

STACKING TYPE MANIFOLD - BASE MOUNTED TYPE DIN RAIL MOUNTED. PRE-WIRED TYPE SERIES SY AND SX

- ✓ Number of stations can be increased on DIN rail
- \checkmark A variety of centralised wiring methods are possible
- ✓ Easy electrical connection
- Can be used with serial transmission
- ✓ Integral or seperate exhausts
- ✓ Compact, light weight and aesthetic

NOTE: For applicable valves for this manifold series, please see the following page.

- 45 🔾 🤇



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

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

SY3245-5FU (1set)

SY3140-5FU (2set)

\$\$5Y3-45FD-05U-C6

SX3000-75-2A (1set)



VALVE TYPE -

XSX valve YSY valve

MANIFOLD SERIES - 3SY3000, SX3000

5SY5000, SX5000

POLARITY -

NNegative common (F + P types only)

Nil ...Positive common

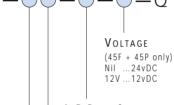
CONNECTION -

- T9-pole terminal block T118 pole terminal block
- FD-sub connection (25-pin)
- PFlat cable type (26 pin)
- Nil ... 45T+45TI types

CONNECTION/MOUNTING BLOCK - TERMINAL POSITION

 $U\ \dots\dots U\ side$

DD side



A-B PORT SIZE

- C4 ...One touch fittings for C4 is available for S*3000
- C6 ...One touch fittings for Ø6
- C8 ...One touch fittings for Ø8 (SY 5000 and SX5000 only)

Supply Exhaust Block Assembly Mounting Position

- UU Side 2 to 10 station
- DD side 2 to 10 station
- BBoth sides 2 to 20 station

VALVE STATIONS

VALVE STATIONS	
SY	SX
022 station	044 Station (45T)
to	088 Station (45T1)
088 station (45T)	1010 Station (45F + 45P)
to	
1717 station (45TI)	
to	
2020 station (45F + 45P)	

PLEASE NOTE

Double solenoid type SY valves used on this manifold are the SY**45 type and <u>two</u> manifold stations must be allocated to each valve

STOCKED PRODUCTS
FOR A LIST OF STOCKED PRODUCTS,
PLEASE SEE THE CURRENT SMC PRICE LIST

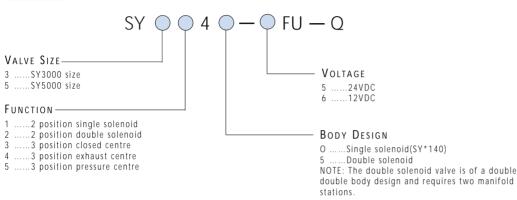




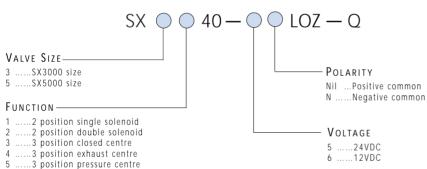
Applicable valves for Type 45 Plug-In Manifolds

NOTE: SY and SX valves cab be used on this type of manifold. Please specify the appropriate manifold when ordering as the internal wiring differs. It is also possible to mix SY and SX valves on one manifold. Please contact your local Regional Centre to arrange assistance from your SMC Sales Engineer when ordering this type of assembly.









Accessories

Type 45 Pre-wired Manifolds

SY3000	SY5000	SX3000	SX5000
SX3000-75-2A	SX5000-76-2A	SX3000-75-2A	SX5000-76-2A
KQP-04-X19	KQP-04-X19	KQP-04-X19	
KQP-06-X19	KQP-06-X19	KQP-06-X19	KQP-06-X19
	KQP-08-X19		KQP-08-X19
SX3000-77-1A	SX3000-77-1A	SX3000-77-1A	SX3000-77-1A
VVQ1000-50A-C4	VVQ1000-51A-C4	VVQ1000-50A-C4	
VVQ1000-50A-C6	VVQ1000-51A-C6	VVQ1000-50A-C6	VVQ1000-51A-C6
	SX3000-75-2A KQP-04-X19 KQP-06-X19 SX3000-77-1A VVQ1000-50A-C4	SX3000-75-2A SX5000-76-2A KQP-04-X19 KQP-04-X19 KQP-06-X19 KQP-06-X19 SX3000-77-1A SX3000-77-1A VVQ1000-50A-C4 VVQ1000-51A-C4	\$X3000-75-2A \$X5000-76-2A \$X3000-75-2A \$QP-04-X19 \$QP-04-X19 \$QP-04-X19 \$QP-06-X19 \$QP-06-X19 \$QP-06-X19 \$QP-08-X19 \$X3000-77-1A \$X3000-77-1A \$X3000-77-1A \$VVQ1000-50A-C4 \$VVQ1000-51A-C4 \$VVQ1000-50A-C4

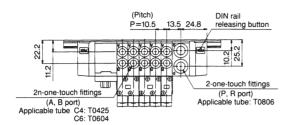
STOCKED PRODUCTS FOR A LIST OF STOCKED PRODUCTS, PLEASE SEE THE CURRENT SMC PRICE LIST



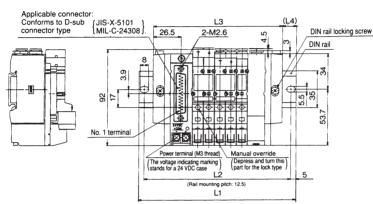






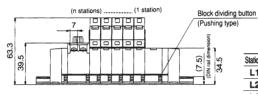


Note) The L1~L4 dimensions of SS5Y3-45FU- Stations U- $^{c4}_{c6}$ are identical to those of SS5Y3-45FU- Stations D- $^{c4}_{c6}$.



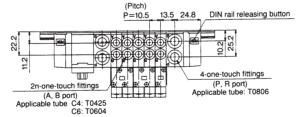
Note:

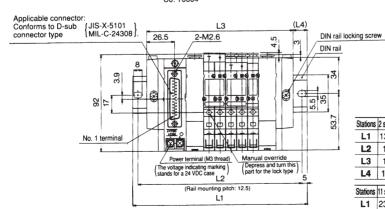
Manifold dimensions are identical for SY and SX valves. Overall lengths are unchanged by electrical entry type F, P, T or T1 type. Drawings show a manifold with SY valves. SX valves fit within the same overall space envelope.



Stations	2 stations	3	4	5	6	7	8	9	10 stations
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

SS5Y3-45FU- Stations B- C4



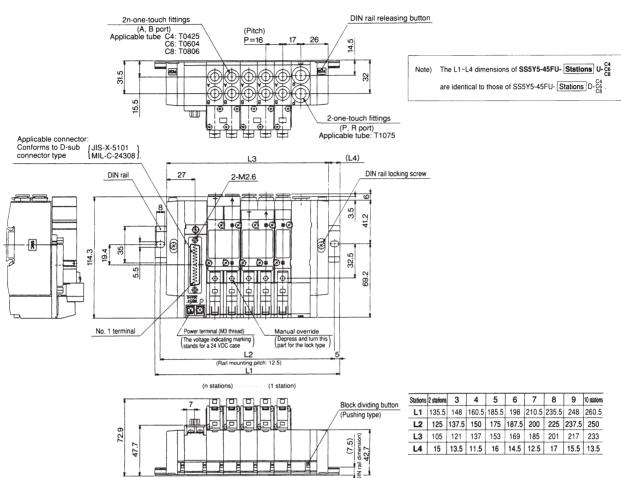


Stations	2 stations	3	4	5	6	7	8	9	10 stations	í
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223	
L2	125	137.5	150	162.5	175	175	187.5	200	212.5	
L3	108	118.5	129	139.5	150	160.5	171	181.5	192	
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5	
Stations	11 stations	12	13	14	15	16	17	18	19	20 stations
L1	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

