

Series SX3000/5000/7000 Body Ported Manifold Bar Stock Type Individual Wiring

Type **20**

How to Order Manifold

SS5X **5** - 20 - **05**

Series	
3	SX3000
5	SX5000
7	SX7000

Stations	
02	2 stations
⋮	⋮
20	20 stations

P, R ports Thread type	
Nil	Rc
00F	G
00N	NPT
00T	NPTF



- 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

Cylinder port size

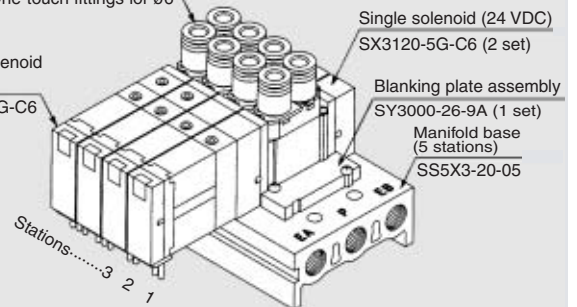
C6: With One-touch fittings for ø6

Double solenoid
(24 VDC)
SX3220-5G-C6
(2 set)

Single solenoid (24 VDC)
SX3120-5G-C6 (2 set)

Blanking plate assembly
SY3000-26-9A (1 set)

Manifold base
(5 stations)
SS5X3-20-05



SS5X3-20-05..... 1 set (Type 20, 5-station manifold base part no.)
 *SY3000-26-9A..... 1 set (Blanking plate assembly part no.)
 *SX3120-5G-C6..... 2 sets (Single solenoid part no.)
 *SX3220-5G-C6..... 2 sets (Double solenoid part no.)

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

Add the valve and option part number under the manifold base part number. In the case of complex arrangement, specify them on the manifold specification sheet.

How to Order Valves

SX **5** **1** 20 - **5** **N** **L** - **01**

Series	
3	SX3000
5	SX5000
7	SX7000

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

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



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



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

A, B port size

Symbol	Port size	Applicable series
M5	M5 x 0.8	SX3000
C4	One-touch fitting for ø4	
C6	One-touch fitting for ø6	
01	1/8	SX5000
C4	One-touch fitting for ø4	
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	SX7000
02	1/4	
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

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

Manifold Specifications

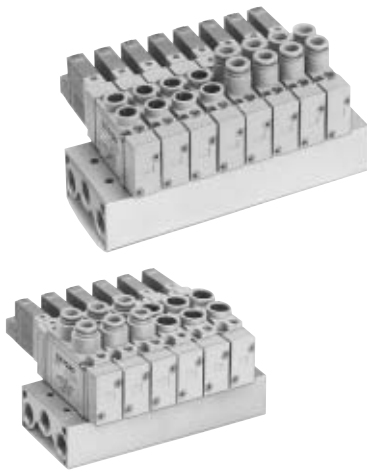
Model	SS5X3-20	SS5X5-20	SS5X7-20	
Applicable valve	SX3□20	SX5□20	SX7□20	
Manifold type	Single base/B mount			
P (SUP)/R (EXH)	Common SUP/Common EXH			
Valve stations <small>Note</small>	2 to 20 stations			
A, B port location	Valve			
Port size	P, EA, EB port	Rc 1/8	Rc 1/4	Rc 1/4
	A, B port	M5 x 0.8 C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	Rc 1/8 C4 (One-touch fitting ø4) C6 (One-touch fitting for ø6) C8 (One-touch fitting for ø8)	Rc 1/4 C8 (One-touch fitting for ø8) C10 (One-touch fitting for ø10)
Manifold base weight W (g) n: Stations	W = 19n + 45	W = 43n + 77	W = 51n + 81	

Note) For more than 10 stations, supply pressure to P port on both sides and exhaust from EA and EB 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
SS5X3-20	Rc 1/8	C6	0.72	0.29	0.18	0.80	0.36	0.21
SS5X5-20	Rc 1/4	C8	1.9	0.28	0.48	2.2	0.20	0.53
SS5X7-20	Rc 1/4	C10	3.6	0.31	0.93	3.6	0.27	0.88

