

Series SQ2000 Plug Lead Unit

How to Order Manifold

SS5Q24 — **08** **FD2** — **D**

Stations

01	1 station
⋮	⋮
16 ^{Note)}	16 stations

Note) The maximum number of stations depends on the type of electrical entries.

Option

Nil	None
02 to 24 ⁽¹⁾	DIN rail length specified
B	Back pressure check valve
K ⁽²⁾	Special wiring specifications (Except double wiring)
N	With name plate (Side ported only)
R	External pilot specifications
S	Built-in silencer, direct exhaust

Note 1) Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.)

Example: -D08

Note 2) Standard wiring specifications are for double wiring. Indicate wiring specifications for single wiring or mixed single and double wiring, or when exceeding the standard number of stations. (Except C kit)

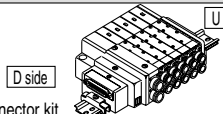
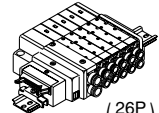
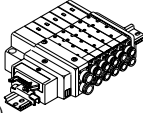
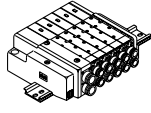
Note 3) When two or more symbols are specified, indicate them alphabetically. Example: -BKN

Manifold mounting

D	DIN rail mounting style
E ^{Note)}	Direct mounting style

Note) Type E is only available with a C kit.

Electrical entry

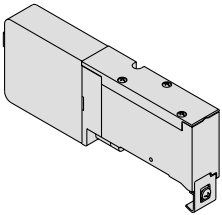
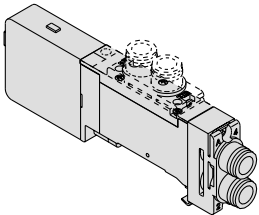
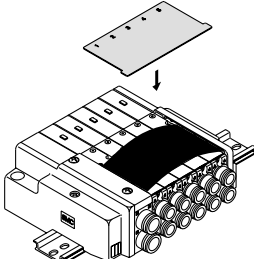
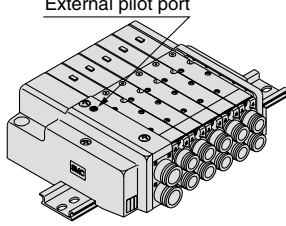
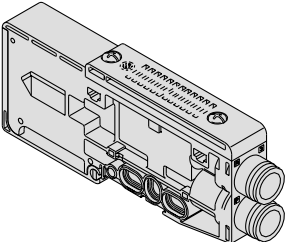
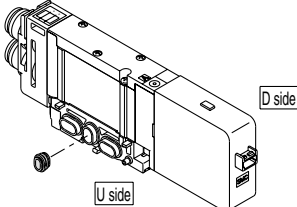
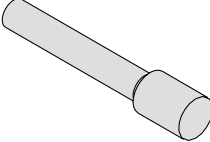
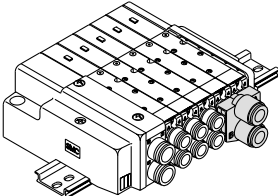
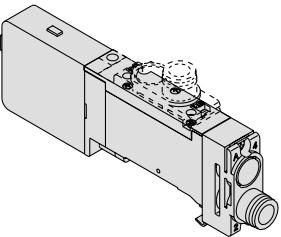
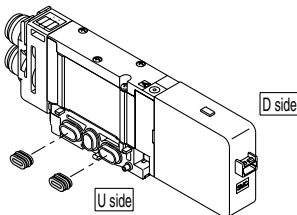
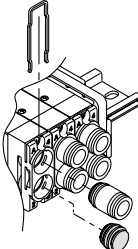
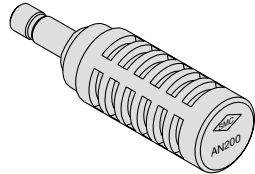
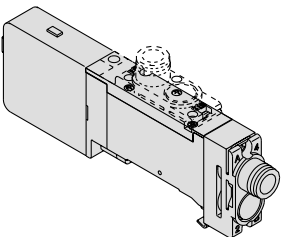
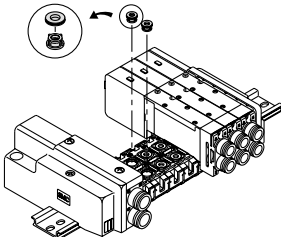
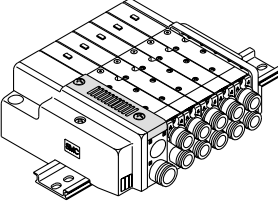
Kit type	Lead wire connector location	Cable specifications	Stations	Max. number of stations for special wiring specifications	Max. number of solenoids ⁽²⁾
F kit  D-sub connector kit	D side	FD0	1 to 12 stations	16 stations	24
		FD1			
		FD2			
		FD3			
P kit  Flat ribbon cable connector kit (26P/20P)	D side ⁽¹⁾	PD0	1 to 12 stations	16 stations	24
		PD1			
		PD2			
		PD3			
		PDC	1 to 9 stations	18	
J kit  Flat ribbon cable (20P) (PC Wiring System compatible)	D side	Flat ribbon cable (20P) PC Wiring System compatible	1 to 8 stations	16 stations	16
C kit  Connector kit	—	Connector kit	1 to 16 stations	—	—

Note 1) Separately order the 20P type cable assembly for the P kit.

Note 2) The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

Series SQ2000

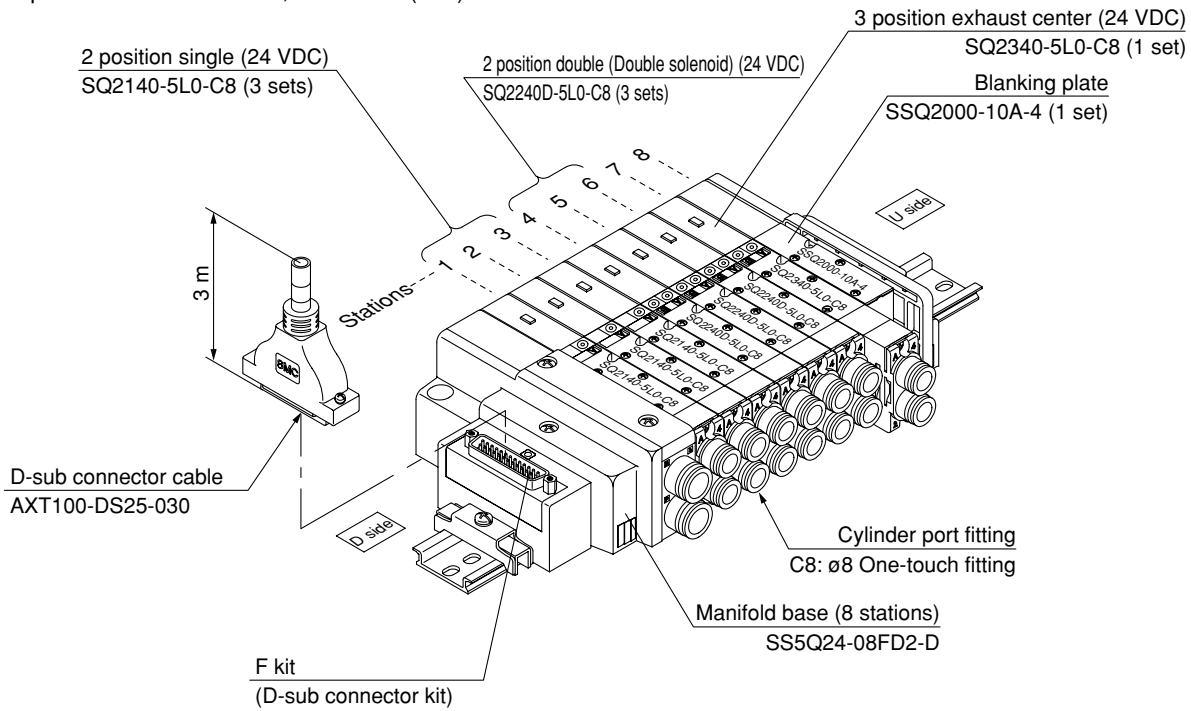
Manifold Option

<p>Blanking plate P. 2-3-103 SSQ2000-10A-4</p> 	<p>Individual SUP/EXH spacer P. 2-3-104 SSQ2000-PR1-4-C₈L₈</p> 	<p>Name plate (-N) P. 2-3-106 SSQ2000-N3-n</p> 	<p>External pilot specifications (-R) P. 2-3-107</p> <p>External pilot port</p> 																																																																																											
<p>SUP/EXH block P. 2-3-103 SSQ2000-PR-3-C10(-S)</p> 	<p>SUP block plate P. 2-3-105 SSQ2000-B-R</p>  <p>D side</p> <p>U side</p>	<p>Blanking plug P. 2-3-106 KQ2P-04/06/08/10</p> 	<p>Dual flow fitting P. 2-3-107 SSQ2000-52A-C₁₀N₁₁</p> 																																																																																											
<p>Individual SUP spacer P. 2-3-103 SSQ2000-P-4-C₈L₈</p> 	<p>EXH block plate P. 2-3-105 SSQ2000-B-R</p>  <p>D side</p> <p>U side</p>	<p>Port plug P. 2-3-106 VVQZ2000-CP</p> 	<p>Silencer (For EXH port) P. 2-3-107</p> 																																																																																											
<p>Individual EXH spacer P. 2-3-104 SSQ2000-R-4-C₈L₈</p> 	<p>Back pressure check valve (-B) P. 2-3-105 SSQ2000-BP</p> 	<p>Built-in silencer (-S) P. 2-3-106</p> 	<p>Special wiring specifications (-K) P. 2-3-108</p> <p>D-sub connector</p> <table border="0"> <tr> <td>14</td><td>○</td><td>1</td><td>SOLA</td><td>○</td><td>1</td><td>(-)</td> </tr> <tr> <td>15</td><td>○</td><td>2</td><td>SOLA</td><td>○</td><td>14</td><td>(-)</td> </tr> <tr> <td>16</td><td>○</td><td>3</td><td>SOLA</td><td>○</td><td>2</td><td>(-)</td> </tr> <tr> <td>17</td><td>○</td><td>4</td><td>SOLA</td><td>○</td><td>15</td><td>(-)</td> </tr> <tr> <td>18</td><td>○</td><td>5</td><td>SOLA</td><td>○</td><td>3</td><td>(-)</td> </tr> <tr> <td>19</td><td>○</td><td>6</td><td>SOLB</td><td>○</td><td>16</td><td>(-)</td> </tr> <tr> <td>20</td><td>○</td><td>7</td><td>SOLA</td><td>○</td><td>4</td><td>(-)</td> </tr> <tr> <td>21</td><td>○</td><td>8</td><td>SOLA</td><td>○</td><td>17</td><td>(-)</td> </tr> <tr> <td>22</td><td>○</td><td>9</td><td>SOLA</td><td>○</td><td>5</td><td>(-)</td> </tr> <tr> <td>23</td><td>○</td><td>10</td><td>SOLB</td><td>○</td><td>18</td><td>(-)</td> </tr> <tr> <td>24</td><td>○</td><td>11</td><td>SOLA</td><td>○</td><td>6</td><td>(-)</td> </tr> <tr> <td>25</td><td>○</td><td>12</td><td>SOLB</td><td>○</td><td>19</td><td>(-)</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td>COM.</td><td>13 (+)</td> </tr> </table> <p>Connector terminal no.</p>	14	○	1	SOLA	○	1	(-)	15	○	2	SOLA	○	14	(-)	16	○	3	SOLA	○	2	(-)	17	○	4	SOLA	○	15	(-)	18	○	5	SOLA	○	3	(-)	19	○	6	SOLB	○	16	(-)	20	○	7	SOLA	○	4	(-)	21	○	8	SOLA	○	17	(-)	22	○	9	SOLA	○	5	(-)	23	○	10	SOLB	○	18	(-)	24	○	11	SOLA	○	6	(-)	25	○	12	SOLB	○	19	(-)						COM.	13 (+)
14	○	1	SOLA	○	1	(-)																																																																																								
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					COM.	13 (+)																																																																																								

Although the standard products come with double wiring, mixed single and double wiring is available upon request.

How to Order Manifold Assembly (Example)

Example: D-sub connector kit, with cable (3 m)



VQC
SQ
VQ0
VQ4
VQ5
VQZ
VQD

SS5Q24-08FD2-D 1 set (F kit 8 station manifold base)

* SQ2140-5L0-C8 3 sets (2 position single)

* SQ2240D-5L0-C8 3 sets (2 position double [double solenoid])

* SQ2340-5L0-C8 1 set (3 position exhaust center)

* SSQ2000-10A-4 1 set (Blanking plate)

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

Add the valve and option part numbers in order starting from the first station on the D side.
When entry of part numbers becomes complicated, indicate on the manifold specification sheet.

Manifold Specifications

Base model	Porting specifications			Applicable solenoid valve	Type of connection	Applicable stations ⁽³⁾	5 station weight (g) ⁽⁴⁾	1 station weight (g) ⁽⁴⁾		
	Port size ⁽¹⁾									
	1(P), 3(R)	4(A), 2(B)								
	Port location	Port size								
SS5Q24-□□-□	C10 (For ø10)	Side	C4 (For ø4) C6 (For ø6) C8 (For ø8)		SQ2□40 SQ2□41	F kit: D-sub connector		1 to 12 stations	580	35
			L4 (For ø4) L6 (For ø6) L8 (For ø8)			P kit: Flat ribbon cable		26P	1 to 12 stations	580
	J kit: Flat ribbon cable PC Wiring System compatible					20P	1 to 9 stations			
	Option Built-in silencer, direct exhaust		Top ⁽²⁾			C kit: Connector kit		1 to 12 stations	620	50

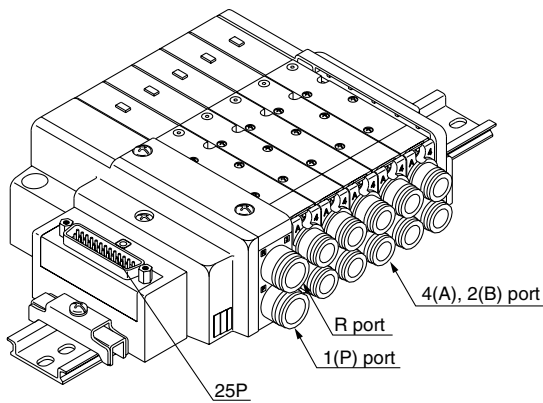


Note 1) One-touch fittings in inch sizes are also available. For details, refer to page 2-3-110.

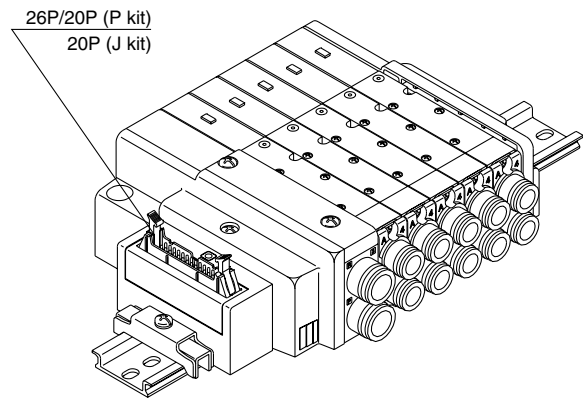
Note 2) Can be changed to side ported configuration.

Note 3) An optional specification for special wiring is available to increase the maximum number of stations. Refer to page 2-3-108 for details.

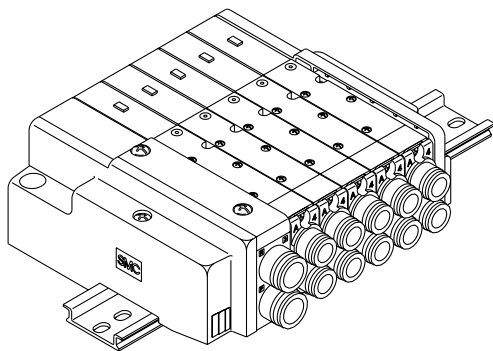
Note 4) Except valves. For valve weight, refer to page 2-3-88.



F kit



P kit J kit



C kit

VQC

SQ

VQ0

VQ4

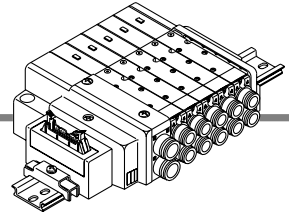
VQ5

VQZ

VQD

Series SQ2000

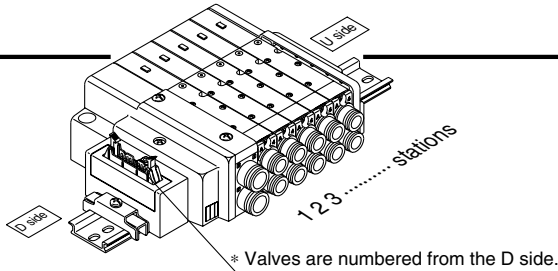
J Kit (PC wiring system compatible flat ribbon cable Kit)



- PC Wiring System compatible.
- Using connector for flat ribbon cable (20P) conforming to MIL standard permits the use of connectors put on the market and gives a wide interchangeability.
- Top or side entry for the connector can be changed freely, allowing later changes according to the mounting space.

Manifold specifications

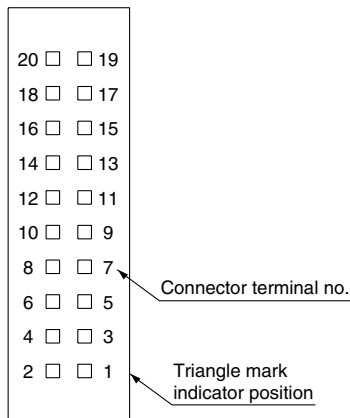
Series	Port location	Porting specifications		Maximum number of stations
		1(P), 3(R)	4(A), 2(B)	
SQ2000	Side, Top	C10	C4, C6, C8	8 stations (16 as an option)



Electrical wiring specifications

Double wiring (connected to SOL. A and SOL. B) is adopted for the internal wiring of each station, regardless of valve and option types.
Mixed single and double wiring is available as an option.
For details, refer to page 2-3-108.

Flat ribbon cable connector

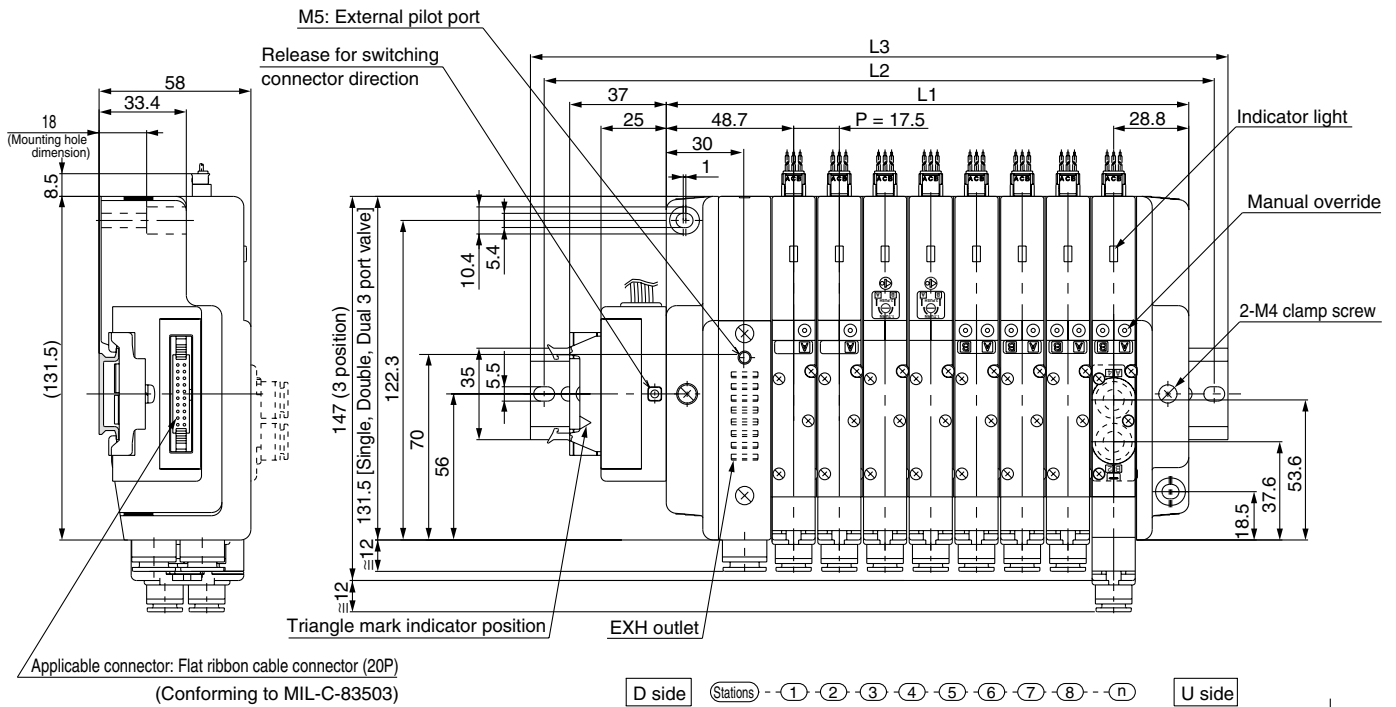


	Terminal no.	Polarity
1 station	SOL.A 20	(-) (+)
	SOL.B 18	(-) (+)
2 stations	SOL.A 16	(-) (+)
	SOL.B 14	(-) (+)
3 stations	SOL.A 12	(-) (+)
	SOL.B 10	(-) (+)
4 stations	SOL.A 8	(-) (+)
	SOL.B 6	(-) (+)
5 stations	SOL.A 19	(-) (+)
	SOL.B 17	(-) (+)
6 stations	SOL.A 15	(-) (+)
	SOL.B 13	(-) (+)
7 stations	SOL.A 11	(-) (+)
	SOL.B 9	(-) (+)
8 stations	SOL.A 7	(-) (+)
	SOL.B 5	(-) (+)
	4	(-) (+)
	3	(-) (+)
	COM. 2	(+) (-)
	COM. 1	(+) (-)

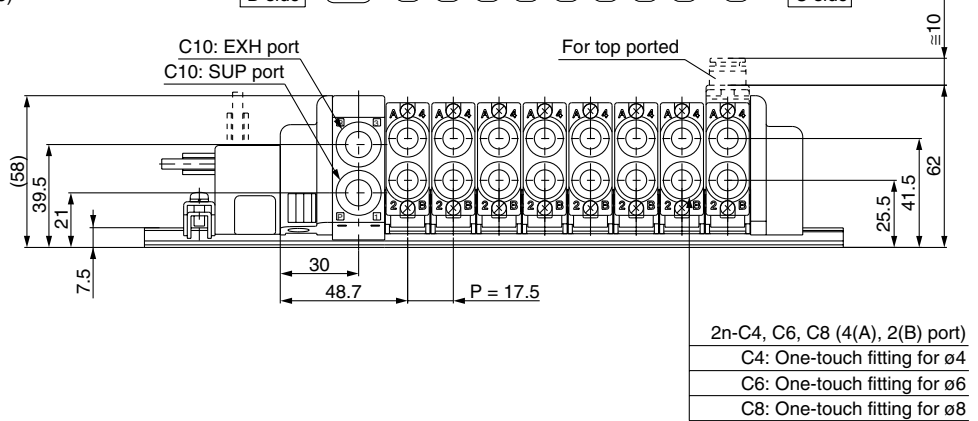
Note)
 Positive common specifications Negative common specifications

Note) When using the negative common specifications, use valves for negative common. For details about the PC Wiring System, refer to catalog CAT.ES02-20 separately.

