

45<sub>Type</sub>

# SX3000/5000 Base Mounted Stacking Manifold/DIN Rail Mounted Individual Wiring

## How to Order Manifold

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

**Manifold series**

3	SX3000
5	SX5000

**Stations**

02	2 stations
⋮	⋮
20	20 stations

**Supply/Exhaust block ass'y mounting position**

Symbol	Mounting position	Applicable series
U	U-side	2 to 10 stations
D	D-side	
B	Both sides	2 to 20 stations
M*	Special specification	

\* Special specification available by special order.

**A/B port size**

SX3000		SX5000	
Symbol	Port size	Symbol	Port size
C4	One-touch fittings for ø4	C4	One-touch fittings for ø4
C6	One-touch fittings for ø6	C6	One-touch fittings for ø6
M*	Mixed	C8	One-touch fittings for ø8
		M*	Mixed

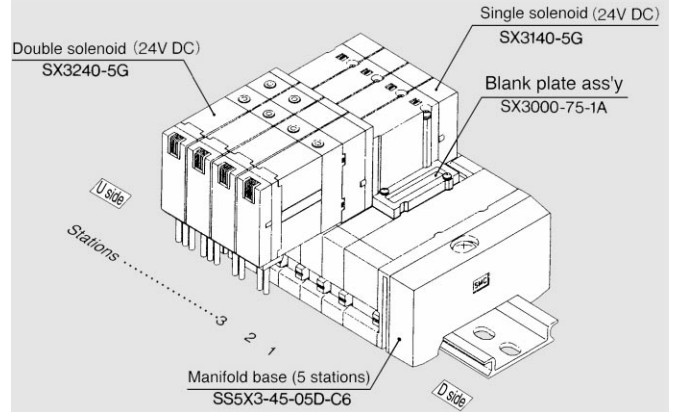
\* Mixed porting available by special order.

**Option**

If a longer DIN rail than the one with designated station is required, specify the required station number. (Maximum: 20 stations)

## How to Order Valve Manifold Ass'y (Example)

### Ordering example



SS5X3-45-05D-C6 ····· 1set (45 type 5-station manifold base No.)  
 \* SX3000-75-1A ····· 1set (Blank plate assembly No.)  
 \* SX3140-5G ····· 2sets (Single solenoid No.)  
 \* SX3240-5G ····· 2sets (Double solenoid No.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

They are assembled in the order listed starting at the first station at the D side even if the air supply/exhaust block assembly is located at either end. For more complicated assemblies, refer to the manifold specifications.



- Connector assembly for L and M type ····Refer to p.1.3-6.
- Common connector ass'y for manifold ····Refer to p.1.3-7.

## How to Order Valve

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

### Series

3	SX3000
5	SX5000

### Configuration

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

### Rated voltage

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

### Common

—	Positive common
N	Negative common



Note) For single solenoid valves with the 'G' electrical entry only positive common wiring is available. For single solenoid valves without the 'S' or 'Z' protection circuit only positive common wiring is available.

### Manual override

—	Non-locking push style
D	Push-turn-locking slotted style

### Indicator light and surge voltage suppressor

—	Without indicator light and surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light and surge voltage suppressor

### Electrical entry

Grommet	L type connector	M type connector
G: 300mm lead wire	L: 300mm lead wire	M: 300mm lead wire
H: 600mm lead wire	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.

SY

SYJ

**SX**

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

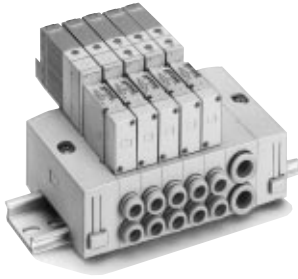
VQD

VZS

VFS

VS

VS7



### Manifold Specifications

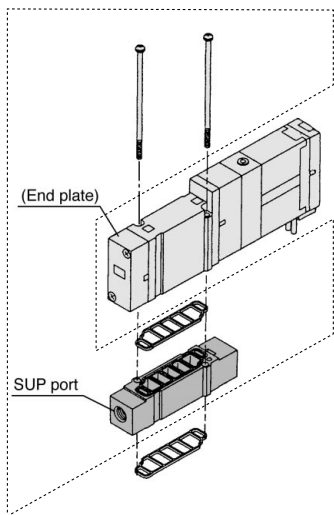
Model		<b>SS5X3-45</b>	<b>SS5X5-45</b>
Applicable valve		<b>SX3□40</b>	<b>SX5□40</b>
Manifold style		Stacking DIN rail mounted	
P(SUP)/R(EXH) style		Common supply/Common exhaust	
Valve stations <sup>(1)</sup>		2 to 20 stations	
A/B porting specifications	Location	Base	
	Direction	Side	
Port size	P/R port	C8 (One-touch fittings for ø8)	C10 (One-touch fittings for ø10)
	A/B port	C4 (One-touch fittings for ø4) C6 (One-touch fittings for ø6)	C4 (One-touch fittings for ø4) C6 (One-touch fittings for ø6) C8 (One-touch fittings for ø8)
Valve effective area <sup>(2)</sup> (mm <sup>2</sup> ) (Cv factor)		C6: P→A/B 4.68 (0.26) A/B→R 4.68 (0.26)	C8: P→A/B 12.6 (0.7) A/B→R 12.6 (0.7)
Manifold base weight W(g)		2 to 10 stations: W=22n+118	2 to 10 stations: W=47n+156
n: Stations		11 to 20 stations: W=22n+140	11 to 20 stations: W=47n+190



Note 1) For more than 11 stations, supply pressure to P port on both sides and exhaust from R port on both sides.  
 Note 2) Valve for single operation of 2 position valve mounted on manifold base (5 stations).

## Manifold Options

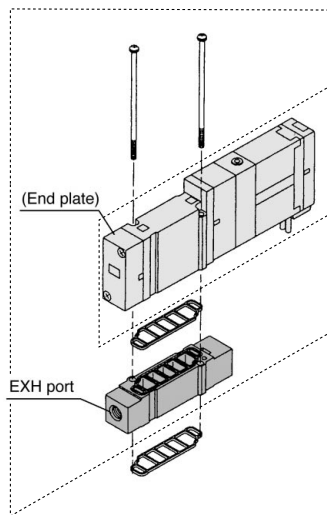
### Individual SUP spacer ass'y



Series	Ass'y No.	Port size
SX3000	SX3000-38-2A	M5 X 0.8
SX5000	SX5000-38-2A	Rc (PT) 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.)

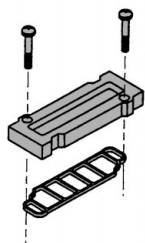
### Individual EXH spacer ass'y



Series	Ass'y No.	Port size
SX3000	SX3000-39-2A	M5 X 0.8
SX5000	SX5000-39-2A	Rc (PT) 1/8

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

### Blank plate assembly



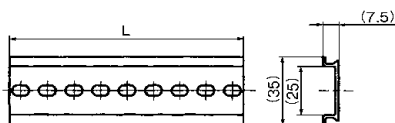
Series	Ass'y No.
SX3000	SX3000-75-1A
SX5000	SX5000-76-1A

### Dimensions/DIN rail

VZ1000-11-1-□

See L dimensions

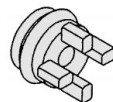
\* Fill in □ with an appropriate no. listed on the table of DIN rail dimensions shown below.



No.	0	1	2	3	4	5	6	7	8	9	10
L	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	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	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	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	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	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	923	935.5	948	960.5	973	985.5					

### SUP block disc

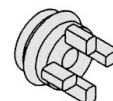
Different pressures can be supplied into one manifold by attaching supply block disks to pressure supply groove.



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

### EXH block disc

Exhausted air from valves can be divided in order not to affect other valves by attaching exhaust block disks to pressure exhaust groove.



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

### Block disc indication label

These labels are stuck on the block with SUP and EXH block discs inside for confirmation from outside. (3 sheets respectively)

#### VZ3000-123-1A

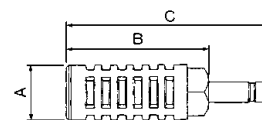
Label for SUP block disc    Label for EXH block disc    Label for SUP, EXH block disc



Note) When ordering block disc installed at the factory, labels will be attached to the manifold showing the locations.

### Silencer for One-touch fittings

The silencer plugs directly into the One-touch fittings of the manifold.

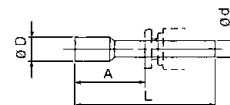


Series	Model	Effective area	A	B	C
SX3000 (ø8)	AN203-KM8	14mm <sup>2</sup>	ø16	26	51
SX5000 (ø10)	AN200-KM10	26mm <sup>2</sup>	ø22	53.8	80.8
	AN300-KM10	30mm <sup>2</sup>	ø25	70	97

### Plug

Inserted into an unused cylinder port and SUP/EXH ports. The minimum order quantity is 10 pcs.

KQP-<sup>04</sup>/<sub>06</sub>/<sub>08</sub>/<sub>10</sub>-X19  
 ● White color



### Dimensions

Fittings size ød	Model	A	L	D
4	KQP-04-X19	16	32	6
6	KQP-06-X19	18	35	8
8	KQP-08-X19	20.5	39	10
10	KQP-10-X19	22	43	12

### Caution

#### Mounting screw tightening torque

M2: 0.15Nm  
 M3: 0.6Nm  
 M4: 1.4Nm

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

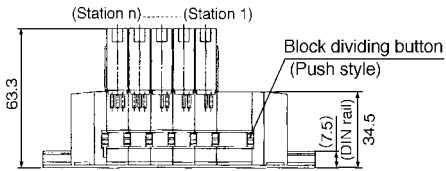
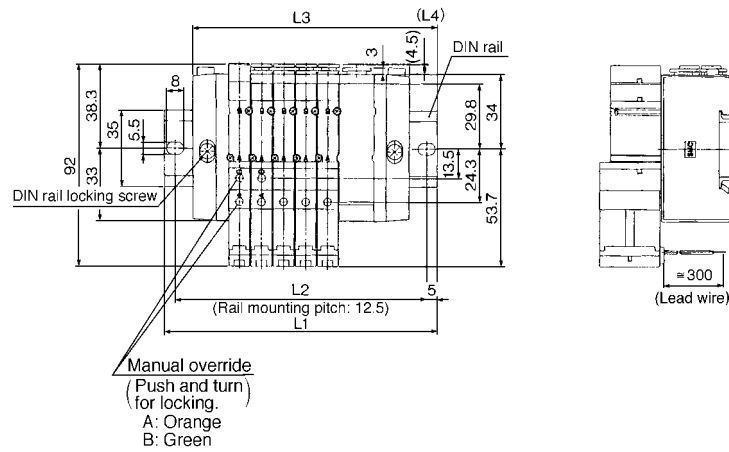
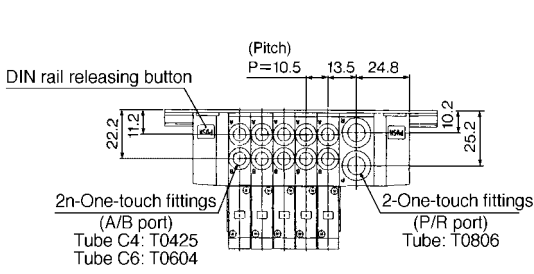
VFS

VS

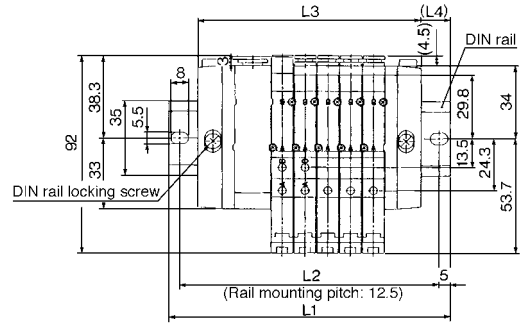
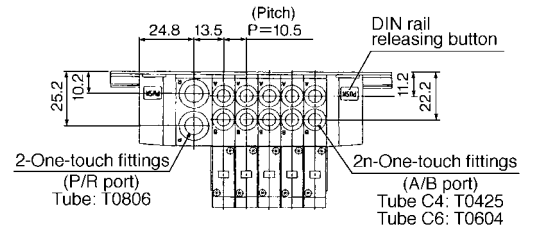
VS7

## Dimensions/Series SX3000

### SS5X3-45-Stations D-C<sub>6</sub><sup>4</sup>

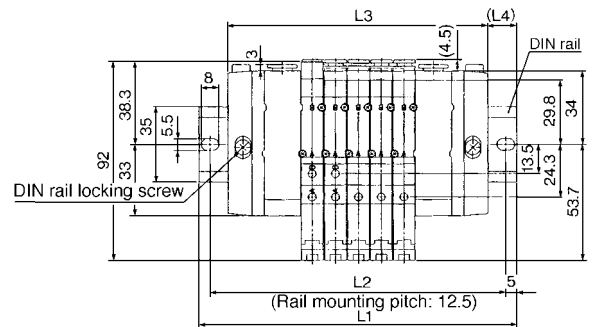
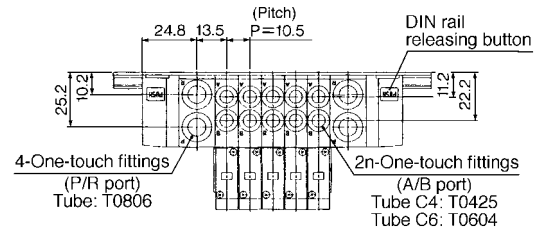


### SS5X3-45-Stations U-C<sub>6</sub><sup>4</sup>



Stations	2	3	4	5	6	7	8	9	10
L1	98	110.5	123	135.5	148	148	160.5	173	185.5
L2	87.5	100	112.5	125	137.5	137.5	150	162.5	175
L3	70.5	81	91.5	102	112.5	123	133.5	144	154.5
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5

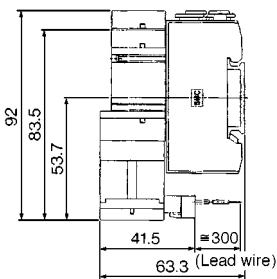
### SS5X3-45-Stations B-C<sub>6</sub><sup>4</sup>



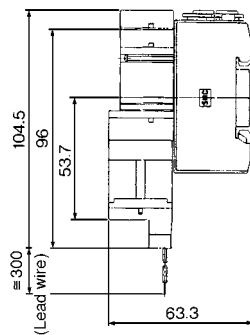
Stations	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	148	160.5	173	185.5	185.5	198
L2	100	112.5	125	137.5	150	162.5	175	175	187.5
L3	87	97.5	108	118.5	129	139.5	150	160.5	171
L4	11.5	12.5	13.5	14.5	15.5	16.5	17.5	12.5	13.5

Stations	11	12	13	14	15	16	17	18	19	20
L1	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5
L2	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300
L3	181.5	192	202.5	213	223.5	234	244.5	255	265.5	276
L4	14.5	15.5	16.5	17.5	12	13	14	15	16	17

### L plug connector



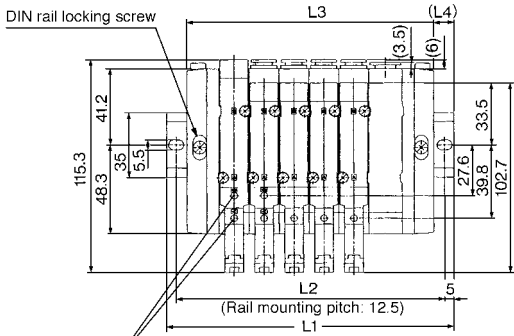
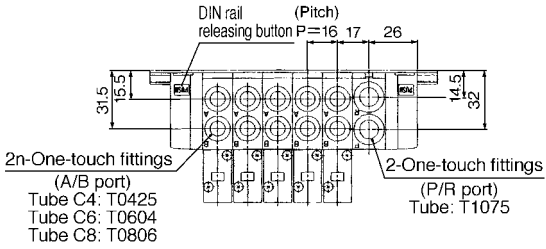
### M plug connector



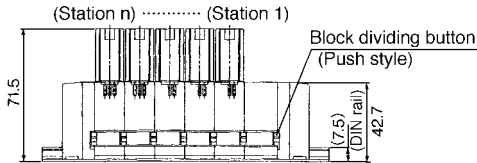
## Dimensions/Series SX5000

### SS5X5-45-Stations D

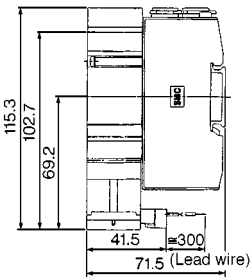
C4  
C6  
C8



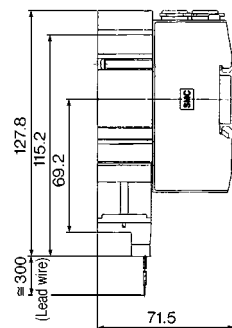
Manual override  
(Push and turn)  
for locking.  
A: Orange  
B: Green



### L plug connector

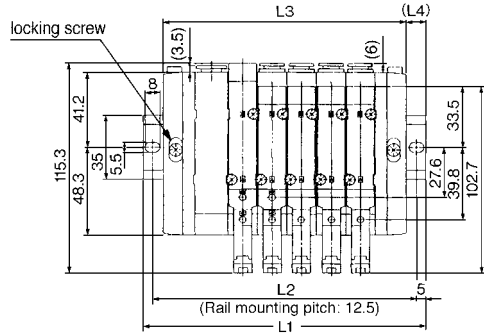
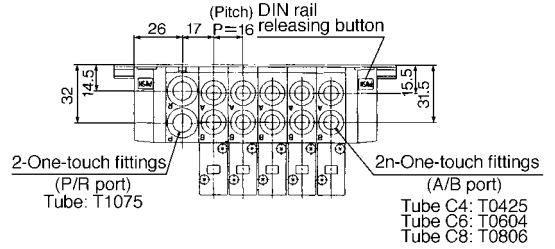


### M plug connector



### SS5X5-45-Stations U

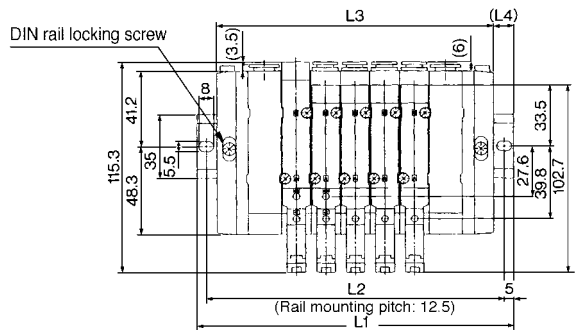
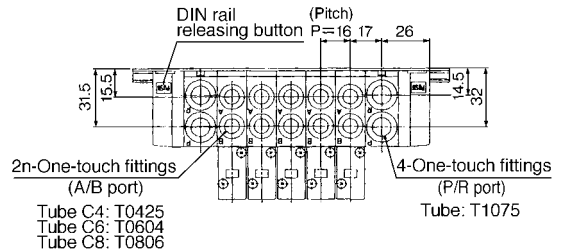
C4  
C6  
C8



Stations	2	3	4	5	6	7	8	9	10
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	2	3	4	5	6	7	8	9	10
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	11	12	13	14	15	16	17	18	19	20
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

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

VFS

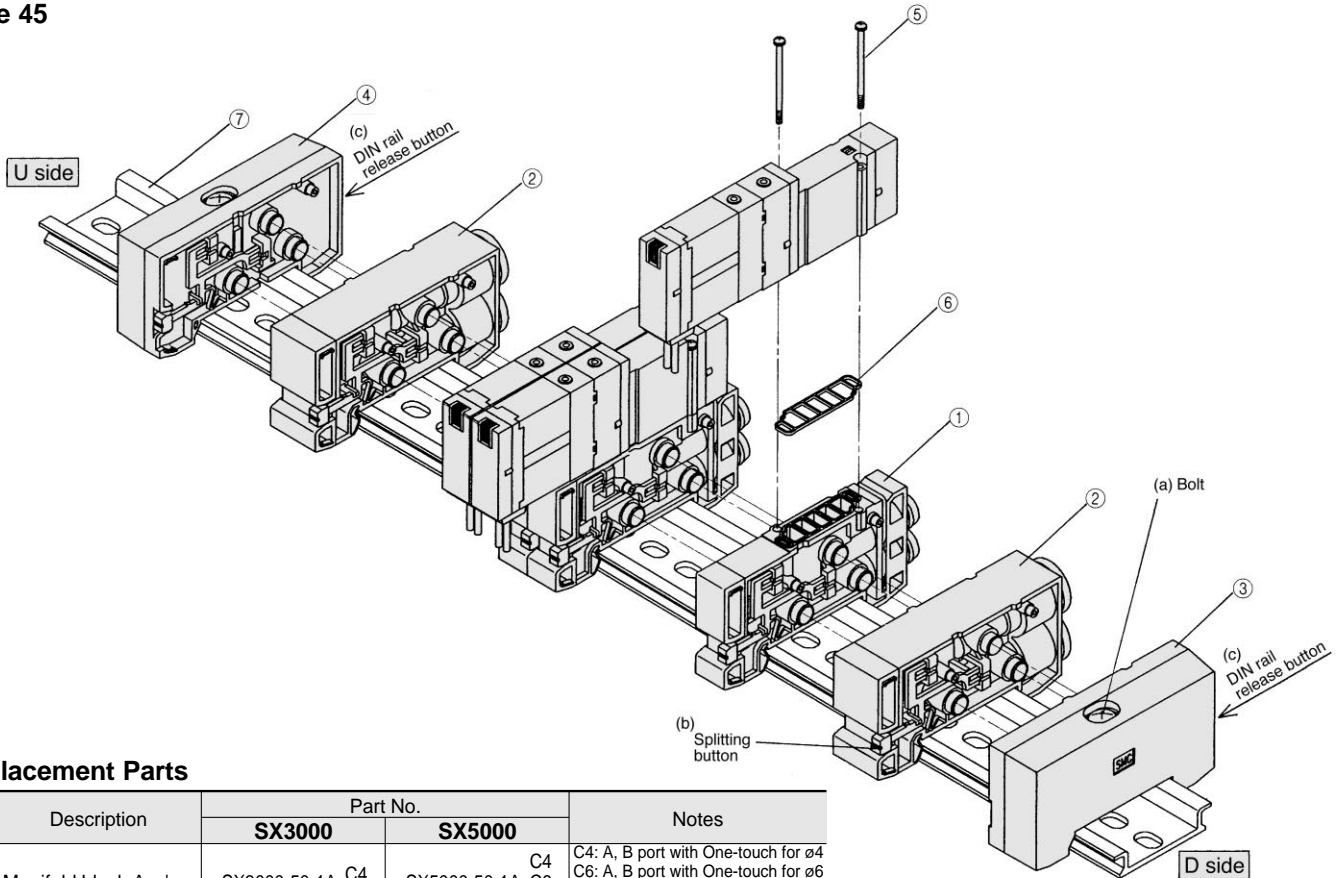
VS

VS7



## Exploded View/DIN Rail Manifold

### Type 45



### Replacement Parts

No.	Description	Part No.		Notes
		SX3000	SX5000	
①	Manifold block Ass'y	SX3000-50-1A-C4 C6	SX5000-50-1A-C6 C8	C4: A, B port with One-touch for ø4 C6: A, B port with One-touch for ø6 C8: A, B port with One-touch for ø8 (Gasket ⑥ is an accessory)
②	SUP/EXH block Ass'y	SX3000-51-1A	SX5000-51-1A	P, R port SX3000 with One-touch for ø8 P, R port SX5000 with One-touch for ø10
③	End block Ass'y R	SX3000-52-1A	SX5000-52-1A	For D side
④	End block Ass'y L	SX3000-53-1A	SX5000-53-1A	For U side
⑤	Phillips head screw	SX3000-22-2 (M2 X 24)	M3 X 30 (Matted nickel plated)	
⑥	Gasket	SX3000-57-4	SX5000-57-1	
⑦	DIN rail	VZ1000-11-1-□		Refer to p.1.3-73

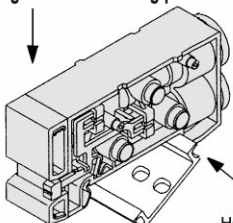
### How to increase manifold bases (Manifold bases can be added at any location.)

- Cut off the air supply to confirm that no air is left in the manifold before starting operation. Remaining air or inappropriate installation may cause an accident.
- 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 ass'y 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 assemblies on the DIN rail as shown in the figure.
  - Press block assemblies until a click sound is produced, and tighten bolt (a) to fix them to the DIN rail. (Torque: 1 Nm) (While lightly holding the blocks with hands after fixing an end block on one side, tighten the other end block for better sealing.)

#### Caution

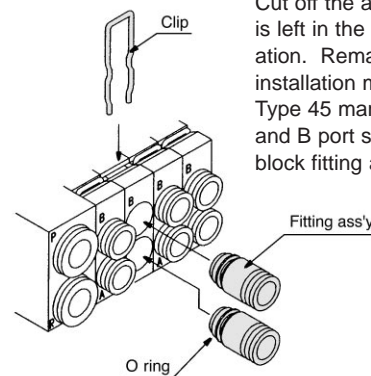
- When adding manifold bases to use more than 10 stations, add SUP/EXH block ass'ys, as well.
- When bolt (a) for the end block is not sufficiently tightened during reassembly, air leakage may result. Before supplying air, check that there is no gap between blocks and that the manifold block is firmly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

Fig.1 Block mounting procedure



Hook this part on the DIN rail and then press in the direction of the arrow until a click sound is produced.

### How to change fitting assembly



Cut off the air supply to confirm that no air is left in the manifold before starting operation. Remaining air or inappropriate installation may cause an accident. 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, etc. For mounting a new fitting ass'y, insert it and then insert a clip until it will not come out of the manifold block.

### Fitting ass'y

Port size	SX3000	SX5000
One-touch fittings for ø4	VVQ1000-50A-C4	VVQ1000-51A-C4
One-touch fittings for ø6	VVQ1000-50A-C6	VVQ1000-51A-C6
One-touch fittings for ø8	—	VVQ1000-51A-C8

- Note 1) P and R ports cannot be changed.  
Note 2) Protect O rings from scratches and dust to prevent air leakage.

# SX3000/5000 Base Mounted Stacking Manifold/DIN Rail Mounted Plug-in

## How to Order Manifold

45F type (D-sub Connector/25 pin)



Manifold series

3	SX3000
5	SX5000

Common

—	Positive common
N	Negative common

Connector box mounting position

Symbol	Mounting position
U	U side
D	D side

Stations

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
10	10	Applicable up to 20 solenoids. Use manifold specification form to specify wiring.
11	11	
⋮	⋮	
20	20	

The number of blank plates ass'y is included.

SUP/EXH block ass'y mounting position

Symbol	Mounting position	Stations
U	U side	2 to 10
D	D side	2 to 10
B	Both side	2 to 20
M*	Special specification	

\* Special specification is available by special order.

A/B port size

SX3000

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

SX5000

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

\* Mixed porting available by special order.

Voltage

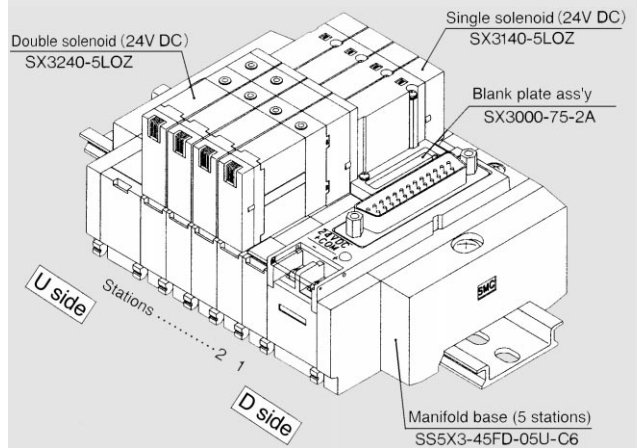
—	24V DC
12V	12V DC

Option

If a longer than standard DIN rail is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

## How to Order Valve Manifold Ass'y (Example)

Ordering example (45F type/D-sub connector (25 pin))

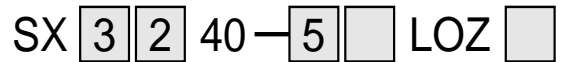


SS5X3-45FD-05U-C6 ··· 1set (45F type D-sub connector 5-station manifold base No.)  
 \* SX3000-75-2A ····· 1set (Blank plate assembly number.)  
 \* SX3140-5LOZ ····· 2sets (Single solenoid number.)  
 \* SX3240-5LOZ ····· 2sets (Double solenoid number.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

- All manifold stations are wired for double solenoid valves. Valves are mounted in the order listed starting at the 1st station of D side of the manifold regardless of the location of the electrical entry.
- When special wiring is required, use the manifold specification form.

## How to Order Valve (Types 45F, 45P□, 45T, 45T1)



Series

3	SX3000
5	SX5000

Configuration

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	24V DC
6	12V DC
V*	6V DC
S*	5V DC
R*	3V DC

Common

—	Positive common
N	Negative common

\* Correspond with common specification for manifold.

\*: Only 45T and 45T1 are available.

Manual override

—	Non-locking push style
D	Push-turn-locking slotted style



## How to Order Manifold

### 45P□type (Flat cable)



**Manifold series**

3	SX3000
5	SX5000

**Common**

—	Positive common
N	Negative common

**Connector poles**

Symbol	Poles	Applicable stations
—	26	2 to 20 stations
G	20	2 to 16 stations
H	10	2 to 8 stations

**Connector mounting position**

Symbol	Mounting position
U	U side
D	D side

**Option**

Specify the station number if a DIN rail longer than the standard is required. (20 stations maximum)

**Voltage**

—	24V DC
12V	12V DC

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

\* Mixed porting available by special order.

**SUP/EXH block assembly mounting position**

Symbol	Mounting position	Stations
U	U side	2 to 10
D	D side	2 to 10
B	Both side	2 to 20
M*	Special specification	

\* Special specification available by special order.

**Valve stations (Blank plate ass'ys are included.)**

**26 pin (P) connector**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
10	10	Applicable up to 20 solenoids. Use manifold specification form to specify wiring.
11	11	
⋮	⋮	
20	20	

**20 pin (PG) connector**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
08	8	Applicable up to 16 solenoids. Use manifold specification form to specify wiring.
09	9	
⋮	⋮	
16	16	

**10 pin (PH) connector**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
04	4	Applicable up to 8 solenoids. Use manifold specification form to specify wiring.
05	5	
⋮	⋮	
08	8	

### 45T type (9 pin terminal block)



**Series**

3	SX3000
5	SX5000

**Terminal block mounting position**

Symbol	Mounting position
U	U side
D	D side

**Stations**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
04	4	Applicable up to 8 solenoids. Use manifold specification form to specify wiring.
05	5	
⋮	⋮	
08	8	

The number of blank plate ass'ys is included.

**SUP/EXH block ass'y mounting position**

Symbol	Mounting position	Stations
U	U side	2 to 8
D	D side	2 to 8
B	Both side	2 to 8
M*	Special specification	

\* Indicate special locations in the manifold specification form.

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

\* Mixed porting is available by special order.

### 45T1 type (18 pin terminal block)



**Series**

3	SX3000
5	SX5000

**Terminal block mounting position**

Symbol	Mounting position
U	U side
D	D side

**Stations**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
08	8	Applicable up to 17 solenoids. Use manifold specification form to specify wiring.
09	9	
⋮	⋮	
17	17	

The number of blank plate ass'ys is included.

**SUP/EXH block ass'y mounting position**

Symbol	Mounting position	Stations
U	U side	2 to 10
D	D side	2 to 10
B	Both side	2 to 17
M	Special specification	

\* Special specification available by special order.

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

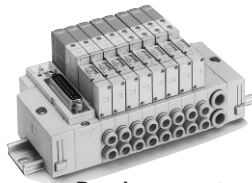
\* Mixed porting is available by special order.



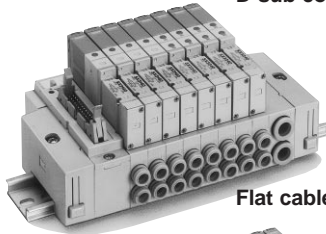
Note) The terminal block (45T□type) manifold has no common polarity. It can be used for both positive and negative common.

- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4

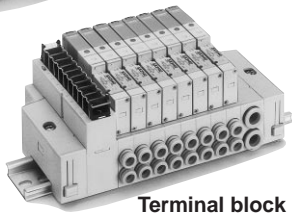
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7



D-sub connector style



Flat cable style



Terminal block style

## Manifold Specifications

Type	D-sub connector 45F	Flat cable 45P□			Terminal block	
		45P	45PG	45PH	45T	45T1
Manifold style	Plug-in					
P(SUP)/R(EXH) style	Common supply/Common exhaust					
Valve stations <sup>(1)</sup>	2 to 20		2 to 16		2 to 8	2 to 17
A/B port specifications	Location	Base				
	Direction	Side				
Port size	P/R port	C8 (One-touch fittings for ø8)				
	A/B port	C10 (One-touch fittings for ø10)				
Valve effective area <sup>(2)</sup> (mm <sup>2</sup> ) (Cv factor)	SX3000	C4 (One-touch fittings for ø4)/C6 (One-touch fittings for ø6)				
	SX5000	C4 (One-touch fittings for ø4)/C6 (One-touch fittings for ø6)/C8 (One-touch fittings for ø8)				
Connector	SX3000	C6: P→A/B 4.68 (0.26) A/B→R 4.68 (0.26)				9 pin terminal block (M3)
	SX5000	C8: P→A/B 12.6 (0.7) A/B→R 12.6 (0.7)				
Internal wiring	+COM (45□type), -COM (45N□type)				Both for +COM and -COM	
Manifold base weight W (g) n: Stations (D-sub connector)	SX3000	2 to 10 stations : W=26n+172 11 to 20 stations : W=26n+199				
	SX5000	2 to 10 stations : W=54n+227 11 to 20 stations : W=54n+264				

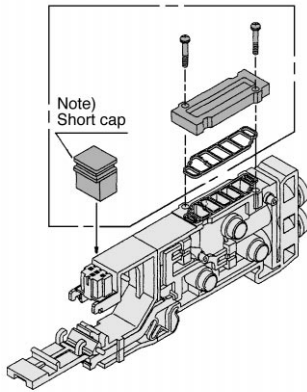


Note 1) There is limit to the number of stations available depending on the number of solenoids required. Please refer to the "How to Order". For more than 10 stations, supply pressure through the 'P' ports at both ends of the manifold exhaust through both ends as well.

Note 2) Valve for single operation of 2 position valve mounted on manifold base (5 stations).

## Manifold Options

### Blank plate assembly



Note) Short cap

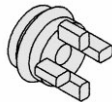
Series	Ass'y No.
SX3000	SX3000-75-2A
SX5000	SX5000-76-2A



Note) When mounting a blank plate, be sure to mount a short cap.

### SUP block disc

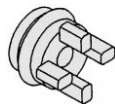
Different pressures can be supplied into one manifold by inserting supply block discs between stations.



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

### EXH block disc

Exhausted air from valves can be divided in order not to affect other valves by inserting exhaust block discs between stations.



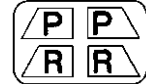
Series	Part No.
SX3000	SX3000-77-1A
SX5000	SX5000-77-1A

### Block disc indication label

These labels are stuck on the block with SUP and EXH block discs inside for confirmation from outside. (3 sheets respectively)

#### VZ3000-123-1A (Both for SX3000, 5000)

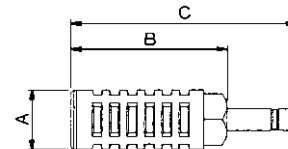
Label for SUP block disc    Label for EXH block disc    Label for SUP, EXH block disc



Note) When ordering block disc installed at the factory, labels are attached to the manifold showing the locations.

### Silencer for One-touch fittings

The silencer plugs directly into the One-touch fittings of the manifold.

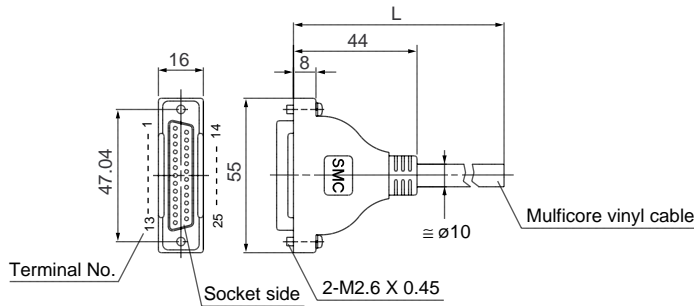


Series	Model	Effective area	A	B	C
SX3000 (ø8)	AN203-KM8	14mm <sup>2</sup>	ø16	26	51
	AN200-KM10	26mm <sup>2</sup>	ø22	53.8	80.8
SX5000 (ø10)	AN300-KM10	30mm <sup>2</sup>	ø25	70	97

## Manifold Options

### ■ D-sub Connector (25 pin)/Cable assembly

AXT100-DS25-  
015  
030  
050



### Wire color table by terminal number of D-sub connector cable ass'y

Terminal no.	Lead wire color	Dot marking
1	Black	—
2	Brown	—
3	Red	—
4	Orange	—
5	Yellow	—
6	Pink	—
7	Blue	—
8	Violet	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	Violet	—
18	Gray	—
19	Orange	Black
20	Red	White
21	Brown	White
22	Pink	Red
23	Gray	Red
24	Black	White
25	White	—

### D-sub connector cable assembly

Cable length (L)	Assembly No.	Note
1.5m	AXT100-DS25-015	Cable 25 pin X 24AWG
3m	AXT100-DS25-030	
5m	AXT100-DS25-050	

\* For other commercial connectors, use a 25 pin female connector made in conformity with MIL-C-24308.

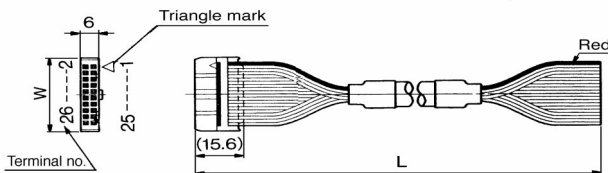
### Electric characteristics

Item	
Conductor resistance $\Omega/\text{km}, 20^\circ\text{C}$	65 or less
Voltage limit V, 1min, AC	1000
Insulation resistance $M\Omega/\text{km}, 20^\circ\text{C}$	5 or more

\* The min. bending radius of D-sub connector cable ass'y is 20 mm.

### ■ Flat Cable Connector/Cable assembly

AXT100-FC□-1 to 3



### Flat Cable connector assembly

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

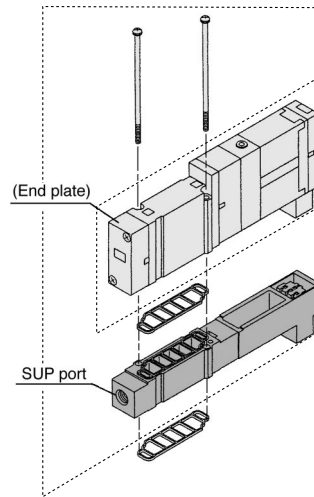
\* For other commercial connectors, use strain relief made in conformity with MIL-C-83503.

### ⚠ Caution

#### Mounting screw tightening torque

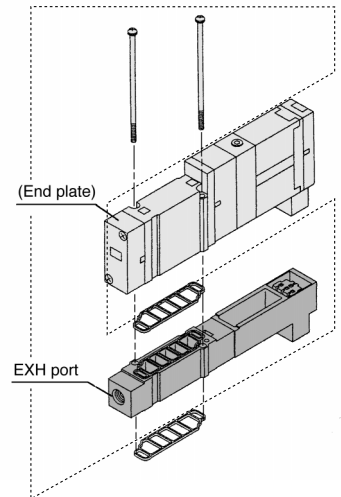
M2: 0.15Nm  
M3: 0.6Nm  
M4: 1.4Nm

### ■ Individual SUP spacer ass'y



Series	Ass'y No.	Port size
SX3000	SX3000-38-3A	M5 X 0.8
SX5000	SX5000-38-3A	Rc(PT) 1/8

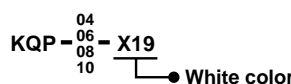
### ■ Individual EXH spacer ass'y



Series	Ass'y No.	Port size
SX3000	SX3000-39-3A	M5 X 0.8
SX5000	SX5000-39-3A	Rc(PT) 1/8

### ■ Plug

Inserted into an unused cylinder port and SUP/EXH ports. The minimum order quantity is 10 pcs.



### Dimensions

Fittings size $\phi$ d	Model	A	L	D
4	KQP-04-X19	16	32	6
6	KQP-06-X19	18	35	8
8	KQP-08-X19	20.5	39	10
10	KQP-10-X19	22	43	12

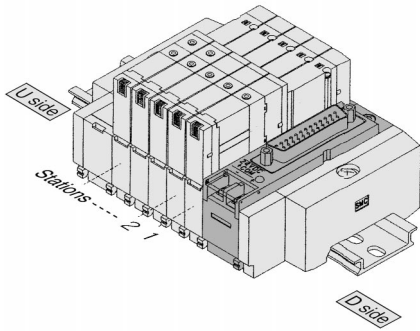
SY  
SYJ  
SX  
VK  
VZ  
VF  
VFR  
VP7  
VP4

VQ  
VQ4  
VQZ  
VQD  
VZS  
VFS  
VS  
VS7

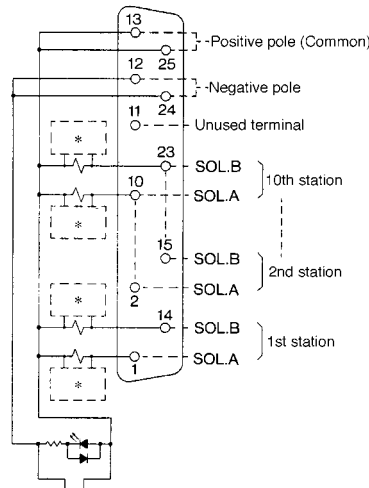
## Manifold Internal Wiring

### 45(N)F/D-sub Connector Style

A D-sub connector used for electric wiring reduces labor during wiring operation. Connectors conforming to MIL are used for interchangeability.



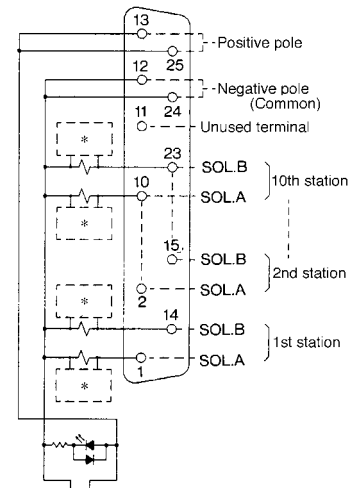
#### <Positive COM (45F)>



Power source terminal

\* Indicator light and surge voltage suppressor

#### <Negative COM (45NF)>

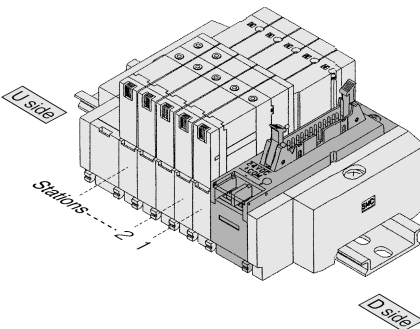


Power source terminal

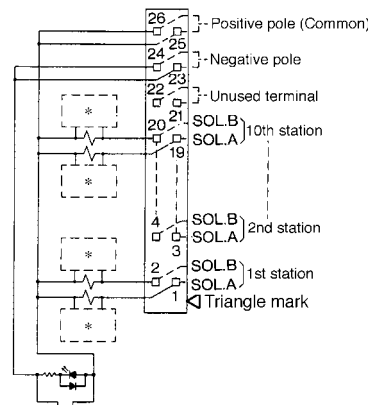
- The power source terminal is used for connecting to an external power source.
- The above diagram is for a 10 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more information.
- When using a single solenoid valve, connect wire to SOL. A.
- The maximum number of stations is 20 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.

### 45(N)P/Flat Cable Style (26 pin)

A flat cable connector used for electric wiring reduces labor during wiring operation. Connectors conforming to MIL are used for interchangeability.



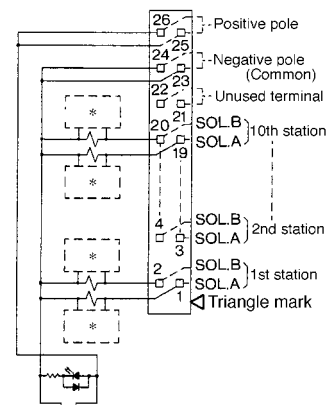
#### <Positive COM (45P)>



Power source terminal

\* Indicator light and surge voltage suppressor

#### <Negative COM (45NP)>



Power source terminal

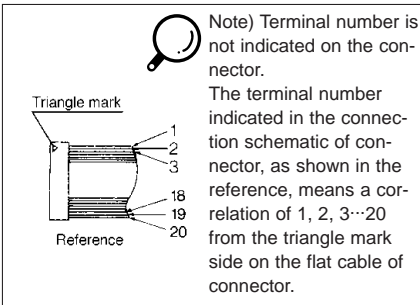
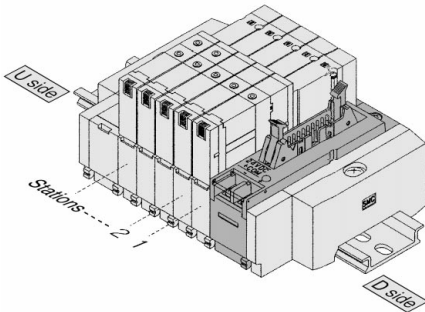
Note) Terminal number is not indicated on the connector.

The terminal number indicated in the connection schematic of connector as shown in the reference, means a correlation of 1, 2, 3...26 from the triangle mark side on the flat cable of connector.

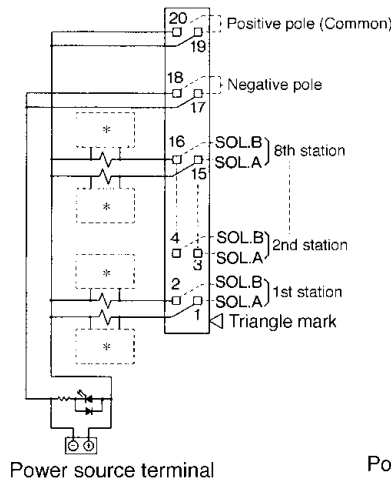
- The power source terminal is used for connecting to an external power source.
- The above diagram is for a 10 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more information.
- When using a single solenoid valve, connect wire to SOL. A.
- The maximum number of stations is 20 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- Regardless of the connector mounting position, stations are counted from the D side.

## 45(N)PG/Flat Cable Style (20 pin)

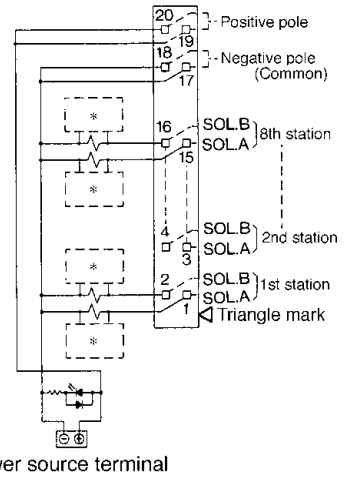
A flat cable connector used for electric wiring reduces labor during wiring operation. Connectors conforming to MIL are used for wide interchangeability.



### <Positive COM (45PG)>



### <Negative COM (45NPG)>

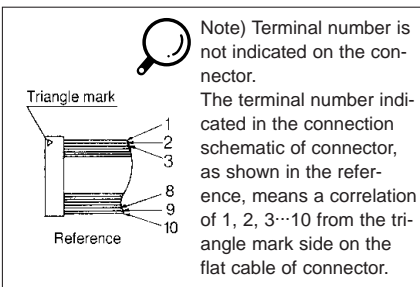
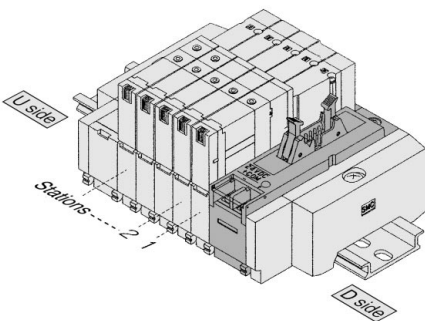


\* Indicator light and surge voltage suppressor

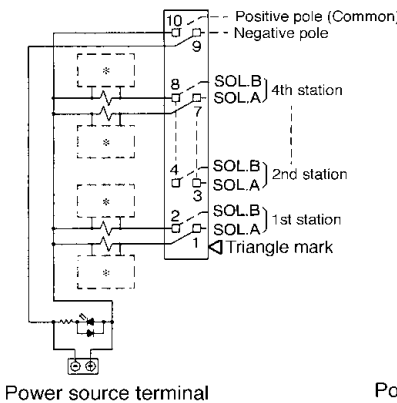
- The power source terminal is used for connecting to an external power source.
- The above diagram is for a 8 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more information.
- When using a single solenoid valve, connect wire to SOL. A.
- The maximum number of stations is 16 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.

## 45(N)PH/Flat Cable Style (10 pin)

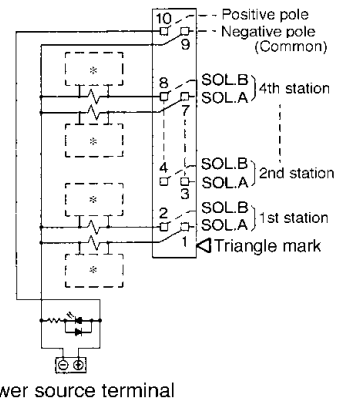
A flat cable connector used for electric wiring reduces labor during wiring operation. Connectors conforming to MIL are used for wide interchangeability.



### <Positive COM (45PH)>



### <Negative COM (45NPH)>



\* Indicator light and surge voltage suppressor

- The power source terminal is used for connecting to an external power source.
- The above diagram is for a 4 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more information.
- When using a single solenoid valve, connect wire to SOL. A.
- The maximum number of stations is 8 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.

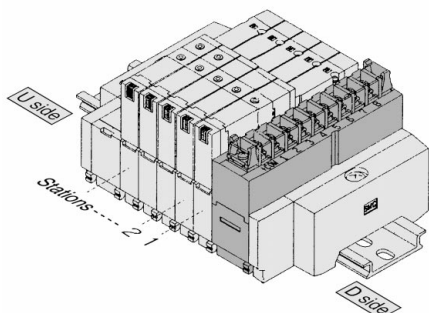
- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7



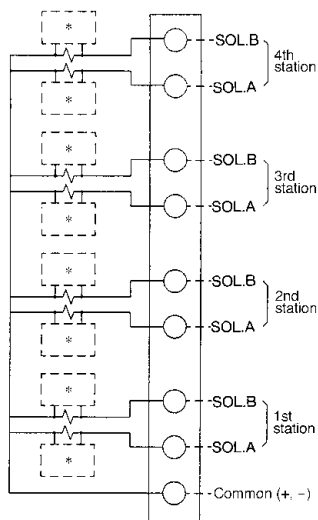
## Manifold Internal Wiring

### 45T/Terminal Block Style

A terminal block type permits direct cable connection without treatment of lead wires.



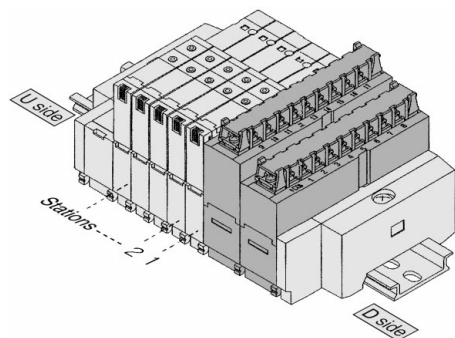
<45T>



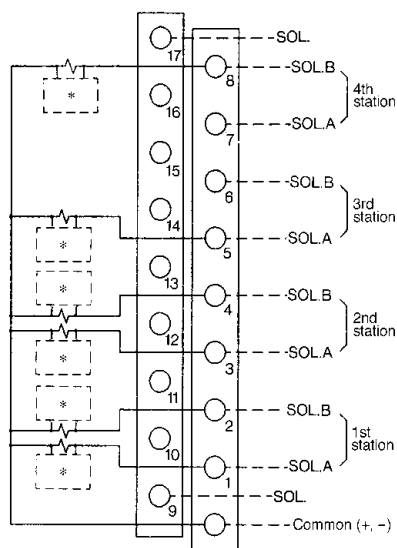
\* Indicator light and surge voltage suppressor

- The maximum number of stations is 8 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- The above diagram is for a 4 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more information.
- When using a single solenoid valve, connect wire to SOL. A.
- Irrespective of the connector mounting position, stations are counted from the D side.
- There is no polarity in the COM wiring. Supply positive power for +COM specification and negative power for -COM specification.

### 45T1/Terminal Block Style



<45T1>



\* Indicator light and surge voltage suppressor

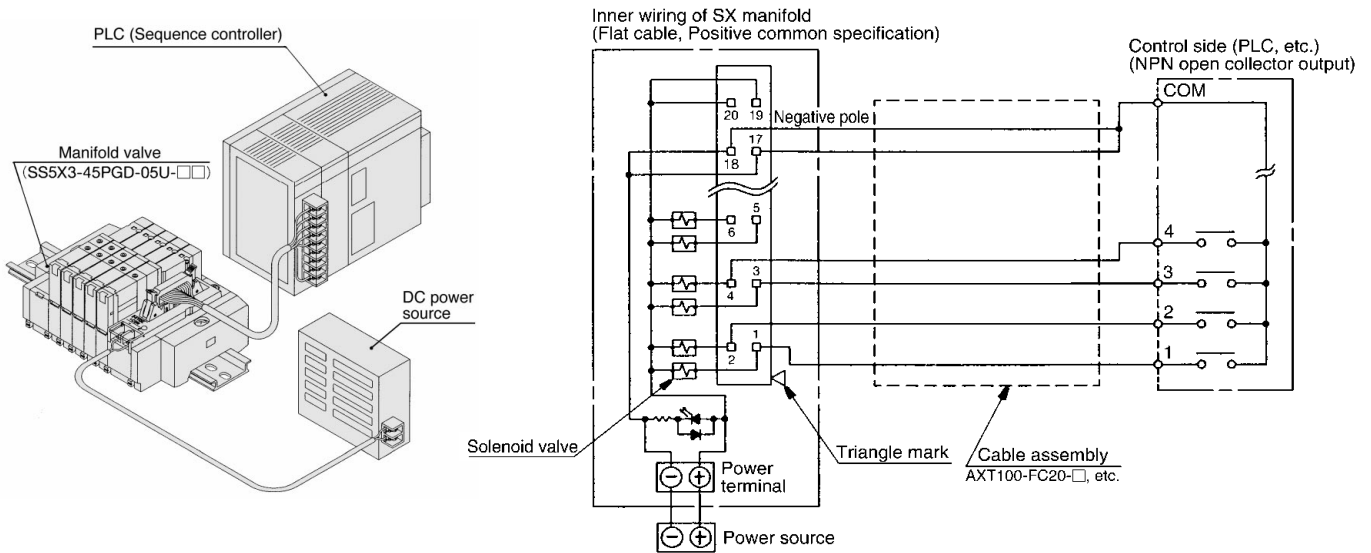
- The maximum number of stations is 17 in terms of manifold bases, as well as solenoids. (Contact SMC for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.
- There is no polarity in the COM wiring. Supply positive power for +COM specification and negative power for -COM specification.



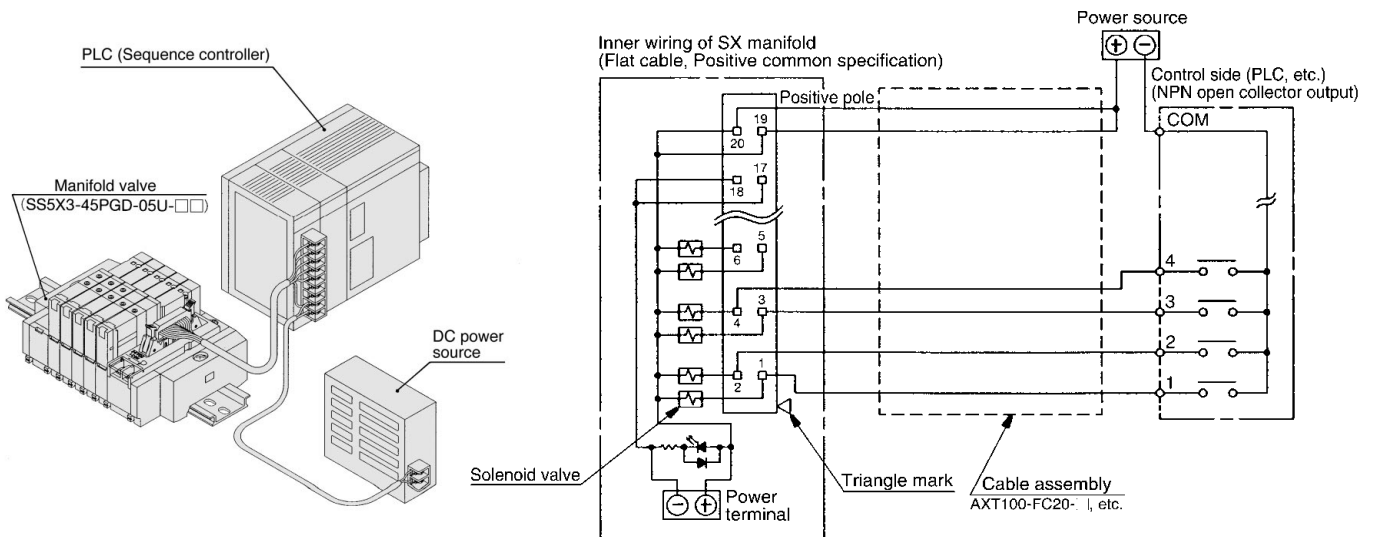
## SS5X□-45□Wiring of Plug-in Style

Power terminal is installed in the plug-in manifold series SX as standard. It enables power for driving the valves to be supplied from both the control side and manifold side.

### 1. Wiring example when the power terminal of the manifold is used



### 2. Wiring example when the power terminal of the manifold is not used



### ⚠ Precaution

For connecting the valves with PLC (sequence controller) and the like, signal wire, COM (common) positions, etc., are different depending on the manufacturers. Make sure that the electrical circuits are suitable for each other by referring to information within the catalogs before connecting them. If wiring is incorrect, not only the manifold and the valves but also the PLC (on the control side) and the power source may be damaged.

- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4

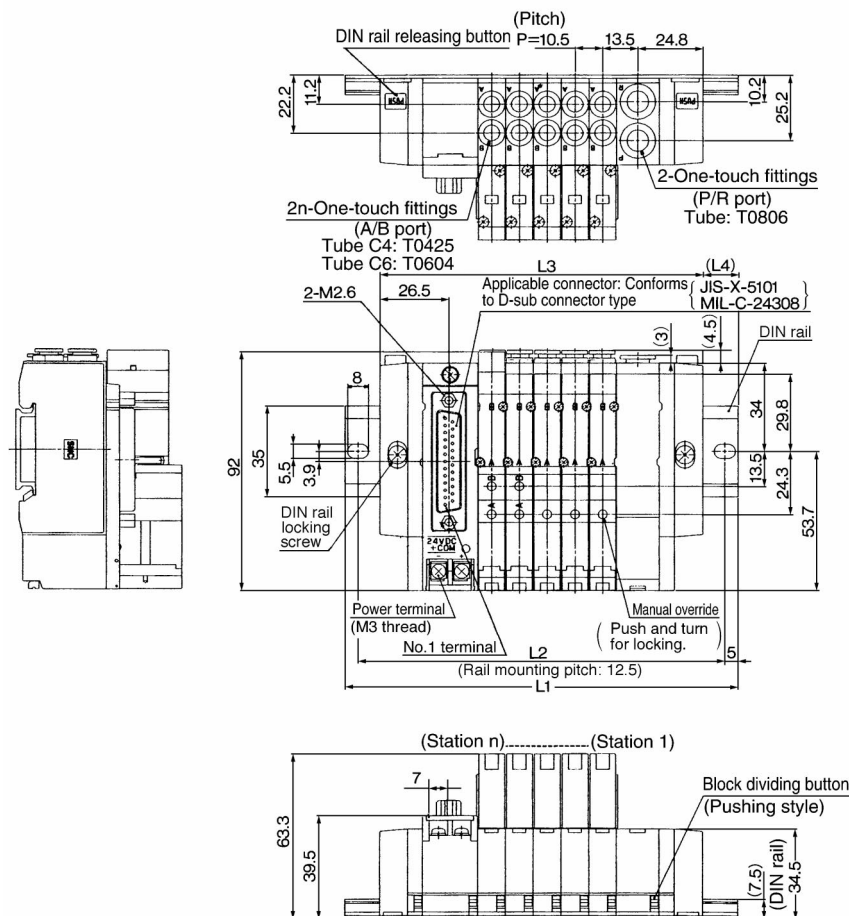
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX3000: D-sub Connector/Plug-in

## SS5X3-45FU- Stations D-C<sub>6</sub><sup>C4</sup>

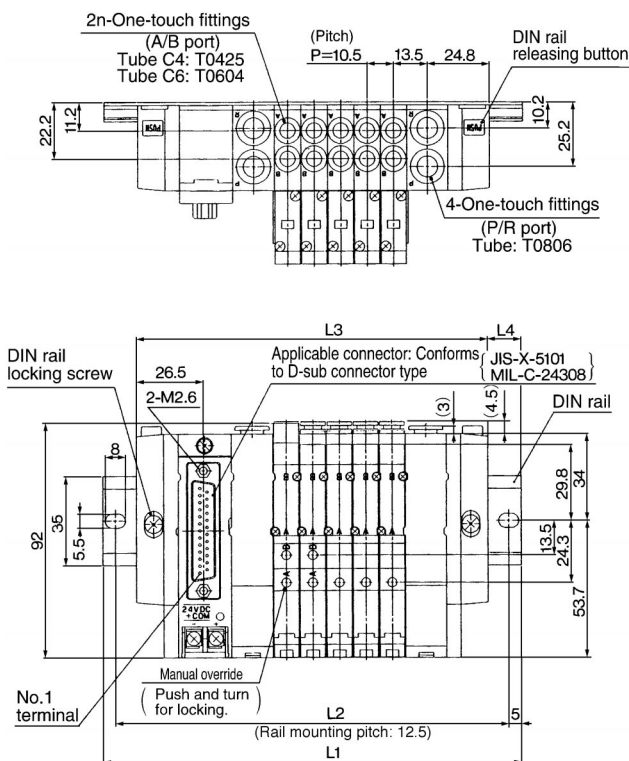


Note) The L1 to L4 dimensions of SS5X3-45FU- Stations U-□ are identical to those of SS5X3-45FU- Stations D-□.