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



SV

SZ

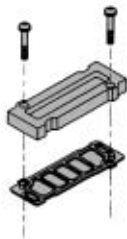
SY

SYJ

SX

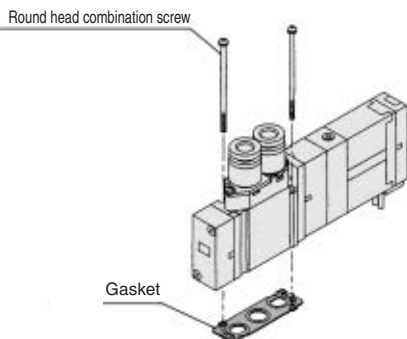
Manifold Option

■ Blanking plate assembly



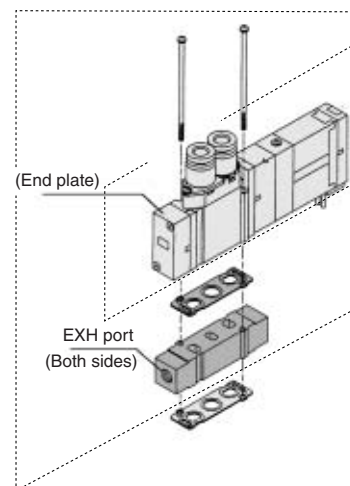
Series	Assembly part no.
SX3000	SY3000-26-9A
SX5000	SY5000-26-20A
SX7000	SY7000-26-22A

■ Bolt and gasket part no.



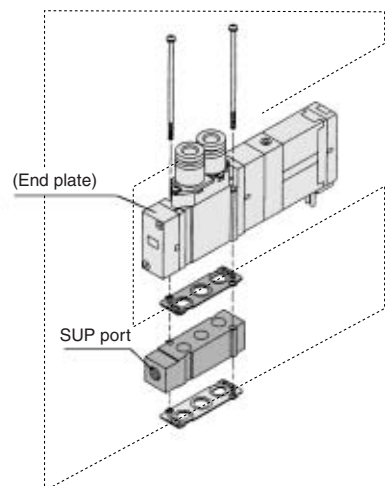
Series	Round head combination screw	Gasket
SX3000	SX3000-22-2 (M2 x 24)	SY3000-11-24
SX5000	M3 x 30 (Matt nickel plated)	SY5000-11-10
SX7000	M4 x 35 (Matt nickel plated)	SY7000-11-9

■ Individual EXH spacer assembly



Series	Assembly part no.	Port size
SX3000	SX3000-39-1回A	M5 x 0.8
SX5000	SX5000-39-1回A	1/8
SX7000	SX7000-39-20A	1/4

■ Individual SUP spacer assembly



Series	Assembly part no.	Port size
SX3000	SX3000-38-1回A	M5 x 0.8
SX5000	SX5000-38-1回A	Rc 1/8
SX7000	SX7000-38-20A	Rc 1/4

■ Plug

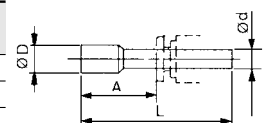
Inserted into an unused cylinder port and SUP/EXH ports. Purchasing order is available in units of 10 pieces.