Plug Lead Unit Series SQ2000



- VQC
- SQ
- VQ0
- VQ4
- VQ5
- VQZ
- VQD



Dimensions

Formula: $L1 = 17.5n + 60$ n: Stations (Maximum 16 stations)

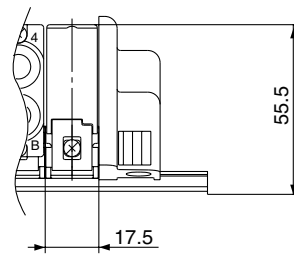
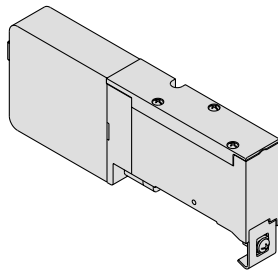
L	n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1		77.5	95	112.5	130	147.5	165	182.5	200	217.5	235	252.5	270	287.5	305	322.5	340
L2		137.5	162.5	175	187.5	212.5	225	250	262.5	275	300	312.5	337.5	350	362.5	387.5	400
L3		148	173	185.5	198	223	235.5	260.5	273	285.5	310.5	323	348	360.5	373	398	410.5

Manifold Option Parts for SQ2000

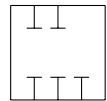
Blanking plate

SSQ2000-10A-4

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



JIS Symbol



SUP/EXH block

SSQ2000-PR-3-C10-□

Option

Nil	Standard
R	External pilot specifications
S	Built-in silencer

Note) When specifying both options, indicate "RS".

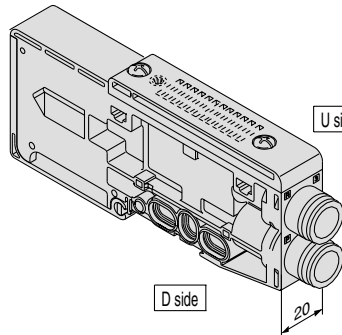
* Specify the spacer mounting position on the manifold

For standard type manifolds, the SUP/EXH block is mounted on the D side.

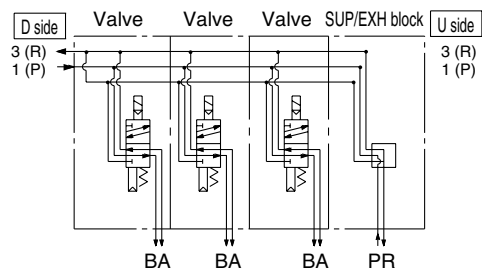
It is added to the manifold to increase SUP/EXH capacity.

* The number of SUP/EXH blocks that can be added is limited to two sets, one between manifold stations and another on the U side of manifold, due to the length of the lead wire.

* SUP/EXH blocks are not included in the number of manifold stations.



		Stations				
Description/Model		1	2	3	4	5
Valve	Single	●	●	●		
	⋮					
Option	SUP/EXH block SSQ2000-PR-3-C10-□				●	



Individual SUP spacer

SSQ2000-P-4-C8

Port location

C8	Side ported
L8	Top ported

This is used as a supply port for different pressures when using different pressures in the same manifold (for one station).

Both sides of the station which is used with supply pressure from the individual SUP spacer are shut off. (Refer to application example.)

* Specify the spacer mounting position and SUP passage shut off positions on the manifold specification sheet. Two shut off positions are required per unit.

(Two pieces of SUP block plate that shut off the supply pressure are included with the individual SUP spacer, therefore, it is not necessary to order them separately.)

* Electrical wiring is also connected to the manifold station with the individual EXH spacer.

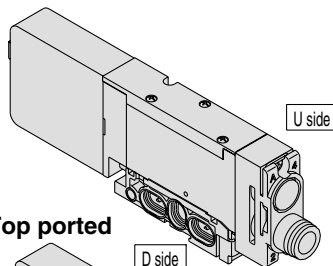
* By changing the fitting shown in the drawing and the block plates, the spacer's specification can be changed later (from the individual SUP spacer to the individual EXH spacer).

* The number of spacers is not limited when ordered with the manifold. However, when adding individual for F, P, and J kits, it is limited to two units, one between manifold stations and another on the U side, due to the length of the lead wire.

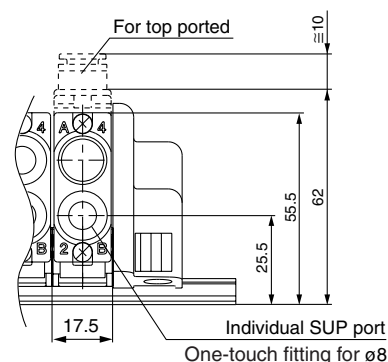
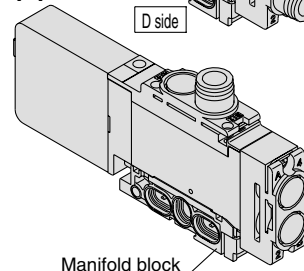
* Model no. with manifold block:

SSQ2000-P-4-^{C8}/_{L8}-M

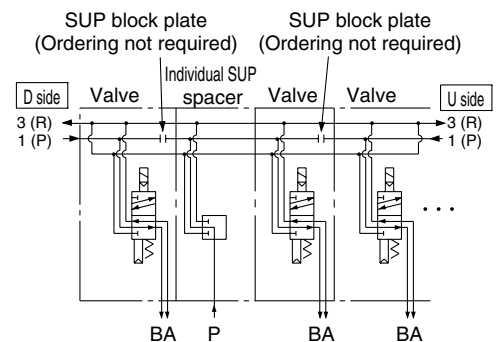
Side ported



Top ported



		Stations				
Description/Model		1	2	3	4	5
Valve	Single	●	●	●		
	⋮					
Option	Individual SUP spacer SSQ2000-P-4- ^{C8} / _{L8}		●			
	SUP shut off position: Specify 2 positions.	●		●		



Series SQ1000/2000

Manifold Option Parts for SQ2000

Individual EXH spacer

SSQ2000-R-4-**C8**

•Port location

C8	Side ported
L8	Top ported

This is used to exhaust an individual valve when the exhaust from a valve interferes with other stations in the circuit (used for one station). Both sides of the station which is to be individually exhausted are shut off. (Refer to application example.)

* Specify the spacer mounting position and EXH passage shut off position on the manifold specification sheet. Two shut off positions are required per unit.

(Four pieces of EXH block plate that shut off the exhaust are included the exhaust are included with the individual EXH spacer, therefore, it is not necessary to order them separately.)

* Electrical wiring is also connected to the manifold station with the individual EXH spacer.

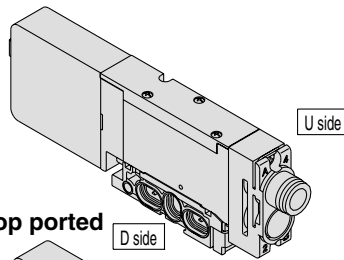
* By changing the fitting shown in the drawing and the block plates, the spacer's specification can be changed later (from the individual EXH spacer to the individual SUP spacer)

* The number of spacers is not limited when ordered with the manifold. However, when adding individual for F, P, and J kits, it is limited to two units, one between manifold stations and another on the U side, due to the length of the lead wire.

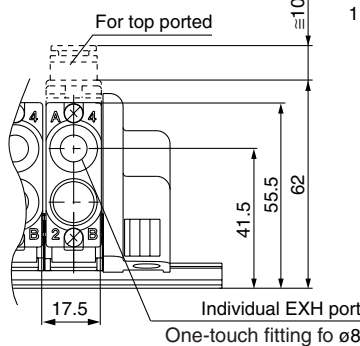
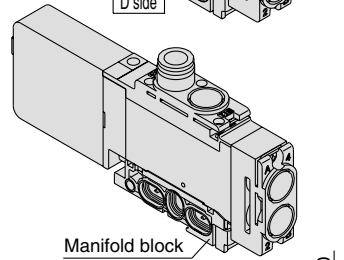
* Model no. with manifold block:

SSQ2000-R-4-**C8**-M
L8

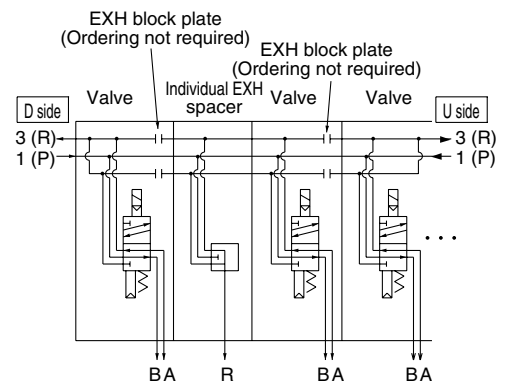
Side ported



Top ported



		Stations				
Description/Model		1	2	3	4	5
Valve	Single	●	●	●		
	⋮					
Option	Individual EXH spacer SSQ2000-R-4- C8 L8		●			
	EXH shut off position: Specify 2 positions.	●		●		



Individual SUP/EXH spacer

SSQ2000-PR1-4-**C8**

•Port location

C8	Side ported
L8	Top ported

This has both functions of the individual SUP and EXH spacers above. (Refer to application example.)

* Specify the spacer mounting position and SUP and EXH passage shut off positions on the manifold specification sheet. Two shut off positions each for SUP and EXH are required per unit.

[Block plates that shut off the SUP and EXH passages are included with the individual SUP/EXH spacer (2 pcs. of SUP block plate and 4 pcs. of EXH block plate).]

* Electrical wiring is also connected to the manifold station with the individual EXH spacer.

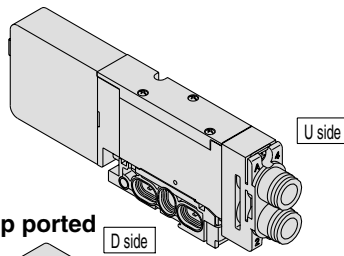
* By changing the fitting shown in the drawing and the block plates, the spacer's specification can be changed later.