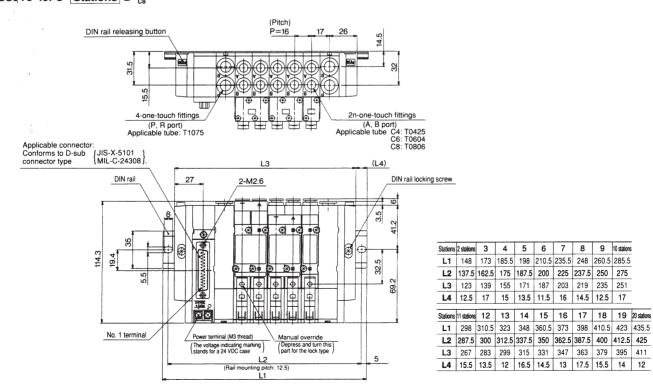








SS5Y5-45FU- Stations B- &



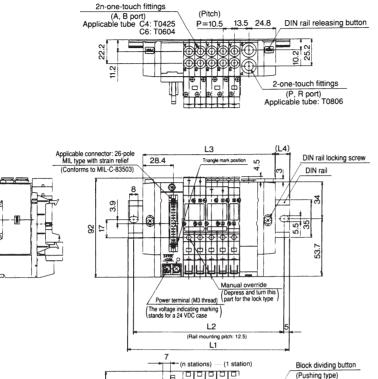


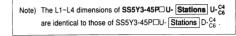


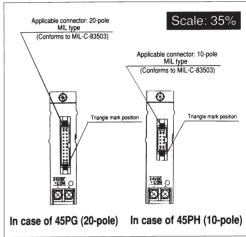




SY3000 FLAT CABLE TYPE/PLUG IN





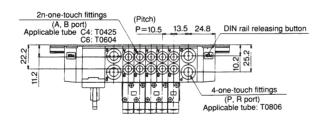


Stations	2 stations	3	4	5	6	7	8	9	10 stations
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3								165	
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5

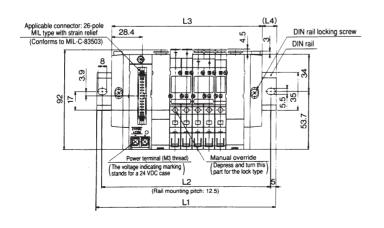
SS5Y3-45PU- Stations B-C4 (26-pole)

63.3

39.5



(2.7) 34.5

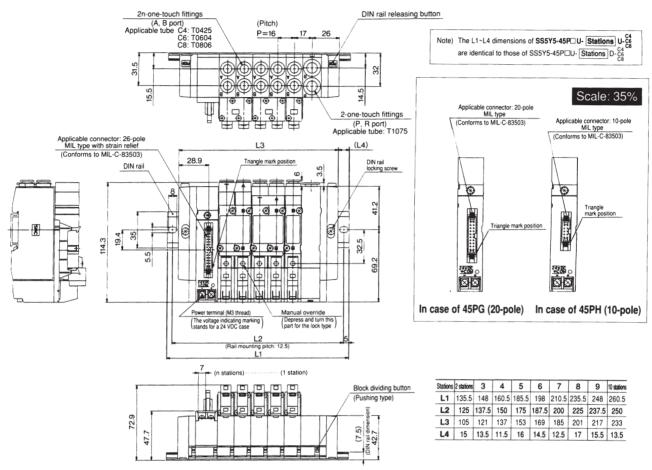


Stations	2 stations	3	4	5	6	7	8	9	10 stations	
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223	
L2	125	137.5	150	162.5	175	175	187.5	200	212.5	
L3	108	118.5	129	139.5	150	160.5	171	181.5	192	
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5	
Stations	11 stations	12	13	14	15	16	17	18	19	20 st
			248	260.5		285.5			310.5	-
L1	235.5		-		_					-
L2	225	237.5	237.5	250	262.5	275	287.5	300	300	31
L3	202.5	213	223.5	234	244.5	255	265.5	276	286.5	29
L4	16.5	17.5	12	13	14	15	16	17	12	1

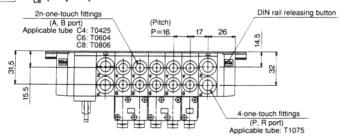


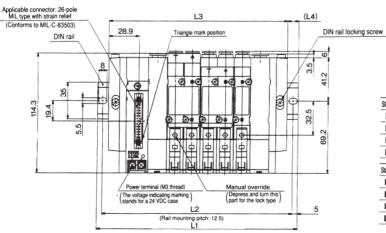






SS5Y5-45PU- Stations B- 64 (26-pole)





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

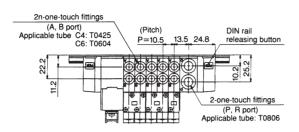




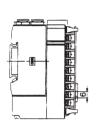


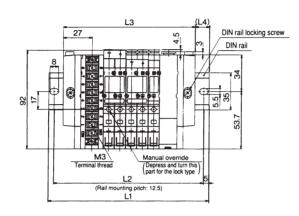


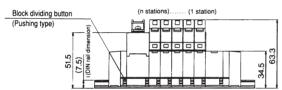
SY3000 9-POLE TERMINAL BLOCK TYPE/PLUG IN



Note) The L1~L4 dimensions of \$S5Y3-45TU- [Stations] U- C6.
\$S5Y3-45TD- [Stations] U- C6.
\$S5Y3-45TD- [Stations] D- C6.
are identical to those of \$S5Y3-45TU- [Stations] D- C6.