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

* Thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

Dimensions

Applicable 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

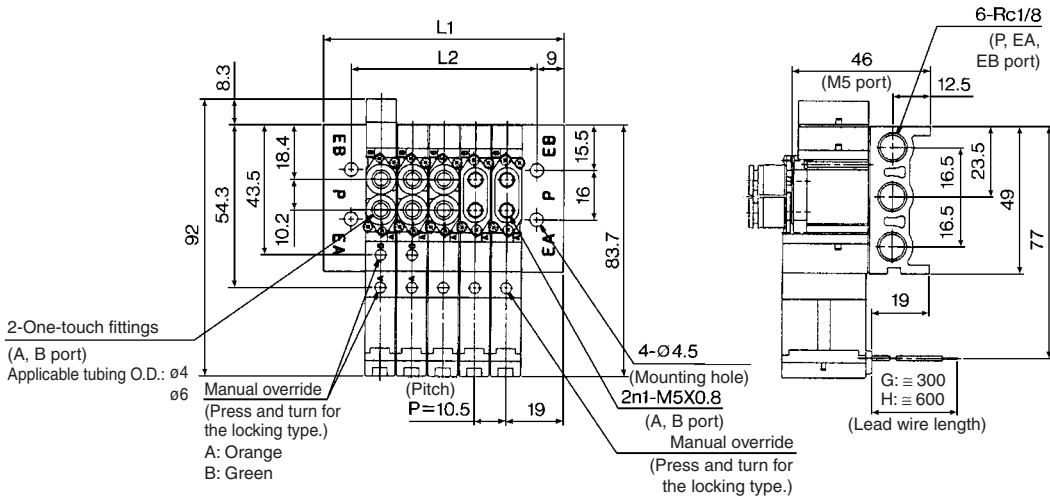
- M2: 0.17 N·m
- M3: 0.8 N·m
- M4: 1.4 N·m

Warning

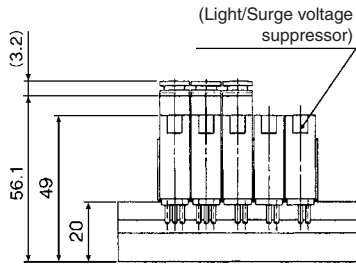
When mounting a valve or spacer on the manifold base or sub-plate, etc., those mounting directions are determined. If mounted in the wrong direction, the equipment to be connected may cause malfunction. Refer to external dimensions in pages 1-6-44 to 1-6-46, and then mount it.

SX3000: SS5X3-20- Stations

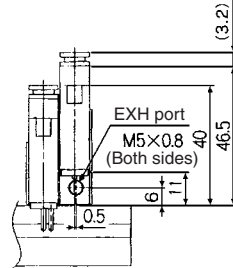
Grommet (G)



(n) (2) (1) stations

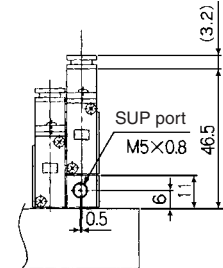


Individual EXH spacer mounting size

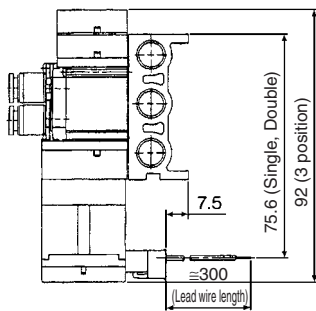


Individual SUP spacer mounting size

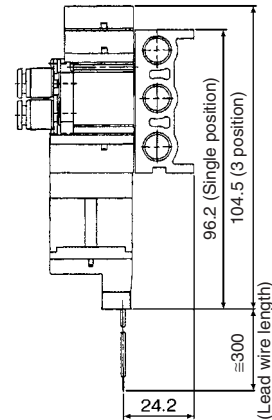
(SUP port is mounted on the end plate side of single solenoid.)



L plug connector (L)



M plug connector (M)



n: Stations (n1 + n2)

Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	48.5	59	69.5	80	90.5	101	111.5	122	132.5	143	153.5	164	174.5	185	195.5	206	216.5	227	237.5
L2	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

Type **41**
Type **42**

Series SX3000/5000/7000 Base Mounted Manifold Bar Stock Type Individual Wiring

How to Order Manifold

Type 41 (Compact type)

SS5X **5** — 41 — **05** — **C8** □

Series

3	SX3000
5	SX5000

Stations

02	2 stations
⋮	⋮
20	20 stations

A/B port size
Thread piping

Symbol	Port size	Applicable series
M5	M5 x 0.8	SX3000
01	1/8	SX5000

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SX3000
C6	One-touch fitting for ø6	
C6	One-touch fitting for ø6	SX5000
C8	One-touch fitting for ø8	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for ø5/32"	SX3000
N7	One-touch fitting for ø1/4"	
N7	One-touch fitting for ø1/4"	SX5000
N9	One-touch fitting for ø5/16"	

