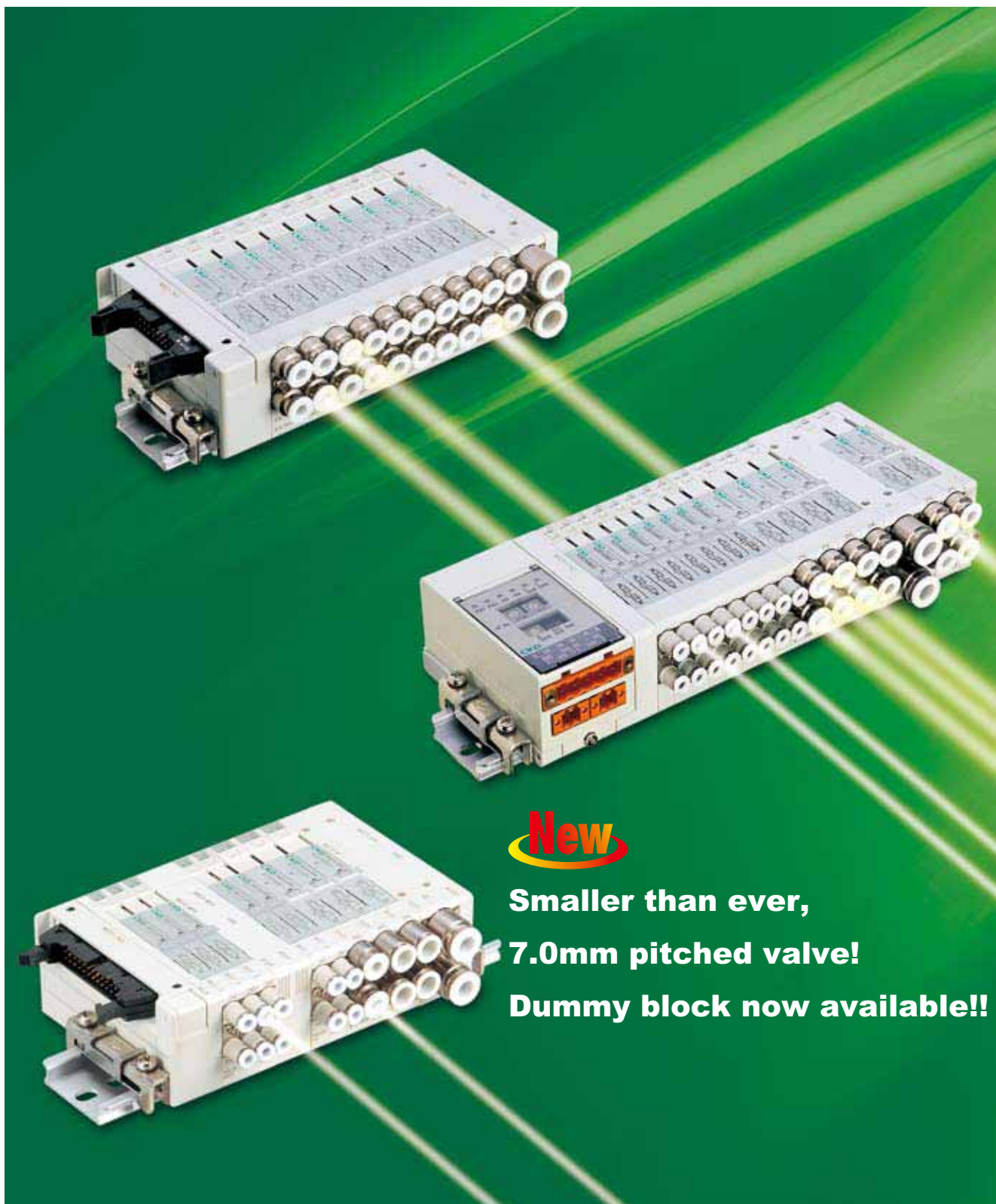


Pilot operated 3, 4 port valve MN3E/MN4E Series

3,4 PORT PILOT OPERATED VALVE MN3E MN4E Series

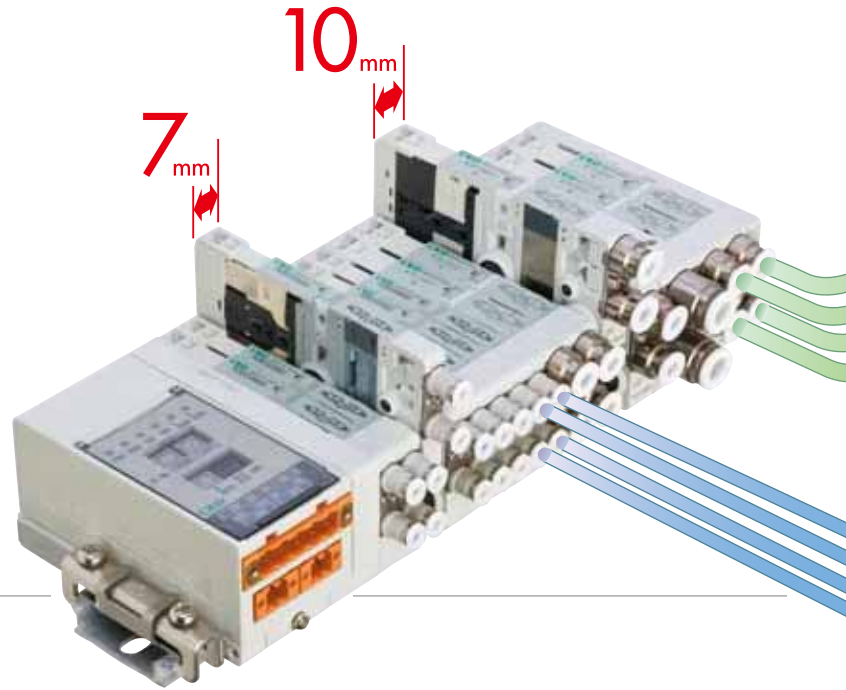
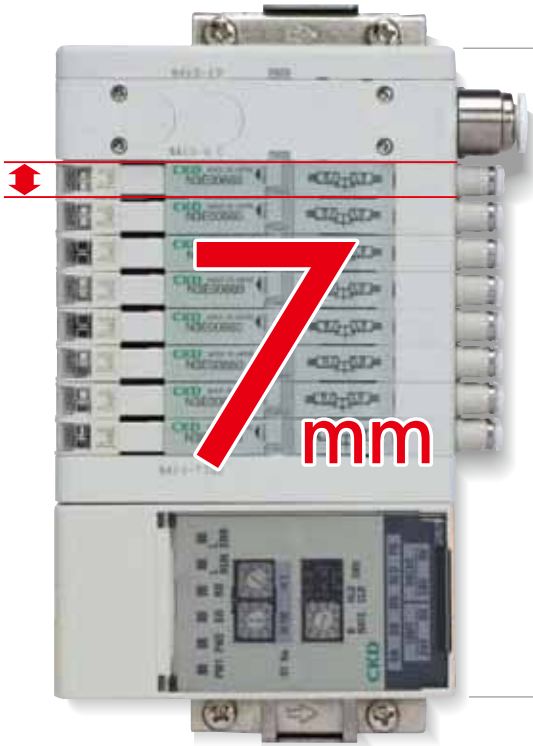


New

**Smaller than ever,
7.0mm pitched valve!
Dummy block now available!!**

7mm pitched pilot operated solenoid valve

Highly integrated, low profile 3, 4



NEW MN3 · 4E00 series



Low profile, low power consumption

Environmentally safe **RoHS**

Less material and energy consumption with smaller and efficient design. We have committed to decreasing environmentally harmful material at a very early stage. The solder used in this product is lead free and the materials are JIG-101A Level A Compliant.

Low profile NEW

In addition to MN3 · 4E0 series with a valve block width 10mm, MN3 · 4E00 with a valve block width of 7mm with manifold pitch of 7mm have newly arrived. Our manifold, smaller than ever with the 7mm pitch, will let you to create smaller and more integrated equipment.

ECO Energy efficient NEW

MN3 · 4E0 Series : 0.6W
MN3 · 4E00 Series : 0.4W
We have achieved higher energy efficiency in our low energy consumption model (Option E)

*This value includes indicator light

MN3·4E0 series	MN3·4E00 series
0.6w	0.4w
Option E	Option E
0.3w	0.22w

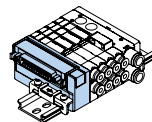
$\phi 3$ Ø3 push-in fitting NEW

Compatible with Ø3 tubes with a great balance of flow rate and footprint. Also compatible with Ø1.8 tubes to reduce footprint even further.

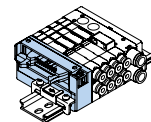
Ample options

Ample options and connections

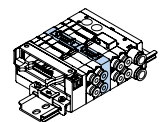
We have prepared a wide range of electric connection, compatible with various connectors and serial connection compatible with various networks. Regulator blocks that can be plugged in easily are also available.



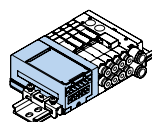
D-sub connector



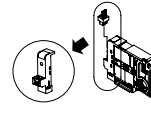
Flat cable connector



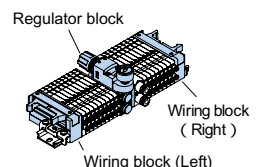
Intermediate wiring block



Serial transmission



Individual wiring type



Regulator block

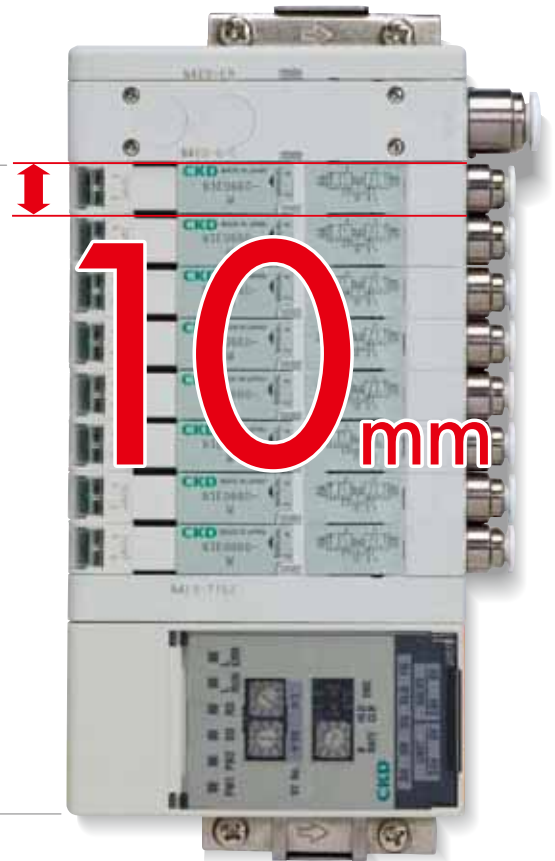
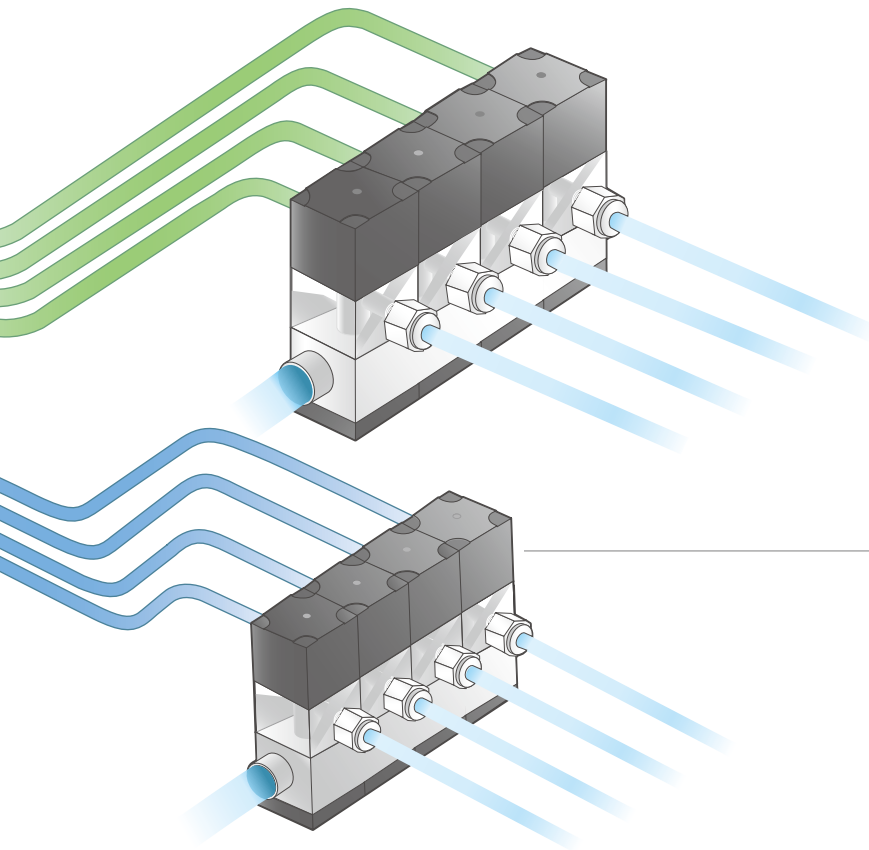
Wiring block (Right)

Wiring block (Left)

*Left/right mixed wiring is possible

manifold with safety and functions as usual.

port block manifold MN3,4E Series



MN3·4E0 series



High performance block manifold with excellent response. Downsized 50% from conventional models.

HIGH SPEC

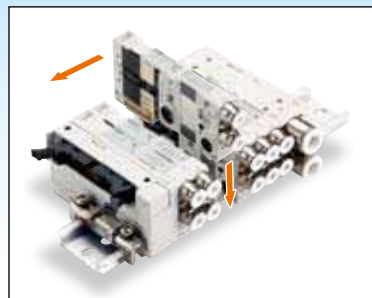
High performance

■ **12ms response with a good balance of A port/B port.**
(Measurement of N3E0 Two 3 port valves integrated type by CKD)

■ **No more wiring**

Wiring is completed by assembling the blocks with connectors. The regularity of the connector pin array is not affected by adding/subtracting valves or by the side the wiring block is installed on.

Assembly



SAFETY

Reduce downtime

■ **Safety features**

Exhaust check valve, manual override cover, and supply filter are provided as standard for safety. These features prevent malfunctions and damage to the product.

Manual override cover

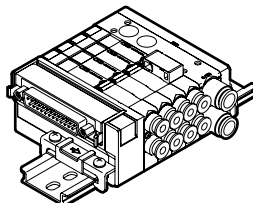


A great variety of wiring variation

Wiring is reduced while pursuing ease-of-use.

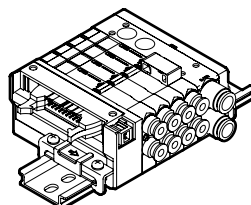
**MN4E0
4E00**

D sub-connector (N4E0-T30)



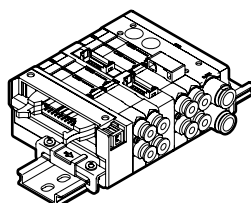
The connector used in T30 wiring, called a D sub-connector, is used widely for FA and OA devices. The 25P type is the connector designated in RS-232-C Standards that is used for communicating with personal computers.

Flat cable connector (N4E0-T5*)



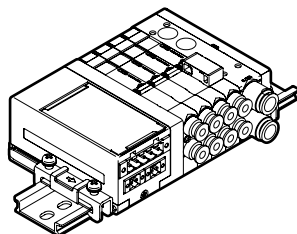
The connector used in T5* conforms to MIL standards. (MIL-C-83503)
Wiring is simplified by flat cable pressure welding.
Pin no. is assigned differently based on the PLC maker, but the function assignment is the same.

Intermediate wiring block (N4E0-TM*)

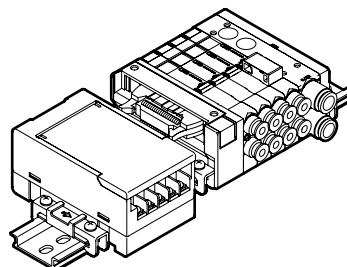


A reduced wiring connection can be made to the center of the manifold. Flat cable connector 10P and RITS a connector 6P are available.

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



Serial transmission (N4E0-T6*)

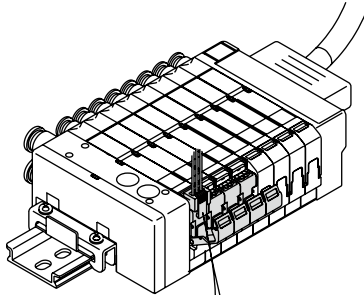


Compatible with each network.
(refer to the table below)

T7D1 T7D2	DeviceNet (16, 32 points)
T7G1 T7G2	CC-Link (16, 32 points)
T7N1 T7N2	S-LINKV (16, 32 points)

T6A0 T6A1	UNIWIRESYSTEM (8, 16 points)
T6C0 T6C1	OMRON CompoBus/S (8, 16 points)
T6E0 T6E1	SUNX S-LINK (8, 16 points)
T6G1	CC-Link (8 points)
T6J0 T6J1	UNIWIRESYSTEM H system (8, 16 points)

- Individual electric supply integrated (AUX) type (MN3E0 MN4E0 Series only)



Useful when adjusting equipments! !

Operate valves without unwiring, using separate power supply.

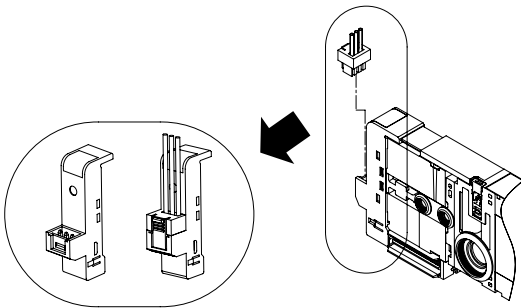
Individual external input is possible with reduced wiring manifold as well. This lets individual valves to be operated without stopping the system.
A random valve can be operated with an external power supply while common wiring is connected.
The height does not differ with this compact design.

- Example of application


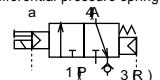
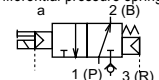
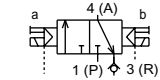
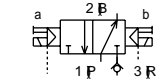

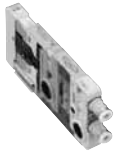
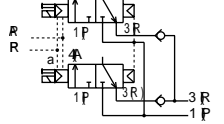
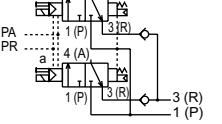
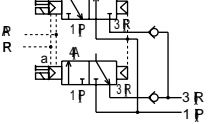
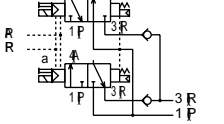

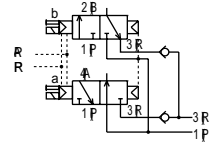
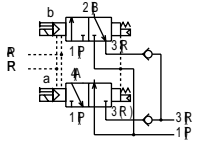
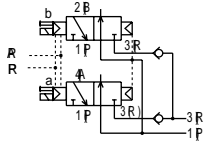
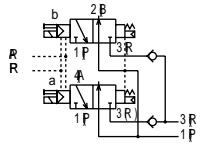

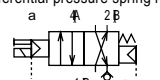
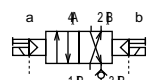

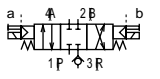
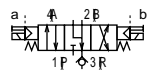
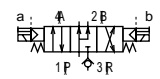
Effective when starting up or having maintenance.
Electrically operate a random valve without disconnecting wiring.
Electrically shield a random valve without disconnecting wiring.

*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 (MN3E0/MN4E0 series only)



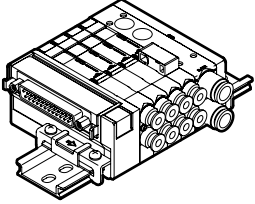
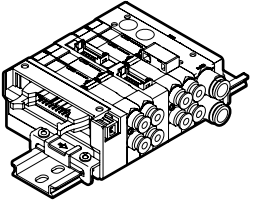
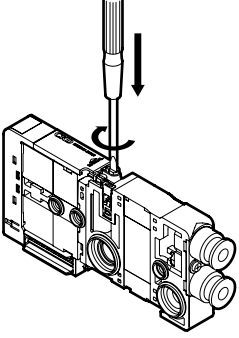
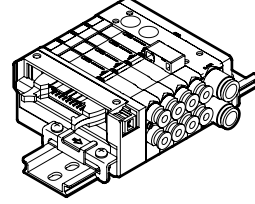
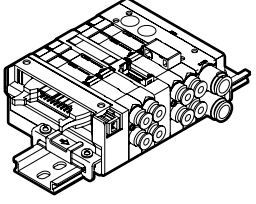
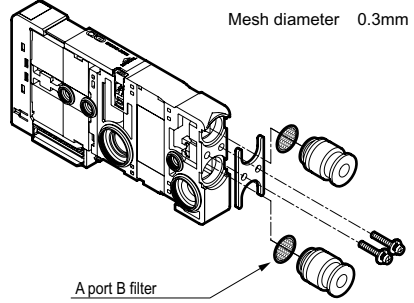
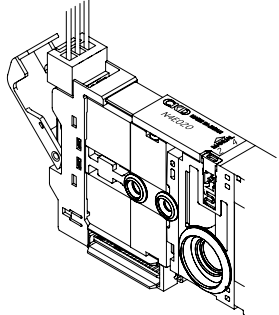
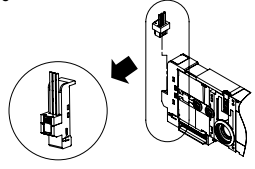
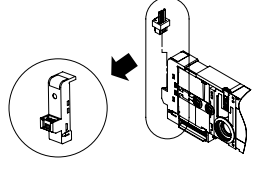
Inputs can be made individually from another system, independent from the central wiring for reduced wiring.

Appearance		No. of solenoid position Note 1 JIS fig. symbol			
		The JIS symbols for the actual part may differ due to the relation of the space and part position.			
3 port valve	MN3E00 3 port valve  (Valve pitch 7.0mm)	3 port valve <ul style="list-style-type: none"> ● 2-position NC self resetting type (Differential pressure spring return)  N3E0010/N3E010 ● 2-position NO self resetting type (Differential pressure spring return)  N3E00110/N3E0110 ● 2-position NC self holding type  N3E0020/N3E020 ● 2-position NO self holding type  N3E00210/N3E0210 			
	MN3E0 3 port valve  (Valve pitch 10.0mm)				
Two 3 port valves integrated type	MN3E00 Two 3 port valves integrated type  (Valve pitch 7.0mm)	Two 3 port valves integrated type <ul style="list-style-type: none"> ● NC/NC type self resetting type (Differential pressure return)  BE0660/BE660 ● NC/NC type self resetting type (Differential pressure spring return)  N3E0066S0/N3E066S0 ● NC/NO type self resetting type (Differential pressure return)  BE0670/BE670 ● NC/NO type self resetting type (Differential pressure spring return)  BE0676S0/BE676S0 			
	MN3E0 Two 3 port valves integrated type  (Valve pitch 10.0mm)	<ul style="list-style-type: none"> ● NO/NC type self resetting type (Differential pressure return)  N3E00760/N3E0760 ● NO/NC type self resetting type (Differential pressure spring return)  N3E0076S0/N3E076S0 ● NO/NO type self resetting type (Differential pressure return)  N3E00770/N3E0770 ● NO/NO type self resetting type (Differential pressure spring return)  N3E0077S0/N3E077S0 			
4 port valve	MN4E00 4 port valve  (Valve pitch 7.0mm)	4 port valve <ul style="list-style-type: none"> ● 2-position single solenoid self resetting type (Differential pressure spring return)  N4E0010/N4E010 ● 2-position double solenoid self holding type  N4E0020/N4E020 			
	MN4E0 4 port valve  (Valve pitch 10.0mm)	<ul style="list-style-type: none"> ● 3-position all ports closed  N4E030 ● 3-position ABR connection  N4E040 ● 3-position PAB connection  N4E050 			

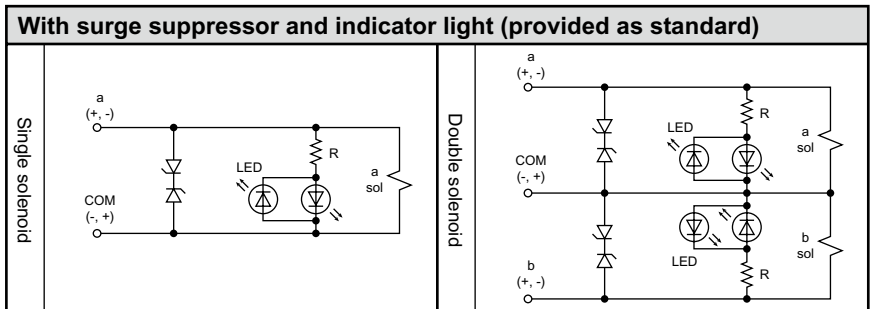
Note 1 Refer to "Self resetting type" on Intro 9 for the movement of self resetting types.
 Note 2 Effective sectional area S and sonic conductance C is converted as $S \approx 5.0 \times C$.

Flow characteristics C (dm ³ / (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			Mix	Push-in fitting			Female thread			Fiber tube fitting	Individual wiring	D sub-connector	Flat cable	Intermediate wiring block		Wiring block mixes	Serial transmission											
		Single NC type	Single NO type	Double NC types	Double NO types	A side NC B side NC	A side NO B side NO	A side NC B side NO	A side NO B side NO	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	Φ1.8	Φ3	Φ4									Φ6	M3	M5	CF	D	*T30*	T5*	TM*	TX	T6*	T7*
0.3		●	●	●	●								●	●	●								●	●	●	●	●						1				
0.54		●	●	●	●								●	●		●							●	●	●	●	●	●	●	●	●		25				
0.3	Note 3 DC24 DC12					●	●	●	●				●	●	●	●							●	●	●	●	●	●	●	●	●		1				
0.50	Note 3 Only DC24V is available for serial transmission					●	●	●	●				●	●	●	●							●	●	●	●	●	●	●	●	●		25				
0.3									●	●			●	●	●	●							●	●	●	●	●	●	●	●	●		1				
0.54 0.50 (N4E030) (N4E050)									●	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●		25				

MN3E⁰ • MN4E⁰ Series

Wiring method		Manual override		Other options	
T30 T30R	D sub-connector	TM1A	Intermediate wiring block (RITS6PX2)	Blank	E Low exoergic, energy saving circuit integrated type
				F AB port filter integrated	
				 Mesh diameter 0.3mm A port B filter	
T50 T50R	20 pin flat cable connector (With power supply terminal)	TM1C	Intermediate wiring block (RITS6PX1)	M Non-locking dedicated	U Individual electric supply integrated (AUX) type *Only MN3E0/MN4E0 
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	D* Individual wiring D-connector *Only MN3E0/MN4E0 	
T53 T53R	26 pin flat cable connector (Without power supply terminal)	T7*	Serial transmission (close contact type)		D* Individual wiring D-connector Socket without socket and terminal attached *Only MN3E0/MN4E0 

Electric connection circuit diagram





Pneumatic components

Safety precautions

Always read this section before starting use.

Refer to pneumatic valves No. CB-023S for general precautions for valves.

Precautions: Pilot operated 3•4 port valve MN3E00•MN4E00•MN3E0•MN4E0 Series

Design & Selection

1. Self resetting type

⚠ WARNING

■ Self reset type is available for the solenoid position of a valve block.

"Differential pressure return" and "differential pressure spring return" are the two self return types. Under normal pressure, the main valve of both types will return automatically when it is OFF, but if the supplied pressure reaches 0 when it is on,

- The "differential pressure return" type will hold the current position.
- 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.

Holding/return state list of main valve

Valve type			Source pressure down when ON	→ source pressure return	Power supply shutdown when ON
N3E00	1 / 11	3 port valve single NC/NO self resetting type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
	2 / 21	3 port valve double NC/NO self holding type	ON position holding		ON position holding
N3E0	66/67/76/77	Two 3 port valve integrated type NC/NO self resetting type (differential pressure return)	ON position holding		OFF (origin) movement
	66S/67S/76S/77S	Two 3 port valve integrated type NC/NO self resetting type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
N4E00	1	4 port valve 2-position single solenoid self resetting type (differential pressure spring return)	OFF (origin) movement	ON movement	OFF (origin) movement
N4E0	2	4 port valve 2-position double solenoid self holding type	ON position holding		ON position holding
	3/4/5 (only N4E0)	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 purposes other than the back pressure block.

3. Individual electric supply integrated (AUX) type

⚠ WARNING

The polarity of the reduced wiring side and individual power supply side is a plus common.

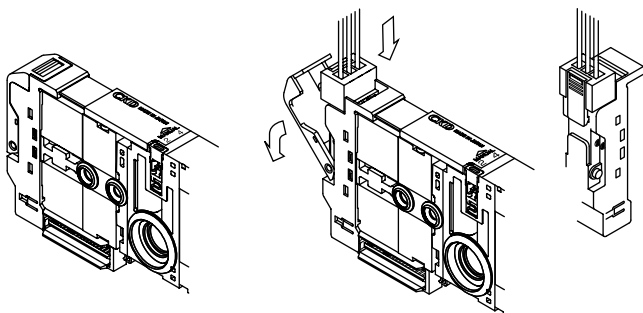
It will not operate properly if polarity is incorrect.

Use a separate power for the reduced wiring side and the individual power input side.

Using the same power supply could result in misoperation because the wiring of the reduced wiring side may not separate.

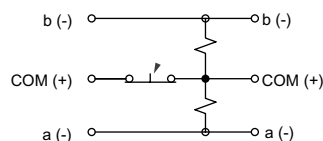
Input method of individual power supply

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



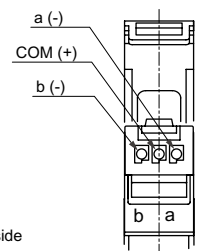
By connecting the power supply input socket, the internal wiring of the valve will be temporarily shut off from the manifold and external power supply will be available.

Shutdown when socket is inserted



Manifold internal wiring side AUX terminal side

Outline of AUX terminal and overview of internal circuit



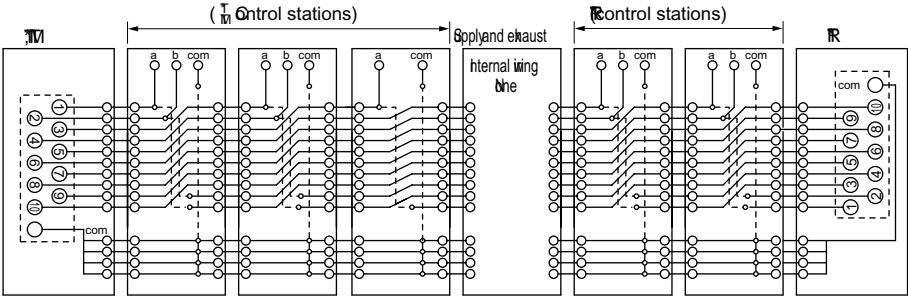
Valve block upper socket insertion diagram

Design & Selection

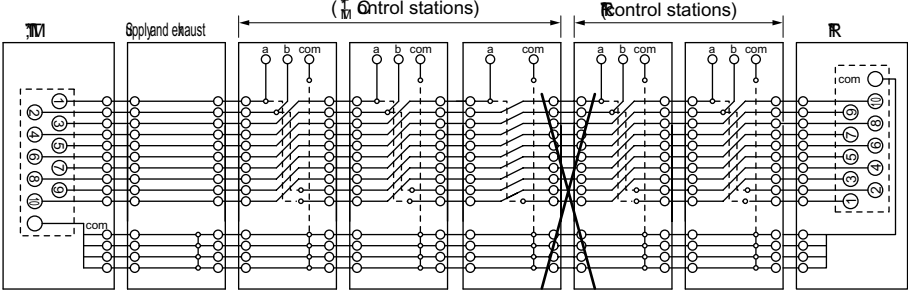
4. Wiring block mix

⚠ 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 leading to damage. Place the supply and exhaust block MN4E0-*C (No internal wiring) in between valves powered from the right side and valves powered from the left side.



Example of incorrect layout Left and right wiring interfere at the center.



5. Surge suppressor

⚠ CAUTION

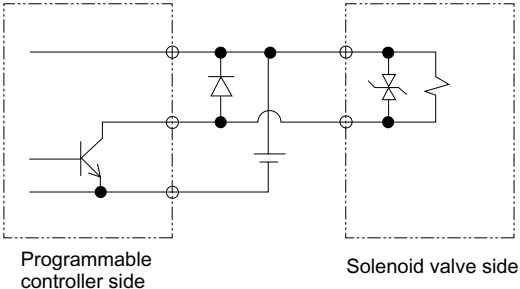
■ The surge suppressor attached to the solenoid valve is for protection of the output contact for solenoid valve operation. It will not protect other peripherals. Also, it may absorb surge caused by other components, resulting in damage such as burn out. Please beware of the following.

- (1) Surge suppressor reduces the solenoid surge that reaches few hundred volts to a level which can be withstood. Depending on the output circuit, this may not be sufficient and result in failure or malfunction. Please determine whether use is appropriate from the surge limit of the solenoid valve, circuit and withstanding voltage of the output component or return delay. If necessary, provide other surge protection measures. The inverse voltage surge generated when OFF can be suppressed to the following levels.

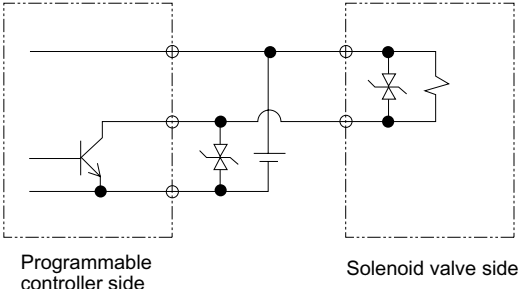
Rated voltage	Reverse voltage value when power turned OFF
DC12V	Approx. 27V
DC24V	Approx. 47V

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

(Example of output transistor protective circuit installation 1)



(Example of output transistor protective circuit installation 2)



MN3E₀₀ • MN4E₀₀ Series

(3) If other components and solenoid valves are connected in parallel, reverse voltage surge will be applied to other components when the solenoid valve is turned OFF. Even with a solenoid valve with surge protector for DC24V, the surge will could reach negative tens, resulting in failure and malfunctions of components connected in parallel. Do not connect components that are weak against reverse voltage such as LED indicators in parallel.

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.

Do not operate multiple solenoid valves in parallel. Even if all solenoid valves operated in parallel had surge suppressors, the surge may concentrate to the surge suppressor with the least voltage limit and burn it. There are discrepancies with the voltage limit of the surge suppressors, even among the same model no. Since this could lead to burn outs, do not connect multiple solenoid valves in parallel.

(4) The surge suppressor installed in the solenoid valve may short circuit if it is damaged by a surge that is generated by other solenoid valves. If the surge suppressor fails, or if a large current flows when the output is on, the output circuit or solenoid valve could be damaged or ignite. Do not power broken valves.

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 a d power savi g circuit i tegrated type

CAUTION

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

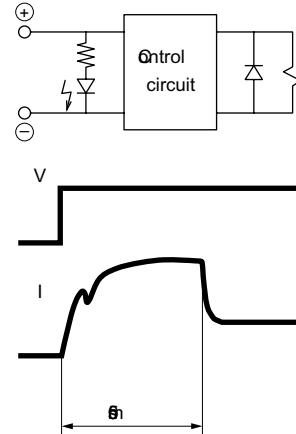
With the type with low exoergic, energy-saving circuit, the current limit circuit is built into the valve block.

The current value when the coil is sucked and held is lowered with this structure.

Only plus common polarity is used.

Low exoergic and power saving circuit integrated type individual specifications

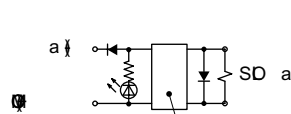
Descriptions		Descriptions		
		MN4E00	MN4E0	
Energizing current A	At starting	DC24	0.017	0.025
		DC12	0.033	0.050
	At holding	DC24	0.009	0.013
		DC12	0.018	0.025
Power consumption W	At starting	DC24	0.4	0.6
		DC12		
	At holding	DC24	0.22	0.3
		DC12		



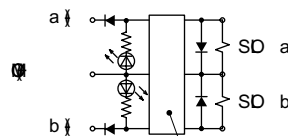
7. Polarity

CAUTION

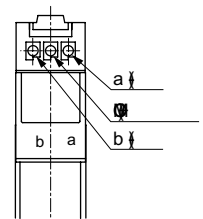
When selecting the low exoergic, energy-saving circuit, the connection is dedicated to the plus common. Always check the connection polarity. Refer to Section 5, "Surge suppressor" on page 10 for the details of the surge suppressor.



Single and power saving circuit integrated



Double and power saving circuit integrated

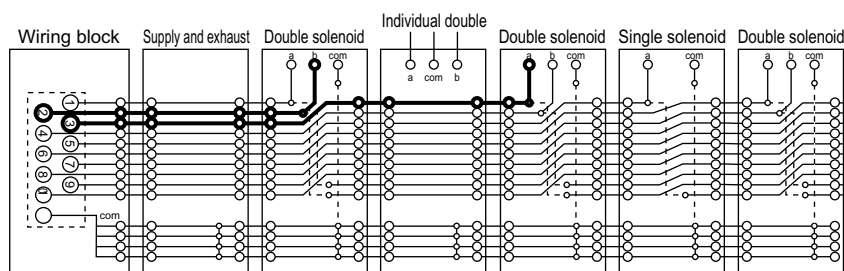


Use block the figure above

8. Wiring manifold when using with reduced wiring 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

- 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 is not visible 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. 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 and turn to lock. If manual override is turned without being pressed down, it could be damaged or air could leak.

2. External pilot piping port

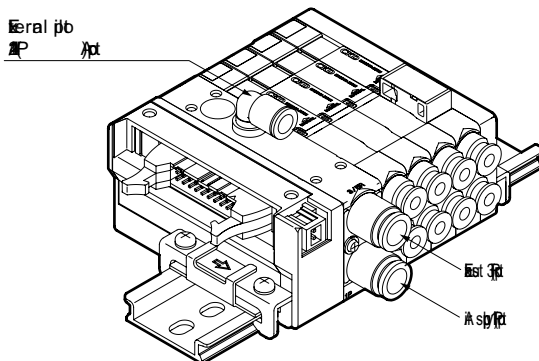
⚠ CAUTION

- The external pilot type has a separate pilot air supply. $\Phi 6$ push-in fitting 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		Indicator (ISO standards)
Pilot air	Pilot air supplying port	12/14

*A/B port and R port cannot be pressurized.

