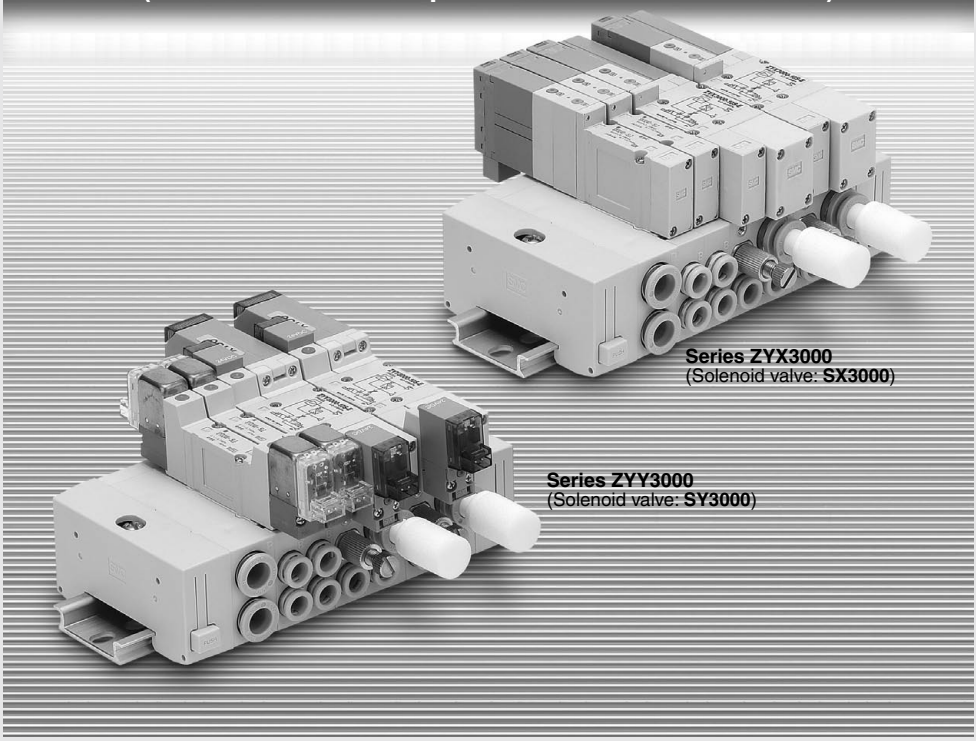
Ejector Valve Unit

Series ZYY/ZYX

Nozzle diameter: ø0.7, ø1.0
Type S: Standard type
L: Large flow type

Ejectors and solenoid valves can be mounted on the same manifold.
Centralized wiring of ejector
(ZYX3000: Individual pressure switch not included)



Series ZYX3000
(Solenoid valve: **SX3000**)

Series ZYY3000
(Solenoid valve: **SY3000**)

Ejector Valve Unit
Series ZYY/ZYX

How to Order Ejector Valves for ZYY3000

ZY Y3 5 LOU L Z – 10 S – 15 –

Lead wire/ Voltage suppressor specifications

LOU	Connector box type

Series

Y3	SY3000

Rated voltage

DC specifications

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

AC specifications (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115VAC]
4	220 VAC [230VAC]

Note) The connector box type and serial transmission type are only available with 5 (24 VDC).

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC

G	Grommet	Lead wire length 300 mm
H		Lead wire length 600 mm
L	L plug connector	With lead wires (Length 300 mm)
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires (Length 300 mm)
MN		Without lead wires
MO		Without connector

Note 1) Types LN and MN are equipped with sockets (2 pcs.).
Note 2) Not compatible with the FU electrical entry which is used on Series SY3000 plug-in type manifolds (45F, 45P□, 45T, 45T1, 45S□, 45S1□, 45S2□, 45S3□).

Light/Surge voltage suppressor

For electrical entry types G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

Note 1) Types R and U are DC only.
Note 2) Since surge voltage is prevented with a rectifier in the case of AC, there is no type "S".

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

Nozzle diameter

07	0.7
10	1.0

Max. vacuum pressure

S	−84 kPa
L	−53 kPa

Silencer

Nil	None
1	With silencer

Vacuum pressure switch

Nil	None
E	With vacuum pressure switch

Wiring specifications (Vacuum pressure switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Output specifications (Vacuum pressure switch)

14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Manifold block

Nil	With manifold block
MN	None

How to Order Ejector Valves for ZYX3000

ZY X3 5 [ ] LOZ / M Z [ ] – 10 S [ ] – [ ] 15 [ ] – [ ] [ ]

Lead wire/ Voltage suppressor specifications

LOZ	Plug-in type Serial transmission type

Series

X3	SX3000

Rated voltage

DC specifications

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

Note 1) The serial transmission type is 5 (24 VDC) only.
Note 2) V, S and R specifications are 45T, 45T1.

Common specifications

Nil	Positive common
N	Negative common

Note 1) The symbol is "Nil" for the single grommet type and when not equipped with light/surge voltage suppressor.
Note 2) Match with the common specification of the manifold.

Electrical entry

G	Grommet	Lead wire length 300 mm
H		Lead wire length 600 mm
L	L plug connector	With lead wires (Length 300 mm)
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires (Length 300 mm)
MN		Without lead wires
MO		Without connector

Note) For types LN and MN, the single solenoid has 2 sockets and the double solenoid has 3 sockets.

Light/Surge voltage suppressor

For electrical entry types G, H, L, M

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

Manual override

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

Nozzle diameter

07	0.7
10	1.0

Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Silencer

Nil	None
1	With silencer

Vacuum pressure switch

Nil	None
E	With vacuum pressure switch

Manifold block

Nil	With manifold block
MN	None

Plug-in/Non plug-in type

Nil	Plug-in type
F	Non plug-in type

Output specifications (Vacuum pressure switch)

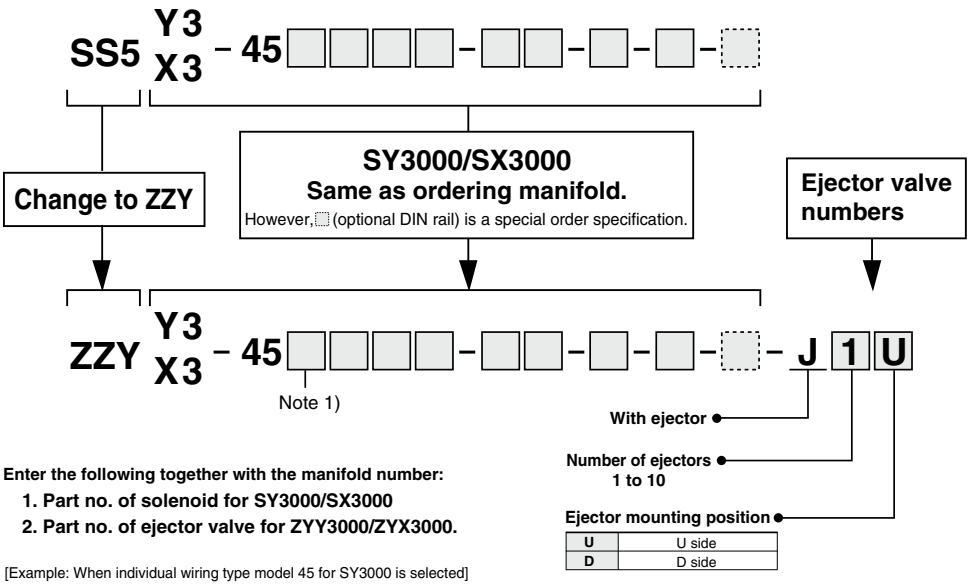
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, with analog output, 200 degree setting

Wiring specifications (Vacuum pressure switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

How to Order Manifold Valves for ZYY3000/ZYX3000 (Split Base/DIN Rail Mounting)

For solenoid valve and ejector valve combination



Enter the following together with the manifold number:

1. **Part no. of solenoid for SY3000/SX3000**
2. **Part no. of ejector valve for ZYY3000/ZYX3000.**

[Example: When individual wiring type model 45 for SY3000 is selected]

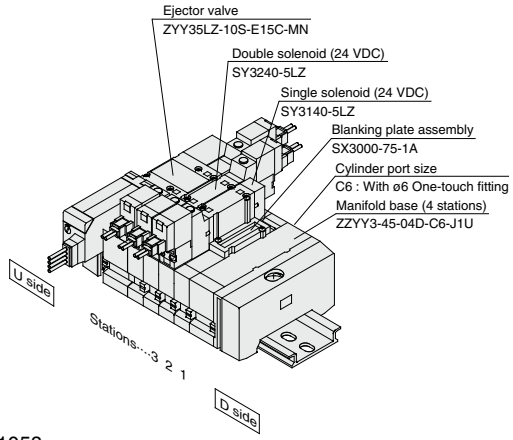
ZZY Y3-45-04D-C6- J1U ---------- 1SET

SY3000 manifold model | Ejector valve numbers

- ∗ **SX3000-75-1A ---------- 1SET**
- ∗ **SY3140-5LZ ---------- 1SET**
- ∗ **SY3240-5LZ ---------- 1SET**
- ∗ **ZYY35LZ-10S-E15C ----- 1SET**

∗ is the symbol for a built-in assembly. Add the ∗ symbol at the beginning of part numbers for solenoid valves, etc. to be mounted, and enter these together in order from the D side.

∗ When ordering manifold valve components individually without adding the ∗ symbol, add -MN at the end of the ejector valve numbers.



Note 1) Varies according to the total number of solenoid valve and ejector valve stations. Refer to pages 1074 to 1095 for the Manifold Valve Specification Sheet.

For ejector valves only (Without solenoid valves: individual wiring type is compliant only.)