Type 42 (Common external pilot type)

SS5X **5** — 42 — **05** — **C8** □

Series

3	SX3000
5	SX5000
7	SX7000

Stations

02	2 stations
⋮	⋮
20	20 stations

A/B port size
Thread piping

Symbol	Port size	Applicable series
01	1/8	SX3000
02	1/4	SX5000
02	1/4	SX7000

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

One-touch fitting (Metric size)

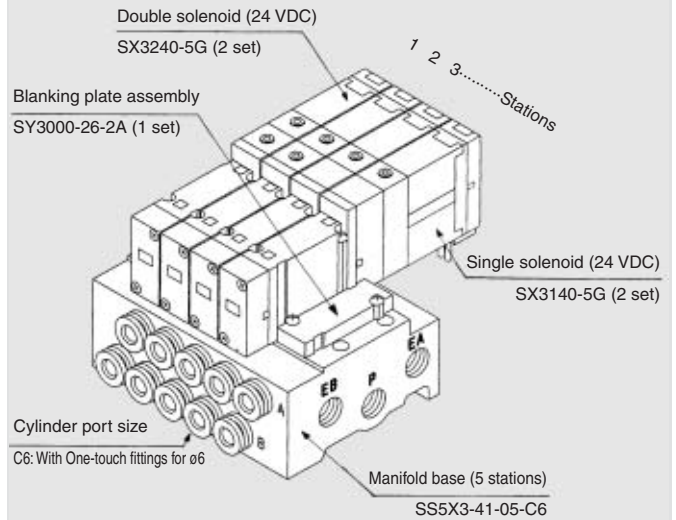
Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SX3000
C6	One-touch fitting for ø6	
C6	One-touch fitting for ø6	SX5000
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	SX7000

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for ø5/32"	SX3000
N7	One-touch fitting for ø1/4"	
N7	One-touch fitting for ø1/4"	SX5000
N9	One-touch fitting for ø5/16"	
N11	One-touch fitting for ø3/8"	SX7000

How to Order Valve Manifold Assembly

Ordering example



SS5X3-41-05-C6..... 1 set (Type 41, 5-station manifold base part no.)
 *SX3240-5G 2 sets (Double solenoid part no.)
 *SX3140-5G 2 sets (Single solenoid part no.)
 *SY3000-26-9A 1 set (Blanking plate assembly part no.)

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

Add the valve and option part number under the manifold base part number. In the case of complex arrangement, specify them on the manifold specification sheet.



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

How to Order Valves

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

● **Series**

3	SX3000
5	SX5000
7	SX7000

● **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

● **Pilot type**

Nil	Internal pilot
R	External pilot

● **Rated voltage**

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

● **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.

● **Common specifications**

Nil	Positive common
N	Negative common

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

SV
SZ
SY
SYJ
SX



Manifold Specifications

Model	SS5X3-41	SS5X3-42	SS5X5-41	SS5X5-42	SS5X7-42
Applicable valve	SX3□40	SX3□40(R)	SX5□40	SX5□40(R)	SX7□40(R)
Manifold type	Single base/B mount				
P(SUP)/R(EXH)	Common SUP/Common EXH				
Valve stations ^{Note)}	2 to 20 stations				
A, B Porting specifications	Location	Base			
	Direction	Side			
Port size	P, EA, EB port	Rc 1/8		Rc 1/4	
	A, B port	M5 x 0.8 C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	Rc 1/8 C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	Rc 1/8 C6 (One-touch fitting for ø6) C8 (One-touch fitting for ø8)	Rc 1/4 C8 (One-touch fitting for ø8) C10 (One-touch fitting for ø10)
Manifold base weight W (g) n: Stations	W = 30n + 50	W = 37n + 63	W = 61n + 101	W = 79n + 127	W = 100n + 151

Note) For more than 10 stations, supply pressure to P port on both sides and exhaust from EA and EB port on both sides.

