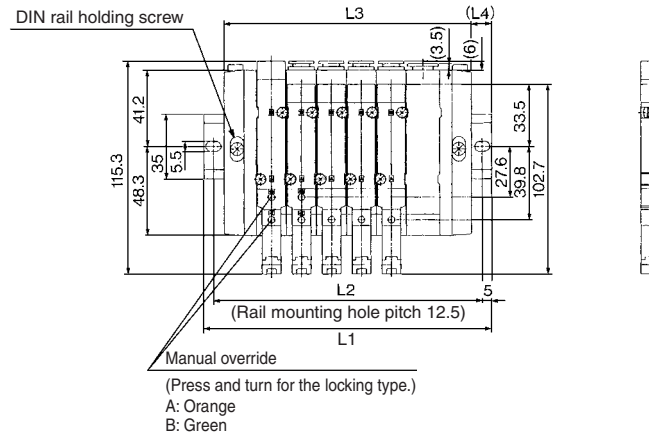
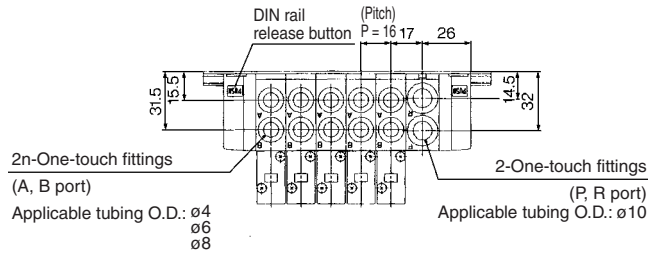
M2: 0.17 N·m
M3: 0.8 N·m
M4: 1.4 N·m

Warning

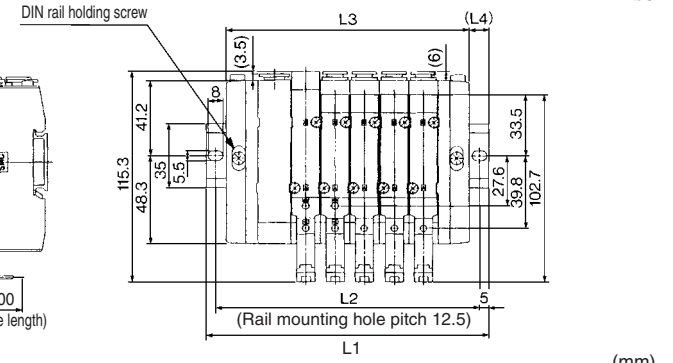
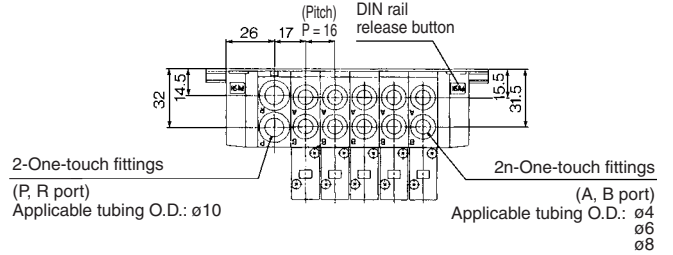
When mounting a valve or spacer on the manifold base or sub-plate, etc., those mounting directions are determined. If mounted in the wrong direction, the equipment to be connected may cause malfunction. Refer to external dimensions in pages 1-6-78 to 1-6-79, and then mount it.

Dimensions: Series SX5000

SS5X5-45- Stations D- C4
C6
C8

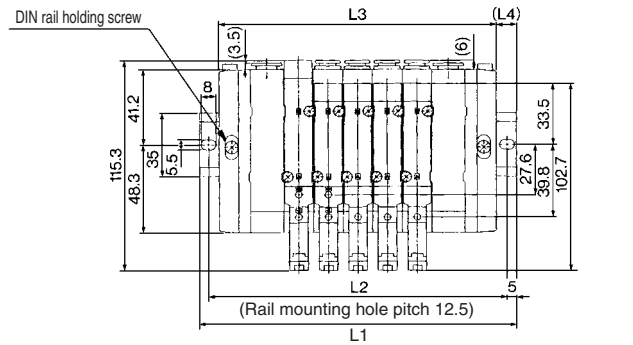
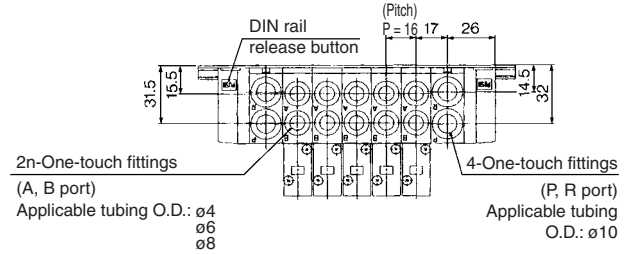


