

# Series SQ1000 Plug-in Unit

## How to Order Manifold

SS5Q13 — **08** **FD2** — **D** □

### Stations

01	1 station
⋮	⋮
24 <sup>Note1)</sup>	24 stations

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

### Option

Nil	None
02 to 24 <sup>(1)</sup>	DIN rail length specified
B	Back pressure check valve
K <sup>(2)</sup>	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

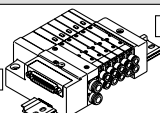
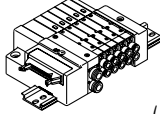
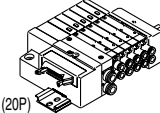
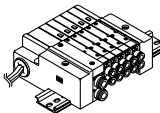
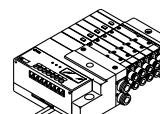
Note 2) Standard wiring specifications are for double wiring. Indicate wiring specifications for single wiring or mixed single and double wiring, or when exceeding the standard maximum number of stations. (Except L kit.)

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

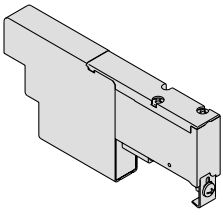
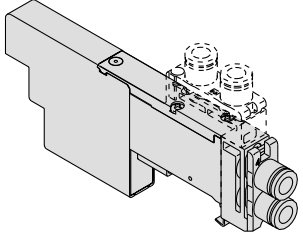
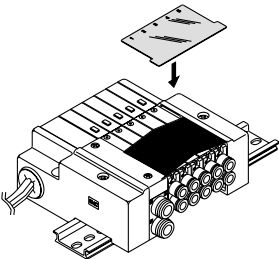
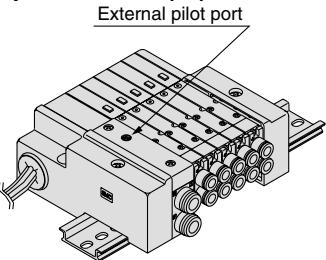
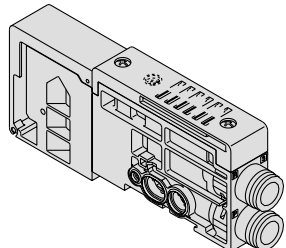
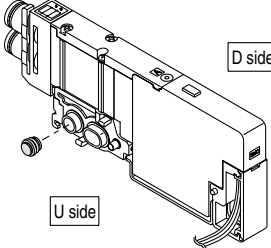
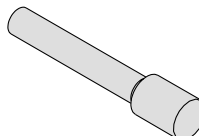
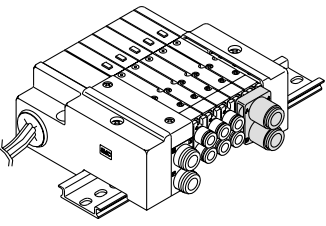
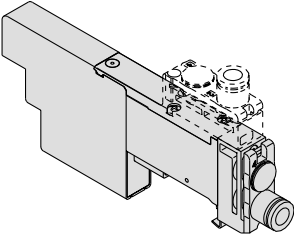
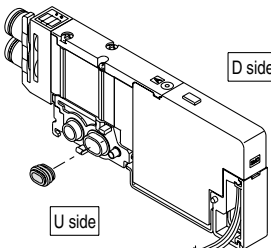
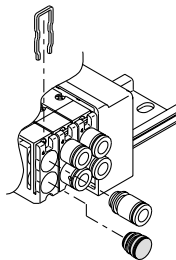
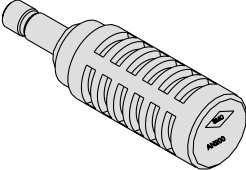
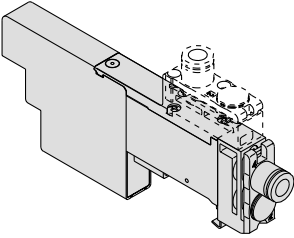
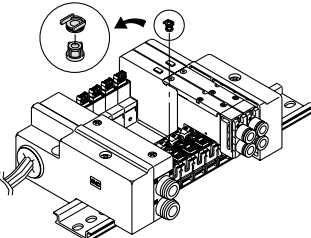
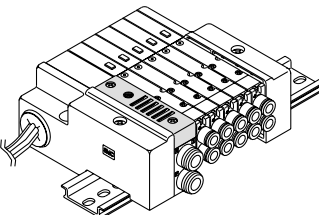
Kit type	Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	Max. number of solenoids <sup>(2)</sup>
<b>F</b> kit  D-sub connector kit	<b>FD0</b>	D side	1 to 12 stations	24 stations	24
	<b>FD1</b>	D-sub connector (25P) kit, without cable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