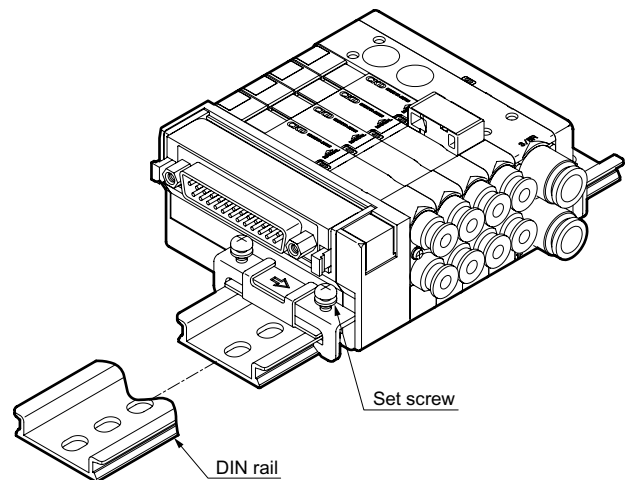


The external pilot supply port is the $\phi 6$ push-in fitting on the top of the supply/exhaust block.

3. How to install manifold

⚠ CAUTION

- 4E Series must be mounted on a 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 100mm 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 pages 1 and 25 for the weights)

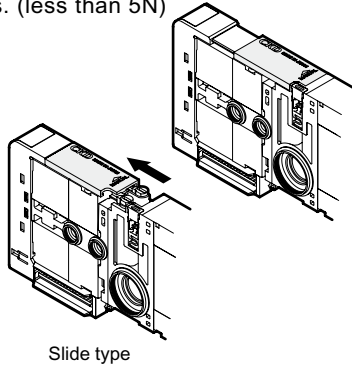


During Use & Maintenance

1. Manual override

⚠ WARNING

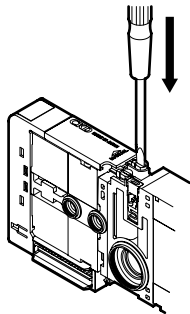
- Opening and closing the manual protective cover Do not apply excessive force to the manual protective cover when opening and closing it. Excessive force could cause faults. (less than 5N)



How to operate manual override

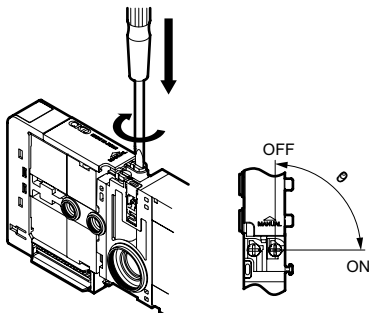
(1) Push/non-locking operation

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.



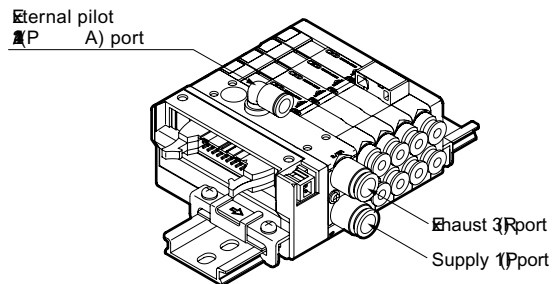
⚠ WARNING

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

2. External pilot piping port

⚠ CAUTION

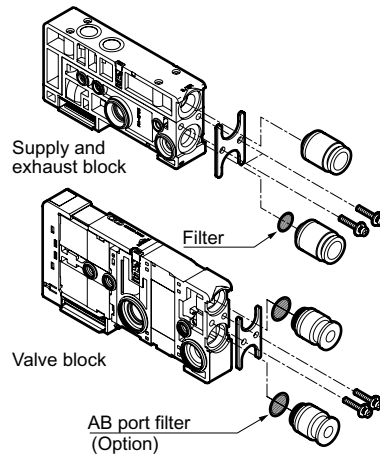
- Observe supply pressure for the type with two 3-port valves. The valving element of the type with two 3 port valves is operated with the main (P port) supply pressure.
 - Check that the main pressure (P port) is not higher than the pilot pressure (PA port).
 - Check that the main pressure (P port) 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 $\phi 0.3\text{mm}$). 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 press on 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.



4. Pneumatics pressure source

⚠ CAUTION

- This product is an oilless valve. If lubricated, the grease will run out and the performance will drop.



Safety precautions

Always read this section before starting use.

When designing and manufacturing a device using CKD products, the manufacturer is obligated to check that device safety mechanism, pneumatic control circuit, or water control circuit and the system operated by electrical control that controls the devices is secured.

It is important to select, use, handle, and maintain the product appropriately to ensure that the CKD product is used safely.




Observe warnings and precautions to ensure device safety.

Check that device safety is ensured, and manufacture a safe device.

WARNING

- 1** This product is designed and manufactured as a general industrial machine part. It must be handled by an operator having sufficient knowledge and experience in handling.
- 2** Use this product in accordance of specifications.
This product must be used within its stated specifications. It must not be modified or machined.
This product is intended for use as a general-purpose industrial device or part. It is not intended for use outdoors or for use under the following conditions or environment.
(Note that this product can be used when CKD is consulted prior to use and the customer consents to CKD product specifications. The customer must provide safety measures to avoid risks in the event of problems.)
 - ① Use for special applications requiring safety including nuclear energy, railroad, aviation, ship, vehicle, medical equipment, equipment or applications coming into contact with beverage or food, amusement equipment, emergency shutoff circuits, press machine, brake circuits, or for safeguard.
 - ② Use for applications where life or assets could be adversely affected, and special safety measures are required.
- 3** Observe corporate standards, regulations and etc., related to the safety of device design and control, etc. ISO4414, JIS B8370 (pneumatic system rules)
JFPS2008 (principles for pneumatic cylinder selection and use)
High Pressure Gas Maintenance Law, Occupational Safety and Sanitation Laws, other safety rules, body standards and regulations, etc.
- 4** Do not handle, pipe or remove devices before confirming safety.
 - ① Inspect and service the machine and devices after confirming safety of the entire system related to this product.
 - ② Note that there may be hot or charged sections even after operation is stopped.
 - ③ When inspecting or servicing the device, turn off the energy source (air supply or water supply), and turn off power to the facility. Discharge any compressed air from the system, and pay enough attention to possible leakage of water and electricity.
 - ④ When starting or restarting a machine or device that incorporates pneumatic components, make sure that the system safety, such as pop-out prevention measures, is secured.
- 5** Observe warnings and cautions on the pages below to prevent accidents.

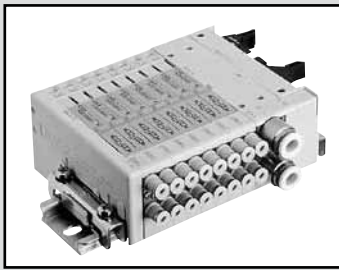
■ The safety cautions are ranked as "DANGER", "WARNING" and "CAUTION" in this section.

-  **DANGER** : When a dangerous situation may occur if handling is mistaken, leading to fatal or serious injuries, or when there is a high degree of emergency to a warning.
-  **WARNING**: When a dangerous situation may occur if handling is mistaken, leading to fatal or serious injuries.
-  **DANGER** : When a dangerous situation may occur if handling is mistaken leading to minor injuries or physical damage.

Note that some items described as "CAUTION" may lead to serious results depending on the situation. In any case, important information that must be observed is explained.

Disclaimer

1. CKD cannot be held liable for any business interruption, loss of profit, personal injury, delay cost, or any other ancillary or indirect loss, cost or damage resulting from the use of or faults in the use of CKD products.
2. CKD cannot be held responsible for the following damage:
 - ① Damage resulting from failure of CKD parts due to acts of god, fire from reasons not attributable to CKD or by intentional or negligence of a third party or customer.
 - ② Damage that could have been avoided if customer equipment were provided with functions and structure, etc., generally accepted in the industry when a CKD product is installed.
 - ③ Damage resulting from use exceeding the scope of specifications provided in CKD catalogs or instruction manuals, etc., or from actions not following precautions for installation, adjustment, or maintenance, etc.
 - ④ Damage resulting from product modifications not approved by CKD, or from faults due to combination with other software or other connected devices.



Reduced wiring block manifold
Pilot operated 3, 4 port valve

MN3E00 • MN4E00 Series



Common specifications

Descriptions		
Manifold method		Block manifold
Manifold type		Common supply and integrated common exhaust check valve Note 1
Working fluid		Compressed air
Type of valve / 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	°C	5 to 55
Fluid temperature	°C	5 to 55
Lubrication		Not required Note 2
Protective structure		Dust proof
Vibration/shock	m/s ²	50 or less/300 or less
Working environment		Containing corrosive gas is not permissible.
Manual override		Lock, common non-locking type/non-locking only

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% if used with serial transmission)
Rated current A	DC24V	0.017 (0.009) Note 3
	DC12V	0.033 (0.018) Note 3
Power consumption W	DC24V	0.4 (0.22) Note 3
	DC12V	
Heat proof class		B
Surge protective circuit		With surge suppressor
Indicator		LED

Note 2: This product is an oilless valve. If lubricated, the grease will run out and the performance will drop.

Note 3: 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 valve integrated type Note 2
Port size	A/B port		Φ1.8, Φ3, Φ4 push-i fitti g a d M3		
	P/R port		Φ6, Φ8 push-i fitti g		
	External pilot port		Φ6 push-i fitti g		—
Response time Note 1 ms	2-position single solenoid		20 or less	20 or less	20 or less
	Double solenoid		20 or less	20 or less	—

Note 1: Response time is the value. when supply pressure 0.5MPa and oil-free.

Note 2: With Two 3 port valve integrated type, 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

		→ A/B		A/B → R	
		C (dm ³ / (s•bar))	b	C (dm ³ / (s•bar))	b
3 port valve	2-position	0.30	0.20	0.32	0.24
4 port valve	2-position	0.30	0.20	0.32	0.24
Two 3 port valves integrated type	2-position	0.30	0.20	0.32	0.24

Note 1: Effective sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$. *Note 2: Value of Φ4 push-i fitti g

Weight

Wiring block (g)	D sub-connector type T30	Flat cable connector type T5*	Intermediate wiring block			Serial transmission	
			TM1A	TM1C	TM52	T6*	T7*
	67	59	32	32	34	205	128
Supply and exhaust block (g)		Q/QZ	QK	QKZ		QX	QKX
	Fitting side	64	69	79		56	61
	Fitting top	90	94	98		62	66
Valve block (g)		2-position single solenoid	2-position double solenoid	Two 3 port valves integrated type			
	Fitting side	31.5	35.0	35.0			
	Fitting top	37.5	41.0	41.0			
Dummy block (g)	MPS/MPD						
	20						
End block (g)	ER/EL						
	40						
DIN rail (g)	—						
	0.9g/mm						

Maximum number of stations energized by manifold

Descriptions		Descriptions	Double solenoid (Double wiring)	Single solenoid	Mix Manifold (Solenoid number)	Listed Page
D sub-connector type (25 pin)	T30	D sub-connector type Left	12 stations	24 stations	24 points	Page 3
	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 x 2 piece Note 1	5 stations	10 stations	10 points	Page 7
	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	UNIWIRESYSTEM8 points	4 stations	8 stations	8 points	
	T6A1	UNIWIRESYSTEM16 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	UNIWIRESYSTEM H system 8 points	4 stations	8 stations	8 points	
	T6J1	UNIWIRESYSTEM H system 16 points	8 stations	16 stations	16 points	
Serial transmission type (close contact type)	T6G1	CC-Link 16 points	8 stations	16 stations	16 points	
	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	
	T7N1	S-LINK V 16 points	8 stations	16 stations	16 points	
T7N2	S-LINK V 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	T7N1 T7N2
Power voltage	Unit side	DC24V±10%			DC24V		DC24V±10%		
	Valve side	24 VDC + 10%-5%			+ 10%-5%		24 VDC + 10%-5%		
	Communication side	-			-		11 to 25 VDC	-	
Current consumption	Unit side	T6C1: 60mA or less T6C0: 40mA or less (when all points output ON)	100mA or less (when all points output ON)	100mA or less (when all points output ON) <small>Note that current consumption of valve is not included</small>	60mA or less (when all points output ON) <small>Note that current consumption of valve is not included</small>	T7D1: 60mA or less T7D2: 85mA or less (when all points output ON)	T7G1: 65mA or less T7G2: 90mA or less (when all points output ON)	T7N1: 40mA or less T7N2: 50mA or less (when all points output ON)	
	Valve side	15mA or less (when all points OFF)							
	Communication side	-			-		50mA or less	-	
Output no.	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	T7N1: 16 points T7N2: 32 points	
Occupied number	T6C1: 2 code address (8 points mode) T6C0: 1 code address (8 points mode)	1 station	T6A1: Output 16 points T6A0: Output 8 points	T6J1: Output 16 points T6J0: Output 8 points	T6E1: FAN-i : 3 T6E0: FAN-i : 3 Note 3	T7D1: 2 byte T7D2: 4 byte	T7G1: 1 station T7G2: 1 station	T7N1: output 16 points T7N2: output 32 points	

Note 1: CC-Link is ver.1.10.

Note 2: Consult with CKD for EDS file. (EDS file: Test file of parameters for communicating with each company's master)

Note 3: FAN-in indicates input capacity from a D-G line. (It is necessary to calculate the connection quantity)

Ozone proof

Ozone proof is made as standard.

Clean room specifications (Catalog No. CB-033S)

- Dust generation preventive structure for use in clean rooms

* Voltage - **PO**

MN3E00 • MN4E00 Series

How to order manifold D-sub/flat cable connector

*Refer to page 7 for serial transmission type.

● Discrete valve block

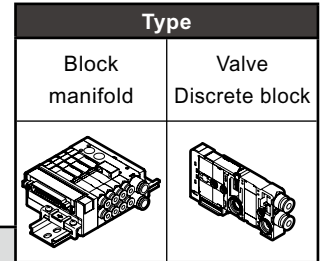
N 3 E00 1 0 - C3 — M W EF — 3

● Block manifold

MN 4 E00 1 0 - C3 - R - M T53 — E - 5 - 3

DIN rail
Mount method

C Port size E Manual override H Option J Voltage
D Pressure adjustment F Wiring method G Terminal and connector pin array I Station number



* Complete manifold specification sheet (Page 85)

A Valve type

B Solenoid position

• Refer to 62 Page for D-sub-cable with connector model no.

⚠ Note on model no. selection

Note 1: Two 3 port valve integrated type can not be used in external pilot type.

Consult with CKD for 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: Refer to page 63 to 70 for connector pin layout of 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: Energizing is limited to the plus common.

Note 6: A filter for prevention of foreign matter is incorporated in the supply/exhaust block's P port.

Note 7: Differs based on specifications. Check on page 2.

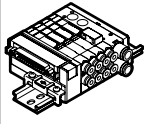
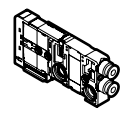
Note 8: Read the precautions on page 9 for the self reset type specifications.

Note 9: Dummy block counts as a station.

Symbol	Descriptions	Type	
		Block manifold	Valve Discrete block
A Valve type			
3	3 port valve and Two 3 port valve integrated type	●	●
4	4 port valve, 3, 4 ports valve mix	●	●
B Solenoid position (note 8)			
1	3 port valve Single NC self resetting type (Differential pressure spring return)	●	●
11	3 port valve Single NO self resetting type (Differential pressure spring return)	●	●
2	3 port valve Double NC self holding type	●	●
21	3 port valve Double NO self holding type	●	●
66	4 port valve A side valve: NC self resetting type (Differential pressure return)	●	●
66S	4 port valve B side valve: NC self resetting type (Differential pressure spring return)	●	●
67	4 port valve A side valve: NC self resetting type (Differential pressure return)	●	●
67S	4 port valve B side valve: NO self resetting type (Differential pressure spring return)	●	●
76	4 port valve A side valve: NO self resetting type (Differential pressure return)	●	●
76S	4 port valve B side valve: NC self resetting type (Differential pressure spring return)	●	●
77	4 port valve A side valve: NO self resetting type (Differential pressure return)	●	●
77S	4 port valve B side valve: NO self resetting type (Differential pressure spring return)	●	●
1	2-port valve 2-position single solenoid self resetting type (Differential pressure spring return)	●	●
2	2-port valve 2-position double solenoid self holding type	●	●
8	Mix manifold	●	
C Port size			
C18	Φ1.8 push-in fitting side (compatible tube UP-9402-**)	●	●
CL18	Φ1.8 push-in fitting up (compatible tube UP-9402-**)	●	●
C3	Φ3 push-in fitting side	●	●
CL3	Φ3 push-in fitting up	●	●
C4	Φ4 push-in fitting, side	●	●
CL4	Φ4 push-in fitting, up	●	●
M3	M3 female thread (with non-rotating)	●	●
CX	Mix push-in fitting	●	
D Pressure adjustment			
Blank	Regulator block mounting, without manifold	●	
R	Regulator block mounting, manifold (Note 2, 3)	●	
E Manual override			
Blank	Non-locking/locking common type (with manual cover)	●	●
M	Non-locking dedicated manual override (with manual cover)	●	●
F Wiring method			
Refer to the following page.		●	
G Terminal and connector pin array			
Blank	Standard wiring	●	●
W	Double wiring (Note 4)	●	●
H Option			
Blank	None	●	●
E	Low exoergic, power saving circuit integrated type (Note 5)	●	●
F	A/B port filter integrated (Note 6)	●	●
I Station number			
1	1 station	●	
to	to		
24	24 stations (note 7)		
J Voltage			
3	24 VDC	●	●
4	DC 12V	●	●

MN3E00 • MN4E00 Series

Reduced wiring block manifold

Type	
Block manifold	Valve Discrete block
	

(Wiring method list)

Symbol	Descriptions		
F 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 x 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		●

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.

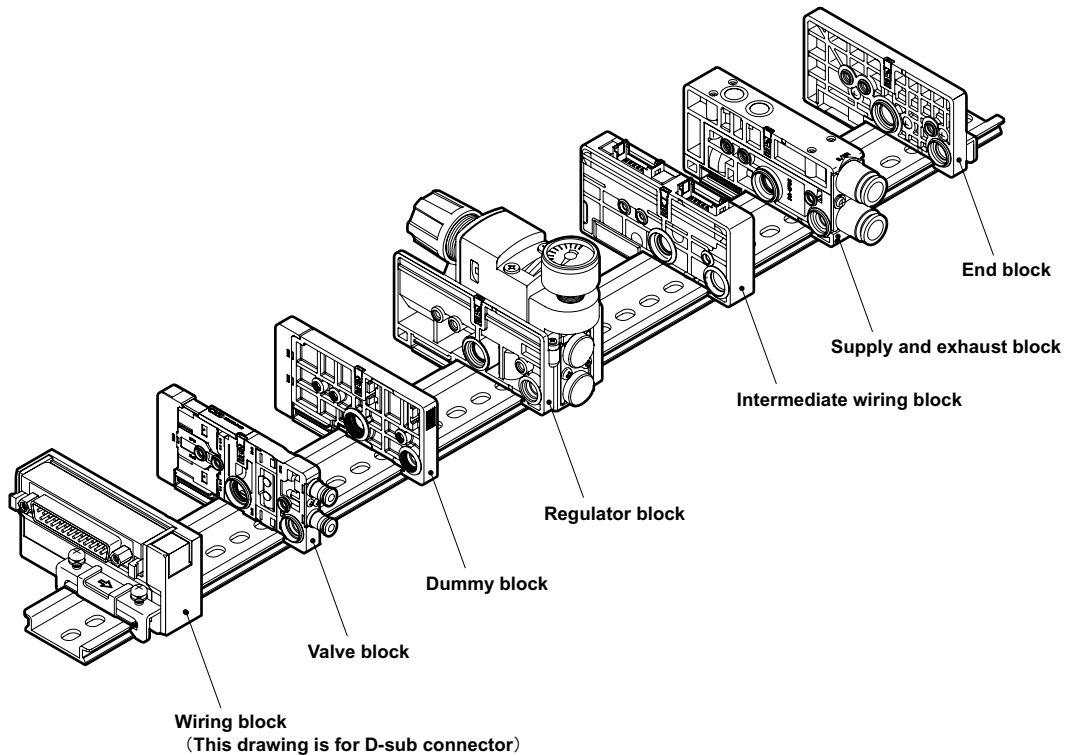
Note 12: RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.

Note 13: Specify 2 pcs. using the manifold specification sheet. Consult with CKD for 3 pcs. or more.

Note 14: If TX is selected for the wiring connection method, individual wiring cannot be selected.

MN3E00 • MN4E00 Series

Manifold components explanation and parts list



Example of main component model no. (Refer to Page 51 to 61 for the details.)

Parts name	Model no. (example)	Parts name	Model no. (example)
Wiring block	N4E0-T30	Supply and exhaust block	N4E0-Q-8
Valve block	N4E0020-C3-3	End block	N4E0-ER
Dummy block	N4E0-MPD		
Regulator block	N4E0-RA-RL		

List of related parts

Parts name	Model no. (example)	Parts name	Model no. (example)
Cartridge type push-in fitting and related parts	N4E00-JOINT-C18	Cartridge type push-in fitting and related parts	N4E0-JOINT-CPG
	N4E00-JOINT-C3		
	N4E00-JOINT-C4		
	N4E00-JOINT-CL18		
	N4E00-JOINT-CL3		
	N4E00-JOINT-CL4		

MEMO

MN3E00 • MN4E00 Series

How to order manifold Serial transmission

*Refer to 3 page for D sub-connector/flat cable connector type.

● Discrete valve block

N 3 E00 1 0 - C3 — M W EF — 3

● Block manifold

MN 4 E00 1 0 - C3 - R - M T6G1 — E - 5 - 3

DIN rail
Mount method

C Port size

E Manual override

H Option

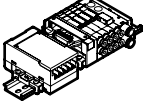
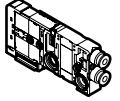
J Voltage

D Pressure
adjustment

F Wiring method
(serial transmission)

I Station number

G Terminal and connector pin array

Type	
Block manifold	Discrete valve block
	

* Complete manifold specification sheet (Page 85)

A Valve type

B Solenoid
position

Symbol	Descriptions			
A Valve type				
3	3 port valve and 3 ports valve 2 piece integrated type		●	●
4	4 port valve, 3, 4 ports valve mix		●	●
B Solenoid position (note 8)				
1	3 port valve	Single NC self reset type (Differential pressure)	●	●
11		Single NO self resetting type (spring return)	●	●
2		Double NC self holding type	●	●
21		Double NO self holding type	●	●
66	Two 3 port valves integrated type (Note 1)	A side valve: NC self resetting type (Differential pressure return)	●	●
66S		B side valve: NC self resetting type (Differential pressure spring return)	●	●
67		A side valve: NC self resetting type (Differential pressure return)	●	●
67S		B side valve: NO self resetting type (Differential pressure spring return)	●	●
76		A side valve: NO self resetting type (Differential pressure return)	●	●
76S		B side valve: NC self resetting type (Differential pressure spring return)	●	●
77		A side valve: NO self resetting type (Differential pressure return)	●	●
77S		B side valve: NO self resetting type (Differential pressure spring return)	●	●
1	4 port valve	2-position single solenoid self resetting type (Differential pressure spring return)	●	●
2		2-position double solenoid self holding type	●	●
8		Mix manifold	●	
C Port size				
C18		Φ1.8 push-in fitting side (compatible tube UP-9402-**)	●	●
CL18		Φ1.8 push-in fitting up (compatible tube UP-9402-**)	●	●
C3		Φ3 push-in fitting side	●	●
CL3		Φ3 push-in fitting up	●	●
C4		Φ4 push-in fitting, side	●	●
CL4		Φ4 push-in fitting, up	●	●
M3		M3 female thread (with non-rotating)	●	●
CX		Mix push-in fitting	●	
D Pressure adjustment				
Blank		Regulator block mounted without manifold	●	
R		Regulator block mounted manifold (Note 2, 3)	●	
E Manual override				
Blank		Non-locking/locking common type (with manual cover)	●	●
M		Non-locking dedicated manual override (with manual cover)	●	●
F Wiring method				
Refer to the following page.			●	
G Terminal and connector pin array				
Blank		Standard wiring	●	●
W		Double wiring (Note 4)	●	●
H Option				
Blank		None	●	●
E		Low exoergic, power saving circuit integrated type (Note 5)	●	●
F		A/B port filter integrated (Note 6)	●	●
I Station number				
1		1 station		
to		to	●	
32		32 stations (note 7)		
J Voltage				
3		24 VDC	●	●

⚠ Note on model no. selection

Note 1: Two 3 port valve integrated type can not be used in external pilot type. Consult with CKD for 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: Refer to page 63 to 70 for connector pin layout of the double wiring specifications.

When ordering a single valve block, the double wiring is limited to the 2-position single solenoid for the 4-port valve, and the 3-port valve.

Note 5: Energizing is limited to the plus common.

Note 6: A filter for prevention of foreign matter is incorporated in the supply/exhaust block's P port.

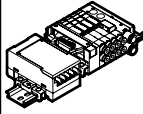
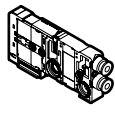
Note 7: Depends on specifications. Refer to page 2.

Note 8: Read the caution on page 9 for the self reset type specifications.

Note 9: Please confirm the lead time for T78N2 (S-LINK V 32 ports output) each time when ordering.

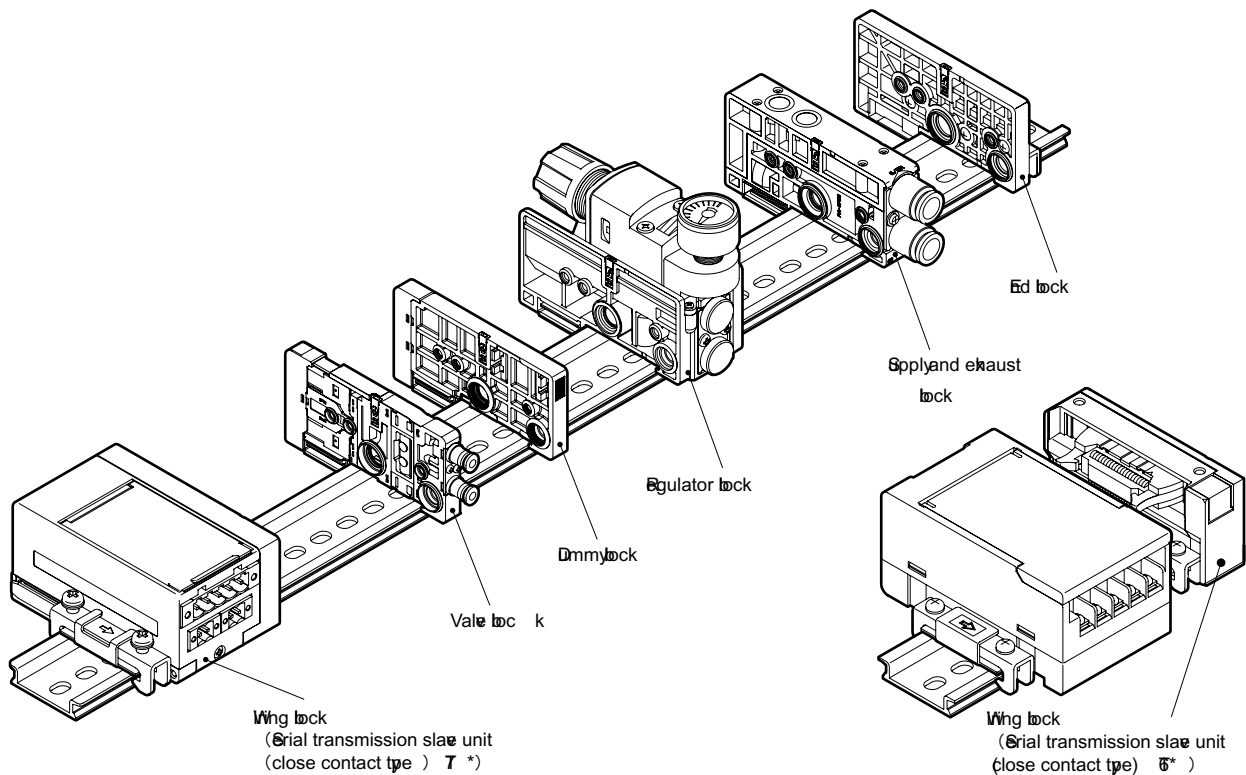
Note 10: Dummy block counts as a station.

(Wiring method list)

Symbol	Descriptions	Type	
		Block manifold	Valve Discrete block
			
F Wiring method			
T6A0	UNIWIRESYSTEM8 poi ts	●	
T6A1	UNIWIRESYSTEM16 poi ts	●	
T6C0	OMRON CompoBus/S 8 poi ts	●	
T6C1	OMRON CompoBus/S 16 poi ts	●	
T6E0	SUNX S-LINK 8 poi ts	●	
T6E1	SUNX S-LINK 16 poi ts	●	
T6J0	UNIWIRESYSTEM H system 8 poi ts	●	
T6J1	UNIWIRESYSTEM H system 16 poi ts	●	
T6G1	CC-Link 16 poi ts	●	
T7D1	Close contact type DeviceNet 16 poi ts	●	
T7D2	Close contact type DeviceNet 32 points	●	
T7G1	Close contact type CC-Link 16 poi ts	●	
T7G2	Close contact type CC-Link 32 points	●	
T7N1	Close contact type S-LINK V 16 poi ts	●	
T7N2	Close contact type S-LINK V 32 points (note 9)	●	
Blank	For reduced wiring valve block		●

MN3E00 • MN4E00 Series

Manifold components explanation and parts list



Example of main component model no. (Refer to page 51 to 61 for details.)

Parts name	Model no. (example)	Parts name	Model no. (example)
Wiring block	N4E0-T6G1	Supply and exhaust block	N4E0-Q-8
Valve block	N4E030-C3-3	End block	N4E0-ER
Dummy block	N4E0-MPD		
Regulator block	N4E0-RA-RL		

List of related parts

Parts name	Model no. (example)	Parts name	Model no. (example)
Cartridge type push-in fitting and related parts	N4E00-JOINT-C18	Cartridge type push-in fitting and related parts	N4E0-JOINT-CPG
	N4E00-JOINT-C3		
	N4E00-JOINT-C4		
	N4E00-JOINT-CL18		
	N4E00-JOINT-CL3		
	N4E00-JOINT-CL4		

MEMO

MN3E00 Series

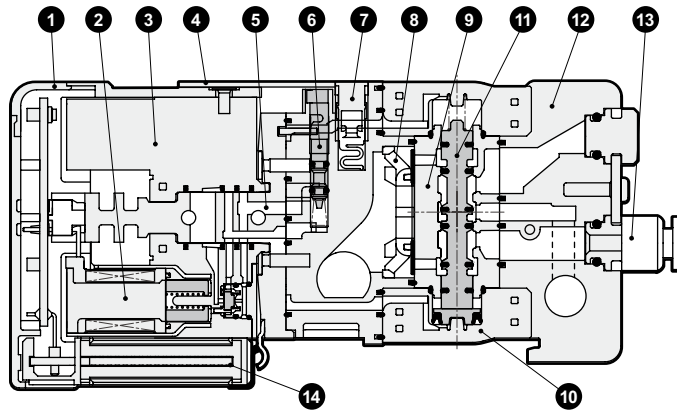
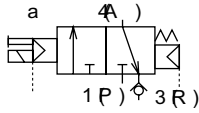
Reduced wiring block manifold (valve block); 3 port valve

Internal structure and parts list

3 port valve

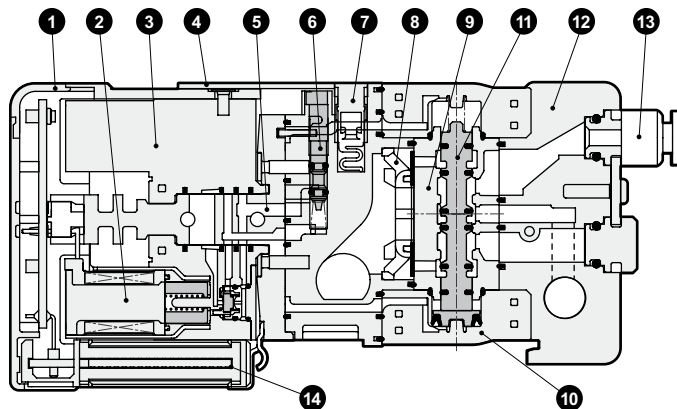
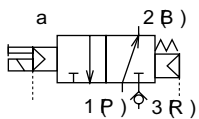
N3E0010

•2-position single solenoid normally closed



N3E00110

•2-position single solenoid normally open



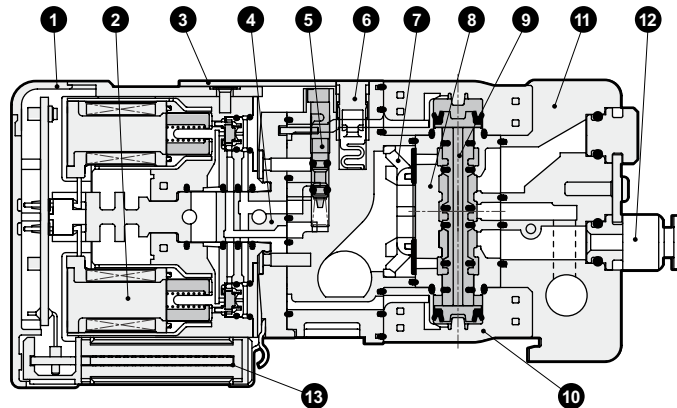
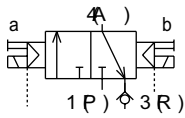
Main parts list

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

Internal structure and parts list

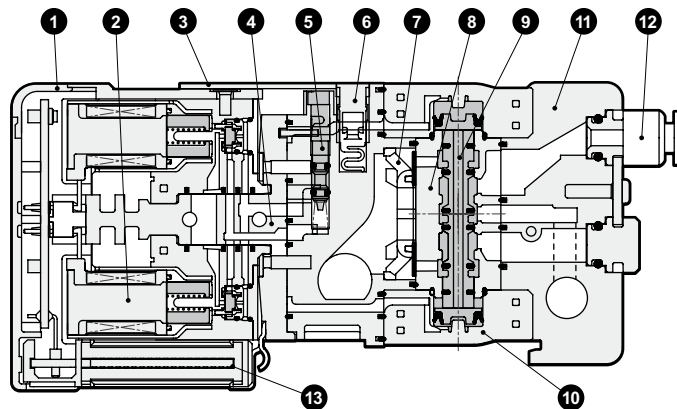
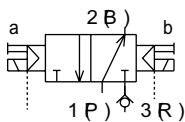
N3E0020

•2-position double solenoid normally closed (self holding type)



N3E00210

•2-position double solenoid normally open (self holding type)



Main parts list

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

MN3E00 Series

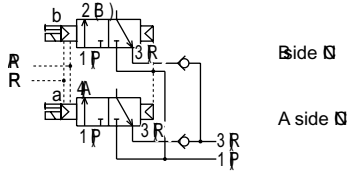
Reduced wiring block manifold (valve block); Two 3 port valve integrated type

Internal structure and parts list

Two 3 port valves integrated type

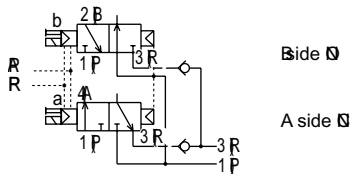
N3E00660

- NC/NC self resetting type (differential pressure return)



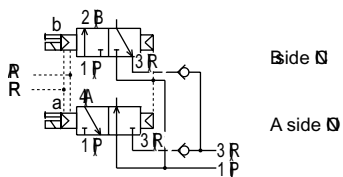
N3E00670

- NC/NO self resetting type (differential pressure return)



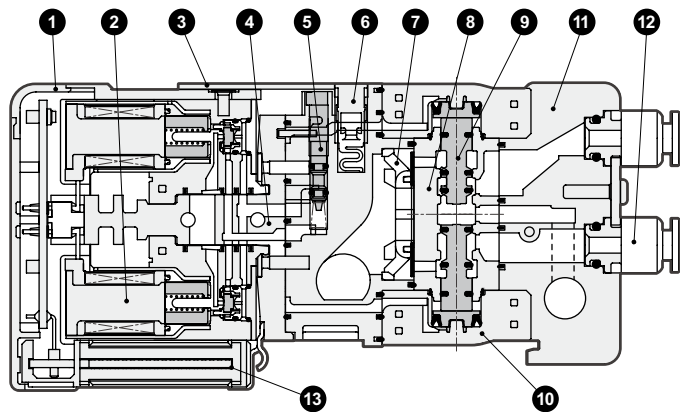
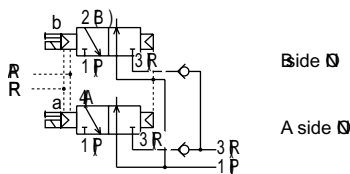
N3E00760

- NO/NC self resetting type (differential pressure return)



N3E00770

- NO/NO self resetting type (differential pressure return)



The drawing is for Two 3 port valve integrated type NC/NO self returning type with (differential pressure return) solenoid on both sides OFF.

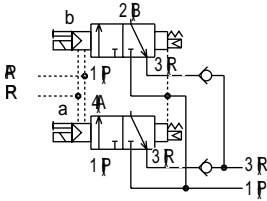
Main parts list

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

Internal structure and parts list

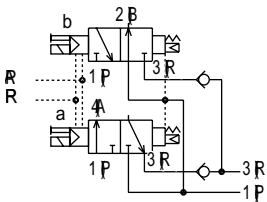
N3E0066S0

- NC/NC self resetting type (differential pressure spring return)



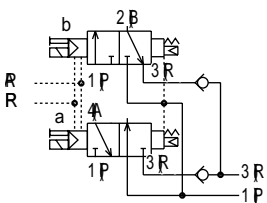
N3E0067S0

- NC/NO self resetting type (differential pressure spring return)



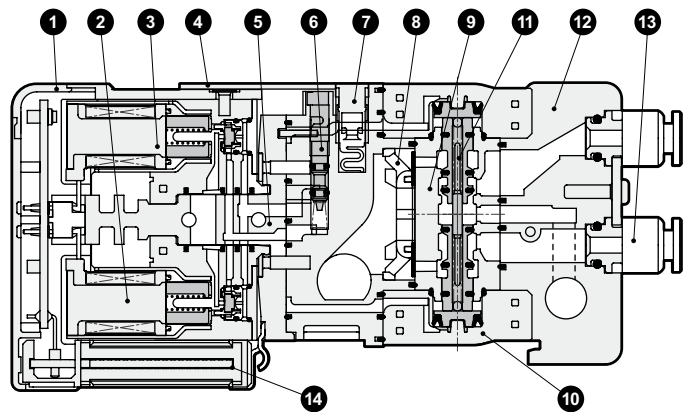
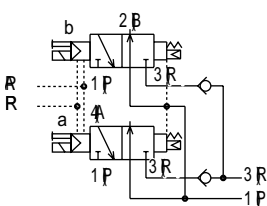
N3E0076S0

- NO/NC self resetting type (differential pressure spring return)



N3E0077S0

- NO/NO self resetting type (differential pressure spring return)



The drawing is for Two 3 port valve integrated type NC/NO self returning type with (differential pressure spring return) solenoid on both sides OFF.

Main parts list

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

MN4E00 Series

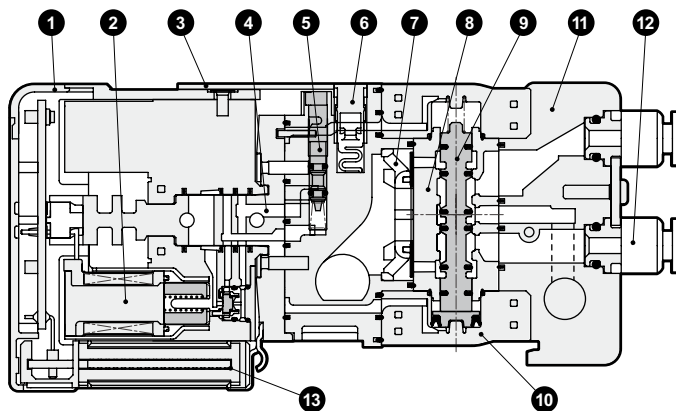
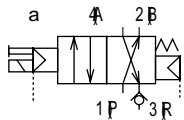
Reduced wiring block manifold (valve block); 4 port valve

Internal structure and parts list

4 port valve

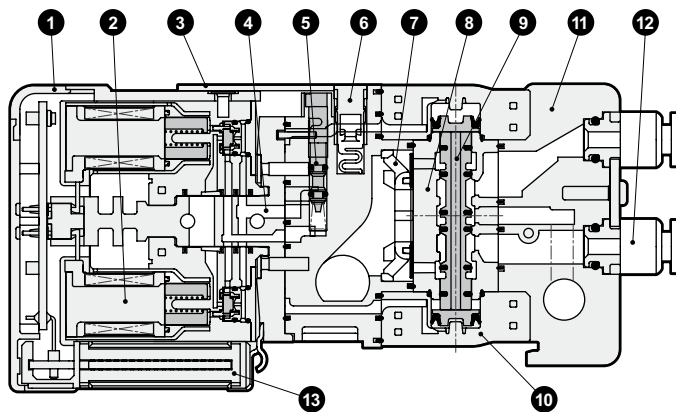
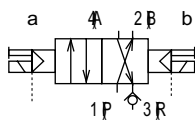
N4E0010

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



N4E0020

- 2 position double solenoid self hold type



Main parts list

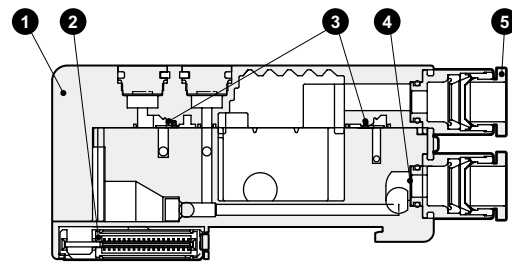
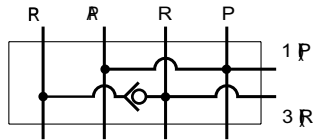
No.	Parts name	Main materials	No.	Parts name	Main materials
1	Electric cover	PBT/PC	8	Body	ZDC
2	Coil assembly	—	9	Piston room assembly	PPS/POM
3	Manual guard	PBT	10	Spool assembly	AL
4	Pilot block assembly	PPS	11	Port block assembly	PA
5	Manual override	POM	12	Cartridge type push-in fitting	—
6	Connection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

Internal structure and parts list

Supply and exhaust block

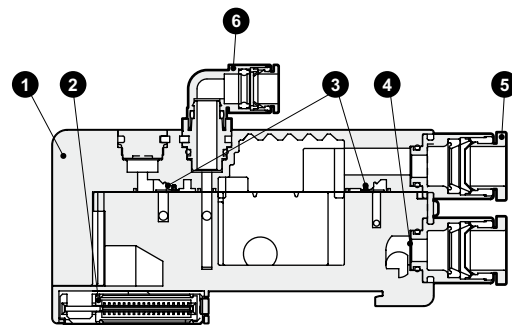
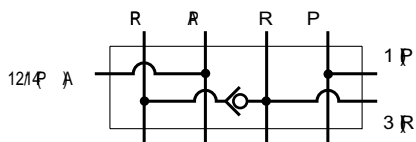
N4E0-Q

- Internal pilot



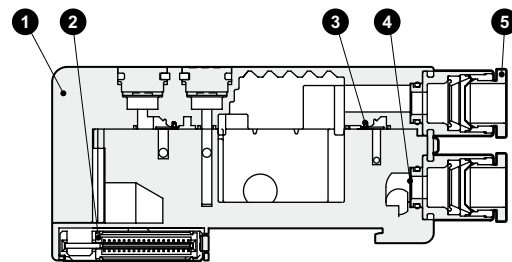
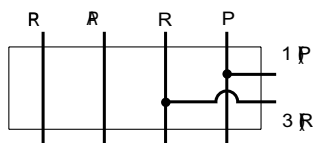
N4E0-QK

- External pilot



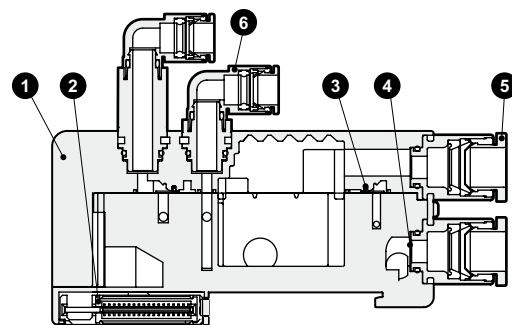
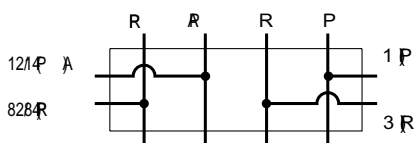
N4E0-QZ

- Multi-pressure circuit



N4E0-QKZ

- PA/PR separate type for external pilot



Main parts list

No.	Parts name	Main materials
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 fitting (main piping section)	—
6	Cartridge type push-in fitting (external pilot piping)	—

MN3E00 • MN4E00 Series

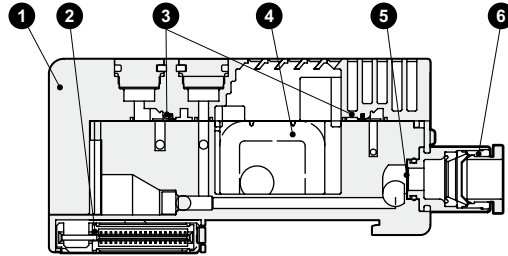
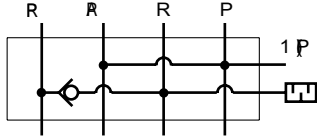
Reduced wiring block manifold (supply and exhaust block)

Internal structure and parts list

Supply and exhaust block

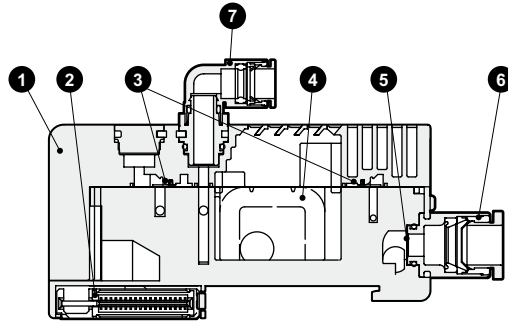
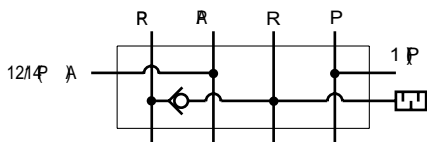
N4E0-QX

• Atmospheric release type for internal pilot



N4E0-QKX

• Atmospheric release type for external pilot



Main parts list

No.	Parts name	Main materials
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 fitting (main piping section)	—
7	Cartridge type push-in fitting (external pilot piping)	—

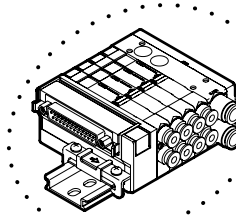
MN34E00-T30 Series

Reduced wiring block manifold D sub-connector type

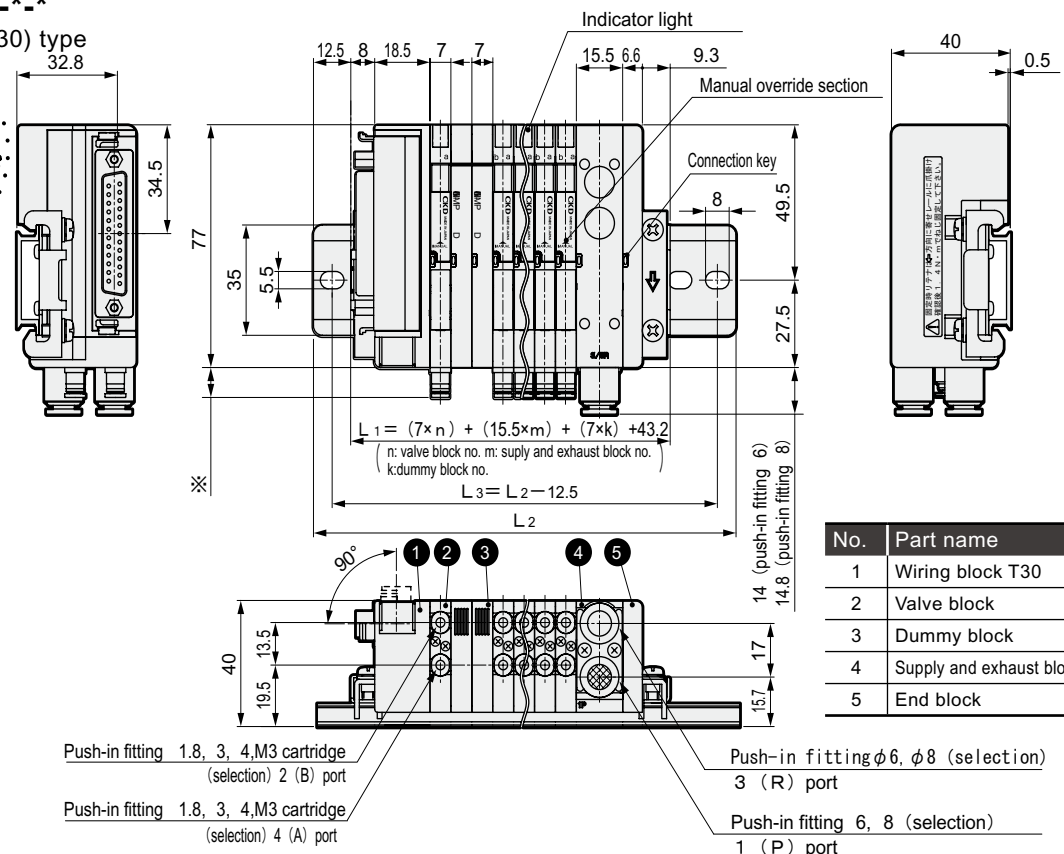
Dimensions

MN₄E00*-*-T30*-*-*

● D sub-connector (T30) type



*The d sub-connector can be faced to the top or bottom.
*Find out how to switch the direction of the connector section on page 24.



*Fitting dimensions

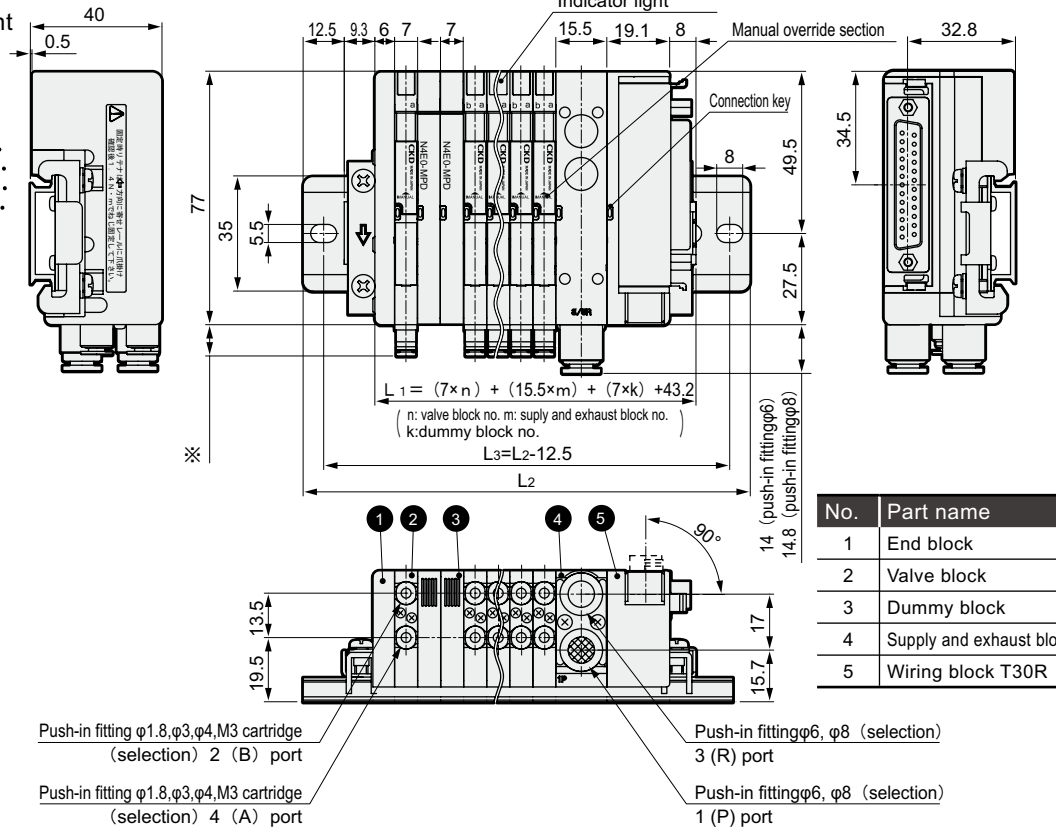
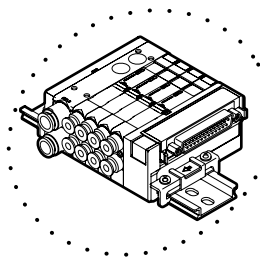
Push-in fitting	1.8	6.8
3	3	9.5
4	4	12.3
M3 female thread		6.1

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

*Refer to page 23 for the outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting and supply/exhaust block (upward), and type with individual power supply function (AUX).

MN₄E00*-*-T30R*-*-*

● D sub-connector right type (T30R)



*Fitting dimensions

Push-in fitting	1.8	6.8
3	3	9.5
4	4	12.3
M3 female thread		6.1

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

Manifold length	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~313.5	~326	~338.5	~351
L1 mm	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~313.5	~326	~338.5	~351
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

MN34E00-T50 Series

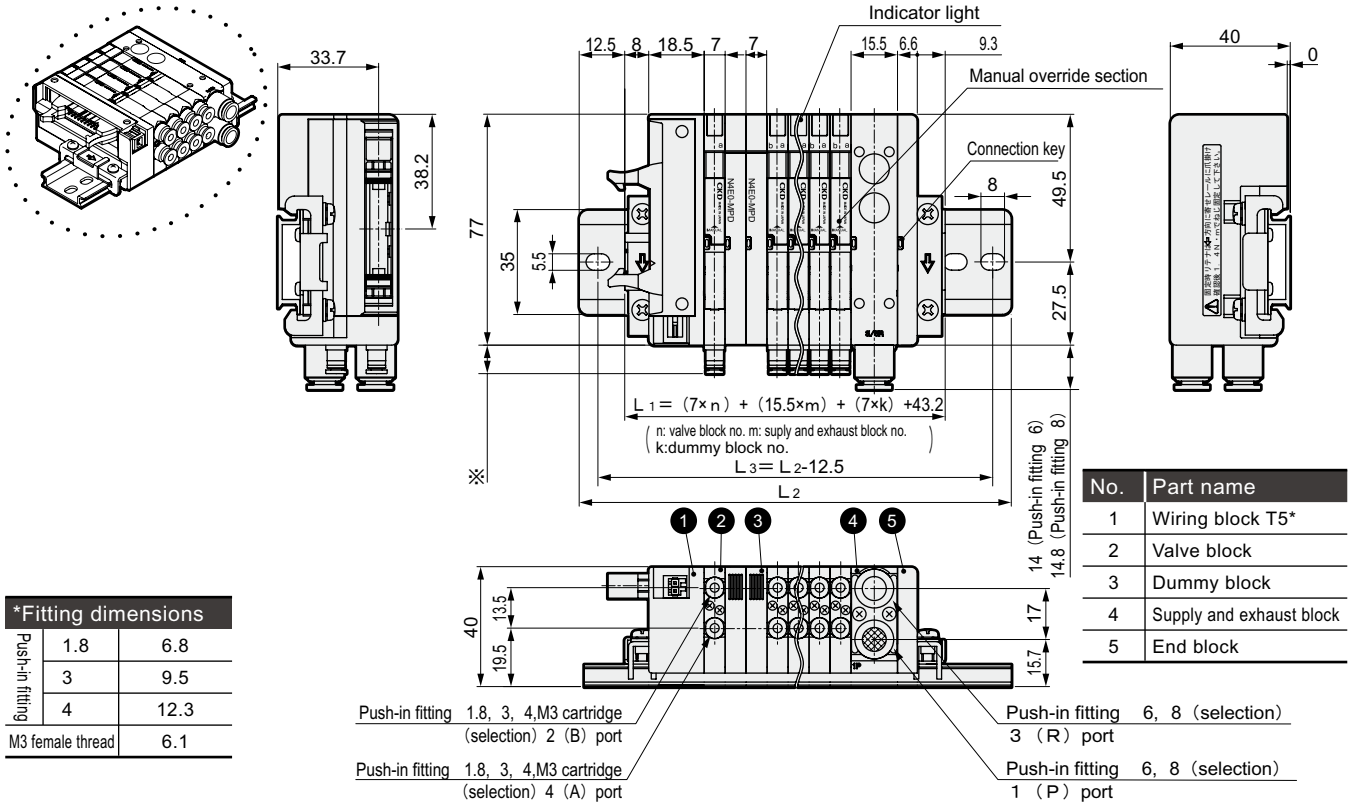
Reduced wiring block manifold; flat cable connector type

Dimensions

MN₄³E00*-*-T50*-*-*

● Flat cable connector left type (T50)

*T51, T52, T53 are also available. Dimensions are the same as T50. Refer to a 20 page for the dimension of the connector section.

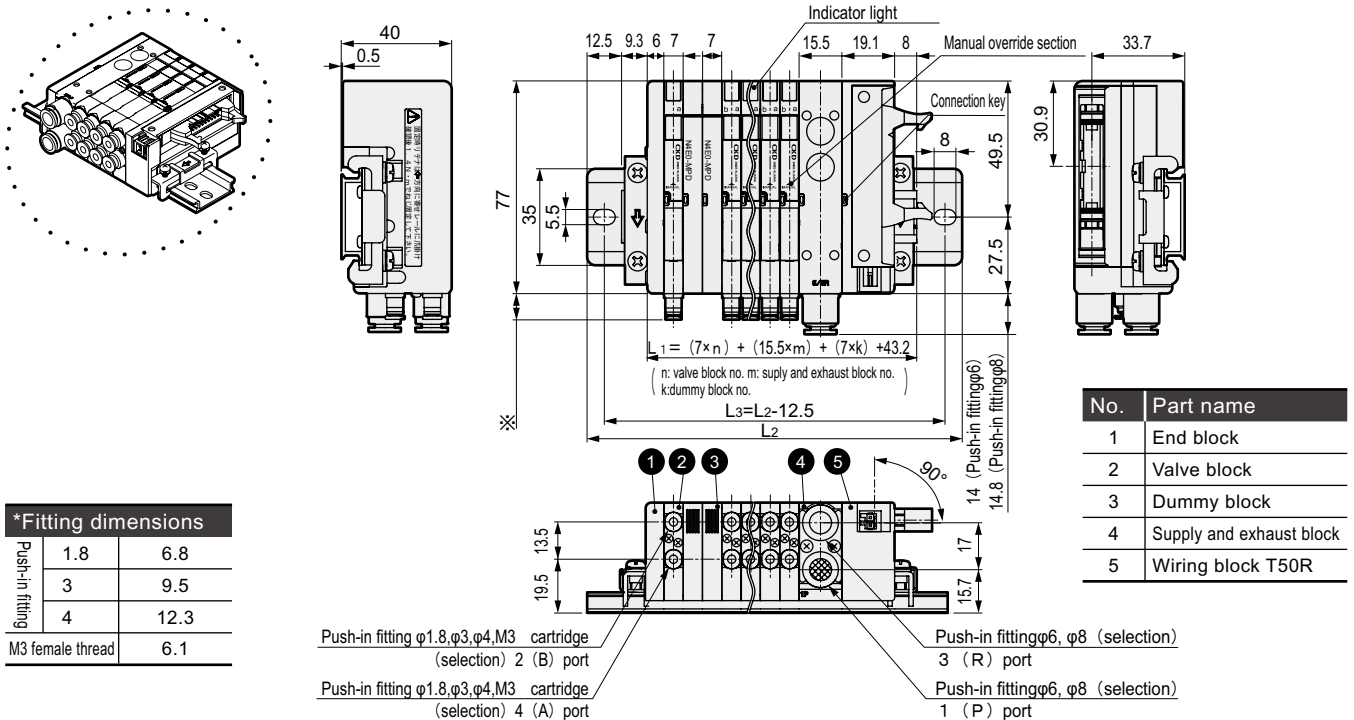


*Refer to page 23 for the outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting and supply/exhaust block (upward), and type with individual power supply function (AUX).

*The power supply connector can be used with T50 to supply power to the PLC output it. Refer to page 24 for dimensions when the connector is connected to page 64 for writing methods and precautions for wiring.

MN₄³E00*-*-T50R*-*-*

● Flat cable connector right type (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

MN34E00-TM Series

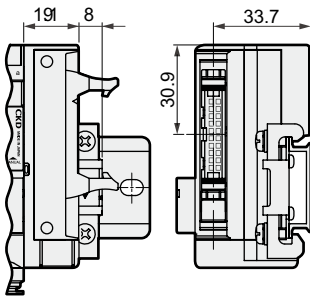
Reduced wiring block manifold; intermediate and right wiring block

Dimensions

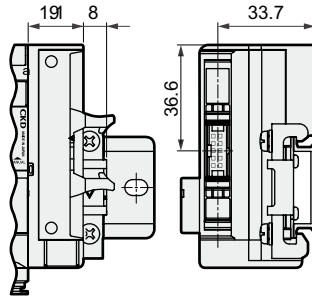
Flat cable connector (T51R/T52R/T53R): Connector section dimensions

*This is a drawing for the type with connector on the right. Dimensions for the type with connector on the left is same.

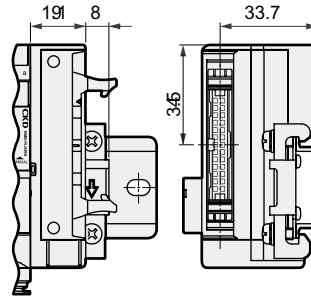
● T51R



● T52R



● T53R

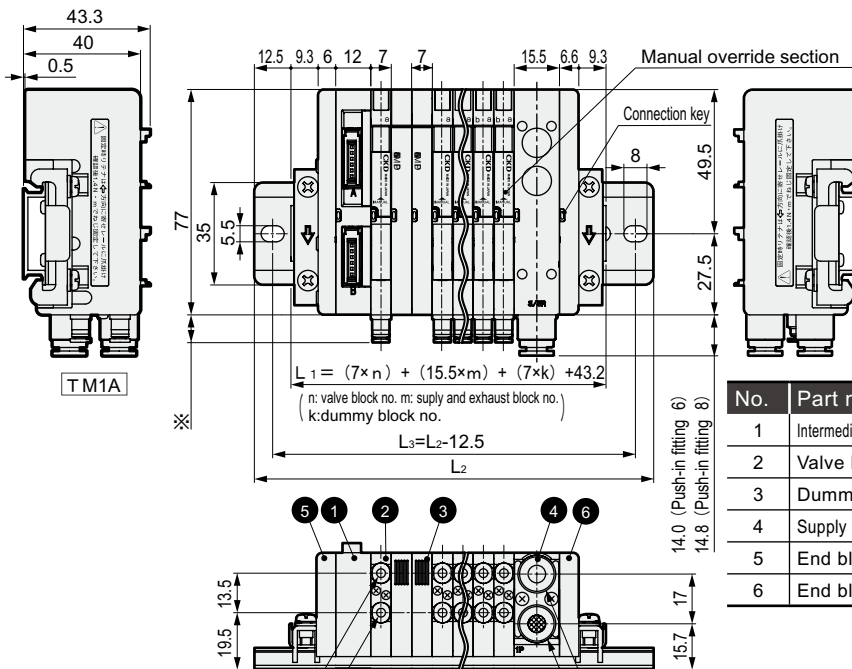
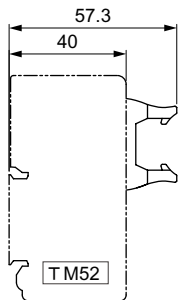
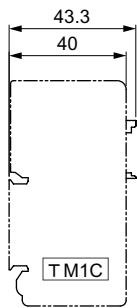
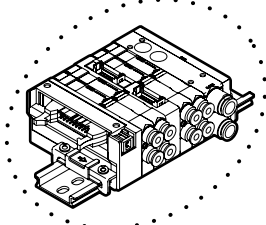


MN₄E00*-*-TM1_C*-*-*

● RITS connector intermediate wiring specifications (TM1_C)

MN₄E00*-*-TM52*-*-*

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



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

*Fitting dimensions

Push-in fitting	1.8	6.8
3	3	9.5
4	4	12.3
M3 female thread		6.1

Push-in fitting 1.8, 3, 4, M3 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 3, 4, M3 cartridge (selection) 4 (A) port

Push-in fitting 6, 8 (selection) 3 (R) port
 Push-in fitting 6, 8 (selection) 1 (P) port

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

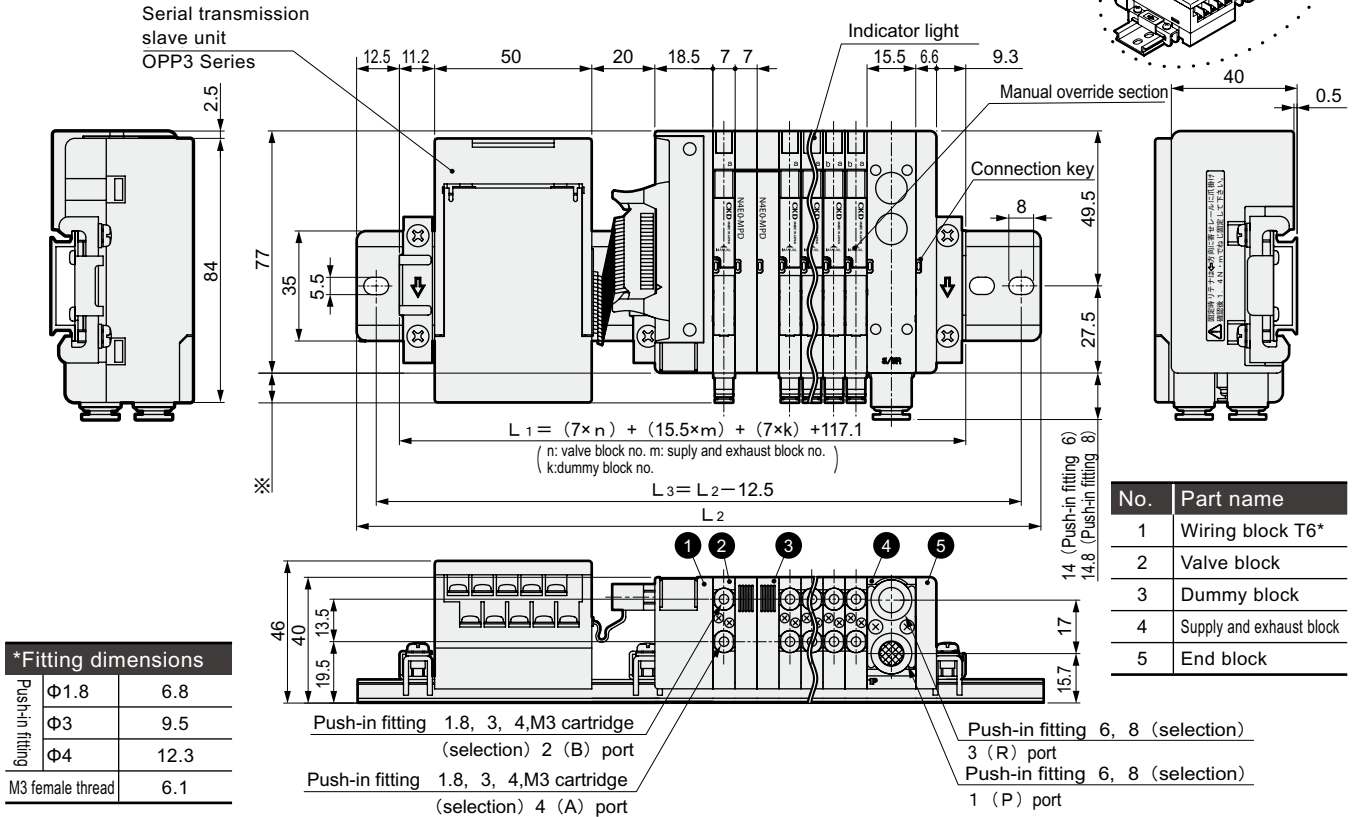
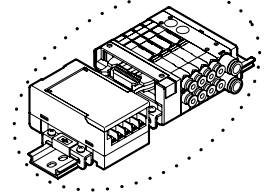
MN34E00-T6 Series

Reduced wiring block manifold; serial transmission type

Dimensions

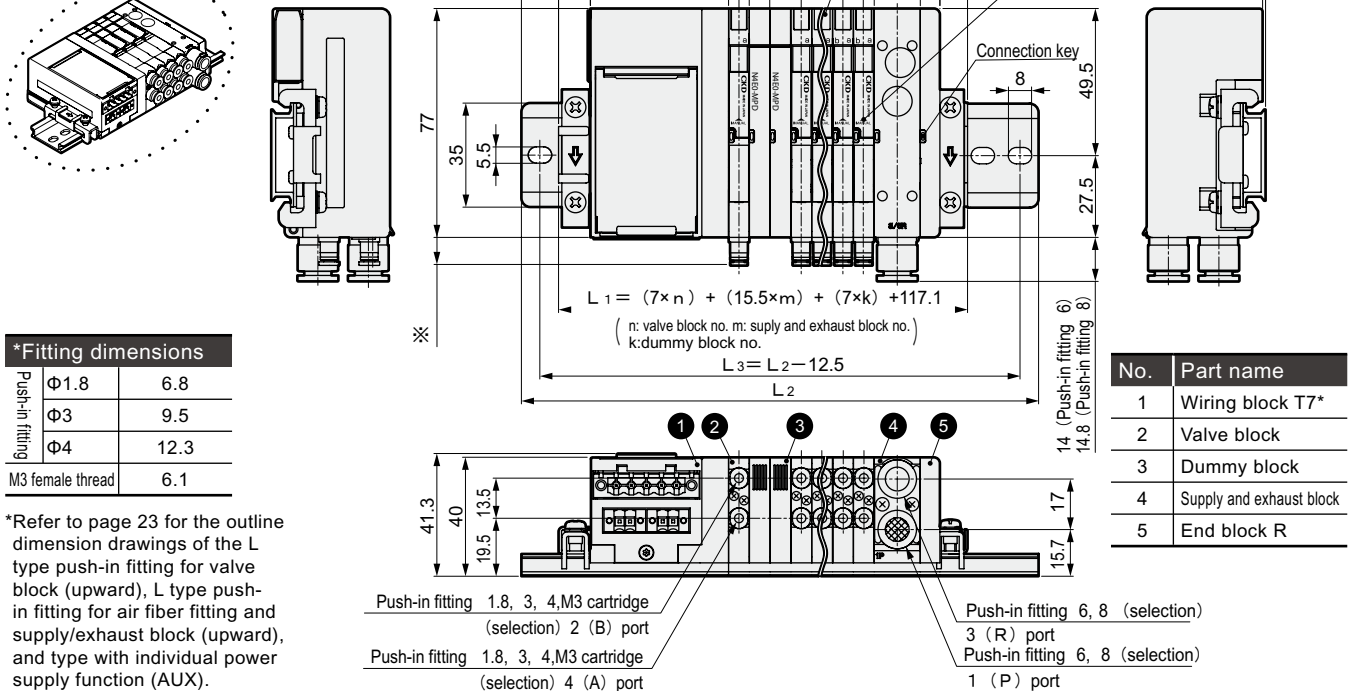
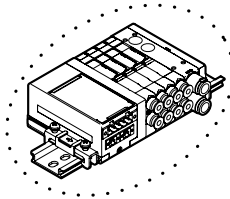
MN₄E00*-*-T6**-*-*

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



MN₄E00*-*-T7**-*-*

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



*Refer to page 23 for the outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting and supply/exhaust block (upward), and type with individual power supply function (AUX).

Manifold length	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~313.5	~326	~338.5	~351	
L1 mm	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less
Mounting rail length	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	
L2 mm																								
Mounting rail pitch	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	
L3 mm																								

MN3E00 • MN4E00 Series

Reduced wiring block manifold

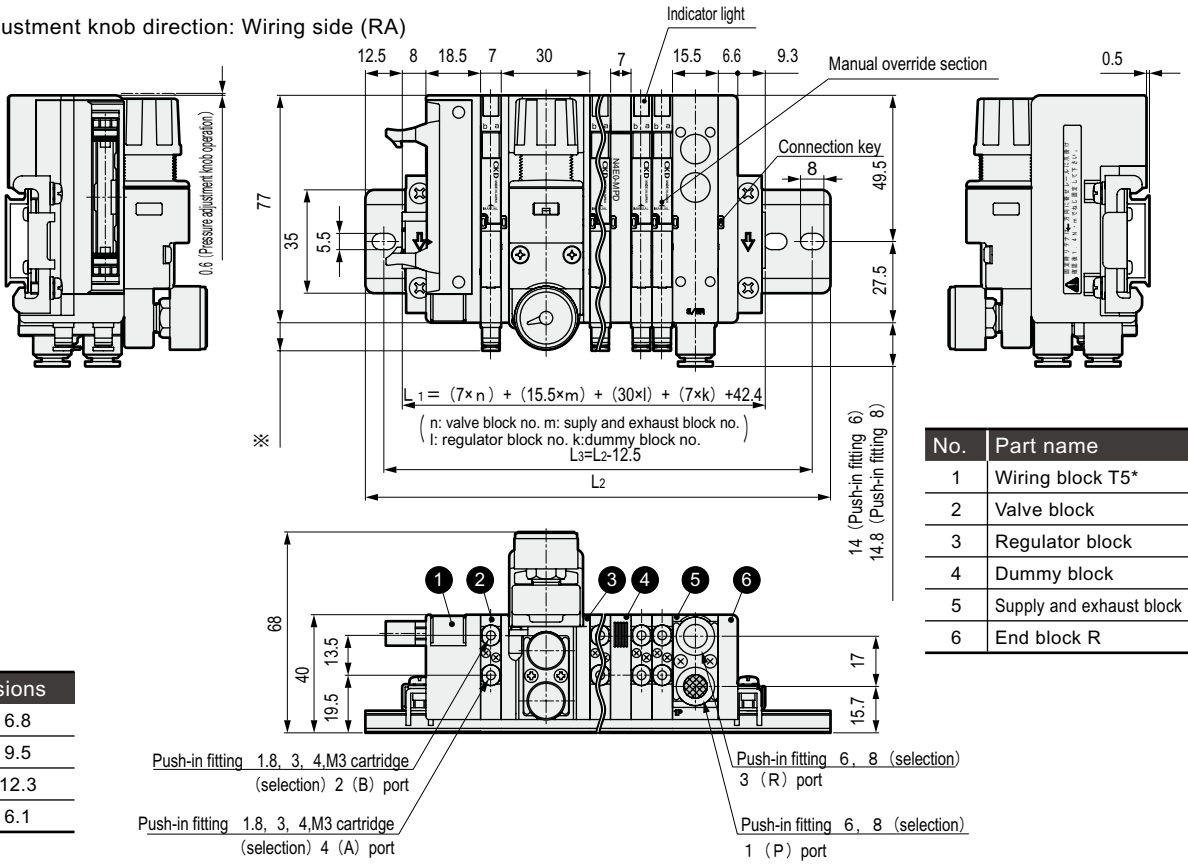
Dimensions

● Piping blocks (common for all type)

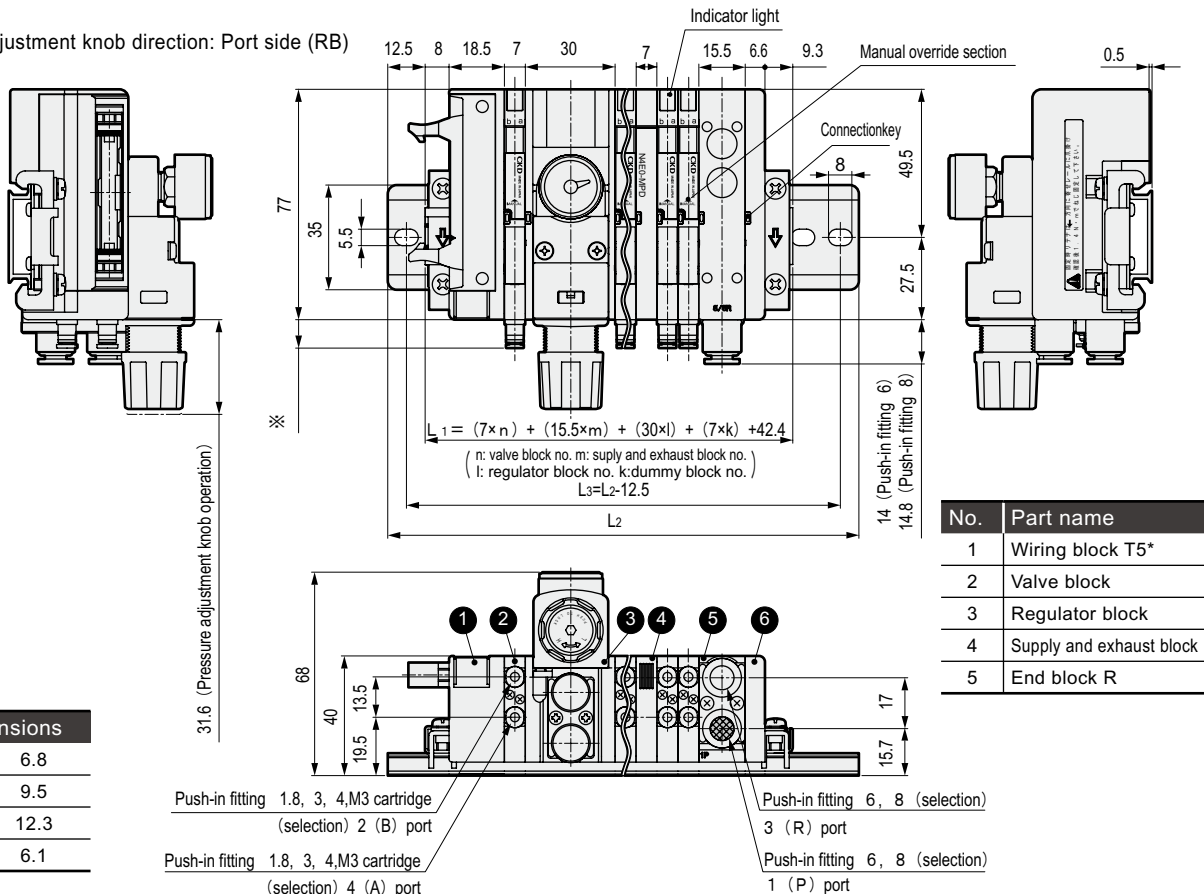
Regulator block

MN₃E0*0*-***R**-*

● Pressure adjustment knob direction: Wiring side (RA)



● Pressure adjustment knob direction: Port side (RB)



MN3E00 • MN4E00 Series

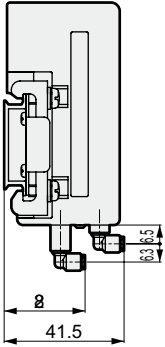
Reduced wiring block manifold

Dimensions

● Piping blocks (all type commons)

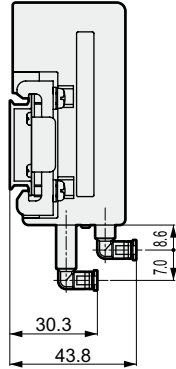
Push-in fitting (upward)
for fiber tube

● $\Phi 1.8$ (CL18)



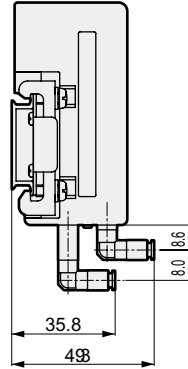
Push-in fitting (upward)
for fiber tube

● $\Phi 3$ (CL3)



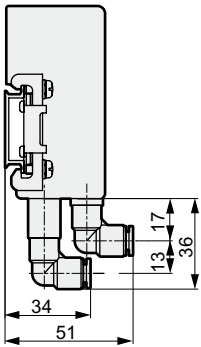
Push-in fitting (upward)
for fiber tube

● $\Phi 4$ (CL4)

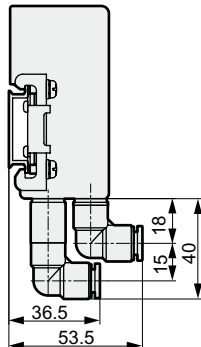


Supply and exhaust block
Push-in fitting L type (radial)

● $\Phi 6$ (CL6)

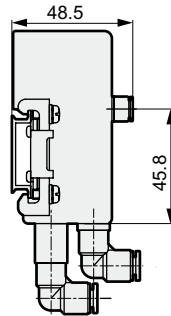


● $\Phi 8$ (CL8)

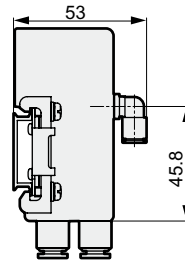


Supply and exhaust block for external pilot

● Upward piping

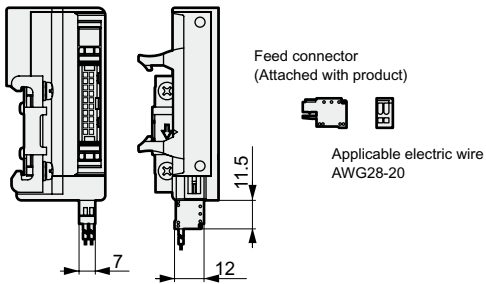


● Lateral piping

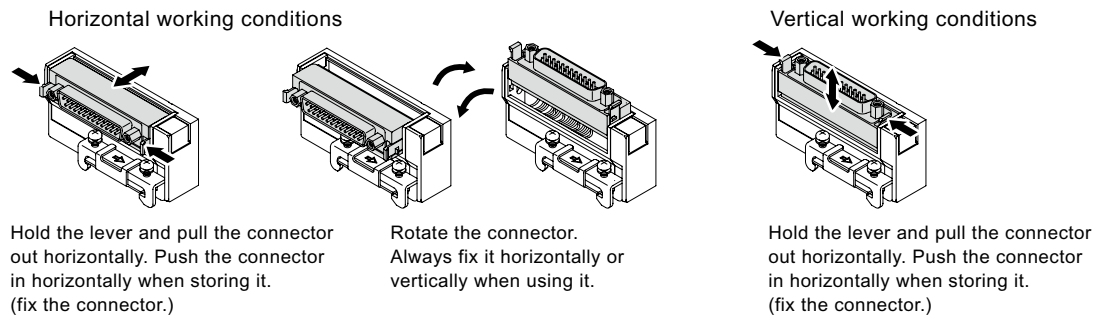


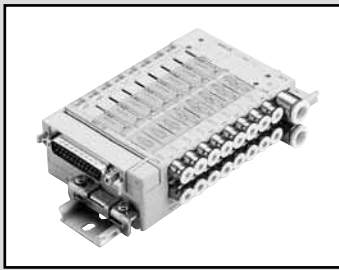
Dimensions

● Dimensions with T50 power supply connector



● D sub-connector (T30/T30R): How to switchover connector section.





Reduced wiring block manifold
Pilot operated 3, 4 port valve

MN3E0 • MN4E0 Series



Common specifications

Descriptions		
Manifold method		Block manifold
Manifold type		Common supply and common exhaust check valve integrated Note 1
Working fluid		Compressed air
Type of valve / 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	°C	5 to 55
Fluid temperature	°C	5 to 55
Lubrication		Not required
Protective structure		Dust proof
Vibration/shock	m/s ²	50 or less/300 or less
Working environment		Containing corrosive gas is not permissible.
Manual override		Common for locking, 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 purposes other than a back pressure block.

Electric specifications

Descriptions		
Rated voltage	V	12, 24 DC
Rated voltage fluctuation range		±10% (+ 10% and -5% using with serial transmission for)
Rated current A	DC24V	0.025 (0.013) Note 2
	DC12V	0.05 (0.025) Note 2
Power consumption W	DC24V	0.6 (0.3) Note 2
	DC12V	
Heat proof class		B
Surge protective circuit		With surge suppressor
Indicator		LED

Note 2: Values in parentheses indicate low exoergic/energy saving circuit integrated type type.
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 valve integrated type Note 2
Port size	A/B port		Φ1.8, Φ4, Φ6 push in fitting, M5, fiber tube		
	P/R port		Φ6, Φ8 push-in fitting		
	External pilot port		Φ6 push-in fitting		—
Response time Note 1 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: Response time is for the 0.5MPa pressure, pre-lubricating type.

Note 2: With Two 3 port valve integrated type, 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 (dm ³ / (s•bar))	b
3 port valve	2-position	0.54	0.12
	2-position	0.54	0.12
4 port valve	3-position	All ports closed	0.50
		A/B/R connection	0.54
		P/A/B connection	0.50
Two 3 port valves integrated type	2-position	0.50	0.16

Note 1: Effective sectional area S and sonic conductance C are converted as $S \doteq 5.0 \times C$.

Weight

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

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

Maximum number of stations energized by manifold

Descriptions		Descriptions	Double solenoid (Double wiring)	Single solenoid	Mix Manifold (Solenoid number)	Listed Page
D sub-connector type (25 pin)	T30	D sub-connector type Left	12 stations	24 stations	24 points	Page 27
	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	
Intermediate electric Block type	TM1A	RITS connector 6P x 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 unit)	T6A0	UNIWIRESYSTEM8 points	4 stations	8 stations	8 points	
	T6A1	UNIWIRESYSTEM16 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	UNIWIRESYSTEM H system 8 points	4 stations	8 stations	8 points	
	T6J1	UNIWIRESYSTEM H system 16 points	8 stations	16 stations	16 points	
Serial transmission type (Close contact type)	T6G1	CC-Link 16 points	8 stations	16 stations	16 points	
	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	
	T7N1	S-LINK V 16 points	8 stations	16 stations	16 points	
	T7N2	S-LINK V 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	T7N1 T7N2
Power voltage	Unit side	DC24V±10%		DC24V			DC24V±10%		
	Valve side	24 VDC + 10%-5%		+ 10%-5%			24 VDC + 10%-5%		
	Communication side	-		-			11 to 25 VDC	-	
Current consumption	Unit side	T6C1: 60mA or less T6C0: 40mA or less (when all points output ON)	100mA or less (when all points output ON)	100mA or less (when all points output ON) Note that current consumption of valve is not included.		60mA or less (when all points output ON) Note that current consumption of valve is not included.	T7D1: 60mA or less T7D2: 85mA or less (when all points output ON)	T7G1: 65mA or less T7G2: 90mA or less (when all points output ON)	T7N1: 40mA or less T7N2: 50mA or less (when all points output ON)
	Valve side	15mA or less (when all points OFF)		-			15mA or less (when all points OFF)		
	Communication side	-		-			50mA or less	-	
Output no.	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	T7N1: 16 points T7N2: 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 byte T7D2: 4 byte	T7G1: 1 station T7G2: 1 station	T7N1: output 16 points T7N2: output 32 points	

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 a D-G line. (This is required when counting the connected units)

Ozone specifications

Ozone specifications can be selected with "H" option "A" in How to Order on pages 27 and 31.

Clean room specifications (Catalog No. CB-033S)

- Dust generation preventing structure for use in cleanrooms

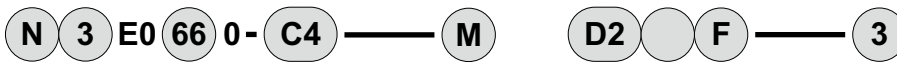
** -Voltage- P70

MN3E0 • MN4E0 Series

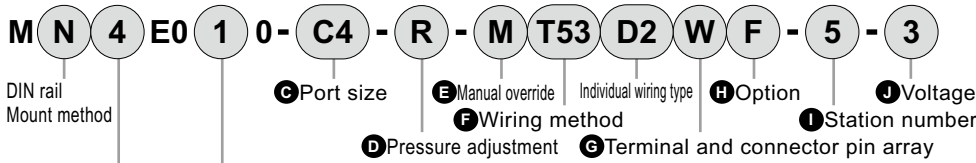
Manifold model no. how to indicate D-sub/flat cable connector

*Refer to 31 Page for serial transmission type.

● Discrete valve block



● Block manifold



DIN rail
Mount method

C Port size

E Manual override

Individual wiring type

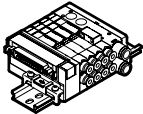
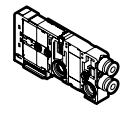
H Option

J Voltage

D Pressure adjustment

G Terminal and connector pin array

*Complete manifold specification (page 84)

Type	
Block manifold	Valve Discrete block
	

A Valve type

B Solenoid position

Symbol	Descriptions				
A Valve type					
3	3 port valve and 3 ports valve 2 piece integrated type		●	●	
4	4 port valve, 3, 4 ports valve mix		●	●	
B Solenoid position (Note 10)					
1	3 port valve	Single NC self reset type (Differential pressure spring return)	●	●	
11		Single NO self resetting type	●	●	
2	3 port valve	Double NC self holding type	●	●	
21		Double NO self holding type	●	●	
66	Two 3 port valves integrated type (Note 1)	A side valve: NC self resetting type (Differential pressure return)	●	●	
66S		B side valve: NC self resetting type (Differential pressure spring return)	●	●	
67		A side valve: NC self resetting type (Differential pressure return)	●	●	
67S		B side valve: NO self resetting type (Differential pressure spring return)	●	●	
76		A side valve: NO self resetting type (Differential pressure return)	●	●	
76S		B side valve: NC self resetting type (Differential pressure spring return)	●	●	
77		A side valve: NO self resetting type (Differential pressure return)	●	●	
77S		B side valve: NO self resetting type (Differential pressure spring return)	●	●	
1		4 port valve	2-position single solenoid self resetting type (Differential pressure spring return)	●	●
2			2-position double solenoid self holding type	●	●
3	3-position all ports closed		●	●	
4	3-position A/B/R connection		●	●	
5	3-position P/A/B connection		●	●	
8	Mix manifold		●	●	
C Port size					
CF	Φ1.8 barbed fitting for fiber tube (tube UP-9102-**)		●	●	
C18	Φ1.8 push-in Fitting side for fiber tube (tube UP-9402-**)	●	●		
CL18	Φ1.8 push-in fitting up for fiber tube (tube UP-9402-**)	●	●		
C4	Φ4 push-in fitting, Side	●	●		
C6	Φ6 push-in fitting, Side	●	●		
CL4	Φ4 push-in fitting, Up	●	●		
CL6	Φ6 push-in fitting, Up	●	●		
M5	M5 female thread (with non-rotating)	●	●		
CX	Mix push-in fitting	●	●		
D Pressure adjustment					
Blank	Without regulator block mounted manifold				
R	Regulator block mounted manifold (Note 2, 3)	●			
E Manual override					
Blank	Locking, common non-locking type (with manual cover)	●	●		
M	Non-locking dedicated manual override (with manual cover)	●	●		
F Wiring method					
Refer to the following page.		●			
G Terminal and connector pin array					
Blank	Standard wiring	●	●		
W	Double wiring (Note 4, 5)	●	●		
H Option					
E	Low exoergic, power saving circuit integrated 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)	●	●		
I Station number					
1	1 station				
6	6	●			
24	24 station (note 9)				
J Voltage					
3	24 VDC	●	●		
4	DC 12V	●	●		

• Refer to 62 Page for D-sub-cable with connector model no.

⚠ Note on model no. selection

Note 1: Two 3 port valve integrated type can not be used in external pilot type. Consult with CKD for 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: Refer to the connector pin layout (example) on page 63 to 70 for double wiring layout.

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: Double wiring specification can not be selected for the discrete individual wiring valve block.

Note 6: Energizing is limited to the plus common. Of "E" and "U" can not be selected same time.

Note 7: "U" can not be selected for individual wiring is selected.

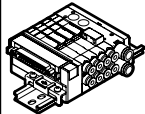
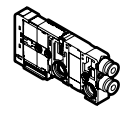
Note 8: A filter (for preventing entry of foreign matter) is incorporated in the supply/exhaust block's P port.

Note 9: Differs based on specifications. Check on page 26.

Note 10: Read the precautions on page 9 for the self resetting type specifications.

Note 11: Dummy blocks counts as a station.

(Wiring method list)

		Type	
		Block manifold	Valve Discrete block
			
Symbol	Descriptions		
F 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 x 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	For reduced wiring valve block		●
D2	Individual wiring type	D-connector 300mm	●
D20		D-connector 500mm	●
D21		D-connector 1000mm	●
D22		D-connector 2000mm	●
D23		D-connector 3000mm	●
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.

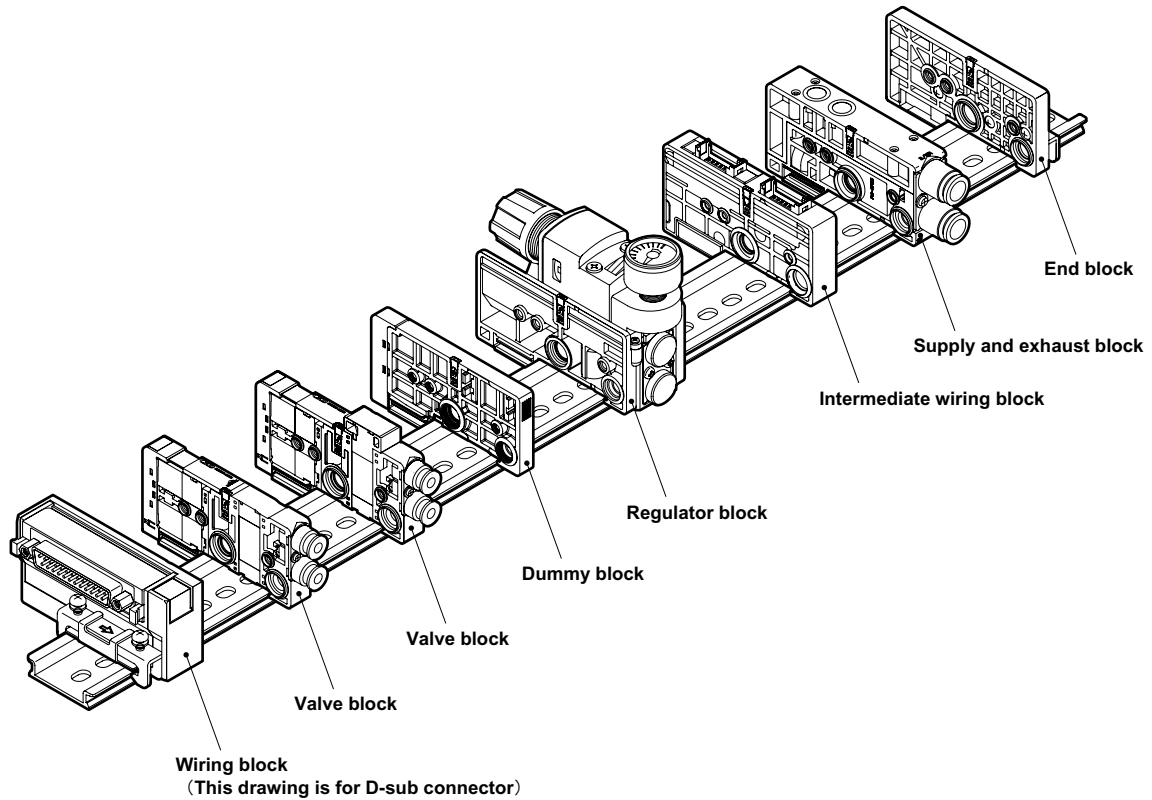
Note 12: RITS connector 6P (1473562-6) Taiko Electronics Amp Co., Ltd.

Note 13: Specify 2 pcs. with the manifold specification sheet. Consult CKD for 3 pcs. or more.

Note 14: If TX is selected for the wiring connection method, individual wiring cannot be selected.

MN3E0 • MN4E0 Series

Manifold components explanation and parts list



Example of main component model no. (Refer to Page 51 to 61 for the details.)

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

List of related parts

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

MEMO

MN3E0 • MN4E0 Series

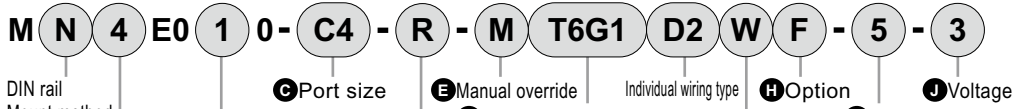
How to order manifold Serial transmission

*Refer to 27 Page for D sub-connector/flat cable connector type.

● Discrete valve block



● Block manifold



DIN rail
Mount method

● C Port size

● E Manual override

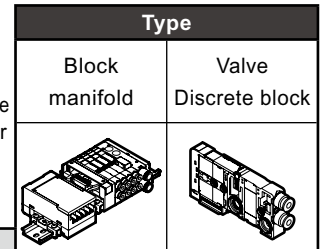
Individual wiring type

● H Option

● J Voltage

● D Pressure adjustment ● G Terminal and connector pin array

* Complete the manifold specification sheet. (page 84)



● A Valve type

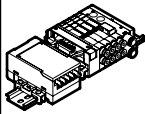
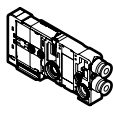
● B Solenoid position

⚠ Note on model no. selection

- Note 1: Two 3 port valves integrated type can not be used in external pilot type.
Consult with CKD for 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: Refer to the connector pin layout (example) on page 63 to 70 for double wiring layout.
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: Double wiring can not be selected in a discrete individual wiring valve block.
- Note 6: Energizing is limited to the plus common.
Of "E" and "U" can not be selected same time.
- Note 7: "U" can not be selected for individual wiring at the same time.
- 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 specifications. Do confirmation by a 26 page.
- Note 10: Read the cautions on Page 9 for in the specifications Introduction of the self reset type very well.
- Note 11: Please confirm the lead time for T7N2(S-LINK V 32 points output) each time when ordering.
- Note 12: Dummy blocks counts as a station.

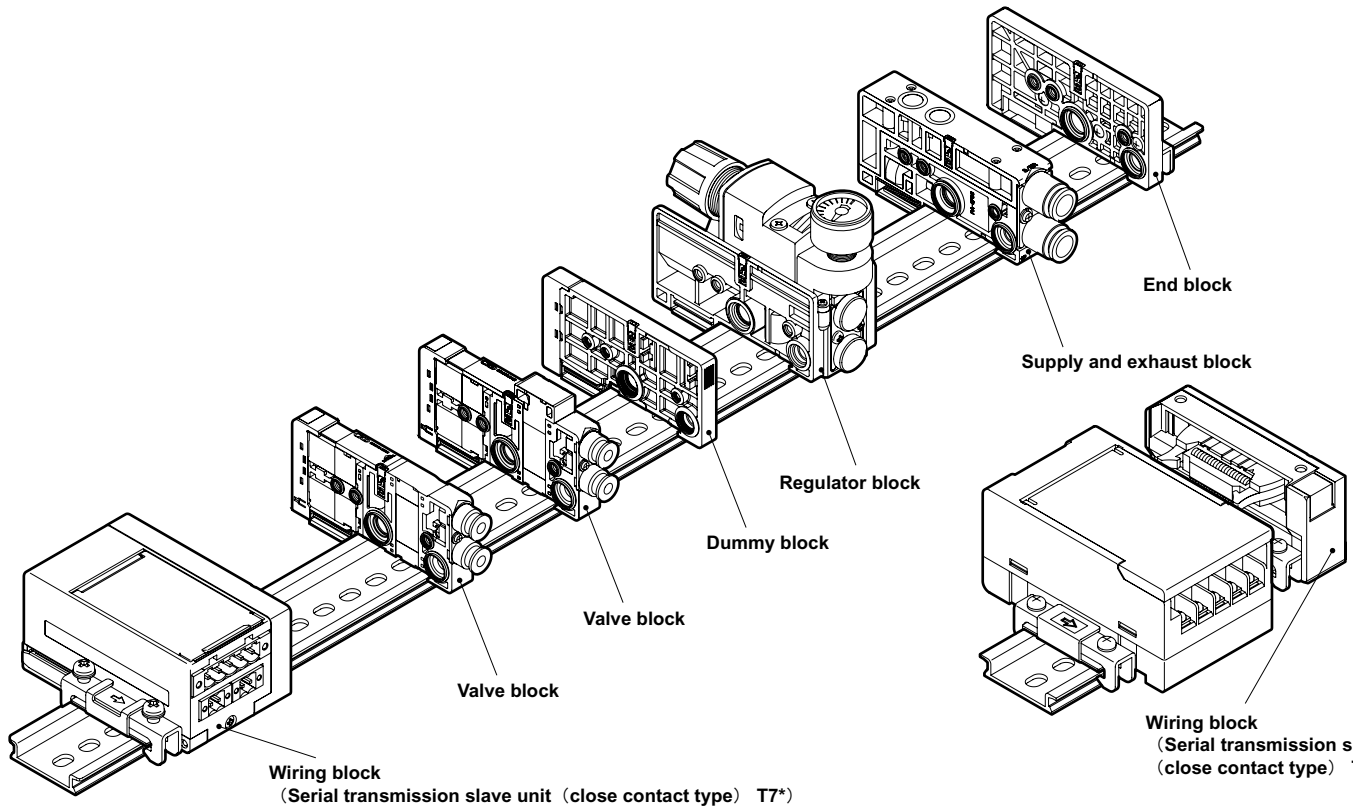
Symbol	Descriptions	Type	
		Block manifold	Valve Discrete block
A Valve type			
3	3 port valv, two 3 port valves integrated type	●	●
4	4 port valve, 3, 4 ports valve mix	●	●
B Solenoid position (Note 10)			
1	3 port valve Single NC self reset type (Differential pressure spring return)	●	●
11	Single NO self resetting type	●	●
2	Double NC self holding type	●	●
21	Double NO self holding type	●	●
66	A side valve: NC self resetting type (Differential pressure return)	●	●
66S	B side valve: NC self resetting type (Differential pressure spring return)	●	●
67	A side valve: NC self resetting type (Differential pressure return)	●	●
67S	B side valve: NO self resetting type (Differential pressure spring return)	●	●
76	A side valve: NO self resetting type (Differential pressure return)	●	●
76S	B side valve: NC self resetting type (Differential pressure spring return)	●	●
77	A side valve: NO self resetting type (Differential pressure return)	●	●
77S	B side valve: NO self resetting type (Differential pressure spring return)	●	●
1	4 port valve 2-position single solenoid self resetting type (Differential pressure spring return)	●	●
2	2-position double solenoid self holding type	●	●
3	3-position all ports closed	●	●
4	3-position A/B/R connection	●	●
5	3-position P/A/B connection	●	●
8	Mix manifold	●	●
C Port size			
CF	Φ1.8 barbed fitting for fiber tube (compatible tube: UP-9102-**)	●	●
C18	Φ1.8 push-in Fitting side for fiber tube (compatible tube: UP-9402-**)	●	●
CL18	Φ1.8 push-in fitting up for fiber tube (compatible tube: UP-9402-**)	●	●
C4	Φ4 push-in fitting, Side	●	●
C6	Φ6 push-in fitting, Side	●	●
CL4	Φ4 push-in fitting, Up	●	●
CL6	Φ6 push-in fitting, Up	●	●
M5	M5 female thread (with non-rotating)	●	●
CX	Mix push-in fitting	●	●
D Pressure adjustment			
Blank	Without regulator block mounted manifold		
R	Regulator block mounted manifold (Note 2, 3)	●	
E Manual override			
Blank	Lock, common non-locking type (with manual cover)	●	●
M	Non-locking dedicated manual override (with manual cover)	●	●
F Wiring method			
Refer to the following page.		●	
G Terminal and connector pin array			
Blank	Standard wiring	●	●
W	Double wiring (Note 4, 5)	●	●
H Option			
E	Low exoergic, power saving circuit integrated 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)	●	●
I Station number			
1	1 station		
to	to	●	
32	32 stations (note 9)		
J Voltage			
3	24 VDC	●	●

(Wiring method list)

Symbol		Descriptions	Type	
			Block manifold	Valve Discrete block
				
F Wiring method				
T6A0		UNIWIRESYSTEM8 points	●	
T6A1		UNIWIRESYSTEM16 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		UNIWIRESYSTEM H system 8 points	●	
T6J1		UNIWIRESYSTEM H system 16 points	●	
T6G1		CC-Link 16 points	●	
T7D1		Close contact type DeviceNet 16 points	●	
T7D2		Close contact type DeviceNet 32 points	●	
T7G1		Close contact type CC-Link 16 points	●	
T7G2		Close contact type CC-Link 32 points	●	
T7N1		Close contact type S-LINK V 16 points	●	
T7N2		Close contact type S-LINK V 32 points (Note 11)	●	
Blank		For reduced wiring valve block		●
D2	Individual wiring type	D-connector 300mm	●	●
D20		D-connector 500mm	●	●
D21		D-connector 1000mm	●	●
D22		D-connector 2000mm	●	●
D23		D-connector 3000mm	●	●
D2N		D-connector without socket	●	●
D3		D-connector socket, terminal attached	●	●

MN3E0 • MN4E0 Series

Manifold components explanation and parts list



Example of main component model no. (Refer to Page 51 to 61 for the details.)

Parts name	Model no. (example)	Parts name	Model no. (example)
Wiring block	N4E0-T7G2	End block	N4E0-ER
Regulator block	N4E0-RA-RL	Supply and exhaust block	N4E0-Q-8
Valve block	N4E020-C4-3 N4E030-C4-3	Dummy block	N4E0-MPD

List of related parts

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

MEMO

MN3E0 Series

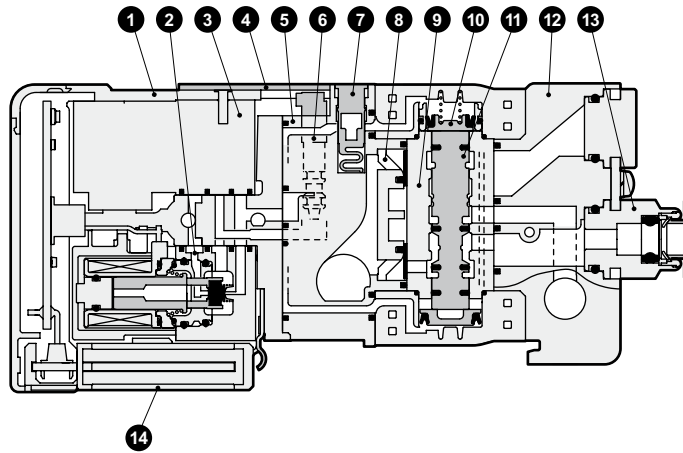
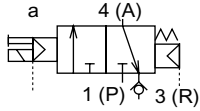
Reduced wiring block manifold (valve block); 3 port valve

Internal structure and parts list

3 port valve

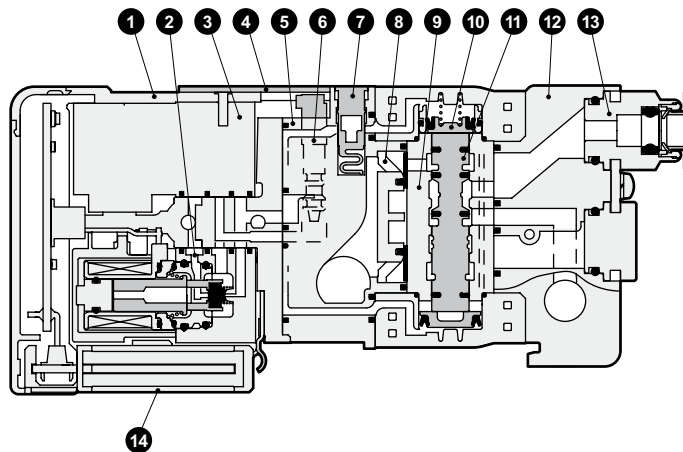
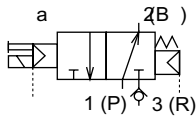
N3E010

•2-position single solenoid normally closed



N3E0110

•2-position single solenoid normally open



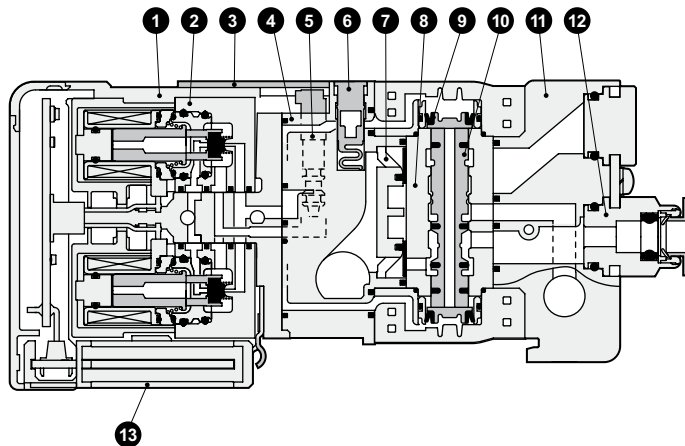
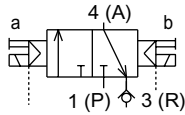
Main parts list

No.	Parts name	Main materials	No.	Parts name	Main materials
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 guard	PBT	11	Spool assembly	Aluminum
5	Pilot block	PPS/PA	12	Port block	PA
6	Manual override	POM	13	Cartridge type push-in fitting	—
7	Connection key	POM	14	Wiring connector assembly	LCP

Internal structure and parts list

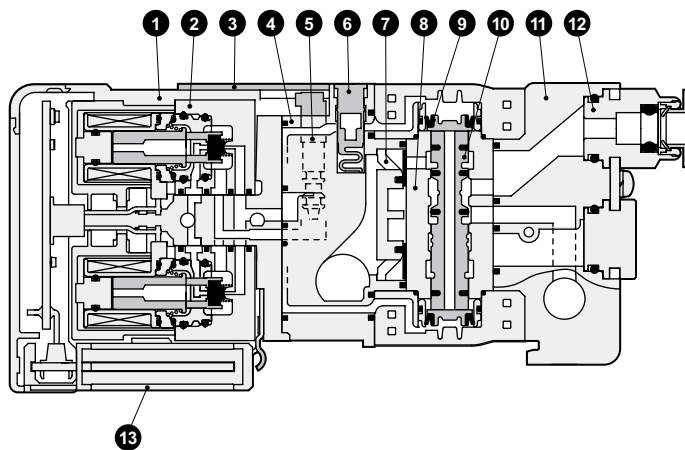
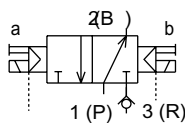
N3E020

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

MN3E0 Series

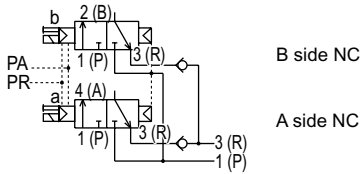
Reduced wiring block manifold (valve block); Two 3 port valves integrated

Internal structure and parts list

Two 3 port valves integrated type

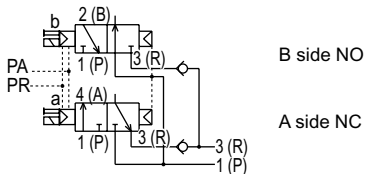
N3E0660

- NC/NC self reset type (differential pressure return)



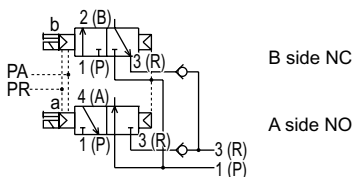
N3E0670

- NC/NO self resetting type (differential pressure return)



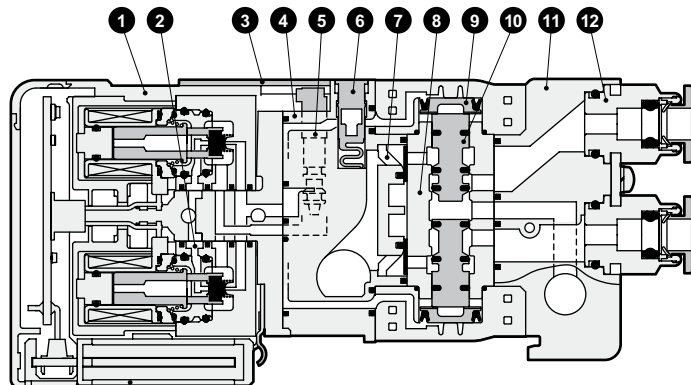
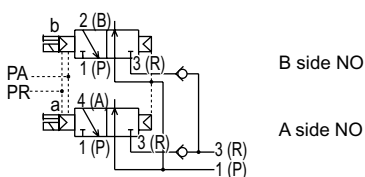
N3E0760

- NO/NC self reset type (differential pressure return)



N3E0770

- NO/NO self reset type (differential pressure return)



13 The drawing is for NC/NO self returning type with (differential pressure return) solenoid on both sides OFF.

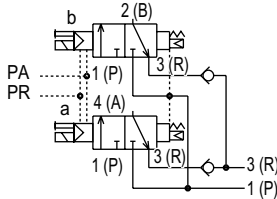
Main parts list

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

Internal structure and parts list

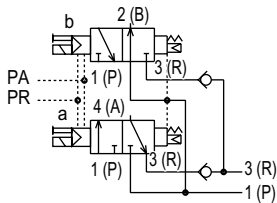
N3E066S0

- NC/NC self reset type (differential pressure spring return)



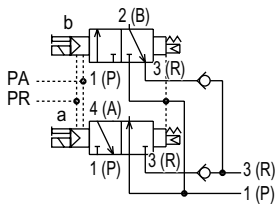
N3E067S0

- NC/NO self reset type (differential pressure spring return)



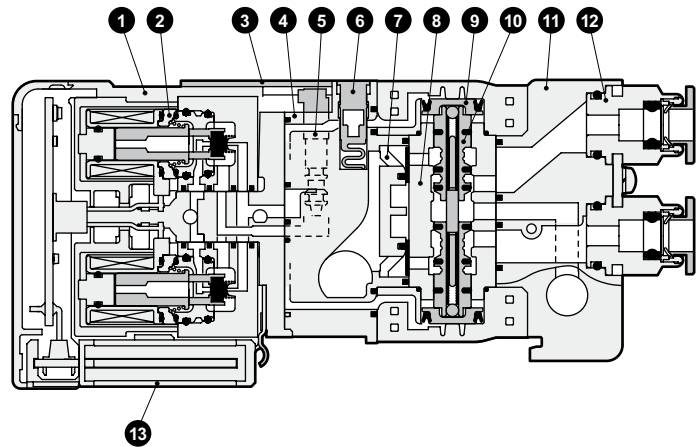
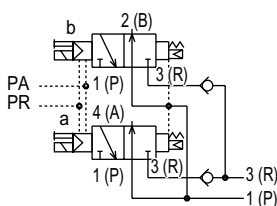
N3E076S0

- NO/NC self reset type (differential pressure spring return)



N3E077S0

- NO/NO self reset type (differential pressure spring return)



The drawing is for NC/NO self returning type with (differential pressure spring return) solenoid on both sides OFF.

Main parts list

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

MN4E0 Series

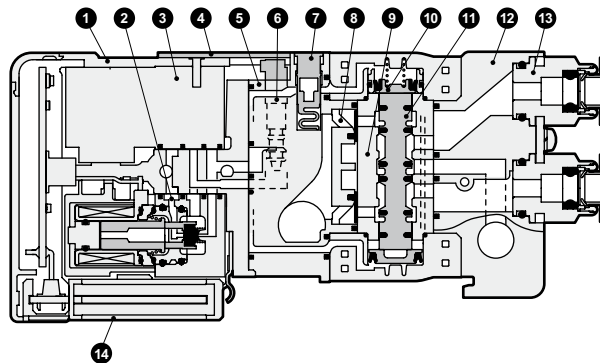
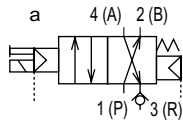
Reduced wiring block manifold (valve block); 4 port valve

Internal structure and parts list

4 port valve

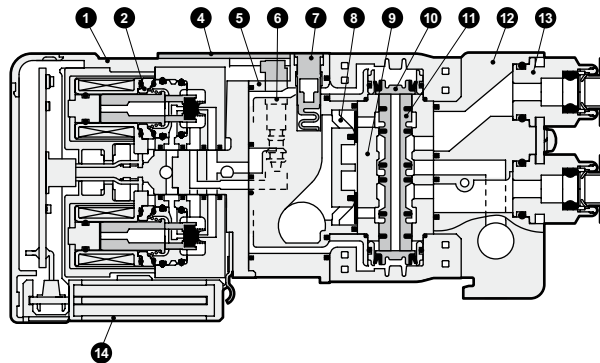
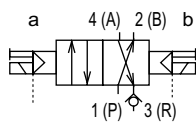
N4E010

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



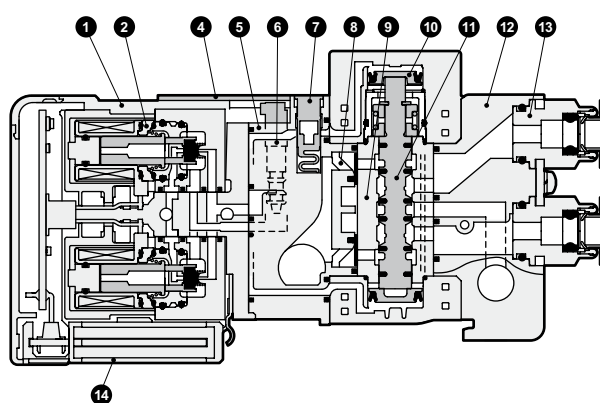
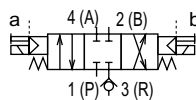
N4E020

- 2-position double solenoid self hold type



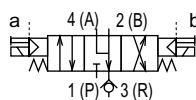
N4E030

- (3) Position all ports closed



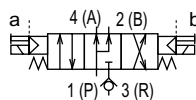
N4E040

- (3) Position A/B/R connection



N4E050

- (3) Position P/A/B connection



Main parts list

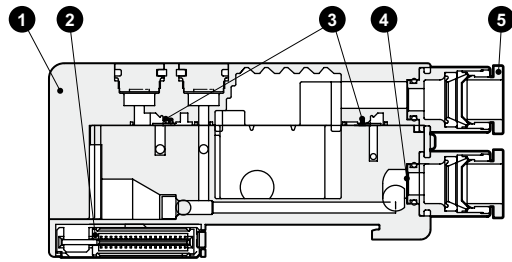
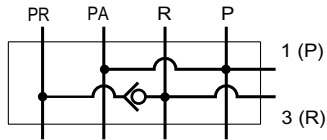
No.	Parts name	Main materials	No.	Parts name	Main materials
1	Electric cover	PBT/PC	8	Check valve	PBT/UR
2	Coil assembly	PPS/POM/PBT	9	Body	Aluminum
3	Coil dummy	PPS	10	Piston room assembly	PPS/POM
4	Manual guard	PBT	11	Spool assembly	Aluminum
5	Pilot block	PPS/PA	12	Port block	PA
6	Manual override	POM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

Internal structure and parts list

Supply and exhaust block

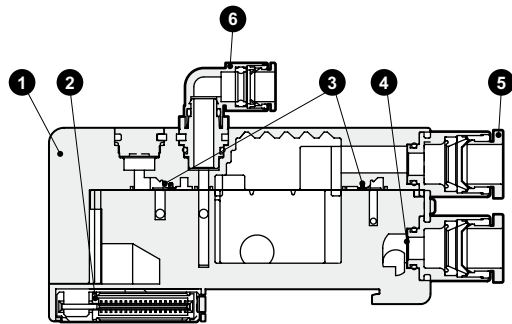
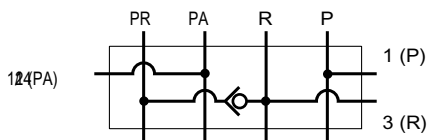
N4E0-Q

- Internal pilot



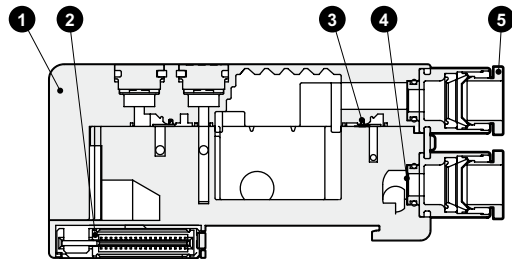
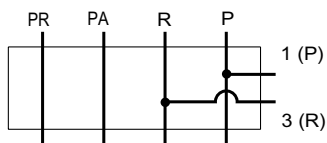
N4E0-QK

- External pilot



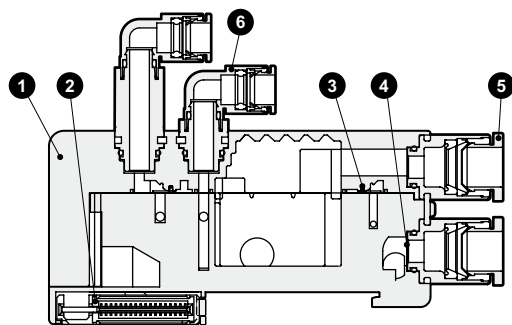
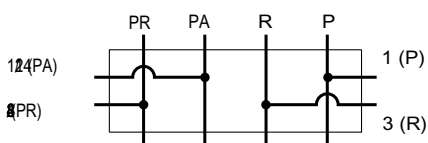
N4E0-QZ

- Multi-pressure circuit



N4E0-QKZ

- PA/PR separate type for external pilot



Main parts list

No.	Parts name	Main materials
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 fitting (main piping section)	—
6	Cartridge type push-in fitting (external pilot piping)	—

MN3E0 • MN4E0 Series

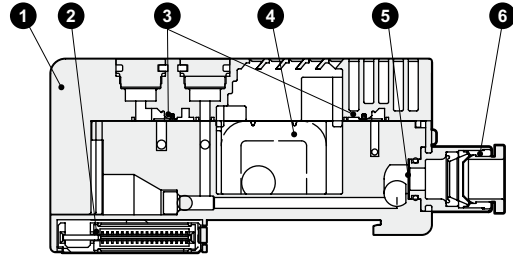
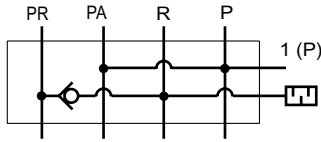
Reduced wiring block manifold (supply and exhaust block)

Internal structure and parts list

Supply and exhaust block

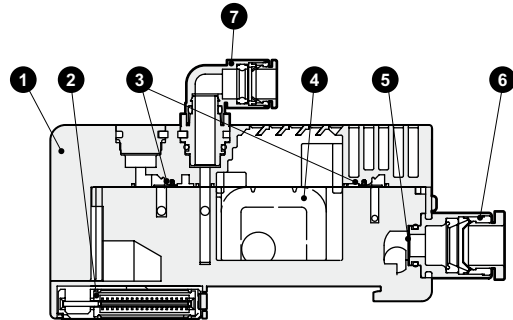
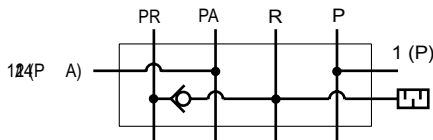
N4E0-QX

- For internal pilot and atmospheric release type



N4E0-QKX

- For external pilot and atmospheric release type



Main parts list

No.	Parts name	Main materials
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 fitting (main piping section)	—
7	Cartridge type push-in fitting (external pilot piping)	—

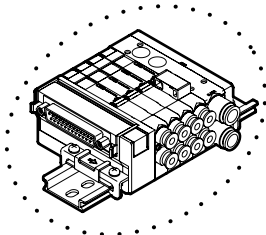
MN34E0-T30 Series

Reduced wiring block manifold D sub-connector type

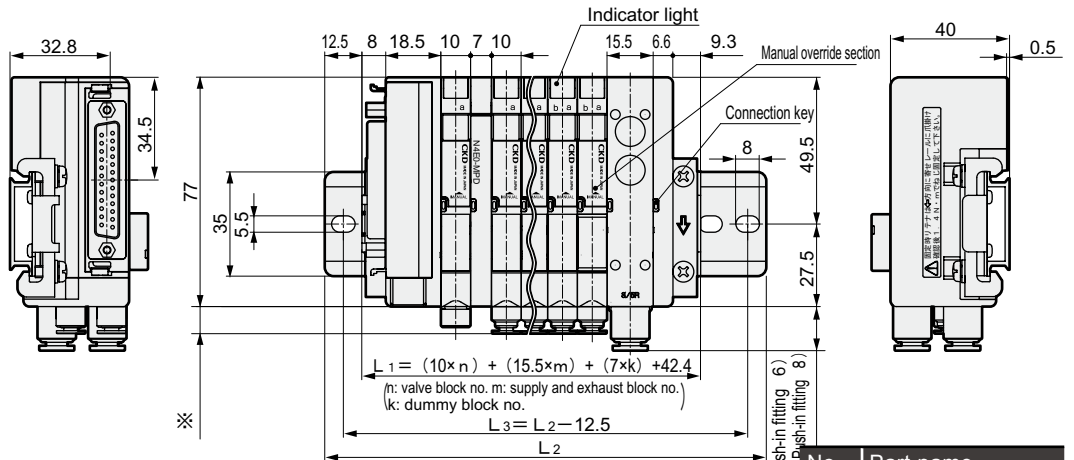
Dimensions

MN₄³E0*-*-T30*-*-*

● D sub-connector (T30) type



*The d sub-connector can be faced to the top or bottom.
*Refer to 48 Page for a connector section direction switchover method.



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

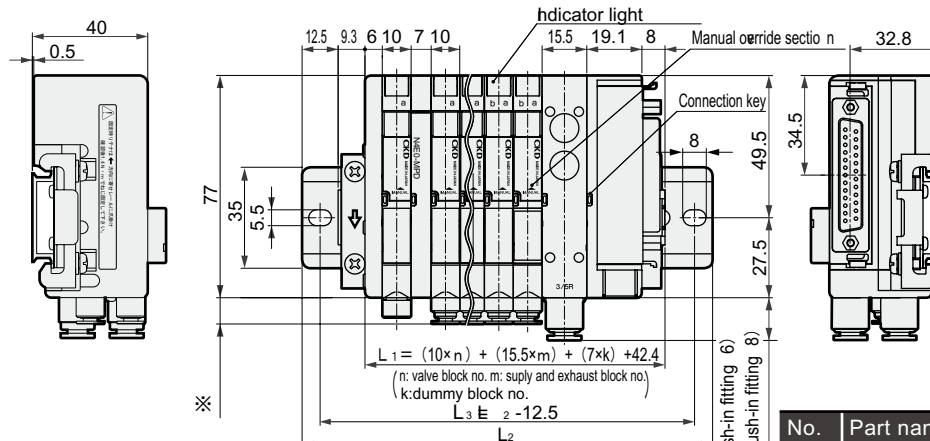
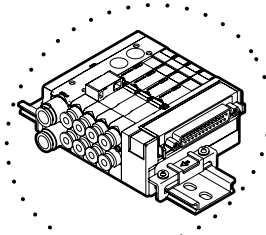
*Fitting dimensions	
Push-in fitting	Φ1.8 5.5
	Φ4 9.1
	Φ6 10.7
Fiber tube	8.5
M5 female thread	6.9

Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port
 Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

*Refer to page 48 for outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting and supply/exhaust block (upward).

MN₄³E0*-*-T30R*-*-*

● D sub-connector right type (T30R)



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

*Fitting dimensions	
Push-in fitting	Φ1.8 5.5
	Φ4 9.1
	Φ6 10.7
Fiber tube	8.5
M5 female thread	6.9

Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port
 Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

Manifold length	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~315.5	~326	~338.5	~351
L1 mm	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less
Mounting rail length	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	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

MN34E0-T50 Series

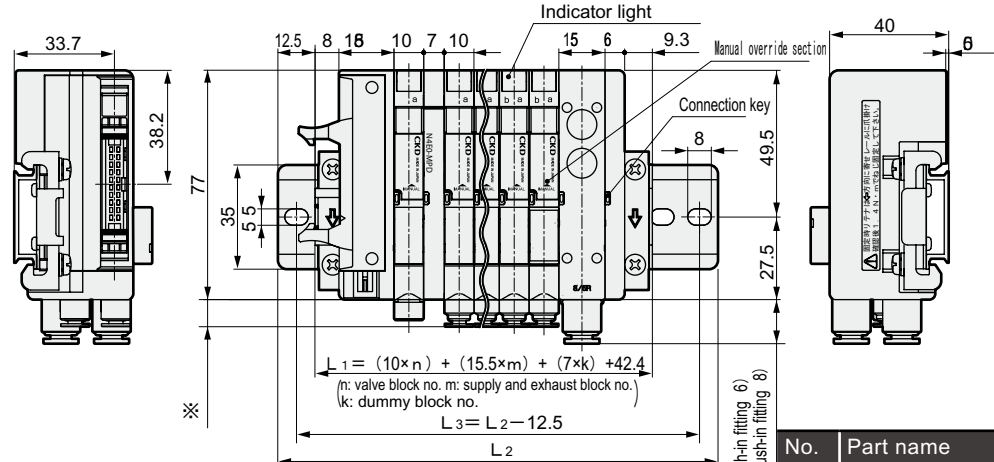
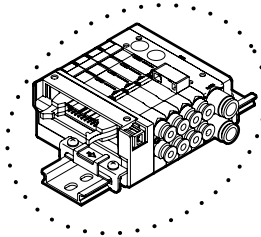
Reduced wiring block manifold; flat cable connector type

Dimensions

MN₄E0*-*-T50*-*-*

● Flat cable connector left type (T50)

*T51, T52, T53 is also available. The dimensions are the same as T50. Refer to page 44 for the dimension of the connector section.



*Fitting dimensions	
Push-in fitting	
Φ1.8	5.5
Φ4	9.1
Φ6	10.7
Fiber tube	8.5
M5 female thread	6.9

Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port

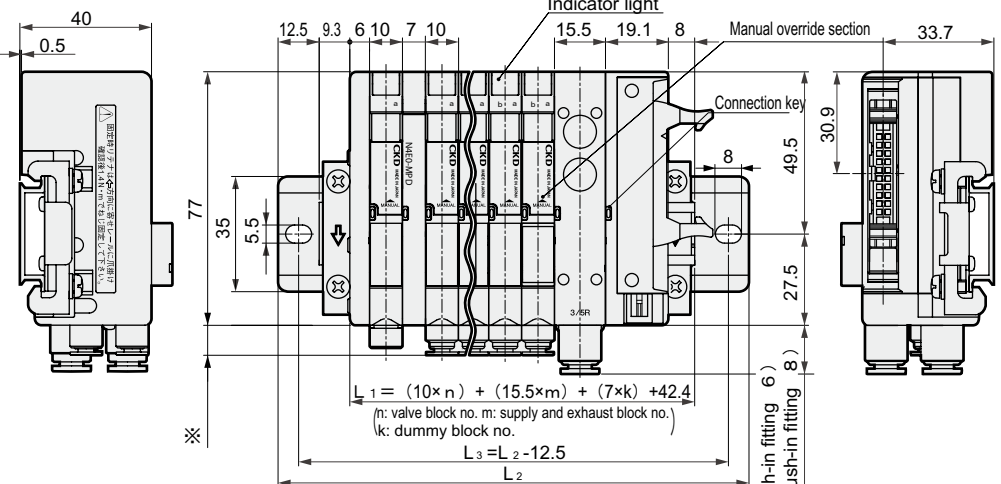
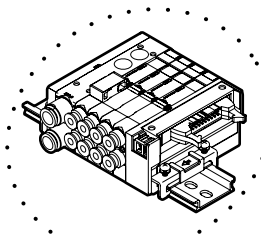
Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

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

*Refer to page 48 for outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting 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 48 for dimensions when the connector is connected, and page 64 for wiring methods and precautions for wiring.

MN₄E0*-*-T50R*-*-*

● Flat cable connector right type (T50R)



*Fitting dimensions	
Push-in fitting	
Φ1.8	5.5
Φ4	9.1
Φ6	10.7
Fiber tube	8.5
M5 female thread	6.9

Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port

Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

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

Manifold length	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~315.5	~326	~338.5	~351	
L1 mm	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less
Mounting rail length	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	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	
L3 mm																								

MN34E0-TM Series

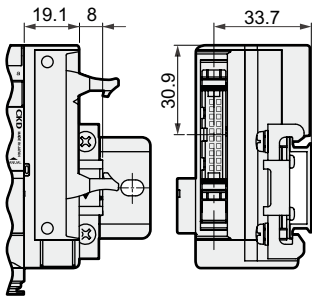
Reduced wiring block manifold; intermediate and right wiring block

Dimensions

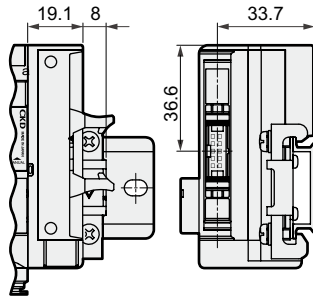
Flat cable connector (T51R/T52R/T53R): Connector section dimensions

*This is a drawing for the type with connector on the right. Dimensions for the type with connector on the left is the same.

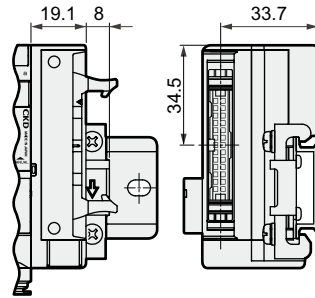
● T51R



● T52R



● T53R

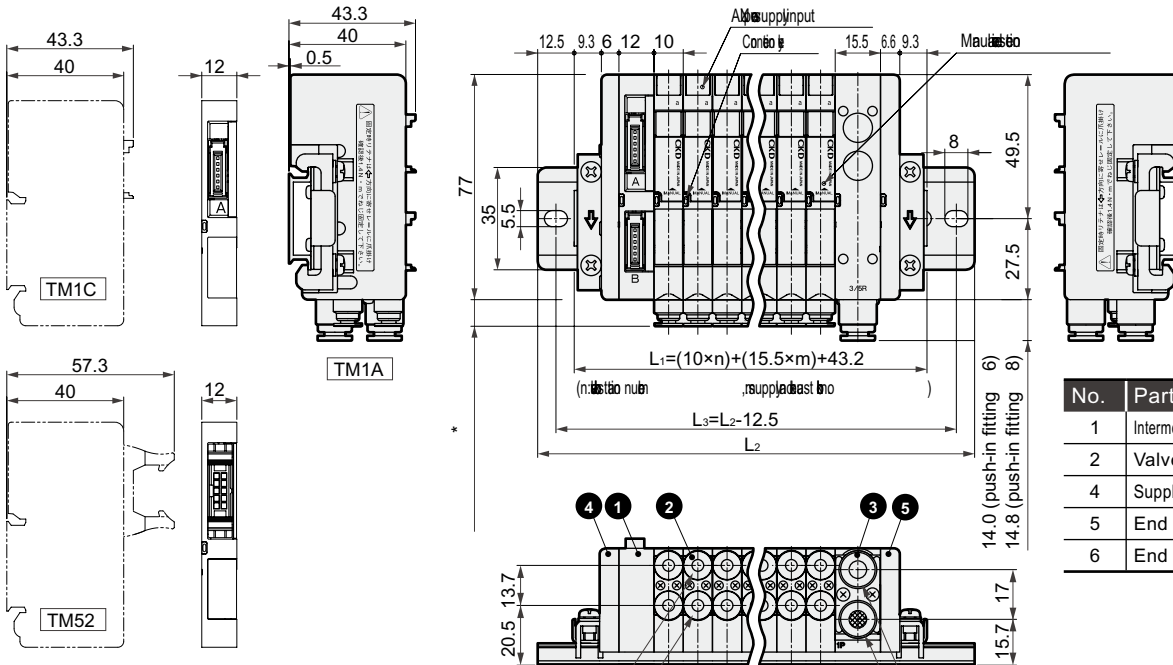
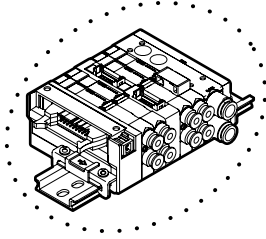


MN₄³E0*-*-TM1_C^A*-*-*

● RITS connector intermediate wiring specifications (TM1[∧])

MN₄³E0*-*-TM52*-*-*

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



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

*Fitting dimensions

Push-in fitting	Φ	h
Φ1.8	5.5	
Φ4	9.1	
Φ6	10.7	
Fiber tube		8.5
M5 female thread		6.9

Bsh-in fitting 1.8, 4, 6, fitub
 M5 Ctg(sbo) 2(Ppb)
 Bsh-in fitting 1.8, 4, 6, fitub
 M5 Ctg(sbo) 4(A) pb

Bsh-in fitting 6, 8 (sbo)
 3 (Ppb)
 Bsh-in fitting 6, 8 (sbo)
 1 (Ppb)

h	76	88.5	101	113.5	126	138.5	151	163.5	176	188.5	201	213.5	226	238.5	251	263.5	276	288.5	301	313.5	326	338.5	351
h	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
h	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	300	312.5	325	337.5	350	362.5	

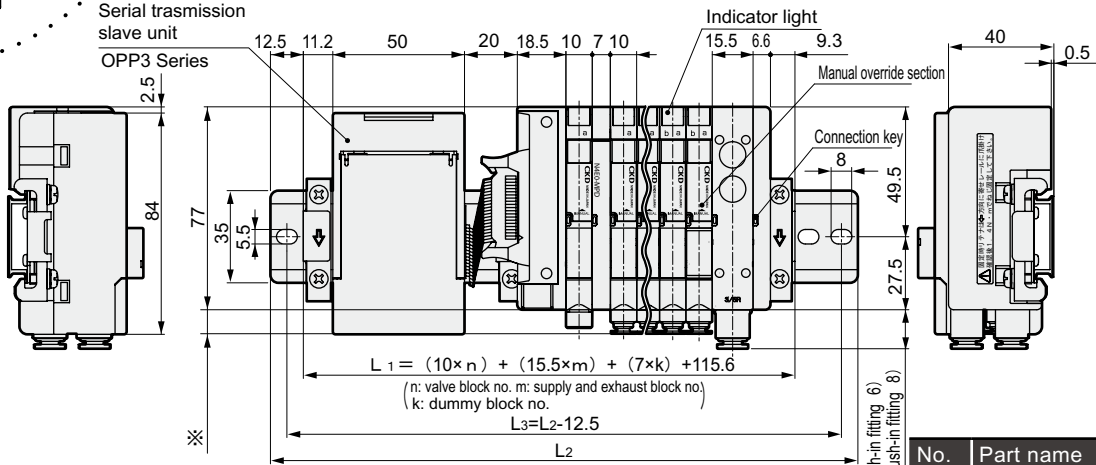
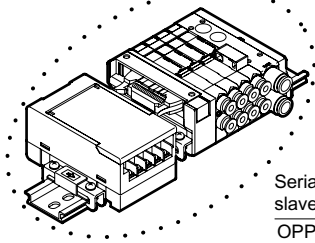
MN34E0-T6 Series

Reduced wiring block manifold; serial transmission type

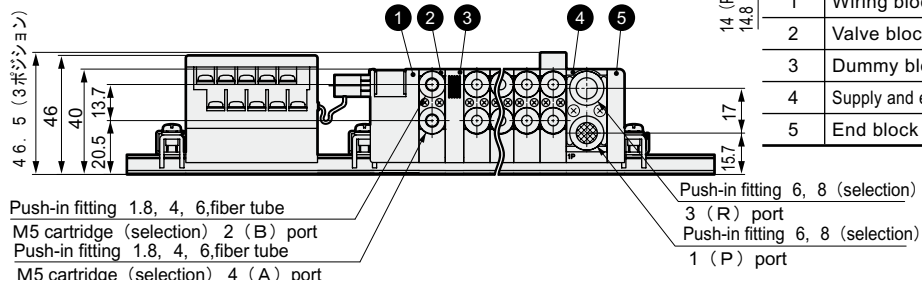
Dimensions

MN₄E0*-*-T6**-*

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



*Fitting dimensions	
Push-in fitting	
Φ1.8	5.5
Φ4	9.1
Φ6	10.7
Fiber tube	8.5
M5 female thread	6.9

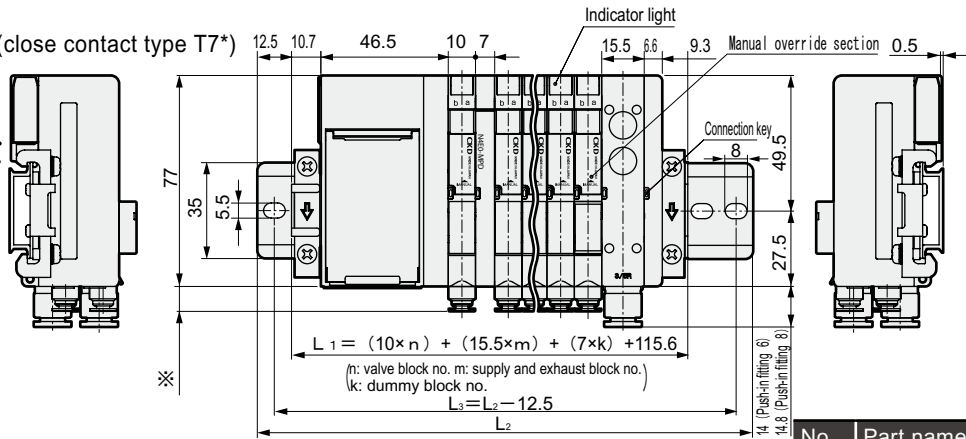
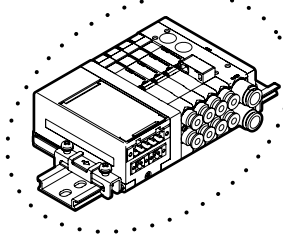


No.	Part name
1	Wiring block T6*
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R

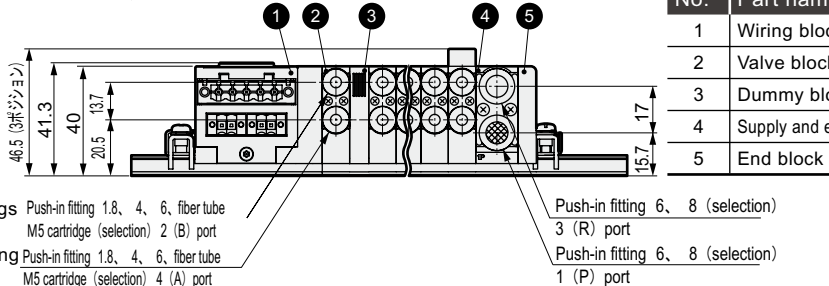
Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port
 Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

MN₄E0*-*-T7**-*

● Serial transmission type (close contact type T7*)



*Fitting dimensions	
Push-in fitting	
Φ1.8	5.5
Φ4	9.1
Φ6	10.7
Fiber tube	8.5
M5 female thread	6.9



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

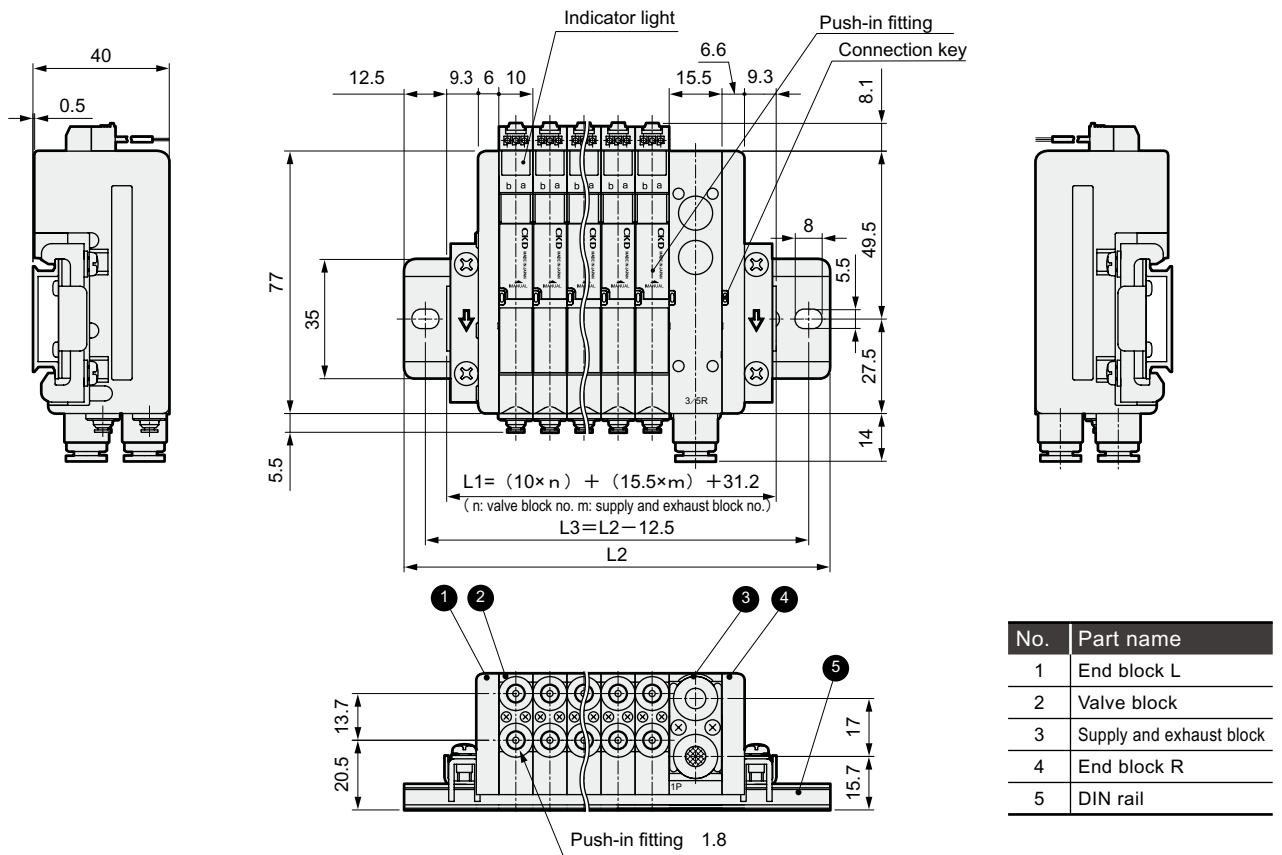
*Refer to page 48 for outline dimension drawings of the L type push-in fitting for valve block (upward), L type push-in fitting for air fiber fitting and supply/exhaust block (upward).
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 2 (B) port
 Push-in fitting 1.8, 4, 6, fiber tube
 M5 cartridge (selection) 4 (A) port
 Push-in fitting 6, 8 (selection)
 3 (R) port
 Push-in fitting 6, 8 (selection)
 1 (P) port

Manifold length	~76	~88.5	~101	~113.5	~126	~138.5	~151	~163.5	~176	~188.5	~201	~213.5	~226	~238.5	~251	~263.5	~276	~288.5	~301	~313.5	~326	~338.5	~351	
L1 mm	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less	or less
Mounting rail length	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	
L2 mm																								
Mounting rail pitch	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	
L3 mm																								

Dimensions

MN₄E0*~*(D2~D3)*~*

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



*This drawing is for $\phi 1.8$ push in fitting Side type(C18).

MN3E0 • MN4E0 Series

Reduced wiring block manifold

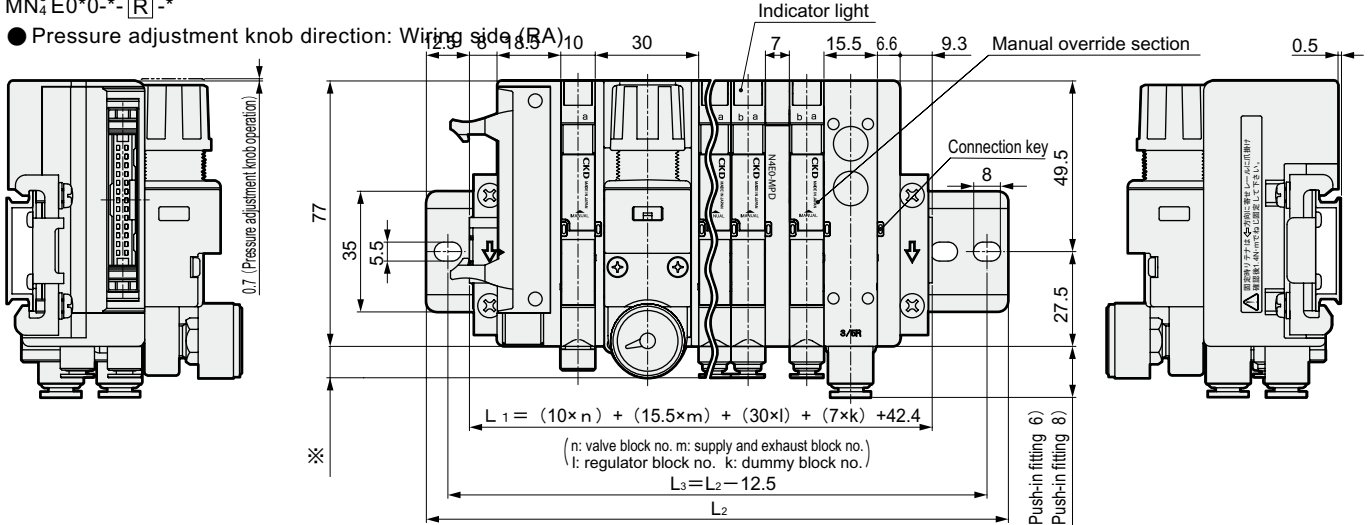
Dimensions

● Piping blocks (all type commons)

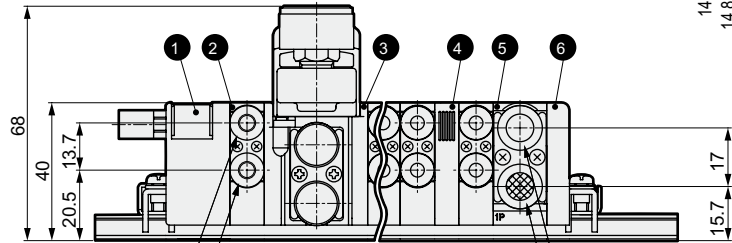
Regulator block

MN₄E0*0*- [R]-*

● Pressure adjustment knob direction: Wiring side (RA)



*Fitting dimensions		
Push-in fitting	Φ1.8	5.5
	Φ4	9.1
	Φ6	10.7
Fiber tube		8.5
M5 female thread		6.9

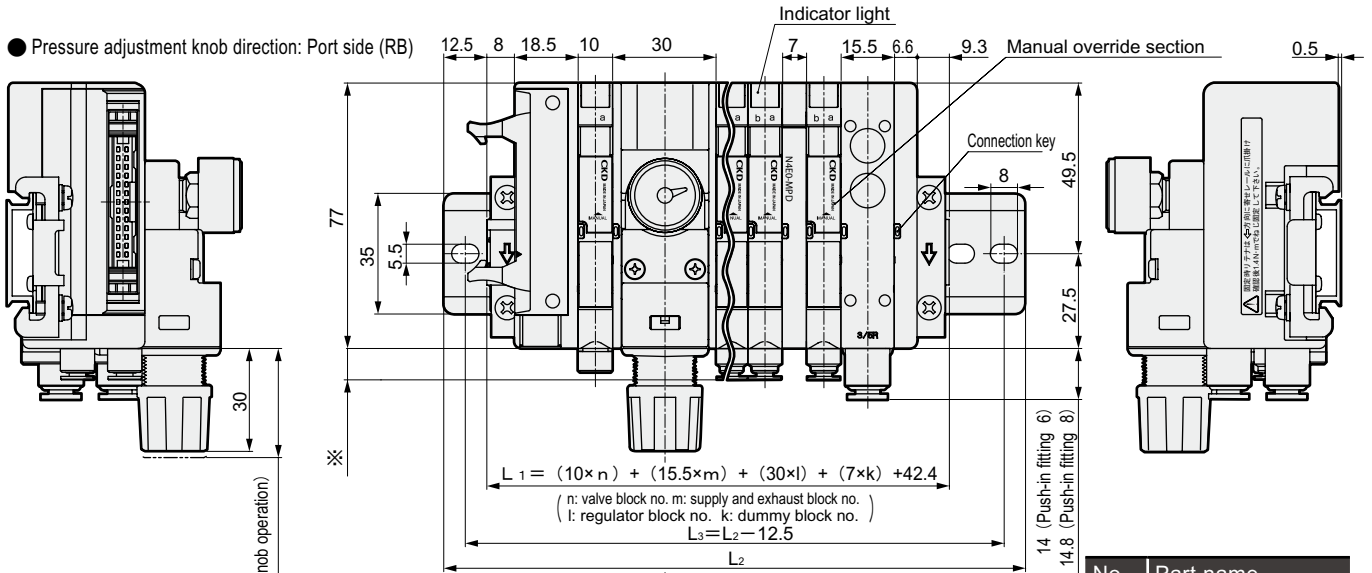


No.	Part name
1	Wiring block T5*
2	Valve block
3	Regulator block
4	Dummy block
5	Supply and exhaust block
6	End block R

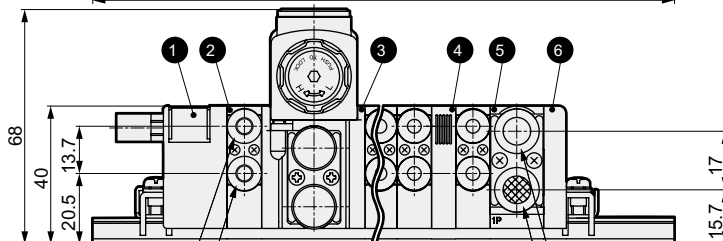
Push-in fitting 1.8, 4, 6, fiber tube
M5 cartridge (selection) 2 (B) port
Push-in fitting 1.8, 4, 6, fiber tube
M5 cartridge (selection) 4 (A) port

Push-in fitting 6, 8 (selection)
3 (R) port
Push-in fitting 6, 8 (selection)
1 (P) port

● Pressure adjustment knob direction: Port side (RB)



*Fitting dimensions		
Push-in fitting	Φ1.8	5.5
	Φ4	9.1
	Φ6	10.7
Fiber tube		8.5
M5 female thread		6.9



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

Push-in fitting 1.8, 4, 6, fiber tube
M5 cartridge (selection) 2 (B) port
Push-in fitting 1.8, 4, 6, fiber tube
M5 cartridge (selection) 4 (A) port

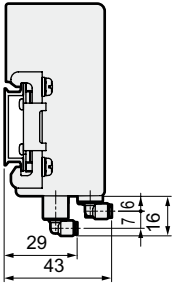
Push-in fitting 6, 8 (selection)
3 (R) port
Push-in fitting 6, 8 (selection)
1 (P) port

Dimensions

● Piping blocks (all type commons)

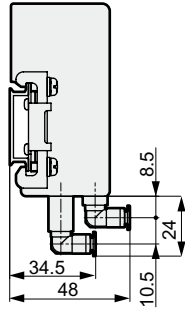
Push-in fitting (radial)
for fiber tube

● $\Phi 1.8$ (CL18)

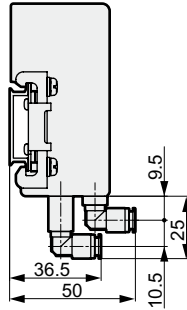


Valve block
Push-in fitting L type (radial)

● $\Phi 4$ (CL4)

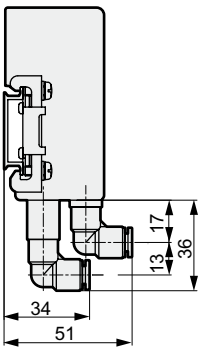


● $\Phi 6$ (CL6)

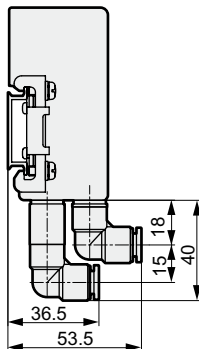


Supply and exhaust block
Push-in fitting L type (radial)

● $\Phi 6$ (CL6)

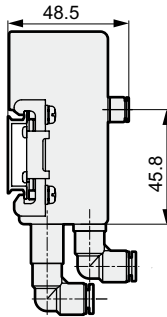


● $\Phi 8$ (CL8)

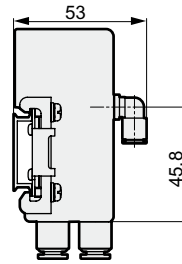


External pilot for supply and exhaust block

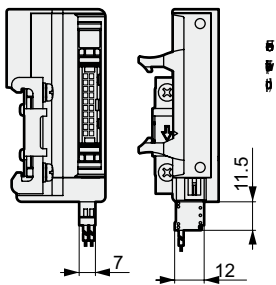
● Upward piping



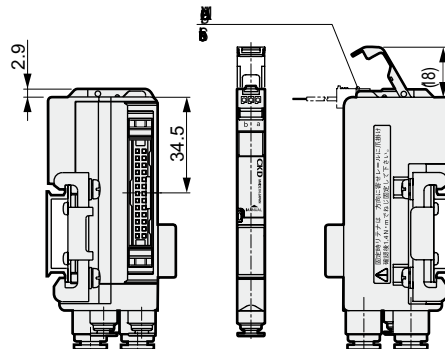
● Lateral piping



● T50 feed connector connection time dimension

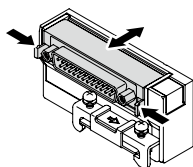


● Individual electric supply integrated (AUX) type

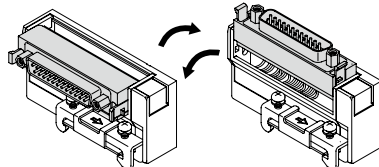


● D sub-connector (T30/T30R): How to switchover the connector section.

Horizontal working conditions

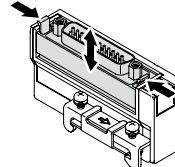


Hold the lever and pull the connector out horizontally. horizontally when storing it.
(fix the connector.)

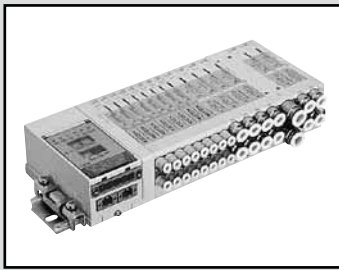


Rotate the connector horizontally.
Fix it vertically or horizontally before using it.

Vertical working conditions



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



MN4E0 • MN4E00 mix manifold

MN3EX0 • MN4EX0 Series

●Applicable cylinder bore size: Φ4 to Φ32

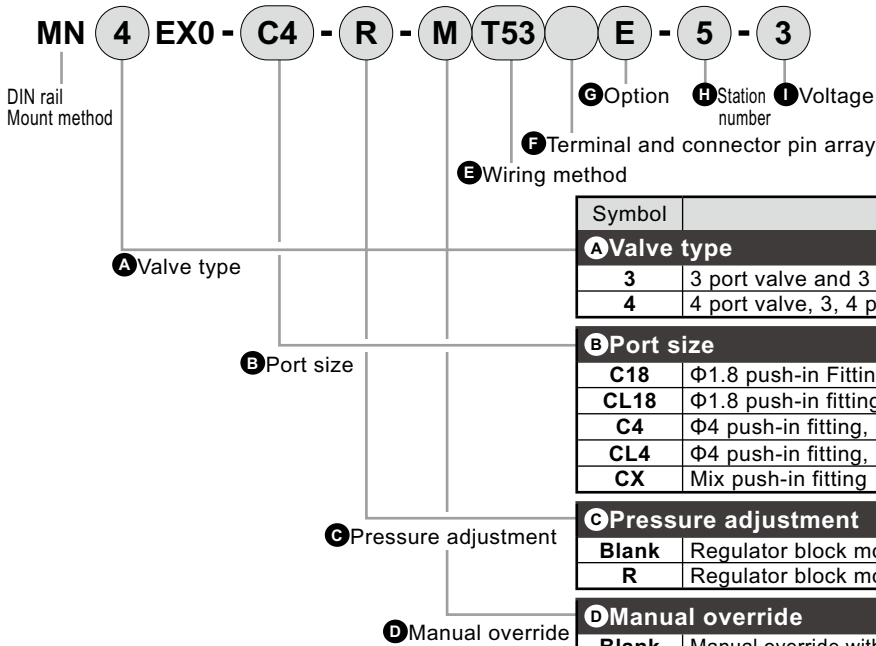


Specifications

Common for each series. Refer to page 1 and 25.

How to order

Block manifold



Symbol	Descriptions
A Valve type	
3	3 port valve and 3 ports valve 2 piece integrated type
4	4 port valve, 3, 4 ports valve mix
B Port size	
C18	Φ1.8 push-in Fitting side (compatible tube UP-9402)
CL18	Φ1.8 push-in fitting up (compatible tube UP-9402)
C4	Φ4 push-in fitting, Side
CL4	Φ4 push-in fitting, Up
CX	Mix push-in fitting
C Pressure adjustment	
Blank	Regulator block mounting, without manifold
R	Regulator block mounting, manifold (Note 1, 2)
D Manual override	
Blank	Manual override with manual guard (locking and non-locking common)
M	Manual override with manual guard (non-locking dedicated)
E Wiring method	
Refer to the following page.	
F Terminal and connector pin array	
Blank	Standard wiring
W	Double wiring (Note 3)
G Option	
Blank	None
E	Low exoergic, energy saving circuit integrated type (Note 4)
A	Ozone proof
F	A/B port filter integrated (Note 5)
H Station number	
1	1 station
to	to
32	32 station (Note 6)
I Voltage	
3	24 VDC
4	DC 12V

Note on model no. selection

Note 1: 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 2: 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 3: Refer to the connector pin layout (example) on page 63 to 71 for double wiring specification. 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 4: Energizing is limited to the plus common.

Note 5: A filter for preventing entry of foreign matter is incorporated in the supply/exhaust block's port.

Note 6: Differs based on specifications. Do confirmation by a 2 and 26 page.

Note 7: Please confirm lead time for T7N2 (S-LINKV 32 points output) each time when ordering.

Note 8: A dummy block counts as a station.

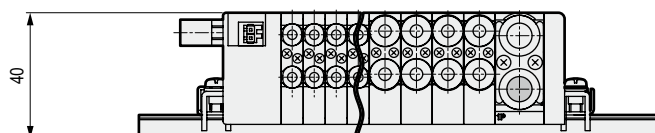
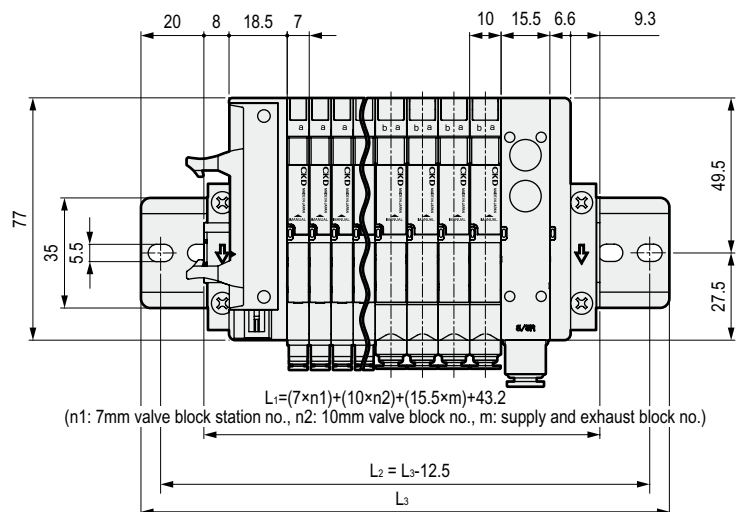
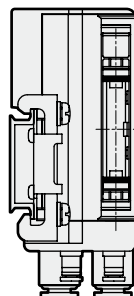
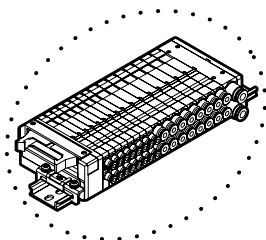
(Wiring method list)

Symbol	Descriptions	
E Wiring method		
TM1A	Intermediate wiring block RITS connector6P (2 pcs.)	
TM1C	Intermediate wiring block RITS connector6P	
TM52	Intermediate wiring block 10 pin flat cable connector 8 points	
T30	D sub-connector left specifications	
T30R	D sub-connector right specifications	
T50	20 pin flat cable connector Left (with power supply terminal)	
T50R	20 pin flat cable connector Right (with power supply terminal)	
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	
TX	Wiring block mix	
T6A0	Serial transmission (UNIWIRESYSTEM8 points)	
T6A1	Serial transmission (UNIWIRESYSTEM16 points)	
T6C0	Serial transmission (OMRON CompoBus/S 8 points)	
T6C1	Serial transmission (OMRON CompoBus/S 16 points)	
T6E0	Serial transmission (SUNX S-LINK 8 points)	
T6E1	Serial transmission (SUNX S-LINK 16 points)	
T6J0	Serial transmission (UNIWIRESYSTEM H system 8 points)	
T6J1	Serial transmission (UNIWIRESYSTEM H system 16 points)	
T6G1	Serial transmission (CC-Link 16 points)	
T7D1	Serial transmission (DeviceNet 16 points)	
T7D2	Serial transmission (DeviceNet 32 points)	
T7G1	Serial transmission (CC-Link 16 points)	
T7G2	Serial transmission (CC-Link 32 points)	
T7N1	Serial transmission (S-LINK V 16 points)	
T7N2	Serial transmission (S-LINK V 32 points) (note 7)	
D2	Individual wiring type* D type connector 300mm	
D20		D type connector 500mm
D21		D type connector 1000mm
D22		D type connector 2000mm
D23		D type connector 3000mm
D2N		D type connector without socket
D3		D type connector socket/terminal attached

*Individual wiring is available for the valve block of your choice (N3E0 and N4E0 only)

Mix block dimensions

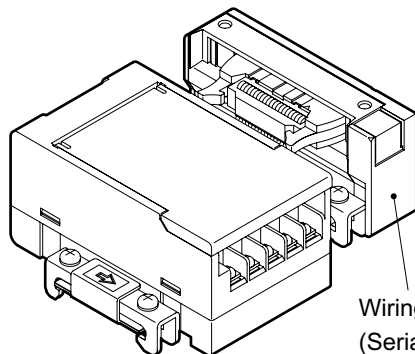
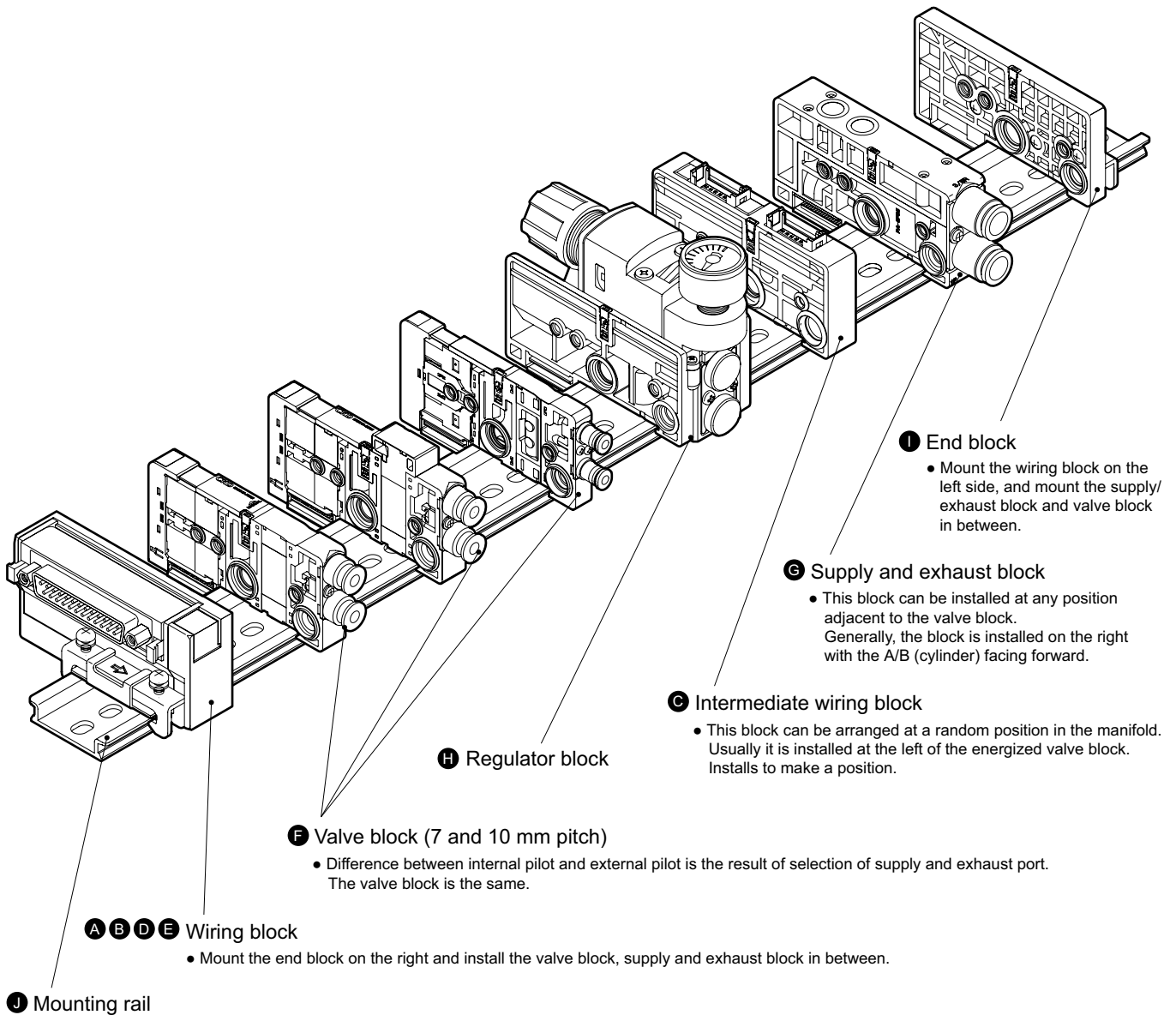
MN₄EX0



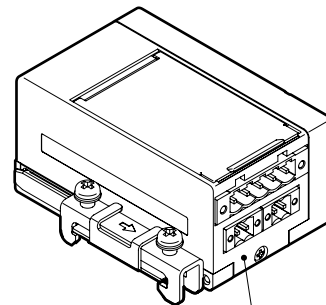
MN3E⁰⁰ • MN4E⁰⁰ Series

Reduced wiring block manifold

Block manifold: Block configurations



Wiring block
(Serial transmission slave unit)



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

Block manifold configuration

Electric component section	Wiring block	A D sub-connector (T30/T30R)	B Flat cable connector (T5*/T5*R)	C Intermediate wiring block (TM*)
				 Note: The drawing is for TM1A.
Piping section	Piping block	D Serial transmission block (T6*)	E Serial transmission block (close contact T7*)	
Related products	Related products	F Valve block Push-in fitting, side	Push-in fitting, up	Female thread (with non-rotating)
Related products	Related products	G Supply and exhaust block Internal pilot (Q)	External pilot (QK)	Atmospheric release (QX)
Related products	Related products	H Regulator block Pressure adjustment knob wiring side (RA) Pressure adjustment knob port side (RB)	I End block Left side mount (EL) Right side mount (ER)	
Related products	Related products	J Related products		
		Mounting rail Push-in cartridge fitting Silencer Supply and exhaust block Push-in cartridge fitting Blanking plug 1.8 barbed Screw in fitting D-sub-cable with connector Push-in fitting Tube remover hand Feed connector/change fuse for power supply terminal for T50 		

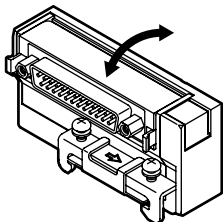
MN3E⁰ • MN4E⁰ Series

Reduced wiring block manifold; block

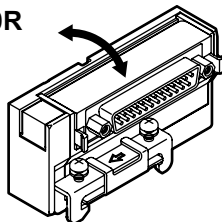
Electric component section

A D sub-connector (T30)

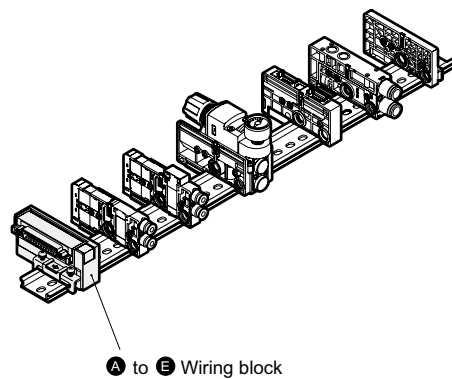
N4E0-T30



N4E0-T30R



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

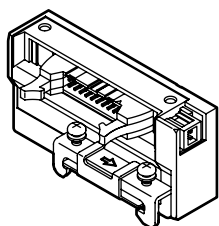


● A to ● E Wiring block

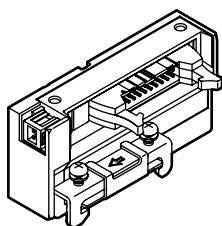
B Flat cable connector (T5*)

● With power supply terminal

N4E0-T50



N4E0-T50R

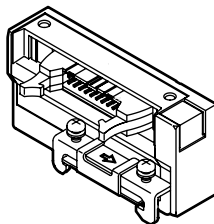


● Without power supply terminal

N4E0-T51

N4E0-T52

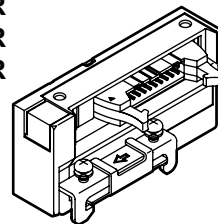
N4E0-T53



N4E0-T51R

N4E0-T52R

N4E0-T53R

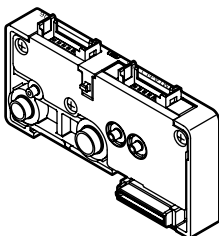


*The drawing is for T51. A pin number differs for T52, T53.
(T51: 20 pin, T52: 10 and T53: 26 pin)

C Intermediate wiring block

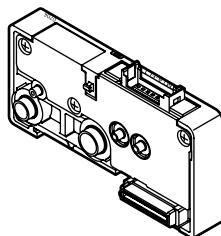
● RITS connector 6P x 2 piece

N4E0-TMIA



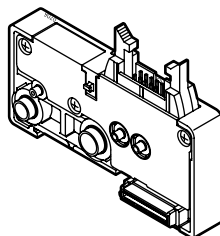
● RITS connector 6P

N4E0-TMIC



● 10 pin flat cable connector

N4E0-TM52



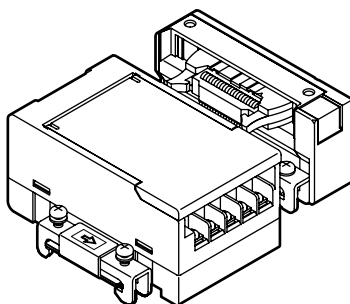
D Serial transmission block (T6**)

N4E0 - T6G1

Model no.

● A Type

Symbol	Descriptions
● A Type	
T6A0	UNIWIRED SYSTEM 8 points
T6A1	UNIWIRED 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	UNIWIRED H system 8 points
T6J1	UNIWIRED H system 16 points
T6G1	CC-Link 16 points



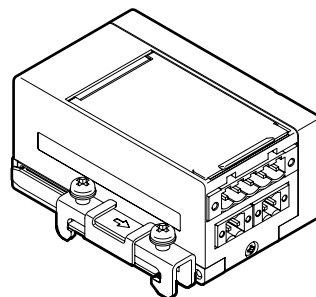
E Serial transmission block (Close contact type T7*)

N4E0 - T7G2

Model no.

● A Type

Symbol	Descriptions
● A Type	
T7D1	DeviceNet 16 points
T7D2	DeviceNet 32 points
T7G1	CC-Link 16 points
T7G2	CC-Link 32 points
T7N1	S-LINK V 16 points
T7N2	S-LINK V 32 points



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

● Discrete serial transmission slave unit

4G - OPP3 - 0A

Ⓐ Wiring method

Symbol	Descriptions
Ⓐ Wiring method	
0A	UNIWIRED SYSTEM8 points
1A	UNIWIRED SYSTEM16 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 16 points
0J	UNIWIRED H system 8 points
1J	UNIWIRED H system 16 points

*This slave unit is the same slave unit as 4G series.
 The model no. will be "4G-*-*".

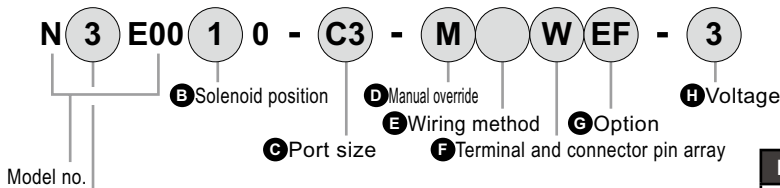
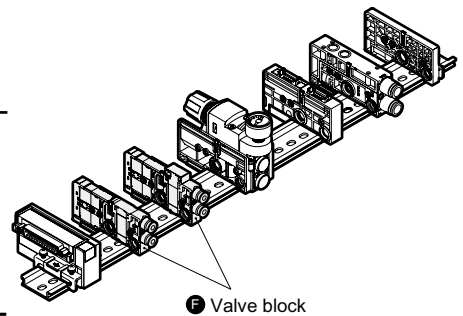
MN3E⁰₀₀ • MN4E⁰₀₀ Series

Reduced wiring block manifold; block

Piping section

F Valve block

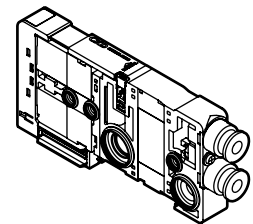
● This is discrete valve block.



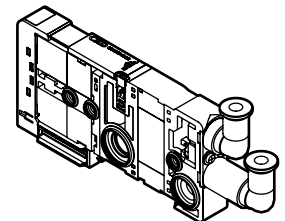
Model no.	N3E00	N3E0	N4E00	N4E0
-----------	-------	------	-------	------

Symbol	Descriptions	N3E00	N3E0	N4E00	N4E0	
A Valve type/model no.						
N3E00	3 port valve and two 3 port valve integrated type (7 mm pitch valve block)	●				
N3E0	3 port valve and two 3 port valve integrated type (10 mm pitch valve block)		●			
N4E00	4 port valve (7 mm pitch valve block)			●		
N4E0	4 port valve (10 mm pitch valve block)				●	
B Solenoid position (Note 1)						
1	3 port valve	Single NC self reset type (Differential pressure	●	●		
11		Single NO self resetting type spring return)	●	●		
2	2 port valve	Double NC self holding type	●	●		
21		Double NO self holding type	●	●		
66	two 3 port valves integrated type (Note 1)	A side valve: NC self resetting type (Differential pressure return)	●	●		
66S		B side valve: NC self resetting type (Differential pressure spring return)	●	●		
67		A side valve: NC self resetting type (Differential pressure return)	●	●		
67S		B side valve: NO self resetting type (Differential pressure spring return)	●	●		
76		A side valve: NO self resetting type (Differential pressure return)	●	●		
76S		B side valve: NC self resetting type (Differential pressure spring return)	●	●		
77		A side valve: NO self resetting type (Differential pressure return)	●	●		
77S		B side valve: NO self resetting type (Differential pressure spring return)	●	●		
1		4 port valve	2-position single solenoid self resetting type (Differential pressure spring return)		●	●
2			2-position double solenoid self holding type		●	●
3			3-position all ports closed			●
4			3-position A/B/R connection			●
5			3-position P/A/B connection			●
C Port size						
CF	Φ1.8 push-in fitting side (tube UP-9402, EH-5802)		●		●	
C18	Φ1.8 push-in fitting side (tube UP-9402, EH-5802)	●	●	●	●	
CL18	Φ1.8 push-in fitting up (compatible tubes UP-9402, EH-5802)	●	●	●	●	
C3	Φ3 push-in fitting side	●		●		
CL3	Φ3 push-in fitting up	●		●		
C4	Φ4 push-in fitting, Side	●	●	●	●	
C6	Φ6 push-in fitting, Side		●		●	
CL4	Φ4 push-in fitting, Up	●	●	●	●	
CL6	Φ6 push-in fitting, Up		●		●	
M3	M3 female thread (with non-rotating)	●		●		
M5	M5 female thread (with non-rotating)	●	●	●	●	
D Manual override						
Blank	Non-locking/locking common type (with manual cover)	●	●	●	●	
M	Non-locking dedicated manual override (with manual cover)	●	●	●	●	
E Wiring method						
Refer to the following page.			●		●	
F Terminal and connector pin array						
Blank	Standard wiring	●	●	●	●	
W	Double wiring (for reduced wiring) (Note 2, Note 3)	●	●	●	●	
G Option						
Blank	None	●	●	●	●	
E	Low exoergic, energy saving circuit integrated type	●	●	●	●	
U	Built-in individual power supply function (AUX) type (Note 4)	●	●		●	
A	Ozone proof (Note 5)		●		●	
F	A/B port filter integrated	●	●	●	●	
H Voltage						
3	24 VDC	●	●	●	●	
4	DC 12V	●	●	●	●	

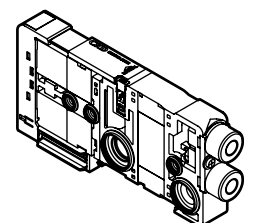
● Push-in fitting, Side



● Push-in fitting, Up



● Female thread (with non-rotating)



Note 1: For specifications of self reset type
Read the precautions on Intro 9.

Note 2: The double wiring designation is limited to 2-position single.

Note 3: Double wiring can not be selected with a discrete individual wiring valve block.

Note 4: "U" can not be selected with individual wiring.

Note 5: Provided as standard for N3E00, N4E00.

(Wiring method list)

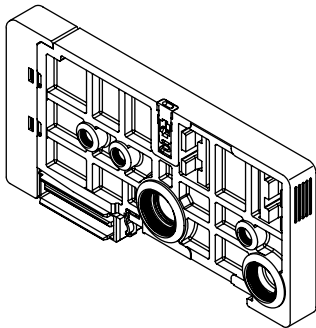
Symbol	Descriptions	Model no.				
		N3E00	N3E0	N4E00	N4E0	
F Wiring method						
Blank	For reduced wiring valve block	●	●	●	●	
D2	Individual wiring type		●		●	
D20		D-connector 300mm		●		●
D21		D-connector 500mm		●		●
D22		D-connector 1000mm		●		●
D23		D-connector 2000mm		●		●
D2N		D-connector 3000mm		●		●
D3		D-connector without socket		●		●
		D-connector socket, terminal attached		●		●

G Dummy block

N4E0 - MPD

A Type

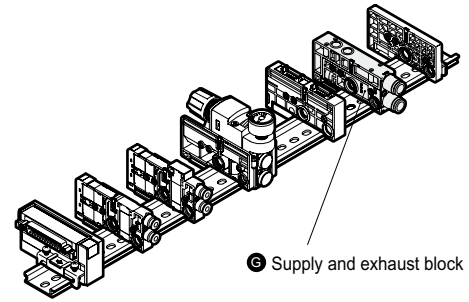
A Type	
MPS	For single wiring
MPD	For double wiring



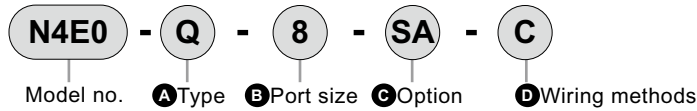
Piping section

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*.
(Can not be used for external pilot type.)



Supply and exhaust block



A Type (Note 1)		B Port size (P/R port) (Note 2)		C Option (Note 3)		D Wiring methods	
Q	Internal pilot	6	Φ6 push-in fitting	Blank	Without partition	Blank	With internal wiring circuit
QK	External pilot	6L	Φ6 push-in fitting Up	S	P/R stop, PA/PR through	C	Without internal wiring circuit Note 4
QZ	Multi-pressure circuit (P and R only)	8	Φ8 push-in fitting	SA	P/R/PA/PR stop		
QKZ	Multi-pressure circuit, external pilot (P, R, PA or PR separate)	8L	Φ8 push-in fitting Up				
QX	Atmospheric release (with silencer)						
QKX	External pilot and atmospheric release (With silencer)						

Note 1: *Individual wiring is available for the valve block of your choice (N3E0 and N4E0 only) in combination.

Note 2: A filter for preventing entry of foreign matter is used 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 84.)

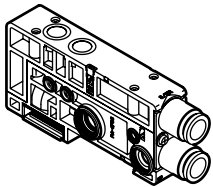
Option symbol

S : Shields the 1(P) and 3(R) flow paths.

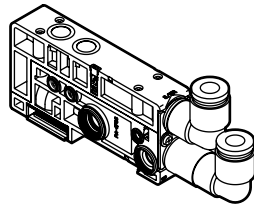
SA1 : Shields the 1(P), 3(R), 12/14(PA), 82/84(PR) flow paths.

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.

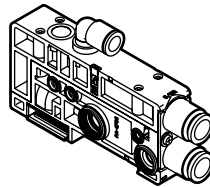
● Q-8
QZ-8



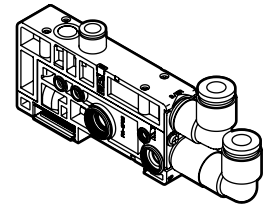
● Q-8L
QZ-8L



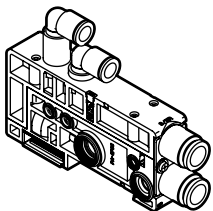
● QK-8



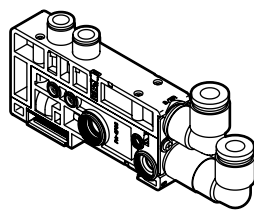
● QK-8L



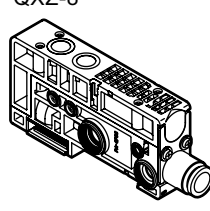
● QKZ-8



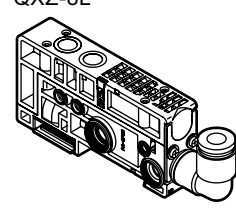
● QKZ-8L



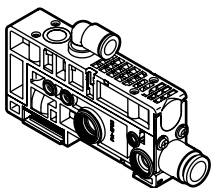
● QX-8
QXZ-8



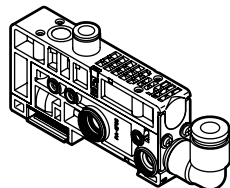
● QX-8L
QXZ-8L



● QKX-8



● QKX-8L



Piping section

Regulator block

- Discrete regulator block

N4E0 - RA - FR - C8 - A

A Pressure adjustment knob direction

B Air supply and pressure adjustment direction Note 2

! Cautions on model no. selection

Note 1: The manifold with regulator block requires more than one supply/exhaust block for the pilot air.

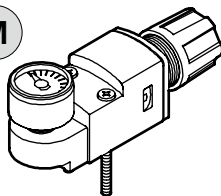
Note 2: Consult with CKD when using the regulator block independently for external pressure control other than the manifold.

Note 3: The elbow fitting (CL6, CL8) cannot be selected when the pressure adjustment knob direction RB is selected.

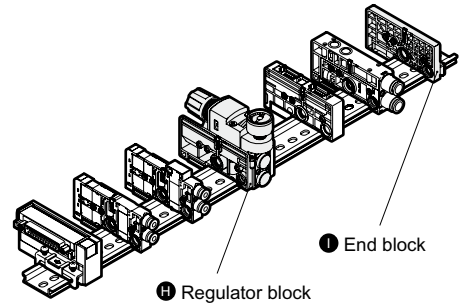
C fitting port size Note 3

- Discrete regulator model no.

RB500-00 M



D Option



A Pressure adjustment knob direction

RA		RB	
----	--	----	--

B Air supply and pressure adjustment direction

LR		RL	
LR		FL	

C fitting port size

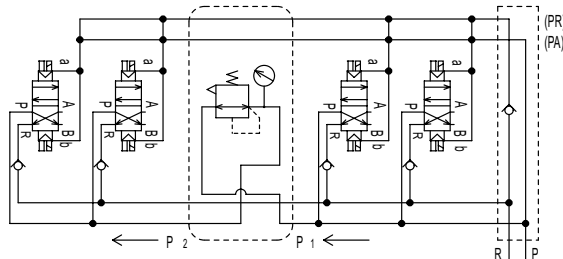
Blank	Plug (for air supply/pressure adjustment direction LR and RL)
C6	Φ6 push-in fitting (for air supply/pressure adjustment direction FR and FL)
C8	Φ8 push-in fitting (for air supply/pressure adjustment direction FR and FL)
CL6	Φ6 push-in fitting, up (for pressure adjustment knob direction RA, air supply/pressure adjustment direction FR or FL)
CL8	Φ8 push-in fitting, up (for pressure adjustment knob direction RA, air supply/pressure adjustment direction FR or FL)

D Option

Blank	None
A	Ozone resistant

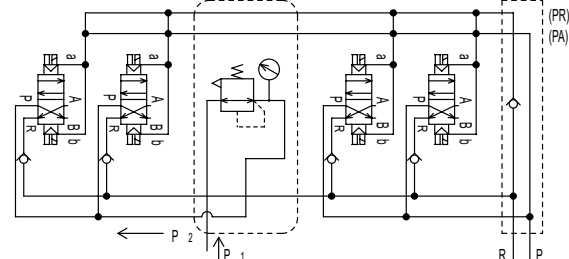
Applications (Consult CKD for other use)

Example 1: Decompression of internal main pressure



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

Example 2: Decompression of external main pressure



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

I End block (right side installation)

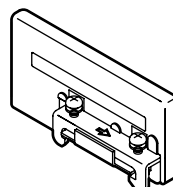
- Installed on the right or left when the piping port is facing forward.

N4E0 - ER

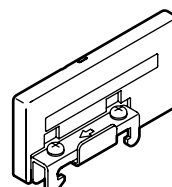
Model no. A Type

A Type	
EL	Left side installation
ER	Right side installation

- N4E0-EL



- N4E0-ER

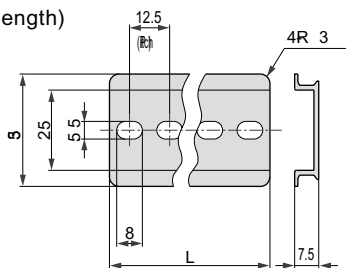


MN3E⁰⁰ • MN4E⁰⁰ Series

Reduced wiring block manifold; related products

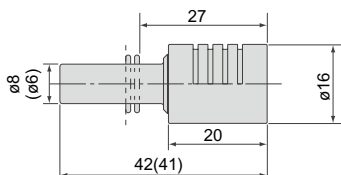
Related products

- Mounting rail
N4G-BAA (length)



- Silencer (attachment)

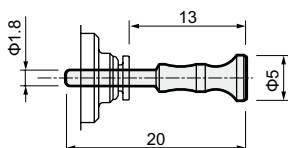
SLW-H8
SLW-H6



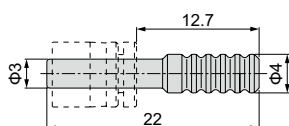
* () inside is H6.
Effective sectional area 9mm²

- Blanking plug (attachment)

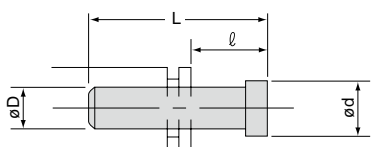
G- 2-B (Φ1.8)



N4E00-fitting- 3MW (Φ3)



(Φ4, Φ6, Φ8)

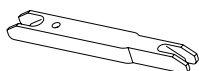


Model no.	D	L	l	d
GW 4-B	Φ4	27	19	6
GW 6-B	Φ6	29	19	8
GW 8-B	Φ8	33	14	10

- Push-in fitting tube remover

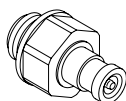
N4E0-EOT18-4 (Φ1.8, Φ3, Φ4)

N4S0-EOT4-6 (Φ3, Φ4, Φ6)



- Φ1.8 barbed fitting (10 piece/1 set)

N4E0 - JOINT - PTN2-M5



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

*Consult with CKD for fiber tube.

- Push-in cartridge fitting

N4E00 - JOINT - C

For valve block and supply/exhaust block PA port.
Can not be used on P, R ports on the supply and exhaust block.

Symbol	Dimensions
C18	Φ1.8 fiber tube Cartridge fitting
C3	Φ3 for tube Cartridge fitting
C4	Φ4 for tube Push-in cartridge fitting
CL18	Short L type for Φ1.8 fiber tube Cartridge fitting
CL3	Φ3 for tube short L type Cartridge fitting
CL4	Φ4 for tube short L type Push-in cartridge fitting
CLL18	Φ1.8 fiber tube length L type Cartridge fitting
CLL3	Φ3 for tube short LL type Cartridge fitting
CLL4	Φ4 for tube long L type Push-in cartridge fitting
CPG	Plug cartridge
CP	Fitting fixing plate (machine screw attached for end plate mount)
CM3	M3 cartridge fitting
CMB	Plug cartridge for M5 (fitting non-rotating plate for M5 for fixing: CMP is necessary.)
CMP	Fitting non-rotating plate for M5 (Machine screw attached for end plate mount)

N4E0 - JOINT - C

For valve block and supply/exhaust block PA port.
Can not be used on P, R ports on the supply and exhaust block.


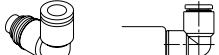

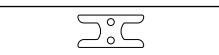
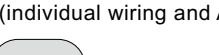


Symbol	Dimensions
CF	Φ1.8 barbed Cartridge fitting
C18	Φ1.8 fiber tube Cartridge fitting
C4	Φ4 for tube Push-in cartridge fitting
C6	Φ6 for tube Push-in cartridge fitting
CL18	Short L type for Φ1.8 fiber tube Cartridge fitting
CL4	Φ4 for tube short L type Push-in cartridge fitting
CL6	Φ6 for tube short L type Push-in cartridge fitting
CLL18	Φ1.8 fiber tube length L type Cartridge fitting
CLL4	Φ4 for tube long L type Push-in cartridge fitting
CLL6	Φ6 for tube long L type Push-in cartridge fitting
CPG	Plug cartridge
CP	Fitting fixing plate (machine screw attached for end plate mount)
CM5	M5 cartridge fitting (fitting non-rotating plate for M5 for fixing: CMP is necessary.)
CMB	Plug cartridge for M5 (fitting non-rotating plate for M5 for fixing: CMP is necessary.)
CMP	Fitting non-rotating plate for M5 (Machine screw attached for end plate mount)

① Related products

- Push-in cartridge fitting for supply and exhaust block

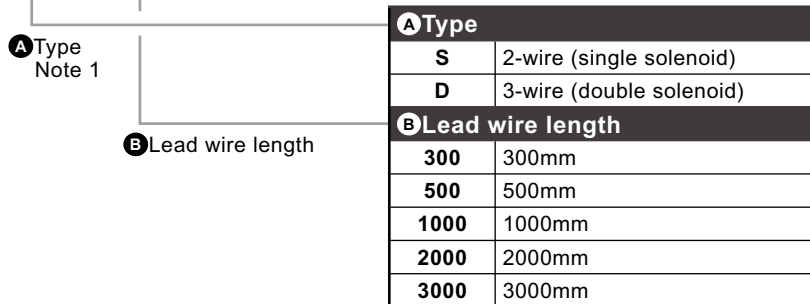
N4E0 - **Q** - **JOINT** - **8**

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

Symbol	Dimensions
6	Push-in fitting for $\Phi 6$ tube 
8	Push-in fitting for $\Phi 8$ tube 
6L	Push-in fitting for $\Phi 6$ tube short L type 
8L	Push-in fitting for $\Phi 8$ tube short L type 
6LL	Push-in fitting for $\Phi 6$ tube long L type 
8LL	Push-in fitting for $\Phi 8$ tube long L type 
P	Fitting fixing plate (machine screw for plate mount attached) 

- Socket assembly for electric supply (individual wiring and AUX)

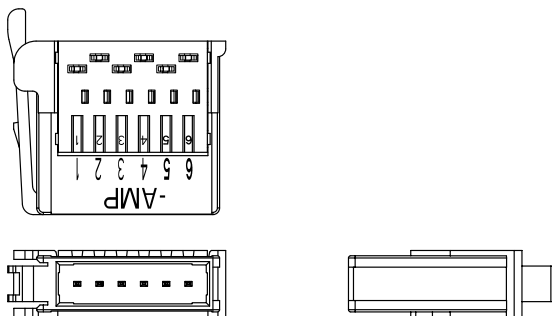
N4E0 - SOCKET - D - 300



Note 1: The type without lead is 3MO-SOCKET-SET.
(Electric wire diameter subject to contact 3 piece attached and: AWG#26 to 28)

- Wiring block TM1 connector (RITS connector 6P)

N4E0-TM-CONNECTOR Tyco Electronics Amp Co., Ltd. RITS connector 6P (part no. 1473562-6)



- Applicable wire (stannum plated recommended wire)

COATING finish diameter	Reference wire cross-sectional area	Wire number/wire diameter
mm	mm ²	wire/mm
$\Phi 1.0$ to 1.15	$\Phi 0.2$ 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 004-884-8058 URL <http://www.amp.com/japan/>
- Dedicated caulking tool 1596114-1

MN3E⁰₀₀ • MN4E⁰₀₀ Series

Reduced wiring block manifold; related products

① Related products

- Feed connector for power supply terminal for T50

N4E0-T50-CONNECTOR

〔 Applicable electric wire AWG28-20/0.08 to 0.5mm² 〕
〔 WAGO connector plug 733-102 〕

- Change fuse for T50

4T9-LM16

〔 Daito communication LM16 〕

- Communication connector for T7D

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

- Communication connector for T7N for T7G

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

- Power supply connector for T7*

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

How to order D-sub-cable with connector



*Pneumatic valves each model
Compatible with D-sub connector T30/T31

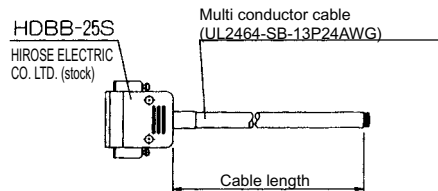
Ⓐ User interface

Ⓑ Cable length

Model	
N4T	
Ⓐ User side connection method	
Symbol	0
	1
	With round terminal for M3.5 screw
Ⓑ Lead wire length	
1	1m
3	3m
5	5m

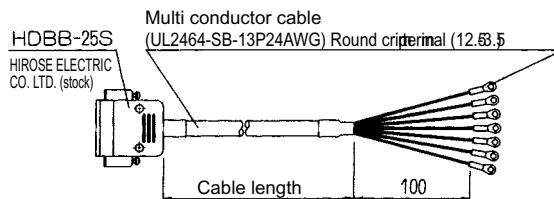
Correspondence of D-sub connector terminal No. and conductor

● N4T-CABLE-D00-Ⓑ



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

● N4T-CABLE-D01-Ⓑ



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

*Up to 24 points available. Cut off any excessive points and use.

MN3E⁰₀₀ • MN4E⁰₀₀ Series

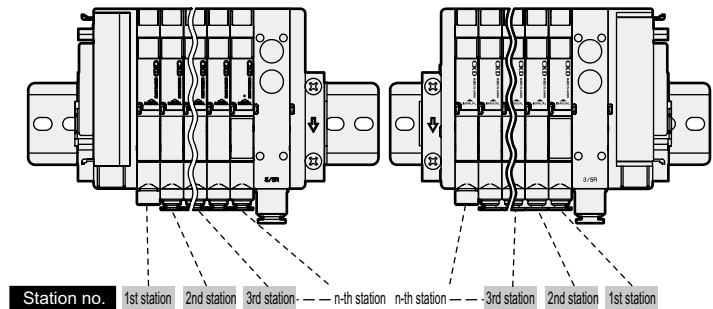
Technical data ① notes when wiring: D sub-connector type

D sub-connector type: 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 the connector designated in RS-232-C Standards that apply to personal computer communication functions.

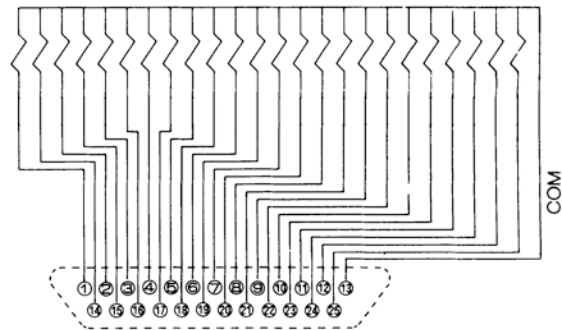
The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. However, it is counted from the other direction for the T30 and T30R.



Cautions 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 due to simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

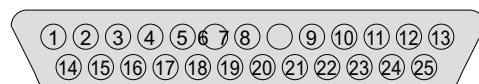
*When using the valve block with individual power supply function (AUX), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.



Connector pin array of wiring method T30 (example)

* The numbers in the valve, 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model. Check the individual specifications.

Connector pin No.



(standard wiring)

• Single solenoid valve only

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

(double wiring)

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

• Double solenoid valve only

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

• Mix (Single and double mixture)

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

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

Flat cable connector type: Wiring method T50

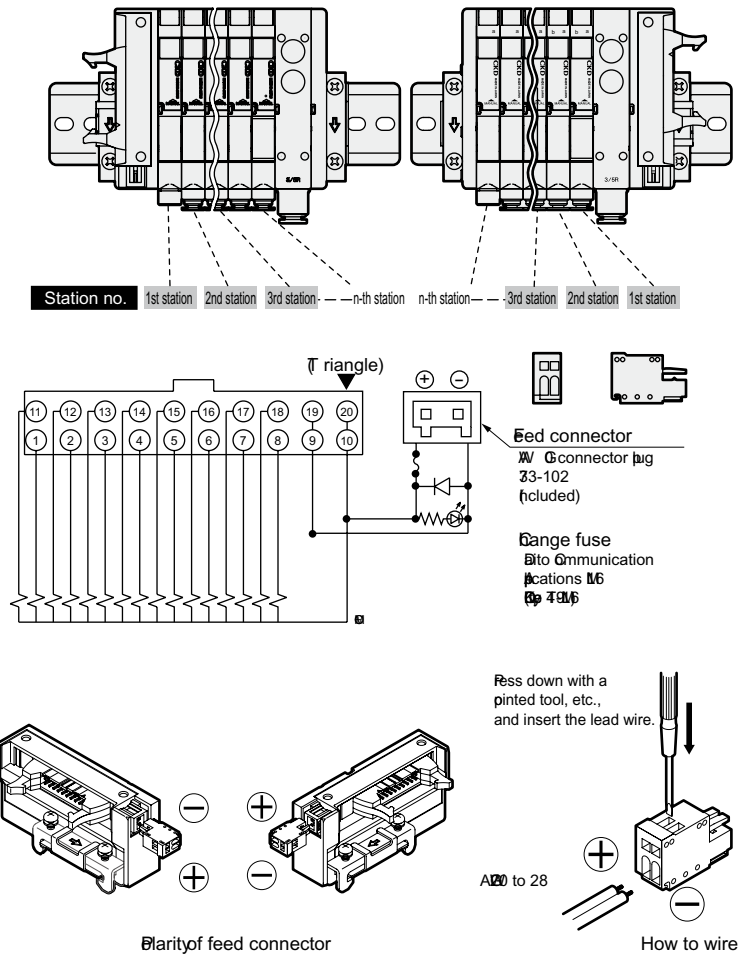
T50 connector

The connector used for T50 wiring method complies with MIL Standards (MIL-C-83503). Wiring is simplified by flat cable pressure welding. Pin no. assignment depends on the connector manufacturer, but function assignments are the same. 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) Power source is 24 VDC and 12 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 due to simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

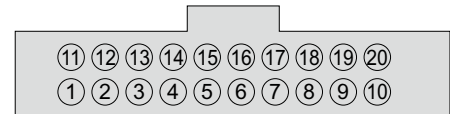
The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. However, it is counted from the other direction for the T50 and T50R.



T50 connector pin array (example)

*1 The numbers in the valve, 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model. Check the individual specifications.

Connector pin No.



(standard wiring)

- Single solenoid valve only

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

(double wiring)

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

- Double solenoid valve only

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

- Mix (Single and double mixture)

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

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

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Technical data ① notes when wiring: Flat cable connector type

Flat cable connector type: Wiring method T51

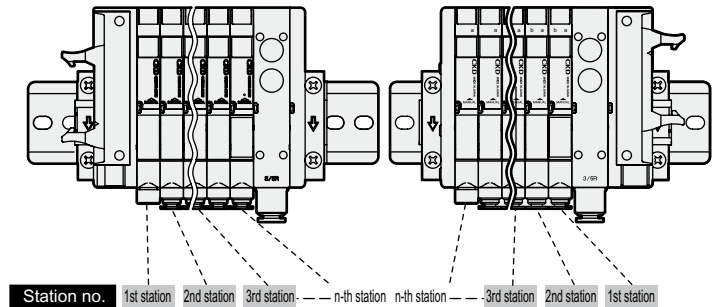
T51 connector

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

Wiring is simplified by flat cable pressure welding.

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.

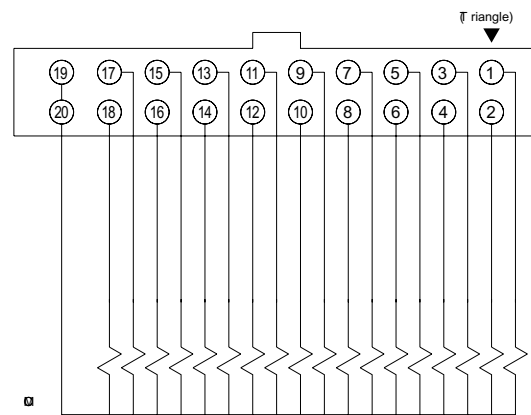
The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. However, it is counted from the other direction for the T51 and T51R.



Cautions for connector type (T51)

- (1) The PLC output unit's signal array and valve signal array must match.
- (2) Power source is 24 VDC and 12 VDC dedicated.
- (3) T51 type is driven by a common 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 due to simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.

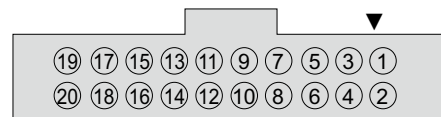
*When using the valve block with individual power supply function (AUX), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.



T51 connector pin array (example)

*1 The numbers in the valve, 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model. Check the specifications for each model.

Connector pin No.



(standard wiring)

• Single solenoid valve only

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

(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)

• Double solenoid valve only

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

• Mix (Single and 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

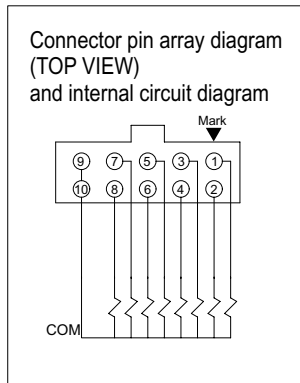
Pin No.	19	17	15	13	11	9	7	5	3	1
Valve No.	COM	9a	8a	7a	6a	5a	4a	3a	2a	1a
Pin No.	20	18	16	14	12	10	8	6	4	2
Valve No.	COM	(Void)	(Void)	7b	(Void)	(Void)	4b	3b	(Void)	(Void)

Flat cable connector type: Wiring method T52

T52 connector

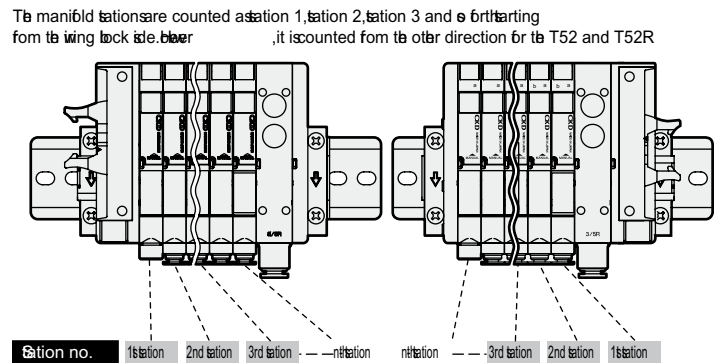
The connector used for T52 wiring method complies with MIL Standards (MIL-C-83503). Wiring is simplified by flat cable pressure welding. Pin no. is assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The ▼ mark is the reference for both the plug and socket.

*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.



Cautions at connector type (T52)

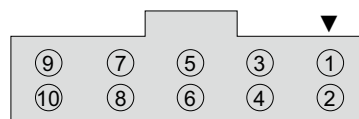
- (1) The PLC output unit's signal array and valve signal array must match.
- (2) Power source is 24 VDC and 12 VDC dedicated.
- (3) T52 type is driven by a common output unit.
- (4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect 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.



T52 connector pin array (example)

*1 The numbers in the valve, 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model. Check the specifications for each model.

Connector pin No.



(standard wiring)

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

(double wiring)

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

- Single solenoid valve only

- Double solenoid valve only

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

- Mix
(Single and 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)

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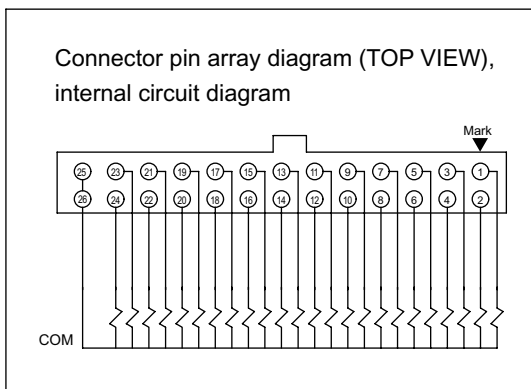
Technical data ① notes when wiring: Flat cable connector type

Flat cable connector type: Wiring method T53

T53 connector

The connector used for T53 wiring method conforms with MIL Standards (MIL-C-83503). Wiring is simplified by flat cable pressure welding. Pin no. is assigned differently based on the PLC maker, but the function assignment is the same. Wire it according to the connector and the triangle (▼) on the table below. The same rule applies to plugs and sockets as well.

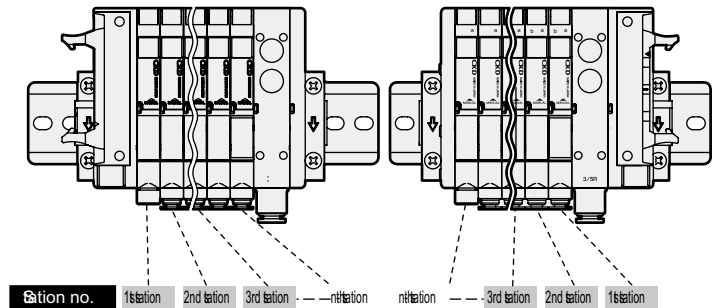
*When using the valve block with individual power supply function (AUX), type with low exoergic or energy-saving circuit, energizing is limited to the plus common.



Cautions at connector type (T53)

- (1) The PLC output unit's signal array and valve signal array must match.
- (2) Power source is 24 VDC and 12 VDC dedicated.
- (3) A T53 type is driven by a common 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.

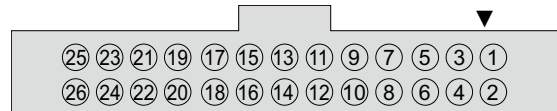
The manifold stations are counted as station 1, station 2, station 3 and so forth starting from the wiring block side. In the case of double wiring, it is counted from the other direction for the T30 and T30R.



Connector pin array of wiring method T53 (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 side solenoid and the b side solenoid. Maximum station number depends on the model. Check the individual specifications.

Connector pin No.



(standard wiring)

• Single solenoid valve only

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

(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)

• Double solenoid valve only

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

• Mix

(Single and 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	5a	4a	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*

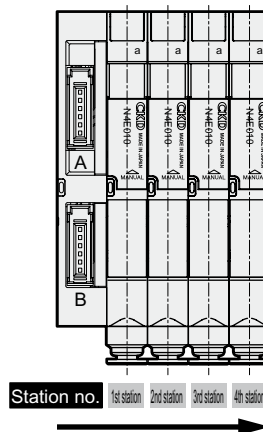
Cautions for wiring method TM

- (1) The PLC output unit's signal array and valve signal array must match.
- (2) Power source is 24 VDC and 12 VDC dedicated.
- (3) TM1B type is driven by a common 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.

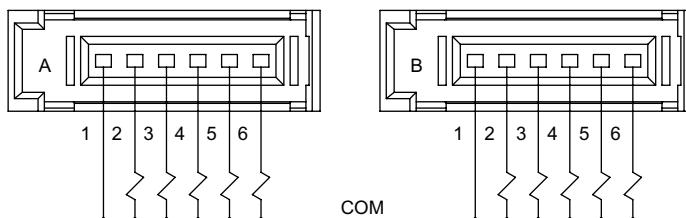


Wiring method TM1A

Connector used for wiring method TM1A.

RITS connector 6p (1473562-6) manufactured by Taiko Electronics Amp

The pin no. 1 to 6 are stamped on the connector. Up to ten 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.

Connector pin array of wiring method TM1A (example)

The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid.

Maximum station number depends on the model but the maximum number of solenoids (coils) is limited to 10.
(standard wiring) (double wiring)

- Single solenoid valve only

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

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

- Double solenoid valve only

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

- Mix (Single and 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

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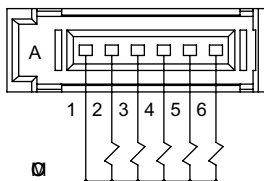
Technical data ❶ notes when wiring: Intermediate wiring block

Wiring method TM1C

A connector is used for wiring method TM1C.

RITS connector 6p (1473562-6) manufactured by Taiko Electronics Amp

The pin no. 1 to 6 are stamped on the connector. Up to ten 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.

Connector pin array of wiring method TM1C (example)

The numbers in the valve No. 1a, 1b, 2a, 2b and so forth indicate the 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid.

Maximum station number depends on the model, but the maximum number of solenoids (coils) is limited to 10.

- Single solenoid valve only

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

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

- Double solenoid valve only

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

- Mix (Single and double mixture)

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

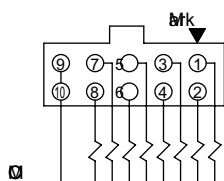
Pin No.	1	2	3	4	5	6
Valve No.	COM	1a	(Void)	2a	2b	3a

Wiring method TM52

A connector is used for wiring method TM52.

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

Pin numbers 1 to 10 are set on the connector starting at the ▼ marked as shown below. Up to eight 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.

Connector pin array of wiring method TM52 (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 number of manifolds depends on the model but the maximum number of solenoids (coils) is limited to 8.

- Single solenoid For valve only

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

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

- Double solenoid For valve only

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

- Mix (Single and 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	

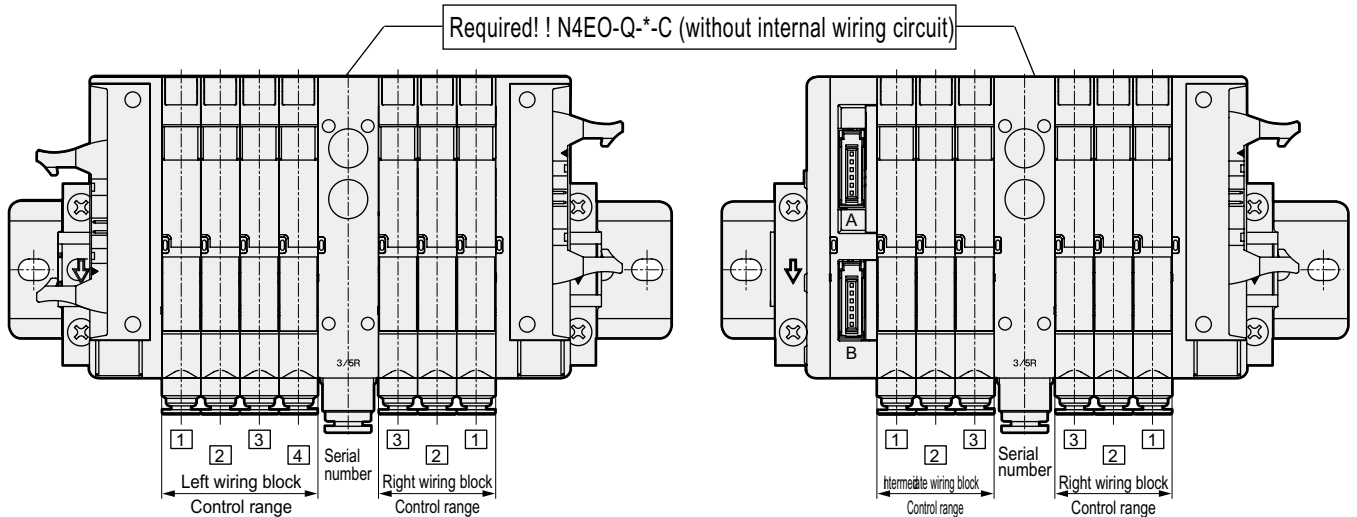
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	(Void)	2a	2b	3a	(Void)	4a	(Void)	COM	

Wiring block mix

How to count stations

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

- Left wiring block (T30, T50, T51, T52, T53)
 - Intermediate wiring block (TM1A, TM1C or TM52)
 - Right wiring block (T30R, T50R, T51R, T52R, T53R)
- } The manifold stations are counted from the wiring block TM to the right with the wiring ports 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.

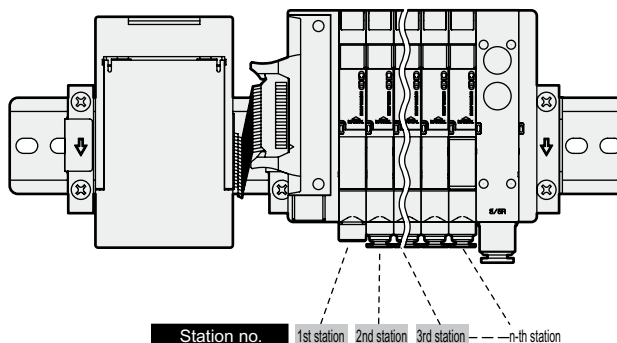
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Technical data ① notes when wiring: Serial transmission type

Serial transmission type: Wiring method T6*

T6*serial transmission type

- The slave unit's output number depends on the manufacturer. The connector pin number and the manifold solenoid corresponds 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.
- Power source is 24 VDC dedicated.
- Use the slave station for each communication system. Contact CKD for the specifications on the usable PLC models, host unit models and communication systems. (refer to 76 page.)
- Pin no. is assigned differently on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangle (▼) are shown below as a reference. The triangle is the reference for both the plug and socket.



Relations between output and connector pin No

- T6A0T6C0T6E0T6J0

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

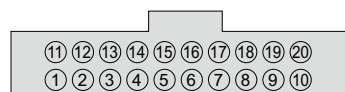
- T6G1

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 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model. Check the individual specifications.

Connector pin No.



(standard wiring)

- Single solenoid For valve only

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

(double wiring)

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

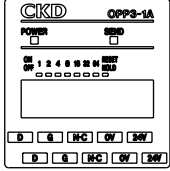
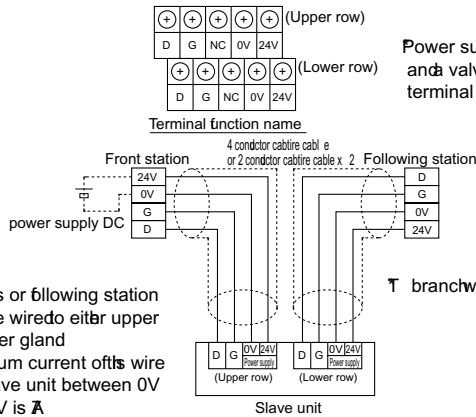
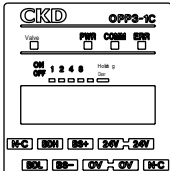
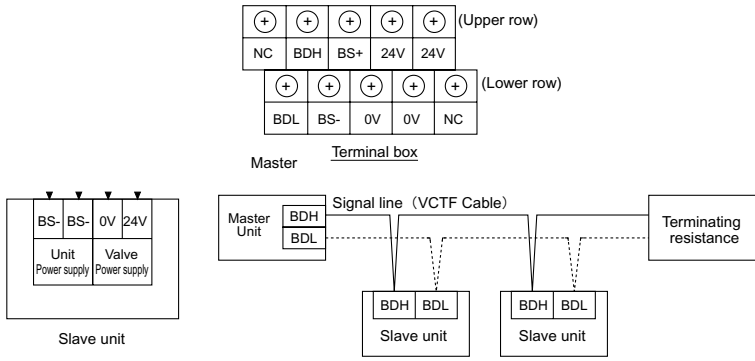
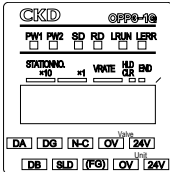
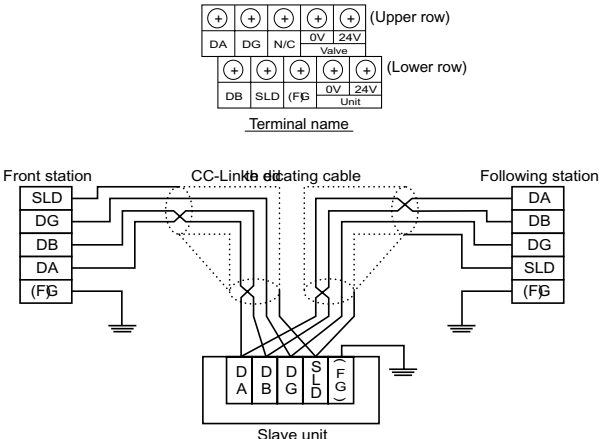
- Double solenoid For valve only

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

- Mix (Single and double mixture)

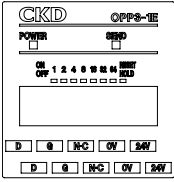
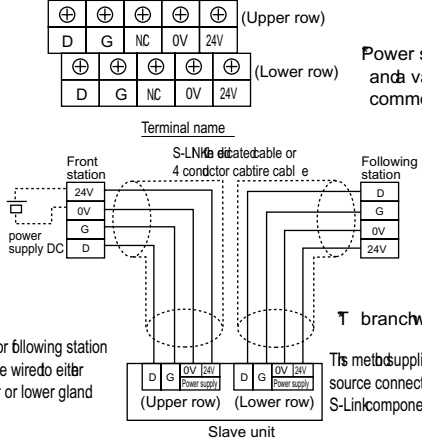
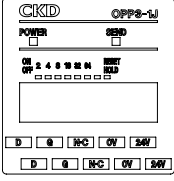
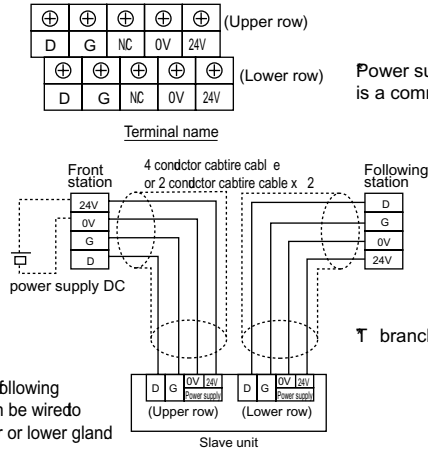
Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	7a	7b	8a	9a	10a	10b	11a	11b	+ COM	
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	3b	4a	4b	5a	6a	+ COM	

Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	5a	(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	

	LED display	Wiring method														
T6A0 T6A1	 <table border="1"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Illuminates when power is ON. Flickers when transmission is normal.</td> </tr> <tr> <td>SEND</td> <td>Illuminates or turns OFF when transmission is not normal.</td> </tr> </tbody> </table>	LED name	Display content	POWER	Illuminates when power is ON. Flickers when transmission is normal.	SEND	Illuminates or turns OFF when transmission is not normal.	 <p>Power supply for an unit and valve is a common terminal</p> <p>Note1. Previous or following station can be wired either upper or lower gland</p> <p>Note2. Maximum current of the wire via slave unit between 0V and 24V is A</p> <p>T branchwiring is not available</p>								
LED name	Display content															
POWER	Illuminates when power is ON. Flickers when transmission is normal.															
SEND	Illuminates or turns OFF when transmission is not normal.															
T6C0 T6C1	 <table border="1"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>Valve (green)</td> <td>Illuminates when valve power is ON.</td> </tr> <tr> <td>PWR (green)</td> <td>Illuminates when unit power is ON.</td> </tr> <tr> <td>COMM (Orange)</td> <td>Illuminates during normal communication. Turns OFF when communication is abnormal or when system is standing by.</td> </tr> <tr> <td>ERR (red)</td> <td>Illuminates when communication error occurs. Turns OFF during normal communication or when system is standing by.</td> </tr> </tbody> </table>	LED name	Display content	Valve (green)	Illuminates when valve power is ON.	PWR (green)	Illuminates when unit power is ON.	COMM (Orange)	Illuminates during normal communication. Turns OFF when communication is abnormal or when system is standing by.	ERR (red)	Illuminates when communication error occurs. Turns OFF during normal communication or when system is standing by.	 <p>Terminal box</p> <p>Master Unit</p> <p>Slave unit</p> <p>Terminating resistance</p>				
LED name	Display content															
Valve (green)	Illuminates when valve power is ON.															
PWR (green)	Illuminates when unit power is ON.															
COMM (Orange)	Illuminates during normal communication. Turns OFF when communication is abnormal or when system is standing by.															
ERR (red)	Illuminates when communication error occurs. Turns OFF during normal communication or when system is standing by.															
T6G1	 <table border="1"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>PW1</td> <td>Illuminates when unit power is ON.</td> </tr> <tr> <td>PW2</td> <td>Illuminates when valve power is ON.</td> </tr> <tr> <td>SD</td> <td>Lighting depending on sending data</td> </tr> <tr> <td>RD</td> <td>Lighting depending on receiving data</td> </tr> <tr> <td>L RUN</td> <td>Turns on when accuracy data is received, and turns off when time has lapsed. (Turns ON when normal data is received.)</td> </tr> <tr> <td>L ERR</td> <td>Illuminates when transmission error occurs. Turns OFF at time over. Illuminates when the station No. setting or transmission speed setting is incorrect. Blinks when the station number setting or transmission speed setting changes midway.</td> </tr> </tbody> </table>	LED name	Display content	PW1	Illuminates when unit power is ON.	PW2	Illuminates when valve power is ON.	SD	Lighting depending on sending data	RD	Lighting depending on receiving data	L RUN	Turns on when accuracy data is received, and turns off when time has lapsed. (Turns ON when normal data is received.)	L ERR	Illuminates when transmission error occurs. Turns OFF at time over. Illuminates when the station No. setting or transmission speed setting is incorrect. Blinks when the station number setting or transmission speed setting changes midway.	 <p>Terminal name</p> <p>Front station</p> <p>Following station</p> <p>Slave unit</p>
LED name	Display content															
PW1	Illuminates when unit power is ON.															
PW2	Illuminates when valve power is ON.															
SD	Lighting depending on sending data															
RD	Lighting depending on receiving data															
L RUN	Turns on when accuracy data is received, and turns off when time has lapsed. (Turns ON when normal data is received.)															
L ERR	Illuminates when transmission error occurs. Turns OFF at time over. Illuminates when the station No. setting or transmission speed setting is incorrect. Blinks when the station number setting or transmission speed setting changes midway.															

MN3E⁰₀₀ • MN4E⁰₀₀ Series

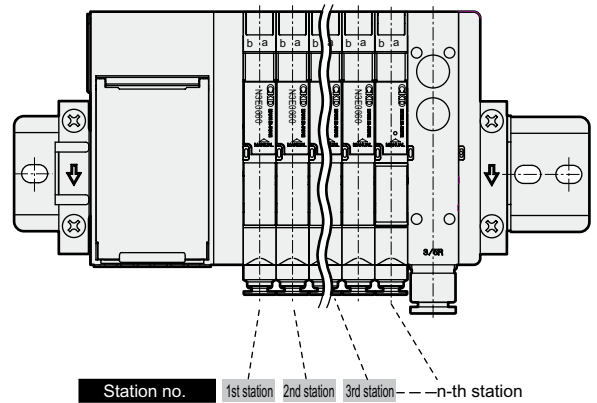
Technical data ① notes when wiring: Serial transmission type

	LED display	Wiring method						
<p>T6E0 T6E1</p>	 <table border="1" data-bbox="252 577 593 694"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Illuminates when power is ON.</td> </tr> <tr> <td>SEND</td> <td>Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.</td> </tr> </tbody> </table>	LED name	Display content	POWER	Illuminates when power is ON.	SEND	Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.	 <p>Power supply for an unit and valve is a common terminal</p> <p>Terminal name</p> <p>Front station</p> <p>power supply DC</p> <p>24V</p> <p>0V</p> <p>G</p> <p>D</p> <p>S-Link cable or 4 conductor cable</p> <p>Following station</p> <p>D</p> <p>G</p> <p>0V</p> <p>24V</p> <p>T branchwiring is also available.</p> <p>This method supplies power from DC power source connected to S-Link controller to all S-Link components and valves at the same time.</p> <p>Note: Previous or following station can be wired either upper or lower gland</p> <p>Slave unit</p> <p>D G 0V 24V Power supply (Upper row)</p> <p>D G 0V 24V Power supply (Lower row)</p>
LED name	Display content							
POWER	Illuminates when power is ON.							
SEND	Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.							
<p>T6J0 T6J1</p>	 <table border="1" data-bbox="252 1182 593 1299"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>POWER</td> <td>Illuminates when power is ON.</td> </tr> <tr> <td>SEND</td> <td>Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.</td> </tr> </tbody> </table>	LED name	Display content	POWER	Illuminates when power is ON.	SEND	Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.	 <p>Power supply for an unit and valve is a common terminal</p> <p>Terminal name</p> <p>Front station</p> <p>power supply DC</p> <p>24V</p> <p>0V</p> <p>G</p> <p>D</p> <p>4 conductor cable or 2 conductor cable x 2</p> <p>Following station</p> <p>D</p> <p>G</p> <p>0V</p> <p>24V</p> <p>T branchwiring is also available.</p> <p>Note: Previous or following station can be wired either upper or lower gland</p> <p>Slave unit</p> <p>D G 0V 24V Power supply (Upper row)</p> <p>D G 0V 24V Power supply (Lower row)</p>
LED name	Display content							
POWER	Illuminates when power is ON.							
SEND	Flickers when transmission is normal. Illuminates or turns OFF when transmission is not normal.							

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 is utilized for an each communication system. Contact CKD for the specifications on the usable PLC models, host unit models and communication systems. (refer to 76 page.)
- Securely tighten each connector (power/communication) after inserting into the product. Close the cover after completing the address settings, etc. (Recommended tightening torque 0.25N•m for power supply, 0.3N•m for communication)



Correspondence of PLC address and serial transmission slave unit I/O No.

(1) Hexadecimal notation

Serial transmission slave unit I/ONo.	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	
S-LINK V																																	

(2) Decimal notation

Serial transmission slave unit I/ONo.	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	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y0	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1	Y1
DeviceNet	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
S-LINK V	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Y**indicates output.

Solenoid output No. for serial transmission slave unit I/ONo.

Type of slave unit	Max. solenoid number	Serial transmission slave unit I/O No																																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
• T7G1 (CC-Link) • T7D1 (DeviceNet) • T7N1 (S-LINK V)	16 points	s1	s2	s3	s4	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16																	
• T7G2 (CC-Link) • T7D2 (DeviceNet) • T7N2 (S-LINK V)	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 1st station and 2nd station. The alphabetic characters a and b indicate the a side solenoid and the b side solenoid. Maximum station number depends on the model.

Check the individual specifications.

<Standard wiring>

• Single solenoid valve only (up to 16 stations)

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

• Double solenoid valve only

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

• Mix (single and double mixture)(Max. 16 stations)

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

<Double wiring>

• Single solenoid valve only

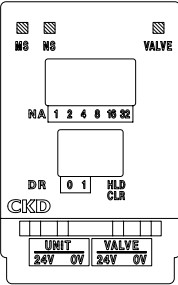
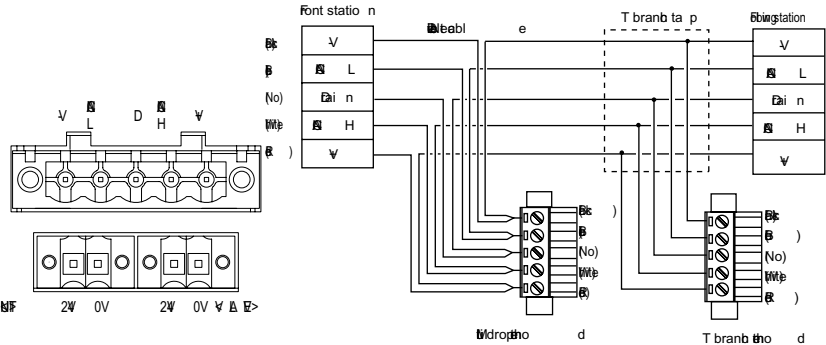
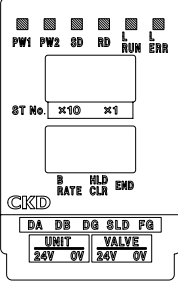
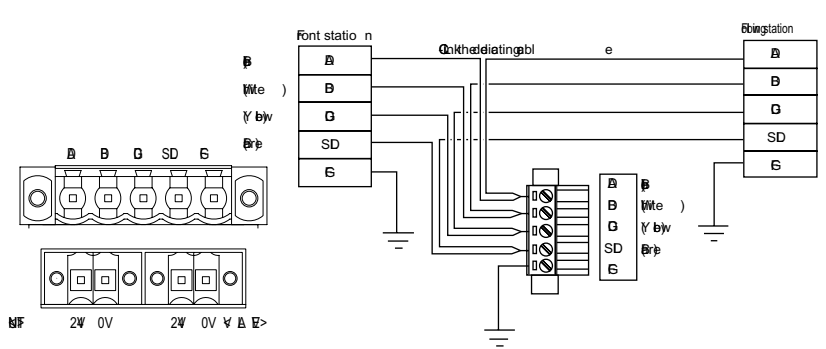
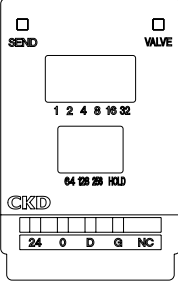
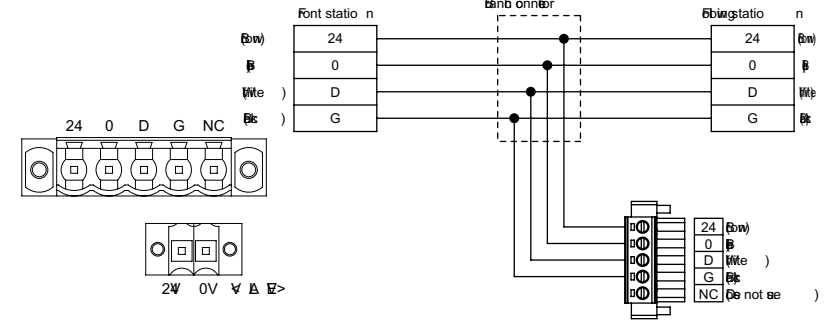
Solenoid output No	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No	1a	(Void)	2a	(Void)	3a	(Void)	4a	(Void)	5a	(Void)	6a	(Void)	7a	(Void)	8a	(Void)	9a	(Void)	10a	(Void)	11a	(Void)	12a	(Void)	13a	(Void)	14a	(Void)	15a	(Void)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

• Mix (single and double mixture)

Solenoid output No	s1	s2	s3	4s	s5	s6	s7	s8	s9	s10	s11	s12	s13	s14	s15	s16	s17	s18	s19	s20	s21	s22	s23	s24	s25	s26	s27	s28	s29	s30	s31	s32
Valve No	1a	(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)

MN3E⁰⁰ • MN4E⁰⁰ Series

Technical data ① notes when wiring: Serial transmission type

	LED display	Wiring method												
T7D1 T7D2	 <table border="1" data-bbox="236 537 574 716"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>MS</td> <td>Slave status is indicated with green and red LEDs. Errors are indicated using combination with "NS LED".</td> </tr> <tr> <td>NS</td> <td>Network status is indicated with green and red LEDs. Errors are indicated using combination with "MS LED".</td> </tr> </tbody> </table>	LED name	Display content	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".	 <ul style="list-style-type: none"> • Power supply is connected to 2-pole connector. • A DeviceNet cable is connected to 5-pole connector. • The power terminal (24V, 0V) is insulated from the communication power terminal (V+, V-) • The wiring section connector is enclosed. 						
LED name	Display content													
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".													
T7G1 T7G2	 <table border="1" data-bbox="236 1048 574 1265"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>PW</td> <td>Illuminates when power is ON.</td> </tr> <tr> <td>SD</td> <td>Illuminates when transmitting data.</td> </tr> <tr> <td>RD</td> <td>Illuminates when receiving data.</td> </tr> <tr> <td>L RUN</td> <td>Illuminates when receiving normal data. Turns OFF when time over occurs.</td> </tr> <tr> <td>L ERR</td> <td>Illuminates when transmission error occurs. Turns OFF when time over occurs. Illuminates when station No. setting or transmission speed setting is incorrect.</td> </tr> </tbody> </table>	LED name	Display content	PW	Illuminates when power is ON.	SD	Illuminates when transmitting data.	RD	Illuminates when receiving data.	L RUN	Illuminates when receiving normal data. Turns OFF when time over occurs.	L ERR	Illuminates when transmission error occurs. Turns OFF when time over occurs. Illuminates when station No. setting or transmission speed setting is incorrect.	 <ul style="list-style-type: none"> • Power is connected to 2-pole connector. • A CC-Link cable is connected to 5-pole connector. • The wiring section connector is enclosed.
LED name	Display content													
PW	Illuminates when power is ON.													
SD	Illuminates when transmitting data.													
RD	Illuminates when receiving data.													
L RUN	Illuminates when receiving normal data. Turns OFF when time over occurs.													
L ERR	Illuminates when transmission error occurs. Turns OFF when time over occurs. Illuminates when station No. setting or transmission speed setting is incorrect.													
T7N1 T7N2	 <table border="1" data-bbox="236 1603 574 1765"> <thead> <tr> <th>LED name</th> <th>Display content</th> </tr> </thead> <tbody> <tr> <td>SEND</td> <td>Synchronization signal display from S-LINK V controller with blinking</td> </tr> <tr> <td>VALVE</td> <td>Valve power supply lighting when energized (Unit power supply can make the only monitor for the ON state.)</td> </tr> </tbody> </table>	LED name	Display content	SEND	Synchronization signal display from S-LINK V controller with blinking	VALVE	Valve power supply lighting when energized (Unit power supply can make the only monitor for the ON state.)	 <ul style="list-style-type: none"> • Power is connected to 2-pole connector. • A S-LINK V cable is connected to 5-pole connector. • The wiring section connector is enclosed. 						
LED name	Display content													
SEND	Synchronization signal display from S-LINK V controller with blinking													
VALVE	Valve power supply lighting when energized (Unit power supply can make the only monitor for the ON state.)													

CAUTION: Wiring connector

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 (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.		MSTB2.5/5-STF-5.08AUM Phoenix contact Corp.	
T7G (CC-Link)		SL3.5/2/90F Widemuller Corp.		BL3.5/2F Widemuller Corp.
T7N (S-LINK V)	SL5.08/5/90FAU Widemuller Corp.		BLZ5.08/5FAU Widemuller Corp.	

PLC table

Model no.	Maker name (recommended body)	Series	Communication system name	Host station model no.
T6A0 T6A1	CKD Corporation KURODA PRECISIONS INDUSTRIES LTD. NKE	Compatible with each PLC, personal computer and SBC Consult with CKD for details.	UNIWIRE SYSTEM	Send unit (UW-SD-120) or UNIWIRE interface connection
T6C0 T6C1	OMRON	SYSMAC α /CS1 Series C200HS/CQM1 (H) Series	CompoBus/S (T6C0/1 is not compatible) (with long distance mode)	Type C200HW-SRM21-V1 Type CQM1-SRM21-V1 Type SRM1-C01/C02-V2
T6E0 T6E1	SUNX	Compatible with PLC, personal computer and SBC	S-LINK	S-LINK controller or S-LINK control board connection
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, PC compatible with CC-Link brand PC		Connect to CC-Link master
T6J0 T6J1	CKD Corporation KURODA PRECISIONS INDUSTRIES LTD. NKE	Compatible with each PLC, personal computer and SBC Consult with CKD for details.	UNIWIRE H system	Send unit (UW-SD-H2 (A)) or UNIWIRE interface connection
T7D1 T7D2	OMRON	SYSMAC CS Series SYSMAC CJ Series SYSMAC CV Series SYSMAC α Series SYSMAC C200HS Series Others	DeviceNet	Type CS1W-DRM21 Type CJ1W-DRM21 Type CVM1-DRM21-V1 Type C200HW-DRM21-V1 Type ITNC-EI * 01-DRM (master integrated PLC) Type 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 DeviceNet brand PC and SBC		Connect to DeviceNet master
T7G1 T7G2	MITSUBISHI	MELSEC A Series MELSEC QnA Series MELSEC Q Series Others	CC-Link	AJ61BT11 AJ61QBT11 A1SJ61BT11 A1SJ61QBT11 QJ61BT11 QJ61BT11N Host for other CC-Link
	CC-Link institution (CLPA)	PLC, PC compatible with CC-Link brand PC		Connect to CC-Link master
T7N1 T7N2	SUNX	Compatible with PLC, PC	S-LINK V	Connect to S-LINK V controller or S-LINK V control boards.

How to disassemble/assemble block manifold

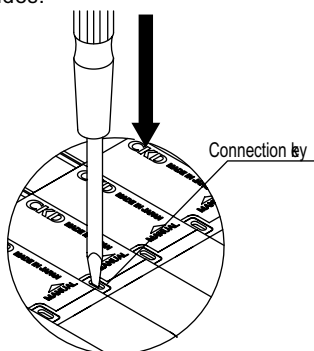
CAUTION: Be sure to turn power OFF and release pressure before increasing or decreasing the manifolds.

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

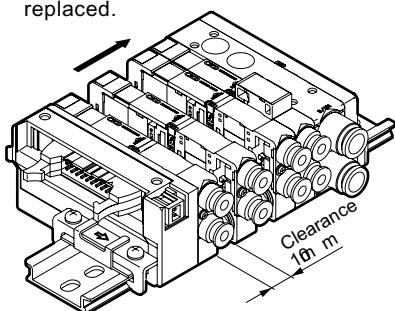
Turn OFF power and stop the air pressure source before starting the disassembly work. When the manifold has been disassembled and assembled, if the connection key is not correctly returned between the blocks or if the wiring and end block screws are tightened insufficiently, air could leak or malfunctions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

Replacement of valve block

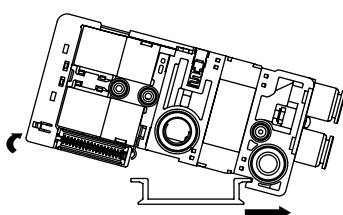
- (1) Loosen the DIN rail set screw on the end block.
- (2) Using a thin tool, press down on the key connecting the valve block to be replaced and the blocks on both sides.



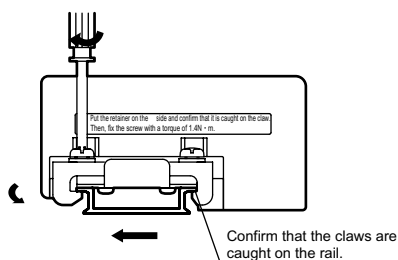
- (3) Slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.



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



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



Expanding manifold

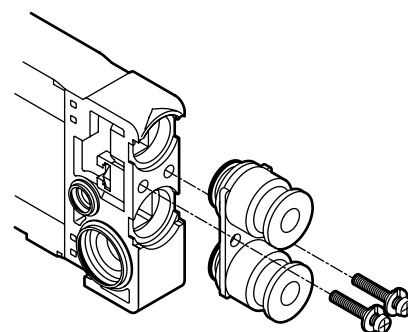
- (1) The blocks are added with the same procedures as replacing the valve blocks.
- (2) If blocks are to be added, designate the DIN rail length in the specifications (page 84 to 86)

Supply and exhaust block installation

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

Replacement of cartridge fitting

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



Tightening torque
 inlet lock **0.2** N·m
 supply/exhaust lock **0.1** N·m

Check after assembly & disassembly

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

How to assemble and disassemble regulator and regulator block

⚠ Cautions: Be sure to turn power off and release the pressure before performing the following work.

The procedures for changing regulator or regulator block specifications, adding regulators, and disassembling and assembling are explained below. Consult with CKD for details.

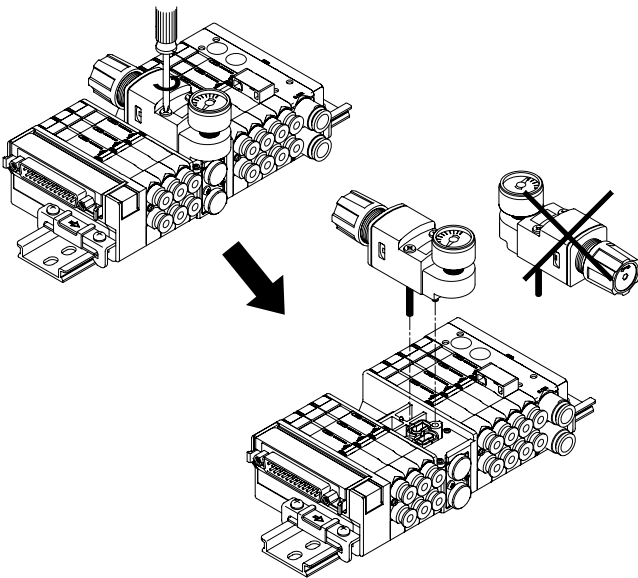
Confirm that the connection key between blocks and the stopper plate for the regulator block are securely assembled before starting use.

Regulator replacement

Loosen the regulator mounting screw, and lift the regulator upward and off.

After replacing the regulator, confirm that the gasket is not deviated from the block grooves, and assemble to the original state.

The appropriate tightening torque for the regulator mounting screw is 0.5 to 0.8 N•m.

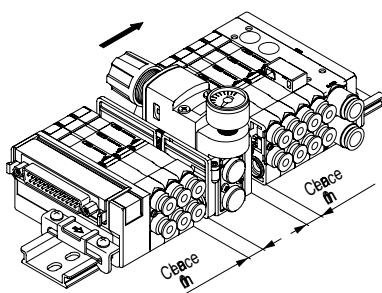
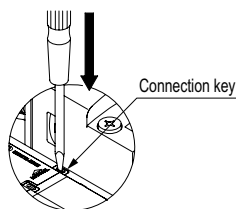


Regulator block replacement

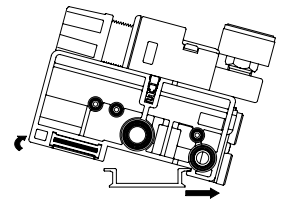
■ Loosen the DIN rail set screw on the end block.

■ Using a thin tool, press down on the key connecting the regulator block to be replaced and the blocks on both sides.

■ While holding down the connection key, slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.



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



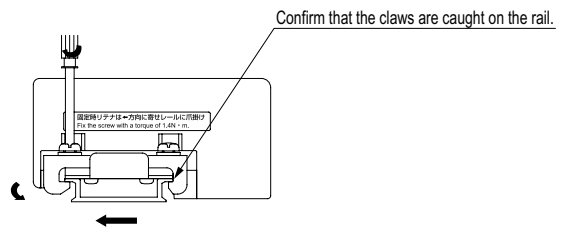
■ Replace the block, and mount the blocks onto the DIN rail in the opposite order that they were removed.

■ Slide all of the blocks to the wiring block side so that there are no spaces between the blocks.

■ Confirm that the connection key has returned to the groove on the block.

■ Slide the end block retainer in the port direction, and catch the claw onto the DIN rail. Confirm that the end block's retainer claw is caught on the DIN rail, and then tighten the set screw.

■ Recommended tightening torque is 1.4 to 1.5N•m.



Fitting replacement

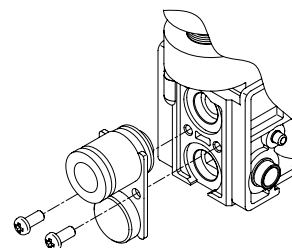
■ Remove the set screw.

■ Pull the stopper plate and joint off together.

■ Align the stopper plate with the groove on the replacement fitting, and temporarily assemble.

■ Assemble the stopper plate and fitting together, and tighten the mounting screw. Recommended tightening torque is 0.4 to 0.45N•m.

■ After replacing, pull on the fitting and confirm that it is installed correctly.



MN3E⁰₀₀ • MN4E⁰₀₀ Series

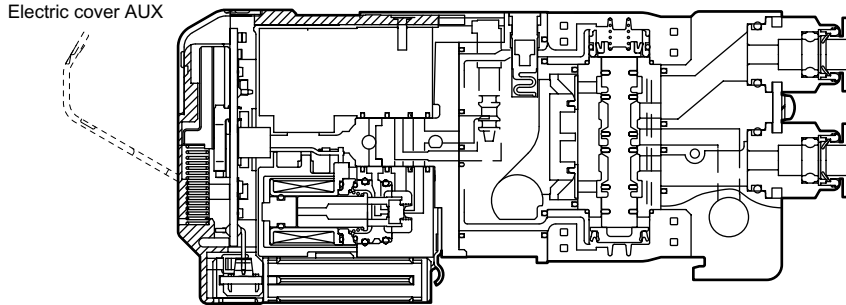
Technical data ③ Built-in individual power supply function (AUX) type

Built-in individual power supply function (AUX) type

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

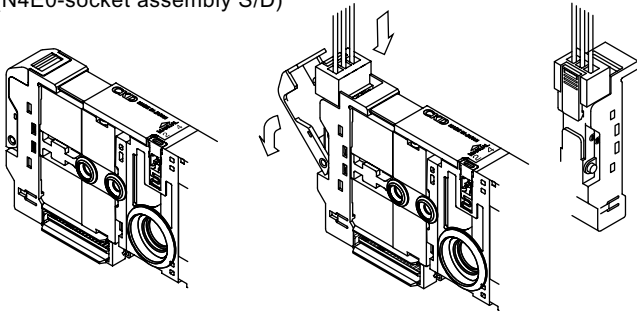
*MN3E0, MN4E0 only

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

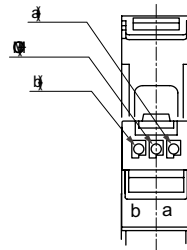


(2) Individual power supply input method

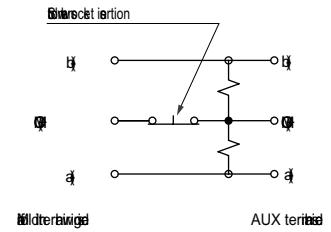
Open the wiring cover, and connect power input socket (N4E0-socket assembly S/D)



(3) AUX terminal structure and internal circuit diagram



Valve block socket interior



AUX terminal

AUX terminal circuit

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

⚠ Safety precautions

Note 1: The polarity of the reduced wiring side and individual power supply side is limited to a plus common.

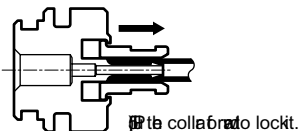
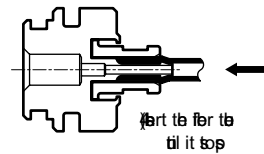
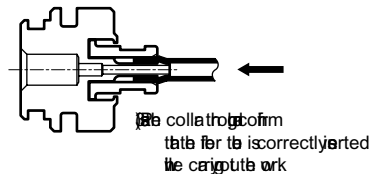
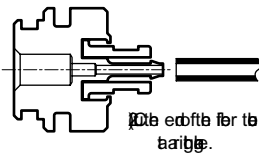
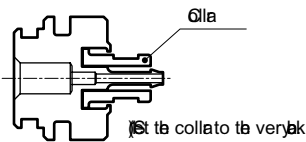
It will not operate properly.

Note 2: Use a separate power for the reduced wiring side and the individual power input side.

If the same power is used, the reduced wiring side's wiring will not be cut off, resulting in incorrect operations.

How to use fitting for fiber tube

*MN3E0, MN4E0 only



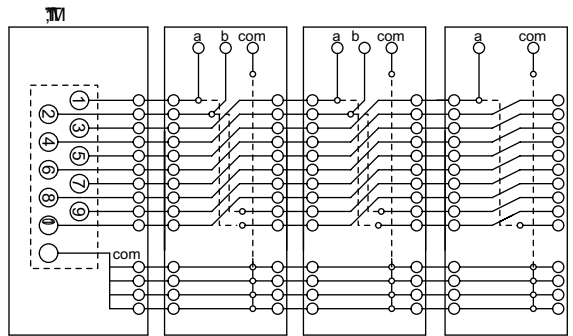
Wiring structure between wiring block and valve block

A part called a dedicated wiring connector is incorporated in the valve block and supply/exhaust block, etc. This enables the wiring to be completed simultaneously with the disassembly and assembly of the block manifold. No special wiring is required during disassembly or assembly. The wiring structure pattern diagram is shown below.

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

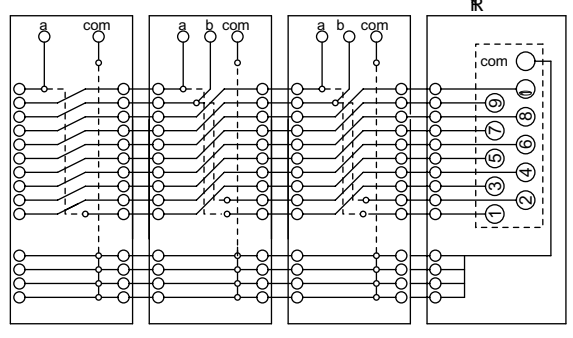
Only T* (left wiring block) or TM* (intermediate wiring block)

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



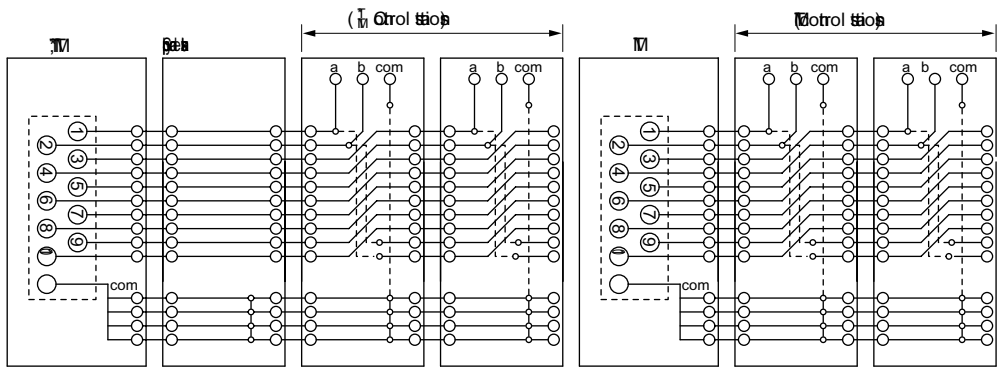
Only T*R (right wiring block)

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



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

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

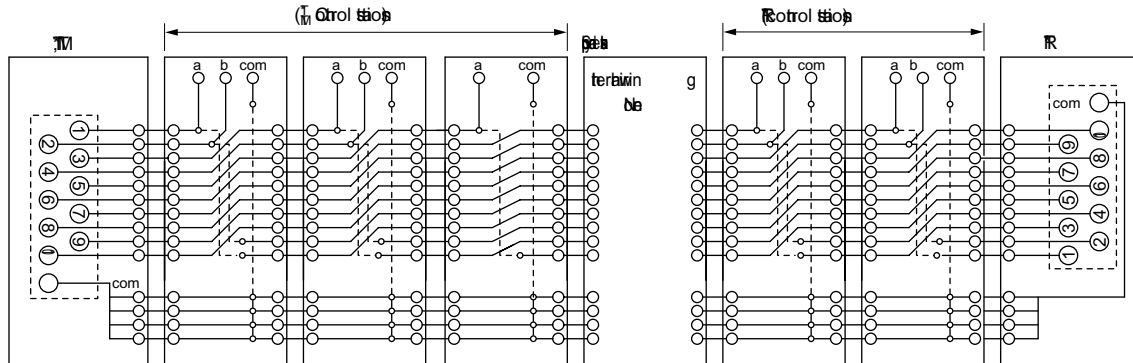


MN3E⁰₀₀ • MN4E⁰₀₀ Series

Technical data ④ wiring structure

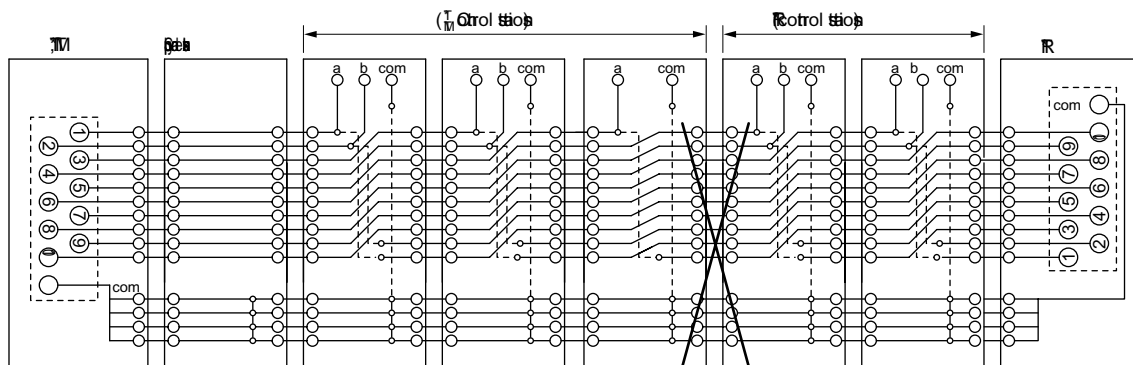
{T*(left wiring block) or TM*(intermediate wiring block)}+TM* (intermediate wiring block) for TX (mix)

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



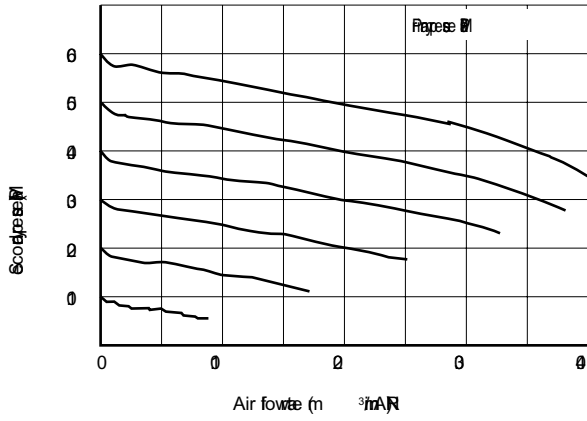
Example of mislocated Left/right wires interfere at the center

The left/right wiring block circuits could be connected via the manifold and result in unexpected valve operation.

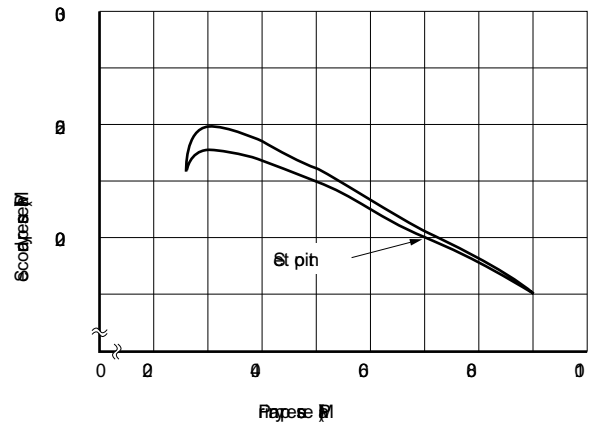


Regulator block features

Flow characteristics



Pressure characteristics



How to fill out MN4E0 series manifold specification sheet

Example of manifold model no. (Select mix manifold when selecting dummy block. A dummy block count as a station)

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 and Connector pin Array Option Station number Voltage

- When completing this form, select the type from the "Block configurations" (pages 51 to 61)
- Complete from the left end, with the piping port facing forward, regardless of the wiring block method. (Refer to page 3, 7, 27, 31 for manifold model no.)

Item	Model no.	Layout																																				Quantity		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
Wiring block	N4E0-T 50R																																							1
Valve block	N4E0-T			○	○																																		2	
Valve block	N 3 E0 1 0 - C6			○																																			2	
Valve block	N 4 E0 1 0 - C4					○																																1		
Valve block	N 4 E0 2 0 - C4							○			○																												2	
Valve block	N 4 E0 3 0 - C4											○	○	○																									3	
Block	N4E0-MPS																																							
Block	N4E0-MPD							○	○																														2	
Block	N4E0-Q-Z-8-S											○																											1	
Block	N4E0-Q-8																○																						1	
Block	N4E0-R-A-FL-C8																																							
Block	N4E0-R																																							
Block	N4E0-R																																							
Block	N4E0-E L																																						1	
Block	N4E0-E																																							
Block	L2=	Blanking plug (push-in fitting)												Silencer						Push-in fitting tube remover Not required (check)																				
		φ 1.8			φ 3			φ 4			φ 6			φ 8			φ 6			φ 8																				
		1.8 for tube barbed threaded fitting (10 piece/1 set)																								Cable with D-sub connector														
		N4E0-JOINT-PTN2-M3						N4E0-JOINT-PTN2-M5						N4E0-JOINT-PTN2-6						N4T-CABLE-D0																				
		Socket assembly for electric supply (individual wiring and AUX)												Wiring block TM1 connector																										
		N4E0-SOCKET						3M0-SOCKET-SET						N4E0-TM-CONNECTOR																										

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 parts connection (pages 51 to 61) and the layout instructions.)
- Write the total block quantity designated for the required quantity at the right end.
- Indicate the quantity of 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.

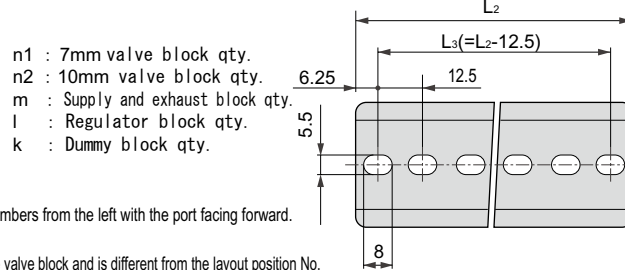
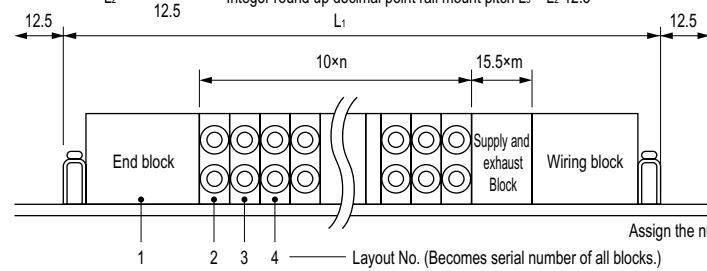
$$\text{Manifold length } L_1 = (7 \times \text{Valve Block}) + (10 \times \text{Valve Block}) + (7 \times \text{Dummy Block})$$

$$\text{Mounting rail length } L_2 = L_1 + 25$$

Integer round up decimal point rail mount pitch $L_3 = L_2 - 12.5$

Wiring block depth 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*	Rleft wiring block+right wiring block	53.6
T6*	Serial transmission slave unit	115.6
T7*	Serial transmission slave unit (close contact type)	73.1



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

MN4E00 series, manifold specifications

Contact	Quantity set	Request date month day	Issue / /
Slip No.	Order No.		Your company name

Example of manifold model no. (Select mix manifold when selecting dummy block. A dummy block count as a station)

7/10mm mix manifold
MN **EX0** - - ... - - (Refer to page 49 for manifold model no.)

7mm manifold
MN **E00** **0** - (Refer to page 3 and 7 for manifold model no.)

10mm manifold
MN **E0** **0** - (Refer to page 27 and 31 for manifold model no.)

Model no. Solenoid position Port size Pressure adjustment Manual override Wiring method Terminal and connector pin array Option Station no Voltage

- When completing this form, select the type from the "Block configurations" (pages 51 to 61)
- Complete from the left end, with the piping port facing forward, regardless of the wiring block method.

Part name	Model no.	Layout																																				Quantity				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36					
Wiring block	N4E0-T <input type="checkbox"/>																																									
	N4E0-T <input type="checkbox"/>																																									
Individual wiring mix position designation (10mm only)*																																										
Valve block 7mm pitch	N <input type="checkbox"/> E00 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
	N <input type="checkbox"/> E00 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
	N <input type="checkbox"/> E00 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
	N <input type="checkbox"/> E00 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
Valve block 10mm pitch	N <input type="checkbox"/> E0 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
	N <input type="checkbox"/> E0 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
	N <input type="checkbox"/> E0 <input type="checkbox"/> 0 - <input type="checkbox"/>																																									
Dummy block	N4E0-MPS																																									
	N4E0-MPD																																									
Supply and exhaust block	N4E0-Q <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
	N4E0-Q <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
	N4E0-Q <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
Regulator block	N4E0-R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
	N4E0-R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
	N4E0-R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																									
End block	N4E0-E <input type="checkbox"/>																																									
	N4E0-E <input type="checkbox"/>																																									
Mounting rail	L2= <input type="checkbox"/>	Blanking plug (push-in fitting)												Silencer				Push-in fitting tube remover Not required (check)																								
		1.8	3	4	6	8	6	8																																		
		1.8 for tube barbed threaded fitting (10 piece/1 set)																D-sub-cable with connector																								
		N4E0-JOINT-PTN2-M3				N4E0-JOINT-PTN2-M5				N4E0-JOINT-PTN2-6				N4T-CABLE-D0: <input type="checkbox"/>																												
		Socket assembly for electric supply (individual wiring and AUX)																Wiring block TM1 connector																								
N4E0-SOCKET- <input type="checkbox"/>																3M0-SOCKET-SET				N4E0-TM-CONNECTOR																						

total of 12.5
 selected for the wiring block

wiring block

Reverse circuit
 The circuit is for the reverse