* The number of spacers is not limited when ordered with the manifold. However, when adding individual for F, P, and J kits, it is limited to two units, one between manifold stations and another on the U side, due to the length of the lead wire.

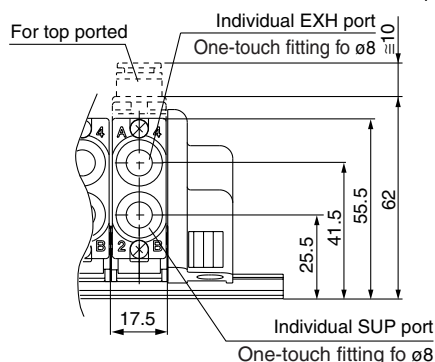
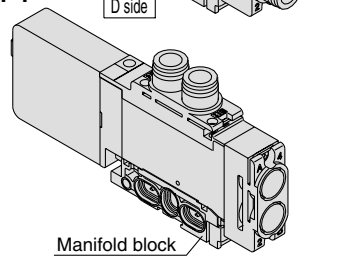
* Model no. with manifold block:

SSQ2000-PR1-4-**C8**-M
L8

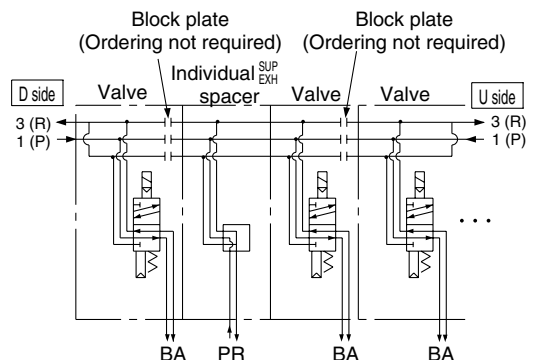
Side ported



Top ported



		Stations				
Description/Model		1	2	3	4	5
Valve	Single	●	●	●		
	⋮					
Option	Individual SUP/EXH spacer SSQ2000-PR1-4- C8 L8		●			
	SUP shut off position: Specify 2 positions.	●		●		
	EXH shut off position: Specify 2 positions.	●		●		



SUP block plate

SSQ1000-B-R

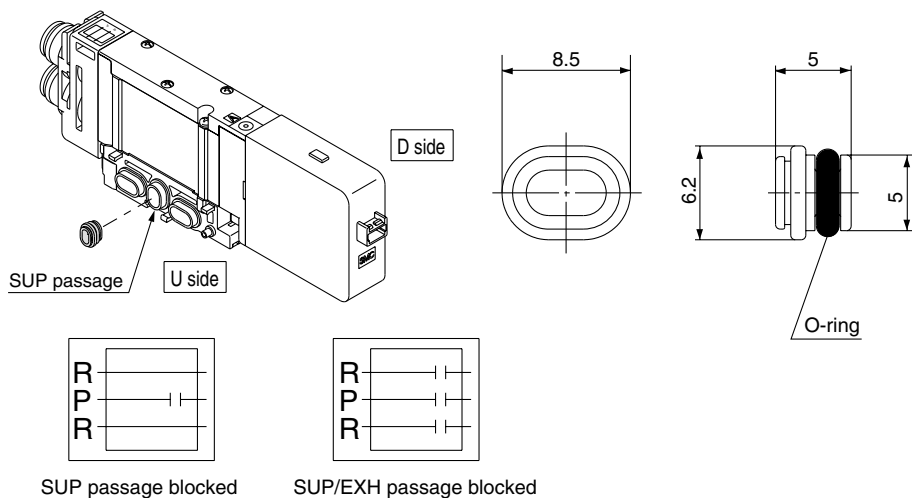
When supplying two different pressures, high and low, to one manifold, this is used between stations with different pressures. Also, it is used with an individual SUP spacer to shut off the air supply.

* Specify the station position on the manifold specification sheet.

<Shut off label>

When a SUP passage is shut off with a SUP block plate, a label is attached for external confirmation of the shut off position (one label each).

* Shut off labels are applied when SUP block plates are ordered with manifolds.



VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

EXH block plate

SSQ2000-B-R

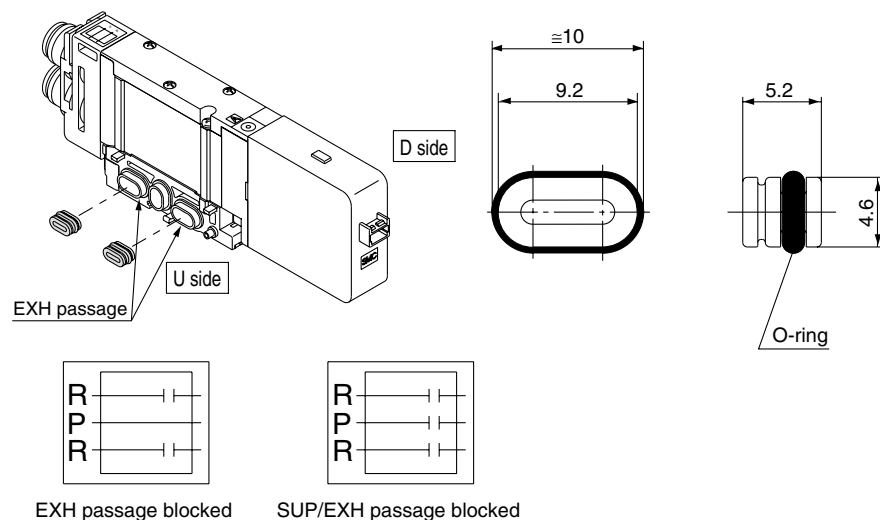
When the exhaust from a valve interferes with other stations in the circuit, this is used between stations to separate exhausts. Also, it is used with an individual EXH spacer to shut off the exhaust of individual valves.

* Specify the station position on the manifold specification sheet.

<Shut off label>

When an EXH passage is shut off with an EXH block plate, a label is attached for external confirmation of the shut off position (one label each).

* Shut off labels are applied when EXH block plates are ordered with manifolds.



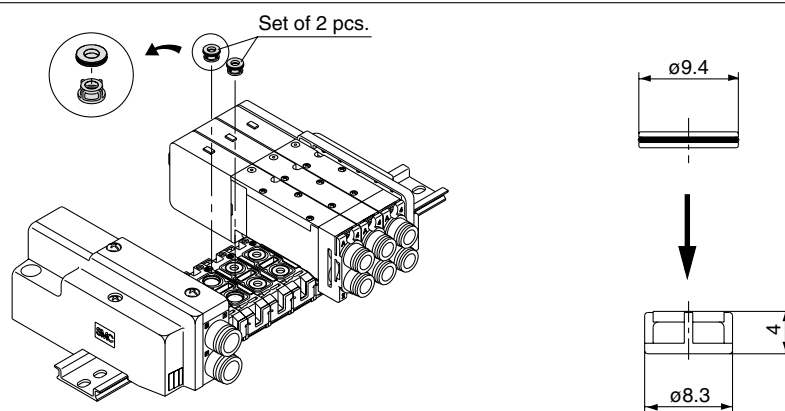
Back pressure check valve [-B]

SSQ2000-BP

This prevents cylinder malfunction caused by the exhaust from other valves. It is inserted into the R (EXH) port of the valve that is affected. It is especially effective when using single acting cylinders or exhaust center type solenoid valves.

* When installing back pressure check valves only on the stations required, enter the part number and specify the station positions on a manifold specification sheet.

* When installing back pressure check valves on all of the stations, indicate "-B" at the end of the manifold part number.



⚠ Caution

1. Although the back pressure check valve is an assembly part with a check valve mechanism, a small amount of air leakage is allowed. Therefore, take care not to restrict the exhaust air from the exhaust port.
2. The effective area of valves is about 20% less when the back pressure check valve is installed.

Series SQ1000/2000

Manifold Option Parts for SQ2000

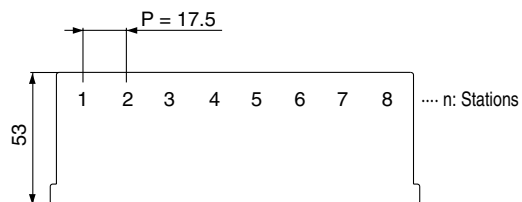
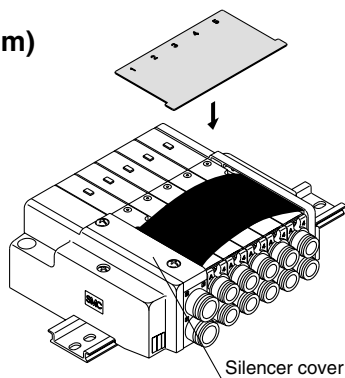
Name plate [-N]

SSQ2000-N3- Stations (1 to maximum)

This is a clear resin plate for applying solenoid valve function description labels, etc.

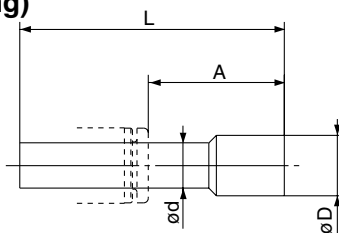
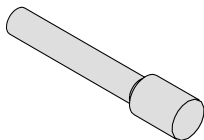
To install, bend the plate slightly as shown and insert into the slots on the end plate side. Also, the plate is difficult to bend for manifolds with only a few stations, therefore, remove the silencer cover to install it.

* When ordering with manifolds, add "-N" at the end of the manifold number.



Blanking plug (For One-touch fitting)

04
KQ2P-06
08
10



This is inserted into cylinder ports and SUP and EXH ports that are not used.

Purchasing order is available in units of 10 pieces.

Dimensions

Applicable fittings size (ød)	Model	A	L	D
4	KQ2P-04	16	32	6
6	KQ2P-06	18	35	8
8	KQ2P-08	20.5	39	10
10	KQ2P-10	22	43	12

Port plug

VVQZ2000-CP

This is used to close the cylinder ports when changing a 5 port valve to a 3 port valve.

* Add "A" or "B" at the end of the valve part number when ordering with valves.

Example) SQ2141-5L-C8-A (N.O. specifications)

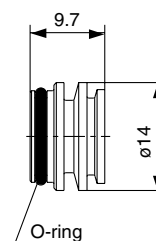
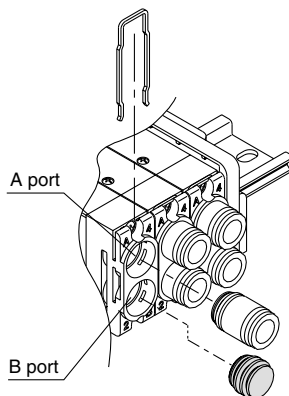
• 4(A) port plug

Example) SQ2141-5L-C8-B (N.C. specifications)

• 2(B) port plug

Example) SQ2141-5L-C8-B-M

(B port plug with manifold block)



Direct EXH outlet, built-in silencer [-S]

The EXH outlet is placed on the top side of the manifold end plate. The built-in silencer provides highly effective noise reduction.

