Extra compact (height 39.5mm)

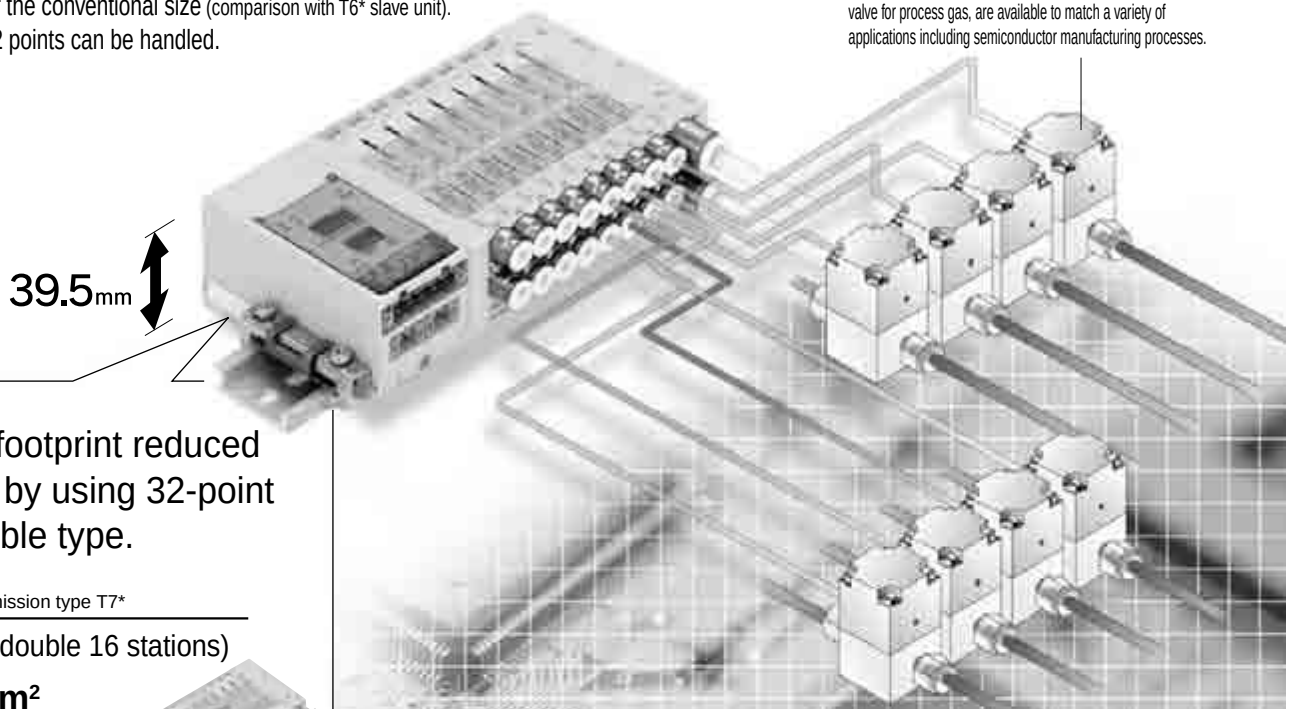
Compact reduced wiring MN4E0 Series 3, 4 port block manifold with high integration, space saving and high function performance.

Compact and space saving

40 mm or less valve height is realized with a 10 mm coil width (CKD conventional part: 46 mm)

Network slave units can be integrated and miniaturized with half the conventional size (comparison with T6* slave unit). Up to 32 points can be handled.

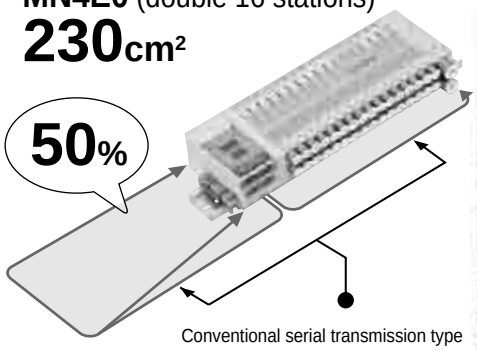
Air operated valve
Various air operated valves, including the AMD Series air operated valve for chemical and the AGD Series air operated valve for process gas, are available to match a variety of applications including semiconductor manufacturing processes.



Device footprint reduced by 50% by using 32-point compatible type.

● Serial transmission type T7*

MN4E0 (double 16 stations)
230cm²



Conventional serial transmission type
MN4S0 (double 8 stations × 2)
440cm²

MN4E0 Series

high-performance block manifold

Environment protection

Eco-friendly nonhalogen leads are used for internal wiring.
(T30 type D sub-connector)

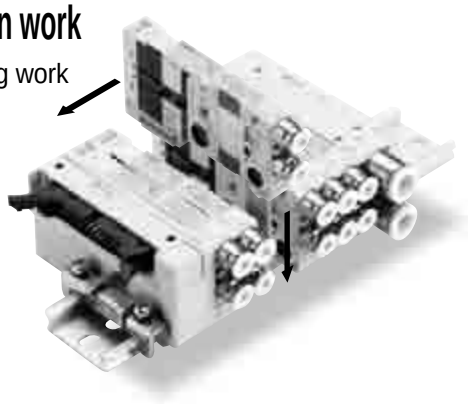
High performance

12 ms responsiveness has balanced
A and B ports.
(CKD data value using two 3 port valves integrated type)

No more bothersome connection work

Adoption of connectors allows wiring work to be completed during assembly.

● Assembly structure

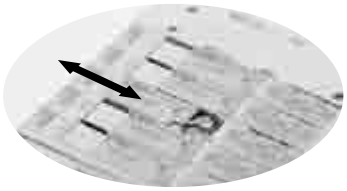


Safety

Prevent malfunctions beforehand

A check valve, manual override protector to prevent incorrect operation, and an intake filter to prevent the entry of foreign matter are provided as standard.
An ultimate pursuit of safety prevents valve malfunctioning.

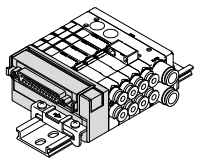
● Manual cover



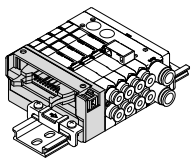
Variety

Various wire connections

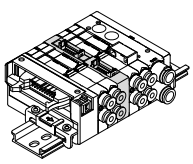
A variety of wire connections including connectors and serial transmission for diverse networks are available.



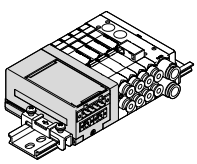
● D sub-connector



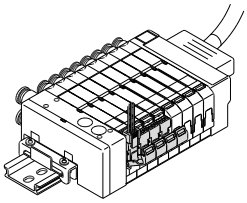
● Flat cable connector



● Intermediate wiring block



● Serial transmission

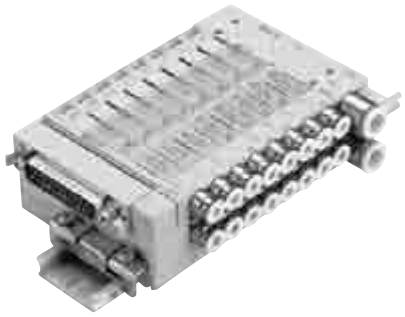


● Built-in individual power supply function (AUX) type

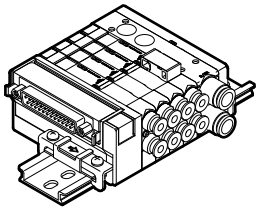
A great variety of wiring variation

Wiring is reduced while pursuing ease-of-use.

MN4E0

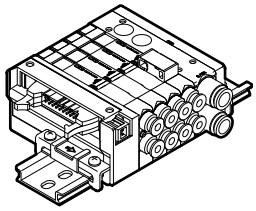


● D sub-connector (N4E0-T30)



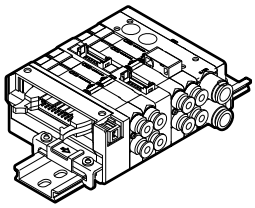
The connector using T30 wiring, called a D sub-connector, is used widely for FA and OA devices. The 25P type is the connector designated in RS-232-C Standards that apply to personal computer communication functions.

● Flat cable connector (N4E0-T5*)



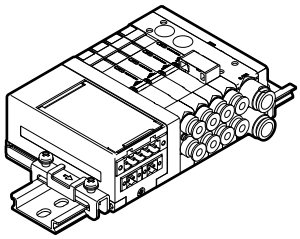
The connector used for T5* wiring complies with MIL Standards (MIL-C-83503).
Wiring work is simplified with the pressure welded flat cable.
Pin numbers are assigned differently based on the PLC maker, but the function assignment is the same.

● Intermediate wiring block (N4E0-TM*)



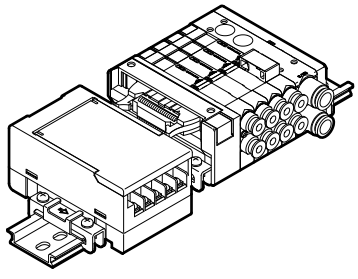
A reduced wiring connection can be made to the center of the manifold. The 10P flat cable connector and 6P RITS connector are available.

● Serial transmission (close contact type) (N4E0-T7*)



T7D1 T7D2	Device Net
T7G1 T7G2	CC-Link

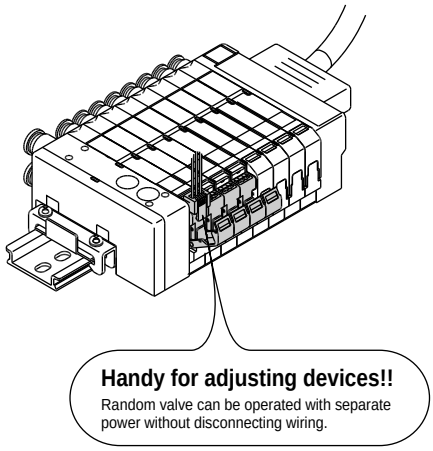
● Serial transmission (N4E0-T6*)



This type is compatible with each network.
(Refer to the following table.)

T6A0 T6A1	UNIWIRE SYSTEM
T6C0 T6C1	OMRON CompoBus/S
T6E0 T6E1	SUNX S-LINK
T6G1	CC-Link
T6J0 T6J1	UNIWIRE H system

● Built-in individual power supply function (AUX) type

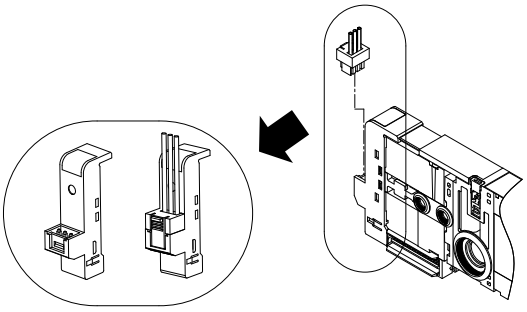


Individual external input is possible even with the reduced wiring manifold. This lets individual valves be operated without stopping the system.
A random valve can be operated with an external power supply while common wiring is connected.
The height does not differ with this compact design.

● Application examples

Use to adjust the product at startup or to facilitate maintenance
Electrically operate a random valve without disconnecting wiring.
Electrically shield a random valve without disconnecting wiring.
* The valve is cut off from wiring in the manifold when the external input socket is inserted, so this can be used as a temporary individual shut-off switch.

● Individual wiring system



Inputs can be made from individually from another system, independent from the central wiring for reduced wiring.

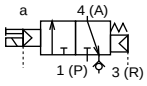
Appearance	No. of solenoid position / JIS symbol — Note 1
3 port valve, two 3 port valves integrated type	* The JIS symbols for the actual part may differ from these drawings due to the relation of the space and port position.

MN3E0

3 port valve, two 3 port valves integrated type

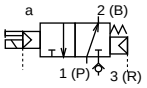
3 port valve

● 2-position N.C. self reset type (Differential pressure spring return)



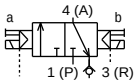
N3E010

● 2-position N.O. self reset type (Differential pressure spring return)



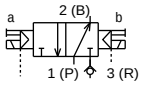
N3E0110

● 2-position N.C. self hold type



N3E020

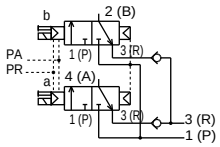
● 2-position N.O. self hold type



N3E0210

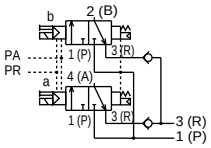
Two 3 port valves integrated type

● N.C./N.C. self reset type (Differential pressure return)



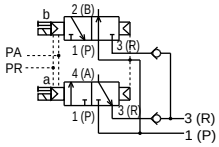
N3E0660

● N.C./N.C. self reset type (Differential pressure spring return)



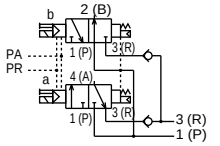
N3E066S0

● N.C./N.C. self reset type (Differential pressure return)



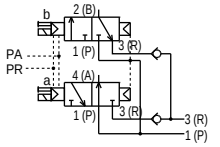
N3E0670

● N.C./N.C. self reset type (Differential pressure spring return)



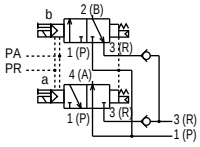
N3E067S0

● N.O./N.C. self reset type (Differential pressure return)



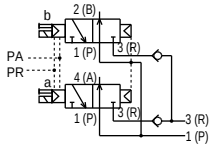
N3E0760

● N.O./N.C. self reset type (Differential pressure spring return)



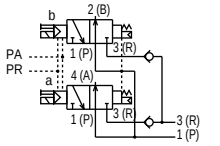
N3E076S0

● N.O./N.C. self reset type (Differential pressure return)



N3E0770

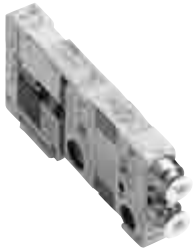
● N.O./N.C. self reset type (Differential pressure spring return)



N3E077S0

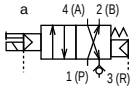
MN4E0

4 port valve



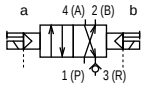
4 port valve

● 2-position single solenoid self reset type (Differential pressure spring return)



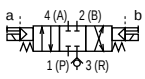
N4E010

● 2-position double solenoid self hold type



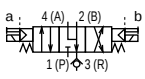
N4E020

● 3-position all ports closed



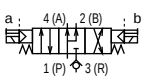
N4E030

● 3-position A/B/R connection



N4E040

● 3-position P/A/B connection



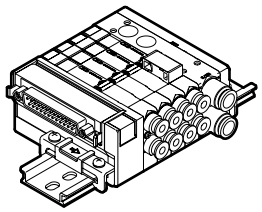
N4E050

Note 1 Refer to "Self-reset type" in Intro 21 for details on self-reset operation.
Note 2 Effective sectional area S and sonic conductance C are converted as S ≒ 5.0 x C.

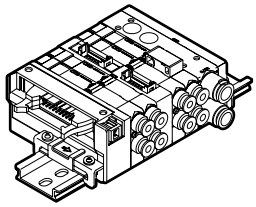
Flow characteristics C [dm³/ (s·bar)] Note 2	Voltage	Solenoid position													A/B port size				Electric connection					Page
		3 port valve				Two 3 port valves integrated type				4 port valve						Push-in joint		Female thread						
		Single N.C. type	Single N.O. type	Double N.C. type	Double N.O. type	A side N.C., B side N.C.	A side N.C., B side N.O.	A side N.O., B side N.C.	A side N.O., B side N.O.	2-position single solenoid	2-position double solenoid	3-position all ports closed	3-position A/B/R connection	3-position P/A/B connection	Mix	ø4	ø6	M5	Fiber tube joint	D sub-connector	Flat cable	Intermediate wiring block	Wiring block mix	Serial transmission	
		C4	C6	M5	CF	T30*	T5*	TM*	TX	T6* T7*															
	0.54					●	●	●	●						●	●	●	●	●	●	●	●	●	●	14
	0.50	Note 3 24 VDC 12 VDC Note 3: Serial transmission is used only for 24 VDC				●	●	●	●						●	●	●	●	●	●	●	●	●	●	14
	0.54 0.50 (N4E030 N4E050)									●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14

Wiring method

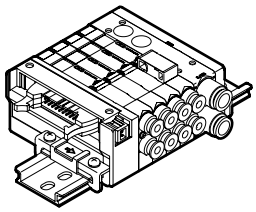
T30 / T30R D sub-connector



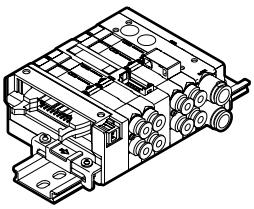
TM1A Intermediate wiring block (RITS6PX2)



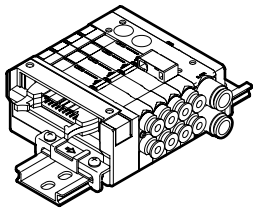
T50 / T50R 20 pin flat cable connector (With power supply terminal)



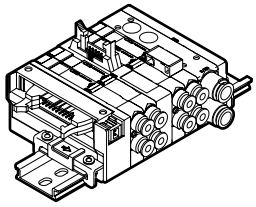
TM1C Intermediate wiring block (RITS6PX1)



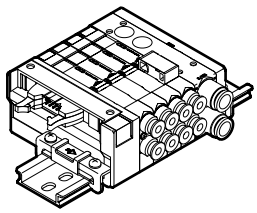
T51 / T51R 20 pin flat cable connector (Without power supply terminal)



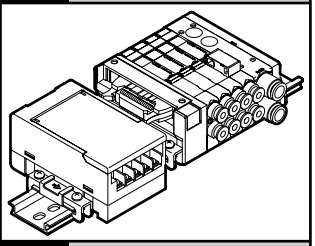
TM52 Intermediate wiring block (10 pin flat cable connector)



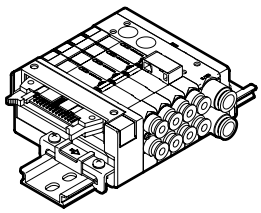
T52 / T52R 10 pin flat cable connector (Without power supply terminal)



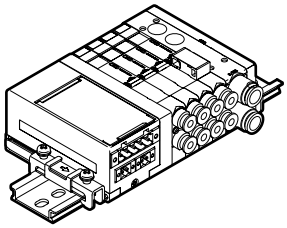
T6* Serial transmission



T53 / T53R 26 pin flat cable connector (Without power supply terminal)

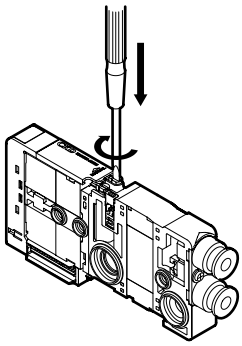


T7* Serial transmission (close contact type)



Manual override

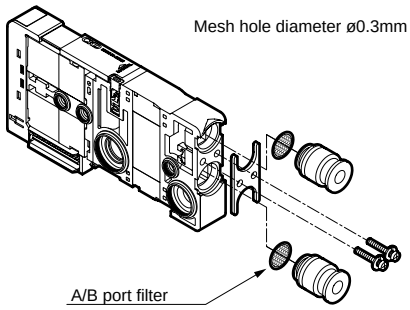
●Common with locking and non-locking (Provided as standard)



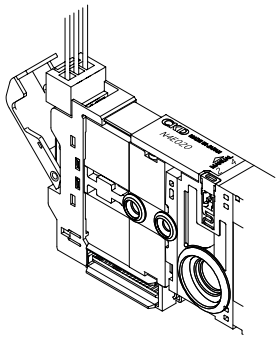
Other options

E Low exoergic, energy saving circuit type

F A/B port filter integrated

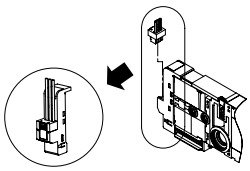


U Built-in individual power supply function (AUX) type



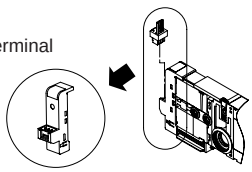
D* Individual wiring D-connector

●Lead wire length
D2 : 300mm
D20 : 500mm
D21 : 1000mm
D22 : 2000mm
D23 : 3000mm



D* Individual wiring D-connector Without socket / with socket and terminal

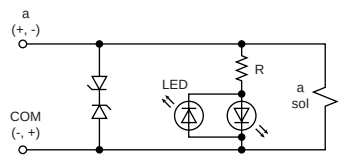
●Without socket
D2N
●With socket and terminal
D3



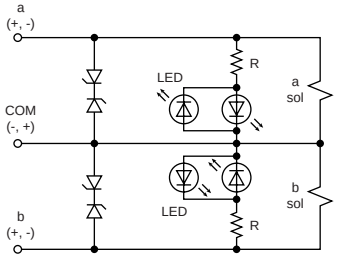
Electric connection circuit diagram

With surge suppressor and indicator light (provided as standard)

Single solenoid



Double solenoid



Safety precautions

Always read this section before starting use.

Refer to Intro 63 for general precautions for valves.

3, 4 port pilot operated valve MN3E0/MN4E0 Series

Design & Selection

1. Self reset type

⚠WARNING

■ The self-reset type is available for the valve block solenoid position class.

There are two self-reset types, "differential pressure return" and "differential pressure spring return". With both types, the main valve returns to the origin (self-resets) when OFF under normal pressures. However, if the supply pressure is 0 in the ON state,

- The "differential pressure return" type will hold the current position, and
- The "differential pressure spring return" type will return to the origin with the spring force.

Select the type based on the interlock specifications of the device in use.

Main valve hold/return states

Valve type			Source pressure down when ON	→ source pressure return	Power supply shutdown when ON
N3E0	1/11	3 port valve single N.C./N.O. self reset type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
	2/21	3 port valve double N.C./N.O. self hold type	ON position holding		ON position holding
	66, 67, 76, 77	Two 3 port valve integrated type N.C./N.O. self reset type (differential pressure return)	ON position holding		OFF (origin) movement
	66S, 67S, 76S, 77S	Two 3 port valve integrated type N.C./N.O. self reset type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
N4E0	1	4 port valve 2-position single solenoid self reset type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
	2	4 port valve 2-position double solenoid self hold type	ON position holding		ON position holding
	3, 4, 5	4 port valve 3-position	OFF (origin) movement	ON movement	OFF (origin) movement

2. Check valve

⚠WARNING

■ The check valve blocks the back pressure from adjacent air devices, etc. However, the structure does not allow the pressure seal to be held continuously, so do not use for other than the back pressure block.

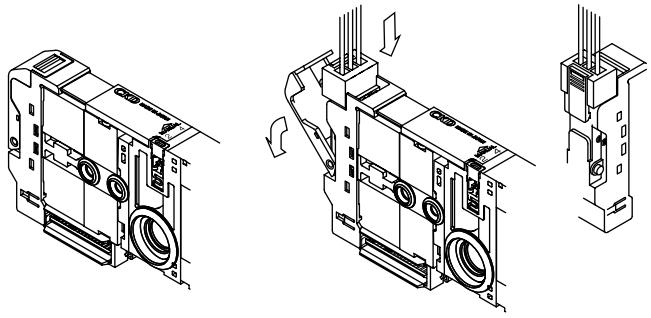
3. Built-in individual power supply function (AUX) type

⚠WARNING

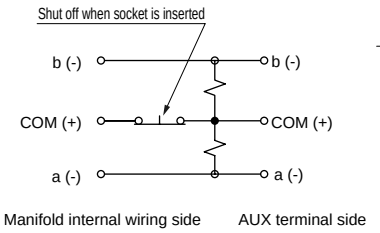
■ The polarity of the reduced wiring side and individual power supply side is **a plus common.**
Proper operation will not occur if polarity is incorrect.
Use a separate power for the reduced wiring side and the individual power input side.
If the same power is used, the reduced wiring side's wiring will not be cut off, resulting in incorrect operations.

■ Inputting individual power

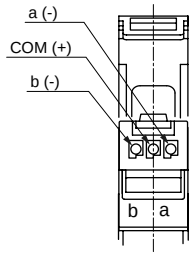
Open the electric cover, and connect the power input socket (N4E0- socket assembly S/D).



When the power input socket is connected, the valve's internal wiring will be temporarily separated from the reduced wiring in the manifold, so power can be supplied from an external source.



Outline of AUX terminal polarity and internal circuit



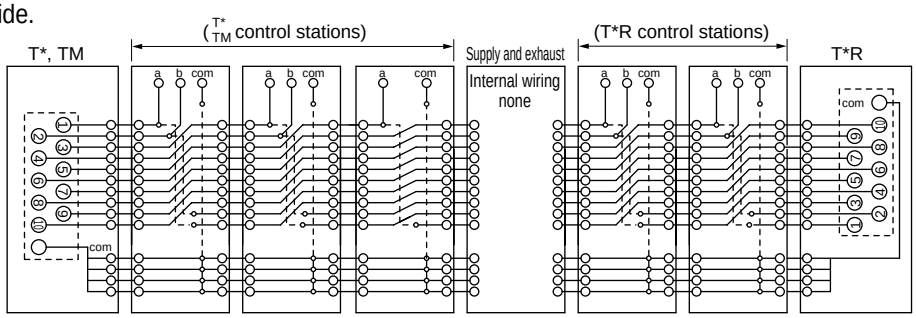
Valve block upper socket insertion diagram

Design & Selection

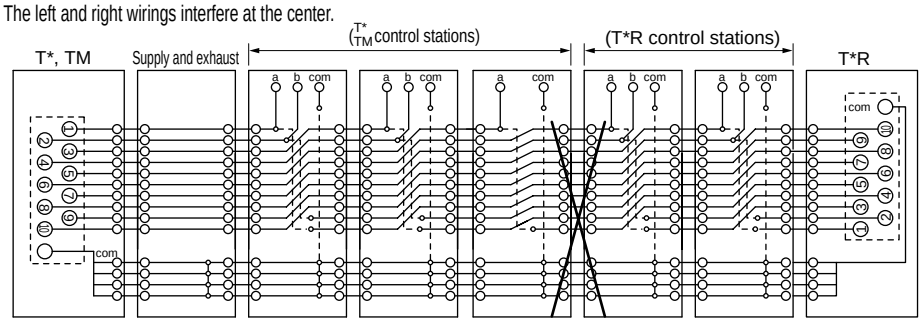
4. Wiring block mix

⚠WARNING

■ When using the mixed wiring block specifications by using T*R (right side specifications) for the wiring block, short-circuiting of the signal wires between the wiring blocks must be prevented.
If the left and right signals are connected, unintentional valve block operation will occur and device damage could occur.
Lay out the supply/exhaust block N4E0-Q*-C (specifications without internal wiring) between the valve supplied power from the left side and the right side.



Example of incorrect layout The left and right wirings interfere at the center.



5.Surge suppressor

⚠CAUTION

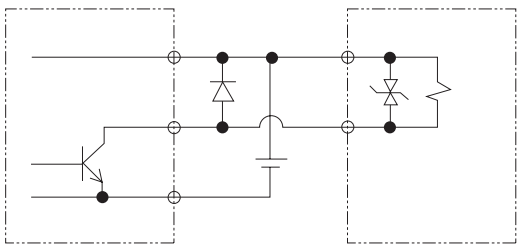
■ The surge suppressor enclosed with the solenoid valve is used to protect the output contact for that solenoid valve drive. There is no protection for the other peripheral devices, and devices could be damaged or malfunction by the surge. Surge generated by other devices could be absorbed and cause damage such as burning. Care must be taken for points below.

(1)The surge suppressor functions to limit a solenoid valve surge voltage, which can reach several hundred V, to a low voltage level that the output contact can withstand. Depending on the output circuit used, this may be insufficient and could result in damage or malfunction. Check whether the surge suppressor can be used by the surge voltage limit of the solenoid valve in use, the output device's withstand pressure and circuit structure, and by the degree of return delay time. If necessary, provide other surge measures. The inverse voltage surge generated when OFF can be suppressed to the following levels.

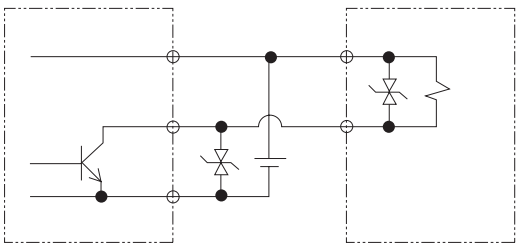
Voltage specification	Reverse voltage value when power turned OFF
12 VDC	27 V
24 VDC	47 V

(2) When using the NPN type output unit, the voltage given in the left table and a surge voltage equivalent to the power voltage could be applied on the output transistor. Install the contact protection circuits in this case.

(Example of output transistor protective circuit installation 1)



(Example of output transistor protective circuit installation 2)



(3) If another device or solenoid valve is connected in parallel to the solenoid valve, the inverse voltage surge generated when the valve is OFF would apply to those devices. Even when using the solenoid valve with surge suppressor for 24 VDC, the surge voltage may reach minus several ten V depending on the model. This inverse polarity voltage could damage or cause the other devices connected in parallel to malfunction. Avoid parallel connection of devices suspected of reversing polarity voltages, e.g., LED indicators.
When driving several solenoid valves in parallel, the surge from other solenoid valves could enter the surge suppressor of one solenoid valve with a surge suppressor. Depending on the current value, that surge suppressor could burn. When driving several solenoid valves with surge suppressors in parallel, surge current could concentrate at the surge suppressor with the lowest limit voltage and cause similar burning. Even if the solenoid valve type is the same, the surge suppressor's limit voltage can be inconsistent, and in the worst case, could result in burning. Avoid parallel drive of several solenoid valves.

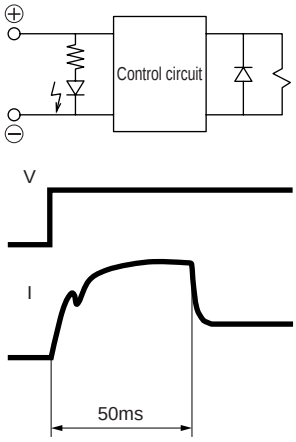
(4) The surge suppressor incorporated in the solenoid valve will often be short-circuited if it is damaged by an excessive voltage or current from the other solenoid valves. If the surge suppressor fails, if a large current flows when output is on, the output circuit or solenoid valve could be damaged or ignite. Do not keep power on in a faulty state.
Provide an overcurrent protection circuit on the power or drive circuit or use a power supply with overcurrent protection so that a large current does not flow continuously.

6. Low exoergic, energy saving circuit type

⚠ CAUTION

■ Do not use this valve in an environment where the vibration and impact exceed specifications. The valve could malfunction.

With the type with low exoergic, energy-saving circuit, the current limit circuit is built into the valve block. The current value when the coil is sucked and held is lowered with this structure. Only plus common polarity is used.



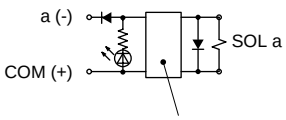
Individual specifications for low exoergic, energy saving circuit type

Descriptions			
Energizing current A	At starting	24 DC	0.025
		12 DC	0.050
	At holding	24 DC	0.013
		12 DC	0.025
Power consumption W	At starting	24 DC	0.6
		12 DC	
	At holding	24 DC	0.3
		12 DC	

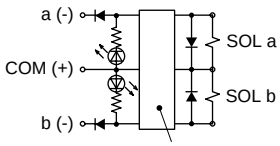
7. Polarity

⚠ CAUTION

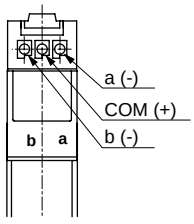
■ When selecting the low exoergic, energy-saving circuit, the connection is dedicated to the plus common. Note the connection polarity. Refer to Section 5, Surge suppressor, on page 10 for details on the surge suppressor.



Single, energy saving circuit integrated



Double, energy saving circuit integrated

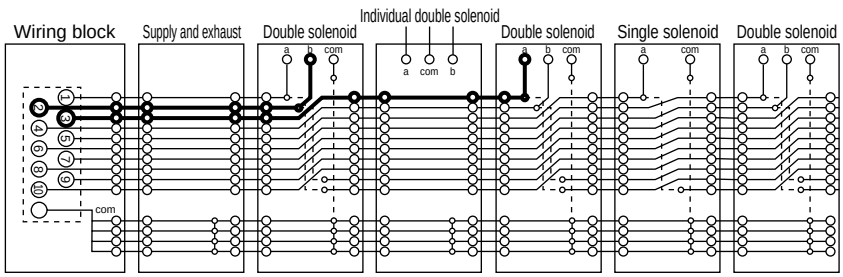


Upper view of valve block

8. Wiring in manifold when using with wiring reduced type

⚠ CAUTION

■ The internal circuit of the individual wiring valve block is completely separated from the reduced wiring electric circuit in the manifold. Even if the individual wiring valve block is inserted between the reduced wiring valve blocks, the pin layout on the wiring block side will not change.



The pin layout on the wiring block side eliminates the individual wiring in order from the first station, and shifts the blocks in order.

Installation & Adjustment

1. Manual override

⚠WARNING

■ The 4E Series is a pilot operated solenoid valve. The main valve will not change even if the manual override is operated unless air is supplied to the P port (PA port for external pilot).

■ Manual override protective cover is provided as standard. The manual override protective cover is closed when the valve is shipped to protect manual override, which cannot be seen when delivered. Open the protective cover and operate manual override. Note that the protective cover cannot be closed unless the locking manual override is released.

■ Manual override is used for both non-locking and locking. The lock is applied by pressing down and turning manual override. Press down first to lock. If manual override is turned without being pressed down, it could be damaged or air could leak.

2. External pilot piping port

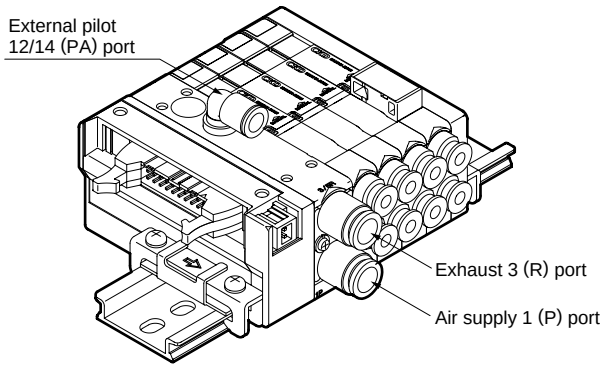
⚠CAUTION

■ The external pilot type has a separate pilot air supply. ø6 push-in joint is used to supply the pilot air, so check that the piping connection position is correct. Malfunctions could occur if the piping is incorrect.

Port indication

Applications		Indication (ISO standards)
Pilot air	Pilot air supplying port	12/14

* The A/B ports and the R port cannot be pressurized.

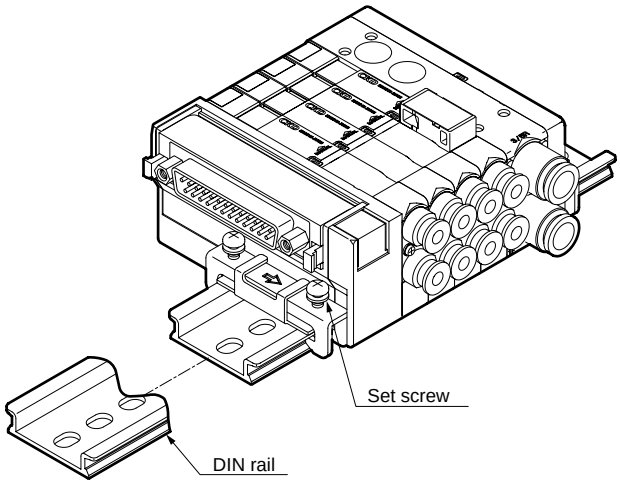


The external pilot supply port is the ø6 push-in joint on the top of the supply/exhaust block.

3. How to install manifold

⚠CAUTION

■ The 4E Series is dedicated for mounting on the DIN rail. The manifold could drop off or be damaged if not installed correctly. If the manifold weighs more than 1 kg, or when using in an environment with vibration or impact, fix the DIN rail onto the surface at 50 to 100 mm spacing, and confirm that there is no problem with installation before starting operation. Use the specifications to calculate the weight. Also calculate the weight of the other devices installed. (Refer to page 14 for the weights.)



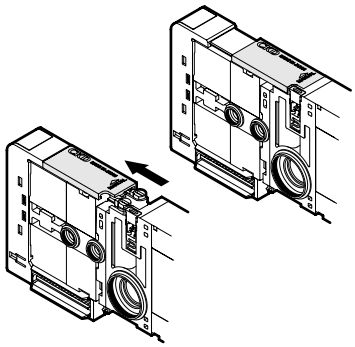
During Use & Maintenance

1. Manual override

⚠WARNING

■ Opening and closing the manual protective cover

Do not excessively force the manual protective cover when opening and closing it. Excessive force could cause faults. (Less than 5 N)

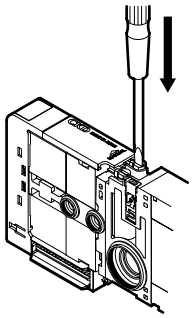


Slide type

■ How to operate manual override

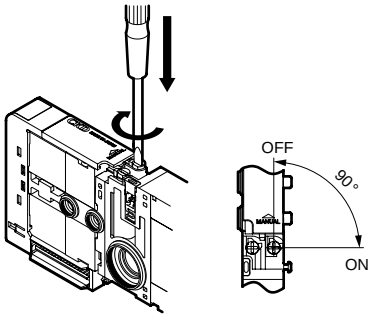
(1)Push & non-locking operation

Push in the direction of the arrow until it stops. Manual override is unlocked when released.



(2)Push & locking operation

Push manual override and turn 90° in the direction of the arrow. Manual override is not unlocked even when released.



WARNING

When conducting manual operations, make sure that there are no people near the moving cylinder.

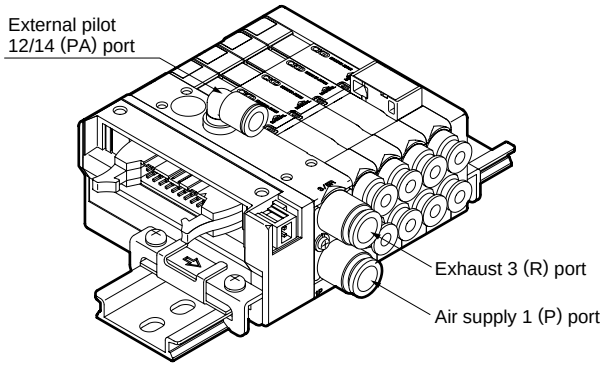
2. External pilot piping port

⚠CAUTION

■ Note supply pressure for the type with two 3 port valves.

The valving element of the type with two 3 port valves is operated with the main (P port) supply pressure.

- Check that the main pressure (P port) is not higher than the pilot pressure (PA port).
- Check that the main pressure (P port) does not drop below 0.2 MPa.



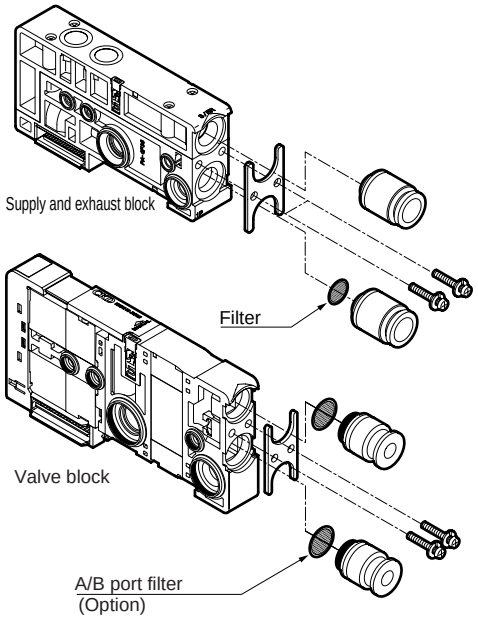
3. Port filter

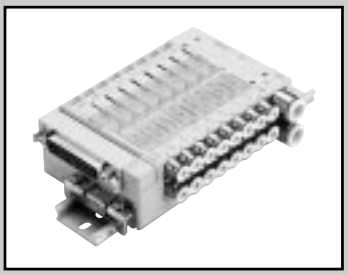
⚠CAUTION

■ The port filter prevents the entry of foreign matter, and prevents problems from occurring in the manifold (mesh hole ø0.3 mm). This does not improve the quality of the compressed air, so read Warnings and Precautions, then mount, install, and adjust the filter accordingly.

Do not remove or force the port filter. The filter could deform and result in problems.

If contaminants and foreign materials are found on the filter surface, blow lightly, or remove them by tweezers, etc.





Reduced wiring block manifold 3, 4 port pilot operated valve

MN3E0/MN4E0 Series

CE Refer to Intro 17 for details. RoHS CAD

Common specifications

Descriptions	
Manifold method	Block manifold
Manifold type	Common supply/exhaust, check valve integrated Note 1
Working fluid	Compressed air
Type of valve and operation method	Pilot operated soft spool valve
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2
Withstanding pressure MPa	1.05
Ambient temperature ℃	5 to 55
Fluid temperature ℃	5 to 55
Lubrication	Not required
Protective structure	Dust proof
Vibration/impact m/s²	50 or less / 300 or less
Working environment	Containing corrosive gas is impermissible.
Manual override	Common with locking and non-locking type

Note 1 Check valve blocks the back pressure from adjacent air devices, etc. However, the structure does not let the pressure seal be held continuously, so do not use for other than the back pressure block.

Electric specifications

Descriptions		
Rated voltage V		12, 24 DC
Rated voltage fluctuation range		±10% (+10% and −5% using serial transmission)
Rated current A	24 VDC	0.025 (0.013) Note 2
	12 VDC	0.05 (0.025) Note 2
Power consumption W	24 VDC	0.6 (0.3) Note 2
	12 VDC	
Heat proof class		B
Surge protective circuit		With surge suppressor
Indicator		LED

Note 2 The values in ( ) are for the type with low exoergic, energy-saving circuit. When using the valve block with individual power supply function (AUX) or type with low exoergic, energy-saving circuit, energizing is limited to the plus common.

Individual specifications

Descriptions \ Port		3 port valve	4 port valve	Two 3 port valves integrated type Note 2
Port size	Port A/B	ø4, ø6 push-in joint, M5, fiber tube		
	Port P/R	ø6, ø8 push-in joint		
	External pilot port	ø6 push-in joint		-
Response time Note1 ms	2-position Single solenoid	20 or less	20 or less	12 or less
	Double solenoid	12 or less	12 or less	-
	3-position	-	20 or less	-

Note 1 The response time is for the 0.5 MPa supply pressure, pre-lubricating type.
Note 2 With the valve with two 3 port valves, the main pressure is used to operate the valving element, and cannot be used with the external pilot. Check that the supply air flow is sufficient so that the supply pressure does not drop below the minimum working pressure due to the operation of the connected load (air operated valve), etc.

Flow characteristics

			C (dm³/ (s·bar))	b
3 port valve	2-position		0.54	0.12
4 port valve	2-position		0.54	0.12
	3-position	All ports closed	0.50	0.08
		A/B/R connection	0.54	0.12
		P/A/B connection	0.50	0.11
Two 3 port valves integrated type	2-position		0.50	0.16

Note: Effective sectional area S and sonic conductance C are converted as S ≒5.0×C.

Weight

Wiring block (g)	D sub-connector type T30	Flat cable connector type T5*	Intermediate wiring block TM1A	TM1C	TM52	Serial transmission T6*	T7*	
	67	59	32	32	34	205	128	
Supply and exhaust block (g)		Q/QZ	QK	QKZ		QX		QKX
	Joint Side	64	69	79		56		61
	Joint Top	90	94	98		62		66
Valve block (g)		2-position single solenoid	2-position double solenoid	3-position		Two 3 port valve integrated type		
	Joint Side	47.5	52	53.5		52		
	Joint Top	54.5	59	60.5		59		
End block (g)	ER/EL							
	40							
DIN rail (g)	-							
	0.9 g/mm							
Regulator block (g) Note 1	-							
	124							

Note 1 The values may differ slightly based on the regulator block specifications.

Maximum number of stations energized by manifold

Descriptions			Double Solenoid (Double wiring)	Single Solenoid	Mix Manifold (Solenoid number)	Page
D sub-connector type (25 pin)	T30	D sub-connector type Left	12 stations	24 stations	24 points	Page 16
	T30R	D sub-connector type Right	12 stations	24 stations	24 points	
Flat cable connector type	T50	20 pin flat cable connector Left (with power supply terminal)	8 stations	16 stations	16 points	
	T50R	20 pin flat cable connector Right (with power supply terminal)	8 stations	16 stations	16 points	
	T51	20 pin flat cable connector Left (without power supply terminal)	9 stations	18 stations	18 points	
	T51R	20 pin flat cable connector Right (without power supply terminal)	9 stations	18 stations	18 points	
	T52	10 pin flat cable connector Left (without power supply terminal)	4 stations	8 stations	8 points	
	T52R	10 pin flat cable connector Right (without power supply terminal)	4 stations	8 stations	8 points	
	T53	26 pin flat cable connector Left (without power supply terminal)	12 stations	24 stations	24 points	
	T53R	26 pin flat cable connector Right (without power supply terminal)	12 stations	24 stations	24 points	
Intermediate wiring block type	TM1A	RITS connector 6P × 2 pcs. Note 1	5 stations	10 stations	10 points	
	TM1C	RITS connector 6P Note 1	2 stations	5 stations	5 points	
	TM52	10 pin flat cable connector	4 stations	8 stations	8 points	
Serial transmission type (with dedicated unit)	T6A0	UNIWIRE SYSTEM 8 points	4 stations	8 stations	8 points	Page 20
	T6A1	UNIWIRE SYSTEM 16 points	8 stations	16 stations	16 points	
	T6C0	OMRON CompoBus/S 8 points	4 stations	8 stations	8 points	
	T6C1	OMRON CompoBus/S 16 points	8 stations	16 stations	16 points	
	T6E0	SUNX S-LINK 8 points	4 stations	8 stations	8 points	
	T6E1	SUNX S-LINK 16 points	8 stations	16 stations	16 points	
	T6J0	UNIWIRE H system 8 points	4 stations	8 stations	8 points	
	T6J1	UNIWIRE H system 16 points	8 stations	16 stations	16 points	
	T6G1	CC-Link	8 stations	16 stations	16 points	
Serial transmission type (close contact type)	T7D1	DeviceNet 16 points	8 stations	16 stations	16 points	
	T7D2	DeviceNet 32 points	16 stations	32 stations	32 points	
	T7G1	CC-Link 16 points	8 stations	16 stations	16 points	
	T7G2	CC-Link 32 points	16 stations	32 stations	32 points	

Note 1 RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.

Slave unit specifications

Descriptions		T6C1 T6C0	T6G1 Note 1	T6A1 T6A0	T6J1 T6J0	T6E1 T6E0	T7D1 Note 2 T7D2	T7G1 Note 1 T7G2
Power voltage	Unit side	24 VDC ±10%		24 VDC			24 VDC ±10%	
	Valve side	24 VDC + 10% - 5%		+ 10% - 5%			24 VDC + 10% - 5%	
	Communication side	-		-			11 to 25 VDC	-
Current consumption	Unit side	T6C1: 60 mA or less T6C0: 40 mA or less (when all points output ON)	100 mA or less (when all points output ON)	100 mA or less (when all points output ON) Note that current consumption of valve is not included.		60 mA or less (when all points output ON) Note that current consumption of valve is not included.	T7D1: 60 mA or less T7D2: 85 mA or less (when all points output ON)	T7G1: 65 mA or less T7G2: 90 mA or less (when all points output ON)
	Valve side	15 mA or less (when all points OFF)					15 mA or less (when all points OFF)	
	Communication side	-		-			50 mA or less	-
Output number		T6C1: 16 points T6C0: 8 points	16 points	T6A1: 16 points T6A0: 8 points	T6J1: 16 points T6J0: 8 points	T6E1: 16 points T6E0: 8 points	T7D1: 16 points T7D2: 32 points	T7G1: 16 points T7G2: 32 points
Occupied number		T6C1: 2 node address (8 points mode) T6C0: 1 node address (8 points mode)	1 station	T6A1: Output 16 points T6A0: Output 8 points	T6J1: Output 16 points T6J0: Output 8 points	T6E1: FAN-in: 3 T6E0: FAN-in: 3 Note 3	T7D1: 2 bytes T7D2: 4 bytes	T7G1: 1 station T7G2: 1 station

Note 1 CC-Link is ver.1.10.
Note 2 Consult with CKD for EDS file. (EDS file: Text file of parameters for communicating with each company's master.)
Note 3 FAN-in indicates input capacity from D-G line. (It is necessary to calculate the connection quantity.)

Ozone specifications

Ozone specifications can be selected with "H" option "A" in How to Order on pages 16 and 20.

Clean room specifications

(Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

**-VOLTAGE- P70

How to order manifold

D-sub / flat cable connector

* Refer to Page 20 for serial transmission type.

● Discrete valve block

N 3 E0 66 0 - C4 —— M D2 F —— 3

● Block manifold

M N 4 E0 1 0 - C4 - R - M T53 D2 W F - 5 - 3

DIN rail mounting method

Ⓐ Valve type

Ⓑ Solenoid position (Note 10)

Ⓒ Port size

Ⓓ Pressure adjustment

Ⓔ Manual override

Ⓕ Wiring method

Individual wiring type

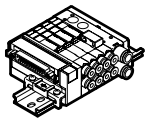
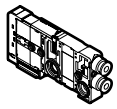
Ⓖ Terminal and connector pin array

Ⓗ Option

Ⓘ Station number

Ⓙ Voltage

* Complete manifold specification sheet (Page 69).

Type	
Block manifold	Discrete valve block
	

Symbol	Descriptions			Block manifold	Discrete valve block
Ⓐ Valve type					
3	3 port valve, two 3 port valve integrated type			●	●
4	4 port valve, 3, 4 port valve mix			●	●
Ⓑ Solenoid position					
1	3 port valve	Single N.C. self reset type	(Differential pressure spring return)	●	●
11	3 port valve	Single N.O. self reset type	(Differential pressure spring return)	●	●
2	3 port valve	Double N.C. self hold type		●	●
21	3 port valve	Double N.O. self hold type		●	●
66	Two 3 port valve integrated type (Note 1)	A side valve: N.C. self reset type	(Differential pressure return)	●	●
66S	Two 3 port valve integrated type (Note 1)	B side valve: N.C. self reset type	(Differential pressure spring return)	●	●
67	Two 3 port valve integrated type (Note 1)	A side valve: N.C. self reset type	(Differential pressure return)	●	●
67S	Two 3 port valve integrated type (Note 1)	B side valve: N.O. self reset type	(Differential pressure spring return)	●	●
76	Two 3 port valve integrated type (Note 1)	A side valve: N.O. self reset type	(Differential pressure return)	●	●
76S	Two 3 port valve integrated type (Note 1)	B side valve: N.C. self reset type	(Differential pressure spring return)	●	●
77	Two 3 port valve integrated type (Note 1)	A side valve: N.O. self reset type	(Differential pressure return)	●	●
77S	Two 3 port valve integrated type (Note 1)	B side valve: N.O. self reset type	(Differential pressure spring return)	●	●
1	4 port valve	2-position single solenoid self reset type	(differential pressure spring return)	●	●
2	4 port valve	2-position double solenoid self hold type		●	●
3	4 port valve	3-position all ports closed		●	●
4	4 port valve	3-position A/B/R connection		●	●
5	4 port valve	3-position P/A/B connection		●	●
8	Mix manifold			●	
Ⓒ Port size					
CF	ø1.8 barbed joint for fiber tube (tube UP-9102-**)			●	●
C18	ø1.8 push-in joint for fiber tube Lateral (tube UP-9402-**)			●	●
CL18	ø1.8 push-in joint for fiber tube Upward (tube UP-9402-**)			●	●
C4	ø4 push-in joint Lateral			●	●
C6	ø6 push-in joint Lateral			●	●
CL4	ø4 push-in joint Upward			●	●
CL6	ø6 push-in joint Upward			●	●
M5	M5 female thread (with non-rotating)			●	●
CX	Mix push-in joint			●	●
Ⓓ Pressure adjustment					
R	Regulator block mounted manifold (Note 2, 3)			●	
Ⓔ Manual override					
M	Non-locking dedicated manual override (with manual cover)			●	●
Ⓕ Wiring method					
Refer to the following page.				●	
Ⓖ Terminal and connector pin array					
Blank	Standard wiring			●	●
W	Double wiring (Note 4, 5)			●	●
Ⓗ Option					
E	Low exoergic, energy saving circuit type (Note 6)			●	●
U	Built-in individual power supply function (AUX) type (Note 6, 7)			●	●
A	Ozone proof			●	●
F	A/B port filter integrated (Note 8)			●	●
Ⓘ Station number					
1	1 station			●	
to	to				
24	24 stations (Note 9)				
Ⓙ Voltage					
3	24 VDC			●	●
4	12 VDC			●	●

• Refer to page 669 for model no. of cable with D-sub connector.

⚠ Note on model no. selection

Note 1: The type with two 3 port valves cannot be used with the external pilot type. Contact CKD for the other working conditions.

Note 2: The type with two 3 port valves resets the main valve with the main pressure, so if there is a difference between the pilot pressure and main pressure, the response time may be delayed.

Note 3: Check that the main pressure supplied to the valve block with two 3 port valves is higher than the pilot pressure, and that the main pressure does not drop below 0.2 MPa.

Note 4: Check the connector pin layout (example) given on pages 48 to 55 for the double wiring specifications. When ordering a single valve block, the double wiring designation is limited to the 2-position single solenoid for the 4 port valve, and the 3 port valve.

Note 5: The double wiring specifications cannot be selected for the discrete individual wiring valve block.

Note 6: Energizing is limited to the plus common. "E" and "U" cannot be selected simultaneously.

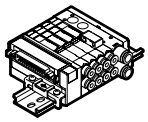
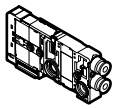
Note 7: "U" cannot be selected when individual wiring is selected.

Note 8: A filter (for preventing entry of foreign matter) is incorporated in the supply/exhaust block's P port.

Note 9: Differs based on the specifications. Check on page 15.

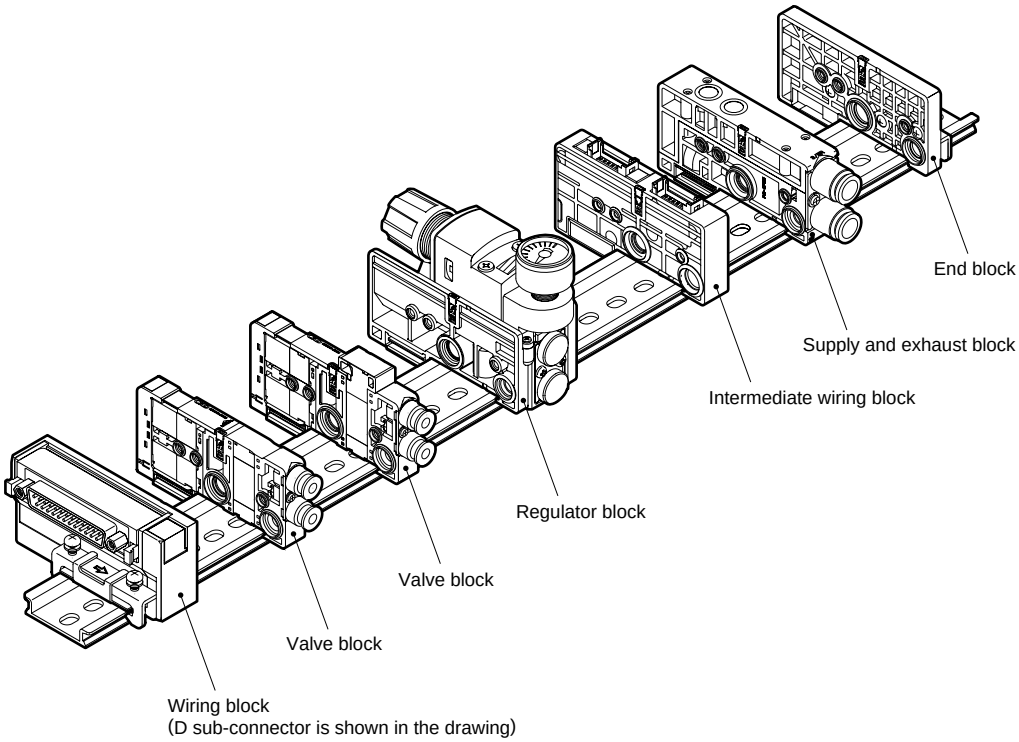
Note 10: Refer to the precautions on page 9 for the selfreset type specifications.

(Wiring method list)

Symbol	Descriptions		Type: Block manifold	Type: Discrete valve block
				
Ⓕ Wiring method				
T30	25 pin D sub-connector Left		●	
T30R	25 pin D sub-connector Right		●	
T50	20 pin flat cable connector Left (with power supply terminal) Note 11		●	
T50R	20 pin flat cable connector Right (with power supply terminal) Note 11		●	
T51	20 pin flat cable connector Left		●	
T51R	20 pin flat cable connector Right		●	
T52	10 pin flat cable connector Left		●	
T52R	10 pin flat cable connector Right		●	
T53	26 pin flat cable connector Left		●	
T53R	26 pin flat cable connector Right		●	
TM1A	Intermediate wiring block RITS connector 6P×2 pcs. Note 12		●	
TM1C	Intermediate wiring block RITS connector 6P Note 12		●	
TM52	Intermediate wiring block 10 pin flat cable connector		●	
TX	Wiring block Mix Note 13, 14		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring type	D-connector 300 mm	●	●
D20		D-connector 500 mm	●	●
D21		D-connector 1000 mm	●	●
D22		D-connector 2000 mm	●	●
D23		D-connector 3000 mm	●	●
D2N		D-connector without socket	●	●
D3		D-connector socket, terminal attached	●	●

Note 11: When mixing the connectors with the T50 or T50R type with power terminal, only T50R can be combined with T50, and T50 with T50R.
Note 12: RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.
Note 13: 2 pcs. are designated in the manifold specifications. Consult with CKD for 3 pcs. or more.
Note 14: If TX is selected for the wiring connection method, individual wiring cannot be selected.

Manifold components explanation and parts list



Example of main component model no. (Refer to Pages 38 to 47 for details.)

Parts name	Model no. (example)	Parts name	Model no. (example)
Wiring block	N4E0-T30	Regulator block	N4E0-RA-RL
Valve block	N4E020-C4-3	Supply and exhaust block	N4E0-Q-8
	N4E030-C4-3	End block	N4E0-ER

Related parts list

Parts name	Model no.	Parts name	Model no.
Cartridge type push-in joint and related parts	N4E0-JOINT-C18	Cartridge type push-in joint and related parts	N4E0-JOINT-CF
	N4E0-JOINT-C4		N4E0-JOINT-CPG
	N4E0-JOINT-C6		
	N4E0-JOINT-CL18		
	N4E0-JOINT-CL4		
	N4E0-JOINT-CL6		

How to order manifold

Serial transmission

* Refer to Page 16 for D sub-connector / flat cable connector type.

● Discrete valve block

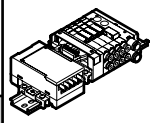
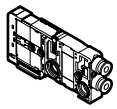
N 3 E0 66 0 - C4 —— M D2 F —— 3

● Block manifold

M N 4 E0 1 0 - C4 - R - M T6G1 D2 W F - 5 - 3

- N: DIN rail mounting method
- 4: Ⓐ Valve type
- 1: Ⓑ Solenoid position (Note 10)
- C4: Ⓒ Port size
- R: Ⓓ Pressure adjustment
- M: Ⓔ Manual override
- T6G1: Individual wiring type
- D2: Ⓕ Wiring method (serial transmission)
- W: Ⓖ Terminal and connector pin array
- F: Ⓗ Option
- 5: Ⓘ Station number
- 3: Ⓙ Voltage

* Complete manifold specification sheet (Page 69).

Symbol	Descriptions			Type: Block manifold	Type: Discrete valve block
					
Ⓐ Valve type					
3	3 port valve, two 3 port valve integrated type			●	●
4	4 port valve, 3, 4 port valve mix			●	●
Ⓑ Solenoid position					
1	3 port valve	Single N.C. self reset type	(Differential pressure spring return)	●	●
11	3 port valve	Single N.O. self reset type	(Differential pressure spring return)	●	●
2	3 port valve	Double N.C. self hold type		●	●
21	3 port valve	Double N.O. self hold type		●	●
66	Two 3 port valve integrated type	A side valve N.C. self reset type	(Differential pressure return)	●	●
66S	Two 3 port valve integrated type	B side valve N.C. self reset type	(Differential pressure spring return)	●	●
67	Two 3 port valve integrated type	A side valve N.C. self reset type	(Differential pressure return)	●	●
67S	Two 3 port valve integrated type	B side valve N.O. self reset type	(Differential pressure spring return)	●	●
76	Two 3 port valve integrated type	A side valve N.O. self reset type	(Differential pressure return)	●	●
76S	Two 3 port valve integrated type	B side valve N.C. self reset type	(Differential pressure spring return)	●	●
77	Two 3 port valve integrated type	A side valve N.O. self reset type	(Differential pressure return)	●	●
77S (Note 1)	Two 3 port valve integrated type	B side valve N.O. self reset type	(Differential pressure spring return)	●	●
1	4 port valve	2-position single solenoid self reset type	(Differential pressure spring return)	●	●
2	4 port valve	2-position double solenoid self hold type		●	●
3	4 port valve	3-position all ports closed		●	●
4	4 port valve	3-position A/B/R connection		●	●
5	4 port valve	3-position P/A/B connection		●	●
8	Mix manifold			●	
Ⓒ Port size					
CF	ø1.8 barbed joint for fiber tube (tube UP-9102-**)			●	●
C18	ø1.8 push-in joint for fiber tube Lateral (tube UP-9402-**)			●	●
CL18	ø1.8 push-in joint for fiber tube Upward (tube UP-9402-**)			●	●
C4	ø4 push-in joint Lateral			●	●
C6	ø6 push-in joint Lateral			●	●
CL4	ø4 push-in joint Upward			●	●
CL6	ø6 push-in joint Upward			●	●
M5	M5 female thread (with non-rotating)			●	●
CX	Mix push-in joint			●	●
Ⓓ Pressure adjustment					
R	Regulator block mounted manifold (Note 2, 3)			●	
Ⓔ Manual override					
M	Non-locking dedicated manual override (with manual cover)			●	●
Ⓕ Wiring method					
Refer to the following page.				●	
Ⓖ Terminal and connector pin array					
Blank	Standard wiring			●	●
W	Double wiring (Note 4, 5)			●	●
Ⓗ Option					
E	Low exoergic, energy saving circuit type (Note 6)			●	●
U	Built-in individual power supply function (AUX) type (Note 6, 7)			●	●
A	Ozone proof			●	●
F	A/B port filter integrated (Note 8)			●	●
Ⓘ Station number					
1	1 station			●	
to	to				
32	32 stations (Note 9)				
Ⓙ Voltage					
3	24 VDC			●	●

⚠ Note on model no. selection

Note 1 : The type with two 3 port valves cannot be used with the external pilot type. Contact CKD for the other working conditions.

Note 2 : The type with two 3 port valves resets the main valve with the main pressure, so if there is a difference between the pilot pressure and main pressure, the response time may be delayed.

Note 3 : Check that the main pressure supplied to the valve block with two 3 port valves is higher than the pilot pressure, and that the main pressure does not drop below 0.2 MPa.

Note 4 : Check the connector pin layout (example) given on pages 56 and 59 for the double wiring specifications. When ordering a single valve block, the double wiring designation is limited to the 2-position single solenoid for the 4 port valve, and the 3 port valve.

Note 5 : The double wiring specifications cannot be selected for the discrete individual wiring valve block.

Note 6 : Energizing is limited to the plus common. "E" and "U" cannot be selected simultaneously.

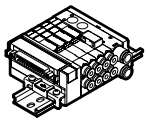
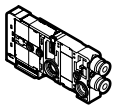
Note 7 : "U" cannot be selected when individual wiring is selected.

Note 8 : A filter (for preventing entry of foreign matter) is incorporated in the supply/exhaust block's P port.

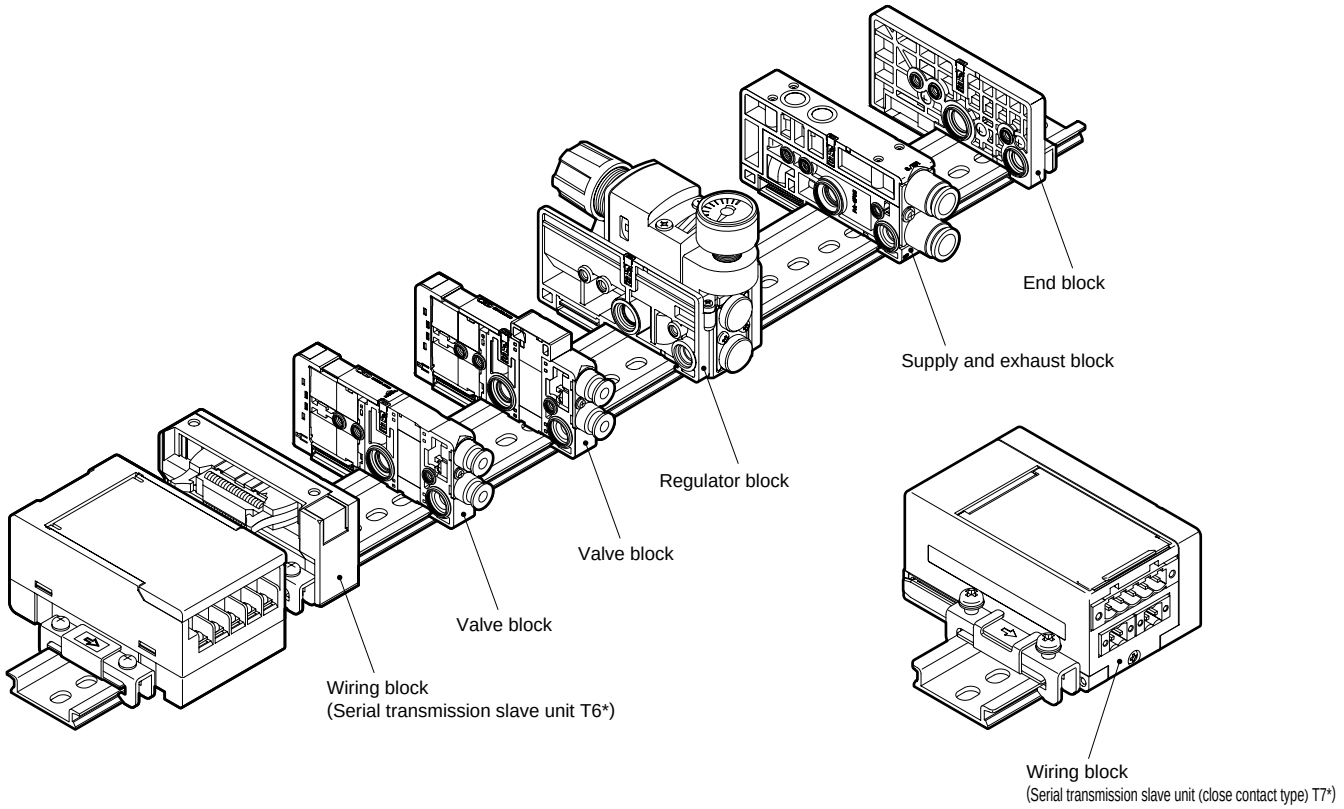
Note 9 : Differs based on the specifications. Check on page 15.

Note10 : Refer to the precautions on page 9 for the self-reset type specifications.

(Wiring method list)

Symbol	Descriptions		Type: Block manifold	Type: Discrete valve block
				
Ⓕ Wiring method				
T6A0	UNIWIRE SYSTEM 8 points		●	
T6A1	UNIWIRE SYSTEM 16 points		●	
T6C0	OMRON CompoBus/S 8 points		●	
T6C1	OMRON CompoBus/S 16 points		●	
T6E0	SUNX S-LINK 8 points		●	
T6E1	SUNX S-LINK 16 points		●	
T6J0	UNIWIRE H system 8 points		●	
T6J1	UNIWIRE H system 16 points		●	
T6G1	CC-Link		●	
T7D1	Close contact type Device Net 16 points		●	
T7D2	Close contact type Device Net 32 points		●	
T7G1	Close contact type CC-Link 16 points		●	
T7G2	Close contact type CC-Link 32 points		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring type	D-connector 300 mm	●	●
D20		D-connector 500 mm	●	●
D21		D-connector 1000 mm	●	●
D22		D-connector 2000 mm	●	●
D23		D-connector 3000 mm	●	●
D2N		D-connector without socket	●	●
D3		D-connector socket, terminal attached	●	●

Manifold components explanation and parts list



Example of main component model no. (Refer to Pages 38 to 47 for details.)

Parts name	Model no. (example)	Parts name	Model no. (example)
Wiring block	N4E0-T6G1	Regulator block	N4E0-RA-RL
Valve block	N4E020-C4-3	Supply and exhaust block	N4E0-Q-8
	N4E030-C4-3	End block	N4E0-ER

Related parts list

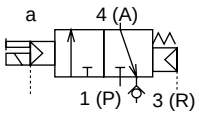
Parts name	Model no.	Parts name	Model no.
Cartridge type push-in joint and related parts	N4E0-JOINT-C18	Cartridge type push-in joint and related parts	N4E0-JOINT-CF
	N4E0-JOINT-C4		N4E0-JOINT-CPG
	N4E0-JOINT-C6		
	N4E0-JOINT-CL18		
	N4E0-JOINT-CL4		
	N4E0-JOINT-CL6		

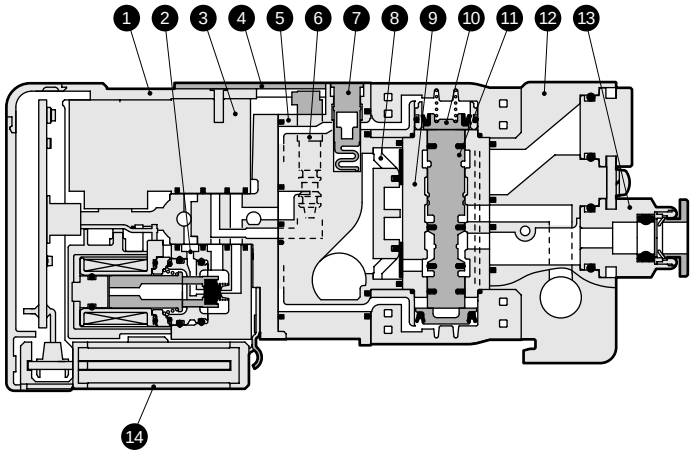
Internal structure and parts list

3 port valve

N3E010

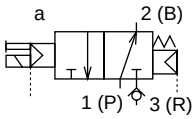
●2-position single solenoid normally closed

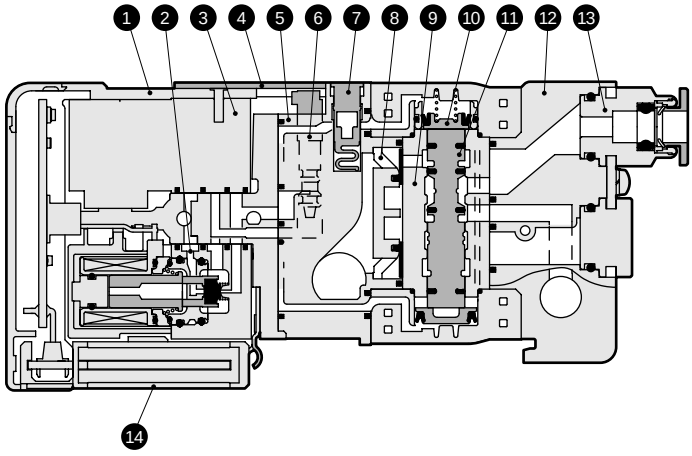




N3E0110

●2-position single solenoid normally open





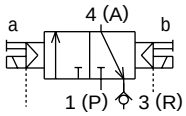
Main parts list

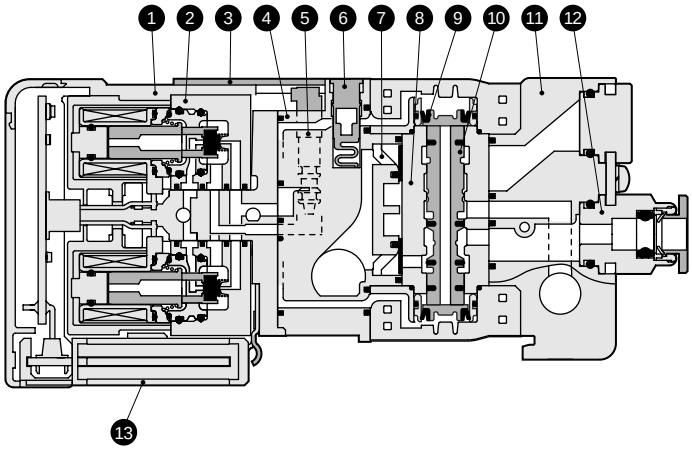
No.	Parts name	Material	No.	Parts name	Material
1	Electric cover	PBT/PC	8	Check valve	PBT/UR
2	Coil assembly	-	9	Body	Aluminum
3	Coil dummy	PPS	10	Piston room assembly	-
4	Manual cover	PBT	11	Spool assembly	Aluminum
5	Pilot block	PPS/PA	12	Port block	PA
6	Manual override	POM	13	Cartridge type push-in joint	-
7	Connection key	POM	14	Wiring connector assembly	LCP

Internal structure and parts list

N3E020

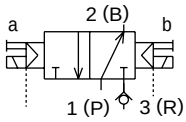
● 2-position double solenoid normally closed
(Self hold type)

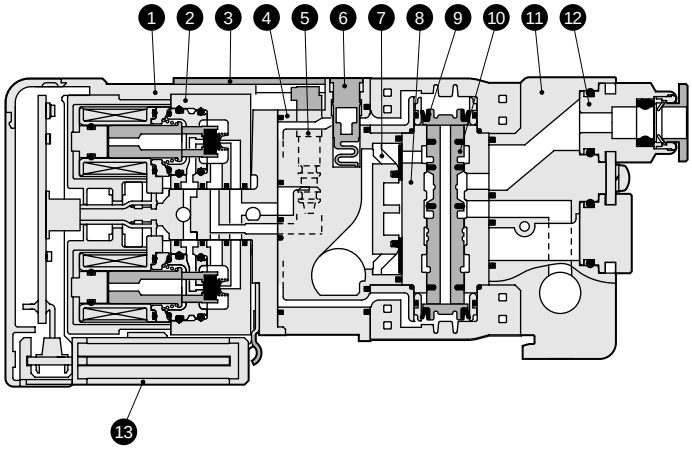




N3E0210

● 2-position double solenoid normally open
(Self hold type)





Main parts list

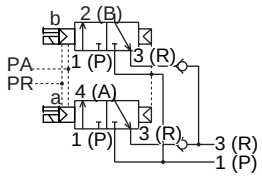
No.	Parts name	Material	No.	Parts name	Material
1	Electric cover	PBT/PC	8	Body	Aluminum
2	Coil assembly	-	9	Piston room assembly	-
3	Manual cover	PBT	10	Spool assembly	Aluminum
4	Pilot block	PPS/PA	11	Port block	PA
5	Manual override	POM	12	Cartridge type push-in joint	-
6	Connection key	POM	13	Wiring connector assembly	LCP
7	Check valve	PBT/UR			

Internal structure and parts list

Two 3 port valves integrated type

N3E0660

● N.C./N.C. self reset type (differential pressure return)

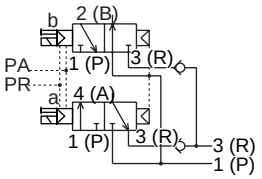


B side N.C.

A side N.C.

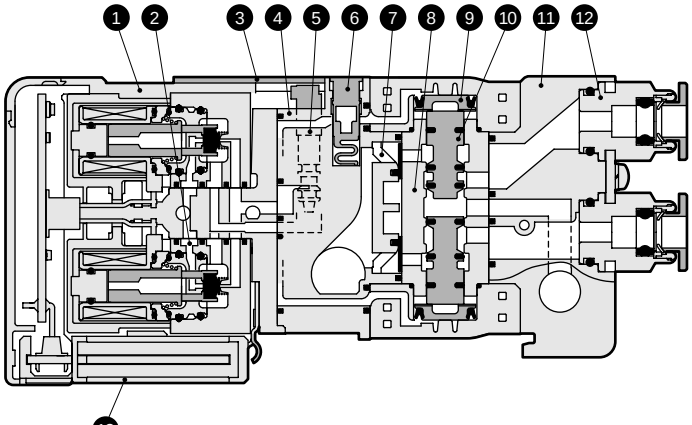
N3E0670

● N.C./N.O. self reset type (differential pressure return)



B side N.O.

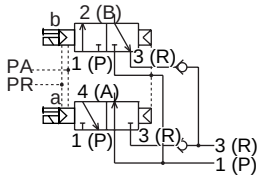
A side N.C.



The drawing shows the solenoids OFF at both ends of the two 3 port valves integrated N.C./N.O. self reset type (differential pressure return).

N3E0760

● N.O./N.C. self reset type (differential pressure return)

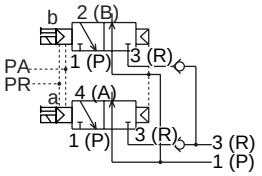


B side N.C.

A side N.O.

N3E0770

● N.O./N.O. self reset type (differential pressure return)



B side N.O.

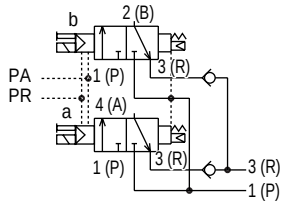
A side N.O.

Main parts list

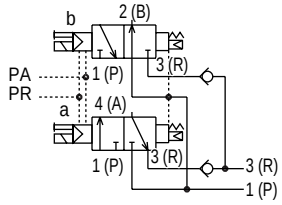
No.	Parts name	Material	No.	Parts name	Material
1	Electric cover	PBT/PC	8	Body	Aluminum
2	Coil assembly	-	9	Piston room assembly	-
3	Manual cover	PBT	10	Spool assembly	Aluminum
4	Pilot block	PPS/PA	11	Port block	PA
5	Manual override	POM	12	Cartridge type push-in joint	-
6	Connection key	POM	13	Wiring connector assembly	LCP
7	Check valve	PBT/UR			

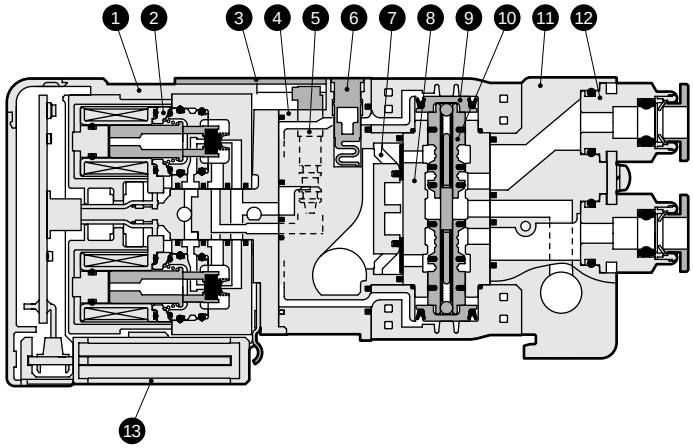
Internal structure and parts list

N3E066S0
●N.C./N.C. self reset type (differential pressure spring return)



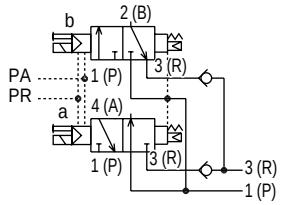
N3E067S0
●N.C./N.O. self reset type (differential pressure spring return)



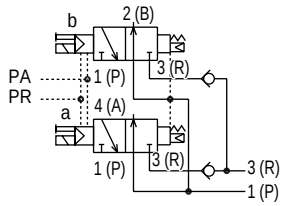


The drawing shows the solenoids OFF at both ends of the two 3 port valves integrated N.C./N.O. self reset type (differential pressure spring return).

N3E076S0
●N.O./N.C. self reset type
(differential pressure spring return)



N3E077S0
●N.O./N.O. self reset type (differential pressure spring return)



Main parts list

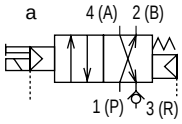
No.	Parts name	Material	No.	Parts name	Material
1	Electric cover	PBT/PC	8	Body	Aluminum
2	Coil assembly	-	9	Piston room assembly	-
3	Manual cover	PBT	10	Spool assembly	Aluminum
4	Pilot block	PPS/PA	11	Port block	PA
5	Manual override	POM	12	Cartridge type push-in joint	-
6	Connection key	POM	13	Wiring connector assembly	LCP
7	Check valve	PBT/UR			

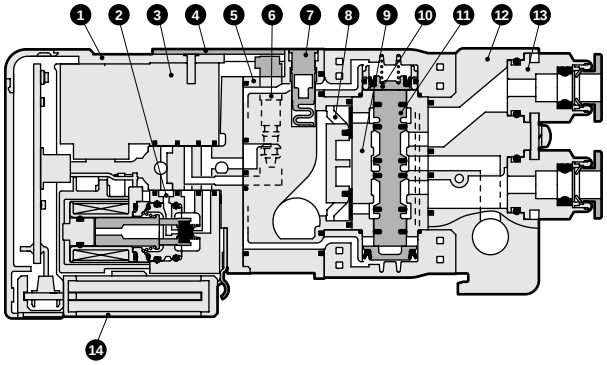
Internal structure and parts list

4 port valve

N4E010

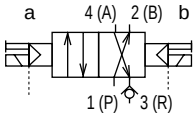
● 2-position single solenoid self reset type (differential pressure spring return)

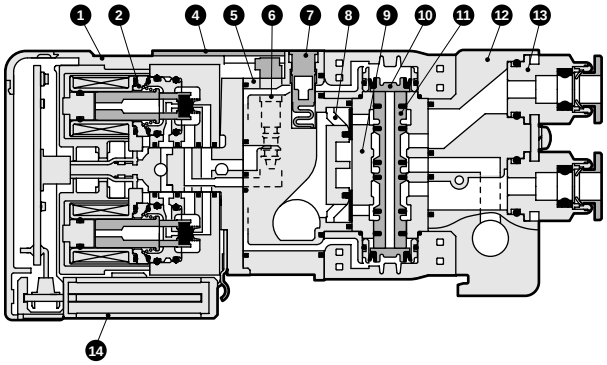




N4E020

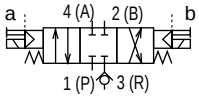
● 2-position double solenoid self hold type





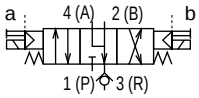
N4E030

● 3-position all ports closed



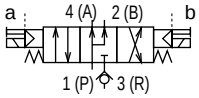
N4E040

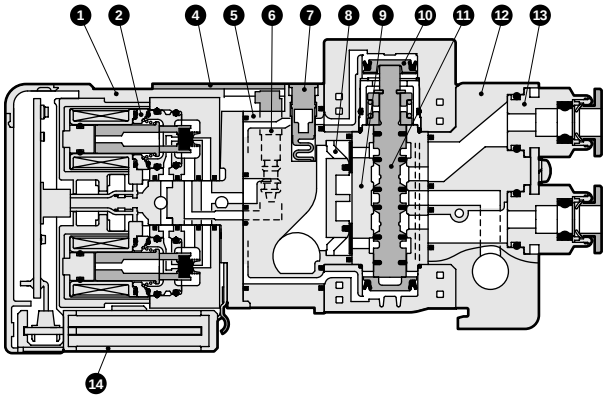
● 3-position A/B/R connection



N4E050

● 3-position P/A/B connection





Main parts list

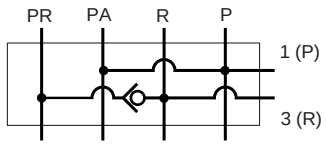
No.	Parts name	Material	No.	Parts name	Material
1	Electric cover	PBT/PC	8	Check valve	PBT/UR
2	Coil assembly	PPS/POM/PBT	9	Body	Aluminum
3	Coil dummy	PPS	10	Piston room assembly	PPS/POM
4	Manual cover	PBT	11	Spool assembly	Aluminum
5	Pilot block	PPS/PA	12	Port block	PA
6	Manual override	POM	13	Cartridge type push-in joint	-
7	Connection key	POM	14	Wiring connector assembly	LCP

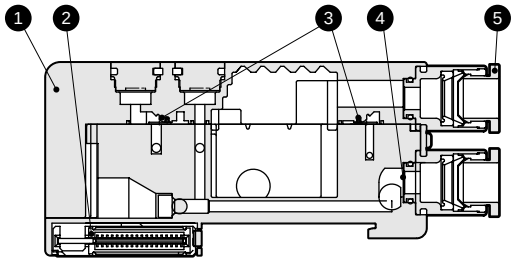
Internal structure and parts list

Supply and exhaust block

N4E0-Q

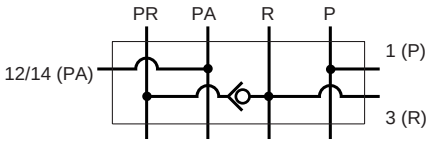
● Internal pilot

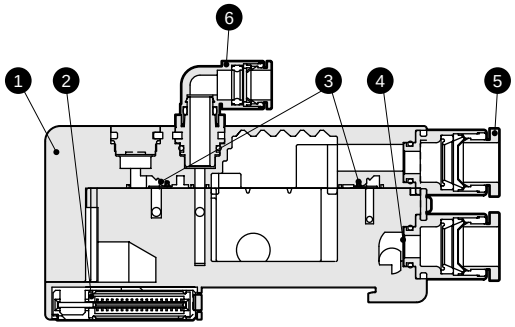




N4E0-QK

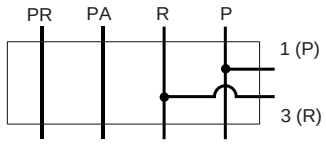
● External pilot

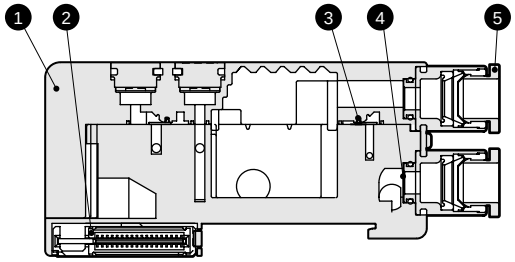




N4E0-QZ

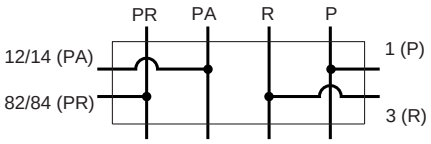
● Multi-pressure circuit

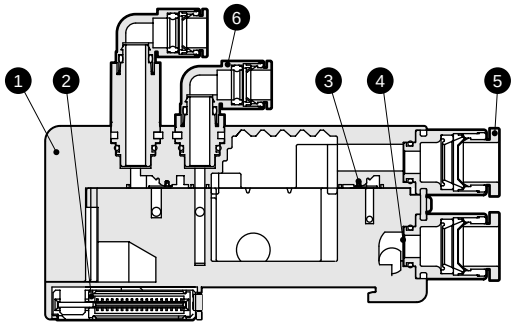




N4E0-QKZ

● PA/PR separate type for external pilot





Main parts list

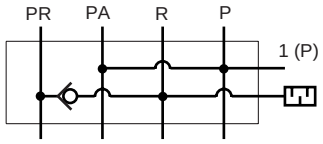
No.	Parts name	Material
1	Supply and exhaust block	PA
2	Wiring connector assembly	LCP
3	Check valve	UR
4	Air supply filter	SUS
5	Cartridge type push-in joint (main piping section)	-
6	Cartridge type push-in joint (external pilot piping)	-

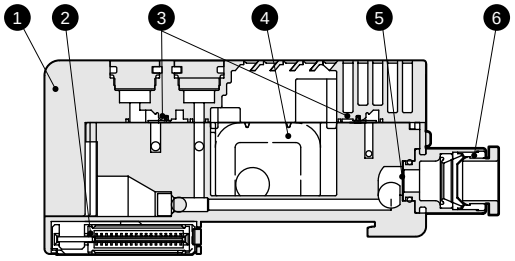
Internal structure and parts list

Supply and exhaust block

N4E0-QX

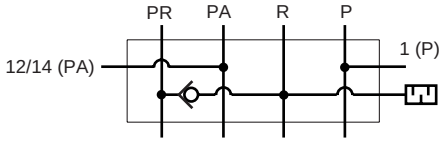
● Atmospheric release type for internal pilot

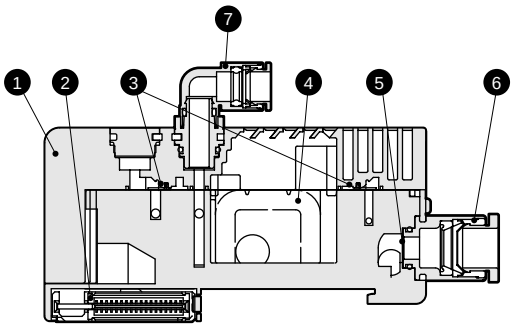




N4E0-QKX

● Atmospheric release type for external pilot





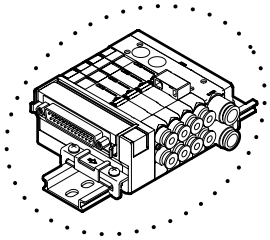
Main parts list

No.	Parts name	Material
1	Supply and exhaust block	PA
2	Wiring connector assembly	LCP
3	Check valve	UR
4	Exhaust filter	-
5	Air supply filter	SUS
6	Cartridge type push-in joint (main piping section)	-
7	Cartridge type push-in joint (external pilot piping section)	-

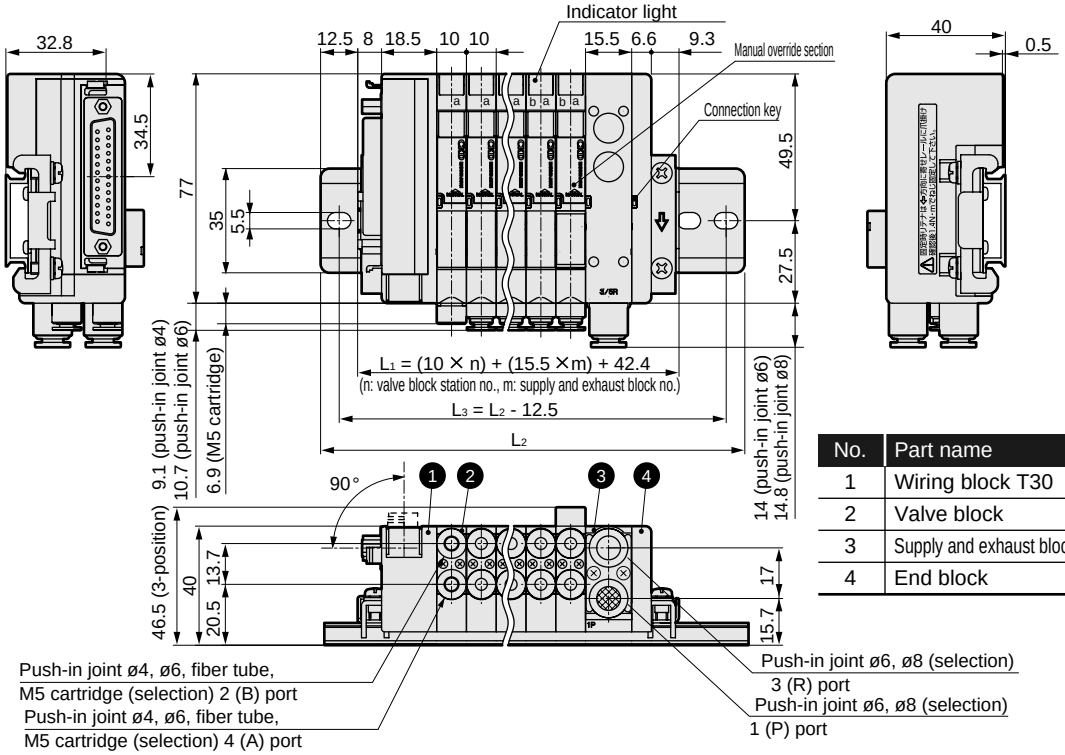
Dimensions

MN3E0*-*-T30*-*-*

● D sub-connector (T30) type



* The D sub-connector can be faced to the top or bottom.
* Refer to page 37 for details on changing the connector direction.

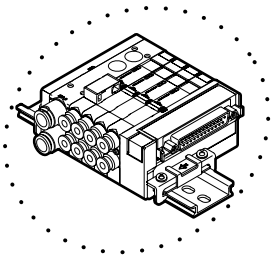


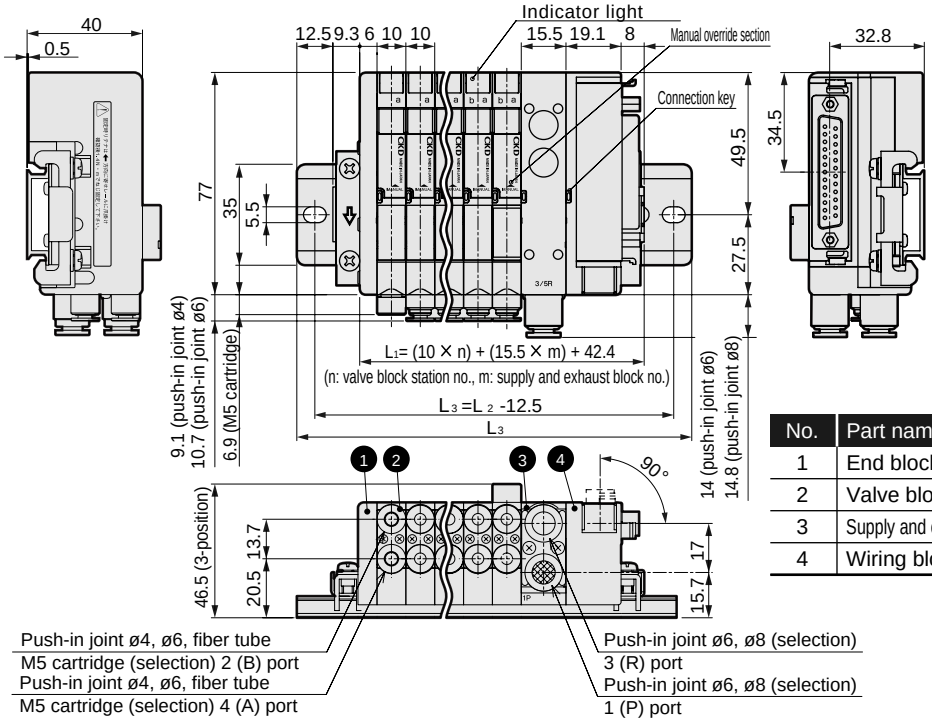
No.	Part name
1	Wiring block T30
2	Valve block
3	Supply and exhaust block
4	End block

* Refer to page 37 for the outline dimension drawings of the L type push-in joint for valve block (upward), L type push-in joint for air fiber joint and supply/exhaust block (upward), and type with individual power supply function (AUX).

MN3E0*-*-T30R*-*-*

● D sub-connector right type (T30R)





No.	Part name
1	End block
2	Valve block
3	Supply and exhaust block
4	Wiring block T30R

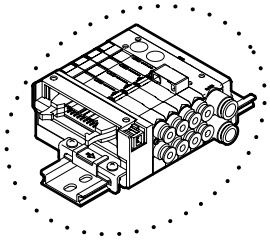
Manifold length L1 mm	76 or less	88.5 or less	101 or less	113.5 or less	126 or less	138.5 or less	151 or less	163.5 or less	176 or less	188.5 or less	201 or less	213.5 or less	226 or less	238.5 or less	251 or less	263.5 or less	276 or less	288.5 or less	301 or less	313.5 or less	326 or less	338.5 or less	351 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

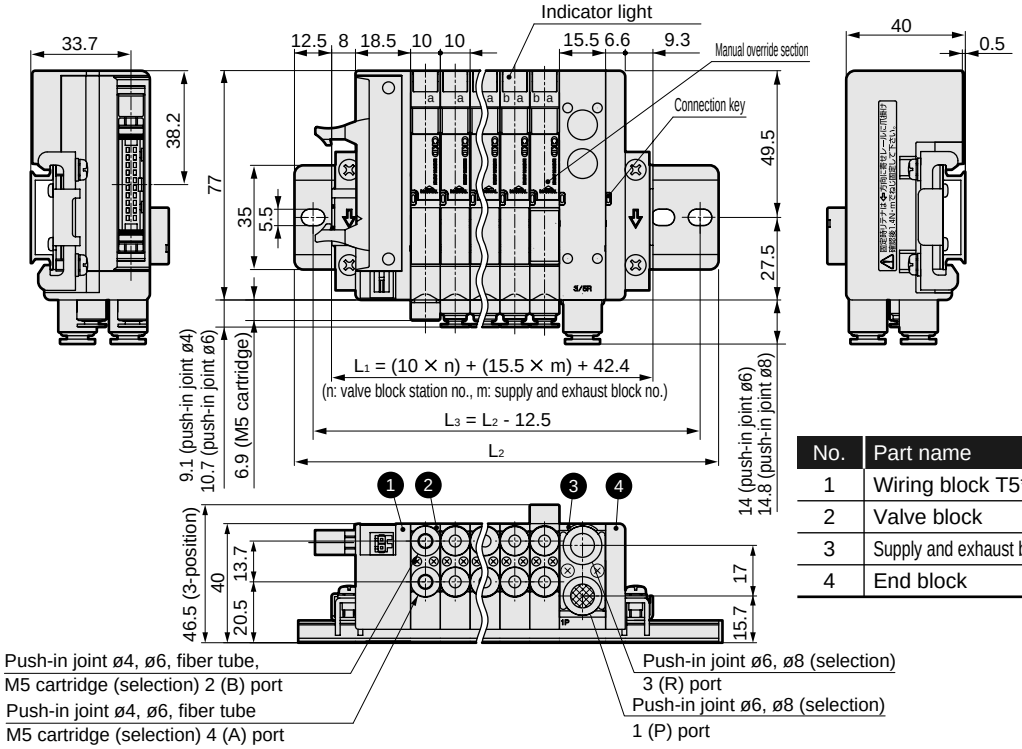
Dimensions CAD

MN$^{3}_{4}$E0*-*-T50*-*-*

● Flat cable connector left type (T50)

* T51, T52 and T53 are also available. The outline dimensions are the same as T50. Refer to page 33 for the connector dimensions.





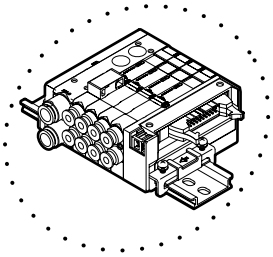
No.	Part name
1	Wiring block T5*
2	Valve block
3	Supply and exhaust block
4	End block

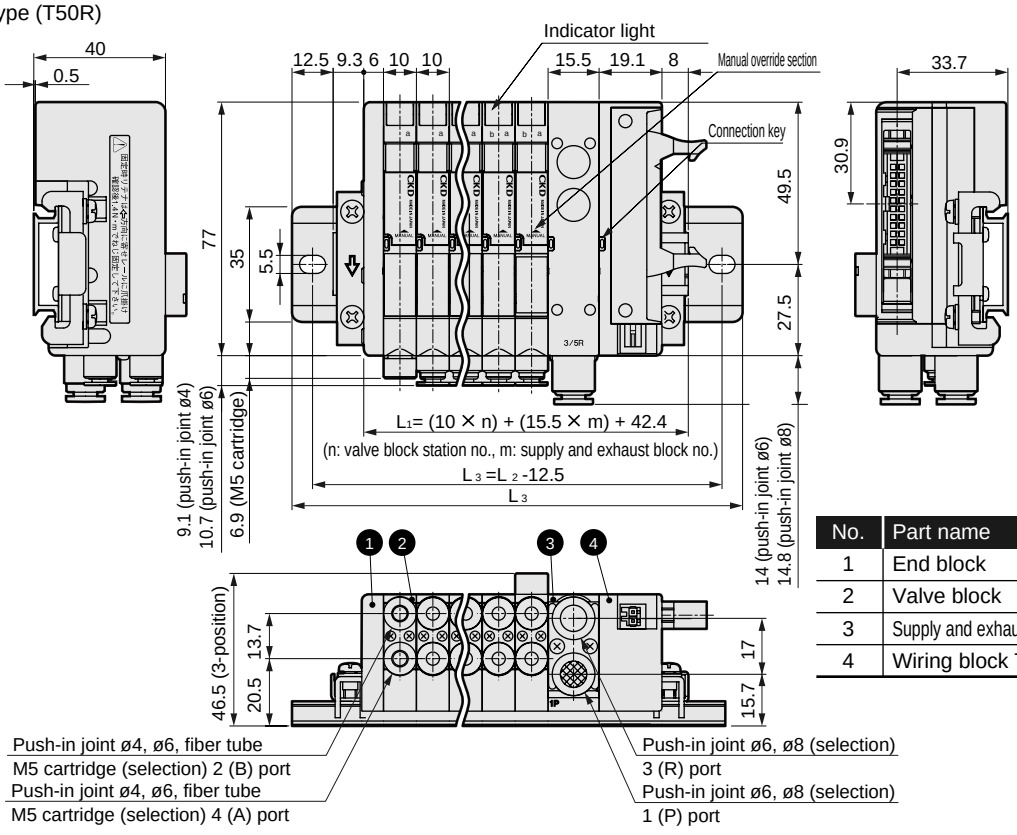
* Refer to page 37 for the outline dimension drawings of the L type push-in joint for valve block (upward), L type push-in joint for air fiber joint and supply/exhaust block (upward).

* The power supply connector can be used with T50 to supply power to the PLC output unit. Refer to page 33 for dimensions when the connector is connected, and to page 49 for wiring methods and precautions for wiring.

MN$^{3}_{4}$E0*-*-T50R*-*-*

● Flat cable connector right type (T50R)





No.	Part name
1	End block
2	Valve block
3	Supply and exhaust block
4	Wiring block T50R

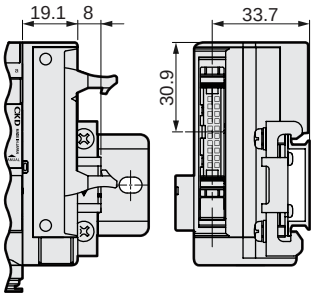
Manifold length L1 mm	76 or less	88.5 or less	101 or less	113.5 or less	126 or less	138.5 or less	151 or less	163.5 or less	176 or less	188.5 or less	201 or less	213.5 or less	226 or less	238.5 or less	251 or less	263.5 or less	276 or less	288.5 or less	301 or less	313.5 or less	326 or less	338.5 or less	351 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions

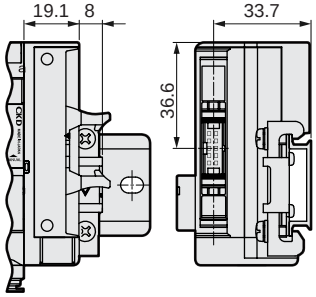
Flat cable connector (T51R/T52R/T53R): Connector section dimensions

* This drawing indicates connector type on the right.
Connector type dimension on the left is also the same.

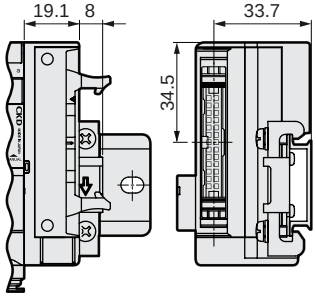
●T51R



●T52R



●T53R

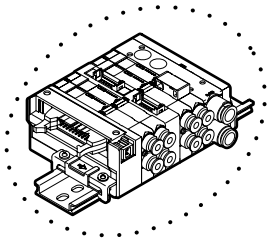


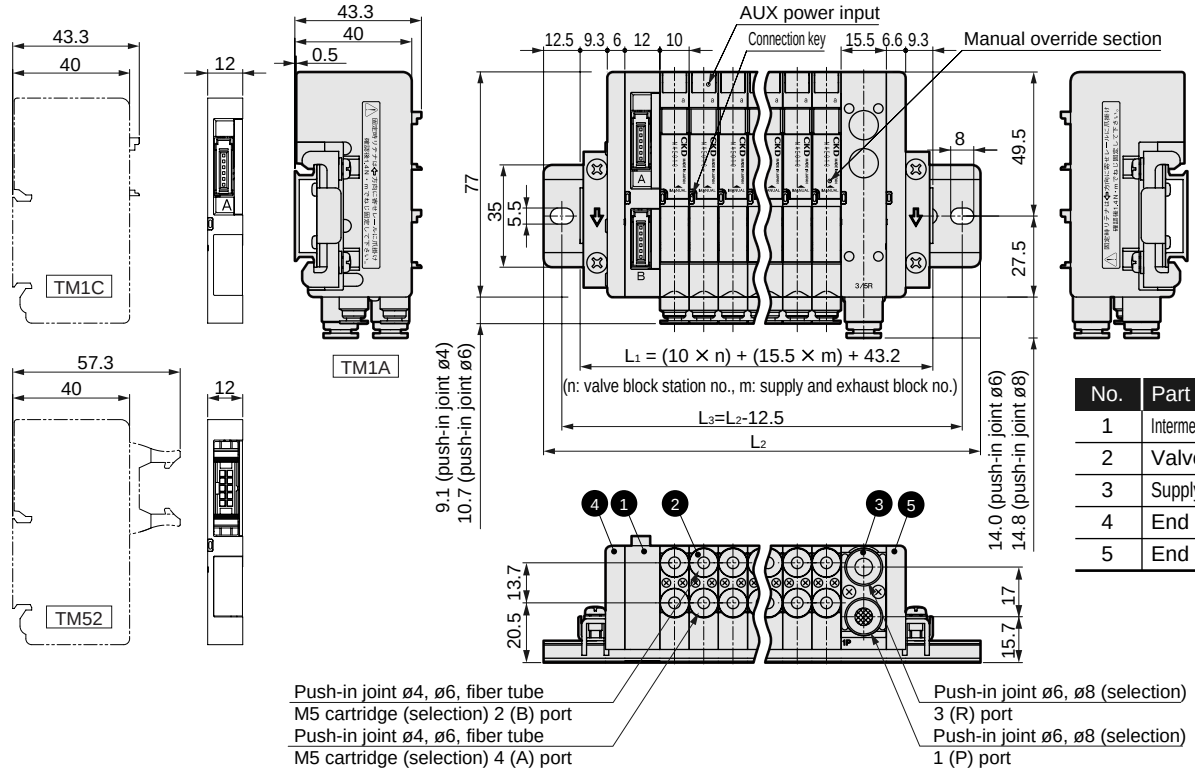
MN$^{3}_{4}$E0*-*-TM1$^{A}_{C}$*-*-*

●RITS connector intermediate wiring specifications (TM1$^{A}_{C}$)

MN$^{3}_{4}$E0*-*-TM52*-*-*

●10 pin flat cable connector intermediate wiring specifications (TM52)





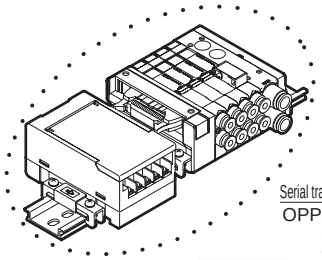
No.	Part name
1	Intermediate wiring block TM1A
2	Valve block
3	Supply and exhaust block
4	End block
5	End block

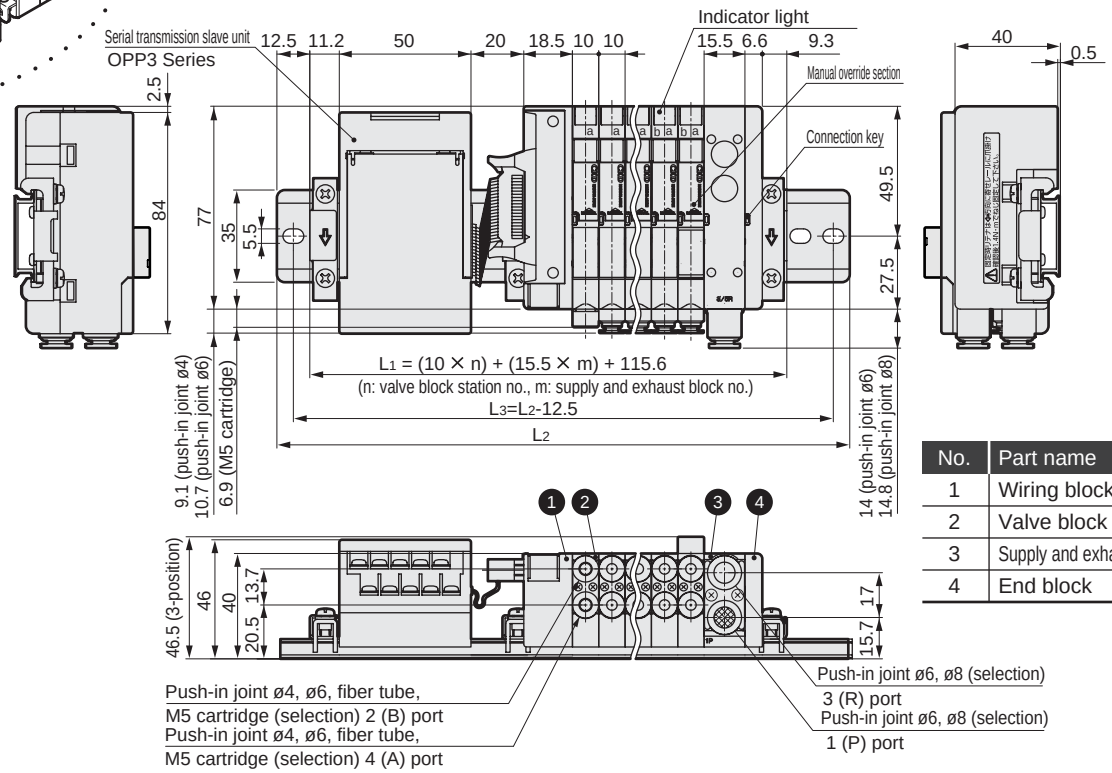
Manifold length L1 mm	76 or less	88.5 or less	101 or less	113.5 or less	126 or less	138.5 or less	151 or less	163.5 or less	176 or less	188.5 or less	201 or less	213.5 or less	226 or less	238.5 or less	251 or less	263.5 or less	276 or less	288.5 or less	301 or less	313.5 or less	326 or less	338.5 or less	351 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions CAD

MN$^{3}_{4}$E0*-*-T6**-*-*

● Serial transmission type (T6A0/1, T6C0/1, T6E0/1, T6J0/1, T6G1)

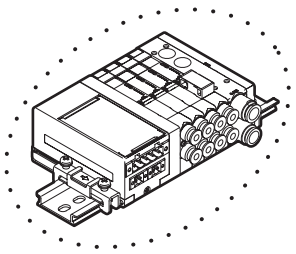


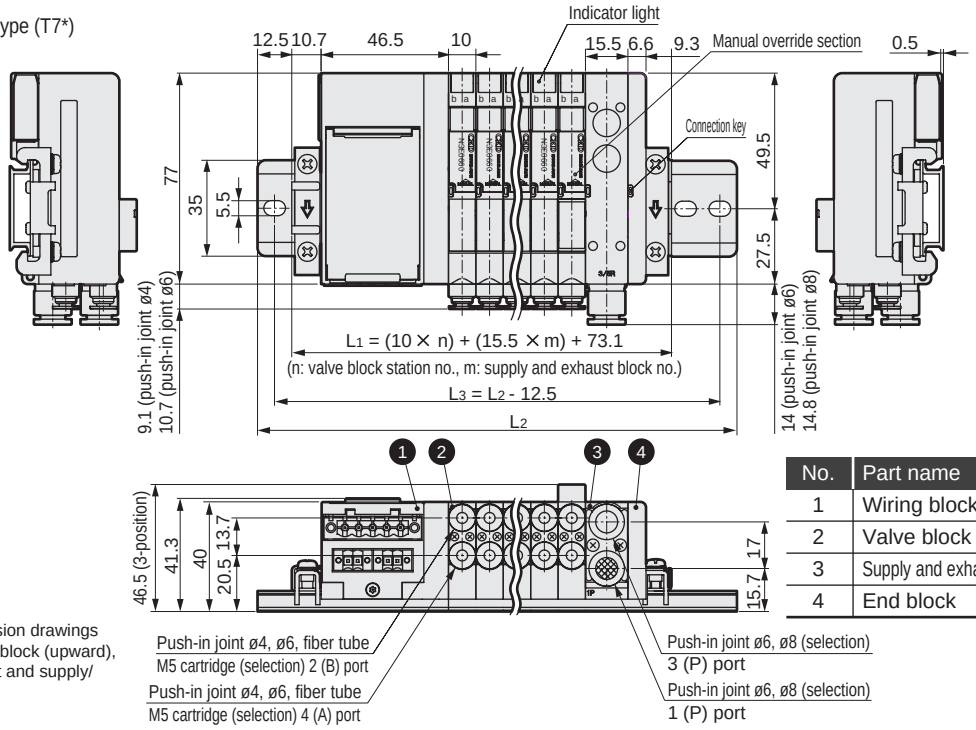


No.	Part name
1	Wiring block T6*
2	Valve block
3	Supply and exhaust block
4	End block

MN$^{3}_{4}$E0*-*-T7**-*-*

● Serial transmission (close contact) type (T7*)





No.	Part name
1	Wiring block T7*
2	Valve block
3	Supply and exhaust block
4	End block

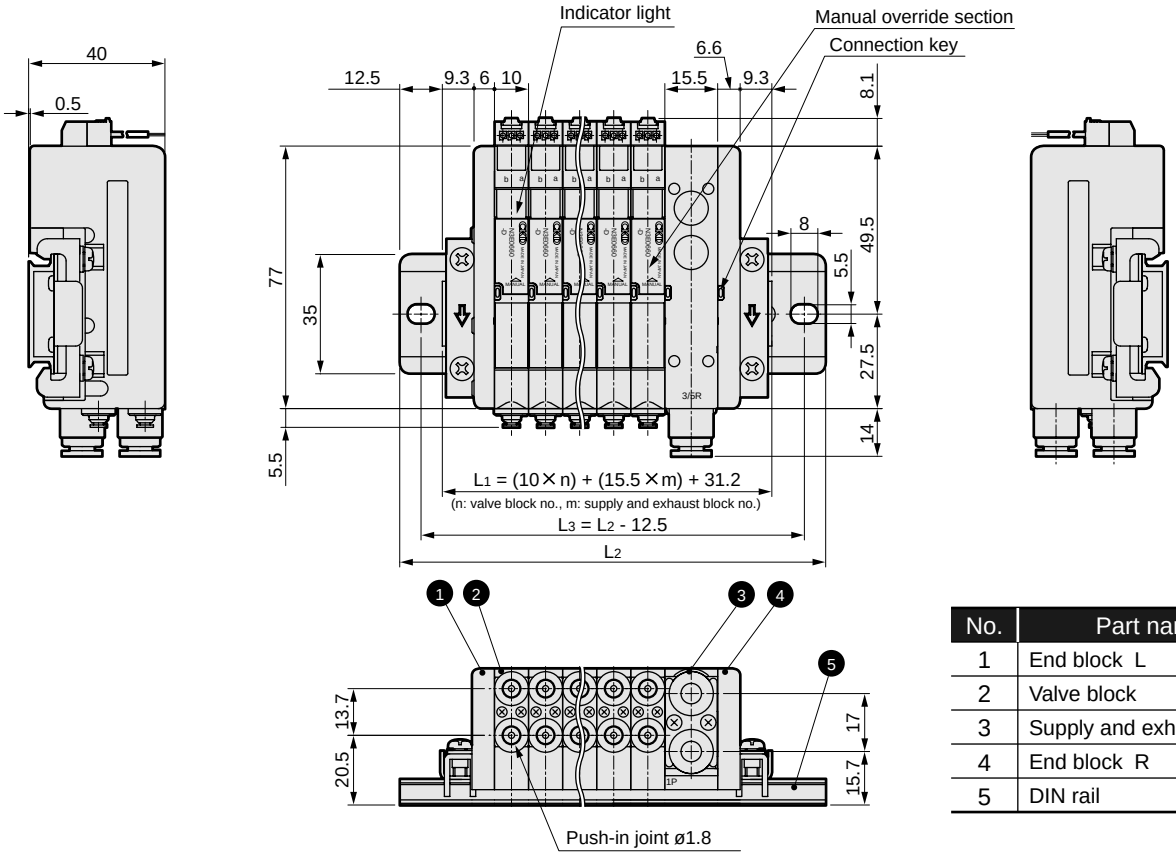
* Refer to page 37 for outline dimension drawings of the L type push-in joint for valve block (upward), L type push-in joint for air fiber joint and supply/ exhaust block (upward).

Manifold length L1 mm	76 or less	88.5 or less	101 or less	113.5 or less	126 or less	138.5 or less	151 or less	163.5 or less	176 or less	188.5 or less	201 or less	213.5 or less	226 or less	238.5 or less	251 or less	263.5 or less	276 or less	288.5 or less	301 or less	313.5 or less	326 or less	338.5 or less	351 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions

MN$^{3}_{4}$E0*-*-(D2 to D3)-*-*

●Individual wiring connector type (D2, D20, D21, D22, D23, D2N, D3)



No.	Part name
1	End block L
2	Valve block
3	Supply and exhaust block
4	End block R
5	DIN rail

* This drawing shows the ø1.8 push-in joint lateral type (C18).

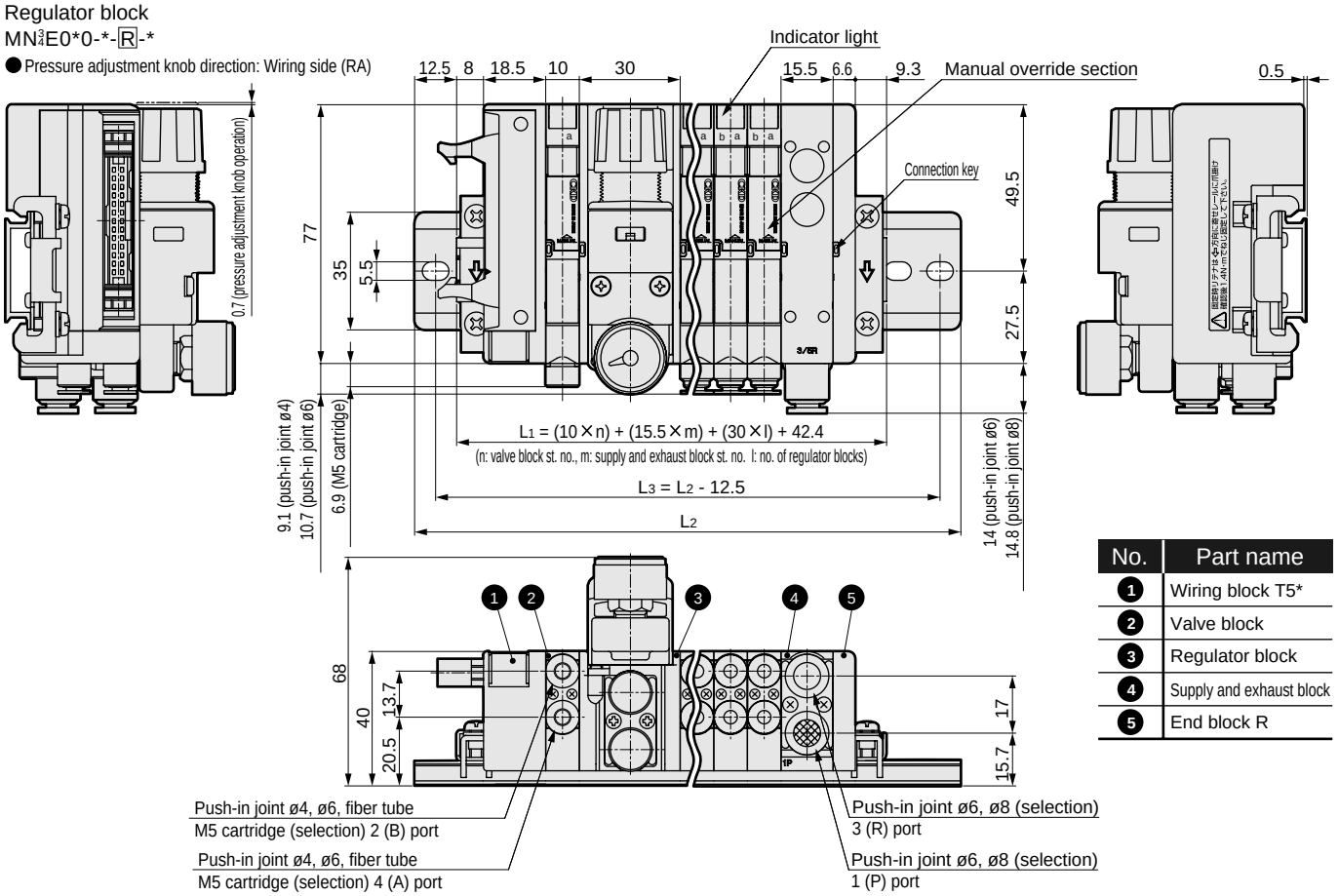
Dimensions

● Piping blocks (common for all type)

Regulator block

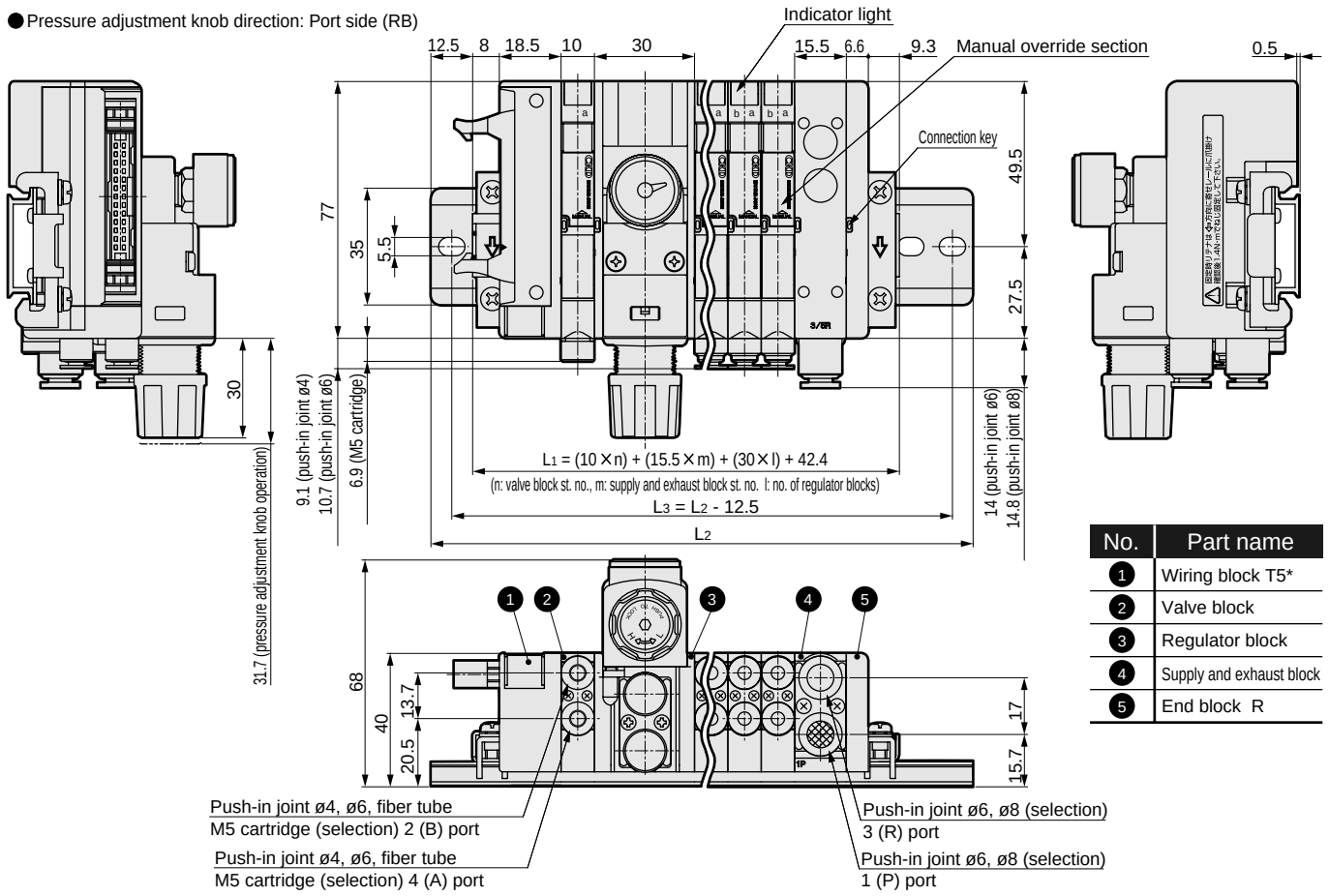
MN3E0*0-*-R-*

● Pressure adjustment knob direction: Wiring side (RA)



No.	Part name
1	Wiring block T5*
2	Valve block
3	Regulator block
4	Supply and exhaust block
5	End block R

● Pressure adjustment knob direction: Port side (RB)

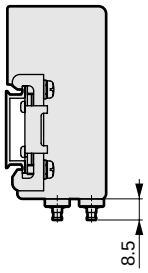


No.	Part name
1	Wiring block T5*
2	Valve block
3	Regulator block
4	Supply and exhaust block
5	End block R

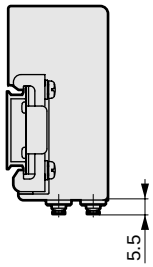
Dimensions

● Piping blocks (common for all type)

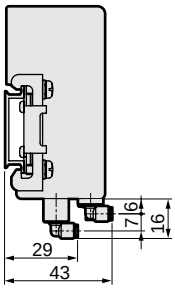
● Fiber tube joint (CF)



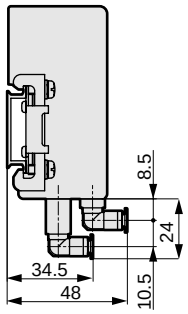
Push-in joint (lateral) for fiber tube
● ø1.8 (C18)



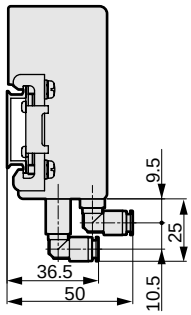
Push-in joint (upward) for fiber tube
● ø1.8 (CL18)



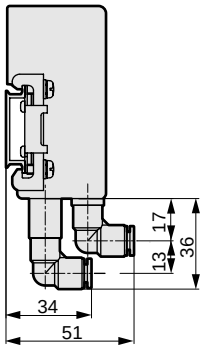
Valve block push-in joint L type (upward)
● ø4 (CL4)



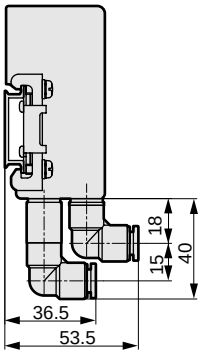
● ø6 (CL6)



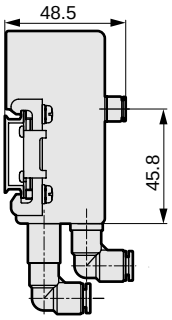
Supply and exhaust block push-in joint L type (upward)
● ø6 (CL6)



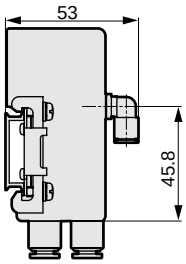
● ø8 (CL8)



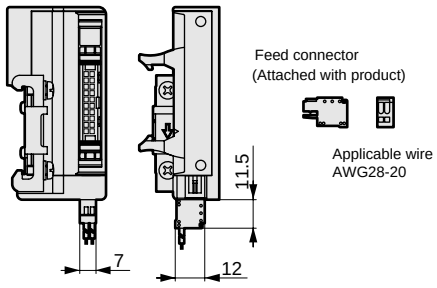
Supply and exhaust block for external pilot
● Upward piping



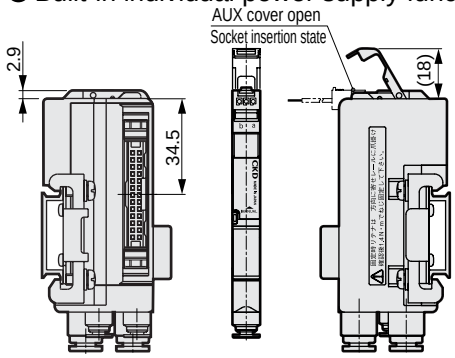
● Lateral piping



● Dimensions with T50 power supply connector

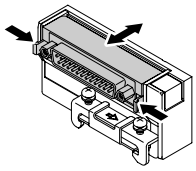


● Built-in individual power supply function (AUX) type

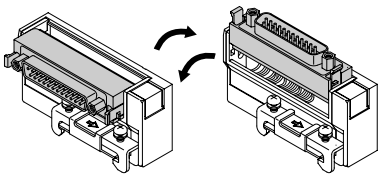


● D sub-connector (T30/T30R): Connector section direction switchover method

Using in a horizontal state

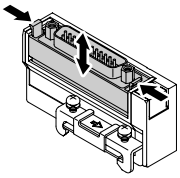


Hold the lever and pull the connector out horizontally. Push the connector in horizontally when storing it. (Fix the connector.)



Rotate the connector. Fix the connector in the horizontal or vertical state during use.

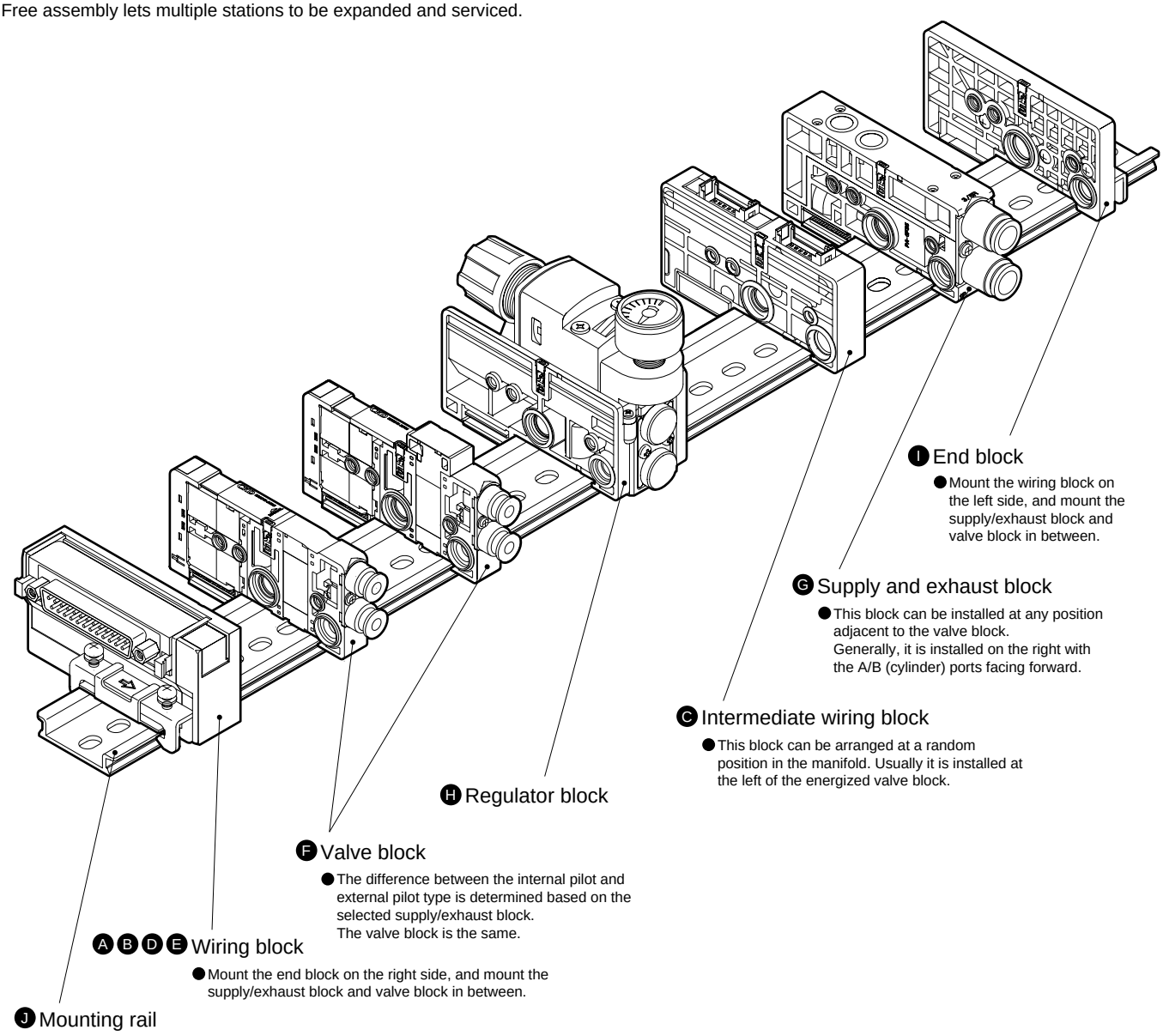
Using in a vertical state



Hold the lever and pull the connector out vertically. Push the connector in horizontally when storing it. (Fix the connector.)

Block manifold: Block configurations

Free assembly lets multiple stations to be expanded and serviced.



I End block
- Mount the wiring block on the left side, and mount the supply/exhaust block and valve block in between.

G Supply and exhaust block
- This block can be installed at any position adjacent to the valve block. Generally, it is installed on the right with the A/B (cylinder) ports facing forward.

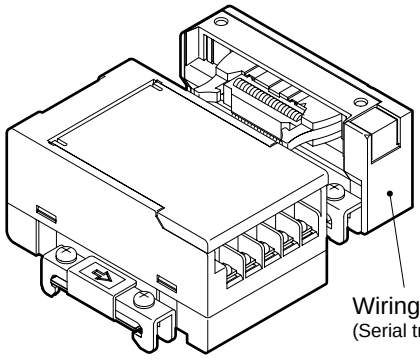
C Intermediate wiring block
- This block can be arranged at a random position in the manifold. Usually it is installed at the left of the energized valve block.

H Regulator block

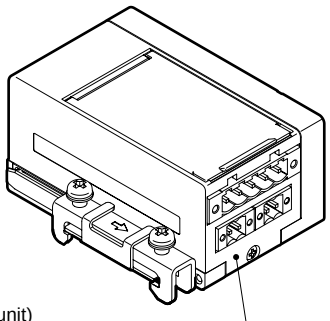
F Valve block
- The difference between the internal pilot and external pilot type is determined based on the selected supply/exhaust block. The valve block is the same.

A B D E Wiring block
- Mount the end block on the right side, and mount the supply/exhaust block and valve block in between.

J Mounting rail



Wiring block
(Serial transmission slave unit)



Wiring block
(Serial transmission slave unit (close contact type))

Block manifold configuration

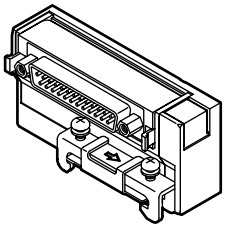
Wiring section

Piping section

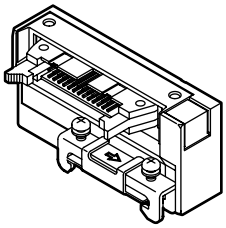
Related products

Wiring block

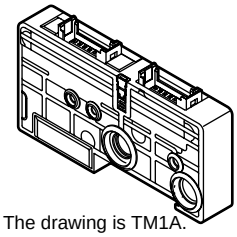
Ⓐ D sub-connector (T30/T30R)



Ⓑ Flat cable connector (T5*/T5*R)

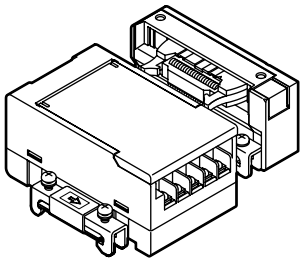


Ⓒ Intermediate wiring block (TM*)

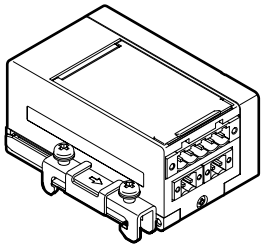


Note: The drawing is TM1A.

Ⓓ Serial transmission block (T6*)



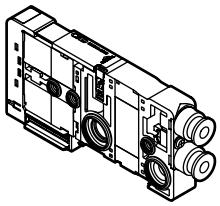
Ⓔ Serial transmission block (close contact type) (T7*)



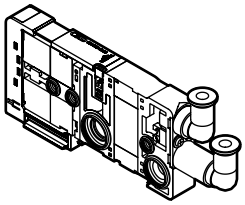
Piping block

Ⓕ Valve block

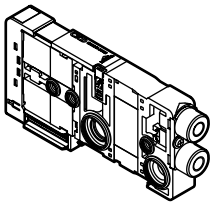
● Push-in joint Lateral



● Push-in joint Upward

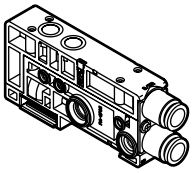


● M5 female thread (with non-rotating)

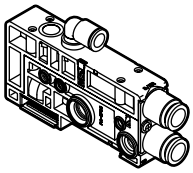


Ⓖ Supply and exhaust block

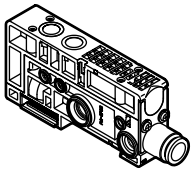
● Internal pilot (Q)



● External pilot (QK)

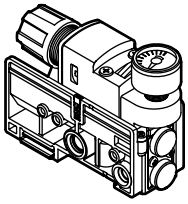


● Atmospheric release (QX)

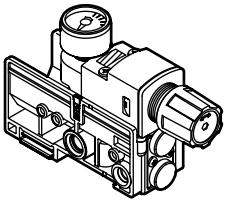


Ⓗ Regulator block

Pressure adjustment knob wiring side (RA)

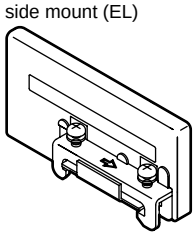


Pressure adjustment knob port side (RB)

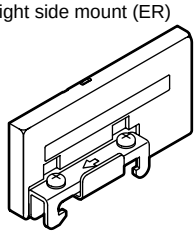


Ⓘ End block

Left side mount (EL)



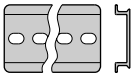
Right side mount (ER)



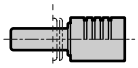
Related products

Ⓙ Related products

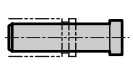
● Mounting rail



● Silencer

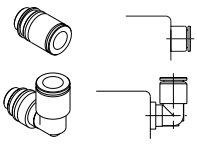


● Blanking plug

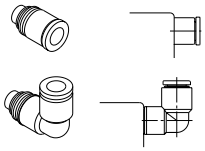


● Cable with D sub-connector

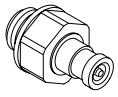
● Push-in cartridge joint



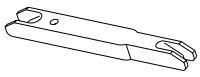
● Supply and exhaust block push-in cartridge joint



● ø1.8 barbed threaded joint



● Push-in joint tube remover

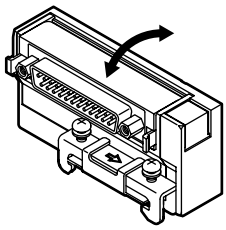


● T50 power terminal power feed connector/replacement fuse

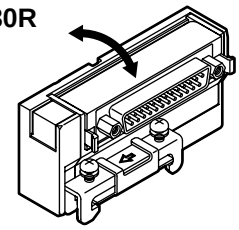
Wiring section

Ⓐ D sub-connector (T30)

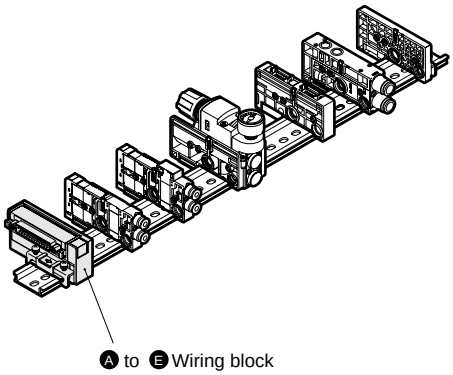
N4E0-T30



N4E0-T30R



* D sub-connector can be faced to the top or bottom.

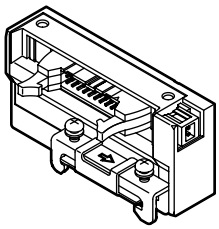


Ⓐ to Ⓔ Wiring block

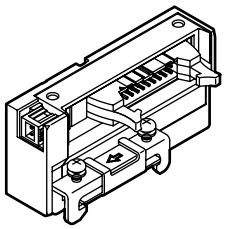
Ⓑ Flat cable connector (T5*)

● With power supply terminal

N4E0-T50

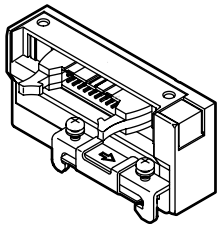


N4E0-T50R

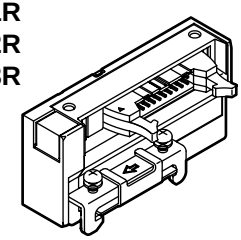


● Without power supply terminal

N4E0-T51
N4E0-T52
N4E0-T53



N4E0-T51R
N4E0-T52R
N4E0-T53R

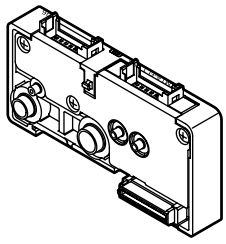


* The drawing is T51. A pin number differs for T52, T53.
(T51: 20 pins, T52: 10 pins, T53: 26 pins)

Ⓒ Intermediate wiring block

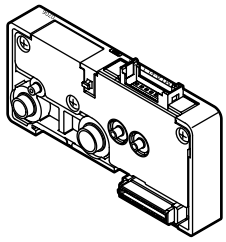
● RITS connector 6P x 2 pcs.

N4E0-TMIA



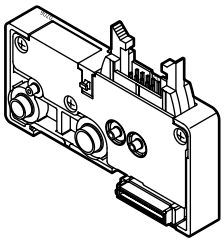
● RITS connector 6P

N4E0-TMIC



● 10 pin flat cable connector

N4E0-TM52

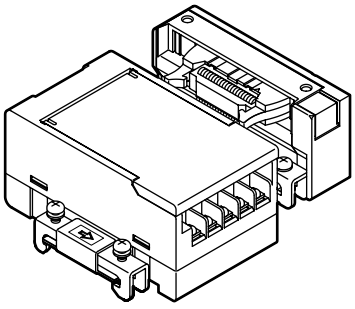


Ⓓ Serial transmission block (T6**)

N4E0 - T6G1

Model no. Ⓐ Type

Symbol	Descriptions
Ⓐ Type	
T6A0	UNIWIRE SYSTEM 8 points
T6A1	UNIWIRE SYSTEM 16 points
T6C0	OMRON CompoBus/S 8 points
T6C1	OMRON CompoBus/S 16 points
T6E0	SUNX S-LINK 8 points
T6E1	SUNX S-LINK 16 points
T6J0	UNIWIRE H system 8 points
T6J1	UNIWIRE H system 16 points
T6G1	CC-Link



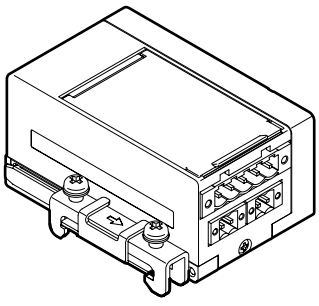
* T6C0/1 is not available for long distance communication mode.

Ⓔ Serial transmission block (close contact type) (T7*)

N4E0 - T7G2

Model no. Ⓐ Type

Symbol	Descriptions
Ⓐ Type	
T7D1	Device Net 16 points
T7D2	Device Net 32 points
T7G1	CC-Link 16 points
T7G2	CC-Link 32 points



● Discrete serial transmission slave unit

4G - OPP3 - 0A

Ⓐ Wiring method

Symbol	Descriptions
Ⓐ Wiring method	
0A	UNIWIRE SYSTEM 8 points
1A	UNIWIRE SYSTEM 16 points
0C	OMRON Compobus/S 8 points
1C	OMRON Compobus/S 16 points
0E	SUNX S-LINK 8 points
1E	SUNX S-LINK 16 points
1G	CC-LINK
0J	UNIWIRE H system 8 points
1J	UNIWIRE H system 16 points

* This slave unit is the same as 4G series.
The model No. is [4G-*-*].

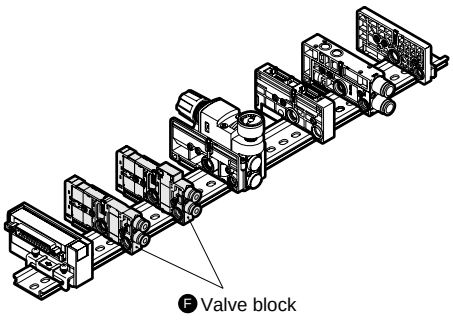
Piping section

Ⓕ Valve block

● Discrete valve block

N 4 E0 1 0 - C4 - M D2 F - 3

Ⓒ Port size
Ⓓ Manual override
Ⓔ Wiring method
Ⓕ Terminal and connector pin array
Ⓖ Option
Ⓗ Voltage
Ⓐ Type
Ⓑ Solenoid position
Note 1



Symbol		Descriptions	
Ⓐ Type			
3		3 port valve, two 3 port valve integrated type	
4		4 port valve	
Ⓑ Solenoid position			
1	3 port valve	Single N.C. self reset type	(Differential pressure spring return)
11	3 port valve	Single N.O. self reset type	(Differential pressure spring return)
2	3 port valve	Double N.C. self hold type	
21	3 port valve	Double N.O. self hold type	
66	Two 3 port valves integrated type	A side valve: N.C. self reset type	(Differential pressure return)
66S	Two 3 port valves integrated type	B side valve: N.C. self reset type	(Differential pressure spring return)
67	Two 3 port valves integrated type	A side valve: N.C. self reset type	(Differential pressure return)
67S	Two 3 port valves integrated type	B side valve: N.O. self reset type	(Differential pressure spring return)
76	Two 3 port valves integrated type	A side valve: N.O. self reset type	(Differential pressure return)
76S	Two 3 port valves integrated type	B side valve: N.C. self reset type	(Differential pressure spring return)
77	Two 3 port valves integrated type	A side valve: N.O. self reset type	(Differential pressure return)
77S	Two 3 port valves integrated type	B side valve: N.O. self reset type	(Differential pressure spring return)
1	4 port valve	2-position single solenoid self reset type	(differential pressure spring return)
2	4 port valve	2-position double solenoid self hold type	
3	4 port valve	3-position all ports closed	
4	4 port valve	3-position A/B/R connection	
5	4 port valve	3-position P/A/B connection	

Ⓒ Port size	
CF	ø1.8 push-in joint for fiber tube Lateral (tube UP-9402-**)
C18	ø1.8 push-in joint for fiber tube Upward (tube UP-9402-**)
CL18	ø1.8 barbed joint for fiber tube (tube UP-9102-**)
C4	ø4 push-in joint Lateral
C6	ø6 push-in joint Lateral
CL4	ø4 push-in joint Upward
CL6	ø6 push-in joint Upward
M5	M5 female thread (with non-rotating)

Ⓓ Manual override	
M	Non-locking dedicated manual override (with manual cover)

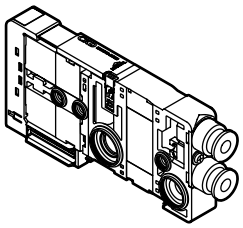
Ⓔ Wiring method
Refer to the following page.

Ⓕ Terminal and connector pin array	
Blank	Standard wiring
W	Double wiring (Note 2, 3)

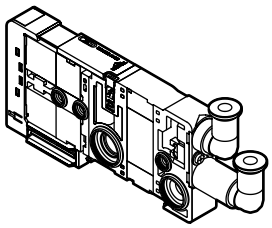
Ⓖ Option	
E	Low exoergic, energy saving circuit type
U	Built-in individual power supply function (AUX) type (Note 4)
A	Ozone proof
F	A/B port filter integrated

Ⓗ Voltage	
3	24 VDC
4	12 VDC

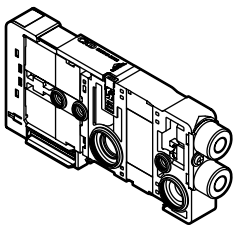
● Push-in joint Lateral



● Push-in joint Upward



● M5 female thread (with non-rotating)



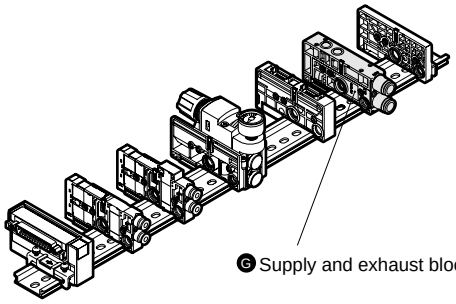
Note 1: Refer to the cautions on Page 9 for the specifications of the self reset type.
Note 2: The double wiring designation is limited to the 2-position single.
Note 3: The double wiring specifications cannot be selected for the discrete individual wiring valve block.
Note 4: "U" cannot be selected when individual wiring is selected.

(Wiring method list)

Symbol	Descriptions	
Ⓔ Wiring method		
Blank	Valve block for reduced wiring	
D2	Individual wiring type	D-connector 300 mm
D20		D-connector 500 mm
D21		D-connector 1000 mm
D22		D-connector 2000 mm
D23		D-connector 3000 mm
D2N		D-connector without socket
D3		D-connector socket, terminal attached

Piping section

G Supply and exhaust block



- This block can be installed at any position adjacent to the valve block. Generally, the block is installed on the right with the A/B (cylinder) port facing forward.)
- Supply the air for the type with two 3 port valves with Q-6* and 8*. (This cannot be used with the external pilot type.)

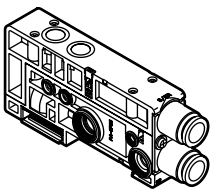
N4E0 - Q - 8 - SA - C

Model no. A Type B Port size C Option D Wiring methods

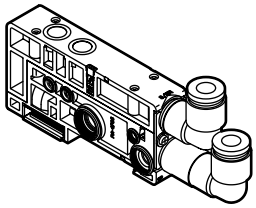
A Type (Note 1)		B Port size (P/R port) (Note 2)		C Option (Note 3)		D Wiring methods	
Q	Internal pilot	**6**	ø6 push-in joint	**Blank**	Without partition	**Blank**	Internal wiring circuit selected
QK	External pilot	**6L**	ø6 push-in joint upward	**S**	P/R stop, PA/PR through	**C**	Without internal wiring circuit Note 4
QZ	Multi-pressure circuit (P, R only)	**8**	ø8 push-in joint	**SA**	P/R/PA/PR stop		
QKZ	Multi-pressure circuit, external pilot (P, R, PA, PR separate)	**8L**	ø8 push-in joint upward				
QX	Atmospheric release (with silencer)						
QKX	External pilot, atmospheric release (With silencer)						

Note 1: QZ cannot be used as an independent part. Use with another type (Q, QK, QKZ).
Note 2: A filter for preventing entry of foreign matter is incorporated in the P port.
Note 3: The manifold port is faced forward to shield the flow path between the supply/exhaust block and block on the right side. (Refer to the circuit diagram on Page 69.)
Option symbol
S : Shields the 1 (P) and 3 (R) flow paths.
SA : Shields the 1 (P), 3 (R), 12/14 (PA) and 82/84 (PR) flow paths.
Note 4: When using the wiring block with a [left + right] or [intermediate + right] combination, arrange the supply/exhaust block "without internal wiring circuit" between the left control station and right control station.

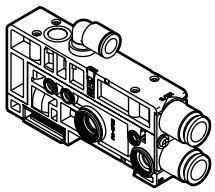
● Q-8
QZ-8



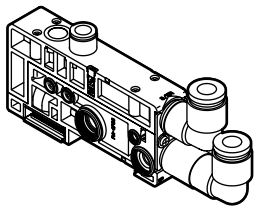
● Q-8L
QZ-8L



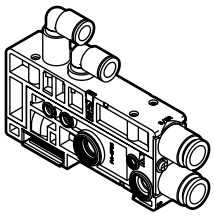
● QK-8



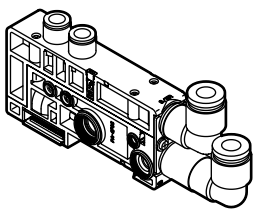
● QK-8L



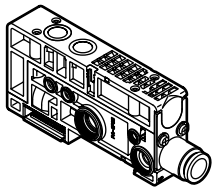
● QKZ-8



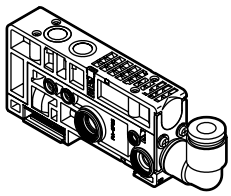
● QKZ-8L



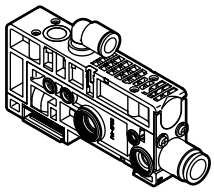
● QX-8
QXZ-8



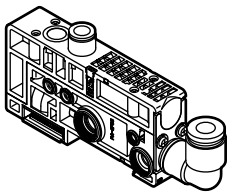
● QX-8L
QXZ-8L



● QKX-8

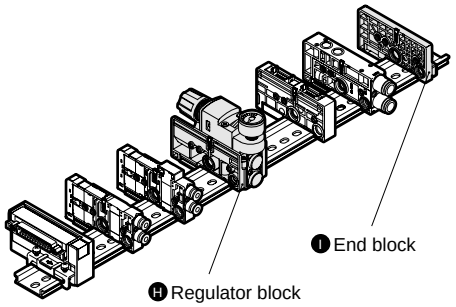


● QKX-8L



Piping section

H Regulator block

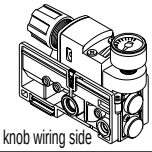
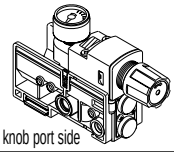


● Discrete regulator block

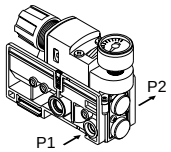
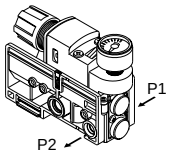
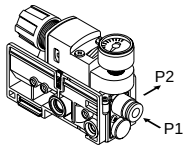
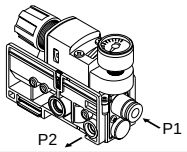
N4E0 - RA - FR - C8

- A Pressure adjustment knob direction
- B Air supply and pressure adjustment direction Note 2
- C Joint port size Note 3

A Pressure adjustment knob direction

RA	 Pressure adjustment knob wiring side	**RB**	 Pressure adjustment knob port side

B Air supply and pressure adjustment direction

LR		**RL**	
FR		**FL**	

C Joint port size

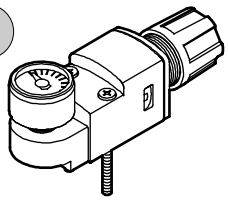
Blank	Plug (for air supply/pressure adjustment direction LR and RL)
C6	ø6 push-in joint (for air supply/pressure adjustment direction FR and FL)
C8	ø8 push-in joint (for air supply/pressure adjustment direction FR and FL)
CL6	ø6 push-in joint Upward (for pressure adjustment knob direction RA, air supply/pressure adjustment direction FR and FL)
CL8	ø8 push-in joint Upward (for pressure adjustment knob direction RA, air supply/pressure adjustment direction FR and FL)

Cautions on model no. selection

Note 1: The manifold with regulator block requires more than one supply/exhaust block for the pilot air.
Note 2: Consult with CKD when using the regulator block independently for external pressure control other than the manifold.
Note 3: The elbow joint (CL6, CL8) cannot be selected when the pressure adjustment knob direction RB is selected.

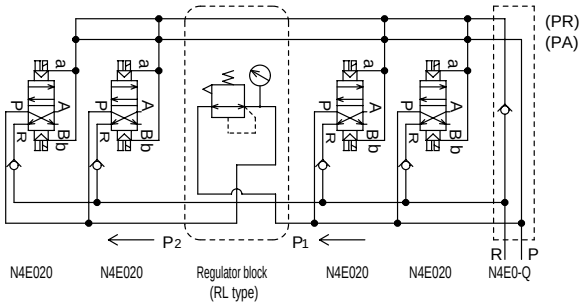
● Discrete regulator model no.

RB500-00 M



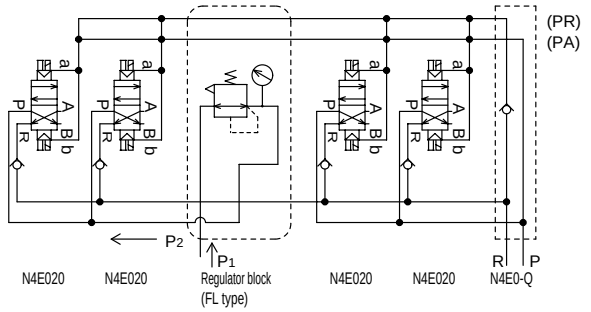
Examples (Consult with CKD for other examples.)

Example 1: Depressurization of internal main pressure



* How to depressurize air supply pressure (P = P1) from supply/exhaust block.

Example 2: Depressurization of external main pressure



* How to depressurize air supply pressure (P ≠ P1) directly from regulator block.

I End block (right side installation)

● Mount the block on the left or right side with the piping port facing forward.

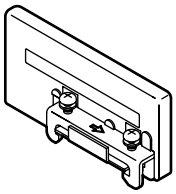
N4E0 - ER

Model no. A Type

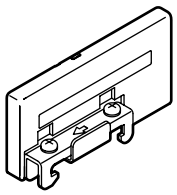
A Type

EL	Left side installation
ER	Right side installation

● N4E0-EL



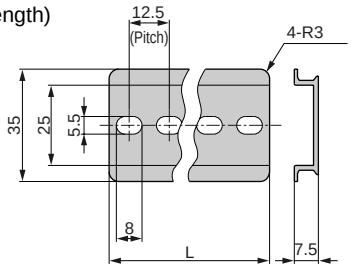
● N4E0-ER



❶ Related products

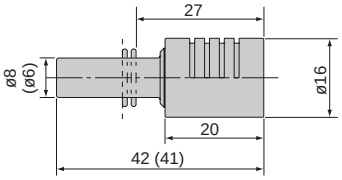
●Mounting rail

N4G-BAA (length)



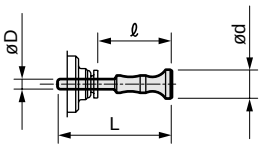
●Silencer (attachment)

SLW-H8
SLW-H6



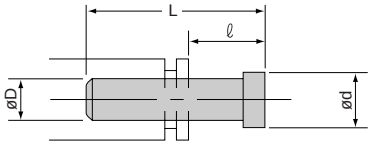
* Value in ( ) is for H6.
Effective sectional area 9mm²

●Blanking plug (attachment)



(For ø1.8)

Model no.	D	L	ℓ	d
PG-P2-B	ø1.8	20	13	5

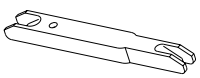


(For ø4, ø6, ø8)

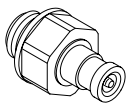
Model no.	D	L	ℓ	d
GWP4-B	ø4	27	11	6
GWP6-B	ø6	29	11.5	8
GWP8-B	ø8	33	14	10

●Push-in joint tube remover

N4E0-EOT18-4 (for ø1.8, ø4)
N4S0-EOT4-6 (for ø4, ø6)



●ø1.8 barbed joint (10 pcs./1 set)



N4E0 – **JOINT** – **PTN2-M5**

Symbol	Dimensions
PTN2-M3	Barbed joint M3 threaded type
PTN2-M5	Barbed joint M5 threaded type
PTN2-6	Barbed joint R1/8

* Consult with CKD for fiber tube.

●Push-in cartridge joint

N4E0 – **JOINT** – **C4**

For valve block and supply/exhaust block PA port.
Can not be used for P or R port of supply/exhaust block.

Symbol	Dimensions
CF	ø1.8 barbed cartridge joint
C18	Cartridge joint for ø1.8 fiber tube
C4	Push-in cartridge joint for ø4 tube
C6	Push-in cartridge joint for ø6 tube
CL18	Short L type cartridge joint for ø1.8 fiber tube
CL4	Short L type push-in cartridge joint for ø4 tube
CL6	Short L type push-in cartridge joint for ø6 tube
CLL18	Long L type cartridge joint for ø1.8 fiber tube
CLL4	Long L type push-in cartridge joint for ø4 tube
CLL6	Long L type push-in cartridge joint for ø6 tube
CPG	Plug cartridge
CP	Joint fixing plate (Machine screw for plate mount attached)
CM5	M5 cartridge joint (Joint non-rotating plate for M5: CMP is necessary for fixing.)
CMB	Plug cartridge for M5 (Joint non-rotating plate for M5: CMP is necessary for fixing.)
CMP	Joint non-rotating plate for M5 (Machine screw for plate mount attached)

●Push-in cartridge joint for supply and exhaust block

N4E0 – **Q** – **JOINT** – **8**

Use the above valve block joint for the pilot pressure supply (for PA).

Symbol	Dimensions
6	Push-in cartridge joint for ø6 tube
8	Push-in cartridge joint for ø8 tube
6L	Short L type push-in cartridge joint for ø6 tube
8L	Short L type push-in cartridge joint for ø8 tube
6LL	Long L type push-in cartridge joint for ø6 tube
8LL	Long L type push-in cartridge joint for ø8 tube
P	Joint fixing plate (Machine screw for plate mount attached)

Related products

● Socket assembly for power supply (for individual wiring, AUX)

N4E0 - SOCKET - D - 300

Ⓐ Type
Note 1

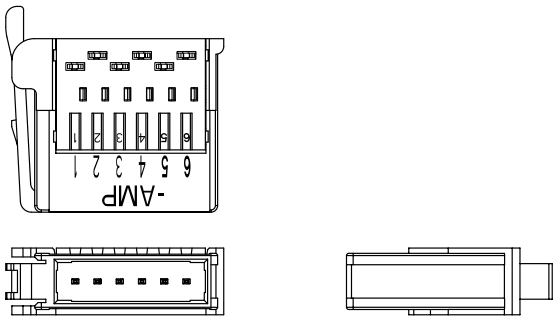
Ⓑ Lead wire length

Ⓐ Type	undefined
S	2-wire (single solenoid)
D	3-wire (double solenoid)
Ⓑ Lead wire length	
300	300mm
500	500mm
1000	1000mm
2000	2000mm
3000	3000mm

Note 1: The type without lead is 3M0-SOCKET-SET.
(3 contacts enclosed, applicable wire diameter: AWG#26 to 28)

● Connector for wiring block TM1 (RITS connector 6P)

N4E0 - TM-CONNECTOR Taiko Electronics Amp Co., Ltd. RITS connector 6P (part No.:1473562-6)



• Applicable wire (Recommended tin-plated wire)

Sheath finished outer diameter	Reference wire cross-sectional area	No. of strands/strand diameter
mm	mm^2	wire/mm
ø1.0 to 1.15	ø0.2 to 0.3	to 60/0.08

Contact the following company for detailed specifications on the applicable wire.
* TYCO ELECTRONICS AMP K.K. Sales department
TEL 044-844-8058 URL http: //www.amp.com/japan/

• Dedicated caulking tool 1596114-1

● Feed connector for power supply terminal for T50

N4E0-T50-CONNECTOR

(Applicable wire AWG28-20 / 0.08 to 0.5mm^2
(WAGO connector plug 733-102))

● Change fuse for T50

4T9-LM16

(Daito Communication Apparatus Co., Ltd. LM16)

● Communication connector for T7D

MSTB2.5/5 - STF - 5.08AUM Phoenix contact (No.: 5880008)

● Communication connector for T7G

BLZ5.08/5FAU Widemuller (No.: 174333)

● Power supply connector for T7*

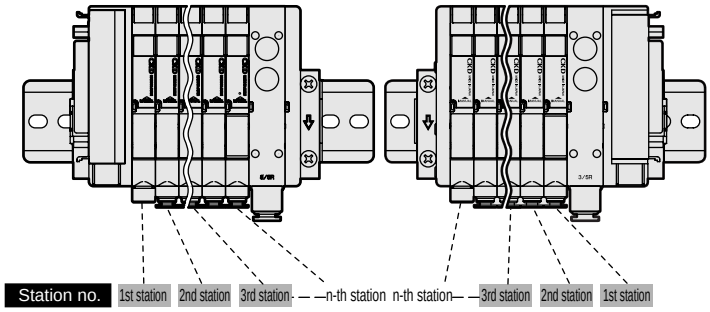
BLT3.5/2F Widemuller (No.: 169524)

D-sub connector: Wiring method T30

T30 connector

Connectors used for T30 wiring method are generally called D-sub connectors. These are commonly used for FA and OA devices.
The 25P type is an RS-232-C Standards designated connector especially used for personal computer communication.

■The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T30 and T30R types.



Precautions for connector type T30

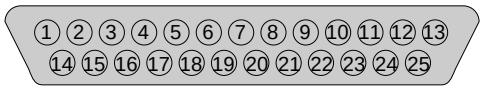
(1) Signal arrays of the PLC output unit must match signal arrays of the valve side.
(2) The working power is 12/24 VDC dedicated.
(3) The voltage could drop because of simultaneous energizing or the cable length.
Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

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

T30 connector pin array (example)

*1 The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid.
Maximum station number differs depending on the model. 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	

Flat cable connector: Wiring method T50

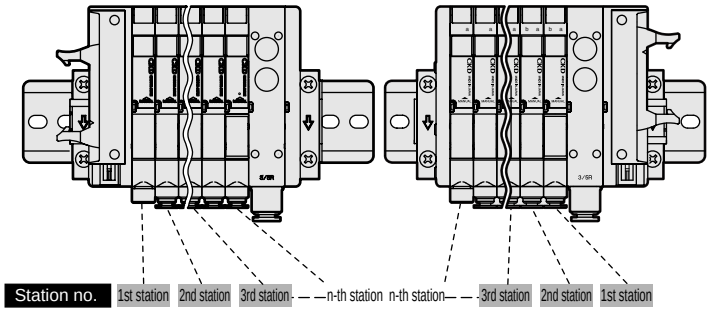
T50 connector

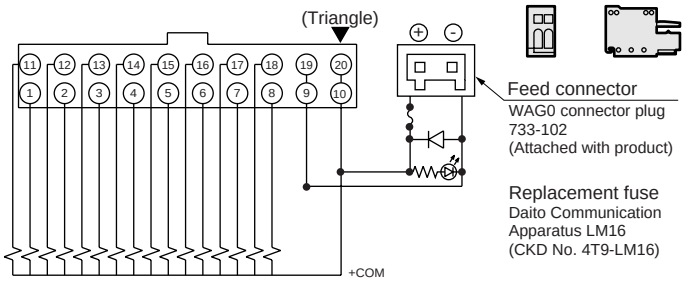
The connector used for T50 wiring method complies with MIL Standards (MIL-C-83503).
The flat cable pressure welding makes wiring work easy. Pin no. is assigned differently based on the PLC maker, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below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

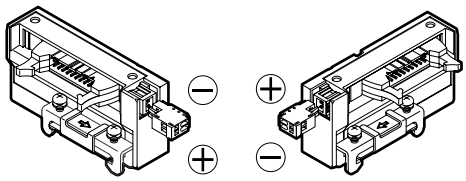
Precautions for connector type T50

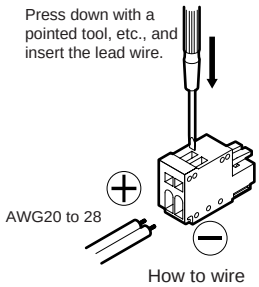
(1) The PLC output unit's signal array and valve signal array must match. Direct connections with the PLC are limited. Use the dedicated cable for each PLC manufacturer.
(2) The working power is 12/24 VDC dedicated.
(3) When connecting the T50 type to a general output unit, use the + terminal (20, 10) of the 20P connector as the + side common, and use the NPN transistor output open collector type 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 stations 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 types.





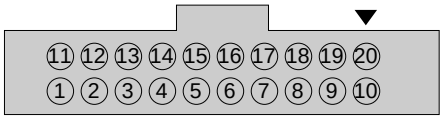




T50 connector pin array (example)

*1 The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. 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	+ power
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a	- power	+ power

(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	+ power
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Void)	2a	(Void)	3a	(Void)	4a	(Void)	- power	+ power

● 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	+ power
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	1b	2a	2b	3a	3b	4a	4b	- power	+ power

● 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	+ power
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	3b	4a	4b	5a	6a	- power	+ power

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

Flat cable connector type: Wiring method T51

T51 connector

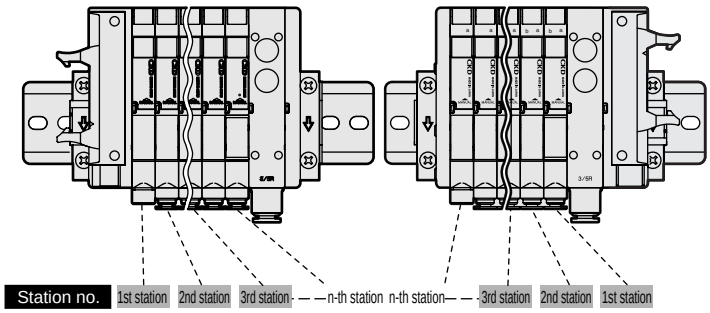
The connector used for T51 wiring method complies with MIL Standards (MIL-C-83503).
The flat cable pressure welding makes wiring work easy. Pin no. is assigned differently based on the PLC maker, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference.
The ▼ mark is the reference for both the plug and socket.

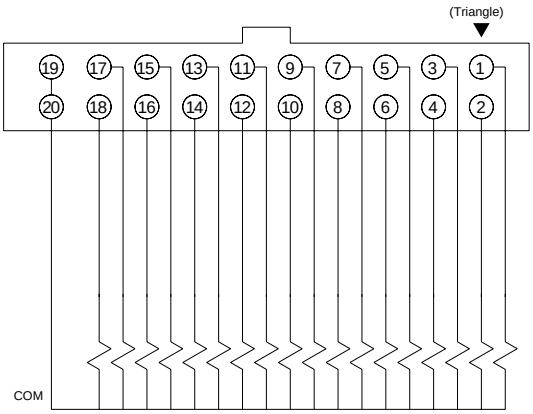
Precautions for connector type T51

(1) The PLC output unit's signal array and valve signal array must match.
(2) The working power is 12/24 VDC dedicated.
(3) The T51 type 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), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.

■ The manifold stations 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.

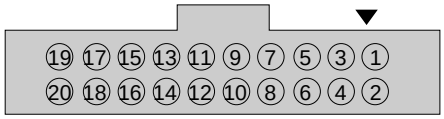




T51 connector pin array (example)

* The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. 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 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)

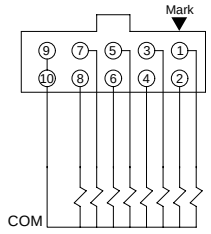
Flat cable connector type: Wiring method T52

T52 connector

The connector used for T52 wiring method complies with MIL Standards (MIL-C-83503).
The flat cable pressure welding makes wiring work easy. Pin no. is assigned differently based on the PLC maker, 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), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.

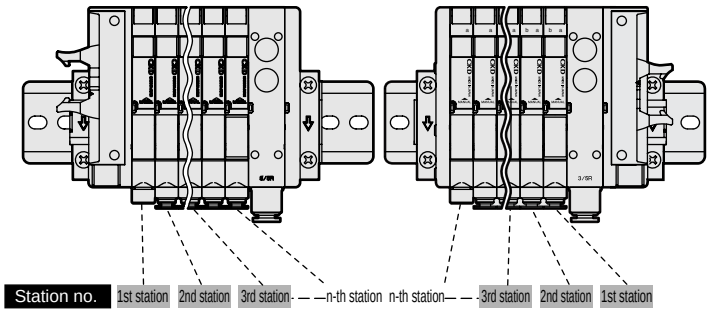
Connector pin array diagram (TOP VIEW) and internal circuit diagram



Precautions for connector type T52

(1) The PLC output unit's signal array and valve signal array must match.
(2) The working power is 12/24 VDC dedicated.
(3) The T52 type 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.

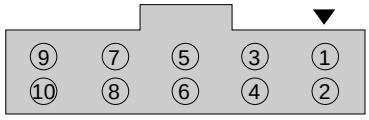
■ The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T52 and T52R types.



T52 connector pin array (example)

* The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. 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 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)

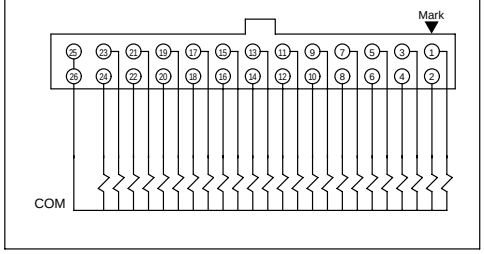
Flat cable connector type: Wiring method T53

T53 connector

The connector used for T53 wiring method complies with MIL Standards (MIL-C-83503).
The flat cable pressure welding makes wiring work easy. Pin no. is assigned differently based on the PLC maker, 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), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.

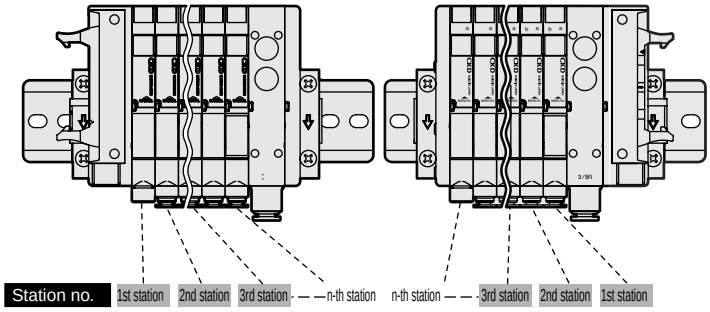
Connector pin array diagram (TOP VIEW) and internal circuit diagram



Precautions for connector type T53

(1) The PLC output unit's signal array and valve signal array must match.
(2) The working power is 12/24 VDC dedicated.
(3) The T53 type 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.

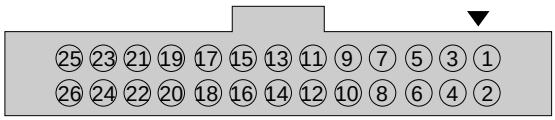
■ The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. The counting direction differs for the T53 and T53R types.



T53 connector pin array (example)

* The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. Check the individual specifications.

Connector pin No.



(Standard wiring)

● For single solenoid valve

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	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

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*

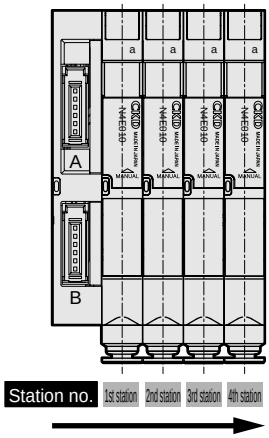
Precautions for wiring method TM

(1) The PLC output unit's signal array and valve signal array must match.
(2) The working power is 12/24 VDC dedicated.
(3) The TM1B type is driven with a general output unit.
(4) Do not connect this manifold to the input unit as major faults could occur on the device.
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), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.

How to count stations

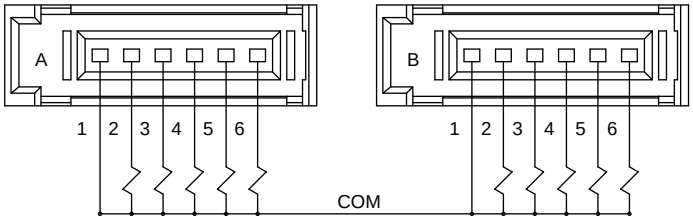
The manifold stations are counted from wiring block TM to the right with the wiring ports facing forward.



Wiring method TM1A

Connector for wiring method TM1A

RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.
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 or energy-saving circuit, energizing is limited to the plus common.

TM1A connector pin array (example)

The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. The max. no. of manifold stations differs based on the model, but there can be a maximum of 10 solenoid (coil) points.

● For single solenoid valve

(Standard wiring)

	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

(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)

● 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 mixture)

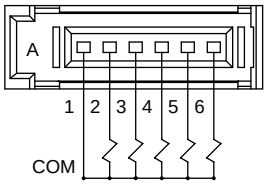
	Connector A						Connector B					
Pin No.	1	2	3	4	5	6	1	2	3	4	5	6
Valve No.	COM	1a	2a	2b	3a	4a	COM	5a	5b	6a	7a	7b

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

Wiring method TM1C

Connector for wiring method TM1C

RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.
The pin numbers 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), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.

TM1C connector pin array (example)

The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. The max. no. of manifold stations differs based on the model, but there can be a maximum of 10 solenoid (coil) points.

(Standard wiring)

● For single solenoid valve

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 mixture)

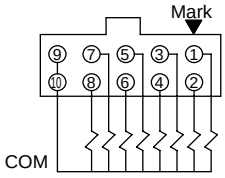
Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	2a	2b	3a	4a

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) conformed 10 pin flat cable connector
Pin numbers 1 to 10 are set on the connector starting at the ▼ marked as shown below. Up to 8 points can be input.



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

TM52 connector pin array (example)

The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. The maximum number of manifold stations differs based on the model, but there can be a maximum of 8 solenoid (coil) points.

(Standard wiring)

● For single solenoid valve

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 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	

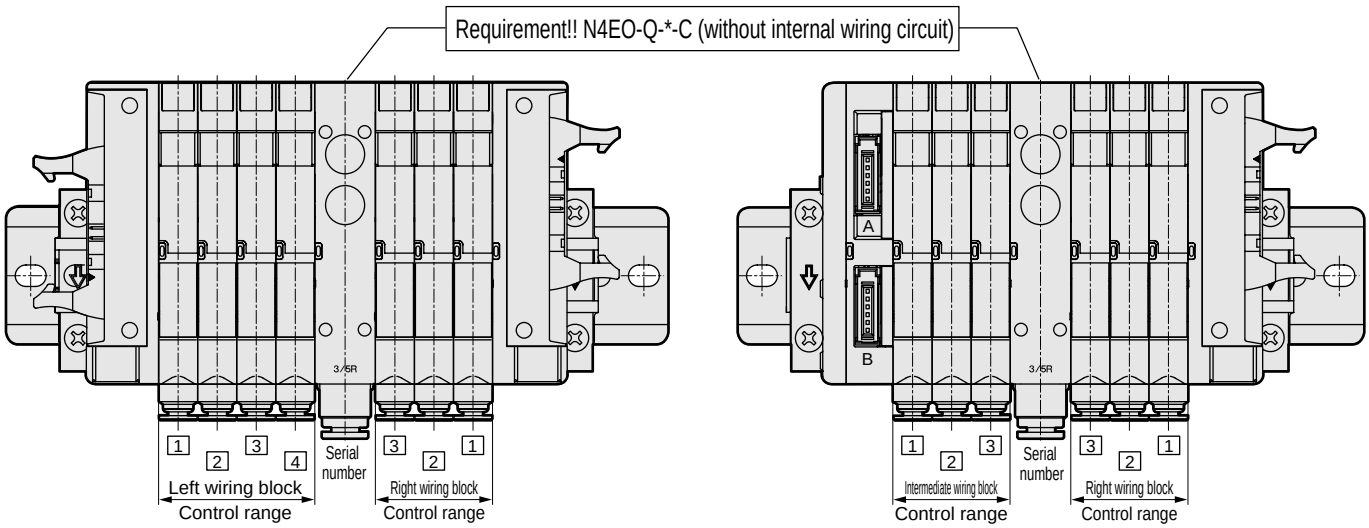
Wiring block mix

How to count stations

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

} The stations are counted in order to the right from the wiring block with piping port facing forward.

- Right wiring block (T30R, T50R, T51R, T52R, T53R): The stations are counted in order to the left from the wiring block with piping port facing forward.

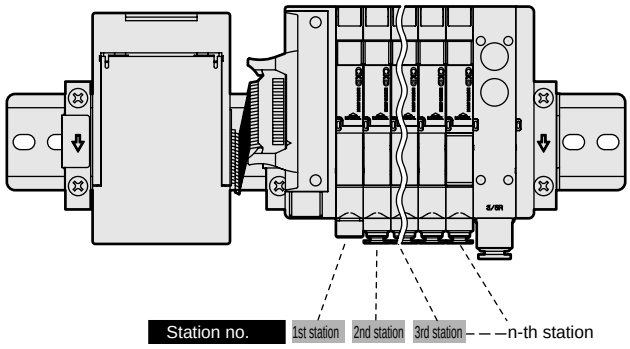


When mixing the right wiring block with another wiring block, the left/right wiring block circuits could be connected via the manifold and result in unexpected valve operation. Install the "N4E0-Q-*-C type with no supply/exhaust block internal wiring circuit" at the end of the right wiring block control station, so that the left and right wiring in the manifold are not connected.

Serial transmission type: Wiring method T6*

T6*serial transmission type

- 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 wiring 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 working power is 24 VDC dedicated.
- 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 61.)
- Pin no. is assigned differently based on the PLC maker, 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.

● T6A0, T6C0, T6E0, T6J0

Output No.	0	1	2	3	4	5	6	7
Connector pin No.	1	2	3	4	5	6	7	8

● T6A1, T6C1, T6E1, T6J1

Output No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Connector pin No.	1	2	3	4	5	6	7	8	11	12	13	14	15	16	17	18

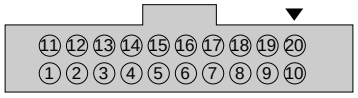
● T6G1

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

Connector pin array of wiring method T6* (example)

* The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. Check the individual specifications.

Connector pin No.



(Standard wiring)

● For single solenoid valve

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 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 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

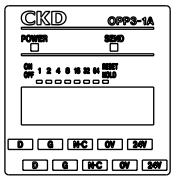
(Double wiring)

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

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

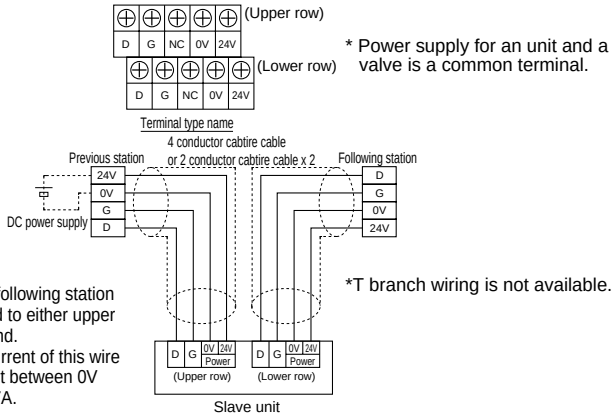
T6A0 T6A1

LED display



LED name	Display description
POWER	Lights when power is ON.
SEND	Flickers when transmission is normal. Lights or turns OFF when transmission is not normal.

Wiring method



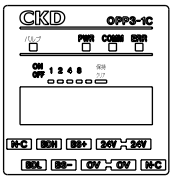
* Power supply for an unit and a valve is a common terminal.

*T branch wiring is not available.

Note 1. Previous or following station can be wired to either upper or lower gland.
Note 2. Maximum current of this wire via slave unit between 0V and 24V is 7A.

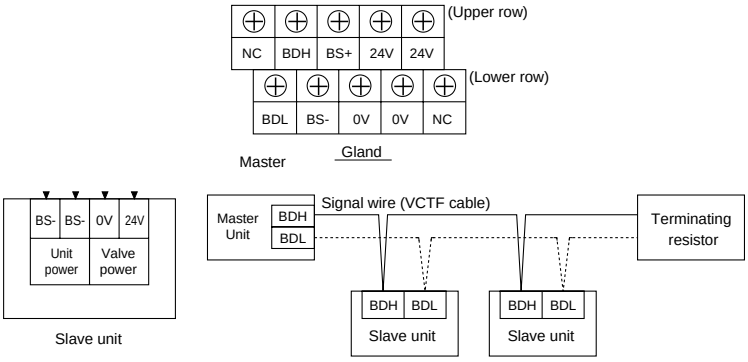
T6C0 T6C1

LED display



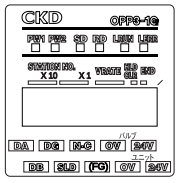
LED name	Display description
Valve (green)	Lights when valve power is ON.
PWR (green)	Lights when unit power is ON.
COMM (orange)	Lights during normal communication. OFF when communication is abnormal or standing by.
ERR (red)	Lights when communication error occurs. OFF when communication is normal or standing by.

Wiring method



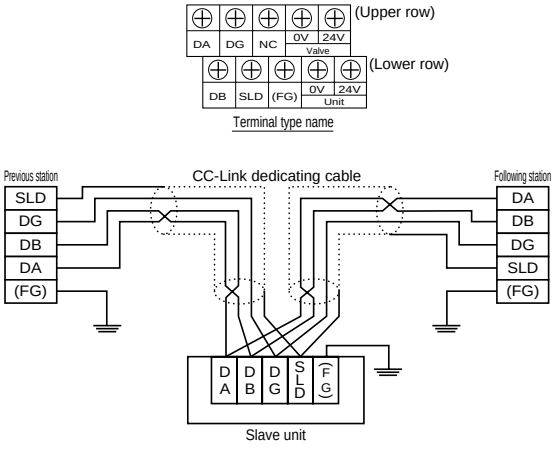
T6G1

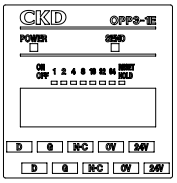
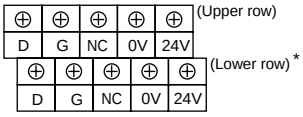
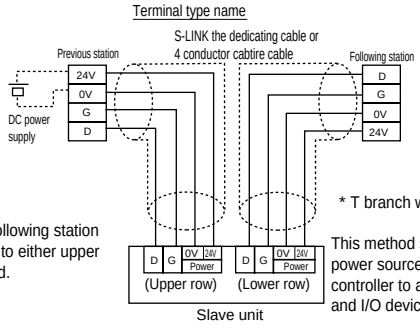
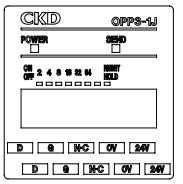
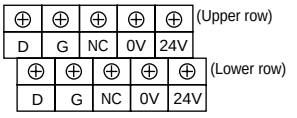
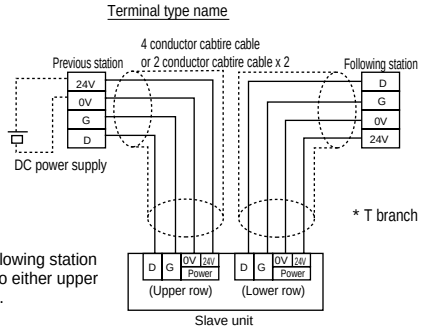
LED display



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 time over. (Turns ON when normal data is received.)
L ERR	Lights when 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

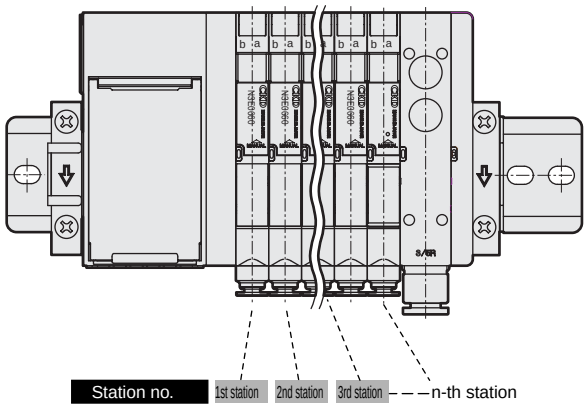


	LED display	Wiring method
T6E0 **T6E1**	 LED name / Display description POWER: Lights when power is ON. SEND: Flickers when transmission is normal. Lights or turns OFF when transmission is not normal.	 * Power supply for unit and valve is a common terminal.  * T branch wiring is also available. Note 1. Previous or following station can be wired to either upper or lower gland. This method supplies power from DC power source connected to S-Link controller to all S-Link components and I/O devices at the same time.
T6J0 **T6J1**	 LED name / Display description POWER: Lights when power is ON. SEND: Flickers when transmission is normal. Lights or turns OFF when transmission is not normal.	 * Power supply for unit and valve is a common terminal.  * T branch wiring is also available. Note 1. Previous or following station can be wired to either upper or lower gland.

Serial transmission type: Wiring method T7*

T7* serial transmission type

- 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 working power is 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 61)
- 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	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	Y0 00	Y0 01	Y0 02	Y0 03	Y0 04	Y0 05	Y0 06	Y0 07	Y0 08	Y0 09	Y0 10	Y0 11	Y0 12	Y0 13	Y0 14	Y0 15	Y1 00	Y1 01	Y1 02	Y1 03	Y1 04	Y1 05	Y1 06	Y1 07	Y1 08	Y1 09	Y1 10	Y1 11	Y1 12	Y1 13	Y1 14	Y1 15

Y** indicates output.

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

Slave unit type	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)	16 points	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16																
• T7G2 (CC-Link) • T7D2 (DeviceNet)	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 in the valve No. 1a, 1b, 2a, 2b and so forth indicate the first station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number differs depending on the model. Check the individual specifications.

<Standard wiring>

- For single solenoid valve (Max. 16 stations)

Solenoid 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 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 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

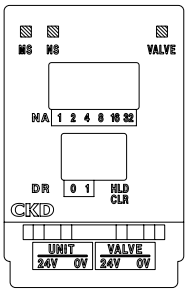
Solenoid output No.	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No.	1a	(Void)	2a	(Void)	3a	(Void)	4a	(Void)	5a	(Void)	6a	(Void)	7a	(Void)	8a	(Void)	9a	(Void)	10a	(Void)	11a	(Void)	12a	(Void)	13a	(Void)	14a	(Void)	15a	(Void)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

- For mixed use (single/double mixture)

Solenoid 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)

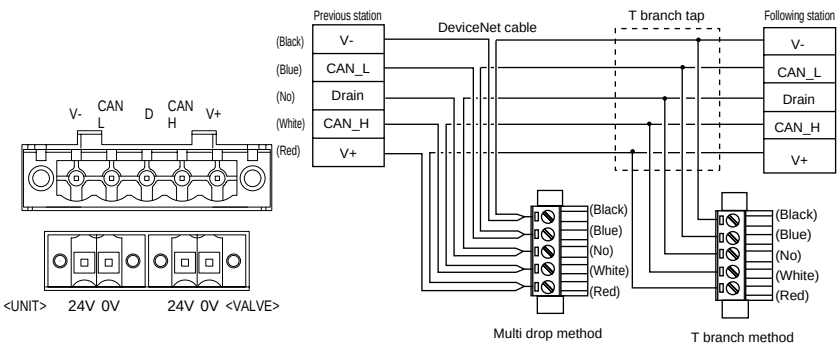
T7D1 T7D2

LED display



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

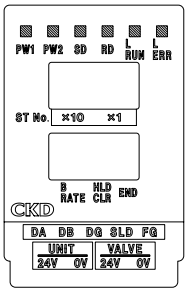
Wiring method



- 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.

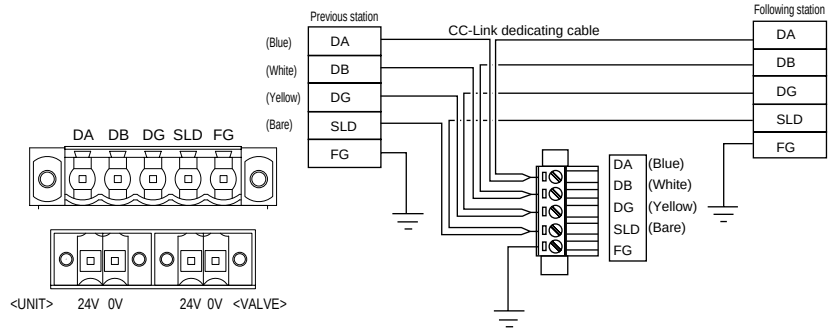
T7G1 T7G2

LED display



LED name	Display description
PW	Lights when power is ON.
SD	Lights when transmitting data.
RD	Lights when receiving data.
L RUN	Lights when receiving normal data. Turns OFF when time over occurs.
L ERR	Lights when 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.
- The CC-Link cable is connected to the 5-pole connector.
- The wiring section connectors are enclosed.

Caution: 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 Widemuller Corp.	MSTB2.5/5-STF-5.08AUM Phoenix contact Corp.	BL3.5/2F Widemuller Corp.
T7G (CC-Link)	SL5.08/5/90FAU Widemuller Corp.		BLZ5.08/5FAU Widemuller Corp.	

Compatible PLC table

Model no.	Manufacturer name (recommended body)	Series	Communication system name	Host station model No.
T6A0 T6A1	CKD Corporation KURODA PRECISIONS INDUSTRIES LTD. NKE company	Compatible with each PLC, personal computer and SBC Consult with CKD for details.	UNIWIRE SYSTEM	Connect to sending unit (UW-SD-120) or each UNIWIRE interfaces
T6C0 T6C1	OMRON	SYSMACα/CS1 Series C200HS/CQM1 (H) Series	CompoBus/S (T6C0/1 is not compatible with long distance mode)	C200HW-SRM21-V1 CQM1-SRM21-V1 SRM1-C01/C02-V2
T6E0 T6E1	SUNX	Compatible with each PLC, personal computer and SBC	S-LINK	Connect to S-LINK controller or S-LINK control board
T6G1	MITSUBISHI	MELSEC A Series MELSEC QnA Series MELSEC Q Series Others	CC-Link	AJ61BT11 AJ61QBT11 A1SJ61BT11 A1SJ61QBT11 QJ61BT11 QJ61BT11N Master for other CC-Link
	CC-Link institution (CLPA)	PLC, personal computer compatible with each CC-Link brand		Connect to each maker's CC-Link master
T6J0 T6J1	CKD Corporation KURODA PRECISIONS INDUSTRIES LTD. NKE company	Compatible with each PLC, personal computer and SBC Consult with CKD for details.	UNIWIRE H system	Connect to sending unit (UW-SD-H2 (A)) or other UNIWIRE interfaces
T7D1 T7D2	OMRON	SYSMAC CS Series SYSMAC CJ Series SYSMAC CV Series SYSMAC α Series SYSMAC C200HS Series Others	DeviceNet	CS1W-DRM21 CJ1W-DRM21 CVM1-DRM21-V1 C200HW-DRM21-V1 ITNC-EI*01-DRM (master integrated PLC) 3G8B3-DRM21 (VME board)
	TOYODA	PC3J/2J Series PC3JD PC2F/PC2FS		THK-5398 TIC-5642 (master integrated PLC) TFU-5359
	ODVA	PLC, personal computer, SBC compatible with each DeviceNet brand		Connect to each maker's DeviceNet master
T7G1 T7G2	MITSUBISHI	MELSEC A Series MELSEC QnA Series MELSEC Q Series Others	CC-Link	AJ61BT11 AJ61QBT11 A1SJ61BT11 A1SJ61QBT11 QJ61BT11 QJ61BT11N Master for other CC-Link
	CC-Link institution (CLPA)	PLC, personal computer compatible with each CC-Link brand		Connect to each maker's CC-Link master

How to fill out MN4E0 series manifold specification sheet

● Example of manifold model No. (Refer to Pages 16 and 20 for the manifold model No.)

MN 4 E0 8 0 – CX – R – M – T50R W F – 8 – 3

Ⓐ Model no. Ⓑ Solenoid position Ⓒ Port size Ⓓ Pressure adjustment Ⓔ Manual override Ⓕ Wiring method Ⓖ Terminal/ connector pin array Ⓗ Option Ⓘ Station number Ⓙ Voltage

· When completing this form, select the type from the "Block configurations" (pages 38 to 47).
· Complete from the left end, with the piping port facing forward, regardless of the wiring block method.

Part name	Model no.	Layout (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)	Quantity
Wiring block	N4E0-T 50R	○ at 12	1
	N4E0-T		
Individual wiring D for mix Position designation*			
Valve block	N4E0 1 0- C4	○ at 3 4 5	3
	N4E0 2 0- C6	○ at 7 8	2
	N4E0 3 0- C4	○ at 9	1
	N4E0 0-		2
	N4E0 0-		
	N4E0 0-		
	N3E0 1 0- C4	○ at 10 11	
	N3E0 0-		
Supply and exhaust block	N4E0-Q - 8 -	○ at 2	1
	N4E0-Q - -		
	N4E0-Q - -		
Regulator block	N4E0-R A - FR - C8	○ at 6	1
	N4E0-R - -		
	N4E0-R - -		
End block	N4E0-E L	○ at 1	1
	N4E0-E		
Mounting rail	L2 =		

Station no. : 8th station

Station no. : 1st station

Check if the tube puller (standard accessory) is not required.

Accessories

Blanking plug								Silencer				Push-in joint tube remover ☑ Not required (Check)
PG-P2-B		GWP4-B		GWP6-B		GWP8-B		SLW-H6		SLW-H8		

Barbed threaded joint for ø1.8 tube (10pcs./set)				Cable with D-sub connector
N4E0-JOINT-PTN2-M3		N4E0-JOINT-PTN2-M5		N4T-CABLE-D0 -
				N4E0-JOINT-PTN2-6

Power supply socket assembly (for individual wiring, AUX)				Wiring block TM1 connector
N4E0-SOCKET- - -		3M0-SOCKET-SET		N4E0-TM-CONNECTOR

Indicate the quantity of these accessories as required.

Preparing the manifold specifications

● Complete from the left end, with the piping port facing forward, regardless of the wiring block method. (Indicate the block type selected from the block part components (pages 38 to 47) and the layout instructions.)
● 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. (Indicate only when a length other than the standard length is required.)

Obtaining the DIN rail length

Obtain the mounting rail length and pitch based on the manifold length (L1) 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 when different from the standard length.

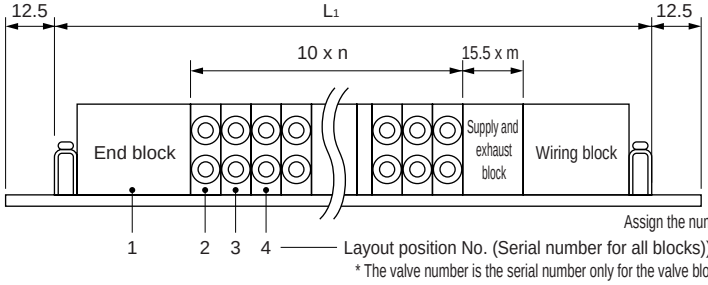
Manifold length L_1 = (10 x Valve block Quantity) + (15.5 x Supply/exhaust block Quantity) + Wiring block (Including end block) Select from the right table

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

$$L_2' = \frac{L_1 + 25}{12.5}$$ → Calculate an integer by rounding up decimal point: rail mounting pitch $L_3 = L_2 - 12.5$

Wiring block dimensions table

Wiring block		Dimension (mm)
T30/T30R	Left or right wiring block	42.4
T5*/T5*R	Left or right wiring block	42.4
TM*	Intermediate wiring block	43.2
TM*x 2	Intermediate wiring block x 2 piece	55.2
TM* + T3*/T5*	Intermediate wiring block + left or right wiring block	54.4
T30/T5* + T30R/T5*R	Left wiring block + right wiring block	53.6
T6*	Serial transmission slave unit	115.6
T7*	Serial transmission slave unit (close contact type)	73.1

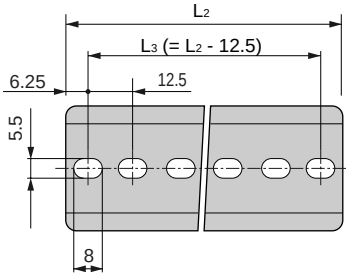


n : Number of valve block
m: Number of supply/exhaust block

Add when expanding the number of blocks.

Assign the numbers from the left with the port facing forward.

* The valve number is the serial number only for the valve block and is different from the layout position No.



MN4E0 manifold specification sheet

● Contact ● Quantity set ● Request date

Issue / /

Slip No.	Order No.

Your company name

Contact

Order No.

● Manifold model No. (Refer to Pages 16 and 20 for the manifold model No.)

MN □ E0 □ 0 – □ – □ – □ □ □ □ – □ – □

Ⓐ Model no. Ⓑ Solenoid position Ⓒ Port size Ⓓ Pressure adjustment Ⓔ Manual override Ⓕ Wiring method Ⓖ Terminal and connector pin array Ⓗ Option Ⓘ Station number Ⓙ Voltage

• When completing this form, select the type from the "Block configurations" (pages 38 to 47).
• Complete from the left end, with the piping port facing forward, regardless of the wiring block method.

Part name	Model no.	Layout 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	Quantity
Wiring block	**N4E0-T** □		
	N4E0-T □		
Individual wiring D for mix Position designation*			
Valve block	**N** □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
	N □ **E0** □ **0-** □		
Supply and exhaust block	**N4E0-Q** □ **-** □ **-** □		
	N4E0-Q □ **-** □ **-** □		
	N4E0-Q □ **-** □ **-** □		
Regulator block	**N4E0-R** □ **-** □ **-** □		
	N4E0-R □ **-** □ **-** □		
	N4E0-R □ **-** □ **-** □		
End block	**N4E0-E** □		
	N4E0-E □		
Mounting rail	**L2=** □		

Accessories

Blanking plug								Silencer				Push-in joint tube remover ☐ Not required (Check)
PG-P2-B		**GWP4-B**		**GWP6-B**		**GWP8-B**		**SLW-H6**		**SLW-H8**		

Barbed threaded joint for ø1.8 tube (10pcs./set)				Cable with D-sub connector	
N4E0-JOINT-PTN2-M3		**N4E0-JOINT-PTN2-M5**		**N4T-CABLE-D0** □ **-** □	
				N4E0-JOINT-PTN2-6	

Power supply socket assembly (for individual wiring, AUX)				Wiring block TM1 connector	
N4E0-SOCKET- □ **-** □		**3M0-SOCKET-SET**		**N4E0-TM-CONNECTOR**	

* The total number of individual wiring point is 16 points for the wiring connection method T** and individual wiring mixed method.
If TX is selected for the wiring connection method, individual wiring cannot be selected.

References circuit diagram

This is the circuit diagram from the manifold (example) on the previous page. Use this for reference.