Stations	2	3	4	5	6	7	8	9	10
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5

## SS5X3-45FU- Stations B-C<sub>6</sub><sup>C4</sup>



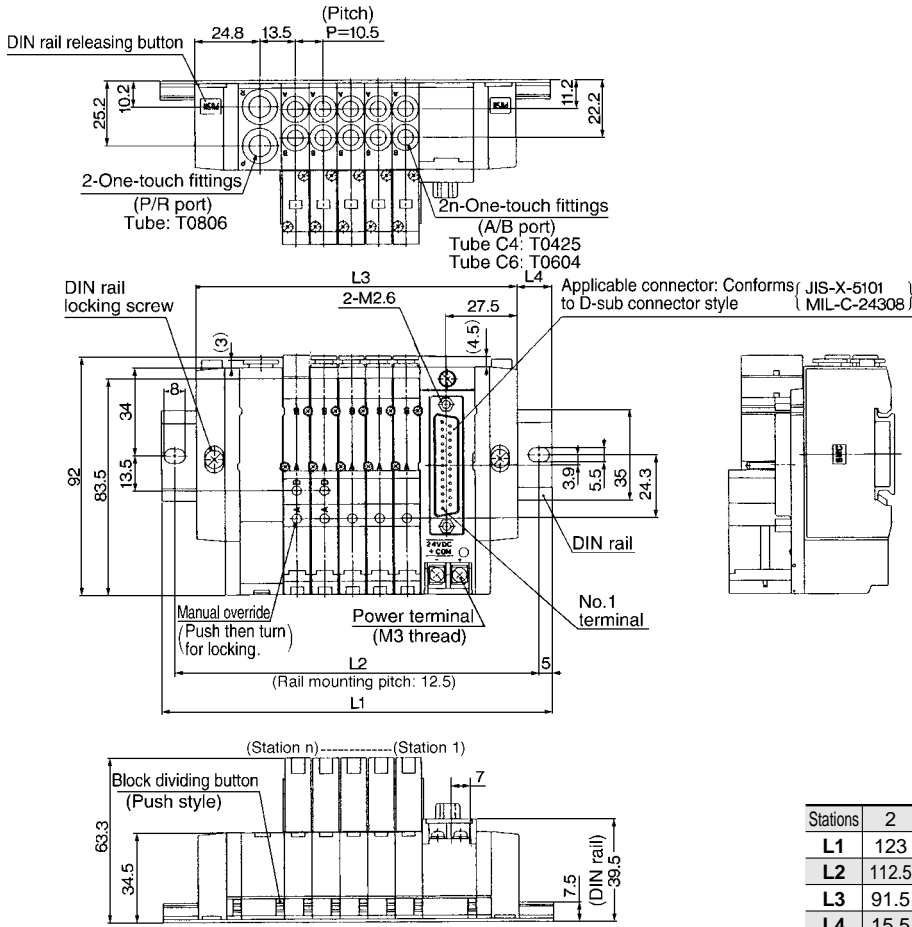
Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223
L2	125	137.5	150	162.5	175	175	187.5	200	212.5
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5

Stations	11	12	13	14	15	16	17	18	19	20
L1	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
L2	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
L3	202.5	213	223.5	234	244.5	255	265.5	276	286.5	297
L4	16.5	17.5	12	13	14	15	16	17	12	13

## SS5X3-45FD- Stations U-C<sub>6</sub><sup>4</sup>

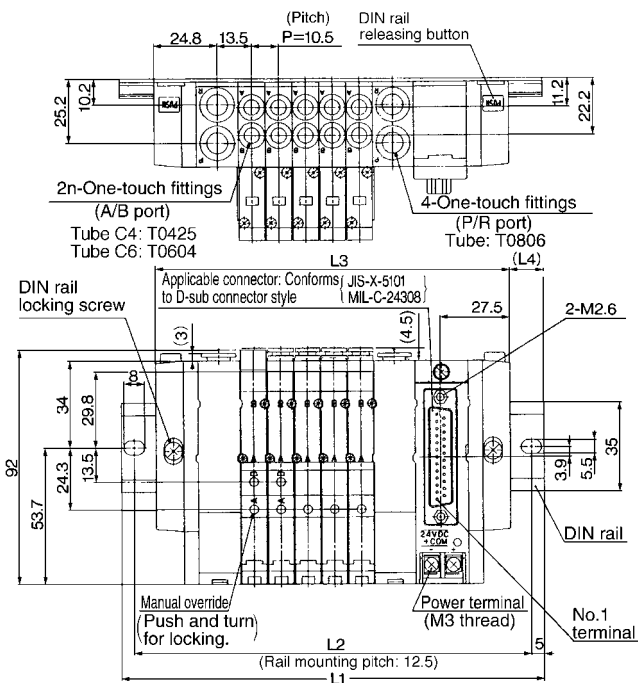


Note) The L1 to L4 dimensions of SS5X3-45FD- Stations D-□ are identical to those of SS5X3-45FD- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5

## SS5X3-45FD- Stations B-C<sub>6</sub><sup>4</sup>



Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223
L2	125	137.5	150	162.5	175	175	187.5	200	212.5
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5

Stations	11	12	13	14	15	16	17	18	19	20
L1	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
L2	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
L3	202.5	213	223.5	234	244.5	255	265.5	276	286.5	297
L4	16.5	17.5	12	13	14	15	16	17	12	13

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

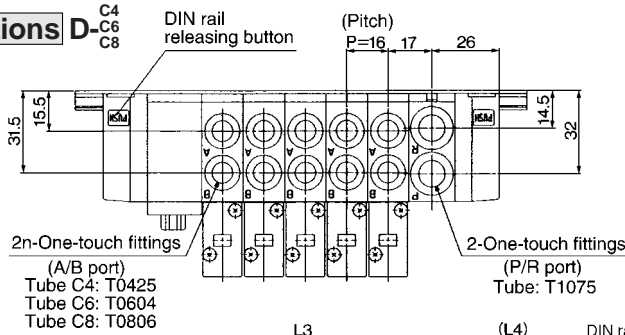
VFS

VS

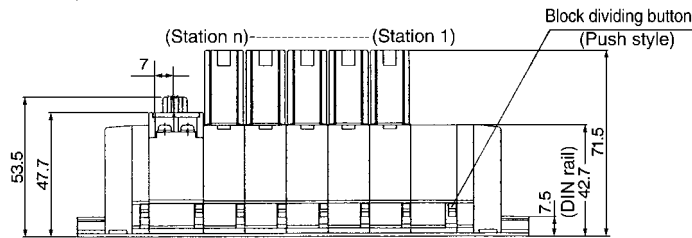
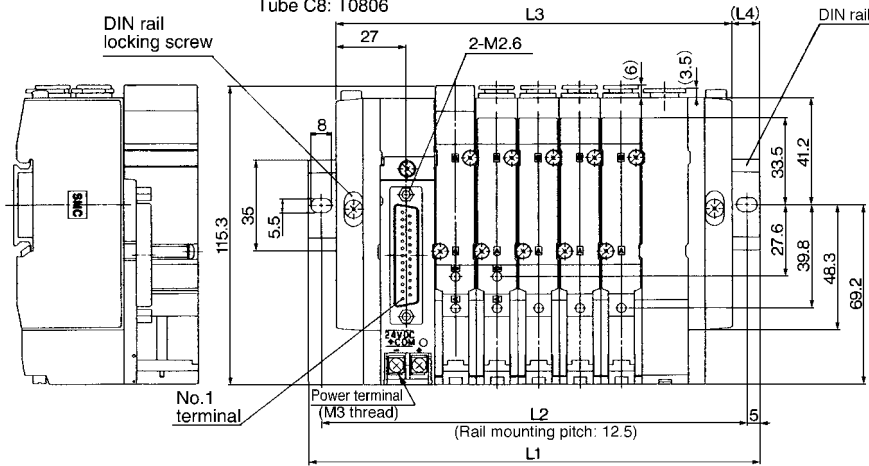
VS7

### SX5000: D-sub Connector/Plug-in

#### SS5X5-45FU- Stations D-□

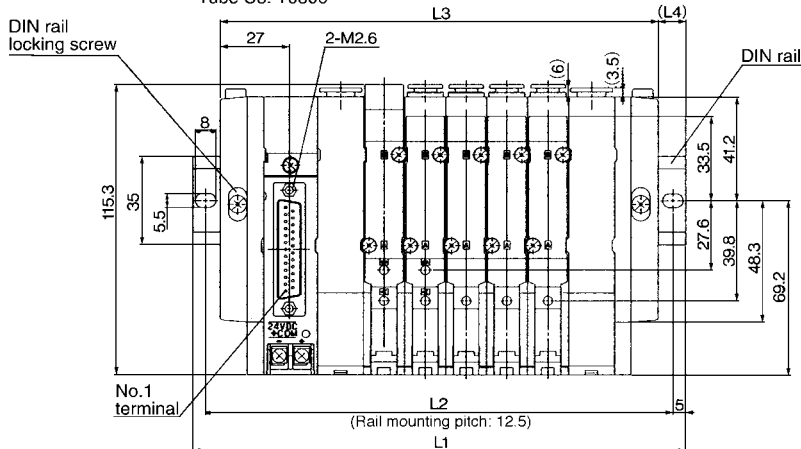
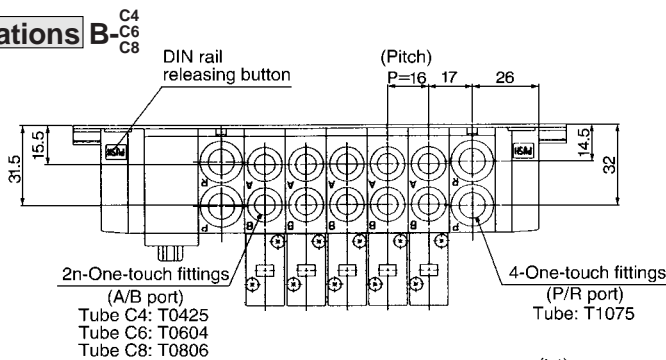


Note) The L1 to L4 dimensions of SS5X5-45FU- Stations U-□ are identical to those of SS5X5-45FU- Stations D-□.



Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	185.5	198	210.5	235.5	248	260.5
L2	125	137.5	150	175	187.5	200	225	237.5	250
L3	105	121	137	153	169	185	201	217	233
L4	15	13.5	11.5	16	14.5	12.5	17	15.5	13.5

#### SS5X5-45FU- Stations B-□



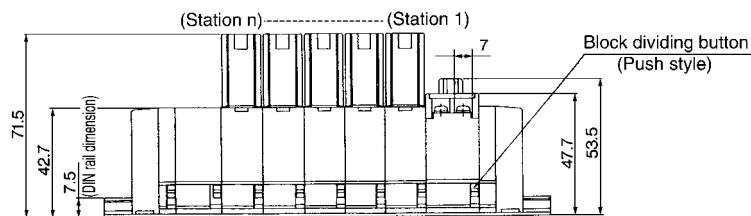
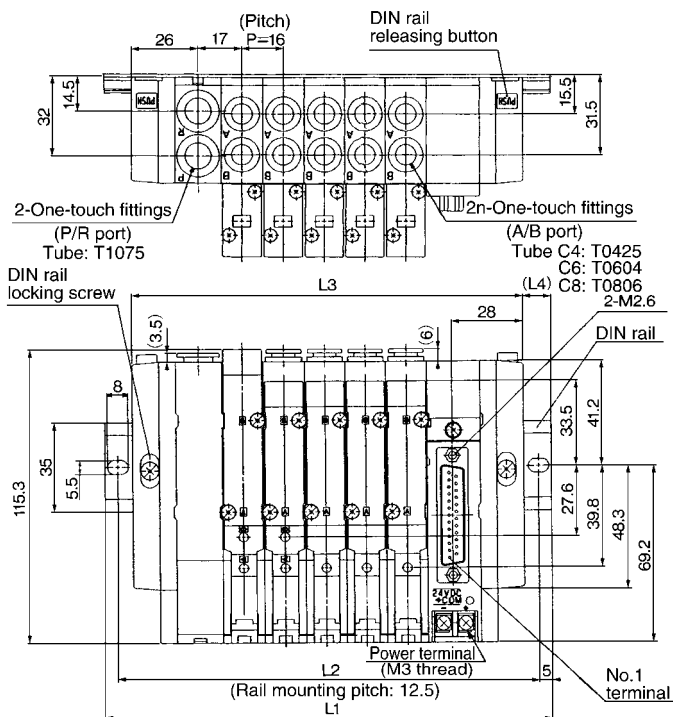
Stations	2	3	4	5	6	7	8	9	10
L1	148	173	185.5	198	210.5	235.5	248	260.5	285.5
L2	137.5	162.5	175	187.5	200	225	237.5	250	275
L3	123	139	155	171	187	203	219	235	251
L4	12.5	17	15	13.5	11.5	16	14.5	12.5	17

Stations	11	12	13	14	15	16	17	18	19	20
L1	298	310.5	323	348	360.5	373	398	410.5	423	435.5
L2	287.5	300	312.5	337.5	350	362.5	387.5	400	412.5	425
L3	267	283	299	315	331	347	363	379	395	411
L4	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14	12

## SS5X5-45FD- Stations U-□

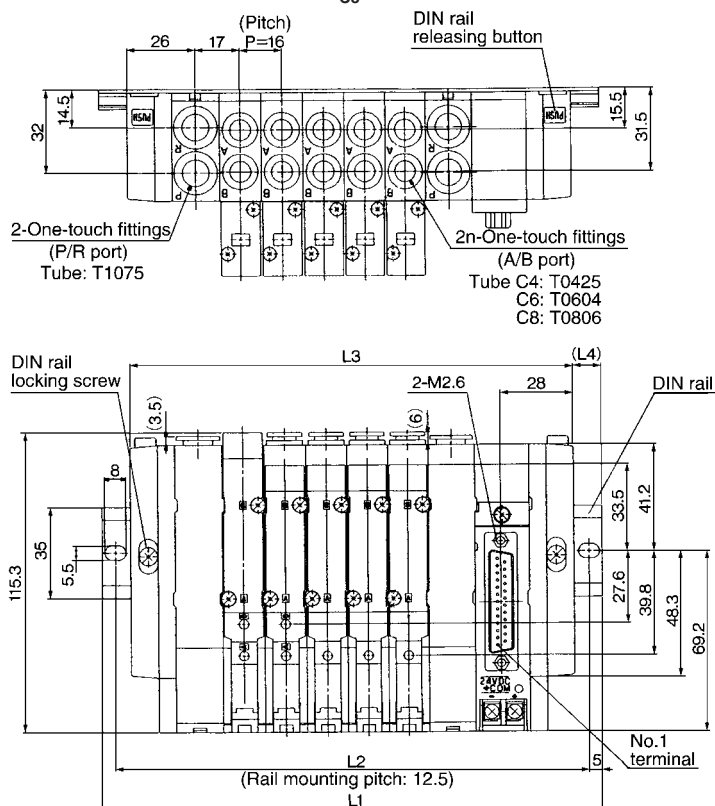


Note) The L1 to L4 dimensions of SS5X5-45FD- Stations D-□ are identical to those of SS5X5-45FD- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	135.5	148	160.5	185.5	198	210.5	235.5	248	260.5
<b>L2</b>	125	137.5	150	175	187.5	200	225	237.5	250
<b>L3</b>	105	121	137	153	169	185	201	217	233
<b>L4</b>	15	13.5	11.5	16	14.5	12.5	17	15.5	13.5

## SS5X5-45FD- Stations B-□



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	148	173	185.5	198	210.5	235.5	248	260.5	285.5
<b>L2</b>	137.5	162.5	175	187.5	200	225	237.5	250	275
<b>L3</b>	123	139	155	171	187	203	219	235	251
<b>L4</b>	12.5	17	15	13.5	11.5	16	14.5	12.5	17

Stations	11	12	13	14	15	16	17	18	19	20
<b>L1</b>	298	310.5	323	348	360.5	373	398	410.5	423	435.5
<b>L2</b>	287.5	300	312.5	337.5	350	362.5	387.5	400	412.5	425
<b>L3</b>	267	283	299	315	331	347	363	379	395	411
<b>L4</b>	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14	12

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

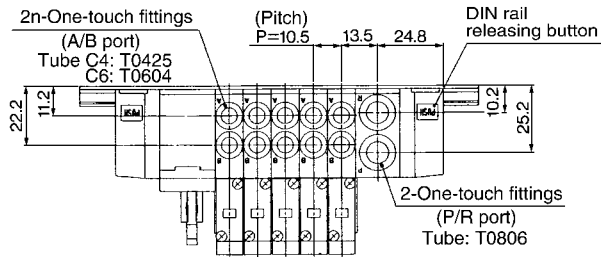
VFS

VS

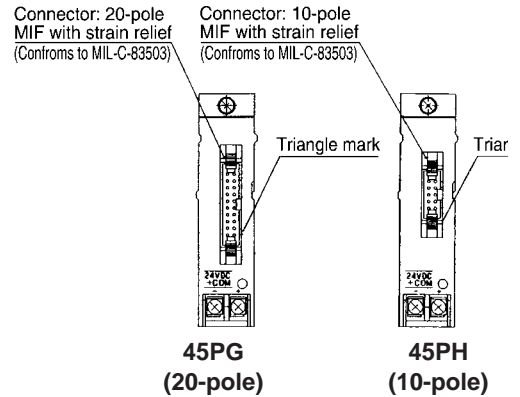
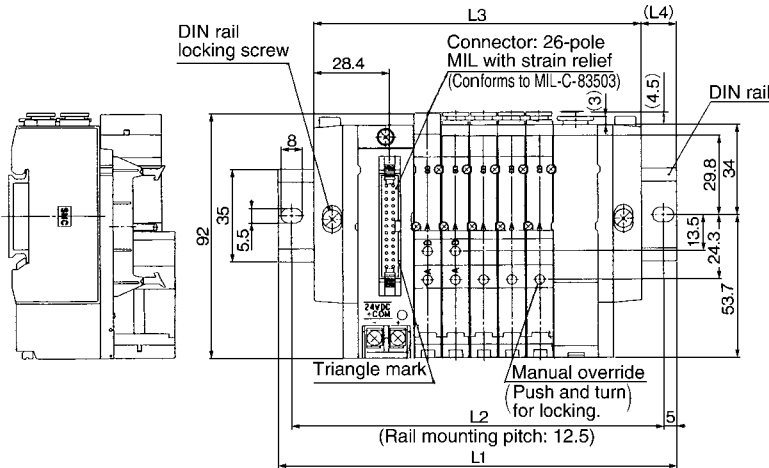
VS7

### SX3000: Flat Cable/Plug-in

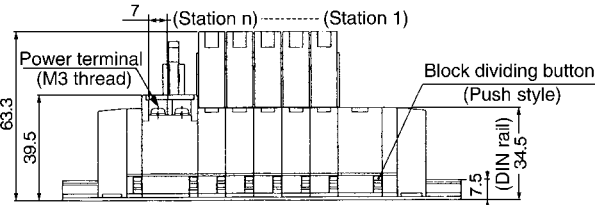
#### SS5X3-45PU- Stations D -C<sub>4</sub> (26-pole)



(Note) The L1 to L4 dimensions of SS5X3-45P□U- Stations U-□ are identical to those of SS5X3-45PU- Stations D-□.

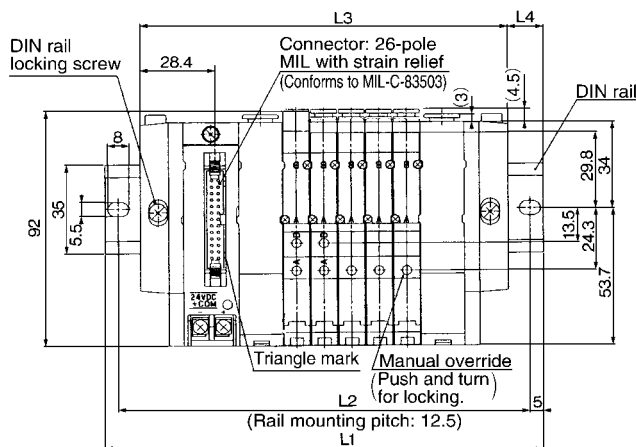
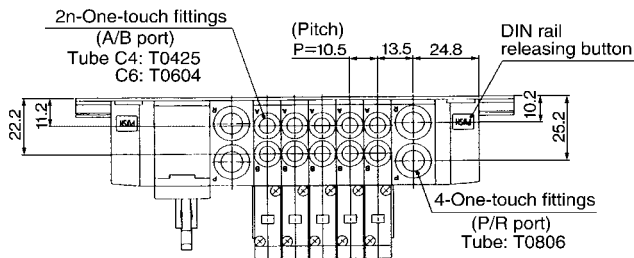


(Note) The only difference between 45PG and 45PH is the connector. The L1-L4 dimensions are the same as those of 45P.



Stations	2	3	4	5	6	7	8	9	10
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5

#### SS5X3-45PU- Stations B -C<sub>4</sub> (26-pole)

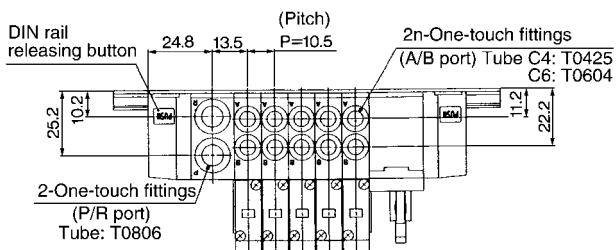


Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223
L2	125	137.5	150	162.5	175	175	187.5	200	212.5
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5

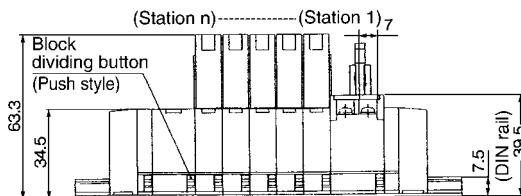
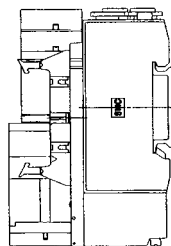
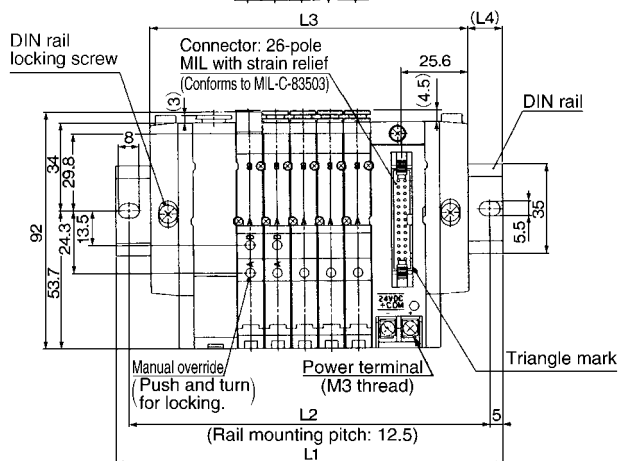
Stations	11	12	13	14	15	16	17	18	19	20
L1	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
L2	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
L3	202.5	213	223.5	234	244.5	255	265.5	276	286.5	297
L4	16.5	17.5	12	13	14	15	16	17	12	13



## SS5X3-45PD- Stations U-C<sub>6</sub><sup>4</sup> (26-pole)

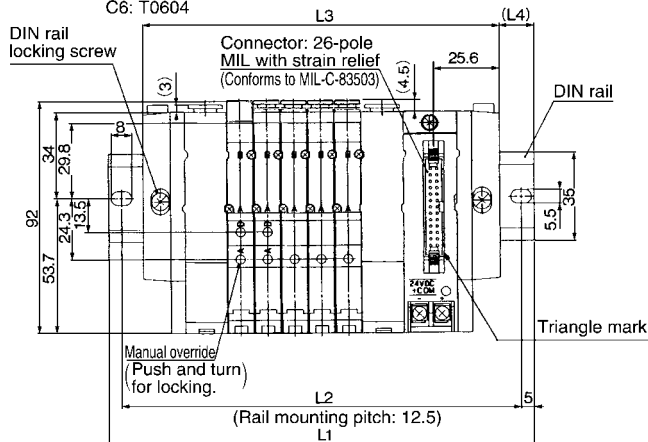
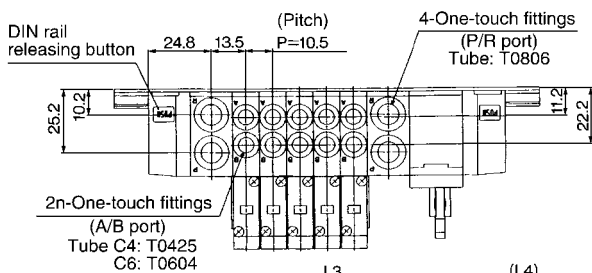


(Note) The L1 to L4 dimensions of SS5X3-45P□D- Stations D-□ are identical to those of SS5X3-45PD- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	123	135.5	148	148	160.5	173	185.5	198	210.5
<b>L2</b>	112.5	125	137.5	137.5	150	162.5	175	187.5	200
<b>L3</b>	91.5	102	112.5	123	133.5	144	154.5	165	175.5
<b>L4</b>	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5

## SS5X3-45PD- Stations B-C<sub>6</sub><sup>4</sup> (26-pole)



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	135.5	148	160.5	173	185.5	185.5	198	210.5	223
<b>L2</b>	125	137.5	150	162.5	175	175	187.5	200	212.5
<b>L3</b>	108	118.5	129	139.5	150	160.5	171	181.5	192
<b>L4</b>	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5

Stations	11	12	13	14	15	16	17	18	19	20
<b>L1</b>	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
<b>L2</b>	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
<b>L3</b>	202.5	213	223.5	234	244.5	255	265.5	276	286.5	297
<b>L4</b>	16.5	17.5	12	13	14	15	16	17	12	13

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

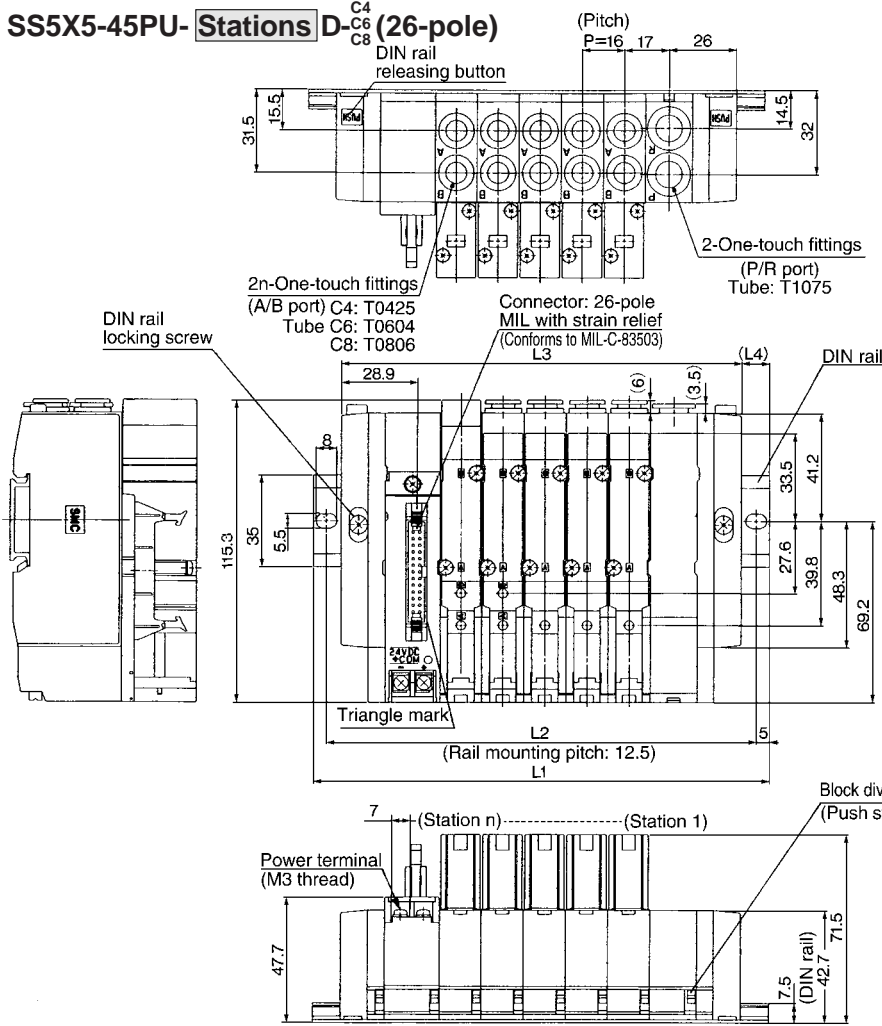
VFS

VS

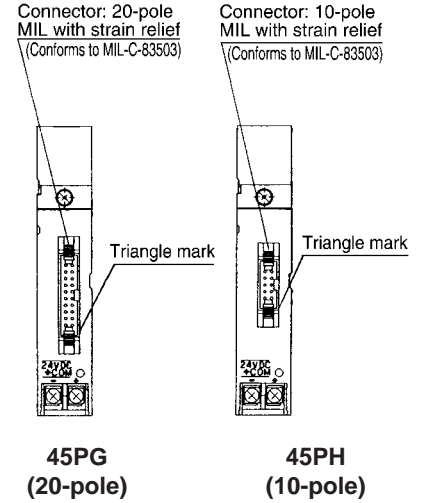
VS7

### SX5000: Flat Cable/Plug-in

#### SS5X5-45PU- Stations D-□ (26-pole)



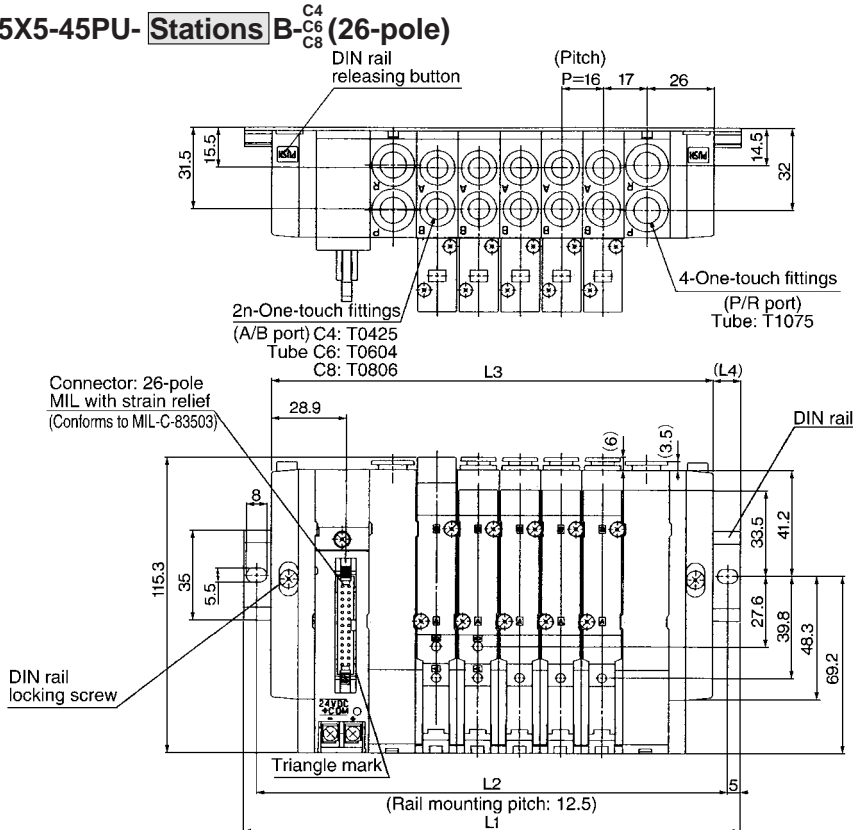
Note) The L1 to L4 dimensions of SS5X5-45P□U- Stations U-□ are identical to those of SS5X5-45PU- Stations D-□.