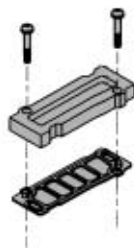
Flow Characteristics

Model	Port size		Flow characteristics ^{Note)}					
			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
SS5X3-41	Rc 1/8	C6	0.75	0.19	0.18	0.81	0.23	0.20
SS5X3-42	Rc 1/8	C6	0.75	0.20	0.18	0.82	0.20	0.20
SS5X5-41	Rc 1/4	C8	1.8	0.23	0.44	1.9	0.16	0.45
SS5X5-42	Rc 1/4	C8	1.9	0.20	0.46	1.9	0.12	0.43
SS5X7-42	Rc 1/4	C10	3.0	0.25	0.75	3.0	0.12	0.66

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

Manifold Option

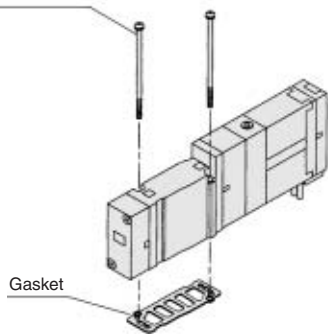
■ Blanking plate assembly



Series	Assembly part no.
SX3000	SY3000-26-9A
SX5000	SY5000-26-20A
SX7000	SY7000-26-22A

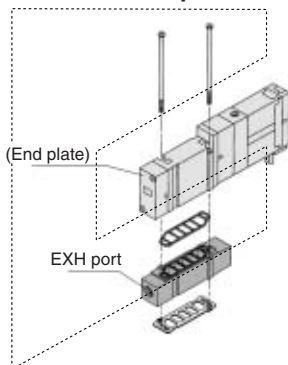
■ Bolt and gasket part no.

Round head combination screw



Series	Round head combination screw	Gasket
SX3000	SX3000-22-2 (M2 x 24)	SY3000-11-25
SX5000	M3 x 30 (Matt nickel plated)	SY5000-11-15
SX7000	M4 x 35 (Matt nickel plated)	SY7000-11-11

■ 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
SX7000	SX7000-39-16□A	1/4

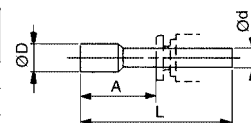
Note) The EXH port may be either on the lead wire side or on the end plate side. (An assembly is shipped under the condition shown in the figure.)

■ Plug

Inserted into an unused cylinder port and SUP/EXH ports. 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

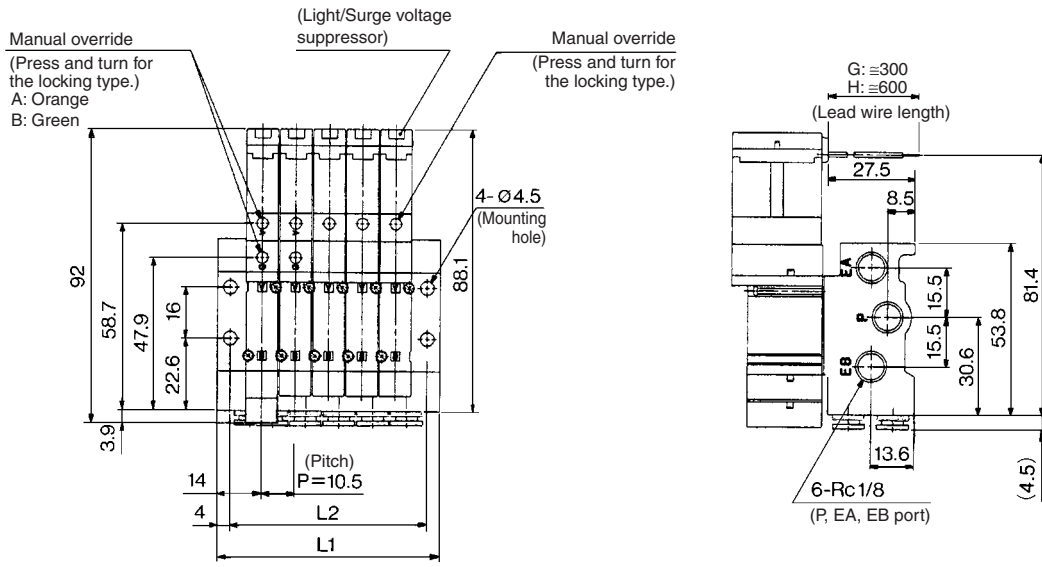
M2: 0.17 N·m
M3: 0.8 N·m
M4: 1.4 N·m

⚠ Warning

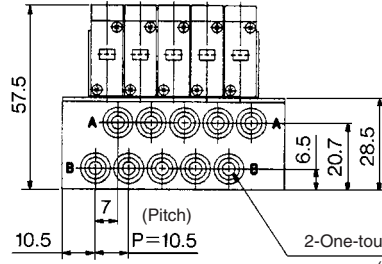
When mounting a valve or spacer on the manifold base or sub-plate, etc., those mounting directions are determined. If mounted in the wrong direction, the equipment to be connected may cause malfunction. Refer to external dimensions in pages 1-6-57 to 1-6-63, and then mount it.

SX3000: SS5X3-41- Stations -M5/C4/C6

Grommet (G)

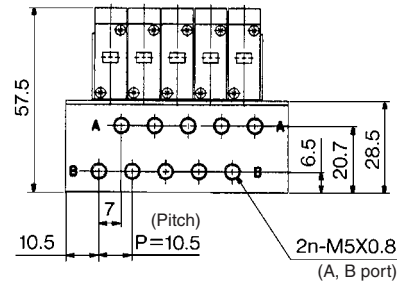


(n) (2) (1) stations



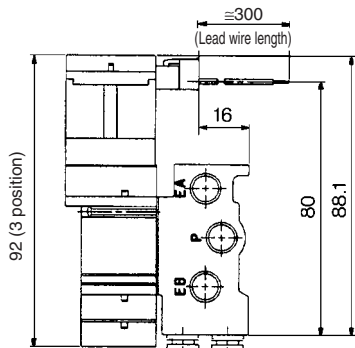
Applicable tubing O.D.: ø4 ø6

M5

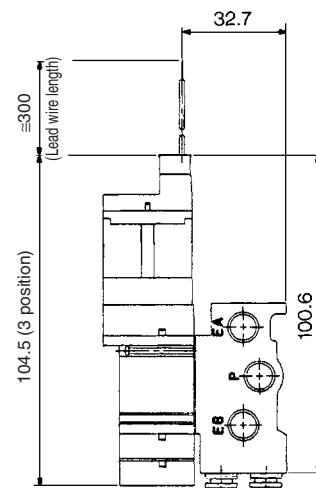


- SV
- SZ
- SY
- SYJ
- SX

L plug connector (L)



M plug connector (M)

