

5 Port Solenoid Valve

Series SZ3000

Serial Transmission Type

Type 60S

How to Order

SS5Z3-60S **Q** **D**-05 **U**

Model

Q	DeviceNet, CompoBus/D (OMRON Corp.)
R1	OMRON Corp.: CompoBus/S System (16 output points)
R2	OMRON Corp.: CompoBus/S System (8 output points)
V	Mitsubishi Electric Corp.: CC-LINK System
F	NKE Corp.: Uni-wire System (16 output points)
H	NKE Corp.: Uni-wire H System
J1	SUNX Corp.: S-LINK System (16 output points)
J2	SUNX Corp.: S-LINK System (8 output points)
0	Without SI unit

SI unit mounting position

D	D side
----------	--------

This should be indicated even without SI unit.

Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout (Up to 16 solenoids possible.)
⋮	⋮	
16	16 stations	

Note 1) Double wiring specifications: Single, double, 3 position and 4 position solenoid valves can be used at all of the manifold stations.

Note 2) Specified layout: Indicate wiring specifications on the manifold specification sheet. (Note that double, 3 and 4 position valves cannot be used where single solenoid wiring has been specified.)

Note 3) R2 and J2 are available with up to 8 solenoids.

Option

When a longer DIN rail is desired than the specified stations, specify the station number to be required.

SUP/EXH block fitting specifications

Nil	Straight
L	Elbow type (Upward)
B	Elbow type (Downward)

Pilot type

Nil	Internal pilot
R	External pilot

SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)
M*	Special specifications

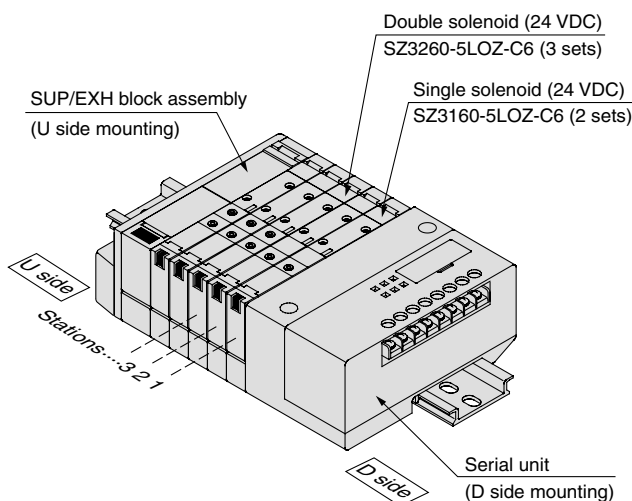


* For special specifications, indicate separately by the manifold specification sheet.

Note) A total of up to 3 SUP/EXH blocks can be mounted. Please contact SMC if 4 or more will be mounted.

How to Order Valve Manifold Assembly

Ordering example (OMRON Corporation compatible serial unit)



SS5Z3-60SR1D-05U 1 set (manifold part number)
*SZ3160-5LOZ-C6 2 sets (Single solenoid part no.)
*SZ3260-5LOZ-C6 3 sets (Double solenoid part no.)

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

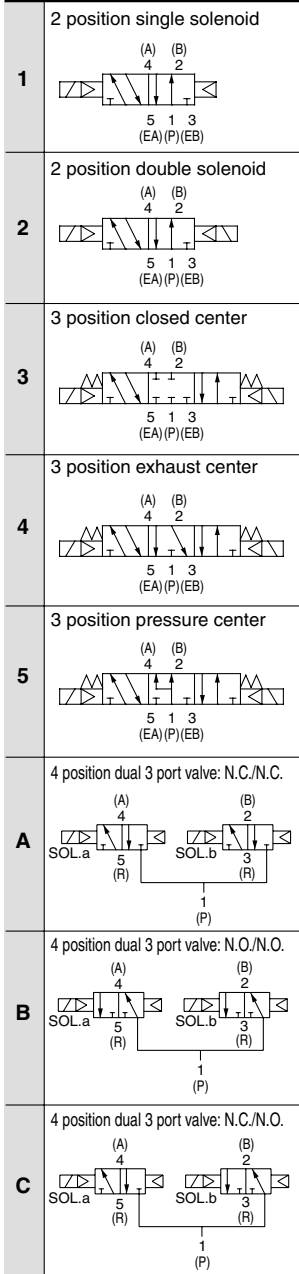
Stations are counted from D side as the 1st one. Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing.

When entry of part numbers becomes complicated, indicate on the manifold specification sheet.

