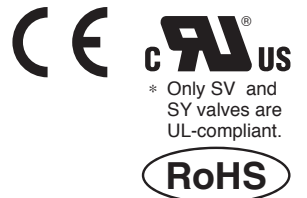


# Fieldbus System

(Output device for driving 5 port solenoid valves)



Compact  
**28 mm**  
(Actual size)

*Space-saving Installation*

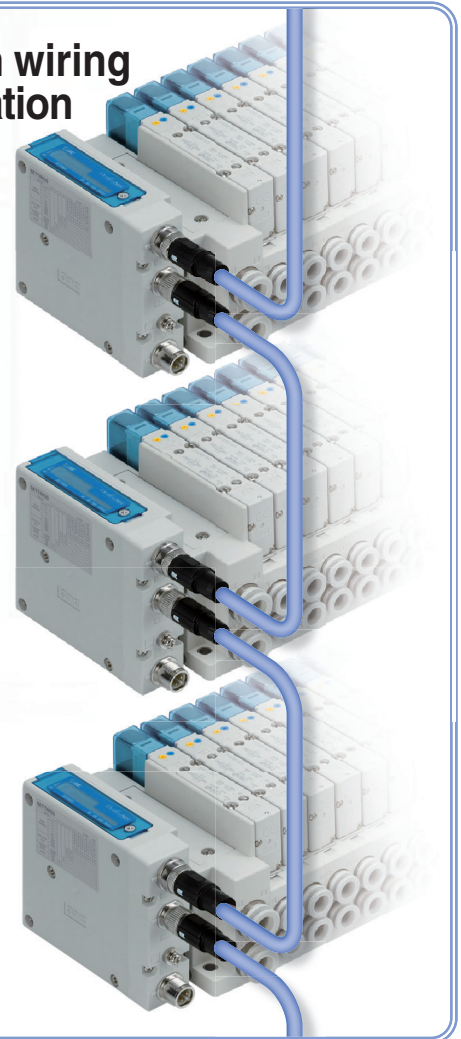


• **IP67\***

\* For units with D-sub connector, and when connected to S0700 manifolds, it is IP40.

• **Drives up to 32 solenoids**

**Daisy-chain wiring communication**



## Compatible Protocols



Made to Order IO-Link AS-Interface Modbus CANopen  
Please contact SMC for details on compatible products.

**Top ported valve**



IP67

SY3000/5000/7000 Series

**Bottom ported valve**



IP67

SY3000/5000/7000 Series

**Side ported valve  
Mixed valve sizes manifold**



IP67

SY3000/5000/7000 Series

**7 mm width valve**



IP40

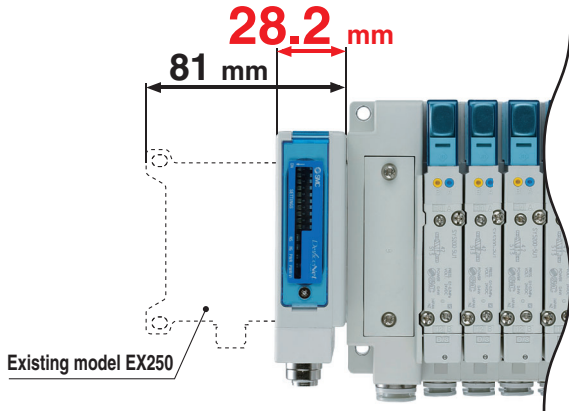
S0700 Series

**EX260 Series**

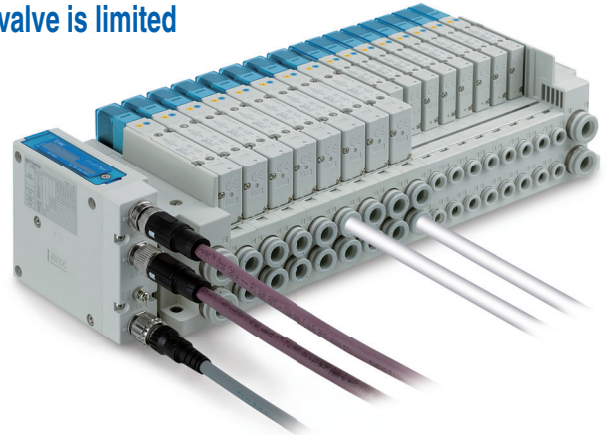


CAT.EU02-25Bb-UK

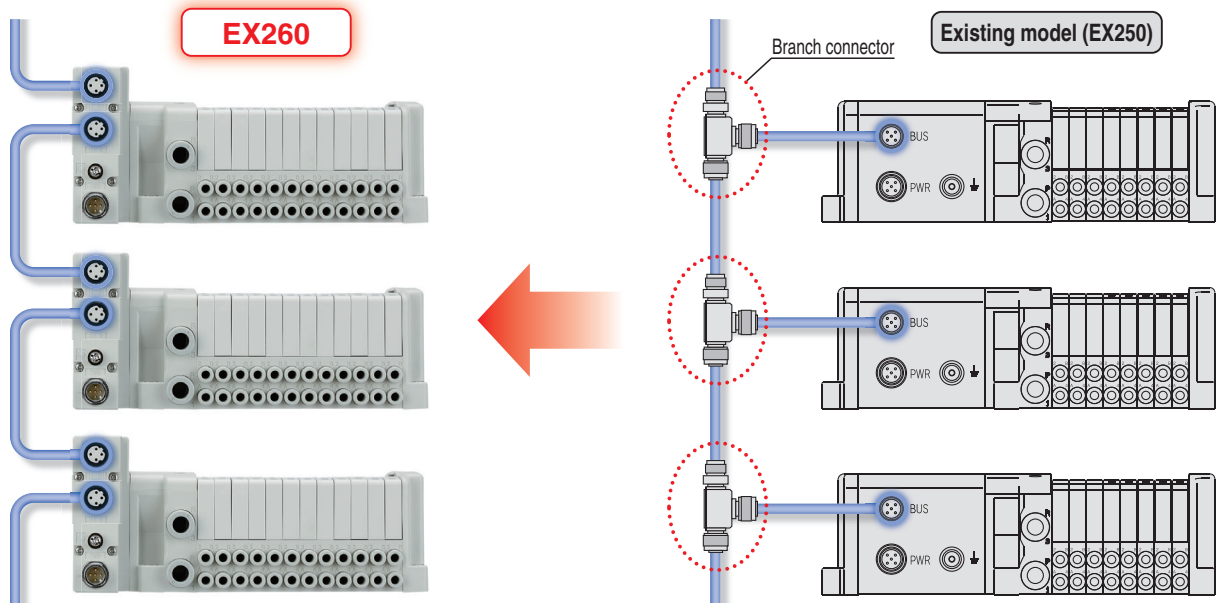
Manifold length is shortened by the small fieldbus output module (SI unit).



Wiring and piping from the same direction is possible. (for side ported)  
Can be installed in locations where space above the valve is limited



External branch connector is not necessary. Daisy-chain wiring is possible. Reduced wiring space

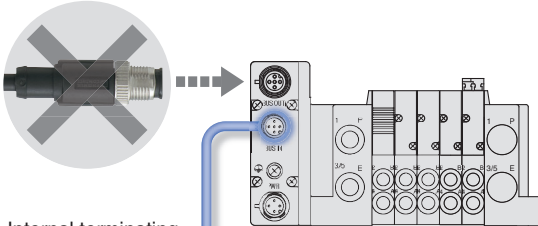


External terminating resistor is not necessary.

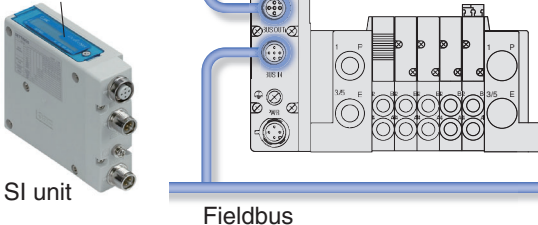
(Only available for M12 PROFIBUS DP, CC-Link communication connectors)

ON/OFF switching is possible with an internal terminating resistor. External terminating resistor is not necessary.

External terminating resistor



Internal terminating resistor



## Product Specification Variations

|                         | PROFIBUS <sup>®</sup> | DeviceNet | CC-Link | PROFIBUS <sup>®</sup> NET | EtherNet/IP | EtherCAT <sup>™</sup> | ETHERNET <sup>™</sup> POWERLINK |
|-------------------------|-----------------------|-----------|---------|---------------------------|-------------|-----------------------|---------------------------------|
| Number of outputs       | 16                    | 16        | 16      | 16                        | 16          | 16                    | 16                              |
|                         | 32                    | 32        | 32      | 32                        | 32          | 32                    | 32                              |
| Output polarity         | PNP                   | PNP       | PNP     | PNP                       | PNP         | PNP                   | PNP                             |
|                         | NPN                   | NPN       | NPN     | NPN                       | NPN         | NPN                   | NPN                             |
| Communication connector | M12                   | M12       | M12     | M12                       | M12         | M12                   | M12                             |
|                         | D-sub                 |           |         |                           |             |                       |                                 |

### Communication connector examples



M12 communication connector (PROFIBUS DP)



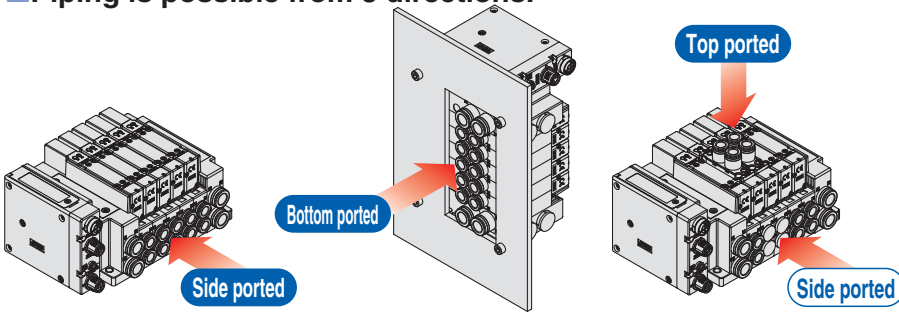
D-sub communication connector (PROFIBUS DP)



# SY3000/5000/7000 Series

## Valve piping direction variations

■ Piping is possible from 3 directions.



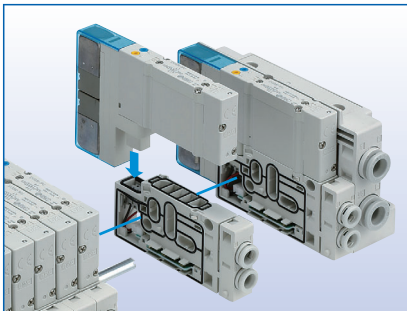
Mixed mounting of top ported and side ported is possible.

Pressure switch

<Example of Use>

By mounting top ported valves on side ported and bottom ported type manifolds, it is possible to detect the output of the A/B port with a pressure switch.

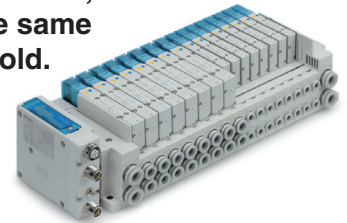
## Up to 24 valve stations can be freely connected.



■ It is possible to connect only the number of valves required, from 1 to 24 stations, to suit the application.  
(Maximum number of solenoids connected: 32)

## Mixed valve sizes manifold

■ Valves with different sizes, SY3000 and SY5000 or SY5000 and SY7000, can be mounted on the same manifold.



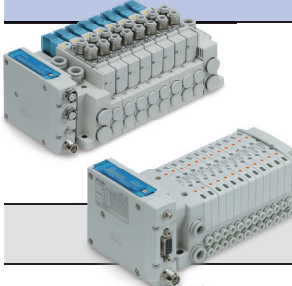











# Series S0700

7 mm width valves can be connected.



■ It is possible to connect only the number of 7 mm width valves required, from 1 to 24 stations.  
(Maximum number of solenoids connected: 32)

## ● Applicable Valve Series

| Series   | Flow rate characteristics (4/2→5/3) |      |  | Maximum number of solenoids | Power consumption [W] | Enclosure   | Standards  |
|--|-------------------------------------|------|--|-----------------------------|-----------------------|---|--|
|  | C [dm <sup>3</sup> /(s·bar)]        | b    | Q [l/min] (ANR) <small>Note 2)</small> |                             |                       |   |  |
|  | SY3000                              | 1.6  | 0.19                                   | 381                         | 32                    | 0.35 (Standard)<br>0.1 (With power-saving circuit)<br>[Inrush 0.4, Holding 0.1] | <br> |
|  | SY5000                              | 3.6  | 0.17                                   | 848                         |                       |   |  |
|  | SY7000                              | 5.9  | 0.20                                   | 1413                        |                       |   |  |
|  | S0700                               | 0.37 | 0.39                                   | 100                         | 32                    | 0.35  | <br> |
|  | SV1000                              | 1.1  | 0.35                                   | 289                         | 32                    | 0.6   | <br> |
|  | SV2000                              | 2.4  | 0.18                                   | 568                         |                       |   |  |
|  | SV3000                              | 4.3  | 0.21                                   | 1036                        |                       |   |  |
|  | VQC1000                             | 1.0  | 0.30                                   | 254                         | 24                    | 0.4 (Standard)<br>0.95 (Standard)<br>0.4 (Low-wattage type)                     | <br> |
|  | VQC2000                             | 3.2  | 0.30                                   | 814                         |                       |   |  |
|  | VQC4000                             | 7.3  | 0.38                                   | 1958                        |                       |   |  |
|  | VQC5000                             | 17   | 0.31                                   | 4350                        |                       |   |  |

Note 1) For units with D-sub communication connector, it is IP40.

Note 2) These values have been calculated according to ISO6358 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.

Note 3) SY series is UL-compliant except for; with residual pressure release valve, vacuum release valve with restrictor and specials others than X90 and X320.

# Applicable Product Selection by Type

## IP67/65 specification models

|                         |  | Type 1<br>Output type for solenoid valves |       | Type 2<br>Gateway type | Type 3<br>Integrated input-output type |       |       |
|-------------------------|--|---|-------|------------------------|--|-------|-------|
|                         | Number of valve outputs                                  | 32  |       | <br>EX500              | <br>EX600      EX245      EX250        |       |       |
|                         |  | 16  |       |                        |  |       |       |
|                         | Number of inputs   | 16  |       | EX124                  |  | EX250 |       |
|                         |  | 32  |       | EX260                  |  | EX126 |       |
| Applicable protocols    | EtherNet/IP™   | ●   |       | ●                      | ●                                      |       | ●     |
|                         | PROFINET   | ●   |       | ●                      |  | ●     |       |
|                         | Modbus®TCP   | ◆   |       |                        |  |       | ◆     |
|                         | Ethernet POWERLINK                                       | ●   |       |                        | ◆                                      |       |       |
|                         | EtherCAT   | ●   |       |                        | ●                                      |       |       |
|                         | CC-Link IE Field   |   |       |                        | ◆                                      |       | ◆     |
|                         | PROFIBUS DP  | ●   |       | ●                      | ●                                      |       | ●     |
|                         | DeviceNet™   |   | ●     | ●                      |  |       | ●     |
|                         | CC-Link  | ●   | ●     |                        | ●                                      |       | ●     |
|                         | AS-Interface   | ◆   |       |                        |  |       | ●     |
|                         | CANopen  | ◆   |       |                        |  |       | ●     |
|                         | CompoNet™  |   | ◆     |                        |  |       |       |
|                         | INTERBUS   |   |       |                        |  | ◆     |       |
| IO-Link                 | ◆  |   |       |                        |  |       |       |
| Series                  |  | EX260                                     | EX124 | EX500                  | EX600                                  | EX245 | EX250 |
| Applicable valve series | SY<br>(Plug-in connector connecting base: 10/11/12 type) | 3000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 5000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 7000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         | S0700 (Stacking base)                                    | 0700                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 1000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 2000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 4000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         | SV   | 1000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 2000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 3000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         |  | 4000                                      | ●     | ●                      | ●                                      | ●     | ●     |
|                         | VQC  | 1000                                      | ●     | ●                      | ●                                      | ●     | ◆     |
|                         |  | 2000                                      | ●     | ●                      | ●                                      | ●     | ◆     |
| 4000                    |  | ●   | ●     | ●                      | ●                                      | ◆     |       |
| 5000                    |  | ●   | ●     | ●                      | ●                                      | ◆     |       |
| VQ                      | 1000   | ●   | ●     | ●                      | ●                                      | ●     |       |
|                         | 2000   | ●   | ●     | ●                      | ●                                      | ●     |       |
|                         | 4000   | ●   | ●     | ●                      | ●                                      | ●     |       |
|                         | 5000   | ●   | ●     | ●                      | ●                                      | ●     |       |

●: Standard product    ◆: Made to order\*1

\*1 Please contact SMC for details about the Made to Orders.



## IP20 specification models

|                         |                         |  | Type 1<br>Output type for solenoid valves |      |   | Type 2<br>Gateway type | Type 3<br>Integrated input-output type |       |       |       |       |   |
|-------------------------|-------------------------|--|---|------|---|------------------------|--|-------|-------|-------|-------|---|
|                         | Number of valve outputs | 32   |   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 16   |   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 16   |   |      |   |                        |  |       |       |       |       |   |
|                         | Number of inputs        | 32   |   |      |   |                        |  |       |       |       |       |   |
| Applicable protocols    |                         |  |   |      |   | ◆                      |  |       |       |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  |   |      |   |                        |  |       | ◆     |       |       |   |
|                         |                         |  | Series                                    |      |   | EX120                  | EX121                                  | EX122 | EX140 | EX180 | EX510 | — |
| Applicable valve series | SY                      | (Plug-in connector connecting base: 10/11/12 type) | 3000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 5000                                      | ●    |   |                        |  |       |       |       |       |   |
|                         |                         |  | 7000                                      | ●    |   |                        |  |       |       |       |       |   |
|                         |                         | (Plug-in metal base: 50/51/52 type)                | 3000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 5000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 7000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         | SJ   | 2000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 3000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         | S0700 (Bar stock)                                  | 0700                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 3000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 5000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         |  | 7000                                      |      |   |                        |  |       |       |       |       |   |
|                         |                         | SY   | (Bar stock: 42SA type)                    | 3000 |   |                        |  |       |       |       |       |   |
|                         |                         |  |   | 5000 |   |                        |  |       |       |       |       |   |
|                         |                         |  |   | 7000 |   |                        |  |       |       |       |       |   |
|                         |                         |  | (Stacking base: 45S6/43SA type)           | 3000 | ● |                        |  |       |       |       |       |   |
|                         |                         |  |   | 5000 | ● |                        |  |       |       |       |       |   |
|                         |                         |  |   | 7000 | ● |                        |  |       |       |       |       |   |
|                         |                         |  |   | 9000 | ● |                        |  |       |       |       |       |   |
|                         |                         | SV   | 1000                                      | ●    |   |                        |  |       |       |       |       |   |
|                         |                         | 2000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 3000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 4000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         | VQ                      | 1000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 2000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 4000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         |                         | 5000   | ●   |      |   |                        |  |       |       |       |       |   |
|                         | SQ                      | 1000   |   |      | ● |                        |  |       |       |       |       |   |
|                         |                         | 2000   |   |      | ● |                        |  |       |       |       |       |   |
|                         | SZ                      | 3000   |   |      | ● |                        |  |       |       |       |       |   |
|                         |                         | 1000   |   |      | ● |                        |  |       |       |       |       |   |
|                         | VQZ                     | 2000   |   |      | ● |                        |  |       |       |       |       |   |
|                         |                         | 3000   |   |      | ● |                        |  |       |       |       |       |   |
|                         | SYJ                     | 3000   |   |      | ● |                        |  |       |       |       |       |   |
|                         |                         | 5000   |   |      | ● |                        |  |       |       |       |       |   |
|                         |                         | 7000   |   |      | ● |                        |  |       |       |       |       |   |

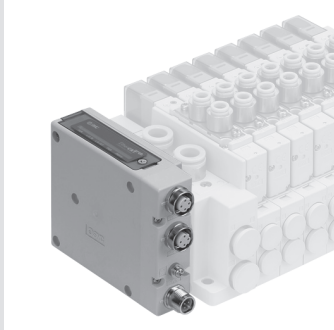
●: Standard product ◆: Made to order\*1

\*1 Please contact SMC for details about the Made to Orders.



# INDEX

## Fieldbus System (Output device for driving 5-port solenoid valves) **EX260 Series**



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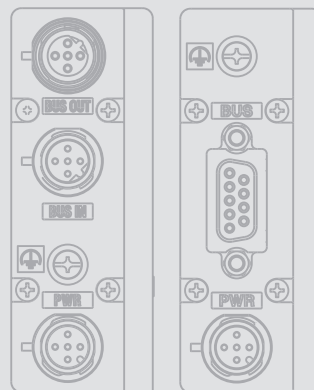
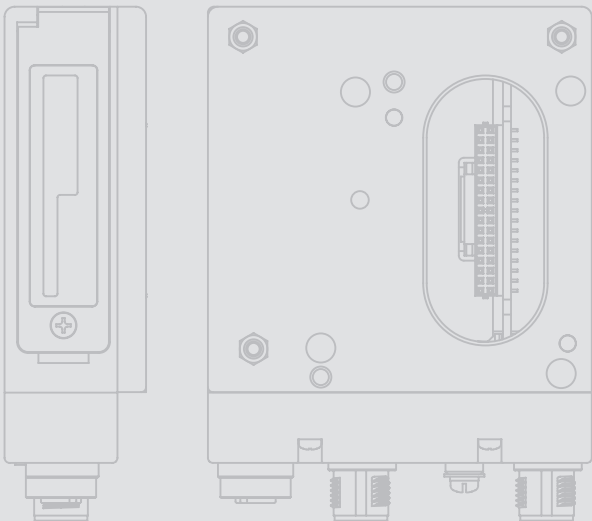
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### Made to Order

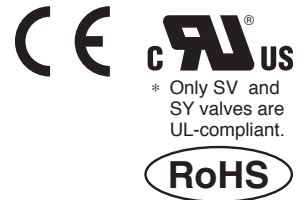
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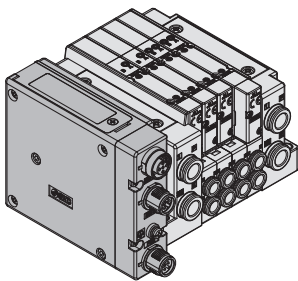


# SI Unit Integrated-type/ For Output Series EX260

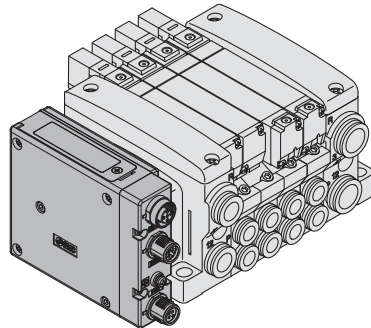


|                                      |   |
|--------------------------------------|---|
| <b>Compact design</b>                | Compact design for space saving   |
| <b>Number of outputs</b>             | Each 32/16 digital output type available in the series  |
| <b>Output polarity</b>               | Each negative common (PNP) / positive common (NPN) type available in the series<br>(Only negative common (PNP) is available for units compatible with Ethernet POWERLINK.)  |
| <b>Enclosure</b>                     | IP67 (For units with D-sub connector, and when connected with S0700 manifolds, it is IP40.)   |
| <b>Internal terminating resistor</b> | ON/OFF switching is possible with an internal terminating resistor for communication.<br>(Only for units compatible with M12 PROFIBUS DP, CC-Link communication connectors) |

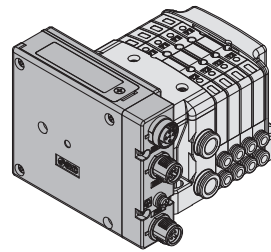
SY3000/5000/7000



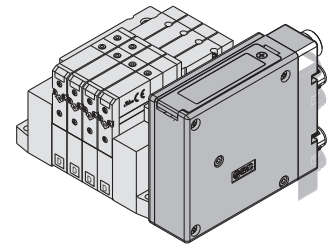
VQC1000/2000/4000/5000



S0700



SV1000/2000/3000



## How to Order SI Units

### EX260 - S PR1

#### Communication protocol

| Symbol | Protocol           | Number of outputs | SI unit output polarity      | Communication connector | Manifold symbol        |     |
|--------|--------------------|-------------------|------------------------------|-------------------------|------------------------|-----|
| DN1    | DeviceNet™         | 32                | Source/PNP (Negative common) | M12                     | QAN                    |     |
| DN2    |                    |                   | Sink/NPN (Positive common)   |                         | QA                     |     |
| DN3    |                    | 16                | Source/PNP (Negative common) |                         | QBN                    |     |
| DN4    |                    |                   | Sink/NPN (Positive common)   |                         | QB                     |     |
| PR1    | PROFIBUS DP        | 32                | Source/PNP (Negative common) | M12                     | NAN                    |     |
| PR2    |                    |                   | Sink/NPN (Positive common)   |                         | NA                     |     |
| PR3    |                    | 16                | Source/PNP (Negative common) |                         | NBN                    |     |
| PR4    |                    |                   | Sink/NPN (Positive common)   |                         | NB                     |     |
| PR5    |                    | 32                | Source/PNP (Negative common) |                         | D-sub <sup>Note)</sup> | NCN |
| PR6    |                    |                   | Sink/NPN (Positive common)   |                         |                        | NC  |
| PR7    |                    | 16                | Source/PNP (Negative common) |                         |                        | NDN |
| PR8    |                    |                   | Sink/NPN (Positive common)   |                         |                        | ND  |
| MJ1    | CC-Link            | 32                | Source/PNP (Negative common) | M12                     |                        | VAN |
| MJ2    |                    |                   | Sink/NPN (Positive common)   |                         |                        | VA  |
| MJ3    |                    | 16                | Source/PNP (Negative common) |                         |                        | VBN |
| MJ4    |                    |                   | Sink/NPN (Positive common)   |                         |                        | VB  |
| EC1    | EtherCAT           | 32                | Source/PNP (Negative common) | M12                     | DAN                    |     |
| EC2    |                    |                   | Sink/NPN (Positive common)   |                         | DA                     |     |
| EC3    |                    | 16                | Source/PNP (Negative common) |                         | DBN                    |     |
| EC4    |                    |                   | Sink/NPN (Positive common)   |                         | DB                     |     |
| PN1    | PROFINET           | 32                | Source/PNP (Negative common) | M12                     | FAN                    |     |
| PN2    |                    |                   | Sink/NPN (Positive common)   |                         | FA                     |     |
| PN3    |                    | 16                | Source/PNP (Negative common) |                         | FBN                    |     |
| PN4    |                    |                   | Sink/NPN (Positive common)   |                         | FB                     |     |
| EN1    | EtherNet/IP™       | 32                | Source/PNP (Negative common) | M12                     | EAN                    |     |
| EN2    |                    |                   | Sink/NPN (Positive common)   |                         | EA                     |     |
| EN3    |                    | 16                | Source/PNP (Negative common) |                         | EBN                    |     |
| EN4    |                    |                   | Sink/NPN (Positive common)   |                         | EB                     |     |
| PL1    | Ethernet POWERLINK | 32                | Source/PNP (Negative common) | M12                     | GAN                    |     |
| PL3    |                    | 16                |                              |                         | GBN                    |     |

Note) Enclosure is IP40 when the communication connector is D-sub.



Made to Order  
→ p. 12

|   |
|---|
| IO-Link compatible                          |
| EtherNet/IP™ Web server function compatible |

## Specifications

### All SI Units Common Specifications

|                          |                                     |  |
|--------------------------|-------------------------------------|--|
| Power supply for control | Power supply voltage                | 21.6 to 26.4 VDC*1   |
|                          | Internal current consumption        | 100 mA or less   |
| Power supply for output  | Power supply voltage                | 22.8 to 26.4 VDC   |
| Environmental resistance | Enclosure                           | IP67*2   |
|                          | Operating temperature range         | -10 to +50 °C  |
|                          | Operating humidity range            | 35 to 85 %RH (No condensation)   |
|                          | Withstand voltage                   | 500 VAC for 1 minute between terminals and housing                             |
|                          | Insulation resistance               | 10 MΩ or more (500 VDC measured via megohmmeter) between terminals and housing |
| Standards                | CE marking, UL (CSA) compliant      |  |
| Weight                   | 200 g                               |  |
| Accessories              | Mounting screw                      | 2 pcs.   |
|                          | Seal cap (for M12 connector socket) | EX9-AWTS (1 pc.)*3   |

\*1 For EX260-SDN□, the power supply voltage will be 11 to 25 VDC to serve as the power supply for communication.

\*2 IP40 applies to EX260-SPR5/6/7/8.

\*3 Not provided for EX260-SPR5/6/7/8

| Model                                 | EX260-SPR1/3   | EX260-SPR2/4   | EX260-SPR5/7                         | EX260-SPR6/8                         | EX260-SDN1/3                         | EX260-SDN2/4                         | EX260-SMJ1/3   | EX260-SMJ2/4   |                                      |
|---------------------------------------|--|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--|--------------------------------------|
| Applicable system                     | Protocol   |  |                                      |                                      | PROFIBUS DP                          |                                      | DeviceNet™   |  | CC-Link                              |
|                                       | Version*1  |  |                                      |                                      | DP-V0                                |                                      | Volume1 (Edition 3.5)<br>Volume3 (Edition 1.5)                 |  | Ver.1.10                             |
|                                       | Configuration file*3   |  |                                      |                                      | GSD file                             |                                      | EDS file   |  | CSP+ file                            |
| I/O occupation area (Inputs/Outputs)  | SPR1: 0/32<br>SPR3: 0/16   | SPR2: 0/32<br>SPR4: 0/16   | SPR5: 0/32<br>SPR7: 0/16             | SPR6: 0/32<br>SPR8: 0/16             | SDN1: 0/32<br>SDN3: 0/16             | SDN2: 0/32<br>SDN4: 0/16             | SMJ1: 32/32<br>SMJ3: 32/32<br>(1 station, remote I/O stations) | SMJ2: 32/32<br>SMJ4: 32/32<br>(1 station, remote I/O stations) |                                      |
| Applicable function                   | —  |  |                                      |                                      | QuickConnect™                        |                                      | —  |  |                                      |
| Communication speed                   | 9.6 k/19.2 k/45.45 k/93.75 k/<br>187.5 k/500 k/1.5 M/3 M/6 M/12 Mbps |  |                                      |                                      | 125 k/250 k/500 kbps                 |                                      | 156 k/625 k/<br>2.5 M/5 M/10 Mbps                              |  |                                      |
| Communication connector specification | M12  |  |                                      | D-sub                                |                                      | M12                                  |  |  |                                      |
| Terminating resistor switch           | Built-in   |  |                                      | None                                 |                                      |                                      | Built-in   |  |                                      |
| Output                                | Output type  | Source/PNP<br>(Negative common)  | Sink/NPN<br>(Positive common)        | Source/PNP<br>(Negative common)      | Sink/NPN<br>(Positive common)        | Source/PNP<br>(Negative common)      | Sink/NPN<br>(Positive common)                                  | Source/PNP<br>(Negative common)                                | Sink/NPN<br>(Positive common)        |
|                                       | Number of outputs  | SPR1: 32 points<br>SPR3: 16 points                                       | SPR2: 32 points<br>SPR4: 16 points   | SPR5: 32 points<br>SPR7: 16 points   | SPR6: 32 points<br>SPR8: 16 points   | SDN1: 32 points<br>SDN3: 16 points   | SDN2: 32 points<br>SDN4: 16 points                             | SMJ1: 32 points<br>SMJ3: 16 points                             | SMJ2: 32 points<br>SMJ4: 16 points   |
|                                       | Load   | Solenoid valve with surge voltage suppressor 24 VDC, 1.5 W or less (SMC) |                                      |                                      |                                      |                                      |  |  |                                      |
|                                       | Supplied voltage   | 24 VDC   |                                      |                                      |                                      |                                      |  |  |                                      |
|                                       | Supplied current   | SPR1: Max. 2.0 A<br>SPR3: Max. 1.0 A                                     | SPR2: Max. 2.0 A<br>SPR4: Max. 1.0 A | SPR5: Max. 2.0 A<br>SPR7: Max. 1.0 A | SPR6: Max. 2.0 A<br>SPR8: Max. 1.0 A | SDN1: Max. 2.0 A<br>SDN3: Max. 1.0 A | SDN2: Max. 2.0 A<br>SDN4: Max. 1.0 A                           | SMJ1: Max. 2.0 A<br>SMJ3: Max. 1.0 A                           | SMJ2: Max. 2.0 A<br>SMJ4: Max. 1.0 A |

| Model                                 | EX260-SEC1/3             | EX260-SEC2/4   | EX260-SPN1/3                         | EX260-SPN2/4   | EX260-SEN1/3                         | EX260-SEN2/4   | EX260-SPL1                                       | EX260-SPL3                      |                              |
|---------------------------------------|--------------------------|--|--------------------------------------|--|--------------------------------------|--|--|---------------------------------|------------------------------|
| Applicable system                     | Protocol                 |  | EtherCAT*2                           |  | PROFINET*2                           |  | EtherNet/IP™*2                                   |                                 | Ethernet POWERLINK*2         |
|                                       | Version*1                |  | Conformance Test Record V.1.1        |  | PROFINET Specification Version 2.2   |  | Volume1 (Edition 3.17)<br>Volume2 (Edition 1.18) |                                 | EPSS DS 301<br>Version 1.2.0 |
|                                       | Configuration file*3     |  | XML file                             |  | GSD file                             |  | EDS file   |                                 | XDD file                     |
| I/O occupation area (Inputs/Outputs)  | SEC1: 0/32<br>SEC3: 0/16 | SEC2: 0/32<br>SEC4: 0/16   | SPN1: 0/32<br>SPN3: 0/16             | SPN2: 0/32<br>SPN4: 0/16   | SEN1: 16/32<br>SEN3: 16/16           | SEN2: 16/32<br>SEN4: 16/16   | 16/32  | 16/16                           |                              |
| Applicable function                   | —                        |  | FSU, MRP                             |  | QuickConnect™, DLR                   |  | —  |                                 |                              |
| Communication speed                   | 100 Mbps*2               |  |                                      |  | 10 M/100 Mbps*2                      |  | 100 Mbps*2                                       |                                 |                              |
| Communication connector specification | M12                      |  |                                      |  |                                      |  |  |                                 |                              |
| Terminating resistor switch           | None (Not required)      |  |                                      |  |                                      |  |  |                                 |                              |
| Output                                | Output type              | Source/PNP<br>(Negative common)  | Sink/NPN<br>(Positive common)        | Source/PNP<br>(Negative common)  | Sink/NPN<br>(Positive common)        | Source/PNP<br>(Negative common)  | Sink/NPN<br>(Positive common)                    | Source/PNP<br>(Negative common) |                              |
|                                       | Number of outputs        | SEC1: 32 points<br>SEC3: 16 points                                       | SEC2: 32 points<br>SEC4: 16 points   | SPN1: 32 points<br>SPN3: 16 points                                       | SPN2: 32 points<br>SPN4: 16 points   | SEN1: 32 points<br>SEN3: 16 points                                       | SEN2: 32 points<br>SEN4: 16 points               | 32<br>16                        |                              |
|                                       | Load                     | Solenoid valve with surge voltage suppressor 24 VDC, 1.5 W or less (SMC) |                                      | Solenoid valve with surge voltage suppressor 24 VDC, 1.0 W or less (SMC) |                                      | Solenoid valve with surge voltage suppressor 24 VDC, 1.5 W or less (SMC) |  |                                 |                              |
|                                       | Supplied voltage         | 24 VDC   |                                      |  |                                      |  |  |                                 |                              |
|                                       | Supplied current         | SEC1: Max. 2.0 A<br>SEC3: Max. 1.0 A                                     | SEC2: Max. 2.0 A<br>SEC4: Max. 1.0 A | SPN1: Max. 2.0 A<br>SPN3: Max. 1.0 A                                     | SPN2: Max. 2.0 A<br>SPN4: Max. 1.0 A | SEN1: Max. 2.0 A<br>SEN3: Max. 1.0 A                                     | SEN2: Max. 2.0 A<br>SEN4: Max. 1.0 A             | Max. 2 A                        | Max. 1 A                     |

\*1 Please note that the version is subject to change.

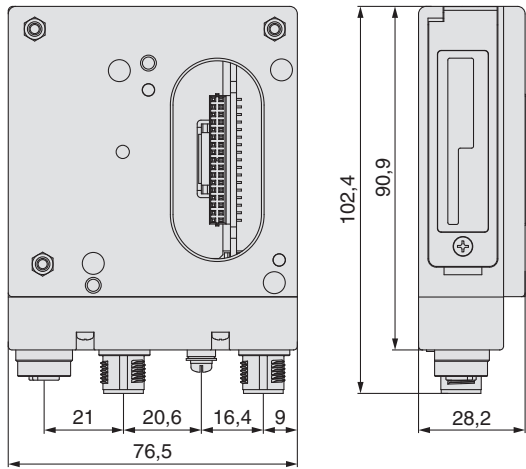
\*2 Use a CAT5 or higher transmission cable for EtherCAT, PROFINET, Ethernet/IP™, and Ethernet POWERLINK.

\*3 The setting file can be downloaded from the SMC website, <http://www.smc.eu>

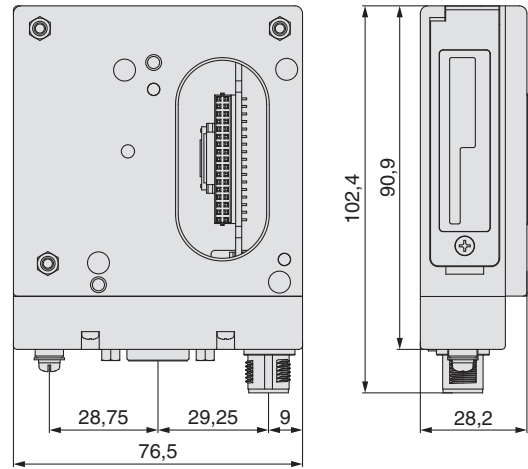
# EX260 Series

## Dimensions

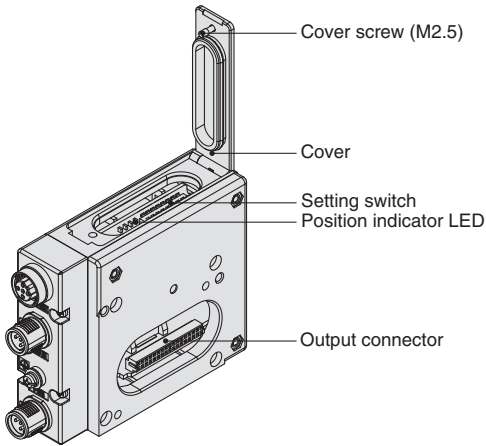
### M12 communication connector type



### D-sub communication connector type (EX260-SPR5/6/7/8)



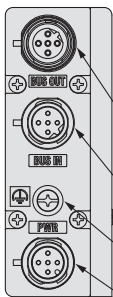
## Parts Description



\* The setting switch varies depending on the model. Refer to the operation manual for details. Please download it via the SMC website, <http://www.smc.eu>

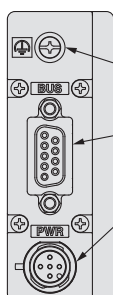
### <Connector>

#### M12 communication connector type



| Part no.                              | EX260-SPR1/-SPR2<br>-SPR3/-SPR4      | EX260-SDN□                           | EX260-SMJ□                             | EX260-SEC□<br>EX260-SPN□<br>EX260-SEN□<br>EX260-SPL□       |
|---------------------------------------|--------------------------------------|--------------------------------------|--|--|
| Communication protocol                | PROFIBUS DP                          | DeviceNet™                           | CC-Link                                | EtherCAT<br>PROFINET<br>EtherNet/IP™<br>Ethernet POWERLINK |
| Communication connector (M12) BUS OUT | 5 pins, socket,<br>B code (SPEEDCON) | 5 pins, socket,<br>A code (SPEEDCON) | 5 pins, socket,<br>A code*1 (SPEEDCON) | 4 pins, socket,<br>D code (SPEEDCON)                       |
| Communication connector (M12) BUS IN  | 5 pins, plug,<br>B code (SPEEDCON)   | 5 pins, plug,<br>A code (SPEEDCON)   | 4 pins, plug,<br>A code (SPEEDCON)     | 4 pins, socket,<br>D code (SPEEDCON)                       |
| Ground terminal                       | M3                                   |                                      |  |  |
| Power connector (M12)                 | 5 pins, plug,<br>A code (SPEEDCON)   | 4 pins, plug,<br>A code (SPEEDCON)   | 5 pins, plug,<br>B code (SPEEDCON)     | 5 pins*2, 4 pins*3,<br>plug, A code (SPEEDCON)             |

#### D-sub communication connector type



| Part no.                                   | EX260-SPR5/-SPR6/-SPR7/-SPR8 |
|--|------------------------------|
| Communication protocol                     | PROFIBUS DP                  |
| Ground terminal                            | M3                           |
| Communication connector (D-sub) BUS IN/OUT | 9 pins, socket               |
| Power connector (M12)                      | 5 pins, plug, A code         |

\*1 Recommended mating M12 4-pin plug, part no. PCA-1567717.

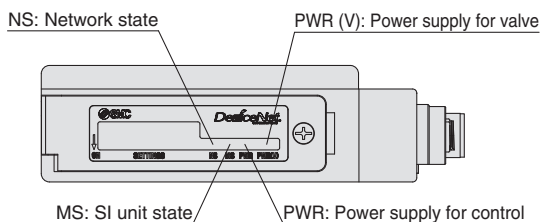
\*2 For EtherCAT, PROFINET and Ethernet POWERLINK

\*3 For EtherNet/IP™

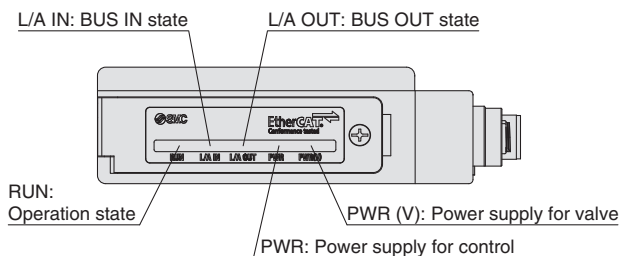


**LED Indicator**

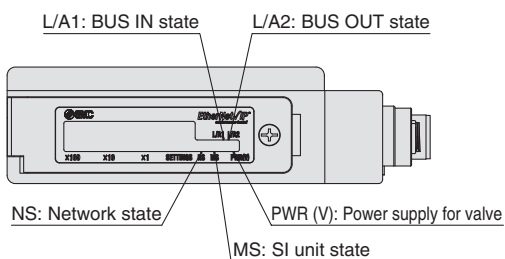
**EX260-SDN**



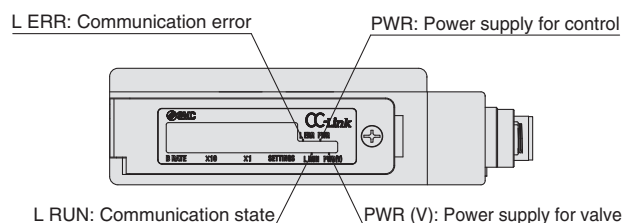
**EX260-SEC**



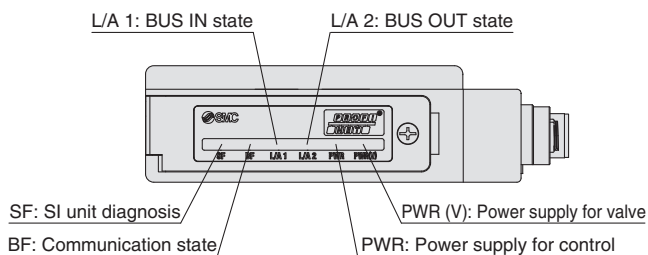
**EX260-SEN**



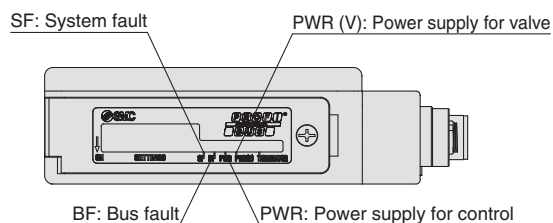
**EX260-SMJ**



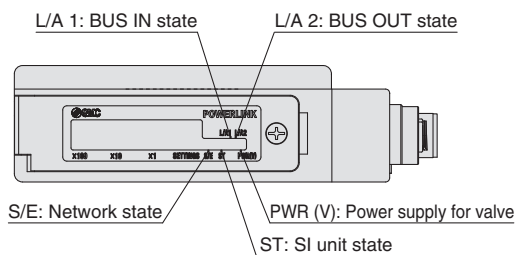
**EX260-SPN**



**EX260-SPR**



**EX260-SPL**

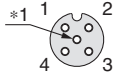


# EX260 Series Accessories

## ① Communication Cable

### For CC-Link

**PCA-1567720**  
(Socket)

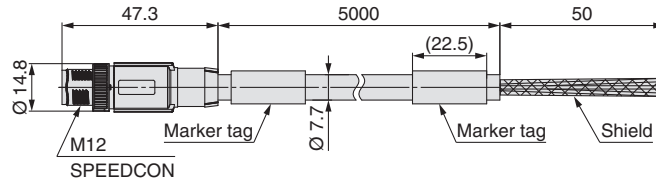
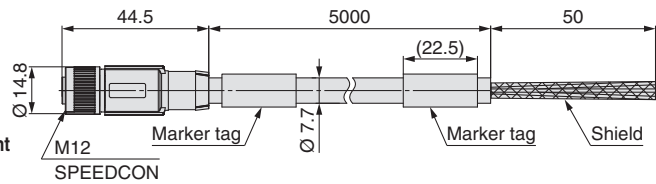


Socket connector pin assignment  
A-coded (Normal key)  
\*1 Number of holes: 5,  
Total number of pins: 4

**PCA-1567717**  
(Plug)

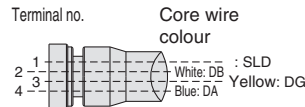


Plug connector pin arrangement  
A-coded (Normal key)



Made to Order

|              |          |       |
|--------------|----------|-------|
| Cable length | 10000 mm | p. 15 |
|--------------|----------|-------|

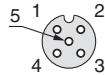


Connections

| Item                            | Specifications             |
|---------------------------------|----------------------------|
| Cable O.D.                      | Ø 7.7 mm                   |
| Conductor nominal cross section | 0.5 mm <sup>2</sup> /AWG20 |
| Wire O.D. (Including insulator) | 2.55 mm                    |
| Min. bending radius (Fixed)     | 77 mm                      |

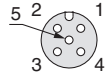
### For DeviceNet™

**PCA-1557633**  
(Socket)

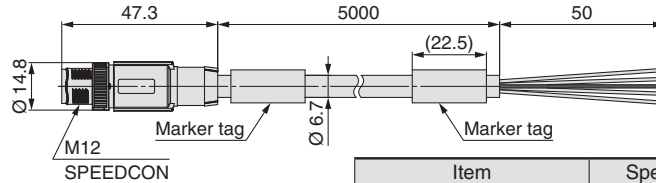
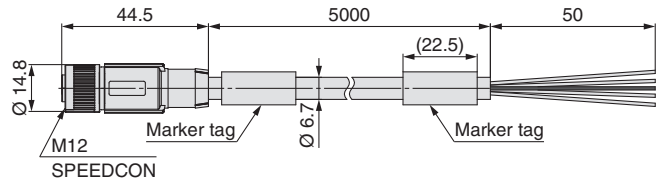


Socket connector pin assignment  
A-coded (Normal key)

**PCA-1557646**  
(Plug)

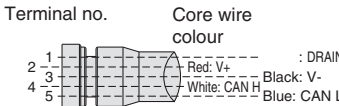


Plug connector pin arrangement  
A-coded (Normal key)



Made to Order

|              |          |       |
|--------------|----------|-------|
| Cable length | 10000 mm | p. 15 |
|--------------|----------|-------|

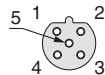


Connections

| Item                            | Specifications |                             |
|---------------------------------|----------------|-----------------------------|
| Cable O.D.                      | Ø 6.7 mm       |                             |
| Conductor nominal cross section | Power pair     | 0.33 mm <sup>2</sup> /AWG22 |
|                                 | Data pair      | 0.2 mm <sup>2</sup> /AWG24  |
| Wire O.D. (Including insulator) | Power pair     | 1.4 mm                      |
|                                 | Data pair      | 2.05 mm                     |
| Min. bending radius (Fixed)     | 67 mm          |                             |

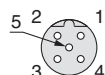
### For PROFIBUS DP

**PCA-1557688**  
(Socket)

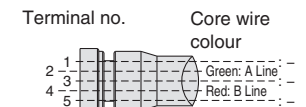
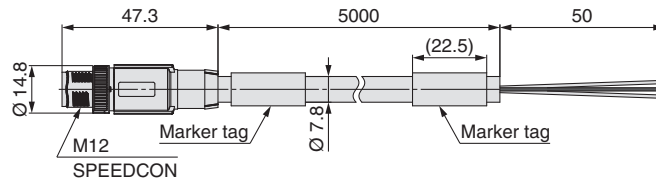
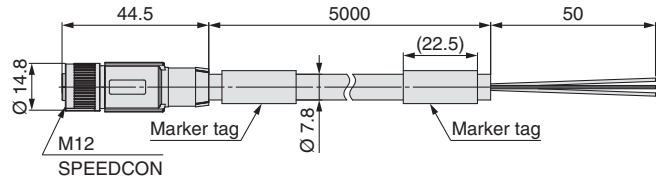


Socket connector pin assignment  
B-coded (Reverse key)

**PCA-1557691**  
(Plug)



Plug connector pin arrangement  
B-coded (Reverse key)



Shield line is connected to the knurl.  
Connections

| Item                            | Specifications              |
|---------------------------------|-----------------------------|
| Cable O.D.                      | Ø 7.8 mm                    |
| Conductor nominal cross section | 0.34 mm <sup>2</sup> /AWG22 |
| Wire O.D. (Including insulator) | 2.55 mm                     |
| Min. bending radius (Fixed)     | 78 mm                       |

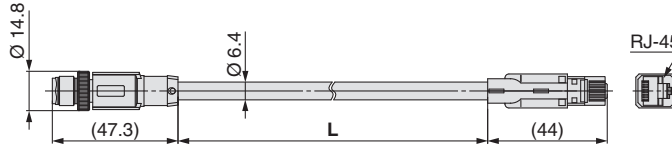
**① Communication Cable**

**For EtherCAT** **For PROFINET** **For EtherNet/IP™** **For Ethernet POWERLINK**

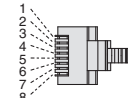
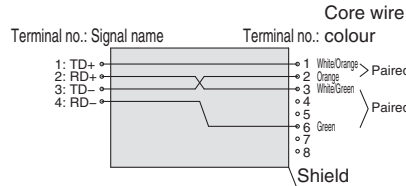
**EX9-AC 020 EN-PSRJ (Plug/RJ-45 connector)**

● Cable length (L)

|            |          |
|------------|----------|
| <b>010</b> | 1000 mm  |
| <b>020</b> | 2000 mm  |
| <b>030</b> | 3000 mm  |
| <b>050</b> | 5000 mm  |
| <b>100</b> | 10000 mm |



**Plug connector pin arrangement D-coded**



**Plug connector pin arrangement**

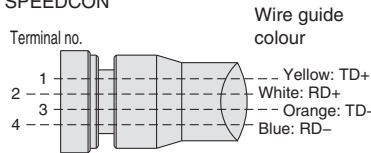
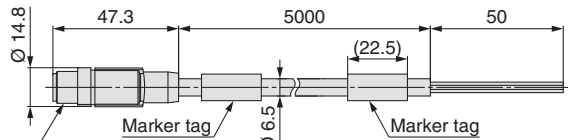
**Connections (Straight cable)**

| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | Ø 6.4 mm                    |
| <b>Conductor nominal cross section</b> | 0.14 mm <sup>2</sup> /AWG26 |
| <b>Wire O.D. (Including insulator)</b> | 0.98 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 26 mm                       |

**PCA-1446566 (Plug)**



**Plug connector pin arrangement D-coded**



**Connections**

| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | Ø 6.5 mm                    |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                      |
| <b>Min. bending radius (Fixed)</b>     | 19.5 mm                     |



**Made to Order**

With angle connector on both sides, Change in the cable length **p. 16**

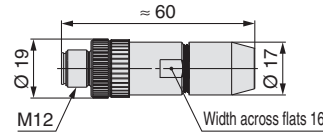


# EX260 Series

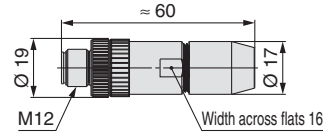
## ② Field-wireable Communication Connector

### Plug

For CC-Link For DeviceNet™  
PCA-1557617 PCA-1557659



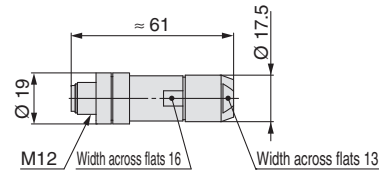
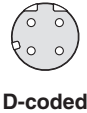
For PROFIBUS DP  
PCA-1557701



### Applicable Cable

| Item                                     | Specifications                             |
|--|--|
| Cable O.D.                               | 4.0 to 8.0 mm                              |
| Wire gauge (Stranded wire cross section) | 0.14 to 0.5 mm <sup>2</sup><br>AWG26 to 20 |

For EtherCAT For PROFINET For EtherNet/IP™ For Ethernet POWERLINK  
PCA-1446553



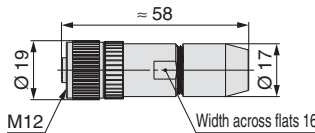
### Applicable Cable

| Item                                     | Specifications                            |
|--|---|
| Cable O.D.                               | 4.0 to 8.0 mm                             |
| Wire gauge (Stranded wire cross section) | 0.14 to 0.34 mm <sup>2</sup> /AWG26 to 22 |

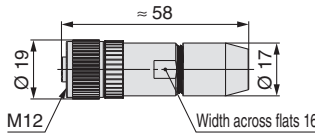
\* The table above shows the specifications for the applicable cable. Adaptation for the connector may vary on account of the conductor construction of the electric wire.

### Socket

For CC-Link For DeviceNet™  
PCA-1557620 PCA-1557662



For PROFIBUS DP  
PCA-1557714



### Applicable Cable

| Item                                     | Specifications                             |
|--|--|
| Cable O.D.                               | 4.0 to 8.0 mm                              |
| Wire gauge (Stranded wire cross section) | 0.14 to 0.5 mm <sup>2</sup><br>AWG26 to 20 |

**③ Power Supply Cable (For SI unit)**

For PROFIBUS DP For DeviceNet™ For EtherCAT For PROFINET For EtherNet/IP™ For Ethernet POWERLINK

EX500-AP **050** - **S**

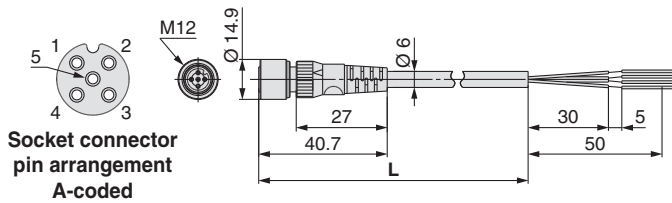
Cable length (L)

|            |         |
|------------|---------|
| <b>010</b> | 1000 mm |
| <b>050</b> | 5000 mm |

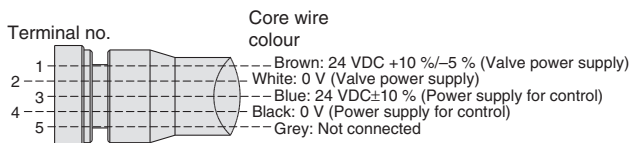
Connector specification

|          |          |
|----------|----------|
| <b>S</b> | Straight |
| <b>A</b> | Angle    |

**Straight connector type**

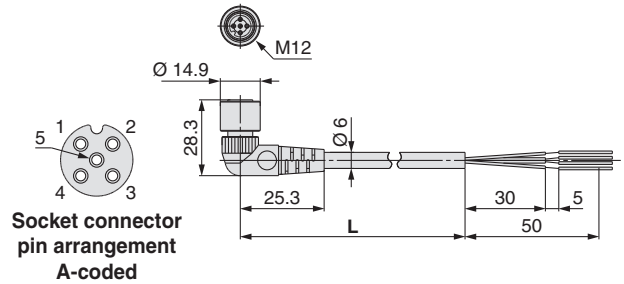


| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | Ø 6 mm                     |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |

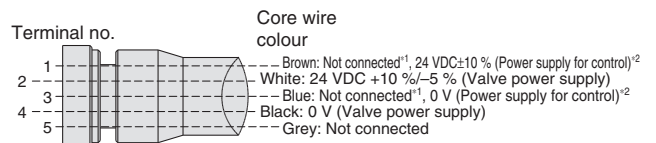


Connections (PROFIBUS DP/EtherCAT/PROFINET/Ethernet POWERLINK)

**Angle connector type**



| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | Ø 6 mm                     |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |



Connections (DeviceNet™, EtherNet/IP™) \*1 For DeviceNet™ \*2 For EtherNet/IP™



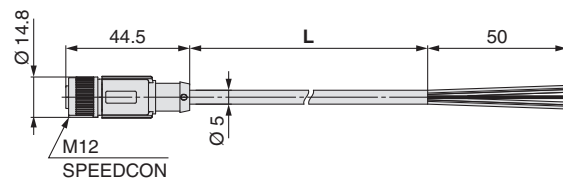
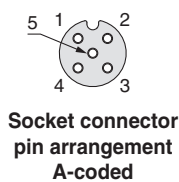
**Made to Order**

|              |          |              |
|--------------|----------|--------------|
| Cable length | 10000 mm | <b>p. 18</b> |
|--------------|----------|--------------|

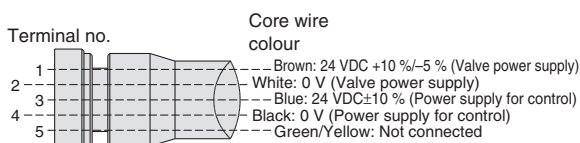
PCA- **1401804**

Cable length (L)

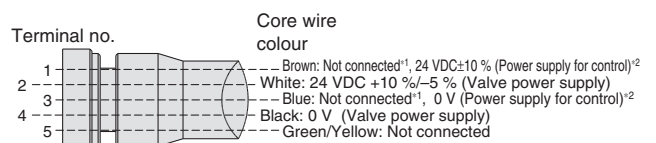
|                |         |
|----------------|---------|
| <b>1401804</b> | 1500 mm |
| <b>1401805</b> | 3000 mm |
| <b>1401806</b> | 5000 mm |



| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | Ø 5 mm                      |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.27 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 21.7 mm                     |



Connections (PROFIBUS DP/EtherCAT/PROFINET/Ethernet POWERLINK)



Connections (DeviceNet™, EtherNet/IP™) \*1 For DeviceNet™ \*2 For EtherNet/IP™

# EX260 Series

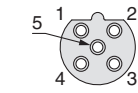
## ④ Power Supply Cable (For SI unit/For power block)

Straight connector type

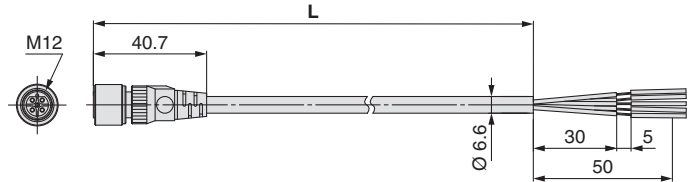
EX9-AC 050 -1

● Cable length (L)

|     |         |
|-----|---------|
| 010 | 1000 mm |
| 030 | 3000 mm |
| 050 | 5000 mm |



Socket connector pin arrangement B-coded

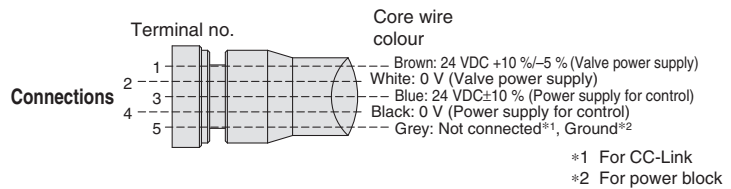


| Item                            | Specifications             |
|---------------------------------|----------------------------|
| Cable O.D.                      | Ø 6.6 mm                   |
| Conductor nominal cross section | 0.3 mm <sup>2</sup> /AWG22 |
| Wire O.D. (Including insulator) | 1.65 mm                    |
| Min. bending radius (Fixed)     | 40 mm                      |



Made to Order

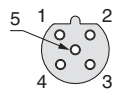
|              |                |       |
|--------------|----------------|-------|
| Cable length | 7000, 10000 mm | p. 17 |
|--------------|----------------|-------|



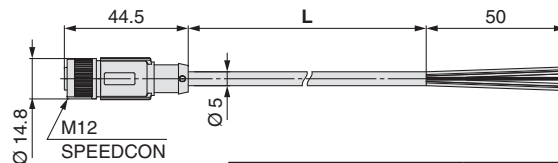
PCA-1401807

● Cable length (L)

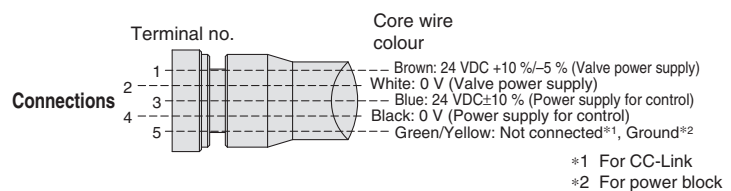
|         |         |
|---------|---------|
| 1401807 | 1500 mm |
| 1401808 | 3000 mm |
| 1401809 | 5000 mm |



Socket connector pin arrangement B-coded



| Item                            | Specifications              |
|---------------------------------|-----------------------------|
| Cable O.D.                      | Ø 5 mm                      |
| Conductor nominal cross section | 0.34 mm <sup>2</sup> /AWG22 |
| Wire O.D. (Including insulator) | 1.27 mm                     |
| Min. bending radius (Fixed)     | 21.7 mm                     |



## ⑤ Seal Cap (10 pcs.)

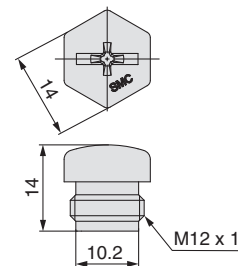
Use this on ports that are not being used for communication connector (M12 connector socket).  
Use of this seal cap maintains the integrity of the IP67 enclosure.

\* Tighten the seal cap with the prescribed tightening torque. (For M12: 0.1 N·m)

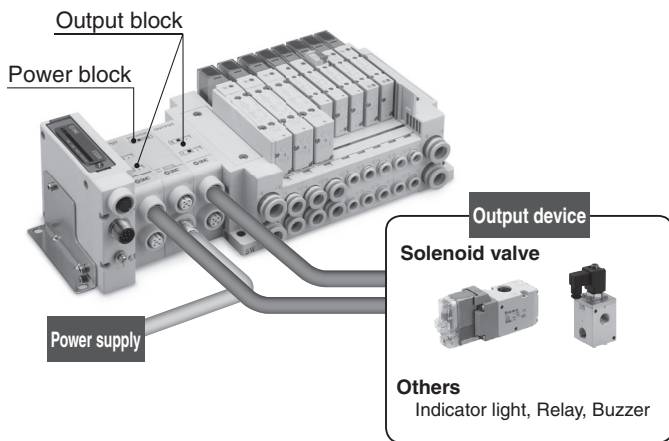
EX9-AW TS

● Connector specification

|    |                                    |
|----|------------------------------------|
| TS | For M12 connector socket (10 pcs.) |
|----|------------------------------------|



For M12 connector socket

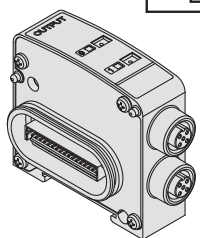


- Output devices other than valve manifold can be operated.
- By using the power block and output block for high watt load, operation up to 0.5 A/point can be performed.
- Possible to mount the output block and power block additionally between the SI unit and the valve (The surplus I/O points are used).
- 2 point outputs per output block (M12 connector)

You are requested to connect it to an SI unit and a valve manifold. For detailed specifications, refer to the operation manual that can be downloaded from SMC website, <http://www.smc.eu>

## 6 Output Block

EX9-OE T 1



### Output specification

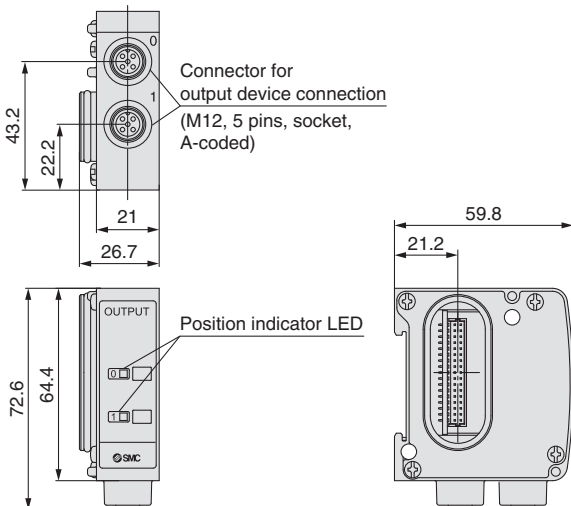
|   |                              |
|---|------------------------------|
| 1 | Source/PNP (Negative common) |
| 2 | Sink/NPN (Positive common)   |

### Power supply type

|   |   |
|---|---|
| T | Internal power supply method (for low-wattage load)       |
| P | Integrated power supply method (for high-wattage load) *1 |

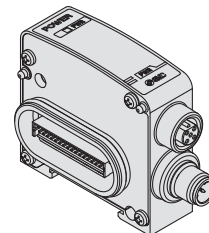
\*1 Required to connect with a power block

### Dimensions/Parts Description

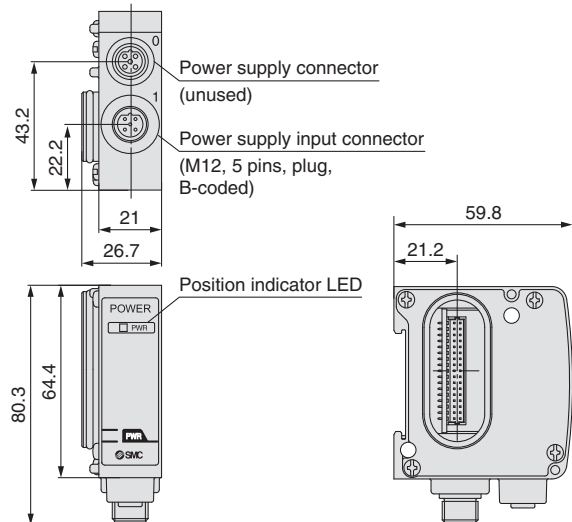


## 7 Power Block

EX9-PE1



### Dimensions/Parts Description



### Specifications

| Model                        | EX9-OET1                             | EX9-OET2                       | EX9-OEP1                   | EX9-OEP2  |  |
|------------------------------|--------------------------------------|--------------------------------|----------------------------|---|--|
| Internal current consumption | 40 mA or less                        |                                |                            |   |  |
| Output                       | Output type                          | Source/PNP (Negative common)   | Sink/NPN (Positive common) | Source/PNP (Negative common) / Sink/NPN (Positive common)           |  |
|                              | Number of outputs                    | 2 outputs                      |                            |   |  |
|                              | Power supply method                  | Internal power supply method   |                            | Integrated power supply method (Power block: supplied from EX9-PE1) |  |
|                              | Output device supply voltage         | 24 VDC                         |                            |   |  |
|                              | Output device supply current         | Max. 42 mA/point (1.0 W/point) |                            | Max. 0.5 A/point (12 W/point)                                       |  |
| Environmental resistance     | Enclosure                            | IP67                           |                            |   |  |
|                              | Operating temperature range          | -10 to 50 °C                   |                            |   |  |
|                              | Operating humidity range             | 35 to 85 %RH (No condensation) |                            |   |  |
| Standards                    | CE marking, UL (CSA), RoHS compliant |                                |                            |   |  |
| Weight                       | 120 g                                |                                |                            |   |  |

### Specifications

| Model  | EX9-PE1                              |                                |
|--|--------------------------------------|--------------------------------|
| Connection block                             | Output block for high wattage load   |                                |
| Connection block stations                    | Output block: Max. 8 stations        |                                |
| Power supply for output and internal control | Power supply voltage                 | 22.8 to 26.4 VDC               |
|  | Internal current consumption         | 20 mA or less                  |
| Supply current                               | Max. 3.1 A*1                         |                                |
| Environmental resistance                     | Enclosure                            | IP67                           |
|  | Operating temperature range          | -10 to 50 °C                   |
|  | Operating humidity range             | 35 to 85 %RH (No condensation) |
| Standards                                    | CE marking, UL (CSA), RoHS compliant |                                |
| Weight                                       | 120 g                                |                                |
| Enclosed parts                               | Seal cap (for M12 connector) 1 pc.   |                                |

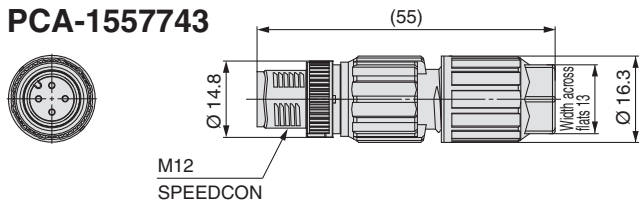
\*1 When using with 3.0 to 3.1 A, the ambient temperature should not exceed 40°C, and do not bundle the cable.

# EX260 Series

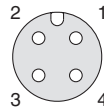
## ⑧ Connector for Output Block Wiring

Field-wireable connector for connecting an output device to an output block

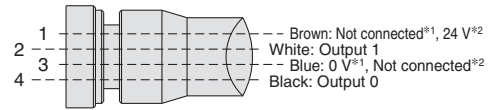
### PCA-1557743



#### A-coded



#### Plug pin arrangement



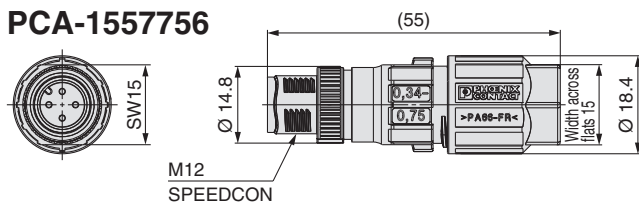
#### Connections

- \*1 When used for EX9-OE□1
- \*2 When used for EX9-OE□2

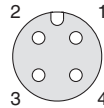
#### Applicable Cable

| Item   | Specifications                            |
|--|---|
| Cable O.D.   | 3.5 to 6.0 mm                             |
| Wire gauge (Stranded wire cross section)           | 0.14 to 0.34 mm <sup>2</sup> /AWG26 to 22 |
| Core wire diameter (Including insulating material) | 0.7 to 1.3 mm                             |

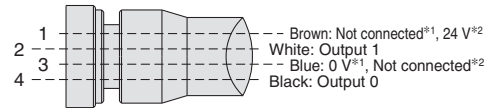
### PCA-1557756



#### A-coded



#### Plug pin arrangement



#### Connections

- \*1 When used for EX9-OE□1
- \*2 When used for EX9-OE□2

#### Applicable Cable

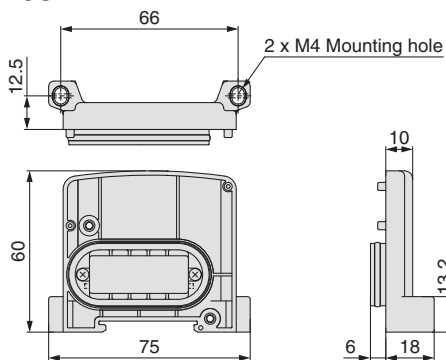
| Item   | Specifications                            |
|--|---|
| Cable O.D.   | 4.0 to 8.0 mm                             |
| Wire gauge (Stranded wire cross section)           | 0.34 to 0.75 mm <sup>2</sup> /AWG22 to 18 |
| Core wire diameter (Including insulating material) | 1.3 to 2.5 mm                             |

Refer to page 9 for the power supply cable for power block.

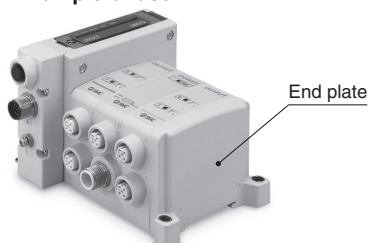
## ⑨ End Plate

Use when an output block is not being used and a valve manifold is not connected.

### EX9-EA03



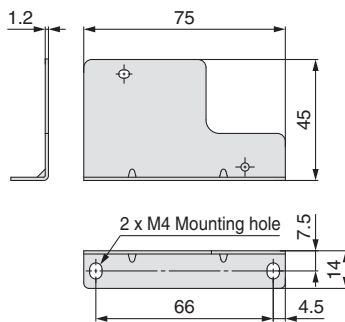
<Example of use>



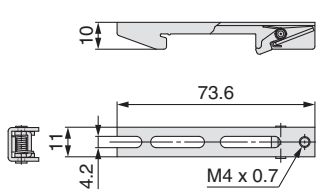
## ⑩ Bracket Plate/DIN Rail Mounting Bracket

A reinforcing brace used to mount an output block or power block onto an SI unit  
To prevent connection failure between products due to deflection, use this bracket plate whenever an output block or power block is mounted.

### EX9-BP1



### EX9-BD1



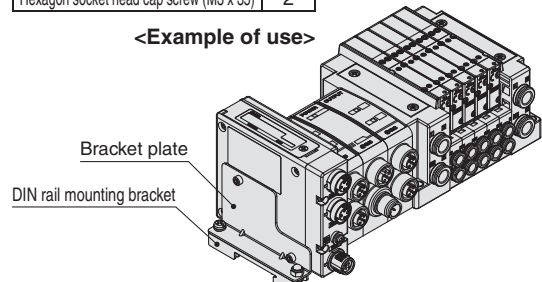
#### Accessory

| Description                            | Qty. |
|--|------|
| Domed cap nut (M4)                     | 1    |
| Round head combination screw (M4 x 8)  | 1    |
| Round head combination screw (M4 x 10) | 1    |

#### Accessory

| Description                             | Qty. |
|---|------|
| Hexagon socket head cap screw (M3 x 35) | 2    |

<Example of use>



# EX260 Series Made to Order

Please contact SMC for detailed specifications and lead times.



## SI Unit

### ① IO-Link compatible

EX260-SIL1-X207

#### IO-Link port class

|      |   |
|------|---|
| X207 | IO-Link port class A, supplied from another connector |
| X210 | IO-Link port class B                                  |

#### Output specification

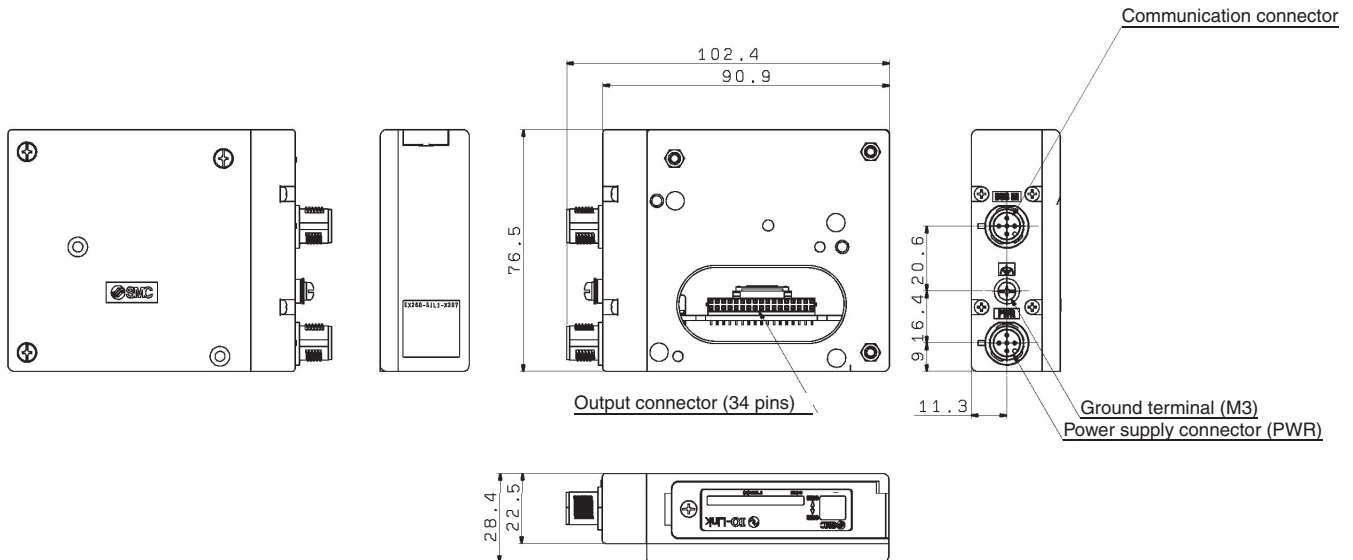
|   |  |
|---|--|
| 1 | 32 outputs, PNP (Negative common)/Source |
|---|--|

#### Communication protocol

|    |         |
|----|---------|
| IL | IO-Link |
|----|---------|

- Send and receive ON/OFF signals + unit information/status
- Supports data update cycles of 1 ms or less
- IO-Link master and SI unit can be connected with one cable (Port class B compliant: X210 specifications)
- Uses 4-wire or 5-wire unshielded cables

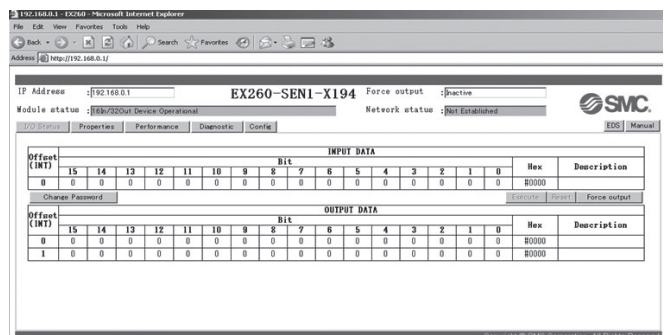
EX260-SIL1-X207 (The X210 is not provided with a power supply connector.)



### ② EtherNet/IP™ Web server function compatible

EX260-SEN1-X194

- Web server compatible: Can conduct a valve operation test (ON/OFF), check communication state, set QuickConnect™, etc.
- Applicable to the power supply taken from Rockwell Automation's safe output module with pulse test function
- Compliant with QuickConnect™ class A specifications
- The gateway address is set to 192.168.□.001 when the IP address is set by the rotary switch.
- Dimensions are the same as those of the standard type.



Web server screen (Example)



# EX260 Series

## Communication Cable

### ① With connector on both sides (Socket/Plug)

For CC-Link For DeviceNet™

EX9-AC 005 MJ -SSPS-X19

• Applicable protocol

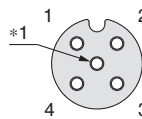
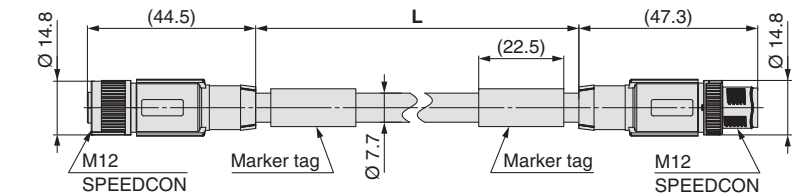
|    |            |
|----|------------|
| MJ | CC-Link    |
| DN | DeviceNet™ |

• Cable length (L)

|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |

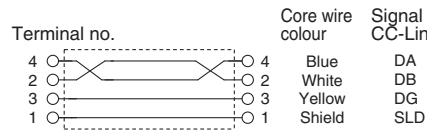
For CC-Link

### Dimensions

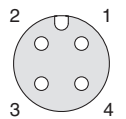


Socket connector pin arrangement  
A-coded (Normal key)

\*1 Number of holes: 5,  
Total number of pins: 4



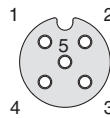
### Connections



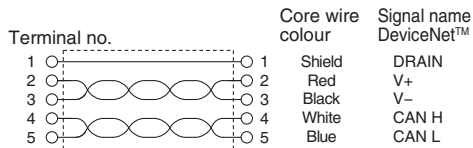
Plug connector pin arrangement  
A-coded (Normal key)

| Item                            | Specifications              |
|---------------------------------|-----------------------------|
| Cable O.D.                      | Ø 7.7 mm                    |
| Conductor nominal cross section | 0.43 mm <sup>2</sup> /AWG20 |
| Wire O.D. (Including insulator) | 2.55 mm                     |
| Min. bending radius (Fixed)     | 77 mm                       |

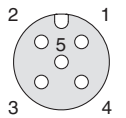
For DeviceNet™



Socket connector pin arrangement  
A-coded (Normal key)



### Connections



Plug connector pin arrangement  
A-coded (Normal key)

| Item                            | Specifications |                             |
|---------------------------------|----------------|-----------------------------|
| Cable O.D.                      | Ø 6.7 mm       |                             |
| Conductor nominal cross section | Power pair     | 0.32 mm <sup>2</sup> /AWG22 |
|                                 | Data pair      | 0.2 mm <sup>2</sup> /AWG24  |
| Wire O.D. (Including insulator) | Power pair     | 1.4 mm                      |
|                                 | Data pair      | 2.05 mm                     |
| Min. bending radius (Fixed)     | 67 mm          |                             |

**Communication Cable**

② With angle connector on both sides (Socket/Plug)

For CC-Link For DeviceNet™  
**EX9-AC 005 MJ -SAPA-X19**

• Applicable protocol

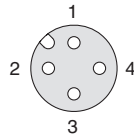
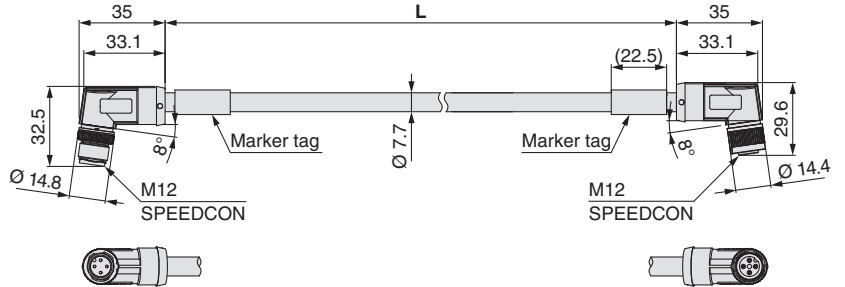
|    |            |
|----|------------|
| MJ | CC-Link    |
| DN | DeviceNet™ |

• Cable length (L)

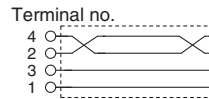
|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |

**Dimensions**

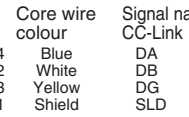
For CC-Link



Plug connector pin arrangement A-coded (Normal key)



Connections

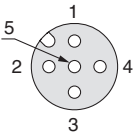
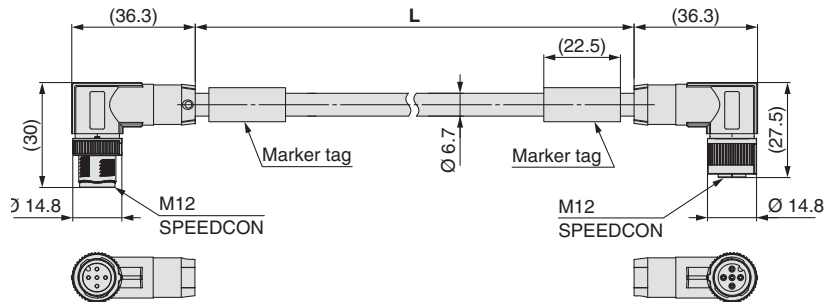


Socket connector pin arrangement A-coded (Normal key)

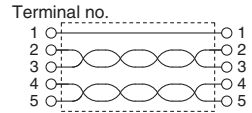
\*1 Number of holes: 5, Total number of pins: 4

| Item                            | Specifications |
|---------------------------------|----------------|
| Cable O.D.                      | Ø 7.7 mm       |
| Wire O.D. (Including insulator) | 2.55 mm        |
| Min. bending radius (Fixed)     | 77 mm          |

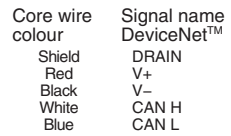
For DeviceNet™



Plug connector pin arrangement A-coded (Normal key)



Connections



Socket connector pin arrangement A-coded (Normal key)

| Item                            | Specifications |                             |
|---------------------------------|----------------|-----------------------------|
| Cable O.D.                      | Ø 6.7 mm       |                             |
| Conductor nominal cross section | Power pair     | 0.32 mm <sup>2</sup> /AWG22 |
|                                 | Data pair      | 0.2 mm <sup>2</sup> /AWG24  |
| Wire O.D. (Including insulator) | Power pair     | 1.4 mm                      |
|                                 | Data pair      | 2.05 mm                     |
| Min. bending radius (Fixed)     | 67 mm          |                             |

# EX260 Series

## Communication Cable

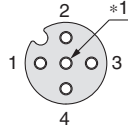
- ③ With connector on one side (Socket)  
Cable length: 10000 mm

For CC-Link    For DeviceNet™

EX9-AC100 MJ -X12

• Applicable protocol

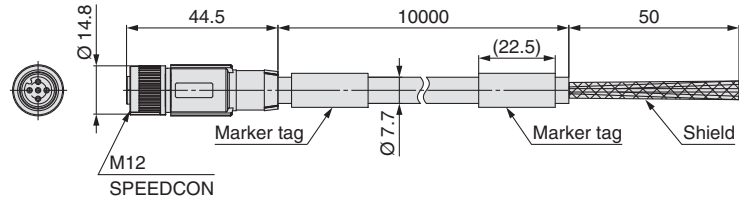
|    |            |
|----|------------|
| MJ | CC-Link    |
| DN | DeviceNet™ |



Socket connector pin arrangement A-coded (Normal key)

### For CC-Link

#### Dimensions



#### Connections

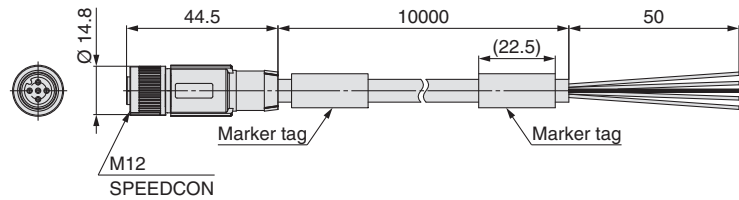
| Terminal no. | Core wire colour: Signal name (CC-Link) |
|--------------|---|
| 1            | Shield: SLD                             |
| 2            | White: DB                               |
| 3            | Yellow: DG                              |
| 4            | Blue: DA                                |

| Item                            | Specifications |
|---------------------------------|----------------|
| Cable O.D.                      | Ø 7.7 mm       |
| Wire O.D. (Including insulator) | 2.55 mm        |
| Min. bending radius (Fixed)     | 77 mm          |

\*1 Number of holes: 5, Total number of pins: 4

### For DeviceNet™

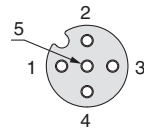
#### Dimensions



#### Connections

| Terminal no. | Core wire colour: Signal name (DeviceNet™) |
|--------------|--|
| 1            | Shield: DRAIN                              |
| 2            | Red: V+                                    |
| 3            | Black: V-                                  |
| 4            | White: CAN H                               |
| 5            | Blue: CAN L                                |

| Item                            | Specifications |                             |
|---------------------------------|----------------|-----------------------------|
| Cable O.D.                      | Ø 6.7 mm       |                             |
| Conductor nominal cross section | Power pair     | 0.32 mm <sup>2</sup> /AWG22 |
|                                 | Data pair      | 0.2 mm <sup>2</sup> /AWG24  |
| Wire O.D. (Including insulator) | Power pair     | 1.4 mm                      |
|                                 | Data pair      | 2.05 mm                     |
| Min. bending radius (Fixed)     | 67 mm          |                             |



Socket connector pin arrangement A-coded (Normal key)

**Communication Cable**

④ With connector on both sides (Socket/Plug) **Dimensions**

For EtherCAT For PROFINET

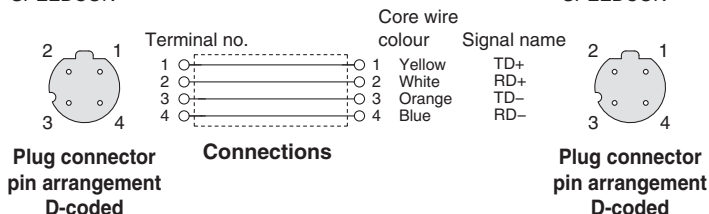
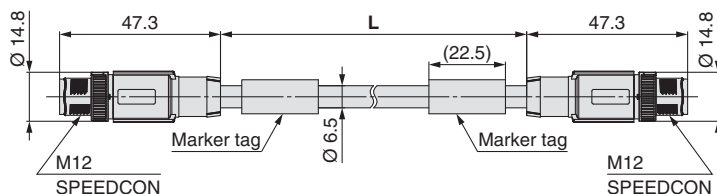
For EtherNet/IP™

For Ethernet POWERLINK

EX9-AC 005 EN-PSPS-X19

● Cable length (L)

|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |



| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | Ø 6.5 mm                    |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                      |
| <b>Min. bending radius (Fixed)</b>     | 19.5 mm                     |

⑤ With angle connector on both sides (Socket/Plug) **Dimensions**

For EtherCAT For PROFINET

For EtherNet/IP™

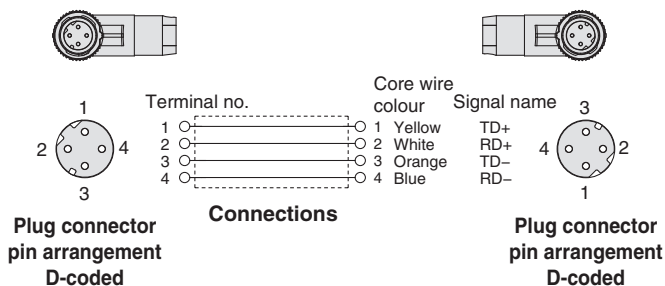
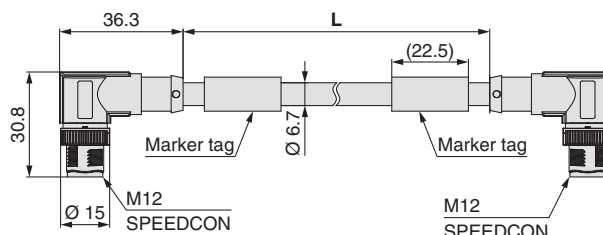
For Ethernet POWERLINK

EX9-AC 005 EN-PAPA-X19

● Cable length (L)

|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |

**Dimensions**



| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | Ø 6.5 mm                    |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                      |
| <b>Min. bending radius (Fixed)</b>     | 19.5 mm                     |

# EX260 Series

## Power Supply Cable

### ① With connector on one side (Socket)

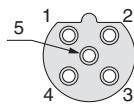
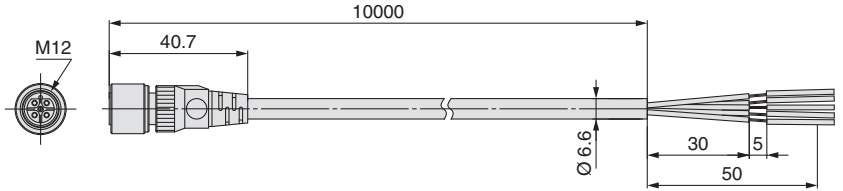
Cable length: 10000 mm

For CC-Link

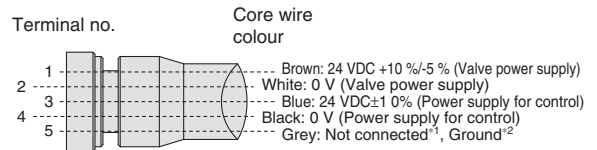
For Power block

### Dimensions

EX9-AC100-1-X16



Socket connector  
pin arrangement  
B-coded (Reverse key)



### Connections

\*1 For CC-Link  
\*2 For power block

| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | Ø 6.6 mm                   |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.65 mm                    |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |

**Power Supply Cable**

② With connector on one side (Socket)

Cable length: 10000 mm

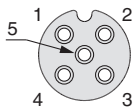
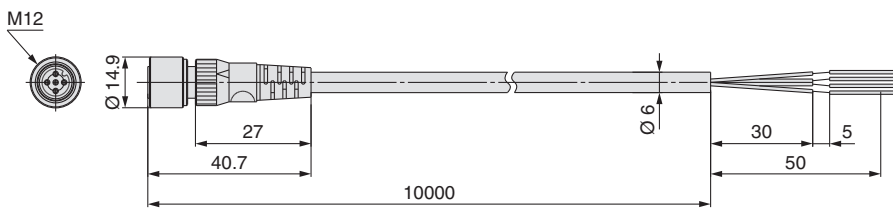
For PROFIBUS DP For DeviceNet™ For EtherCAT For PROFINET For EtherNet/IP™ For Ethernet POWERLINK

EX500-AP100-**S**-X1

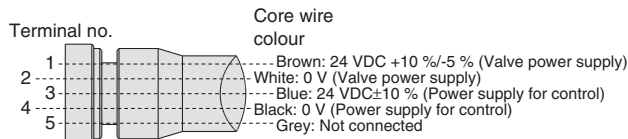
• Connector specification

|          |          |
|----------|----------|
| <b>S</b> | Straight |
| <b>A</b> | Angle    |

**Straight connector type**



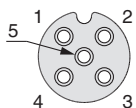
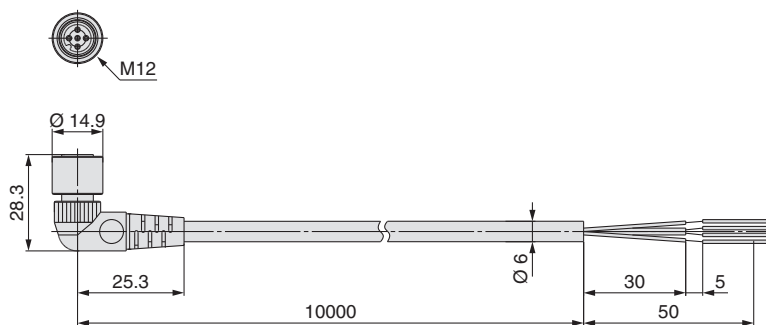
Socket connector pin arrangement A-coded



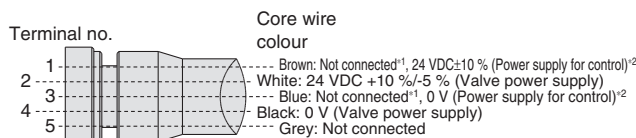
Connections (PROFIBUS DP/EtherCAT/PROFINET/Ethernet POWERLINK)

| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | Ø 6 mm                     |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |

**Angle connector type**



Socket connector pin arrangement A-coded



Connections (DeviceNet™, EtherNet/IP™) \*1 For DeviceNet™ \*2 For EtherNet/IP™

| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | Ø 6 mm                     |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.5 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |





## EX260 Series

# Specific Product Precautions

Be sure to read this before handling the products. For fieldbus system precautions, refer to the "Operation Manual" on the SMC website: [www.smc.eu](http://www.smc.eu)

### Wiring

#### Caution

1. Select connectors that are  $\varnothing 16$  or less if mounting manifolds directly using field-wireable connectors for SI unit power supply wiring.

Using large diameter connectors causes interference with the mounting surface.

The following cables with connectors are recommended.

■ For EX260-SPR□/SDN□/SEC□/SPN□/SEN□/SPL□

<Cable with connector>

- EX500-AP□□□-□
- PCA-1401804/-1401805/-1401806

■ For EX260-SMJ□

<Cable with connector>

- EX9-AC□□□-1
- PCA-1401807/-1401808/-1401809

### Adjustment / Operation

#### Caution

1. For details on programming and address setting, refer to the manual from the PLC manufacturer.

The content of programming related to protocol is designed by the manufacturer of the PLC used.

2. For the EX260-SPN□, the side of the SI unit may become hot.

It may cause burns.

### Operating Environment

#### Caution

1. Select the proper type of enclosure according to the operating environment.

IP67 is achieved when the following conditions are met.

- 1) Provide appropriate wiring between all units using electrical wiring cables, communication connectors and cables with M12 connectors.
- 2) Appropriately mount each unit and valve manifold.
- 3) Be sure to mount a seal cap on any unused connectors.

If using in an environment that is exposed to water splashes, please take measures such as using a cover.

When the enclosure is IP40, do not use in an operating environment or atmosphere where it may come in contact with corrosive gas, chemical agents, seawater, water, or water vapor.

When connected to the EX260-SPR5/6/7/8, manifold enclosure is IP40.

#### ■ Trademark

DeviceNet™ is a trademark of ODVA.

EtherNet/IP™ is a trademark of ODVA.

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

Modbus® is a registered trademark of Schneider Electric, licensed to the Modbus Organization, Inc.

QuickConnect™ is a trademark of ODVA.



# Fieldbus System Precautions 1

Be sure to read this before handling products.

## Design / Selection

### Warning

- 1. Do not use beyond the specification range.**  
Using beyond the specification range may result in a fire, malfunction, or damage to the system.  
Check the specifications before operation.
- 2. When using for an interlock circuit:**
  - **Provide a multiple interlock system which is operated by another system (such as a mechanical protection function).**
  - **Perform an inspection to confirm that it is working properly.**  
Failure to do so may result in possible injuries due to malfunction.

### Caution

- 1. When applicable to UL, use a Class 2 power supply unit which is UL1310 compliant for direct current power supply.**
- 2. Use within the specified voltage range.**  
Using beyond the specified voltage range is likely to cause damage product or malfunction.
- 3. Do not install in places where it can be used as a foothold.**  
Applying any excessive load such as stepping on the product by mistake or placing a foot on it will cause it to break.
- 4. Keep the surrounding space free for maintenance.**  
When designing a system, take into consideration the amount of free space needed to perform maintenance.
- 5. Do not remove the name plate.**  
Improper maintenance or incorrect use of the Operation Manual may lead to equipment failure or malfunction. Also, there is a risk of losing conformity with safety standards.
- 6. Beware of inrush currents when the power supply is turned on.**  
Some connected loads can apply an initial charge current which will trigger the over current protection function, causing the product to malfunction.

## Mounting

### Caution

- 1. When handling and assembling products:**
  - **Do not apply excessive force to the product when disassembling.**  
The connecting parts of the product are firmly joined with seals.
  - **When joining units, take care not to get your fingers caught between the products.**  
Injury may result.
- 2. Do not drop, bump, or apply excessive impact to the product.**  
Doing so may result in damage, equipment failure, or malfunction.

## Mounting

### Caution

- 3. Observe the tightening torque range.**  
Tightening outside of the allowable torque range will likely damage the screw.  
IP65/IP67 cannot be guaranteed if the screws are not tightened to the specified torque.
- 4. When lifting a large solenoid valve manifold, take care to avoid causing stress to the valve connection joint.**  
The connection parts of the product may be damaged.  
Because the product may be heavy, carrying and installation should be performed by more than one operator to avoid strain or injury.
- 5. When installing the product, mount it on a flat surface.**  
Torsion in the whole product may lead to problems such as air leakage or contact failure.

## Wiring

### Caution

- 1. Provide grounding to improve noise immunity.**  
Perform the dedicated grounding separate from the inverter of the drive system and minimize the grounding distance from the product.
- 2. Avoid repeatedly bending or stretching the cable and applying heavy objects or force to it.**  
Wiring where repeated bending and tensile stress are applied to the cable may result in circuit breakage.
- 3. Avoid miswiring.**  
If miswired, there is a danger of malfunction or damage to the product.
- 4. Do not wire while energizing the product.**  
There is a danger of malfunction or damage to the product or input/output device.
- 5. Avoid wiring the power line and high-pressure line in parallel.**  
Signal line noise or surge from the power line or high-pressure line could cause a malfunction.  
Wiring of the product or input/output device and the power line or high-pressure line should be separated from each other.
- 6. Check the wiring insulation.**  
Defective insulation (contact with other circuits, improper insulation between terminals, etc.) may cause damage to the product or input/output device due to excessive voltage or current.



# Fieldbus System Precautions 2

Be sure to read this before handling products.

## Wiring

### ⚠ Caution

- 7. When the product is installed in machinery/equipment, provide adequate protection against noise by using noise filters, etc.**  
Noise in signal lines may cause a malfunction.
- 8. When connecting wires, prevent the entry of water, solvent, or oil from the connector section.**  
Failure to do so may result in damage, equipment failure, or malfunction.
- 9. Avoid wiring patterns in which excessive stress is applied to the connector.**  
Failure to do so may result in equipment failure or malfunction due to contact failure.

## Operating Environment

### ⚠ Warning

- 1. Do not use in atmospheres containing inflammable or explosive gases.**  
Use in such atmospheres is likely to cause a fire or explosion. This product is not explosion proof.

### ⚠ Caution

- 1. Provide adequate protection when operating in locations such as the following.**  
Failure to do so may cause a malfunction or equipment failure. The effect of countermeasures should be checked in individual equipment and machines.
  - 1) Where noise is generated by static electricity, etc.
  - 2) Where there is a strong electric field
  - 3) Where there is a danger of exposure to radiation
  - 4) When in close proximity to power lines or high-voltage lines
- 2. Do not use in environments where oil and chemicals are used.**  
Operating in environments where coolants, cleaning solvents, various oils, or chemicals are present may cause adverse effects (damage, malfunction, etc.) to the product even within a short period of time.
- 3. Do not use in environments where the product could be exposed to corrosive gases or liquids.**  
Use in such environments may cause product damage or malfunction.

## Operating Environment

### ⚠ Caution

- 4. Do not use in locations with sources of surge generation.**  
Installation of the product in an area around equipment (electromagnetic lifters, high-frequency induction furnaces, welding machines, motors, etc.) which generates large surge voltages could cause an internal circuitry element of the product to deteriorate or result in damage. Implement countermeasures against the surge from the generating source, and avoid contact between the lines.
- 5. When directly driving a load which generates a surge voltage by relay, solenoid valve, or lamp, use a load that has an integrated surge-absorption element.**  
When a surge generating load is directly driven, the product may be damaged.
- 6. The product is CE marked but not immune to lightning strikes. Take measures against lightning strikes in your system.**
- 7. Keep dust, wire scraps, and other foreign matter from entering the product.**  
Such materials may cause equipment failure or malfunction.
- 8. Mount the product in a location, which is not affected by vibration or shock.**  
Failure to do so may cause equipment failure or malfunction.
- 9. Do not use in places where there are cyclic temperature changes.**  
When the cyclic temperature exceeds normal temperature changes, the internal product is likely to be adversely affected.
- 10. Do not use in direct sunlight.**  
This may cause equipment failure or malfunction.
- 11. Use within the ambient temperature range.**  
Failure to do so may cause a malfunction.
- 12. Do not use in places where radiated heat may affect the product.**  
Such places are likely to cause a malfunction.



# Fieldbus System Precautions 3

Be sure to read this before handling products.

## Adjustment / Operation

### Warning

1. **Do not perform operation or setting with wet hands.**  
There is a risk of electrical shock.

### Caution

1. **Use a watchmaker's screwdriver with a thin blade for the setting switch.**  
When setting the switch, do not touch any unrelated parts. This may cause parts damage or malfunction due to a short circuit.
2. **Perform appropriate setting for the operating conditions.**  
Failure to do so could result in malfunction. Refer to the Operation Manual for details on setting each switch.
3. **For details on programming and address setting, refer to the manual from the PLC manufacturer.**  
The programming content related to the protocol is designed by the manufacturer of the PLC used.

## Maintenance

### Warning

1. **Do not disassemble, modify (including circuit board replacement), or repair this product.**  
Such actions are likely to cause injuries or equipment failure.
2. **When an inspection is performed:**
  - Turn off the power supply.
  - Stop the air supply, exhaust the residual pressure in the piping, and confirm that the air has been released before performing maintenance work.Failure to do so may result in the unexpected malfunction of system components or injury.

### Caution

1. **When removing from/attaching to the valve manifold:**
  - Do not apply excessive force to the unit.  
The connecting parts are firmly joined with seals.
  - Take care not to get your fingers caught.  
Injury may result.
2. **Perform periodic inspection.**  
Unexpected malfunction in the system composition devices is likely to occur due to malfunction of machinery or equipment.
3. **After maintenance, make sure to perform an appropriate functionality inspection.**  
When abnormalities such as faulty operation occur, stop operation immediately. Unexpected malfunction in the system composition devices is likely to occur.
4. **Do not use benzine or thinner for cleaning the product.**  
Damage to the surface or erasure of the display may result. Wipe off any stains with a soft cloth. If the stain is persistent, soak a cloth in a dilute solution of neutral detergent, wring it out sufficiently, wipe the product, and then finish with a dry cloth.




## Other

### Caution

1. Refer to the catalogue of each series for Common Precautions and Specific Product Precautions for valve manifolds.

## 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.

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

### 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. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalogue.
3. An application which could have negative effects on people, property, or animals requiring special safety analysis.
4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.

### Caution

#### 1. The product is provided for use in manufacturing industries.

The product herein described is basically provided for peaceful use in manufacturing industries.

If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary.

If anything is unclear, contact your nearest sales branch.

### Caution

#### SMC products are not intended for use as instruments for legal metrology.

Measurement instruments that SMC manufactures or sells have not been qualified by type approval tests relevant to the metrology (measurement) laws of each country.

Therefore, SMC products cannot be used for business or certification ordained by the metrology (measurement) laws of each country.

- \*1) ISO 4414: Pneumatic fluid power – General rules relating to systems.  
 ISO 4413: Hydraulic fluid power – General rules relating to systems.  
 IEC 60204-1: Safety of machinery – Electrical equipment of machines.  
 (Part 1: General requirements)  
 ISO 10218-1: Manipulating industrial robots - Safety.  
 etc.

## 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) Vacuum pads are excluded from this 1 year warranty.

A 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 vacuum pad or failure due to the deterioration of rubber material are not covered 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 “Handling Precautions for SMC Products” (M-E03-3) before using.

### SMC Corporation (Europe)

|                |                   |                       |                         |             |                     |                          |                           |
|----------------|-------------------|-----------------------|-------------------------|-------------|---------------------|--------------------------|---------------------------|
| Austria        | +43 (0)2262622800 | www.smc.at            | office@smc.at           | Lithuania   | +370 5 2308118      | www.smc.lt               | info@smc.lt               |
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| Czech Republic | +420 541424611    | www.smc.cz            | office@smc.cz           | Portugal    | +351 226166570      | www.smc.eu               | postpt@smc.smces.es       |
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