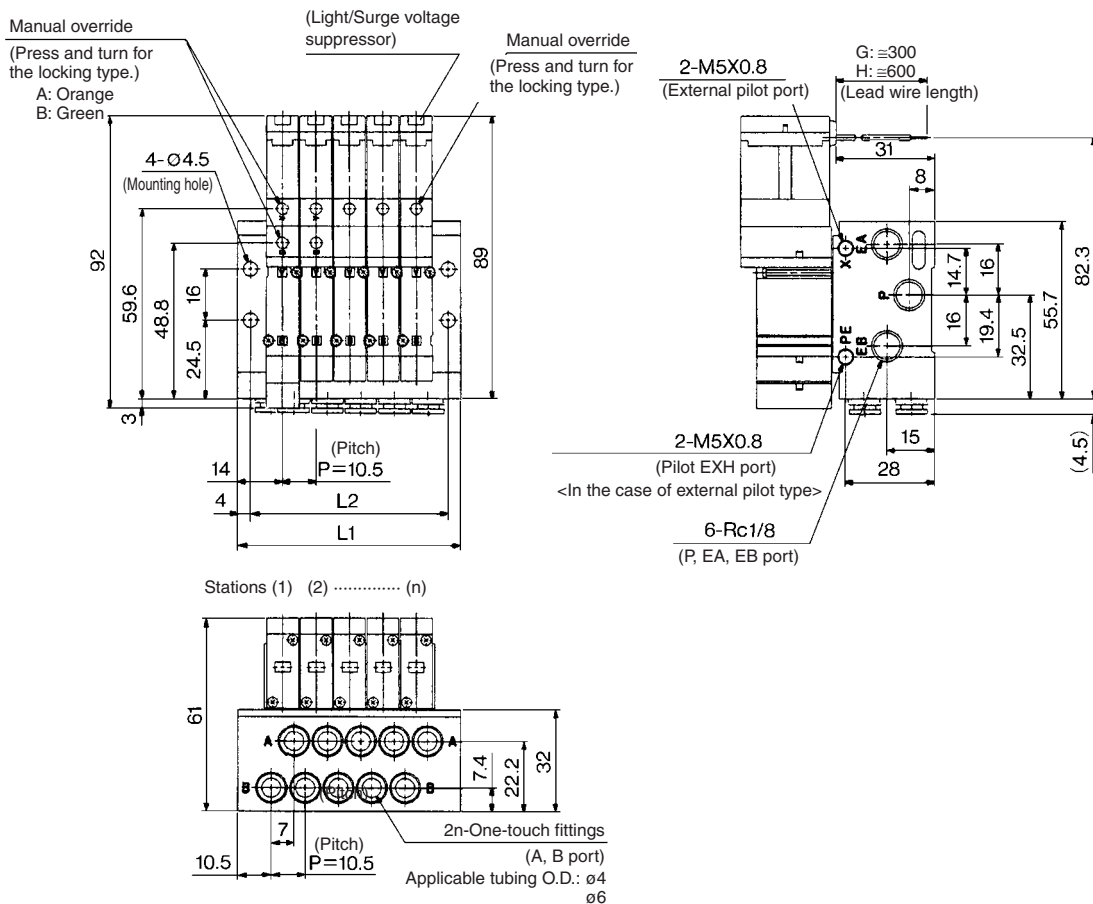


Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	38.5	49	59.5	70	80.5	91	101.5	112	122.5	133	143.5	154	164.5	175	185.5	196	206.5	217	227.5
L2	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

(mm)

SX3000: SS5X3-42- Stations -C4/C6

Grommet (G)



SV

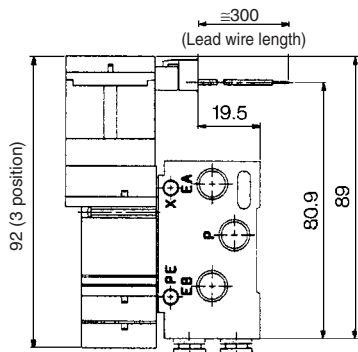
SZ

SY

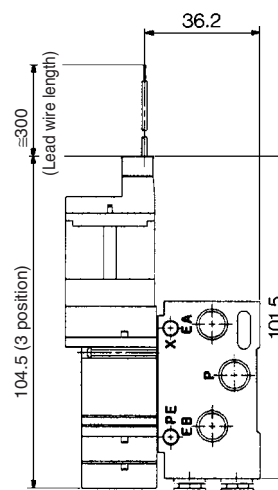
SYJ

SX

L plug connector (L)



M plug connector (M)

