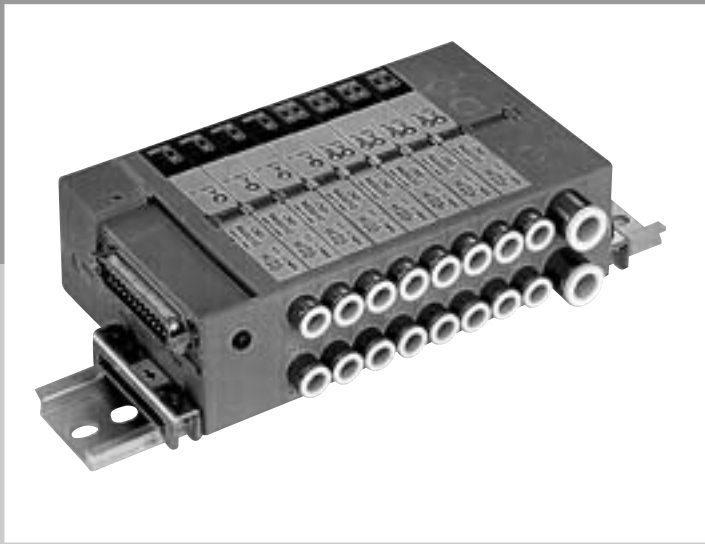
MN3S0/MN4S0

3, 4 port pilot operated valve — Pneumatic valve

PLC compatible reduced wiring block manifold

Overview

The MN4S0 Series is a PLC compatible reduced wiring 3, 4 port solenoid valve which incorporates the single solenoid method having the lead wires, etc., centralized on one side.



Features

Greatly reduced installation space

The valve block with two 3 port valves integrated type has been newly added to the series, allowing highly integrated space saving 3 port valve block manifolds to be structured.

Easy wiring

The connector sections of the D sub-connector and flat cable connector rotate 90°, allowing wiring to be completed freely in the radial and axial directions.

Simple design

Maintenance is simplified with the manual override and light indicators situated on the top surface. In addition, a single solenoid method, built-in exhaust muffler and flat top design have been adopted for a neat flush design.

Energy saving

Low wattage design (25 mA at 24 VDC)

Selective reduced wiring method

The serial transmission method, connector method and common terminal box method are available.

CONTENTS

⚠ Refer to the safety precautions on Introduction and page 587 before starting use.

Newly introducing the two 3 port valves integrated type to complete the series.

The valve block with two 3 port valves integrated type has been newly added to the popular PC compatible reduced wiring 3, 4 port valve block manifold, expanding the variety of available series and variations.

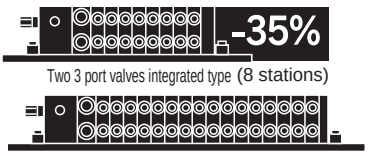
MN3S0 Series

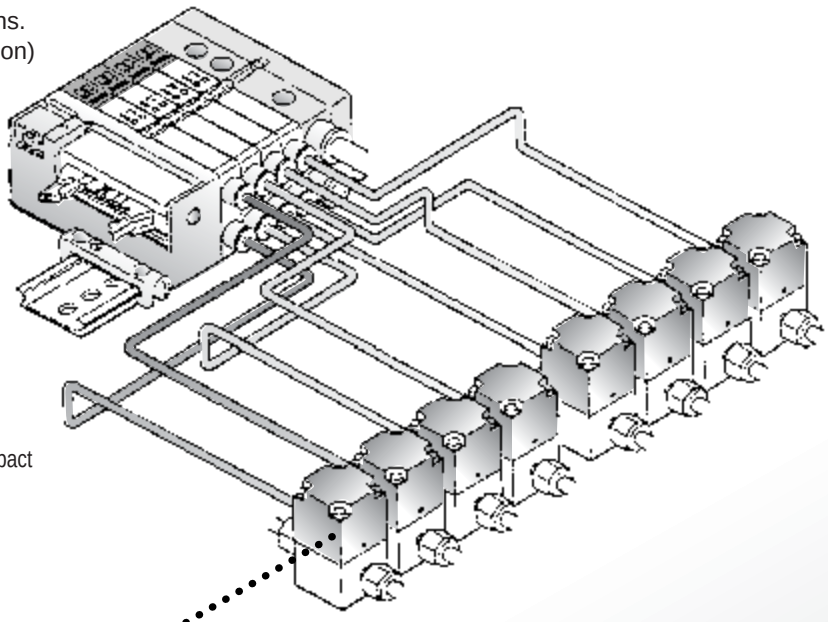
Control two air operated valves with one station with the higher integrated and space saving series.

A valve block compactly integrating two 3 port valves has been newly added to the series.
A high integration, space saving 3 port valve block manifold which can control two air operated valves with one station, or 16 with eight stations, can be configured.

Remarkable footprint reduction

16 stations wide is reduced to 8 stations.
35 % space reduction. (CKD comparison)





Highly reliable exhaust pressure shut out

Each of the 3 port valve is equipped with a compact and highly reliable lead valve, thus preventing miss-operation caused by exhaust pressure.

Six types

The N.C./N.O. can be combined freely.

Mixed 3, 4 port valve usage

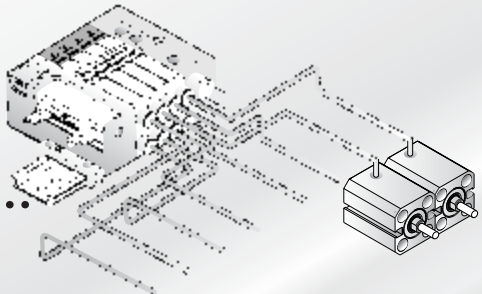
The 3 port and 4 port valves can be mixed within the same manifold.

Air operated valve

Air operated valve AMD series for chemicals
A variety of air operated valves suitable for semiconductor manufacturing processes, such as the air operated valve AGD series for process gas, is available. Contact with CKD.
(Product illustration example)

Easy piping work

The N.C./N.O. class is indicated on the piping port, thus facilitating piping work.



Control up to ø20 cylinders

Max. ø20 single-acting cylinder can be controlled.

MN3/4S0 Series

Ample variations

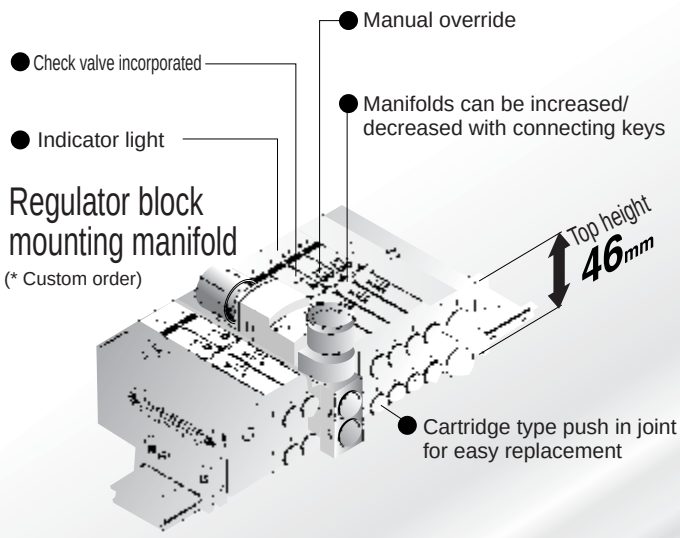
- Compatible with various reduced wiring methods
- Selectable joint types
- Locking or non-locking equipped
- Check valve integrated

Compact and smart

Compact manifold saves space. The flat top face and integrated exhaust muffler provide a smart appearance.

Mixed 3, 4 port valve usage

The 3 port and 4 port valves can be mixed within the same manifold.

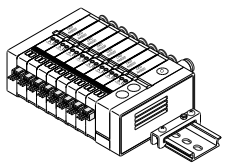


● Wiring method

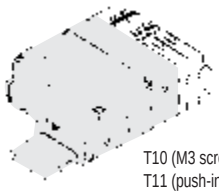
● D sub-connector

● Flat cable connector

● Individual wiring connector

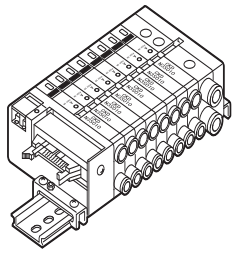
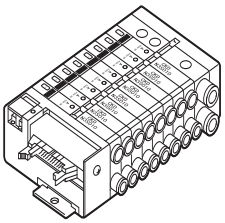
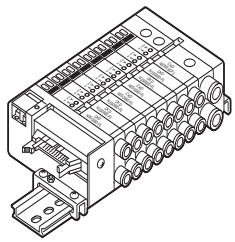


● Common gland



● Serial transmission

T10 (M3 screw): 14 points
T11 (push-in fitting): 24 points

	Appearance		Model no.		Position No. of solenoid JIS symbol	Valve performance: Flow characteristics C ($dm^3/(s \cdot bar)$) Note 1	Valve performance: Applicable cylinder bore size	Voltage (V)	
3, 4 port valve	**MN3S0/MN4S0** 	3 port	MN3S0	DIN rail Installation	3 port valve ● 2-position normally closed ● 2-position normally open 4 port valve ● 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	0.57 to 0.80	ø 20 to ø 40	24 DC 12 DC	
		4 port	MN4S0						
	MT3S0/MT4S0 	3 port	MT3S0	Direct mount (limited to 8 stations)					
		4 port	MT4S0						
Two 3 port valves integrated type	**MN3S0**  Two 3 port valves integrated in a valve block.	3 port	MN3S0	DIN rail Installation	Two 3 port valves integrated type ● N.C./N.C. type (N3S0660) B side: N.C. A side: N.C. ● N.C./N.O. type (N3S0670) B side: N.O. A side: N.C. ● N.O./N.C. type (N3S0760) B side: N.C. A side: N.O. ● N.O./N.O. type (N3S0770) B side: N.O. A side: N.O.	0.50	ø20 or less	24 DC 12 DC	
			MT3S0	Direct mount (limited to 8 stations)					

Note 1: Effective sectional area S and sonic conductance C are converted as S ≒ 5.0 x C.

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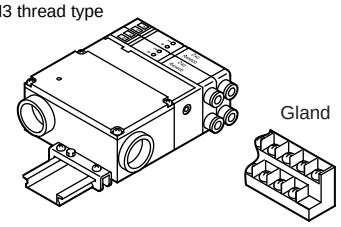
Solenoid position													A/B port size			Wiring method					Page
3, 4 port valve							Two 3 port valves integrated type						Push-in joint		Female thread						
2-position single solenoid	2-position double solenoid	3-position all ports closed	3-position A/B/R connection	3-position P/A/B connection	2-position single solenoid NC	2-position single solenoid NO	A side NC B side NC	A side NC B side NO	A side NO B side NC	A side NO B side NO	Mix	ø4	ø6	M5	Common gland	D sub-connector	Flat cable	Serial transmission	Individual wiring connector	
					●	●					●	●	●	●	●	●	●	●	●	590
●	●	●	●	●							●	●	●	●	●	●	●	●	●	590
					●	●					●	●	●	●	●	●	●		●	590
●	●	●	●	●							●	●	●	●	●	●	●		●	590
							●	●	●	●	●	●	●	●	●	●	●	●	●	590
							●	●	●	●	●	●	●	●	●	●	●		●	590

Refer to the following page for details of wiring method and other options.

Wiring method

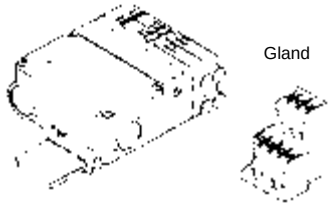
T10 / T10R — Common gland type (left side installation) / Common gland type (right side installation)

- Preparing common wiring
- M3 thread type



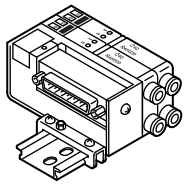
T11 / T11R — Common gland type (left side installation) / Common gland type (right side installation)

- Preparing common wiring
- Push tightening type



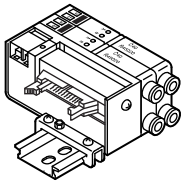
T30 / T30R — D sub-connector type (left side) / D sub-connector type (right side)

- Widely used in FA, OA components
- Specified connector of RS232C standards
- 25P, 24 VDC and 12 VDC dedicated



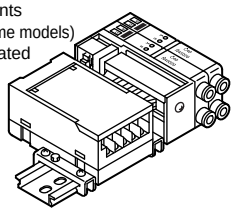
T50 / T50R — Flat cable connector type (left side installation) / Flat cable connector type (right side installation)

- Widely used in FA, OA components
- MIL standards (MIL-C-83503) conformed
- 20P, 24 VDC and 12 VDC dedicated



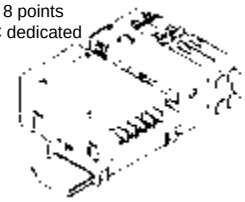
T6G1 / T6C1/0 / T6E1/0 — Serial transmission type

- Compatible with each PLC maker (OMRON, MITSUBISHI, SUNX)
- Output: 16 points (8 points for some models)
- 24 VDC dedicated



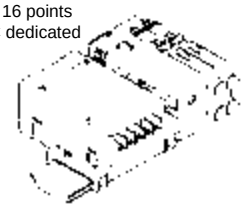
T6A0 / T6J0 — Serial transmission type and UNIWIRE

- UNIWIRE SYSTEM (T6A0), UNIWIRE H SYSTEM (T6J0)
- Output: 8 points
- 24 VDC dedicated



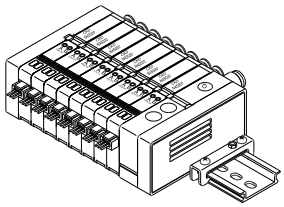
T6A1 / T6J1 — Serial transmission type and UNIWIRE

- UNIWIRE SYSTEM (T6A1), UNIWIRE H SYSTEM (T6J1)
- Output: 16 points
- 24 VDC dedicated

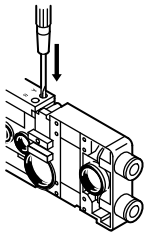


C — With individual wiring connector and lead wire

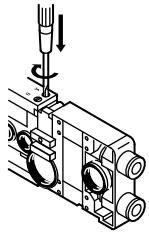
- Lead wire length
  C : 300 mm
  C0 : 500 mm
  C1 : 1000 mm
  C2 : 2000 mm



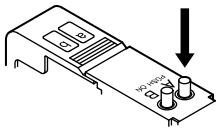
Blank — Non-locking type



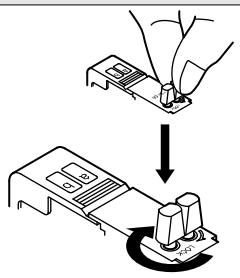
M1 — Locking (tool required)



M2 — Non-locking type Convex type

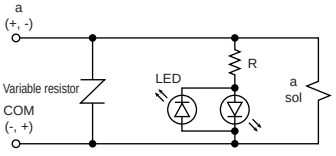
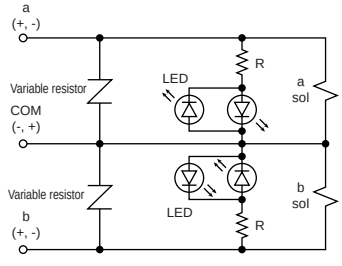


M3 — Locking convex type



Surge suppressor / indicator light internal circuit diagram

* Variable resistor is used for a surge suppressor.

Single solenoid	Double solenoid
	

Safety precautions

Always read this section before starting use.
Refer to Intro 63 for valve general precautions.

PLC compatible reducer wiring 3, 4 port valve block manifold MN3S0/MN4S0 Series

Design & Selection

⚠ CAUTION

■Working air quality
- ●Use clean compressed air.
  (5 μ or less by using dryer, oil mist separator or air filter, etc.)
  This is to prevent accidents from occurring due to drainage, oil oxide, tar, foreign matter or rust in compressed air.
- ●Flush pipes before piping.
- ●This block manifold is used with oilless specifications as a standard.
  If lubrication is required, use Turbine Oil Class 1 ISOVG32 or equivalent. The solenoid valve could fail if a different type of oil is used, if lubrication is excessive, or if lubricant is not replenished after lubricating once.
- ●Use of ultra dry air could reduce life due to scattering of lubricant.
- ●The response time given in product specifications is the value when using with oilless specifications, at 0.5 MPa in energized state. An operation delay could occur if lubrication is excessive.