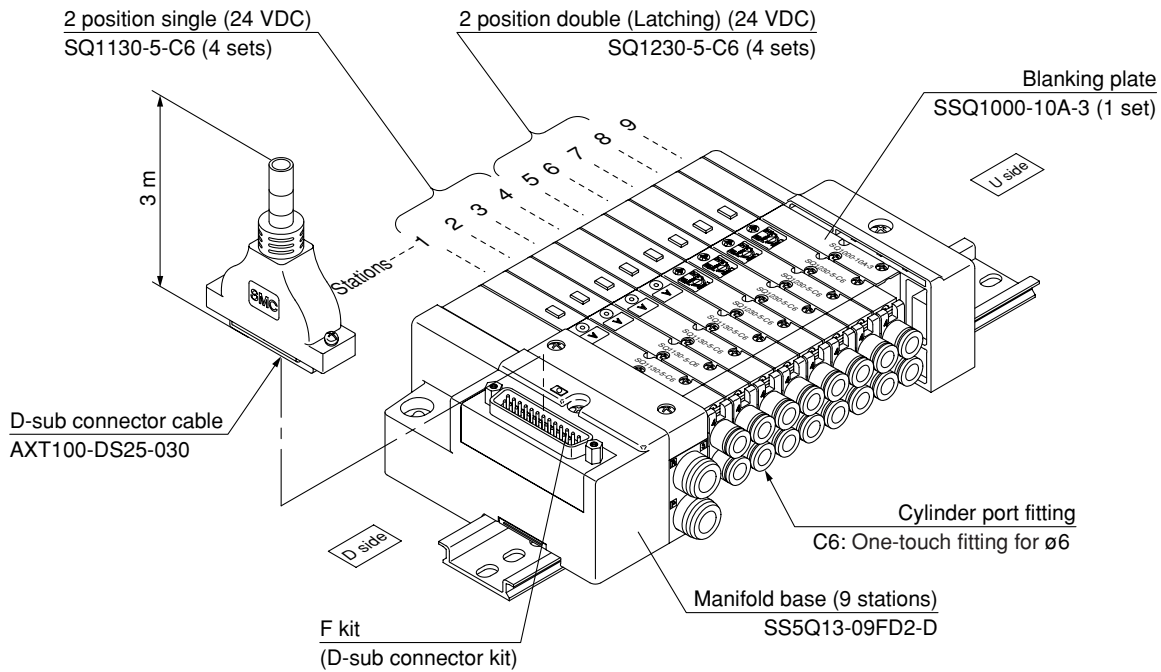
## Manifold Option

<p><b>Blanking plate</b> P. 2-3-44 <b>SSQ1000-10A-3</b></p> 	<p><b>Individual SUP/EXH spacer</b> P. 2-3-45 <b>SSQ1000-PR1-3-</b> C6 L6</p> 	<p><b>Name plate (-N)</b> P. 2-3-47 <b>SSQ1000-N3-n</b></p> 	<p><b>External pilot specifications (-R)</b> P. 2-3-48</p> <p>External pilot port</p> 																																										
<p><b>SUP/EXH block</b> P. 2-3-44 <b>SSQ1000-PR-3-C8 (-S)</b></p> 	<p><b>SUP block plate</b> P. 2-3-46 <b>SSQ1000-B-P</b></p> <p>D side</p> <p>U side</p> 	<p><b>Blanking plug</b> P. 2-3-47 <b>KQ2P-23/04/06/08</b></p> 	<p><b>Dual flow fitting</b> P. 2-3-48 <b>SSQ1000-52A-</b> C8 N9</p> 																																										
<p><b>Individual SUP spacer</b> P. 2-3-44 <b>SSQ1000-P-3-</b> C6 L6</p> 	<p><b>EXH block plate</b> P. 2-3-46 <b>SSQ1000-B-R</b></p> <p>D side</p> <p>U side</p> 	<p><b>Port plug</b> P. 2-3-47 <b>VVQZ100-CP</b></p> 	<p><b>Silencer (For EXH port)</b> P. 2-3-48</p> 																																										
<p><b>Individual EXH spacer</b> P. 2-3-45 <b>SSQ1000-R-3-</b> C6 L6</p> 	<p><b>Back pressure check valve (-B)</b> P. 2-3-46 <b>SSQ1000-BP</b></p> 	<p><b>Built-in silencer (-S)</b> P. 2-3-47</p> 	<p><b>Special wiring specifications (-K)</b> P. 2-3-49</p> <p>D-sub connector</p> <table border="0"> <tr> <td>Terminal no.