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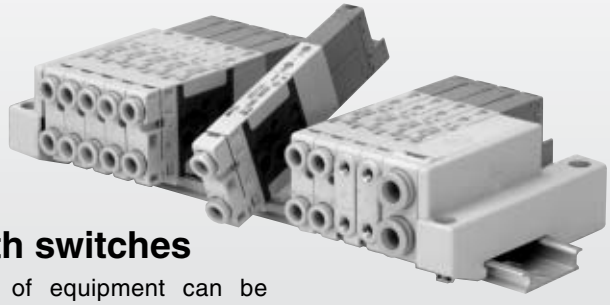
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Find the *SMC SZ3360-5NLOZ-C6* at our website: *Click HERE*

5 Port Solenoid Valve
Rubber Seal, Body Ported
Cassette Type Manifold
Series SZ3000

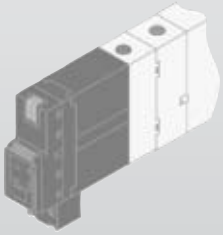
The plug-in cassette system makes valve replacement easy.

A plug-in manifold has been created with a height of 43.5 mm (including DIN rail). Valve replacement can be performed easily. Moreover, since spare terminates for wiring (receptacle housings) are contained inside the manifold, terminal changes (additions) can be performed quickly and easily. (The number of additional stations is limited by the manifold specifications. For details, refer to page 1-3-19.)

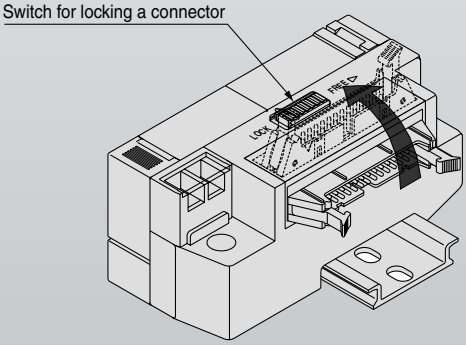


Valves equipped with switches

Adjustment and maintenance of equipment can be performed with greater safety, since the power to each valve can be shut off individually with built-in switches.



The connector entry direction can be changed from top to side with a simple operation.



High speed response of 10 ms

**(SZ3000 double, 0.5 MPa
24 VDC, Without surge voltage suppressor)**

Low power consumption and a faster response time of 10 ms are obtained with a unique pilot valve construction.

Low power consumption: 0.6 W

(Current draw: 25 mA at 24 VDC)

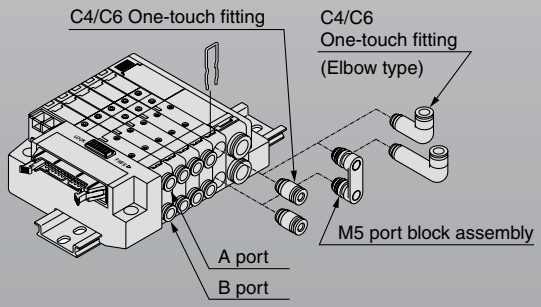
Low power consumption enables direct operation by a PLC. Cost savings are realized through the use of a smaller power supply and the elimination of relay cards.

High reliability and long service life exceeding 50 million cycles or more

High reliability and long service life have been achieved with guide ring construction which prevents eccentricity of the main valve, and a return piston with increased return force. (Single and double solenoid type)

Easy attaching/detaching of the tubing

The interval between ports A and B is a wide 20.5 mm, allowing easy changes of fittings and tubing.



Size and weight reduced by eliminating the manifold base

Series	SZ3000
Height	△31% reduction
Weight	△12% reduction

(Compared with SX3000-45 with DIN rail manifold and 5 stations)

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⚠Precautions 1

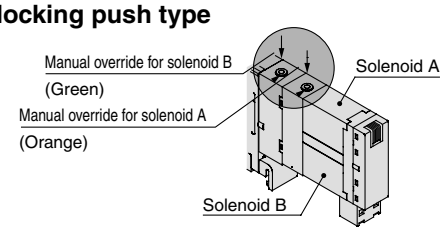
Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 1-7-2.

Manual Override Operation

⚠Warning

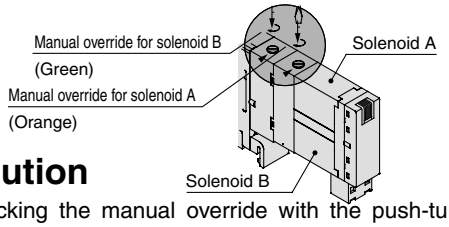
Handle carefully, as connected equipment can be actuated through manual override operation.

■ Non-locking push type



■ Push-turn locking slotted type

After pushing down, turn in the direction of the arrow.
If it is not turned, it can be operated the same way as the non-locking type.



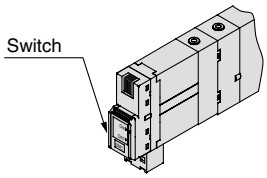
⚠Caution

When locking the manual override with the push-turn locking slotted type, be sure to push it down before turning.
Turning without first pushing it down can cause damage to the manual override and other trouble such as air leakage, etc.

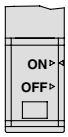
Valves with Switches

⚠Warning

When turning OFF with the switch, be sure to move the switch to the locked position. Connected equipment may be actuated if current flow occurs with the switch at an improper position.

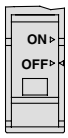


ON position



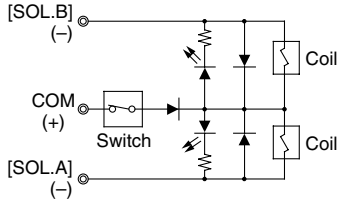
Normal operating condition.
Switching of valve is based on an electric signal from the connector.

OFF position



The valve coil is kept in a de-energized state even when there is an electric signal from the connector.

Electric circuit diagram (With positive common and light/surge voltage suppressor)



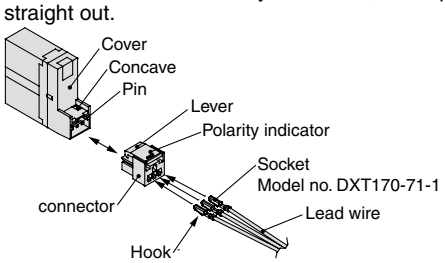
How to Use Plug Connector

⚠Caution

When attaching and detaching a connector, first shut off the electric power and the air supply.
Also, crimp the lead wires and sockets securely.

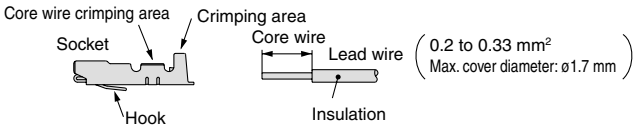
1. Attaching and detaching connectors

- To attach a connector, hold the lever and connector unit between your fingers and insert straight onto the pins of the solenoid valve so that the lever's pawl is pushed into the groove and locks.
- To detach a connector, remove the pawl from the groove by pushing the lever downward with your thumb, and pull the connector straight out.



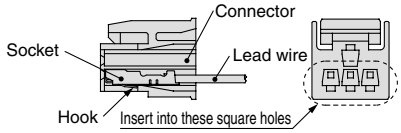
2. Crimping of lead wires and sockets

Peel 3.2 to 3.7 mm of the tip of lead wire, enter the core wires neatly into a socket and crimp it with a special crimp tool. Be careful so that the cover of lead wire does not enter into the crimping part.
(Crimping tool: Model no. DXT170-75-1)



3. Attaching and detaching lead wires with sockets

- **Attaching**
  Insert the sockets into the square holes of the connector (with ⊕ and ⊖ indication), and continue to push the sockets all the way in until the lock by hooking into the seats in the connector. (When they are pushed in, their hooks open and they are locked automatically.) Then confirm that they are locked by pulling lightly on the lead wires.
- **Detaching**
  To detach a socket from a connector, pull out the lead wire while pressing the socket's hook with a stick having a thin tip (approx. 1 mm). If the socket is used again, spread the hook outward.



■ Plug connector lead wire lengths

Plug connector lead wires have a standard length of 300 mm, however, the following lengths are also available.

M Type Connector Assembly Part No.

Positive common specifications

For single solenoid : **SX100-40-4S-**
For double solenoid
For 3 position type : **SX100-40-4D-**
For 4 position type

Negative common specifications

For single solenoid : **SX100-41-4S-**
For double solenoid
For 3 position type : **SX100-41-4D-**
For 4 position type

●Lead wire length

Nil	300 mm
6	600 mm
10	1000 mm
15	1500 mm
20	2000 mm
25	2500 mm
30	3000 mm
50	5000 mm

How to Order

Include the connector assembly part number together with the part number for the plug connector's solenoid valve without connector.

<Example>
Lead wire length 2000 mm
SZ3160-5MO-M5
SX100-40-4S-20

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⚠Precautions 2

Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 1-7-2.

Common Connector Assembly for Manifold

⚠Caution

By using a common connector assembly for the solenoid valves on a manifold, the common wiring for each solenoid valve is reduced to one line, making it possible to achieve labor savings on wiring work.

Common connector assembly part numbers

Positive common specifications
For single solenoid
SX100-42-4S



Negative common specifications
For single solenoid
SX100-43-4S



For double solenoid, 3 position type, 4 position type
SX100-42-4D



For double solenoid, 3 position type, 4 position type
SX100-43-4D



With common lead wire for single solenoid
SX100-40-4S



With common lead wire for single solenoid
SX100-41-4S



With common lead wire for double solenoid, 3 position type, 4 position type
SX100-40-4D



(Lead wire length 300 mm)

With common lead wire for double solenoid, 3 position type, 4 position type
SX100-41-4D



(Lead wire length 300 mm)

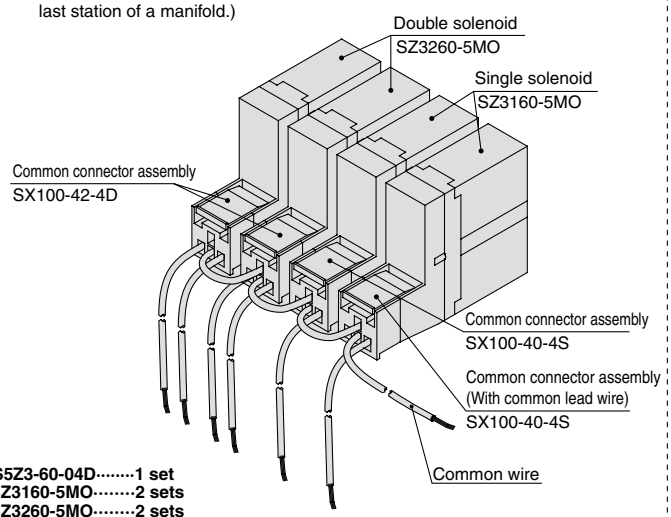
How to Order

Include the common connector assembly part number together with the manifold and solenoid valve part numbers. If the arrangement becomes complicated, then indicate on the manifold specification sheet.

Note 1) Take note that applications with unused connectors or with blanking plates between stations are not possible.

Note 2) For the solenoid valve, specify "without connector" for the plug connect or type. The grommet type cannot be used.

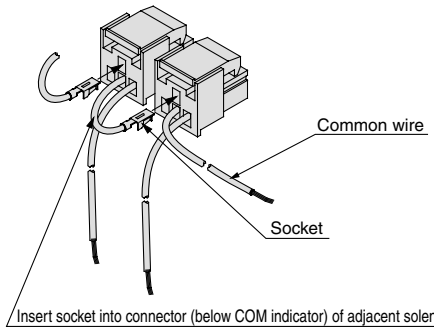
Note 3) In places where signals will be sent to the common wiring, use a connector assembly with a common lead wire. (This is limited to the first station or the last station of a manifold.)



SS5Z3-60-04D·····1 set
∗SZ3160-5MO·····2 sets
∗SZ3260-5MO·····2 sets
∗SX100-40-4S·····1 set (with common Lead wire for single solenoid)
∗SX100-42-4S·····1 set (For single solenoid)
∗SX100-42-4D·····2 sets (For double solenoid, for 3 position, 4 position)
└ The ∗ mark denotes the assembling symbol. Prefix "∗" to the part nos. of solenoid valves, etc.

Common connector assembly wiring

When ordering common connector assemblies alone, wiring should be performed as outlined in the drawing below. For details on attachment of sockets, refer to the section "How to Use Plug Connectors" on page 1-3-2.



One-touch Fittings

⚠Caution

The pitch of each piping port (P, A, B, etc.) for Series SZ is based on the assumption that Series KJ One-touch fittings will be used. For this reason, when other fittings are used, they may interfere with one another depending on their types and sizes. Therefore, the dimensions of the fittings to be used should first be confirmed in their respective catalogs.

Exhaust Restriction

⚠Caution

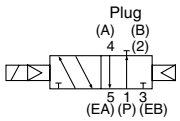
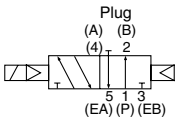
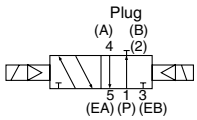
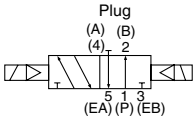
Since Series SZ is a type in which the pilot valve exhaust joins the main valve exhaust inside the valve, care must be taken that the piping from the exhaust port is not restricted.

Series SZ3000 Used as a 3 Port Valve

⚠Caution

Using a 5 port valve as a 3 port valve

Series SZ3000 valves can be used as normally closed (N.C.) or normally open (N.O.) 3 port valves by closing one of the cylinder ports (A or B) with a plug. However, they should be used with the exhaust ports kept open. They are convenient at times when a double solenoid type 3 port valve is required.

Plug position		B port	A port
Type of actuation		N.C.	N.O.
Number of solenoids	Single		
	Double		

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⚠Precautions 3

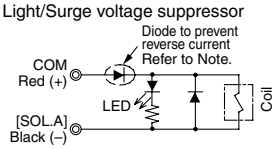
Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 1-7-2.

Light/Surge Voltage Suppressor

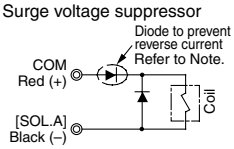
⚠Caution

Pos. common specifications
Single solenoid type

Light/Surge voltage suppressor

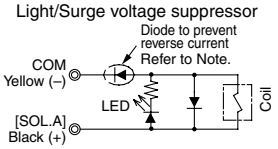


Surge voltage suppressor

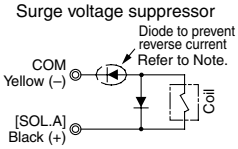


Neg. common specifications
Single solenoid type

Light/Surge voltage suppressor

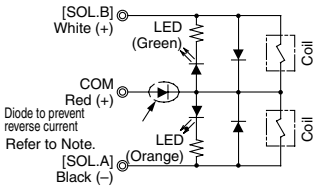


Surge voltage suppressor

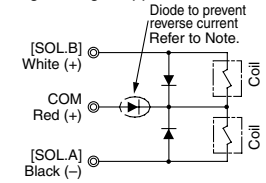


Pos. common specifications
Double solenoid, 3 position type, 4 position type

Light/Surge voltage suppressor

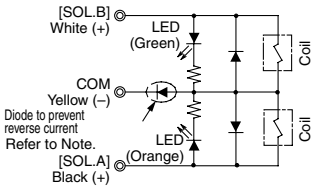


Surge voltage suppressor

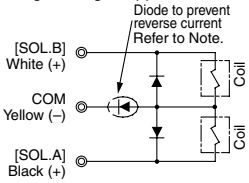


Neg. common specifications
For double solenoid, 3 position type, 4 position type

Light/Surge voltage suppressor



Surge voltage suppressor



Note) Connect so that polarity is matched to the connector's (+), (–) and A, B and COM indicators. In case of voltage specifications other than 12 or 24 VDC, take care to avoid mistaking polarity, as there is no diode to prevent reverse current.
In the event that lead wires are connected in advance, they will be as shown below.

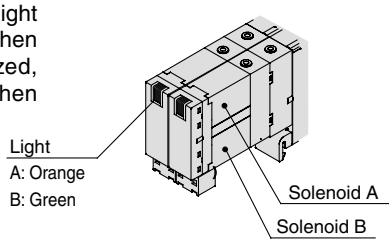
Pos. common specifications
A (–): Black
COM (+): Red
B (–): White (No lead wire in case of single solenoid)

Neg. common specifications A
A (+): Black
COM (–): Yellow
B (+): White (No lead wire in case of single solenoid)

Light Indication

⚠Caution

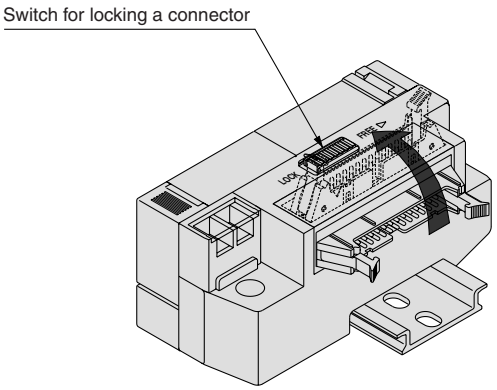
When equipped with indicator light and surge voltage suppressor, the light window turns orange when solenoid A is energized, and it turns green when solenoid B is energized.



Changing the Connector Entry Direction

⚠Caution

To change the connector's entry direction, press the levers on both sides of the connector, take it off, and change the direction as shown in the drawing. Since lead wires are attached to the connector, excessive pulling or twisting can cause broken wires or other trouble. Also, take care that lead wires are not pinched when installing the connector.
If an excessive force is applied on the connector in the LOCK position, the connector block may be damaged. Also, using in such a way that the connector floats in the FREE position, it may cause the lead wire, etc. to break. Thus, refrain from using in these ways.



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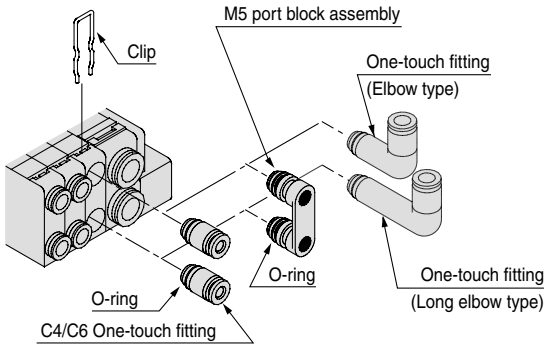
⚠ Precautions 4

Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 1-7-2.