■Avoid using this product in the following environment.
- ●Where the ambient temperature exceeds 5 to 50 °C.
- ●Where product could be subject to water drops or cutting oil.
- ●Where there are high levels of dust.
- ●Environment containing salt air or corrosive gas.
  If the product must be used in this type of environment, provide protection with cover, etc.
  If used where subject to direct sunlight, the product could be discolored slightly by ultraviolet rays. However, this will not affect product performance.

Installation & Adjustment

1. Installation

⚠ CAUTION

■Avoid using this product where vibration is 50 m/s^2 and impact is 300 m/s^2 or more.
Failure to observe this caused lead to malfunctions.

■Do not restrict air supply piping.
Operation could be delayed by a temporary drop in the air supply pressure when manifolds operate simultaneously.

■Do not use the cylinder port released to air.
Operation faults could occur due to a drop in air supply pressure, so use the external pilot operated type.
(The lower limit pressure of the internal pilot operated type is 0.2 MPa.)

■Do not restrict the exhaust path.
The cylinder's response could be delayed. Adjust the speed between the cylinder and valve.

■Do not seal the pilot exhaust path.
Operation faults could occur if the pilot exhaust path is sealed, so provide an exhaust path.

■When braking the cylinder with 3-position all ports closed (N4S030), check that there are no leaks from piping connection and no internal leaks in the cylinder.
(Use a cylinder with brake when long-term holding and a stopping accuracy are required.))

■Avoid installing this product in a place with poor ventilation and heat radiation.
The surface temperature of the manifold will rise when continuously energized, but this is not problem. Check that the ambient temperature does not exceed 50 °C.

■When using the two 3 port valves integrated type, check that the main pressure in the manifold does not drop below the minimum working pressure due to the various pressure control method, and avoid using with the valve block released to air.

2. Applicable piping tube

⚠ CAUTION

■Observe the following precautions when using nylon tubes or urethane tubes for piping material.
- ●Use a flame resistance tube or steel pipe when using in an environment where spatter could scatter.
- ●Use a hydraulic hose for piping to be used for both hydraulics and pneumatics.
  When using the standard push-in joint on the spiral tube, fix the base of the tube with a hose band. The tube could rotate and reduce holding performance.
  Use a tightened joint when using in a high ambient temperature. The push-in joint can not be used.

⚠ CAUTION

■ Connecting piping

● Applicable tube

When using a solenoid valve with push-in joint, use the CKD designated tube.

Soft nylon (F-1500 Series)
Urethane (U-9500 Series)

When using a commercially available tube, check dimensions accuracy, thickness, and hardness. Use a urethane tube with a hardness of 93° over (rubber hardness meter). If a tube that does not satisfy the diameter accuracy or hardness is used, the chucking force may drop, the tube may dislocate, or may be difficult to insert.

Tube dimension

Outer diameter mm	Inner diameter mm	
	Nylon	Urethane
ø4	ø2.5	ø2
ø6	ø4	ø4
ø8	ø5.7	ø5
ø10	ø7.2	ø6.5
ø12	ø8.9	ø8

Tolerance of outer diameter

Soft/hard nylon	±0.1 mm
Urethane ø4, ø6	+0.1 mm -0.15 mm
ø8, ø10, ø12,	+0.1 mm -0.2 mm

● Tube bending radius

The tube's bending radius must be larger than the min. bending radius. (Failure to observe this can lead to dislocation or leaks.)

Bore size	Minimum bending radius mm	
	Nylon	Urethane
ø4	10	10
ø6	20	20
ø8	30	30
ø10	40	40
ø12	55	50

● Cutting the tube

Always use a tube cutter (AZ1200), and cut at a right angle in the axial direction. Air could leak if a tube cut at a slant is inserted.

● State of tube connection

Provide a straight section as long as the O.D. of the tube being used from the end of the joint, and avoid piping with a sudden bending at the joint insertion port. Check that the tube's tensile strength in the lateral direction does not exceed 40 N.

● Applicable blanking plug

When using the solenoid valve with push-in joint, use the CKD designated blanking plug.

Blanking plug GZP*-B Series

3. Power supply circuit and connection

⚠ CAUTION

■ Check that leakage current from the programmable controller is less than 1 mA at the circuit.

The valve could malfunction if the leakage current is high.

■ The instantaneous energizing operation of the double solenoid type must be at least 0.1 second over.

■ Refer to the instruction manual when replacing or extending blocks. Pay attention to the order of connecting cable connector.

■ Refer to precautions for wiring for details on other wire connections.

■ If the valve block may be expanded in the future, indicate the spare cable in manifold specifications. (Note that up to 4 cables can be connected to 1 air supply/exhaust

4. Manual override

⚠ CAUTION

■ The MN4S0 is manually operated with an indirect drive method using pilot pressure.

The valve will not operate unless pilot pressure is supplied.

(1) Non-locking type

· Press the button on the top of the valve with a thin tool (ø2 or less), until it is completely pressed. Pressing A will be the same as when the a coil operates, and pressing B will be the same as when the b coil operates.

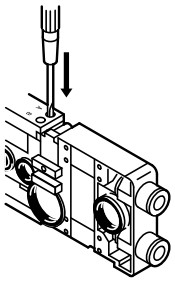
· When the single or 3-position type is released, the main valve will also return. With the double type, the button will return, but the main valve will be held at that position.

(2) Locking type

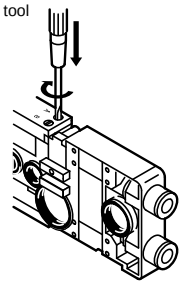
· In addition to non-locking type functions, when the button is pressed and turned 90 degrees in the direction of the arrow (using a 2 mm precision flat-tip screwdriver), the state can be held.

Release the lock before starting normal operation.

Types requiring tool



● Non-locking



● Locking

When using the custom order non-locking type or locking type that does not require a tool, provide a cover when not in use to ensure safety.

During Use & Maintenance

1. Surge suppressor

⚠ CAUTION

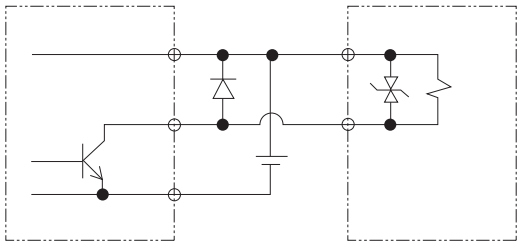
■ The surge suppressor enclosed with the solenoid valve is to protect the output contact for that solenoid valve's drive. There is no significant protection for the other peripheral devices, and devices could be damaged or malfunction by the surge. Surge generated by other devices could be absorbed and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

(1) The surge suppressor limits solenoid valve surge voltage, which can reach several hundred volts, to a lower voltage level withstandable by the output contact. Depending on the output circuit used, this may be insufficient and could result in damage or malfunction. Check whether the surge suppressor can be used by the surge voltage limit of the solenoid valve in use, the output device's withstand pressure and circuit structure, and by the degree of return delay time.
If necessary, provide other surge measures. Solenoid valves with surge suppressors suppress the reverse voltage surge generated during OFF operation to the levels below.

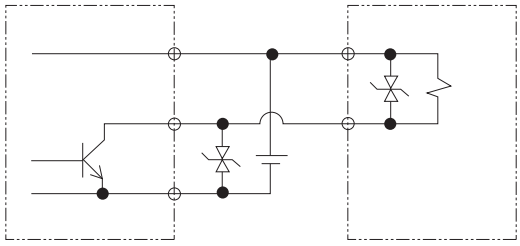
Rated voltage	Reverse voltage value when power turned OFF
12 VDC	27 V
24 VDC	47 V

(2) When using the NPN output unit, a surge voltage equivalent to the voltage above plus the power voltage surge could be applied. Provide contact protection circuit.

(Example of output transistor protective circuit installation 1)



(Example of output transistor protective circuit installation 2)



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

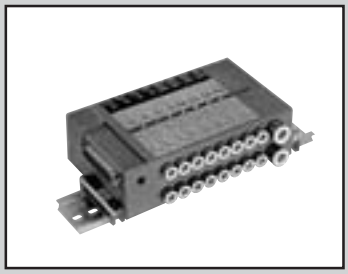
(4) The surge suppressor incorporated in the solenoid valve often short-circuits if damaged by excessive voltage or current the other solenoid valves. If the surge suppressor fails, if a large current flows when output is on, the output circuit or solenoid valve could be damaged or ignite. Do not keep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

2. Assembling & Disassembling

⚠ CAUTION

■ Turn power OFF and depressurize before starting following work:

- Refer to technical data (page 615) for details on expansion, disassembly, and assembly required when changing the regulator body or regulator block specifications or when replacing a spent regulator. Consult with CKD for details.
- After assembly, confirm that the joint's stop pin is accurately assembled between the connection key and regulator block.
  Refer to the MN4S0 Instruction Manual for details on handling the valve block.



Reduced wiring block manifold 3, 4 port pilot operated valve

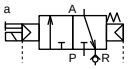
MN3S0/MN4S0 Series

● Applicable cylinder bore size: ø20 to ø40 CE Refer to Intro 17 for details. RoHS CAD

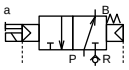
JIS Symbol

● 3 port valve

2-position single solenoid N.C. type

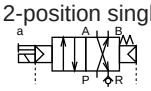


2-position single solenoid N.O. type

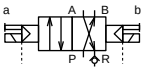


● 4 port valve

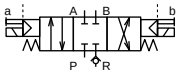
2-position single solenoid



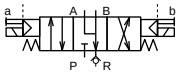
2-position double solenoid



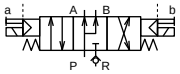
3-position all ports closed



3-position A/B/R connection

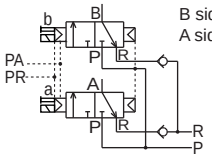


3-position P/A/B connection

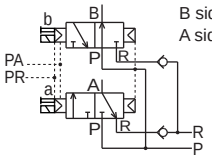


● Two 3 port valves integrated type

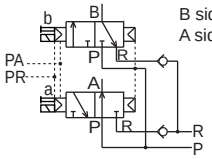
N.C./N.C. type (N3S0660)



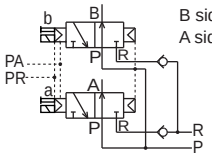
N.C./N.O. type (N3S0670)



N.O./N.C. type (N3S0760)



N.O./N.O. type (N3S0770)



Common specifications

Descriptions	Descriptions
Manifold method	DIN Rail mount Direct mount (8 limited to stations)
Manifold type	Common supply , Common exhaust
Station quantity	From 1 station (refer to the following page.)
Valve and operation type	Internal pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.70
Min. working pressure MPa	0.20 (When external pilot , main pressure 0)
Withstanding pressure MPa	1.05
Ambient temperature °C	5 to 50
Fluid temperature °C	5 to 50
Lubrication	Not required
Protective structure	Dust proof
Vibration/impact m/s²	50 or less / 300
Working environment	Containing corrosive gas is impermissible.

Electric specifications

Descriptions			Descriptions
Rated voltage V	DC		12 , 24
Rated voltage fluctuation range			±10% (When using with serial transmission +10%, -5%)
Rated current A	DC	12 V	0.050
		24 V	0.025
Power consumption W	DC	12 V	0.6
		24 V	
Heat proof class			B
Surge protective circuit			With surge suppressor
Indicator			LED

Individual specifications

Port / Descriptions		3 port valve	4 port valve	Note 2 3 port valve 2 piece integrated type
Port size	A/B Port	ø4, ø6 push-in joint , M5	ø4, ø6 push-in joint , M5	ø4, ø6 push-in joint , M5
	P/R Port	ø8, ø6 push-in joint	ø8, ø6 push-in joint	ø8, ø6 push-in joint
	External pilot port	ø6 push-in joint	ø6 push-in joint	-
Response time Note 1 ms	2-position	20 or less	20 or less	20 or less
	3-position	-	30 or less	-

Note1: Response time is the value when ON for supply pressure 0.5 MPa, pre-lubricated. The value varies depending on pressure and quality of lubricant.
Note2: For two 3 port valve integrated valve block, external pilot is not available because main pressure is used to operate valving element. Supply enough air flow rate not to drop supply pressure less than minimum working pressure by driving connecting load (air operated valve) etc.

Flow characteristics

Descriptions			C (dm³/ (s·bar))	b
3 port valve	2-position		0.80	0.33
4 port valve	2-position		0.80	0.33
	3-position	all ports closed	0.57	0.31
		A/B/R connection	0.80	0.34
		P/A/B connection	0.60	0.31
Two 3 port valves integrated type	2-position		0.50	0.17

Note 1: Effective sectional area S and sonic conductance C are converted as S ≒ 5.0 x C.
Note 2: The flow characteristics are the values with check valve (standard).

Ozone specifications (Ending 5)

** - Voltage - P11

Slave unit specifications

Descriptions	T6C1 T6C0	Note 1 T6G1	T6A1 T6A0	T6J1 T6J0	T6E1 T6E0
Unit side power voltage	24 VDC ±10%		24 VDC +10% -5%		
Valve side power voltage	24 VDC +10% -5%				
Unit side current consumption	T6C1: 60mA or less, T6C0: 40mA or less (when all outputs ON)	100mA or less (when all outputs ON)	100 mA or less (when all outputs ON. Current consumption of valve not included)		60 mA or less (when all outputs ON. Current consumption of valve not included)
Valve side current consumption	15mA or less (All points OFF)				
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

Note 1: CC-Link is Ver.1.10.

Manifold wiring specifications Note1

Descriptions		Descriptions	Max. station number		
			Double solenoid	Single solenoid	Mix manifold (solenoid number)
Common gland type	T10(Left)	Terminal thread M3	7 stations	14 stations	14 points
	T10R(Right)				
	T11(Left)	26 pole push tightening type	12 stations	24 stations	24 points
	T11R(Right)				
D sub-connector type (25P)	T30(Left)	MIL standards D sub-connector (Terminal number 25)	12 stations	24 stations	24 points
	T30R(Right)				
Flat cable connector type (20P)	T50(Left)	Pressure welding connector MIL-C-83503 standards conformed Flat cable 1.27 mm pitch 20 pieces	8 stations	16 stations	16 points
	T50R(Right)				
Serial transmission type (With dedicated unit)	T6A0	UNIWIRE SYSTEM	4 stations	8 stations	8 points
	T6A1		8 stations	16 stations	16 points
	T6C0	OMRON	4 stations	8 stations	8 points
	T6C1	CompoBus/S	8 stations	16 stations	16 points
	T6E0	SUNX	4 stations	8 stations	8 points
	T6E1	S-LINK	8 stations	16 stations	16 points
	T6G1	CC-Link	8 stations	16 stations	16 points
	T6J0	UNIWIRE H SYSTEM	4 stations	8 stations	8 points
	T6J1		8 stations	16 stations	16 points
Individual wiring connector type (Double is common)	C	Individual connector lead wire length 300 mm	-	-	-
	C0	Individual connector lead wire length 500 mm	-	-	-
	C1	Individual connector lead wire length 1000 mm	-	-	-
	C2	Individual connector lead wire length 2000 mm	-	-	-

Note 1 Contact CKD if more manifold stations than the max. number of stations for each reduced-wiring specification are required.

Weight

Wiring block	Descriptions	Common gland type T10 (R) / T11 (R)	D sub-connector type T30 (R)	Flat cable connector type T50 (R)	Serial transmission type T6*	
	Weight (g)	175	85	85	220	
Supply/exhaust block	Descriptions	Q	QK	QZ	QKZ	
	Weight (g)	48	53	48	60	
Partition block	Descriptions	S	SA	SP	SE	
	Weight (g)	20	20	20	20	
Valve block	Descriptions	N4S010	N4S020	N4S030/040/050	N3S010/110	N3S0**0
	Weight (g)	50	55	58	46	55
End block	Descriptions	E (EL)	EX (EXL)			
	Weight (g)	50	50			
DIN rail	Descriptions	-				
	Weight (g)	0.9 g/mm				

How to order manifold

D sub / flat cable connector / individual wiring C-connector

● Discrete valve block

N 3 S0 1 0 – C4 – M1 ——— 3

● Block manifold

M N 3 S0 1 0 – C4 – M1 T10 – 5 – 3

● Regulator block mounting manifold

M N 3 S0 1 0 – C4 – R – T10 – 5 – 3 — Technical confirmation No.

Solenoid valve type

Note 1: Complete manifold specification sheet (pages 618 to 620).