Note) The only difference between 45PG and 45PH is the connector. The L1-L4 dimensions are the same as those of 45P.

Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	185.5	198	210.5	235.5	248	260.5
L2	125	137.5	150	175	187.5	200	225	237.5	250
L3	105	121	137	153	169	185	201	217	233
L4	15	13.5	11.5	16	14.5	12.5	17	15.5	13.5

#### SS5X5-45PU- Stations B-□ (26-pole)

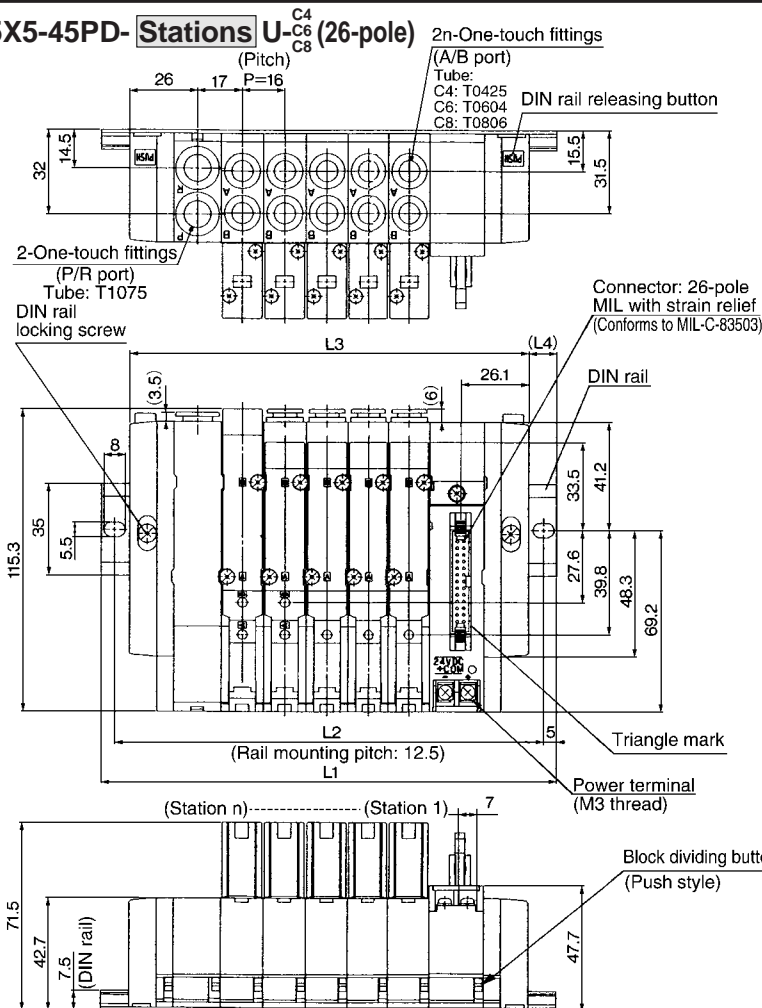


Stations	2	3	4	5	6	7	8	9	10
L1	148	173	185.5	198	210.5	235.5	248	260.5	285.5
L2	137.5	162.5	175	187.5	200	225	237.5	250	275
L3	123	139	155	171	187	203	219	235	251
L4	12.5	17	15	13.5	11.5	16	14.5	12.5	17

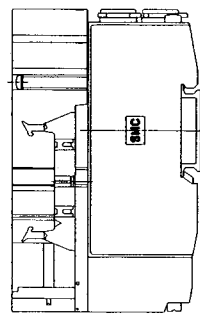
  

Stations	11	12	13	14	15	16	17	18	19	20
L1	298	310.5	323	348	360.5	373	398	410.5	423	435.5
L2	287.5	300	312.5	337.5	350	362.5	387.5	400	412.5	425
L3	267	283	299	315	331	347	363	379	395	411
L4	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14	12

## SS5X5-45PD- Stations U-□ (26-pole)

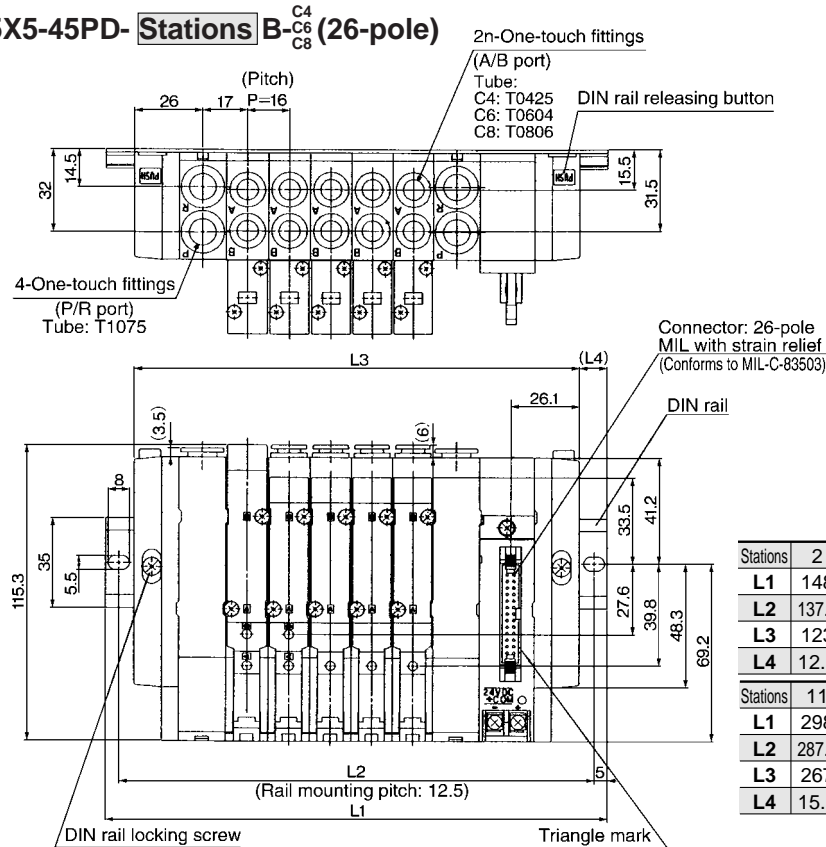


Note) The L1 to L4 dimensions of SS5X5-45PD- Stations D-□ are identical to those of SS5X5-45PD- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	185.5	198	210.5	235.5	248	260.5
L2	125	137.5	150	175	187.5	200	225	237.5	250
L3	105	121	137	153	169	185	201	217	233
L4	15	13.5	11.5	16	14.5	12.5	17	15.5	13.5

## SS5X5-45PD- Stations B-□ (26-pole)



Stations	2	3	4	5	6	7	8	9	10
L1	148	173	185.5	198	210.5	235.5	248	260.5	285.5
L2	137.5	162.5	175	187.5	200	225	237.5	250	275
L3	123	139	155	171	187	203	219	235	251
L4	12.5	17	15	13.5	11.5	16	14.5	12.5	17

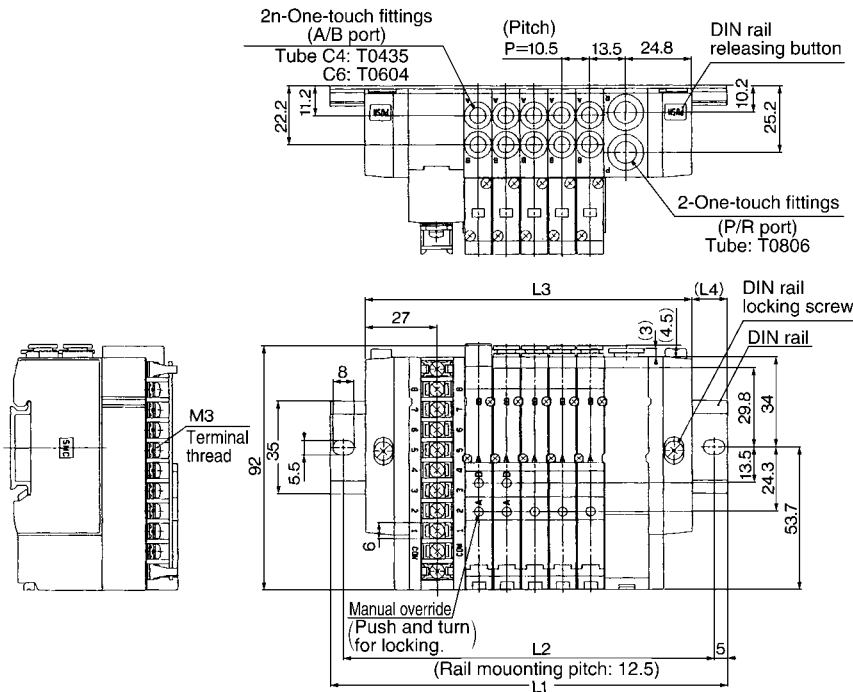
  

Stations	11	12	13	14	15	16	17	18	19	20
L1	298	310.5	323	348	360.5	373	398	410.5	423	435.5
L2	287.5	300	312.5	337.5	350	362.5	387.5	400	412.5	425
L3	267	283	299	315	331	347	363	379	395	411
L4	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14	12

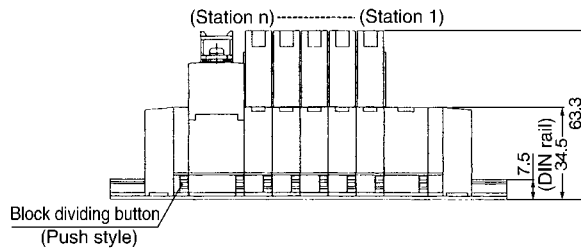
- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX3000: 9 pole Terminal Block/Plug-in

## SS5X3-45TU- Stations D-C<sub>6</sub><sup>C4</sup>

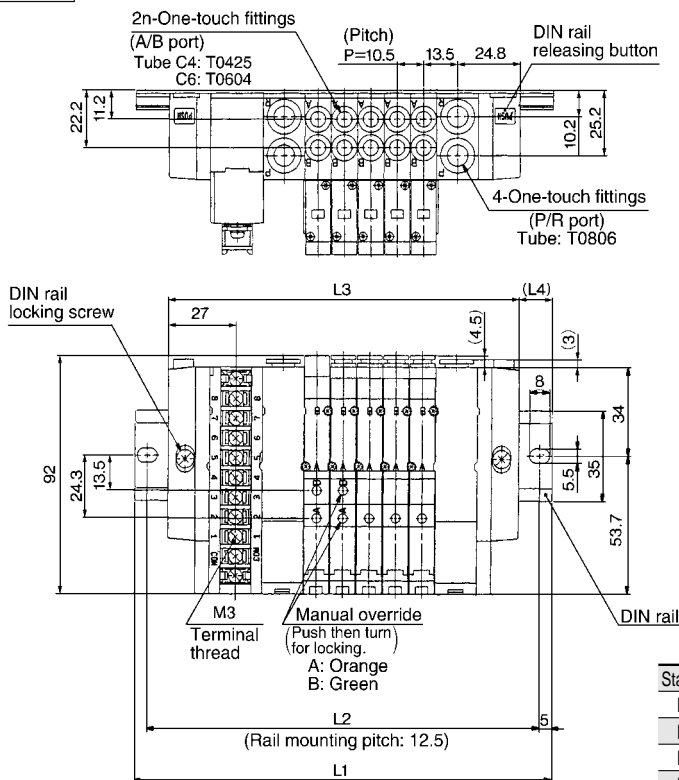


Note) The L1 to L4 dimensions of SS5X3-45TU- Stations U-□, SS5X3-45TD- Stations U-□, SS5X3-45TD- Stations D-□, are identical to those of SS5X3-45TU- Stations D-□.



Stations	2	3	4	5	6	7	8
L1	123	135.5	148	148	160.5	173	185.5
L2	112.5	125	137.5	137.5	150	162.5	175
L3	91.5	102	112.5	123	133.5	144	154.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5

## SS5X3-45TU- Stations B-C<sub>6</sub><sup>C4</sup>

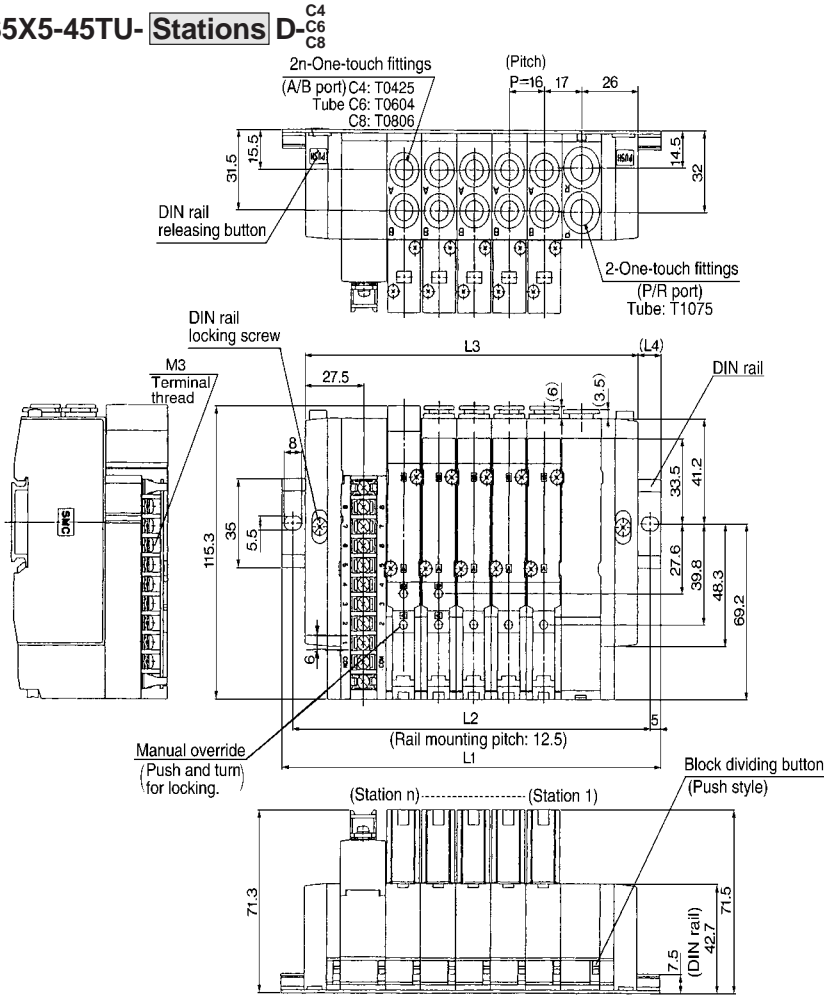


Note) The L1 to L4 dimensions of SS5X3-45TD- Stations B-□ are identical to those of SS5X3-45TU- Stations B-□.

Stations	2	3	4	5	6	7	8
L1	135.5	148	160.5	173	185.5	185.5	198
L2	125	137.5	150	162.5	175	175	187.5
L3	108	118.5	129	139.5	150	160.5	171
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5

## SX5000: 9 pole Terminal Block/Plug-in

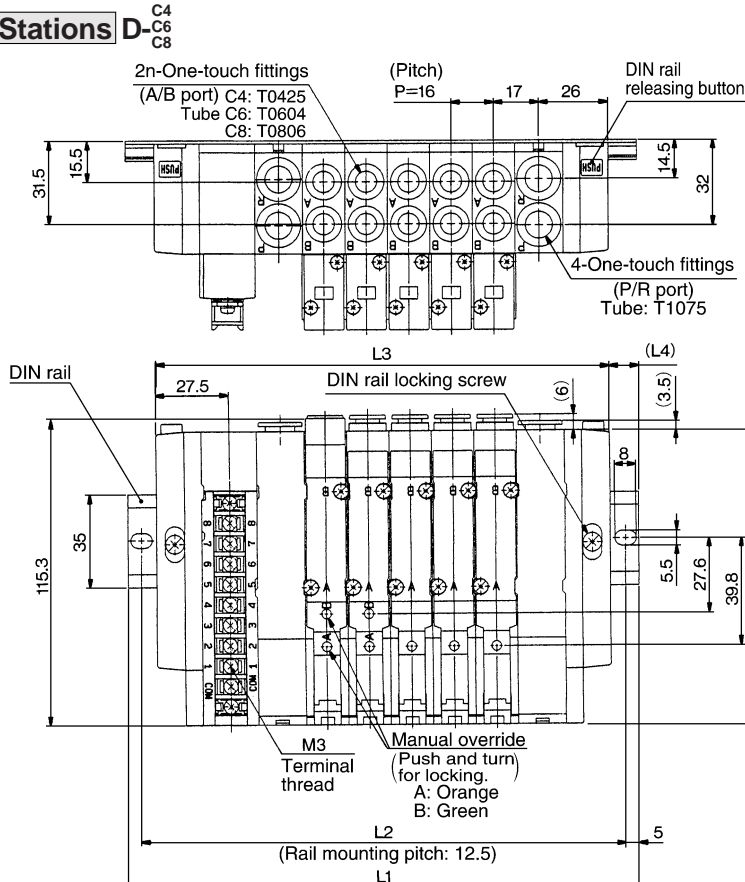
### SS5X5-45TU- Stations D-□



Note) The L1 to L4 dimensions of SS5X5-45TU- Stations U-□, SS5X5-45TD- Stations U-□, SS5X5-45TD- Stations D-□, are identical to those of SS5X5-45TU- Stations D-□.

Stations	2	3	4	5	6	7	8
L1	135.5	148	160.5	185.5	198	210.5	235.5
L2	125	137.5	150	175	187.5	200	225
L3	105	121	137	153	169	185	201
L4	15	13.5	11.5	16	14.5	12.5	17

### SS5X5-45TU- Stations B-□



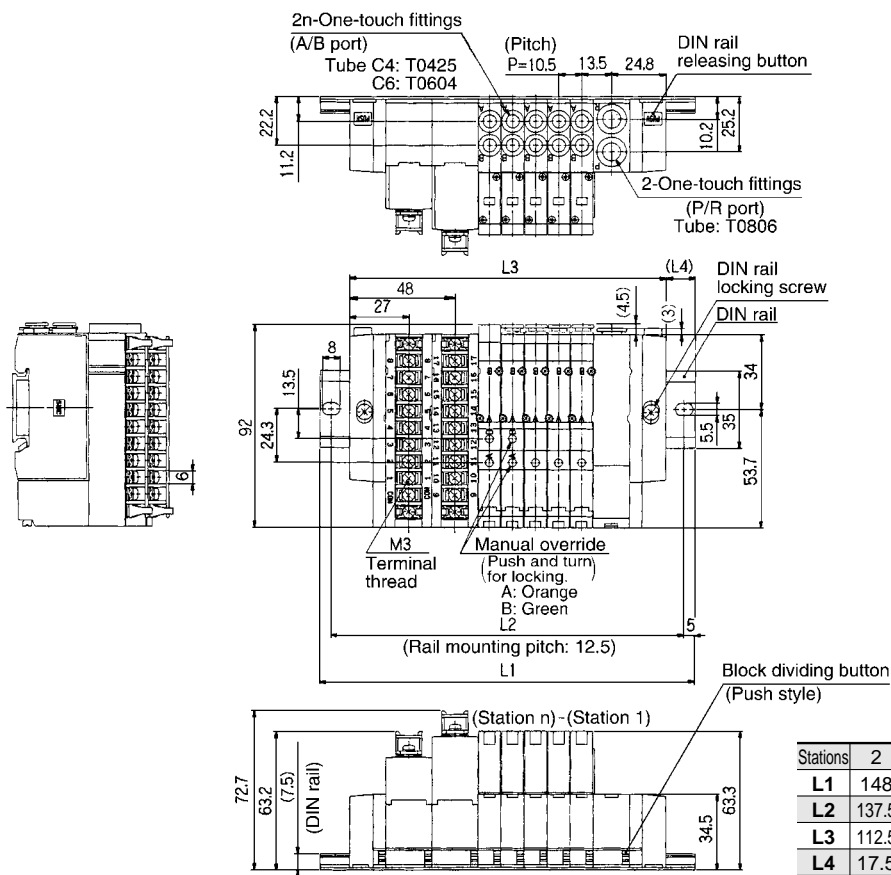
Note) The L1 to L4 dimensions of SS5X5-45TD- Stations B-□ are identical to those of SS5X5-45TU- Stations B-□.

Stations	2	3	4	5	6	7	8
L1	148	173	185.5	198	210.5	235.5	248
L2	137.5	162.5	175	187.5	200	225	237.5
L3	123	139	155	171	187	203	219
L4	12.5	17	15	13.5	11.5	16	14.5

- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX3000: 18 pole Terminal Block/Plug-in

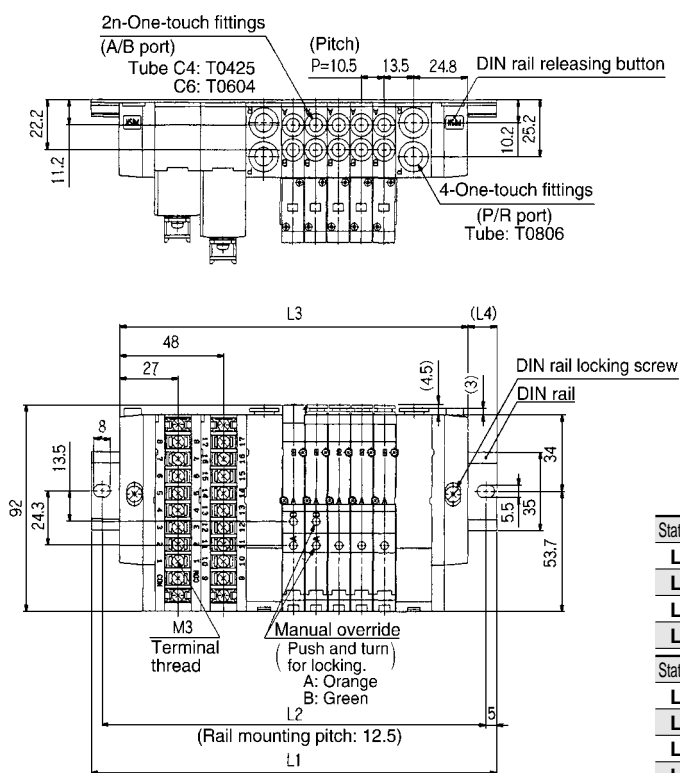
## SS5X3-45T1U- Stations D-C<sub>6</sub><sup>4</sup> (18-pole)



(Note) The L1 to L4 dimensions of **SS5X3-45T1U- Stations U-□** are identical to those of SS5X3-45T1U- Stations D-□.

Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	148	148	160.5	173	185.5	198	210.5	210.5	223
<b>L2</b>	137.5	137.5	150	162.5	175	187.5	200	200	212.5
<b>L3</b>	112.5	123	133.5	144	154.5	165	175.5	186	196.5
<b>L4</b>	17.5	12.5	13.5	14.5	15.5	16.5	17.5	12	13

## SS5X3-45T1U- Stations B-C<sub>6</sub><sup>4</sup> (18-pole)



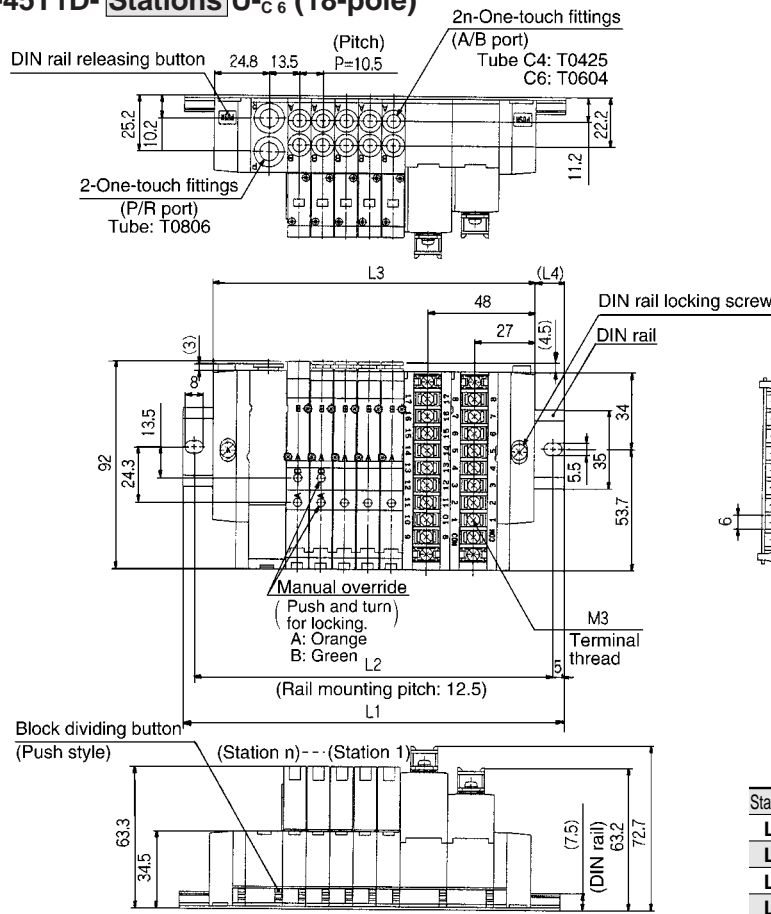
Stations	2	3	4	5	6	7	8	9
<b>L1</b>	160.5	173	185.5	185.5	198	210.5	223	235.5
<b>L2</b>	150	162.5	175	175	187.5	200	212.5	225
<b>L3</b>	129	139.5	150	160.5	171	181.5	192	202.5
<b>L4</b>	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5

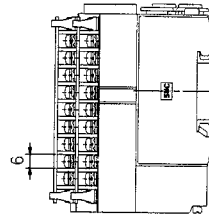
Stations	10	11	12	13	14	15	16	17
<b>L1</b>	248	248	260.5	273	285.5	298	310.5	310.5
<b>L2</b>	237.5	237.5	250	262.5	275	287.5	300	300
<b>L3</b>	213	223.5	234	244.5	255	265.5	276	286.5
<b>L4</b>	17.5	12	13	14	15	16	17	12



## SS5X3-45T1D- Stations U-C<sub>6</sub><sup>4</sup> (18-pole)

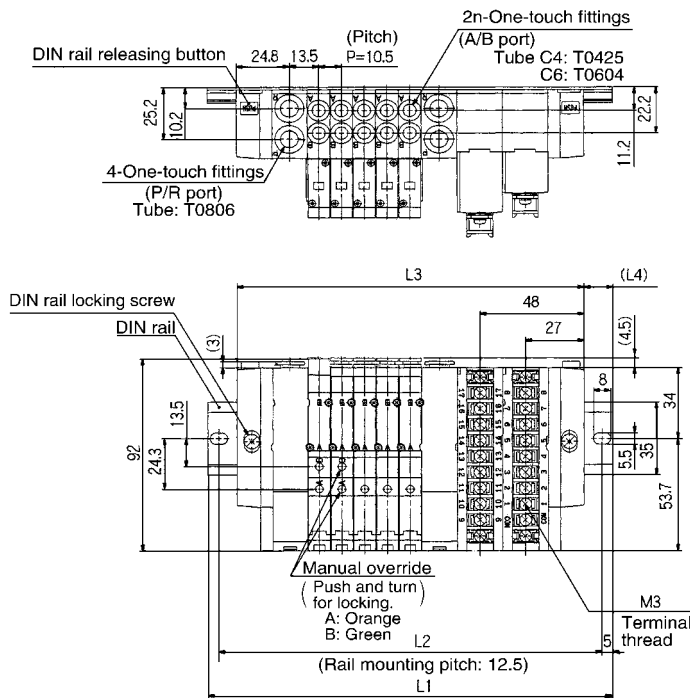


(Note) The L1 to L4 dimensions of **SS5X3-45T1D- Stations D-□** are identical to those of SS5X3-45T1D- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	148	148	160.5	173	185.5	198	210.5	210.5	223
<b>L2</b>	137.5	137.5	150	162.5	175	187.5	200	200	212.5
<b>L3</b>	112.5	123	133.5	144	154.5	165	175.5	186	196.5
<b>L4</b>	17.5	12.5	13.5	14.5	15.5	16.5	17.5	12	13

## SS5X3-45T1D- Stations B-C<sub>6</sub><sup>4</sup> (18-pole)



Stations	2	3	4	5	6	7	8	9
<b>L1</b>	160.5	173	185.5	185.5	198	210.5	223	235.5
<b>L2</b>	150	162.5	175	175	187.5	200	212.5	225
<b>L3</b>	129	139.5	150	160.5	171	181.5	192	202.5
<b>L4</b>	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5

Stations	10	11	12	13	14	15	16	17
<b>L1</b>	248	248	260.5	273	285.5	298	310.5	310.5
<b>L2</b>	237.5	237.5	250	262.5	275	287.5	300	300
<b>L3</b>	213	223.5	234	244.5	255	265.5	276	286.5
<b>L4</b>	17.5	12	13	14	15	16	17	12

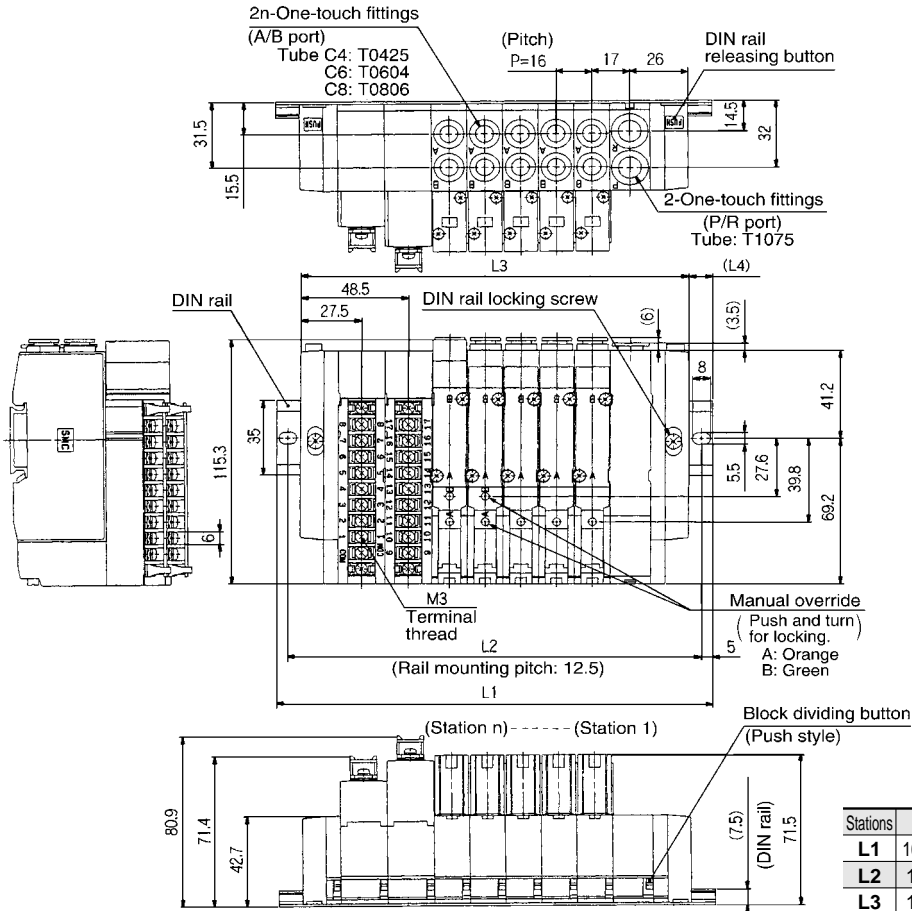
- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX5000: 18 pole Terminal Block/Plug-in

## SS5X5-45T1U- Stations D-□ (18-pole)

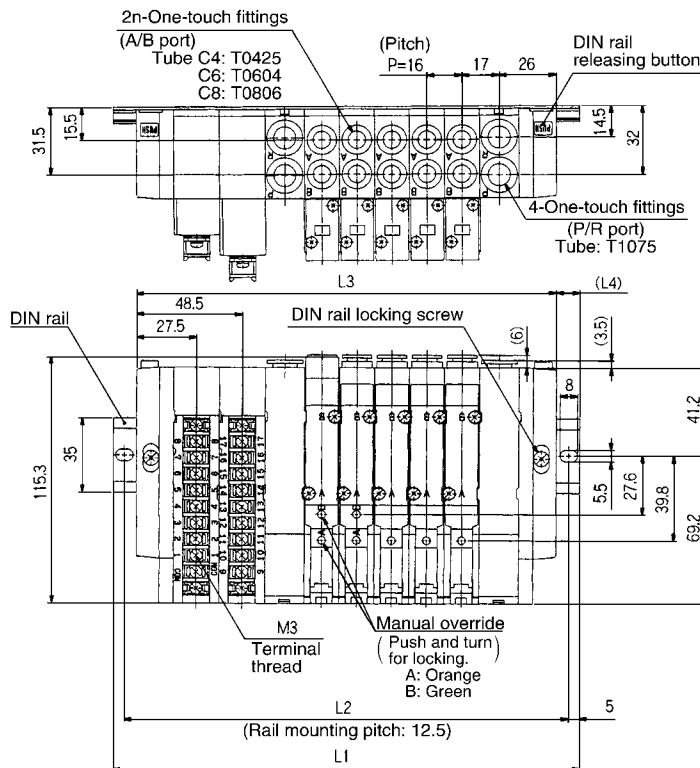


Note) The L1 to L4 dimensions of SS5X5-45T1U- Stations U-□ are identical to those of SS5X5-45T1U- Stations D-□.



Stations	2	3	4	5	6	7	8	9	10
L1	160.5	173	185.5	198	223	235.5	248	273	285.5
L2	150	162.5	175	187.5	212.5	225	237.5	262.5	275
L3	126	142	158	174	190	206	222	238	254
L4	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5

## SS5X5-45T1U- Stations B-□ (18-pole)

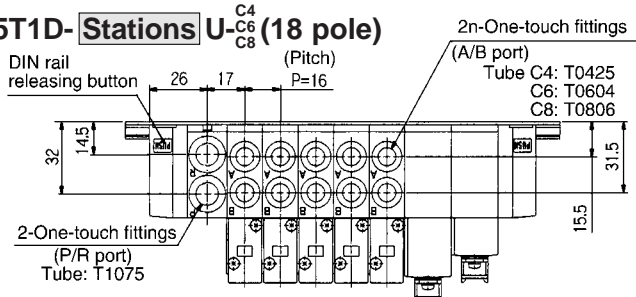


Stations	2	3	4	5	6	7	8	9
L1	173	185.5	210.5	223	235.5	248	273	285.5
L2	162.5	175	200	212.5	225	237.5	262.5	275
L3	144	160	176	192	208	224	240	256
L4	14.5	12.5	17	15.5	13.5	12	16.5	14.5

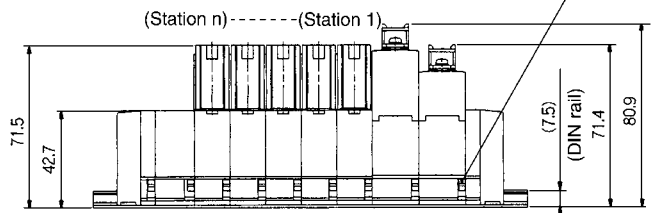
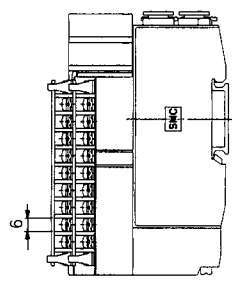
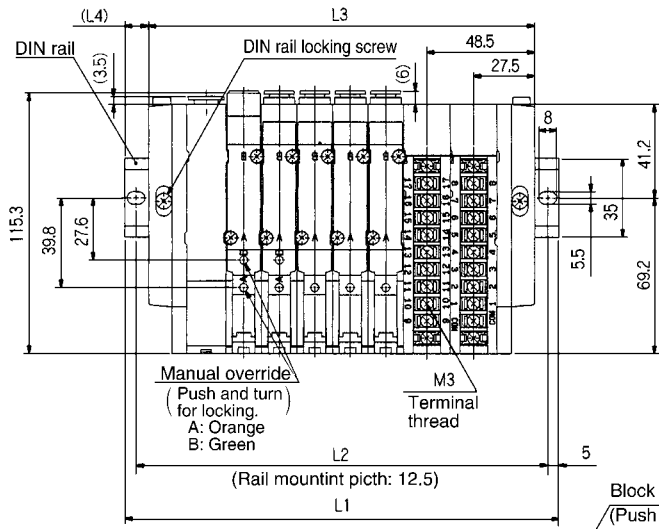
  

Stations	10	11	12	13	14	15	16	17
L1	298	323	335.5	348	360.5	385.5	398	410.5
L2	287.5	312.5	325	337.5	350	375	387.5	400
L3	272	288	304	320	336	352	368	384
L4	13	17.5	15.5	14	12	16.5	15	13

## SS5X5-45T1D- Stations U-□ (18 pole)

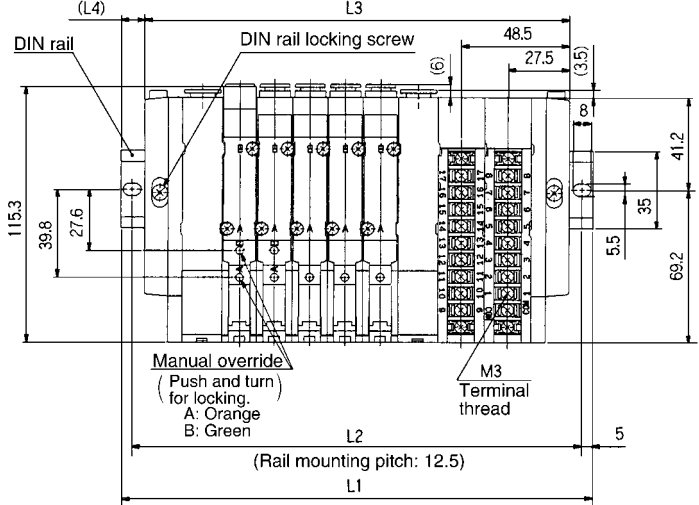
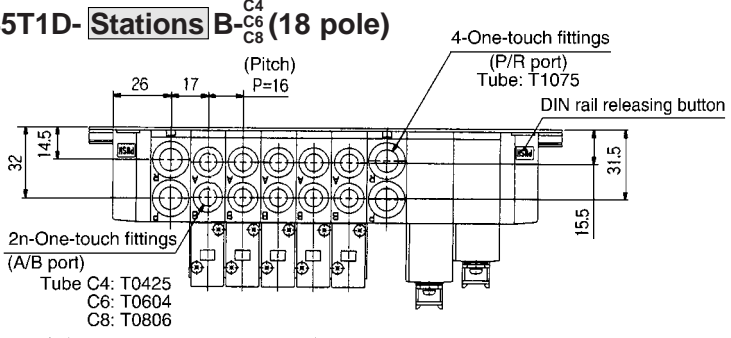


(Note) The L1 to L4 dimensions of SS5X5-45T1D- Stations D-□ are identical to those of SS5X5-45T1D- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
L1	160.5	173	185.5	198	223	235.5	248	273	285.5
L2	150	162.5	175	187.5	212.5	225	237.5	262.5	275
L3	126	142	158	174	190	206	222	238	254
L4	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5

## SS5X5-45T1D- Stations B-□ (18 pole)



Stations	2	3	4	5	6	7	8	9
L1	173	185.5	210.5	223	235.5	248	273	285.5
L2	162.5	175	200	212.5	225	237.5	262.5	275
L3	144	160	176	192	208	224	240	256
L4	14.5	12.5	17	15.5	13.5	12	16.5	14.5

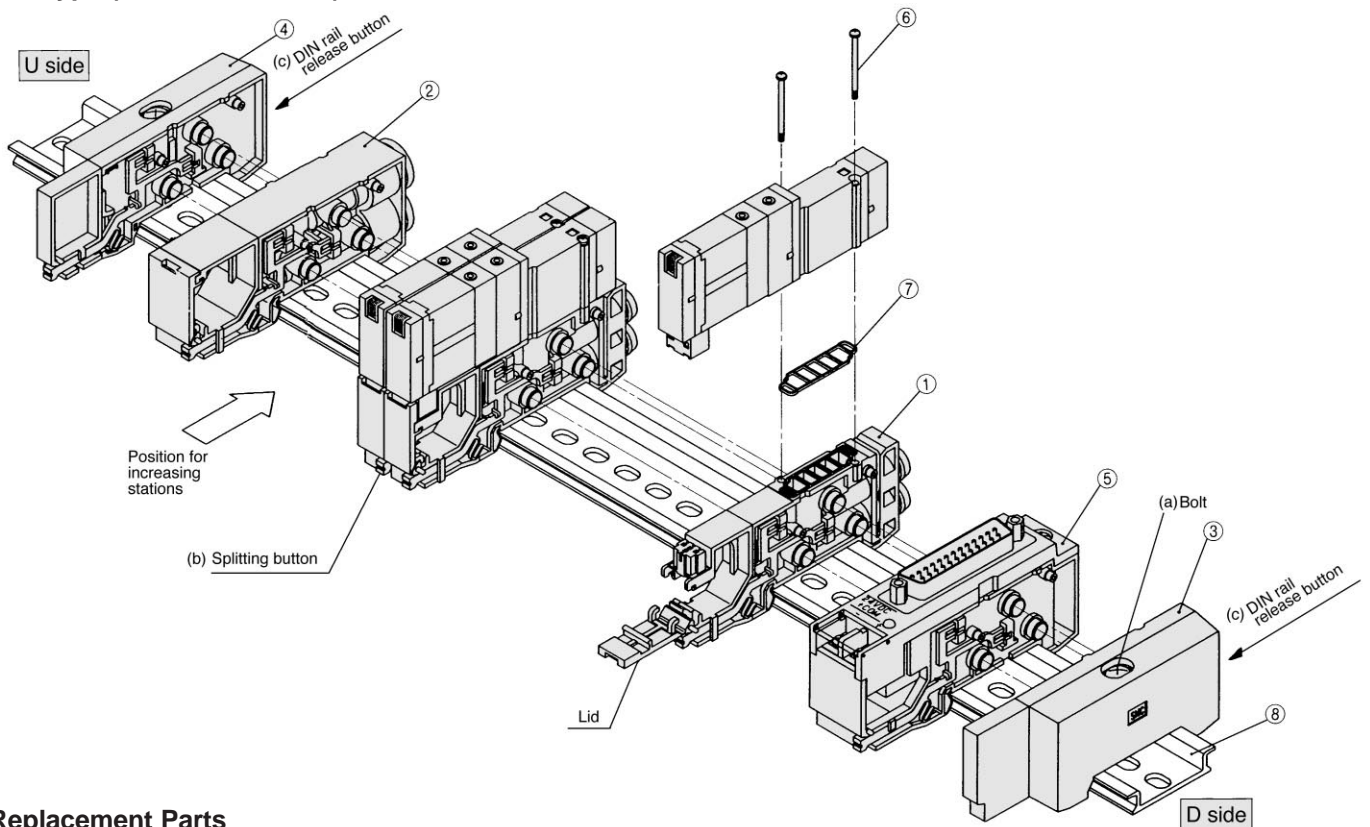
  

Stations	10	11	12	13	14	15	16	17
L1	298	323	335.5	348	360.5	385.5	398	410.5
L2	287.5	312.5	325	337.5	350	375	387.5	400
L3	272	288	304	320	336	352	368	384
L4	13	17.5	15.5	14	12	16.5	15	13

- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

## Exploded View/DIN Rail Manifold

### 45F Type (D-sub Connector) Manifold



### Replacement Parts

No.	Description	Part No.		Notes
		SX3000	SX5000	
①	Manifold block Ass'y	The manifold block assembly no. differs according to an attached lead wire assembly based on the connector specification (single, double) Select an appropriate no. from among the manifold block assembly nos. shown below.		
②	SUP/EXH block Ass'y	SX3000-51-2A	SX5000-51-2A	SX3000: P/R port with ø8 One-touch fittings SX5000: P/R port with ø10 One-touch fittings
③	End block Ass'y R	SX3000-52-2A	SX5000-52-2A	For D side
④	End block Ass'y L	SX3000-53-2A	SX5000-53-2A	For U side
⑤-1	Connector block Ass'y (for D-sub connector)	SX3000-64- <sup>1A</sup> <sub>1NA</sub>	SX5000-64- <sup>1A</sup> <sub>1NA</sub>	-1A: +COM. -1NA: -COM.
⑤-2	Connector block Ass'y (for 26 pin flat cable)	SX3000-64- <sup>2A</sup> <sub>2NA</sub> -26	SX5000-64- <sup>2A</sup> <sub>2NA</sub> -26	Note) 24V DC specification
⑤-3	Connector block Ass'y (for 20 pin flat cable)	SX3000-64- <sup>2A</sup> <sub>2NA</sub> -20	SX5000-64- <sup>2A</sup> <sub>2NA</sub> -20	
⑤-4	Connector block Ass'y (for 10 pin flat cable)	SX3000-64- <sup>2A</sup> <sub>2NA</sub> -10	SX5000-64- <sup>2A</sup> <sub>2NA</sub> -10	
⑤-5	Connector block Ass'y (for 2- to 8-station (T, T1) terminal block)	SX3000-64-3A	SX5000-64-3A	Both for +COM and -COM
⑤-6	Connector block Ass'y (for 9- to 17-station (T1) terminal block)	SX3000-64-8A	SX5000-64-8A	
⑥	Phillips head screw	SX3000-22-2 (M2 X 24)	M3 X 30 (Matted nickel plated)	
⑦	Gasket	SX3000-57-4	SX5000-57-1	
⑧	DIN rail	VZ1000-11-1-□		Refer to p.1.3-73

Note) The numbers ⑤-1 to -4 are for 24 V DC. For 12 V DC, suffix -12V to the parts No. (Example) SX3000-64-1A-12V

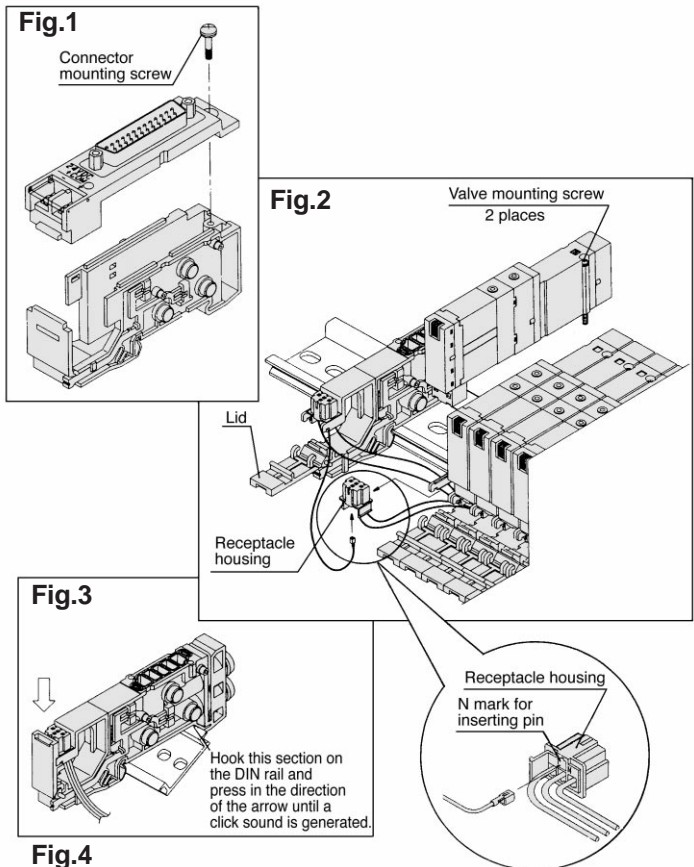
### Manifold Block Assembly Part No.

Style of manifold	Wiring	Manifold block Ass'y No.	Notes
For 45(N)F (D-sub connector)	Double	SX <sup>3</sup> 000-50-2A-□□	□□: -SX3000 C4: With One-touch for ø4 C6: With One-touch for ø6 -SX5000
	Single	SX <sup>3</sup> 000-50-3A-□□	
For 45(N) <sub>PH</sub> (Flat cable)	Double	SX <sup>3</sup> 000-50-4A-□□	C4: With One-touch for ø4 C6: With One-touch for ø6 C8: With One-touch for ø8 (Gasket ⑦ is supplied as an accessory.)
	Single	SX <sup>3</sup> 000-50-5A-□□	
For 45 <sub>T1</sub> (Terminal block)	Double	SX <sup>3</sup> 000-50-6A-□□	
	Single	SX <sup>3</sup> 000-50-7A-□□	



## How to Increase Manifold Bases

- 1 Loosen bolt (a) fixing the manifold base until it begins to turn idly. (While pressing DIN rail release button (c), separate the manifold base from the DIN rail.)
- 2 Additional bases are to be added to the U side. Press splitting button (b) of the manifold block assembly on the U side until button (b) locks, and then separate the block assemblies.
- 3 Separate the connector block assembly in the same manner as 2, and remove the connector mounting screw shown in Fig.1.
- 4 Loosen the valve mounting screw on the U side, remove the valve, and take out the receptacle housing. (See Fig.2.)
- 5 Insert the common wire (red) of the manifold block assembly to be added into the pin insertion section (N mark) of the receptacle housing that was taken out in 4, mount it on the manifold block, and mount the removed valve.
- 6 As shown in Fig.3, mount the additional manifold block assembly on the DIN rail on the U side. Refer to the circuit diagram, and insert the lead wire (SOL.A:Black, SOL.B: White) as shown in Fig.4.
- 7 Press the blocks against each other until a click sound is produced, place the lead wire in the manifold block, and close the lid without pinching the lead wire.
- 8 Hold blocks tightly so that there will be no gap between them, and tighten the bolt (a) to fix them to the DIN rail. (Torque: 1Nm)



### ⚠ Cautions

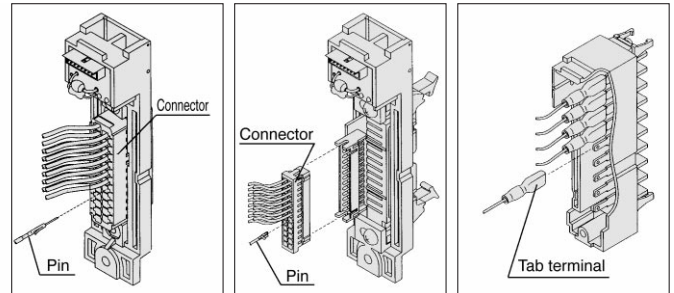
1. Depending on the connector, there is a limit to the number of solenoids. When all manifold stations are wired for double solenoid valves, expansion of the manifold may not be possible. Please consult SMC for more information.
2. The manifold block assembly mounting position for additional manifold bases is always on the U side, because wires are connected to respective connectors sequentially from the D side.
3. 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.

### Fig.4

D-sub connector (45F)

Flat cable (45P□)

Terminal block (45T)



Note) After inserting pins, pull lead wires lightly to check that the pins are locked.

Note) Insert pins after removing the connector from the main unit. After inserting pins, pull lead wires lightly to check that the pins are locked.

Note) Insert tab terminals completely.

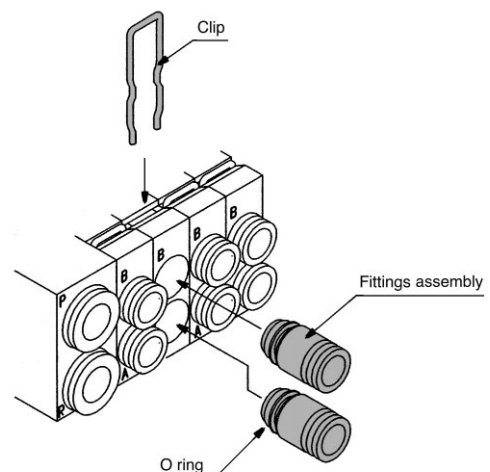
## How to change fitting assembly

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 No.

Port size	SX3000	SX5000
One-touch fittings for $\phi 4$	VVQ1000-50A-C4	VVQ1000-51A-C4
One-touch fittings for $\phi 6$	VVQ1000-50A-C6	VVQ1000-51A-C6
One-touch fittings for $\phi 8$		VVQ1000-51A-C8

- Note 1) P and R ports cannot be changed.  
 Note 2) O rings must be free from scratches and dust. Otherwise, air leakage may result.



SY  
 SYJ  
**SX**  
 VK  
 VZ  
 VF  
 VFR  
 VP7  
 VP4  
 VQ  
 VQ4  
 VQZ  
 VQD  
 VZS  
 VFS  
 VS  
 VS7

# SX3000/5000 Base Mounted Stacking Manifold/DIN Rail Mounted Integral Serial Interface Unit

## How to Order Manifold

SS5X 3 - 45S A - 05 U - 05 - □

**Manifold series**

3	SX3000
5	SX5000

**Models**

Symbol	Specifications
O	No Serial Interface
A	General SI unit: Series EX300
B	SI for Mitsubishi (MELSECNET/mini-S3 data link system)
C	SI for OMRON (SYSBUS wire system)
D	SI for Sharp (Satellite I/O link system)
E	SI for Matsushita (MEWMET-F system)
F1	SI for NKE (Wiring saving system, 16 outputs)
G	SI for Allen-Bradley Co. (Remote I/O (RIO) system)
J1	SI for SUNX (S-LINK system, 16 outputs)
J2	SI for SUNX (S-LINK system, 8 outputs)
K	SI for Fuji Electric (T-LINK mini system)
Q	SI for Device Net, OMRON (CompoBus/D)
R1	SI for OMRON (CompoBus/S, 16 outputs)
R2	SI for OMRON (CompoBus/S, 8 outputs)

- SI unit must be mounted on CPU side of general type.
- DIN rail length of manifold without SI unit is long enough for future expectancy of mounting SI unit. If shorter DIN rail (same length as 45□) is required, put "0" at the end of part number.

**Stations**

Symbol	Stations	Note
02	2	Double wiring specification
∴	∴	
08	8	
09	9	Applicable up to 16 solenoids. Use manifold specification from to specify wiring.
∴	∴	
16	16	

- The number of blank plate assemblies is included.
- When special wiring is required on manifold with 2-8, stations, please use the manifold specification form.

**SUP/EXH block ass'y mounting position**

Symbol	Mounting position	Stations
U	U-side	2 to 10
D	D-side	2 to 10
B	Both sides	2 to 16
M	Special specification	

\* Special specification is available by special order.

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

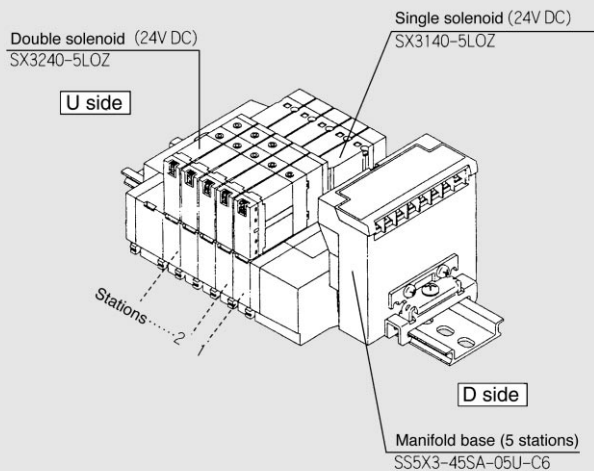
**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

\* Mixed porting available by special order.

## How to Order Valve Manifold Ass'y (Example)

### Ordering example



SS5X3-45SA-05U-C6 . . . . . 1 set (45S with serial 5-station manifold base No.)  
 \* SX3140-5LOZ . . . . . 2 sets (Single solenoid No.)  
 \* SX3240-5LOZ . . . . . 3 sets (Double solenoid No.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

- All manifold stations are wired for double solenoid valves. Valves are mounted in the order listed starting at the 1st station of D side of the manifold regardless of the mounting position of the SI unit.
- For manifolds with more than 8 stations (9-16), special wiring is required. Please use the manifold specification form.
- Serial unit is available for only D side mounting style.

## How to Order Valve

SX 3 2 40 - 5 LOZ □

**Series**

3	SX3000
5	SX5000

**Configuration**

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	24V DC
---	--------

**Manual override**

—	Non-locking push style
D	Push-turn-locking slotted style

**Option**

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

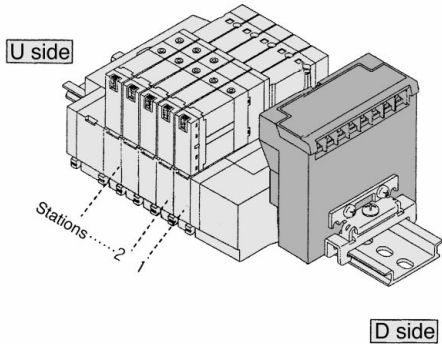
### Parts Number System of SI Units

Symbol	Specification	For SS5X□-45S	Symbol	Specification	For SS5X□-45S
A	General SI unit: Series EX300	EX322-S001	J1	SUNX (S-LINK system, 16 outputs)	EX122-SSL1
B	Mitsubishi (MELSECNET/mini-S3 data link system)	EX122-SMB1	J2	SUNX (S-LINK system, 8 outputs)	EX122-SSL2
C	OMRON (SYSBUS wire system)	EX122-STA1	K	Fuji Electric (T-LINK mini system)	EX122-SFU1
D	Sharp (Satellite I/O link system)	EX122-SSH1	Q	Device Net, OMRON (CompoBus/D)	EX122-SDN1
E	Matsushita (MEWMET-F system)	EX122-SPA1	R1	OMRON (CompoBus/S, 16 outputs)	EX122-SCS1
F1	NKE (Wiring saving system, 16 outputs)	EX122-SUW1	R2	OMRON (CompoBus/S, 8 outputs)	EX122-SCS2
G	Allen-Bradley Co. (Remote I/O (RIO) system)	EX122-SAB1			



# SX3000/5000 Base Mounted Manifold 45S□Type

- The serial transmission system minimizes wire mass and wire connection labor and promotes space savings.
- 16 stations max. (Specify a model with more than 8 stations by using manifold specification form.)



- Stations are sequentially numbered from the D side.
- Maximum station: Up to 16 solenoids (16 single solenoids).