ZZY – J 1 U

With ejector

Number of ejectors
1 to 10

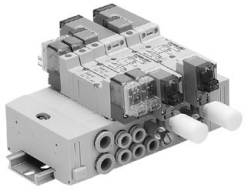
Example) **ZYY-J3U ---------- 1SET**

- ∗ **ZYY35MZ-10S1-E15C ---------- 2SETS**
- ∗ **ZYY35MZ-10S1 ---------- 1SET**

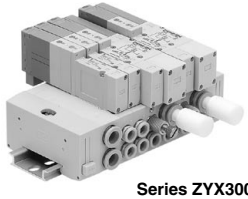
Series SY3000/SX3000 in manifold/split base combinations DIN rail mount type can be mounted

Compact (integrated construction of ejector and valve)

Copper-free and fluorine-free measures implemented



Series ZYY3000



Series ZYX3000

Ejector Valve Specifications

Ejector valve model	ZY□3□□□–07S	ZY□3□□□–07L	ZY□3□□□–10S	ZY□3□□□–10L
Nozzle diameter (mm)	0.7		1.0	
Max. suction flow rate N (L/min (ANR))	11	18	22	32
Max. vacuum pressure (kPa)	−84	−53	−84	−53
Maximum operating pressure	0.6 MPa			
Standard supply pressure	0.45 MPa			
Operating temperature range	5 to 50°C			

Supply/Release Valve Specifications

Valve type	Pilot type 3 position 3 port solenoid valve
Type of actuation	Closed center
Fluid	Air
Operating pressure range	0.2 to 0.6 MPa
Ambient and fluid temperature	5 to 50°C
Allowable voltage fluctuation	−10 to +10%
Electrical entry	Grommet : G, H L plug connector: L, LN, LO M plug connector: M, MN, MO
Power consumption	0.5 W (With indicator light: 0.6 W): Series ZYY3000 0.6 W (With indicator light: 0.65 W): Series ZYX3000
Effective area (Cv factor)	4.68 mm² (0.26)

Electronic Vacuum Pressure Switch Specifications

Model	ZSE1–00–14□ –X129 (–X130)	ZSE1–00–15□ –X129 (–X130)	ZSE1–00–16□ –X129 (–X130)	ZSE1–00–17□ –X129 (–X130)	ZSE1–00–18□ –X129 (–X130)	ZSE1–00–19□ –X129 (–X130)	ZSE1–00–55□ –X129 (–X130)
Sensor type	Diffusion type semiconductor pressure sensor						
Set pressure range	0 to –101 kPa						
Hysteresis	1 to –10% of set pressure (Adjustable)		3% full span or less (Fixed)		1 to –10% of set pressure (Adjustable)		
Repeatability	±1% full span or less						
Temperature characteristics	±3% full span or less						
Operating voltage	12 to 24 VDC (Ripple ±10% or less)						
ON-OFF output	NPN open collector 30 V Max. 80 mA						PNP open collector Max. 80 mA
Analog output	None				1 to 5 V		None
Setting points	1 point		2 point		1 point		
Operation indicator light	Lights up when ON (Red)		Lights up when ON (OUT1: Red, OUT2: Green)		Lights up when ON (Red)		
Setting trimmer rotation angle	3 turns	200 degrees	3 turns	200 degrees	3 turns	200 degrees	200 degrees
Current consumption	17 mA or less (When 24 VDC is ON)		25 mA or less (When 24 VDC is ON)		17 mA or less (When 24 VDC is ON)		
Max. operating pressure	0.2 MPa						

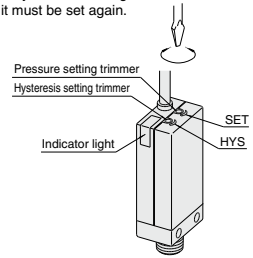
Note 1) When using an ejector, there is no problem if pressure of 0.5 MPa is applied for 1 second or less.
Note 2) X129 is for Series ZYX3000 and X130 is for Series ZYY3000.
Note 3) For details about wiring, refer to the Operation Manual that can be downloaded from SMC website (http://www.smcworld.com).

How to Set the Pressure

- The ON pressure is set with the pressure setting trimmer. High vacuum settings are obtained by turning it clockwise.
- When setting, use a flat head screw driver which fits the slot in the trimmer, and turn it gently with your finger tips.

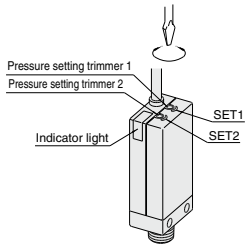
ZSE1-□□-14/-15/-18/-19

- Hysteresis can be set using the hysteresis setting trimmer. The setting is increased by turning it clockwise, and the range is 1 to 10% of the ON pressure.
- When the hysteresis setting trimmer is moved after setting the ON pressure, it must be set again.

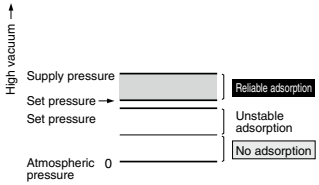


ZSE1-□□-16/-17

- OUT1 (white lead wire, red LED) can be set with pressure setting trimmer 1 (SET1).
- OUT2 (green lead wire, green LED) can be set with pressure setting trimmer 2 (SET2).



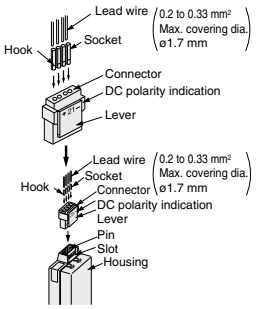
- When using to confirm adsorption, set to the minimum vacuum pressure at which adsorption is possible. If set below this valve, the switch will turn ON even when adsorption has failed or is insufficient. Also take note that if the setting is too high, the switch may not turn ON even with good adsorption.



How to Use the Connector

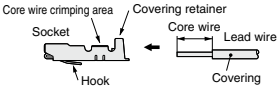
1. Attaching and detaching connectors

- To install the connector, hold the lever and connector unit between your fingers and insert it straight onto the pins. Then lock it by pressing the pawl of the lever into the slot on the housing.
- To remove the connector, pull it straight out while pressing the lever down with your thumb to release the pawl from the slot.



2. Crimping of lead wire and socket

Strip 3.2 to 3.7 mm at the end of the wire, place the exposed core wire into the socket properly and crimp with a crimping tool. When this is done, be sure that the lead wire covering does not get into the core wire crimping area. (Crimping tool: Model DXT170-75-1)



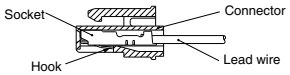
3. Attaching and detaching of socket to connector with lead wire

- **Attaching**

Insert the sockets into the square holes of the connector (with +, 1, 2, – indication), and continue to push the sockets all the way in until they 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.

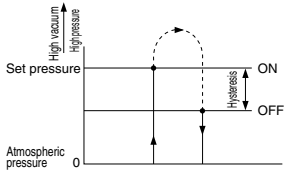
- **Detaching**

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 (about 1 mm). If the socket will be used again, first spread the hook outward.



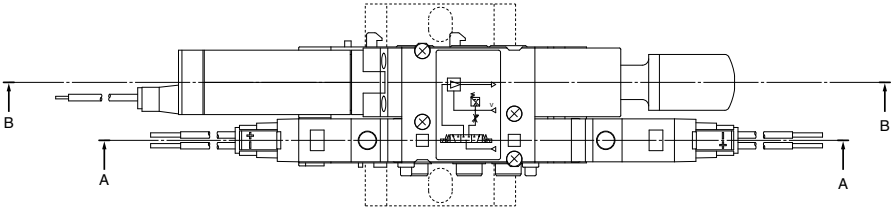
Hysteresis

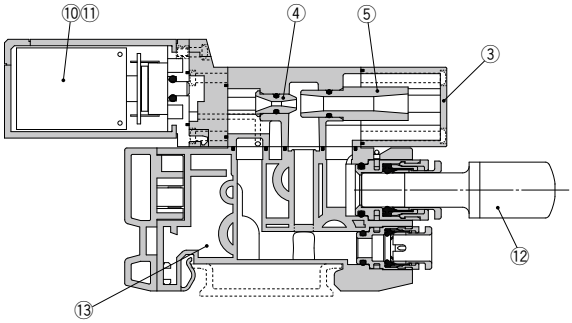
Hysteresis is the difference between the pressure at which the output signal turns ON and the pressure at which it turns OFF. It turns ON at the set pressure.



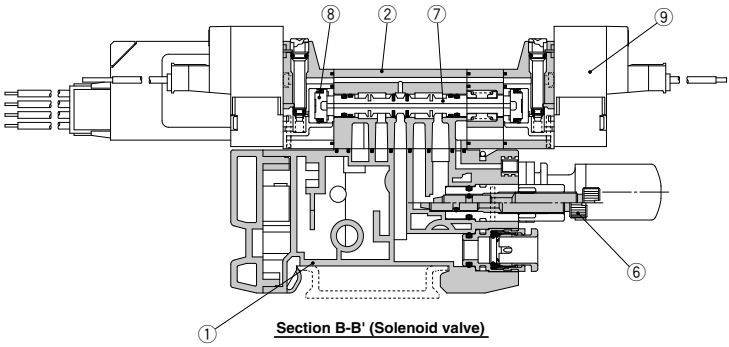
Construction

ZYY3000





Section A-A' (Ejector)



Section B-B' (Solenoid valve)

Component Parts

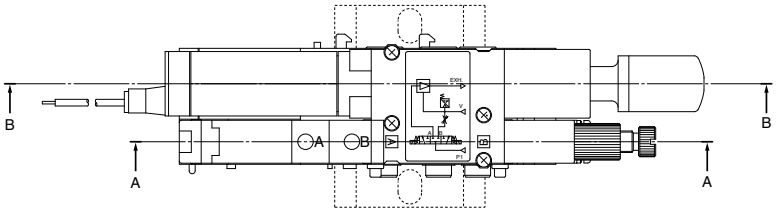
No.	Description	Material	Note
1	**Manifold block**	Resin	
2	**Body**	Zinc die-casted	
3	**Silencer cover**	Resin	
4	**Nozzle**	Aluminum alloy	
5	**Diffuser**	Aluminum alloy	
6	**Needle**	Stainless steel	
7	**Spool**	Aluminum alloy	
8	**Piston**	Resin	

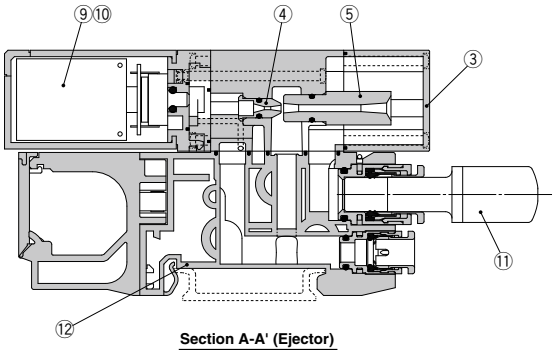
Replacement Parts

No.	Description	Part no.
9	**3 port solenoid valve**	SY114-□□□
10	**Vacuum pressure switch**	
11	**End plate assembly**	For without a switch
12	**Silencer**	AN15-C08
13	**Non plug assembly**	ZYY3000-NPA

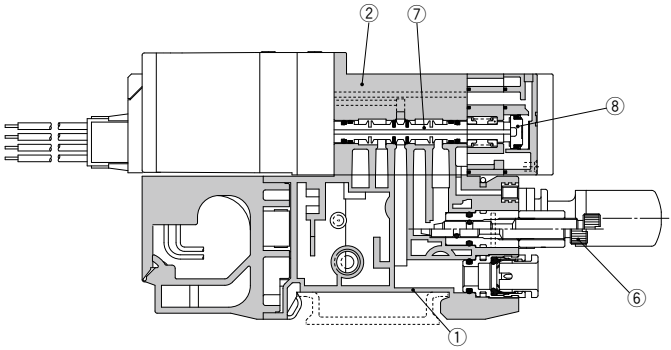
Construction

ZYX3000





Section A-A' (Ejector)



Section B-B' (Solenoid valve)

Component Parts

No.	Description	Material	Note
1	**Manifold block**	Resin	
2	**Body**	Zinc die-casted	
3	**Silencer cover**	Resin	
4	**Nozzle**	Aluminum alloy	
5	**Diffuser**	Aluminum alloy	
6	**Needle**	Stainless steel	
7	**Spool**	Aluminum alloy	
8	**Piston**	Resin	

Replacement Parts

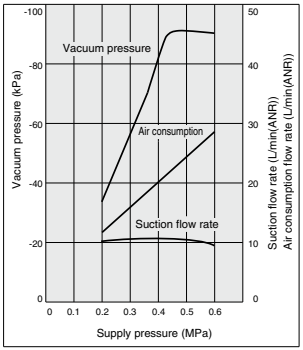
No.	Description	Part no.
9	**Vacuum pressure switch**	
10	**End plate assembly**	For without a switch
11	**Silencer**	AN15-C08
12	**Plug assembly**	ZYY3000-PA

Exhaust Characteristics/Flow Characteristics

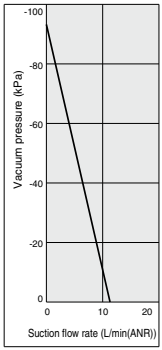
The flow rate characteristics correspond to a supply pressure of 0.45 MPa.

ZY$^{Y3}_{X3}$□□□□□-07S

Exhaust Characteristics

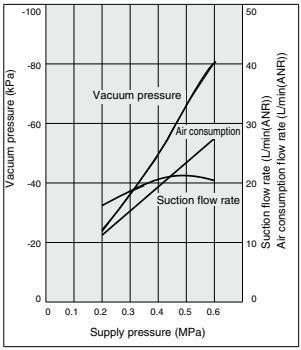


Flow Characteristics

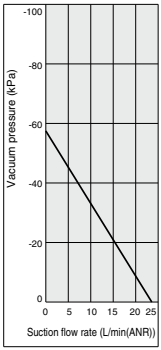


ZY$^{Y3}_{X3}$□□□□□-07L

Exhaust Characteristics

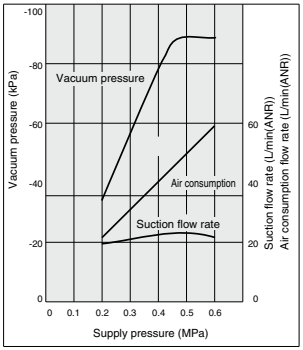


Flow Characteristics

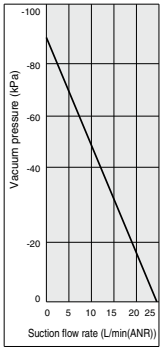


ZY$^{Y3}_{X3}$□□□□□-10S

Exhaust Characteristics

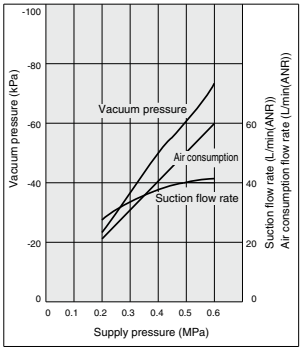


Flow Characteristics

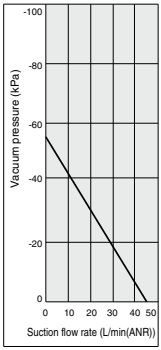


ZY$^{Y3}_{X3}$□□□□□-10L

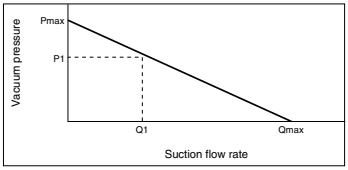
Exhaust Characteristics



Flow Characteristics



How to Read Flow Characteristics Graph



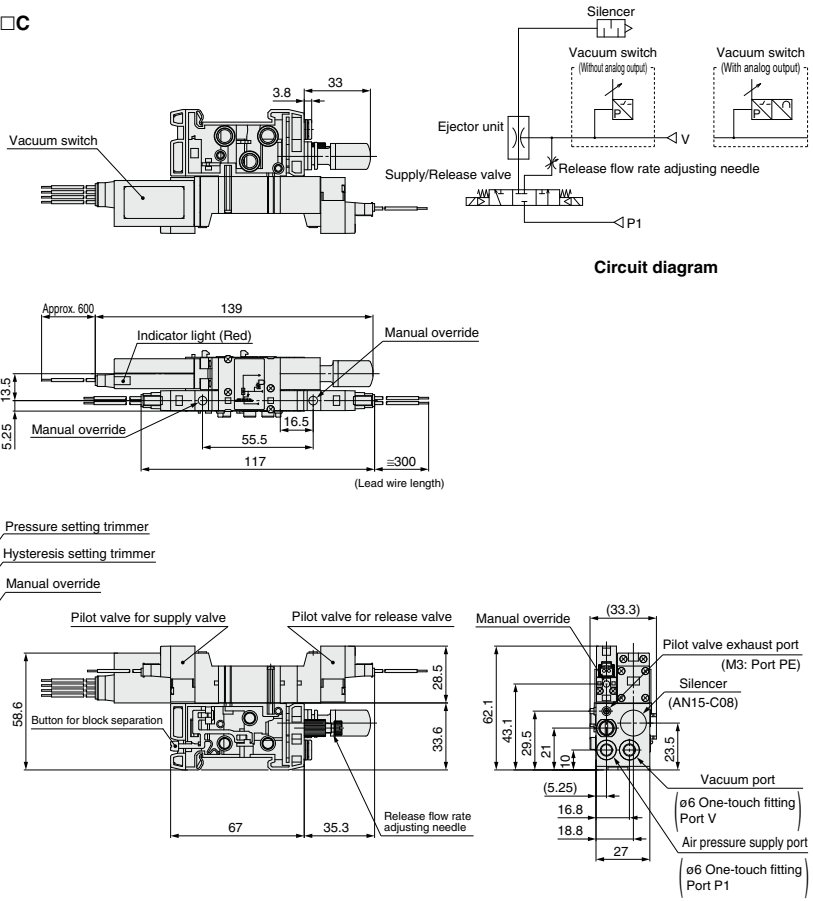
The flow rate characteristics indicate the relationship between the vacuum pressure and the suction flow rate of the ejector, and show that when the suction flow rate changes the vacuum pressure also changes. In general, this indicates the relationship at the ejector's standard operating pressure. In the graph, Pmax indicates the maximum vacuum pressure, and Qmax indicates the maximum suction flow rate. These are the values that are published as specifications in catalogs, etc. The methods for changing the vacuum pressure will be explained in order.

1. If the ejector's suction port is closed and sealed tight, the suction flow rate becomes "0" and the vacuum pressure increases to the maximum (Pmax).
2. If the suction port is opened gradually and air is allowed to flow (the air leaks), the inlet flow rate increases and the vacuum pressure decreases. (the condition of P1 and Q1)
3. If the suction port is opened completely, the suction flow rate increases to the maximum (Qmax), while the vacuum pressure then drops almost to "0" (atmospheric pressure).

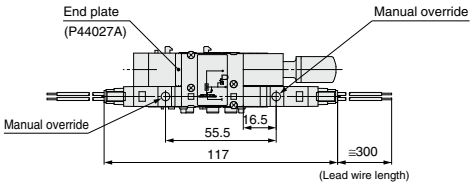
In this way, when the suction flow rate changes the vacuum pressure also changes. In other words, when there is no leakage at the vacuum port (vacuum piping), the vacuum pressure increases to the maximum, but the vacuum pressure drops as the amount of leakage increases, and when the amount of leakage and the maximum suction flow rate become equal, the vacuum pressure decreases nearly to "0". When adsorbing workpieces which are permeable or subject to leakage, etc., caution is required as the vacuum pressure will not be very high.

Ejector Valve Dimensions

ZYY3□LZ-□□1-E□C

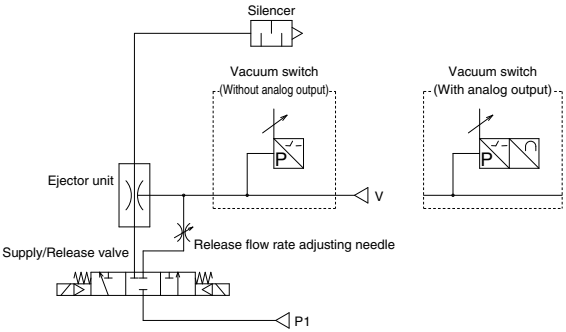


ZYY3□LZ-□S1(Specifications without vacuum switch)

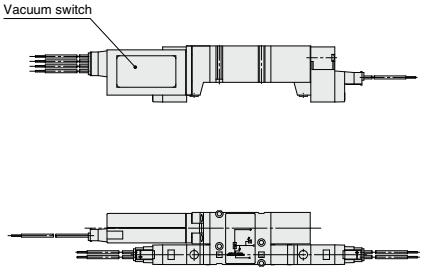


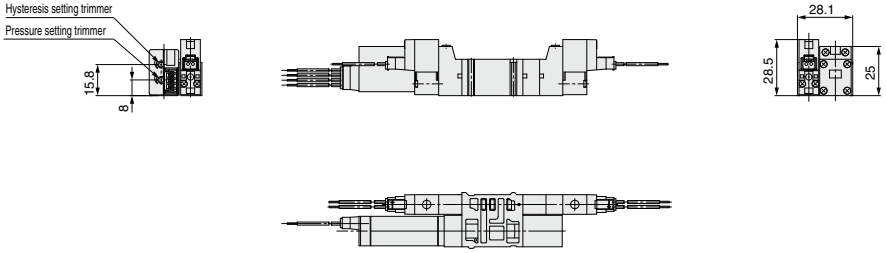
Ejector Valve Dimensions

ZYY3□LZ-□□1-E□C-MN



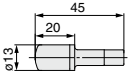
Circuit diagram





Accessory (packed together)

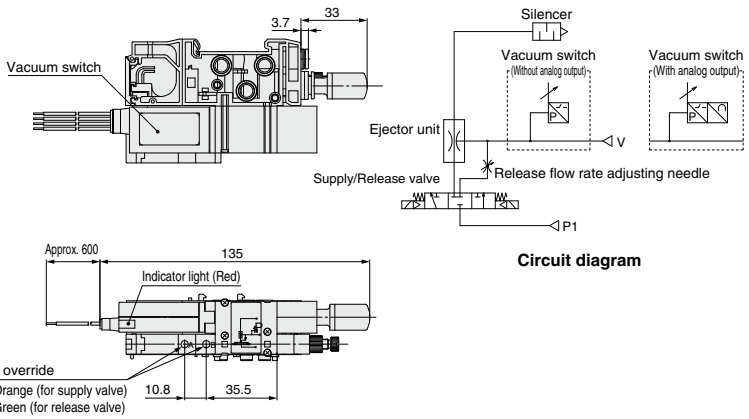
1. Silencer (AN15-C08···1 pc.)

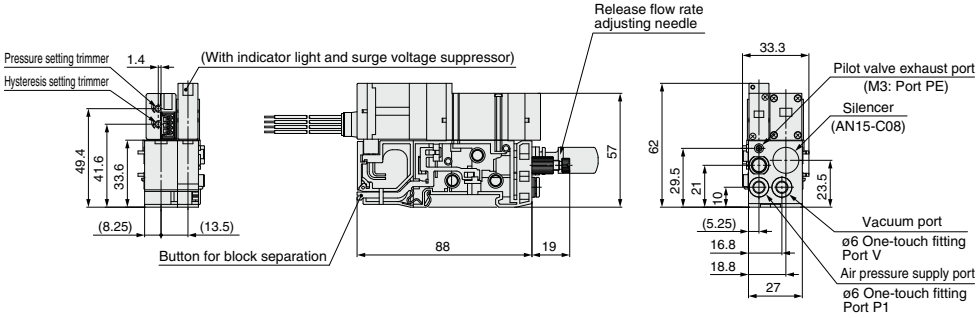


2. Mounting bolt nut (M2 x 0.4 x 20···4 pcs.)

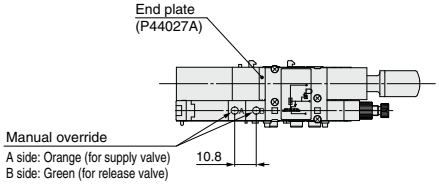
Ejector Valve Dimensions

ZYX3□LOZ-□□1-E□C



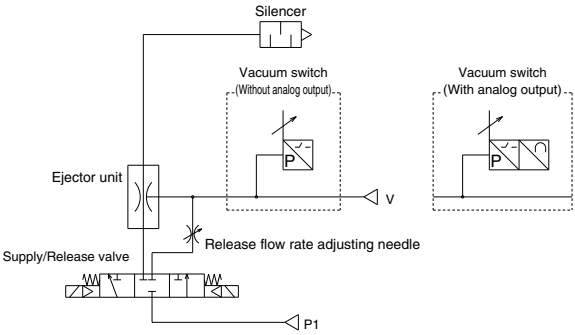


ZYX3□LOZ-□S1(Specifications without vacuum switch)

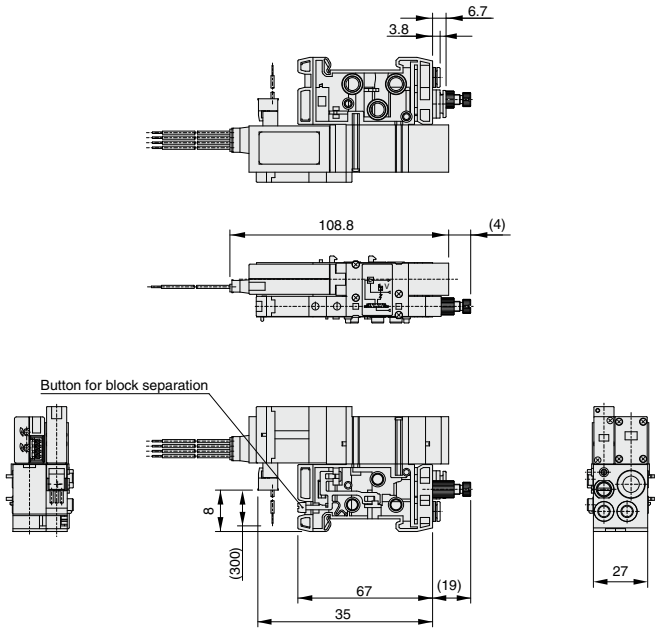


Ejector Valve Dimensions

ZYX3□L-□S-E□C-F

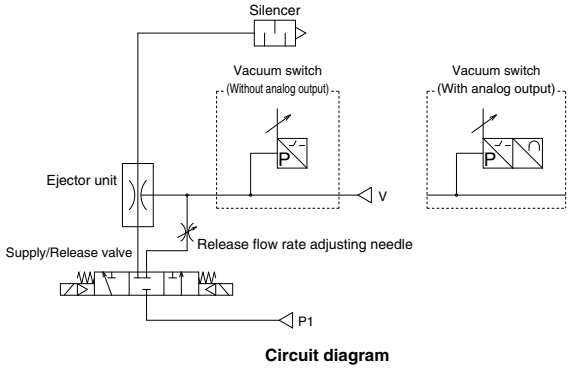


Circuit diagram

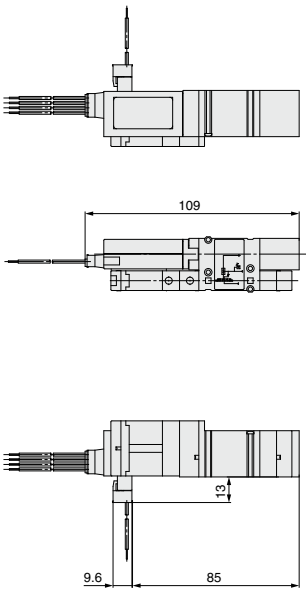


Ejector Valve Dimensions

ZYX3□L-□S1-E□C-FMN

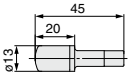


Circuit diagram



Accessory (packed together)

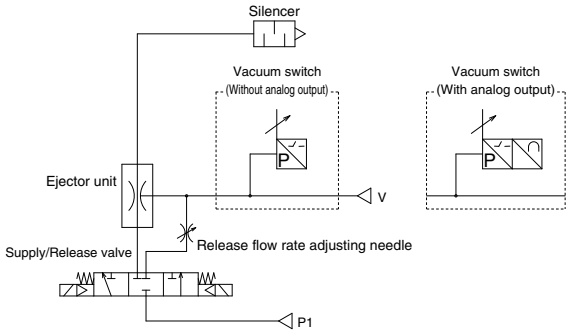
1. Silencer (AN15-C08···1 pc)



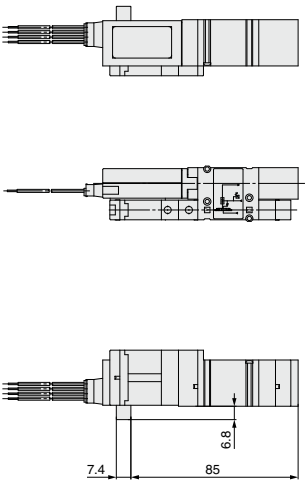
2. Mounting bolt nut (M2 x 0.4 x 25···4 pcs.)

Ejector Valve Dimensions

ZYX3□L-□S1-E□C-MN

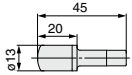


Circuit diagram



Accessory (packed together)

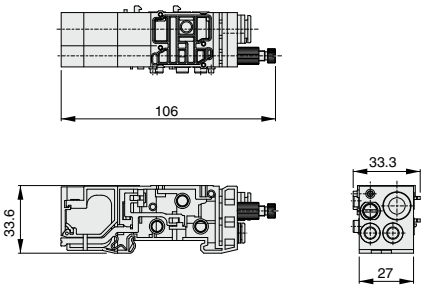
1. Silencer (AN15-C08···1 pc)



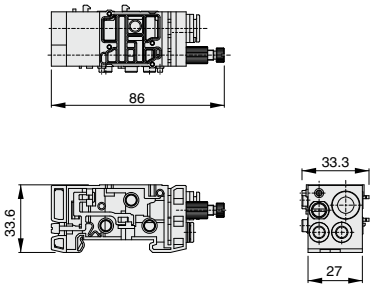
2. Mounting bolt nut (M2 x 0.4 x 25···4 pcs.)

Ejector Valve Dimensions

ZYY3000-PA (Plug-in assembly)



ZYY3000-NPA (Non plug-in assembly)



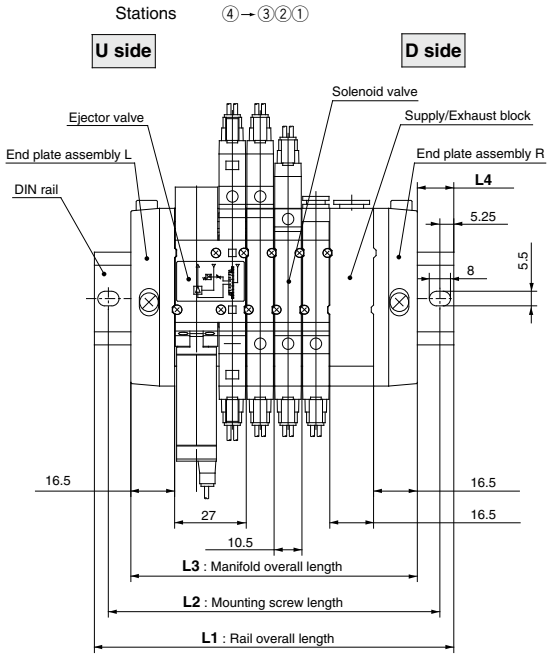
Dimensions of DIN Rail Mounting Unit for ZYY3000/ZYX3000 Manifold

The length of the standard accessory DIN rail is calculated with the formula below.

Manifold overall length (L3) = (27 x Number of ejector valve stations) + (10.5 x Number of solenoid valve stations) + (16.5 x Number of supply/exhaust block stations) + C1 [mm]
Note) In the case of ejector valves only (without solenoid valves), calculate the number of solenoid valve stations and supply/exhaust block stations as "0".
Number of mounting holes (N) = (L3/12.5 + 1): Decimal fractions are truncated
DIN rail overall length (L1) = N x 12.5 + 23 [mm]
Mounting screw length (L2) = L1 – 10.5 [mm]
Rail length on one side (L4) = (L1 – L3)/2 [mm]

C1 Value Selection (mm)

Separate wiring type	45	33
Connector box type	45-$^{A}_{NA}$	86
D-sub connector 25 pin type	45F	54
Flat cable type	45P□	
Terminal block 9 pole type	45T	
Terminal block 18 pole type	45T1	75
Serial transmission type	45S□	81.8
	45S1□	94.3
	45S2	132
	45S3	126



Indication example
In the case of
ZZYY3-45-04D-C6
∗**SY3140-5LZ**
∗**SY3240-5LZ**
∗**SY3340-5LZ**
∗**ZYY35LZ-10S-E15C**
the dimensions are
L1 = 135.5 mm
L2 = 125 mm
L3 = 108 mm
L4 = 13.75 mm

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYY3000 Individual Wiring Type
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYY3−45 □ □ □ □ − J □ □

Total number of ejector and valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 20 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations
1 to 10 stations

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYY3 □ □ □ □ − □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ Ⓚ

Ⓐ Rated voltage

DC

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

AC (50/60 HZ)

1	100 VAC
2	200 VAC
3	110 VAC (115 V)
4	220 VAC (230 V)

Ⓑ Electrical entry

G	Grommet (Lead wire length 300 mm)	
H	Grommet (Lead wire length 600 mm)	
L	L plug connector	With lead wires
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires
MN		Without lead wires
MO		Without connector

Ⓒ Light/Surge voltage suppressor

Nil	Without light/ surge voltage suppressor
S	With surge voltage suppressor
Z	With light/ surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

Note) • U, R: 24 VDC only.
• Since surge voltage is prevented with a rectifier in the case of AC, there is no type "S".

Ⓓ Manual override

Nil	Non-locking push type
D	Push-locking slotted type
E	Push-locking lever type

Ⓔ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓕ Max. vacuum pressure

S	−84 kPa
L	−53 kPa

Ⓖ Silencer

Nil	None
1	With silencer

Ⓗ Vacuum switch

Nil	None
E	With vacuum switch

Ⓘ Output specifications (Vacuum switch)

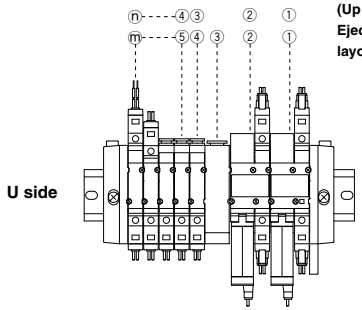
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓙ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓚ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 20 stations)
Ejector/Valve stations layout (Special specifications)

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SY3 ✻ 40 ✻ – □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ

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

Specify using the Stations Table below.

Pilot method

Nil	Internal pilot
R	External pilot

Put "○" in the blanks of "External pilot specification" in the Stations Table below to use external pilot valves.

Ⓐ Rated voltage

DC

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

AC (50/60HZ)

1	100 VAC
2	200 VAC
3	110 VAC (115 V)
4	220 VAC (230 V)

Ⓑ Electrical entry

G	Grommet (Lead wire length 300 mm)	
H	Grommet (Lead wire length 600 mm)	
L	L plug connector	With lead wires
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires
MN		Without lead wires
MO		Without connector

Ⓒ Light/Surge voltage suppressor

Nil	Without light/ surge voltage suppressor
S	With surge voltage suppressor
Z	With light/ surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

Note) • U, R: 24 VDC only.
• Since surge voltage is prevented with a rectifier in the case of AC, there is no type "S".

Ⓓ Manual override

Nil	Non-locking push type
D	Push-locking slotted type
E	Push-locking lever type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc.

Valve stations or Layout								20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
		Vacuum pressure L	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
		Vacuum pressure L	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
	Non-plug assembly																											
Valve specifications	2 position			Single solenoid																								
				Double solenoid																								
	3 position			Cosed center																								
				Exhaust center																								
				Pressure center																								
	Blanking plate assembly																											
	Fill in to order special specifications.		SUP/EXH block assembly																									
	SUP blocking disk																											
	EXH blocking disk																											
	Accessory		Individual SUP spacer assembly																									
			Individual EXH spacer assembly																									
A, B port size (Mixed specifications)																												

Note) • Non-plug assembly: ZYY3000-NPA
• Blanking plate assembly: SX3000-75-1A
• SUP blocking disk: SX3000-77-1A
• EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
• Individual SUP spacer assembly: SY3000-38-2A
• Individual EXH spacer assembly: SY3000-39-2A
• SUP/EXH block assembly (Standard): SX3000-51-1A
• SUP/EXH block assembly (R): SX3000-51-3A
• SUP/EXH block assembly (S): SX3000-51-4A
• SUP/EXH block assembly (RS): SX3000-51-5A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Individual Wiring Type
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3−45 [ ][ ][ ][ ] J [ ][ ]

Total number of ejector and valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 20 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations
1 to 10 stations

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 [Ⓐ][Ⓑ][Ⓒ][Ⓓ]−[Ⓔ][Ⓕ][Ⓖ][Ⓗ][Ⓘ][Ⓙ][Ⓚ][Ⓛ]

Ⓐ Rated voltage DC

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

Ⓑ Electrical entry

G	Grommet (Lead wire length 300 mm)	
H	Grommet (Lead wire length 600 mm)	
L	L plug connector	With lead wires
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires
MN		Without lead wires
MO		Without connector

Ⓒ Light/Surge voltage suppressor

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

Ⓓ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓔ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓕ Max. vacuum pressure

S	−84 kPa
L	−53 kPa

Ⓖ Silencer

Nil	None
1	With silencer

Ⓗ Vacuum switch

Nil	None
E	With vacuum switch

Ⓘ Output specifications (Vacuum switch)

14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓙ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

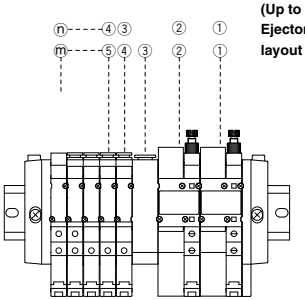
Ⓚ Manifold type

Nil	Plug-in type
F	Non plug-in type

Ⓛ Manifold block

Nil	With manifold block
MN	None

(Up to a total of 20 stations)
Ejector/Valve stations layout (Special specifications)



U side **D side**

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40R — Ⓐ Ⓑ Ⓒ Ⓓ

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

Specify using the Stations Table below.

Ⓐ Rated voltage

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

Ⓑ Electrical entry

G	Grommet (Lead wire length 300 mm)	
H	Grommet (Lead wire length 600 mm)	
L	L plug connector	With lead wires
LN		Without lead wires
LO		Without connector
M	M plug connector	With lead wires
MN		Without lead wires
MO		Without connector

Ⓒ Light/Surge voltage suppressor

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

Ⓓ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

Valve stations or Layout																												Quantity
								20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
		Vacuum pressure L	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
		Vacuum pressure L	With silencer	With switch																								
				Without switch																								
			Without silencer	With switch																								
				Without switch																								
	Non-plug assembly																											
Valve specifications	ⓐ	2 position	Single solenoid																									
			Double solenoid																									
		3 position	Cosed center																									
			Exhaust center																									
			Pressure center																									
	Blanking plate assembly																											
	Fill in to order special specifications.		SUP/EXH block assembly																									
	SUP blocking disk																											
	EXH blocking disk																											
	Accessory		Individual SUP spacer assembly																									
			Individual EXH spacer assembly																									
A, B port size (Mixed specifications)																												

Note) • Non-plug assembly: ZYY3000-NPA

- Blanking plate assembly: SX3000-75-1A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SY3000-38-2A
- Individual EXH spacer assembly: SY3000-39-2A
- SUP/EXH block assembly (Standard): SX3000-51-1A
- SUP/EXH block assembly (R): SX3000-51-3A
- SUP/EXH block assembly (S): SX3000-51-4A
- SUP/EXH block assembly (RS): SX3000-51-5A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Terminal Block (9 Pins)
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45T □ □ □ □ □ − J □ □

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
04	4 stations	
05	5 stations	Up to 8 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
07	7 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position
U	U side
D	D side
B	Both sides
M	Special specifications

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Number of ejector stations 1 to 3 stations

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

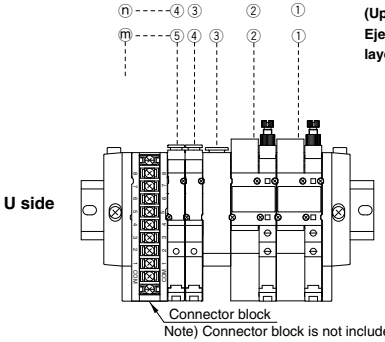
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 7 stations) Ejector/Valve stations layout (Special specifications)

Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} □ □ LOZ □
Ⓐ Ⓑ Ⓒ

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

Specify using the Stations Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

Valve stations or Layout									7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch												
				Without switch												
			Without silencer	With switch												
				Without switch												
		Vacuum pressure L	With silencer	With switch												
				Without switch												
			Without silencer	With switch												
				Without switch												
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch												
				Without switch												
			Without silencer	With switch												
				Without switch												
		Vacuum pressure L	With silencer	With switch												
				Without switch												
			Without silencer	With switch												
				Without switch												
	Plug-in assembly															
Valve specifications	ⓐ	2 position	Single solenoid													
			Double solenoid													
		3 position	Cosed center													
			Exhaust center													
			Pressure center													
		Blanking plate assembly														
	Fill in to order special specifications.	SUP/EXH block assembly														
	SUP blocking disk															
	EXH blocking disk															
	Accessory	Individual SUP spacer assembly														
		Individual EXH spacer assembly														
	Wiring specifications	Single wiring														
		Double wiring														
A, B port size (Mixed specifications)																

Fill in only when the stations are more than five or specifying wiring specifications for four stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Terminal Block (18 Pins)
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45T1 □ □ □ □ □ − J □ □

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
09	9 stations	Up to 17 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
16	16 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 16 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Number of ejector stations 1 to 8 stations

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

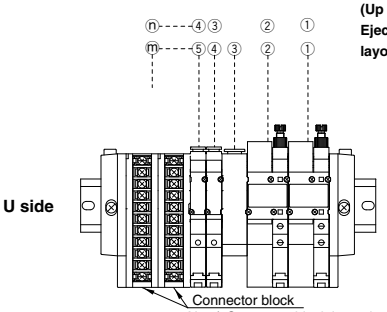
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 16 stations) Ejector/Valve stations layout (Special specifications)

Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} □ (Ⓐ) □ (Ⓑ) LOZ □ (Ⓒ)

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

Specify using the Stations Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

Valve stations or Layout				16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Plug-in assembly																			
Valve specifications	ⓐ	2 position	Single solenoid																	
			Double solenoid																	
		3 position	Cosed center																	
			Exhaust center																	
			Pressure center																	
	Blanking plate assembly																			
	Fill in to order special specifications.		SUP/EXH block assembly																	
	SUP blocking disk																			
	EXH blocking disk																			
	Accessory		Individual SUP spacer assembly																	
			Individual EXH spacer assembly																	
	Wiring specifications		Single wiring																	
			Double wiring																	
A, B port size (Mixed specifications)																				

Fill in only when the stations are more than nine or specifying wiring specifications for eight stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Flat Ribbon Cable 10 Pins
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45 □ PH □ − □ □ □ − □ − J □ □

Common specifications

Nil	Positive common
N	Negative common

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	
⋮	⋮	Double wiring specification
04	4 stations	
05	5 stations	Up to 8 solenoids possible.
⋮	⋮	Specify wiring specifications
07	7 stations	using the Stations Table.

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position
U	U side
D	D side
B	Both sides
M	Special specifications

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations 1 to 3 stations

Voltage

Nil	24 VDC
12V	12 VDC

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

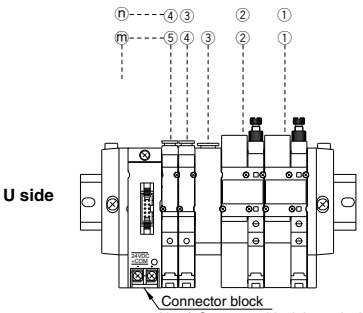
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 7 stations)
Ejector/Valve stations layout (Special specifications)

Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} □ □ LOZ □
Ⓐ Ⓑ Ⓒ

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

Specify using the Stations Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

Valve stations or Layout								7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch											
				Without switch											
			Without silencer	With switch											
				Without switch											
		Vacuum pressure L	With silencer	With switch											
				Without switch											
			Without silencer	With switch											
				Without switch											
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch											
				Without switch											
			Without silencer	With switch											
				Without switch											
		Vacuum pressure L	With silencer	With switch											
				Without switch											
			Without silencer	With switch											
				Without switch											
	Plug-in assembly														
Valve specifications	ⓐ	2 position	Single solenoid												
			Double solenoid												
		3 position	Cosed center												
			Exhaust center												
			Pressure center												
		Blanking plate assembly													
	Fill in to order special specifications.	SUP/EXH block assembly													
	SUP blocking disk														
	EXH blocking disk														
	Accessory	Individual SUP spacer assembly													
		Individual EXH spacer assembly													
	Wiring specifications	Single wiring													
		Double wiring													
A, B port size (Mixed specifications)															

Fill in only when the stations are more than five or specifying wiring specifications for four stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Flat Ribbon Cable 20 Pins
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45 □ PG □ □ □ □ □ □ − J □ □

Common specifications

Nil	Positive common
N	Negative common

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
09	9 stations	Up to 16 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
15	15 stations	

The number of blanking plate assembly is included.

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 15 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations 1 to 7 stations

Voltage

Nil	24 VDC
12V	12 VDC

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

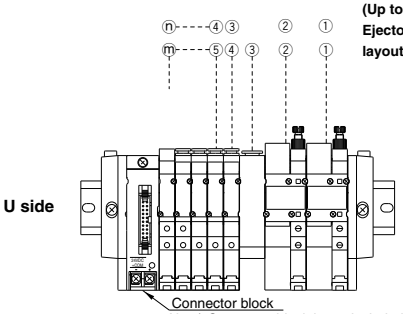
Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None

(Up to a total of 15 stations) Ejector/Valve stations layout (Special specifications)



Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} □ □ LOZ □
Ⓐ Ⓑ Ⓒ

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

Specify using the Specifications Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

				Valve stations or Layout	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Plug-in assembly																			
Valve specifications	ⓐ	2 position	Single solenoid																	
			Double solenoid																	
		3 position	Cosed center																	
			Exhaust center																	
			Pressure center																	
		Blanking plate assembly																		
	Fill in to order special specifications.	SUP/EXH block assembly																		
	SUP blocking disk																			
	EXH blocking disk																			
	Accessory	Individual SUP spacer assembly																		
		Individual EXH spacer assembly																		
	Wiring specifications	Single wiring																		
		Double wiring																		
	A, B port size (Mixed specifications)																			

Fill in only when the stations are more than nine or specifying wiring specifications for eight stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

Company	
Person in charge	
Sheet No.	
Order No.	
Equipment	
Quantity	Set / Date of delivery

ZYX3000 Flat Ribbon Cable 26 Pins
DIN rail manifold

Manifold Valve Specification Sheet

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45 □ P □ □ □ □ □ □ − J □ □

Common specifications

Nil	Positive common
N	Negative common

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
10	10 stations	
11	11 stations	Up to 20 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
19	19 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 19 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations 1 to 10 stations

Voltage

Nil	24 VDC
12V	12 VDC

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

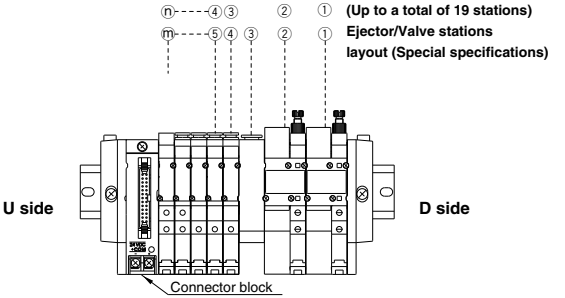
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40R [ ] [ ] LOZ [ ]
Ⓐ Ⓑ Ⓒ

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

Specify using the Specifications Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

				Valve stations or Layout							19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																										
				Without switch																										
			Without silencer	With switch																										
				Without switch																										
		Vacuum pressure L	With silencer	With switch																										
				Without switch																										
			Without silencer	With switch																										
				Without switch																										
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																										
				Without switch																										
			Without silencer	With switch																										
				Without switch																										
		Vacuum pressure L	With silencer	With switch																										
				Without switch																										
			Without silencer	With switch																										
				Without switch																										
	Plug-in assembly																													
Valve specifications	ⓐ	2 position	Single solenoid																											
			Double solenoid																											
		3 position	Cosed center																											
			Exhaust center																											
			Pressure center																											
	Blanking plate assembly																													
	Fill in to order special specifications.		SUP/EXH block assembly																											
	SUP blocking disk																													
	EXH blocking disk																													
	Accessory	Individual SUP spacer assembly																												
		Individual EXH spacer assembly																												
	Wiring specifications	Single wiring																												
		Double wiring																												
	A, B port size (Mixed specifications)																													

Fill in only when the stations are more than eleven or specifying wiring specifications for ten stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 D-sub Connector
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 − 45 □ F □ □ □ □ □ □ − J □ □

Common specifications

Nil	Positive common
N	Negative common

Connector mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
10	10 stations	
11	11 stations	Up to 20 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
19	19 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 19 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

Number of ejector stations 1 to 10 stations

Voltage

Nil	24 VDC
12V	12 VDC

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 □ □ LOZ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓓ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓔ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓕ Silencer

Nil	None
1	With silencer

Ⓖ Vacuum switch

Nil	None
E	With vacuum switch

Ⓗ Output specifications (Vacuum switch)

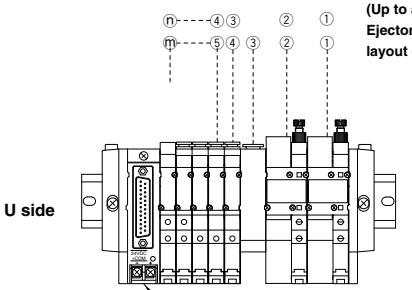
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓘ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 19 stations)
Ejector/Valve stations layout (Special specifications)

Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40R □ □ LOZ □
Ⓐ Ⓑ Ⓒ

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

Specify using the Stations Table below.

Ⓐ Rated voltage

5	24 VDC
6	12 VDC

Match with the voltage specification of the manifold.

Ⓑ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓒ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

				Valve stations or Layout	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																				
				Without switch																				
			Without silencer	With switch																				
				Without switch																				
		Vacuum pressure L	With silencer	With switch																				
				Without switch																				
			Without silencer	With switch																				
				Without switch																				
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																				
				Without switch																				
			Without silencer	With switch																				
				Without switch																				
		Vacuum pressure L	With silencer	With switch																				
				Without switch																				
			Without silencer	With switch																				
				Without switch																				
	Plug-in assembly																							
Valve specifications	ⓐ	2 position	Single solenoid																					
			Double solenoid																					
		3 position	Cosed center																					
			Exhaust center																					
			Pressure center																					
	Blanking plate assembly																							
	Fill in to order special specifications.		SUP/EXH block assembly																					
	SUP blocking disk																							
	EXH blocking disk																							
	Accessory		Individual SUP spacer assembly																					
			Individual EXH spacer assembly																					
	Wiring specifications		Single wiring																					
			Double wiring																					
	A, B port size (Mixed specifications)																							

Fill in only when the stations are more than eleven or specifying wiring specifications for ten stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Serial Wiring Type (Bar Stock Type)
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 −45S [ ][ ][ ][ ][ ] J [ ][ ]

SI unit specifications

Symbol	Protocol type
0	Without SI unit
F1	NKE Corp.: Fieldbus System
H	NKE Corp.: Fieldbus H System
J1	Panasonic Industrial Devices SUNX Co., Ltd.: S-LINK (16 outputs)
J2	Panasonic Industrial Devices SUNX Co., Ltd.: S-LINK (8 outputs)
Q	DeviceNet™
R1	OMRON Corp.: CompoBus/S (16 outputs) compatible
R2	OMRON Corp.: CompoBus/S (8 outputs) compatible
V	CC-LINK
ZB	CompoNet™

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
09	9 stations	Up to 16 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
15	15 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 15 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Number of ejector stations
1 to 7 stations

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 5 [Ⓐ] LOZ [Ⓑ][Ⓒ][Ⓓ][Ⓔ][Ⓕ][Ⓖ][Ⓗ][Ⓙ]

Rated voltage
24 VDC

Ⓐ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓑ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓒ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓓ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓔ Silencer

Nil	None
1	With silencer

Ⓕ Vacuum switch

Nil	None
E	With vacuum switch

Ⓖ Output specifications (Vacuum switch)

14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

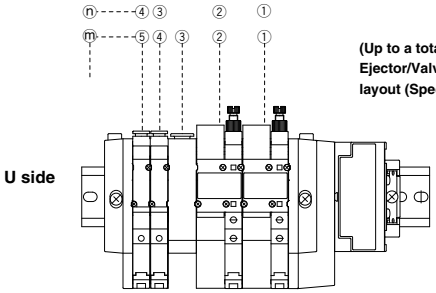
Ⓗ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None

(Up to a total of 15 stations)
Ejector/Valve stations layout (Special specifications)



SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} – 5 LOZ [ ]
Ⓐ

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

Specify using the Stations Table below.

Rated voltage
24 VDC

Ⓐ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

Valve stations or Layout				15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch															
				Without switch															
			Without silencer	With switch															
				Without switch															
		Vacuum pressure L	With silencer	With switch															
				Without switch															
			Without silencer	With switch															
				Without switch															
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch															
				Without switch															
			Without silencer	With switch															
				Without switch															
		Vacuum pressure L	With silencer	With switch															
				Without switch															
			Without silencer	With switch															
				Without switch															
	Plug-in assembly																		
Valve specifications	ⓐ	2 position	Single solenoid																
			Double solenoid																
		3 position	Cosed center																
			Exhaust center																
			Pressure center																
		Blanking plate assembly																	
	Fill in to order special specifications.	SUP/EXH block assembly																	
	SUP blocking disk																		
	EXH blocking disk																		
	Accessory	Individual SUP spacer assembly																	
		Individual EXH spacer assembly																	
	Wiring specifications	Single wiring																	
		Double wiring																	
A, B port size (Mixed specifications)																			

Fill in only when the stations are more than nine or specifying wiring specifications for eight stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Serial Wiring Type (Separated)
DIN rail manifold

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 −45S1 □ □ — □ □ — □ — J □ □

SI unit specifications

Symbol	Protocol type
0	Without SI unit
F1	NKE Corp.: Fieldbus System
H	NKE Corp.: Fieldbus H System
J1	Panasonic Industrial Devices SUNX Co., Ltd.: S-LINK (16 outputs)
J2	Panasonic Industrial Devices SUNX Co., Ltd.: S-LINK (8 outputs)
Q	DeviceNet™
R1	OMRON Corp.: CompoBus/S (16 outputs) compatible
R2	OMRON Corp.: CompoBus/S (8 outputs) compatible
V	CC-LINK
ZB	CompoNet™

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
09	9 stations	Up to 16 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
15	15 stations	

The number of blanking plate assembly is included.

SI unit mounting position

Symbol	Mounting position
U	U side
D	D side

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 15 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

Number of ejector stations
1 to 7 stations

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
* R	External pilot specification
* S	Internal pilot/Built-in silencer
* RS	External pilot/Built-in silencer

∗ : Made to order

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 5 □ LOZ □ □ □ □ □ □ □ □ □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓙ

Rated voltage
24 VDC

Ⓐ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓑ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓒ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓓ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓔ Silencer

Nil	None
1	With silencer

Ⓕ Vacuum switch

Nil	None
E	With vacuum switch

Ⓖ Output specifications (Vacuum switch)

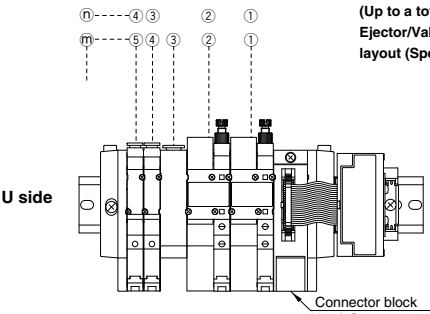
14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

Ⓗ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None



(Up to a total of 15 stations)
Ejector/Valve stations layout (Special specifications)

Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} – 5 LOZ [ ]
Ⓐ

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

Specify using the Stations Table below.

Rated voltage
24 VDC

Ⓐ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

				Valve stations or Layout	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Plug-in assembly																			
Valve specifications	ⓐ	2 position	Single solenoid																	
			Double solenoid																	
		3 position	Cosed center																	
			Exhaust center																	
			Pressure center																	
		Blanking plate assembly																		
	Fill in to order special specifications.	SUP/EXH block assembly																		
	SUP blocking disk																			
	EXH blocking disk																			
	Accessory	Individual SUP spacer assembly																		
		Individual EXH spacer assembly																		
	Wiring specifications	Single wiring																		
		Double wiring																		
	A, B port size (Mixed specifications)																			

Fill in only when the stations are more than nine or specifying wiring specifications for eight stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SXY3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Please copy this form and use it. (Do not detach this page.)

Date: / / (YY/MM/DD)

ZYX3000 Serial Transmission Unit (For OMRON Corp.)

DIN rail manifold (G71-0D16)

Manifold Valve Specification Sheet

Company			
Person in charge			
Sheet No.			
Order No.			
Equipment			
Quantity	Set	Date of delivery	

Fill in the blanks in the order from ① to ④.

❶ Manifold Model

Fill in the blanks below with the symbols for required specifications.

ZZYX3 −45S2 □ □ — □ □ — □ — J □ □

Unit

Nil	With transmission unit
0	Without transmission unit

SI unit mounting position

Symbol	Mounting position
U	U side
D	D side

Total number of ejector and valve stations

Symbol	Stations	Note
02	2 stations	Double wiring specification
⋮	⋮	
08	8 stations	
09	9 stations	Up to 16 solenoids possible. Specify wiring specifications using the Stations Table.
⋮	⋮	
15	15 stations	

The number of blanking plate assembly is included.

SUP/EXH block assembly mounting position

Symbol	Mounting position	Valve applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 15 stations
M	Special specifications	

For special specifications, specify using the Stations Table on the next page.

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R*	External pilot specification
S*	Internal pilot/Built-in silencer
RS*	External pilot/Built-in silencer

∗ : Made to Order

Number of ejector stations 1 to 7 stations

A, B port size (valve only)

Symbol	Specifications
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M	Mixed size

For ordering the mixed size, put C4 or C6 respectively instead of "○" in the Stations Table.

Ejector mounting position

Symbol	Mounting position
U	U side
D	D side

❷ Ejector Valve Model

Fill in the blanks below with the symbols for required specifications.

ZYX3 5 □ LOZ □ — □ □ □ — □ □ □ — □

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓙ

Rated voltage
24 VDC

Ⓐ Common specifications

Nil	Positive common
N	Negative common

Match with the common specification of the manifold.

Ⓑ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

Ⓒ Nozzle diameter

07	ø0.7 mm
10	ø1.0 mm

Ⓓ Max. vacuum pressure

S	–84 kPa
L	–53 kPa

Ⓔ Silencer

Nil	None
1	With silencer

Ⓕ Vacuum switch

Nil	None
E	With vacuum switch

Ⓖ Output specifications (Vacuum switch)

14	NPN open collector 1 output, without analog output, 3 turn setting
15	NPN open collector 1 output, without analog output, 200 degree setting
16	NPN open collector 2 outputs, without analog output, 3 turn setting
17	NPN open collector 2 outputs, without analog output, 200 degree setting
18	NPN open collector 1 output, with analog output, 3 turn setting
19	NPN open collector 1 output, with analog output, 200 degree setting
55	PNP open collector 1 output, without analog output, 200 degree setting

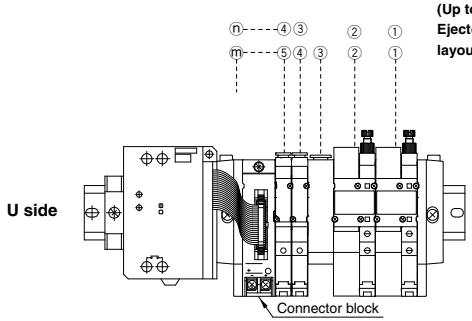
Ⓗ Wiring specifications (Vacuum switch)

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN		Connector type

Ⓙ Manifold block

Nil	With manifold block
MN	None

(Up to a total of 15 stations)
Ejector/Valve stations layout (Special specifications)



Note) Connector block is not included in the stations and layout.

SMC

❸ Valve Model

Fill in the blanks below with the symbols for required specifications.

SX3✻40: Internal pilot
SX3✻40R: External pilot

SX3 ✻ 40^{R} – 5 LOZ [ ]
Ⓐ

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

Specify using the Stations Table below.

Rated voltage
24 VDC

Ⓐ Manual override

Nil	Non-locking push type
D	Push-locking slotted type

❹ Stations Table

Put "○" at stations needed for the arrangement of ejectors, valves, etc. (For mixed sizes of A, B port size, put C4 or C6 in the row of ⓐ.)

					15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Quantity
Ejector specifications	Nozzle diameter 07	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Nozzle diameter 10	Vacuum pressure S	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
		Vacuum pressure L	With silencer	With switch																
				Without switch																
			Without silencer	With switch																
				Without switch																
	Plug-in assembly																			
Valve specifications	ⓐ	2 position	Single solenoid																	
			Double solenoid																	
		3 position	Cosed center																	
			Exhaust center																	
			Pressure center																	
		Blanking plate assembly																		
	Fill in to order special specifications.	SUP/EXH block assembly																		
	SUP blocking disk																			
	EXH blocking disk																			
	Accessory	Individual SUP spacer assembly																		
		Individual EXH spacer assembly																		
	Wiring specifications	Single wiring																		
		Double wiring																		
	A, B port size (Mixed specifications)																			

Fill in only when the stations are more than nine or specifying wiring specifications for eight stations or less is required.

Note) • Plug-in assembly: ZYY3000-PA

- Blanking plate assembly: SX3000-75-2A
- SUP blocking disk: SX3000-77-1A
- EXH blocking disk: SX3000-77-1A (Two pieces used for one station)
- Individual SUP spacer assembly: SX3000-38-3A
- Individual EXH spacer assembly: SX3000-39-3A
- SUP/EXH block assembly (Standard): SX3000-51-2A
- SUP/EXH block assembly (R): SX3000-51-6A
- SUP/EXH block assembly (S): SX3000-51-7A
- SUP/EXH block assembly (RS): SX3000-51-8A

For SMC Use Only

	Model No.	Qty.

	Model No.	Qty.

Customer code	
Code for person in charge	
Departmental code	

Note) Put down the model number and quantity of SUP/EXH block assemblies with the manifold model number when the mounting positions of SUP/EXH block assemblies are special specifications.

Series ZYY/ZYX
Electronic Pressure Switches Specific Product Precautions 1

Be sure to read before handling.

Design/Selection

⚠Warning

1. Use with the specified voltage.
Use with voltage outside of the specifications can cause malfunction or switch damage, as well as electrocution and fire hazard, etc.

2. Never use a load which exceeds the maximum load capacity.
This may damage a switch or reduce its service life.

3. Do not use a load that generates surge voltage.
Although a zener diode for surge protection is connected at the output side of a switch, damage may still occur if the surge is applied repeatedly.
When a load, such as a relay or solenoid, which generates surge is directly driven, use a type of switch having a built-in surge absorbing element.

4. Be sure to confirm the fluid specifications.
Since switches do not have explosion-proof construction, do not use flammable gases or fluids. This may cause a fire or explosion.

5. Be certain to observe the regulating pressure range and maximum operating pressure.
Operation at a pressure outside of this range can cause failure. In addition, the switch will be broken if operated above the maximum operating pressure.

Mounting

⚠Warning

1. Do not use until you can verify that equipment can operate properly.
Verify correct mounting by suitable function and leakage inspections after air and power are connected following mounting, maintenance or conversions.

2. Do not drop or bump.
Do not drop, bump or apply excessive impact (1000 m/s^2) when handling. Even if the switch body is not damaged, the switch may suffer internal damage that will lead to malfunction.

3. Hold the product from the body side when handling.
The tensile strength of the power cord is 49 N, and pulling it with a force greater than this can cause failure. Hold by the body when handling.

4. Turn the setting trimmer gently using a watchmakers screw driver.
Turn the setting trimmer gently using a watchmakers screw driver. Do not turn beyond the stoppers located at both sides. If the trimmer is broken, adjustment will be impossible.

5. Pressure port
Do not insert wire, etc, from the pressure port. This will damage the pressure sensor, making it impossible to obtain normal operation.

Wiring

⚠Warning

1. Confirm wire colors and terminal numbers when wiring is performed.
Since incorrect wiring can lead to breakage or failure of the switch as well as malfunction, perform wiring after confirming wiring colors and terminal numbers with the instruction manual.

2. Avoid repeatedly bending or stretching lead wires.
Broken lead wires will result from applying bending stress or stretching force to the lead wires. In the event that lead wires are damaged creating a possibility of malfunction, replace the entire product. (For cases in which the lead wires cannot be replaced through grommets.)

3. Confirm proper insulation of wiring.
Be certain that there is no faulty wiring insulation (contact with other circuits, ground fault, improper insulation between terminals, etc.). Damage may occur due to excess currect flow into a switch.

4. Do not wire power lines or high voltage lines.
Wire separately from power lines or high voltage lines, avoiding pararell wiring or wiring in the same conduit with these lines. Control circuits, including switches, may malfunction due to noise from these other lines.

5. Do not allow short circuiting of loads.
Use caution, as switches will be damaged instantly if a load is short circuited. Be especially careful not to reverse the power supply line (Brown) and the output line (Black).

Pressure Source

⚠Warning

1. Observe the fluid and ambient temperature ranges.
The fluid and ambient temperatures are 5 to 50°C. Moisture in circuits can freeze at 5°C or below, causing damage to O-rings, and malfunction. Consider measures to prevent freezing. The installation of an air dryer is recommended to remove drainage and moisture from circuits.
Furthermore, even though the ambient temperature range remains within specifications, do not operate in locations where there are abrupt temperature changes.

2. Vacuum pressure switches
There will be no change in performance if a pressure of 0.5 MPa or less is applied for 1 second or less (when releasing a vacuum), but care should be taken that pressures of 0.2 MPa or more are not regularly applied.

Series ZYY/ZYX
Electronic Pressure Switches Specific Product Precautions 2

Be sure to read before handling.

Operating Environment

⚠ Warning

1. Never use in an atmosphere of explosive gases.
The strucuture of pressure switches is not intended to prevent explosion. Never use in an atmosphere with an explosive gas since this may cause a serious explosion.

2. Do not use in locations with sources of surge generation.
When equipment that generates a large amount of surge (solenoid type lifters, high frequency induction furnaces, motors, etc.) is located in the area around a pressure switch, thers is a danger of deterioration or damage to the switch's internal circuit elements. Therefore, implement surge countermeasures at the sources, and avoid the mixing and touching of lines.

3. Operating environment
Since the electronic pressure switch is basically an open type, avoid use in locations where there is a scattering of water or oil, etc.

Maintenance

⚠ Warning

1. Perform maintenance regularly.
It may otherwise not be possible to assure safety due to unexpected malfunction or misoperation, etc.

2. When used in an interlock circuit
When used in an interlock circuit, provide multiple interlock circuits as a precaution against failure, and also perform regular inspections to confirm normal operation.

3. When the body requires cleaning
Use a soft cloth to clean the case. In case of heavy soiling, wipe it off with a cloth soaked in a neutral detergent diluted with water after wringing it out thoroughly, and finish up by wiping with a dry cloth.

⚠ Precautions

Be sure to read before handling.
Refer to front matter 35 for Safety Instructions and pages 899 to 901 for Vacuum Equipment Precautions.

Piping

⚠ Caution

1. Connect the compressed air supply piping separately to the solenoid valves and ejector valves. Also, connect each ejector valve to separate piping system.

Operation of Ejector Valves

⚠ Caution

1. When the pilot valve for air supply is turned ON, the main valve switches, and vacuum is generated by the flow of compressed air from the nozzle to the diffuser.
When the pilot valve for vacuum release is turned ON, the main valve switches, and the vacuum is quickly released as air passes through the release flow adjustment needle and flows to the vacuum port.
When the pilot valve for air supply and the pilot valve for vacuum release are both OFF, the main valve is in a closed state in the center position.

Operating Environment

⚠ Caution

1. Avoid use exposed to direct sunlight.

Solenoid Valves (Series SY3000/SX3000)

⚠ Caution

1. Refer to Best Pneumatics No. 1 and SMC website for Specific Product Precautions for solenoid valves (Series SY3000/SX3000).

Serial Wiring

⚠ Caution

1. Serial wiring is possible only for the solenoid valve section. Wire the vacuum switch separately.