Before Use

Fieldbus device





Thank you for purchasing an SMC Fieldbus device.

Please read this manual carefully before operating the product and make sure you understand its capabilities and limitations. Please keep this manual handy for future reference.

> To obtain the operation manual about this product and control unit, please refer to the SMC website (URL http://www.smcworld.com) or contact SMC directly.

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) and other safety regulations.

CAUTION indicates a hazard with a low level of risk which, if ⚠ Caution: CAUTION ITILICATES A TIAZARD WILL A CONTROL OF THE CAUTION TILICATES A TIAZARD WILL

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.

Operator

- ◆ This operation manual is intended for those who have knowledge of machinery using pneumatic equipment, and have sufficient knowledge of assembly, operation and maintenace of such equipment. Only those persons are allowed to perform assembly, operation and maintenance.
- ◆ Read and understand this operation manual carefully before assembling, operating or providing maintenance to the product.

■Safety Instructions

⚠ Warning

■ Do not disassemble, modify (including changing the printed circuit board) or repair. An injury or failure can result.

■ Do not operate the product outside of the specifications.

Do not use for flammable or harmful fluids

Fire, malfunction, or damage to the product can result. Verify the specifications before use.

■ Do not operate in an atmosphere containing flammable or explosive gases.

This product is not designed to be explosion proof.

■If using the product in an interlocking circuit:

-Provide a double interlocking system, for example a mechanical system.

-Check the product regularly for proper operation.

Otherwise malfunction can result, causing an accident.

■The following instructions must be followed during maintenance:

• Turn off the power supply.

• Stop the air supply, exhaust the residual pressure and verify that the air is released before performing maintenance.

Otherwise an injury can result.

⚠ Caution

■ After maintenance is complete, perform appropriate functional inspections.

Stop operation if the equipment does not function properly.

Safety cannot be assured in the case of unexpected malfunction.

■Provide grounding to assure the noise resistance of the product. Individual grounding should be provided close to the product with a short cable

■NOTE

- •When conformity to UL is necessary the SI unit must be used with a UL1310 Class 2 power supply
- •The product is a UL approved product only if it has a . The mark on the body.

Summary of Product parts

1. EX9-OET1/EX9-OET2/EX9-OEP1/EX9-OEP2



I	No.	Element	Description
	1	Output connector	Connects with output device.
-	2	Indicator LED	Indicates the output status.

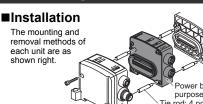
2. EX9-PE1



	No.	Element	Description
	1	Power supply connector	Unused.
	2	Power input connector	Supplies power for output devices. *1
	3	Power LED	Indicates the power supply status.
4.5.6.4.6.41.11.11			

^{*1:} Refer to for the Wiring

Mounting and Installation



Supply / exhaust block assembly. end plate R, power block, or other EX9 series general purpose output block.

Power block or EX9 series general purpose output block Tie rod: 4 pcs.

SI unit for general purpose output block (EX500-Q□02 etc.) M3 x 18: 2 pcs. (Hexagon socket head cap screw (with SW))

*: Please refer to the separate catalog regarding assembly and disassembly with other unit.

Hold together so that there is no gap between units and tighten the screws. Be sure to tighten each screw with the required tightening torque. (Tightening torque: 0.6 Nm)

■Wiring

Output wiring

EX9-OET1/EX9-OET2/EX9-OEP1/EX9-OEP2 output connector

M12 5-pin socket A-code



Model		EX9_OFT1	/EX9-OEP1	EXQ-OFT2	/EX9-OEP2
	Model	EX9-OET II	ILA9-OLI I	EX9-OL12	ILX9-OLI Z
١	No.	PNP output		NPN output	
		Output connector No.0	Output connector No.1	Output connector No.0	Output connector No.1
	1	N.C.	N.C.	Power supply (24 VDC)	Power supply (24 VDC)
	2	Output (OUT1)*	N.C.	Output (OUT1)*	N.C.
	3	Power supply (GND)	Power supply (GND)	N.C.	N.C.
	4	Output (OUT0)	Output (OUT1)	Output (OUT0)	Output (OUT1)
[5	N.C.	N.C.	N.C.	N.C.
	Two outputs are available with only output connector No. 0. N.C. Net accept				C . Not

^{*:} Two outputs are available with only output connector No. 0. N.C.: Not conne

EX9-PE1 power supply connector No.0

*: Keep the waterproof cap mounted on power supply connector No.0 while using EX9-PE1. This connector is supplementary and not normally used.

EX9-PE1 power input connector No.1

M12 5-pin plug B-code



W12 3-pin plug B-couc		
No.	Element	
1	Power supply for output devices (24 VDC)	
2	Power supply for output devices (0 V)	
3	[Power supply for sensor (24 VDC)]	
4	[Power supply for sensor (0 V)]	
5	Ground (FE)	

The pins whose applications are shown in brackets [], are prepared supplementary and not used normally

Specifications

Electrical specifications

Output block (EX9-OE*)

Item	Specifications		
item	EX9-OET1 / EX9-OET2	EX9-OEP1 / EX9-OEP2	
Rated voltage	24 VDC		
Rated load current	Max. 62 mA (1.5 W) / point	Max. 0.5 A (12 W) / point	
Operating ambient temp.	-10 to +50 °C (solenoid valve type)		

Dower block (EVO DE1)

ower block (EX9-1 E1)	
Item	Specifications
Rated voltage	24 VDC
Supply current	Max. 3.1 A
Operating ambient temp.	-10 to +50 °C (solenoid valve type)

^{*1:} Input terminal are not isolated from Power source

*2: Do not connect outside Power source to Input and Output terminals.

Dimensions / Option

Refer to the product catalogue or operation manual from SMC website $(\text{URL } \underline{\text{http://www.smcworld.com}}) \text{ for more information about the product dimensions and option.}$

SMC Corporation URL http://www.smcworld.com

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Note: Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

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EX: **-OM

Power supply wiring