

Series SQ1000 Plug-in Unit

How to Order Manifold

SS5Q13 — **08** **FD2** — **D** **□**

Stations

01	1 station
⋮	⋮
24 ^{Note1)}	24 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

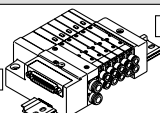
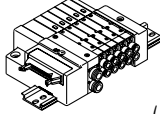
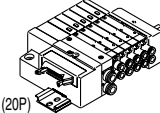
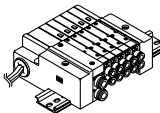
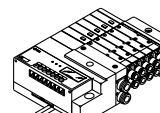
Note 2) Standard wiring specifications are for double wiring. Indicate wiring specifications for single wiring or mixed single and double wiring, or when exceeding the standard maximum number of stations. (Except L kit.)

Note 3) For specifying two or more options, enter them alphabetically. Example: -BKN

Manifold mounting

D	DIN rail mounting style
E	Direct mounting style

Electrical entry

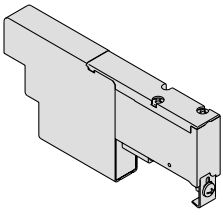
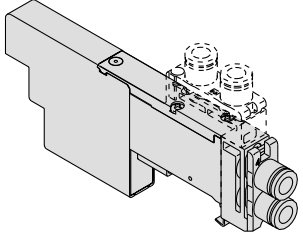
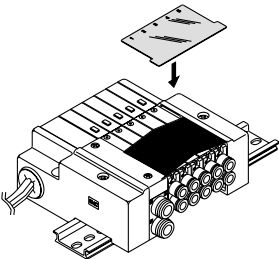
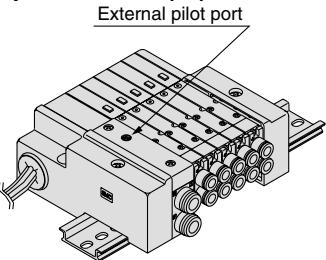
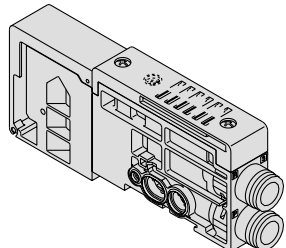
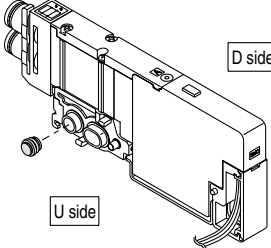
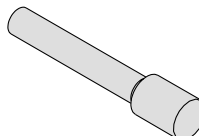
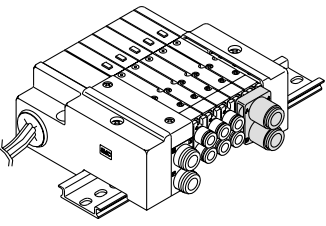
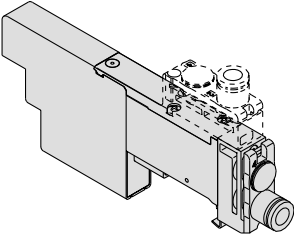
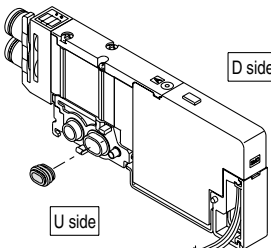
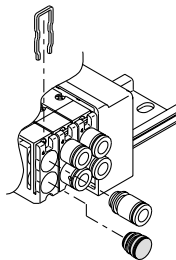
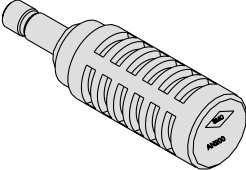
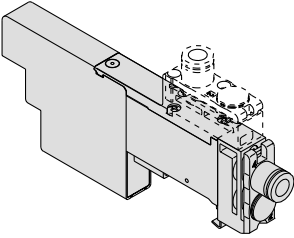
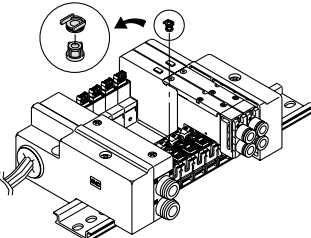
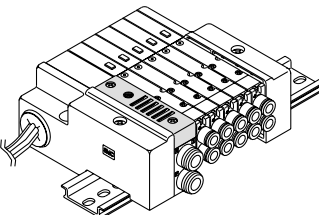
Kit type	Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	Max. number of solenoids ⁽²⁾
F kit  D-sub connector kit	FD0	D side	1 to 12 stations	24 stations	24
	FD1	D-sub connector (25P) kit, without cable			
	FD2	D-sub connector (25P) kit, with 1.5 m cable			
	FD3	D-sub connector (25P) kit, with 3.0 m cable			
P kit  Flat ribbon cable connector kit (26P/20P)	PD0	D side ⁽¹⁾	1 to 12 stations	24 stations	24
	PD1	Flat ribbon cable (26P) kit, without cable			
	PD2	Flat ribbon cable (26P) kit, with 1.5 m cable			
	PD3	Flat ribbon cable (26P) kit, with 3.0 m cable			
	PDC	Flat ribbon cable (26P) kit, with 5.0 m cable			
J kit  Flat ribbon cable (20P) (PC Wiring System compatible)	JD0	D side	1 to 9 stations	18 stations	18
L kit  Lead wire kit	LD0	D side	1 to 12 stations	—	—
	LU0	U side			
	LD1	D side			
	LU1	U side			
	LD2	D side			
	LU2	U side			
S kit  Serial transmission kit	SDF	D side	1 to 8 stations	16 stations	16
	SDH				
	SDJ1		NKE Corp.: Uni-wire H System		
	SDJ2		SUNX Corp.: S-LINK System (16 output points)		
	SDQ		SUNX Corp.: S-LINK System (8 output points)		
	SDR1		DeviceNet, CompoBus/D (OMRON Corp.)		
	SDR2		OMRON Corp.: CompoBus/S System (16 output points)		
	SDV		OMRON Corp.: CompoBus/S System (8 output points)		
	Mitsubishi Electric Corp.: CC-LINK System	1 to 4 stations	8 stations	8	
		1 to 8 stations	16 stations	16	