SS5X5-45- Stations U- C4
C6
C8



Stations n	2 stations	3	4	5	6	7	8	9	10 stations
L1	110.5	135.5	148	160.5	173	198	210.5	223	235.5
L2	100	125	137.5	150	162.5	187.5	200	212.5	225
L3	84	100	116	132	148	164	180	196	212
L4	13	17.5	16	14	12.5	17	15	13.5	11.5

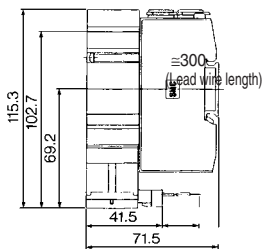
SS5X5-45- Stations B- C4
C6
C8



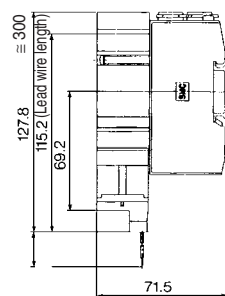
Stations n	2 stations	3	4	5	6	7	8	9	10 stations
L1	135.5	148	160.5	185.5	198	210.5	223	248	260.5
L2	125	137.5	150	175	187.5	200	212.5	237.5	250
L3	102	118	134	150	166	182	198	214	230
L4	16.5	15	13	17.5	16	14	12.5	17	15

Stations n	11 stations	12	13	14	15	16	17	18	19	20 stations
L1	273	285.5	310.5	323	335.5	360.5	373	385.5	398	423
L2	262.5	275	300	312.5	325	350	362.5	375	387.5	412.5
L3	246	262	278	294	310	326	342	358	374	390
L4	13.5	11.5	16	14.5	12.5	17	15.5	13.5	12	16.5