</td> <td></td> <td></td> </tr> <tr> <td>14 0</td> <td>01</td> <td>SOLA 1 (-)</td> </tr> <tr> <td>15 0</td> <td>02</td> <td>SOLA 14 (-)</td> </tr> <tr> <td>16 0</td> <td>03</td> <td>SOLA 2 (-)</td> </tr> <tr> <td>17 0</td> <td>04</td> <td>SOLA 3 (-)</td> </tr> <tr> <td>18 0</td> <td>05</td> <td>SOLA 15 (-)</td> </tr> <tr> <td>19 0</td> <td>06</td> <td>SOLB 16 (-)</td> </tr> <tr> <td>20 0</td> <td>07</td> <td>SOLA 4 (-)</td> </tr> <tr> <td>21 0</td> <td>08</td> <td>SOLA 17 (-)</td> </tr> <tr> <td>22 0</td> <td>09</td> <td>SOLA 5 (-)</td> </tr> <tr> <td>23 0</td> <td>10</td> <td>SOLA 18 (-)</td> </tr> <tr> <td>24 0</td> <td>11</td> <td>SOLA 6 (-)</td> </tr> <tr> <td>25 0</td> <td>12</td> <td>SOLB 19 (-)</td> </tr> <tr> <td></td> <td>13</td> <td>COM. 13 (+)</td> </tr> </table> <p>Connector terminal no.</p>	Terminal no.			14 0	01	SOLA 1 (-)	15 0	02	SOLA 14 (-)	16 0	03	SOLA 2 (-)	17 0	04	SOLA 3 (-)	18 0	05	SOLA 15 (-)	19 0	06	SOLB 16 (-)	20 0	07	SOLA 4 (-)	21 0	08	SOLA 17 (-)	22 0	09	SOLA 5 (-)	23 0	10	SOLA 18 (-)	24 0	11	SOLA 6 (-)	25 0	12	SOLB 19 (-)		13	COM. 13 (+)
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	13	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 <sup>(3)</sup>	5 station weight (g) <sup>(4)</sup>	1 station weight (g) <sup>(4)</sup>				
	Port size <sup>(1)</sup>											
	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)	SQ1□30 SQ1□31	F kit: D-sub connector		1 to 12 stations	420	20			
			C4 (For ø4)		C6 (For ø6)	M5 (M5 thread)	26P	P kit: Flat ribbon cable		1 to 12 stations	420	20
								20P	1 to 9 stations			
		Top <sup>(2)</sup>	L3 (For ø3.2)		L4 (For ø4)	L6 (For ø6)	L5 (M5 thread)	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							