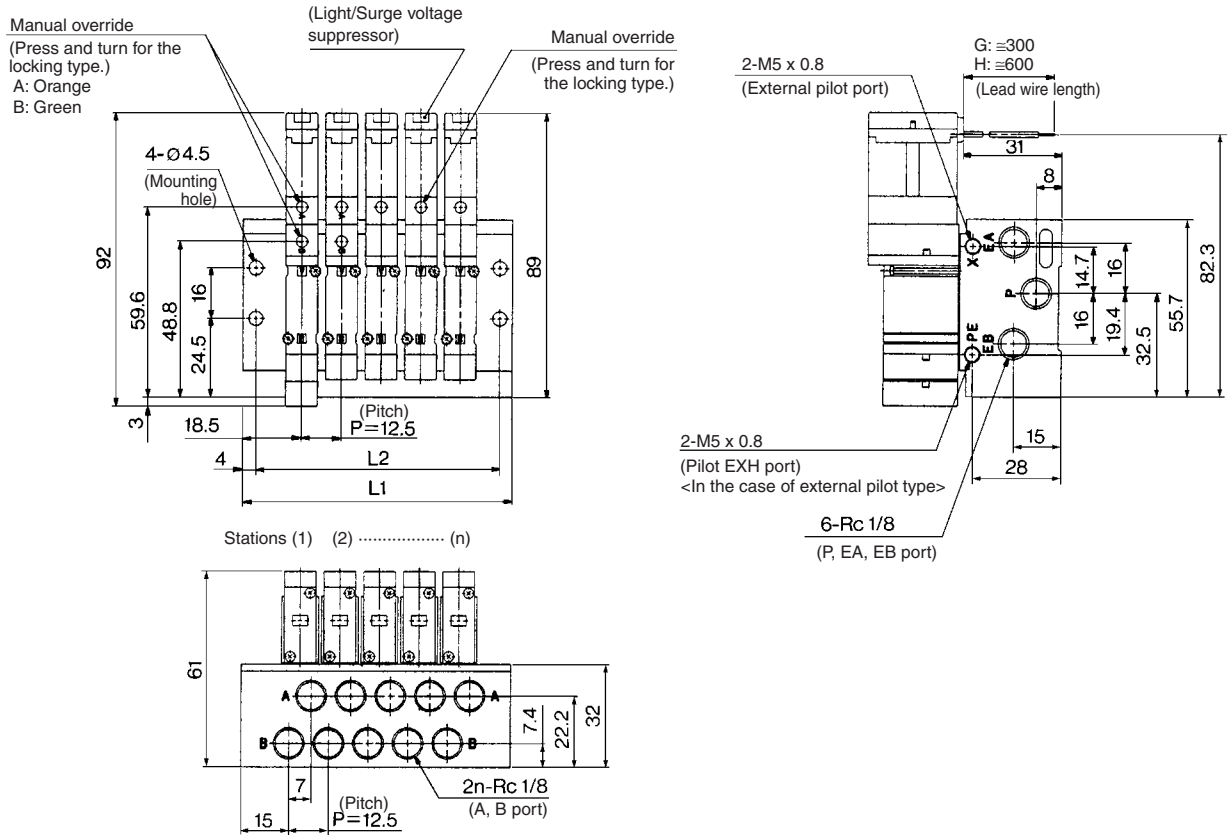


(mm)

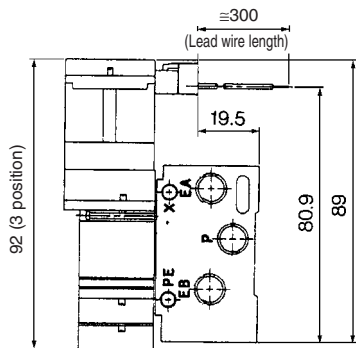
Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	38.5	49	59.5	70	80.5	91	101.5	112	122.5	133	143.5	154	164.5	175	185.5	196	206.5	217	227.5
L2	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

SX3000: SS5X3-42- Stations -01

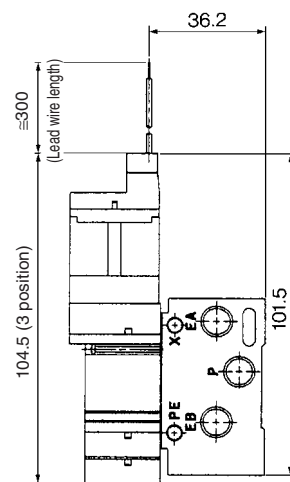
Grommet (G)



L plug connector (L)



M plug connector (M)



Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	47.5	60	72.5	85	97.5	110	122.5	135	147.5	160	172.5	185	197.5	210	222.5	235	247.5	260	272.5
L2	39.5	52	64.5	77	89.5	102	114.5	127	139.5	152	164.5	177	189.5	202	214.5	227	239.5	252	264.5