Consult with CKD when ordering regulator block mounting manifold. (Technical confirmation No. is required.)

● Refer to page 669 for the models of the cable with a D sub-connector.

Symbol	Descriptions		Type: Block manifold	Type: Discrete valve block
Ⓐ Model				
N	DIN rail mount method		●	
T	Direct mount method (limited to valve block 8 stations)		●	
Ⓑ Valve type				
3	3 port valve, two 3 port valves integrated type Note 2		●	●
4	4 port valve, 3, 4 ports valve mix		●	●
Ⓒ Solenoid position				
1	3 port valve	2-position normally closed single	●	●
11	3 port valve	2-position normally open single	●	●
66	Two 3 port valves integrated type	A side valve: Normally closed	●	●
		B side valve: Normally closed	●	●
67	Two 3 port valves integrated type	A side valve: Normally closed	●	●
		B side valve: Normally open	●	●
76	Two 3 port valves integrated type	A side valve: Normally open	●	●
		B side valve: Normally closed	●	●
77	Two 3 port valves integrated type	A side valve: Normally open	●	●
		B side valve: Normally open	●	●
1	4 port valve	2-position single solenoid	●	●
2	4 port valve	2-position double solenoid	●	●
3	4 port valve	3-position all ports closed	●	●
4	4 port valve	3-position A/B/R connection	●	●
5	4 port valve	3-position P/A/B connection	●	●
8	Mix manifold		●	
Ⓓ Port size				
C4	ø4 push-in joint lateral		●	●
C6	ø6 push-in joint lateral		●	●
CL4	ø4 push-in joint upward		●	●
CL6	ø6 push-in joint upward		●	●
M5	M5 female thread (non-rotating)		●	●
CX	Mix push-in joint		●	
Ⓔ Manual override				
Blank	Non-locking manual override	Standard	●	●
M1	Locking manual override (tool required)	Option	●	●
M2	Non-locking convex type	Custom order	●	●
M3	Locking convex type	Custom order	●	●
MX	Mix of manual override		●	
Ⓕ Wiring method				
T10	Common gland (M3 screw) type Left		●	
T11	Common gland (push-in fitting) type Left		●	
T30	D sub-connector type (25P) Left		●	
T50	Flat cable connector type (20P) Left		●	
T10R	Common gland (M3 screw) type Right		●	
T11R	Common gland (push-in fitting) type Right		●	
T30R	D sub-connector type (25P) Right		●	
T50R	Flat cable connector type (20P) Right		●	
C	Individual wiring connector with lead wire length 300 mm		●	●
C0	Individual wiring connector with lead wire length 500 mm		●	●
C1	Individual wiring connector with lead wire length 1000 mm		●	●
C2	Individual wiring connector with lead wire length 2000 mm		●	●
Ⓖ Station number				
1 to **24**	1 station to 24 stations	(Differs based on wiring specifications. Refer to wiring specifications (page 591))	●	
8	Direct mount method		●	
Ⓗ Voltage				
3	24 VDC		●	●
4	12 VDC		●	●

⚠ Note on model no. selection

Note 2: Consult with CKD about working conditions of two 3 port valves integrated type valve block.
Note 3: For A/B port with filter (foreign matter mixture prevention), indicate F after port size symbol. (Option)
Note 4: Wiring methods of direct mount method for T10, T11, T30, T50.
Note 5: The dedicating cable is required to connect between wiring block and valve block of reduced wiring type. If the block will be expanded or specifications will be changed, when placing order, indicate reserve cable. (When standard wire, 2 expansion cable are initially attached.)

Note: Refer to page 586 for circuit diagram.

<Example of model number>

MN3S0660-C4-T10-6-3

Block manifold

- Ⓐ Model : DIN rail mount method
- Ⓑ Valve type : Two 3 port valves integrated type
- Ⓒ Solenoid position : A side valve: Normally closed
  B side valve: Normally closed
- Ⓓ Port size : ø4 push-in joint lateral (cylinder port)
- Ⓔ Manual override : Non-locking manual override
- Ⓕ Wiring method : Common gland (M3 screw) type
- Ⓖ Manifold solenoid valve station number : 6 stations
- Ⓗ Voltage : 24 VDC

How to order manifold

Serial transmission

● Discrete valve block

N 4 S0 1 0 – C4 – M1 ——— 3

● Block manifold

M N 4 S0 1 0 – C4 – M1 T6G1 – 5 – 3

● Regulator block mounting manifold

M N 4 S0 1 0 – C4 – R – T6G1 – 5 – 3 – Technical confirmation No.

Solenoid valve type

Consult with CKD when ordering regulator block mounting manifold. (Technical confirmation No. is required.)

Note 1: Complete manifold specification sheet (pages 618 to 620).

Symbol	Descriptions		Type: Block manifold	Type: Discrete valve block
Ⓐ Model				
N	DIN rail mount method		●	
Ⓑ Valve type				
3	3 port valve, two 3 port valves integrated type Note 2		●	●
4	4 port valve, 3, 4 ports valve mix		●	●
Ⓒ Solenoid position				
1	3 port valve	2-position normally closed single	●	●
11	3 port valve	2-position normally open single	●	●
66	Two 3 port valves integrated type	A side valve: Normally closed	●	●
		B side valve: Normally closed	●	●
67		A side valve: Normally closed	●	●
		B side valve: Normally open	●	●
76		A side valve: Normally open	●	●
		B side valve: Normally closed	●	●
77		A side valve: Normally open	●	●
		B side valve: Normally open	●	●
1	4 port valve	2-position single solenoid	●	●
2		2-position double solenoid	●	●
3		3-position all ports closed	●	●
4		3-position A/B/R connection	●	●
5		3-position P/A/B connection	●	●
8	Mix manifold		●	
Ⓓ Port size				
C4	ø4 push-in joint lateral		●	●
C6	ø6 push-in joint lateral		●	●
CL4	ø4 push-in joint upward		●	●
CL6	ø6 push-in joint upward		●	●
M5	M5 female thread (non-rotating)		●	●
CX	Mix push-in joint		●	
Ⓔ Manual override				
Blank	Non-locking manual override	Standard	●	●
M1	Locking manual override (tool required)	Option	●	●
M2	Non-locking convex type	Custom order	●	●
M3	Locking convex type		●	●
MX	Mix of manual override		●	
Ⓕ Wiring method				
T6A0	Serial transmission type (UNIWIRE SYSTEM 8 points)		●	
T6A1	Serial transmission type (UNIWIRE SYSTEM 16 points)		●	
T6C0	Serial transmission type (OMRON: CompoBus/S 8 points)		●	
T6C1	Serial transmission type (OMRON: CompoBus/S 16 points)		●	
T6E0	Serial transmission type (SUNX: S-LINK 8 points)		●	
T6E1	Serial transmission type (SUNX: S-LINK 16 points)		●	
T6G1	Serial transmission type (CC-Link 16 points)		●	
T6J0	Serial transmission type (UNIWIRE H SYSTEM 8 points)		●	
T6J1	Serial transmission type (UNIWIRE H SYSTEM 16 points)		●	
Ⓖ Station number				
1 to 16	1 station to 16 stations (Differs based on wiring specifications. Refer to wiring specifications (page 591))		●	
Ⓗ Voltage				
3	24 VDC		●	●

Ⓐ Model

Ⓑ Valve type

Ⓒ Solenoid position

Ⓓ Port size
Note 3

Ⓔ Manual override

Ⓕ Wiring method
Note 4
Note: Refer to page 586 for circuit diagram.

Ⓖ Manifold solenoid valve station number

Ⓗ Voltage

⚠ Note on model no. selection

Note 2: Consult with CKD about working conditions of two 3 port valves integrated type valve block.

Note 3: For A/B port with filter (foreign matter mixture prevention), indicate F after port size symbol. (Option)

Note 4: The dedicating cable is required to connect between wiring block and valve block of reduced wiring type. If the block will be expanded or specifications will be changed, when placing order, indicate reserve cable. (When standard wire, 2 expansion cable are initially attached.)

<Example of model number>

MN3S010-C4-T6G1-6-3

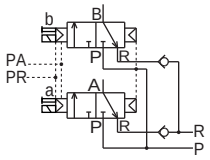
Block manifold

Ⓐ Model: DIN rail mount method
Ⓑ Valve type : 3 Port valve
Ⓒ Solenoid position : 2-position normally closed Single
Ⓓ Port size : ø 4 push-in joint lateral (Cylinder port)
Ⓔ Manual override : Non-locking manual override
Ⓕ Wiring method : Serial transmission type (CC-Link 16 points)
Ⓖ Manifold solenoid valve station number: 6 stations
Ⓗ Voltage : 24 VDC

Internal structure and parts list

N3S0660

● (Two 3 port valves integrated type N.C./N.C. type)

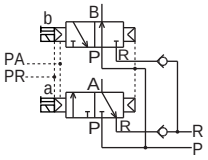


B side N.C.

A side N.C.

N3S0670

● (Two 3 port valves integrated type N.C./N.O. type)

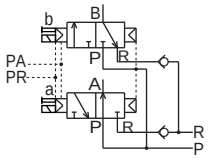


B side N.O.

A side N.C.

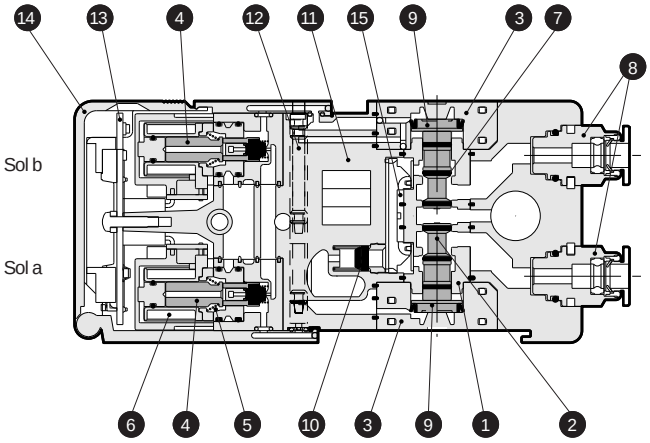
N3S0760

● (Two 3 port valves integrated type N.O./N.C. type)



B side N.C.

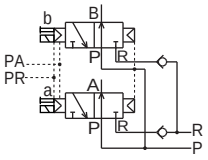
A side N.O.



This drawing shows the two 3 port valves integrated N.C./N.C. type with the solenoids on both ends OFF.

N3S0770

● (Two 3 port valves integrated type N.O./N.O. type)



B side N.O.

A side N.O.

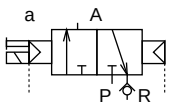
Main parts list

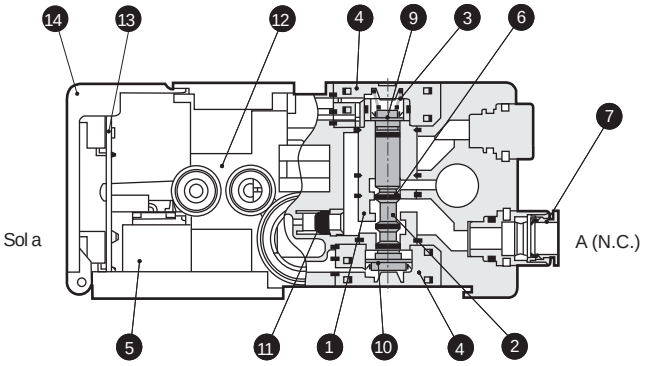
No.	Parts name	Material	No.	Parts name	Material
1	Body	Aluminum alloy	9	Piston D assembly	-
2	Valving element (spool)	Aluminum, nitrile rubber	10	Check valve	-
3	Cap	-	11	Pilot block	Resin
4	Plunger	Stainless steel	12	Manual override	Aluminum
5	Plunger spring	Stainless steel wire	13	Circuit board assembly	-
6	Coil assembly	-	14	Electric cover	Polycarbonate
7	Spool packing seal	Nitrile rubber	15	Lead valve assembly	-
8	Cartridge type push-in joint	-			

Internal structure and parts list

N3S010

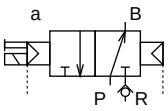
●2-position single solenoid normally closed

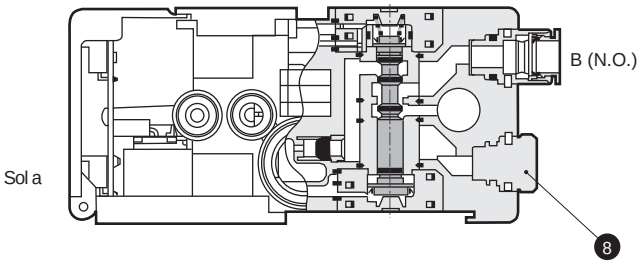




N3S0110

●2-position single solenoid normally open





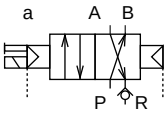
Main parts list

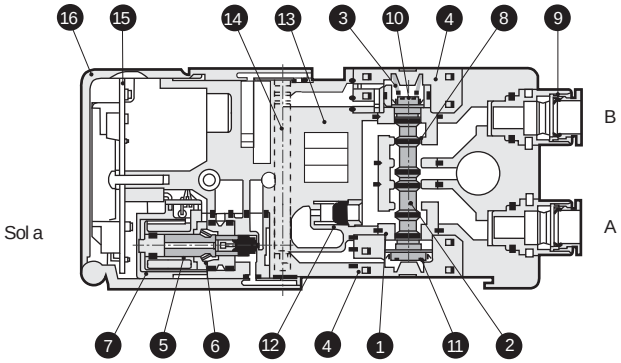
No.	Parts name	Material	No.	Parts name	Material
1	Body	Aluminum alloy	9	Piston S assembly	-
2	Valving element (spool)	Aluminum alloy	10	Piston D assembly	-
3	Valve spring	-	11	Check valve	-
4	Cap	-	12	Pilot block	Resin
5	Coil assembly	-	13	Circuit board assembly	-
6	Spool packing seal	Nitrile rubber	14	Electric cover	Polycarbonate
7	Cartridge type push-in joint	-			
8	Plug cartridge	-			

Internal structure and parts list

N4S010

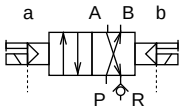
● 2-position single solenoid

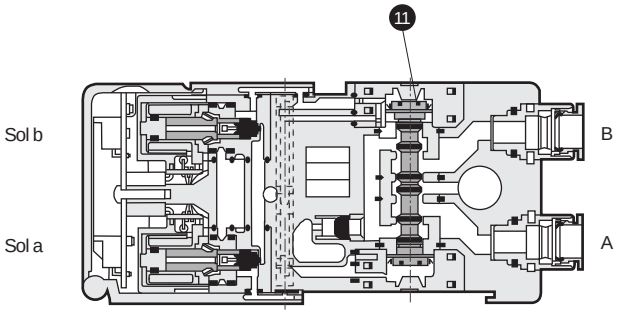




N4S020

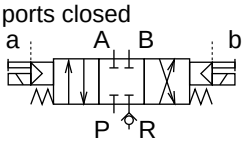
● 2-position double solenoid





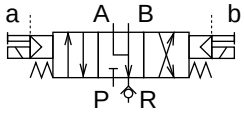
N4S030

● 3-position all ports closed



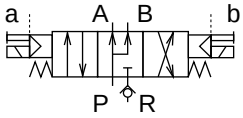
N4S040

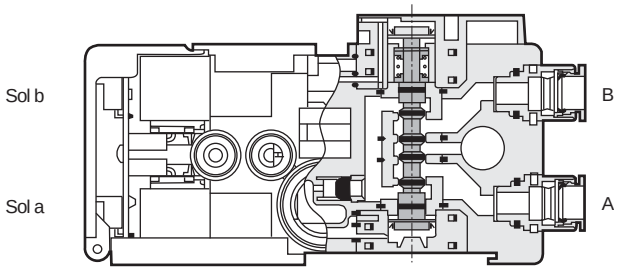
● 3-position A/B/R connection



N4S050

● 3-position P/A/B connection





This drawing shows the state with the all ports closed OFF.