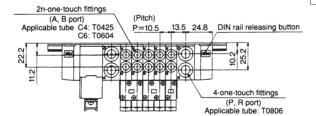


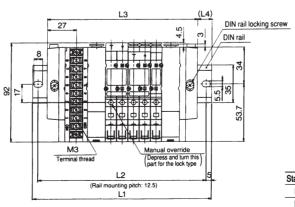


Stations	2 stations	3	4	5	6	7	8 stations
L1	123	135.5	148	148	160.5	173	185.5
L2	112.5	125	137.5	137.5	150	162.5	175
L3	91.5	102	112.5	123	133.5	144	154.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5

Note) The L1~L4 dimensions of SS5Y3-45TD- Stations B- $^{c4}_{C6}$ are identical to those of SS5Y3-45TU- Stations B- $^{c4}_{C6}$.

SS5Y3-45TU- Stations B-C4 (9-pole)





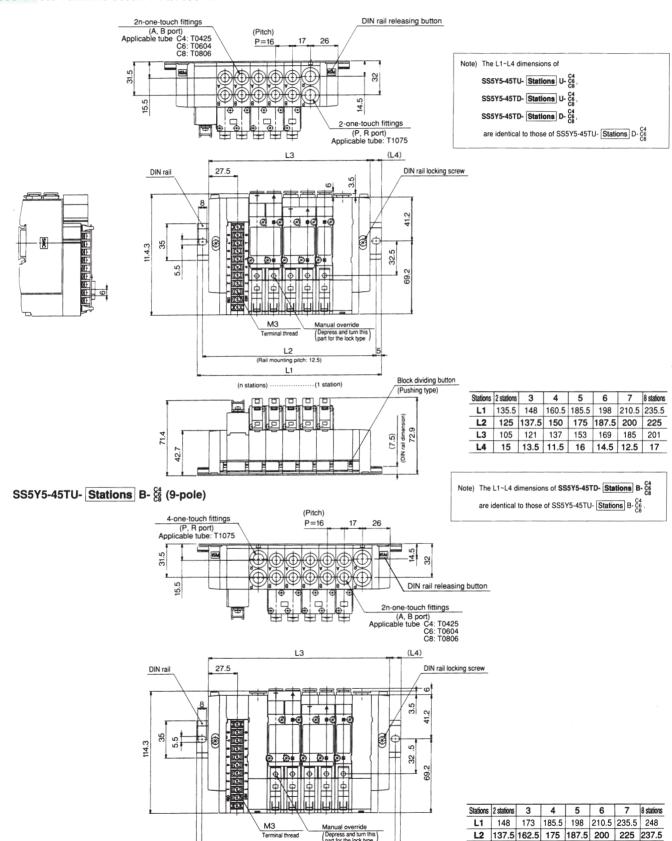
Stations	2 stations	3	4	5	6	7	8 stations
L1	135.5	148	160.5	173	185.5	185.5	198
L2	125	137.5	150	162.5	175	175	187.5
L3	108	118.5	129	139.5	150	160.5	171
L4	13.5	14.5	15.5	16.5	17.5	12.5	13.5







SY5000 9-POLE TERMINAL BLOCK TYPE/PLUG IN







L3 123 139 155 171 187 203 219

L4 12.5 17 15 13.5 11.5 16 14.5

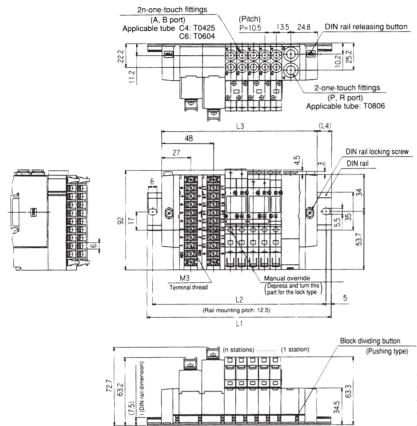
L2

L1





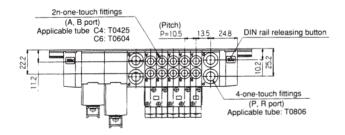
SY3000 18-POLE TERMINAL BLOCK TYPE/PLUG IN

