

! Contact our sales office for delivery dates and prices as this is a special model.

EX600 Series Analog Input Unit

EX600-AXB-X3

Features

- Up to 4 channels can be connected with one unit.
- Compatible with CC-Link/CC-Link IE Field*1 and EtherNet/IP™*2
- IP67 compliant (Manifold assembly)

*1 EX600-SCF1-X60

*2 Only the 2-port specifications (EX600-SEN3, EX600-SEN4) are supported.

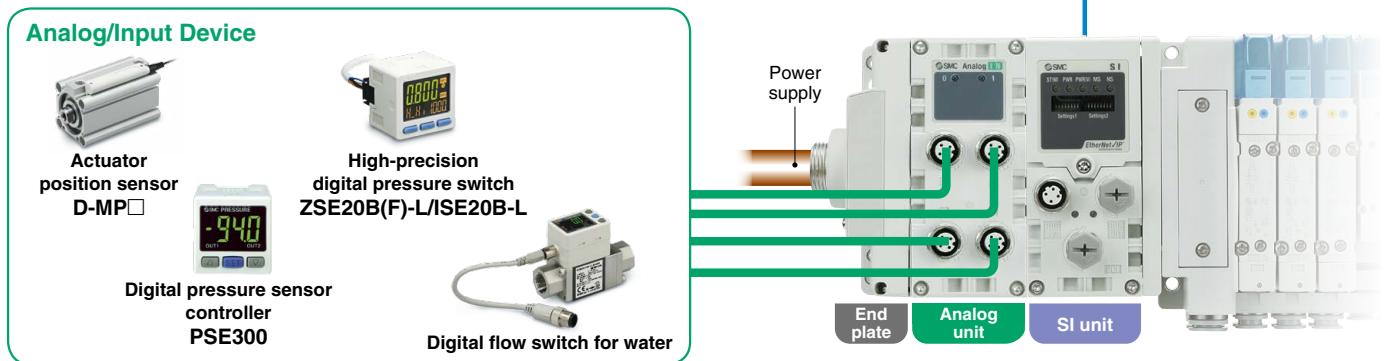


■ Trademark
EtherNet/IP™ is a trademark of ODVA.



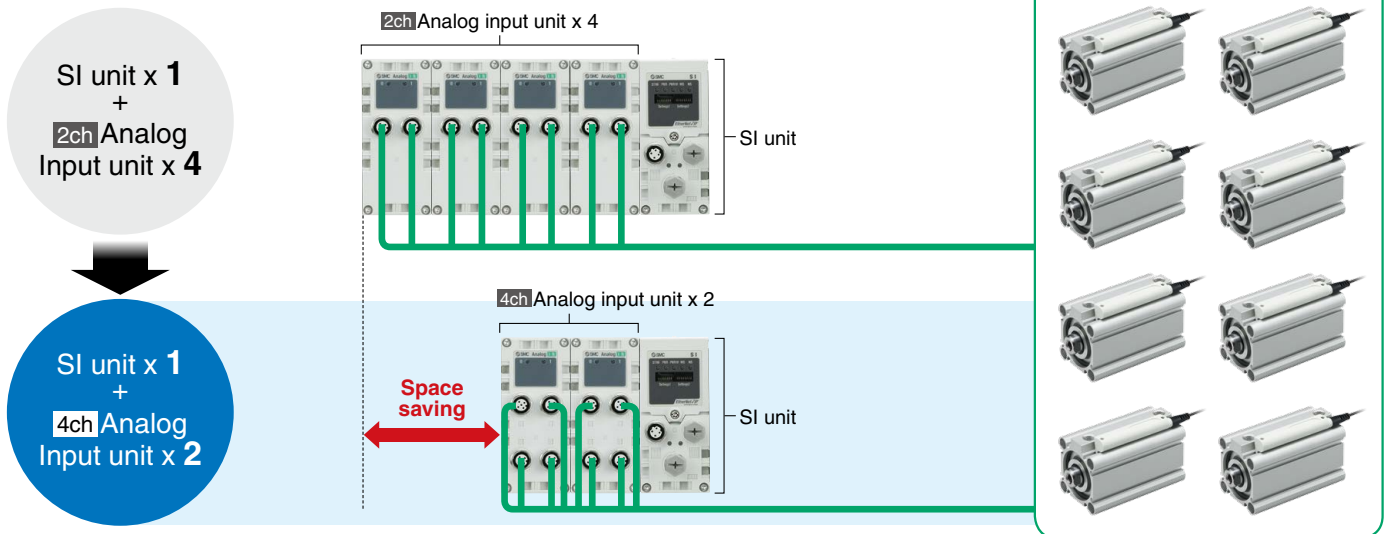
Fieldbus

CC-Link CC-Link IE Field EtherNet/IP™



Application Example

Space saving



Caution To ensure the safest possible operation of this product, please be sure to thoroughly read the "Safety Instructions" in our "Best Pneumatics" catalog before use.

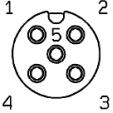


Specifications

Item		Specifications		
Input	Input type	Voltage	Current	
	Input connector	M12 (5-pin) socket*1		
	Input channels	4 channels (1 channel/connector)		
	Power supply (for control/input)	24 VDC		
	Max. sensor supply current	0.5 A/connector		
	Protection	Short-circuit protection		
	Input signal range	12 bit resolution	0 to 10 V, 1 to 5 V, 0 to 5 V	0 to 20 mA, 4 to 20 mA
	Max. rated input signal	15 V		40 mA
	Input impedance	100 kΩ		240 Ω
	Linearity (25°C)	±0.05% F.S. or less		
	Repeatability (25°C)	±0.15% F.S. or less		
	Absolute accuracy (25°C)	±0.5% F.S. or less		±0.6% F.S. or less
Environmental resistance	Enclosure	IP67 compliant (Manifold assembly)		
	Operating temperature range	-10 to 50°C		
	Storage temperature range	-20 to 60°C		
	Operating humidity range	35 to 85% RH (No condensation)		
	Withstand voltage	500 VAC for 1 minute between external terminals and FE		
	Insulation resistance	500 VDC, 10 MΩ or more between external terminals and FE		
	Vibration resistance	10 to 57 Hz: constant amplitude 0.75 mm p-p 57 to 150 Hz: constant acceleration 49 m/s ² for 2 hours in each direction (X, Y, and Z respectively) (De-energized)		
Impact resistance	147 m/s ² 3 times in each direction (X, Y, and Z respectively) (De-energized)			
Standards	CE marking			
Weight	300 g			

*1 An M12 (4-pin) connector can also be connected.
All unused connectors must have a seal cap fitted.

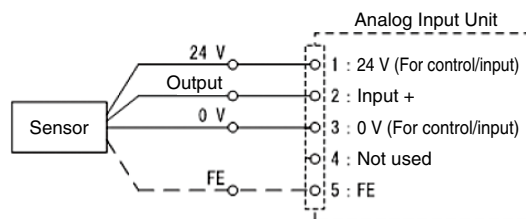
M12 Connector Pin No.

Configuration	Pin no.	Function
	1	24 V (For control/input)
	2	Input +
	3	0 V (For control/input)
	4	Not used
	5	FE

• Examples of wiring with input devices

When using a sensor whose analog output signal is 0 V (standard type)

As the single end input specifications (0 V is standard as the analog signal value) are used for the EX600-AXB-X3, wiring with the pressure switch and/or flow switch is easy.



⚠ Precautions for handling

When using a differential output type analog sensor, be sure to use the EX600-AXA or EX600-AMB.

How to Order

EX600-AXB-X3

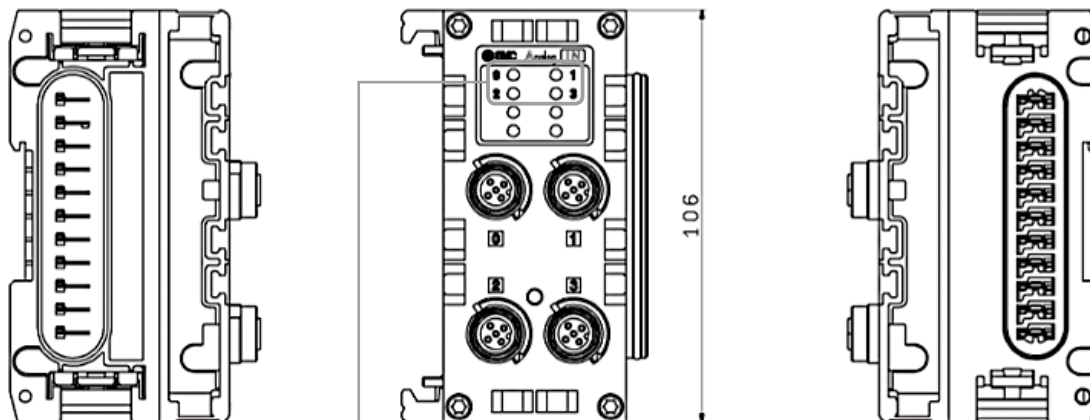
Analog input

• Number of input channels and connectors

Symbol	Number of input channels	Connectors
B	4 channels	4 M12 connectors (5-pin)

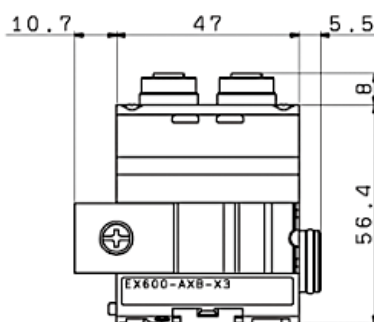
Dimensions

[mm]



LED Display

Display	Content	
0 to 3	OFF	The power supply for control and input is OFF.
	Green LED is ON.	The product is operating normally.
	Red LED is ON.	The power supply of the input device has a short circuit.
	Red LED flashes.	Either of the following conditions: <ul style="list-style-type: none"> • The upper or lower limit of the range has been exceeded. • The upper or lower limit of the measured value (the user's set value) has been exceeded.



Accessories

1. PCI Communication Cable: EX600-AC020-2-X36

For SI units compatible with CC-Link, the handheld terminal is used to set the parameters of each unit. However, as the EX600-AXB-X3 is not supported by the handheld terminal, please use the PC application software "EX600 PC Setting Tool" to set the parameters. In addition to this, a PCI communication cable (EX600-AC020-2-X36) is required to connect the PC and the EX600.

(Use the web server function for SI units compatible with EtherNet/IP™ or the CSP file for SI units compatible with CC-Link IE Field to set the EX600-AXB-X3 parameters.)

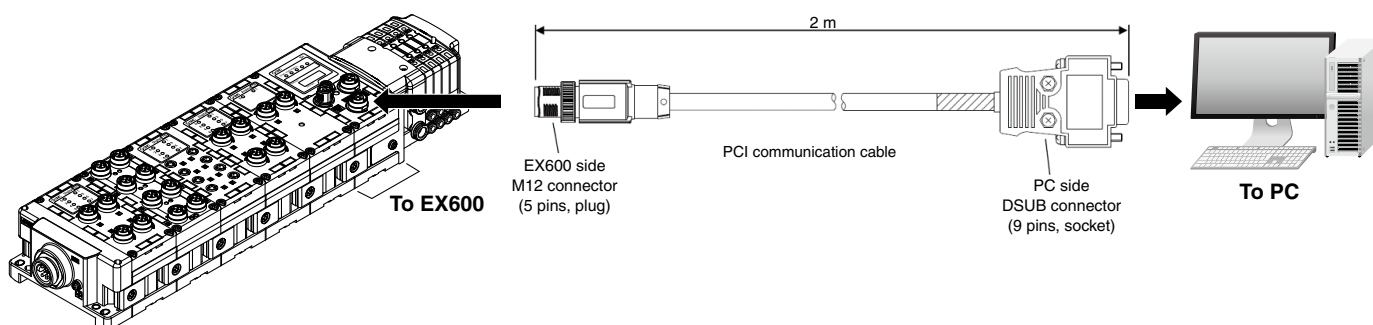
The operation manual and "EX600 PC Setting Tool" can be downloaded from our website (<http://www.smcworld.com>).

Rating/Performance

Rated current	4 A	
Rated voltage	60 V	
Insulation resistance	≥100 MΩ	
Ambient temperature	-25 to 80°C	
Min. bending radius (Fixed)	29.5 mm	
Standard	M12 connector	UL94HB
	Cable	UL

Wiring

Cable O.D.	5.9 mm
Wire gauge	0.34 mm ² /AWG22
Wire diameter (Including insulator)	1.27 mm

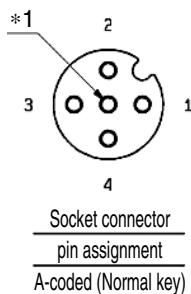
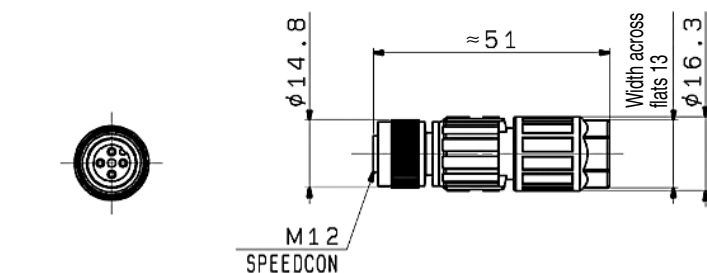


Accessories

2. Field-wireable Connector (Between the sensor/switch and the input device)

To serve as a sensor/switch relay, a socket (M12) has been added to the field-wireable connector.

EX9-CP9-1521588-X49



Connections

Terminal no.	Wire color
1	Brown
2	White
3	Blue
4	Black

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

Rating/Performance

Rated current	4 A
Rated voltage	125 V
Insulation resistance	≥100 MΩ
Ambient temperature	-25 to 80°C
Enclosure	IP67 (Only with screw tightened)
Allowable number of repeated insertions/withdrawals	100
Allowable number of repeated connections between conductors of the same cross section	10

Material/Treatment

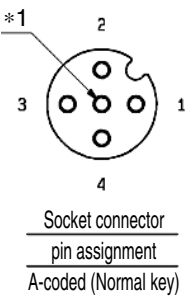
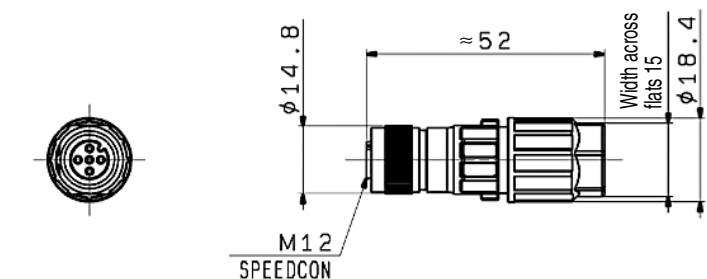
Material of knurl	Zinc die-cast
Contact (Surface treatment)	CuSn (Ni/Au)
Housing	PA6

Applicable cable

Cable O.D.	3.5 to 6.0 mm
Wire gauge (Stranded wire cross section)	0.14 to 0.34 mm ² /AWG26 to 22
Core wire diameter (Including insulator)	0.7 to 1.3 mm

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

EX9-CP9-1521601-X49



Connections

Terminal no.	Wire color
1	Brown
2	White
3	Blue
4	Black

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

Rating/Performance

Rated current	4 A
Rated voltage	250 V
Insulation resistance	≥100 MΩ
Ambient temperature	-25 to 80°C
Enclosure	IP67 (Only with screw tightened)
Allowable number of repeated insertions/withdrawals	100
Allowable number of repeated connections between conductors of the same cross section	10

Material/Treatment

Material of knurl	Zinc die-cast
Contact (Surface treatment)	CuSn (Ni/Au)
Housing	PA6

Applicable cable

Cable O.D.	4.0 to 8.0 mm
Wire gauge (Stranded wire cross section)	0.34 to 0.75 mm ² /AWG22 to 18
Core wire diameter (Including insulator)	1.3 to 2.5 mm

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