Fitting Assembly Replacement

⚠ Caution

By replacing a valve's fitting assembly, it is possible to change the connection diameter of the A, B, P, and R ports.
When replacing it, pull out the fitting assembly after removing the clip with a flat head screwdriver, etc. To mount a new fitting assembly, insert it into place and then fully reinsert the clip.



Part No.

	Port size	Part no.
4(A), 2(B) port	One-touch fitting assembly for ø4	VVQ1000-50A-C4
	One-touch fitting assembly for ø6	VVQ1000-50A-C6
	One-touch fitting assembly for ø4 (Elbow type)	SZ3000-73-1A-L4
	One-touch fitting assembly for ø6 (Elbow type)	SZ3000-73-1A-L6
	One-touch fitting assembly for ø4 (Long elbow type)	SZ3000-73-2A-L4
	One-touch fitting assembly for ø6 (Long elbow type)	SZ3000-73-2A-L6
	M5 port block assembly	SZ3000-56-1A
1(P), 3(R) port	One-touch fitting assembly for ø6	VVQ1000-51A-C6
	One-touch fitting assembly for ø8	VVQ1000-51A-C8
	One-touch fitting assembly for ø6 (Elbow type)	SZ3000-74-1A-L6
	One-touch fitting assembly for ø8 (Elbow type)	SZ3000-74-1A-L8
	One-touch fitting assembly for ø6 (Long elbow type)	SZ3000-74-2A-L6
	One-touch fitting assembly for ø8 (Long elbow type)	SZ3000-74-2A-L8

Note 1) When changing the connection diameters for ports 1(P) and 3(R) indicate this on the manifold specification sheets.
Note 2) Be careful to avoid damage or contamination of O-rings, as this can cause air leakage.
Note 3) When removing a straight type fitting assembly from valve, after removing the clip, connect a tube or plug (KPQ-□□) to the One-touch fitting and pull it out by holding the tube (or plug). If the fitting assembly is pulled out by holding its release button (resin part), the release bushing may be damaged.
Note 4) Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
Note 5) When inserting tubing into an elbow type fitting assembly, insert the tubing while holding the elbow fitting assembly body with your hand. If the tubing is inserted without holding the elbow, excessive force can be applied to the valve and fitting assembly, causing air leakage or damage, etc.

How to Calculate the Flow Rate

For obtaining the flow rate, refer to page 1-1-12.

One-touch Fittings

⚠ Caution

1. Tube attachment/detachment for One-touch fittings

1) Attaching of tube

(1) Take a tube having no flaws on its periphery and cut it off at a right angle. When cutting the tube, use tube cutters TK-1, 2 or 3. Do not use pinchers, nippers or scissors, etc. If cutting is done with tools other than tube cutter, the tube may be cut diagonally or become flattened, etc. This can make a secure installation impossible, and cause problems such as the tube pulling out after installation or air leakage.
Also allow some extra length in the tube.

(2) Grasp the tube and push it in slowly, inserting it securely all the way into the fitting.

(3) After inserting the tube, pull on it lightly to confirm that it will not com out. If it is not installed securely all the way into the fitting, this can cause problems such as air leakage or the tube pulling out.

2) Detaching of tube

(1) Push in the release button sufficiently, pushing the collar evenly.

(2) Pull out the tube while holding down the release button so that it does not come out. If the release button is not pressed down sufficiently, there will be increased bite on the tube and it will become more difficult to pull it out.

(3) When the removed tube is to be used again, cut off the portion which has been chewed before reusing it. If the chewed portion of the tube is used as is, this can cause trouble such as air leakage or difficulty in removing the tube.

Other Tube Brands

⚠ Caution

1. When using other tubing than SMC brand, confirm that the following specifications are satisfied with respect to the outside diameter tolerance of the tube.

1) Nylon tubing within ±0.1 mm
2) Soft nylon tubing within ±0.1 mm
3) Polyurethane tubing within +0.15 mm, within –0.2 mm

Do not use tubes which do not meet these outside diameter tolerances. It may not be possible to connect them, or they may cause other trouble, such as air leakage or the tube pulling out after connection.

Built-in Back Pressure Check Valve

⚠ Caution

Valves with built-in back pressure check valve is to protect the back pressure inside a valve. For this reason, use caution that the valves with external pilot specification cannot be pressurized from exhaust port [3(R)]. As compared with the types which do not integrate the back pressure check valve, C value of the flow characteristics goes down. For details, please contact SMC.

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5 Port Solenoid Valve

Series SZ3000

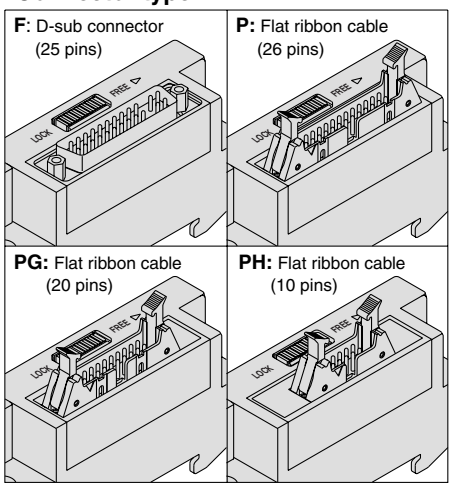
Plug-in Type

How to Order

● Plug-in manifold with power supply terminals

SS5Z3–60 F D 1 – 05 U [ ] [ ] – P – [ ]

● Connector type



● SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 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.

● Pilot type

Nil	Internal pilot
R	External pilot

● Option

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

● Power supply terminals

Symbol	Specifications
P	24 VDC, Positive common
P12	12 VDC, Positive common
N	24 VDC, Negative common
N12	12 VDC, Negative common

● SUP/EXH block fitting specifications

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

● Valve stations

F: D-sub connector

Symbol	Stations	Note
02	2 stations	Double wiring specifications (1)
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout (2) (Up to 21 solenoids possible)
⋮	⋮	
20	20 stations	

P: Flat ribbon cable connector (26 pins)

Symbol	Stations	Note
02	2 stations	Double wiring specifications
⋮	⋮	
11	11 stations	
02	2 stations	Specified layout (Up to 22 solenoids possible)
⋮	⋮	
20	20 stations	

PG: Flat ribbon cable connector (20 pins)

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

PH: Flat ribbon cable connector (10 pins)

Symbol	Stations	Note
02	2 stations	Double wiring specifications
⋮	⋮	
04	4 stations	
02	2 stations	Specified layout (Up to 8 solenoids possible)
⋮	⋮	
08	8 stations	

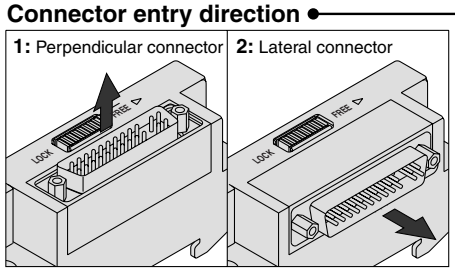
Note 1) Double wiring specifications: Single, double, 3 position and 4 position solenoid valves can be used at all of the manifold stations.

Note 2) Specified layout: Indicate wiring specifications on a manifold specification sheet. (Please note that in locations where single solenoid wiring is indicated, it will be impossible to use double or 3 position/4 position valves.)

● Connector mounting position

Symbol	Mounting position
D	D side

● Connector entry direction



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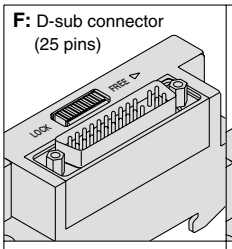
How to Order

● Plug-in manifold without power supply terminals

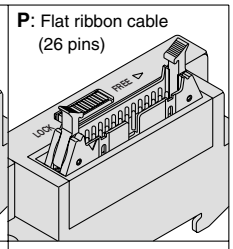
SS5Z3–60 F D 1 – 05 U □ □ – □

Connector type

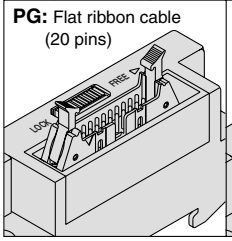
F: D-sub connector (25 pins)



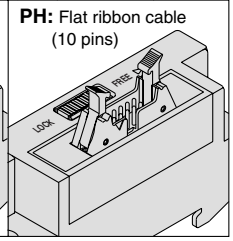
P: Flat ribbon cable (26 pins)



PG: Flat ribbon cable (20 pins)



PH: Flat ribbon cable (10 pins)

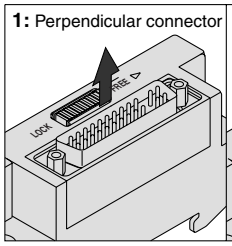


Connector mounting position

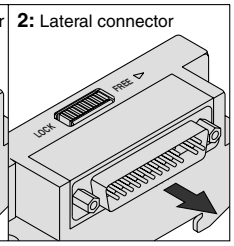
Symbol	Mounting position
D	D side

Connector entry direction

1: Perpendicular connector



2: Lateral connector



SUP/EXH block mounting position

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 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.

Pilot type

Nil	Internal pilot
R	External pilot

SUP/EXH block fitting specifications

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

Option

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

Valve stations

F: D-sub connector

Symbol	Stations	Note
02	2 stations	Double wiring specifications (1)
⋮	⋮	
12	12 stations	
02	2 stations	Specified layout (2) (Up to 24 solenoids possible)
⋮	⋮	
20	20 stations	

P: Flat ribbon cable connector (26 pins)

Symbol	Stations	Note
02	2 stations	Double wiring specifications
⋮	⋮	
12	12 stations	
02	2 stations	Specified layout (Up to 25 solenoids possible)
⋮	⋮	
20	20 stations	

PG: Flat ribbon cable connector (20 pins)

Symbol	Stations	Note
02	2 stations	Double wiring specifications
⋮	⋮	
09	9 stations	
02	2 stations	Specified layout (Up to 19 solenoids possible)
⋮	⋮	
19	19 stations	

PH: Flat ribbon cable connector (10 pins)

Symbol	Stations	Note
02	2 stations	Double wiring specifications
⋮	⋮	
04	4 stations	
02	2 stations	Specified layout (Up to 9 solenoids possible)
⋮	⋮	
09	9 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 a manifold specification sheet. (Please note that in locations where single solenoid wiring is indicated, it will be impossible to use double or 3 position/4 position valves.)

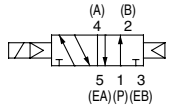
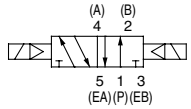
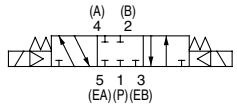
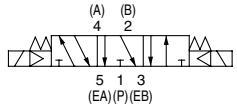
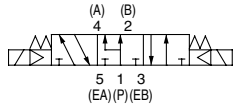
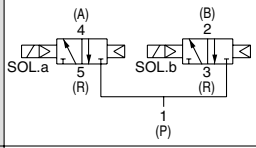
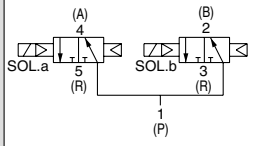
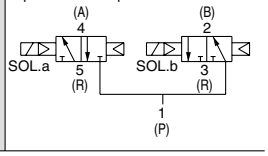
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How to Order

● How to order solenoid valves For plug-in (Common for both with and without power supply terminals)

SZ3 [1] 60 [ ][ ] – [5] [ ] LOZ [ ][ ] – [C6]

Type of actuation

1	2 position single solenoid 
2	2 position double solenoid 
3	3 position closed center 
4	3 position exhaust center 
5	3 position pressure center 
A	4 position dual 3 port valve: N.C./N.C. 
B	4 position dual 3 port valve: N.O./N.O. 
C	4 position dual 3 port valve: N.C./N.O. 

Rated voltage

5	24 VDC
6	12 VDC

- When using on a manifold with power supply terminals, be sure to match with the manifold's voltage specifications.

Back pressure check valve

Nil	None
K	Built-in

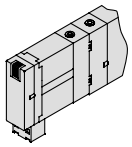
- The built-in back pressure check valve type has an effective area approximately 20% smaller.
- The 3 position closed center and 3 position pressure center are not available with back pressure check valve.

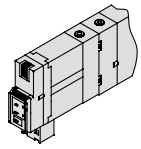
Pilot type

Nil	Internal pilot
R	External pilot

- The 4 position dual 3 port valve is not available with external pilot specifications.

Switch specifications

Nil: Without switch 

J: With switch 

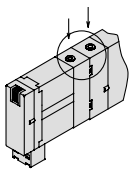
* For switch operation, refer to page 1-3-8.

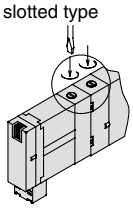
Common specifications

Nil	Positive common
N	Negative common

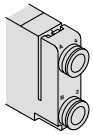
- When using on a manifold with power supply terminals, be sure to match with the manifold's common specifications.

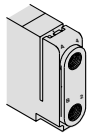
Manual override

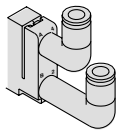
Nil: Non-locking push type 

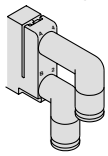
D: Push-turn locking slotted type 

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 

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How to Order Valve Manifold Assembly

Ordering example (SZ3000, positive common with power supply terminals)

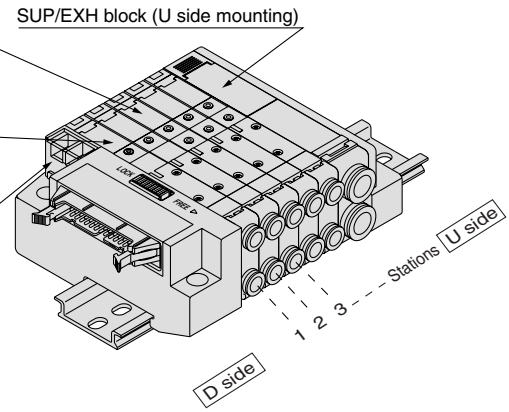




Double solenoid (24 VDC)
SZ3260-5LOZ-C6 (3 sets)

Single solenoid (24 VDC)
SZ3160-5LOZ-C6 (2 sets)

With power supply terminals
Plug-in manifold
SS5Z3-60PD2-05U-P



SS5Z3-60PD2-05U-P····· 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.

Made to Order Specifications
(For details, refer to page 1-3-38.)

Manifold Specifications

Model			D-sub connector Type 60F	Flat ribbon cable type 60P□ Type 60P	Type 60PG	Type 60PH
Manifold			Plug-in type			
1 (P: SUP), 3/5 (R: EXH) system			Common SUP, EXH			
Valve stations (With power terminal)			2 to 20 stations		2 to 16 stations	2 to 8 stations
Applicable connector			D-sub connector Comferming to MIL-C-24308 JIS-X-5101	Flat ribbon cable connector Socket: 26 pins MIL type with strain relief Conforming to MIL-C-83503	Flat ribbon cable connector Socket: 20 pins MIL type with strain relief Conforming to MIL-C-83503	Flat ribbon cable connector Socket: 10 pins MIL type with strain relief Conforming to MIL-C-83503
Internal wiring			+ COM, –COM			
4 (A), 2 (B) port Porting specification		Location	Valve			
		Direction	Lateral, Upward, Downward			
Port size	1 (P), 3/5 (R) port		C8			
	4 (A), 2 (B) port		C4, C6, M5			
Weight W (g) (2) (n1: Stations n2: Number of SUP/EXH blocks m: Weight of DIN rail)			$W = 3.2n_1 + 53n_2 + m + 126.5$			

Note 1) In cases such as those where many valves are operated simultaneously, use type B (double side SUP/EXH), applying pressure to the 1(P) ports on both sides and exhausting from the 3(R) ports on both sides.

Note 2) The weight W is the value for the D-sub connector manifold with power supply terminals only. To obtain the weight with solenoid valves attached, add the solenoid valve weights given on page 1-3-10 for the appropriate number of stations. For DIN rail weight, refer to page 1-3-12.

Flow Characteristics

Port size		Flow characteristics					
1, 5, 3	4, 2	1 → 2/4 (P → A/B)			4/2 → 3 (A/B → R)		
(P, EA, EB)	(A, B)	C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
C8	**C4**	0.58 [0.49]	0.26 [0.36]	0.14 [0.13]	0.76 [0.65]	0.15 [0.20]	0.18 [0.15]
	C6	0.73 [0.64]	0.24 [0.27]	0.18 [0.16]	0.77 [0.74]	0.19 [0.16]	0.19 [0.19]
	M5	0.60 [0.57]	0.38 [0.35]	0.17 [0.15]	0.67 [0.58]	0.16 [0.39]	0.16 [0.16]

Note) • The value is for manifold base with 5 stations and individually operated 2 position type.
• Values inside [ ] are for 4 position dual 3 port valves.

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Solenoid Valve Specifications

Series			SZ3000
Fluid			Air
Internal pilot operating pressure range (MPa)	2 position single		0.15 to 0.7
	2 position double		0.1 to 0.7
	3 position		0.2 to 0.7
	4 position dual 3 port valve		0.15 to 0.7
External pilot operating pressure range (MPa)	Operating pressure range		–100 kPa to 0.7
	Pilot pressure range	2 position single	0.25 to 0.7
		2 position double	0.25 to 0.7
		3 position	0.25 to 0.7
Ambient and fluid temperature (°C)			–10 to 50 (No freezing. Refer to page 1-7-4.)
Max. operating frequency (Hz)	2 position single, double 4 position dual 3 port valve		10
	3 position		3
Manual override (Manual operation)			Non-locking push type, Push-turn locking slotted type
Pilot type			Common exhaust type for main and pilot valve
Lubrication			Not required
Mounting orientation			Unrestricted
Impact/Vibration resistance m/s^2 Note)			150/30
Enclosure			Dust-protected

Note) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)
Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Solenoid Specifications

Electrical entry	L type (For plug-in), M type plug connector (M)
Rated coil voltage (V) Note)	24, 12, 6, 5, 3 DC
Allowable voltage fluctuation	±10% of rated voltage
Power consumption (W)	0.6 (With light: 0.65)
Surge voltage suppressor	Diode
Indicator light	LED

Note) Only 24 VDC and 12 VDC are available for plug-in use.