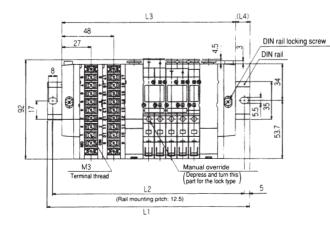


Note) The L1~L4 dimensions of SS5Y3-45T1U- $\fbox{Stations}$ U- $^{C4}_{C6}$ are identical to those of SS5Y3-45T1U- $\fbox{Stations}$ D- $^{C4}_{C6}$.

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

SS5Y3-45T1U- Stations B- C4 (18-pole)





Stations	2 stations	3	4	5	6	7	8	9 stations
L1	160.5	173	185.5	185.5	198	210.5	223	235.5
L2	150	162.5	175	175	187.5	200	212.5	225
L3	129	139.5	150	160.5	171	181.5	192	202.5
L4	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5
Stations	10 stations	11	12	13	14	15	16	17 stations
L1	248	248	260.5	273	285.5	298	310.5	310.5
L2	237.5	237.5	250	262.5	275	287.5	300	300
L3	213	223.5	234	244.5	255	265.5	276	286.5
L4	17.5	12	13	14	15	16	17	12

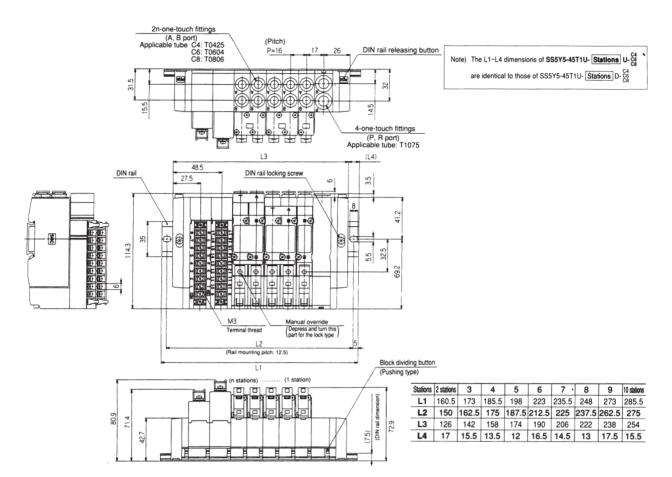


Valves

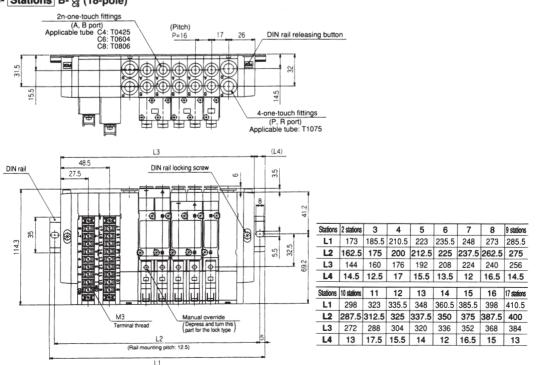




SY5000 18-POLE TERMINAL BLOCK TYPE/PLUG IN



SS5Y5-45T1U- Stations B- & (18-pole)





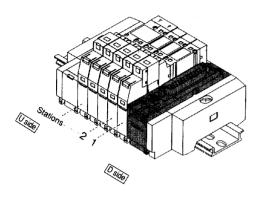




ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SY ONLY)

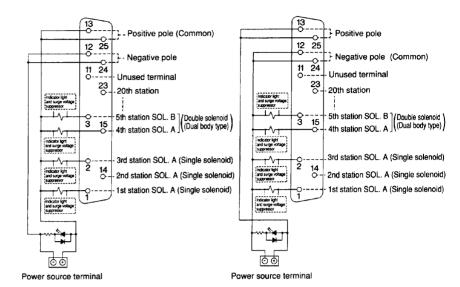
45(N)F/D-sub Connector Type

A D-sub connector used for electric wiring permits rationalization and labor-saving for wiring operation. Connectors conforming to MIL are used for wide interchangeability.



