

Plug-in Connector Connecting Base

D-sub Connector Flat Ribbon Cable

Type 10
Side Ported

JSY1000/3000/5000 Series



RoHS

Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10** **F** **1** - **05** **D** **□** - **C6** **□**

1 2 3 4 5 6 7 8 9



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

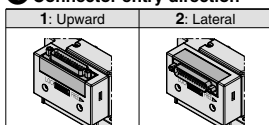
1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
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4 Connector entry direction



* The connector entry direction for connector types "FW", "FC", and "□C" cannot be rotated. If it is necessary to change, order connector block assembly and SUP/EXH block assembly (pages 124 and 125) separately.

6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

7 SUP/EXH block assembly

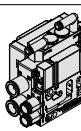
Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The 3/5(E) port is plugged for the built-in silencer type.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	—	●	●
C8	ø8	—	—	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

* The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
□	DIN rail mounting

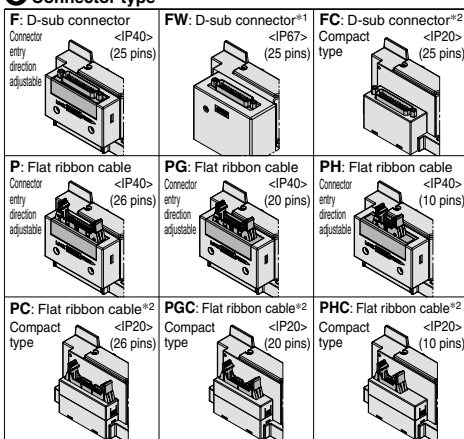
DIN Rail Option

Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations Specify a length longer than that of the standard
24	For 24 stations rail.

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown on the left.)

* Refer to page 160 for details on securing the DIN rail mounting type manifold.

3 Connector type



*1 FW is not available for the JSY1000.

*2 Compact type is not available for the JSY5000.

5 Valve stations

F/FW/FC: D-sub connector (25 pins)			P/PG/PH: Flat ribbon cable (26 pins)		
Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations	Double wiring*1	02	2 stations	Double wiring*1
12	12 stations		12	12 stations	
02	2 stations		02	2 stations	
24	24 stations	Specified layout*2 (Up to 24 solenoids available)	24	24 stations	Specified layout*2 (Up to 24 solenoids available)
PG/PGC: Flat ribbon cable (20 pins)			PH/PHC: Flat ribbon cable (10 pins)		
Symbol	Stations	Note	Symbol	Stations	Note
02	2 stations	Double wiring*1	02	2 stations	Double wiring*1
09	9 stations		04	4 stations	
02	2 stations		02	2 stations	
18	18 stations	Specified layout*2 (Up to 18 solenoids available)	08	8 stations	Specified layout*2 (Up to 8 solenoids available)

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

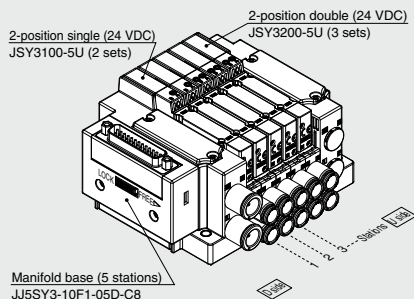
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

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

* This also includes the number of blanking plates.

How to Order Manifold Assembly

Example (JJ5SY3-10F1-□)



JJ5SY3-10F1-05D-C8 --- 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 The asterisk denotes the symbol for the assembly.
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY **3** **1** 00 **□** - 5 **□** **□**

① ② ③ ④ ⑤



Made to Order
 (Refer to page 156 for details.)

Specification
External pilot

① Series

1	JSY1000
3	JSY3000
5	JSY5000

② Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
A	4-position	N.C./N.C.
B	dual 3-port	N.O./N.O.
C		N.C./N.O.

③ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

* For the JSY1000 series, only the power-saving circuit specification is available.

* Be careful of the energizing time when the power-saving circuit is selected.

For details, refer to page 158.

④ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U			Non-polar	—	●	●
Z	●	●	Polar Positive common	●	●	●
NZ			Polar Negative common	●	●	●

* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 159.

* Only "Z" and "NZ" types are available with a power saving circuit.

⑤ Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

Plug-in Connector Connecting Base

Spring Type Terminal Block Box

Terminal Block Box

Type 10
Side Ported

JSY1000/3000/5000 Series



RoHS

Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10** **TC** - **05** **D** - **C6**

1 2 3 4 5 6 7 8



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 Wiring

TC	Spring type terminal block box
T	Terminal block box

4 Valve stations

TC: Spring type terminal block box

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
:	:	
24	24 stations	

T: Terminal block box

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
10	10 stations	
02	2 stations	Specified layout*2 (Up to 20 solenoids available)
:	:	
20	20 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

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

*3 This also includes the number of blanking plates.

5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

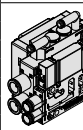
* The 3/5(E) port is plugged for the built-in silencer type.

* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

7 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

* The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D	DIN rail mounting

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)

* Refer to page 160 for details on securing the DIN rail mounting type manifold.

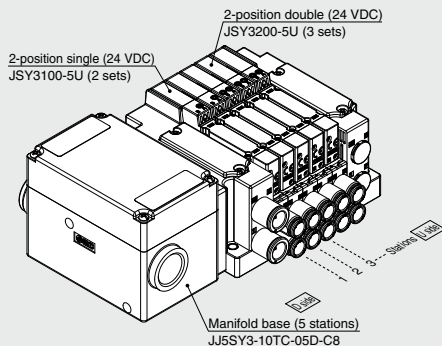
DIN Rail Option

Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
:	:
24	For 24 stations

Specify a length longer than that of the standard rail.

How to Order Manifold Assembly

Example (JJ5SY3-10TC-□)



JJ5SY3-10TC-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 The asterisk denotes the symbol for the assembly.
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.

- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY 3 1 0 0 - 5

1 2 3 4 5



Made to Order

(Refer to page 156 for details.)

Specification
 External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	Single
2	2-position
3	Double
4	3-position
5	Closed center
A	Exhaust center
B	Pressure center
C	4-position dual 3-port
	N.C./N.C.
	N.O./N.O.
	N.C./N.O.

3 Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

* For the JSY1000 series, only the power-saving circuit specification is available.

* Be careful of the energizing time when the power-saving circuit is selected.

For details, refer to page 156.

4 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U			Non-polar	—	●	●
Z	●	●	Polar	●	●	●
			Positive common	●	●	●
NZ			Polar	●	●	●
			Negative common	●	●	●

* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 159.

* Only "Z" and "NZ" types are available with a power saving circuit.

5 Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

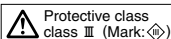
* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.



Plug-in Connector Connecting Base

Lead Wire

Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10** **L1** **1** - **05** **U** - **C6**

1 2 3 4 5 6 7 8 9



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

4 Lead wire length

1	0.6 m
2	1.5 m
3	3 m

6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

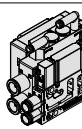
7 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM ^{*1}	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

5 Valve stations

L1□: 34 cores

Symbol	Stations	Note
02	2 stations	Double wiring ^{*1}
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout ^{*2} (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

L2□: 17 cores

Symbol	Stations	Note
02	2 stations	Double wiring ^{*1}
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout ^{*2} (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

L3□: 9 cores

Symbol	Stations	Note
02	2 stations	Double wiring ^{*1}
⋮	⋮	
4	4 stations	
02	2 stations	Specified layout ^{*2} (Up to 8 solenoids available)
⋮	⋮	
08	8 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- *3 This also includes the number of blanking plates.

9 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.

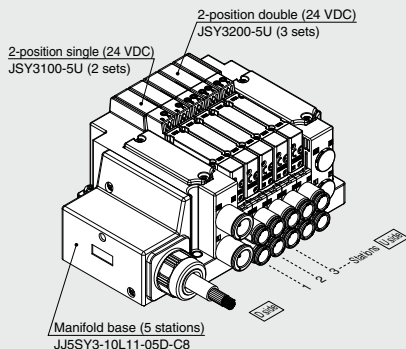
DIN Rail Option

Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
⋮	⋮
24	For 24 stations

Specify a length longer than that of the standard rail.

How to Order Manifold Assembly

Example (JJ5SY3-10L11-□)



JJ5SY3-10L11-05D-C8-- 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 ↳ The asterisk denotes the symbol for the assembly.
 Prefix it to the part numbers of the valve, etc.

For the valve arrangement, the valve closest to the D side is considered the 1st station.

Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY 3 1 0 0 - 5

1 2 3 4 5



Made to Order

(Refer to page 156 for details.)

Specification
 External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	Single
2	2-position
3	Double
4	3-position
5	Closed center
A	Exhaust center
B	Pressure center
C	4-position dual 3-port
	N.C./N.C.
	N.O./N.O.
	N.C./N.O.

3 Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

* For the JSY1000 series, only the power-saving circuit specification is available.

* Be careful of the energizing time when the power-saving circuit is selected.

For details, refer to page 156.

4 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U	—	—	Non-polar	—	●	●
Z	●	●	Polar	●	●	●
NZ	—	—	Positive common	●	●	●
	—	—	Polar	●	●	●
	—	—	Negative common	●	●	●

* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 159.

* Only "Z" and "NZ" types are available with a power saving circuit.

5 Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

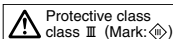
* When ordering a valve individually, the base gasket is not included.

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.



Type 10
Side Ported

JSY1000/3000/5000 Series

Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10** S6 **Q** **2** **2** - **05** **U** - **C6**

1 2 3 4 5 6 7 8 9



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 SI unit

Q	Without SI unit
Q	DeviceNet®
N	PROFIBUS DP
V	CC-Link
EA	EtherNet/IP™
EB	EtherNet/IP™ (IO-Link unit)
DA	EtherCAT (IO-Link unit)
F	PROFINET
FA	PROFINET (IO-Link unit)
WE	EtherNet/IP™ compatible wireless base*1
WF	PROFINET compatible wireless base*1
WS	Wireless remote*1

- *1 The wireless system is suitable for use only in a country where it is in accordance with the Radio Act and regulations of that country.
- * I/O unit cannot be mounted without SI unit.
- * Valve plate which connects manifold and SI unit is included, but it is not mounted to a valve without SI unit. For mounting, refer to the EX600 series on page 129.

4 SI unit output polarity, End plate type (Part no.)

SI unit output polarity	M12 power supply connector B-coded (EX600-ED2)	7/8 inch power supply connector (EX600-ED3)	M12 power supply connector IN/OUT, A-coded Pin arrangement 1 (EX600-ED4)	Pin arrangement 2 (EX600-ED5)
Without SI unit	Nil			
SI unit positive common	2	3	6	8
SI unit negative common	4	5	7	9

- * Ensure a match with the common specification of the valve to be used.
- * When not selecting an SI unit, the symbol will be "nil."

5 I/O unit stations

Nil	None
1	1 station
:	:
9	9 stations

- * When not selecting an SI unit, the symbol will be "nil."
- * SI unit is not included in I/O unit stations.
- * When I/O unit is selected, it is shipped separately, and assembled by users. Refer to the attached operation manual for mounting.

6 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
16	16 stations	Specified layout*2 (Up to 32 solenoids available)
02	2 stations	
:	:	
24	24 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.

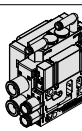
7 P, E port entry, SUP/EXH block assembly

P, E port entry	Internal pilot	Internal pilot, Built-in silencer
U side (2 to 10 stations)	U	C
D side (2 to 10 stations)	D	E
Both sides (2 to 24 stations)	B	F

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.

DIN Rail Option

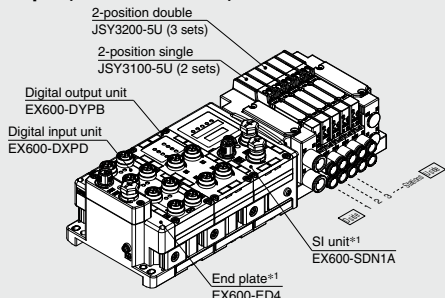
Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
:	Specify a length longer than that of the standard rail.
24	For 24 stations

- * If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 152 for the DIN rail part number.)

For details on the EX600 Integrated Type (For Input/Output) Serial Transmission System, refer to the **Web Catalog** and the **Operation Manual**. For the part numbers of the SI units to be mounted, refer to pages 129 and 130. (IP40 specifications may be required according to the I/O unit to be selected.) Please download the Operation Manual via the SMC website, <https://www.smcworld.com>

How to Order Manifold Assembly

Example (JJ5SY3-10S6□-□)



JJ5SY3-10S6Q72-05D-C8 -- 1 set (Type 10 5-station manifold base part no.)

- * JSY3100-5U 2 sets (2-position single part no.)
- * JSY3200-5U 3 sets (2-position double part no.)
- * EX600-DXPD 1 set I/O unit part number (Station 1)
- * EX600-DYPB 1 set I/O unit part number (Station 2)

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

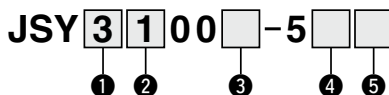
- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted, then the I/O units in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

*1 Do not enter the SI unit part number and the end plate part number together.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.



Made to Order

(Refer to page 156 for details.)

Specification
External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
A	4-position	N.C./N.C.
B		N.O./N.O.
C	dual 3-port	N.C./N.O.

3 Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

* For the JSY1000 series, only the power-saving circuit specification is available.

* Be careful of the energizing time when the power-saving circuit is selected.

For details, refer to page 158.

4 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U			Non-polar	—	●	●
Z	●	●	Polar Positive common	●	●	●
NZ			Polar Negative common	●	●	●

* Only "Z" and "NZ" types are available with a power saving circuit.

5 Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

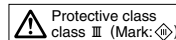
* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.



Plug-in Connector Connecting Base

EX245

Type 10/
Side Ported

JSY3000/5000 Series



RoHS

How to Order Manifolds

JJ5SY **3** - **10 S** **AAN** **05** **D** **C6**

1 2 3 4 5 6 7 8 9

Only direct mounting is selectable for the manifold.



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

1 Series

3	JSY3000
5	JSY5000

2 Type

10	Side ported
-----------	-------------

3 SI unit

Symbol (Output polarity)	Protocol	Communication connector	Communication connector specifications
Negative common (PNP)			
0		Without SI unit	
AAN	PROFINET	Push/Pull (SCRJ): 2 pcs.	Push/Pull (24 V): 2 pcs.
ABN		Push/Pull (RJ45): 2 pcs.	Push/Pull (24 V): 2 pcs.
ACN		M12: 2 pcs.	7/8 inch: 2 pcs.

* The valve output polarity for the SI unit is negative common (PNP).

4 With or without I/O modules

Nil	Without I/O module
Y	With I/O module

* When not selecting an SI unit, the symbol will be "nil."

5 Number of I/O modules

Nil	Without I/O module
1	1 station
:	:
8	8 stations

* When not selecting an SI unit, the symbol will be "nil."

6 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
16	16 stations	
02	2 stations	Specified layout*2 (Available up to 32 solenoids)
:	:	
24	24 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout

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

* This also includes the number of the blanking plate assembly.

7 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

8 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

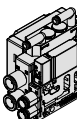
* The 3/5(E) port is plugged for the built-in silencer type.

* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

9 A, B port size (Metric)

Symbol	A, B port	JSY3000	JSY5000
C4	ø4 One-touch fitting	●	—
C6	ø6 One-touch fitting	●	●
C8	ø8 One-touch fitting	●	●
C10	ø10 One-touch fitting	—	●
C12	ø12 One-touch fitting	—	●
CM*1	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø12

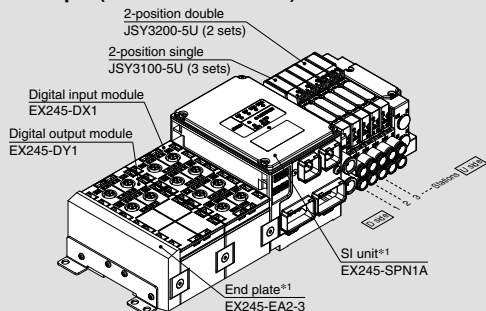


For details on the EX245 Integrated Type (For Input/Output) Serial Transmission System, refer to the **Web Catalog** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 131. Please download the Operation Manual via the SMC website, <https://www.smcworld.com>

*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

How to Order Manifold Assembly

Example (JJ5SY3-10SAAN□-□)



JJ5SY3-10SAANY2-05D-C6---1 set (Type 10 5-station manifold base part no.)

- * JSY3100-5U 3 sets (2-position single part no.)
- * JSY3200-5U 2 sets (2-position double part no.)
- * EX245-DX1 1 set I/O module part number
- * EX245-DY1 1 set I/O module part number

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

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- The I/O module station arrangement is numbered starting from the SI unit side.
- Under the manifold part number, state the valves to be mounted, then the I/O modules in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.
- *1 Do not enter the SI unit part number and the end plate part number together.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY **3** **1** **00** **5**

1 2 3 4 5



Made to Order

(Refer to page 156 for details.)

Specification
External pilot

1 Series

3	JSY3000
5	JSY5000

2 Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position	N.C./N.C.
B	dual 3-port	N.O./N.O.
C		N.C./N.O.

3 Coil specifications

Symbol	Coil specifications	JSY3000	JSY5000
Nil	Standard	●	●
T	With power-saving circuit (Continuous duty type)	●	●

* Be careful of the energizing time when the power-saving circuit is selected.


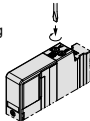
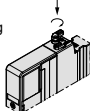
For details, refer to page 158.

4 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY3000	JSY5000
U			Non-polar	●	●
NZ	●	●	Polar	●	●
			Negative common	●	●

* Only "NZ" type is available with a power saving circuit.

5 Manual override

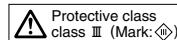
Symbol/Specification	JSY3000	JSY5000
Nil: Non-locking push type 	●	●
D: Push-turn locking slotted type 	●	●
E: Push-turn locking lever type 	●	●

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to page 137 for base gasket and mounting screw part numbers.



Plug-in Connector Connecting Base

EX250

Type 10
Side Ported

JSY1000/3000/5000 Series



Internal Pilot

How to Order Manifolds

JJ5SY 3 - 10 **S** Q 1 **A** - 05 **U** - C6

1
 2
 3
 4
 5
 6
 7
 8
 9

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

3 SI unit

0	Without SI unit		
Q	DeviceNet™ (Negative common)		
TA	AS-Interface (Negative common)	2 isolated common type	8 in/8 out
TB		4 in/4 out	4 in/4 out
TC		1 common type	4 in/4 out
TD		4 in/4 out	4 in/4 out
ZE	EtherNet/IP™ (Negative common)		

- * Ensure a match with the common specification of the valve to be used.
- * Input block cannot be mounted without SI unit.
- * The supply current from the SI unit of AS-Interface applicable 1 power supply system specification to the input block and valve is limited.

2 Type

10	Side ported
----	-------------

4 Input block stations

Nil	None
1	1 station
:	:
8	8 stations

- * When not selecting an SI unit, the symbol will be "nil." The maximum number of stations is limited for the AS-Interface applicable SI unit.

5 Input block type

	PNP sensor input	NPN sensor input
Without input block	Nil	
M12, 2 inputs	A	D
M12, 4 inputs	B	E
M8, 4 inputs	C	F

- * When not selecting an SI unit, the symbol will be "nil."

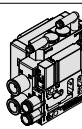
7 P, E port entry, SUP/EXH block assembly

P, E port entry	Internal pilot	Internal pilot, Built-in silencer
U side (2 to 10 stations)	U	C
D side (2 to 10 stations)	D	E
Both sides (2 to 24 stations)	B	F

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM ^{*1}	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

For details on the EX250 Integrated Type (For Input/Output) Serial Transmission System, refer to the **Web Catalog** and the **Operation Manual**. For the part numbers of the SI units to be mounted, refer to page 133. Please download the Operation Manual via the SMC website, <https://www.smcworld.com>



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

6 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring ^{*1}
:	:	
16	16 stations	
02	2 stations	Specified layout ^{*2} (Up to 32 solenoids available)
:	:	
24	24 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.) When determining the number of valve stations, note that the maximum number of solenoids for the AS-Interface applicable SI unit specification is as follows.
 - 8 in/8 out specification: Max. 8 solenoids
 - 4 in/4 out specification: Max. 4 solenoids
- * This also includes the number of blanking plates.
- * For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

9 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.
- * DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

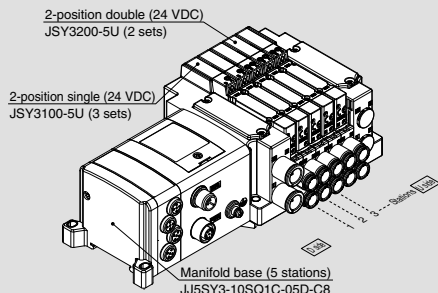
Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
:	:
24	For 24 stations

Specify a length longer than that of the standard rail.

- * Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 152 for the DIN rail part number.)

How to Order Manifold Assembly

Example (JJ5SY3-10S□-□)



JJ5SY3-10SQ1C-05D-C8 ... 1 set (Type 10 5-station manifold base part no.)

- * JSY3100-5U 3 sets (2-position single part no.)
- * JSY3200-5U 2 sets (2-position double part no.)

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

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY **3** **1** 00 **□** - 5 **□** **□**

① ② ③ ④ ⑤



Made to Order
(Refer to page 156 for details.)

Specification
External pilot

① Series

1	JSY1000
3	JSY3000
5	JSY5000

② Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

③ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

- * For the JSY1000 series, only the power-saving circuit specification is available.
 - * Be careful of the energizing time when the power-saving circuit is selected.
- For details, refer to page 158.

④ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U	●	●	Non-polar	—	●	●
NZ	—	—	Polar Negative common	●	●	●

* Only "NZ" type is available with a power saving circuit.

⑤ Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.
Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

Plug-in Connector Connecting Base

EX260

Type 10
Side Ported

JSY1000/3000/5000 Series



Refer to page 106 for details on manifolds that support safety communication (PROFIsafe).

Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10 S** **QA** - **05 D** **□** - **C6** **□**
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

① Series

1	JSY1000
3	JSY3000
5	JSY5000

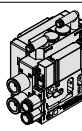
③ SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)	Protocol	Number of outputs	Communication connector
Positive common (NPN)	Negative common (PNP)		
①*1 Without SI unit			
QA QAN	DeviceNet®	32	M12
QB QBN		16	
NA NAN		32	M12
NB NBN	PROFIBUS	32	
NC NCN	DP	32	D-sub*3
ND NDN		16	
VA VAN	CC-Link	32	M12
VB VBN		16	
DA DAN	EtherCAT	32	M12
DB DBN		16	
FA FAN	PROFINET	32	M12
FB FBN		16	
EA EAN	EtherNet/IP™	32	M12
EB EBN		16	
—*2 GAN	Ethernet	32	M12
—*2 GBN	POWERLINK	16	
—*2 KAN	IO-Link	32*4	M12

- *1 Without SI unit, the output polarity is decided by the SI unit used.
Ensure a match with the common specification of the valves to be used.
- *2 Positive common (NPN) type is not available.
- *3 IP40 for the D-sub applicable communication connector specification.
- *4 Only the 32 outputs type is available.
- * DIN rail cannot be mounted without SI unit.

⑦ A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	—	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the **Operation Manual**. For the part numbers of the SI units to be mounted, refer to page 134. Please download the Operation Manual via the SMC website, <https://www.smcworld.com>

② Type

10	Side ported
----	-------------

⑤ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

⑥ SUP/EXH block assembly

NII	Internal pilot
S	Internal pilot, Built-in silencer

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

④ Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.
- * For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

⑧ Mounting and Option

Symbol	Mounting
NII	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.
- * DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

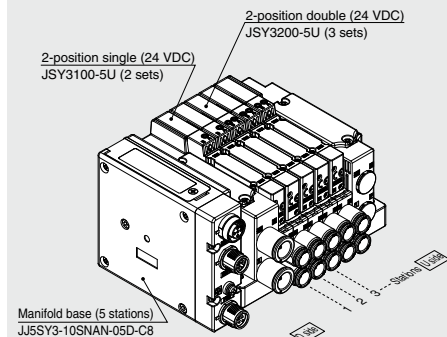
NII	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
⋮	⋮
24	For 24 stations

Specify a length longer than that of the standard rail.

- * Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 152 for the DIN rail part number.)

How to Order Manifold Assembly

Example (JJ5SY3-10SNAN-□)



JJ5SY3-10SNAN-05D-C8 -- 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 → The asterisk denotes the symbol for the assembly.
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY **3** **1** 00 **5** **1** **1**

① ② ③ ④ ⑤



Made to Order
 (Refer to page 156 for details.)

Specification
 External pilot

① Series

1	JSY1000
3	JSY3000
5	JSY5000

② Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
A	4-position	N.C./N.C.
B	dual 3-port	N.O./N.O.
C		N.C./N.O.

③ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

- * For the JSY1000 series, only the power-saving circuit specification is available.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to page 158.

④ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U			Non-polar	—	●	●
Z	●	●	Polar Positive common	●	●	●
NZ			Polar Negative common	●	●	●

- * Select "U" or "Z" for the valve when the SI unit output polarity is positive common. Select "U" or "NZ" for the valve when the SI unit output polarity is negative common.
- * Only "Z" and "NZ" types are available with a power saving circuit.

⑤ Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●
D: Push-turn locking slotted type	●	●	●
E: Push-turn locking lever type	—	●	●

- * Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

Plug-in Connector Connecting Base

EX260 Safety Communication Protocol (PROFIsafe)

Type 10
Side Ported

JSY1000/3000/5000 Series



Using the safety communication protocol

Refer to the EX260 Web Catalog for details on units that support the safety communication protocol. When using a manifold valve within an ISO 13849-compliant safety system, the device needs to be considered from both the pneumatic circuit and the electric side.

Devices (including valves) need to be selected based on whether their functions are in line with the safety level of the equipment as a whole.

The use of valves that have been validated as being compliant with ISO 13849-2 may be required.

For details on valves that have been validated, please contact SMC.

In addition, refer to "Safety Instructions" for precautions on model selection.

Internal Pilot

How to Order Manifolds

Refer to page 104 for details on manifolds that support Fieldbus and Industrial Ethernet.

JJ5SY **3** - **10** S **FPN** - **05** **D** - **C6**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series

1	JSY1000
3	JSY3000
5	JSY5000

④ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

*1 Double wiring: 2-position single, 3-position, and 4-position valves can be used on all manifold stations.

The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

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

* This also includes the number of blanking plates.

② Type

10	Side ported
----	-------------

⑤ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

⑥ SUP/EXH block assembly

NII	Internal pilot
S	Internal pilot, Built-in silencer

- * The 3/5(E) port is plugged for the built-in silencer type.
- * When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

⑦ A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	—	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12

*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

* The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

⑧ Mounting and Option

Symbol	Mounting
NII	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.
- * DIN rail mounting (D□) is not available for the product without the SI unit (S0).



Made to Order

(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

③ SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)	Protocol	Number of outputs	Communication connector
Positive common (NPN)	Without SI unit	32*3	M12
Negative common (PNP)			
—*2	FPN	PROFIsafe	

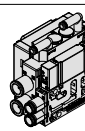
*1 Without SI unit, the output polarity is decided by the SI unit used.

Ensure a match with the common specification of the valves to be used.

*2 Positive common (NPN) type is not available.

*3 Only the 32 outputs type is available.

* DIN rail cannot be mounted without SI unit.



[Validated product examples]

Please contact SMC for further details as supported variations are continually being added.

* 2-position double of rubber seal and manual override with locking function (D, E type) are excluded, because they don't comply with safety standard.

Internal Pilot

How to Order Valves (With mounting screw)

JSY **3** **1** 00 **5** **1** **1**

① ② ③ ④ ⑤



Made to Order
(Refer to page 156 for details.)

Specification
External pilot

① Series

1	JSY1000
3	JSY3000
5	JSY5000

② Type of actuation

1	2-position	Single
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

③ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

* For the JSY1000 series, only the power-saving circuit specification is available.

* Be careful of the energizing time when the power-saving circuit is selected.

For details, refer to page 158.

④ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U	●	●	Non-polar	—	●	●
NZ	●	●	Polar Negative common	●	●	●

* Only "NZ" type is available with a power saving circuit.

⑤ Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type	●	●	●



Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

* When ordering a valve individually, the base gasket is not included.

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to page 137 for base gasket and mounting screw part numbers.

Plug-in Connector Connecting Base

EX120

Type 10
Side Ported

JSY1000/3000/5000 Series



RoHS

Internal Pilot

How to Order Manifolds

JJ5SY **3** - **10** S**3** **Q** - **05** **D** - - -

1 2 3 4 5 6 7 8

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type

10	Side ported
----	-------------

3 SI unit

0	Without SI unit
Q	DeviceNet® (Positive common NPN)
V	CC-Link (Positive common NPN)
ZB*1	Positive common NPN
ZBN*1	Negative common PNP

*1 The communication connector (for the opposite side) is not provided. Please order it separately.

* Ensure a match with the common specification of the valve to be used.

5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

6 SUP/EXH block

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- * The 3/5(E) port is plugged for the built-in silencer type.
- * The external pilot specification should be ordered as Made to Order. For details, refer to page 156.



Made to Order
(Refer to page 156 for details.)

Specification
External pilot (SUP/EXH block assembly)

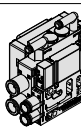
4 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	

- *1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- *2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- * This also includes the number of blanking plates.
- * Since R2 type SI unit has 8 outputs, note that up to 8 solenoids can be accommodated.

7 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	JSY1000	JSY3000	JSY5000
C2	ø2	●	—	—
C4	ø4	●	●	—
C6	ø6	●	●	●
C8	ø8	—	●	●
C10	ø10	—	—	●
C12	ø12	—	—	●
CM*1	Straight port, mixed sizes	●	●	●
P, E port size (One-touch fittings)		ø8	ø10	ø12



- *1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- * The JSY1000 manifold pitch for C2 and C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

8 Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- * Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- * Refer to page 160 for details on securing the DIN rail mounting type manifold.

DIN Rail Option

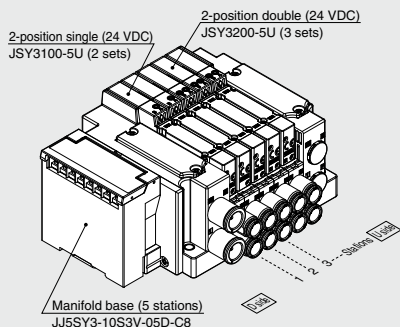
Nil	DIN rail mounting (With DIN rail)
0	DIN rail mounting (Without DIN rail)
3	For 3 stations
16	For 16 stations

- * If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to page 152 for the DIN rail part number.)

For details on the EX120 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the **Operation Manual**. For the part numbers of the SI units to be mounted, refer to page 135. Please download the Operation Manual via the SMC website, <https://www.smcworld.com>

How to Order Manifold Assembly

Example (JJ5SY3-10S3V-□)



JJ5SY3-10S3V-05D-C8 ...1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single part no.)
 * JSY3200-5U 3 sets (2-position double part no.)
 → The asterisk denotes the symbol for the assembly.
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY 3 1 0 0 - 5

1 2 3 4 5



Made to Order
(Refer to page 156 for details.)

Specification
 External pilot

1 Series

1	JSY1000
3	JSY3000
5	JSY5000

2 Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

3 Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000	JSY5000
Nil	Standard	—	●	●
T	With power-saving circuit (Continuous duty type)	●	●	●

- * For the JSY1000 series, only the power-saving circuit specification is available.
- * Be careful of the energizing time when the power-saving circuit is selected. For details, refer to page 158.

4 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000	JSY5000
U			Non-polar	—	●	●
Z	●	●	Polar Positive common	●	●	●
NZ			Polar Negative common	●	●	●

* Only "Z" and "NZ" types are available with a power saving circuit.

5 Manual override

Symbol/Specification	JSY1000	JSY3000	JSY5000
Nil: Non-locking push type 	●	●	●
D: Push-turn locking slotted type 	●	●	●
E: Push-turn locking lever type 	—	●	●

* Push-turn locking lever type "E" is not available for the JSY1000.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

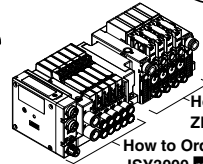
Refer to page 137 for base gasket and mounting screw part numbers.

⚠ Caution

If the JSY3000/5000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

Type 10
Side Ported

JSY3000 Series



How to Order
ZK2
pp. 142, 143

How to Order
JSY3000
pp. 140, 141

Specify the valve manifold and mounted valve part numbers as well as the ejector manifold and mounted ejector part numbers for ordering. Refer to page 141 for an order example.

Internal Pilot

How to Order Manifolds

Valve Manifold

JJ5SY 3-10 SQ 1 A-05 DS-C6-M

1 2 3 4 5 6 7 8 9
Combination manifold

1 Series

3 JSY3000

3 Connector type, Wiring, Number of cores, SI unit

Symbol	Type	Page
F	D-sub connector (25 pins)	IP40
FW		IP67
FC		IP20
P		26 pins
PG	Flat ribbon cable	20 pins
PH		10 pins
PC	Flat ribbon cable	26 pins
PGC	Compact type	20 pins
PHC		10 pins
TC	Spring type terminal block box	
T	Terminal block box	64
L1		34 cores
L2	Lead wire	17 cores
L3		9 cores
S6□		EX600 84
S□		EX245 94
S□	Serial transmission	EX250 98
S□		EX260 104
S3□		EX120 112

* Refer to the pages shown in the table above for details.

2 Type

10 Side ported

4

Connector entry direction (F□/P□)

Symbol	Type
1	Upward
2	Downward

Lead wire length (L1/L2/L3)

Symbol	Type
1	0.6 m
2	1.5 m
3	3 m

SI unit output polarity, End plate type (S6□)

Refer to page 84.

With or without I/O modules (S□)

Refer to page 94.

Input block stations (S□)

Refer to page 98.

5 I/O unit stations (S6□)

Refer to page 84.

Number of I/O modules (S□)

Refer to page 94.

Input block type (S□)

Refer to page 98.

6 Valve stations

For 32 output points (TC/L1/S6□/S□)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
15	15 stations	
02	2 stations	Specified layout*2
:	:	(Up to 30 solenoids available)
24	24 stations	

For 20 output points (T)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
09	9 stations	
02	2 stations	Specified layout*2
:	:	(Up to 18 solenoids available)
18	18 stations	

For 16 output points (L2/S□/S3□)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
07	7 stations	
02	2 stations	Specified layout*2
:	:	(Up to 14 solenoids available)
14	14 stations	

For 24 output points (F/FW/FC/P/PC)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
11	11 stations	
02	2 stations	Specified layout*2
:	:	(Up to 22 solenoids available)
22	22 stations	

For 18 output points (PG/PGC)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	
02	2 stations	Specified layout*2
:	:	(Up to 16 solenoids available)
16	16 stations	

For 8 output points (PH/PHC/L3)

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
03	3 stations	
02	2 stations	Specified layout*2
:	:	(Up to 6 solenoids available)
06	6 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal.

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

* The total number of solenoids for the valve and ejector should not exceed the number of output points. (Number of ejector solenoids: 2 per station)

* This also includes the number of blanking plates.

* For models without an SI unit (S□), note the number of output points of the SI unit that will be mounted.

7 P, E port entry, SUP/EXH block assembly

Symbol	P, E port entry	SUP/EXH block assembly	Application
U	U side (2 to 10 stations)		
D	D side (2 to 10 stations)	Internal pilot	All
B	Both sides (2 to 24 stations)		
BS	Both sides (2 to 24 stations)	Internal pilot, Built-in silencer	D-sub connector (F□), Terminal block box (TC, T), Flat ribbon cable (P□), Lead wire (L□), EX260(S□)/EX245(S□)/EX120(S3□)
C	U side (2 to 10 stations)	Internal pilot,	EX600(S6□)
E	D side (2 to 10 stations)	Built-in silencer	EX250(S□)
F	Both sides (2 to 24 stations)		

* The 3/5(E) port is plugged for the built-in silencer type.

* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

* The external pilot specification should be ordered as Made to Order. For details, refer to page 156.

8 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	P, E port
C4	Straight ø4	
C6	Straight ø6	
C8	Straight ø8	
CM*1	Straight port, mixed sizes	ø10

*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

9 Mounting

Symbol	Mounting
Nil	Direct mounting
D	DIN rail mounting (With DIN rail)
D0	DIN rail mounting (Without DIN rail)

* Refer to page 160 for details on securing the DIN rail mounting type manifold.

Specify the valve manifold and mounted valve part numbers as well as the ejector manifold and mounted ejector part numbers for ordering. Refer to the bottom of this page for an order example.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to page 34 for valve specifications.

JSY 3 1 00 - 5

① ② ③ ④ ⑤



Made to Order
(Refer to page 156 for details.)

Specification
External pilot


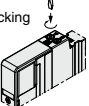
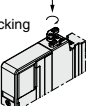
① Series

3	JSY3000
---	---------

② Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
A		N.C./N.C.
B	4-position	N.O./N.O.
C	dual 3-port	N.C./N.O.

⑤ Manual override

Symbol/Specification	JSY3000
Nil: Non-locking push type 	●
D: Push-turn locking slotted type 	●
E: Push-turn locking lever type 	●

③ Coil specifications

Symbol	Coil specifications	JSY3000
Nil	Standard	●
T	With power-saving circuit (Continuous duty type)	●

* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to page 158.

④ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY3000
U			Non-polar	●
Z	●	●	Polar Positive common	●
NZ			Polar Negative common	●

* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to page 159.

* Only "Z" and "NZ" types are available with a power saving circuit.



Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

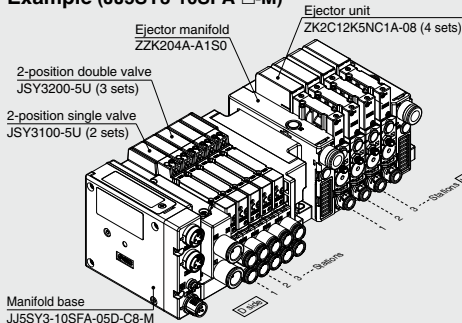
* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to page 137 for base gasket and mounting screw part numbers.

How to Order Manifold Assembly

Example (JJ5SY3-10SFA-□-M)



Refer to pages 121 and 122 for how to order ZK2 vacuum units.

JSY3-10SFA-05D-C8-M ... 1 set (Type 10 5-station manifold base part no.)
 * JSY3100-5U 2 sets (2-position single valve part no.)
 * JSY3200-5U 3 sets (2-position double valve part no.)
 * ZK204A-A1S0 1 set (Ejector manifold part no.)
 * ZK2C12K5NC1A-08 4 sets (Ejector unit part no.)

→ The asterisk denotes the symbol for the assembly.
Prefix it to the part numbers of the ejector manifold, valve, etc.

- For the valve and ejector arrangement, the valves closest to the D side are considered the 1st stations respectively.
- Under the manifold part number, state the valves, ejector manifold, and ejector units to be mounted in order starting with the 1st station as shown in the figure.
- Complex exhaust and individual port exhaust cannot be mixed in the ejector manifold.
- If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

JSY3000 Series

Specify the valve manifold and mounted valve part numbers as well as the ejector manifold and mounted ejector part numbers for ordering. Refer to page 141 for an order example.

How to Order Manifolds

Ejector Manifold

* ZKK2 04 A-A 1 S0-
 1 2 3 4 5

Symbol for the assembly

1 Stations*1



Symbol	Stations
01	1 station
02	2 stations
⋮	⋮
08	8 stations

*1 For adequate performance, the number of stations that can be operated simultaneously depends on the nozzle diameter. For details, refer to the ZK2□A series catalog.

2 System/Port

Symbol	System	Port
A	Ejector system	ø8 (Common PV)

3 Exhaust

Symbol	Exhaust	Selectable single unit number
1	Complex exhaust*2	ZK2C  Direct exhaust End plate exhaust
2	Individual exhaust	ZK2F, ZK2H  Individual port exhaust

*2 Combination of direct exhaust and end plate exhaust from each station

4 Supply valve and release valve wiring*3

Symbol	Wiring	Selectable wiring for manifold (Refer to "How to Order Ejectors" on page 143.)
		C C1
S0	Centralized wiring	● ●

*3 Individual wiring is specified for pressure switches for vacuum and sensors.

5 Option*4

Symbol	Type	Selectable options for manifold (Refer to "How to Order Ejectors" on page 143.)					
		E	J	K	L	P	W
Nil	Without option	●	●	●	—	—	●
B	With DIN rail mounting bracket*5	●	●	●	—	—	●
D	With common release pressure supply (PD) port	●	●	●	—	⊙*6	●
L	Manifold individual supply specification	●	●	●	⊙*6	—	●






*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -BD)

*5 Be sure to select the DIN rail mounting for the mounting method of the valve manifold.

*6 When option "D" is selected, select option "P" for the single unit for manifold. When option "L" is selected, select option "L" for the single unit for manifold. (⊙ must be selected.)

* For details, refer to "Optional Specifications/Functions/Applications" below.

Optional Specifications/Functions/Applications

Symbol	Type	Function/Application
E	Screwdriver operation type long lock nut  Screwdriver operation type long lock nut	· Used when the port position is close to the manifold's individual supply and needle adjustment is difficult
J	Vacuum break flow adjusting needle Round lock nut  Lock nut	· Thicker than the standard hexagon type · More suitable for hand tightening · The round lock nut improves operability when the manifold or exhaust port type is used.
K	Screwdriver operation type  Vacuum break flow adjusting needle	· The slotted type allows for fine adjustment when the manifold or exhaust port type is used.
L	Manifold individual supply specification  Individual supply port	· For adjusting the manifold's supply pressure and the vacuum pressure reached by each ejector individually
P	With manifold common release pressure supply (PD) port	· When selecting option "D" (with common release pressure supply (PD) port), a pressure which is different from the common PV can be supplied to the common PD.
W	With exhaust interference prevention valve  Exhaust interference prevention valve	· When ejectors are operated individually, exhausted air may flow backward from the V ports of ejectors that are turned off. The exhaust interference prevention valve prevents this backflow.

Specify the valve manifold and mounted valve part numbers as well as the ejector manifold and mounted ejector part numbers for ordering. Refer to page 141 for an order example.

For ejector specifications, refer to the **Web Catalog**.



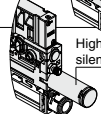
How to Order Ejectors

ZK2□A Series

ZK2 **C** **12** **K** **5** **A** **C** **A** - **08** - **□**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1 
F		Individual port exhaust 
H		High-noise reduction silencer exhaust 

*1 Combination of direct exhaust and end plate exhaust from each station

⑤ Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN 2 outputs	PNP	With unit selection function*3
A	Pressure switch for vacuum	0 to -101	●	—	●
B			—	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E			—	—	●
F	Pressure sensor	-100 to 100	●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

⑦ Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8

② Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

* Refer to the ZK2□A series catalog for the standard supply pressure per nozzle diameter.

③ Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	Self-holding	N.C.
K	●	—	●
J	●	—	—
R	—	●*2	●

*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.




④ Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

⑥ Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
	Centralized wiring specification (Plug-in)			
C	●	●		Cannot be selected when ⑤ is N
C1	●	None		Cannot be selected when ⑤ is P or T

⑧ Option*4 (For details on the Function/Application, refer to page 142.)

Symbol	Type	Note
NII	Without option	—
E	Vacuum break flow adjusting needle Screwdriver operation type long lock nut 	Cannot be selected when ⑤ is J Can be selected only for the combination of J and K
J		
K		
L	Manifold individual supply specification*5 Individual supply port 	—
P	With manifold common release pressure supply (PD) port	Cannot be selected when ⑤ is J
W	With exhaust interference prevention valve Exhaust interference prevention valve 	When J is selected for ⑧, install the release valve or vacuum breaker in the middle of the vacuum piping.

*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -EL)

*5 When F or H is selected for ① and L is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E or K.