Response Time

Note) Based on dynamic performance test, JIS B 8375-1981. (Coil temperature: 20°C, at rated voltage)

Type of actuation	Response time (ms) (at the pressure of 0.5 MPa)	
	Without surge voltage suppressor	With surge voltage suppressor S, Z type
2 position single	12 or less	15 or less
2 position double	10 or less	13 or less
3 position	15 or less	20 or less
4 position dual 3 port valve	30 or less	35 or less

Weight

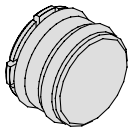
Valve model	Type of actuation		Port size 4 (A) , 2 (B)	Weight (g)
SZ3□60-□-C4	2 position	Single	C4 (One-touch fitting for ø4)	78
		Double		84
	3 position	Closed center		88
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		84
SZ3□60-□-C6	2 position	Single	C6 (One-touch fitting for ø6)	74
		Double		81
	3 position	Closed center		85
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		81
SZ3□60-□-M5	2 position	Single	M5 x 0.8	69
		Double		75
	3 position	Closed center		79
		Exhaust center		
		Pressure center		
	4 position	Dual 3 port valve		75

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Manifold Option

■ SUP block disk

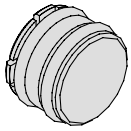
By installing a SUP block disk in the pressure supply passage of a manifold valve, it is possible to supply two or more different high and low pressures to one manifold. (Use in combination with a pilot port block disk.)



Series	Part no.
SZ3000	SZ3000-114-4A

■ EXH block disk

By installing an EXH block disk in the exhaust passage of a manifold valve, it is possible to divide the valve's exhaust so that it does not affect another valve. (Two block disks are needed to divide both exhausts.)



Series	Part no.
SZ3000	SZ3000-114-4A

■ Pilot port block disk

By installing a pilot port block disk in the pilot passage of a manifold valve, it can be function as an internal pilot/external pilot mixed manifold.



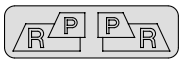
Series	Part no.
SZ3000	SZ3000-114-2A

■ Label for block disk

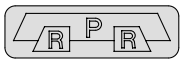
The labels shown below are used on manifold stations containing SUP/EXH block disk(s) to show their location. (3 pcs. each)

SZ3000-155-1A

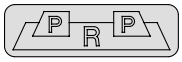
Label for SUP/EXH block disk



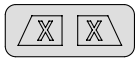
Label for EXH block disk



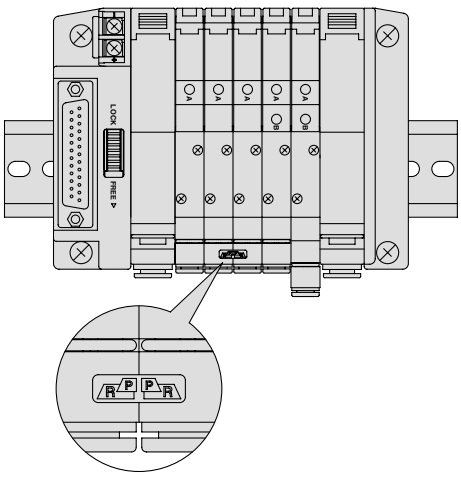
Label for SUP block disk



Label for pilot port block disk



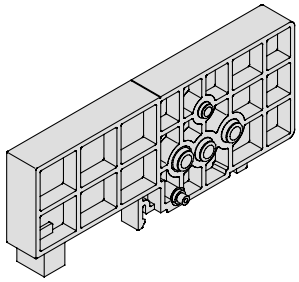
∗ When a block disk is concurrently ordered by specifying on the manifold specification sheet, etc., a label will be stuck on the position where block disk is mounted.



■ Blanking block assembly

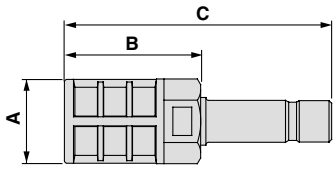
SZ3000-55-1A

These are mounted when later addition of valves is planned, etc.



■ Silencer with One-touch fitting

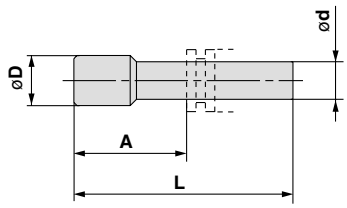
This silencer can be mounted on the manifolds' port R (exhaust) with a single touch.



For Series	Model	Effective area	A	B	C
SZ3000 (ø8)	AN203-KM8	14 mm²	ø16	26	51

■ Plug (White)

These are inserted in cylinder ports or SUP/EXH ports which are not being 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

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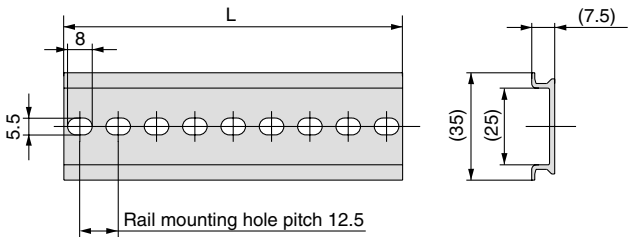
Manifold Option

■ DIN rail dimensions/Weight

VZ1000-11-1-□

• Refer to the L dimension tables

∗ Enter a number from the DIN rail dimension table below.



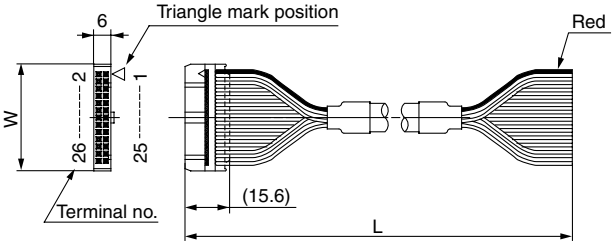
No.	0	1	2	3	4	5	6	7	8	9
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5
Weight (g)	17.6	19.9	22.1	24.4	26.6	28.9	31.1	33.4	35.6	37.9

No.	10	11	12	13	14	15	16	17	18	19
L dimension	223	235.5	248	260.5	273	285.5	298	310.5	323	335.5
Weight (g)	40.1	42.4	44.6	46.9	49.1	51.4	53.6	55.9	58.1	60.4

No.	20	21	22	23	24	25	26	27	28	29
L dimension	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5
Weight (g)	62.6	64.9	67.1	69.4	71.6	73.9	76.1	78.4	80.6	82.9

■ Flat ribbon cable type/Cable assembly

AXT100-FC□- 1 to 3



Flat Ribbon Cable Assembly

Cable length (L)	10 pins	20 pins	26 pins
1.5 m	AXT100-FC10-1	AXT100-FC20-1	AXT100-FC26-1
3 m	AXT100-FC10-2	AXT100-FC20-2	AXT100-FC26-2
5 m	AXT100-FC10-3	AXT100-FC20-3	AXT100-FC26-3
Connector width (W)	17.2	30	37.5

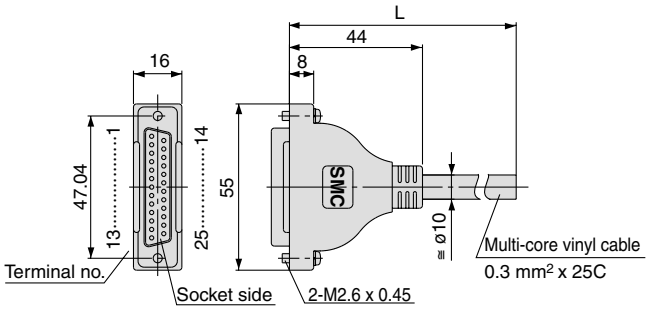
∗ For other commercial connectors, use a type with strain relief conforming to MIL-C-83503.

Connector manufacturers' example

- **Hirose Electric Co., Ltd.**
- **Sumitomo 3M Limited**
- **Fujitsu Limited**
- **Japan Aviation Electronics Industry, Ltd.**
- **J.S.T. Mfg. Co., Ltd.**

■ D-sub connector (25 pins)/Cable assembly

AXT100-DS25- 015 / 030 / 050



D-sub Connector Cable Assembly Terminal No.

Terminal no.	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

Cable length (L)	Assmbly part no.	Note
1.5 m	AXT100-DS25-015	Cable 25 cores x 24AWG
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.

Connector manufacturers' example

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

Electric Characteristics

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

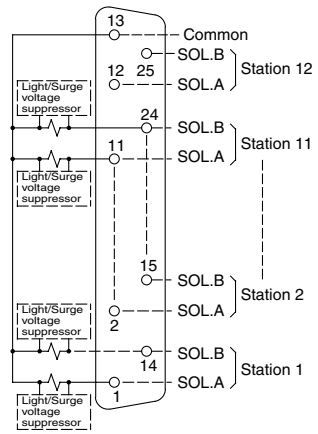
Note) The minimum bending radius for D-sub connector cables is 20 mm.

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Manifold Electrical Wiring

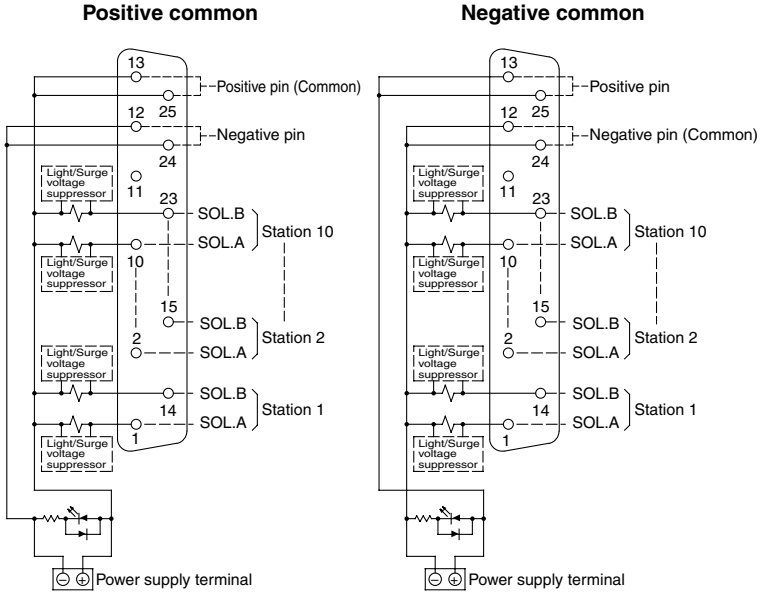
Type 60F D-sub Connector Type (25 pins)

● Without Power Supply Terminal



- The common polarity should be the same as the common specifications of the valve to be used.
- The maximum number of stations that can be accommodated is 20 manifold stations, with up to 24 solenoids.

● With Power Supply Terminal

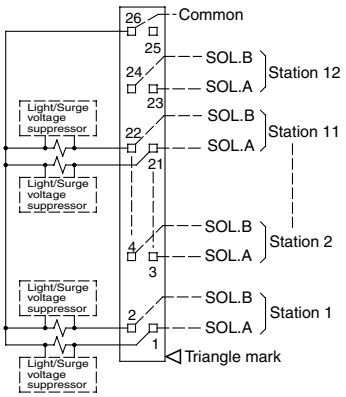


- The maximum number of stations that can be accommodated is 20 manifold stations, with up to 21 solenoids.

- The circuits above are for the double wiring specifications with up to 10 or 12 stations. Connect to SOL.A in the case of a single solenoid. Moreover, when wiring instructions are given on a manifold specification sheet, the “A” signal for single and the “A, B” signals for double should be wired in order 1, 14, 2, 15.....etc., without skipping or leaving any connectors remaining.
- Stations are counted from D side as the 1st one.

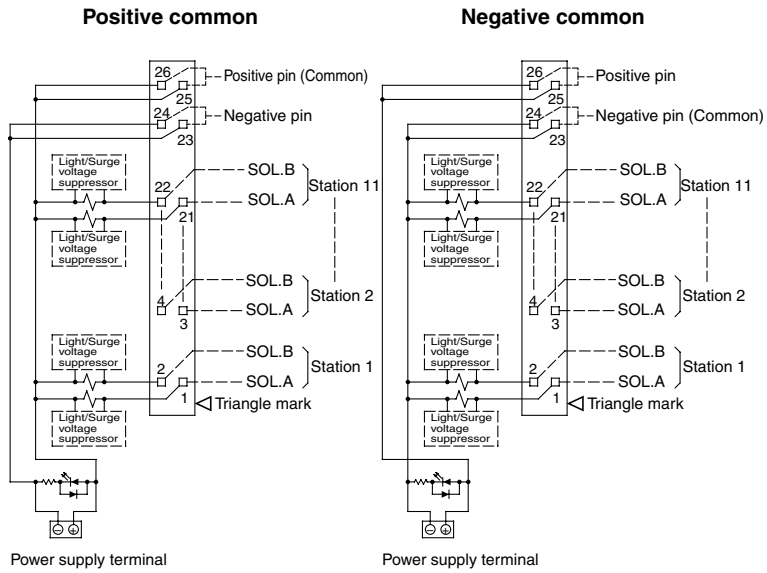
Type 60P Flat Ribbon Cable Type (26 pins)

● Without Power Supply Terminal



- The common polarity should be the same as the common specifications of the valve to be used.
- The maximum number of stations that can be accommodated is 20 manifold stations, with up to 25 solenoids.

● With Power Supply Terminal



- The maximum number of stations that can be accommodated is 20 manifold stations, with up to 22 solenoids.

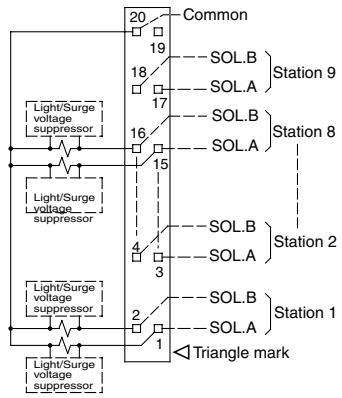
- The circuits above are for the double wiring specifications with up to 11 or 12 stations. Connect to SOL.A in the case of a single solenoid. Moreover, when wiring instructions are given on a manifold specification sheet, the “A” signal for single and the “A, B” signals for double should be wired in order 1, 2, 3, 4.....etc., without skipping or leaving any connectors remaining.
- Stations are counted from D side as the 1st one.
- Since terminal numbers are not indicated on the flat cable, use the triangle mark as a reference for wiring.

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Manifold Electrical Wiring

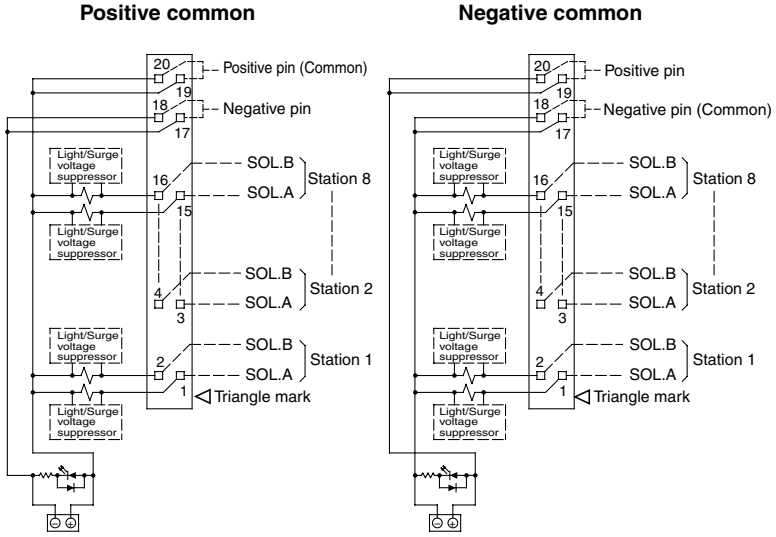
Type 60PG Flat Ribbon Cable Type (20 pins)

● **Without Power Supply Terminal**



- The common polarity should be the same as the common specifications of the valve to be used.
- The maximum number of stations that can be accommodated is 19 manifold stations, with up to 19 solenoids.

● **With Power Supply Terminal**

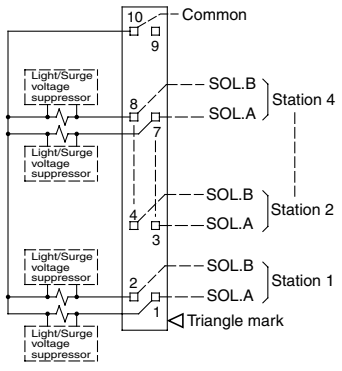


- The maximum number of stations that can be accommodated is 16 manifold stations, with up to 16 solenoids.

- The circuits above are for the double wiring specifications with up to 8 or 9 stations. Connect to SOL.A in the case of a single solenoid. Moreover, when wiring instructions are given on a manifold specification sheet, the “A” signal for single and the “A, B” signals for double should be wired in order 1, 2, 3, 4.....etc., without skipping or leaving any connectors remaining.
- Stations are counted from D side as the 1st one.
- Since terminal numbers are not indicated on the flat cable, use the triangle mark as a reference for wiring.

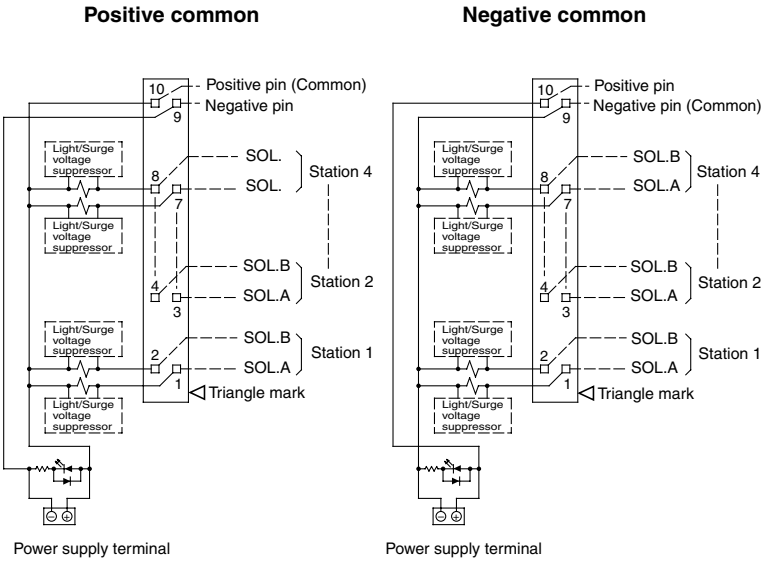
Type 60PH Flat Ribbon Cable Type (10 pins)

● **Without Power Supply Terminal**



- The common polarity should be the same as the common specifications of the valve to be used.
- The maximum number of stations that can be accommodated is 9 manifold stations, with up to 9 solenoids.

● **With Power Supply Terminal**



- The maximum number of stations that can be accommodated is 8 manifold stations, with up to 8 solenoids.

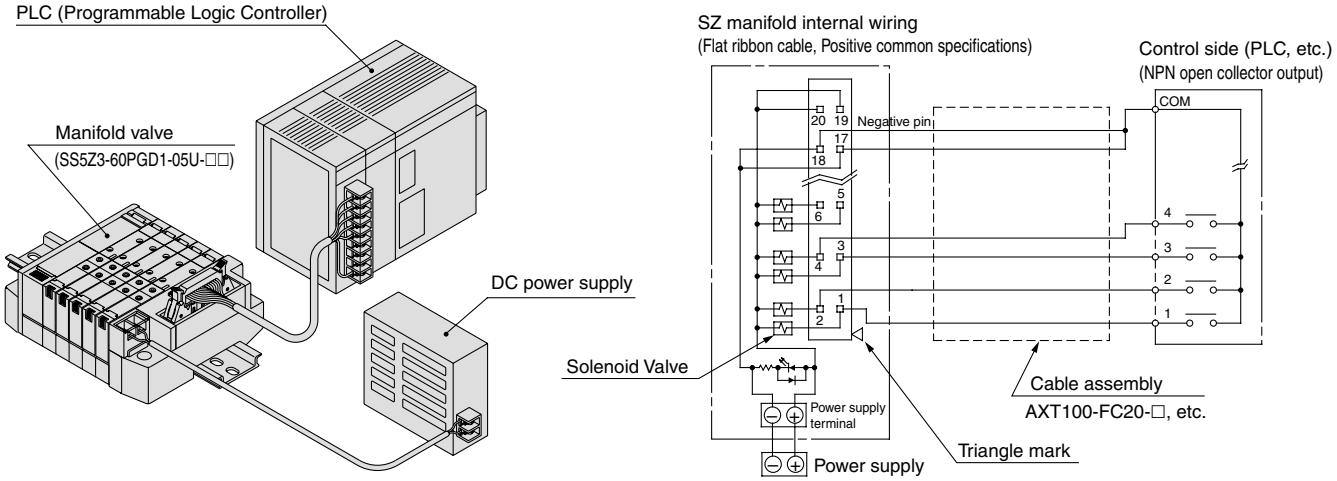
- The circuits above are for the double wiring specifications with up to 4 stations. Connect to SOL.A in the case of a single solenoid. Moreover, when wiring instructions are given on a manifold specification sheet, the “A” signal for single and the “A, B” signals for double should be wired in order 1, 2, 3, 4.....etc., without skipping or leaving any connectors remaining.
- Stations are counted from D side as the 1st one.
- Since terminal numbers are not indicated on the flat cable, use the triangle mark as a reference for wiring.

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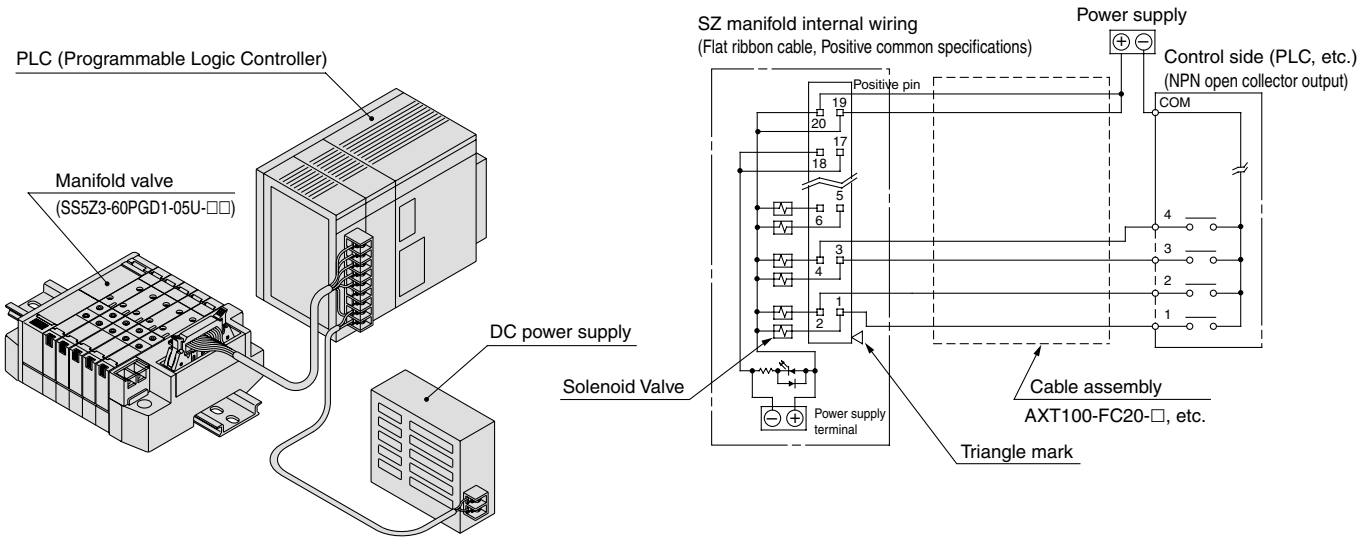
Wiring of Plug-in Type Manifold with Power Supply Terminal (Example)

● Since the power supply to drive valves with power supply terminals can be supplied from either the control side or the manifold side, these wiring examples should be used for reference when wiring is performed.

1. Wiring example when using manifold power supply terminal



2. Wiring example when not using manifold power supply terminal (Power is supplied to the control side or along the wiring, etc.)



⚠Caution

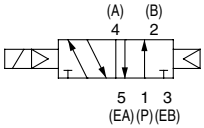
- Single wire, COM position, etc. of PLC are different from each manufacturer. When connecting with PLC, read the specifications carefully and understand the electrical circuit. Poor wiring could cause damage to PLC, power source, etc. as well as manifold and valve.

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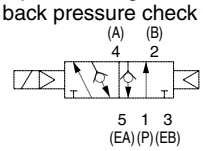
Construction

JIS Symbol

2 position single

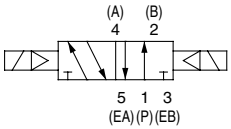


2 position single with back pressure check valve

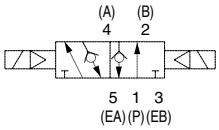


JIS Symbol

2 position double

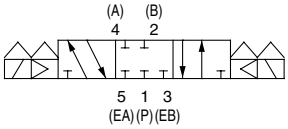


2 position double with back pressure check valve

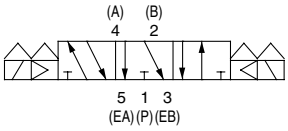


JIS Symbol

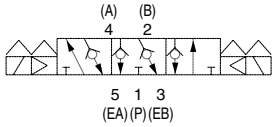
3 position closed center



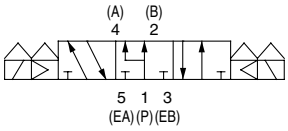
3 position exhaust center



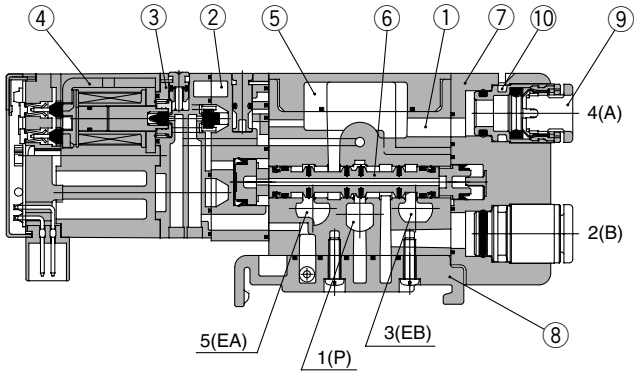
3 position exhaust center with back pressure check valve



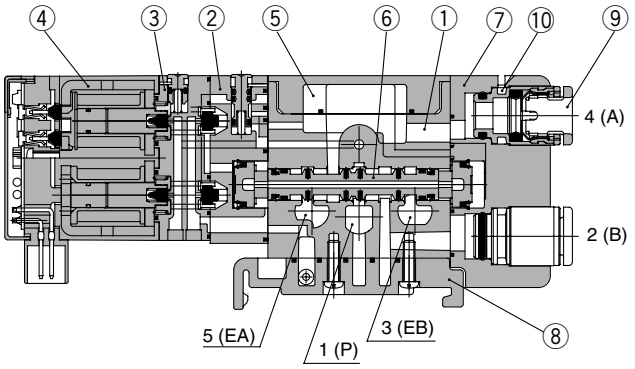
3 position pressure center



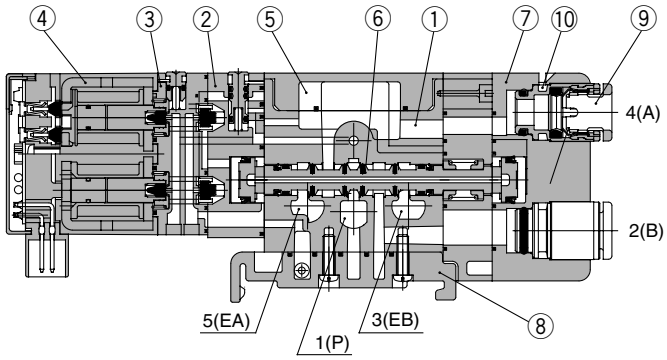
2 position single



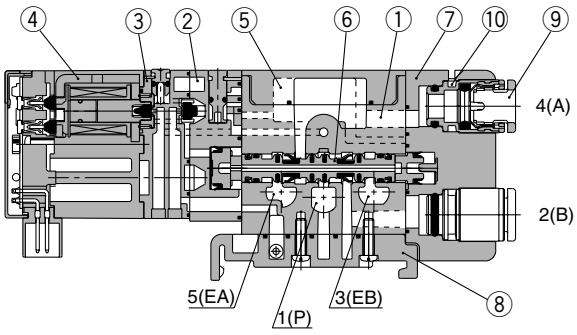
2 position double



3 position closed center/exhaust center/pressure center



2 position single with back pressure check valve



Component Parts

No.	Description	Material	Note
①	Body	Zinc die-casted	—
②	Adapter plate	Resin	Urban white
③	Pilot body	Resin	Urban white
④	Molded coil	—	Urban gray
⑤	Body cover	Resin	Urban white
⑥	Spool valve assembly	Aluminum/HNBR	—
⑦	Port block	Resin	Urban white
⑧	Bottom cover assembly	—	Urban white

Replacement Parts

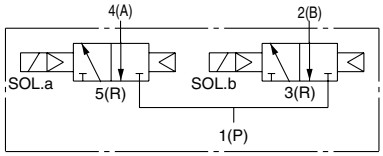
No.	Description	Part no.
⑨	One-touch fitting	Refer to One-touch fitting part number information on page 1-3-5.
⑩	Clip	SX3000-115-2

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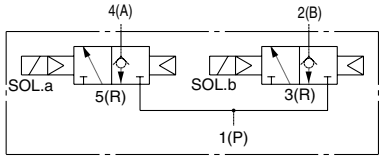
JIS Symbol

4 position dual 3 port valve

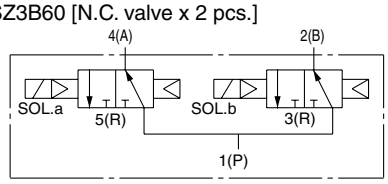
SZ3A60 [N.C. valve x 2pcs.]



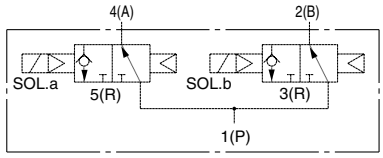
SZ3A60K/With back pressure check valve



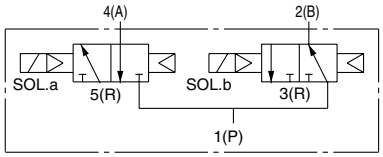
SZ3B60 [N.C. valve x 2 pcs.]



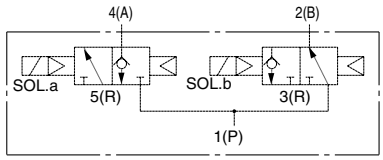
SZ3B60K/With back pressure check valve



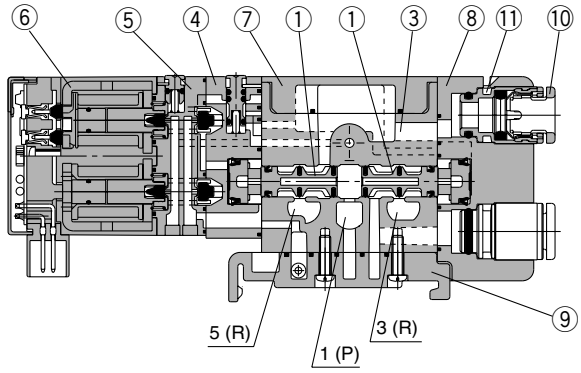
SZ3C60 [N.C. valve, N.O. valve 1 pc. each]



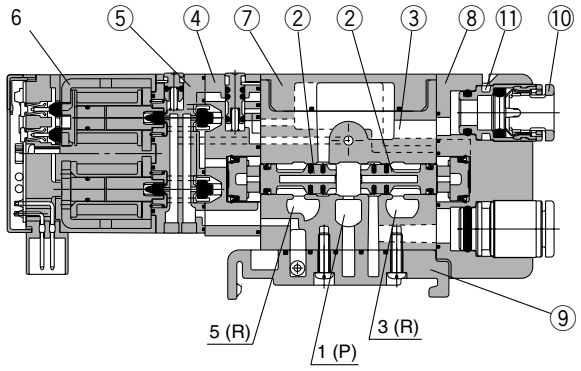
SZ3C60K/With back pressure check valve



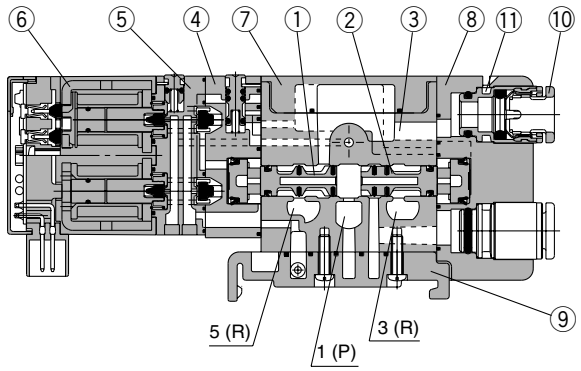
SZ3A60 [N.C. valve x 2 pcs.]



SZ3B60 [N.O. valve x 2 pcs.]



SZ3C60 [N.C. valve, N.O. valve 1 pc. each]



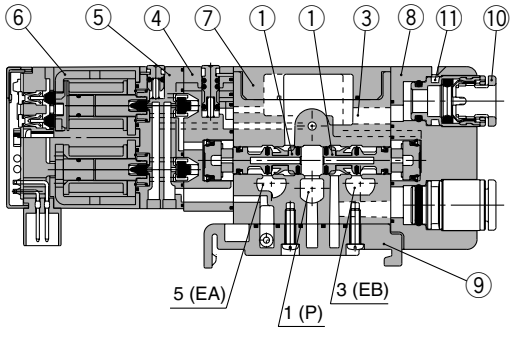
Component Parts

No.	Description	Material	Note
①	Spool valve assembly	Resin/HNBR	For N.C. (Normally closed)
②	Spool valve assembly	Resin/HNBR	For N.O. (Normally open)
③	Body	Zinc die-casted	—
④	Adapter plate	Resin	Urban white
⑤	Pilot body	Resin	Urban white
⑥	Molded coil	—	Urban gray
⑦	Body cover	Resin	Urban white
⑧	Port block	Resin	Urban white
⑨	Bottom cover assembly	—	Urban white

Replacement Parts

No.	Description	Part no.
⑩	One-touch fitting	Refer to One-touch fitting part number information on page 1-3-5.
⑪	Clip	SX3000-115-2

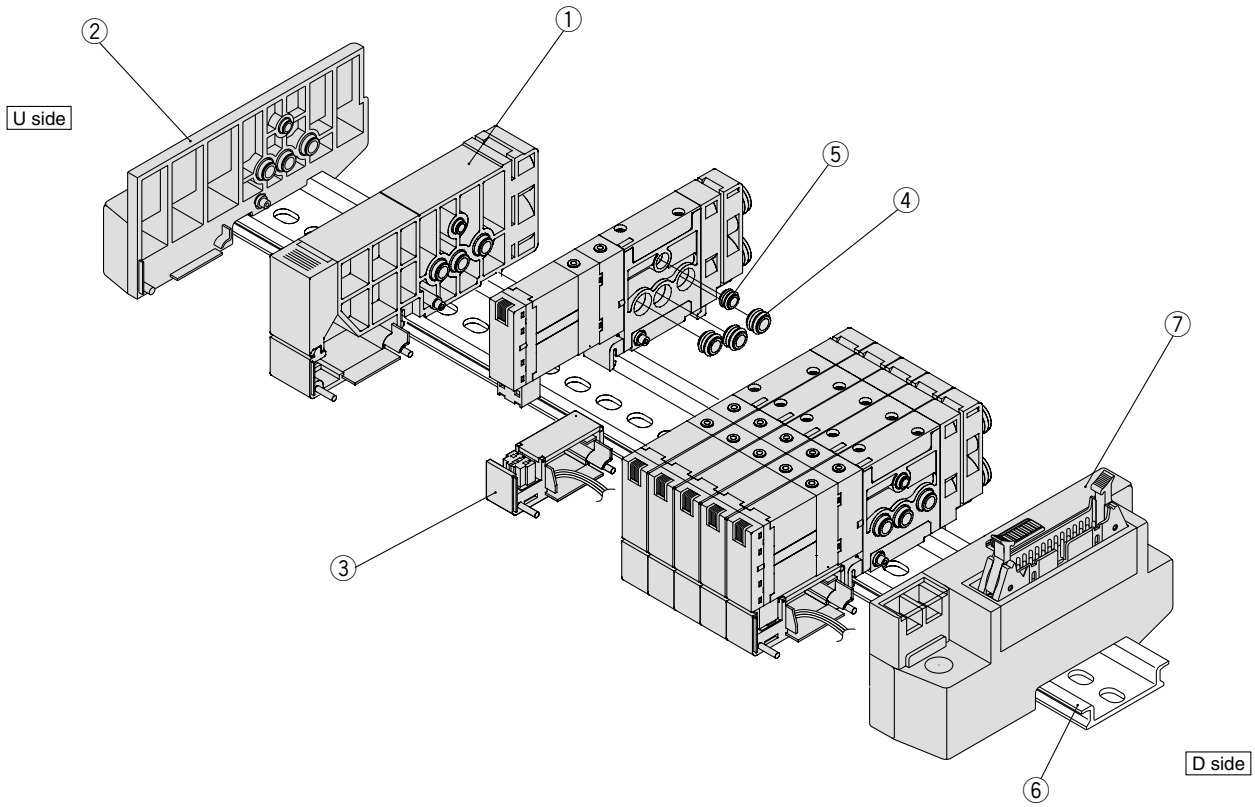
SZ3A60K/With back pressure check valve



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Manifold Exploded View

Type 60P Manifold (Plug-in, flat ribbon cable type)



Component Parts

No.	Description	Part no.	Note
①	SUP/EXH block assembly	**SZ3000-50-1A-□□**	C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 L6: With One-touch fitting for ø6 (Elbow fetching upward) L8: With One-touch fitting for ø8 (Elbow fetching upward) B6: With One-touch fitting for ø6 (Elbow fetching downward) B8: With One-touch fitting for ø8 (Elbow fetching downward)
②	End block assembly	**SZ3000-53-5A**	
③	Housing holder	**SX3000-113-1**	
④	SUP block bush assembly	**SZ3000-114-3A**	
⑤	SUP block bush assembly	**SZ3000-114-1A**	
⑥	DIN rail	**VZ1000-11-1-□**	Refer to page 1-3-12.
⑦	Connector block assembly	**SZ3000-42-□□**	Refer to connector block assembly part no. table below.

Connector Block Assembly Part No.

Connector specifications	Mounting position	Part no.		Note
		Without power supply terminals	With power supply terminals	
For D-sub connector	D side	**SZ3000-42-1A-□□D$^{1}_{2}$**	**SZ3000-42-2A-□□D-$^{1}_{2}$$^{P}_{N}$**	∗1: Perpendicular connector ∗2: Lateral connector P: Positive common N: Negative common (Note) The assembly part numbers with power supply terminals are 24 VDC specifications. If 12 VDC specifications are required, enter "12" at the end of the assembly part number.
For flat ribbon cable 26 pins	D side	**SZ3000-42-3A-□□D$^{1}_{2}$**	**SZ3000-42-4A-□□D-$^{1}_{2}$$^{P}_{N}$**	
For flat ribbon cable 20 pins	D side	**SZ3000-42-5A-□□D$^{1}_{2}$**	**SZ3000-42-6A-□□D-$^{1}_{2}$$^{P}_{N}$**	
For flat ribbon cable 10 pins	D side	**SZ3000-42-7A-□□D$^{1}_{2}$**	**SZ3000-42-8A-□□D-$^{1}_{2}$$^{P}_{N}$**	
For serial	D side	**SZ3000-42-10A-□□D**	———	

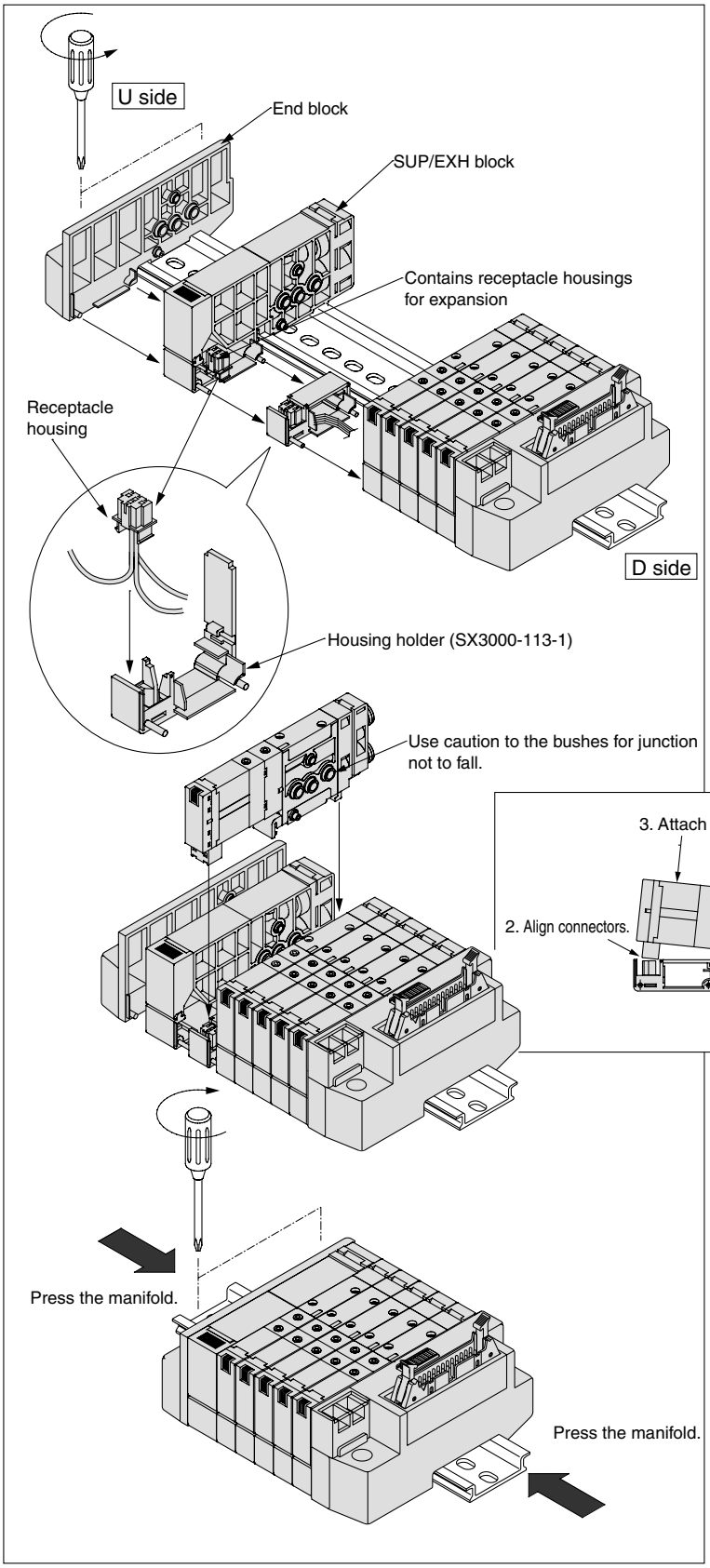
Note) Connector block assembly can be shipped as an assembly only in the case of double wiring. Since the possible number of stations differs depending on the connector type, refer to the valve station section on catalog pages 1-3-6, 1-3-7, and 1-3-32, and enter the number of stations in the mm section of the assembly part number. Please contact SMC if a connector block assembly is required having a wiring specification other than double wiring.

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Plug-in Manifold Station Expansion

⚠Caution In addition to solenoid valves, housing holders (SX3000-113-1) are necessary for expansion of manifold stations.

● Double wiring specifications manifolds which do not have the maximum number of stations, contain spare receptacle housings for expansion in the housing holder of the last station, or inside the supply/exhaust block assembly (for a maximum of 2 stations). When expanding stations, perform the disassembly and assembly of the manifold while referring to the expansion method shown below.



(1) Loosen the DIN rail holding screw if the end block on the U side.

(2) Separate the end block and SUP/EXH block.

(3) Take out the receptacle housing for expansion which is inside the SUP/EXH block, attach it to the newly added housing holder, and attach to the manifold. (Numbers are displayed on the side of the receptacle housings, and they should be used in order from the lowest number.)

(4) Mount the valve on the DIN rail.

(5) While pressing the manifold together from both sides, refasten the side U end block's DIN rail holding screw.

⚠**Caution** (Tightening torque: 1.4 N·m)

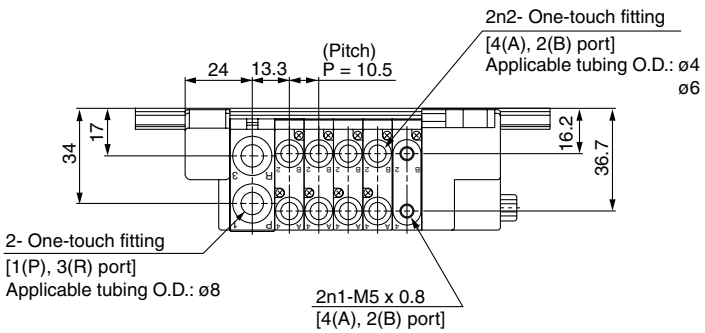
⚠Caution

1. Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
2. When disassembly and assembly are performed, air leakage may result if connections between blocks and tightening of the end block's holding screw, is inadequate. Before supplying air, confirm that there are no gaps, etc. between blocks, and that manifold blocks are securely fastened to the DIN rail. Then supply air and confirm that there is no air leakage before operating.
3. Note that for manifolds specified with other than double wiring, spare receptacle housings for expansion are not included unless indicated at the time of order.

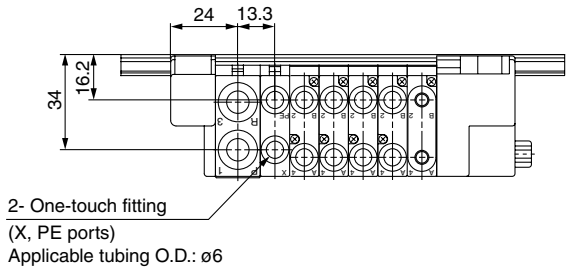
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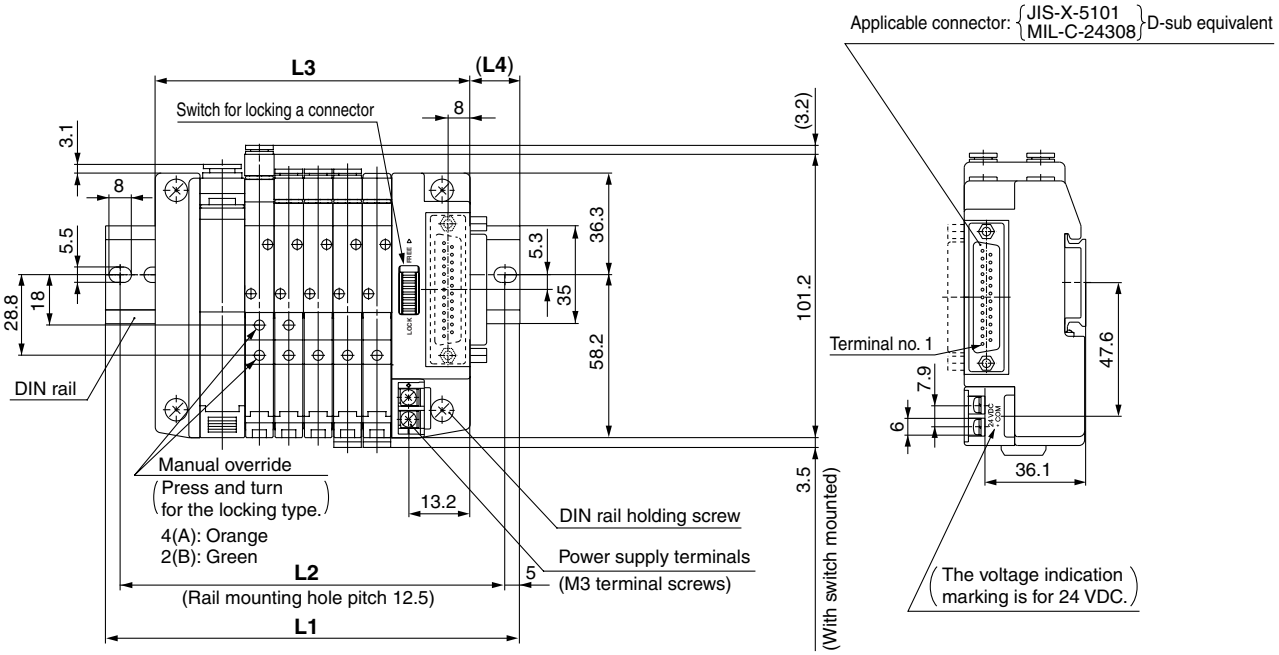
Dimensions: SZ3000 Plug-in

SS5Z3-60FD$\frac{1}{2}$- Stations U-□

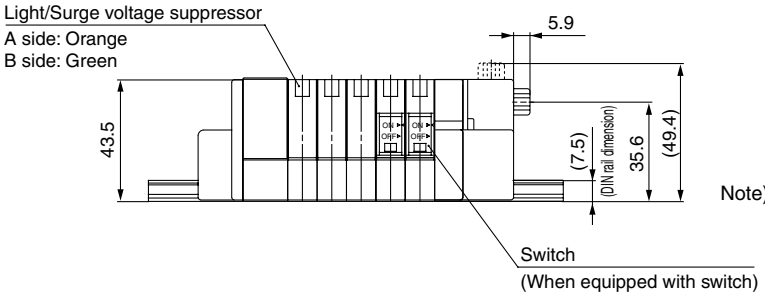


With external pilot





(Station n) ····· (Station 1)



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	110.5	123	135.5	148	148	160.5	173	185.5	198
L2	100	112.5	125	137.5	137.5	150	162.5	175	187.5
L3	81	91.5	102	112.5	123	133.5	144	154.5	165
L4	15	16	17	18	12.5	13.5	14.5	15.5	16.5

External Pilot Manifold L Dimension

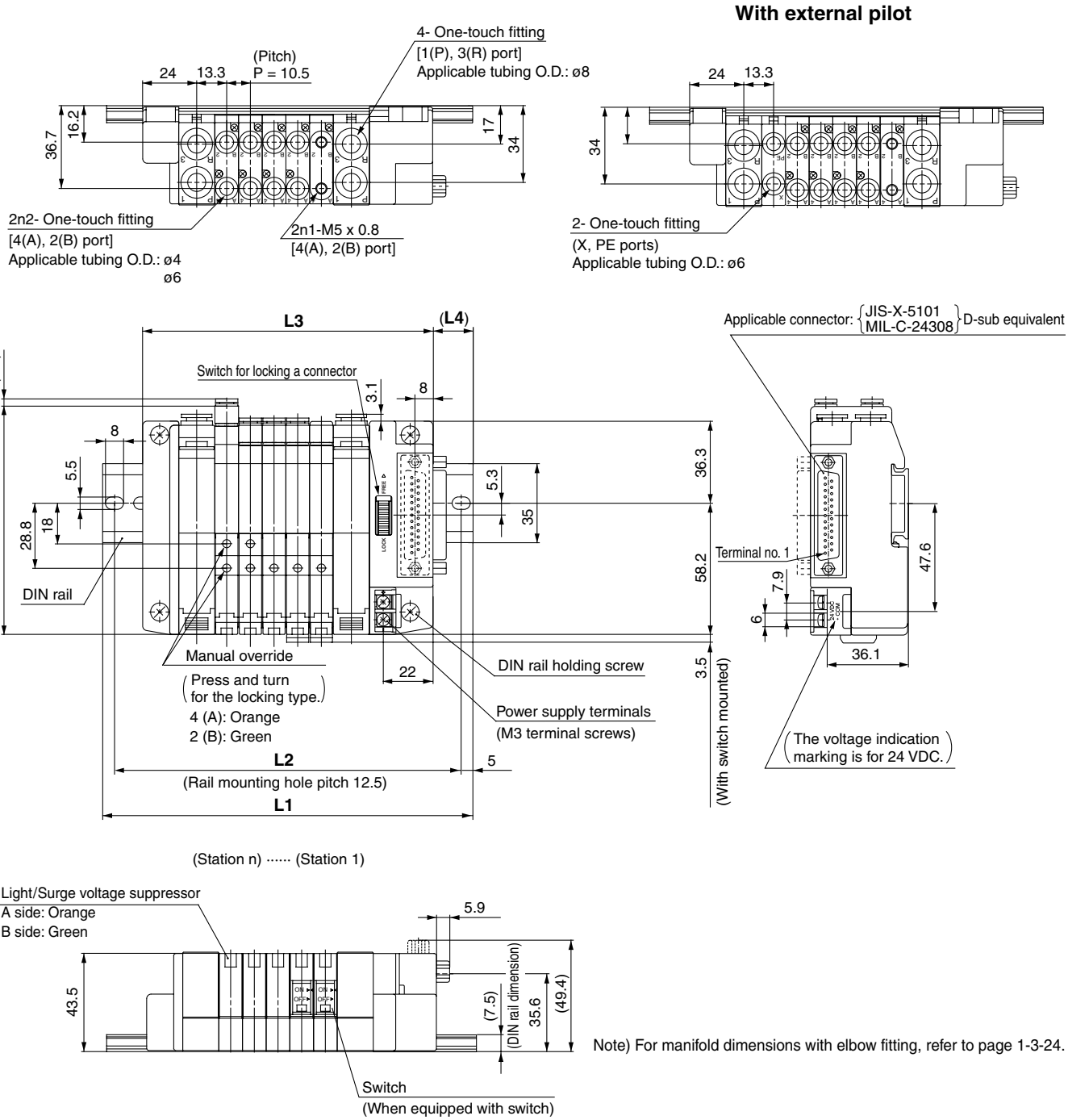
n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9	10
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5

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Dimensions: SZ3000 Plug-in

SS5Z3-60FD$^{1}_{2}$- Stations B-□



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	11	12	13	14	15	16	17	18	19	20
L1	123	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	310.5
L2	112.5	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	300
L3	97	107.5	118	128.5	139	149.5	160	170.5	181	191.5	202	212.5	223	233.5	244	254.5	265	275.5	286
L4	13	14	15	16	17	12	13	14	15	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5	12.5

External Pilot Manifold L Dimension

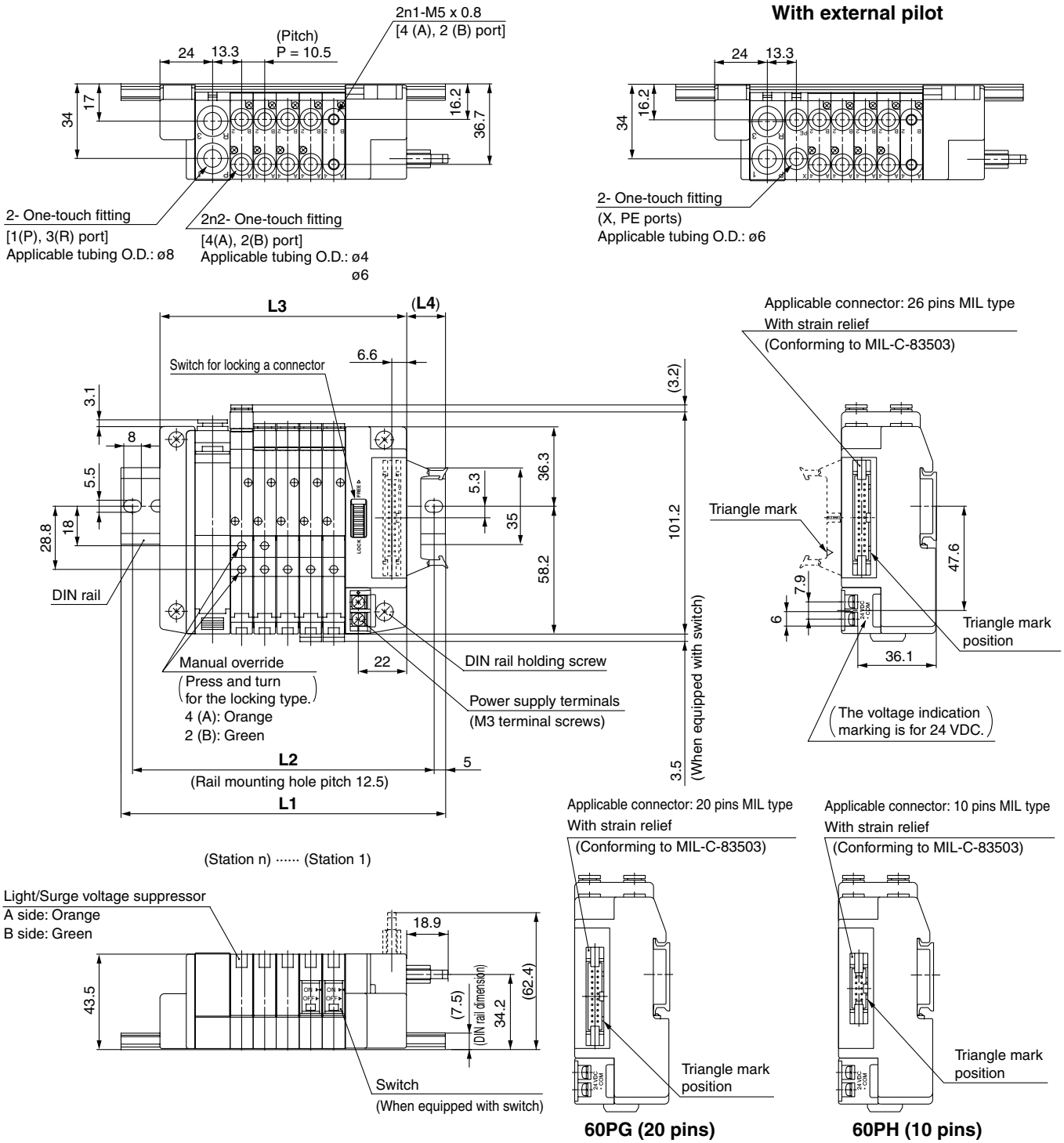
n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
L2	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
L3	107.5	118	128.5	139	149.5	160	170.5	181	191.5	202	212.5	223	233.5	244	254.5	265	275.5	286	296.5
L4	14	15	16	17	12	13	14	15	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5	12.5	13.5

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Dimensions: SZ3000 Plug-in

SS5Z3-60PD$\frac{1}{2}$-Stations U-□ (26 pins)



60PG (20 pins) **60PH (10 pins)**

Note 1) Types 60PG and 60PH differ only in their connectors, and the L1 through L4 dimensions are the same as type 60P.

Note 2) 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	110.5	123	135.5	148	148	160.5	173	185.5	198
L2	100	112.5	125	137.5	137.5	150	162.5	175	187.5
L3	81	91.5	102	112.5	123	133.5	144	154.5	165
L4	15	16	17	18	12.5	13.5	14.5	15.5	16.5

External Pilot Manifold L Dimension

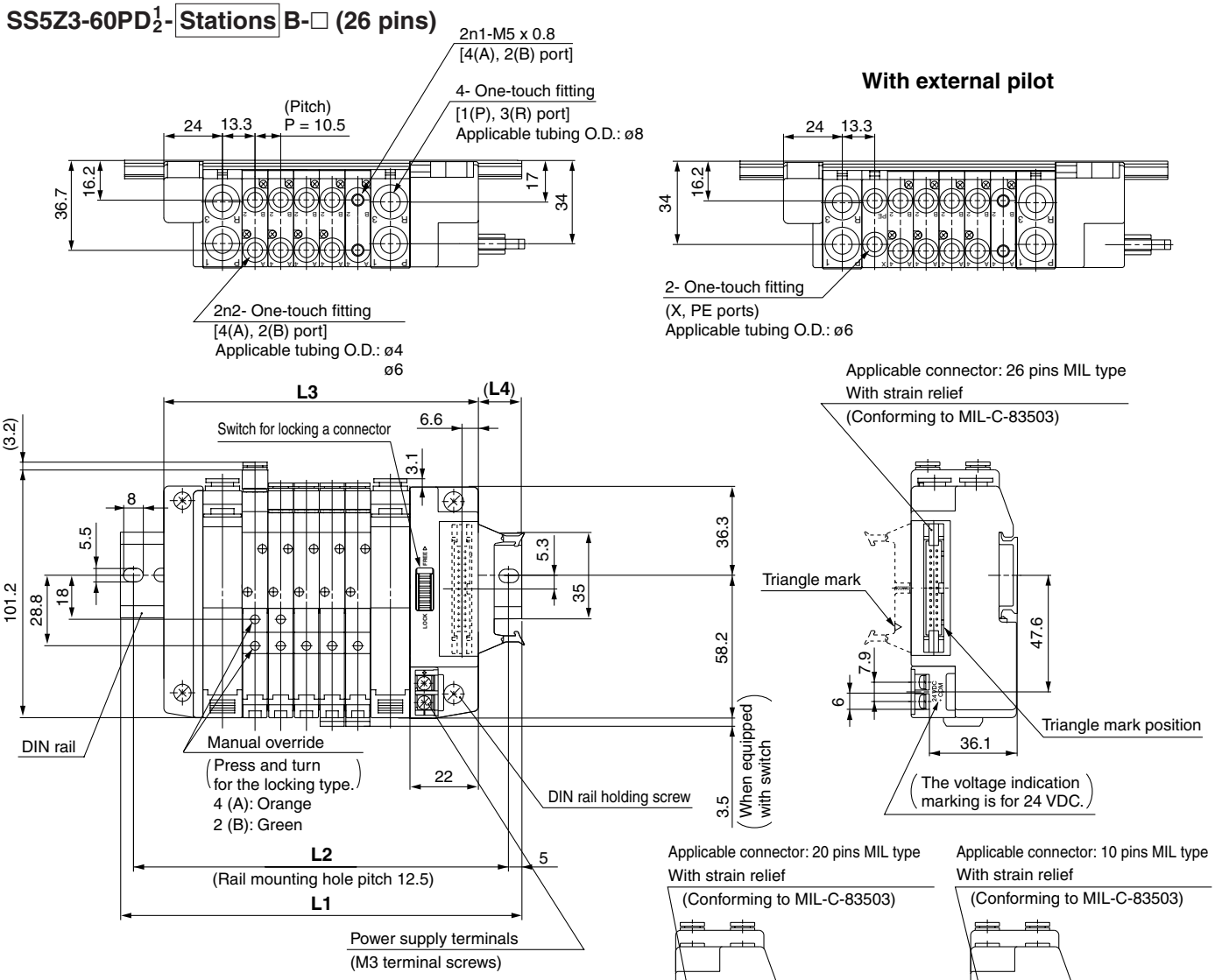
n: Stations (n1 + n2)

L \ n	2	3	4	5	6	7	8	9	10
L1	123	135.5	148	148	160.5	173	185.5	198	210.5
L2	112.5	125	137.5	137.5	150	162.5	175	187.5	200
L3	91.5	102	112.5	123	133.5	144	154.5	165	175.5
L4	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5

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Dimensions: SZ3000 Plug-in

SS5Z3-60PD$\frac{1}{2}$-Stations B-□ (26 pins)



60PG (20 pins) **60PH (10 pins)**

Note 1) Types 60PG and 60PH differ only in their connectors, and the L1 through L4 dimensions are the same as type 60P.

Note 2) 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	11	12	13	14	15	16	17	18	19	20
L1	123	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	310.5
L2	112.5	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	300
L3	97	107.5	118	128.5	139	149.5	160	170.5	181	191.5	202	212.5	223	233.5	244	254.5	265	275.5	286
L4	13	14	15	16	17	12	13	14	15	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5	12.5

External Pilot Manifold L Dimension

n: Stations (n1 + n2)

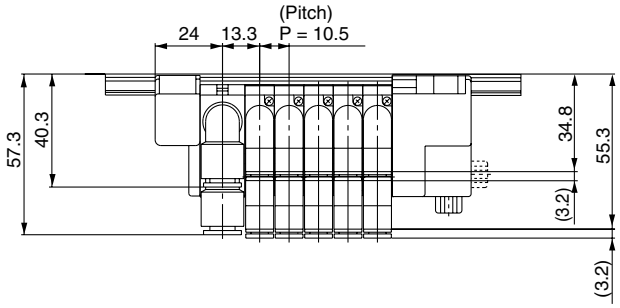
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	310.5	323
L2	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	300	312.5
L3	107.5	118	128.5	139	149.5	160	170.5	181	191.5	202	212.5	223	233.5	244	254.5	265	275.5	286	296.5
L4	14	15	16	17	12	13	14	15	16	17	18	12.5	13.5	14.5	15.5	16.5	17.5	12.5	13.5

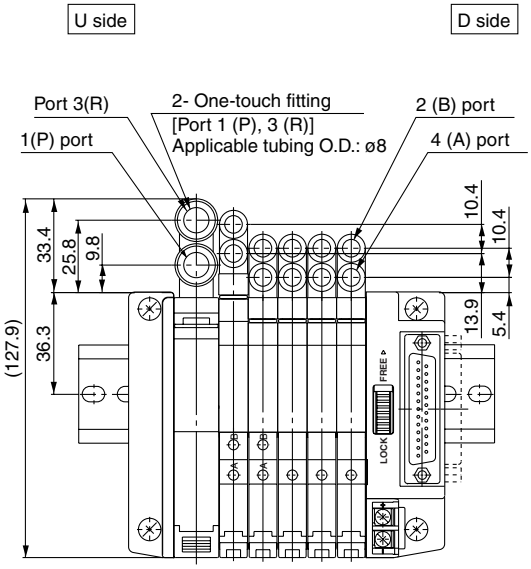
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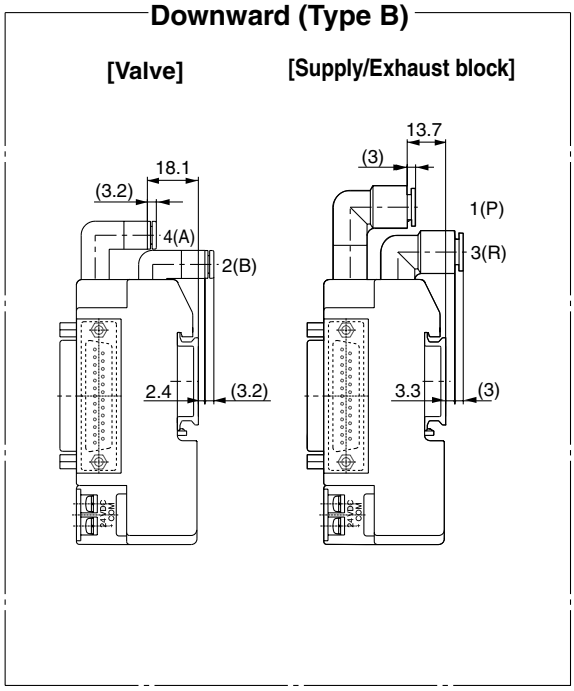
Dimensions with Elbow Fitting: SZ3000 Plug-in, D-sub Connector

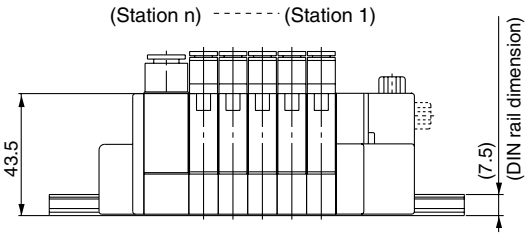
SS5Z3-60FD$^{1}_{2}$- Stations U$^{L}_{B}$-□

(The fitting dimension of the flat cable and non plug-in types is the same.)









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5 Port Solenoid Valve

Series SZ3000

Non Plug-in Type

How to Order

● Non plug-in manifold

SS5Z3 – 60 – 05 U □ □ □

Stations

02	2 stations
⋮	⋮
20	20 stations

SUP/EXH block mounting position

D	D side (2 to 10 stations)
U	U side (2 to 10 stations)
B	Both sides (2 to 20 stations)
M*	Special specifications

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

Pilot type

Nil	Internal pilot
R	External pilot

SUP/EXH block fitting specifications

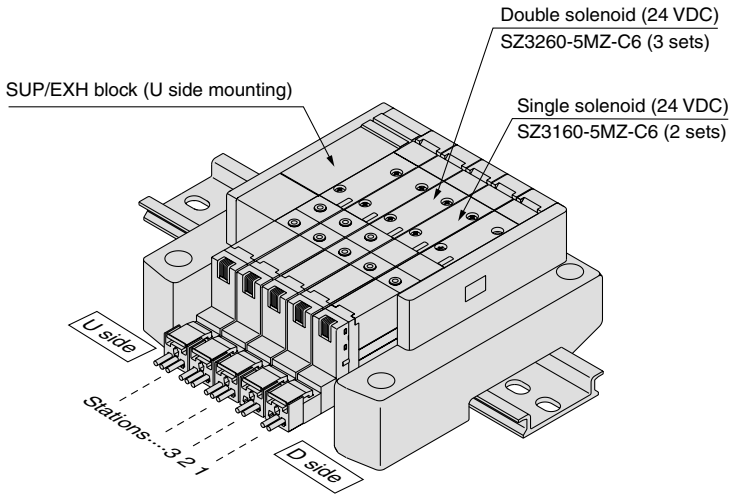
Nil	Straight
L	Elbow type (Upward)
B	Elbow type (Downward)

Option

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

How to Order Valve Manifold Assembly

Ordering example (SZ3000, Non plug-in)



SS5Z3-60-05U····· 1 set (Manifold part number)
*SZ3160-5MZ-C6 ····· 2 sets (Single solenoid part no.)
*SZ3260-5MZ-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.

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How to Order

SZ3 [1] 60 [ ] [ ] – [5] [ ] [M] [ ] [ ] – [C6]

Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	4 position dual 3 port valve: N.C./N.C.
B	4 position dual 3 port valve: N.O./N.O.
C	4 position dual 3 port valve: N.C./N.O.

Pilot type

Nil	Internal pilot
R	External pilot

• The 4 position dual 3 port valve is not available with external pilot specifications.

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.

Rated voltage

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

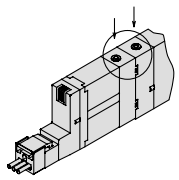
Common specifications

Nil	Positive common
N	Negative common

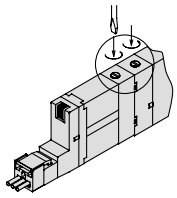
• The symbol is "Nil" when not equipped with light/surge voltage suppressor.

Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type

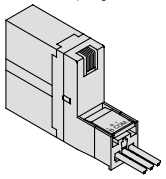


Light/Surge voltage suppressor

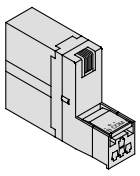
Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

Electrical entry

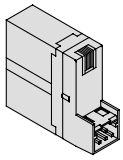
M: With lead wire (Length 300 mm)



MN: Without lead wire

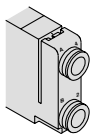


MO: Without connector

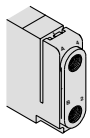


A, B port size

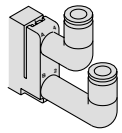
C4: One-touch fitting for ø4
C6: One-touch fitting for ø6



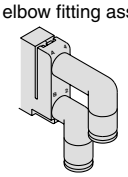
M5: M5 x 0.5



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



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Made to Order **Made to Order Specifications**
(For details, refer to page 1-3-38.)

Manifold Specifications

Model			Type SS5Z3-60
Manifold			Non plug-in type
1 (P: SUP), 3/5 (R: EXH) system			Common SUP, EXH
Valve stations			2 to 20 stations
4(A), 2(B) port Porting specifications		Location	Valve
		Direction	Lateral, Upward, Downward
Port size	1(P), 3/5(R) port		C8
	4(A), 2(B) port		C4, C6, M5
Weight W (g) [2] (n: Number of SUP/EXH blocks, m: Weight of DIN rail)			W = 34n + m + 89

Note 1) In cases such as those where many valves are operated simultaneously, use type B (double side SUP/EXH), applying pressure to the 1(P) ports on both sides and exhausting from the 3(R) ports on both sides.

Note 2) The weight W is the value for the D-sub connector manifold with power supply terminals only. To obtain the weight with solenoid valves attached,add the solenoid valve weights given on page 1-3-10 for the appropriate number of stations. For DIN rail weight, refer to page 1-3-12.

Flow Characteristics

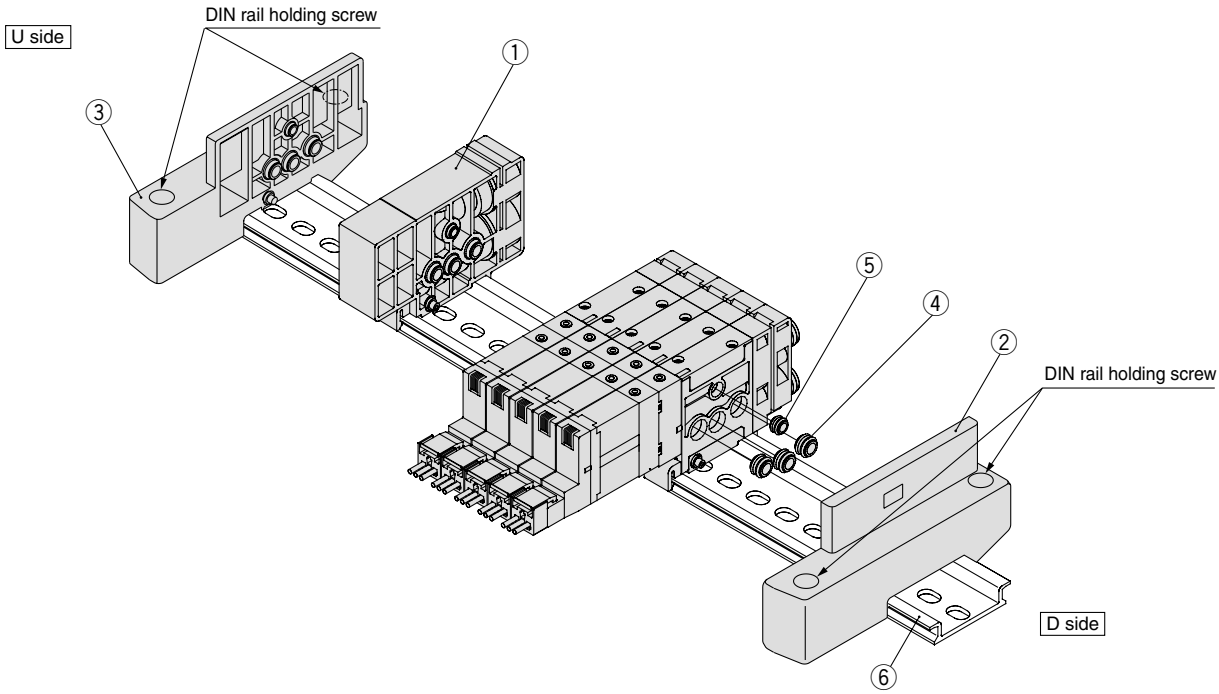
Port size		Flow characteristics					
1, 5, 3	4, 2	1 → 2/4 (P → A/B)			4/2 → 3 (A/B → R)		
(P, EA, EB)	(A, B)	C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
C8	**C4**	0.58 [0.49]	0.26 [0.36]	0.14 [0.13]	0.76 [0.65]	0.15 [0.20]	0.18 [0.15]
	C6	0.73 [0.64]	0.24 [0.27]	0.18 [0.16]	0.77 [0.74]	0.19 [0.16]	0.19 [0.19]
	M5	0.60 [0.57]	0.38 [0.35]	0.17 [0.15]	0.67 [0.58]	0.16 [0.39]	0.16 [0.16]

Note) • The value is for manifold base with 5 stations and individually operated 2 position type.
• Values inside [ ] are for 4 position dual 3 port valves.

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Manifold Exploded View

Type 60 (Non plug-in) manifold



Component Parts

No.	Description	Part no.	Note
①	SUP/EXH block assembly	**SZ3000-50-2A-□□**	C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 L6: With One-touch fitting for ø6 (Elbow fetching upward) L8: With One-touch fitting for ø8 (Elbow fetching upward) B6: With One-touch fitting for ø6 (Elbow fetching downward) B8: With One-touch fitting for ø8 (Elbow fetching downward)
②	End block assembly	**SZ3000-53-8A**	D side
③	End block assembly	**SZ3000-53-7A**	U side
④	SUP block bush assembly	**SZ3000-114-3A**	
⑤	SUP block bush assembly	**SZ3000-114-1A**	
⑥	DIN rail	**VZ1000-11-1-□**	Refer to page 1-3-12.

Manifold Station Expansion Station expansion is possible at any position.

(1) Loosen one DIN rail holding screw on either U side or D side.

(2) Separate the blocks at the location where station expansion is desired.

(3) Mount the valve on the DIN rail.

(4) While pressing the manifold together from both sides, retighten the DIN rail holding screw of the end block assembly which was loosened.

⚠ Caution (Tightening torque: 1.4 N·m)

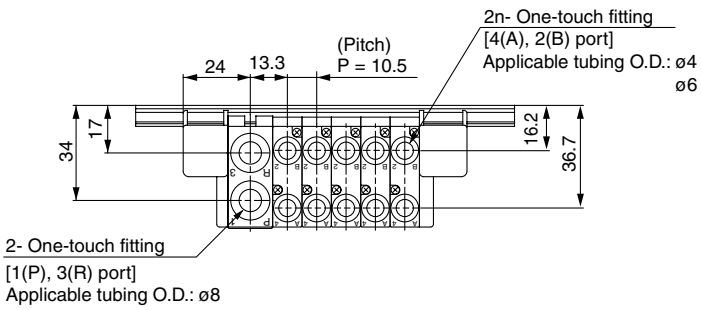
⚠ Caution

1. Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.
2. When disassembly and assembly are performed, air leakage may result if connections between blocks and tightening of the end block's holding screw, is inadequate. Before supplying air, confirm that there are no gaps, etc. between blocks, and that manifold blocks are securely fastened to the DIN rail. Then supply air and confirm that there is no air leakage before operating.

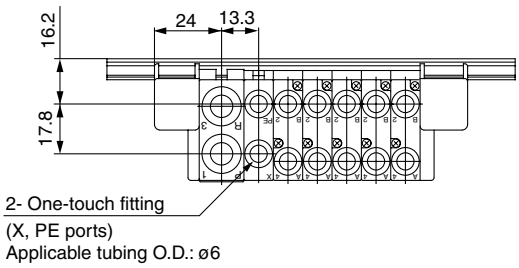
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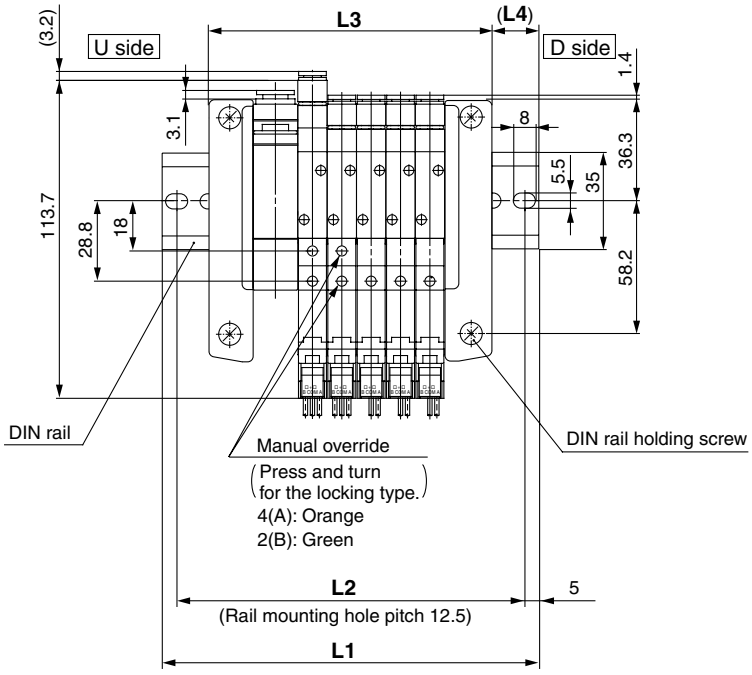
Dimensions: SZ3000 Non Plug-in

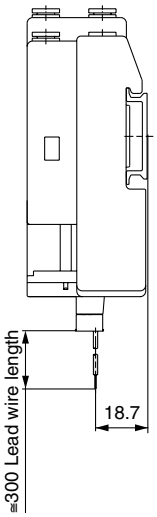
SS5Z3-60-Stations U



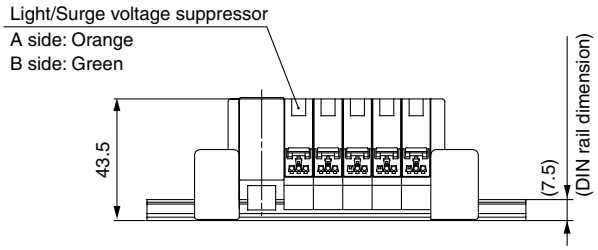
With external pilot







(Station n) ····· (Station 1)



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

Internal Pilot Manifold L Dimension

n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	98	110.5	123	135.5	135.5	148	160.5	173	185.5
L2	87.5	100	112.5	125	125	137.5	150	162.5	175
L3	70	80.5	91	101.5	112	122.5	133	143.5	154
L4	14	15	16	17	12	13	14	15	16

External Pilot Manifold L Dimension

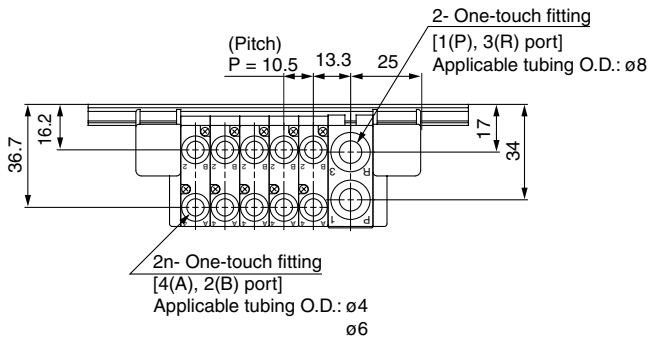
n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	135.5	148	160.5	173	185.5	198
L2	100	112.5	125	125	137.5	150	162.5	175	187.5
L3	80.5	91	101.5	112	122.5	133	143.5	154	164.5
L4	15	16	17	12	13	14	15	16	17

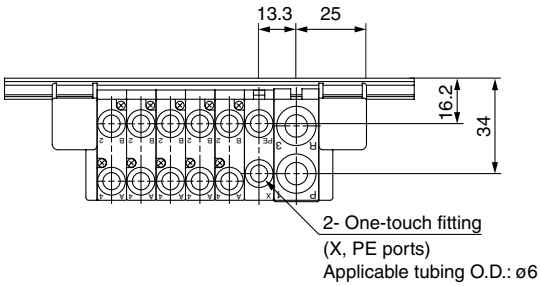
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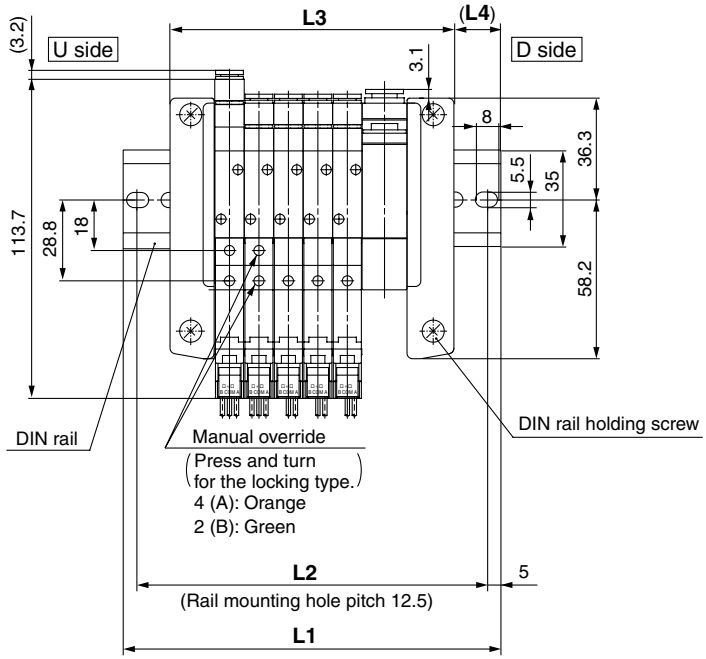
Dimensions: SZ3000 Non Plug-in

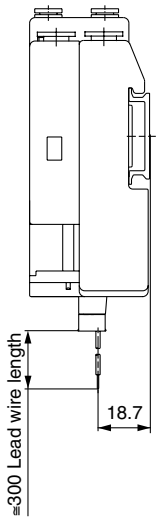
SS5Z3-60-Stations D



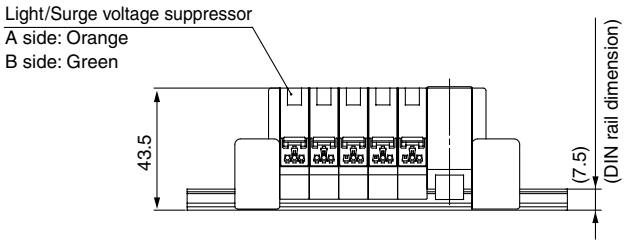
With external pilot







(Station n) ····· (Station 1)



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

Internal Pilot Manifold L Dimension

n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	98	110.5	123	135.5	135.5	148	160.5	173	185.5
L2	87.5	100	112.5	125	125	137.5	150	162.5	175
L3	70	80.5	91	101.5	112	122.5	133	143.5	154
L4	14	15	16	17	12	13	14	15	16

External Pilot Manifold L Dimension

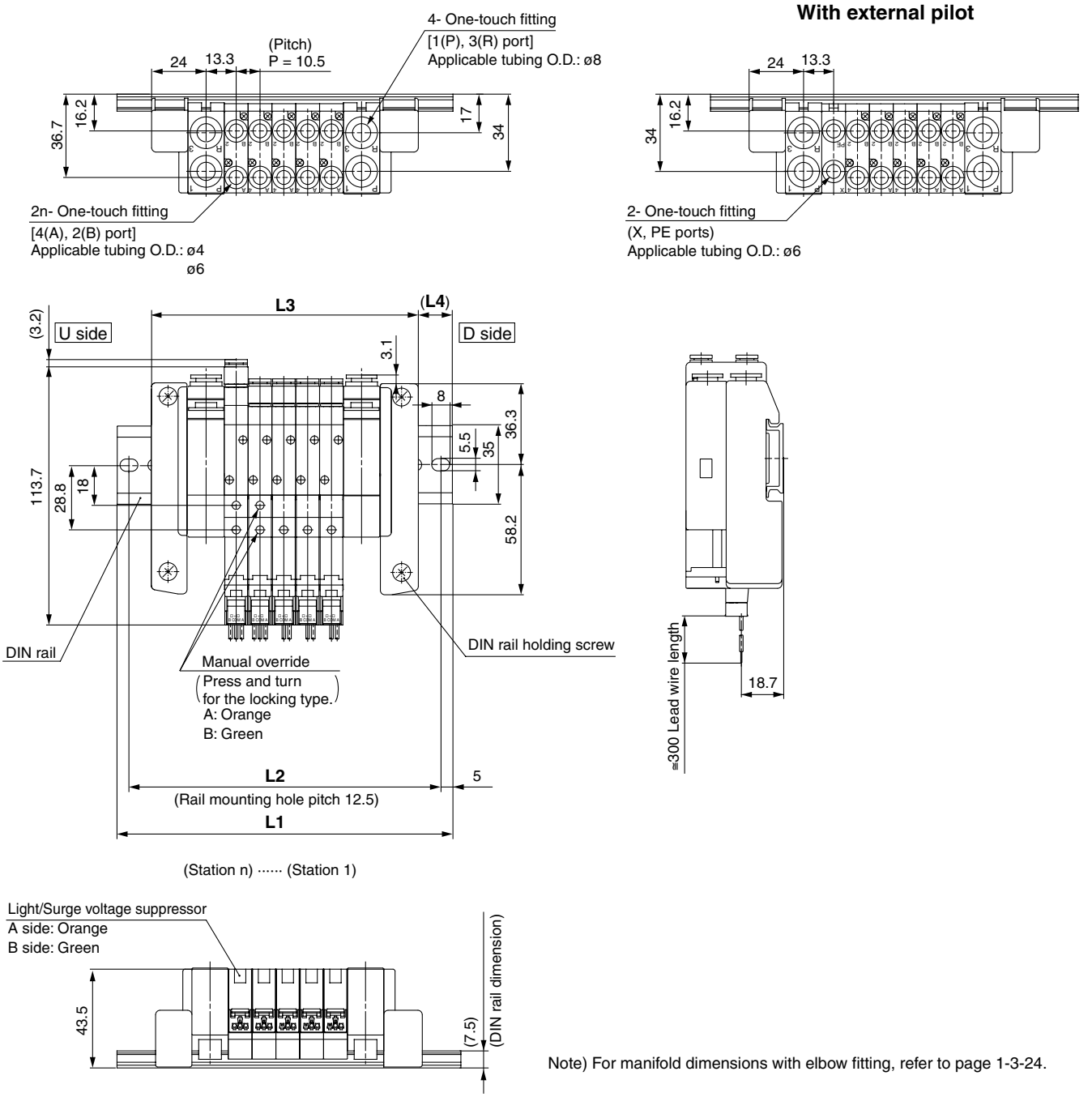
n: Stations

L \ n	2	3	4	5	6	7	8	9	10
L1	110.5	123	135.5	135.5	148	160.5	173	185.5	198
L2	100	112.5	125	125	137.5	150	162.5	175	187.5
L3	80.5	91	101.5	112	122.5	133	143.5	154	164.5
L4	15	16	17	12	13	14	15	16	17

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Dimensions: SZ3000 Non Plug-in

SS5Z3-60-Stations B



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

Internal Pilot Manifold L Dimension

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	110.5	123	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	310.5
L2	100	112.5	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	300
L3	86	96.5	107	117.5	128	138.5	149	159.5	170	180.5	191	201.5	212	222.5	233	243.5	254	264.5	275
L4	12	13	14	15	16	17	12	13	14	15	16	17	12	13	14	15	16	17	18

External Pilot Manifold L Dimension

n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	123	135.5	148	160.5	173	173	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	310.5	310.5
L2	112.5	125	137.5	150	162.5	162.5	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	300	300
L3	96.5	107	117.5	128	138.5	149	159.5	170	180.5	191	201.5	212	222.5	233	243.5	254	264.5	275	285.5
L4	13.5	14.5	15.5	16.5	17.5	12	13	14	15	16	17	12	13	14	15	16	17	18	12.5

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Type 60S□

5 Port Solenoid Valve

Series SZ3000

Serial Transmission Type

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

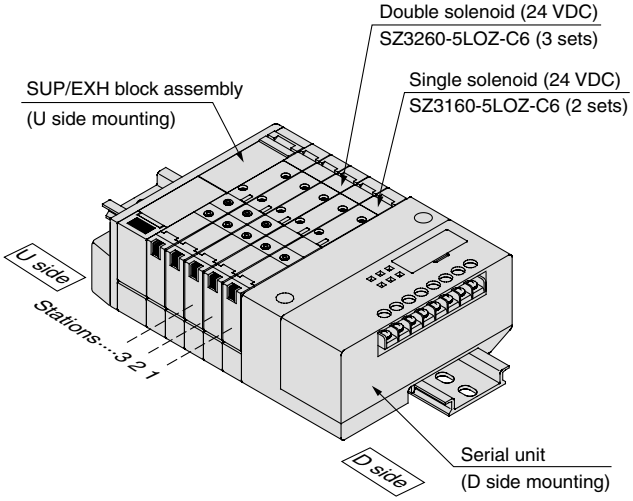
SUP/EXH block mounting position

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.

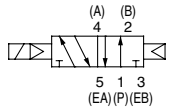
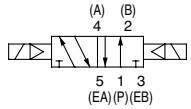
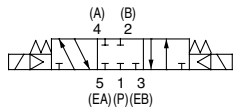
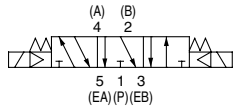
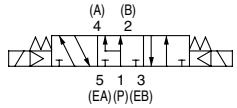
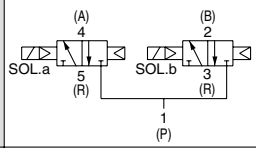
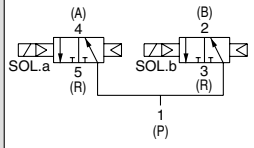
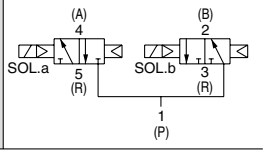
Stations are counted from D side as the 1st one. Indicate the valves to be attached below the manifold part number, in order starting from station 1 as shown in the drawing.
When entry of part numbers becomes complicated, indicate on the manifold specification sheet.

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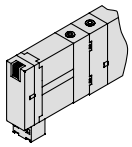
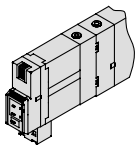
How to Order Solenoid Valves

SZ3 [1] 60 [ ] [ ] – 5LOZ [ ] [ ] – [C6]

Type of actuation

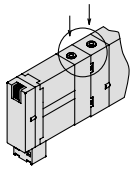
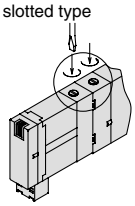
1	2 position single solenoid 
2	2 position double solenoid 
3	3 position closed center 
4	3 position exhaust center 
5	3 position pressure center 
A	4 position dual 3 port valve: N.C./N.C. 
B	4 position dual 3 port valve: N.O./N.O. 
C	4 position dual 3 port valve: N.C./N.O. 

Switch specifications

Nil: Without switch 	**J**: With switch 

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

Manual override

Nil: Non-locking push type 	**D**: Push-turn locking slotted type 

Back pressure check valve

Nil	None
K	Built-in

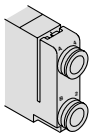
- The built-in back pressure check valve type has an effective area approximately 20% smaller.
- The 3 position closed center and 3 position pressure center are not available with back pressure check valve.

Pilot type

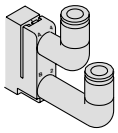
Nil	Internal pilot
R	External pilot

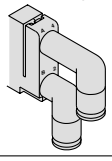
- Dual 3 port valves are not available with external pilot specifications.

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 

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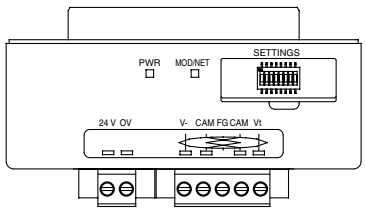
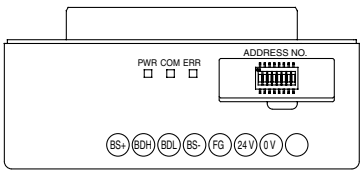
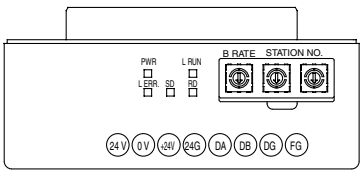
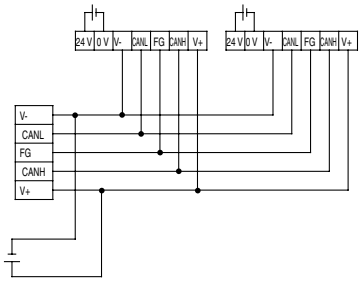
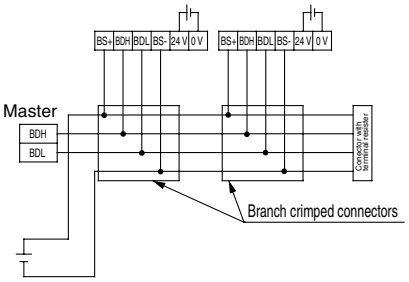
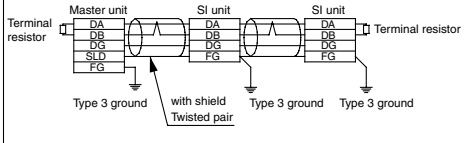
Specifications

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			
	LED / Description POWER: Green light ON with circuit power input MOD/NET: Light OFF: When the unit is not online or circuit power is OFF 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	• DeviceNet • OMRON Corporation CompoBus/D System Master unit: C200HW-DRM21 • No. of output points, 16 points	• 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)	• CC-LINK System Master unit: AJ61BT11 Master unit: A1SJ61BT11 Master unit: AJ61QBT11 Master unit: A1SJ61QBT11 • No. of output points, 16 points
Cable wiring			

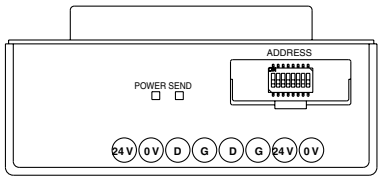
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SI Unit Part No.

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

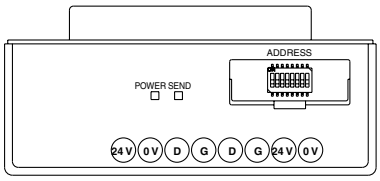
Name of terminal block, LED

Type SF
NKE Corporation
Uni-wire System



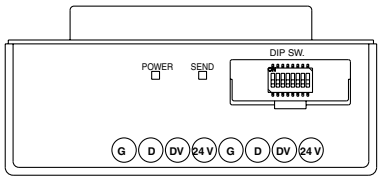
LED	Description
POWER	Lighting when power is turned ON (Light ON when normal, flickers when voltage is low)
SEND	Transmission indicator Normal: Blinks, Abnormal: Light OFF or ON

Type SH
NKE Corporation
Uni-wire H System



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

Type SJ1/SJ2
SUNX Corporation
S-LINK System



LED	Description
POWER	Lighting when power is turned ON
SEND	Transmission indicator Normal: Blinks, Abnormal: Blinks slowly

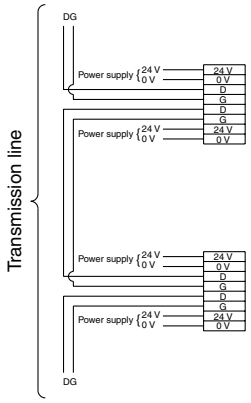
Note

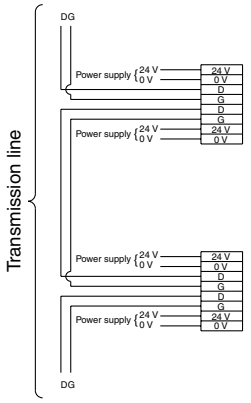
- Uni-wire System
  Send unit: SD-120
- No. of output points, 16 points

- Uni-wire H System
  Send unit: SD-H2
- No. of output points, 16 points

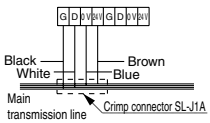
- S-LINK System
  S-LINK controller: SL-CU1
- No. of output points, 16 points (Type SJ1)
  No. of output points, 8 points (Type SJ2)

Cable wiring

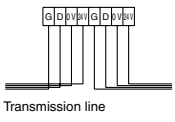




a) Type T branching multi-drop wiring (S-LINK System)



b) Crossover wiring (Sensor link system)



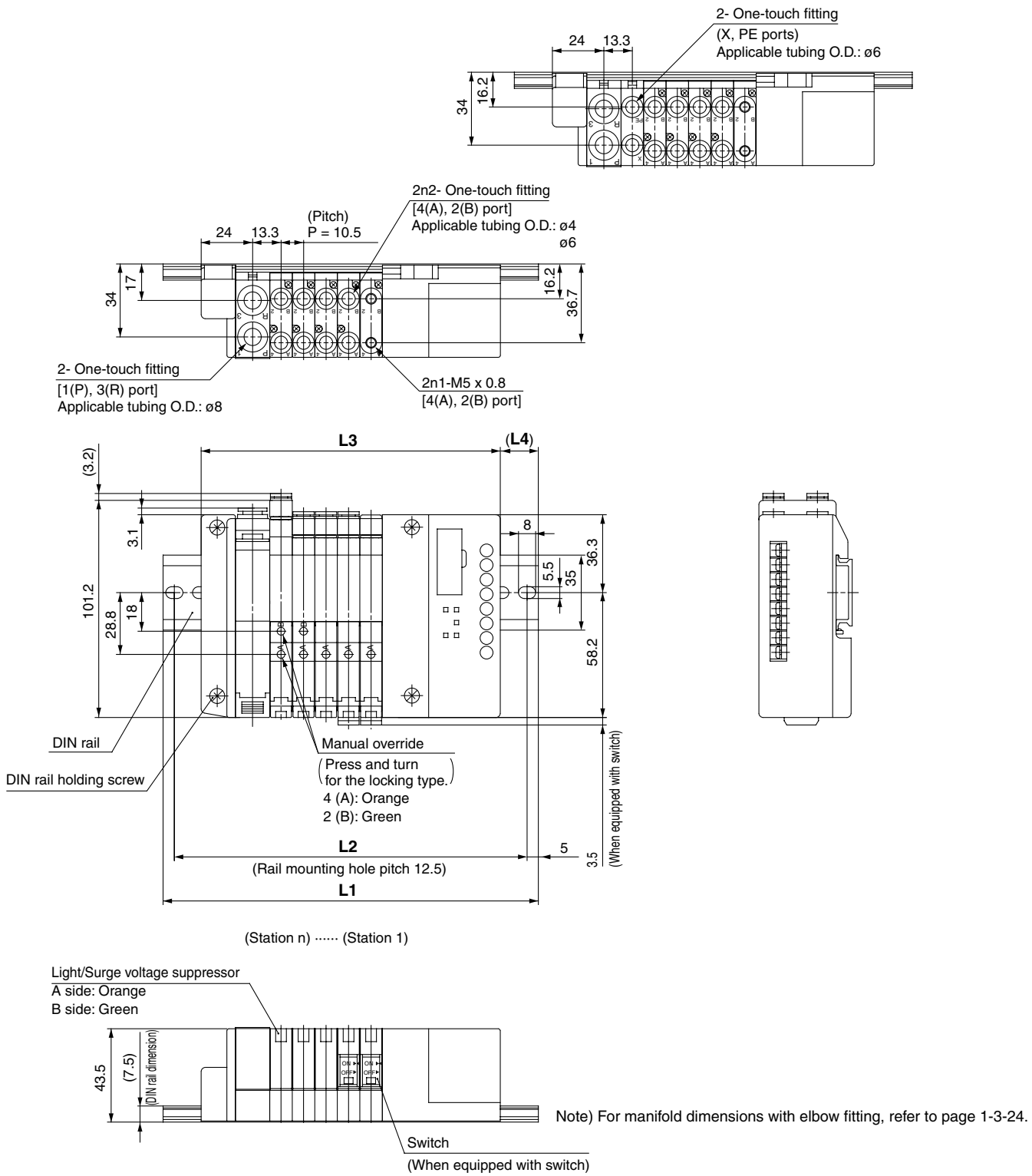
The above is the example of using dedicated S-LINK flat ribbon cable SL-RCM□00.

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Dimensions: SZ3000 Serial Transmission Type

SS5Z3-60S □D-[Stations]U

[With external pilot]



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)

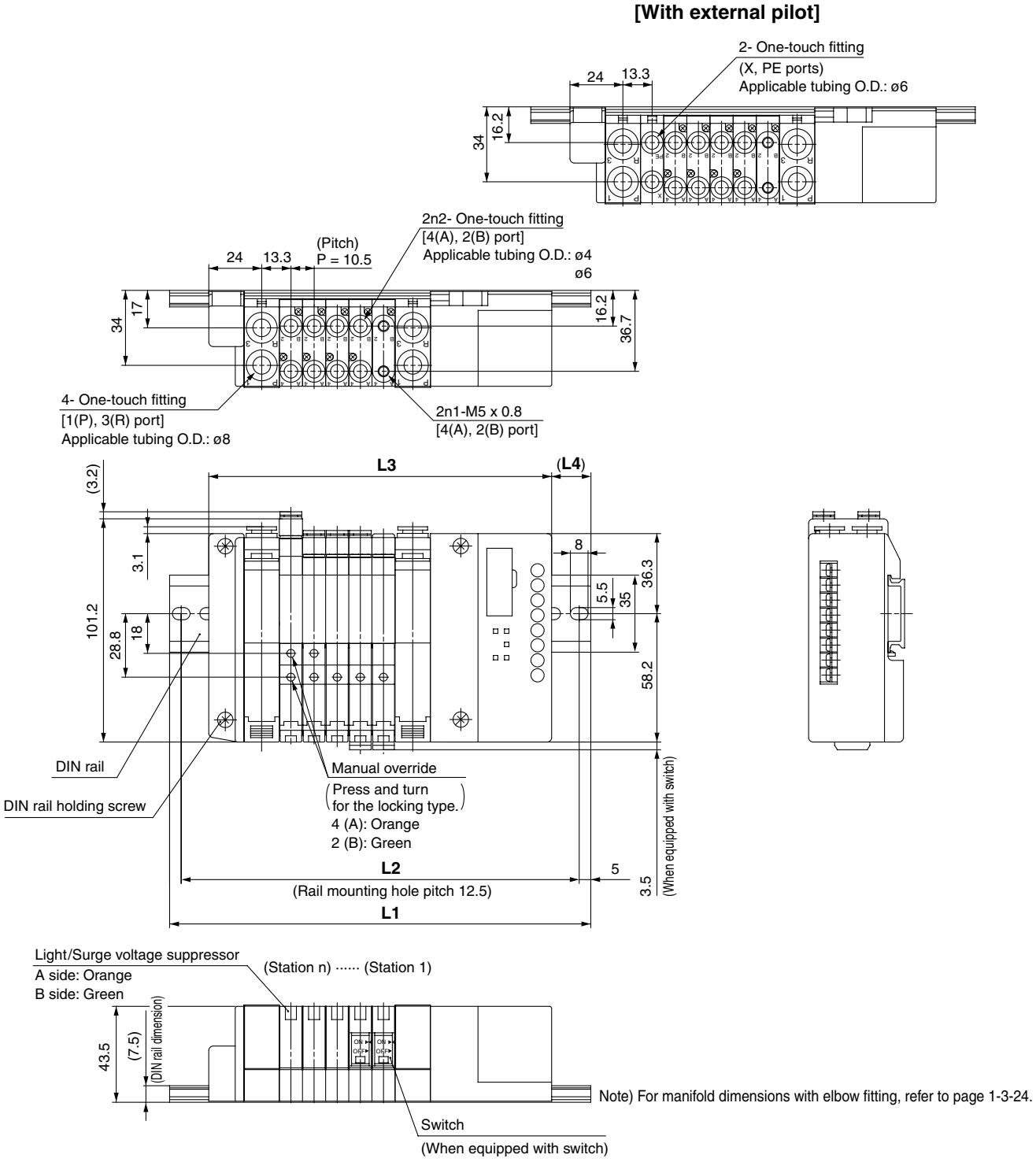
L \ n	2	3	4	5	6	7	8	9	10
L1	148	160.5	173	185.5	185.5	198	210.5	223	235.5
L2	137.5	150	162.5	175	175	187.5	200	212.5	225
L3	118.5	129	139.5	150	160.5	171	181.5	192	202.5
L4	15	16	17	18	12.5	13.5	14.5	15.5	16.5

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Dimensions: SZ3000 Serial Transmission Type

SS5Z3-60S □D-Stations B

[With external pilot]



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
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

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Made to Order

Series SZ3000

Made to Order Specifications:

Please contact SMC for detailed specifications, delivery and pricing.

1 Main Valve Fluoro Rubber Specifications

Symbol: -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 thereis 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□60(R)-□□□□-□-□-X90

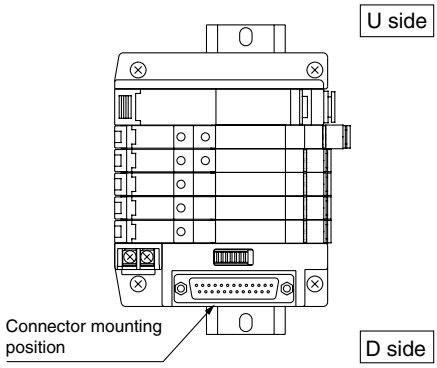
- **Entry is the same as standard products.**
  Specifications and performance are the same as standard products.

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.

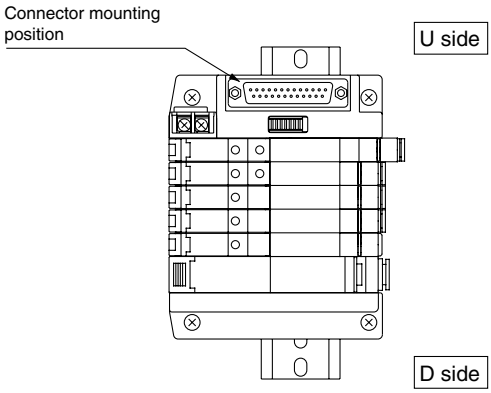
2 Plug-in Manifold Connector and Serial Unit Mounted on Side U

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.

Standard



Made-to-order



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