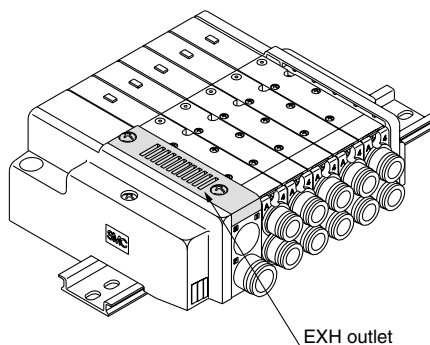
(Noise reduction of 30 dB)



Note) Note that when excessive drainage occurs in the air supply, the drainage will be released along with the exhaust.

* Add "S" at the end of the manifold part number when ordering with manifolds.

* For precautions on handling and how to replace elements, refer to page 2-3-5.



External pilot specifications [-R]

This can be used when the air pressure is 0.1 to 0.2 MPa lower than the minimum operating pressure of the solenoid valves or used for vacuum specifications.

Add "R" to the part numbers of manifolds and valves to indicate the external pilot specifications.

An M5 port will be installed on the top side of the manifold's SUP/EXH block.

- How to order valves (Example)
SQ2140 R -5L-C6

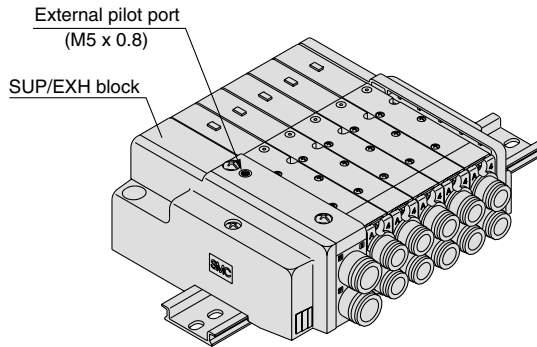
External pilot specifications

- How to order manifold (Example)

* Indicate "R" for an option.

SS5Q24-08FD1-DR

External pilot specifications



Note 1) Not applicable for dual 3 port valves.

Note 2) Indicate "RY" for low wattage types.

Note 3) Valves with the external pilot specifications have a pilot EXH with individual exhaust specifications and EXH can be pressurized. However, the pressure supplied from EXH should be 0.4 MPa or lower.

VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

Dual flow fitting

SSQ2000-52A-**C10**

Port size

C10	ø10
N11	ø3/8"

To drive a large bore cylinder, two valve stations are operated simultaneously to double the air flow. This fitting is used on the cylinder ports in this situation. Available sizes are ø10 and ø3/8" One-touch fittings.

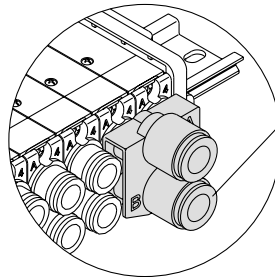
* When ordering with valves, specify the valve part number without One-touch fitting and list without One-touch fitting and list the dual flow fitting part number.

Example) Valve part number (without One-touch fitting)

SQ2141-5L-**C0** 2 sets

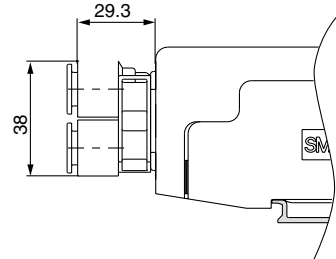
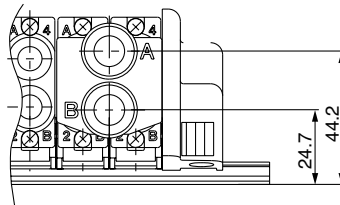
* SSQ2000-52A-^{C10} 1 set

^{N11} 1 set



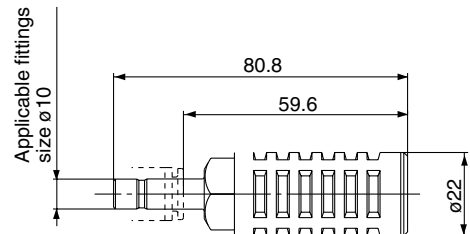
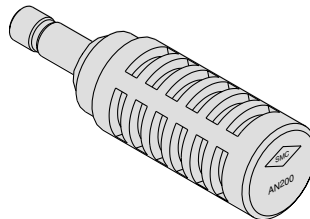
C10: ø10 One-touch fitting

N11: ø3/8" One-touch fitting



Silencer (For EXH port)

This is inserted into the centralized type EXH port (One-touch fitting).



Specifications

Series	Model	Effective area (mm ²) (Cv factor)	Noise reduction (dB)
SQ2000	AN200-KM10	26 (1.4)	30

Series SQ1000/2000

Manifold Option Parts for SQ1000/SQ2000

Special Wiring Specifications

In the internal wiring of F kit, P kit, and J kit, double wiring (connected to SOL. A and SOL. B) is adopted for each station regardless of the valve and option types. Mixed single and double wiring is available as an option.

1. How to order

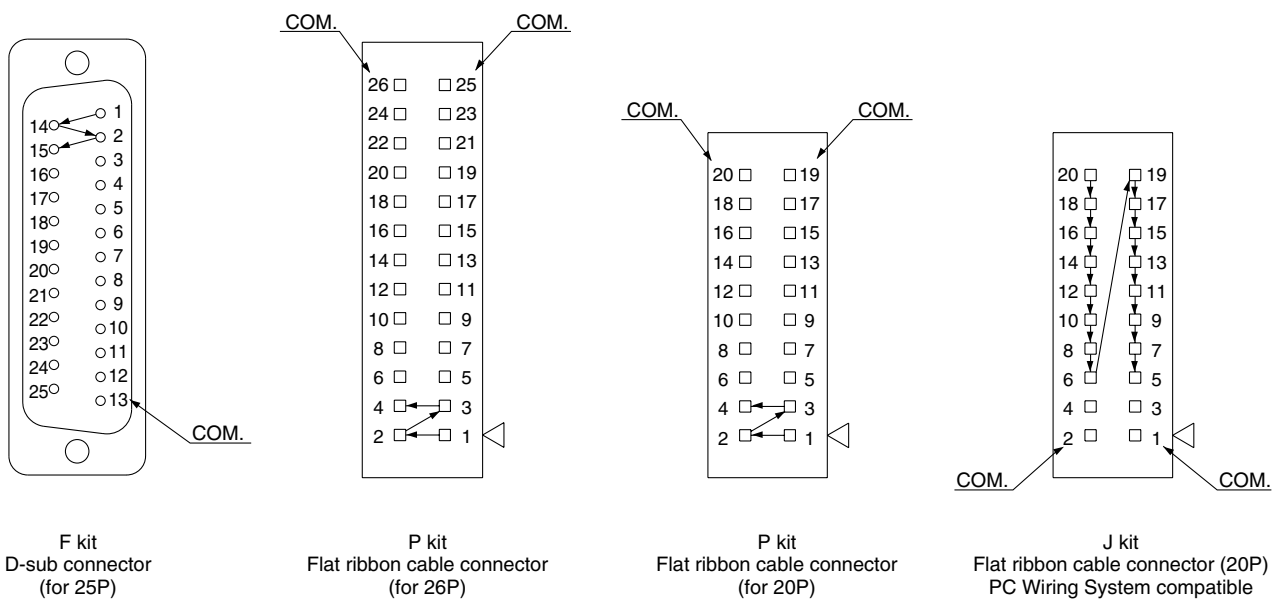
Indicate option symbol “-K” in the manifold part number and be sure to specify station positions for single or double wiring on the manifold specification sheet.

Example) **SS5Q14-09FD0-DKS**

Others, option symbols: to be indicated alphabetically.

2. Wiring specifications

Connector terminal numbers are connected from solenoid station 1 on the A side in the order indicated by the arrows without skipping any terminal numbers.



3. Maximum stations

The maximum number of manifold stations is determined by the number of solenoids. Count one point for a single solenoid type and two points for a double solenoid type. Determine the number of stations so that the total number of solenoids is no more than the maximum points in the table below.

Kit	F kit (D-sub connector)	P kit (Flat ribbon cable connector)		J kit Flat ribbon cable PC Wiring System compatible
Type	FD□ 25P	PD□ 26P	PDC 20P	JD0 20P
Max. points	24 points	24 points	18 points	16 points

Note) Maximum stations SQ1000: 24 stations
SQ2000: 16 stations

Special DIN Rail Length (DIN rail mounting (-D) only)

The standard DIN rail provided is approximately 30 mm longer than the overall length of the manifold with a specified number of stations. The following options are also available.

● DIN rail length longer than the standard type (for stations to be added later, etc.)

In the manifold part number, specify "-D" for the manifold mounting symbol and add the number of required stations after the symbol.

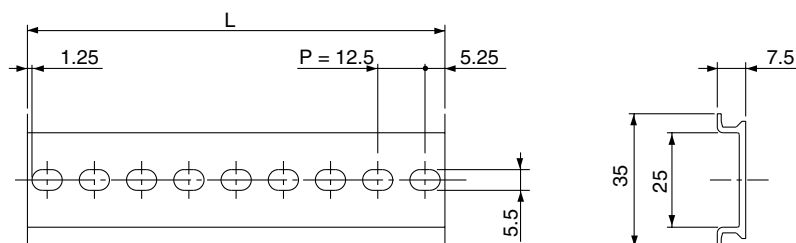
Example) **SS5Q14- 08FD0 - D09BNK**

- 8 station manifold
- Option symbols (alphabetically)
- DIN rail for 9 stations

● Ordering DIN rail only

DIN rail part number

AXT100- DR - [n] Note) For "n", enter a number from the "No." line in the table below. For L dimension, refer to the dimensions of each kit.



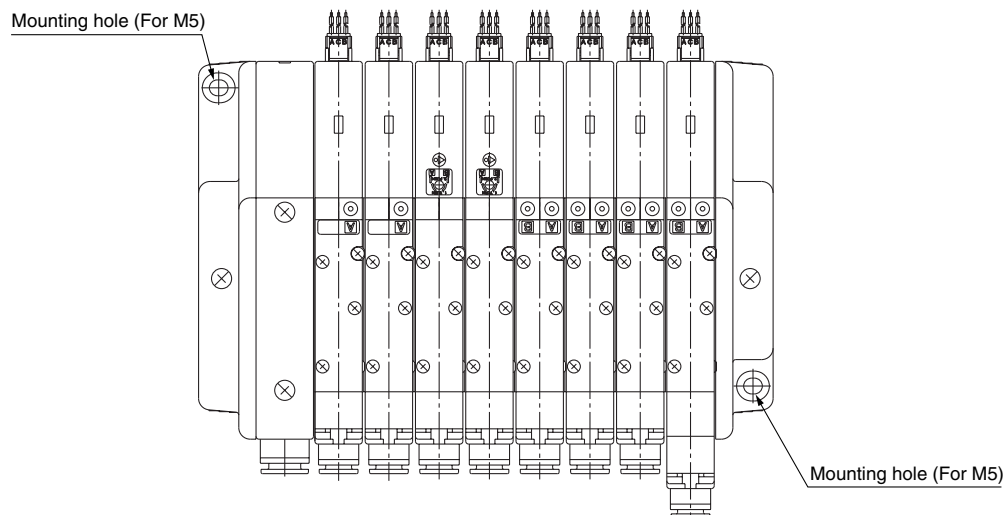
L Dimension

$$L = 12.5 \times n + 10.5$$

No.	1	2	3	4	5	6	7	8	9	10
L dimension	23	35.5	48	60.5	73	85.5	98	110.5	123	135.5
No.	11	12	13	14	15	16	17	18	19	20
L dimension	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5
No.	21	22	23	24	25	26	27	28	29	30
L dimension	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5
No.	31	32	33	34	35	36	37	38	39	40
L dimension	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5

Direct Mounting Style (-E) (SQ2000 C kit only)

Manifold is mounted by using mounting holes of both sides of the manifold. DIN rail is not sticking out of the edge of end plate.