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 SQ1000

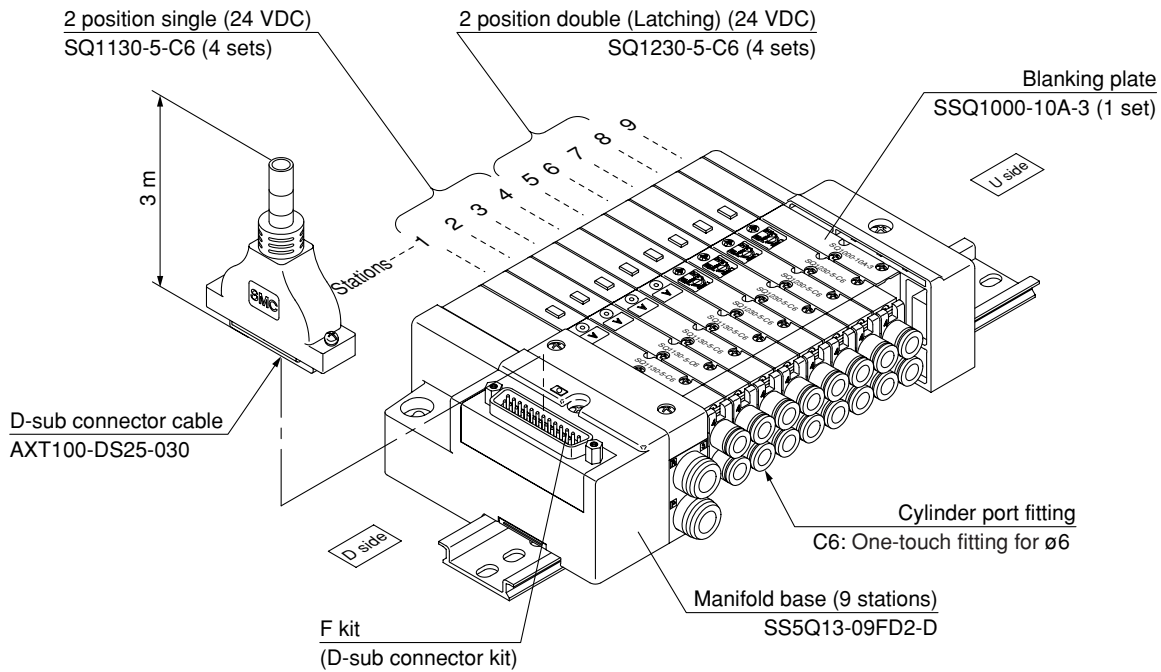
Manifold Option

<p>Blanking plate P. 2-3-44 SSQ1000-10A-3</p> 	<p>Individual SUP/EXH spacer P. 2-3-45 SSQ1000-PR1-3- C6 L6</p> 	<p>Name plate (-N) P. 2-3-47 SSQ1000-N3-n</p> 	<p>External pilot specifications (-R) P. 2-3-48</p> <p>External pilot port</p> 																																										
<p>SUP/EXH block P. 2-3-44 SSQ1000-PR-3-C8 (-S)</p> 	<p>SUP block plate P. 2-3-46 SSQ1000-B-P</p> <p>D side</p> <p>U side</p> 	<p>Blanking plug P. 2-3-47 KQ2P-23/04/06/08</p> 	<p>Dual flow fitting P. 2-3-48 SSQ1000-52A- C8 N9</p> 																																										
<p>Individual SUP spacer P. 2-3-44 SSQ1000-P-3- C6 L6</p> 	<p>EXH block plate P. 2-3-46 SSQ1000-B-R</p> <p>D side</p> <p>U side</p> 	<p>Port plug P. 2-3-47 VVQZ100-CP</p> 	<p>Silencer (For EXH port) P. 2-3-48</p> 																																										
<p>Individual EXH spacer P. 2-3-45 SSQ1000-R-3- C6 L6</p> 	<p>Back pressure check valve (-B) P. 2-3-46 SSQ1000-BP</p> 	<p>Built-in silencer (-S) P. 2-3-47</p> 	<p>Special wiring specifications (-K) P. 2-3-49</p> <p>D-sub connector</p> <table border="1"> <thead> <tr> <th>Terminal no.