Item	Specifications
External power supply	24V DC±10%
Current consumption (Internal unit)	0.1A SA, SB, SD, SE, SF1, SG, SJ1, SJ2, SK, SR1, SR2
	0.3A SC, SQ

	SA type applicable to Series EX300	SB type applicable to Mitsubishi Electric model MELSECNET/mini-S3 data link system																		
Name of terminal block (LED)	<table border="1"> <thead> <tr> <th>LED name</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>TRD</td> <td>Lighting during data reception</td> </tr> <tr> <td>RUN/ERR</td> <td>Blinking when data is normal; Lighting when data is abnormal</td> </tr> </tbody> </table>	LED name	Details	TRD	Lighting during data reception	RUN/ERR	Blinking when data is normal; Lighting when data is abnormal	<table border="1"> <thead> <tr> <th>LED name</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Lighting when power is turned ON</td> </tr> <tr> <td>RUN</td> <td>Lighting when data with master is normal</td> </tr> <tr> <td>RD</td> <td>Lighting during data reception</td> </tr> <tr> <td>SD</td> <td>Lighting during data transmission</td> </tr> <tr> <td>ERR.</td> <td>Lighting when error occurs, off when corrected.</td> </tr> </tbody> </table>	LED name	Details	POWER	Lighting when power is turned ON	RUN	Lighting when data with master is normal	RD	Lighting during data reception	SD	Lighting during data transmission	ERR.	Lighting when error occurs, off when corrected.
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Note	<ul style="list-style-type: none"> <li>● Serial transmission is possible by connecting with I/O card of T unit PLC manufacturer. EX300-TMB1...For Mitsubishi Electric model EX300-TTA1...For OMRON model EX300-TFU1...For Fuji Electric model EX300-T001...For General model * Control marks of T unit: 32 points/unit</li> <li>● Number of outputs: 16</li> </ul>	<ul style="list-style-type: none"> <li>● MELSECNET/mini-S3 data link system Master unit: AJ71PT32-S3 AJ71T32-S3 A1SJ71PT32-S3</li> <li>● Output points: 16, Occupation stations: 2</li> </ul>																		
Twisted pair cable wiring	<p>* The shielding of the shielded wire should be grounded on the reception or transmission side.</p>	<p>* The shielding of the shielded wire should be one-point grounded on the reception or transmission side.</p>																		

	SC type applicable to Omron models Applicable to SYSBUS wire system	SD type applicable to Sharp models Satellite I/O link system	SE type Applicable to Matsushita Electric models MEWNET-F system																												
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Note	<ul style="list-style-type: none"> <li>● SYSBUS wire system Master Station unit: C500-RM201 C200H-RH201</li> <li>● Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>● Satellite I/O link system Master station unit: ZW-31LM JW-31LM JW-23LM</li> <li>● Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>● MEWNET-F system Master unit: AFP3740 AFP5740</li> <li>● Output points: 16</li> </ul>																												
Twisted pair cable wiring		<p>a) Double wiring type Wiring without signal contact wire (SG)</p> <p>b) Triple wiring type Wiring with signal contact wire (SG)</p>																													

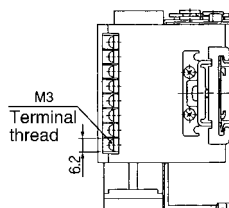
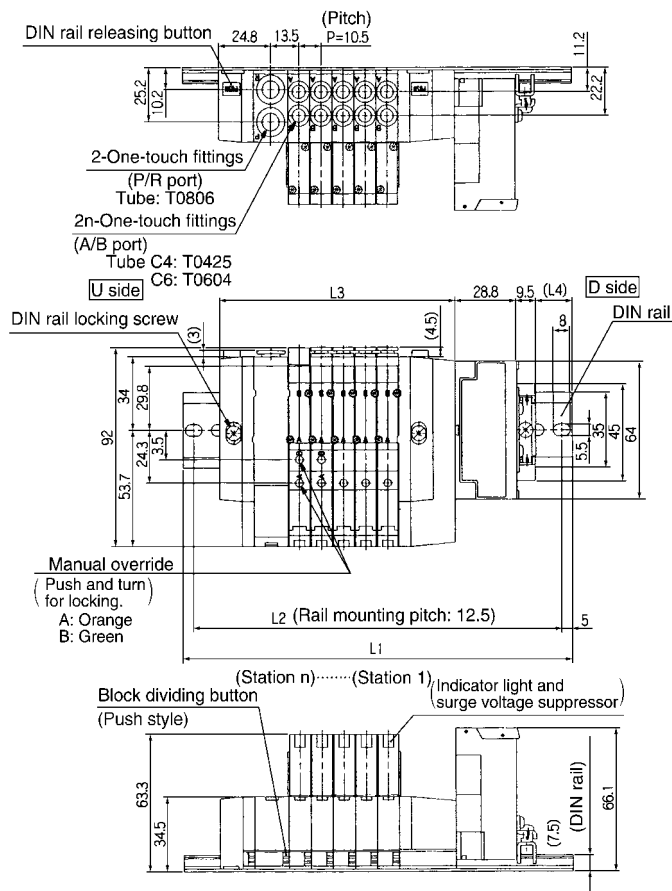
- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

	SF1 type Applicable to NKE model, Simplified wiring system	SG type Applicable to Allen-Bradley Co. model, Remote I/O (RIO) system	SJ1/SJ2 type Applicable to SUNX model, S-LINK system																				
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Notes	<ul style="list-style-type: none"> <li>●Wiring simplifying system Send unit: SD-120</li> <li>●Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>●Remote I/O (RIO) system</li> <li>●Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>●S-LINK system S-LINK controller: SL-CU1</li> <li>●Output points: 16 (SJ1) Output points: 8 (SJ2)</li> </ul>																				
Wiring of cable			<p>a) T type diverging multi drop wiring (S-LINK system)    b) Contact wiring (Sensor link system)</p> <p>The example above shows a case that S-LINK exclusive flat cable "SL-RCM*00" is used.</p>																				

	SK type Applicable to Fuji Electric model T-link mini system	SQ type Applicable to Device Net	SR1/SR2 type Applicable to OMRON model Compo Bus/S																				
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Note	<ul style="list-style-type: none"> <li>●T-LINK mini system Master unit: FTM 100B Converter : FRC100A-G02 Repeater : FRC200A-C10</li> <li>●Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>●DeviceNet</li> <li>●OMRON's Compo Bus/D system Master unit: C200HW-DSM21</li> <li>●Output points: 16</li> </ul>	<ul style="list-style-type: none"> <li>●Compo Bus/S system Master unit: C200HW-SRM21 Master unit: CQM1-SRM21</li> <li>●Output points: 16 (SR1) Output points: 8 (SR2)</li> </ul>																				
Wiring of cable	<p>Connect shield wires to SD terminal. Without connecting shield wires to SD terminal, normal transmission cannot be operated even for short distance.</p>		<p>Connector with end resistance</p>																				

## SX3000: Serial Interface Unit/Plug-in Style

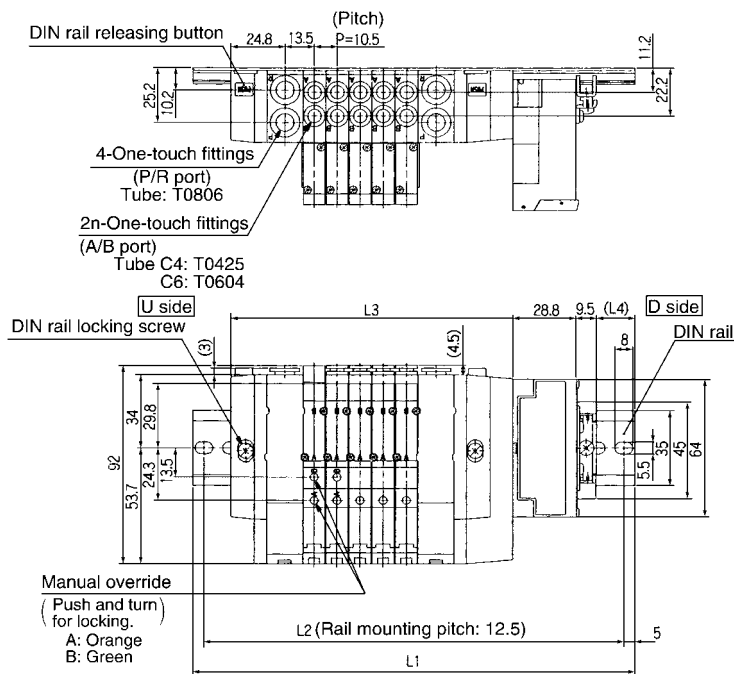
### SS5X3-45S□ - Stations D-C 4



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	148	160.5	173	185.5	185.5	198	210.5	223	235.5
<b>L2</b>	137.5	150	162.5	175	175	187.5	200	212.5	225
<b>L3</b>	81	91.5	102	112.5	123	133.5	144	154.5	165
<b>L4</b>	14.5	15.5	16.5	17.5	12	13	14	15	16

Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

### SS5X3-45S□ - Stations B-C 5



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	160.5	173	185.5	198	210.5	223	223	235.5	248
<b>L2</b>	150	162.5	175	187.5	200	212.5	212.5	225	237.5
<b>L3</b>	97.5	108	118.5	129	139.5	150	160.5	171	181.5
<b>L4</b>	12.5	13.5	14.5	15.5	16.5	17.5	12	13	14

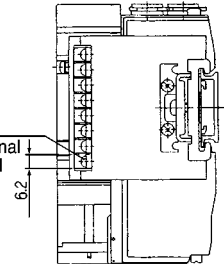
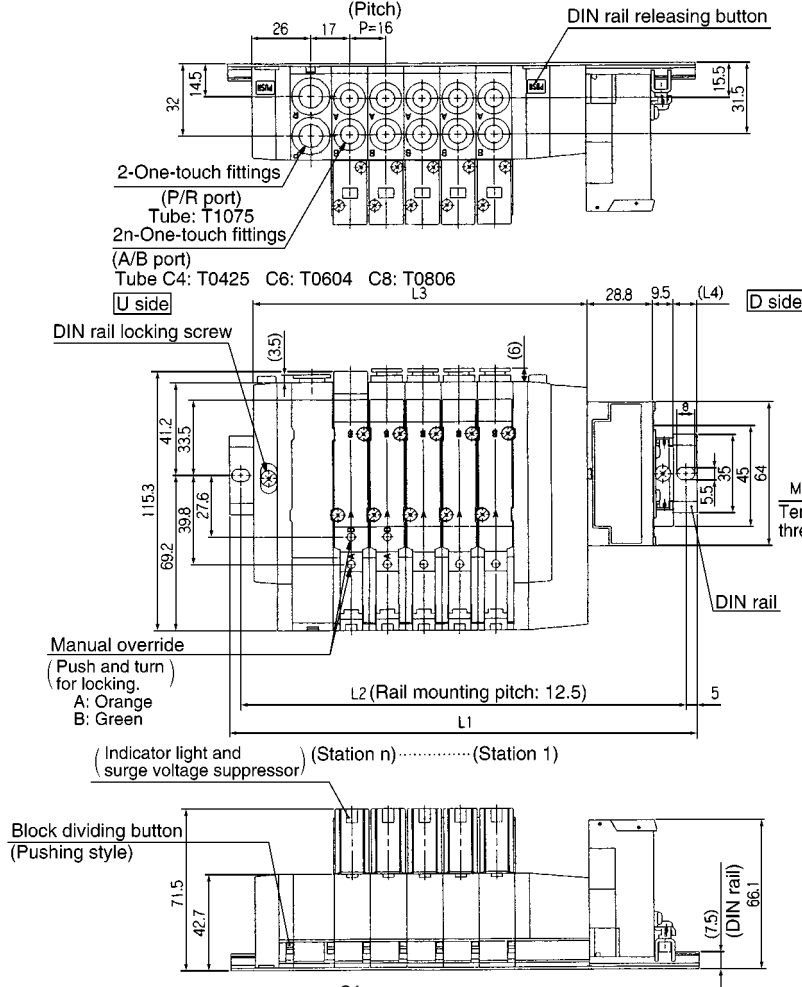
Stations	11	12	13	14	15	16
<b>L1</b>	260.5	273	285.5	285.5	298	310.5
<b>L2</b>	250	262.5	275	275	287.5	300
<b>L3</b>	192	202.5	213	223.5	234	244.5
<b>L4</b>	15	16	17	12	13	14

Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX5000: Serial Interface Unit/Plug-in Style

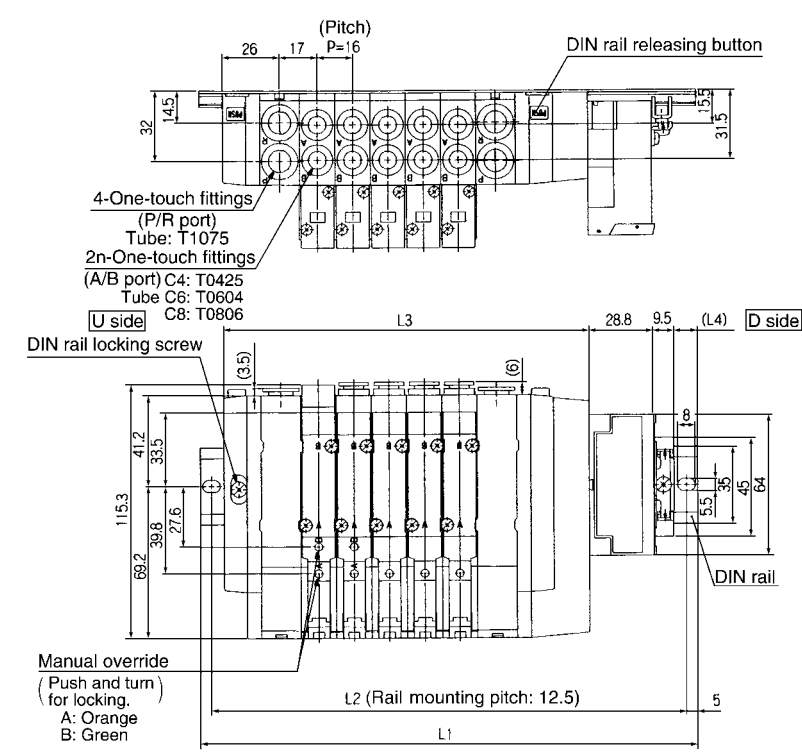
## SS5X5-45S □ - Stations U-<sup>C4</sup><sub>C6</sub><sub>C8</sub>



Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	173	185.5	198	210.5	235.5	248	260.5	285.5	298
<b>L2</b>	162.5	175	187.5	200	225	237.5	250	275	287.5
<b>L3</b>	100	116	132	148	164	180	196	212	228
<b>L4</b>	17.5	15.5	14	12	16.5	15	13	17.5	16

Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to 24.3mm. Consult SMC for further information.

## SS5X5-45S □ - Stations B-<sup>C4</sup><sub>C6</sub><sub>C8</sub>



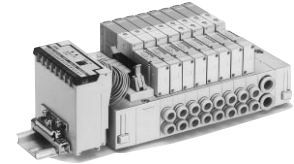
Stations	2	3	4	5	6	7	8	9	10
<b>L1</b>	185.5	198	223	235.5	248	260.5	285.5	298	310.5
<b>L2</b>	175	187.5	212.5	225	237.5	275	275	287.5	300
<b>L3</b>	118	134	150	166	182	214	214	230	246
<b>L4</b>	14.5	13	17.5	15.5	14	12	16.5	15	13

Stations	11	12	13	14	15	16
<b>L1</b>	335.5	348	360.5	373	398	410.5
<b>L2</b>	325	337.5	350	362.5	387.5	400
<b>L3</b>	262	278	294	310	326	342
<b>L4</b>	17.5	16	14	12.5	17	15

Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to 24.3mm. Consult SMC for further information.

45S1 □ Type

# SX3000/5000 Base Mounted Stacking Manifold/DIN Rail Mounted Serial Interface (Separate Style)



## How to Order Manifold

SS5X **3** - 45S1 **A** **D** - **05** **U** - **C4** - □

**Manifold series**

3	SX3000
5	SX5000

**Models**

Symbol	Specifications
O	Without SI unit
A	General type: EX300
B	Mitsubishi Electric MELSECNET/MINI-S3 data link system
C	OMRON SYSBUS wire system
D	Sharp Satellite I/O link system
E	Matsushita Electric MEWNET-F system
F1	NKE wiring simplifying system (16 output points)
G	Allen-Bradley Co. remote I/O (RIO) system
J1	SUNX S-LINK system (16 output points)
J2	SUNX S-LINK system (8 output points)
K	Fuji Electric T-LINK mini system
Q	Device Net and OMRON CompoBus/D
R1	OMRON CompoBus/S (16 points)
R2	OMRON CompoBus/S (8 points)

- Transmission unit is required on CPU side for general style.
- Length of DIN rail without SI unit is long enough for future mounting expectancy. If SI unit with shorter DIN rail (same as 45□) is required, put "0" in the option space.

**SI unit mounting position**

Symbol	Mounting position
U	U side
D	D side

**Stations**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
08	8	
09	9	Applicable up to 16 solenoids.
⋮	⋮	Use manifold specification from to specify wiring.
16	16	

- The number of blanking plate assemblies are included.
- When special wiring is required on manifold with 2-8 stations, please use the manifold

**SUP/EXH block ass'y mounting position**

Symbol	Mounting position	Stations
U	U-side	2 to 10
D	D-side	2 to 10
B	Both sides	2 to 16
M	Special specification	

\* Special specification is available by special order.

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M	Mixed

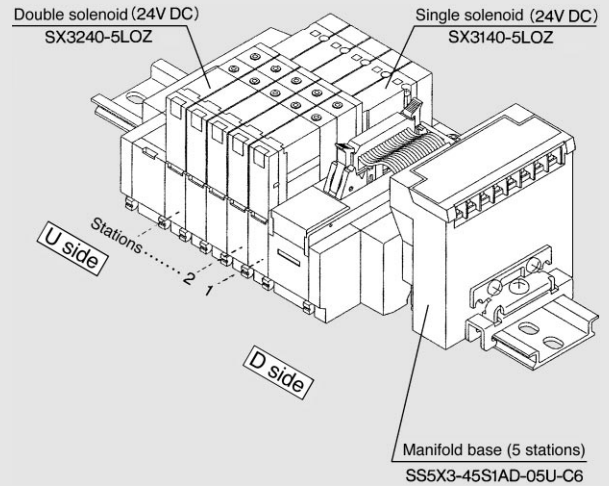
**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M	Mixed

\* Mixed porting available by special order.

## How to Order Valve Manifold Ass'y (Example)

**Ordering example**



SS5X3-45S1AD-05U-C6 ··· 1 set (45S1 with serial 5-station manifold base No.)  
 \* SX3140-5LOZ ······ 2 sets (Single solenoid No.)  
 \* SX3240-5LOZ ······ 3 sets (Double solenoid No.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

- All manifold stations are wired for double solenoid valves. Valves are mounted in the order listed starting at the 1st station of D side of the manifold regardless of the mounting position of the SI unit.
- For manifolds with more than 8 stations (9-16), special wiring is required. Please use the manifold specification form.

## How to Order Valve

SX **3** **2** 40 - **5** LOZ □

**Series**

3	SX3000
5	SX5000

**Configuration**

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	24V DC
---	--------

**Manual override**

-	Non-locking push style
D	Push-turn-locking slotted style

**Option**

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

## Part Number System of SI Units

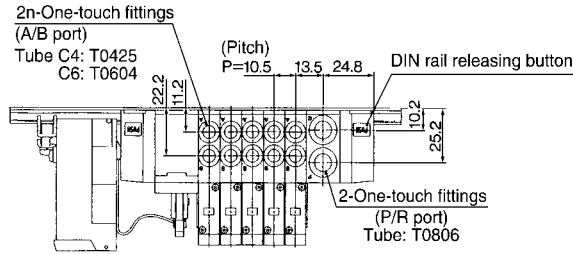
Symbol	Specification	For SS5X□-45S1	Symbol	Specification	For SS5X□-45S1
A	General type: Series EX300	EX321-S001	J1	SUNX S-LINK system (16 output points)	EX121-SSL1
B	Mitsubishi Electric MELSECNET/MINI-S3 data link system	EX121-SMB1	J2	SUNX S-LINK system (8 output points)	EX121-SSL2
C	OMRON SYSBUS wire system	EX121-STA1	K	Fuji Electric T-Link mini system	EX121-SFU1
D	Sharp Satellite I/O link system	EX121-SSH1	Q	Device Net and OMRON CompoBus/D	EX121-SDN1
E	Matsushita Electric MEWNET-F system	EX121-SPA1	R1	OMRON CompoBus/S (16 points)	EX121-SCS1
F1	NKE wiring simplifying system (16 output points)	EX121-SUW1	R2	OMRON CompoBus/S (8 points)	EX121-SCS2
G	Allen-Bradley Co. remote I/O (RIO) system	EX121-SAB1			

- SY
- SYJ
- SX**
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

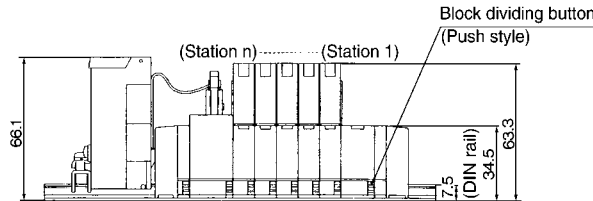
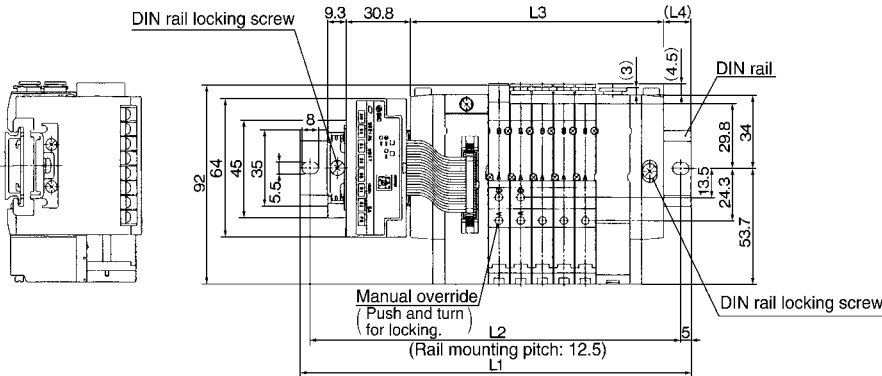


# SX3000: Serial Interface Unit/Plug-in Style

## SS5X3-45S1 □ U- Stations D-C<sup>4</sup><sub>C6</sub>



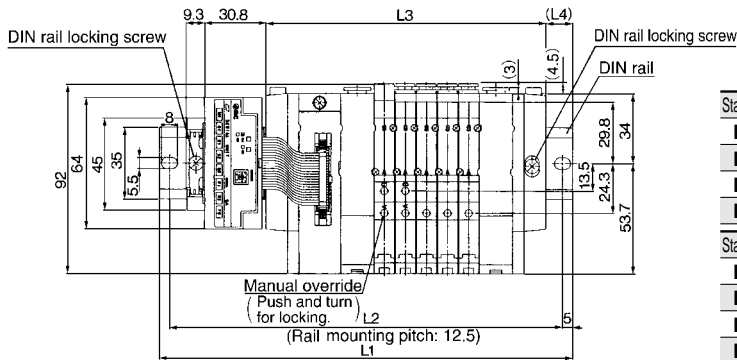
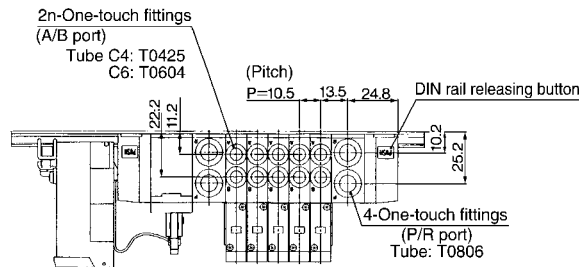
(Note) The L1 to L4 dimensions of SS5X3-45S1 □ U- Stations U-□ are identical to those of SS5X3-45S1 □ U- Stations D-□.



Stations	2	3	4	5	6	7	8	9	10
L1	160.5	173	185.5	198	198	210.5	223	235.5	248
L2	150	162.5	175	187.5	187.5	200	212.5	225	237.5
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	14	15	16	17	12	13	14	15	16

(Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to 24.3mm. Consult SMC for further information.

## SS5X3-45S1 □ U- Stations B-C<sup>4</sup><sub>C6</sub>



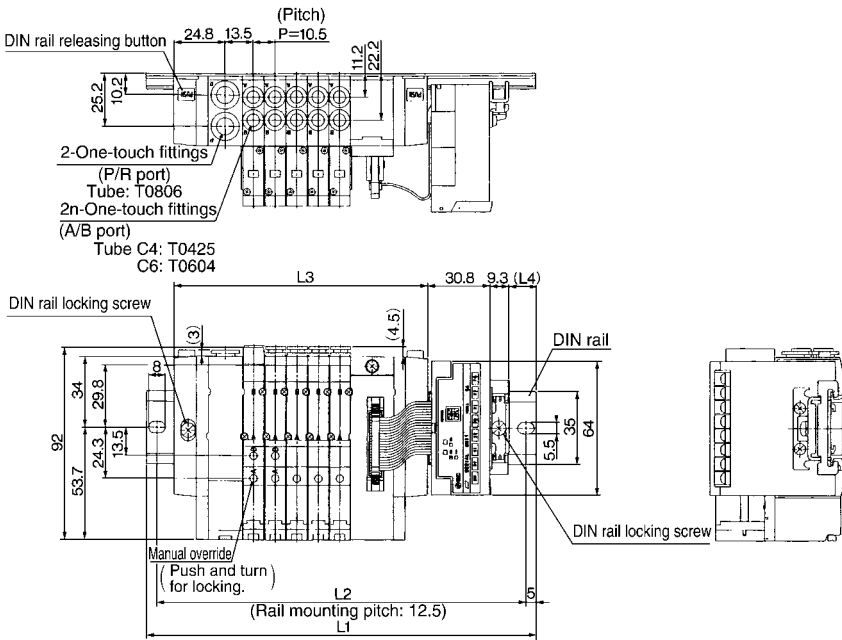
Stations	2	3	4	5	6	7	8	9	10
L1	173	185.5	198	210.5	223	235.5	235.5	248	260.5
L2	162.5	175	187.5	200	212.5	225	225	237.5	250
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	12	13	14	15	16	17	12	13	14

Stations	11	12	13	14	15	16
L1	273	285.5	298	298	310.5	323
L2	262.5	275	287.5	287.5	300	312.5
L3	202.5	213	223.5	234	244.5	255
L4	15	16	17	11.5	12.5	13.5

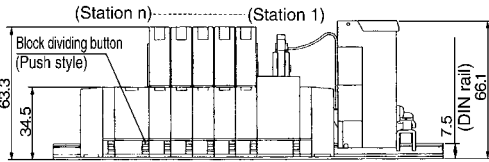
(Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to 24.3mm. Consult SMC for further information.



## SS5X3-45S1 □ D- Stations U-C<sub>4</sub>



Note) The L1 to L4 dimensions of SS5X3-45S1 □ D- Stations are identical to those of SS5X3-45S1 □ D- Stations U-□.

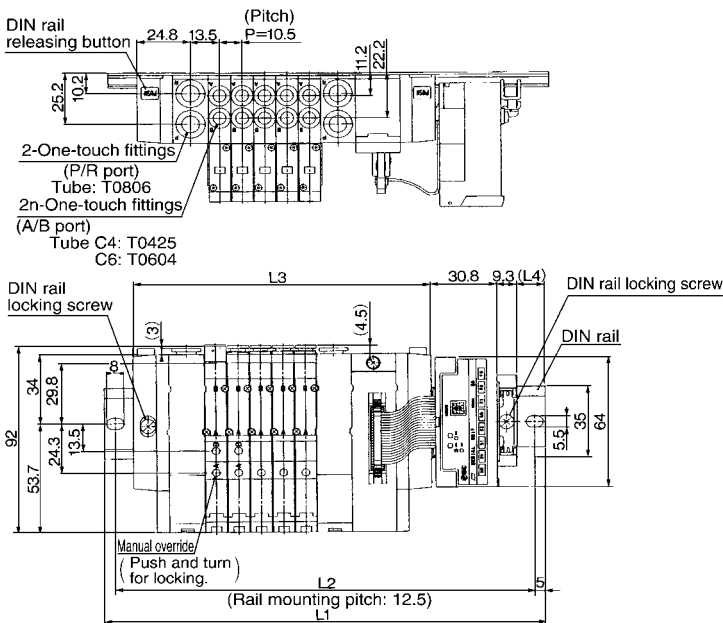


Stations	2	3	4	5	6	7	8	9	10
L1	160.5	173	185.5	198	198	210.5	223	235.5	248
L2	150	162.5	175	187.5	187.5	200	212.5	225	237.5
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	14	15	16	17	12	13	14	15	16



Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

## SS5X3-45S1 □ D- Stations B-C<sub>4</sub>



Stations	2	3	4	5	6	7	8	9	10
L1	173	185.5	198	210.5	223	235.5	235.5	248	260.5
L2	162.5	175	187.5	200	212.5	225	225	237.5	250
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	12	13	14	15	16	17	12	13	14

Stations	11	12	13	14	15	16
L1	273	285.5	298	298	310.5	323
L2	262.5	275	287.5	287.5	300	312.5
L3	202.5	213	223.5	234	244.5	255
L4	15	16	17	11.5	12.5	13.5



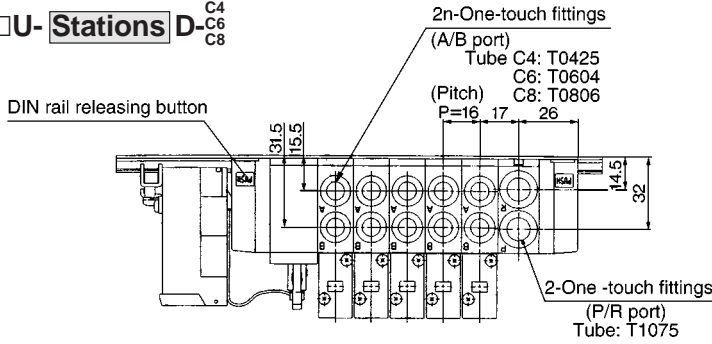
Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4

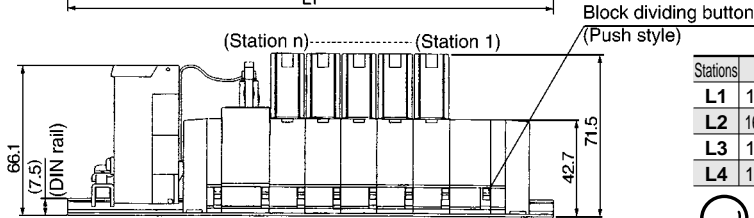
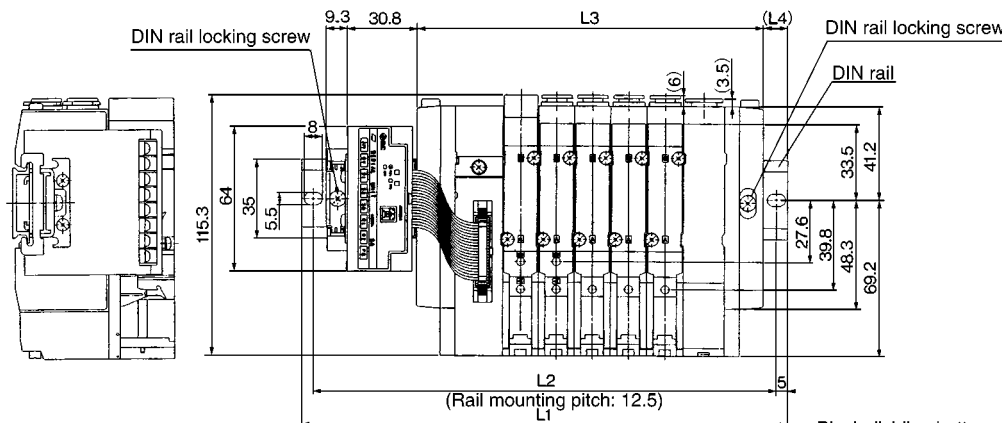
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

### SX5000: Serial Transmission Unit/Plug-in Style

#### SS5X5-45S1 □ U- Stations D-□



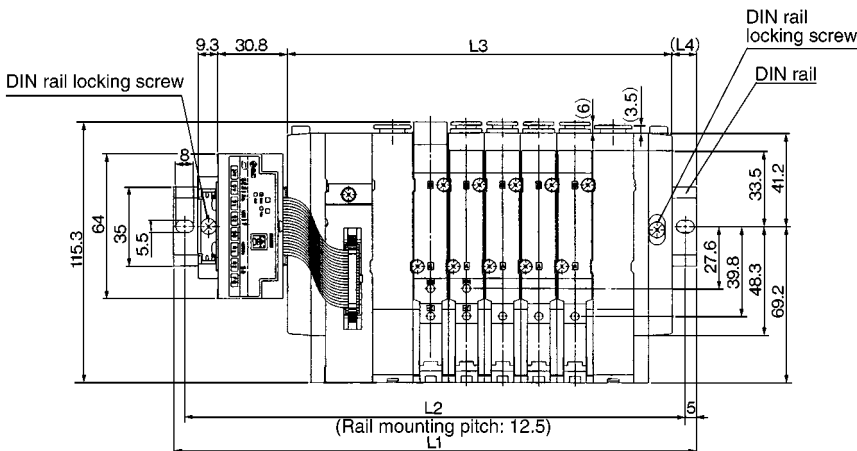
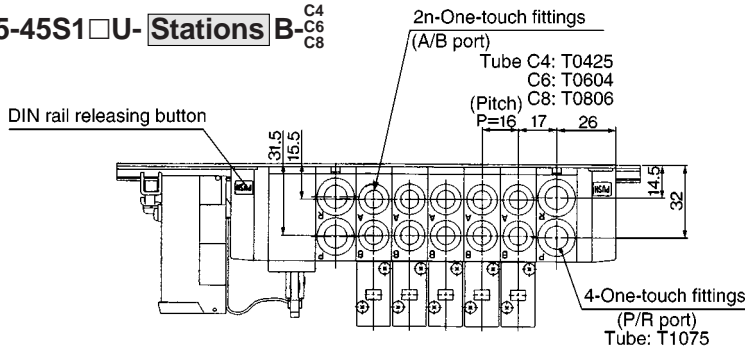
Note) The L1 to L4 dimensions of SS5X5-45S1 □ U- Stations U-□ are identical to those of SS5X5-45S1 □ U- Stations D-□.



Stations	2	3	4	5	6	7	8	9	10
L1	173	185.5	210.5	223	235.5	260.5	273	285.5	298
L2	162.5	175	200	212.5	225	250	262.5	275	287.5
L3	105	121	137	153	169	185	201	217	233
L4	13.5	12	16.5	14.5	13	17.5	15.5	14	12

Note) Width of SI unit applicable to "E":  
Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

#### SS5X5-45S1 □ U- Stations B-□

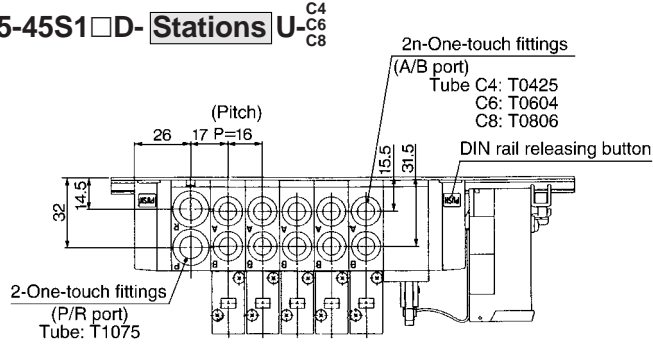


Stations	2	3	4	5	6	7	8	9	10
L1	198	210.5	223	235.5	260.5	273	285.5	310.5	323
L2	187.5	200	212.5	225	250	262.5	275	300	312.5
L3	123	139	155	171	187	203	219	235	251
L4	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5

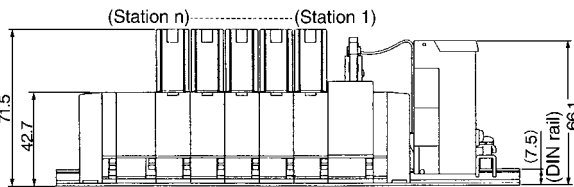
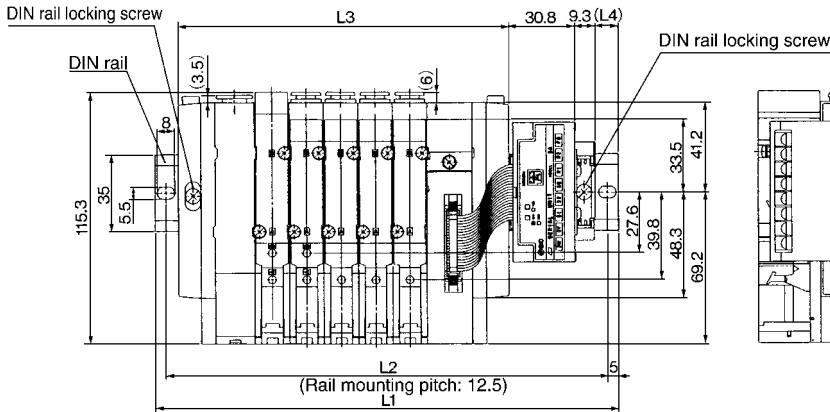
Stations	11	12	13	14	15	16
L1	335.5	348	373	385.5	398	410.5
L2	325	337.5	362.5	375	387.5	400
L3	267	283	299	315	331	347
L4	14	12	16.5	15	13	11.5

Note) Width of SI unit applicable to "E":  
Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

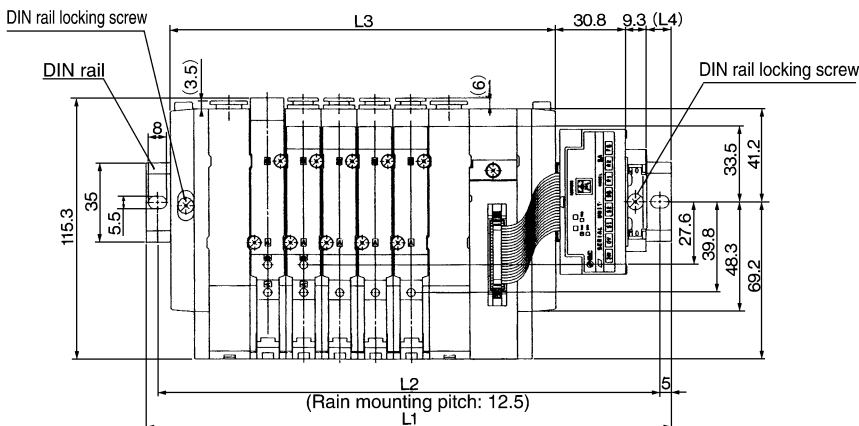
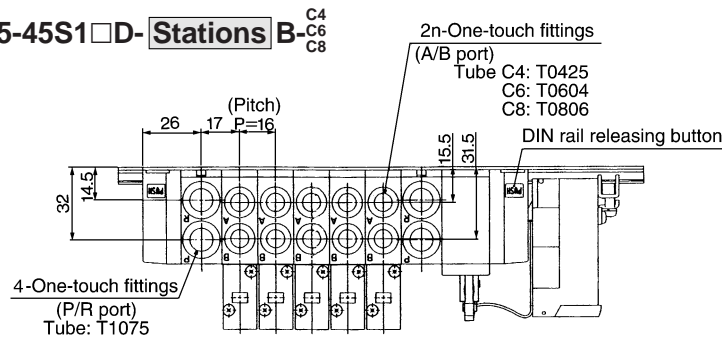
## SS5X5-45S1 □ D- Stations U- □



Note) The L1 to L4 dimensions of SS5X5-45S1 □ D- Stations U- □ are identical to those of SS5X5-45S1 □ D- Stations U- □.



## SS5X5-45S1 □ D- Stations B- □



Stations	2	3	4	5	6	7	8	9	10
L1	173	185.5	210.5	223	235.5	260.5	273	285.5	298
L2	162.5	175	200	212.5	225	250	262.5	275	287.5
L3	105	121	137	153	169	185	201	217	233
L4	13.5	12	16.5	14.5	13	17.5	15.5	14	12



Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

Stations	2	3	4	5	6	7	8	9	10
L1	198	210.5	223	235.5	260.5	273	285.5	310.5	323
L2	187.5	200	212.5	225	250	262.5	275	300	312.5
L3	123	139	155	171	187	203	219	235	251
L4	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5

Stations	11	12	13	14	15	16
L1	335.5	348	373	385.5	398	410.5
L2	325	337.5	362.5	375	387.5	400
L3	267	283	299	315	331	347
L4	14	12	16.5	15	13	11.5



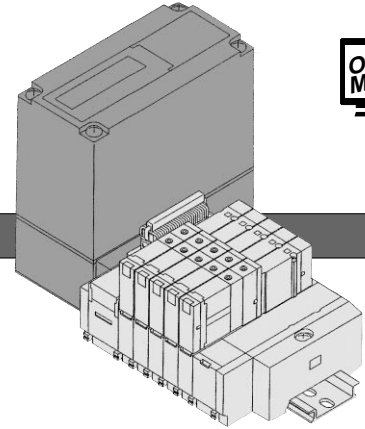
Note) Width of SI unit applicable to "E": Matsushita Electric and "G": Allen-Bradley widens to [24.3mm]. Consult SMC for further information.

- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4

- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

45S2 Type

# Made to Order Specifications SX3000/5000 Serial Interface Unit IN313



## Serial Interface manifold equipped with IN313

### How to Order Manifold

45S2 (Serial interface unit IN313)

SS5X **3** - 45S2 **U** - **06** **D** - **C4** -  

**Manifold series**

3	SX3000
5	SX5000

**SI unit mounting position**

Symbol	Mounting position
U	U side
D	D side

**Stations**

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
08	8	Applicable up to 16 solenoids. Use manifold specification from to specify wiring.
09	9	
⋮	⋮	
16	16	

The number of blank plate ass'y is included.

**SUP/EXH block ass'y mounting position**

Symbol	Mounting position	Stations
U	U-side	2 to 10
D	D-side	2 to 10
B	Both sides	2 to 16
M	Special specification	

\* Special specification is available by special order.

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M	Mixed

**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M	Mixed

\* Mixed porting available by special order.

**Option**

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

### How to Order Applicable SI Unit

IN313 - **MB1**

**Applicable makers**

MB1	For Mitsubishi Electric
TA1	For OMRON
FU1	For Fuji Electric
SH1	For Sharp
TY1	For Toyota Machine Works
TY2	
PA1	For Matsushita Electric Works
HT1	For Hitachi
AB1	For Allen Bradley
TS1	For Toshiba

### How to Order Valve

SX **3** **2** 40 - **5** LOZ  

**Series**

3	SX3000
5	SX5000

**Configuration**

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	24V DC
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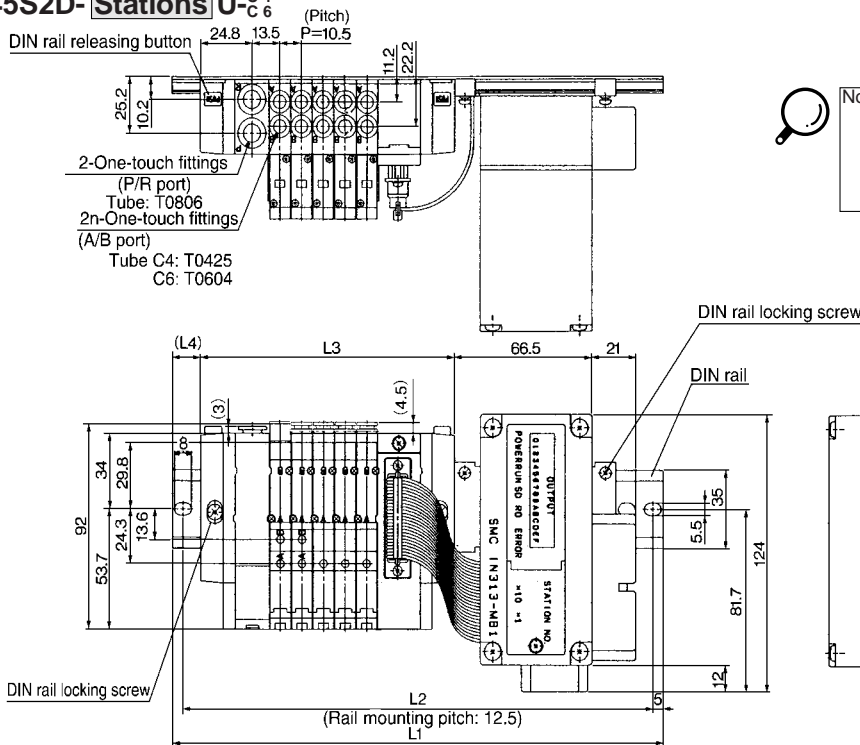
**Manual override**

-	Non-locking push style
D	Push-turn-locking slotted style

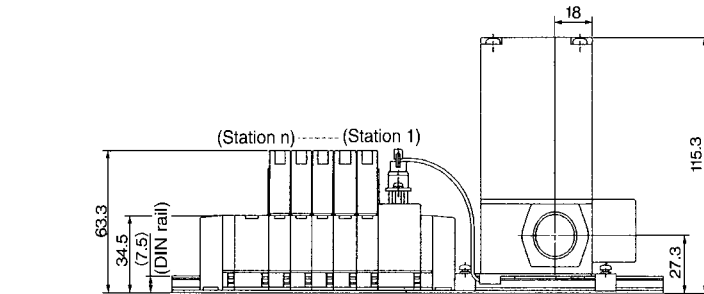
# SX3000/5000 Made to Order Specifications

## 45S2<sub>Type</sub> SX3000: Serial Interface Unit/Plug-in Style

### SS5X3-45S2D- Stations U-C<sub>4</sub> 6

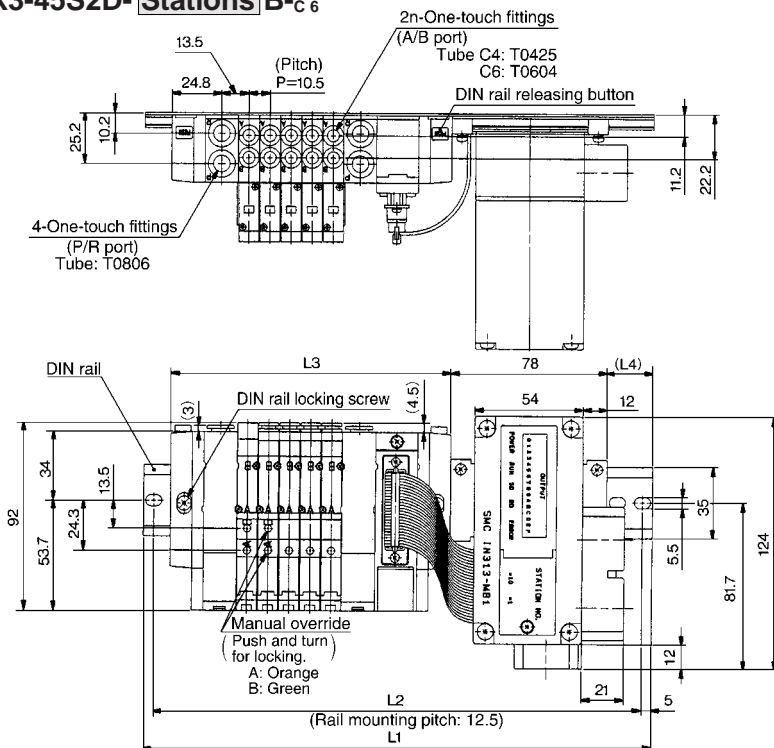


Note) The L1 to L4 dimensions of SS5X3-45S2D- Stations D-□, SS5X3-45S2U- Stations D-□, SS5X3-45S2U- Stations U-□, are identical to those of SS5X3-45S2D- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
L1	198	210.5	223	235.5	235.5	248	260.5	273	285.5
L2	187.5	200	212.5	225	225	237.5	250	262.5	275
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	14	15	16	17	12	13	14	15	16

### SS5X3-45S2D- Stations B-C<sub>4</sub> 6



Note) The L1 to L4 dimensions of SS5X3-45S2U- Stations B-□ are identical to those of SS5X3-45S2D- Stations B-□.

Stations	2	3	4	5	6	7	8	9
L1	210.5	223	235.5	248	260.5	273	273	285.5
L2	200	212.5	225	237.5	250	262.5	262.5	275
L3	108	118.5	129	139.5	150	160.5	171	181.5
L4	12	13	14	15	16	17	12	13

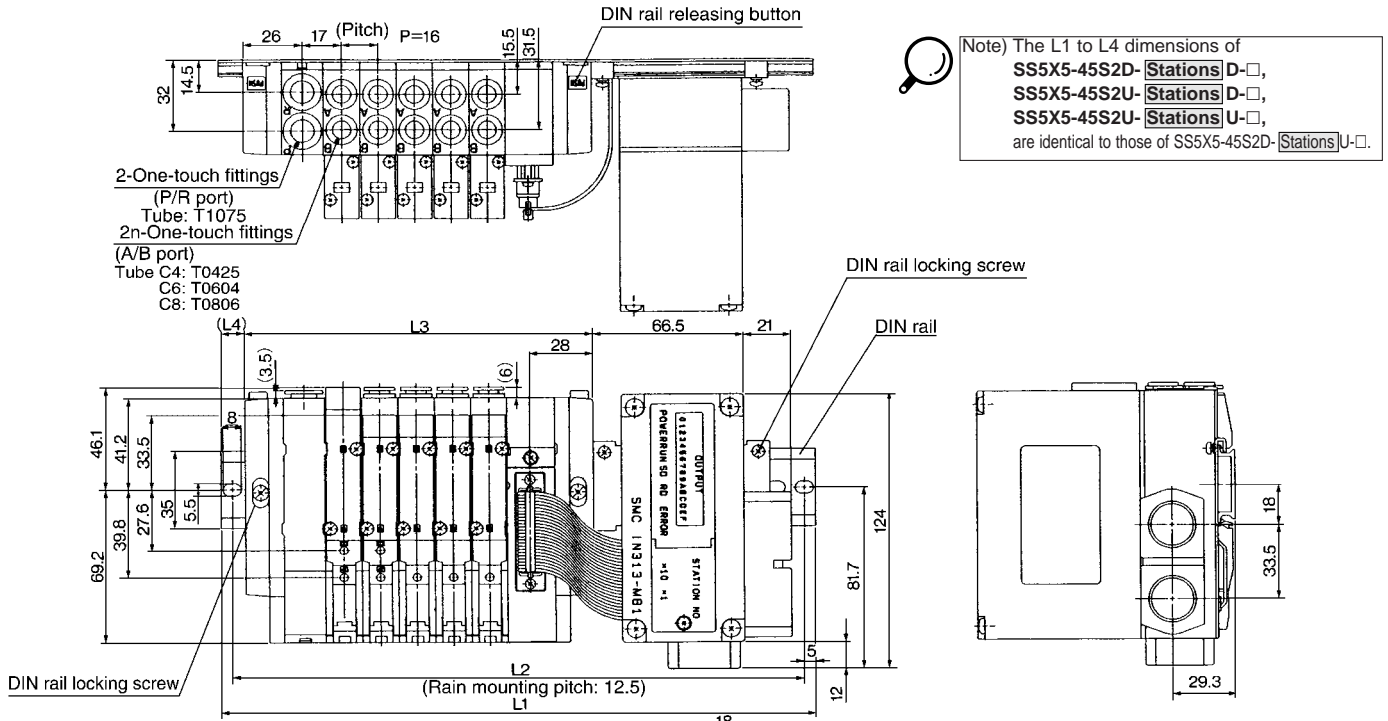
Stations	10	11	12	13	14	15	16
L1	298	310.5	323	335.5	335.5	348	360.5
L2	287.5	300	312.5	325	325	337.5	350
L3	192	202.5	213	223.5	234	244.5	255
L4	14	15	16	17	11.5	12.5	13.5

- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

# SX3000/5000

## 45S2<sub>Type</sub> SX5000: Serial Interface Unit/Plug-in Style

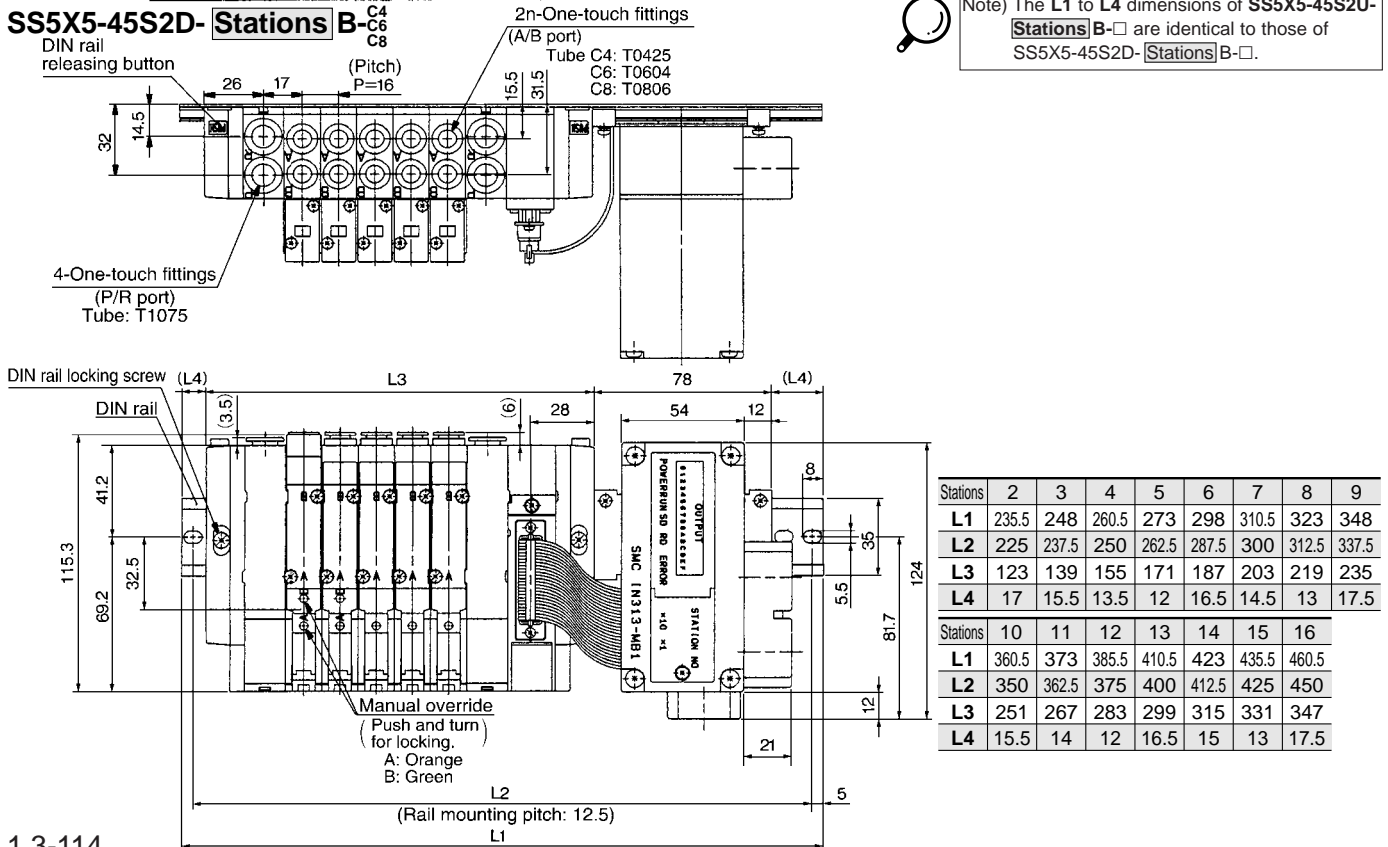
### SS5X5-45S2D- Stations U<sub>C4</sub> C6 C8



Note) The L1 to L4 dimensions of SS5X5-45S2D- Stations D-□, SS5X5-45S2U- Stations D-□, SS5X5-45S2U- Stations U-□, are identical to those of SS5X5-45S2D- Stations U-□.

Stations	2	3	4	5	6	7	8	9	10
L1	210.5	223	248	260.5	273	298	310.5	323	335.5
L2	200	212.5	237.5	250	262.5	287.5	300	312.5	325
L3	105	121	137	153	169	185	201	217	233
L4	13.5	12	16.5	14.5	13	17.5	15.5	14	12

### SS5X5-45S2D- Stations B<sub>C4</sub> C6 C8



Note) The L1 to L4 dimensions of SS5X5-45S2U- Stations B-□ are identical to those of SS5X5-45S2D- Stations B-□.

Stations	2	3	4	5	6	7	8	9
L1	235.5	248	260.5	273	298	310.5	323	348
L2	225	237.5	250	262.5	287.5	300	312.5	337.5
L3	123	139	155	171	187	203	219	235
L4	17	15.5	13.5	12	16.5	14.5	13	17.5

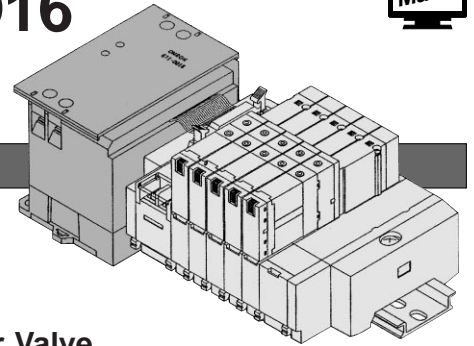
  

Stations	10	11	12	13	14	15	16
L1	360.5	373	385.5	410.5	423	435.5	460.5
L2	350	362.5	375	400	412.5	425	450
L3	251	267	283	299	315	331	347
L4	15.5	14	12	16.5	15	13	17.5



45S3 Type

# Made to Order Specifications SX3000/5000 Serial Interface Unit With OMRON's G71-OD16



Serial interface manifold equipped with OMRON's transmission unit G71-OD16

## How to Order Manifold

45S3 (Serial interface manifold with transmission unit)

SS5X **3** - 45S3 **U** - **06** **D** - **C4** - **□**

Manifold series

3	SX3000
5	SX5000

### Specifications

Symbol	Specifications
—	With transmission unit
0 (Note)	Without transmission unit

Note) Models without a transmission unit have a DIN rail that have an additional length as long as the transmission unit mounting space. Put "0" for shorter DIN rails (same as 45□type) in the option specifying space at the end of ordering part number.

### Transmission unit mounting position

Symbol	Mounting position
U	U side
D	D side

### Valve stations

Symbol	Stations	Note
02	2	Double wiring specification
⋮	⋮	
08	8	Applicable up to 16 solenoids. Use manifold specification from to specify wiring.
09	9	
⋮	⋮	
16	16	

Note) The number of blank plate ass'y is included.

### SUP/EXH block ass'y mounting position

Symbol	Mounting position	Stations
U	U-side	2 to 10
D	D-side	2 to 10
B	Both sides	2 to 16
M	Special specification	

\* Special specification is available by special order.

### A/B port size

#### SX3000

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M	Mixed

#### SX5000

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M	Mixed

\* Mixed porting available by special order.

### Option

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

## How to Order Valve

SX **3** **2** **40** - **5** **LOZ** **□**

Series

3	SX3000
5	SX5000

Configuration

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

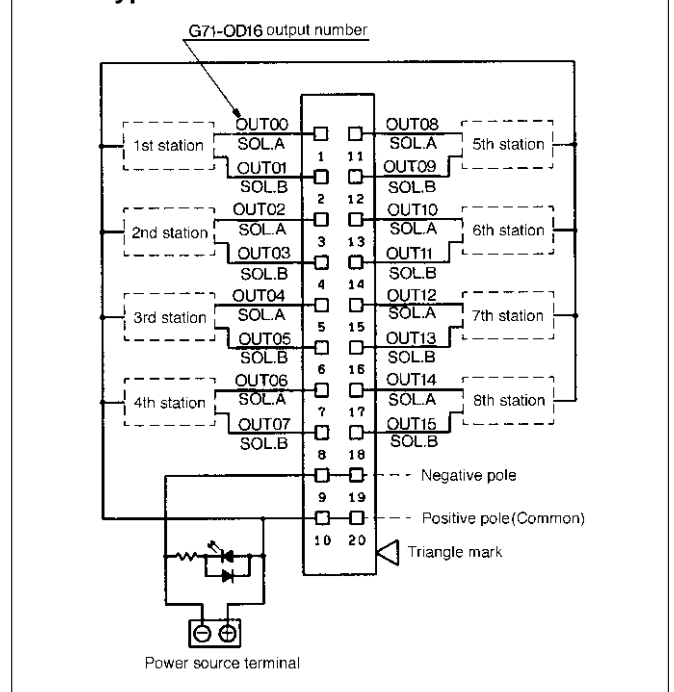
5	24V DC
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Manual override

—	Non-locking push style
D	Push-turn-locking slotted style

## Manifold Internal Wiring

### Serial type 45S3



- Refer to the instruction manual for or the catalog of transmitter terminals for the specifications OMRON's transmission terminals.
- When using a single solenoid, connect wire to A side.
- The circuit above shows double wiring specification up to eight stations. When wiring is specified in manifold specification form, valves corresponding to number of transmission unit are different from circuit above.
- Maximum solenoid station: 16 (e.g. Single solenoid: 16 max.) Consult SMC for more stations.

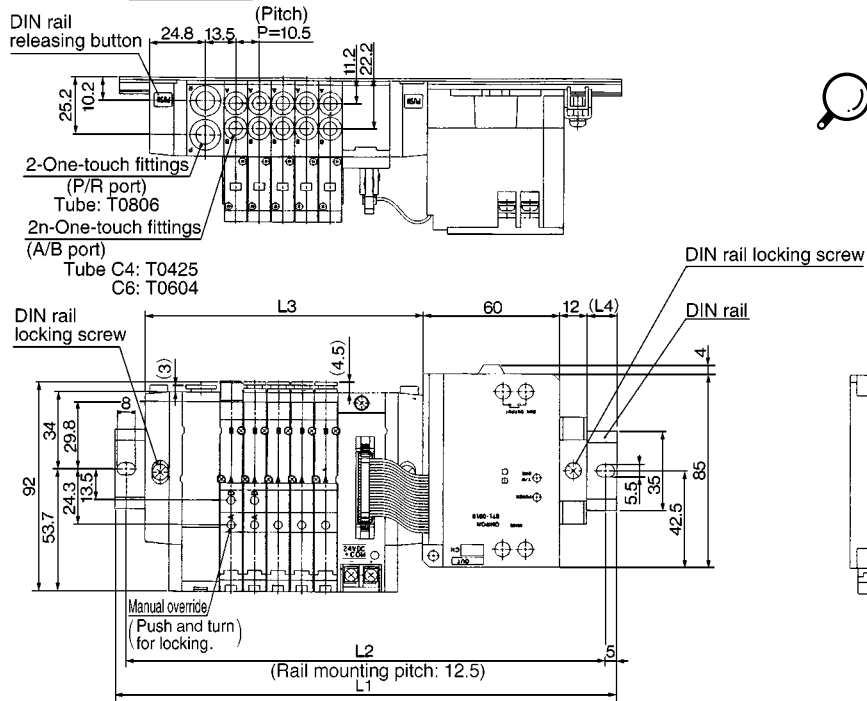
### Caution

- The wiring specification for SS5X<sup>3</sup>-45S30 is different from that for SS5X<sup>3</sup>-45PG.

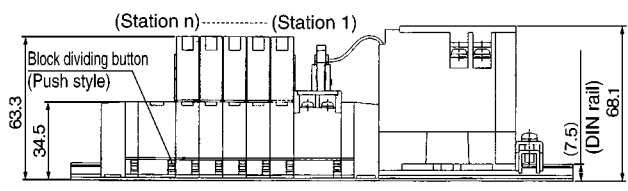
- SY
- SYJ
- SX
- VK
- VZ
- VF
- VFR
- VP7
- VP4
- VQ
- VQ4
- VQZ
- VQD
- VZS
- VFS
- VS
- VS7

## 45S3<sub>Type</sub> SX3000: Serial Interface Unit/Plug-in Style

### SS5X3-45S3D- Stations U-C<sub>4</sub>

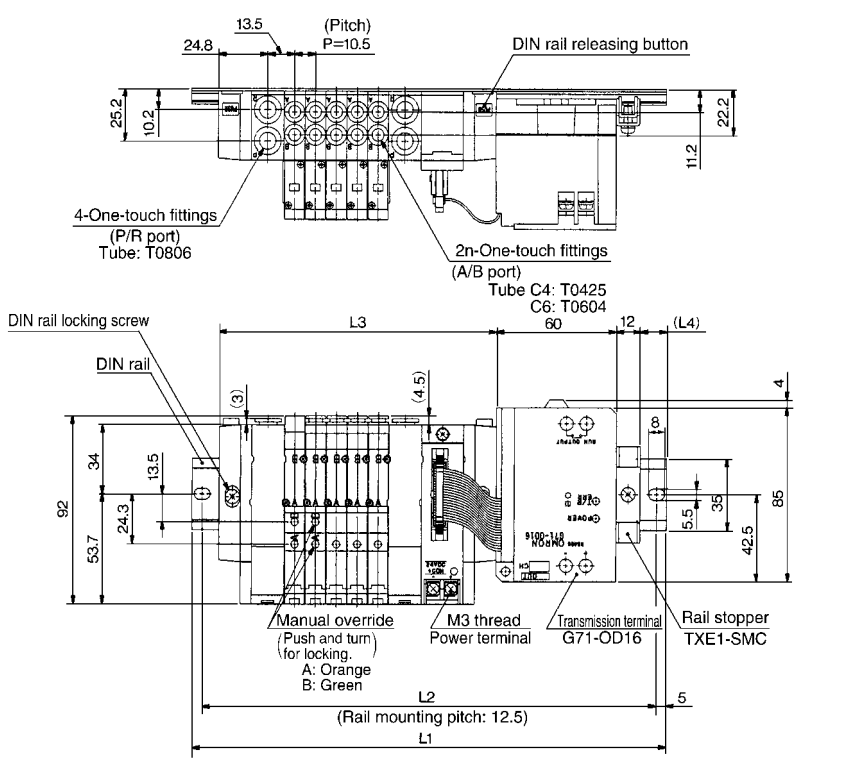


Note) The L1 to L4 dimensions of SS5X3-45S3D- Stations D-□, SS5X3-45S3U- Stations D-□, SS5X3-45S3U- Stations U-□, are identical to those of SS5X3-45S3D- Stations U-□.



Stations	2	3	4	5	6	7	8	9	10
L1	198	198	210.5	223	235.5	248	260.5	260.5	273
L2	187.5	187.5	200	212.5	225	237.5	250	250	262.5
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	17	12	13	14	15	16	17	11.5	12.5

### SS5X3-45S3D- Stations B-C<sub>4</sub>



Note) The L1 to L4 dimensions of SS5X3-45S3U- Stations B-□ are identical to those of SS5X3-45S3D- Stations B-□.

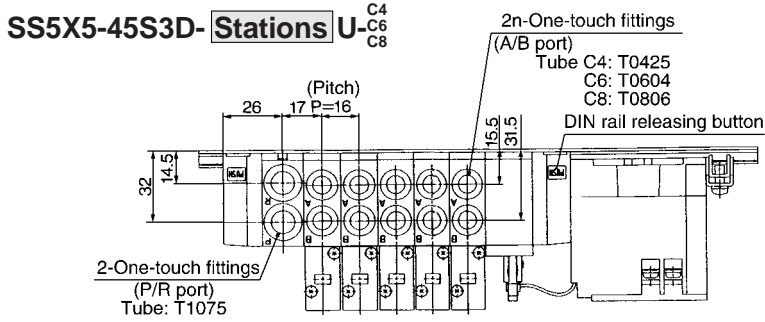
Stations	2	3	4	5	6	7	8	9
L1	210.5	223	235.5	235.5	248	260.5	273	285.5
L2	200	212.5	225	225	237.5	250	262.5	275
L3	108	118.5	129	139.5	150	160.5	171	181.5
L4	15	16	17	12	13	14	15	16

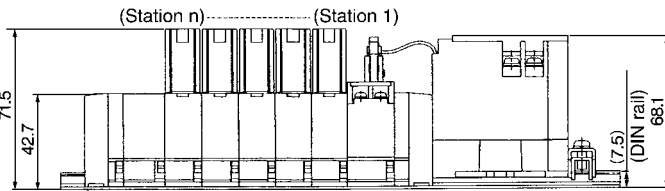
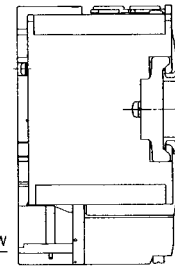
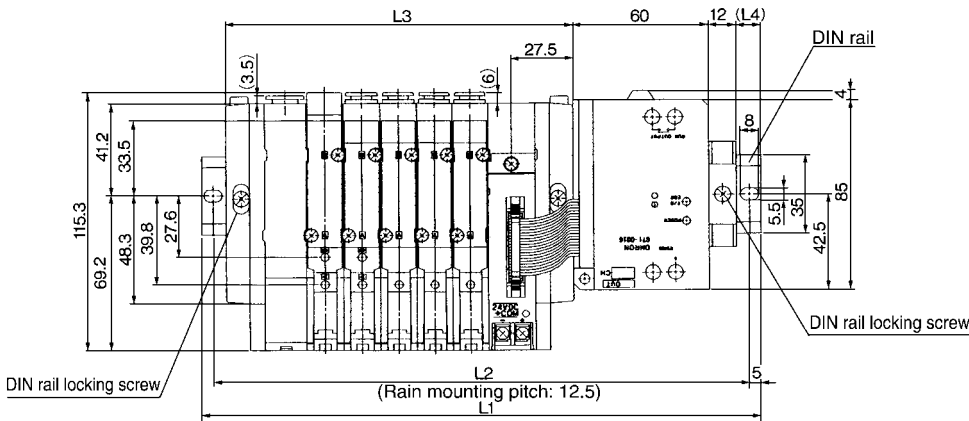
Stations	10	11	12	13	14	15	16
L1	298	298	310.5	323	335.5	348	360.5
L2	287.5	287.5	300	312.5	325	337.5	350
L3	192	202.5	213	223.5	234	244.5	255
L4	17	11.5	12.5	13.5	14.5	15.5	16.5

# SX3000/5000 Made to Order Specifications

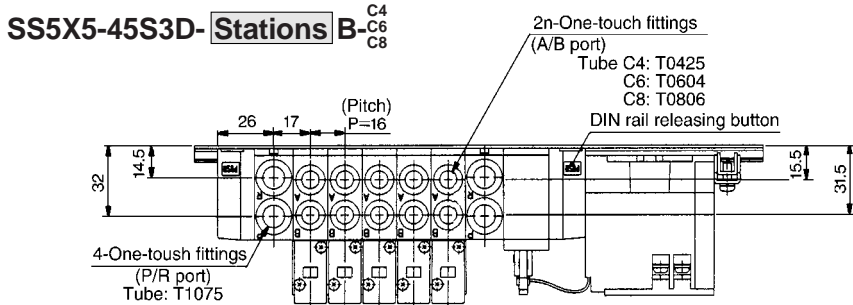
## SX5000: Serial Interface Unit/Plug-in Style



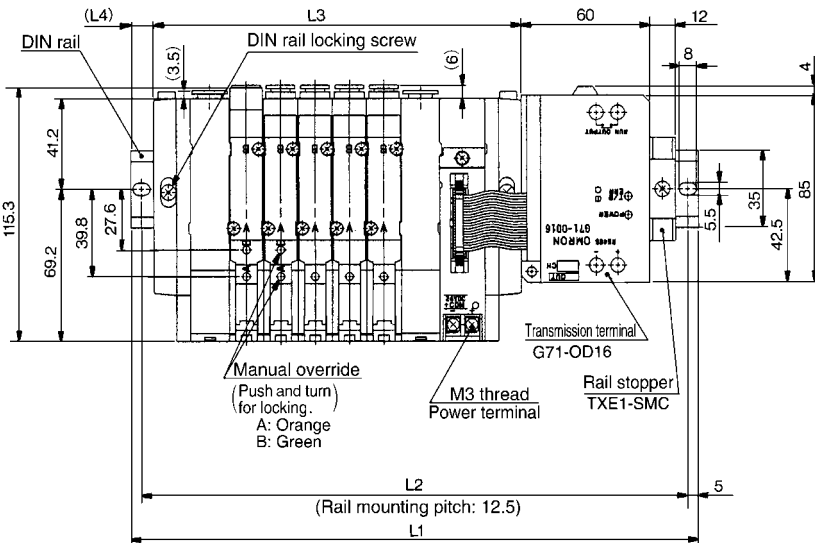
(Note) The L1 to L4 dimensions of **SS5X5-45S3D- Stations D**□, **SS5X5-45S3U- Stations D**□, **SS5X5-45S3U- Stations U**□, are identical to those of **SS5X5-45S3D- Stations U**□.



Stations	2	3	4	5	6	7	8	9	10
L1	210.5	223	235.5	260.5	273	285.5	298	323	335.5
L2	200	212.5	225	250	262.5	275	287.5	312.5	325
L3	105	121	137	153	169	185	201	217	233
L4	16.5	15	13	17.5	16	14	12.5	17	15



(Note) The L1 to L4 dimensions of **SS5X5-45S3U- Stations B**□ are identical to those of **SS5X5-45S3D- Stations B**□.



Stations	2	3	4	5	6	7	8	9
L1	223	235.5	260.5	273	285.5	310.5	323	335.5
L2	212.5	225	250	262.5	275	300	312.5	325
L3	123	139	155	171	187	203	219	235
L4	14	12	16.5	15	13	17.5	16	14

Stations	10	11	12	13	14	15	16
L1	348	373	385.5	398	410.5	435.5	448
L2	337.5	362.5	375	387.5	400	425	437.5
L3	251	267	283	299	315	331	347
L4	12.5	17	15	13.5	11.5	16	14.5

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

VFS

VS

VS7

# Made to Order SX3000/5000 External Pilot with Built-in Silencer

External pilot manifold bases for low-pressure/vacuum use are added to split-type/DIN rail manifold. The built-in silencer has a clean-cut appearance.



45 Type

## Individual wiring

### How to Order Manifold

45 type

SS5X<sup>3</sup>/<sub>5</sub>-45-05UR-C6

**Series**

3	SX3000
5	SX5000

**Stations**

Symbol	Stations	SUP/EXH block ass'y mounting position
02	2	Symbol Mounting position Stations
:	:	
20	20	

The number of blank plate ass'y is included.

\* Special specification is available by special order.

**SUP/EXH block ass'y specifications**

Symbol	Specifications
R	External pilot specification
S	Internal pilot specification/with silencer
RS	External pilot specification/with silencer

**A/B port size**

**SX3000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
M*	Mixed

**SX5000**

Symbol	Port size
C4	One-touch fittings for ø4
C6	One-touch fittings for ø6
C8	One-touch fittings for ø8
M*	Mixed

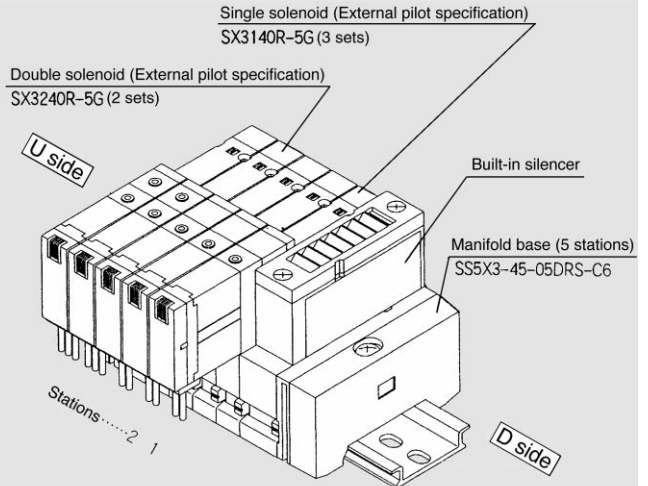
\* Mixed porting available by special order.

**Option**

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

### How to Order Valve Manifold Ass'y (Example)

#### Ordering example



SS5X3-45-05DRS-C6 ···· 1 set (External pilot with built-in silencer No.)  
 \* SX3140R-5G ······ 3 sets (Single solenoid No.)  
 \* SX3240R-5G ······ 2 sets (Double solenoid No.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

They will be assembled in the order listed starting at the first station at the D side even if supply/exhaust block ass'y is located at either end.

For more complicated assemblies.

For manifolds with supply/exhaust block at each end of the manifold, external pilot ports and silencers will also be located at each end of the manifold.

To order the supply/exhaust block ass'y (SX3/5000-51-1A) mounted at a location other than the ends of manifold.

### How to Order Valve

SX 5 2 40 5 N L

**Series**

3	SX3000
5	SX5000

**Configuration**

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

**Pilot**

—	Internal pilot
R	External pilot

**Rated voltage**

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

**Manual override**

—	Non-locking push style
D	Push-turn-locking slotted style.

**Indicator light and surge voltage suppressor**

—	W/o indicator light and surge suppressor
S	With surge suppressor
Z	With indicator light and surge suppressor

**Electrical entry**

Grommet	L plug connector	M plug connector
G: 300mm lead wire	L: 300mm lead wire	M: 300mm lead wire
H: 600mm lead wire	LN: Without lead wire LO: Without connector	MN: Without lead wire MO: Without connector

**Common**

—	Positive common
N	Negative common

Note) For single solenoid valves with the 'G' electrical entry, only positive common wiring is available. For single solenoid valves without the 'S' or 'Z' protection circuit, only positive common wiring is available.

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

**45** Type

Plug-in style

## How to Order Manifold

45 Type

SS5X<sup>3</sup><sub>5</sub>-45 F U-05 UR-C4

### Series

3	SX3000
5	SX5000

### Common

—	Positive common
N	Negative common

No symbol is used for T, T1, S□ types.

### Connector type

Symbol	Mounting position
F	D-sub connector
P	Flat cable 26-pole
PG	Flat cable 20-pole
PH	Flat cable 10-pole
T	Terminal block 9-pole
T1	Terminal block 18-pole
S□	Serial transmission unit

See p.1.3-78 for details.

### Connector mounting position

Symbol	Mounting position
U	U side
D	D side

### Stations

Symbol	Stations	Note
02	2	Single wiring specification
⋮	⋮	(Limit for station number differs depending on connectors. Refer to p.1.3-78 for further information.)
20	20	

The number of blank plate ass'y is included.

### SUP/EXH block ass'y mounting position

Symbol	Mounting position	Stations
U	U-side	2 to 10
D	D-side	2 to 10
B	Both sides	2 to 20
M	Special specification	

\* Special specification is available by special order.

### SUP/EXH block ass'y specifications

Symbol	Specifications
R	External pilot specification
S	Internal pilot specification/with silencer
RS	External pilot specification/with silencer

### A/B port size

SX3000		SX5000	
Symbol	Port size	Symbol	Port size
C4	One-touch fittings for ø4	C4	One-touch fittings for ø4
C6	One-touch fittings for ø6	C6	One-touch fittings for ø6
M*	Mixed	C8	One-touch fittings for ø8
		M*	Mixed

\* Mixed porting is available by special order.

### Voltage

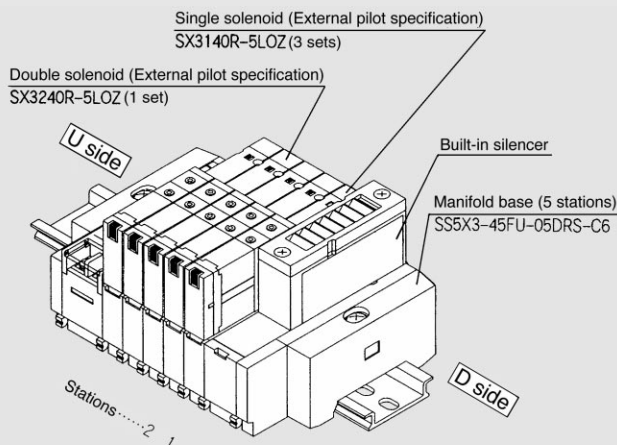
—	24V DC
12V	12V DC

### Option

When a DIN rail longer than standard is required, enter the number of manifold stations that corresponds with the length of DIN rail needed. (20 stations max.)

## How to Order Valve Manifold Ass'y (Example)

### Ordering example



SS5X3-45FU-05DRS-C6 ··· 1 set (External pilot specification/with silencer No.)  
 \* SX3140R-5LOZ ····· 3 sets (Single solenoid No.)  
 \* SX3240R-5LOZ ····· 1 set (Double solenoid No.)

To order valves and options mounted onto the manifold at the factory, list the valve/options with an asterisk in front of each part number.

They will be assembled in the order listed starting at the first station at the D side even if supply/exhaust block ass'y is located at either end.

For more complicated assemblies.

For manifolds with supply/exhaust block at each end of the manifold, external pilot ports and silencers will also be located at each end of the manifold.

To order the supply/exhaust block ass'y (SX3/5000-51-2A) mounted at a location other than the ends of manifold.

When ordering double solenoid valves, please keep in mind that they require two manifold stations.

## How to Order Valve

SX 3 2 40 — 5 — LOZ

### Series

3	SX3000
5	SX5000

### Configuration

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

### Pilot

—	Internal pilot
R	External pilot

### Rated voltage

5	24V DC
6	12V DC
V*	6V DC
S*	5V DC
R*	3V DC

\*mark: 45T and T1 only  
 S□ type: 24V DC only

### Common

—	Positive common
N	Negative common

\* Common specification for the valve must correspond with common specification for the manifold.

### Manual override

—	Non-locking push style
D	Push-turn-locking slotted style

SY

SYJ

SX

VK

VZ

VF

VFR

VP7

VP4

VQ

VQ4

VQZ

VQD

VZS

VFS

VS

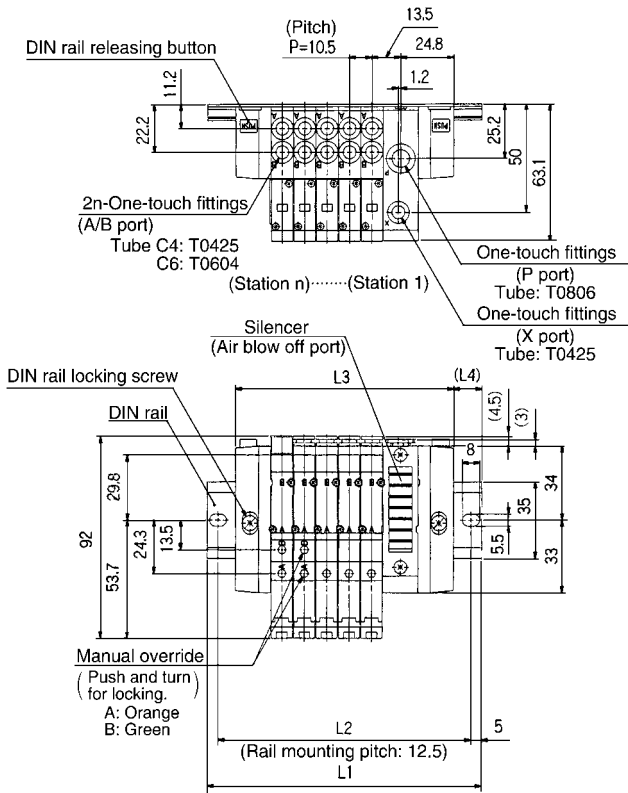
VS7



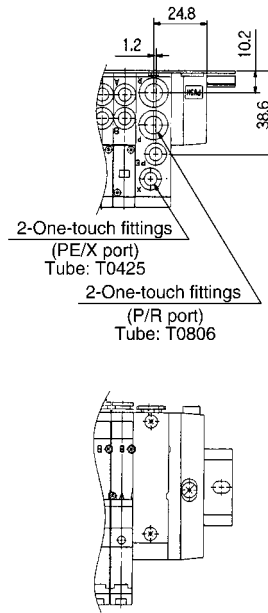
# SX3000/5000

## 45<sub>Type</sub> External pilot/Built-in Silencer

### SX3000: SS5X3-45- Stations DRS-<sup>C4</sup><sub>C6</sub>

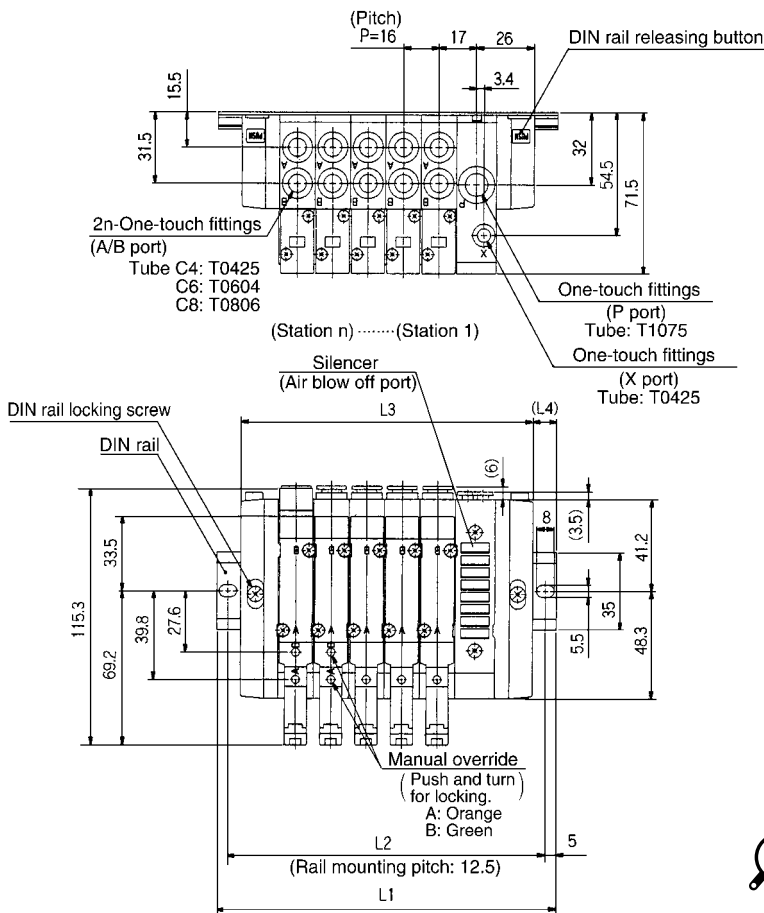


### SS5X3-45- Stations DR-<sup>C4</sup><sub>C6</sub>

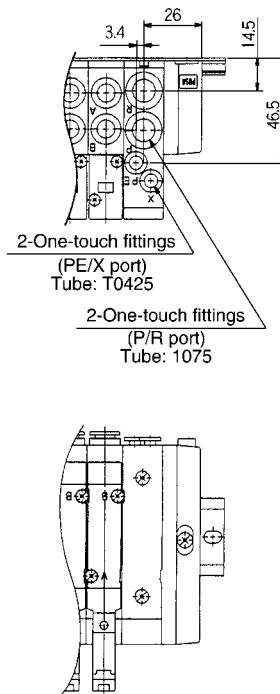


\* The dimensions L1 to L4 are identical to SS5X3-45- Stations <sup>U</sup><sub>B</sub>-<sup>C4</sup><sub>C6</sub> (P.1.3-74)

### SX5000: SS5X5-45- Stations DRS-<sup>C4</sup><sub>C6</sub> <sup>C8</sup>



### SS5X5-45- Stations DR-<sup>C4</sup><sub>C6</sub> <sup>C8</sup>



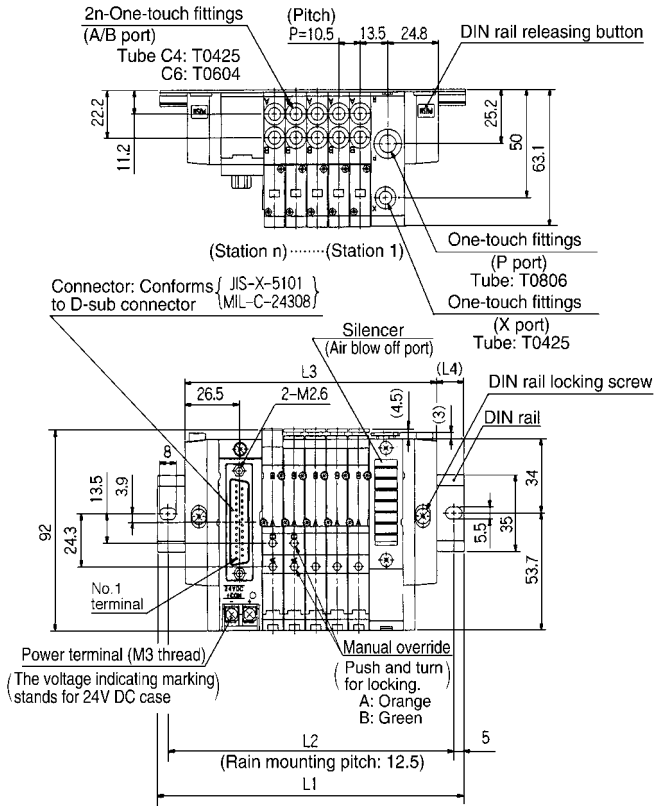
\* The dimensions L1 to L4 are identical to SS5X5-45- Stations <sup>U</sup><sub>B</sub>-<sup>C4</sup><sub>C6</sub>  
<sup>C8 (P.1.3-75)</sup>



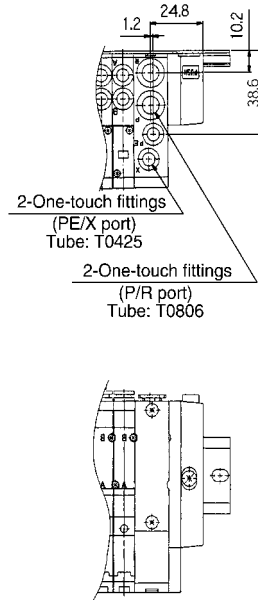
# SX3000/5000 Made to Order Specifications

## 45□ Type External Pilot/Built-in Silencer

### SX3000: SS5X3-45FU- Stations DRS-<sup>C4</sup><sub>C6</sub>

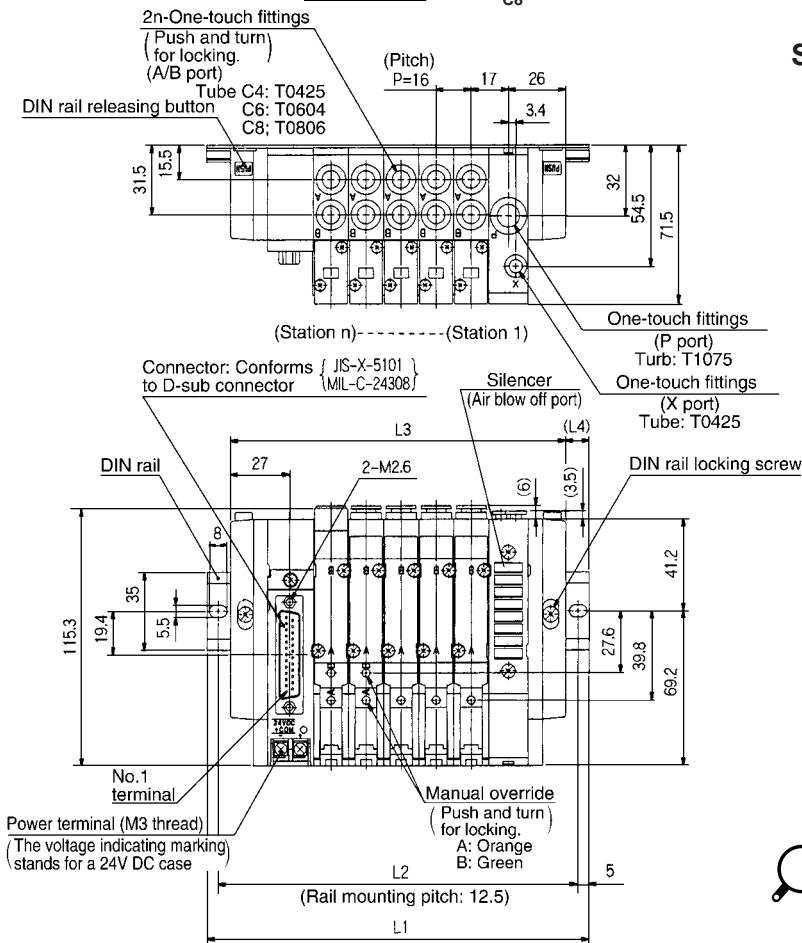


### SS5X3-45FU- Stations DR-<sup>C4</sup><sub>C6</sub>

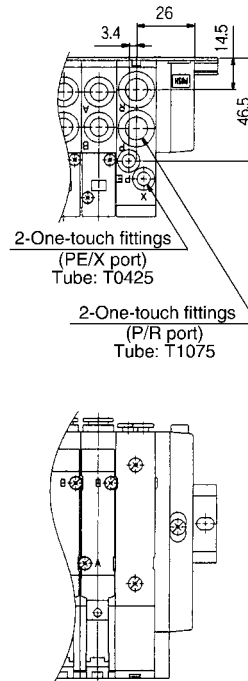


\* The dimensions L1 to L4 are identical to SS5X3-45FU- Stations<sup>U</sup><sub>B</sub>-<sup>C4</sup><sub>C6</sub> (P.1.3-86)

### SX5000: SS5X5-45FU- Stations DRS-<sup>C4</sup><sub>C6</sub> <sup>C8</sup>



### SS5X5-45FU- Stations DR-<sup>C4</sup><sub>C6</sub> <sup>C8</sup>



\* The dimensions L1 to L4 are identical to SS5X3-45FU- Stations<sup>U</sup><sub>B</sub>-<sup>C4</sup><sub>C6</sub> (P.1.3-88)

SY  
SYJ  
SX  
VK  
VZ  
VF  
VFR  
VP7  
VP4

VQ  
VQ4  
VQZ  
VQD  
VZS  
VFS  
VS  
VS7