# 64-station Compatible Manifold

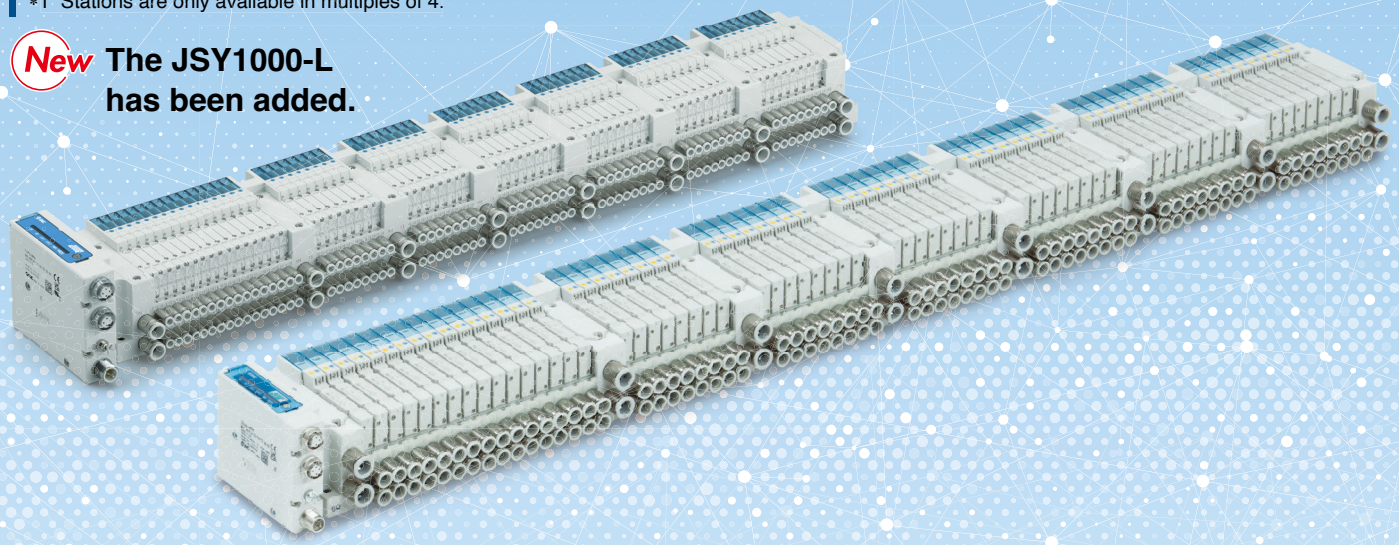
## Plug-in Compact 5-Port Solenoid Valve

### Valve stations/Number of outputs:
### For 4 to 64 stations*1/128 points

*1 Stations are only available in multiples of 4.

CE UKCA RoHS

New The JSY1000-L has been added.

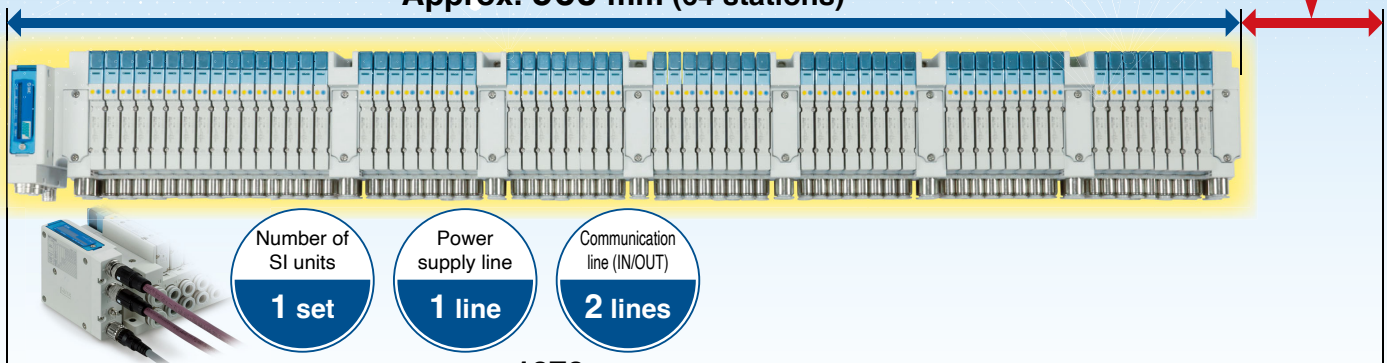


### Space saving, Reduced number of SI units, Reduced wiring and wiring work

- Installation space: Reduced by up to 110 mm * For the JSY3000-L

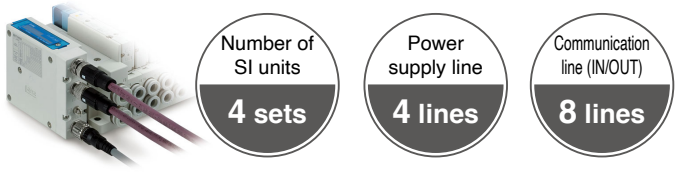
110 mm shorter (10 % reduction)

Approx. 960 mm (64 stations)






Approx. 1070 mm (16 stations x 4 manifolds)




**Compatible protocols**

PROFINET, EtherNet/IP, EtherCAT, IO-Link*1, CIP Safety*2

*1 EX260 only

*2 EX600 only

# *JSY1000/3000-L Series*

# CONTENTS

## 64-station Compatible Manifold
## Plug-in Compact 5-Port Solenoid Valve
## *JSY1000/3000-L Series*

# Plug-in Connector Connecting Base

## Manifold Specifications

| | | | |
|---|---|---|---|
| **Wiring** | | | Serial wiring<br>EX260/EX600 for 64-station compatible manifold |
| **Manifold type** | | | Plug-in connector connecting base<br>(64-station compatible manifold) |
| **SUP/EXH port type** | | | Common SUP/EXH (Common for the 3/5 port) |
| **Valve stations** | | | 4 to 64 stations |
| **Internal wiring** | | | Negative common |
| **Port size** | **1(P), 3/5(E) port** | **JSY1000** | ø8 One-touch fitting |
| | | **JSY3000** | Ø 10 One-touch fitting |
| | **4(A), 2(B) port** | **JSY1000** | Ø 2 One-touch fitting, Ø 4 One-touch fitting |
| | | **JSY3000** | Ø 4 One-touch fitting, Ø 6 One-touch fitting,<br>Ø 8 One-touch fitting |
| **Enclosure** | | | JSY1000: IP40<br>JSY3000: IP67 (Based on IEC 60529. I/O unit: partially IP40) |

## Formula for 64-station Compatible Manifold Weight*1

(Unit: g)

| | |
|---|---|
| **JSY1000** | **W = 22 x $n_1$ + 248 + 130 x $n_2$** |
| **JSY3000** | **W = 47 x $n_1$ + 273 + 138 x $n_2$ (For EX260)** |
| | **W = 47 x $n_1$ + 383 + 138 x $n_2$ (For EX600)** |

**$n_1$**: Valve stations*2
**$n_2$**: Number of intermediate SUP/EXH blocks

*2 Stations are only available in multiples of 4, from 4 stations to 64 stations.

*1 Weight: "W" is the value for the internal pilot specification, the max. fitting size, and the manifold only (without SI unit). To obtain the weight with valves and the serial unit mounted, add the valve weight and serial unit weight given in the **Web Catalogue** (plug-in type 5-port solenoid valve JSY series) for the appropriate number of stations.

## Manifold Flow Rate Characteristics

| Model | Port size | | Valve flow rate characteristics | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1, 3/5 (P, E) | 4, 2 (A, B) | 1 → 4/2 (P → A/B) | | | 4/2 → 3/5 (A/B → E) | | |
| | | | C [dm³/(s·bar)] | b | Q [l/min(ANR)]*1 | C [dm³/(s·bar)] | b | Q [l/min(ANR)]*1 |
| **JJ5SY1-L10 (Side ported)** | C8 | C4 | 0.63 | 0.46 | 167 | 0.87 | 0.47 | 250 |
| **JJ5SY3-L10 (Side ported)** | C10 | C8 | 2.23 | 0.30 | 567 | 2.77 | 0.27 | 691 |

* Calculation of effective area "S" and sonic conductance "C": S = 5.0 x C
* Values measured in accordance with ISO 6358:1989, JIS B 8390:2000

*1 These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.

# ⚠Caution

### Securing the DIN Rail Mounting Type Manifold

1. When mounting the manifold to a DIN rail using bolts, be sure that the bottom surface of the DIN rail is in contact with the manifold installation surface (in a horizontal state), then secure both ends of the DIN rail with the bolts. However, for other mounting methods or for side facing or upside down orientations, use the formula below to calculate the number of bolts to use at even intervals along the DIN rail.

   **Formula: Number of bolts = (Manifold stations + 5) / 5**
   (Round up to the nearest whole number)

   Example) For 28 stations, secure in 7 locations as a guide.

2. When using the manifold with a DIN rail in an environment where any vibration or impact is applied to it, the DIN rail itself may break. In particular, if the installation surface vibrates when mounting the manifold on the wall, or if a load is directly applied to the manifold, the DIN rail may break, causing the manifold to drop. When any vibration, impact, or load will be applied to the manifold, be sure to use a direct mounting manifold.

Type 10
Side Ported

# 64-station Compatible Manifold
# Plug-in Connector Connecting Base EX260
# JSY1000/3000-L Series

RoHS

Internal Pilot

* Only the dedicated SI unit can be mounted on the 64-station compatible manifold.

## How to Order Manifolds

JJ5SY 1 – L 10 S F N – 24 B ☐ 1 – C8 ☐

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

64-station compatible manifold identification symbol

### ❶ Series

| | |
|---|---|
| 1 | JSY1000 |
| 3 | JSY3000 |

### ❷ Type

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

### Made to Order

**(For details, refer to the plug-in type 5-port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot (SUP/EXH block and Intermediate SUP/EXH block) |

### ❸ SI unit

| Symbol | Protocol |
|---|---|
| 0*1 | Without SI unit |
| F | PROFINET |
| E | EtherNet/IP™ |
| D | EtherCAT |
| K | IO-Link |

*1 If there is no SI unit, it is not possible to select a model with DIN rail.

### ❹ Manifold polarity

| | |
|---|---|
| N | Negative common |

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

### ❺ Valve stations

| Symbol | Stations | Note |
|---|---|---|
| 04 | 4 stations | Double wiring*1 |
| 08 | 8 stations | |
| ⋮ | ⋮ | |
| 60 | 60 stations | |
| 64 | 64 stations | |

*1 All stations will have double wiring. 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a single solenoid will result in an unused control signal.
This also includes the number of blanking plates.

* For stations, only multiples of 4, from 4 stations to 64 stations, can be selected.
The 4 boards inside the manifold are integrated

### ❻ Manifold 1(P), 3/5(E) port entry on both ends

| | |
|---|---|
| D | D side |
| U | U side |
| B | Both sides |

### ❼ SUP/EXH block, Intermediate SUP/EXH block

| Symbol | Internal pilot | External pilot | Built-in silencer |
|---|---|---|---|
| — | ● | – | – |
| S*1 | ● | – | ● |
| R*2 | – | ● | – |

*1 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.

*2 The external pilot specification should be ordered as Made to Order.

### ❽ Number of intermediate SUP/EXH blocks, mounting position

| Symbol | Quantity | Mounting position |
|---|---|---|
| 0 | 0 | – |
| 1 | 1 | Specify the mounting position on the manifold specification sheet. |
| ⋮ | ⋮ | |
| 6 | 6 | |

### ❾ 4(A), 2(B) port One-touch fitting size (Metric)

| Symbol | A, B port | | JSY1000 | JSY3000 |
|---|---|---|---|---|
| C2 | Straight | Ø 2 | ● | – |
| C4 | | Ø 4 | ● | ● |
| C6 | | Ø 6 | – | ● |
| C8 | | Ø 8 | – | ● |
| CM*1 | | Mixed sizes | ● | ● |
| P, E port size | | | Ø 8 | Ø 10 |

*1 Indicate the sizes on the manifold specification sheet for "CM."

### ❿ Mounting

| Symbol | Mounting |
|---|---|
| — | Direct mounting |
| D*1 | DIN rail mounting (With DIN rail) |
| D0*2 | DIN rail mounting (Without DIN rail) |

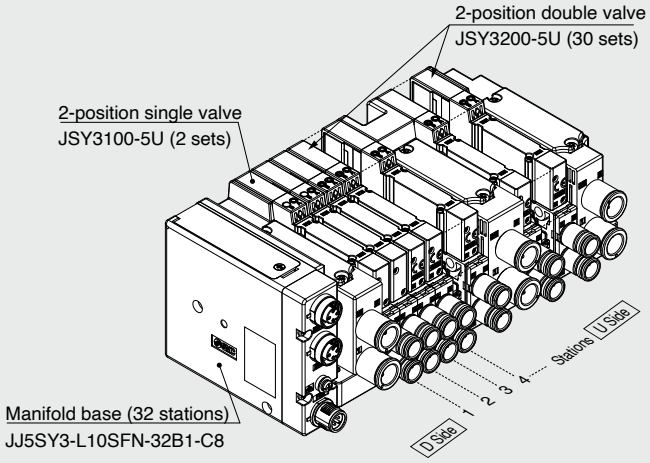
*1 If there is no SI unit (S0), it is not possible to select a model with DIN rail.

*2 Order the DIN rail separately, referring to dimension L3. (Refer to page 23 for DIN rail product numbers and lengths.)

**For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 14. Please download the Operation Manual via the SMC website: https://www.smc.eu**

## How to Order Manifold Assembly

### Example (JJ5SY3-L10SFN-□)




**JJ5SY3-L10SFN-32B1-C8 ··· 1 set (32-station manifold base part no.)**
**∗JSY3100-5U ····· 2 sets (2-position single part no.)**
**∗JSY3200-5U ····· 30 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.
- Use the manifold specifications sheet to specify the mounting position of the intermediate SUP/EXH blocks.

∗ Stations are only available in multiples of 4.

**Internal Pilot**

## How to Order Valves (With mounting screw)

**Refer to the Web Catalogue (plug-in type 5-port solenoid valve JSY series) for valve specifications.**

**JSY 3 1 0 0 □ – 5 U □**
❶ ❷ ❸ ❹ ❺ ❻ ❼

● Base mounted

**Made to Order**
**(For details, refer to the plug-in type 5-port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot |

### ❶ Series

| | |
|---|---|
| 1 | JSY1000 |
| 3 | JSY3000 |

### ❸ Pilot valve exhaust method

| | |
|---|---|
| 0 | Pilot valve individual exhaust |

### ❹ Coil specifications

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

∗ For the JSY1000 series, only the power-saving circuit specification is available.
∗ Refer to page 158 of the standard product catalog for details on the power-saving circuit.

### ❺ Rated voltage

| | |
|---|---|
| 5 | 24 VDC |

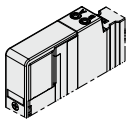
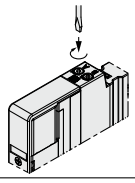
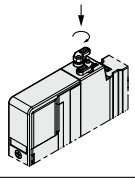
### ❷ Type of actuation

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

### ❻ Light/surge voltage suppressor and common specification

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

### ❼ Manual override

| Symbol/Specification | JSY1000 | JSY3000 |
|---|---|---|
| —: 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 the **Web Catalogue** for base gasket and mounting screw part numbers.

## ⚠Caution

**If the product is to be continuously energised, please be sure to select the power-saving circuit (continuous duty type) specification.**

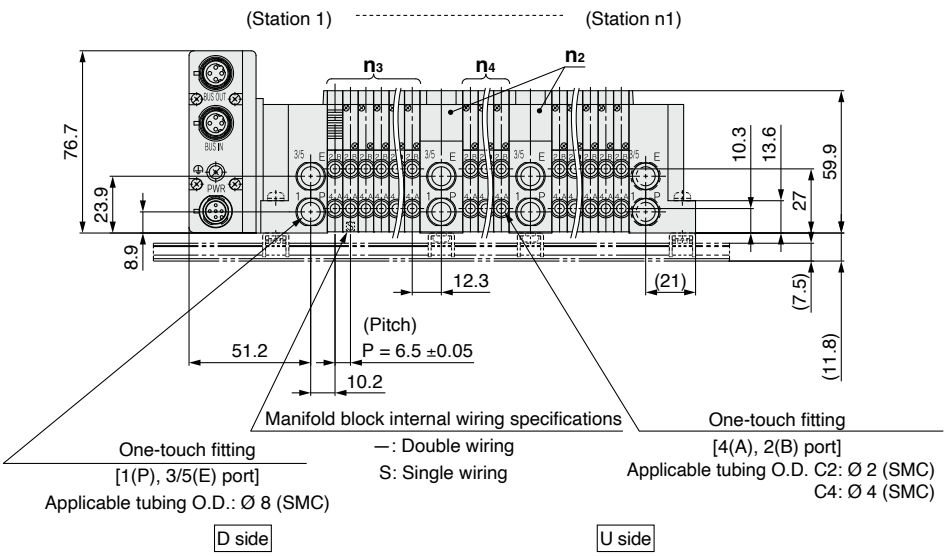
∗ Refer to the “With power-saving circuit” section in the “Specific Product Precautions” of the plug-in type JSY series **Web Catalogue** for details.

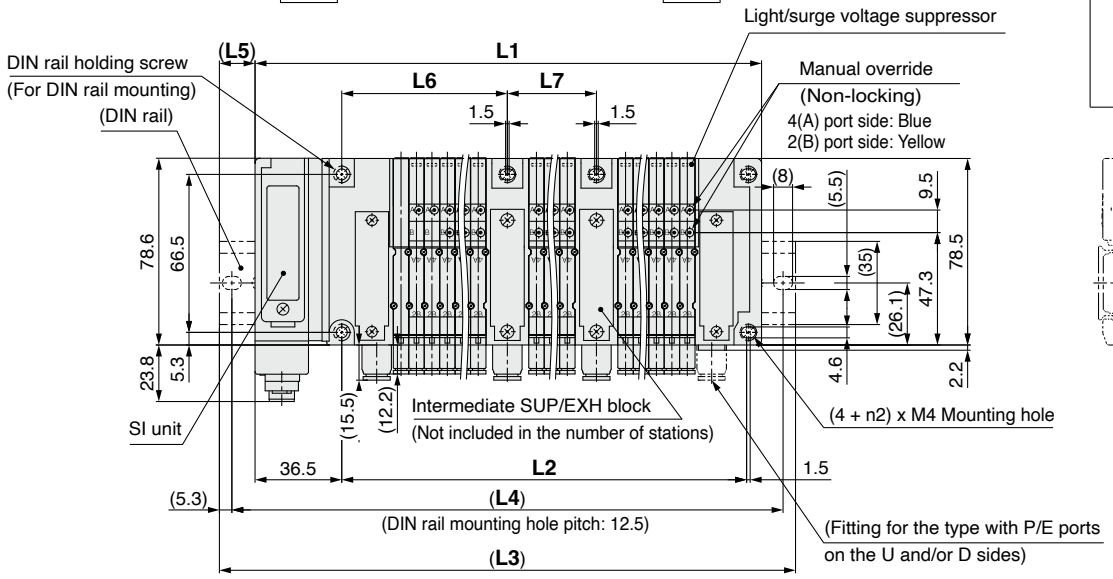
⚠ Protective class class III (Mark: ⧫)

## Dimensions: JSY1000-L Series

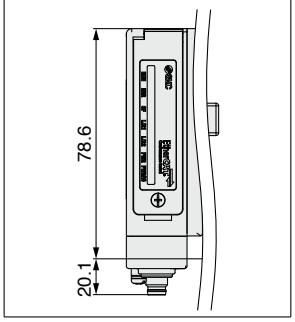
**Type 10/Side Ported**
**EX260/64-station Compatible Manifold**

### JJ5SY1-L10S□N-Stations U/D/B □□-C2/C4(D)

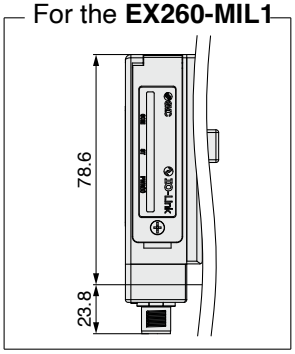


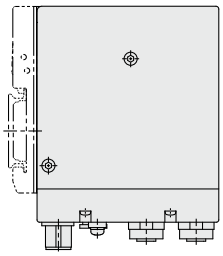




For the **EX260-MEC1**




For the **EX260-MIL1**



**Dimension calculation formulas**

L1 = 6.5 x $n_1$ + 18 x $n_2$ + 86.2
L2 = 6.5 x $n_1$ + 18 x $n_2$ + 43.5
M = L1 / 12.5 + 1  Round down to the nearest whole number.
L3 = 12.5 x M + 23
L4 = L3 – 10.5
L5 = (L3 – L1) / 2  Round up to the nearest whole number.
L6 = 6.5 x $n_3$ + 30.7
L7 = 6.5 x $n_4$ + 18

$n_1$: Number of JSY1000 valve stations (Multiples of 4)
$n_2$: Number of intermediate SUP/EXH blocks
$n_3$: Stations from the D side to the first intermediate SUP/EXH block
$n_4$: Stations between the intermediate SUP/EXH blocks

* These figures show the JJ5SY1-L10SFN-□D2-C4.
* Refer to the **Web Catalogue** for the dimensions of the external pilot and silencer.

### ⚠Caution

There will be slight variations in the width of manifold blocks due to tolerance.
As the manifold is made up of a combination of manifold blocks, there will be slight variations between the actual pitch dimensions of the mounting holes used to secure the manifold and the values stated in the catalog due to tolerance.

### L: Dimensions When the intermediate SUP/EXH block count is "$n_2$ = 0"*1

$n_1$: Stations

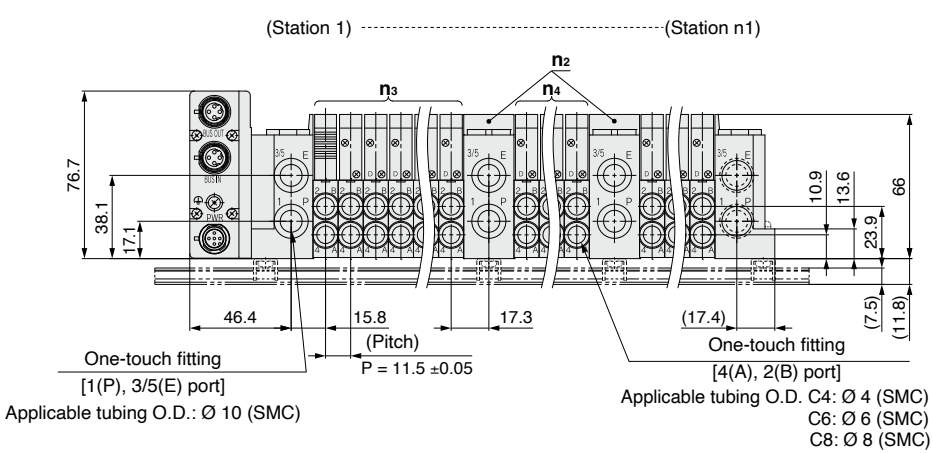
| L \ $n_1$ | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **L1** | 112.2 | 138.2 | 164.2 | 190.2 | 216.2 | 242.2 | 268.2 | 294.2 | 320.2 | 346.2 | 372.2 | 398.2 | 424.2 | 450.2 | 476.2 | 502.2 |
| **L2** | 69.5 | 95.5 | 121.5 | 147.5 | 173.5 | 199.5 | 225.5 | 251.5 | 277.5 | 303.5 | 329.5 | 355.5 | 381.5 | 407.5 | 433.5 | 459.5 |
| **L3** | 135.5 | 173 | 198 | 223 | 248 | 273 | 298 | 323 | 348 | 373 | 398 | 423 | 448 | 485.5 | 510.5 | 535.5 |
| **L4** | 125 | 162.5 | 187.5 | 212.5 | 237.5 | 262.5 | 287.5 | 312.5 | 337.5 | 362.5 | 387.5 | 412.5 | 437.5 | 475 | 500 | 525 |
| **L5** | 12 | 18 | 17 | 17 | 16 | 16 | 15 | 15 | 14 | 14 | 13 | 13 | 12 | 18 | 18 | 17 |

*1 When the number of intermediate SUP/EXH blocks is "$n_2$ = 1 to 6," calculate the respective dimensions using the various dimension calculation formulas above.

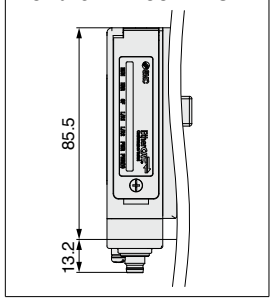
## Dimensions: JSY3000-L Series

**Type 10/Side Ported**
**EX260/64-station Compatible Manifold**

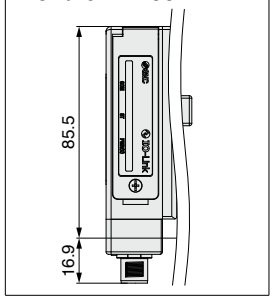
**JJ5SY3-L10S□N - Stations U/D/B □□ - C4/C6/C8 (D)**

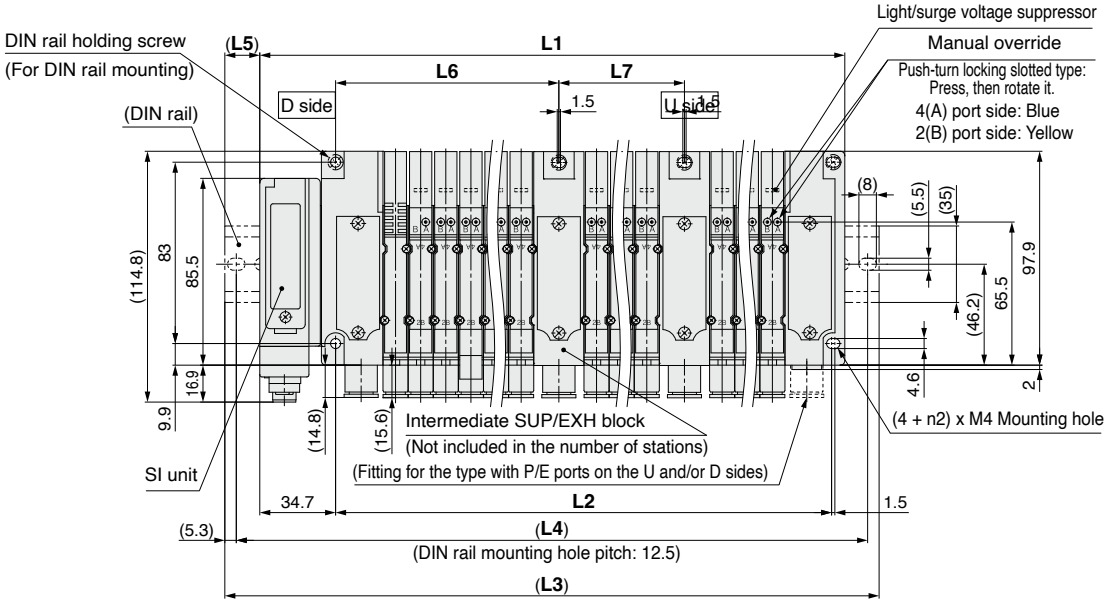


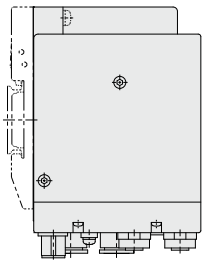

For the **EX260-MEC1**




For the **EX260-MIL1**



**Dimension calculation formulas**

$L1 = 11.5 \times n_1 + 23 \times n_2 + 83.8$
$L2 = 11.5 \times n_1 + 23 \times n_2 + 43.1$
$M = L1 / 12.5 + 1$ Round down to the nearest whole number.
$L3 = 12.5 \times M + 23$
$L4 = L3 - 10.5$
$L5 = (L3 - L1) / 2$ Round up to the nearest whole number.
$L6 = 11.5 \times n_3 + 33.2$
$L7 = 11.5 \times n_4 + 23$

$n_1$: Number of JSY3000 valve stations (Multiples of 4)
$n_2$: Number of intermediate SUP/EXH blocks
$n_3$: Stations from the D side to the first intermediate SUP/EXH block
$n_4$: Stations between the intermediate SUP/EXH blocks

* These figures show the JJ5SY3-L10SFN-□D2-C8.
* Refer to the **Web Catalogue** for the dimensions of the external pilot and silencer.

### ⚠Caution

There will be slight variations in the width of manifold blocks due to tolerance.
As the manifold is made up of a combination of manifold blocks, there will be slight variations between the actual pitch dimensions of the mounting holes used to secure the manifold and the values stated in the catalog due to tolerance.

**L: Dimensions When the intermediate SUP/EXH block count is "$n_2 = 0$"*1**

$n_1$: Stations

| L \ n1 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **L1** | 129.8 | 175.8 | 221.8 | 267.8 | 313.8 | 359.8 | 405.8 | 451.8 | 497.8 | 543.8 | 589.8 | 635.8 | 681.8 | 727.8 | 773.8 | 819.8 |
| **L2** | 89.1 | 135.1 | 181.1 | 227.1 | 273.1 | 319.1 | 365.1 | 411.1 | 457.1 | 503.1 | 549.1 | 595.1 | 641.1 | 687.1 | 733.1 | 779.1 |
| **L3** | 160.5 | 210.5 | 248 | 298 | 348 | 385.5 | 435.5 | 485.5 | 523 | 573 | 623 | 660.5 | 710.5 | 760.5 | 798 | 848 |
| **L4** | 150 | 200 | 237.5 | 287.5 | 337.5 | 375 | 425 | 475 | 512.5 | 562.5 | 612.5 | 650 | 700 | 750 | 787.5 | 837.5 |
| **L5** | 16 | 18 | 14 | 16 | 18 | 13 | 15 | 17 | 13 | 15 | 17 | 13 | 15 | 17 | 13 | 15 |

*1 When the number of intermediate SUP/EXH blocks is "$n_2 = 1$ to 6," calculate the respective dimensions using the various dimension calculation formulas above.

Type 10
Side Ported

# 64-station Compatible Manifold
# Plug-in Connector Connecting Base EX600
# JSY3000-L Series

Internal Pilot

* Only the dedicated SI unit can be mounted on the 64-station compatible manifold.

## How to Order Manifolds

JJ5SY 3 – L 10 S6 F □ □ – 24 B 1 – C8 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

64-station compatible manifold identification symbol

### ❶ Series

| | |
|---|---|
| 3 | JSY3000 |

### ❷ Type

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

### ❸ SI unit

| Symbol | Protocol |
|---|---|
| 0*1 | Without SI unit |
| F | PROFINET |
| E | EtherNet/IP™ |
| D | EtherCAT |

*1 If there is no SI unit, it is not possible to select a model with DIN rail.
* I/O unit cannot be mounted without SI unit.
* SI units, I/O units, and valve plates are shipped together with the product but do not come assembled.

### ❺ I/O unit stations

| | |
|---|---|
| — | None |
| 1 | 1 station |
| ⋮ | ⋮ |
| 8 | 8 stations |

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

### Made to Order

**(For details, refer to the plug-in type 5-port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot (SUP/EXH block and Intermediate SUP/EXH block) |

### ❹ End plate (SI unit)

| | | |
|---|---|---|
| — | Without SI unit | |
| 4 | M12 power supply connector, B-coded (EX600-ED2) | |
| 5 | 7/8 inch power supply connector (EX600-ED3) | |
| 7 | M12 power supply connector IN/OUT, A-coded | Pin arrangement 1 (EX600-ED4) |
| 9 | | Pin arrangement 2 (EX600-ED5) |

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

### ❻ Valve stations

| Symbol | Stations | Note |
|---|---|---|
| 04 | 4 stations | Double wiring*1 |
| 08 | 8 stations | |
| ⋮ | ⋮ | |
| 60 | 60 stations | |
| 64 | 64 stations | |

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a single solenoid will result in an unused control signal.
This also includes the number of blanking plates.
* For stations, only multiples of 4, from 4 stations to 64 stations, can be selected.
The 4 boards inside the manifold are integrated.

### ❼ P, E port entry, SUP/EXH block assembly, Intermediate SUP/EXH block

| P, E port entry | Internal pilot | Internal pilot, Built-in silencer | External pilot (Made to order) |
|---|---|---|---|
| U side (4 to 8 stations) | U | C | G |
| D side (4 to 8 stations) | D | E | H |
| Both sides (4 to 64 stations) | B | F | J |

* 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.

### ❽ Number of intermediate SUP/EXH blocks, mounting position

| Symbol | Quantity | Mounting position |
|---|---|---|
| 0 | 0 | — |
| 1 | 1 | Specify the mounting position on the manifold specifications sheet. |
| ⋮ | ⋮ | |
| 6 | 6 | |

* A block can be installed for every 4 valve stations, but as a guideline, it is recommended that one be installed for every 8 to 12 stations.

### ❾ 4(A), 2(B) port size (Metric/One-touch fitting)

| Symbol | A, B port | P, E port |
|---|---|---|
| C4 | Straight Ø 4 | Straight Ø 10 |
| C6 | Straight Ø 6 | |
| C8 | Straight Ø 8 | |
| CM*1 | Straight port, mixed sizes | |

*1 Indicate the sizes on the manifold specification sheet for "CM."

### ❿ Mounting

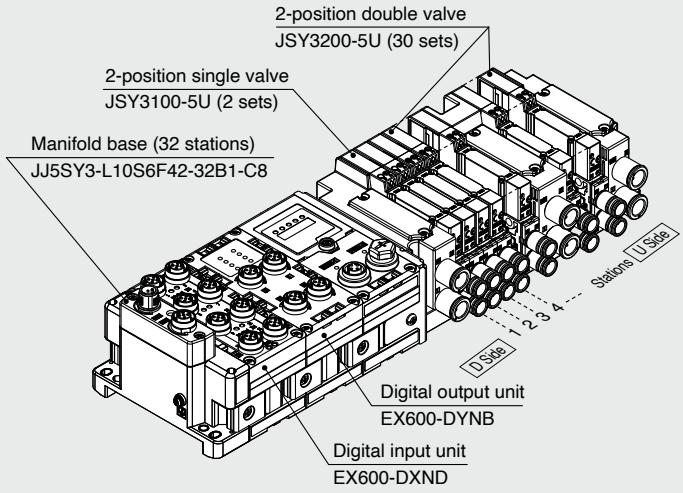
| Symbol | Mounting |
|---|---|
| — | Direct mounting |
| D*1 | DIN rail mounting (With DIN rail) |
| D0*2 | DIN rail mounting (Without DIN rail) |

*1 Option "D" with DIN rail mounting is not compatible with the product without an SI unit.
*2 Order the DIN rail separately, referring to dimension L3.
(Refer to page 2 3 for DIN rail product numbers and lengths.)
* Refer to page 1 for details on securing the DIN rail mounting type manifold.

**For details on the EX 6 0 0 Integrated Type (For Input/Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 18. Please download the Operation Manual via the SMC website: https://www.smc.eu**

## How to Order Manifold Assembly

### Example (JJ5SY3-L10S6F42-□)




**JJ5SY3-L10S6F42-32B1-C8 ··1 set (32-station manifold base part no.)**
**∗JSY3100-5U ·····2 sets (2-position single part no.)**
**∗JSY3200-5U ·····30 sets (2-position double part no.)**
**∗EX600-DXND·····1 set I/O unit part number (Station 1)**
**∗EX600-DYNB·····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 in order starting with the 1 st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.
- Use the manifold specifications sheet to specify the mounting position of the intermediate SUP/EXH blocks.

∗ Stations are only available in multiples of 4.

**Internal Pilot**

## How to Order Valves (With mounting screw)

**Refer to the Web Catalogue (plug-in type 5-port solenoid valve JSY series) for valve specifications.**

**JSY 3 1 0 0 □ – 5 U □**
❶ ❷ ❸ ❹ ❺ ❻ ❼

**Base mounted**

**Made to Order**
**(For details, refer to the plug-in type 5-port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot |

### ❶ Series

| | |
|---|---|
| **3** | JSY3000 |

### ❷ Type of actuation

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

### ❸ Pilot valve exhaust method

| | |
|---|---|
| **0** | Pilot valve individual exhaust |

### ❹ Coil specifications

| Symbol | Coil specifications |
|---|---|
| **—** | Standard |
| **T** | With power saving circuit (Continuous duty type) |

∗ Be careful of the energising time when the power-saving circuit is selected.

### ❺ Rated voltage

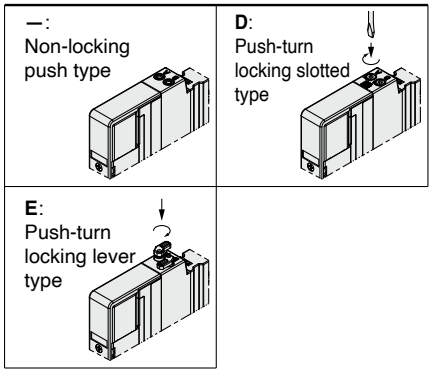
| | |
|---|---|
| **5** | 24 VDC |

### ❻ Light/surge voltage suppressor and common specification

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

∗ Only "NZ" type is available with a power saving circuit.
∗ When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the **Web Catalogue**.

### ❼ Manual override




∗ **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 the **Web Catalogue** for base gasket and mounting screw part numbers.

### ⚠ Caution

**If the product is to be continuously energised, please be sure to select the power-saving circuit (continuous duty type) specification.**

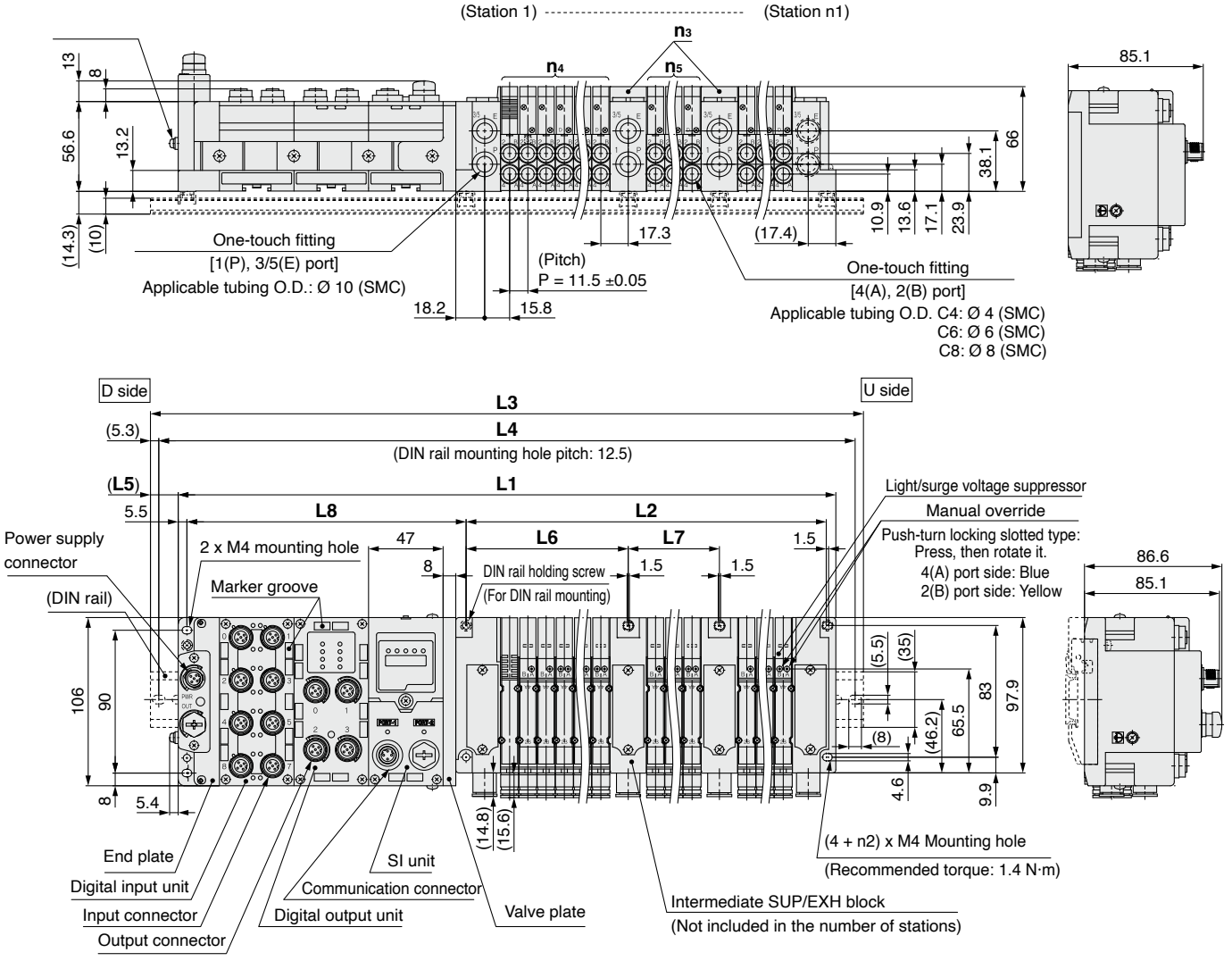
∗ Refer to the "With power-saving circuit" section in the "Specific Product Precautions" of the plug-in type JSY series **Web Catalogue** for details.

⚠ Protective class class III (Mark: Ⅲ)

## Dimensions: JSY3000-L Series

**Type 10/Side Ported**
**EX600/64-station Compatible Manifold (M12 connector)**

### JJ5SY3-L10S6□ 4/7/9 □-Stations U/D/B C4/C6/C8 (D)




**Dimension calculation formulas**

L1 = 11.5 x $n_1$ + 136.6 + 47 x $n_2$ + 23 x $n_3$
L2 = 11.5 x $n_1$ + 43.1 + 23 x $n_3$
M = L1 / 12.5 + 1  Round down to the nearest whole number.
L3 = 12.5 x M + 23
L4 = L3 – 10.5
L5 = (L3 – L1) / 2  Round up to the nearest whole number.
L6 = 11.5 x $n_4$ + 33.2
L7 = 11.5 x $n_5$ + 23
L8 = 47 x $n_2$ + 82

$n_1$: Number of JSY3000 valve stations (Multiples of 4)
$n_2$: Number of I/O units
$n_3$: Number of intermediate SUP/EXH blocks
$n_4$: Stations from the D side to the first intermediate SUP/EXH block
$n_5$: Stations between the intermediate SUP/EXH blocks

* These figures show the JJ5SY3-L10S6F72-□B2-C8.
* Refer to the **Web Catalogue** for the dimensions of the external pilot and silencer.

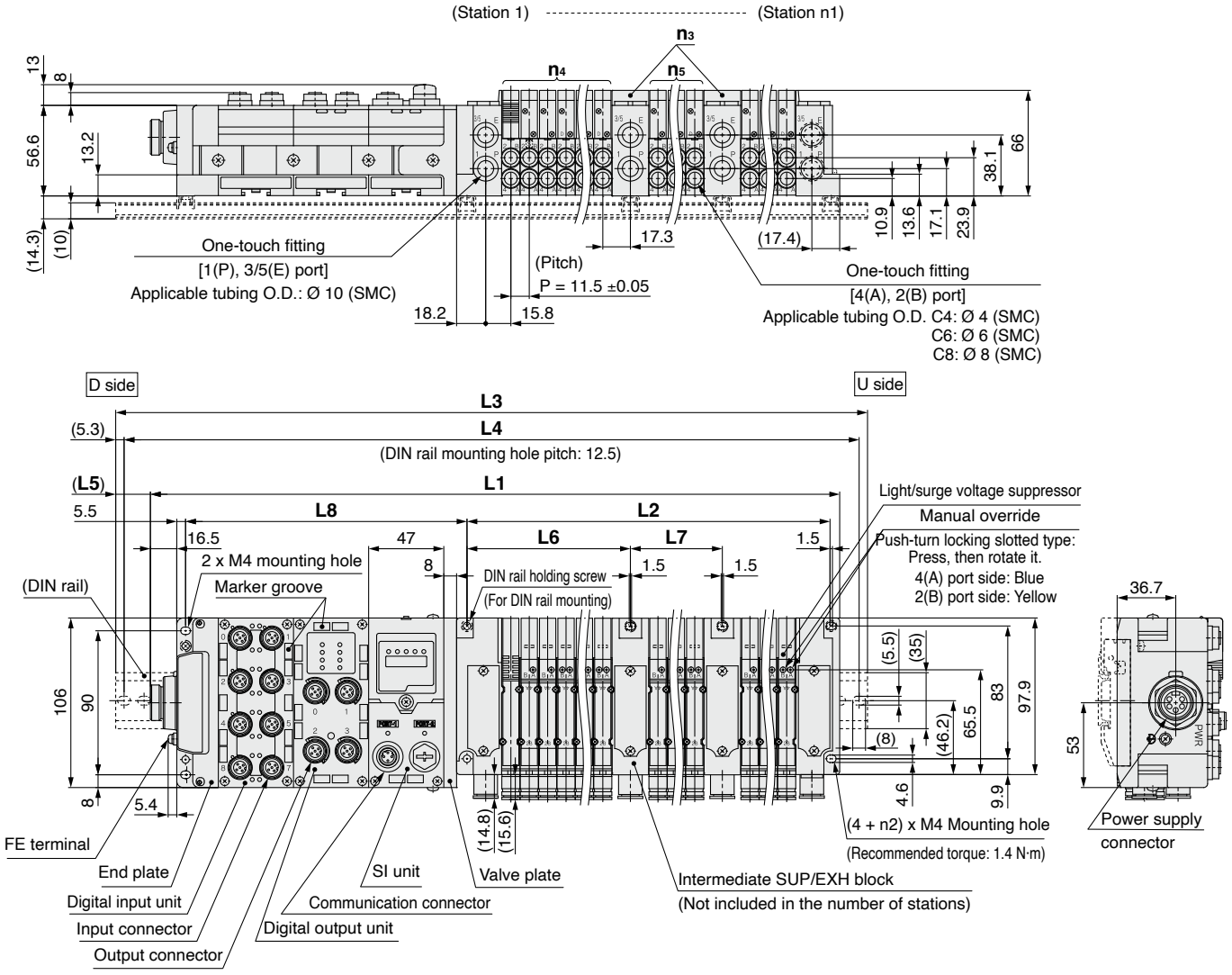
### ⚠Caution

There will be slight variations in the width of manifold blocks due to tolerance.
As the manifold is made up of a combination of manifold blocks, there will be slight variations between the actual pitch dimensions of the mounting holes used to secure the manifold and the values stated in the catalog due to tolerance.

## Dimensions: JSY3000-L Series

**Type 10/Side Ported**
**EX600/64-station Compatible Manifold (7/8 inch connector)**

### JJ5SY3-L10S6□5□-Stations U/D/B C4/C6/C8 (D)




**Dimension calculation formulas**

L1 = 11.5 x $n_1$ + 153.1 + 47 x $n_2$ + 23 x $n_3$
L2 = 11.5 x $n_1$ + 43.1 + 23 x $n_3$
M = L1 / 12.5 + 1  Round down to the nearest whole number.
L3 = 12.5 x M + 23
L4 = L3 – 10.5
L5 = (L3 – L1) / 2  Round up to the nearest whole number.
L6 = 11.5 x $n_4$ + 33.2
L7 = 11.5 x $n_5$ + 23
L8 = 47 x $n_2$ + 82

$n_1$: Number of JSY3000 valve stations (Multiples of 4)
$n_2$: Number of I/O units
$n_3$: Number of intermediate SUP/EXH blocks
$n_4$: Stations from the D side to the first intermediate SUP/EXH block
$n_5$: Stations between the intermediate SUP/EXH blocks

* These figures show the JJ5SY3-L10S6F52-□B2-C8.
* Refer to the **Web Catalogue** for the dimensions of the external pilot and silencer.

### ⚠Caution

There will be slight variations in the width of manifold blocks due to tolerance.
As the manifold is made up of a combination of manifold blocks, there will be slight variations between the actual pitch dimensions of the mounting holes used to secure the manifold and the values stated in the catalog due to tolerance.

# 64-station Compatible Manifold
# Plug-in Connector Connecting Base
## EX600 Safety Protocol (CIP Safety)

**Type 10 Side Ported**

# JSY3000-L Series

CE UK CA RoHS

**Using the safety communication protocol**
**Refer to the Web Catalogue 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**

∗ **Only the dedicated SI unit can be mounted on the 64-station compatible manifold.**

## How to Order Manifolds

**JJ5SY 3 – L 10 S6 EP 5 – 24 B 1 – C8 ❑**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

**64-station compatible manifold identification symbol**

### ❶ Series

| | |
|---|---|
| **3** | JSY3000 |

### ❷ Type

| | |
|---|---|
| **10** | Side ported |

### Made to Order

**(For details, refer to the plug-in type 5-port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot (SUP/EXH block and Intermediate SUP/EXH block) |

### ❹ End plate

| | |
|---|---|
| **5** | 7/8 inch power supply connector (EX600-ED3) |

### ❸ Safety communication fieldbus (Output polarity, Protocol, Number of outputs), Safety I/O unit stations, I/O unit stations, End plate power supply connector

| Safety communication fieldbus | | | | Safety I/O unit stations | I/O unit stations | End plate power supply connector |
|---|---|---|---|---|---|---|
| Symbol (Output polarity) | | Protocol | Number of outputs | | | |
| Positive common (NPN) | Negative common (PNP) | | | | | |
| —∗1 | **EP** | CIP Safety | 32∗2 | 1 | 0 to 9 | 7/8 inch |

∗1 Positive common (NPN) type is not available.
∗2 Only the 32 outputs type is available.
∗ Manifold + valve plate part number
∗ The EX600 devices are shipped together with the product. Refer to the operation manual for details on the mounting method.
∗ When selecting a safety communication fieldbus system, refer to the EX600 series catalog, and specify the part number when ordering. In addition, be sure to order a safety fieldbus module and a safety I/O module to operate the valve.
∗ If your order includes a safety fieldbus module, it will be shipped with the product. Refer to the attached operation manual for details on the mounting method.

### ❺ Valve stations

| Symbol | Stations | Note |
|---|---|---|
| **04** | 4 stations | Double wiring∗1 |
| **08** | 8 stations | |
| ⋮ | ⋮ | |
| **60** | 60 stations | |
| **64** | 64 stations | |

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a single solenoid will result in an unused control signal.
This also includes the number of blanking plates.
∗ For stations, only multiples of 4, from 4 stations to 64 stations, can be selected.
The 4 boards inside the manifold are integrated.

### ❻ P, E port entry, SUP/EXH block assembly, Intermediate SUP/EXH block

| P, E port entry | Internal pilot | Internal pilot, Built-in silencer | External pilot (Made to order) |
|---|---|---|---|
| U side (4 to 8 stations) | **U** | **C** | **G** |
| D side (4 to 8 stations) | **D** | **E** | **H** |
| Both sides (4 to 64 stations) | **B** | **F** | **J** |

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

### ❼ Number of intermediate SUP/EXH blocks, mounting position

| Symbol | Quantity | Mounting position |
|---|---|---|
| **0** | 0 | — |
| **1** | 1 | Specify the mounting position on the manifold specifications sheet. |
| ⋮ | ⋮ | |
| **6** | 6 | |

∗ A block can be installed for every 4 valve stations, but as a guideline, it is recommended that one be installed for every 8 to 12 stations.

### ❽ 4(A), 2(B) port size (Metric/One-touch fitting)

| Symbol | A, B port | P, E port |
|---|---|---|
| **C4** | Straight Ø 4 | Straight Ø 10 |
| **C6** | Straight Ø 6 | |
| **C8** | Straight Ø 8 | |
| **CM**∗1 | Straight port, mixed sizes | |

∗1 Indicate the sizes on the manifold specification sheet for "CM."

### ❾ Mounting

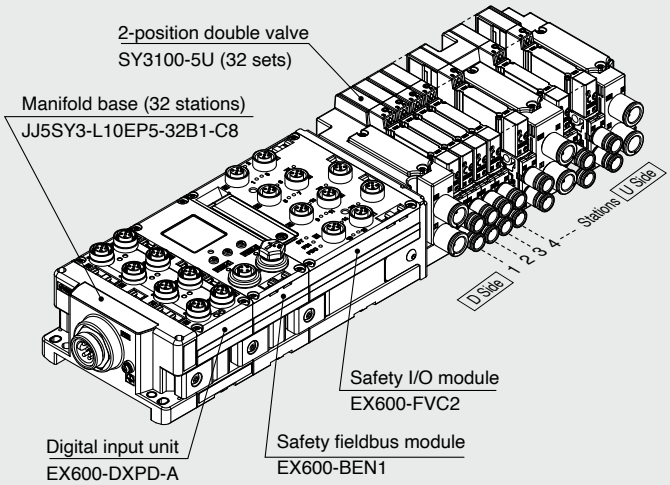
| Symbol | Mounting |
|---|---|
| **—** | Direct mounting |
| **D0**∗1 | DIN rail mounting (Without DIN rail) |

∗1 Order the DIN rail separately, referring to dimension L3.
(Refer to page 23 for DIN rail product numbers and lengths.)
∗ Refer to page 2 for details on securing the DIN rail mounting type manifold.

**For details on the EX600 Integrated Type (For Input/Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the fieldbus modules to be mounted, refer to page 21. Please download the Operation Manual via the SMC website: https://www.smc.eu**

## How to Order Manifold Assembly

### Example (JJ5SY3-L10S6EP5-□)




**JJ5SY3-L10EP5-32B1-C8**
- ∗ **JSY3100-5U ····· 32 sets (2-position single part no.)**
- ∗ **EX600-ED3 ····· End plate part no.**
- ∗ **EX600-DXPD-A ····· I/O unit part no. (Station 1)**
- ∗ **EX600-BEN1 ····· Safety fieldbus module part no.**
- ∗ **EX600-FVC2 ····· Safety I/O module part no.**
- ∗ **EX600-ZMV4 ····· Valve plate part no.**

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

· Indicate the part numbers of valves and optional parts to be mounted in order, starting from station 1 (D side).
· Indicate the part numbers for the end plate, I/O unit (1st station from the D side), safety fieldbus module, and safety I/O module in that order.
∗ The manifold part number above does not include an end plate, I/O unit, safety fieldbus module, or safety I/O module. However, they can be shipped with the product if they are ordered together. For details on the compatible EX600 models, refer to page 21.
In addition, be sure to order a fieldbus module and a safety I/O module to operate the valve.

## [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 0 0 □ – 5 □ □**

❶ ❷ ❸ ❹ ❺

**Made to Order**
**(For details, refer to the plug-in type 5 -port solenoid valve JSY series in the Web Catalogue.)**

| Specification |
|---|
| External pilot |

### ❶ Series

| | |
|---|---|
| **3** | JSY3000 |

### ❷ Type of actuation

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

### ❸ Coil specifications

| Symbol | Coil specifications |
|---|---|
| **—** | Standard |
| **T** | With power saving circuit (Continuous duty type) |

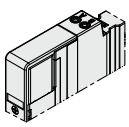
∗ Be careful of the energising time when the power-saving circuit is selected.
For details, refer to page 158 of the standard product catalog.

### ❹ Light/surge voltage suppressor and common specification

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

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

### ❺ Manual override

| Symbol/Specification | |
|---|---|
| —: Non-locking push type |  |

∗ **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.

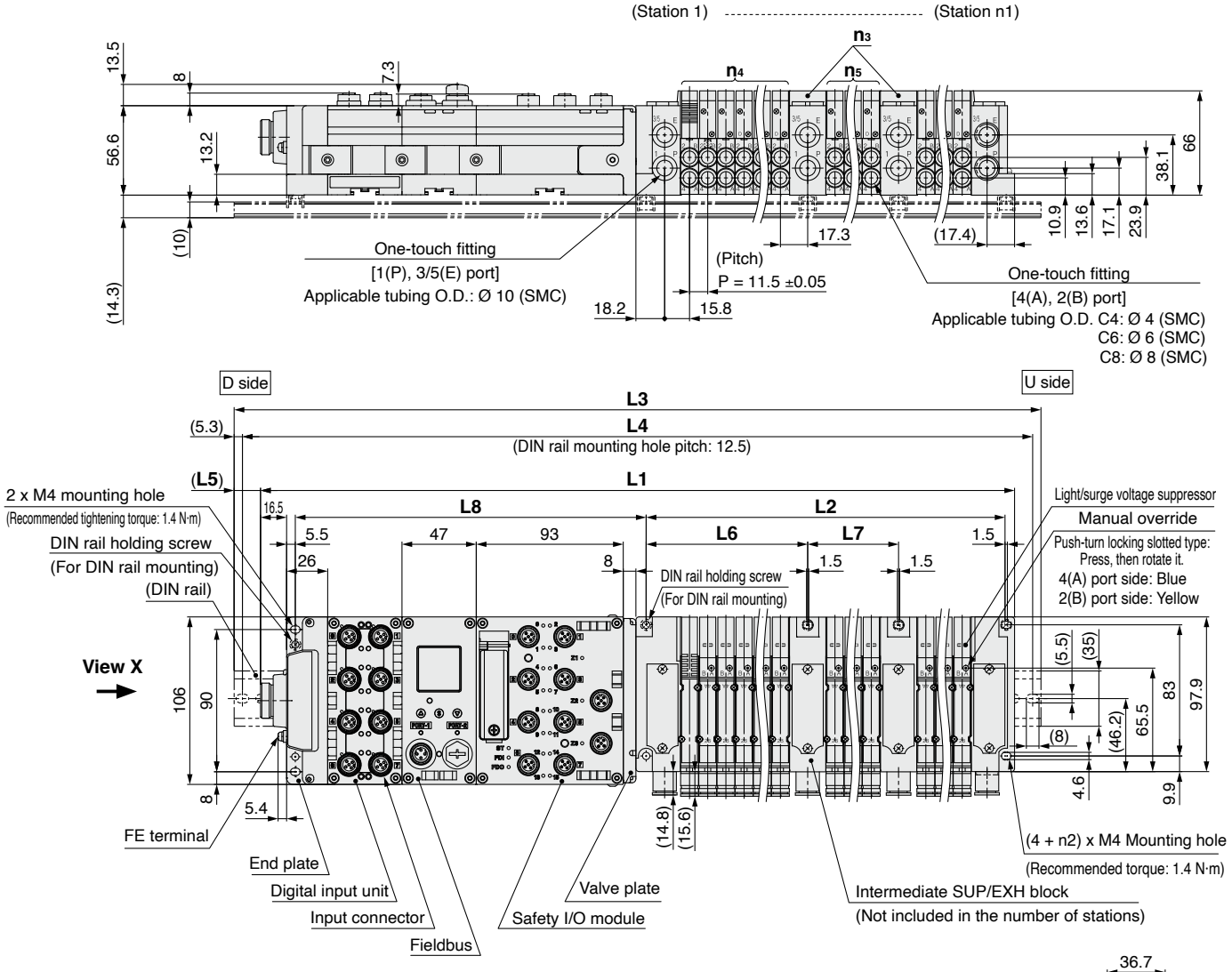
### ⚠Caution

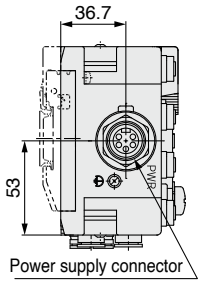
**If the JSY3000 series is to be continuously energised, please be sure to select the power-saving circuit (continuous duty type) specification.**

## Dimensions: JSY3000-L Series

**Type 10/Side Ported**
**EX600 Safety Protocol (7/8 inch connector)**

### JJ5SY3-L10S6EP5-Stations U/D/B - C4/C6/C8(D)




View X

**Dimension calculation formulas**

L1 = 11.5 x $n_1$ + 153.1 + 47 x $n_2$ + 93 x $n_3$ + 23 x $n_4$
L2 = 11.5 x $n_1$ + 43.1 + 23 x $n_4$
M = L1 / 12.5 + 1  Round down to the nearest whole number.
L3 = 12.5 x M + 23
L4 = L3-10.5
L5 = (L3-L1) / 2  Round up to the nearest whole number.
L6 = 11.5 x $n_5$ + 33.2
L7 = 11.5 x $n_6$ + 23
L8 = 47 x $n_2$ + 93 x $n_3$ + 82

$n_1$: Number of JSY3000 valve stations (Multiples of 4)
$n_2$: Number of I/O units
$n_3$: Number of safety I/O modules
$n_4$: Number of intermediate SUP/EXH blocks
$n_5$: Stations from the D side to the first intermediate SUP/EXH block
$n_6$: Stations between the intermediate SUP/EXH blocks

∗ These figures show the JJ5SY3-L10S6EP5-□B2-C8.
∗ Refer to the **Web Catalogue** for the dimensions of the external pilot and silencer.

### ⚠Caution

There will be slight variations in the width of manifold blocks due to tolerance.
As the manifold is made up of a combination of manifold blocks, there will be slight variations between the actual pitch dimensions of the mounting holes used to secure the manifold and the values stated in the catalog due to tolerance.

# *EX260 Series*
# SI Unit Specifications

## How to Order SI Units

**EX260 – M PN1**

**Communication protocol**

| Symbol | Protocol | Output | Communication connector | Power supply connector | Manifold symbol | Applicable manifold |
|---|---|---|---|---|---|---|
| **PN1** | PROFINET | For the 64-station compatible manifold | M12 | M12 | F | JSY1000/3000-L (64 stations specification) |
| **EN1** | EtherNet/IP™ | | M12 | M12 | E | |
| **EC1** | EtherCAT | | M8 | M8 | D | |
| **IL1** | IO-Link | | M12 | | K | |

## Specifications

### Common Specifications for All SI Units

| | | |
|---|---|---|
| **Power supply for control** | **Power supply voltage** | 24 VDC +20 %, -15 % |
| | **Internal current consumption** | 100 mA or less*1 |
| **Power supply for output*2** | **Power supply voltage** | 24 VDC +20 %, -15 % |
| | **Max. supply current** | 3 A |
| | **Voltage drop to valve supply** | Max. 1.2 V (at 24 VDC) |
| **Environmental resistance** | **Enclosure (Based on IEC 60529)** | IP67 |
| | **Operating temperature range** | -10 to +50 °C |
| | **Operating humidity range** | 35 to 85 % RH (No condensation) |
| | **Withstand voltage** | 500 VAC for 1 min between external terminals and FE |
| | **Insulation resistance** | 500 VDC, 10 MΩ or more between external terminals and FE |
| **Standards** | | CE/UKCA marking |
| **Weight** | | 200 g |

*1 150 mA or less for the EX260-MPN1
*2 This is the SI unit power supply voltage. Supply power according to the type of solenoid valve used.

### SI Unit Specifications by Model

| Model | | EX260-MPN1 |
|---|---|---|
| **Applicable system** | **Protocol** | PROFINET*1 |
| | **Configuration file*2** | GSD file |
| **Applicable functions** | | MRP function, MRPD function, Fast Startup function, Shared Device function, System Redundancy S2 function, PROFIenergy function, Conformance Class C, NET Load Class Ⅲ |
| **Communication speed** | | 100 Mbps |
| **Communication connector specification** | | M12 |
| **Output** | **Number of outputs** | Max. 128 outputs |
| | **Load** | Solenoid valve with surge voltage suppressor, 24 VDC, 0.4 W or less (SMC) |
| **Accessories** | **Mounting screw** | Hexagon socket head cap screw M3 x 30 (2 pcs.) |
| | **Seal cap (for M12 connector socket)** | EX9-AWTS (1 pc.) |

| Model | | EX260-MEC1 |
|---|---|---|
| **Applicable system** | **Protocol** | EtherCAT*1 |
| | **Configuration file*2** | ESI file |
| **Applicable functions** | | CoE, FoE*3, DC synchronous |
| **Communication speed** | | 100 Mbps |
| **Communication connector specification** | | M8 |
| **Output** | **Number of outputs** | Max. 128 outputs |
| | **Load** | Solenoid valve with surge voltage suppressor, 24 VDC, 0.4 W or less (SMC) |
| **Accessories** | **Mounting screw** | Hexagon socket head cap screw M3 x 30 (2 pcs.) |
| | **Seal cap (for M8 connector socket)** | EX9-AWES (2 pcs.) |

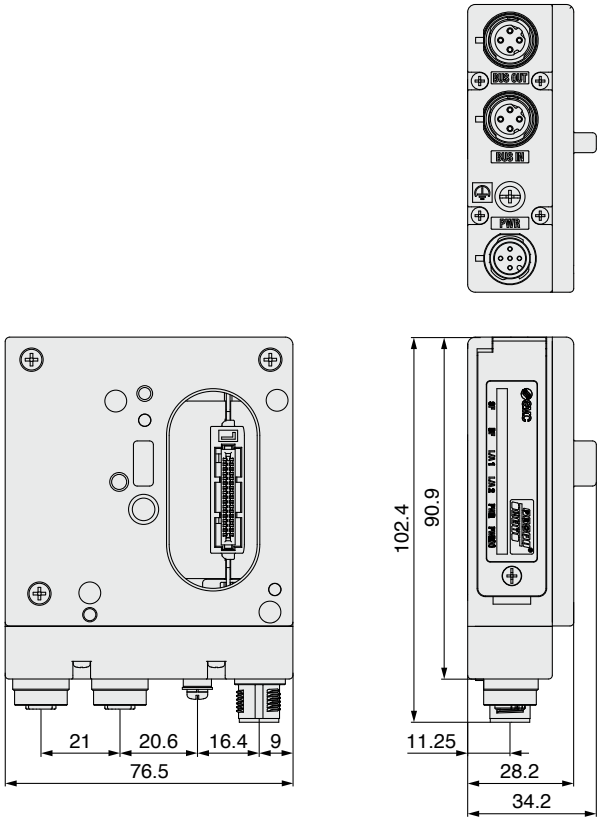
| Model | | EX260-MEN1 |
|---|---|---|
| **Applicable system** | **Protocol** | EtherNet/IP™ |
| | **Configuration file*2** | EDS file |
| **Applicable functions** | | Quickconnect, DLR, Web server |
| **Communication speed** | | 100 Mbps |
| **Communication connector specification** | | M12 |
| **Output** | **Number of outputs** | Max. 128 outputs |
| | **Load** | Solenoid valve with surge voltage suppressor, 24 VDC, 0.4 W or less (SMC) |
| **Accessories** | **Mounting screw** | Hexagon socket head cap screw M3 x 30 (2 pcs.) |
| | **Seal cap (for M12 connector socket)** | EX9-AWTS (1 pc.) |

| Model | | EX260-MIL1 |
|---|---|---|
| **Applicable system** | **Protocol** | IO-Link |
| | **Configuration file*2** | IODD file |
| **Applicable functions** | | ISDU, Data Storage |
| **Communication speed** | | COM3 (230.4 kbps) |
| **Communication connector specification** | | M12 |
| **Output** | **Number of outputs** | Max. 128 outputs |
| | **Load** | Solenoid valve with surge voltage suppressor, 24 VDC, 0.4 W or less (SMC) |
| **Accessories** | **Mounting screw** | Hexagon socket head cap screw M3 x 30 (2 pcs.) |

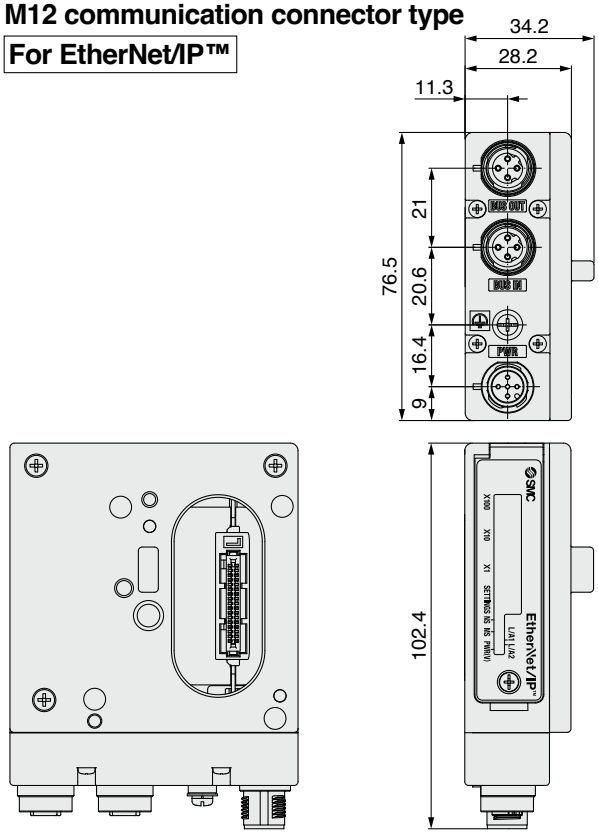
*1 Use a CAT5 or higher communication cable for EtherCAT, Ethernet/IP™, and PROFINET.
*2 The configuration file can be downloaded from the SMC website: https://www.smc.eu
*3 There is a firmware update function using FoE, but depending on the product's hardware and firmware versions, it may not be possible to use the firmware update function.

## Dimensions

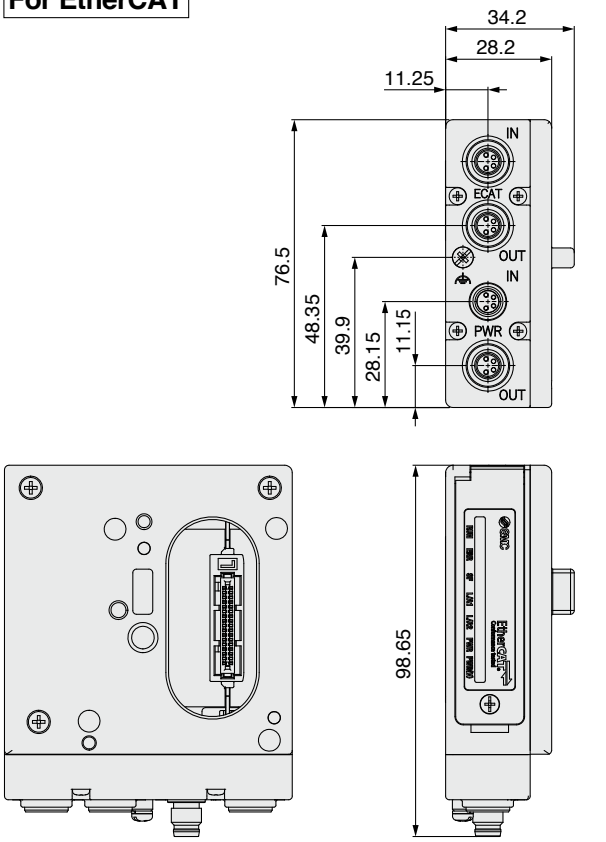
### M12 communication connector type
**For PROFINET**



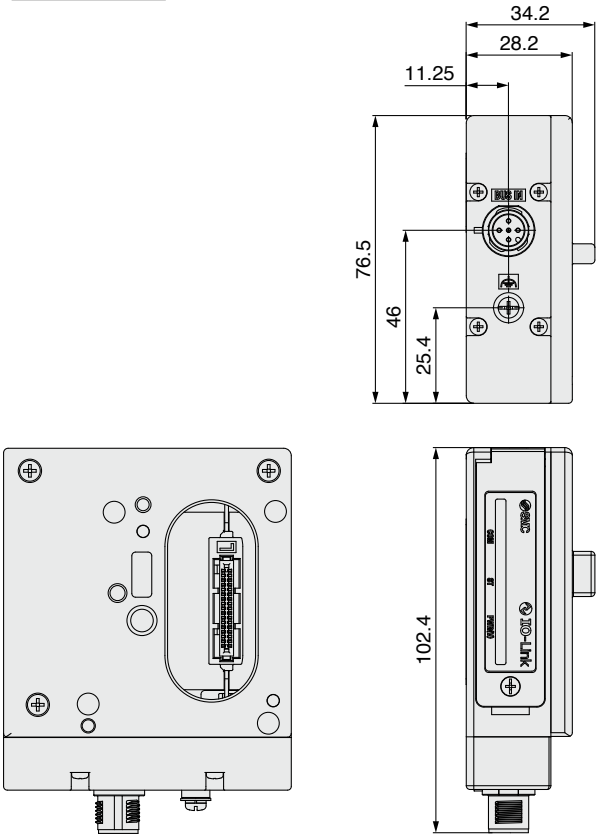

### M12 communication connector type
**For EtherNet/IP™**




### M8 communication connector type
**For EtherCAT**

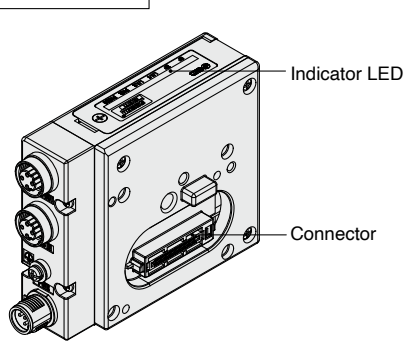



### M12 communication/Power supply connector type
**For IO-Link**



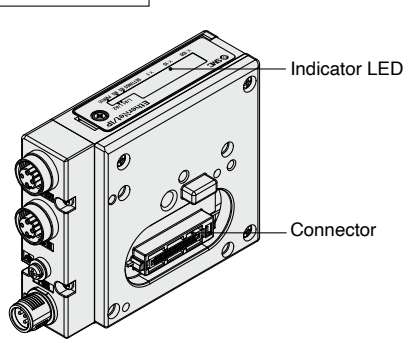
## Parts Description

### For PROFINET



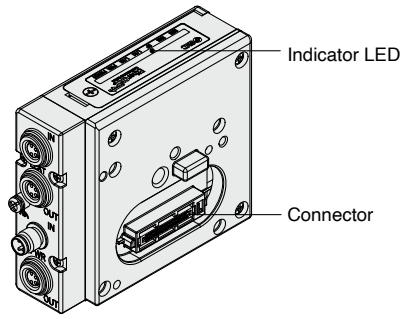

| Part no. | EX260-MPN1 |
|---|---|
| Protocol | PROFINET |
| Communication connector (M12) BUS OUT | 4 pins, socket, D code |
| Communication connector (M12) BUS IN | 4 pins, socket, D code |
| Ground terminal | M3 |
| Power connector (M12) PWR | 4 pins, plug, A code |

### For EtherNet/IP™



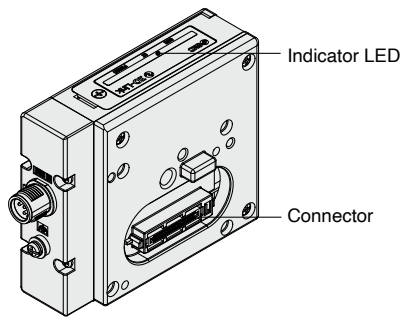

| Part no. | EX260-MEN1 |
|---|---|
| Protocol | EtherNet/IP™ |
| Communication connector (M12) BUS OUT | 4 pins, socket, D code |
| Communication connector (M12) BUS IN | 4 pins, socket, D code |
| Ground terminal | M3 |
| Power connector (M12) PWR | 4 pins, plug, A code |

### For EtherCAT




| Part no. | EX260-MEC1 |
|---|---|
| Protocol | EtherCAT |
| Communication connector (M8) Port1 | 4 pins, socket, A code |
| Communication connector (M8) Port2 | 4 pins, socket, A code |
| Ground terminal | M3 |
| Power connector (M8) PWR IN | 4 pins, plug, A code |
| Power connector (M8) PWR OUT | 4 pins, socket, A code |

### For IO-Link

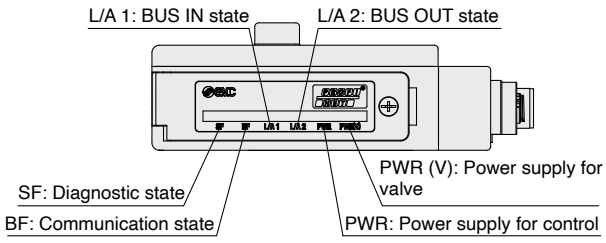



| Part no. | EX260-MIL1 |
|---|---|
| Protocol | IO-Link |
| Communication/Power connector (M12)*1 | 5 pins, plug, A code |
| Ground terminal | M3 |

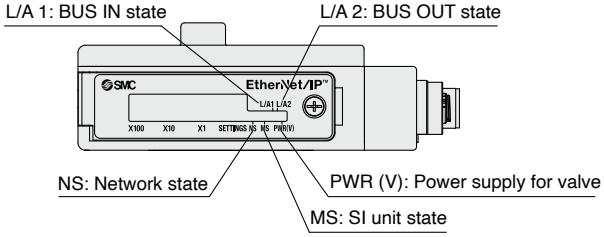
*1 The communication line, control/sensor power supply line, and the valve power supply line are connected using the same cable.

## LED Indicator

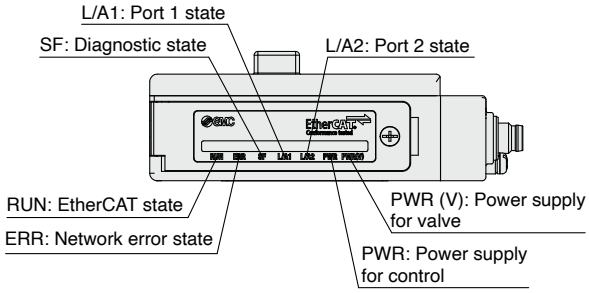
### For PROFINET EX260-MPN1



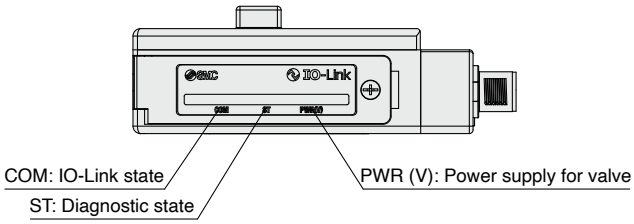

### For EtherNet/IP™ EX260-MEN1




### For EtherCAT EX260-MEC1




### For IO-Link EX260-MIL1




## Accessories

For details, refer to the **Web catalogue on https://www.smc.eu** (EX260 series).

* SMC does not provide cables for the EtherCAT compatible type (M8 connector). Order a cable from another cable manufacturer.

# *EX600 Series*
# SI Unit Specifications

## How to Order SI Units

**EX600 – M PN1**

**Communication protocol**

| Symbol | Protocol | Output | Manifold symbol | Applicable manifold |
|---|---|---|---|---|
| **PN1** | PROFINET | For the 64-station compatible manifold | F | JSY3000-L (64 stations specification) |
| **EN1** | EtherNet/IP™ | | E | |
| **EC1** | EtherCAT | | D | |

## Specifications

### SI Unit Specifications by Model

| Model | | EX600-MPN1 |
|---|---|---|
| Communication | **Protocol** | PROFINET IO (Conformance Class C) |
| | **Communication speed** | 100 Mbps |
| | **Configuration file**∗1 | GSDML file |
| | **Applicable function** | Fast Start up |
| | | MRP |
| | | System Redundancy S2 |
| | | Web server |
| **Internal current consumption (Power supply for control/input)** | | 0.17 A or less |
| **Output** | **Electro-pneumatic regulator for manifold** | Up to 4 units |
| **Standards** | | CE/UKCA marking, UL (CSA) |
| **Weight** | | 310 g |
| Environmental resistance | **Operating temperature range** | Operating: –10 to +50 °C, Stored: –20 to +60 °C |
| | **Operating humidity range** | 35 to 85 % RH (No condensation) |
| | **Withstand voltage** | 500 VAC for 1 minute between external terminals and FE |
| | **Insulation resistance** | 500 VDC, 10 MΩ or more between external terminals and FE |

∗1 The configuration file can be downloaded from the SMC website: https://www.smc.eu

| Model | | EX600-MEN1 |
|---|---|---|
| Communication | **Protocol** | EtherNet/IP™ (Conformance version: Composite19) |
| | **Communication speed** | 10/100 Mbps |
| | **Configuration file**∗1 | EDS file |
| | **Applicable function** | QuickConnect™ |
| | | DLR |
| | | Web server |
| **Internal current consumption (Power supply for control/input)** | | 0.17 A or less |
| **Output** | **Electro-pneumatic regulator for manifold** | Up to 4 units |
| **Standards** | | CE/UKCA marking, UL (CSA) |
| **Weight** | | 310 g |
| Environmental resistance | **Operating temperature range** | Operating: -10 to +50 °C, Stored: -20 to +60 °C |
| | **Operating humidity range** | 35 to 85 % RH (No condensation) |
| | **Withstand voltage** | 500 VAC for 1 minute between external terminals and FE |
| | **Insulation resistance** | 500 VDC, 10 MΩ or more between external terminals and FE |

∗1 The configuration file can be downloaded from the SMC website: https://www.smc.eu

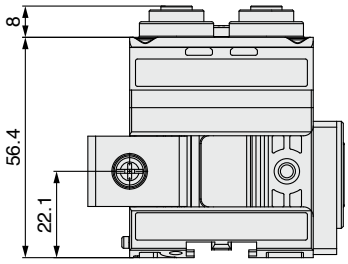
| Model | | EX600-MEC1 |
|---|---|---|
| Communication | **Protocol** | EtherCAT (Conformance Test Record V2.4.0) |
| | **Communication speed** | 100 Mbps |
| | **Configuration file**∗1 | XML file |
| | **Applicable function** | Web server |
| **Internal current consumption (Power supply for control/input)** | | 0.17 A or less |
| **Output** | **Electro-pneumatic regulator for manifold** | Up to 4 units |
| **Standards** | | CE/UKCA marking, UL (CSA) |
| **Weight** | | 310 g |
| Environmental resistance | **Operating temperature range** | Operating: -10 to +50 °C, Stored: -20 to +60 °C |
| | **Operating humidity range** | 35 to 85 % RH (No condensation) |
| | **Withstand voltage** | 500 VAC for 1 minute between external terminals and FE |
| | **Insulation resistance** | 500 VDC, 10 MΩ or more between external terminals and FE |

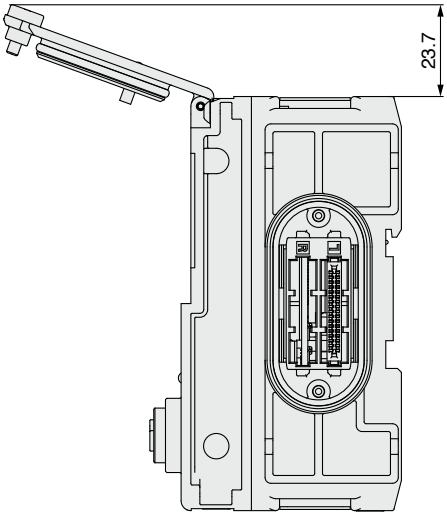
∗1 The configuration file can be downloaded from the SMC website: https://www.smc.eu

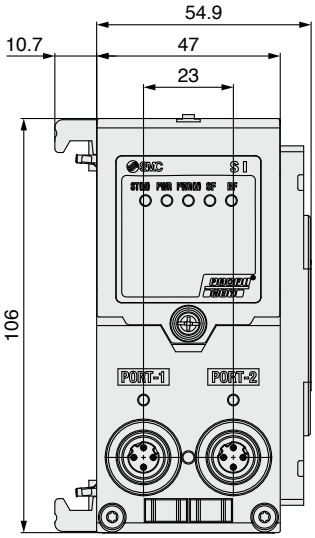
## Dimensions

### SI unit

**EX600-MPN1**
**EX600-MEN1**
**EX600-MEC1**




■ **Trademark**

EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.
QuickConnect™ is a trademark of ODVA

## Manifold Parts Nos.

### EX600 digital input unit

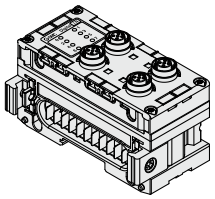
**EX600 – DX [P] [B]**

**Input type**

| Symbol | Description |
|---|---|
| **P** | PNP |
| **N** | NPN |

**Number of inputs, open-circuit detection, and connector**

| Symbol | Number of inputs | Open-circuit detection | Connector |
|---|---|---|---|
| **B** | 8 | No | M12 connector (5 pins) 4 pcs. |
| **C** | 8 | No | M8 connector (3 pins) 8 pcs. |
| **C1** | 8 | Yes | M8 connector (3 pins) 8 pcs. |
| **D** | 16 | No | M12 connector (5 pins) 8 pcs. |
| **E** | 16 | No | D-sub connector (25 pins) |
| **F** | 16 | No | Spring type terminal block (32 pins) |



### EX600 digital output unit

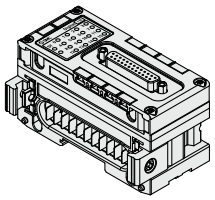
**EX600 – DY [P] [B]**

**Output type**

| Symbol | Description |
|---|---|
| **P** | PNP |
| **N** | NPN |

**Number of outputs and connector**

| Symbol | Number of outputs | Connector |
|---|---|---|
| **B** | 8 | M12 connector (5 pins) 4 pcs. |
| **E** | 16 | D-sub connector (25 pins) |
| **F** | 16 | Spring type terminal block (32 pins) |



### EX600 digital input/output unit

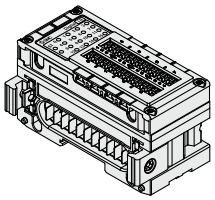
**EX600 – DM [P] [E]**

**Input/Output type**

| Symbol | Description |
|---|---|
| **P** | PNP |
| **N** | NPN |

**Number of inputs/outputs and connector**

| Symbol | Number of inputs | Number of outputs | Connector |
|---|---|---|---|
| **E** | 8 | 8 | D-sub connector (25 pins) |
| **F** | 8 | 8 | Spring type terminal block (32 pins) |



### EX600 analog input/output unit

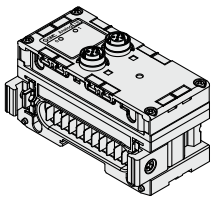
**EX600 – [AX] [A]**

**Analog input/output**

| Symbol | Description |
|---|---|
| **AX** | Analog input |
| **AY** | Analog output |

**Number of channels and connector**

| Symbol | Number of channels | Connector |
|---|---|---|
| **A** | 2 channels | M12 connector (5 pins) 2 pcs. |



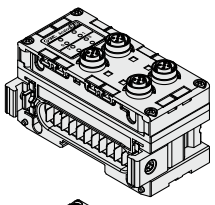
### EX600 analog input/output unit

**EX600 – [AM] [B]**

**Analog input/output**

**Number of input/output channels and connector**

| Symbol | Number of input channels | Number of output channels | Connector |
|---|---|---|---|
| **B** | 2 channels | 2 channels | M12 connector (5 pins) 4 pcs. |



### EX600 IO-Link unit

**EX600 – L [A] [B] 1**

**Port specification**

| Symbol | Description |
|---|---|
| **A** | Port class A |
| **B** | Port class B |

**Number of ports and connector**

| Symbol | Number of ports | Connector |
|---|---|---|
| **B** | 4 ports | M12 connector (5 pins) 4 pcs. |

### EX600 end plate

**EX600 – ED [2] – [ ]**

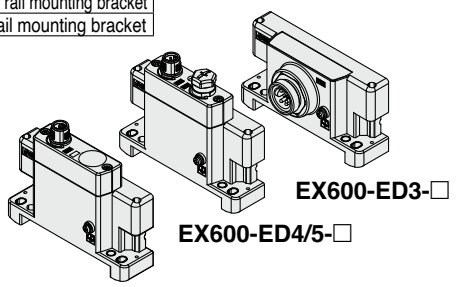
**Power connector**

| Symbol | Connector |
|---|---|
| **2** | M12 power supply connector, B-coded |
| **3** | 7/8 inch power supply connector |
| **4** | M12 power supply connector IN/OUT, A-coded, Pin arrangement 1 |
| **5** | M12 power supply connector IN/OUT, A-coded, Pin arrangement 2 |

∗ The pin layout for the "4" and "5" pin connectors is different.

**Mounting**

| Symbol | Description |
|---|---|
| **—** | Without DIN rail mounting bracket |
| **3** | With DIN rail mounting bracket |



**EX600-ED3-□**

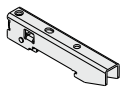
**EX600-ED4/5-□**

**EX600-ED2-□**

∗ For details, refer to the **Web Catalogue** of the Fieldbus system (for input/output) EX600 series.

### Clamp bracket for EX600

**EX600 – ZMA3**

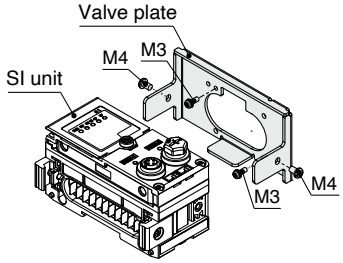


**Enclosed parts**
Round head screw with washer (M4 x 20) 1 pc.
P-tight screw (4 x 14) 2 pcs.

### Valve plate

**EX600 – ZMV3**

∗ With mounting screws (2 pcs. of M4 x 6 and 2 pcs. of M3 x 8)

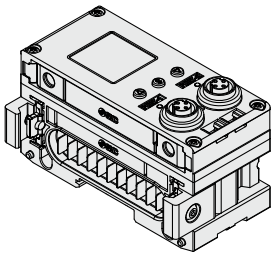


# *JSY3000-L Series*
# Safety Communication Fieldbus System for Manifold (For EX600)

## How to Order

### Fieldbus Module

**EX600 – B EN 1**

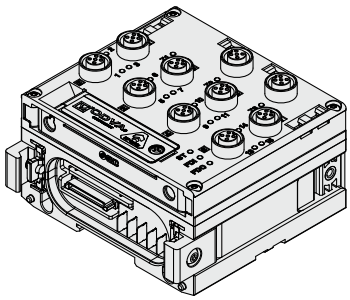


| Symbol | Protocol |
|---|---|
| **EN** | EtherNet/IP™ |

∗ 1 seal cap (for an M12 connector) is included with the product.

### Safety I/O Module

**EX600 – FV C 2**



| Symbol | Protocol |
|---|---|
| **C** | CIP Safety™ |

| Symbol | Number of valve outputs | Number of safety inputs | Number of safety outputs | | Note |
|---|---|---|---|---|---|
| | | | For valve | For external device | |
| **2** | 128 outputs | 16 inputs | 1 output | 2 outputs | JSY3000-L/P, IITV23 series |

∗ There is no seal cap included with the product. However, a seal cap should be mounted on any unused connectors.

### Fieldbus Module

| Model | | EX600-BEN1 |
|---|---|---|
| Communication | **Protocol** | EtherNet/IP™ |
| | **Communication speed** | 10/100 Mbps |
| | **Configuration file** | EDS file∗1 |
| | **QuickConnect™** | ●∗2 |
| | **DLR** | ● |
| **Number of connectable I/O modules** | | D-side (General Input/Output): 9 modules |
| **Internal current consumption** | | 150 mA or less |
| **Enclosure** | | IP65/67∗3 |
| **Weight** | | 310 g or less |

∗1 The configuration file can be downloaded from the SMC website: **https://www.smc.eu**
∗2 It is invalid when connected to EX600-FVC2.
∗3 It depends on IP on manifold when connected to manifold.

### Safety Input/Output Module

| Model | | EX600-FVC2 |
|---|---|---|
| **Protocol** | | CIP Safety™ |
| **Input/Output type** | | PNP |
| **Input** | **Number of safety inputs** | 16 inputs |
| | **Power source** | US1 |
| | **Max. supply current** | 0.6 A/connector, 2 A/module |
| | **Protection** | Short-circuit protection |
| | **ON voltage** | 11 V or more (Input current: 4.5 mA or less) |
| | **OFF voltage** | 5 V or less |
| **Output** | **Number of valve outputs** | 128 outputs |
| | **Manifold electro-pneumatic regulator** | Up to 4 units |
| | **Number of safety outputs** | 1 output for valves (Zone 1), 2 outputs for external devices (Zones 2, 3) |
| | **Power source** | US2 |
| | **Max. load current** | Zone 1: 2 A/zone, Zones 2, 3: 0.25 A/zone |
| | **Protection** | Short-circuit protection |
| **Internal current consumption** | | 150 mA or less |
| **Enclosure** | | IP65/IP67∗1 |
| **Weight** | | 540 g |

∗1 It depends on IP on manifold when connected to manifold.

## Manifold Parts Nos.

### EX600 digital input unit

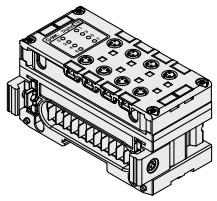
**EX600 – DX P C – A**

**Input type**

| Symbol | Description |
|---|---|
| **P** | PNP |

**Number of inputs, open-circuit detection, and connector**

| Symbol | Number of inputs | Open-circuit detection | Connector |
|---|---|---|---|
| **C** | 8 | No | M8 connector (3 pins) 8 pcs. |
| **D** | 16 | No | M12 connector (5 pins) 8 pcs. |



### EX600 digital output unit

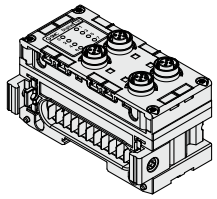
**EX600 – DY P B – A**

**Output type**

| Symbol | Description |
|---|---|
| **P** | PNP |

**Number of outputs and connector**

| Symbol | Number of outputs | Connector |
|---|---|---|
| **B** | 8 | M12 connector (5 pins) 4 pcs. |



### EX600 IO-Link unit

**EX600 – L A B 1 – A**

**Port specification**

| Symbol | Description |
|---|---|
| **A** | Port class A |
| **B** | Port class B |

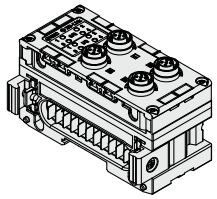
**Number of ports and connector**

| Symbol | Number of ports | Connector |
|---|---|---|
| **B** | 4 ports | M12 connector (5 pins) 4 pcs. |

**⚠ Caution**

The compatible SI unit models are as shown below.

- PROFINET compatible: EX600-SPN3/ EX600-SPN4/EX600-SPN31
- EtherNet/IP™ compatible: EX600-SEN7/ EX600-SEN8
- EtherCAT compatible: EX600-SEC3/ EX600-SEC4



### EX600 end plate

**EX600 – ED 3 – □**

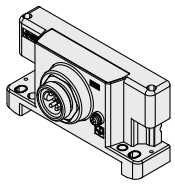
**Power supply connector**

| Symbol | Connector |
|---|---|
| **3** | 7/8 inch power supply connector |

**Mounting**

| Symbol | Description |
|---|---|
| **—** | Without DIN rail mounting bracket |
| **3** | With DIN rail mounting bracket |

∗ The pin layout for the " 4 " and "5" pin connectors is different.



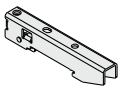
### Valve plate

**EX600−ZMV4**

∗ With mounting screws (2 pcs. of M4 x 6 and 2 pcs. of M3 x 8)

### Clamp bracket for EX600

**EX600−ZMA3**



**Enclosed parts**

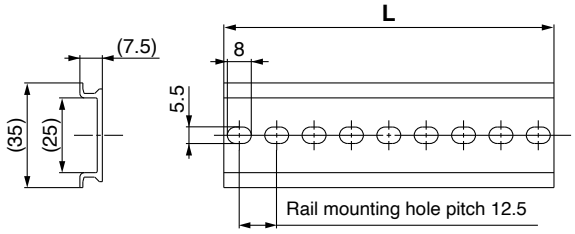
Round head screw with washer (M4 x 20) 1 pc.
P-tight screw (4 x 14) 2 pcs.

∗ For details, refer to the **Web Catalogue** of the Fieldbus system (for input/output) EX600 series.

## ■DIN rail dimensions/weight for the JSY1000/3000 (EX260) 64-station compatible manifold

### VZ1000-11-1-□

∗ After confirming the L3 dimension in the dimensions table, refer to the DIN rail dimensions table below and specify the number in the box □.




| No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 98 | 110.5 | 123 | 135.5 | 148 | 160.5 | 173 | 185.5 | 198 | 210.5 | 223 | 235.5 | 248 | 260.5 | 273 | 285.5 | 298 | 310.5 | 323 |
| Weight [g] | 17.6 | 19.9 | 22.1 | 24.4 | 26.6 | 28.9 | 31.1 | 33.4 | 35.6 | 37.9 | 40.1 | 42.4 | 44.6 | 46.9 | 49.1 | 51.4 | 53.6 | 55.9 | 58.1 |

| No. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 335.5 | 348 | 360.5 | 373 | 385.5 | 398 | 410.5 | 423 | 435.5 | 448 | 460.5 | 473 | 485.5 | 498 | 510.5 | 523 | 535.5 | 548 | 560.5 |
| Weight [g] | 60.4 | 62.5 | 64.9 | 67.1 | 69.4 | 71.6 | 73.9 | 76.1 | 78.4 | 80.6 | 82.9 | 85.1 | 87.4 | 89.6 | 91.9 | 94.1 | 96.4 | 98.6 | 100.9 |

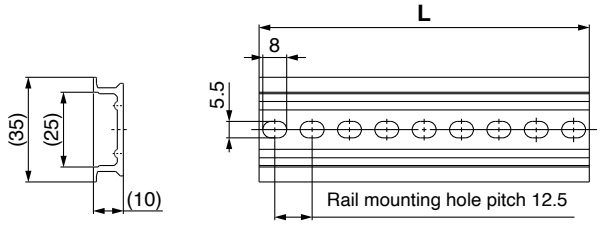
| No. | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 573 | 585.5 | 598 | 610.5 | 623 | 635.5 | 648 | 660.5 | 673 | 685.5 | 698 | 710.5 | 723 | 735.5 | 748 | 760.5 | 773 | 785.5 | 798 |
| Weight [g] | 103.1 | 105.4 | 107.6 | 109.9 | 112.1 | 114.4 | 116.6 | 118.9 | 121.1 | 123.4 | 125.6 | 127.9 | 130.1 | 132.4 | 134.6 | 136.9 | 139.1 | 141.4 | 143.6 |

| No. | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 810.5 | 823 | 835.5 | 848 | 860.5 | 873 | 885.5 | 898 | 910.5 | 923 | 935.5 | 948 | 960.5 | 973 | 985.5 |
| Weight [g] | 145.9 | 148.1 | 150.4 | 152.6 | 154.9 | 157.1 | 159.4 | 161.6 | 163.9 | 166.1 | 168.4 | 170.6 | 172.9 | 175.1 | 177.4 |

## ■DIN rail dimensions/weight for the JSY3000 (EX600) 64-station compatible manifold

### VZ1000-11-4-□

∗ After confirming the L3 dimension in the dimensions table, refer to the DIN rail dimensions table below and specify the number in the box □.




| No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 98 | 110.5 | 123 | 135.5 | 148 | 160.5 | 173 | 185.5 | 198 | 210.5 | 223 | 235.5 | 248 | 260.5 | 273 | 285.5 | 298 | 310.5 | 323 |
| Weight [g] | 24.8 | 28 | 31.1 | 34.3 | 37.4 | 40.6 | 43.8 | 46.9 | 50.1 | 53.3 | 56.4 | 59.6 | 62.7 | 65.9 | 69.1 | 72.2 | 75.4 | 78.6 | 81.7 |

| No. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 335.5 | 348 | 360.5 | 373 | 385.5 | 398 | 410.5 | 423 | 435.5 | 448 | 460.5 | 473 | 485.5 | 498 | 510.5 | 523 | 535.5 | 548 | 560.5 |
| Weight [g] | 84.9 | 88 | 91.2 | 94.4 | 97.5 | 100.7 | 103.9 | 107 | 110.2 | 113.3 | 116.5 | 119.7 | 122.8 | 126 | 129.2 | 132.3 | 135.5 | 138.6 | 141.8 |

| No. | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 573 | 585.5 | 598 | 610.5 | 623 | 635.5 | 648 | 660.5 | 673 | 685.5 | 698 | 710.5 | 723 | 735.5 | 748 | 760.5 | 773 | 785.5 | 798 |
| Weight [g] | 145 | 148.1 | 151.3 | 154.5 | 157.6 | 160.8 | 163.9 | 167.1 | 170.3 | 173.4 | 176.6 | 179.8 | 182.9 | 186.1 | 189.2 | 192.4 | 195.6 | 198.7 | 201.9 |

| No. | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 810.5 | 823 | 835.5 | 848 | 860.5 | 873 | 885.5 | 898 | 910.5 | 923 | 935.5 | 948 | 960.5 | 973 | 985.5 | 998 | 1010.5 | 1023 | 1035.5 |
| Weight [g] | 205.1 | 208.2 | 211.4 | 214.5 | 217.7 | 220.9 | 224 | 227.2 | 230.4 | 233.5 | 236.7 | 239.8 | 243 | 246.2 | 249.3 | 252.5 | 255.7 | 258.8 | 262 |

| No. | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 1048 | 1060.5 | 1073 | 1085.5 | 1098 | 1110.5 | 1123 | 1135.5 | 1148 | 1160.5 | 1173 | 1185.5 | 1198 | 1210.5 | 1223 | 1235.5 | 1248 | 1260.5 | 1273 |
| Weight [g] | 265.1 | 268.3 | 271.5 | 274.6 | 277.8 | 281 | 284.1 | 287.3 | 290.4 | 293.6 | 296.8 | 299.9 | 303.1 | 306.3 | 309.4 | 312.6 | 315.7 | 318.9 | 322.1 |

| No. | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 1285.5 | 1298 | 1310.5 | 1323 | 1335.5 | 1348 | 1360.5 | 1373 | 1385.5 | 1398 | 1410.5 | 1423 | 1435.5 | 1448 | 1460.5 | 1473 | 1485.5 | 1498 | 1510.5 |
| Weight [g] | 325.2 | 328.4 | 331.6 | 334.7 | 337.9 | 341 | 344.2 | 347.4 | 350.5 | 353.7 | 356.9 | 360 | 363.2 | 366.3 | 369.5 | 372.7 | 375.8 | 379 | 382.2 |

| No. | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L dimension | 1523 | 1535.5 | 1548 | 1560.5 | 1573 | 1585.5 | 1598 | 1610.5 | 1623 | 1635.5 | 1648 | 1660.5 | 1673 | 1685.5 | 1698 | 1710.5 | 1723 | 1735.5 | 1748 |
| Weight [g] | 385.3 | 388.5 | 391.6 | 394.8 | 398 | 401.1 | 404.3 | 407.5 | 410.6 | 413.8 | 416.9 | 420.1 | 423.3 | 426.4 | 429.5 | 432.7 | 435.9 | 439 | 442.2 |

| No. | 133 | 134 | 135 | 136 | 137 | 138 | 139 |
|---|---|---|---|---|---|---|---|
| L dimension | 1760.5 | 1773 | 1785.5 | 1798 | 1810.5 | 1823 | 1835.5 |
| Weight [g] | 445.4 | 448.5 | 451.7 | 454.9 | 458 | 461.2 | 464.4 |

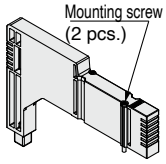
**⚠Caution**

| Tightening torque for mounting screw |
|---|
| M1.4: 0.06 N·m (JSY1000) |
| M2: 0.16 N·m (JSY3000) |

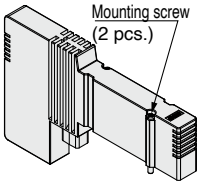
## ■Blanking plate

[With two mounting screws]

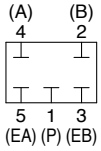
Used when valve additions are expected or for maintenance




**JSY11M-26P-1A**




**JSY31M-26P-1A**




**Circuit diagram**

**JSY 3 1M – 26P – 1A**

**●Series**

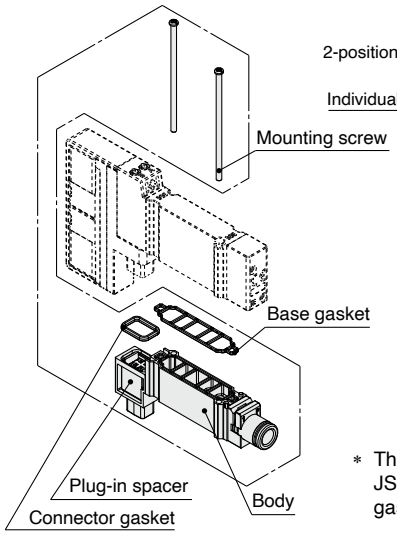
| | |
|---|---|
| **1** | JSY1000 |
| **3** | JSY3000 |

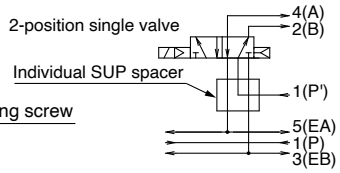
∗ Refer to page 29 for dimensions.

## ■Individual SUP spacer

[With a connector gasket, a base gasket, and two mounting screws]

When the same manifold is to be used for different pressures, an individual SUP spacer assembly can be used to act as a supply port for different pressures.




**Circuit diagram**

(Mounting example of a 2-position single valve)

**Part numbers of mounting screw (For repairs)**

**JSY1000: JSY11V-23-2A (2 pcs.)**
**JSY3000: JSY31V-23-2A (2 pcs.)**

∗ The body and plug-in spacer of the JSY1000 are separate. The connector gasket is not used.

**JSY 3 1M – 38 P – 1A – C6**

**●Spacer type**

| | |
|---|---|
| **38** | Individual SUP spacer |
| **39** | Individual EXH spacer |

**●Series**

| | |
|---|---|
| **1** | JSY1000 |
| **3** | JSY3000 |

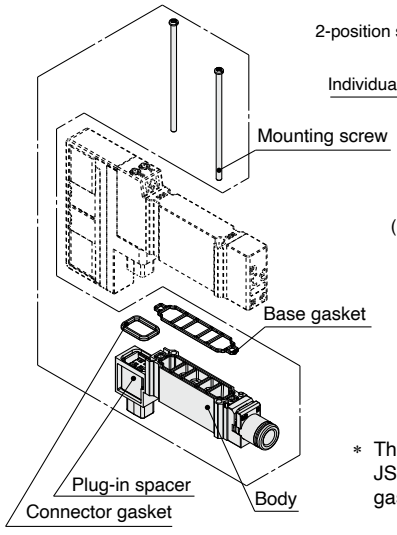
**●Port size (One-touch fittings)**

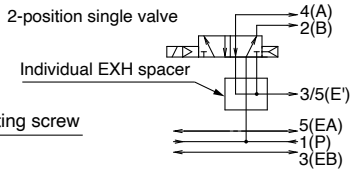
| Symbol | P, E port | JSY1000 | JSY3000 |
|---|---|---|---|
| **C4** | Ø 4 One-touch fitting | ● | – |
| **C6** | Ø 6 One-touch fitting | – | ● |

## ■Individual EXH spacer

[With a connector gasket, a base gasket, and two mounting screws]

When valve exhaust affects other stations due to the circuit configuration, this spacer can be used for individual valve exhaust.




**Circuit diagram**

(Mounting example of a 2-position single valve)

**Part numbers of mounting screw (For repairs)**

**JSY3000: JSY31V-23-2A (2 pcs.)**

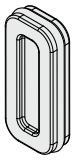
∗ The body and plug-in spacer of the JSY1000 are separate. The connector gasket is not used.

∗ Refer to page 29 for dimensions.

## ■SUP/EXH blocking disk

**[SUP blocking disk]**
Inserting an SUP blocking disk in the pressure supply passage of a manifold valve can allow for the use of 2 different pressures (high and low) in 1 manifold.

**[EXH blocking disk]**
Inserting an EXH blocking disk in the exhaust passage of a manifold valve can separate the exhaust from the valve so it does not affect the other valves. It can also be used in positive pressure and vacuum pressure mixed manifolds. ( 2 pieces are required to block both the EA and EB sides of the EXH.)



### ⚠Caution

The manifold base cannot be disassembled by the customer.
Specify the locations of any blocking disks on the manifold specification sheet.

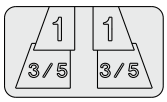
* Each manifold block is made up of 4 stations, so blocking disks can only be mounted every 4 stations.

| Series | SUP blocking disk | EXH blocking disk |
|---|---|---|
| **JSY1000** | JSY11M-40P-1A | |
| **JSY3000** | JSY31M-40P-1A | JSY31M-40P-2A |

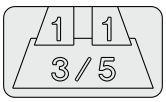
## ■Labels for blocking disks

These labels can be used to indicate and confirm where on the manifold the SUP/EXH blocking disk assemblies were inserted. (3 labels of each)

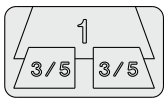
**SUP/EXH blocking disk label**




**SUP blocking disk label**




**SUP blocking disk label**

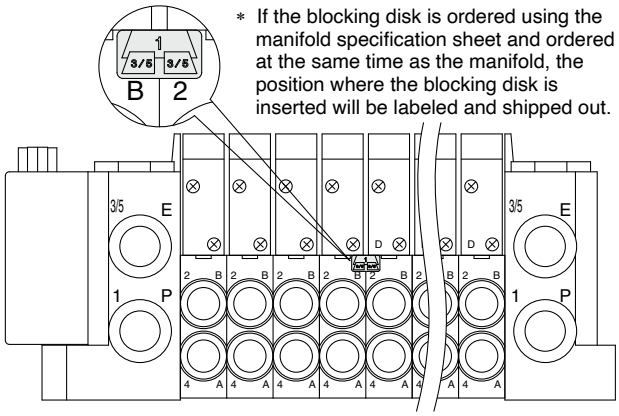



| Series | Part no. |
|---|---|
| **JSY1000**<br>**JSY3000** | SJ3000-155-1A |

### ⚠Caution

The manifold base cannot be disassembled by the customer.

* If the blocking disk is ordered using the manifold specification sheet and ordered at the same time as the manifold, the position where the blocking disk is inserted will be labeled and shipped out.




## ■Intermediate SUP/EXH block assembly

**JSY 1 1M – 125P – 1A □ – B – C10 □**

**Series**

| | |
|---|---|
| **1** | JSY1000 |
| **3** | JSY3000 |

**Mounting**

| | |
|---|---|
| **—** | Direct mounting |
| **D0** | DIN rail mounting (Without DIN rail) |

**Pilot, Silencer type**

| Symbol | Pilot type | | Built-in silencer |
|---|---|---|---|
| | Internal | External (Made to Order) | |
| **—** | ● | — | — |
| **S** | ● | — | ● |
| **R** | — | ● | — |

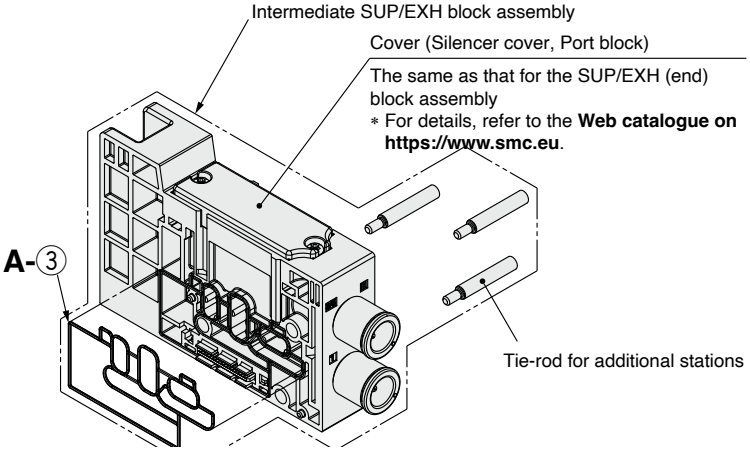
**P, E port size (One-touch fitting)**

| Symbol | P, E port | JSY1000 | JSY3000 |
|---|---|---|---|
| **C8** | Ø 8 One-touch fitting | ● | — |
| **C10** | Ø 10 One-touch fitting | — | ● |

**Pilot port block disk**

| Symbol | Block disk |
|---|---|
| **—** | Without |
| **B**∗1 | With |

∗1 Only for the JSY1000




**SUP/EXH block assembly accessories and the number of accessories**

| Accessories | Quantity |
|---|---|
| **Tie-rod for additional stations** | 3 pcs. |
| **A-③ Manifold block gasket** | 1 pc. |

∗ Gasket is mounted.

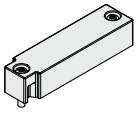
### Clamp bracket

| Series | Part no. |
|---|---|
| **JSY1000** | JSY11M-15P-4A |
| **JSY3000** | SY30M-15-1A |

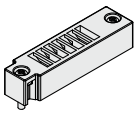
### ⚠Caution

The manifold base cannot be disassembled by the customer.
Specify the mounting location of the intermediate SUP/EXH block assembly on the manifold specification sheet.

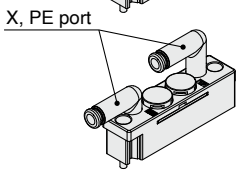
■ **Cover, silencer cover, port block for the JSY1000 intermediate SUP/EXH block assembly**
**(For the JSY3000, it is the same as that for the SUP/EXH block assembly.)**



**Cover**
**(Internal pilot)**



**Silencer cover**
**(Internal pilot, Built-in silencer)**




**Port block**
**(External pilot: Made to order)**

∗ Cover, silencer cover, and port block are included in the JSY1000 intermediate SUP/EXH block assembly, but they need to be ordered for piping specification change.
∗ Mounting screws (2 pcs.) for the JSY1000 SUP/EXH block assembly are included.

**Tightening torque for mounting screw**
**JSY1000 (M2.5) : 0.32 N·m**

**JSY 1 1M − 4P − 2A**

**JSY 1 1M − 5P − 2A**

**JSY 1 1M − 6P − 2AR − 00**

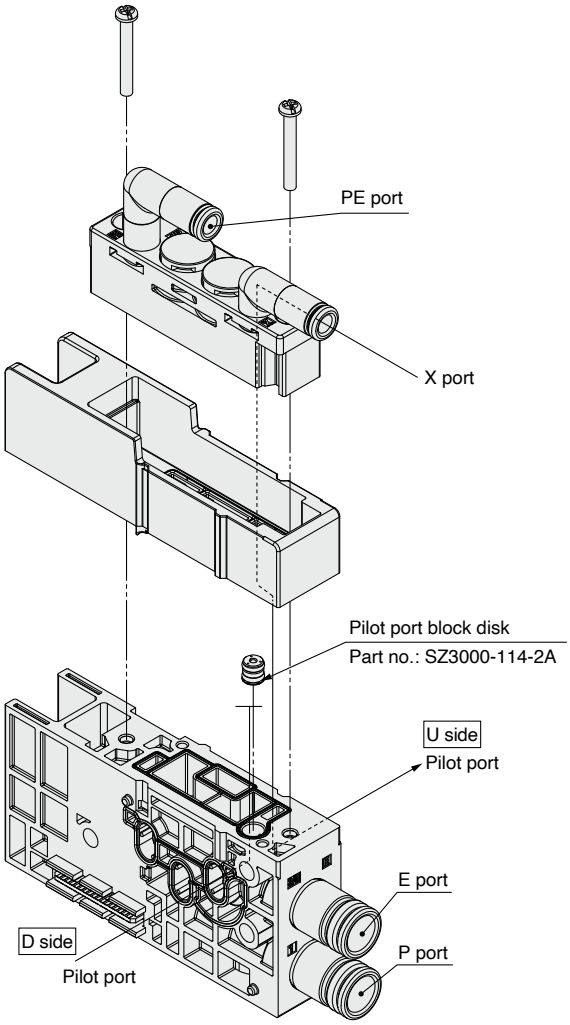
**Series**

| | |
|---|---|
| **1** | JSY1000 |

## ⚠ Caution

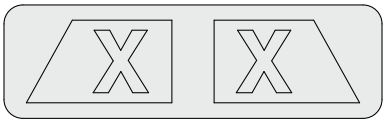
1 . Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping, and manifold, confirm that the air is completely exhausted before performing any work.
2 . When disassembly and assembly are performed, air leakage may result if the tightening of the cover and port block assemblies are inadequate.

## ■ Pilot port block disk (Only for the JSY1000)



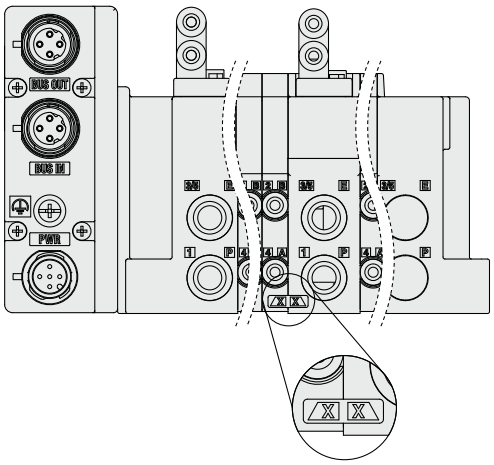

## ■ Label for pilot port block disk

This label is for attaching to the intermediate SUP/EXH blocks containing pilot port block disks in order to identify the installed locations. (3 labels included)




| Series | Part no. |
|---|---|
| **JSY1000** | SZ3000-155-1-4 |

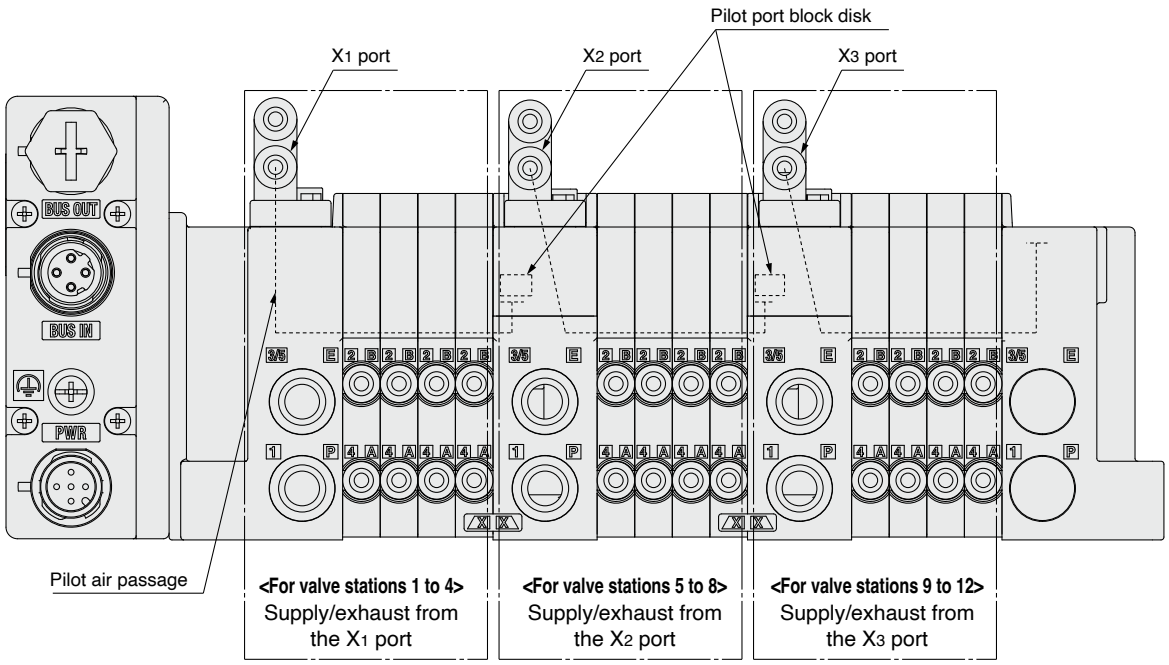
* When a pilot port block disk is concurrently ordered by specifying on the manifold specification sheet, a label will be stuck on the position where pilot port block disk is mounted.




### Example

Part no.: **JJ5SY1-10LSFN-12DR2-C8**

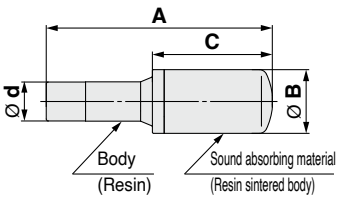
(Indicate the pilot port block disk locations on the manifold specification sheet.)



## ■ Silencer
**(One-touch fitting connection type)**

This silencer can be mounted to the 3/5 (E: EXH) port of the manifold in one step.

∗ Shipped together with the product

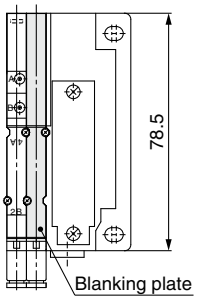


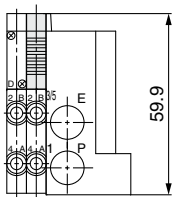

| Series (Ø **d**) | Model | Effective area | **A** | **B** | **C** |
|---|---|---|---|---|---|
| For JSY1000 (Ø 8) | **AN15-C08** | 20 mm² | 45 | 13 | 20 |
| For JSY3000 (Ø 10) | **AN20-C10** | 30 mm² | 57.5 | 16.5 | 30.5 |

## Dimensions

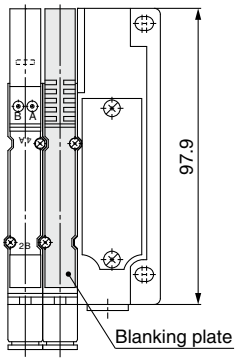
### ■ Blanking plate

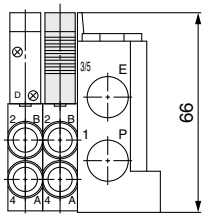
#### JSY1000 series



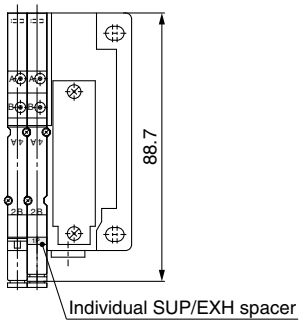

#### JSY3000 series

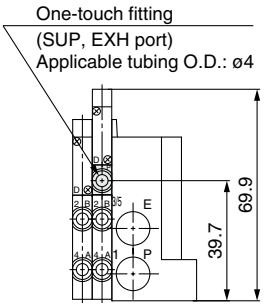


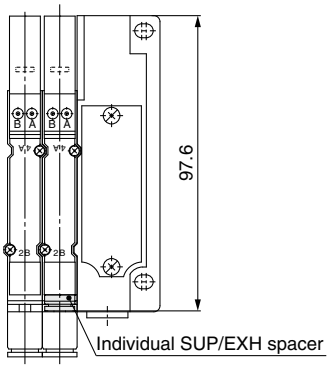

### ■ Individual SUP/EXH spacer

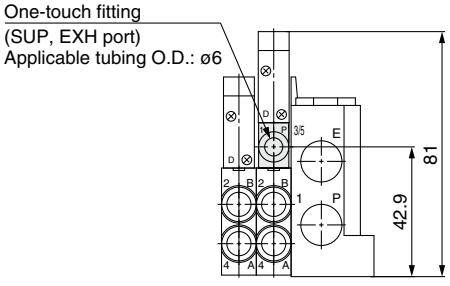
#### JSY1000 series




#### JSY3000 series




■ **Trademark**

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

## ⚠ Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of **"Caution," "Warning"** or **"Danger."** They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC) [1], and other safety regulations.

| | |
|---|---|
| ⚠ **Danger:** | **Danger** indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury. |
| ⚠ **Warning:** | **Warning** indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury. |
| ⚠ **Caution:** | **Caution** indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury. |

1) ISO 4414: Pneumatic fluid power – General rules and safety requirements for systems and their components.
ISO 4413: Hydraulic fluid power – General rules and safety requirements for systems and their components.
IEC 60204-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)
ISO 10218-1: Robots and robotic devices - Safety requirements for industrial robots - Part 1: Robots.
etc.

## ⚠ Warning

**1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.**
Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

**2. Only personnel with appropriate training should operate machinery and equipment.**
The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

**3. Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.**
1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

**4. SMC products cannot be used beyond their specifications.**
**They are not developed, designed, and manufactured to be used under the following conditions or environments.**
**Use under such conditions or environments is not allowed.**
1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Use for nuclear power, railways, aviation, space equipment, ships, vehicles, military application, equipment affecting human life, body, and property, combustion equipment, entertainment equipment, emergency shut-off circuits, press clutches, brake circuits, safety equipment, etc., and use for applications that do not conform to standard specifications such as catalogues and operation manuals.
3. Use for interlock circuits, except for use with double interlock such as installing a mechanical protection function in case of failure. Please periodically inspect the product to confirm that the product is operating properly.

## ⚠ Caution

**SMC develops, designs, and manufactures products to be used for automatic control equipment, and provides them for peaceful use in manufacturing industries.**
**Use in non-manufacturing industries is not allowed.**
Products SMC manufactures and sells cannot be used for the purpose of transactions or certification specified in the Measurement Act of each country.
The new Measurement Act prohibits use of any unit other than SI units in Japan.

# Limited warranty and Disclaimer/Compliance Requirements

The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements".Read and accept them before using the product.

## Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first. [2] Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.

2) **Suction cups (Vacuum pads) are excluded from this 1 year warranty.**
A suction cup (vacuum pad) is a consumable part, so it is warranted for a year after it is delivered. Also, even within the warranty period, the wear of a product due to the use of the suction cup (vacuum pad) or failure due to the deterioration of rubber material are not allowed by the limited warranty.

## Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

| | |
|---|---|
| ⚠ **Safety Instructions** | Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use. |

## SMC Corporation (Europe)

| | | | |
|---|---|---|---|
| **Austria** | +43 (0)2262622800 | www.smc.at | office.at@smc.com |
| **Belgium** | +32 (0)33551464 | www.smc.be | info@smc.be |
| **Bulgaria** | +359 (0)2807670 | www.smc.bg | sales.bg@smc.com |
| **Croatia** | +385 (0)13707288 | www.smc.hr | sales.hr@smc.com |
| **Czech Republic** | +420 541424611 | www.smc.cz | office.at@smc.com |
| **Denmark** | +45 70252900 | www.smcdk.com | smc.dk@smc.com |
| **Estonia** | +372 651 0370 | www.smcee.ee | info.ee@smc.com |
| **Finland** | +358 207513513 | www.smc.fi | smc.fi@smc.com |
| **France** | +33 (0)164761000 | www.smc-france.fr | supportclient.fr@smc.com |
| **Germany** | +49 (0)61034020 | www.smc.de | info.de@smc.com |
| **Greece** | +30 210 2717265 | www.smchellas.gr | sales@smchellas.gr |
| **Hungary** | +36 23513000 | www.smc.hu | office.hu@smc.com |
| **Ireland** | +353 (0)14039000 | www.smcautomation.ie | technical.ie@smc.com |
| **Italy** | +39 03990691 | www.smcitalia.it | mailbox.it@smc.com |
| **Latvia** | +371 67817700 | www.smc.lv | info.lv@smc.com |
| **Lithuania** | +370 5 2308118 | www.smclt.lt | info.lt@smc.com |
| **Netherlands** | +31 (0)205318888 | www.smc.nl | info@smc.nl |
| **Norway** | +47 67129020 | www.smc-norge.no | post.no@smc.com |
| **Poland** | +48 22 344 40 00 | www.smc.pl | office.pl@smc.com |
| **Portugal** | +351 214724500 | www.smc.eu | apoiocliente.pt@smc.com |
| **Romania** | +40 213205111 | www.smcromania.ro | office.ro@smc.com |
| **Russia** | +7 (812)3036600 | www.smc.eu | sales@smcru.com |
| **Slovakia** | +421 (0)413213212 | www.smc.sk | sales.sk@smc.com |
| **Slovenia** | +386 (0)73885412 | www.smc.si | office.si@smc.com |
| **Spain** | +34 945184100 | www.smc.eu | post.es@smc.com |
| **Sweden** | +46 (0)86031240 | www.smc.nu | order.se@smc.com |
| **Switzerland** | +41 (0)523963131 | www.smc.ch | helpcenter.ch@smc.com |
| **Turkey** | +90 212 489 0 440 | www.smcturkey.com.tr | satis.tr@smc.com |
| **UK** | +44 (0)845 121 5122 | www.smc.uk | sales.gb@smc.com |
| **South Africa** | +27 10 900 1233 | www.smcza.co.za | Sales.za@smc.com |

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