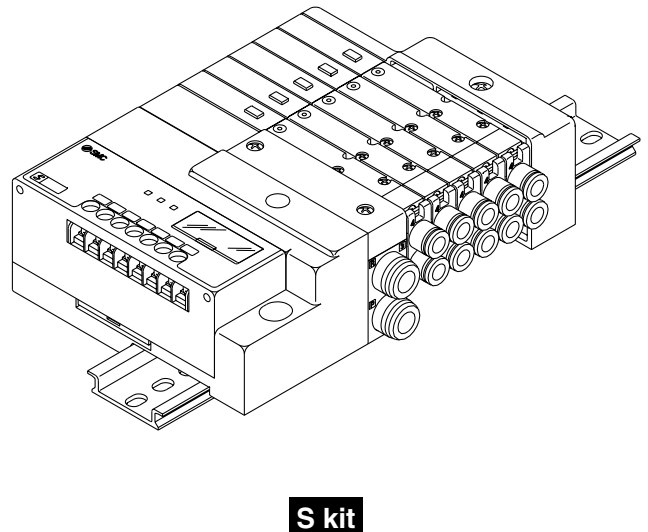
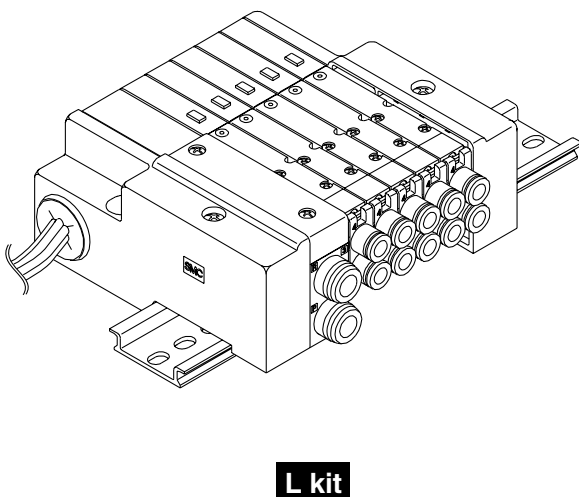
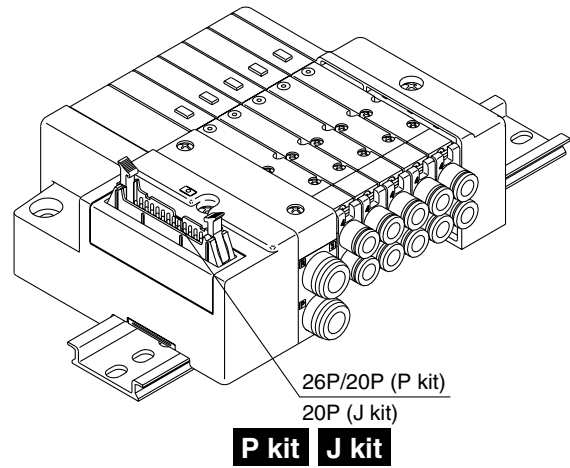
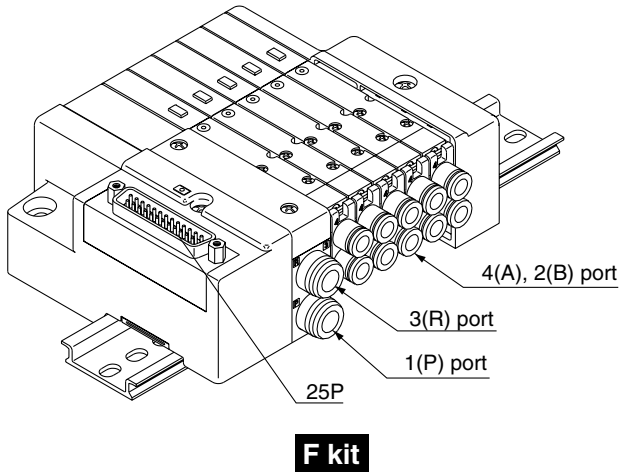


Note 1) One-touch fittings in inch sizes are also available. For details, refer to page 2-3-56.

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.

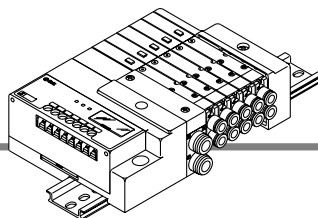
Note 4) Except valves. For valve weight, refer to page 2-3-10.