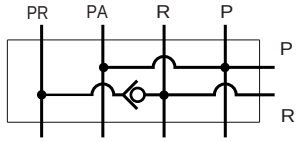
Main parts list

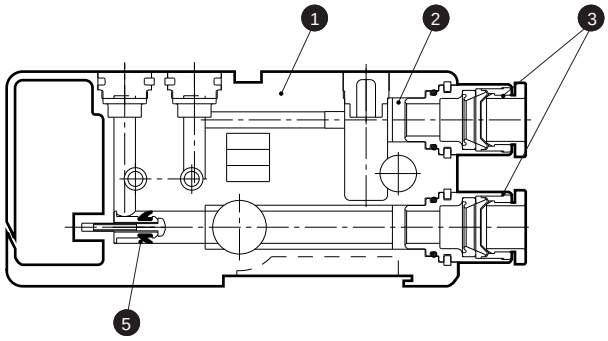
No.	Parts name	Material	No.	Parts name	Material
1	Body	Aluminum alloy	9	Cartridge type push-in joint	-
2	Valving element (spool)	Aluminum alloy	10	Piston S assembly	-
3	Valve spring	-	11	Piston D assembly	-
4	Cap	-	12	Check valve	-
5	Plunger	Stainless steel	13	Pilot block	Resin
6	Plunger spring	Stainless steel wire	14	Manual override	Aluminum
7	Coil assembly	-	15	Circuit board assembly	-
8	Spool packing seal	Nitrile rubber	16	Electric cover	Polycarbonate

Internal structure and parts list

N4S0-Q

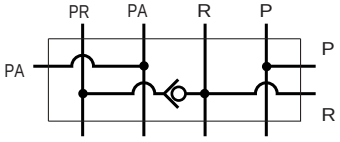
● Supply and exhaust block (internal pilot)

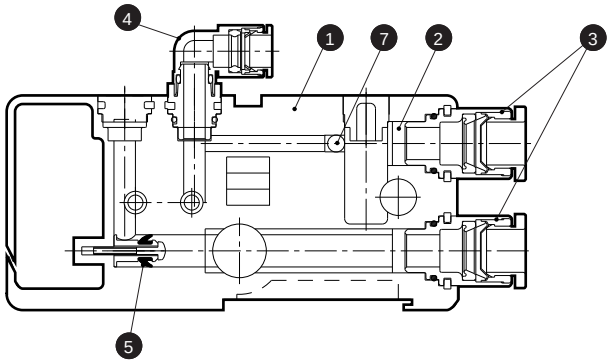




N4S0-QK

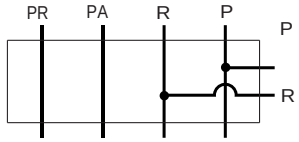
● Supply and exhaust block (external pilot)

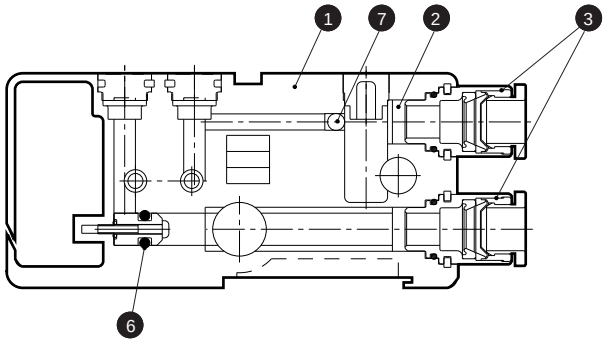




N4S0-QZ

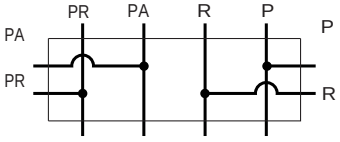
● Supply and exhaust block (multi-pressure circuit)

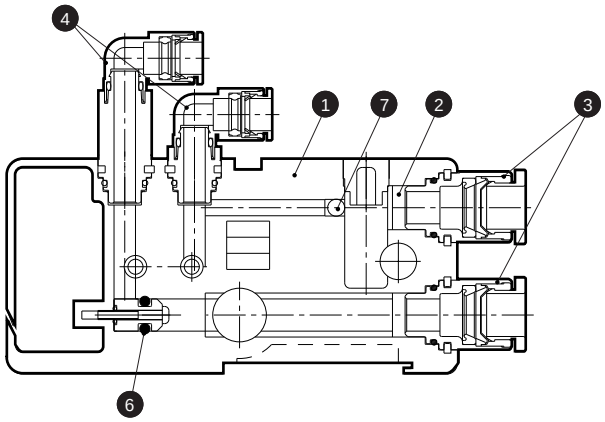




N4S0-QKZ

● Supply and exhaust block (PA/PR separate type for external pilot)





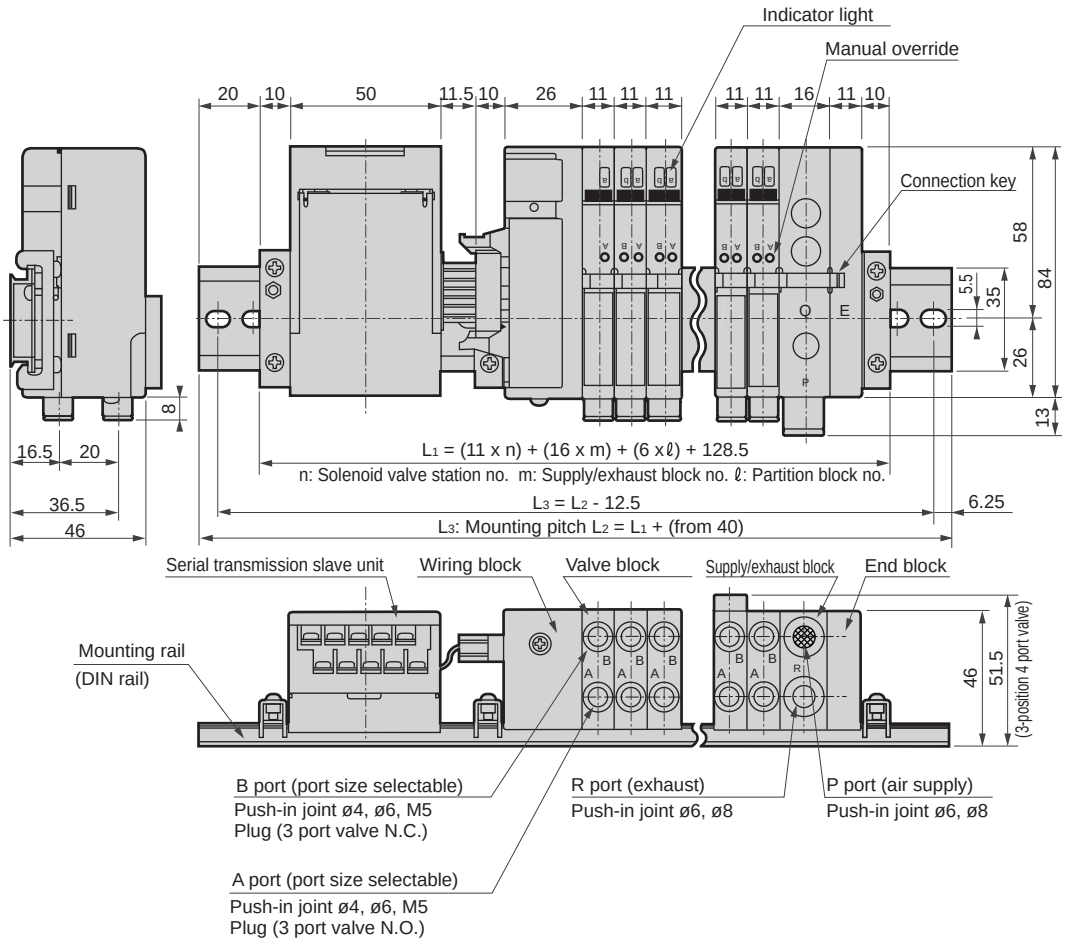
Main parts list

No.	Parts name	Material	No.	Parts name	Material
1	Supply and exhaust block	Resin	5	Check valve	-
2	Filter	-	6	R/PR separation plug	-
3	Cartridge type push-in joint (main piping section)	-	7	Stainless steel ball	-
4	Cartridge type push-in joint (external pilot piping)	-			

Dimensions

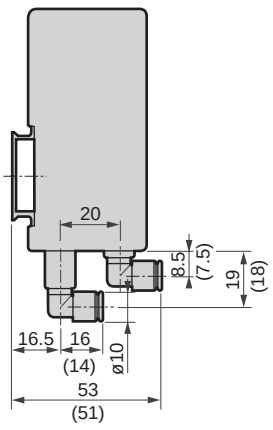
MN$^{3}_{4}$ S0*0-*-*T6*-*-*

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

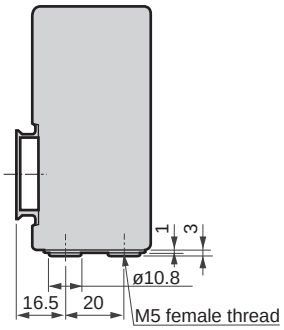


Dimensions of piping blocks (all type common)

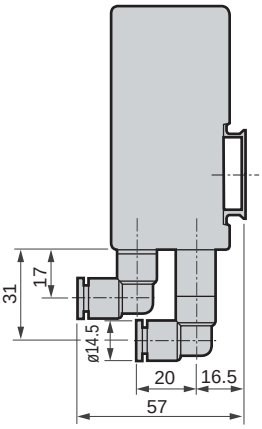
● Valve block,
Push-in joint upward
N$^{3}_{4}$S0*0-CL6 (CL4)



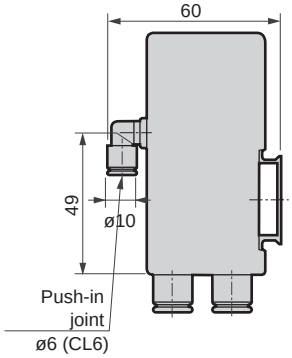
● Valve block,
M5, joint
N$^{3}_{4}$S0*0-M5



● Supply/exhaust block,
Upward piping
N4S0-Q-8L



● Supply/exhaust block,
For external pilot
N4S0-QK-L

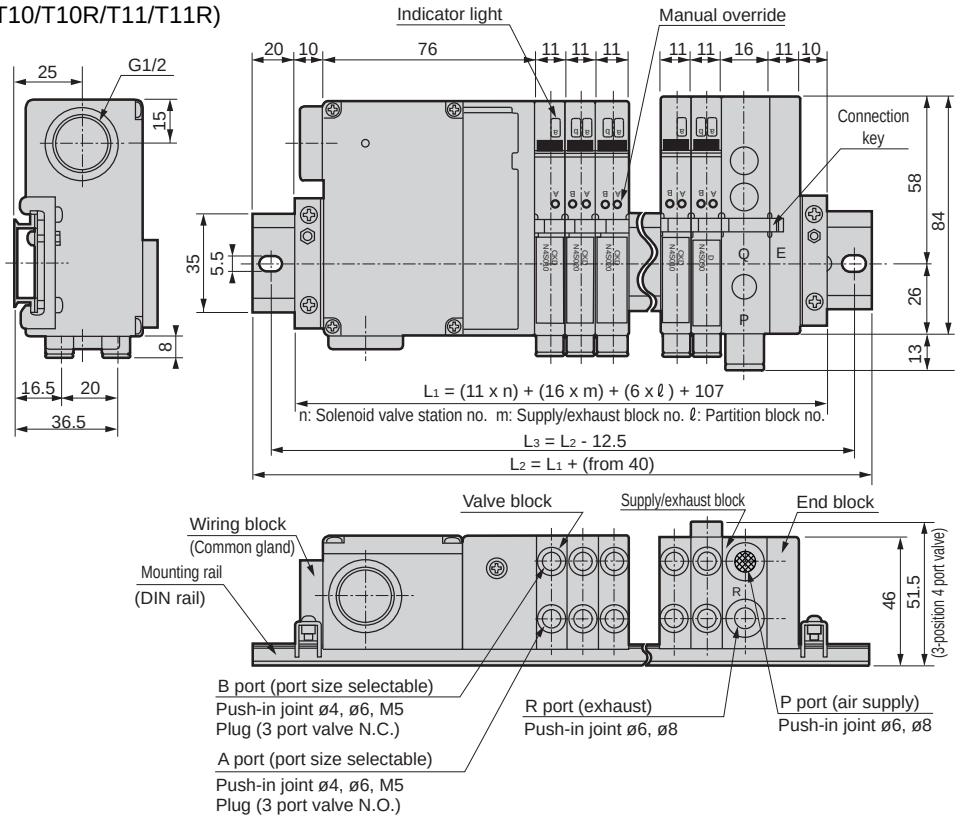


Dimensions CAD

MN^{3}_{4}S0*0-*-*T10-*-*
MN^{3}_{4}S0*0-*-*T11-*-*

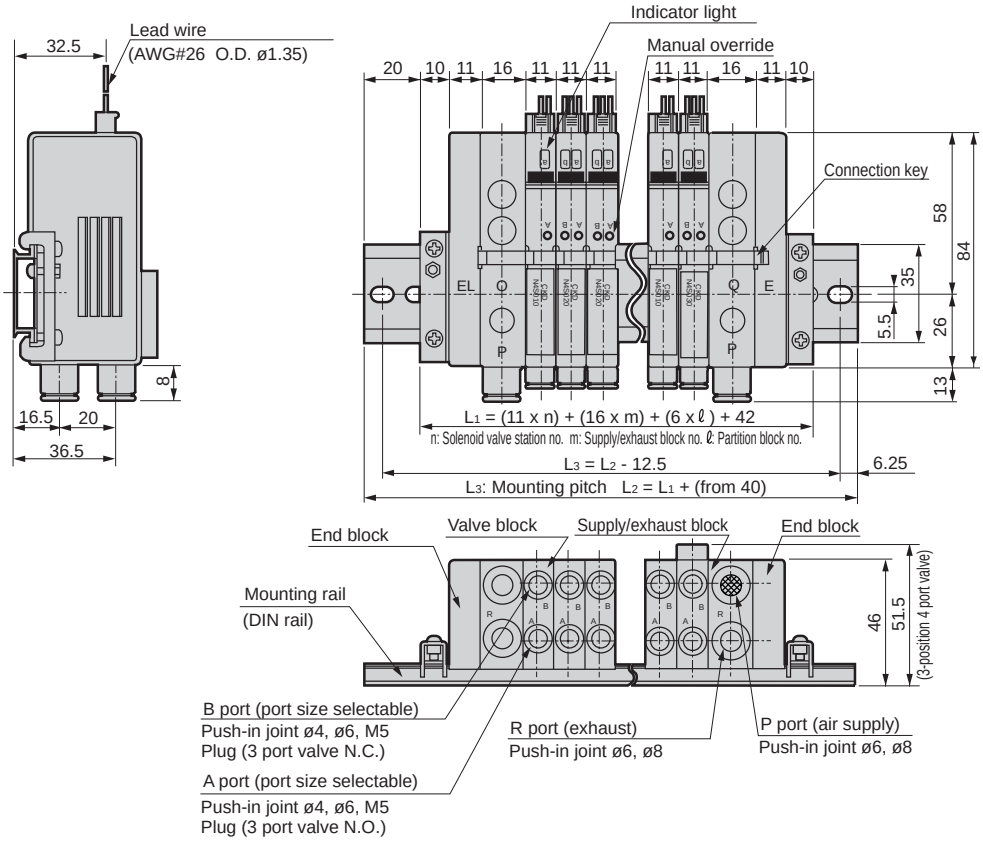
Wiring block and end block are switched for right wiring specifications.