Series SQ1000/2000

Manifold Option for SQ1000/SQ2000

Negative Common Specifications

The following valve part numbers are for negative COM specifications. Manifold part numbers are the same as standard.

● How to order negative COM valves (Example)

SQ1140 N -5L-C6

- Negative common specifications

Inch-size One-touch Fittings

For One-touch fittings in inch sizes, use the following part numbers. Also, the color of the release button is orange.

● How to order valves (Example)

SQ1140-5L-□ N7

Port location

Cylinder port

Nil	Side ported	Symbol	N1	N3	N7	N9
L	Top ported	Applicable tubing O.D. (Inch)	ø1/8"	ø5/32"	ø1/4"	ø5/16"
4(A), 2(B) port		SQ1000	●	●	●	—
		SQ2000	—	●	●	●

● How to order manifold (Example)

Add "00T" at the end of the part number.

SS5Q14- 08 FD0 DN - 00T

- 1 (P), 3 (R) port in inch size
 - { SQ1000: ø5/16" (N9)
 - { SQ2000: ø3/8" (N11)

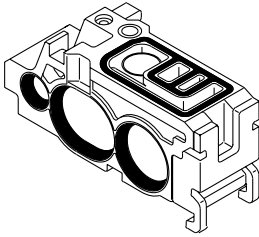
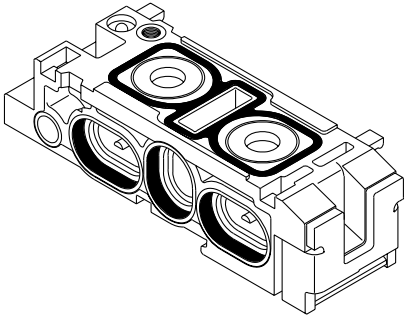




How to Add Manifold Stations for SQ1000/SQ2000

1. How to Add Manifold Stations

What to order

- Valves with manifold block (refer to pages 2-3-71 and 2-3-85) or the manifold blocks shown below. For F kit, P kit, and J kit, also order the lead wire assemblies in the next section.

Manifold Block Part No.

SQ1000	SQ2000												
													
<p>SSQ1000-1A-4- </p> <p>Option ● </p> <table border="1" data-bbox="279 1108 574 1198"> <tr> <td>Nil</td> <td>None</td> </tr> <tr> <td>B</td> <td>Back pressure check valve</td> </tr> <tr> <td>R</td> <td>External pilot specifications</td> </tr> </table> <p>Note) Enter "-BR" for both options.</p>	Nil	None	B	Back pressure check valve	R	External pilot specifications	<p>SSQ2000-1A-4- </p> <p>Option ● </p> <table border="1" data-bbox="997 1108 1292 1198"> <tr> <td>Nil</td> <td>None</td> </tr> <tr> <td>B</td> <td>Back pressure check valve</td> </tr> <tr> <td>R</td> <td>External pilot specifications</td> </tr> </table> <p>Note) Enter "-BR" for both options.</p>	Nil	None	B	Back pressure check valve	R	External pilot specifications
Nil	None												
B	Back pressure check valve												
R	External pilot specifications												
Nil	None												
B	Back pressure check valve												
R	External pilot specifications												

VQC

SQ

VQ0

VQ4

VQ5

VQZ

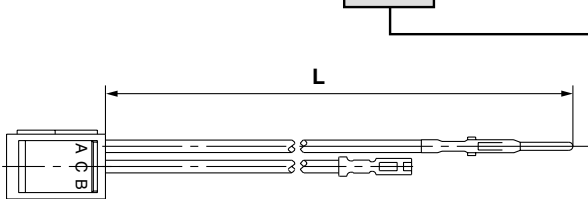
VQD

SQ2000

D-sub connector kit (F kit)

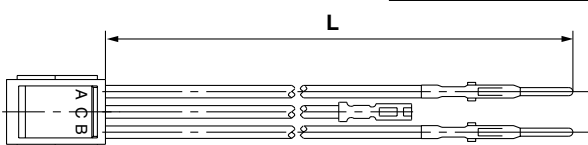
- For single wiring

SSQ1000—40A—F—250



- For double wiring

SSQ1000—41A—F—350

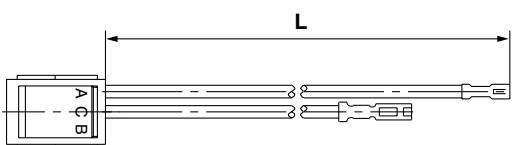


Stations	Symbol (L dimension)	Stations	Symbol (L dimension)
Station 2	190	Station 14	430
Station 3	210	Station 15	450
Station 4	230	Station 16	470
Station 5	250	Station 17	490
Station 6	270	Station 18	510
Station 7	290	Station 19	530
Station 8	310	Station 20	550
Station 9	330	Station 21	570
Station 10	250	Station 22	590
Station 11	370	Station 23	610
Station 12	390	Station 24	630
Station 13	410		

Flat ribbon cable kit (P kit), PC Wiring System compatible (J kit)

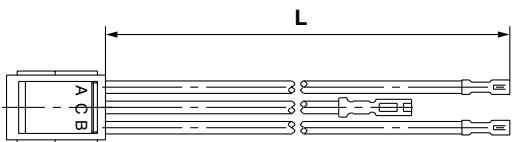
- For single wiring

SSQ1000—40A—P—250



- For double wiring

SSQ1000—41A—P—350



Stations	Symbol (L dimension)	Stations	Symbol (L dimension)
Station 2	190	Station 14	430
Station 3	210	Station 15	450
Station 4	230	Station 16	470
Station 5	250	Station 17	490
Station 6	270	Station 18	510
Station 7	290	Station 19	530
Station 8	310	Station 20	550
Station 9	330	Station 21	570
Station 10	250	Station 22	590
Station 11	370	Station 23	610
Station 12	390	Station 24	630
Station 13	410		

VQC

SQ

VQ0

VQ4

VQ5

VQZ

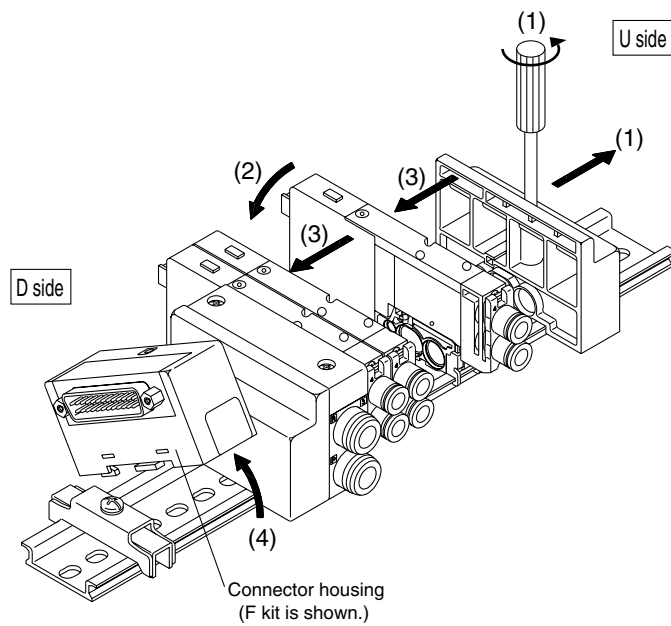
VQD

Series SQ1000/2000

How to Add Manifold Stations for SQ1000/SQ2000

Steps for adding stations

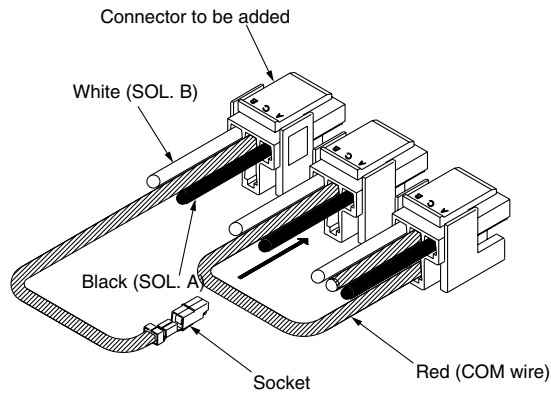
- (1) Loosen the clamp screw on the U side end plate and open the manifold.
- (2) Mount the manifold block or valve with manifold block to be added.
- (3) Press on the end plate to eliminate any space between the manifold blocks and tighten the clamp screw.
(Proper tightening torque: 0.8 to 1.0 N·m)
- (4) In the case of F kit, P kit or J kit, remove the connector housing from the DIN rail and connect the wiring.



2. Connection Method

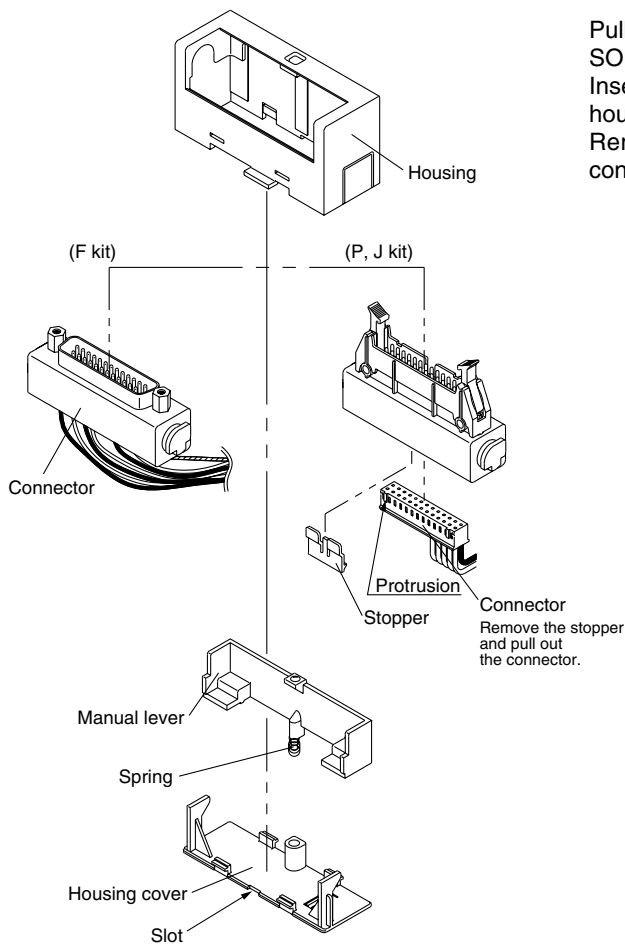
(1) Connecting common wire

Insert the red lead wire (common wire) of the connector to be added into the adjacent connector as shown in the drawing below. After inserting,



VQC
SQ
VQ0
VQ4
VQ5
VQZ
VQD

(2) Pulling out connector



Pull out the connector to connect the lead wires for SOL. A and SOL. B.
 Insert a flat head screwdriver into the slot of the housing cover and remove it.
 Remove the manual lever and pull out the connector.

F, P, J kit

Series SQ1000/2000

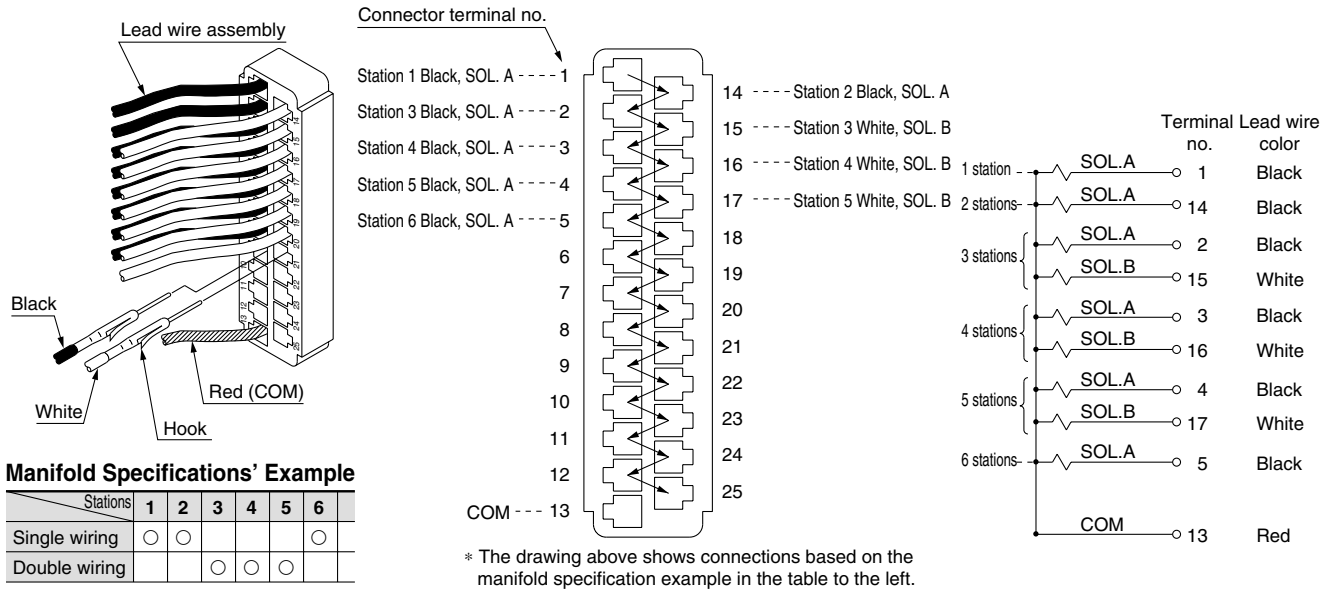
How to Add Manifold Stations for SQ1000/SQ2000

(3) Connector connection/Connect the black and white lead wire pins to the positions shown below in accordance with each kit.

- ⚠ Caution**
1. After inserting the pin, confirm that the pin hook is locked by lightly pulling the lead wire.
 2. Do not pull the lead wire forcefully when connecting. Also, take care that lead wires do not get caught between manifolds or when remounting the housing.

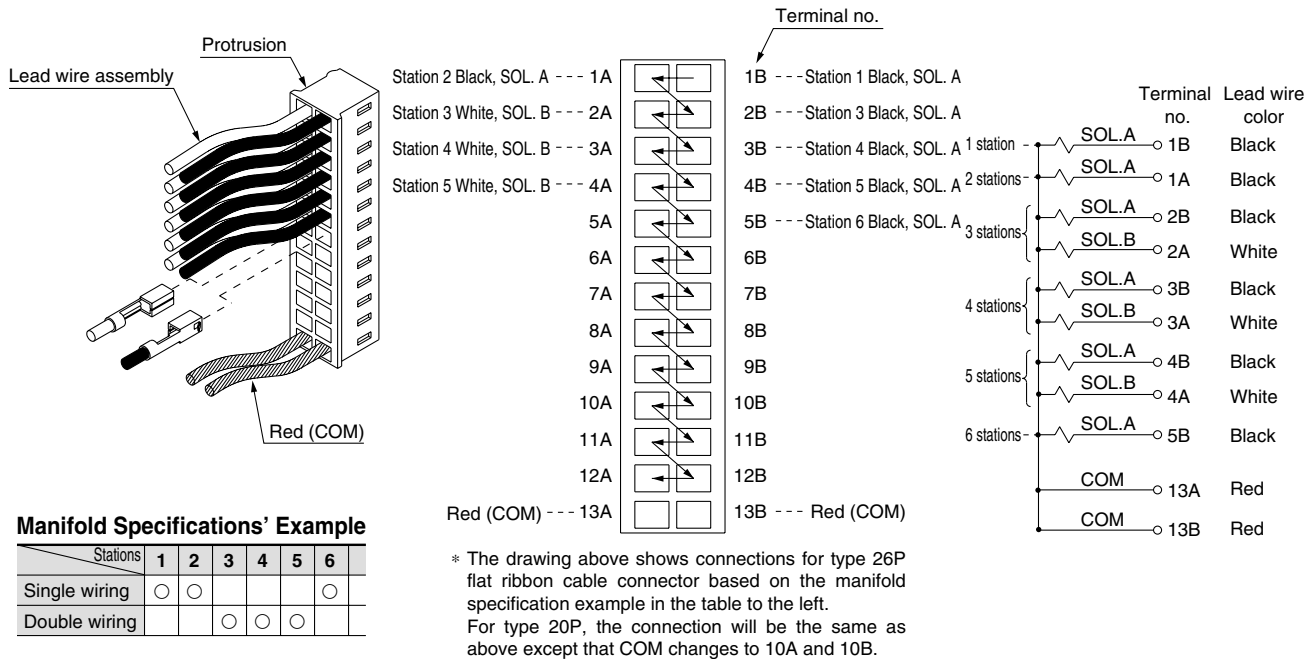
Wiring (F kit: D-sub connector kit)

Procedure) Based on the manifold specifications, station 1 of SOL.A (black wire) will be terminal number 1 of the D-sub connector, and for station 2 and thereafter, connect black wires, then white wires in the order as shown below by the arrows.



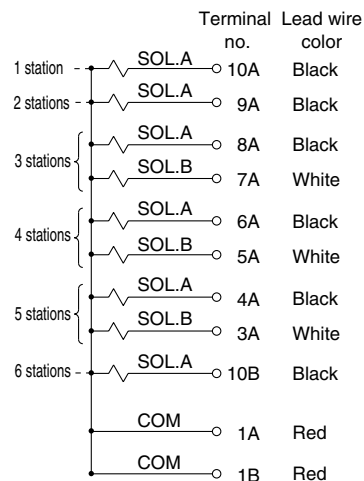
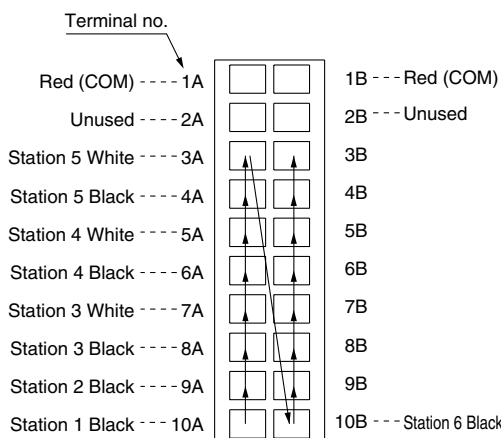
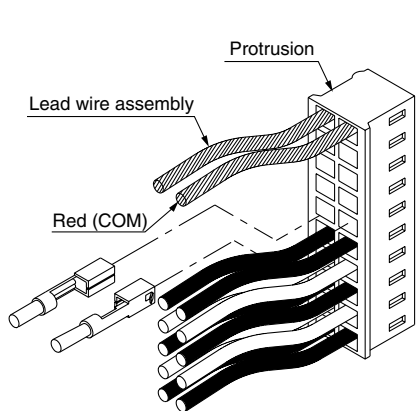
Wiring (P kit: Flat ribbon cable kit)

Procedure) Based on the manifold specifications, station 1 of SOL.A (black wire) will be terminal number 1B of the flat ribbon cable connector, and for station 2 and thereafter, connect black wires, then white wires in the order as shown below by the arrows.



Wiring (J kit: Flat ribbon cable, PC Wiring System compatible)

Procedure) Based on the manifold specifications, station 1 of SOL.A (black wire) will be terminal number 10A of the flat ribbon cable connector, and for station 2 and thereafter, connect black wires, then white wires in the order as shown below by the arrows.



Manifold Specifications' Example

Stations	1	2	3	4	5	6
Single wiring	○	○				○
Double wiring			○	○	○	

VQC

SQ

VQ0

VQ4

VQ5

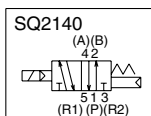
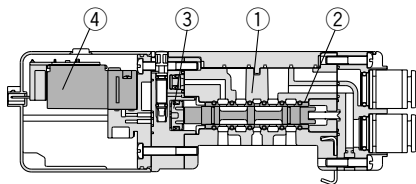
VQZ

VQD

Construction: Series SQ2000 Plug Lead Type Main Parts and Pilot Valve Assembly

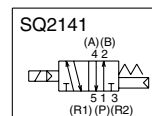
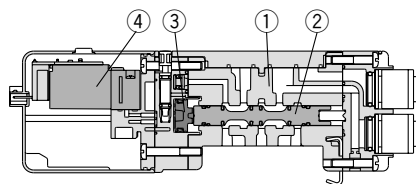
Metal seal type

Single: SQ2140

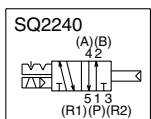
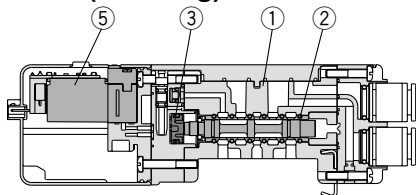


Rubber seal type

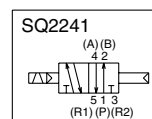
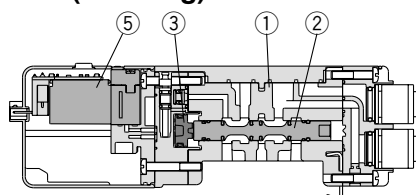
Single: SQ2141



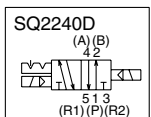
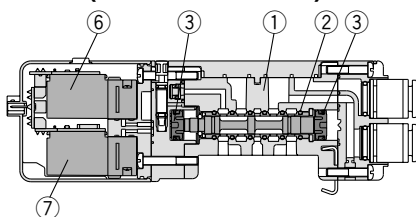
Double (Latching): SQ2240



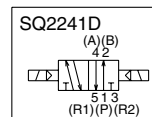
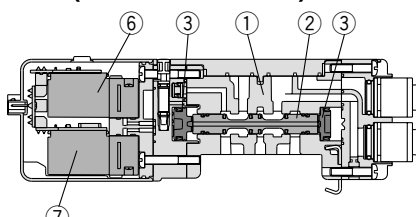
Double (Latching): SQ2241



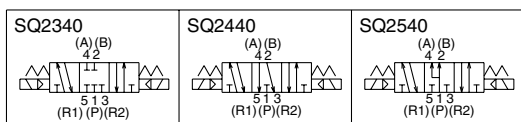
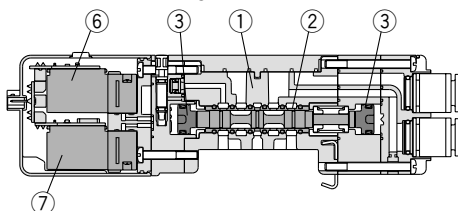
Double (Double solenoid): SQ2240D



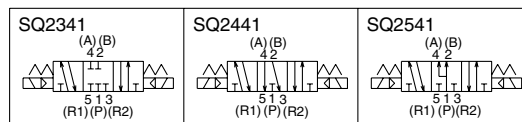
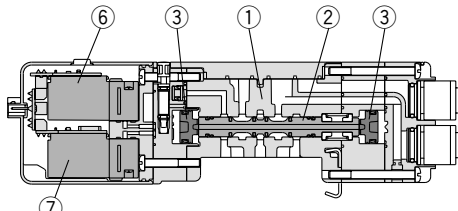
Double (Double solenoid): SQ2241D



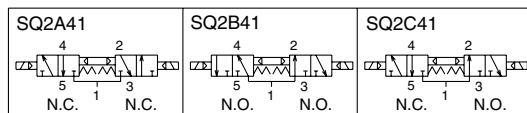
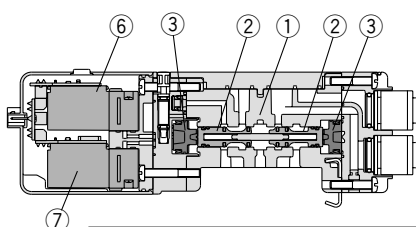
3 position: SQ2 3/4 40



3 position: SQ2 3/4 41



Dual 3 port valve: SQ2 3/4 41



Component Parts

No.	Description	Material
①	Body	Aluminum die-casted
②	Spool/Sleeve	Stainless steel (Metal seal)
	Spool	Aluminum (Rubber seal)
③	Piston	Resin

Pilot Valve Assembly Note)

No.	Model	SQ2□4□
④	For single	VQ111S(Y)- ⁵ / ₆ (N)J21
⑤	For double (latching)	VQ110SL- ⁵ / ₆ J22 Negative COM: VQ110SN- ⁵ / ₆ J22
⑥	For double (Double solenoid) on A side For 3P, Dual 3 port on A side	VQ111S(Y)- ⁵ / ₆ (N)J23
⑦	For double (Double solenoid) on B side For 3P, Dual 3 port on B side	VQ111S(Y)- ⁵ / ₆ (N)J24



Note) Nil : Standard
N : Negative COM specifications
Y : Low wattage specifications

VQC

SQ

VQ0

VQ4

VQ5

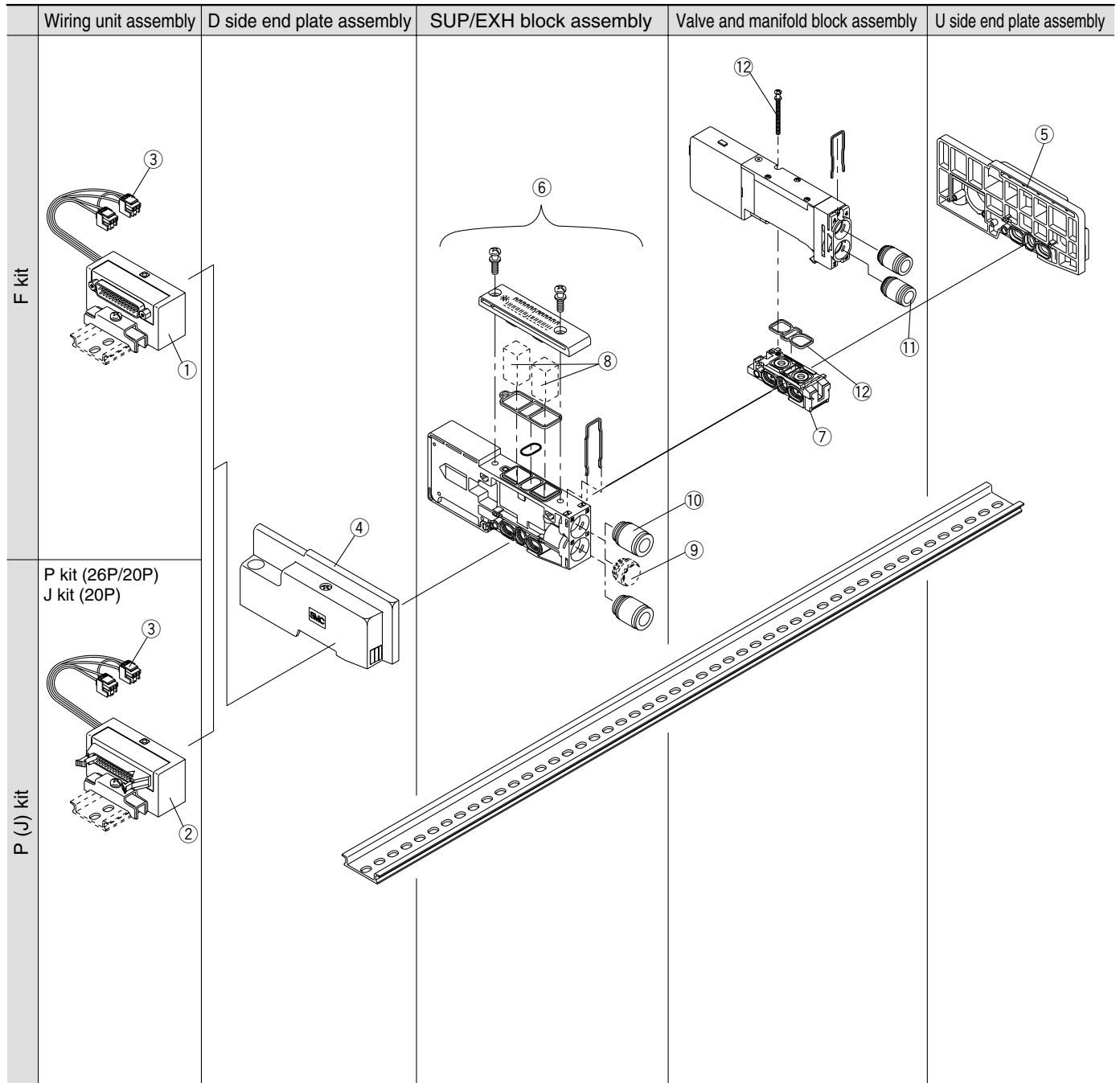
VQZ

VQD

Series SQ1000/2000

Exploded View of Manifold: SQ2000 (Plug lead type manifold) SS5Q24

(F, P, J, C kit)



Manifold Spare Parts



Refer to pages 2-3-112 to 2-3-117 of "How to Add Manifold Stations" regarding the mounting of each spare parts.

<① D-sub connector housing assembly>

AXT100 - 41 - FL25 - S 03

Wiring		Stations	
S	Single wiring	01	For 1 station
D	Double wiring	:	:
		12	For 12 stations

<② Flat ribbon cable connector housing assembly>

AXT100 - 41 - PL20 - S 03

Wiring		Stations		Note)	
S	Single wiring	01	For 1 station	PL26: 01 to 12 (P kit, 26P)	
D	Double wiring	:	:	PL20: 01 to 09 (P kit, 20P)	
		12	For 12 stations	JL20: 01 to 08 (J kit, 20P)	

<③ Lead wire assembly> (For F kit)

For station 1 **SSQ1000 - 4 1 B - F - 170**

Wiring	
0	For single (2-wire)
1	For double (3-wire)

For 2 to station 24 **SSQ1000 - 4 1 A - F - 230**

Wiring	
0	For single (2-wire)
1	For double (3-wire)

Lead wire length

Stations	L dimension (mm)	Stations	L dimension (mm)	Stations	L dimension (mm)	Stations	L dimension (mm)
Station 2	190	Station 8	310	Station 14	430	Station 20	550
Station 3	210	Station 9	330	Station 15	450	Station 21	570
Station 4	230	Station 10	250	Station 16	470	Station 22	590
Station 5	250	Station 11	370	Station 17	490	Station 23	610
Station 6	270	Station 12	390	Station 18	510	Station 24	630
Station 7	290	Station 13	410	Station 19	530		

(For P, J kit)

For station 1 **SSQ1000 - 4 1 B - P - 170**

Wiring	
0	For single (2-wire)
1	For double (3-wire)

For 2 to station 24 **SSQ1000 - 4 1 A - P - 310**

Wiring	
0	For single (2-wire)
1	For double (3-wire)

Lead wire length

Stations	L dimension (mm)	Stations	L dimension (mm)	Stations	L dimension (mm)	Stations	L dimension (mm)
Station 2	190	Station 8	310	Station 14	430	Station 20	550
Station 3	210	Station 9	330	Station 15	450	Station 21	570
Station 4	230	Station 10	250	Station 16	470	Station 22	590
Station 5	250	Station 11	370	Station 17	490	Station 23	610
Station 6	270	Station 12	390	Station 18	510	Station 24	630
Station 7	290	Station 13	410	Station 19	530		

(For C kit)

AXT661 - 1 3 AL - 6

Wiring	
3	For double (3-wire)
4	For single (2-wire)

Lead wire length

Symbol	L dimension (mm)
Nil	300
6	600
10	1000
15	1500
20	2000
25	2500
30	3000
50	5000

<④ D side end plate assembly>

SSQ2000 - 3A - 4

Manifold mounting	
Nil	DIN rail mount style
E	Direct mount style

<⑤ U side end plate assembly>

SSQ2000 - 2A - 4 - 1

Manifold mounting	
Nil	DIN rail mount style
E	Direct mount style

<⑥ SUP/EXH block assembly>

SSQ2000 - PR - 3 - C10

Port size	
C8	One-touch fitting for ø8
C10	One-touch fitting for ø10
N9	One-touch fitting for ø5/16"
N11	One-touch fitting for ø3/8"

Option	
Nil	Common exhaust type
R	External pilot
S	Built-in silencer, direct exhaust

Note) Enter "RS" for both options.

<⑦ Manifold block assemblies>

SSQ2000 - 1A - 4 Including gaskets ⑫

Option	
Nil	None
B	Back pressure check valve
R	External pilot specifications

<⑧ Element>

SSQ2000 - SE

Note) Part number for a 10 piece set of elements. Refer to page 2-3-5 for replacement procedure.

<⑨ Port plug>

VVQZ3000 - CP

<⑩ Fitting assembly>

(For P, R port)

VVQ2000 - 51A - C10

Port size	
C8	One-touch fitting for ø8
C10	One-touch fitting for ø10
N9	One-touch fitting for ø5/16"
N11	One-touch fitting for ø3/8"

Note) Purchasing order is available in units of 10 pieces

<⑪ Fitting assembly>

(For cylinder port)

VVQ1000 - 51A - C8

Port size	
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
C8	One-touch fitting for ø8
N3	One-touch fitting for ø5/32"
N7	One-touch fitting for ø1/4"
N9	One-touch fitting for ø5/16"

Note) Purchasing order is available in units of 10 pieces

<⑫ Gasket and screw assembly>

SQ2000 - GS

Note) Part number for 10 pieces each of gaskets and screws.

VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD