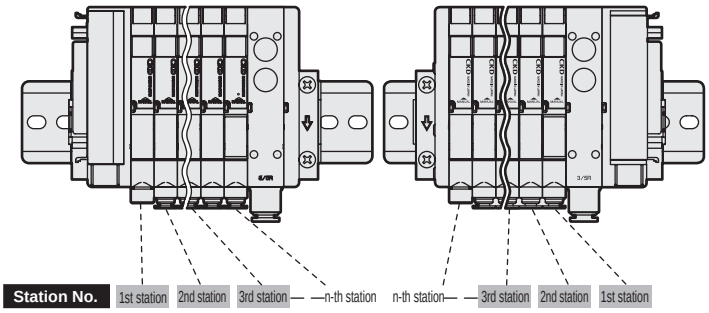
D-sub connector: Wiring method T30(N)

T30(N) connector

Connectors used for T30(N) wiring, called a D sub-connector, is used widely for FA and OA devices. The 25P is an RS232C Standards designated connector especially used for personal computer communication.

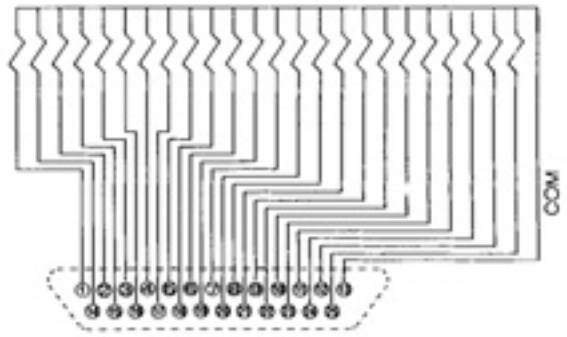
■ The manifold station No. are counted as station 1, station 2, station 3, and so forth starting from the wiring block side. The counting direction is opposite for the T30(N) and T30(N)R.



Precautions for connector T30(N)

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

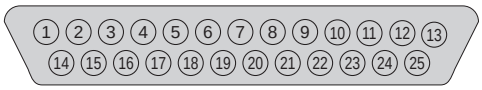
* When using the valve block with individual power supply function (AUX), with low exoergic or energy saving circuit, energizing is limited to the plus common.



T30(N) connector pin array (example)

*1 The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[Standard wiring]

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.	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	

● For double solenoid valve

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 solenoid 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.	(Void)	(Void)	3b	4b	(Void)	(Void)	7b	(Void)	(Void)	(Void)	11b	12b	

How to order cable with D sub-connector

N4T - CABLE - D 0 0 - 1 - P70

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

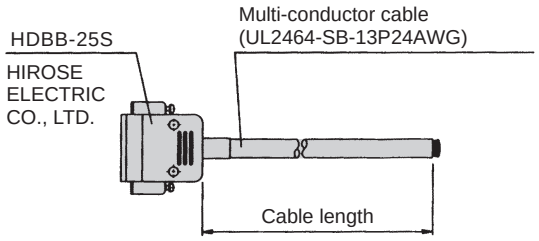
Ⓐ User side connection

Ⓑ Cable length

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

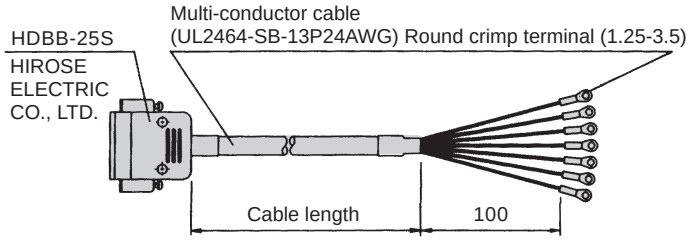
D sub-connector terminal No. and conductor

● N4T-CABLE-D00-Ⓑ



D sub-connector terminal No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Conductor	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 point	2 point	2 point
	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**	
Conductor	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Mark type	2 point	2 point	2 point	2 point	2 point	2 point	2 point	3 point	3 point	3 point	3 point	3 point	
	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
Conductor	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 point	2 point	2 point
	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**	
Conductor	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Mark type	2 point	2 point	2 point	2 point	2 point	2 point	2 point	3 point	3 point	3 point	3 point	3 point	
	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	

* Available for up to 24 points. Cut the wires for surplus points before use.

Flat cable connector: Wiring method T50

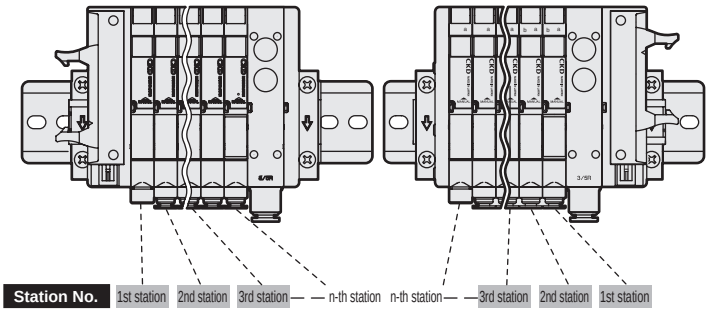
T50 connector

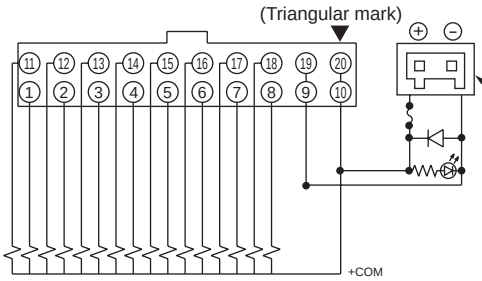
The connector used for T50 wiring method complies with MIL Standards (MIL-C-83503).
Wiring work is simplified with the pressure welded flat cable.
Pin No. is assigned differently based on the PLC manufacturer, but the function assignment is the same.
Layout using connectors and the triangular mark (▼) shown below as a reference. The ▼ mark is the reference for both the plug and socket.

Precautions for connector T50

(1) Signal arrays of the PLC output unit must match signal arrays of 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 + side common, and use the NPN transistor output open collector for the drive circuit.
(4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

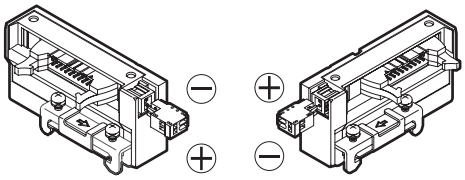
■ The manifold station No. are counted as station 1, station 2, station 3, and so forth starting from the wiring block side. The counting direction is opposite for the T50 and T50R.



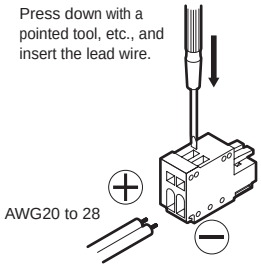


Feed connector
WAG0 connector plug
733-102
(supplied with the product)

Replacement fuse
LM16 manufactured by Daito Communication Apparatus Co., Ltd. (CKD part No. 4T9-LM16)



Polarity of feed connector

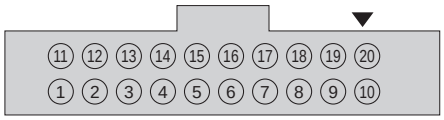


Cable connection

T50 connector pin array (example)

*1 The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[Standard wiring]

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

[Double wiring]

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

● For double solenoid valve

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 solenoid 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

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

Flat cable connector: Wiring method T51

T51 connector

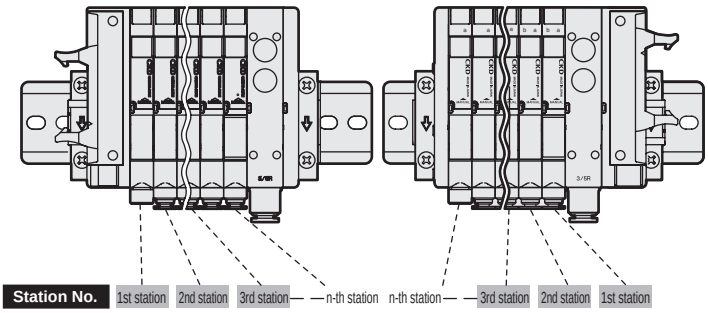
The connector used for T51 wiring method complies with MIL Standards (MIL-C-83503).
Wiring work is simplified with the pressure welded flat cable. Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The (▼) mark is the reference for both the plug and socket.

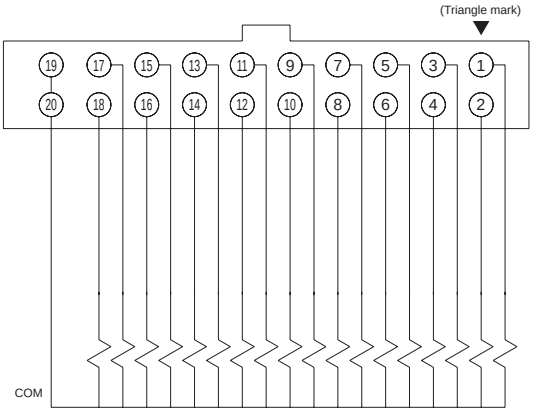
Precautions for connector (T51)

(1) Signal arrays of the PLC output unit must match signal arrays of the valve side.
(2) The working power is 12/24 VDC dedicated.
(3) The T51 is driven with a general output unit.
(4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the 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), with low exoergic or energy saving circuit, energizing is limited to the plus common.

■ The manifold station No. are counted as station 1, station 2, station 3, and so forth starting from the wiring block side. The counting direction is opposite for the T51 and T51R.

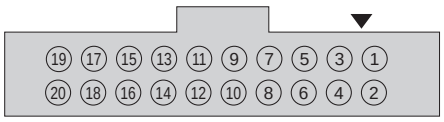




T51 connector pin array (example)

*1 The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[Standard wiring]

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

[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	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)

● For double solenoid valve

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 solenoid 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

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	(Void)	(Void)	7b	(Void)	(Void)	4b	3b	(Void)	(Void)

Flat cable connector: Wiring method T52

T52 connector

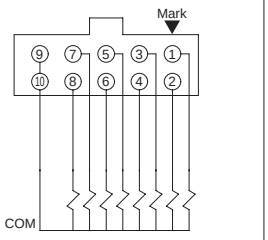
The connector used for T52 wiring method complies with MIL Standards (MIL-C-83503).
Wiring work is simplified with the pressure welded flat cable. Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The (▼) mark is the reference for both the plug and socket.

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

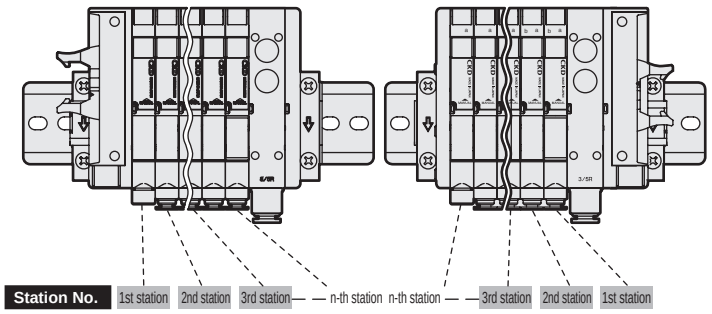
Precautions for connector (T52)

(1) Signal arrays of the PLC output unit must match signal arrays of the valve side.
(2) The working power is 12/24 VDC dedicated.
(3) The T52 is driven with a general output unit.
(4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

Connector pin array diagram
(TOP VIEW)
and internal circuit diagram



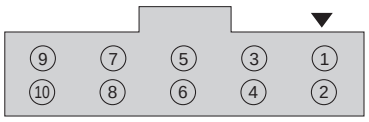
■ The manifold station No. are counted as station 1, station 2, station 3, and so forth starting from the wiring block side. The counting direction is opposite for the T52 and T52R.



T52 connector pin array (example)

*1 The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[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	(Void)	(Void)	(Void)	(Void)

● For double solenoid valve

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

● For mixed use (single/double solenoid mixture)

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	(Void)	(Void)	(Void)

Flat cable connector: Wiring method T53

T53 connector

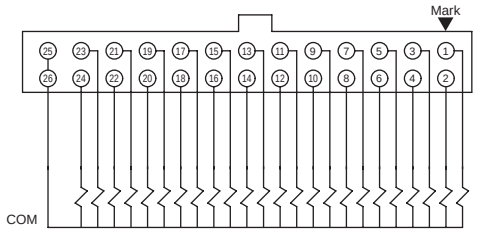
The connector used for T53 wiring method complies with MIL Standards (MIL-C-83503).
Wiring work is simplified with the pressure welded flat cable. Pin numbers are assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The (▼) mark is the reference for both the plug and socket.

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

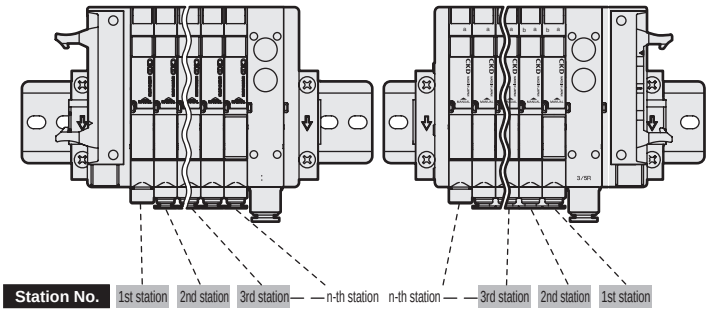
Precautions for connector (T53)

(1) Signal arrays of the PLC output unit must match signal arrays of the valve side.
(2) The working power is 12/24 VDC dedicated.
(3) The T53 is driven with a general output unit.
(4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

Connector pin layout diagram (TOP VIEW) and internal circuit diagram



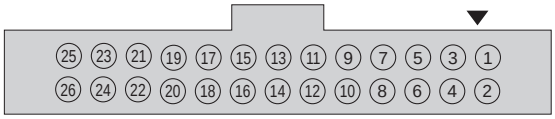
■ The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction is opposite for the T53 and T53R.



T53 connector pin array (example)

*1 The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[Standard wiring]

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

[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	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)	(Void)

● For double solenoid valve

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	8b	8b	7b	6b	5b	4b	3b	2b	1b

● For mixed use (single/double solenoid 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

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	(Void)	(Void)	(Void)	9b	8b	7b	(Void)	5b	4b	(Void)	(Void)	(Void)

Intermediate wiring block: Wiring method TM*

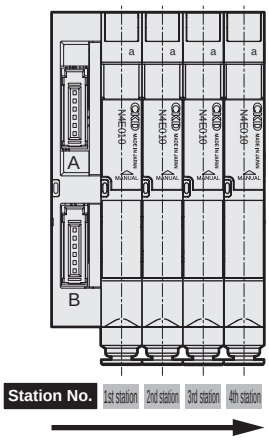
Precautions for TM wiring method

(1) Signal arrays of the PLC output unit must match signal arrays of the valve side.
(2) The working power is 12/24 VDC dedicated.
(3) The TM* is driven with a general output unit.
(4) Do not connect this manifold to the input unit as major faults could occur. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the 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), with low exoergic or energy saving circuit, energizing is limited to the plus common.

How to count stations

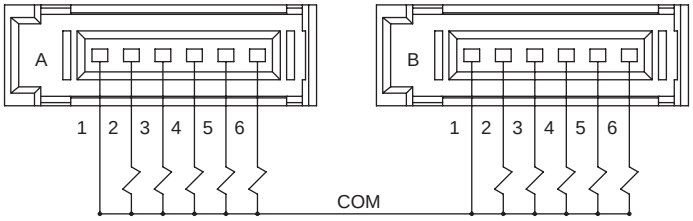
The manifold stations are counted from electrical block TM to the right with the wiring ports facing forward.



Wiring method TM1A

Connector for wiring method TM1A

RITS connector 6P (1473562-6) Tyco Electronics Japan G.K. made
The pin No. 1 to 6 are stamped on the connector. Input is allowed up to 10 points as shown below.



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

TM1A connector pin array (example)

The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The max. station No. of manifold differs based on the model, but there are a max. of 10 solenoid (coil) points.

[Standard wiring]

● For single solenoid valve

	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

● For double solenoid valve

	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

● For mixed use (single/double solenoid 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

[Double wiring]

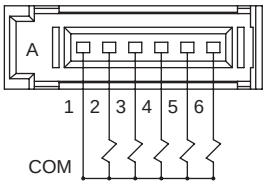
	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	(Void)	2a	(Void)	3a	COM	(Void)	4a	(Void)	5a	(Void)

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

Wiring method TM1C

Connector for wiring method TM1C

RITS connector 6P (1473562-6) manufactured by Tyco Electronics Japan G.K.
On the connector No. 1 to 6 is stamped on it. Input is allowed up to 5 points as shown below.



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

TM1C connector pin array (example)

The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum station number of manifold differs based on the model, but the maximum is 5 solenoid (coil) points.

● For single solenoid valve

[Standard wiring]

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	(Void)	2a	(Void)	(Void)

● For double solenoid valve

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

● For mixed use (single/double solenoid mixture)

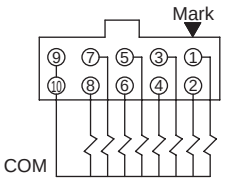
Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	2a	2b	3a	4a

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

Wiring method TM52

Connector for wiring method TM52

MIL standards (MIL-C-83503) compatible 10 pin flat cable connector
Pin numbers 1 to 10 are set on the connector starting at the ▼ marked as shown below. Input is allowed up to 8 points.



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

TM52 connector pin array (example)

The numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum station number of manifold differs based on the model, but the maximum is 8 solenoid (coil) points.

● For single solenoid valve

[Standard wiring]

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	(Void)	2a	(Void)	3a	(Void)	4a	(Void)	COM	

● For double solenoid valve

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 solenoid 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	(Void)	2a	2b	3a	(Void)	4a	(Void)	COM	

Wiring block mix

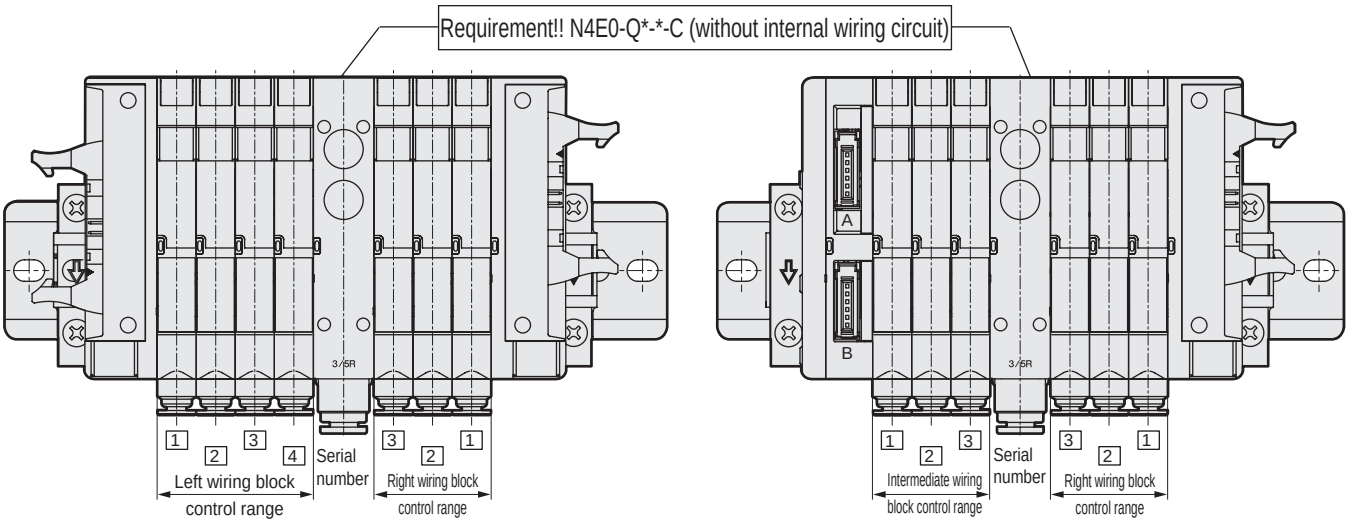
How to count stations

With the piping port facing toward you, the manifold station numbers are counted

- Left wiring blocks (T30, T50, T51, T52, T53)
- Intermediate electrical block (TM1A, TM1C, TM52)

} from left to right.

- Right wiring blocks (T30R, T50R, T51R, T52R, T53R) from right to left.



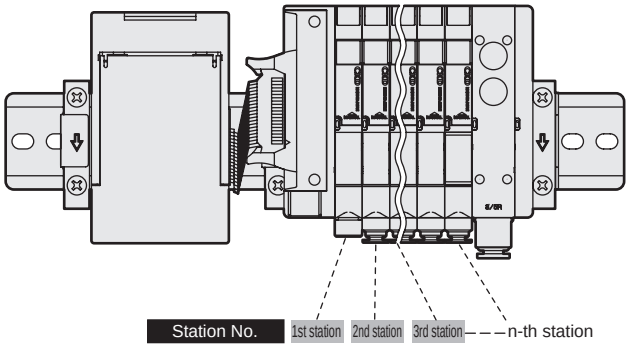
When mixing the right wiring block with another wiring block, the left/right wiring block circuits may connect via the manifold and result in unexpected valve operation. Be sure to install the “N4E0-Q*-*-C type without supply and exhaust block internal wiring circuit” at the end of the right wiring block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

MEMO

Serial transmission: Wiring method T6G1

T6G1 serial transmission

- The slave unit's output number differs with the manufacturer. The connector pin number 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 electrical block position.
- Internal connectors are wired in order, so there may be some void numbers depending on the number of stations. These void outputs cannot be used for drive other than the solenoid manifold in use.
- The power is limited to 24 VDC.
- A slave unit for each communication system is used. Contact CKD for the specifications on the usable PLC models, host unit models and communication systems. (Refer to page 404)
- Output No. is assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The ▼ mark is the reference for both the plug and socket.



Correspondence of output No. and connector pin No.

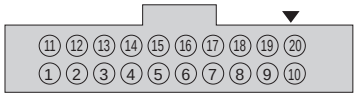
● T6G1

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 numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. The maximum number of stations varies depending on the model No. Check the individual specifications.

Connector pin No.



● For single solenoid valve

[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

[Double wiring]

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

● For double solenoid valve

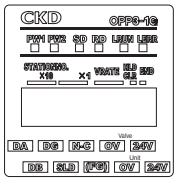
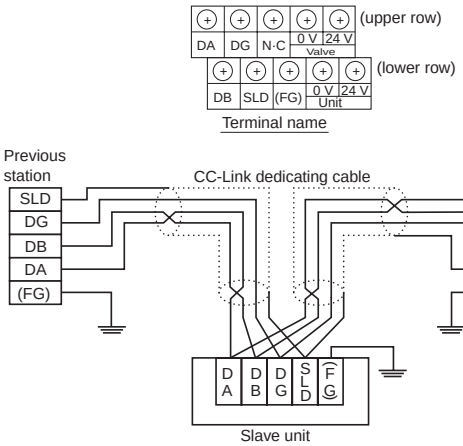
Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	5b	6a	6b	7a	7b	8a	8b		+COM
Pin No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b		+COM

● For mixed use (single/double solenoid 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	(Void)	6a	(Void)	7a	7b	8a	(Void)		+COM
Pin No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Valve No.	1a	(Void)	2a	(Void)	3a	3b	4a	4b		+COM

Technical data ❶ Notes when wiring: D sub-connector type

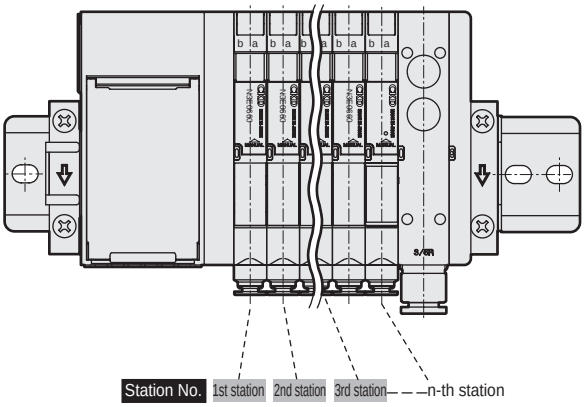
	LED display	Wiring method
T6G1		

LED name	Display description
PW1	Lights when unit power is ON.
PW2	Lights when valve power is ON.
SD	Turns ON when sending data.
RD	Turns ON when receiving data.
L RUN	This stays ON when normal data is received and turns off when the time limit comes. (This stays ON when normal data is received.)
L ERR	This stays ON when a transmission error occurs. This turns off when the time limit comes. This stays ON when the station No. setting or transmission speed setting is incorrect. This flashes when the station No. setting or transmission speed setting changes midway.

Serial transmission: Wiring method T7*

T7* serial transmission

- The slave unit I/O numbers differ based on each PLC maker, so see the following tables.
- The slave unit I/O numbers correspond to the manifold solenoids as shown below.
- The solenoid valve manifold station numbers are set in order from left with the piping port facing forward.
- The power is limited to 24 VDC.
- A slave unit for each communication system is used. Contact CKD for the specifications on the usable PLC model nos., host unit model nos. and communication systems. (Refer to page 404)
- 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 address and serial transmission slave unit I/O No.

(1) Hexadecimal notation

Serial transmission slave 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 EtherNet/IP	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 slave 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 EtherNet/IP	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 slave unit I/O No.

Slave unit	Max. solenoids	Serial transmission slave 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) •T7EN1 (EtherNet/IP)	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) •T7EN2 (EtherNet/IP)	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 numbers of valve No. (1a, 1b, 2a, 2b ...) indicate the order of stations (first station, second station, ...) and the alphabets a and b indicate the a side solenoid valve and b side solenoid valve respectively. Max. station No. differs depending on the model. Check the individual specifications.

[Standard wiring]

● For single solenoid valve (Max. 16 stations)

Solenoid valve output No.	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.	1a	2a	3a	4a	5a	6a	7a	8a	9a	10a	11a	12a	13a	14a	15a	16a																

● For double solenoid valve

Solenoid valve output No.	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.	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 valve output No.	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.	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

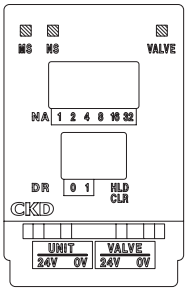
Solenoid valve output No.	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	(Void)	2a	(Void)	3a	(Void)	4a	(Void)	5a	(Void)	6a	(Void)	7a	(Void)	8a	(Void)	9a	(Void)	10a	(Void)	11a	(Void)	12a	(Void)	13a	(Void)	14a	(Void)	15a	(Void)	16a	(Void)

● For mixed use (single/double solenoid mixture)

Solenoid valve output No.	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.	1a	(Void)	2a	(Void)	3a	3b	4a	4b	5a	(Void)	6a	(Void)	7a	7b	8a	(Void)	9a	(Void)	10a	(Void)	11a	11b	12a	12b	13a	(Void)	14a	(Void)	15a	15b	16a	(Void)

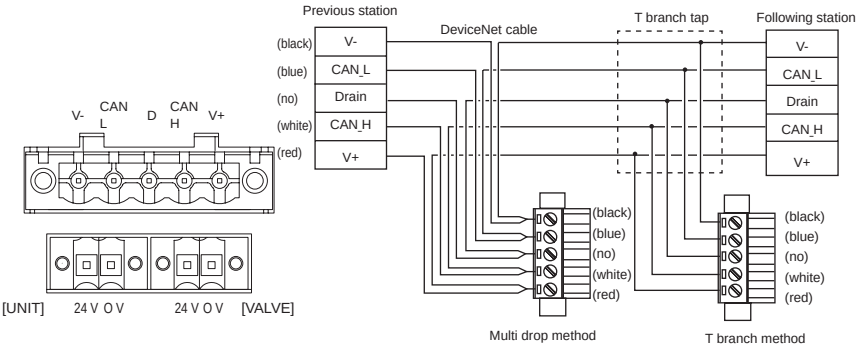
T7D1 T7D2

LED display



LED name	Display description
MS	Slave status is indicated with green and red LEDs. Errors are indicated using combinations with "NS LED".
NS	Network status is indicated with green and red LEDs. Errors are indicated using combinations with "MS LED".

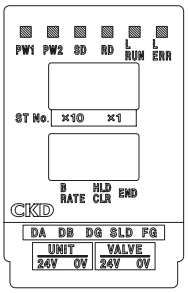
Wiring method



- Power is connected to the 2-pole connector.
- The DeviceNet cable is connected to the 5-pole connector.
- The power terminal (24 V, 0 V) is insulated from the communication power terminal (V+, V-).
- The wiring section connectors are enclosed.

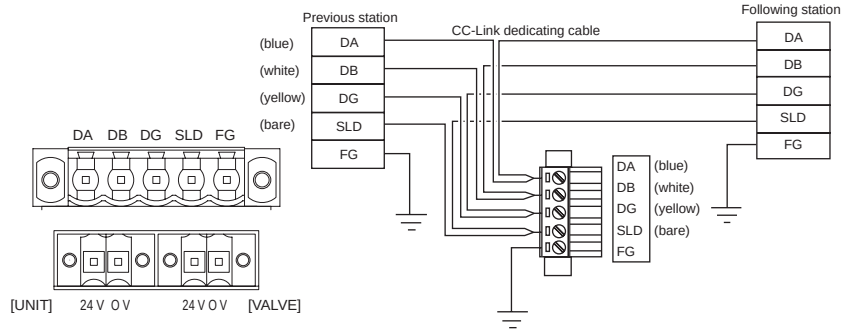
T7G1 T7G2

LED display



LED name	Display description
PW	Lights when power is ON.
SD	Lights when transmitting data.
RD	Lights when receiving data.
L RUN	This stays ON when normal data is received. This turns OFF when time is over.
L ERR	This stays ON when a transmission error occurs. Turns OFF when time over occurs. Lights when station No. or transmission speed setting fails. Blinks when station No. or transmission speed in setting changes.

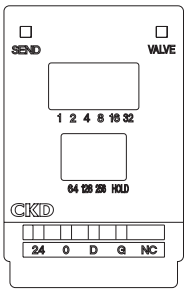
Wiring method



- Power is connected to the 2-pole connector.
- CC-Link cable is connected to the 5-pole connector.
- The wiring section connectors are enclosed.

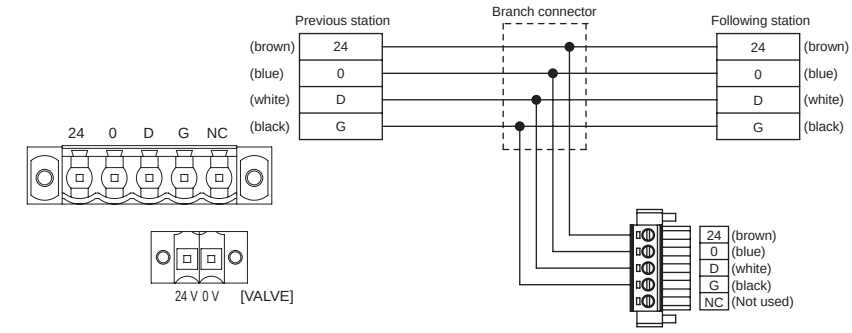
T7N1 T7N2

LED display



LED name	Display description
SEND	This indicates a synchronization signal from the S-LINK V controller with flashing.
VALVE	This stays ON when the valve power supply is energized (This works only when the unit power is ON).

Wiring method



- Power is connected to the 2-pole connector.
- S-LINK V cable is connected to the 5-pole connector.
- The wiring section connectors are enclosed.

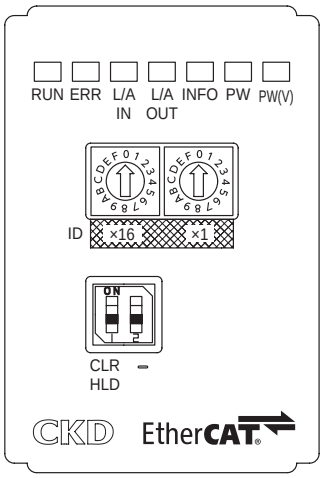
Note: Wiring connection connectors

The wiring connection connectors are enclosed with the product. However, if the connector fits the slave unit side connector listed below, it can be used.

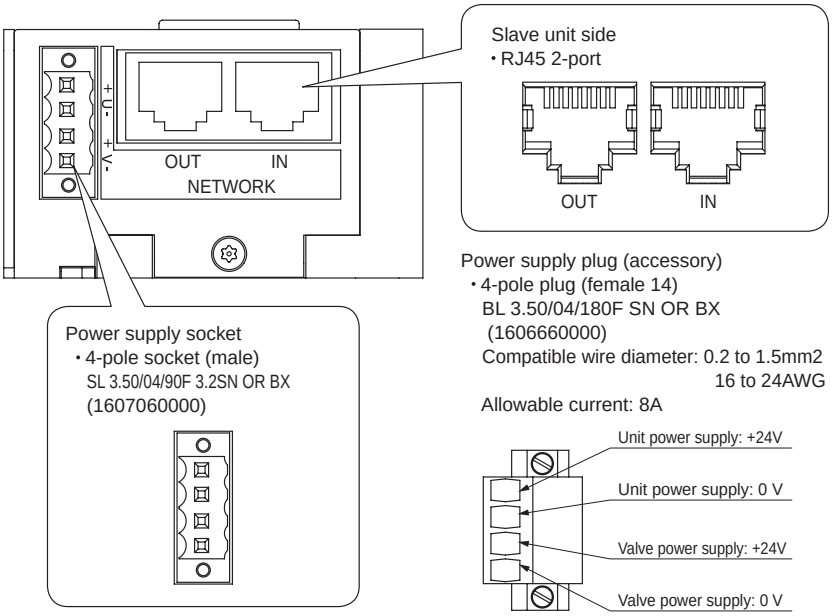
	Slave unit side connector model No.		Wiring side connector recommended model No. (attachment)	
	5-pole connector (communication)	2-pole connector (power supply)	5-pole connector (communication)	2-pole connector (power supply)
T7D (DeviceNet)	MSTB2.5/5-GF-5.08AU Phoenix Contact Corp.	SL3.5/2/90F Weidmuller 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)				

Model No.	LED display	Wiring

T7EC1 T7EC2



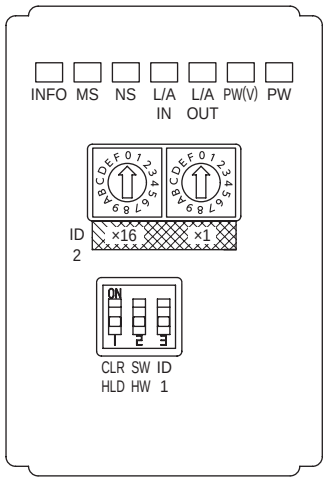
LED	Display description
RUN	Communication status of EtherCAT is indicated by the LED (green) state (OFF/ON/blinking)(Green lamp is ON during normal communication)
ERR	Abnormal status of EtherCAT is indicated by the LED (red) state (OFF/ON/blinking)(Lamp is OFF during normal communication)
L/A IN	Status of the Ethernet port (IN side) is indicated by the LED (green) state (OFF/ON/rapid blinking)
L/A OUT	Status of the Ethernet port (OUT side) is indicated by the LED (green) state (OFF/ON/rapid blinking)
INFO	Error status of the slave unit is indicated by the LED (red) (Lamp is OFF when normal)
PW	Lights when unit power is ON.Green lamp is ON when normal
PW(V)	Lights when valve power is ON.Green lamp is ON when normal (Cannot be monitored when the unit power is not turned ON)



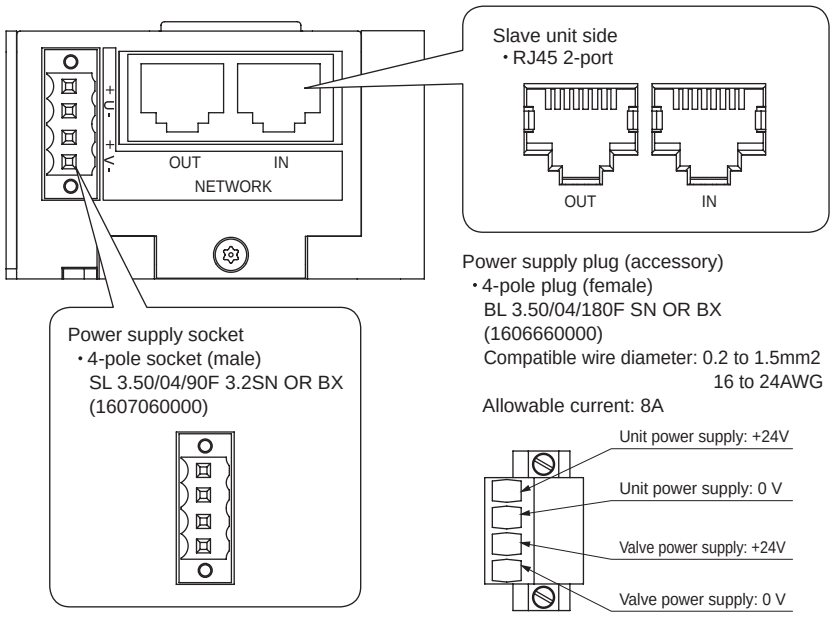
Communication connector pin array

Port	Pin	Comm	Function
IN/OUT	1	TD+	Transmitted data, positive
	2	TD-	Transmitted data, negative
	3	RD+	Received data, positive
	4	Vacant	
	5	Vacant	
	6	RD-	Received data, negative
	7	Vacant	
	8	Vacant	

T7EN1 T7EN2



LED	Function	Display description	
INFO	Not used	–	–
MS	EtherNet/IP slave unit state display	green blinking green light red blinking red light	IP address not set state or setting communication Normal switch setting illegal slave unit body abnormality
NS	Communication state	green blinking green light red blinking red light	No link Link detection (normal communication) Communication error (timeout) address overlap
L/A IN	Ethetnet IN side link state	OFF green light Green ON/ yellow blinking	No link, no transmission/reception data No link detection, no transmission/reception data Link detection, transmitting and receiving data
L/A OUT	Ethetnet OUT side link state	OFF green light Green ON/ yellow blinking	No link, no transmission/reception data No link detection, no transmission/reception data Link detection, transmitting and receiving data
PW (V)	Valve power state	OFF green light	Valve power OFF Valve power ON
PW	Unit power supply state	OFF green light	Unit power OFF Unit power ON



Communication socket pin array

Port	Pin	Comm	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	

PLC compatibility table

Model No.	Manufacturer name (recommended organization)	Communication protocol	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
T7EN*	ODVA	EtherNet/IP	

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

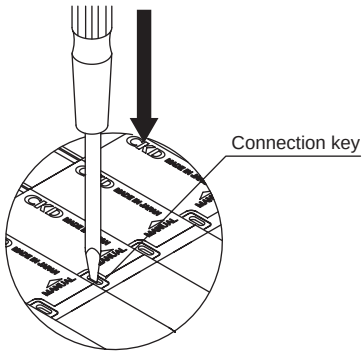
How to disassemble/assemble block manifold

CAUTION: Be sure to turn power OFF and release pressure before you add or remove a manifold.

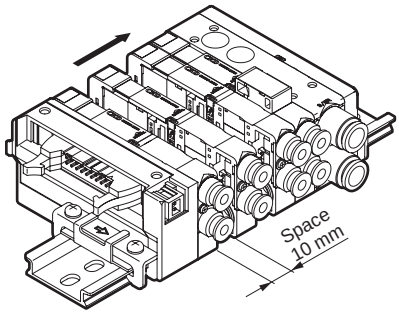
In the section below, the following procedures are explained: Changing the valve blocks, replacing the valve blocks due to service life, etc., adding the supply/exhaust blocks and changing/increasing the specifications using various pressure supply devices. Refer to the individual Instruction Manuals for details.
Turn OFF power and stop the air pressure source before starting disassembly. When the manifold has been disassembled and assembled, if the connection key is not correctly returned 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 returned between the blocks and that the blocks are securely fixed onto the DIN rail before supplying the air. CKD recommends using identification marking when disconnecting A and B port piping.

Replacing valve blocks and dummy blocks

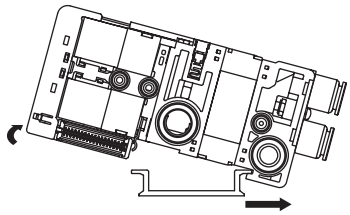
(1)Loosen the DIN rail set screw on the end block.
(2)Using a thin tool, press down on the key connecting the valve block to be replaced and the blocks on both sides.



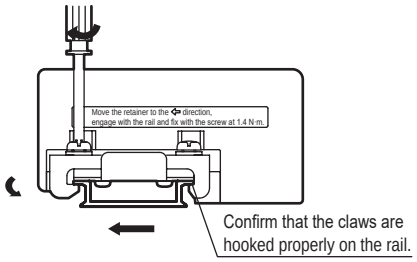
(3)Slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.
Take off the valve block moving parallel to the DIN rail.
⚠ Sliding it at an angle may damage the wiring connector.



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



(5)Replace with a new block.
(6)Slide all of the blocks to the electrical block side so that there are no spaces between the blocks.
(7)Confirm that the connection key has returned to the groove on the block.
(8)Confirm that the end block's retainer claws are hooked on both sides of the DIN rail, and then tighten the set screw with a screwdriver. Correct tightening torque is 1.4 N·m.



Increasing the valve blocks

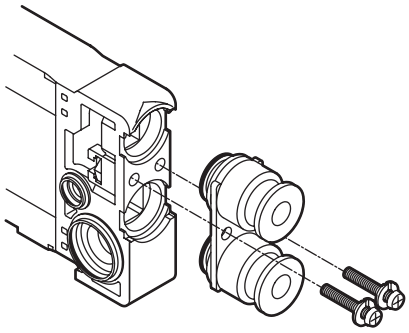
(1)The blocks are added with the same procedures as replacing the valve blocks.
(2)If you plant to add another one in the future, specify the DIN rail length in the specifications (page 410).

Mounting the supply/exhaust block

(1)The blocks are added with the same procedures as replacing the valve blocks.

Replacing the cartridge fitting

(1)Remove the set screw.
(2)Pull out the stopper plate with the fitting.
(3)Align the groove of the replacement fitting with the stopper plate and assemble them temporarily.
(4)Assemble the stopper plate with the fitting, and tighten the set screw. Pull on the fitting and confirm that it is installed correctly.



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

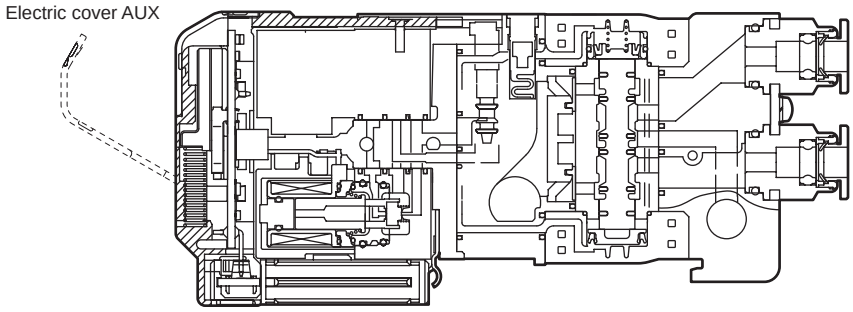
Check the piping and confirm that it is correct. Check that the port A and B piping is connected correctly.

Built-in individual power supply function (AUX)

The type with individual power supply function (AUX) allows a random valve in the manifold, which is already connected with reduced wiring, to be operated with a separate power supply. This is effective when adjusting the device, etc.

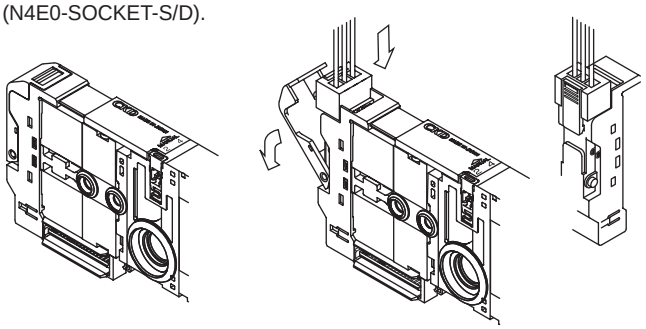
* MN3E0/MN4E0 only

(1) Valve block with individual power supply function (AUX) Internal structure diagram



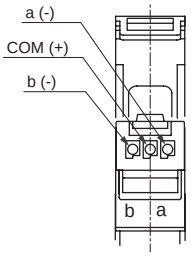
(2) Inputting the individual power supply

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

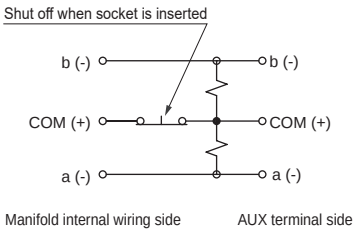


When the power input socket is connected, the wiring in the valve is temporarily separated from the reduced wiring in the manifold, and power can be supplied from an external source.

(3) AUX terminal structure and internal circuit diagram



Top of valve block with socket inserted



Outline of AUX terminal polarity and internal circuit

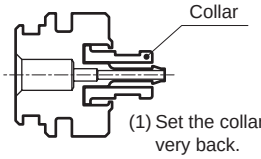
⚠ Safety precautions

Note 1: The polarity of the reduced wiring side and individual power supply side is **limited to the positive common**. The product does not work correctly if the polarity is incorrect.

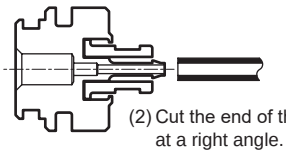
Note 2: **Use a separate power for the reduced wiring side and the individual power input side.** If the same power is used, the reduced wiring side's wiring will not be cut off, resulting in incorrect operations.

How to operate barbed fitting for ø1.8 fiber tube

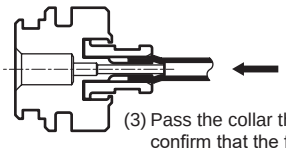
* MN3E0/MN4E0 only



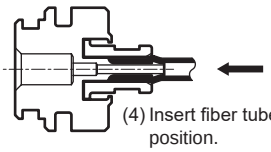
(1) Set the collar at the very back.



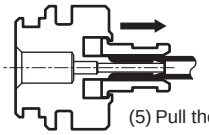
(2) Cut the end of the fiber tube at a right angle.



(3) Pass the collar through, and confirm that the fiber tube is correctly inserted while carrying out the work.



(4) Insert fiber tube to the last position.



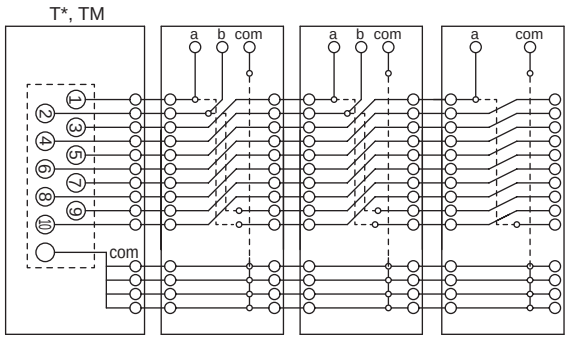
(5) Pull the collar forward to lock it.

Wiring structure between electrical block and valve block

A part called a dedicated wiring connector is incorporated in the valve block and supply/exhaust block, etc. This 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. The wiring structure pattern diagram is shown below.
There is regularity to the wiring block connector pin nos. and arranged valves. Refer to the section on the wiring method, and connect the wires between the valves and control device. Take special care when increasing or decreasing the number of valve blocks.

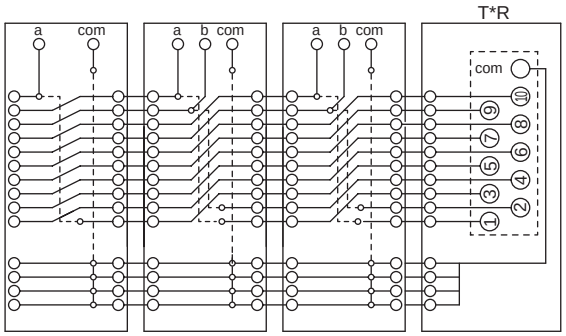
Only T* (left electrical block) or TM* (intermediate electrical block)

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



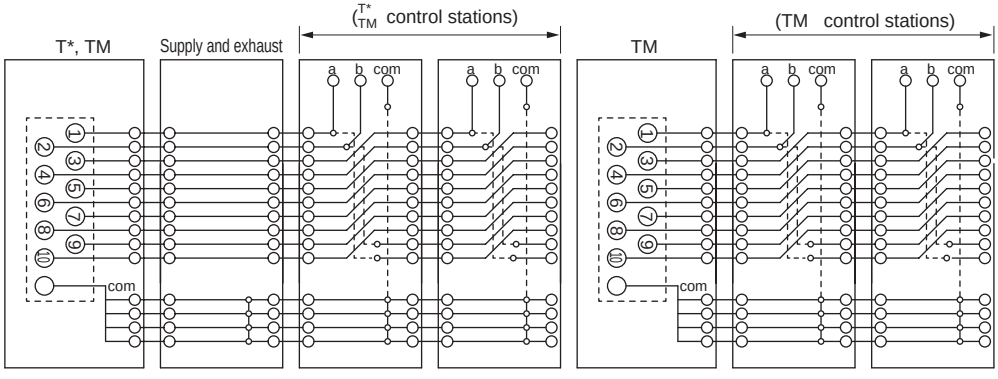
Only T*R (right electrical block)

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



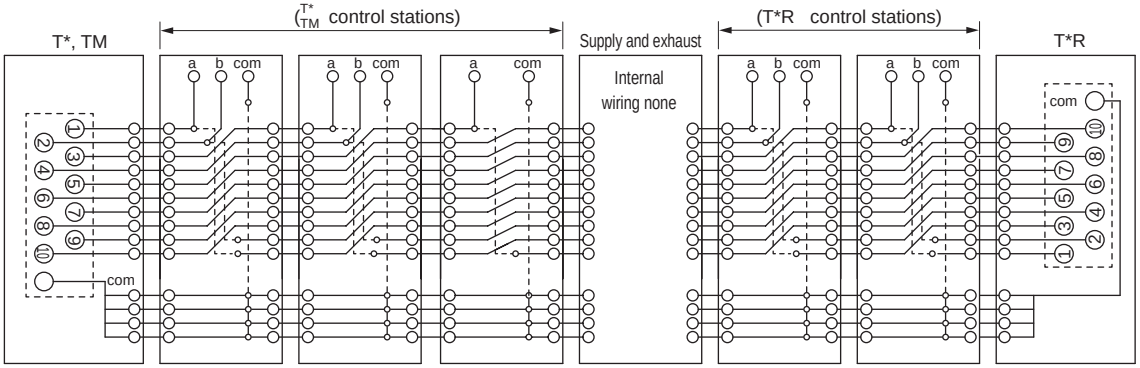
TX (mix) consisting of (T* (left wiring block) or TM* (intermediate wiring block)) + TM* (intermediate wiring block)

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. A wiring ends on the left of the intermediate wiring block.

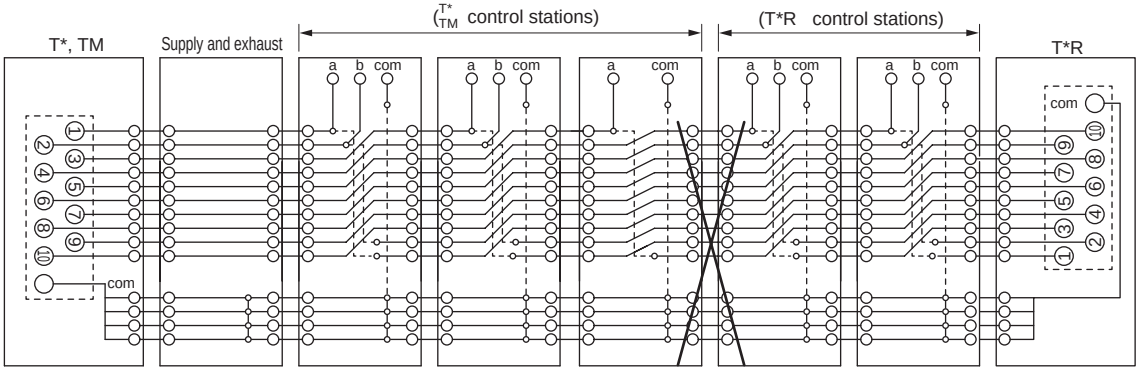


TX (mix) consisting of (T* (left wiring block) or TM* (intermediate wiring block)) + T*R (right wiring block)

1a, 1b, 2a and so forth layout starting from the left electrical block and 1a, 1b, 2a and so forth layout starting from right electrical block exist.
The circuit is shut off at the center with the supply/exhaust block N4E0-Q-*-C (type with no internal wiring circuit) to prevent the wires from interfering with each other.



Example of incorrect layout Left/right wires interfere at center
The left/right electrical block circuits could be connected via the manifold and result in unexpected valve operation.



How to fill out MN3E/MN4E Series manifold specification sheet

● Example of manifold model No. (To include a dummy block, select mix manifold and write the station No. including the number of dummy blocks.)

MN 4 E0 8 0 – CX – M – T50RD2 W F – 10 – 3 – P70

Ⓐ Model No. Ⓑ Solenoid position Ⓒ Port size Ⓓ Manual operating device Ⓔ Wiring method Ⓕ Terminal/ Connector pin array Ⓖ Option Ⓗ Station No. Ⓘ Voltage Clean room specification

(For the manifold model No., refer to pages 340, 342, 352 and 354.)

• Refer to the "Block configurations" (pages 364 to 372) and select the model No.
• Complete from the left end, with the piping port facing forward, regardless of the wiring block method.

Part name	Model No.	Layout position 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 32 33 34 35 36	Qty.
Electrical block	N4E0-T 50R	○ at 15	1
	N4E0-T		
Layout when including individual wiring		○ at 2, ○ at 3	2
Valve block 7 mm pitch	N E00 0-	Individual wiring	
	N E00 0-		
	N E00 0-	Station No. 10th station	
	N E00 0-		
Valve block 10 mm pitch	N 3 E0 1 0- C6	○ at 2, ○ at 3	2
	N 3 E0 1 0- C4	○ at 5	1
	N 3 E0 2 0- C4	○ at 6, ○ at 9	2
	N 3 E0 3 0- C4	○ at 11, ○ at 12, ○ at 13 — Station No. 1st station	3
Dummy block	N4E0-MPS		
	N4E0-MPD	○ at 7, ○ at 8	2
Supply and exhaust block	N4E0-Q Z- 8- S	○ at 10	1
	N4E0-Q-8	○ at 14	1
	N4E0-Q - - - -		
End block	N4E0-E L	○ at 1	1
	N4E0-E		
Mounting rail	L2= (Write an integer multiple of 12.5.)		

Accessories

Blank plug (for push-in fitting)										Silencer				Push-in fitting tube remover ☐ Not required (Put a check mark)
ø1.8		ø3		ø4		ø6		ø8		ø6		ø8		

ø 1.8 tube barbed threaded fitting (10 pieces in a set)			Cable with D sub-connector
N4E0-JOINT-PTN2-M3	N4E0-JOINT-PTN2-M5	N4E0-JOINT-PTN2-6	N4T-CABLE-D0 -

Socket assembly for power supply (for individual wiring, AUX)			Electrical block TM1 connector
N4E0-SOCKET- -	3M0-SOCKET-SET		N4E0-TM-CONNECTOR
N4E00-SOCKET- -	N4E00-SOCKET-SET		

Preparing the manifold specifications

● Complete from the left end, with the piping port facing forward, regardless of the electrical block method.
(Please include the model No. of the block selected from block configurations (pages 378 to 387) and instructions for the arrangement thereof.)
● Indicate the total number of blocks designated in the required quantity on the right of the table.
● Indicate the quantity for required accessories.
● Indicate the mounting rail length. (Only when requiring a length other than the standard length, write an integer multiple of 12.5.)

Obtaining the DIN rail length

Obtain the mounting rail length and pitch based on the manifold length (L_1) with the following calculation formula.
The rail length obtained here is the standard length, and does not need to be indicated in the specifications. Indicate the length in the specifications only if it is different from the standard length.

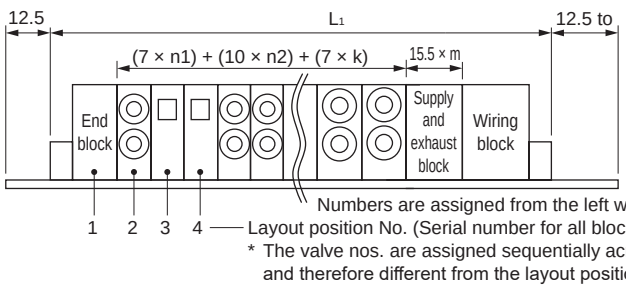
Manifold length L_1 = (7 × Valve block) + (10 × Valve block) + (7 × Dummy block)
+ (15.5 × Supply and exhaust block) + Electrical block (including end block) ..... Select from the right table.

Mounting rail length $L_2 = L_2' \times 12.5$

$L_2' = \frac{L_1 + 25}{12.5}$ → Round up the first decimal place. DIN rail mounting pitch $L_3 = L_2 - 12.5$

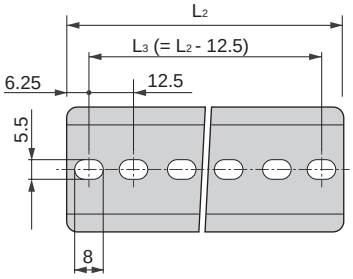
Electrical block width table

Electrical block		Dimensions (mm)
T30(N)/T30(N)R	Left or right electrical block	42.4
T5*/T5*R	Left or right electrical block	42.4
TM*	Intermediate electrical block	43.2
TM* × 2	Intermediate electrical block × 2 piece	55.2
TM* + T3*/T5*	Intermediate electrical block + left or right electrical block	54.4
T30/T5* + T30R/T5*R	Left wiring block + right electrical block	53.6
T6*	Serial transmission slave unit	115.6
T7*	Serial transmission slave unit (close contact)	73.1
T7EC*/T7EN*	Serial transmission slave unit (close contact)	86.6



n1 : Number of 7 mm wide valve blocks
n2 : Number of 10 mm wide valve blocks
m : Number of supply and exhaust blocks
k : Number of dummy blocks

Numbers are assigned from the left with the port facing forward.
Layout position No. (Serial number for all blocks)
* The valve nos. are assigned sequentially across the valve blocks and dummy blocks, and therefore different from the layout position nos.



MN3E/MN4E Series manifold specifications

● Contact ● Quantity set(s) ● Request date /

Slip No. | Order No.

Issue date / /

Company

Contact

Order No.

● Manifold model No. (To include a dummy block, select mix manifold and write the station No. including the number of dummy blocks.)

7/10 mm pitch mix manifold

MN □ EX0 – □ – □ □ □ □ – □ – □ (For the manifold model No., refer to page 376.)

7 mm pitch manifold

MN □ E00 □ 0 – □ – □ □ □ □ – □ – □ (For the manifold model No., refer to pages 346 and 350.)

10 mm pitch manifold

MN □ E0 □ 0 – □ – □ □ □ □ – □ – □ (For the manifold model No., refer to pages 362 and 366.)

Ⓐ Model No. Ⓑ Solenoid position Ⓒ Port size Ⓓ Manual operating device Ⓔ Wiring method Ⓕ Terminal/Connector pin array Ⓖ Option Ⓗ Station No. Ⓘ Voltage -P70 Clean room specifications

• Refer to the "Block configurations" (pages 378 to 387) and select the model No.
• Complete from the left end, with the piping port facing forward, regardless of the wiring block method.

Part name	Model No.	Layout position 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	32	33	34	35	36	Qty.
Electrical block	**N4E0-T □**																																					
	N4E0-T □																																					
Layout when including individual wiring																																						
Valve block 7 mm pitch	**N □ E00 □ 0- □**																																					
	N □ E00 □ 0- □																																					
	N □ E00 □ 0- □																																					
	N □ E00 □ 0- □																																					
Valve block 10 mm pitch	**N □ E0 □ 0- □**																																					
	N □ E0 □ 0- □																																					
	N □ E0 □ 0- □																																					
	N □ E0 □ 0- □																																					
Dummy block	**N4E0-MPS**																																					
	N4E0-MPD																																					
Supply and exhaust block	**N4E0-Q □ - □ - □ - □**																																					
	N4E0-Q □ - □ - □ - □																																					
	N4E0-Q □ - □ - □ - □																																					
End block	**N4E0-E □**																																					
	N4E0-E □																																					

Mounting rail **L2= □** (Write an integer multiple of 12.5.)

Accessories

Blank plug (for push-in fitting)												Silencer				Push-in fitting tube remover ☐ Not required (Put a check mark)	
ø1.8		ø3		ø4		ø6		ø8		ø6		ø8			
ø 1.8 tube barbed threaded fitting (10 pieces in a set)														Cable with D sub-connector	
N4E0-JOINT-PTN2-M3		**N4E0-JOINT-PTN2-M5**				**N4E0-JOINT-PTN2-6**								**N4T-CABLE-D0 □ -**	
Socket assembly for power supply (for individual wiring, AUX)														Electrical block TM1 connector	
N4E0-SOCKET- □ - □				**3M0-SOCKET-SET**										**N4E0-TM-CONNECTOR**	
N4E00-SOCKET- □ - □				**N4E00-SOCKET-SET**											

* The max. number of inputs of individual wiring is 16 when the T** wiring method and individual wiring are combined. Individual wiring is not available for the TX wiring method.

References circuit diagram

The circuit diagram of the manifold model No. (example) on the previous page is shown as below for reference.