

# MN3E<sup>0</sup><sub>00</sub>/MN4E<sup>0</sup><sub>00</sub> Series

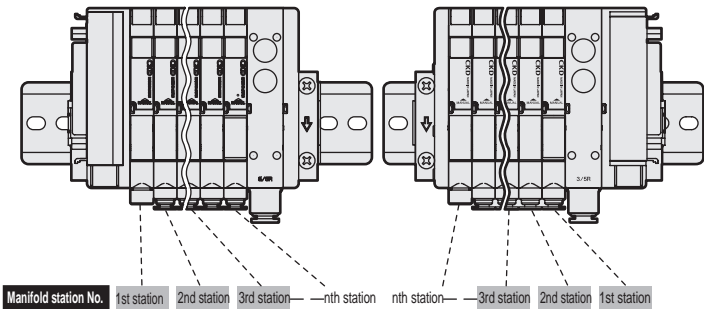
Technical data ① Notes on wiring: D sub-connector

## D sub-connector: Wiring method T30(N)

### T30(N) Connectors

The connector used for T30(N) wiring, called a D sub-connector, is used widely for FA and OA devices. The 25P in particular is also an RS-232-C Standards designated connector, used for personal computer communication.

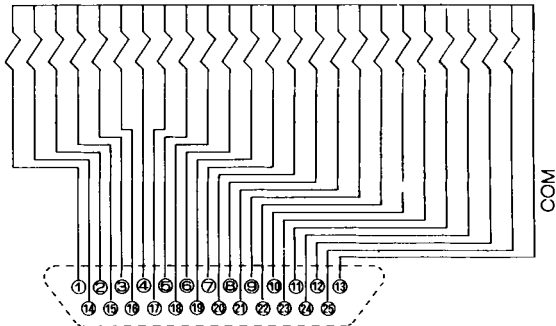
■ The manifold station numbers are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. T30 is counted from the left direction and T30R from the right direction.



### Precautions for connector T30(N)

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side.
- (2) The working power is 12/24 VDC dedicated.
- (3) A voltage drop may occur due to simultaneous energizing or cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

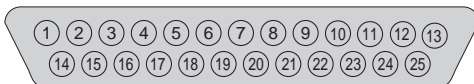
\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.



### T30(N) connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively. The manifold's max. station number differs depending on the model. Check the specifications of each model.

#### Connector pin No.



#### [Standard wiring]

● For single solenoid valve only

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	3a	5a	7a	9a	11a	13a	15a	17a	19a	21a	23a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	2a	4a	6a	8a	10a	12a	14a	16a	18a	20a	22a	24a	

#### [Double wiring]

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	9a	10a	11a	12a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	

● For double solenoid valve only

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	9a	10a	11a	12a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	1b	2b	3b	4b	5b	6b	7b	8b	9b	10b	11b	12b	

● For mixed use (single/double mixture)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	3a	4a	5a	7a	8a	10a	11b	12b	14a	15b	17a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	2a	3b	4b	6a	7b	9a	11a	12a	13a	15a	16a	17b	

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	9a	10a	11a	12a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	(Blank)	(Blank)	3b	4b	(Blank)	(Blank)	7b	(Blank)	(Blank)	(Blank)	11b	12b	

### How to order cable with D sub-connector

**N4T** - **CABLE** - **D** **0** **0** - **1**

\* Each pneumatic valve model can be used for D sub-connector T30(N).

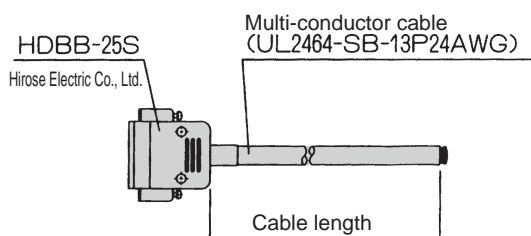
Ⓐ User interface

Ⓑ Cable length

Model	
N4T	
Code	
Ⓐ User interface	
0	Cut only
1	With round terminal for M3.5 screw
Ⓑ Cable length	
1	1 m
3	3 m
5	5 m

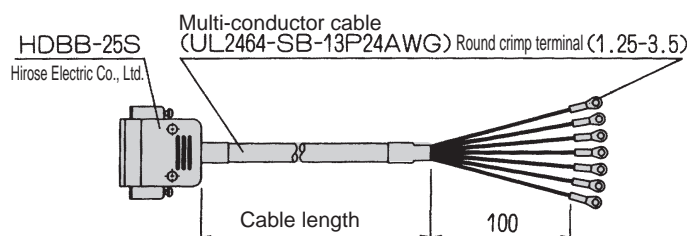
### D sub-connector terminal No. and conductor

● N4T-CABLE-D00-Ⓑ



D sub-connector terminal No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Core identification	Insulator color	Orange	Orange	Yellow	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow
	Mark type	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	2 points	2 points	2 points
	Mark color	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black
D sub-connector terminal No.		14	15	16	17	18	19	20	21	22	23	24	25	
Core identification	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Mark type	2 points	2 points	2 points	2 points	2 points	2 points	2 points	3 points	3 points	3 points	3 points	3 points	
	Mark color	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	

● N4T-CABLE-D01-Ⓑ



D sub-connector terminal No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Core identification	Insulator color	Orange	Orange	Yellow	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow
	Mark type	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	2 points	2 points	2 points
	Mark color	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black
Mark tube No.		1	2	3	4	5	6	7	8	9	10	11	12	13
D sub-connector terminal No.		14	15	16	17	18	19	20	21	22	23	24	25	
Core identification	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Mark type	2 points	2 points	2 points	2 points	2 points	2 points	2 points	3 points	3 points	3 points	3 points	3 points	
	Mark color	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	
Mark tube No.		14	15	16	17	18	19	20	21	22	23	24	25	

\* Up to 24 points can be used. Cut the wires for surplus points before use.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# MN3E<sup>00</sup>/MN4E<sup>00</sup> Series

Technical data ① Notes on wiring: Flat cable connector

## Flat cable connector: wiring method T50

### T50 Connectors

The connector used for T50 wiring method complies with MIL Standards (MIL-C-83503).

Wiring work is simplified with the pressure welded flat cable.

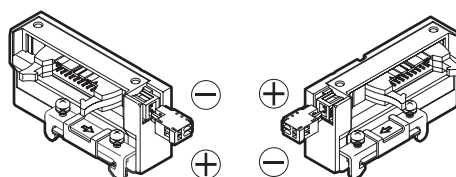
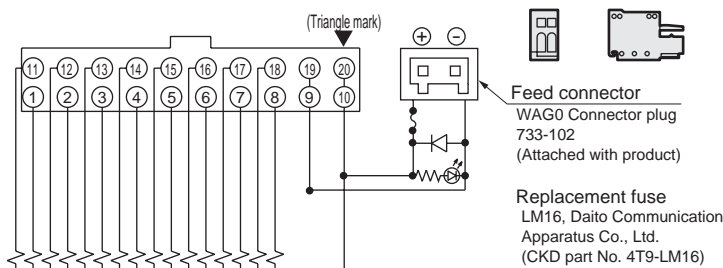
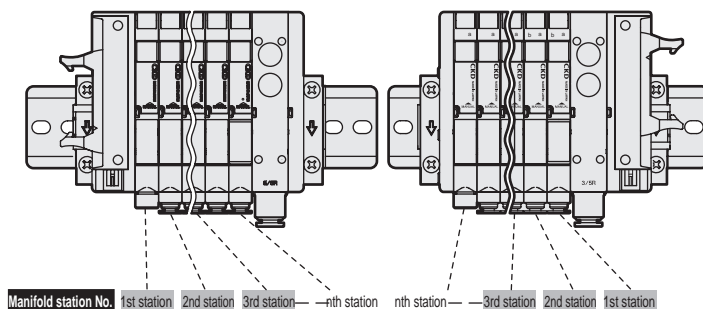
Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same.

Arrange using connectors and the triangular mark (▼) in the table below for reference. The ▼ mark is the reference for both plug and socket.

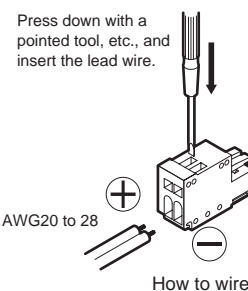
### Precautions for connector T50

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side. Direct connections with the PLC are limited. Use the dedicated cable for each PLC manufacturer.
- (2) The working power is 12/24 VDC dedicated.
- (3) When connecting the T50 to a general output unit, use the + terminal (20, 10) of the 20P connector as the plus side common, and use the NPN transistor output open collector for the drive circuit.
- (4) Never connect this manifold to the input unit, as major failures could occur in this device and in peripherals. Be sure to connect the manifold to the output unit.
- (5) A voltage drop may occur due to simultaneous energizing or cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

■ The manifold station numbers are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T50 and T50R.