VQC  
SQ  
VQ0  
VQ4  
VQ5  
VQZ  
VQD

# Series SQ1000

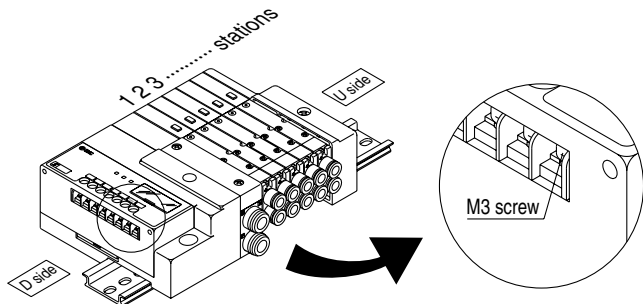
## S Kit (Serial transmission unit)



- The serial transmission system reduces wiring work, while minimizing wiring and saving space.
- The maximum number of stations is 8. (16 as an option). Only for type J2 and R2, the maximum stations are 4 (8 as an option).

### Manifold Specifications

Series	Porting specifications			Maximum number of stations
	Port location	Port size		
		1(P), 3(R)	4(A), 2(B)	
SQ1000	Side, Top	C8	C3, C4, C6, M5	8 stations



- Stations are counted from station 1 on the D side.
- Double wiring (connected to SOL. A and SOL. B) is adopted for the internal wiring of each station, regardless of valve and option types.

Item	Specifications
External power supply	24 VDC, +10%, -5%
Current consumption (Inside unit)	0.1 A or less

### ● Corresponding SI unit output numbers and solenoid coils <Wiring example 1>

SI unit output no.	0	1	2	3	4	5	6	7	8	9
	A B	A B	A B	A None	A None	A B				
SI unit	Double		Double		Single		Single		Single	
Stations	1		2		3		4		5	

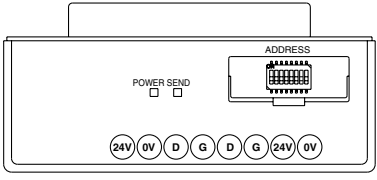
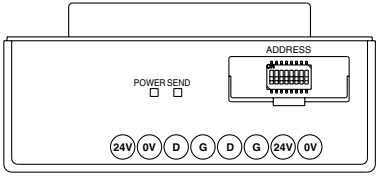
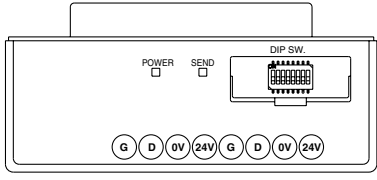
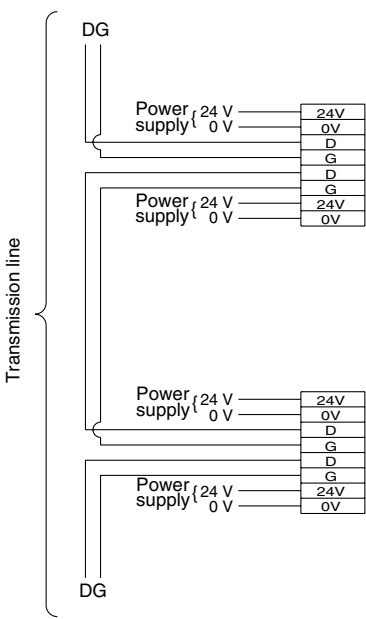
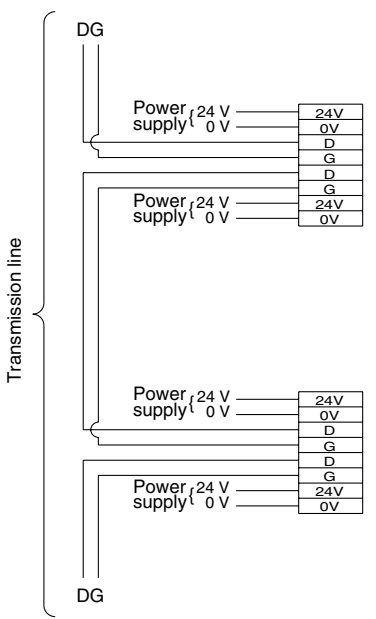
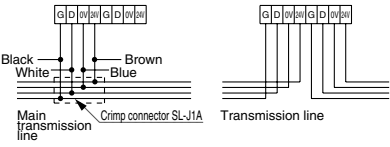
Double wiring (Standard)

### <Wiring example 2>

\* Mixed wiring is available as an option. Specify the wiring specification by means of the manifold specification sheet. Refer to page 2-3-54 for details.

SI unit output no.	0	1	2	3	4	5	6	7
	A B	A B	A B	A	A	A B		
SI unit	Double		Double		Single		Double	
Stations	1		2		3		5	

Mixed single and double wiring (Option)

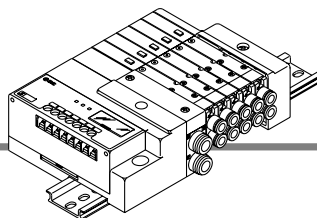
	Type SDF NKE Corporation Uni-wire System	Type SDH NKE Corporation Uni-wire H System	Type SDJ1, SDJ2 SUNX Corporation S-LINK System																	
Name of terminal block, LED																				
	<table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Light ON with power input (Light ON when normal, flickers when voltage is low)</td> </tr> <tr> <td>SEND</td> <td>Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON</td> </tr> </tbody> </table>	LED	Description	POWER	Light ON with power input (Light ON when normal, flickers when voltage is low)	SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON	<table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Light ON with power input (Light ON when normal, flickers when voltage is low)</td> </tr> <tr> <td>SEND</td> <td>Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON</td> </tr> </tbody> </table>	LED	Description	POWER	Light ON with power input (Light ON when normal, flickers when voltage is low)	SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON	<table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Light ON with power input</td> </tr> <tr> <td>SEND</td> <td>Transmission indicator Normal: Blinks, Abnormal: Blinks slowly</td> </tr> </tbody> </table>	LED	Description	POWER	Light ON with power input	SEND
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Cable wiring			<p>a) Type T branching multi-drop wiring (S-LINK System)</p> <p>b) Crossover wiring (Sensor link system)</p>  <p>The above is the example of using dedicated S-LINK flat ribbon cable SL-RCM□00.</p>																	
Note	<ul style="list-style-type: none"> <li>• Uni-wire System Send unit: SD-120</li> <li>• No. of output points, 16 points</li> </ul>	<ul style="list-style-type: none"> <li>• Uni-wire H System Send unit: SD-H2</li> <li>• No. of output points, 16 points</li> </ul>	<ul style="list-style-type: none"> <li>• S-LINK System S-LINK controller: SL-CU1</li> <li>• No. of output points, 16 points (Type SDJ1) No. of output points, 8 points (Type SDJ2)</li> </ul>																	

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

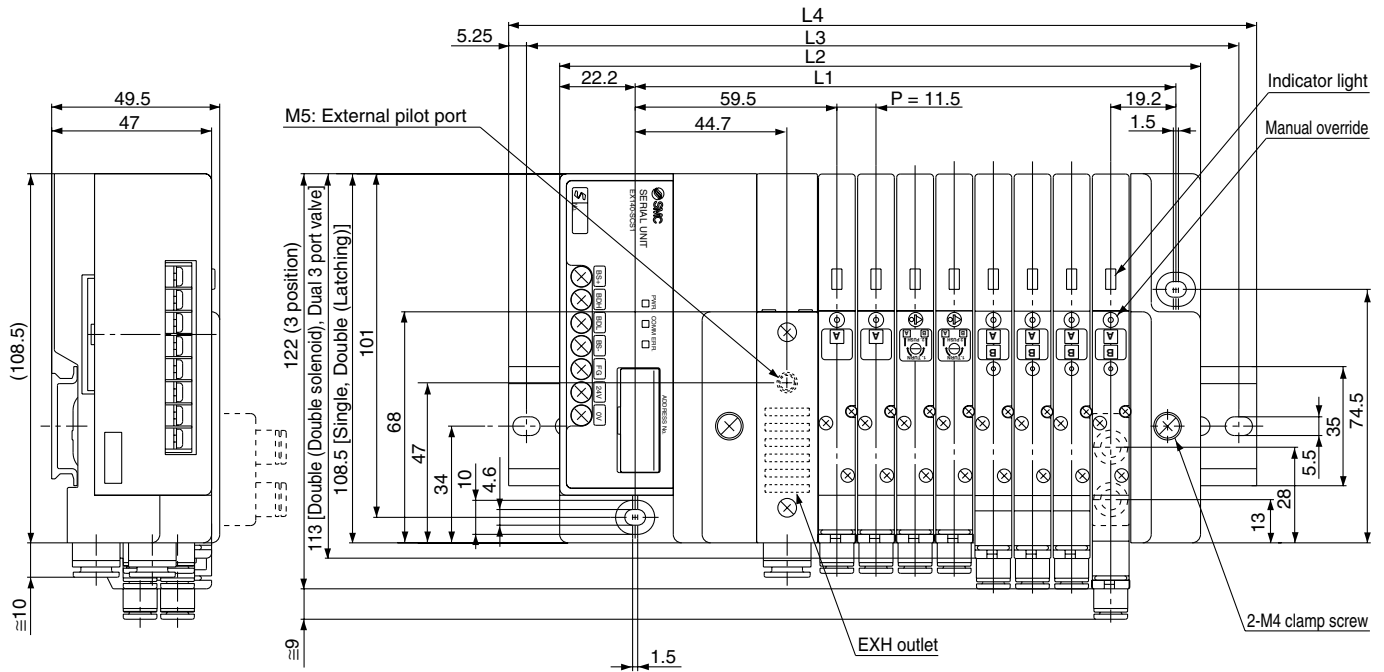
# Series SQ1000

# S

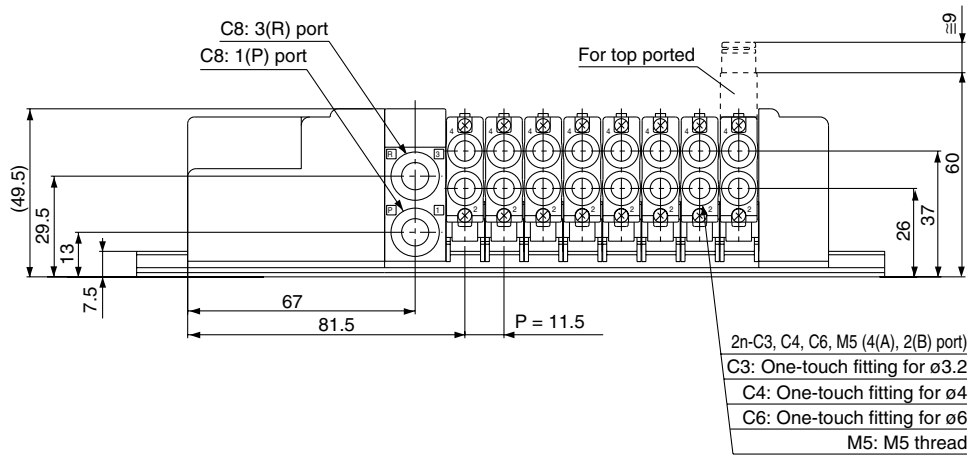
## Kit (Serial transmission unit)



	Type SDQ OMRON Corporation DeviceNet, CompoBus/D	Type SDR1, SDR2 OMRON Corporation CompoBus/S System	Type SDV Mitsubishi Electric Corporation CC-LINK System																											
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Note	<ul style="list-style-type: none"> <li>• DeviceNet</li> <li>• OMRON Corporation CompoBus/D System Master unit: C200HW-DRM21</li> <li>• No. of output points, 16 points</li> </ul>	<ul style="list-style-type: none"> <li>• CompoBus/S System Master unit: C200HW-SRM21 Master unit: CQM1-SRM21</li> <li>• No. of output points, 16 points (Type SDR1) No. of output points, 8 points (Type SDR2)</li> </ul>	<ul style="list-style-type: none"> <li>• CC-LINK System Master unit: AJ61BT11 Master unit: A1SJ61BT11 Master unit: AJ61QBT11 Master unit: A1SJ61QBT11</li> <li>• No. of output points, 16 points</li> </ul>																											



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



## Dimensions

Formula:  $L1 = 11.5n + 67$ ,  $L2 = 11.5n + 96.5$  n: Stations (Maximum 16 stations)

L \ n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	78.5	90	101.5	113	124.5	136	147.5	159	170.5	182	193.5	205	216.5	228	239.5	251
L2	108	119.5	131	142.5	154	165.5	177	188.5	200	211.5	223	234.5	246	257.5	269	280.5
L3	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	300	
L4	148	160.5	173	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	310.5