How to Order Solenoid Valves

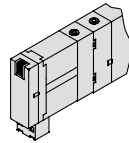
SZ3 1 60 - 5LOZ - C6

Type of actuation

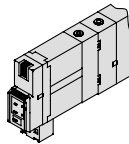


Switch specifications

Nil: Without switch

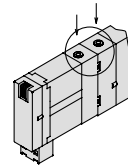


J: With switch

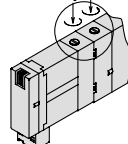


Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type



* For switch operation, refer to page 1-3-2.

Back pressure check valve

Nil	None
K	Built-in

- The built-in back pressure check valve type has an effective area approximately 20% smaller.
- The 3 position closed center and 3 position pressure center are not available with back pressure check valve.

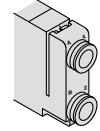
Pilot type

Nil	Internal pilot
R	External pilot

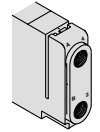
- Dual 3 port valves are not available with external pilot specifications.

A, B port size

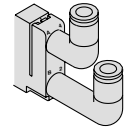
C4: One-touch fitting for ø4
C6: One-touch fitting for ø6



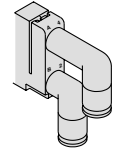
M5: M5 x 0.5



Elbow fitting assembly (Upward)
L4: ø4 elbow fitting assembly
L6: ø6 elbow fitting assembly



Elbow fitting assembly (Downward)
B4: ø4 elbow fitting assembly
B6: ø6 elbow fitting assembly



SV

SZ

SY

SYJ

SX

Series SZ3000

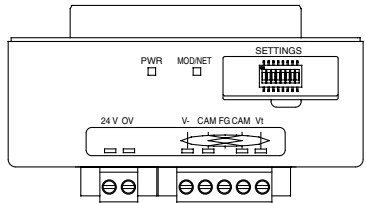
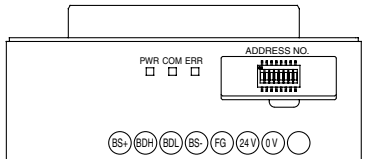
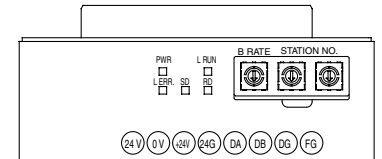
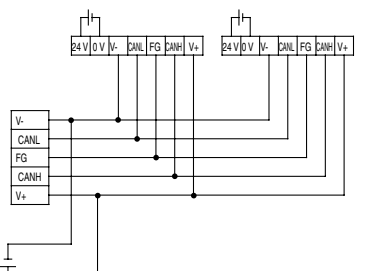
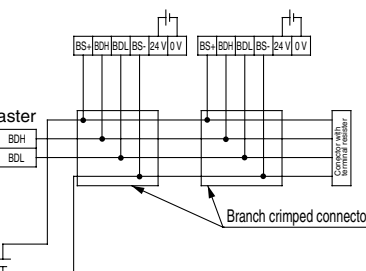
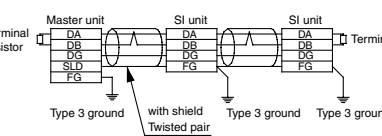
Specifications

Specifications

External power supply	24 VDC +10%/–5%	
Current consumption (Inside unit)	0.1 A	F, H, J1, J2, Q, R1, R2, V

SI Unit Part No.

Symbol	Specifications	Part no.
Q	DeviceNet, CompoBus/D (OMRON Corp.)	EX140-SDN1
R1	OMRON Corp.: CompoBus/S System (16 output points)	EX140-SCS1
R2	OMRON Corp.: CompoBus/S System (8 output points)	EX140-SCS2
V	Mitsubishi Electric Corp.: CC-LINK System	EX140-SMJ1

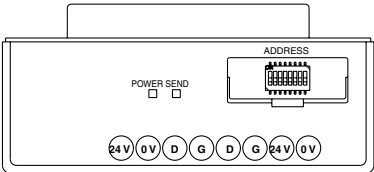
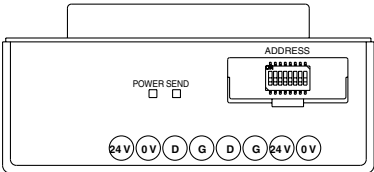
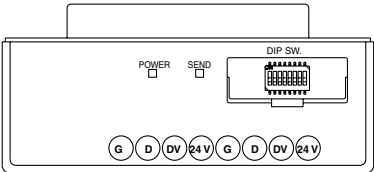
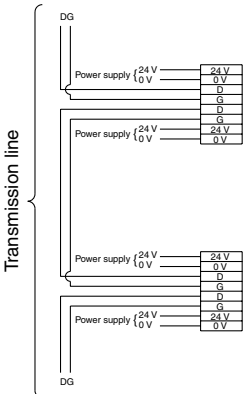
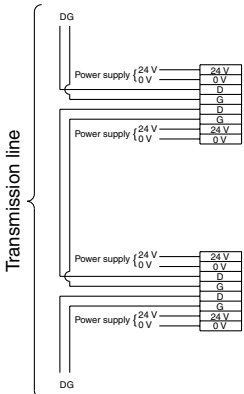
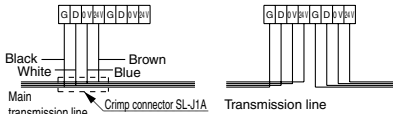
	Type SQ DeviceNet	Type SR1/SR2 OMRON Corporation CompoBus/S System	Type SV Mitsubishi Electric Corporation CC-LINK System																										
Name of terminal block, LED	 <table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Green light ON with circuit power input Light OFF: When the unit is not online or circuit power is OFF</td> </tr> <tr> <td>MOD/NET</td> <td>Green light ON continuously: When the unit is online and in operation Red light blinks: When a reversible abnormal transmission occurs Red light ON continuously: When irreversible abnormal transmission occurs or the same line is unable to go online</td> </tr> </tbody> </table>	LED	Description	POWER	Green light ON with circuit power input Light OFF: When the unit is not online or circuit power is OFF	MOD/NET	Green light ON continuously: When the unit is online and in operation Red light blinks: When a reversible abnormal transmission occurs Red light ON continuously: When irreversible abnormal transmission occurs or the same line is unable to go online	 <table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>PWR.</td> <td>Light ON with transmission power input, light Off without it</td> </tr> <tr> <td>COMM</td> <td>Light ON with normal transmission, light OFF with abnormal or standby transmission</td> </tr> <tr> <td>ERR.</td> <td>Light ON with abnormal transmission, light Off with normal or standby transmission</td> </tr> </tbody> </table>	LED	Description	PWR.	Light ON with transmission power input, light Off without it	COMM	Light ON with normal transmission, light OFF with abnormal or standby transmission	ERR.	Light ON with abnormal transmission, light Off with normal or standby transmission	 <table border="1"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>PWR.</td> <td>Light ON with transmission power input, light Off without it</td> </tr> <tr> <td>L RUN</td> <td>Light ON when receiving normal data</td> </tr> <tr> <td>SD</td> <td>Light ON when sending data</td> </tr> <tr> <td>RD</td> <td>Light ON when receiving data</td> </tr> <tr> <td>L ERR.</td> <td>Light ON with transmission error/setting error, light blinks with changes in the station no. or transmission speed setting</td> </tr> </tbody> </table>	LED	Description	PWR.	Light ON with transmission power input, light Off without it	L RUN	Light ON when receiving normal data	SD	Light ON when sending data	RD	Light ON when receiving data	L ERR.	Light ON with transmission error/setting error, light blinks with changes in the station no. or transmission speed setting
LED	Description																												
POWER	Green light ON with circuit power input Light OFF: When the unit is not online or circuit power is OFF																												
MOD/NET	Green light ON continuously: When the unit is online and in operation Red light blinks: When a reversible abnormal transmission occurs Red light ON continuously: When irreversible abnormal transmission occurs or the same line is unable to go online																												
LED	Description																												
PWR.	Light ON with transmission power input, light Off without it																												
COMM	Light ON with normal transmission, light OFF with abnormal or standby transmission																												
ERR.	Light ON with abnormal transmission, light Off with normal or standby transmission																												
LED	Description																												
PWR.	Light ON with transmission power input, light Off without it																												
L RUN	Light ON when receiving normal data																												
SD	Light ON when sending data																												
RD	Light ON when receiving data																												
L ERR.	Light ON with transmission error/setting error, light blinks with changes in the station no. or transmission speed setting																												
Note	<ul style="list-style-type: none"> • DeviceNet • OMRON Corporation CompoBus/D System Master unit: C200HW-DRM21 • No. of output points, 16 points 	<ul style="list-style-type: none"> • CompoBus/S System Master unit: C200HW-SRM21 Master unit: CQM1-SRM21 • No. of output points, 16 points (Type SR1) No. of output points, 8 points (Type SR2) 	<ul style="list-style-type: none"> • CC-LINK System Master unit: AJ61BT11 Master unit: A1SJ61BT11 Master unit: AJ61QBT11 Master unit: A1SJ61QBT11 • No. of output points, 16 points 																										
Cable wiring																													

Cassette Type Manifold Serial Transmission Type **Series SZ3000**

SI Unit Part No.

Symbol	Specifications	Part no.
F	NKE Corp.: Uni-wire System	EX140-SUW1
H	NKE Corp.: Uni-wire H System	EX140-SUH1
J1	SUNX Corp.: S-LINK System (16 output points)	EX140-SSL1
J2	SUNX Corp.: S-LINK System (8 output points)	EX140-SSL2

SV
SZ
SY
SYJ
SX

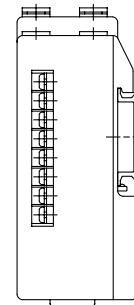
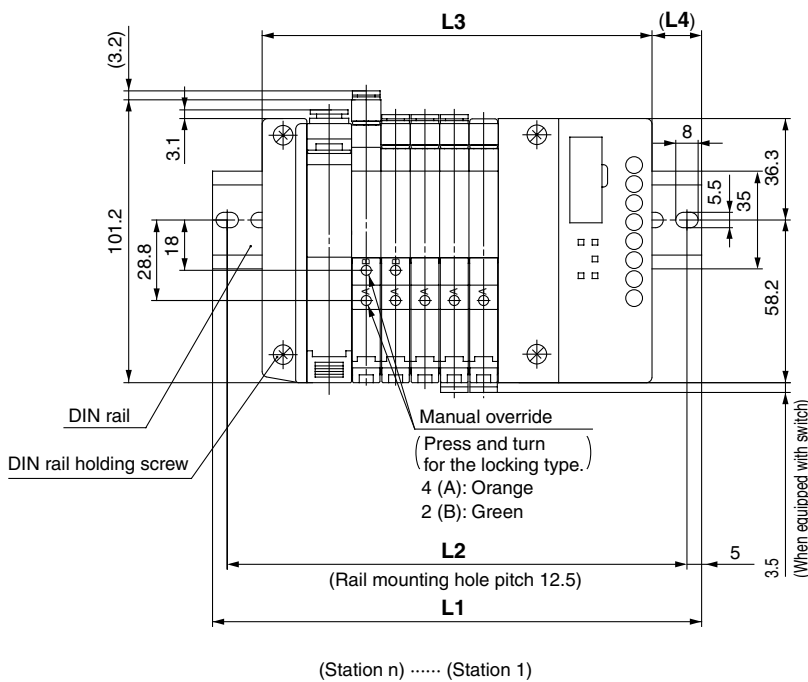
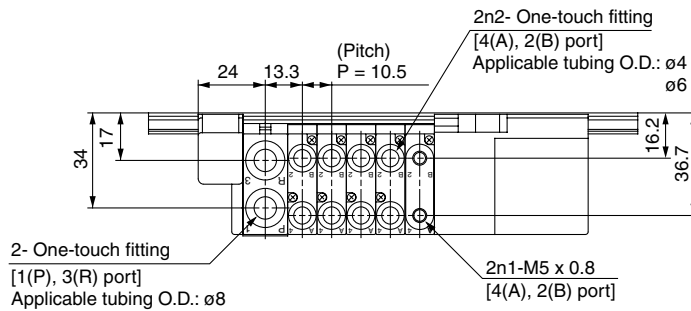
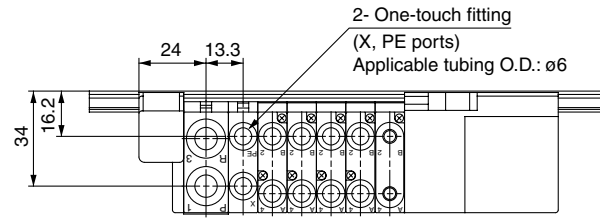
	Type SF NKE Corporation Uni-wire System	Type SH NKE Corporation Uni-wire H System	Type SJ1/SJ2 SUNX Corporation S-LINK System																		
Name of terminal block, LED	 <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Lighting when power is turned ON (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	Lighting when power is turned ON (Light ON when normal, flickers when voltage is low)	SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON	 <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Lighting when power is turned ON (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	Lighting when power is turned ON (Light ON when normal, flickers when voltage is low)	SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON	 <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>LED</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Lighting when power is turned ON</td> </tr> <tr> <td>SEND</td> <td>Transmission indicator Normal: Blinks, Abnormal: Blinks slowly</td> </tr> </tbody> </table>	LED	Description	POWER	Lighting when power is turned ON	SEND	Transmission indicator Normal: Blinks, Abnormal: Blinks slowly
LED	Description																				
POWER	Lighting when power is turned ON (Light ON when normal, flickers when voltage is low)																				
SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON																				
LED	Description																				
POWER	Lighting when power is turned ON (Light ON when normal, flickers when voltage is low)																				
SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON																				
LED	Description																				
POWER	Lighting when power is turned ON																				
SEND	Transmission indicator Normal: Blinks, Abnormal: Blinks slowly																				
Note	<ul style="list-style-type: none"> • Uni-wire System Send unit: SD-120 • No. of output points, 16 points 	<ul style="list-style-type: none"> • Uni-wire H System Send unit: SD-H2 • No. of output points, 16 points 	<ul style="list-style-type: none"> • S-LINK System S-LINK controller: SL-CU1 • No. of output points, 16 points (Type SJ1) No. of output points, 8 points (Type SJ2) 																		
Cable wiring			<p>a) Type T branching multi-drop wiring (S-LINK System) 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>																		

Series SZ3000

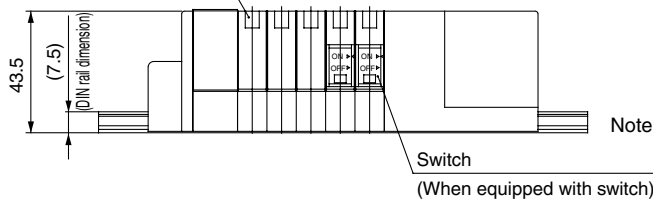
Dimensions: SZ3000 Serial Transmission Type

SS5Z3-60S □D- Stations U

[With external pilot]



Light/Surge voltage suppressor
A side: Orange
B side: Green



Note) For manifold dimensions with elbow fitting, refer to page 1-3-24.

Internal Pilot Manifold L Dimension n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9	10
L1	135.5	148	160.5	173	185.5	185.5	198	210.5	223
L2	125	137.5	150	162.5	175	175	187.5	200	212.5
L3	108	118.5	129	139.5	150	160.5	171	181.5	192
L4	14	15	16	17	18	12.5	13.5	14.5	15.5

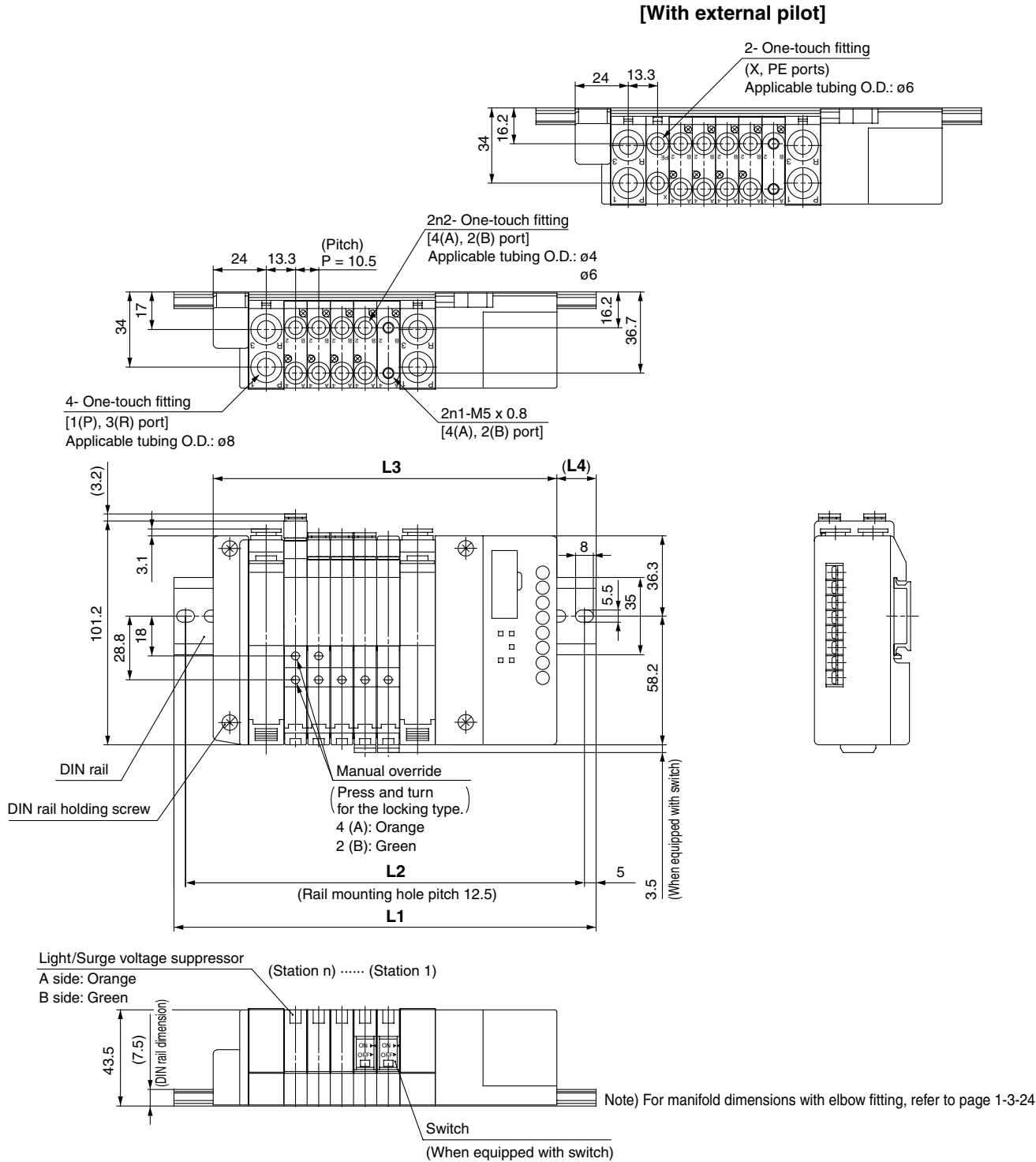
External Pilot Manifold L Dimension n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9	10
L1	148	160.5	173	185.5	185.5	198	210.5	223	235.5
L2	137.5	150	162.5	175	175	187.5	200	212.5	225
L3	118.5	129	139.5	150	160.5	171	181.5	192	202.5
L4	15	16	17	18	12.5	13.5	14.5	15.5	16.5

Cassette Type Manifold Serial Transmission Type **Series SZ3000**

Dimensions: SZ3000 Serial Transmission Type

SS5Z3-60S □D- Stations B



- SV
- SZ
- SY
- SYJ
- SX

Internal Pilot Manifold L Dimension n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9
L1	148	160.5	173	185.5	198	210.5	210.5	223
L2	137.5	150	162.5	175	187.5	200	200	212.5
L3	124	134.5	145	155.5	166	176.5	187	197.5
L4	12	13	14	15	16	17	12	13

L \ n	10	11	12	13	14	15	16
L1	235.5	248	260.5	273	285.5	285.5	298
L2	225	237.5	250	262.5	275	275	287.5
L3	208	218.5	229	239.5	250	260.5	271
L4	14	15	16	17	18	12.5	13.5

External Pilot Manifold L Dimension n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9
L1	160.5	173	185.5	198	210.5	210.5	223	235.5
L2	150	162.5	175	187.5	200	200	212.5	225
L3	134.5	145	155.5	166	176.5	187	197.5	208
L4	13	14	15	16	17	12	13	14

L \ n	10	11	12	13	14	15	16
L1	248	260.5	273	285.5	285.5	298	310.5
L2	237.5	250	262.5	275	275	287.5	300
L3	218.5	229	239.5	250	260.5	271	281.5
L4	15	16	17	18	12.5	13.5	14.5

Series SZ3000

Made to Order Specifications:

Please contact SMC for detailed specifications, delivery and pricing.

1 Main Valve Fluoro Rubber Specifications -X90

Fluoro rubber is used for rubber parts of the main valve to allow use in applications such as the following.

1. When using a lubricant other than the recommended turbine oil, and there is a possibility of malfunction due to swelling of the spool valve seals.
2. When ozone enters or is generated in the air supply.

Model no.

SZ3 -X90

- Entry is the same as standard products. Specifications and performance are the same as standard products.

Note) Because in series -X90 fluoro rubber is used for only main valve, the rubber parts of the application/usage in conditions requiring heat resistance should be avoided.

2 Plug-in Manifold Connector and Serial Unit Mounted on Side U

Products are also available with the plug-in manifold connector mounting position and the serial unit mounting position on the reverse side (U side). For details about part numbers and wiring specifications, etc., please contact SMC.