</th> <th>Station</th> <th>Wiring</th> </tr> </thead> <tbody> <tr><td>14</td><td>0</td><td>1 station SOLA 1 (-)</td></tr> <tr><td>15</td><td>0</td><td>2 stations SOLA 14 (-)</td></tr> <tr><td>16</td><td>0</td><td>3 stations SOLA 2 (-)</td></tr> <tr><td>17</td><td>0</td><td>4 stations SOLA 15 (-)</td></tr> <tr><td>18</td><td>0</td><td>5 stations SOLA 3 (-)</td></tr> <tr><td>19</td><td>0</td><td>6 stations SOLB 16 (-)</td></tr> <tr><td>20</td><td>0</td><td>7 stations SOLA 4 (-)</td></tr> <tr><td>21</td><td>0</td><td>8 stations SOLA 17 (-)</td></tr> <tr><td>22</td><td>0</td><td>9 stations SOLA 5 (-)</td></tr> <tr><td>23</td><td>0</td><td>10 stations SOLA 18 (-)</td></tr> <tr><td>24</td><td>0</td><td>11 stations SOLA 6 (-)</td></tr> <tr><td>25</td><td>0</td><td>12 stations SOLB 19 (-)</td></tr> <tr><td>26</td><td>0</td><td>13 stations COM. 13 (+)</td></tr> </tbody> </table> <p>Connector terminal no.</p>	Terminal no.	Station	Wiring	14	0	1 station SOLA 1 (-)	15	0	2 stations SOLA 14 (-)	16	0	3 stations SOLA 2 (-)	17	0	4 stations SOLA 15 (-)	18	0	5 stations SOLA 3 (-)	19	0	6 stations SOLB 16 (-)	20	0	7 stations SOLA 4 (-)	21	0	8 stations SOLA 17 (-)	22	0	9 stations SOLA 5 (-)	23	0	10 stations SOLA 18 (-)	24	0	11 stations SOLA 6 (-)	25	0	12 stations SOLB 19 (-)	26	0	13 stations COM. 13 (+)
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26	0	13 stations 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

SS5Q13-09FD2-D 1 set (F kit 9 station manifold base)

*SQ1130-5-C6 4 sets (2 position single)

*SQ1230-5-C6 4 sets (2 position double [latching])

*SSQ1000-10A-3 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 station ⁽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									
SS5Q13-□□□□	C8 (For ø8) Option Built-in silencer, direct exhaust	Side	C3 (For ø3.2) C4 (For ø4) C6 (For ø6) M5 (M5 thread)		SQ1□30 SQ1□31	F kit: D-sub connector		1 to 12 stations	420	20	
			Top ⁽²⁾	L3 (For ø3.2) L4 (For ø4) L6 (For ø6) L5 (M5 thread)		P kit: Flat ribbon cable		26P 1 to 12 stations	420	20	
						20P 1 to 9 stations					
						J kit: Flat ribbon cable PC Wiring System compatible		1 to 8 stations	420	20	
						L kit: Lead wire		1 to 12 stations	460	35	
				S kit: Serial transmission		1 to 8 stations	475	20			

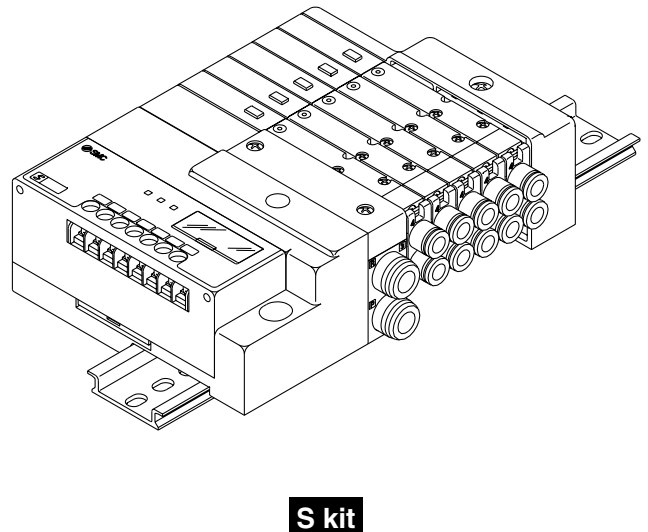
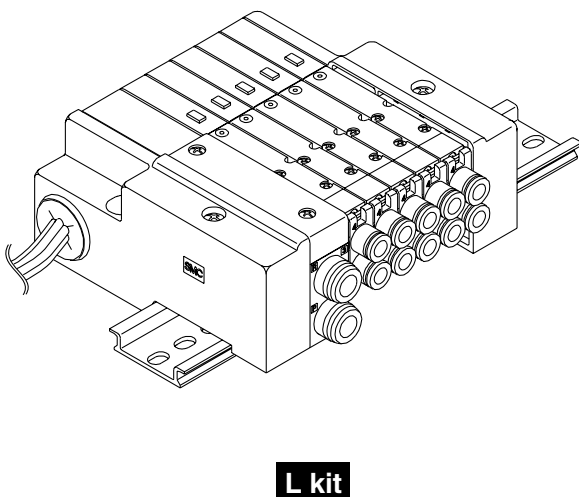
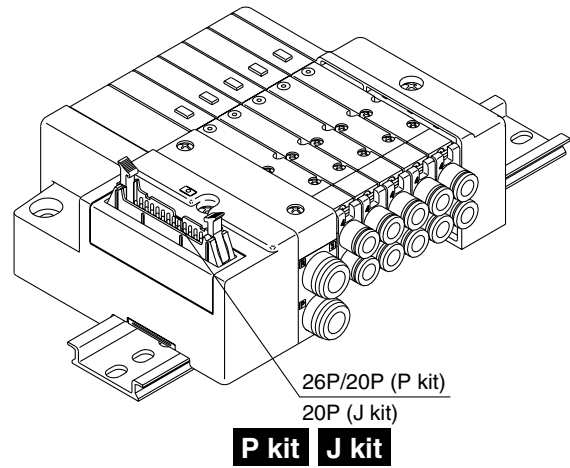
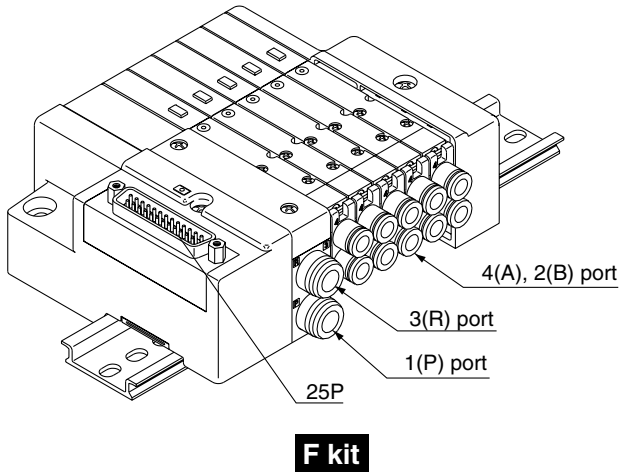


Note 1) One-touch fittings in inch sizes are also available. For details, refer to page 2-3-56.

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 2-3-54 for details.

Note 4) Except valves. For valve weight, refer to page 2-3-10.

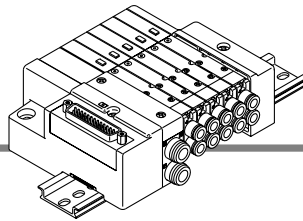


VQC
SQ
VQ0
VQ4
VQ5
VQZ
VQD

Series SQ1000

F

Kit (D-sub connector kit)



- Simplification and labor savings for wiring work can be achieved by using a D-sub connector for the electrical connection.
- Using connector for flat ribbon cable (25P) 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

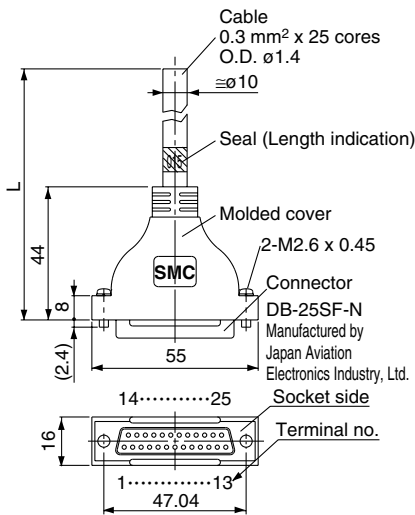
Series	Porting specifications		Maximum number of stations
	Port location	Port size	
SQ1000	Side, Top	1(P), 3(R)	4(A), 2(B)
		C8	C3, C4, C6, M5

D-sub Connector (25 pins)

Cable assembly

AXT100-DS25-⁰¹⁵
-⁰³⁰
-⁰⁵⁰

(D-sub connector cable assemblies can be ordered with manifolds.)
(Refer to manifold ordering.)



D-sub Connector Cable Assembly Terminal No.

Terminal number	Lead wire color	Dot marking
1	Black	None
2	Brown	None
3	Red	None
4	Orange	None
5	Yellow	None
6	Pink	None
7	Blue	None
8	Purple	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	Purple	None
18	Gray	None
19	Orange	Black
20	Red	White
21	Brown	White
22	Pink	Red
23	Gray	Red
24	Black	White
25	White	None

D-sub Connector Cable Assembly (Option)

Cable length (L)	Assembly part no.	Note
1.5 m	AXT100-DS25-015	Cable 0.3 mm ² x 25 cores
3 m	AXT100-DS25-030	
5 m	AXT100-DS25-050	

* For other commercial connectors, use a 25 pins type with female connector conforming to MIL-C-24308.

* Cannot be used for transfer wiring.

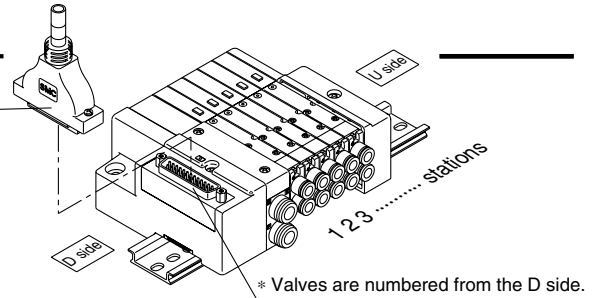
Electric Characteristics

Item	Characteristics
Conductor resistance Ω/km, 20°C	65 or less
Voltage limit VAC, 1 min.	1000
Insulation resistance MΩ/km, 20°C	5 or less

Note) The minimum bending radius for D-sub connector cables is 20 mm.

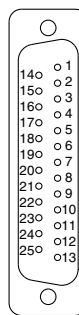
Connector manufacturers' example

- Fujitsu, Ltd.
- Japan Aviation Electronics Industry, Ltd.
- J.S.T. Mfg. Co., Ltd.
- Hirose Electric Co., Ltd.



Electrical wiring specifications

D-sub connector



Connector terminal no.

As the standard electrical wiring specifications, double wiring (connected to SOL. A and SOL. B) is adopted for the internal wiring of each station for 12 stations or less, regardless of valve and option types. Mixed single and double wiring is available as an option. For details, refer to page 2-3-54.

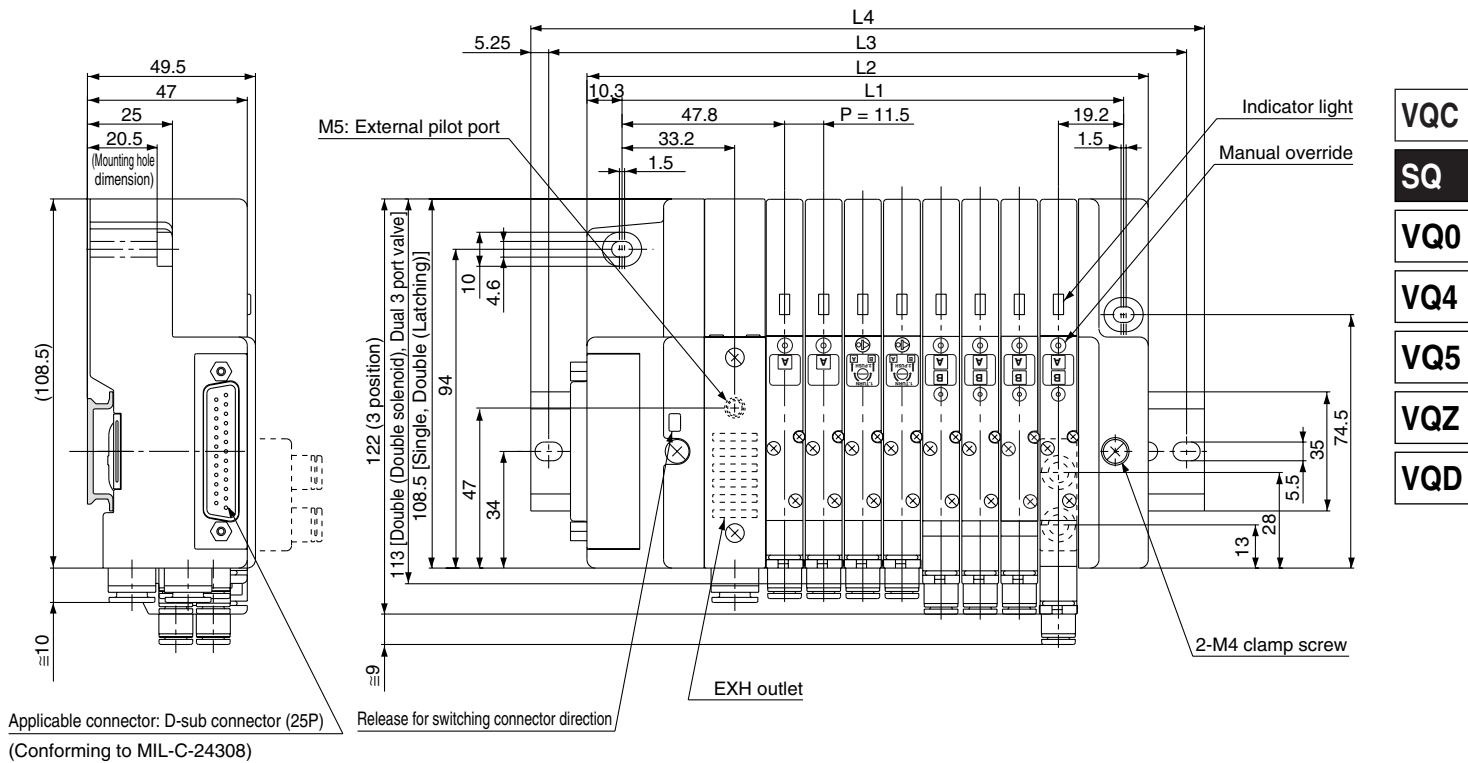
Lead wire colors for D-sub connector assembly (AXT100-DS25-⁰¹⁵ -⁰³⁰ -⁰⁵⁰)

	Terminal no.	Polarity	Lead wire color	Dot marking
1 station	SOL.A 1	(-)	(+)	Black None
	SOL.B 14	(-)	(+)	Yellow Black
2 stations	SOL.A 2	(-)	(+)	Brown None
	SOL.B 15	(-)	(+)	Pink Black
3 stations	SOL.A 3	(-)	(+)	Red None
	SOL.B 16	(-)	(+)	Blue White
4 stations	SOL.A 4	(-)	(+)	Orange None
	SOL.B 17	(-)	(+)	Purple None
5 stations	SOL.A 5	(-)	(+)	Yellow None
	SOL.B 18	(-)	(+)	Gray None
6 stations	SOL.A 6	(-)	(+)	Pink None
	SOL.B 19	(-)	(+)	Orange Black
7 stations	SOL.A 7	(-)	(+)	Blue None
	SOL.B 20	(-)	(+)	Red White
8 stations	SOL.A 8	(-)	(+)	Purple White
	SOL.B 21	(-)	(+)	Brown White
9 stations	SOL.A 9	(-)	(+)	Gray Black
	SOL.B 22	(-)	(+)	Pink Red
10 stations	SOL.A 10	(-)	(+)	White Black
	SOL.B 23	(-)	(+)	Gray Red
11 stations	SOL.A 11	(-)	(+)	White Red
	SOL.B 24	(-)	(+)	Black White
12 stations	SOL.A 12	(-)	(+)	Yellow Red
	SOL.B 25	(-)	(+)	White None
	COM. 13	(+)	(-)	Orange Red

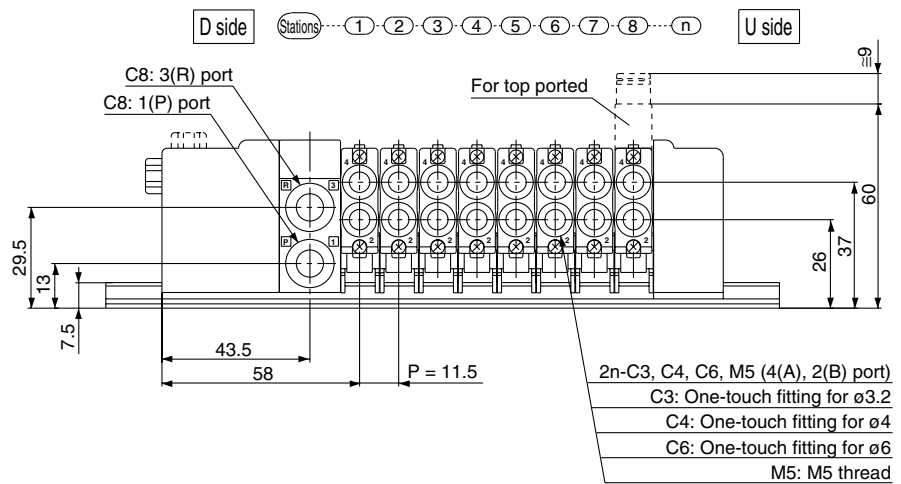
Note) Positive common specifications Negative common specifications

Note) When using the negative common specifications, use valves for negative common.

Plug-in Unit Series SQ1000



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



Dimensions

Formula: $L1 = 11.5n + 55.5$, $L2 = 11.5n + 73$ n: Stations (Maximum 24 stations)

L	n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1		67	78.5	90	101.5	113	124.5	136	147.5	159	170.5	182	193.5	205	216.5	228	239.5	251	262.5	274	285.5	297	308.5	320	331.5
L2		84.5	96	107.5	119	130.5	142	153.5	165	176.5	188	199.5	211	222.5	234	245.5	257	268.5	280	291.5	303	314.5	326	337.5	349
L3		112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	300	312.5	325	337.5	350	362.5	375	
L4		123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	310.5	323	335.5	348	360.5	373	385.5	