Polarity of feed connector

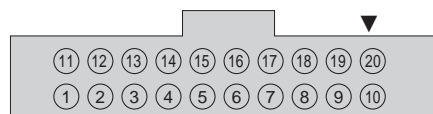


How to wire

### T50 connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively. The manifold's max. station number differs depending on the model. Check the specifications of each model.

#### Connector pin No.



#### [Standard wiring]

- For single solenoid valve only

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	9a	10a	11a	12a	13a	14a	15a	16a	Power supply	Power supply
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	Power supply	Power supply

- For double solenoid valve only

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	5b	6a	6b	7a	7b	8a	8b	Power supply	Power supply
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b	Power supply	Power supply

- For mixed use (single/double mixture)

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	7a	7b	8a	9a	10a	10b	11a	11b	Power supply	Power supply
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	3b	4a	4b	5a	6a	Power supply	Power supply

#### [Double wiring]

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	(Blank)	6a	(Blank)	7a	(Blank)	8a	(Blank)	Power supply	Power supply
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	(Blank)	3a	(Blank)	4a	(Blank)	Power supply	Power supply

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	(Blank)	6a	(Blank)	7a	7b	8a	(Blank)	Power supply	Power supply
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	(Blank)	3a	3b	4a	4b	Power supply	Power supply

### Flat cable connector: wiring method T51

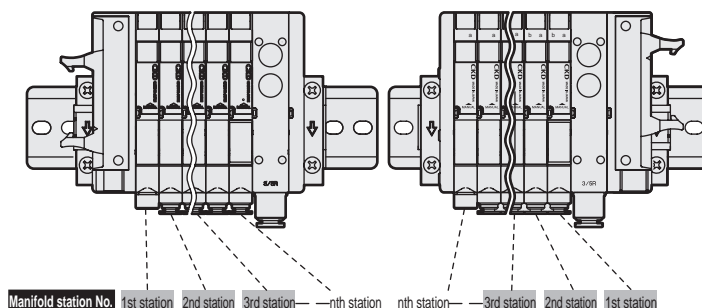
#### T51 Connectors

The connector used for T51 wiring method complies with MIL Standards (MIL-C-83503).

Wiring work is simplified with the pressure welded flat cable.

Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same. Arrange using connectors and the triangular mark (▼) in the table below for reference. The triangular mark (▼) is the reference for both plug and socket.

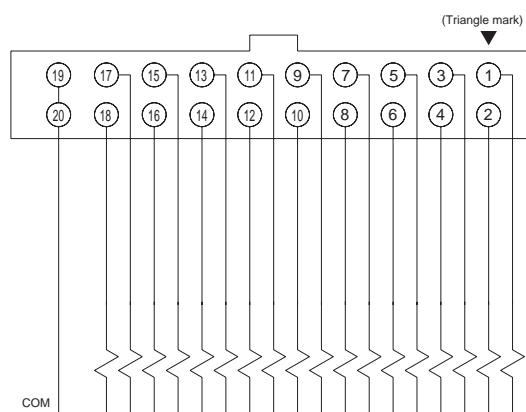
■ The manifold station numbers are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T51 and T51R types.



#### Precautions for connector (T51)

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side.
- (2) The working power is 12/24 VDC dedicated.
- (3) The T51 is driven with a general output unit.
- (4) Never connect this manifold to the input unit, as major failures could occur in this device and in peripherals.  
Be sure to connect the manifold to the output unit.
- (5) A voltage drop may occur due to simultaneous energizing or cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

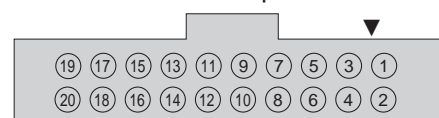
\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.



#### T51 connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively. The manifold's max. station number differs depending on the model. Check the specifications of each model.

Connector pin No.



[Standard wiring]

- For single solenoid valve only

Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	17a	15a	13a	11a	9a	7a	5a	3a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	18a	16a	14a	12a	10a	8a	6a	4a	2a

- For double solenoid valve only

Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	9b	8b	7b	6b	5b	4b	3b	2b	1b

- For mixed use (single/double mixture)

Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	12a	11a	10a	8a	7a	5a	4a	3a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	13a	11b	10b	9a	7b	6a	4b	3b	2a

[Double wiring]

Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)

Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	(Blank)	(Blank)	7b	(Blank)	(Blank)	4b	3b	(Blank)	(Blank)

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
<b>MN3E</b>
<b>MN4E</b>
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

### Flat cable connector: wiring method T52

#### T52 Connectors

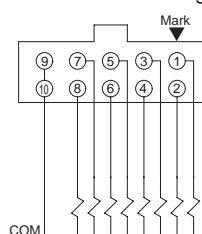
The connector used for T52 wiring method complies with MIL Standards (MIL-C-83503).

Wiring work is simplified with the pressure welded flat cable.

Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same. Arrange using connectors and the triangular mark (▼) in the table below for reference. The triangular mark (▼) is the reference for both plug and socket.

\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.

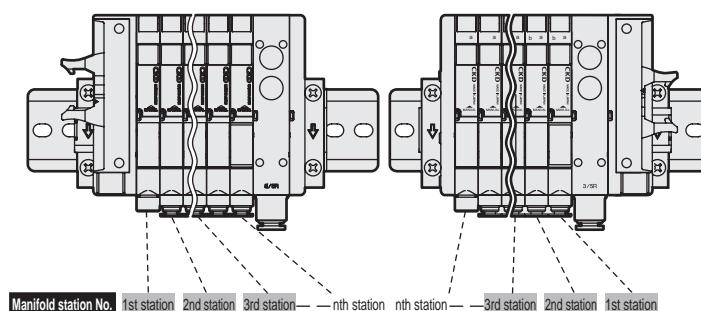
Connector pin array diagram (top view) and internal circuit diagram



#### Precautions for connector (T52)

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side.
- (2) The working power is 12/24 VDC dedicated.
- (3) The T52 is driven with a general output unit.
- (4) Never connect this manifold to the input unit, as major failures could occur in this device and in peripherals. Be sure to connect the manifold to the output unit.
- (5) A voltage drop may occur due to simultaneous energizing or cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

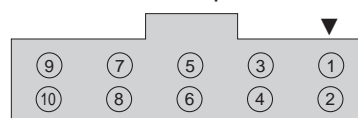
■ The manifold station numbers are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T52 and T52R.



#### T52 connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively. The manifold's max. station number differs depending on the model. Check the specifications of each model.

Connector pin No.



[Standard wiring]

Pin No.	9	7	5	3	1
Valve No.	COM	7a	5a	3a	1a
Pin No.	10	8	6	4	2
Valve No.	COM	8a	6a	4a	2a

[Double wiring]

Pin No.	9	7	5	3	1
Valve No.	COM	4a	3a	2a	1a
Pin No.	10	8	6	4	2
Valve No.	COM	(Blank)	(Blank)	(Blank)	(Blank)

● For single solenoid valve only

● For double solenoid valve only

● For mixed use (single/double mixture)

Pin No.	9	7	5	3	1
Valve No.	COM	4a	3a	2a	1a
Pin No.	10	8	6	4	2
Valve No.	COM	4b	3b	2b	1b

Pin No.	9	7	5	3	1
Valve No.	COM	5b	4b	3a	1a
Pin No.	10	8	6	4	2
Valve No.	COM	6a	5a	4a	2a

Pin No.	9	7	5	3	1
Valve No.	COM	4a	3a	2a	1a
Pin No.	10	8	6	4	2
Valve No.	COM	4b	(Blank)	(Blank)	(Blank)



### Flat cable connector: wiring method T53

#### T53 Connectors

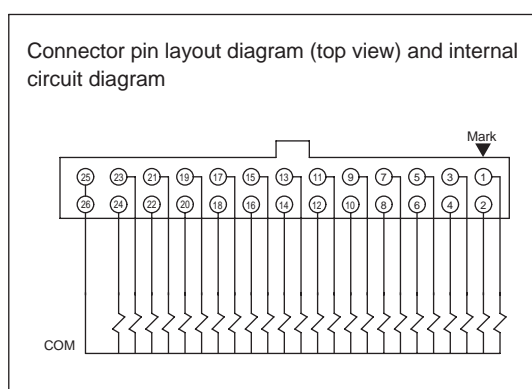
The connector used for T53 wiring method complies with MIL Standards (MIL-C-83503).

Wiring work is simplified with the pressure welded flat cable.

Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same.

Arrange using connectors and the triangular mark (▼) in the table below for reference. The triangular mark (▼) is the reference for both plug and socket.

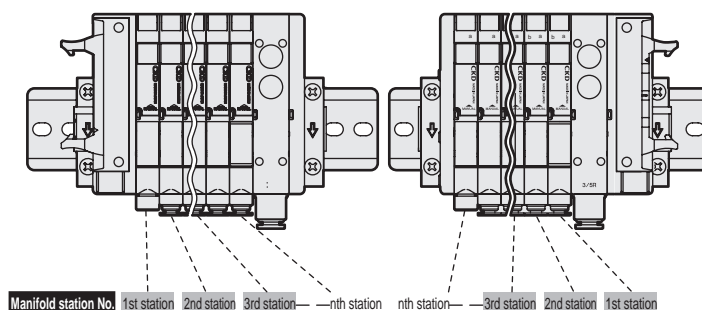
\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.



#### Precautions for connector (T53)

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side.
- (2) The working power is 12/24 VDC dedicated.
- (3) The T53 is driven with a general output unit.
- (4) Never connect this manifold to the input unit, as major failures could occur in this device and in peripherals. Be sure to connect the manifold to the output unit.
- (5) A voltage drop may occur due to simultaneous energizing or cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

■ The manifold station numbers are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T53 and T53R.

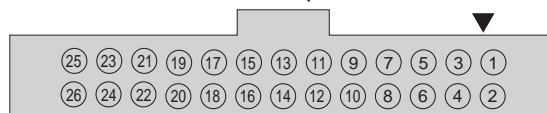


#### T53 connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively.

The manifold's max. station number differs depending on the model. Check the specifications of each model.

#### Connector pin No.



#### [Standard wiring]

● For single solenoid valve only

Pin No.	25	23	21	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	23a	21a	19a	17a	15a	13a	11a	9a	7a	5a	3a	1a
Pin No.	26	24	22	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	24a	22a	20a	18a	16a	14a	12a	10a	8a	6a	4a	2a

● For double solenoid valve only

Pin No.	25	23	21	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	12a	11a	10a	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	26	24	22	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	12b	11b	10b	9b	8b	7b	6b	5b	4b	3b	2b	1b

● For mixed use (single/double mixture)

Pin No.	25	23	21	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	16a	15a	14a	12a	10a	9a	8a	7a	5b	4b	3a	1a
Pin No.	26	24	22	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	16b	15b	14b	13a	11a	9b	8b	7b	6a	5a	4a	2a

#### [Double wiring]

Pin No.	25	23	21	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	12a	11a	10a	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	26	24	22	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)

Pin No.	25	23	21	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	12a	11a	10a	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	26	24	22	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	(Blank)	(Blank)	(Blank)	(Blank)	9b	8b	7b	(Blank)	5b	4b	(Blank)	(Blank)

# MN3E<sup>0</sup><sub>00</sub>/MN4E<sup>0</sup><sub>00</sub> Series

Technical data ① Notes on wiring: Intermediate wiring block

## Intermediate wiring block: Wiring method TM\*

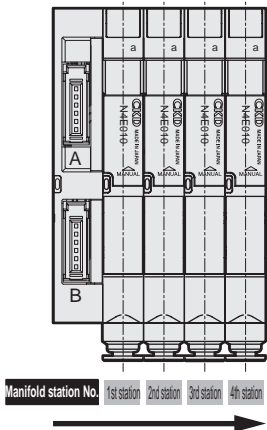
### Precautions for TM wiring method

- (1) Signal arrays of the PLC output unit must match signal arrays on the valve side.
- (2) The working power is 12/24 VDC dedicated.
- (3) The TM\* is driven with a general output unit.
- (4) Never connect this manifold to the input unit, as major failures could occur. Be sure to connect the manifold to the output unit.
- (5) A voltage drop may occur due to simultaneous energizing or cable length.  
Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.

### How to count stations

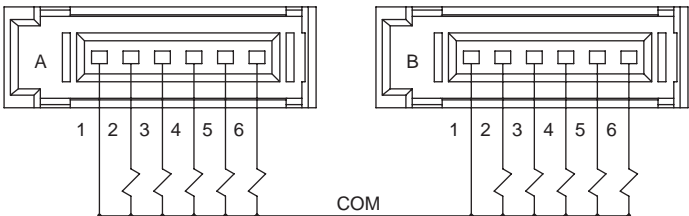
The manifold stations are counted from wiring block TM to the right with the wiring ports facing forward.



## Wiring method TM1A

### Connector for wiring method TM1A

RITS connector 6P (1473562-6) Tyco Electronics Japan G.K.  
The pin No. 1 to 6 are stamped on the connector. Up to 10 points can be input as shown below.



\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.

### TM1A connector pin array (example)

The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively.  
The manifold's max. station number differs depending on the model, with a maximum of 10 solenoid (coil) points.

#### [Standard wiring]

#### [Double wiring]

● For single solenoid valve only

	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	2a	3a	4a	5a	COM	6a	7a	8a	9a	10a

	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	(Blank)	2a	(Blank)	3a	COM	(Blank)	4a	(Blank)	5a	(Blank)

● For double solenoid valve only

	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	1b	2a	2b	3a	COM	3b	4a	4b	5a	5b

	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	(Blank)	2a	(Blank)	3a	COM	(Blank)	4a	(Blank)	5a	(Blank)

● For mixed use (single/double mixture)

	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	2a	2b	3a	4a	COM	5a	5b	6a	7a	7b

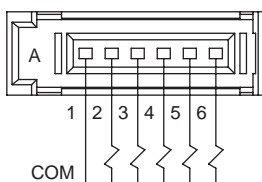
	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	(Blank)	2a	2b	3a	COM	(Blank)	4a	(Blank)	5a	5b

### Wiring method TM1C

#### Connector for wiring method TM1C

RITS connector 6P (1473562-6) Tyco Electronics Japan G.K.

The pin No. 1 to 6 are stamped on the connector. Up to 5 points can be input as shown below.



\* When using the valve block with individual power supply function (AUX), with low exoergic/energy-saving circuit, energizing is limited to the plus common.

#### TM1C connector pin array (example)

The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively.

The manifold's max. station number differs depending on the model, with a maximum of 5 solenoid (coil) points.

#### [Standard wiring]

- For single solenoid valve only

Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	2a	3a	4a	5a

#### [Double wiring]

Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	(Blank)	2a	(Blank)	(Blank)

- For double solenoid valve only

Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	1b	2a	2b	(Blank)

- Mix  
For (single/double mixture)

Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	2a	2b	3a	4a

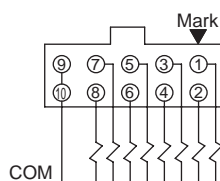
Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	(Blank)	2a	2b	3a

### Wiring method TM52

#### Connector for wiring method TM52

10-pin flat cable connector compliant with MIL standards (MIL-C-83503)

Pin numbers 1 to 10 are set on the connector starting at the ▼ reference mark as shown in the figure below. Up to 8 points can be input.



\* When using the valve block with individual power supply function (AUX), type with low exoergic/energy-saving circuit, energizing is limited to the plus common.

#### TM52 connector pin array (example)

The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively.

The manifold's max. station number differs depending on the model, with a maximum of 8 solenoid (coil) points.

#### [Standard wiring]

- For single solenoid valve only

Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	COM	

#### [Double wiring]

Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	(Blank)	3a	(Blank)	4a	(Blank)	COM	

- For double solenoid valve only

Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b	COM	

- For mixed use  
(single/double mixture)

Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	2b	3a	4a	5a	5b	6a	COM	

Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	2b	3a	(Blank)	4a	(Blank)	COM	



# MN3E<sup>00</sup>/MN4E<sup>00</sup> Series

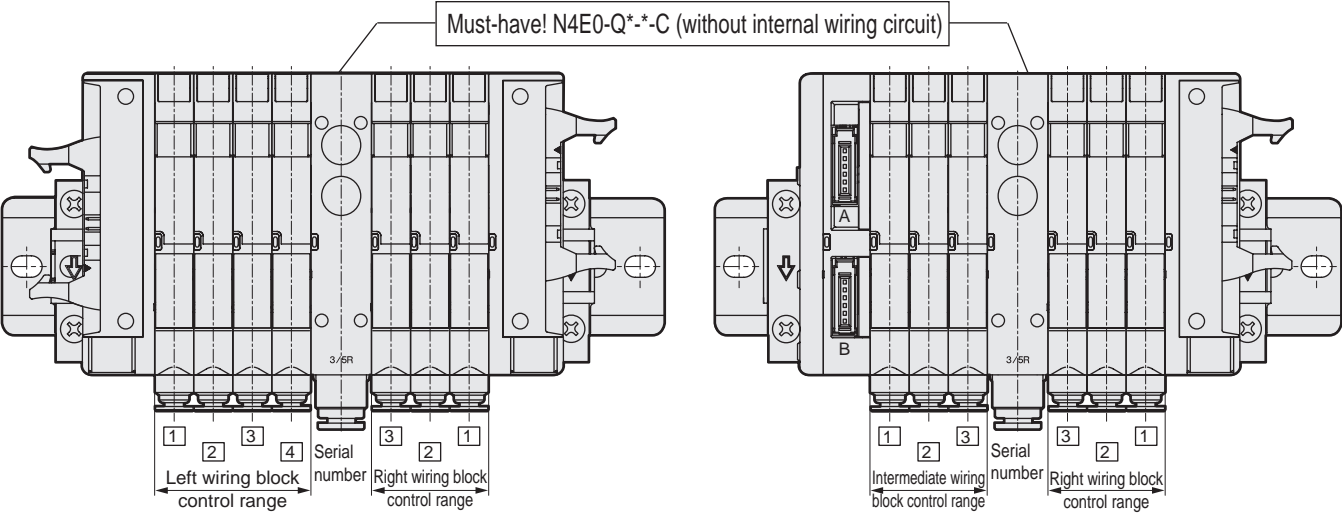
Technical data ① Notes on wiring: Intermediate wiring block, mix

## Wiring block mix

### How to count stations

The manifold station numbers are set with the piping port facing forward

- Left wiring blocks (T30, T50, T51, T52, T53)
  - Intermediate wiring block (TM1A, TM1C, TM52)
  - Right wiring blocks (T30R, T50R, T51R, T52R, T53R)
- are counted from left to right.
- are counted from right to left.



**!** When mixing the right wiring block with another wiring block, the left/right wiring block circuits may connect via the manifold and result in unexpected valve operation. Be sure to install the “N4E0-Q\*-C type without supply and exhaust block internal wiring circuit” at the end of the right wiring block control station, so that the left and right wiring in the manifold are not connected.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

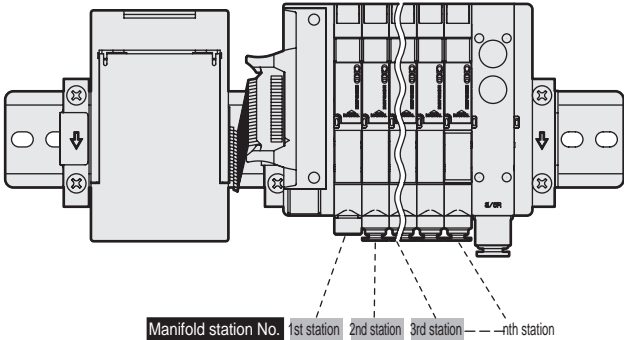
# MN3E<sup>0</sup><sub>00</sub>/MN4E<sup>0</sup><sub>00</sub> Series

Technical data ① Notes on wiring: Serial transmission

## Serial transmission: Wiring method T6G1

### T6G1 serial transmission

- The device unit's output No. differs with the manufacturer. The connector pin No. and the manifold solenoid correspond as shown below.
- Station manifolds are set in order from the left with the piping port facing forward regardless of the wiring block position.
- Internal connectors are wired in order, so there may be some blank numbers depending on the number of stations. These blank outputs cannot be used to drive other than the solenoid manifolds in use.
- The working power is 24 VDC.
- A device unit for each communication system is used. Contact CKD for usable PLC models, host unit model numbers and communication system specifications. (Refer to page 949)
- Output number differs by PLC manufacturer, but the function assignment is the same. Arrange using connectors and the triangular mark (▼) in the table below for reference. The ▼ mark is the reference for both plug and socket.



### Correspondence of output No. and connector pin No.

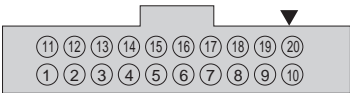
#### ● T6G1

Output No.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Connector pin No.	1	2	3	4	5	6	7	8	11	12	13	14	15	16	17	18

### T6G1 connector pin array (example)

\*1 The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively. The manifold's max. station number differs depending on the model. Check the specifications of each model.

#### Connector pin No.



#### [Standard wiring]

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	9a	10a	11a	12a	13a	14a	15a	16a		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a		+COM

- For single solenoid valve only

#### [Double wiring]

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	(Blank)	6a	(Blank)	7a	(Blank)	8a	(Blank)		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	(Blank)	3a	(Blank)	4a	(Blank)		+COM

- For double solenoid valve only

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	5b	6a	6b	7a	7b	8a	8b		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b		+COM

- For mixed use (single/double mixture)

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	7a	7b	8a	9a	10a	10b	11a	11b		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	3b	4a	4b	5a	6a		+COM

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	(Blank)	6a	(Blank)	7a	7b	8a	(Blank)		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Blank)	2a	(Blank)	3a	3b	4a	4b		+COM

## LED display

LED name	Display description
PW1	Lights when unit power is ON.
PW2	Lights when valve power is ON.
SD	Lights when transmitting data.
RD	Lights when receiving data.
L RUN	Lights when receiving normal data, and turns OFF at timeover. (Lights when receiving normal data.)
L ERR	Lights when transmission error occurs. Turns OFF when time has lapsed. Lights when the station No. setting or transmission speed setting is incorrect. Blinks when station No. or transmission speed in setting changes.

## Wiring method

(+)	(+)	(+)	(+)	(+)	(Upper row)
DA	DG	N/C	0 V	24 V	Valve
(+)	(+)	(+)	(+)	(+)	(Lower row)
DB	SLD	(FG)	0 V	24 V	Unit

Terminal function name

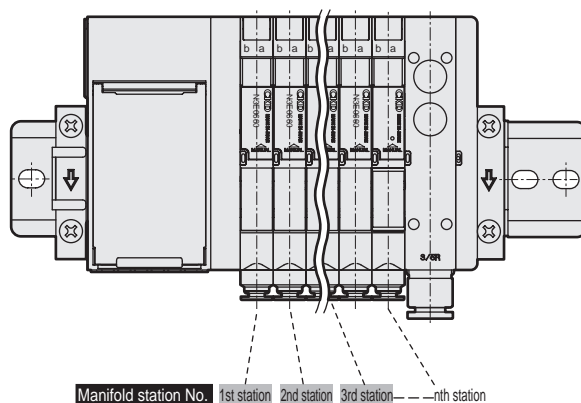
# MN3E<sup>0</sup>/<sub>00</sub>MN4E<sup>0</sup>/<sub>00</sub> Series

Technical data ① Notes on wiring: Serial transmission

## Serial transmission: Wiring method T7\*

### T7\* serial transmission

- Refer to the table below, as device unit I/O numbers differ according to PLC manufacturer.
- The device unit I/O numbers correspond to the manifold solenoids as shown below.
- Solenoid valve manifold station numbers are configured in order from the left, with the piping port in the front.
- The working power is 24 VDC.
- A device unit for each communication system is used. Contact CKD for usable PLC models, host unit model numbers and communication system specifications. (Refer to page 949)
- Securely tighten each connector (power/communication) after inserting into the product. Close the cover after completing the address settings, etc. (Recommended tightening torque 0.25 N·m for power supply, 0.3 N·m for communication)



### Correspondence of PLC addresses and serial transmission device unit I/O numbers

#### (1) For hexadecimal notation

Serial transmission device unit I/O No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
CC-Link DeviceNet S-LINK V EtherCAT	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F

#### (2) For decimal notation

Serial transmission device unit I/O No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
CC-Link DeviceNet S-LINK V EtherCAT	Y0															Y1																
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15

Y\*\* indicates output.

### Solenoid output No. corresponding to serial transmission device unit I/O No.

Device unit	Max. solenoids	Serial transmission device unit I/O No.																															
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
·T7G1 (CC-Link) ·T7D1 (DeviceNet) ·T7N1 (S-LINK V) ·T7EC1 (EtherCAT)	16 points	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16																
·T7G2 (CC-Link) ·T7D2 (DeviceNet) ·T7N2 (S-LINK V) ·T7EC2 (EtherCAT)	32 points	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32

### Valve No. layout corresponding to wiring method T7\* solenoid output No. (example)

\* The numerals of valve numbers 1a, 1b, 2a, 2b ... indicate the order of stations first station, second station... and the letters "a" and "b" indicate the "a side" solenoid and "b side" solenoid, respectively.

The manifold's max. station number differs depending on the model. Check the specifications of each model.

#### [Standard wiring]

##### ● For single solenoid valve (Max. 16 stations)

Solenoid output No.	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	9a	10a	11a	12a	13a	14a	15a	16a																

##### ● For double solenoid valve

Solenoid output No.	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b	13a	13b	14a	14b	15a	15b	16a	16b

##### ● For mixed use (single/double mixture) (Max. 16 stations)

Solenoid output No.	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	2a	3a	3b	4a	4b	5a	6a	7a	7b	8a	9a	10a	10b	11a	11b	12a	13a	14a	14b	15a	15b	16a									

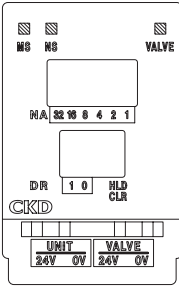
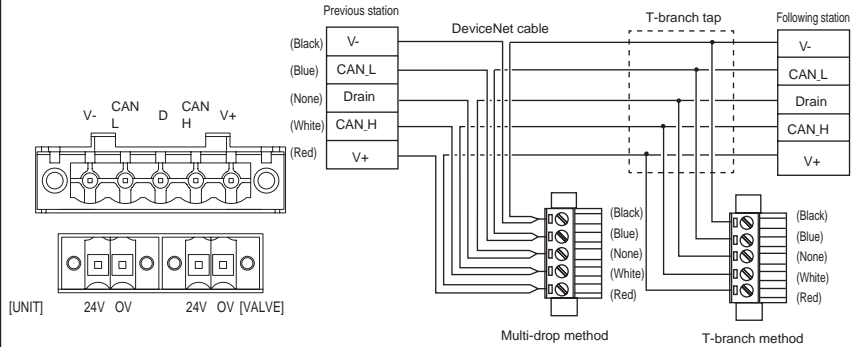
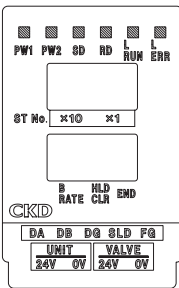
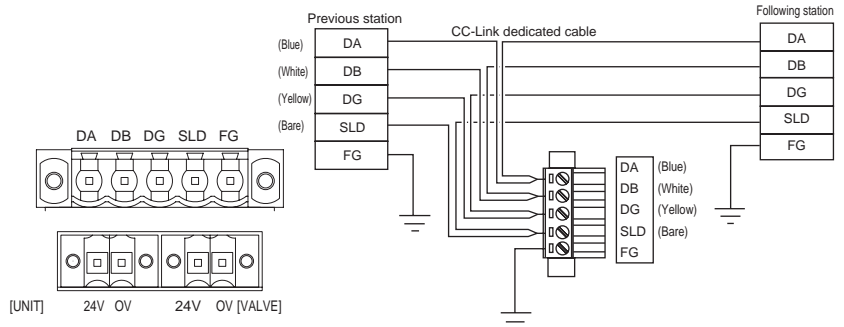
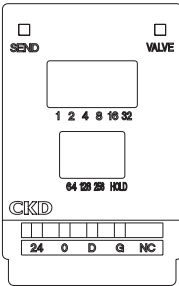
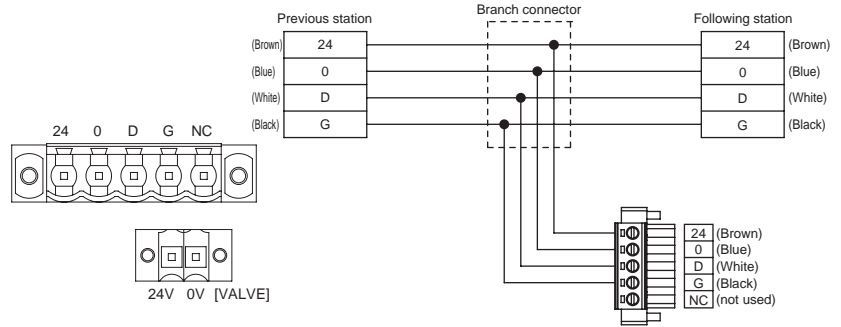
#### [Double wiring]

##### ● For single solenoid valve

Solenoid output No.	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	(Blank)	2a	(Blank)	3a	(Blank)	4a	(Blank)	5a	(Blank)	6a	(Blank)	7a	(Blank)	8a	(Blank)	9a	(Blank)	10a	(Blank)	11a	(Blank)	12a	(Blank)	13a	(Blank)	14a	(Blank)	15a	(Blank)	16a	(Blank)

##### ● For mixed use (single/double mixture)

Solenoid output No.	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	(Blank)	2a	(Blank)	3a	3b	4a	4b	5a	(Blank)	6a	(Blank)	7a	7b	8a	(Blank)	9a	(Blank)	10a	(Blank)	11a	11b	12a	12b	13a	(Blank)	14a	(Blank)	15a	15b	16a	(Blank)

	LED display	Wiring method												
T7D1 T7D2	<div></div> <table><tr><th>LED name</th><th>Display description</th></tr><tr><td>MS</td><td>Device status is indicated with green and red LEDs. Errors are indicated using combination with NS LED.</td></tr><tr><td>NS</td><td>Network status is indicated with green and red LEDs. Errors are indicated using combination with MS LED.</td></tr></table>	LED name	Display description	MS	Device status is indicated with green and red LEDs. Errors are indicated using combination with NS LED.	NS	Network status is indicated with green and red LEDs. Errors are indicated using combination with MS LED.	<div></div> <ul style="list-style-type: none"><li>• Connect the power supply to the 2-pole connector.</li><li>• Connect the DeviceNet cable to the 5-pole connector.</li><li>• The power terminal (24 V, 0 V) is insulated from the communication power terminal (V+, V-).</li><li>• Wiring section connectors are attached.</li></ul>						
LED name	Display description													
MS	Device status is indicated with green and red LEDs. Errors are indicated using combination with NS LED.													
NS	Network status is indicated with green and red LEDs. Errors are indicated using combination with MS LED.													
T7G1 T7G2	<div></div> <table><tr><th>LED name</th><th>Display description</th></tr><tr><td>PW</td><td>Lights when power is ON.</td></tr><tr><td>SD</td><td>Lights when transmitting data.</td></tr><tr><td>RD</td><td>Lights when receiving data.</td></tr><tr><td>L RUN</td><td>Lights when receiving normal data. Turns OFF at time over.</td></tr><tr><td>L ERR</td><td>Lights when transmission error occurs. Turns OFF at time over. Lights when station No. or transmission speed setting fails. Blinks when station No. or transmission speed setting changes.</td></tr></table>	LED name	Display description	PW	Lights when power is ON.	SD	Lights when transmitting data.	RD	Lights when receiving data.	L RUN	Lights when receiving normal data. Turns OFF at time over.	L ERR	Lights when transmission error occurs. Turns OFF at time over. Lights when station No. or transmission speed setting fails. Blinks when station No. or transmission speed setting changes.	<div></div> <ul style="list-style-type: none"><li>• Connect the power supply to the 2-pole connector.</li><li>• Connect the CC-Link cable to the 5-pole connector.</li><li>• Wiring section connectors are attached.</li></ul>
LED name	Display description													
PW	Lights when power is ON.													
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RD	Lights when receiving data.													
L RUN	Lights when receiving normal data. Turns OFF at time over.													
L ERR	Lights when transmission error occurs. Turns OFF at time over. Lights when station No. or transmission speed setting fails. Blinks when station No. or transmission speed setting changes.													
T7N1 T7N2	<div></div> <table><tr><th>LED name</th><th>Display description</th></tr><tr><td>SEND</td><td>Blinks when receiving a synchronization signal from the S-LINK V controller.</td></tr><tr><td>VALVE</td><td>Lights when valve power supply is energized (Can be monitored only when the unit power is ON.)</td></tr></table>	LED name	Display description	SEND	Blinks when receiving a synchronization signal from the S-LINK V controller.	VALVE	Lights when valve power supply is energized (Can be monitored only when the unit power is ON.)	<div></div> <ul style="list-style-type: none"><li>• Connect the power supply to the 2-pole connector.</li><li>• Connect the S-Link V cable to the 5-pole connector.</li><li>• Wiring section connectors are attached.</li></ul>						
LED name	Display description													
SEND	Blinks when receiving a synchronization signal from the S-LINK V controller.													
VALVE	Lights when valve power supply is energized (Can be monitored only when the unit power is ON.)													

Note: Wiring connectors

Wiring connectors are attached with the product. However, connectors fitting the device unit side connectors listed below can be used.

	Device unit side connector model No.		Wiring side connector recommended model No. (attachment)	
	5-pole connector (communication)	2-pole connector (power supply)	5-pole connector (communication)	2-pole connector (power supply)
T7D (DeviceNet)	MSTB2.5/5-GF-5.08AU Phoenix Contact Corp.	SL3.5/2/90F Weidmüller Corp.	MSTB2.5/5-STF-5.08AUM Phoenix Contact Corp.	BL3.5/2F Weidmüller Corp.
T7G (CC-Link)	SL5.08HC/05/90F 3.2SN OR BX Weidmüller Corp.		BLZP5.08HC/05/180F SN OR BX Weidmüller Corp.	
T7N (S-LINK V)				



## Technical data ❶ Notes on wiring: Serial transmission

948

PLC compatibility table

Model No.	Manufacturer name (recommended organization)	Communication system name	Host unit model No.
T6G1	CC-Link Partner Association (CLPA)	CC-Link	Connected to each manufacturer's CC-Link compatible master
	Mitsubishi Electric Corporation		QJ61BT11N
T7D*	ODVA	DeviceNet	Connected to each manufacturer's DeviceNet compatible master
	OMRON Corporation		CJ1W-DRM21
T7G*	CC-Link Partner Association (CLPA)	CC-Link	Connected to each manufacturer's CC-Link compatible master
	Mitsubishi Electric Corporation		QJ61BT11N
T7N*	Panasonic Industrial Devices SUNX Co., Ltd.	S-LINK V	Connected to S-LINK V controller or various S-LINK V control boards
T7EC*	EtherCAT Technology Group	EtherCAT	Connected to EtherCAT-compatible master
	OMRON Corporation		NJ101 NJ301 NJ501 CJ1W-NC□82

CAUTION: For details on master units and models not listed above, contact each PLC manufacturer.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
<b>MN3E</b>
<b>MN4E</b>
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

### How to assemble / disassemble block manifold

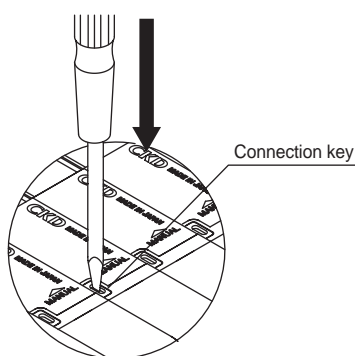
**CAUTION:** Be sure to turn power OFF and release pressure before adding or removing the manifolds.

The procedures for changing the valve blocks, replacing the valve blocks due to service life, etc., adding the supply and exhaust blocks and changing/increasing the specifications using various pressure supply devices are explained below. Refer to the individual Instruction Manuals for details.

Turn OFF power and stop the air pressure source before starting the disassembly work. When the manifold has been disassembled and assembled, if the connection key is not correctly reset between the blocks or if the wiring and end block screws are insufficiently tightened, air could leak or malfunctions could result. Confirm that the connection keys are correctly reset between the blocks and that the blocks are securely fixed onto the DIN rail before supplying air. CKD recommends using identification marking when disconnecting the A and B port piping.

#### Replacing valve blocks and dummy blocks

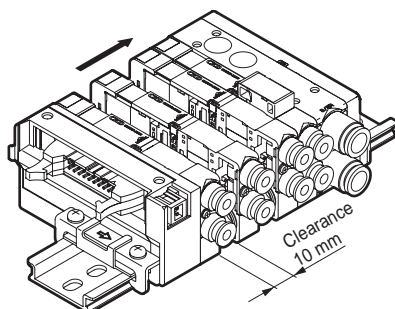
- Loosen the DIN rail set screw on the end block.
- Using a thin tool, press down on the key connecting the valve block to be replaced and the blocks on both sides.



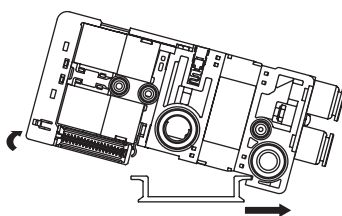
- Slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.

Slide the valve block horizontally on the DIN rail.

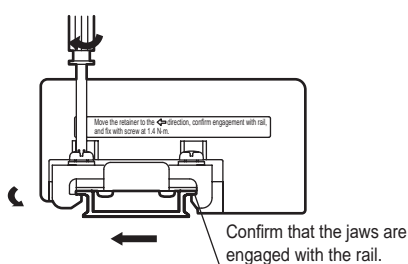
⚠ Sliding it at an angle may damage the wiring connector.



- Lift up the block's wiring cover side, and pull toward the piping port side. The block will come off the DIN rail.



- Replace with a new block.
- Slide all of the blocks to the wiring block side on the DIN rail and assemble them in parallel so that there are no spaces between the blocks.
- Confirm that the connection key has returned to the groove on the block.
- Confirm that the end block's retainer claw is caught on both sides of the DIN rail, and then tighten the set screw with a screwdriver. Appropriate tightening torque is 1.4 N·m.



#### Increasing the valve blocks

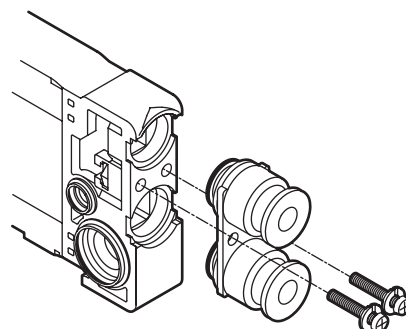
- The blocks are added with the same procedures as replacing the valve blocks.
- If there are plans to add more blocks, designate the DIN rail length in the specifications sheet (page 957).

#### Mounting the supply and exhaust block

- The blocks are added with the same procedures as replacing the valve blocks.

#### Replacing the cartridge fitting

- Remove the set screw.
- Pull out the stopper plate and fitting together.
- Align the groove of the replacement fitting with the stopper plate and assemble them temporarily.
- Assemble the stopper plate with the fitting, and tighten the mounting screw. Pull on the fitting to confirm that it is properly installed.



Tightening torque  
Valve block: 0.22±0.02 N·m  
Supply and exhaust block: 0.42±0.02 N·m

#### Checking after disassembly and assembly

Check the piping and confirm that it is correct. In particular, be careful of incorrect connections of the A, B-ports for piping.

### How to disassemble/assemble regulator and regulator block



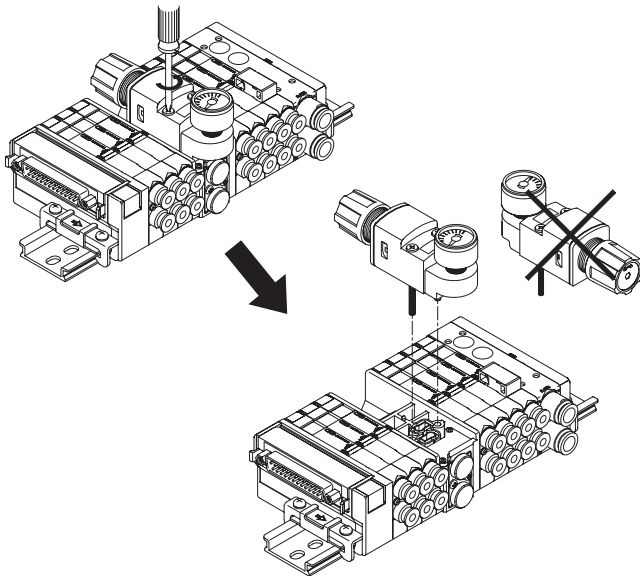
**Caution:** Be sure to turn power OFF and release the pressure before performing the following work.

The procedures for adding, disassembling and assembling regulator bodies and regulator blocks, due to specifications change or service life, are explained below. Contact CKD for details.

Confirm that the connection key between blocks and the stopper plate for the regulator block are securely assembled before use.

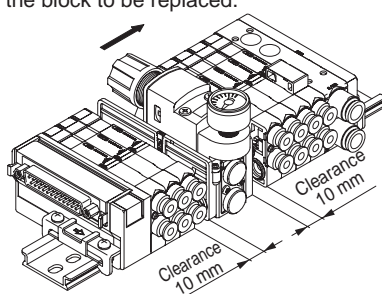
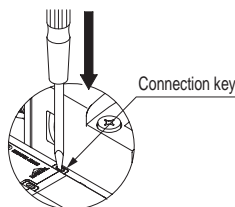
#### Regulator replacement

- Loosen the regulator body mounting screw, and lift the regulator upward and off.
- After replacing the regulator, confirm that the gasket has not deviated from the block grooves, and assemble in the original state. The appropriate tightening torque for the regulator body mounting screw is 0.5 to 0.8 N·m.

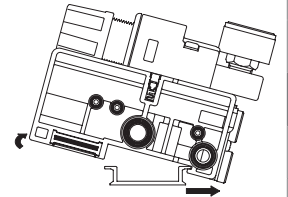


#### Regulator block replacement

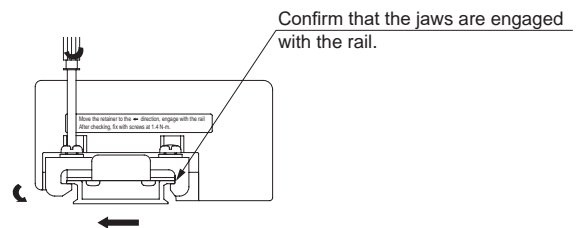
- Loosen the DIN rail set screw on the end block.
- Using a pointed tool, press down on the key connecting the regulator block** to be replaced and the blocks on both sides.
- While holding down the connection key**, slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.



- Lift up the side opposite the block piping port, and pull toward the piping port side to remove the block from the DIN rail.

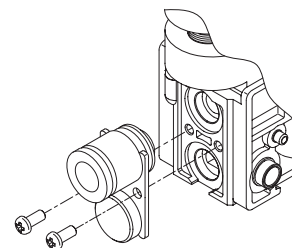


- Replace the block, and mount the blocks onto the DIN rail in the reverse order that they were removed.
- Slide all of the blocks to the wiring block side so that there are no spaces between the blocks.
- Confirm that the connection key has returned to the groove on the block.
- Slide the end block retainer in the port direction, and catch the claw onto the DIN rail. Confirm that the end block's retainer claw is engaged, and then tighten the set screw. The appropriate tightening torque is 1.4 to 1.5 N·m.



#### Replacing the cartridge fitting

- Remove the set screw.
- Pull out the stopper plate with the fitting.
- Align the groove of the replacement fitting with the stopper plate and assemble them temporarily.
- Assemble the stopper plate with the fitting, and tighten the mounting screw. The appropriate tightening torque is 0.4 to 0.45 N·m.
- After replacement, pull the fitting to check that it is installed securely.



4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
<b>MN3E MN4E</b>
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# MN3E<sup>0</sup>/<sub>00</sub>/MN4E<sup>0</sup>/<sub>00</sub> Series

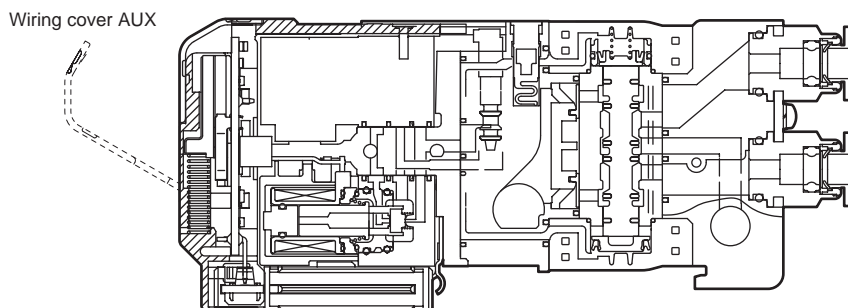
Technical data ③ Type with built-in individual power supply function (AUX)

## Built-in individual power supply function (AUX)

The type with individual power supply function (AUX) enables operation with a separate power supply of any arbitrary valve in manifolds which have already been connected with reduced wiring. This is effective when adjusting equipment, etc.

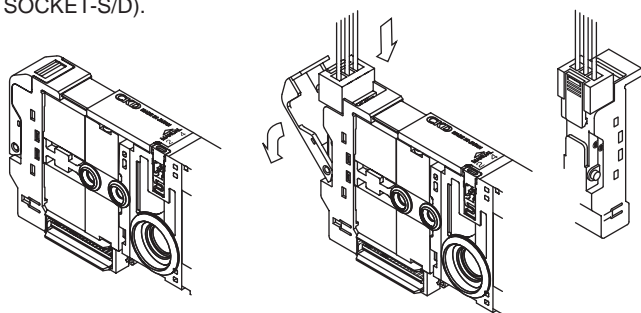
\* MN3E0/MN4E0 only

### ① Valve block with built-in individual power supply function (AUX) Internal structure diagram

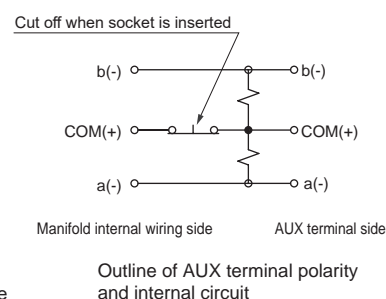
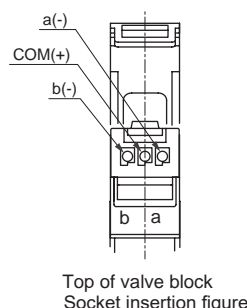


### ② Inputting individual power

Open the wiring cover and connect the power input socket (N4E0-SOCKET-S/D).



### ③ AUX terminal structure and internal circuit diagram



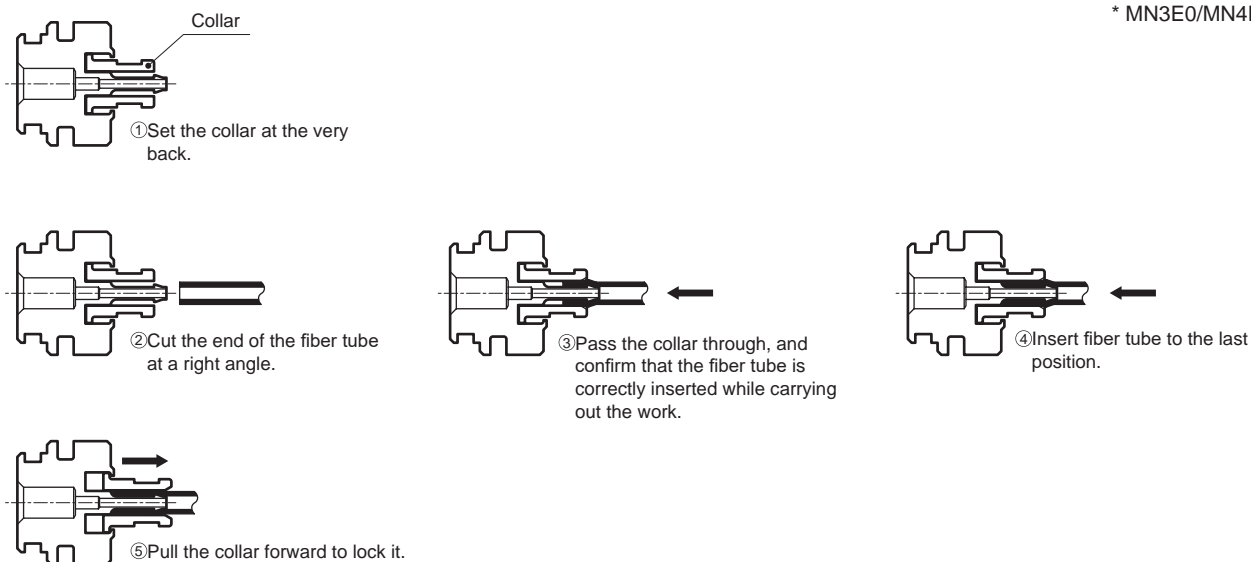
When the power input socket is connected, the wiring in the valve is temporarily separated from the reduced wiring in the manifold, and power can be supplied from an external source.

## ⚠ Safety precautions

- \*1: The polarity of the reduced wiring side and individual power supply side is **limited to a plus common**. Normal operation will be impossible if the polarity is incorrect.
- \*2: **Use separate power for the reduced wiring side and the individual power input side.** If the same power is used, the reduced wiring side's wiring will not be cut off, resulting in incorrect operation.

## How to operate barbed fitting for ø1.8 fiber tube

\* MN3E0/MN4E0 only



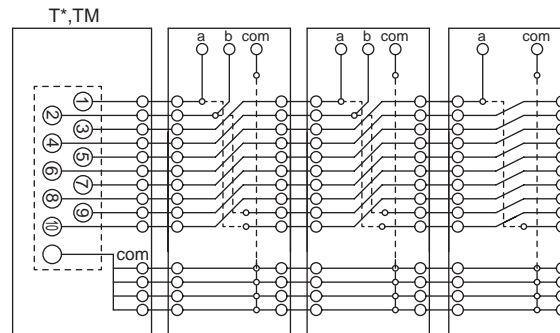
### Wiring structure between wiring block and valve block

A part called a dedicated wiring connector is built into the valve block and supply and exhaust block, etc. This structure enables the wiring to be completed simultaneously with the disassembly and assembly of the block manifold. Special wiring work is not required during disassembly and assembly. A wiring structure pattern diagram is shown below.

There is regularity to the wiring block connector pin numbers and arranged valves. Refer to the section on the wiring method, and connect the wires between the valves and control equipment. Take special care when increasing or decreasing the number of valve blocks.

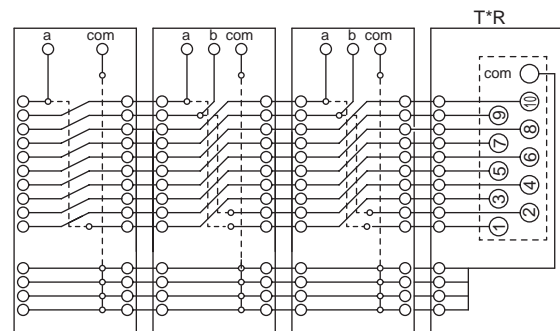
#### For T\* (left wiring block) or TM\* (intermediate wiring block) only

The blocks are arranged in the order of 1a, 1b, 2a and so forth from the valve block to the right of the wiring block with the port facing forward.



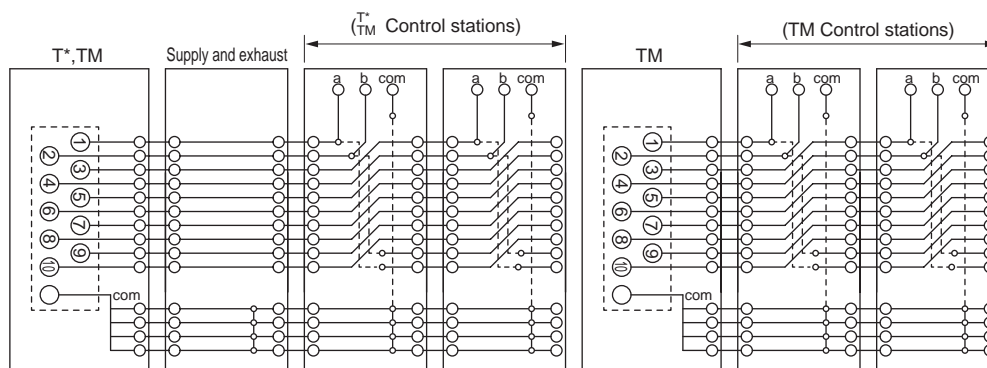
#### For only T\*R (right wiring block)

The blocks are arranged in the order of 1a, 1b, 2a and so forth from the valve block to the left of the wiring block with the port facing forward.



#### For {T\* (left wiring block) or TM\* (intermediate wiring block)} + TM\* (intermediate wiring block) for TX (mix)

The blocks are arranged in the order of 1a, 1b, 2a and so forth from the valve block on the right of the wiring block with the port facing forward. Wiring is cut off on the left of the intermediate wiring block.



4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
<b>MN3E</b>
<b>MN4E</b>
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

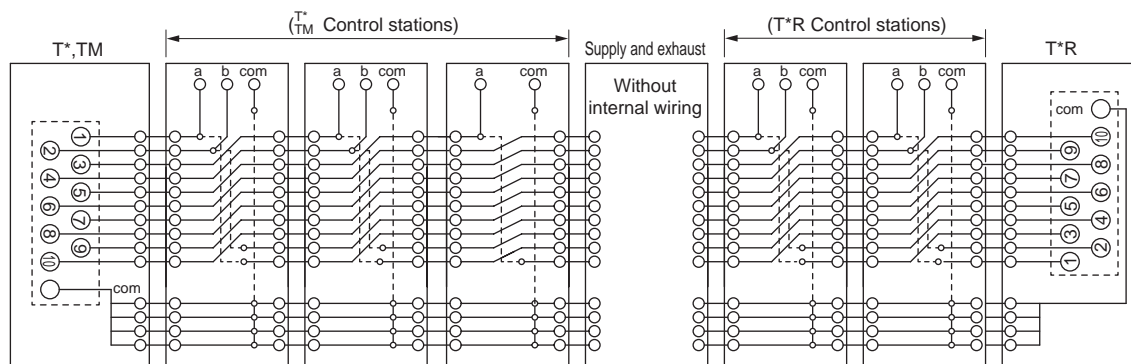


# MN3E<sup>0</sup>/<sub>00</sub>MN4E<sup>0</sup>/<sub>00</sub> Series

## Technical data ④ Wiring structure

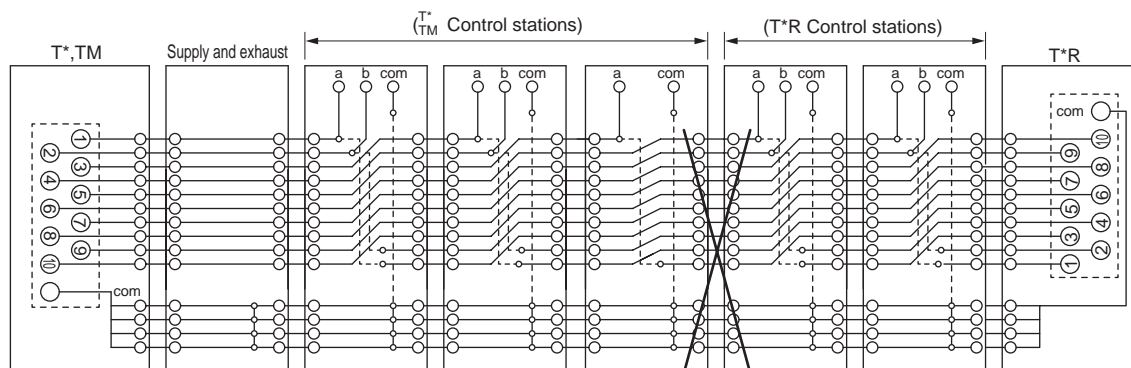
For {T\* (left wiring block) or TM\* (intermediate wiring block)} + T\*R (right wiring block) for TX (mix)

The 1a, 1b, 2a, etc., layout starting from the left wiring block and the 1a, 1b, 2a, etc., layout starting from right wiring block coexist.  
The circuit is cut off at the center with the supply and exhaust block N4E0-Q-\*C (type with no internal wiring circuit) to prevent mutual wiring interference.



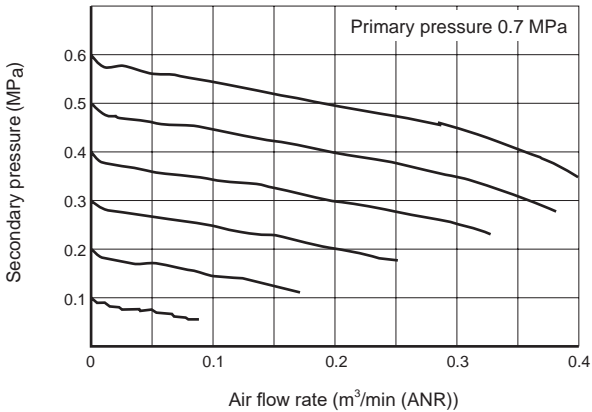
**Example of incorrect layout** Left/right wires interfere at center

The left/right wiring block circuits may connect via the manifold and result in unexpected valve operation.

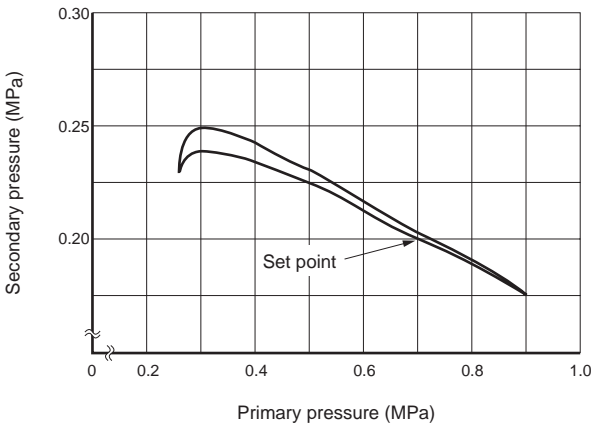


Regulator block characteristics

Flow characteristics



Pressure characteristics



4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending