CKD

New Products

EtherNet/IP compliant Serial Transmission Slave Unit MN4E-T7 Series

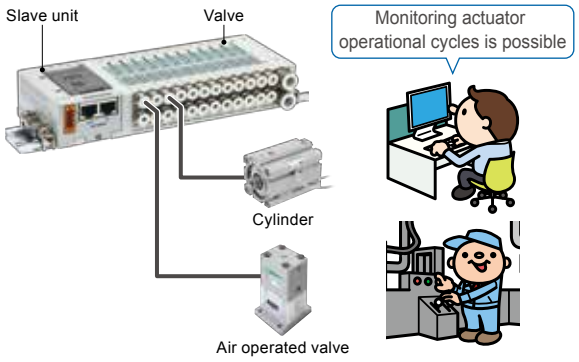
EtherNet/IP compliant. Compact design.

EtherNet/IP™

Ideal for preventive maintenance

Counter function

Slave units count the number of times each valve solenoid contact turns ON. The number of operation cycles of the valve or actuator connected to the secondary side can be counted.
It anticipates the maintenance period from the operation cycle and nominal lifespan, and makes preventative maintenance possible.



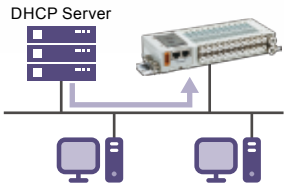
A variety of connection types

Line type, star type, ring type (DLR) compatible

Various IP address settings

Assign from a DHCP server

If a separate server is available, automatic acquisition of addresses is possible.



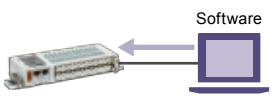
Setting with switches

You can directly set the address with the switch.

Assign from a PC

You can use third-party software to set the address.

[Reference software]
OMRON: Network Configurator
Rockwell Automation: BOOTP/DHCP Server



Read the safety precautions in "Pneumatic Valves" (Catalog No. CB-023SA) before use.

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CC-1495A

Specifications Refer to the Pneumatic Valves Catalog (No.CB-023SA-8) as well.

Item		N4E*-T7EN1	N4E*-T7EN2
Communication protocol		EtherNet/IP	
Power supply voltage	Unit side	24 VDC ±10%	
	Valve side	24 VDC +10%, -5%	
Current consumption	Unit side	120 mA or less	
	Valve side	15 mA or less (when all points are OFF)	
Output		NPN output	
No. of I/O points		16 points	32 points
Connector leadout direction		Port side	
Address setting		IP address: 192 (the 1st octet) . 168 (the 2nd octet) . 1 (the 3rd octet) . 0 (the 4th octet) The IP address can be set in the range of 1 to 254 (DEC), but the target octets as shown in (1) to (3) below are limited by the setting method. (1) IP address setting using DIP switches: Only the 3rd octet can be set in the range of 0 and 1 (2) IP address setting using rotary switches: Only the 4th octet can be set (3) IP address setting using software configuration: Octets 1 to 4 can be configured	
LED		EtherNet/IP: MS, NS, L/A IN, OUT	
Display lamp		Others: PW, PW (V), INFO	
Output setting during communication error		Hold (hold all points final output) / Clear (clear all points output)	

* 1: The model numbers above are those of the serial transmission block. When ordering reduced wiring valves, refer to the next page for the model numbers.

Individual specifications

Item		MN3E00*/MN4E00*		MN3E0*/MN4E0*	
		T7EN1	T7EN2	T7EN1	T7EN2
Max. station No.	Standard wiring	16	32	16	32
	Double wiring	8	16	8	16
Max. number of solenoids		16	32	16	32

How to order

● Block manifold

MN3E00 **1** 0 - **C4** - **R** - **M** **T7EN2** **W** **F** - **10** - **3**

- A Model No.
- B Switching position Category
- C Port size
- D Adjustment function
- E Manual override
- F Serial Transmission slave unit
- G Terminal/connector Pin array method
- H Option
- I Station No.
- J Voltage

Code	Descprition
F Serial transmission slave unit (lamp/surge suppressor provided as standard)	
T7EN1	Close contact type EtherNet/IP 16 outputs
T7EN2	Close contact type EtherNet/IP 32 outputs

[Example of model No.]

MN3E0010-C4-R-MT7EN2WF-10-3

AModel No.	: 3-port valve
BSwitching position category	: Single NC self-reset
CPort size	: ø4 push-in fitting
DAdjustment function	: Manifold for regulator block
EManual override	: Dedicated manual override of non-locking
FSerial transmission slave unit	: Close contact type EtherNet/IP 32 outputs
GTerminal/connector pin array	: Double wiring
HOption	: Port A/B filter integrated
IStation No.	: 10 stations
JVoltage	: 24 VDC

* Model Numbers

Only models with serial transmission slave unit (T7EN*) newly added are shown in this catalog. Refer to "Pneumatic Valves (Catalog No. CB-023SA)" for details (specifications, model No., etc.) of the MN4E Series.

Technical data

Slave unit wiring

・Wiring to the communication socket

A communication plug is not included with this product, so purchase one suiting the specifications.
(The following cable with EtherNet/IP dedicated plug is recommended).
For wiring method, refer to the following communication socket pin array and communication cable wiring example.

Recommended cable with plug [Cat.5e]:

IETP-SB-S***□ Industrial EtherNet cable (double shield) made by JMACS

***: Length, □: Unit M = meter, C = centimeter

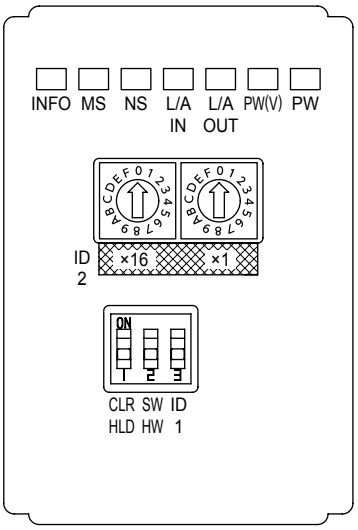
・Wiring to the power supply socket

A power supply plug is included with this product. Power supply can be wired by wiring the unit power cable and valve power cable to the power supply plug and connecting it to the power socket of the slave unit.

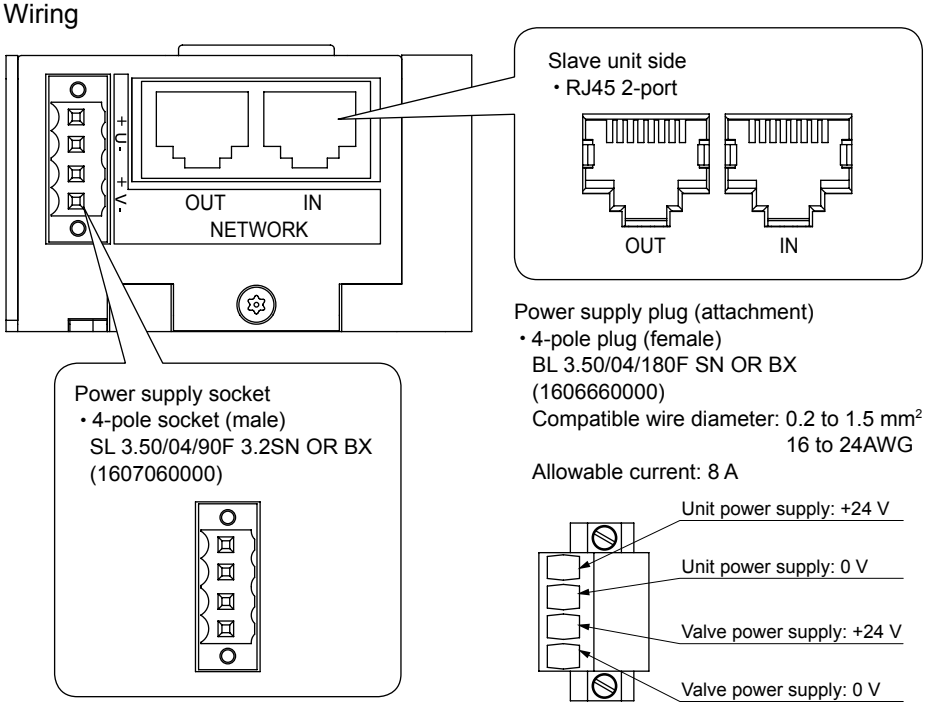
Included power supply plug:

BL3.50/04/180F SN 0R BX 4-pole connector made by Weidmüller

LED display



Wiring



LED display description

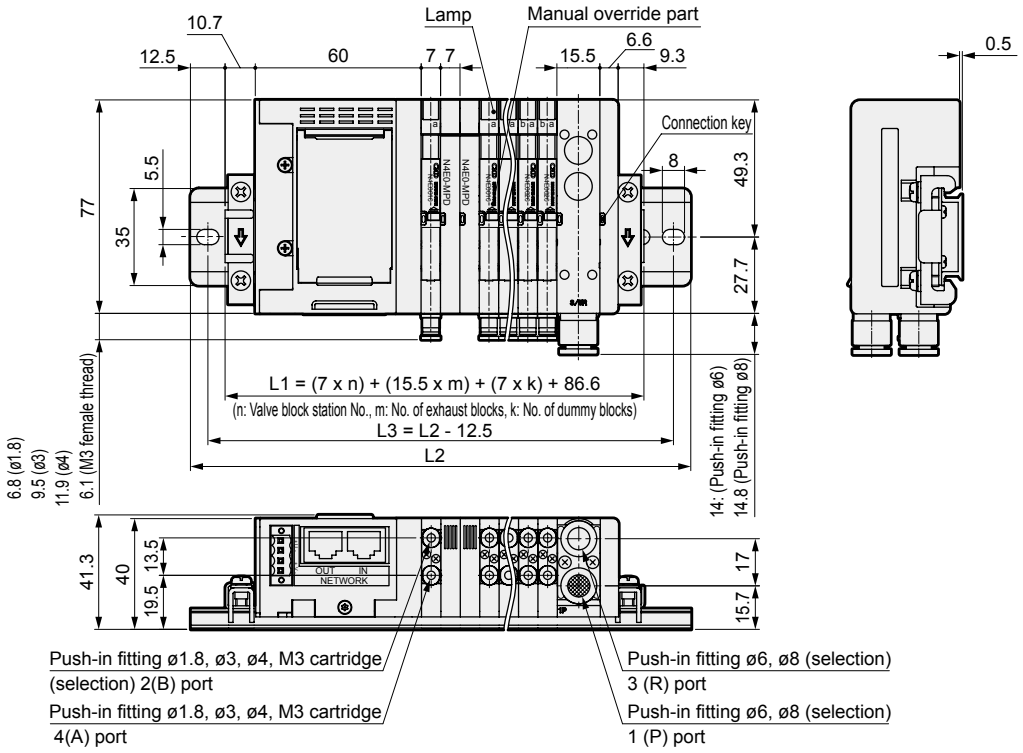
LED name	Function	Display description	
INFO	Not in use	–	–
MS	EtherNet/IP slave unit State display	Green blinking Green lit Red blinking Red lit	IP address not configured or currently communicating Normal Switch setting not correct Slave unit error
NS	Communication status	Green blinking Green lit Red blinking Red lit	No link Link detection (correctly communicating) Communication error (timeout) Address duplication
L/A IN	Ethernet IN Link status	OFF Green lit Green lit/yellow rapid blinking	No link, no transmitted data Link detection, no transmitted data Line detection, transmitting data
L/A OUT	Ethernet OUT Link status	OFF Green lit Green lit/yellow rapid blinking	No link, no transmitted data Link detection, no transmitted data Line detection, transmitting data
PW(V)	Valve power supply status	OFF Green lit	Valve power supply OFF Valve power supply ON
PW	Unit power supply status	OFF Green lit	Unit power supply OFF Unit power supply ON

Communication socket pin array

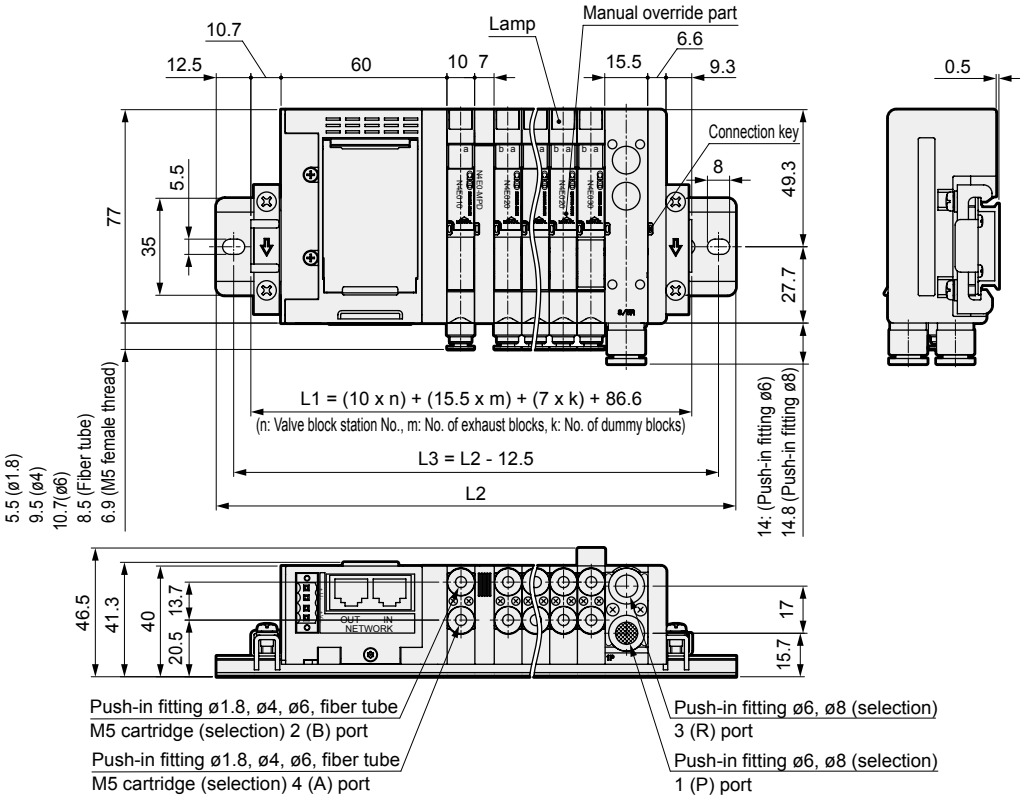
Port	Pin	Signal name	Function
IN/OUT	1	TXD+	Transmitted data, positive
	2	TXD-	Transmitted data, negative
	3	RXD+	Received data, positive
	4	Vacant	
	5	Vacant	
	6	RXD-	Received data, negative
	7	Vacant	
	8	Vacant	

Dimensions

● MN4E00



● MN4E0



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