<In case of positive COM (45F)>

<In case of negative COM (45NF)>

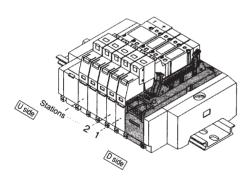


- The power source terminal is used for connecting an external power source.
- The maximum number of stations is 20 in terms of manifold bases, as well as solenoids. (Contact us for more stations.)
- · Irrespective of the connector mounting position, stations are counted from the D side.

ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SY ONLY)

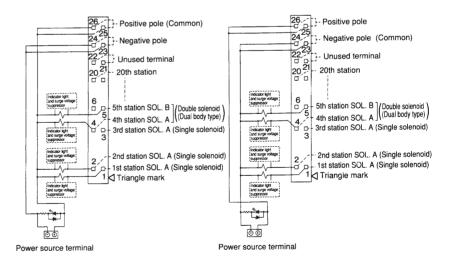
45(N)P/Flat Cable Type (26-Pole)

A flat cable connector used for electric wiring permits rationalization and labor-saving for wiring operation. Connectors conforming to MIL are used for wide interchangeability.



<In case of positive COM (45P)>

<In case of negative COM (45NP)>





Terminal number is not indicated on the connetor. 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 ribbon cable of connector

- · The power source terminal is used for connecting an external power source.
- The maximum number of stations is 20 in terms of manifold bases, as well as solenoids. (Contact us for more stations.
- Irrespective of the connector mounting position, stations are counted from the D side.

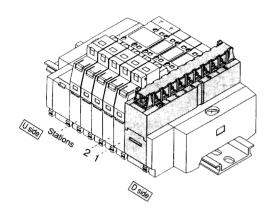




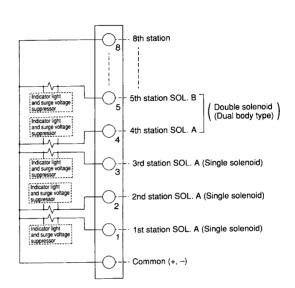
ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SY ONLY)

45T/Terminal Block Type

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



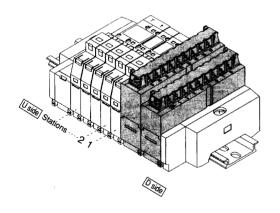
<45T>



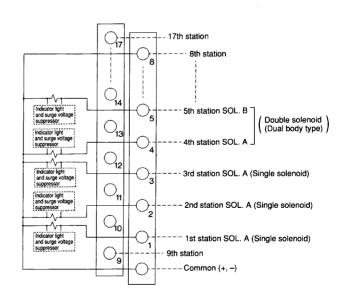
- The maximum number of stations is 8 in terms of manifold bases, as well as solenoids. (Contact us for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.
- There is no polarity in the COM wiring. Supply positive power for +COM spec. and negative power for -COM spec.

ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SY ONLY)

45T1/Terminal Block Type



<45T1>



- The maximum number of stations is 17 in terms of manifold bases, as well as solenoids. (Contact us for
- 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 spec. and negative power for -COM spec.



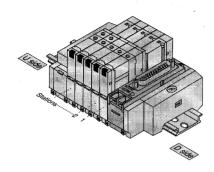


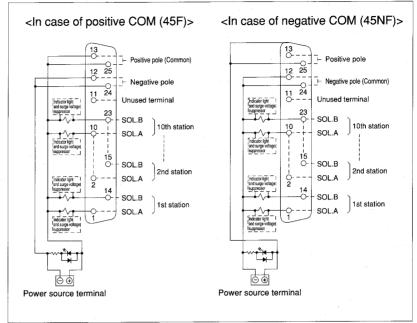


ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SX ONLY)

45(N)F/D-sub Connector Type

A D-sub connector used for electric wiring permits rationalization and labor-saving for wiring operation. Connectors conforming to MIL are used for wide interchangeability.



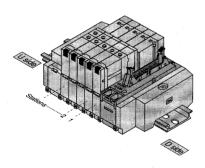


- The power source terminal is used for connecting an external power source.
- The above diagram is for a 10 station double solenoid specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please contact SMC for more
- When using a single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

ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SX ONLY)

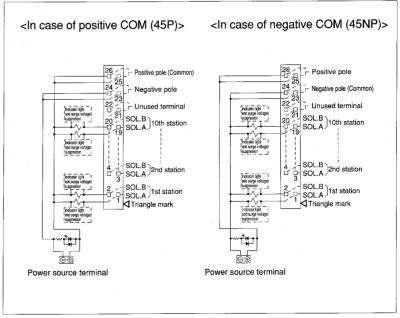
45(N)P/Flat Cable Type (26-Pole)

A flat cable connector used for electric wiring permits rationalization and labor-saving for wiring operation. Connectors conforming to MIL are used for wide interchangeability.





Note)
Terminal number is not indicated on the connetor. 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 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 us for
- Irrespective of the connector mounting position, stations are counted from the D side.

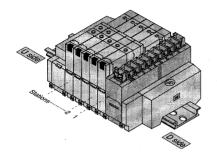


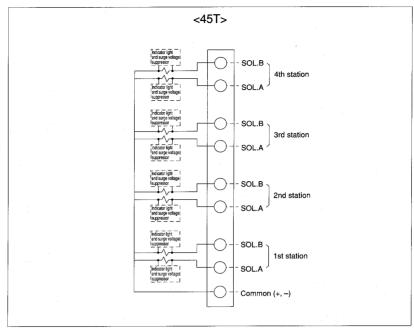


ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SX ONLY)

45T/Terminal Block Type

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

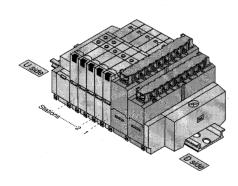


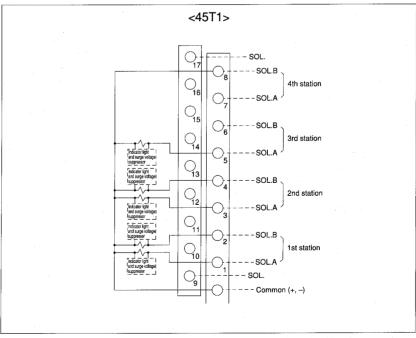


- The maximum number of stations is 8 in terms of manifold bases, as well as solenoids. (Contact us for more stations.)
- The above diagram is for a 4 station double soleniod specification. When custom manifolds are ordered using the manifold specification form, the wiring may differ from above. Please 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.

ELECTRICAL WIRING OF PRE-WIRED MANIFOLD (SX ONLY)

45T1/Terminal Block Type





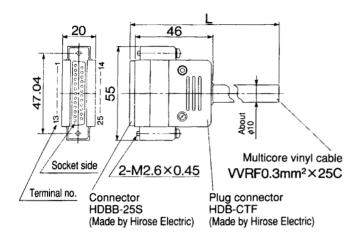
- The maximum number of stations is 17 in terms of manifold bases, as well as solenoids. (Contact us for more stations.)
- Irrespective of the connector mounting position, stations are counted from the D side.
- There is no polarity in the COM wiring. Supply positive power for +COM specification and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







CABLE ASSEMBLIES FOR TYPE 45 PRE-WIRED MANIFOLDS



D-sub connector cable ass'y

Cable tength (L)	Ass'y No.	Note
1.5m	VVZS3000-21A-1	0 11 05
3m	VVZS3000-21A-2	Cable 25-core
5m	VVZS3000-21A-3	× 24AWG

^{**} For other commercial connectors, use a 25pole female connector made in conformity with MIL-C-24308.

Electric characteristics

Item	Characteristics
Conductor resistance /km, 20°C	65 or less
Voltage limit V, 1min, AC	1000
Insulation resistance M km, 20°C	5 or more

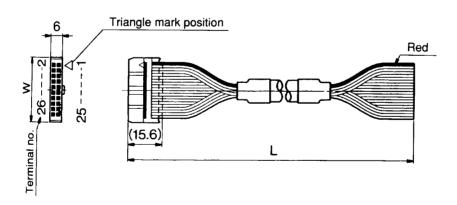
Note) The min. bending radius of D-sub connector cable ass'y is 20 mm.

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	

■ Flat Cable Connector / Cable Ass'y

AXT100-FC □ - 1/3



Accessories

CABLE ASSEMBLIES FOR TYPE 45 PRE-WIRED MANIFOLDS

Model	Cable Length	Part No.
1	1.5m	AXT100-FC26-1
2	3m	AXT100-FC26-2
3	5m	AXT100-FC26-3

STOCKED PRODUCTS FOR A LIST OF STOCKED PRODUCTS, PLEASE SEE THE CURRENT SMC PRICE LIST