L plug connector



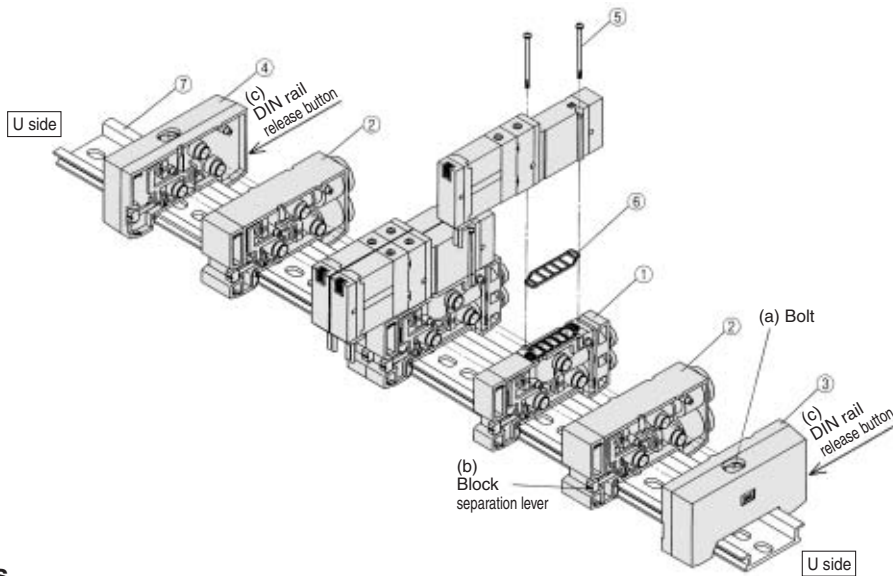
M plug connector



- SV
- SZ
- SY
- SYJ
- SX

Exploded View/DIN Rail Manifold

Type 45



Replacement Parts

No.	Description	Part no.		Note
		SX3000	SX5000	
①	Manifold block assembly	SX3000-50-1A-□□ □□	SX5000-50-1A-C6□□ □□	<ul style="list-style-type: none"> SX3000 (Metric size) <ul style="list-style-type: none"> C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 SX5000 (Metric size) <ul style="list-style-type: none"> C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 (Inch size) <ul style="list-style-type: none"> N3: With One-touch fitting for ø5/32" N7: With One-touch fitting for ø1/4" (Inch size) <ul style="list-style-type: none"> N3: With One-touch fitting for ø5/32" N7: With One-touch fitting for ø1/4" N9: With One-touch fitting for ø5/16" (Gasket ⑥ is included.)
②	SUP/EXH block assembly	(Metric size) SX3000-51-1A (Inch size) SX3000-51-15A	(Metric size) SX5000-51-1A (Inch size) SX3000-51-15A	P, R port SX3000 (Metric size) With One-touch fitting for ø8 (Inch size) With One-touch fittings for ø5/16"
③	End block assembly R	SX3000-52-1A	SX5000-52-1A	For D side
④	End block assembly L	SX3000-53-1A	SX5000-53-1A	For U side
⑤	Round head combination screw	SX3000-22-2 (M2 x 24)	M3 x 30 (Matt nickel plated)	
⑥	Gasket	SX3000-57-4	SX5000-57-6	
⑦	DIN rail	VZ1000-11-1-□		Refer to page 1-6-77.

How to Increase Manifold Bases

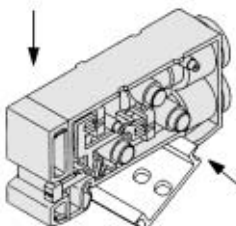
Station expansion is possible at any position.

- Loosen bolt (a) fixing the manifold base until it begins to turn idly. (While pressing DIN rail release buttons (c) at two locations, separate the manifold base from the DIN rail.)
- Press manifold block assembly splitting button (b), that are at the location where manifold bases are to be added, until button (b) locks, and then separate the block assemblies.
- Mount additional manifold block assembly on the DIN rail as shown in the figure.
- Press the block assembly until a click sound is produced, and tighten the bolts (a) to fix them to the DIN rail.
⚠ Caution (Tightening torque: 1.4 N·m)
 (While lightly holding the blocks after fixing an end block on one side, tighten the other end block for better sealing.)

Fig. (1) Block mounting procedure

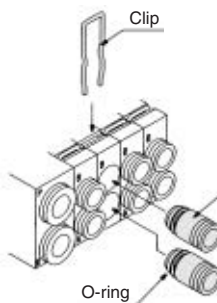
⚠ Caution

- When adding manifold bases to use more than 10 stations, add SUP/EXH block assembly, as well.
- When bolt (a) for the end block is not sufficiently tightened during reassembly, air leakage may result. Before supplying air, check that there is no gap between blocks and that the manifold block is firmly fixed to the DIN rail in order to ensure air supply without leakage.



Hook this section on the DIN rail and press in the direction of the arrow until a click sound is generated.

How to Change Fitting Assembly



Type 45 manifold permits change in the A and B port sizes by changing the manifold block fitting assembly.

After removing the valve, remove the clip with a screwdriver. To mount a new fitting assembly insert it and then insert a clip so it does not come out of the manifold block.

Fitting Assembly Part No.

Metric size

SX3000	One-touch fitting for ø4	VVQ1000-50A-C4
	One-touch fitting for ø6	VVQ1000-50A-C6
SX5000	One-touch fitting for ø4	VVQ1000-51A-C4
	One-touch fitting for ø6	VVQ1000-51A-C6
	One-touch fitting for ø8	VVQ1000-51A-C8

Inch size

SX3000	One-touch fitting for ø5/32"	VVQ1000-50A-N3
	One-touch fitting for ø1/4"	VVQ1000-50A-N7
SX5000	One-touch fitting for ø5/32"	VVQ1000-51A-N3
	One-touch fitting for ø1/4"	VVQ1000-51A-N7
	One-touch fitting for ø5/16"	VVQ1000-51A-N9



Note 1) P and R ports cannot be changed.

Note 2) Use caution that O-rings must be free from scratches and dust. Otherwise, air leakage may result.