● Common gland type: (T10/T10R/T11/T11R)



MN^{3}_{4}S0*0-*-* (C to C2)-*-*

● Individual wiring connector type: (C/C0/C1/C2)



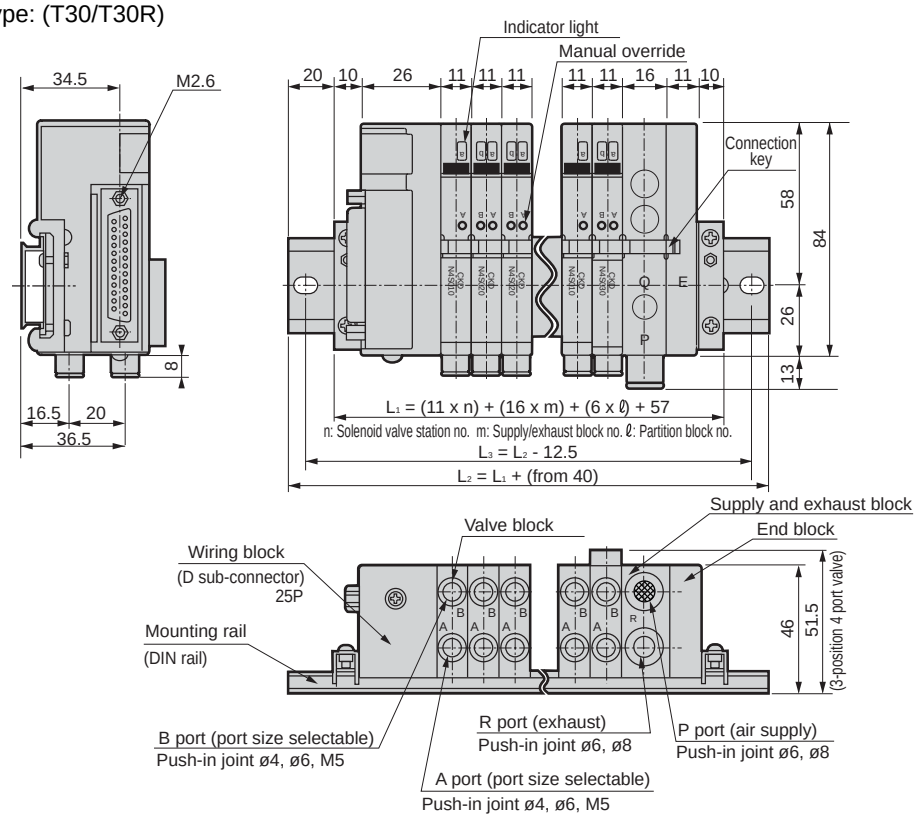
* Refer to page 598 for the dimensions of piping blocks.

Dimensions CAD

$MN^{3}_{4}S0*0-*-*T30-*-*$
$MN^{3}_{4}S0*0-*-*T30R-*-*$

Wiring block is on the right and end block is on the left for right wiring specifications.

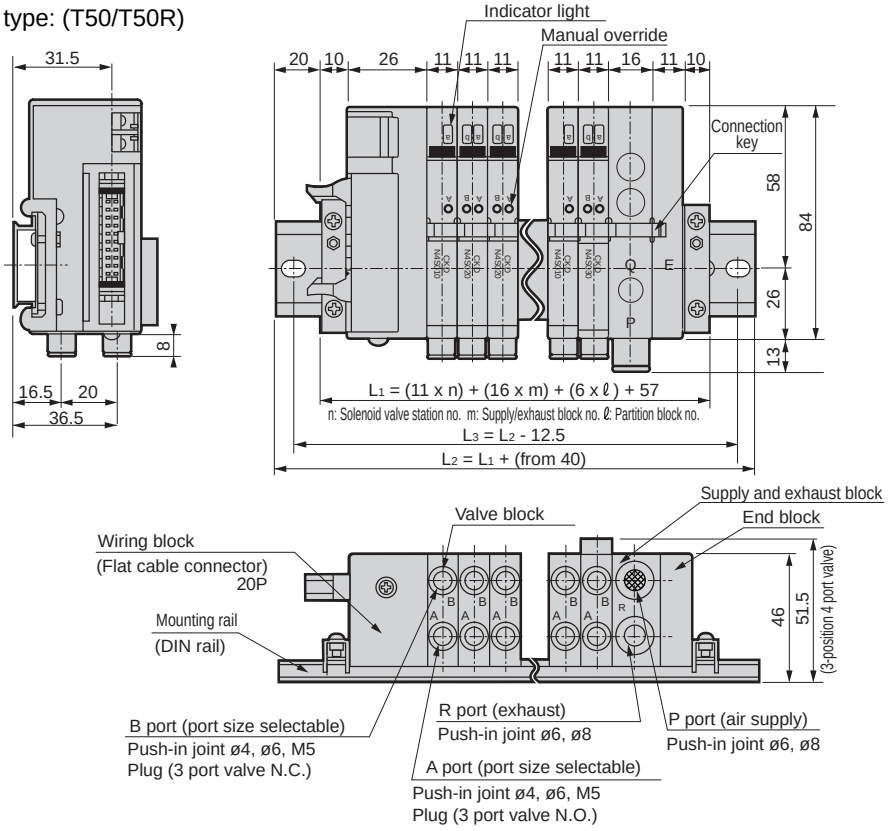
● D sub-connector type: (T30/T30R)



$MN^{3}_{4}S0*0-*-*T50-*-*$
$MN^{3}_{4}S0*0-*-*T50R-*-*$

Wiring block is on the right and end block is on the left for right wiring specifications.

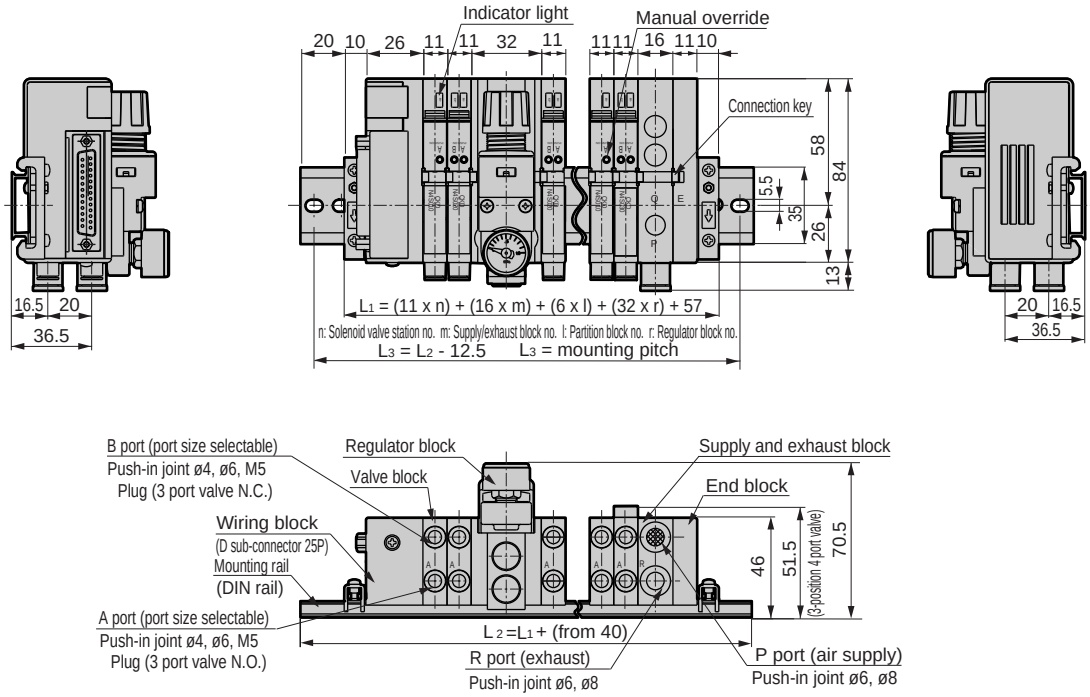
● Flat cable connector type: (T50/T50R)



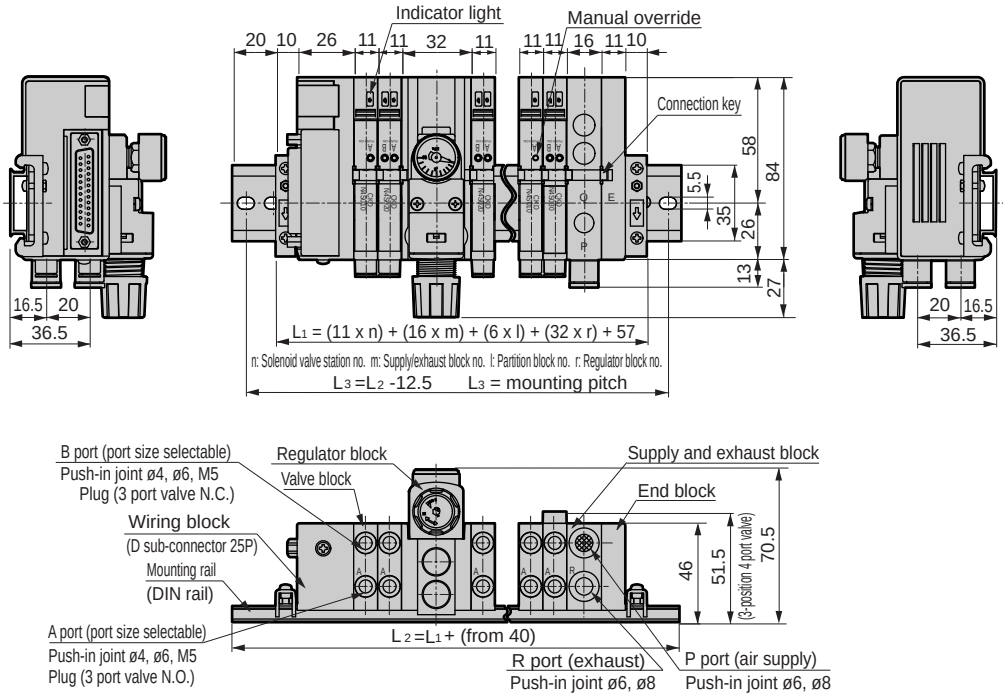
* Refer to page 598 for the dimensions of piping blocks.

Dimensions

● N4S0-RA (pressure adjustment knob rear)



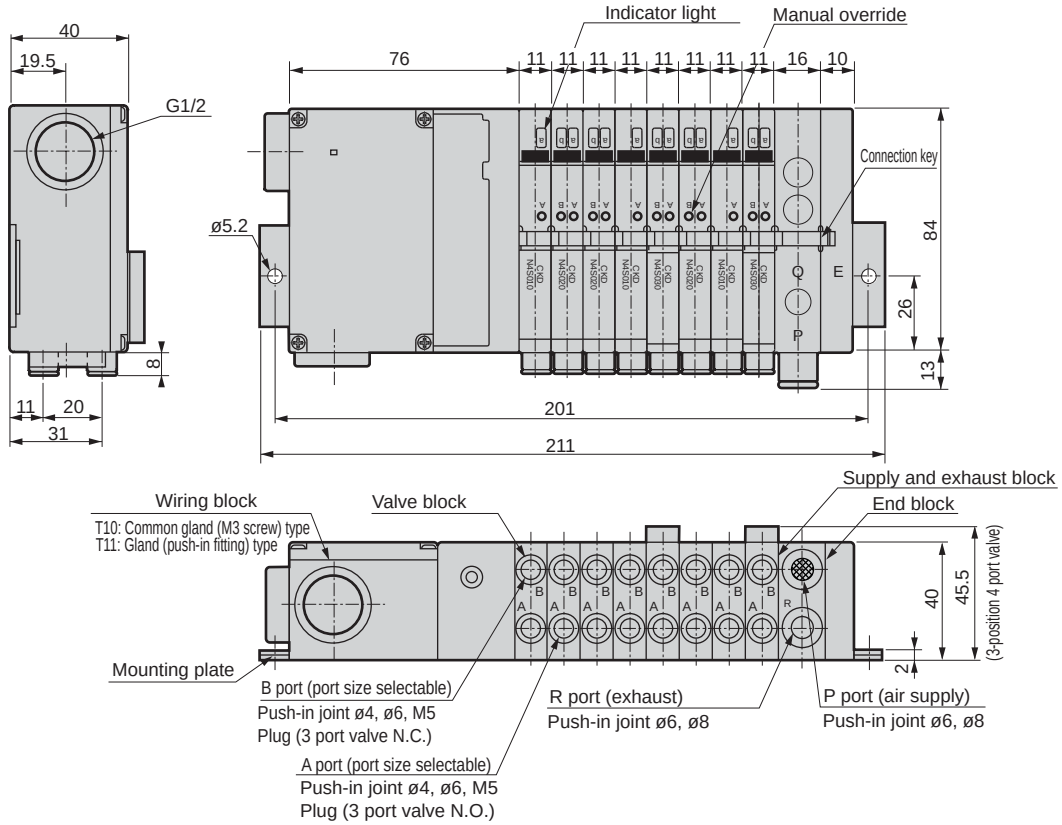
● N4S0-RB (pressure adjustment knob front)



Dimensions CAD

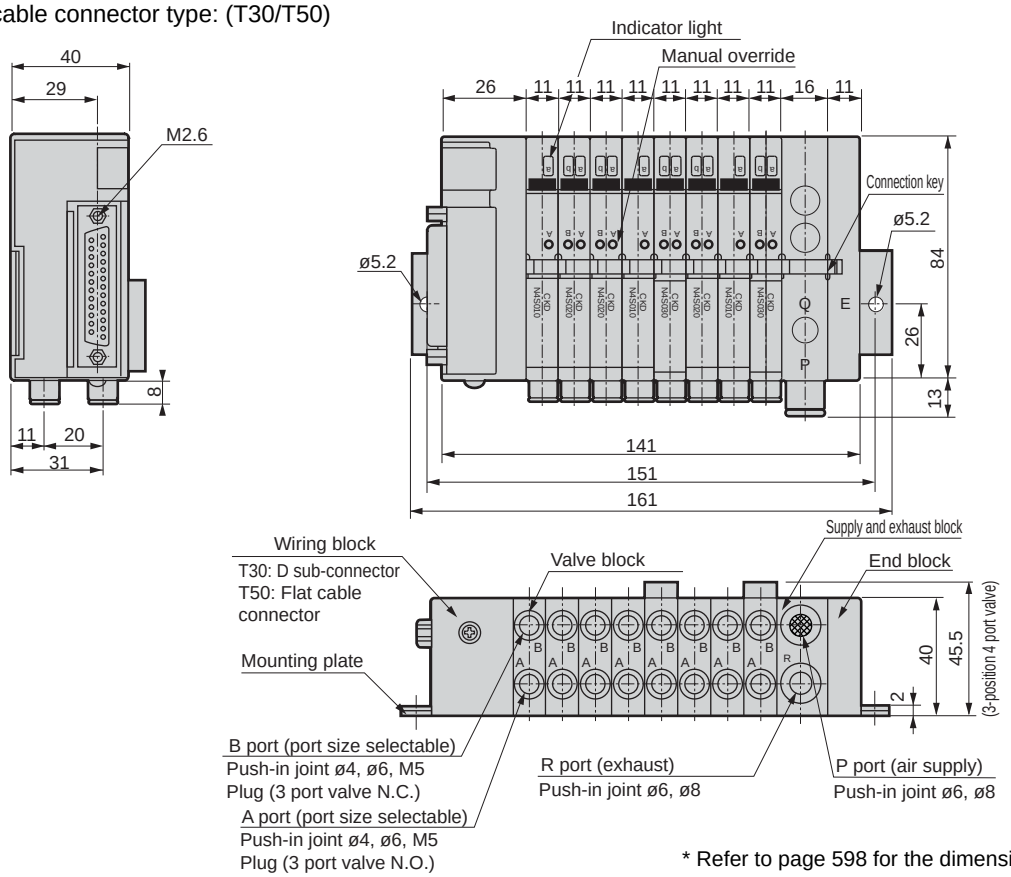
$MT^{3}_{4}S0*0-*-*T10-*-*$
$MT^{3}_{4}S0*0-*-*T11-*-*$

● Common gland type: (T10/T11)



$MT^{3}_{4}S0*0-*-*T30-*-*$
$MT^{3}_{4}S0*0-*-*T50-*-*$

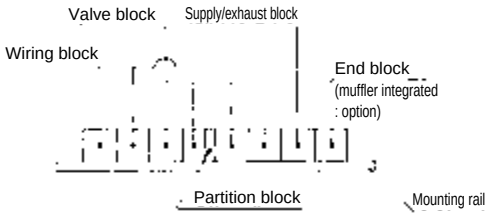
● D-sub/flat cable connector type: (T30/T50)



* Refer to page 598 for the dimensions of piping blocks.

Flexible mix manifold enables easy increase/decrease of station and maintenance.

- Viewed from cylinder port, wiring block is installed on left (right) side while end block is installed on right (left) side. Install the block as sandwiching supply/exhaust block, valve block and partition block.
- Supply/exhaust block can be installed at any location adjacent to valve block. Generally, the block is installed on the right with the A/B (cylinder) port facing forward.
- Internal pilot operated or external pilot operated is automatically decided according to supply/exhaust block selection. Same valve blocks are used. Combining partition block and supply/exhaust block enables mix manifold of multi-pressure, internal pilot and external pilot.

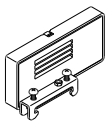


Block manifold configuration

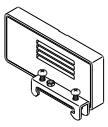
Piping section

Piping block

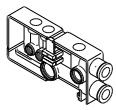
A End block (E)
Right side mount



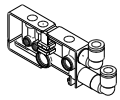
Left side mount



B Supply and exhaust block (Q)
● Q-8 QZ-8

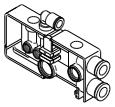


● Q-8L QZ-8L

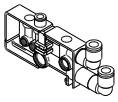


* Joint downward should be indicated in the specification sheet.

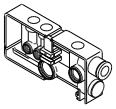
B Supply/exhaust block (QK) (QZ) (QKZ)
● QK-8



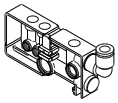
● QK-8L



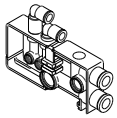
● Q-8X QZ-8X



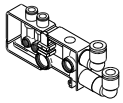
● Q-8LX QZ-8LX



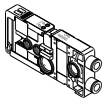
● QKZ-8



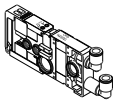
● QKZ-8L



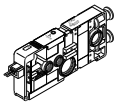
C Push-in joint lateral



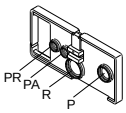
C Push-in joint upward



C Individual connector



D Partition block

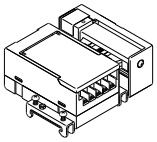


* Joint downward should be indicated in the specification sheet.

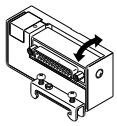
Wiring section

Wiring block

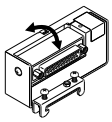
E Serial transmission unit (T6*)



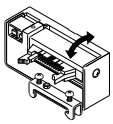
F D sub-connector block (T30/T30R)
Left side installation



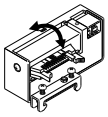
Right side installation



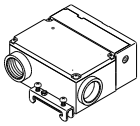
G Flat cable connector block (T50/T50R)
Left side installation



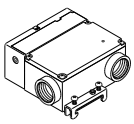
Right side installation



H Common gland block (T10/T11)
Left side installation



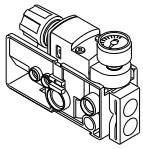
Right side installation



Option

Regulator block

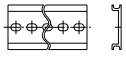
I



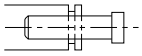
Related products

Related products

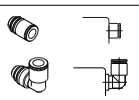
J Mounting rail



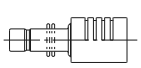
J Blanking plug



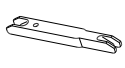
J Push-in cartridge joint



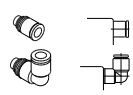
J Silencer



J Push-in joint Tube remover



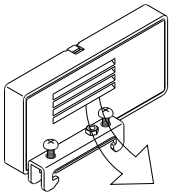
J Push-in cartridge joint for supply and exhaust block



Piping section

A End block (E)

Right side installation

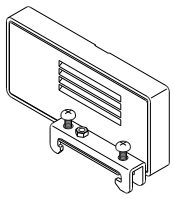


For atmospheric release, use large exhaust air flow rate EX type.
Effective sectional area 23mm²

N4S0 – E

Symbol	Descriptions
E	Right end block
EX	Muffler incorporated end block for right side

Left side installation



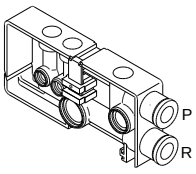
For atmospheric release, use large exhaust air flow rate EXL type.
Effective sectional area 23mm²

N4S0 – EL

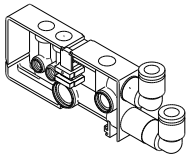
Symbol	Descriptions
EL	Left end block
EXL	Muffler incorporated end block for left side

B Supply and exhaust block (Q) (QK) (QZ)

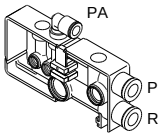
● **Q-8**
QZ-8



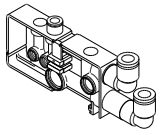
● **Q-8L**
QZ-8L



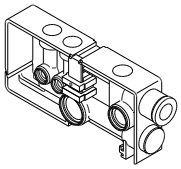
● **QK-8**



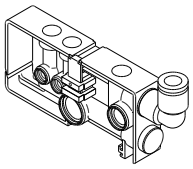
● **QK-8L**



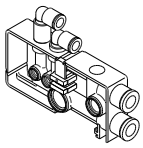
● **Q-8X**
QZ-8X



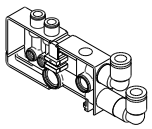
● **Q-8LX**
QZ-8LX



● **QKZ-8**



● **QKZ-8L**



Discrete supply and exhaust block **N4S0 – Q – 8 ( )**

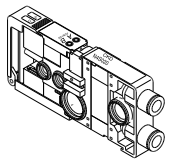
Symbol	P port	PA port	R port	PR port	Piping direction	Applications
Q-8 (X)	Group ø8 joint		Group ø8 joint (Plug)		Lateral	Internal pilot
Q-8L (X)					Upward	
QK-8 (X)	ø8 joint	ø6 joint			Lateral	External pilot dedicated
QK-8L (X)					Upward	
QZ-8 (X)	ø8 joint	—	ø8 joint (Plug)	—	Lateral	Multi-pressure circuit
QZ-8L (X)					Upward	
QKZ-8 (X)	ø8 joint	ø6 joint	ø8 joint (Plug)	ø6 joint	Lateral	External pilot dedicated (Pilot circuit separate)
QKZ-8L (X)					Upward	

- Air is exhausted from end block for atmospheric release type. In that case, if R port with plug is required, indicate "X" after model no.
- Port sizes ø6, 1/4 (ø6.4) of P/R ports are custom order. Model No. of ø6 is N4S0-Q-6, 1/4 is N4S0-Q-6.4
- QZ is used with Q and QK. Can not be used as a discrete part.
- A filter for preventing entry of foreign matter is incorporated in P port. (Standard)

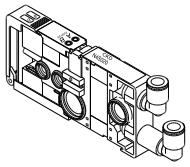
Piping section

C $MN^{3}_{4}S0$ series, manifold configuration block valve

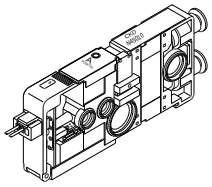
● Push-in joint Lateral



● Push-in joint Upward



● Individual connector



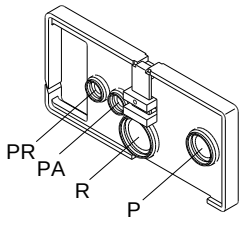
Discrete valve block **N 4 S0 1 0 – C4 – M1 ○ – 3**

A Valve type		B Solenoid position			C Port size		D Manual override			E Wiring method				F Voltage		
3	3 port valve (Two 3 port valves integrated type)	3 port valve	**1**	2-position normally closed single	**C4**	ø4 push-in joint lateral	**Blank**	Non-locking manual override	Standard	**Blank**	For reduced wiring	Standard	**3**	24 VDC	Standard
			11	2-position normally open single	**C6**	ø6 push-in joint lateral	**M1**	Locking manual override (tool required)	Option	**C**	Individual wiring connector Lead wire length 300 mm	Option	**4**	12 VDC	
4	4 port valve	Two 3 port valve integrated type	**66**	A side: N.C. / B side: N.C. type	**CL4**	ø4 push-in joint upward	**M2**	Non-locking convex type	Custom order	**C0**	Individual wiring connector Lead wire length 500 mm				
			67	A side: N.C. / B side: N.O. type	**CL6**	ø6 push-in joint upward	**M3**	Locking convex type		**C1**	Individual wiring connector Lead wire length 1,000 mm				
			76	A side: N.O. / B side: N.C. type	**M5**	M5 female thread with non-rotating				**C2**	Individual wiring connector Lead wire length 2,000 mm				
			77	A side: N.O. / B side: N.O. type											
		4 port valve	**1**	2-position single solenoid											
			2	2-position double solenoid											
			3	3-position all ports closed											
			4	3-position A/B/R connection											
			5	3-position P/A/B connection											

* For AB port with filter (foreign matter prevention) indicate F after port size symbol.

● When ordering only the cable for individual wiring connector, indicate S single or D double.
Example: N4S0-INDIVIDUAL-CONNECTOR-CS1

D Partition block



PA and PR passage of pilot pressure is not plugged except SA block.
Consider this when designing system. S is used for multi-pressure specifications.

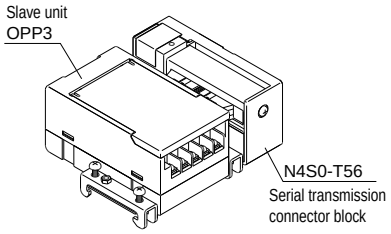
N4S0 – SA

Symbol	Descriptions	
SA	P/R/PA/PR stop	Standard
S	P/R stop, PA/PR through	
SP	P stop, R/PA/PR through	Option
SE	R stop, P/PA/PR through	

Wiring section (Wiring block)

* The wiring block is integrated with the wiring cable and cannot be ordered as a discrete part.

E Serial transmission unit (T6*)



N4S0 – **T6***

Serial slave unit and manifold are connected with flat cable connector.
Power source is 24 VDC dedicated.

Descriptions		Descriptions	
Serial transmission type	**T6A0**	8 points	UNIWIRE SYSTEM
	T6A1	16 points	Compatible with each maker's PLC, personal computer and SBC
	T6C0	8 points	OMRON SYSMAC α/CS1 series, C200HS, CQM1 series
	T6C1	16 points	CompoBus/S
	T6E0	8 points	SUNX Compatible with each maker's PLC
	T6E1	16 points	S-LINK
	T6G1	16 points	CC-Link
	T6J0	8 points	UNIWIRE H SYSTEM
	T6J1	16 points	Compatible with each maker's PLC, personal computer and SBC

Discrete serial transmission slave unit model no.

N4S0 - **OPP3** - **0A**

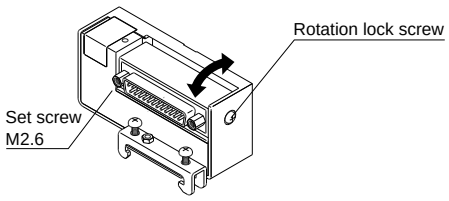
A Wiring method

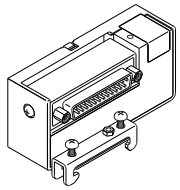
Symbol	Descriptions
A Wiring method	
0A	T6A0 Serial transmission type (UNIWIRE SYSTEM 8 points)
1A	T6A1 Serial transmission type (UNIWIRE SYSTEM 16 points)
0C	T6C0 Serial transmission type (OMRON: CompoBus/S 8 points)
1C	T6C1 Serial transmission type (OMRON: CompoBus/S 16 points)
0E	T6E0 Serial transmission type (SUNX: S-LINK 8 points)
1E	T6E1 Serial transmission type (SUNX: S-LINK 16 points)
1G	T6G1 Serial transmission type (CC-Link 16 points)
0J	T6J0 Serial transmission type (UNIWIRE H SYSTEM 8 points)
1J	T6J1 Serial transmission type (UNIWIRE H SYSTEM 16 points)

Wiring section (Wiring block)
* The wiring block is integrated with the wiring cable and cannot be ordered as a discrete part.

F D sub-connector block (T30/T30R) *MIL standards conformed (MIL-C-24308)

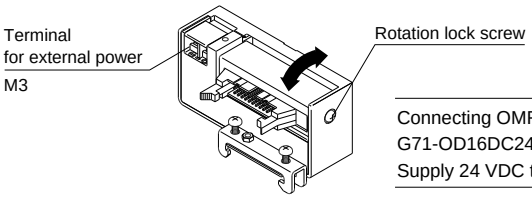
Left side installation	Right side installation
N4S0 – T30	**N4S0 – T30R**



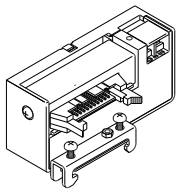


G Flat cable connector block (T50/T50R) *MIL standards conformed (MIL-C-83503)

Left side installation	Right side installation
N4S0 – T50	**N4S0 – T50R**

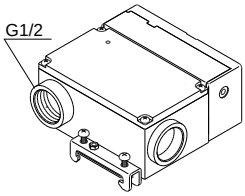


Connecting OMRON transmission terminal type G71-OD16DC24V enables direct drive.
Supply 24 VDC to external power terminal.



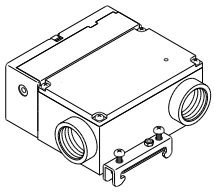
H Common gland block (T10/T11)

Left side installation	Right side installation



Solenoid 14 points
T10/T10R

Solenoid 24 points
T11/T11R



N4S0 – T10

Symbol	Descriptions
T10	M3 thread fastening gland for left
T11	Push tightening gland for left

N4S0 – T10R

Symbol	Descriptions
T10R	M3 thread fastening gland for right
T11R	Push tightening gland for right

MN3S0/MN4S0 Series

Reduced wiring block manifold: Block

Ⓘ Block with regulator

N4S0 - RA - LR - C6 - FL259661

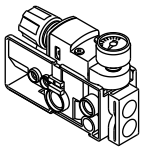
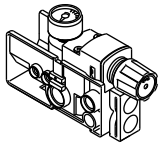
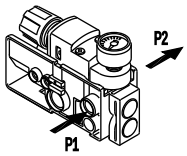
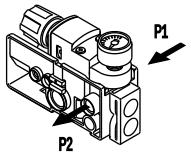
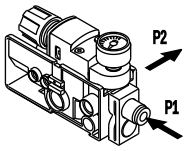
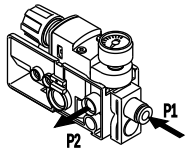
N4S0 - RB - LR - C6 - FL259662

Model no.

Ⓐ Pressure adjustment knob direction

Ⓑ Air supply / pressure adjustment direction

Ⓒ Joint size
Note 1

Symbol	Descriptions	Symbol	Descriptions
Ⓐ Pressure adjustment knob direction			
RA	 Pressure adjustment gauge knob rear	RB	 Pressure adjustment gauge knob front
Ⓑ Air supply / pressure adjustment direction			
LR		RL	
FR		FL	

Symbol	Descriptions	
Ⓒ Joint size		
Blank	Plug (for air supply direction LR, RL)	
C6	ø6 push-in joint (straight)	
C8	ø8 push-in joint (straight)	
CL6	ø6 push-in joint (elbow)	Custom order
CL8	ø8 push-in joint (elbow)	

⚠ Cautions on model no. selection

Note 1: Straight joint provided as standard. Elbow is custom order part.
Note 2: When mounting regulator block on the manifold, a supply/exhaust block for pilot air is required.
Note 3: When using regulator block individually with external pressure control not from the same manifold, consult with CKD.

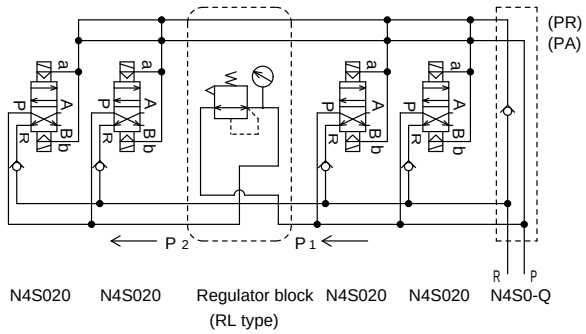
Discrete regulator model no.

RB500 - 00 M

Note: When using the option, consult with CKD.

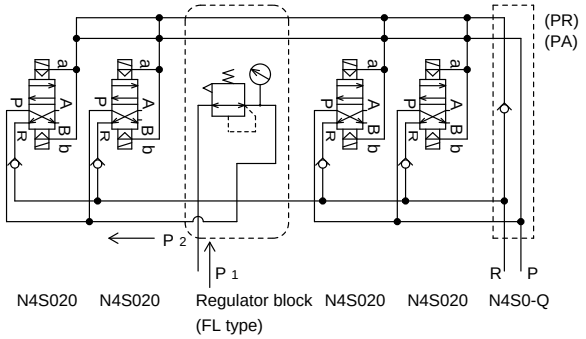
Application (Consult with CKD about other applications.)

Example 1: Depressurization of internal main pressure



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

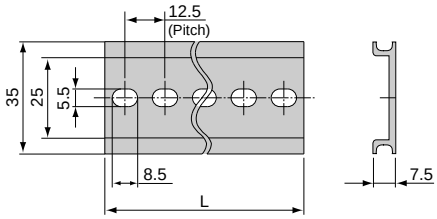
Example 2: Depressurization of external main pressure



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

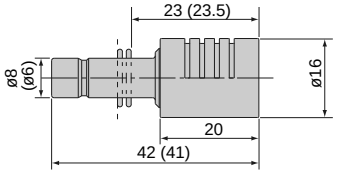
J Related products

● Mounting rail



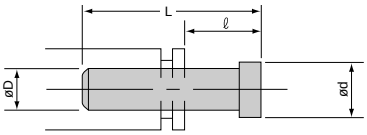
● Silencer (attachment)

SLW-H8
SLW-H6



* The value in ( ) is for H6.
Effective sectional area 8.5 (7) mm^2

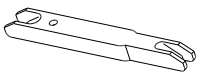
● Blanking plug (attached)



Model no.	D	L	ℓ	d
GZP4-B	ø4	27	19	6
GZP6-B	ø6	29	19	8
GZP8-B	ø8	33	19	10

● Push-in joint tube remover

N4S0-EOT4-6



● Push-in cartridge joint

N4S0 – JOINT – C4

For valve block and supply/exhaust block PA port.
Not available for P or R port of supply/exhaust block.

Symbol	Dimensions
C4	Push-in cartridge joint for ø4, ø6 tube
C6	
CL4	Short L type push-in cartridge joint for ø4, ø6 tube
CL6	
CLL4	Long L type push-in cartridge joint for ø4, ø6 tube
CLL6	
CM5	M5 cartridge dedicated non rotating plate is necessary.
CMP	M5 cartridge dedicated non rotating plate
CPG	Plug cartridge
CMB	Cartridge plug for M5 cartridge
M5-4-KIT	M5 cartridge (x 2) / Non rotating plate for M5 cartridge (x 1)
M5-3-KIT	M5 cartridge (x 1) / Cartridge plug for M5 cartridge (x 1) / Non rotating plate for M5 cartridge (x 1)

● Push-in cartridge joint for supply/exhaust block

N4S0 – Q – JOINT – 8

Use compatible valve block above for pilot air supply (PA).

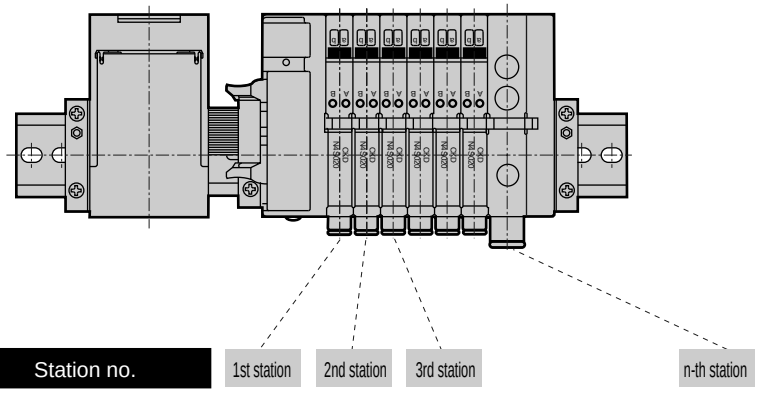
Symbol	Dimensions
8	Push-in cartridge joint for ø8 tube
6	Push-in cartridge joint for ø6 tube
8L	Short L type push-in cartridge joint for ø8 tube
6L	Short L type push-in cartridge joint for ø6 tube
8LL	Long L type push-in cartridge joint for ø8 tube
6LL	Long L type push-in cartridge joint for ø6 tube
MP	Port plug for P, R

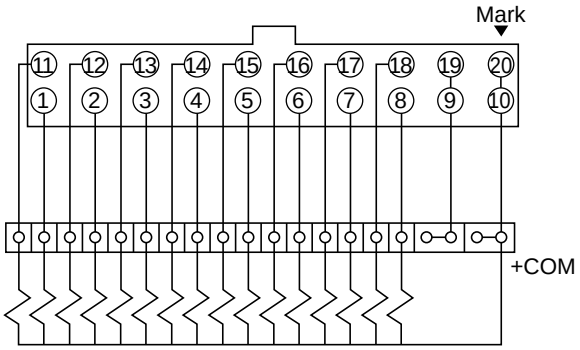
Serial transmission type: Wiring method

T6* Serial transmission type

- The slave unit's output number differs with the manufacturer. The manifold internal connector pin number and the manifold solenoid correspond as shown below.
- Station manifolds are set in order from the left with the piping port facing forward regardless of the wiring block position.
- Internal connectors are wired in order, so there may be some void numbers depending on the number of manifolds. These void outputs cannot be used for drive other than the solenoid manifold in use.
- The working power is 24 VDC dedicated.
- A slave unit for each communication system is used. Contact CKD for the specifications on the usable PLC models, host unit models and communication systems.
- Pin no. is assigned differently based on the PLC maker, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The ▼ mark is the reference for both the plug and socket.

When valve side signal array is required other than standard array, mark a or b on the wiring specifications of manifold specification sheets. For expansion, installation cable should be installed.
Circle on the wiring specifications terminal No.

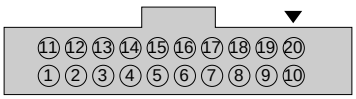




(internal circuit)

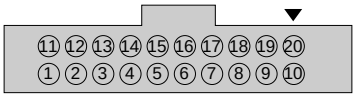
T6* connector pin array (example)

- For single solenoid valve
  (Available up to 16 stations)



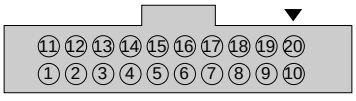
Pin No.	11	12	13	14	15	16	17	18	19	20
Valve No.	9a	10a	11a	12a	13a	14a	15a	16a		+COM
Pin No.	1	2	3	4	5	6	7	8	9	10
Valve No.	1a	2a	3a	4a	5a	6a	7a	8a		+COM

- For double solenoid valve
  (Available up to 8 stations)



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

- For mix (single and double mixture)
  (Available up to 16 solenoids)



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

*1: Valve Nos. 1a, 1b, 2a, 2b, etc., express the first and second stations. Letters a and b refer to solenoid a or solenoid b.

Output No. and connector pin No.

- T6A1, T6C1, T6E1, T6J1, T6G1

Output number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Connector pin	1	2	3	4	5	6	7	8	11	12	13	14	15	16	17	18

- T6A0, T6C0, T6E0, T6J0

Output number	0	1	2	3	4	5	6	7
Connector pin	1	2	3	4	5	6	7	8

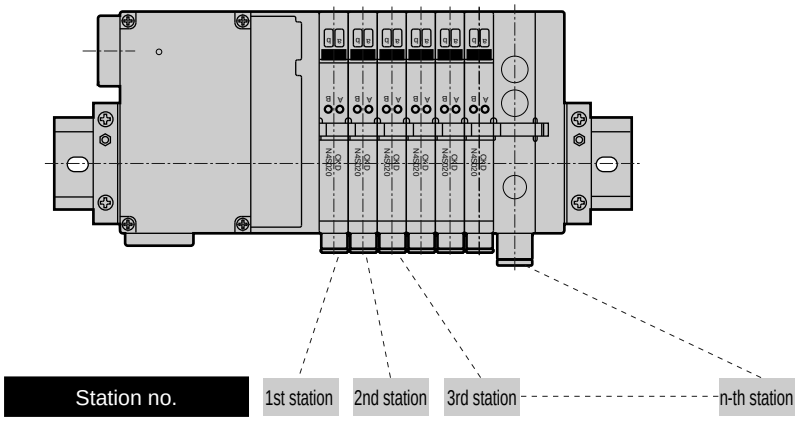
PLC table of serial transmission

Manufacture	Series	Communication system name	Host station model no.
T6A0/T6A1 UNIWIRE	Compatible with each PLC, PC, SBC Consult with CKD for details.	UNIWIRE SYSTEM	Connect to sending unit (UW-SD-120) or each UNIWIRE interfaces
T6C0/T6C1 OMRON	SYSMACα/CS1 Series C200HS/CQM1 Series	CompoBus/S	C200HW-SRM21 CQM1-SRM21 SRM1-C01/C02
T6E0/T6E1 SUNX	Compatible with each PLC, PC, SBC Consult with CKD for details.	S-LINK	Connect to S-LINK controller or S-LINK control board
T6G1 MITSUBISHI CC-Link institution (CLPA)	MELSEC A Series MELSEC QnA Series MELSEC Q Series PLC, PC compatible with each CC-Link brand	CC-Link	AJ61BT11 AJ61QBT11 A1SJ61BT11 A1SJ61QBT11 QJ61BT11 (N) Connect to each maker's CC-Link master
T6J0/T6J1 UNIWIRE H SYSTEM	Compatible with each PLC, personal computer Consult with CKD for details.	UNIWIRE H SYSTEM	Connect to sending unit (UW-SD-H2) or Interface for H SYSTEM

Common gland type: Wiring method

T10/T11 Common gland type

With the common gland, common wires are treated inside beforehand. Compatibility between terminal number (printed on gland cover) and manifold solenoid is as following table.
Station manifolds are set in order from the left with the piping port facing forward regardless of the wiring block position.



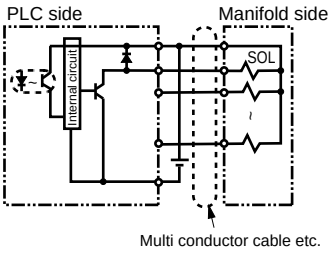
Precautions for common gland type

When using T10 type out side of panel, if required, **prepare a protective cover.**
For common gland type, common wiring's already internally arranged. In the following cases, man-hours for wiring is increased or wiring is impossible.

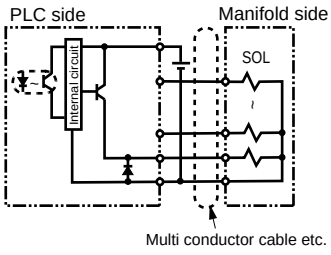
- **Unify power supply of manifold.**
- **When individual contact point type PLC output unit, the contact should be wired to common.**

Wiring methods

● For DC output unit (NPN output)



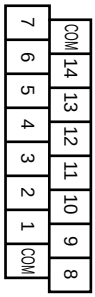
● For DC output unit (PNP output)



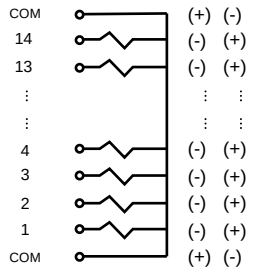
T10 Manifold internal wiring

● Up to 14 stations

Terminal layout drawing



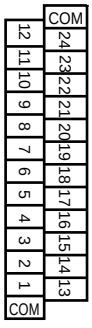
Gland No. Polarity



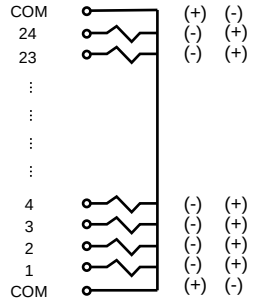
T11 Manifold internal wiring

● Up to 24 stations

Terminal layout drawing



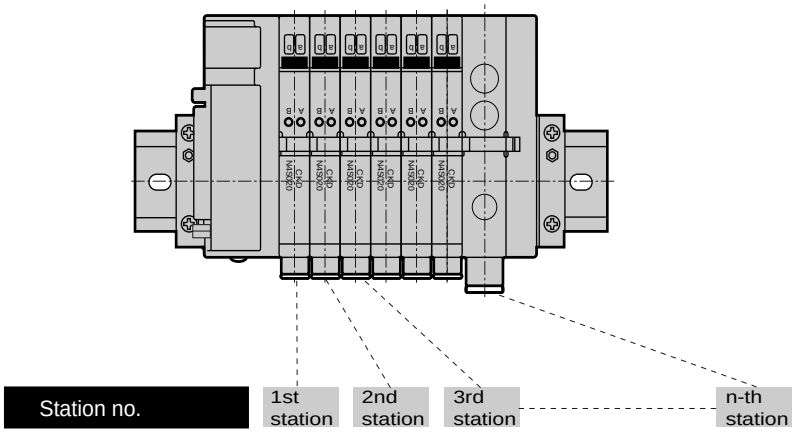
Gland No. Polarity



D sub-connector type: Wiring method T30

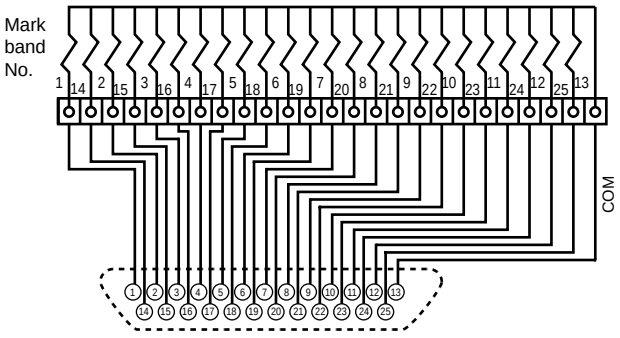
T30 Connector

Connectors used for T30/T31 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. Station manifolds are set in order from the left with the piping port facing forward regardless of the wiring block position.



Cautions for connector type T30

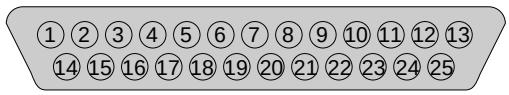
(1) The PLC output unit's signal array and valve signal array must match.
(2) The working power is 12/24 VDC dedicated.
(3) The voltage could drop because of simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.



<Internal circuit>

T30 connector pin array (example)

*1: Valve No. 1a, 1b, 2a, 2b, etc., express the first and second stations. Letters a and b refer to solenoid a or solenoid b.



● For single solenoid valve (Available up to 24 stations)

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	

● For double solenoid valve (Available up to 12 stations)

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

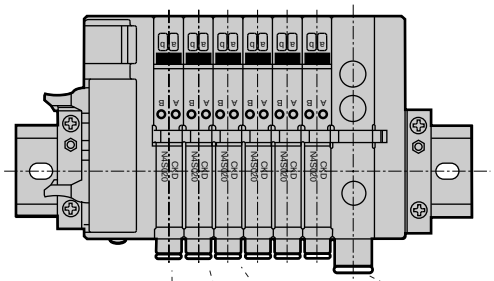
● For mix (single and double mixture) (Available up to 24 solenoids)

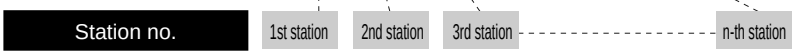
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Valve No.	1a	3a	4a	5a	7a	8a	10a	11b	12b	14a	16a	17a	COM
Pin No.	14	15	16	17	18	19	20	21	22	23	24	25	
Valve No.	2a	3b	4b	6a	7b	9a	11a	12a	13a	15a	16b	17b	

Flat cable connector type: Wiring method

T50 Connector

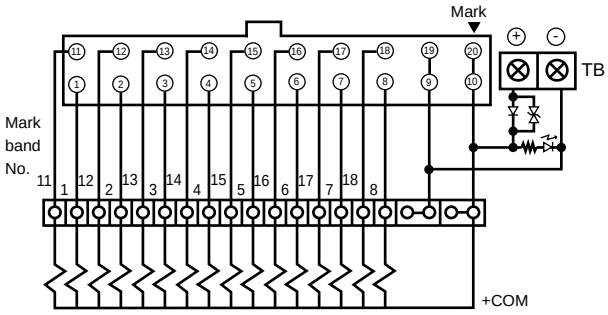
The connector used for T50 wiring method complies with MIL Standards (MIL-C-83503). The flat cable pressure welding makes wiring work easy. Pin no. is assigned differently based on the PLC manufacturer, but the function assignment is the same. Layout using connectors and the triangular mark (▼) shown below as a reference. The ▼ mark is the reference for both the plug and socket. Station manifolds are set in order from the left with the piping port facing forward regardless of the wiring block position.





Precautions for connector type T50

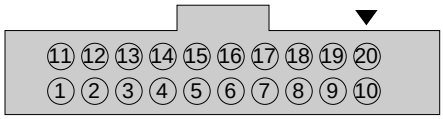
(1) The PLC output unit's signal array and valve signal array must match. Direct connections with the PLC are limited. Use the dedicated cable for each PLC manufacturer.
(2) The working power is 12/24 VDC dedicated.
(3) When connecting the T50 type to a general output unit, use the + terminal (20, 10) of the 20P connector as the + side common, and use the NPN transistor output open collector type for the drive circuit.
(4) Do not connect this manifold to the input unit as major faults could occur in this device and in peripherals. Connect this manifold to the output unit.
(5) The voltage could drop because of simultaneous energizing or the cable length. Confirm that the voltage drop for the solenoid is within 10% of the rated voltage.



<Internal circuit>

T50 connector pin array (example)

*: Valve No. 1a, 1b, 2a, 2b, etc., express the first and second stations.
Letters a and b refer to solenoid a or solenoid b.



● For single solenoid valve
(Available up to 16 stations)

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

● For double solenoid valve
(Available up to 8 stations)

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

● For mix (single and double mixture)
(Available up to 16 solenoids)

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

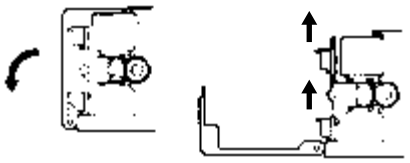
How to disassemble/assemble block manifold

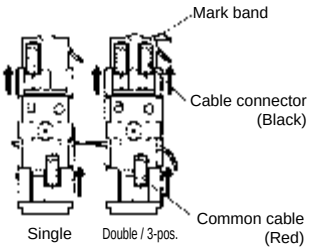
CAUTION: Be sure to turn power OFF and release pressure before increasing or decreasing the manifolds.

The procedures for changing the valve blocks, replacing the valve blocks when spent, etc., adding the supply/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 insufficiently tightened, air could leak or malfunctions could result. Confirm that the connection keys are correctly returned between the blocks and that the blocks are securely fixed onto the DIN rail before supplying the air. CKD recommends using identification marking when disconnecting the A and B port piping.

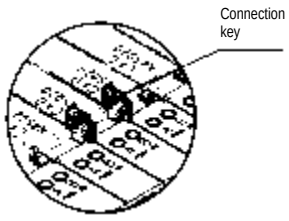
Replacement of valve block

(1) Loosen the DIN rail set screw on the end block.
(2) Open the electric cover of valve block to be replaced and blocks on both sides, and remove cable connector a, b from wiring block and common cable connector.

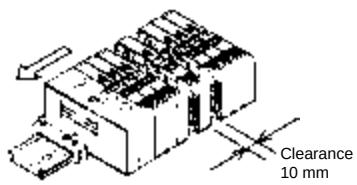




(3) Using a flat-tip screwdriver, etc., lift up the connection key fixing the valve block to be replaced with the block on either side.

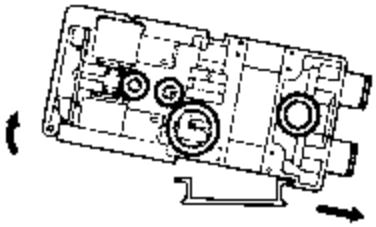


(4) Slide the block to the end block side, and provide a space of 10 mm on each side of the block to be replaced.

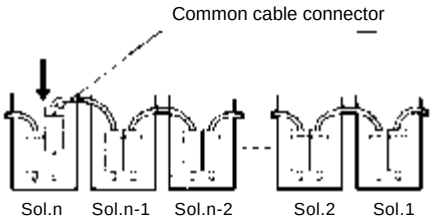


Note that the wiring could break if the valve block is slid out with force.

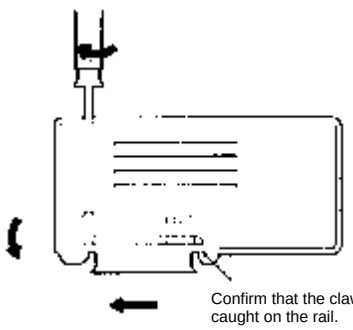
(5) Lift up the block's wiring cover side, and pull toward the piping port side. The block will come off the DIN rail. Open the cover and pass the wiring cable through.



(6) Replace with a new block. Pass the wiring cable through, and pass the latch on the bottom of the block through the port side and catch it onto the DIN rail.
(7) Slide all of the blocks to the wiring block side so that there are no spaces between the blocks.
(8) Push in the connection key to the groove on the top of the block.
(9) Check the numbers on the mark band, and correctly connect the cable connectors a and b and the common connectors as originally connected.



(10) Confirm that the end block's retainer claw is caught on both sides of the DIN rail, and then tighten the set screw with a screwdriver. Appropriate tightening torque is 1.4 N·m.



Increasing the valve blocks

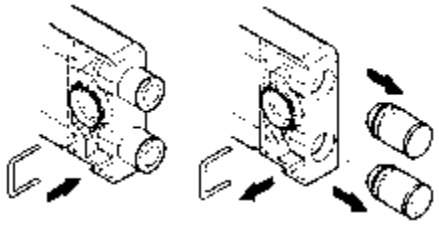
(1) If planning to expand the stations, designate the expansion cable on the specifications when ordering the manifold. The reserved valve block can also be designated.
(2) If no reserve is planned, the wiring must be connected from the wiring block. Consult with CKD.

Installation of supply/ exhaust block and partition block

(1) The blocks are added with the same procedures as replacing the valve blocks.
(2) Pass the cable from the wiring block and the common cable through the cover while providing slack at the cover slit on the supply/exhaust block or partition block's wiring side.
(3) If blocks are expanded, the cable length may be too short.

Replacement of cartridge joint

(1) The blocks are separated with the same procedures as replacing the valve blocks.
(2) Using a flat-tip screwdriver, etc., release the stopper inserted from the left block port side of the joint to be replaced, and then replace the cartridge joint.
(3) Make sure that there is no dirt, etc., on the joint's O-ring, and then set it at the original position.



Checking after disassembly and assembly

Check the piping, wiring and confirm that they are correct. Check that the A, B port piping and a, b wiring is connected correctly.

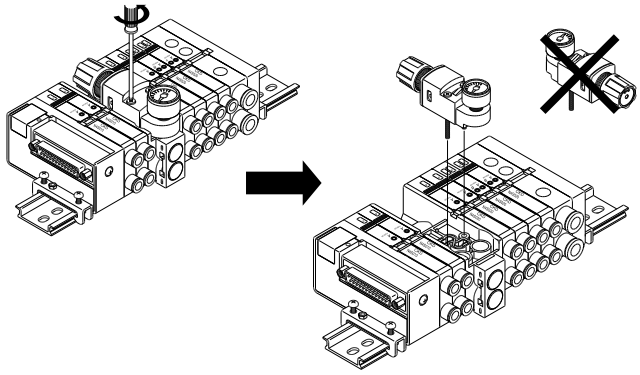
How to disassemble/assemble regulator and regulator block

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

The procedures for changing the regulator or regulator block specifications, replacing the regulator when spent, etc., adding the regulators, and disassembling and assembling are explained below. Consult with CKD.
Confirm that the connection key between blocks and the stopper plate for the regulator block are securely assembled before starting use.
Refer to the MN4S0 Instruction Manual for details on handling the valve block.

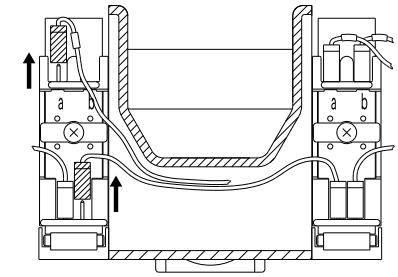
Regulator replacement

(1) Loosen the regulator mounting screw, and lift the regulator upward and off.
(2) 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.
(Note) Pressure reduction may not be possible if the regulator's knob direction is reversed from the original position when replaced. Assemble a regulator which has been removed in the original state.



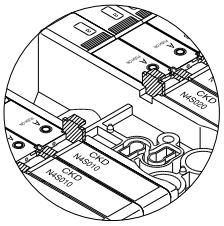
Regulator block replacement

(1) Remove the regulator body. (Refer to the section above for the removal methods.)
(2) Open the cover of the wiring block for the valve blocks on either side of the regulator block, and disconnect the cable connector a (and b) and common cable connector for the (n + 1) station valve block.

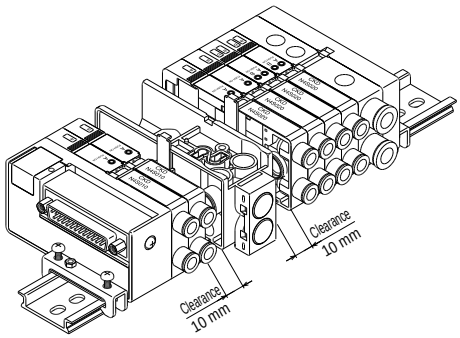


(n + 1)th station nth station

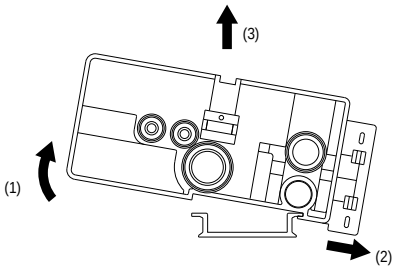
(3) Using a flat-tip screwdriver, etc., lift up the connection key fixing the regulator block with the valve blocks on either side.



(4) Loosen the DIN rail set screw on the end block.
(5) Slide the block to the end block side, and provide a space of 10 mm on each side of the regulator block to be replaced.



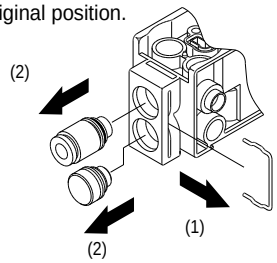
(6) Lift up the side opposite the block piping port, and pull toward the piping port side to remove the block from the DIN rail. {Refer to the following diagram (1) → (3)}



(7) Replace the block, and mount the blocks onto the DIN rail in the reverse order that they were removed.
(8) Slide all of the blocks to the wiring block side so that there are no spaces between the blocks.
(9) Push in the connection key to the groove on the top of the block.
(10) Check the numbers on the mark band, and correctly connect the cable connectors a and b and the common connectors as originally connected.
(11) 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 of set screw is 1.4 to 1.5 N·m.

Regulator block cartridge joint replacement

(1) Separate the blocks in the same process as the "Replacing the regulator block" procedures.
(2) Using a flat-tip screwdriver, etc., release the stopper right side of the joint to be replaced, and then replace the joint. {Refer to the following diagram (1) → (2)}
(3) Make sure that there is no dirt, etc., on the joint's O-ring, and then set it at the original position.



How to fill out block manifold specification sheet

● Manifold model no. (example) Refer to pages 603 to 609 for part no. and details.

MN$^{3}_{4}$S0 8 0- CX - MX T50 - 7 - 3

DIN rail mount type / Solenoid position / Port size / Manual override / Wiring method / Valve block station number / Voltage

Part name	Model no. \ Installation position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Qty.
Wiring block	N4S0- T50	○																									1
Valve block	N4S0 1 0- C4 - M1			○	○	○	○																				4
	N4S0 2 0- C6 -								○	○																	2
	N4S0 4 0- C6 -										○																1
	N3S0 0- -																										
Supply and exhaust block	N4S0-Q - 8											○															1
	N4S0-Q Z - 8		○																								1
Partition block	N4S0- (Note 1)							S																			1
End block	N4S0-E												○														1

Mounting rail	Accessories				
L_2 =	Blanking plug	GZP4-B		Silencer	SLW-H8	
	Blanking plug	GZP6-B		Cable with D-sub connector	N4T-CABLE-DO*-*	
	Blanking plug	GZP8-B		Push-in joint tube remover (standard)	☐ Not required (Check)	

(Note 1) When using partition blocks, indicate the model SA, S, SP or SE for the installation position No.

Preparing the manifold specifications

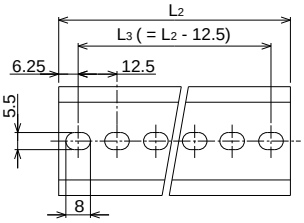
- Complete from the left end, with the piping port facing forward.
  (Indicate the block type selected from the block part components (pages 603 to 609) and the layout instructions.))
- Indicate the total number of blocks designated in the required quantity on the right of the table.
- Indicate the total number of required accessories.
- Indicate the mounting rail length. (Indicate only when a length other than the standard length is required.)
- Manifold specifications are available for individual series, so fill out corresponding specifications.
  - MN$^{3}_{4}$SO ····· Page 618
  - MT$^{3}_{4}$SO ····· Page 619
  - MN$^{3}_{4}$SO (regulator block mounting) ····· Page 620

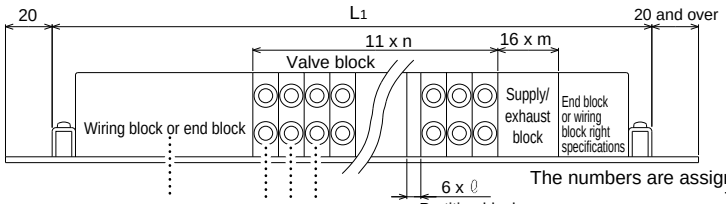
Calculating the DIN rail length

Manifold length L_1 = (11 x n) + (16 x m) + (6 x ℓ) + 57 (Wiring method T30/T50 type)
= (11 x n) + (16 x m) + (6 x ℓ) + 107 (Wiring method T10/T11 type)
= (11 x n) + (16 x m) + (6 x ℓ) + 128.5 (Wiring method T6* type)
= (11 x n) + (16 x m) + (6 x ℓ) + 42 (Wiring method Individual wiring type)
n: Valve block no. ℓ: Partition block no. m: Supply/exhaust block no.

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

$L_2' = \frac{L_1 + 40}{12.5}$ ⇨Integer round up decimal point, rail mount pitch $L_3 = L_2 - 12.5$





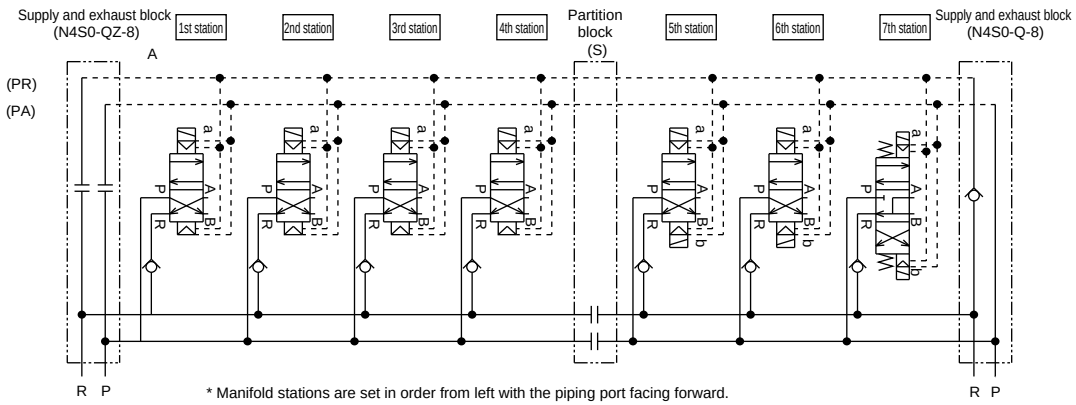
When expanding the stations, add the number of stations.
With the standard calculations, valve blocks can be expanded for two stations.

The numbers are assigned from the left facing the port side.
This also applies for the wiring block right specifications.

Installation position No. 1 2 3 4 ····· Serial No. for all blocks.
Valve No. 1 2 3 ····· Serial No. for only the valve block.

References circuit diagram

This is the circuit diagram from the manifold (example) above.



* Manifold stations are set in order from left with the piping port facing forward.
(The wiring block, supply/exhaust block, partition block and end block are not included in the number of manifold stations.)

How to fill out wiring specifications form

* Not required for standard wiring

● Notes of wiring specifications

(1) With the wiring block and valve block, common wires are treated inside beforehand.

(2) The connector pin and terminal block No. are set to correspond with the solenoid No. according to the T10, T11, T30 and T50 wiring methods. Refer to the precautions for each wiring method and indicate the numbers. Contact CKD when designating specifications other than the standard wiring specifications.

(3) If the expansion valve specification might change, the expansion cable must be provided beforehand. (Two expansion valves are provided with the standard wiring.)

Indicate ○ mark for each pin connector or terminal No. in the wiring Specifications field. (Refer to example below.)

Note that the supply/exhaust block must be installed on the end block side to ensure space for storing the expansion cables. If 5 or more cable wires need to be installed, an extra supply/exhaust block must be provided. If the single type might be changed to a double type, indicate the valve numbers a and b, circle b, and circle the terminal No. In this case, the supply/exhaust block does not need to be expanded even if there are more than 5 cables.

● Example (Completed based on the previous page's manifold specifications.)

Connector pin or gland No.					Valve No.													
T10	T11	T30	(T50)	T	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1	1	1	1	a													
2	2	14	2	2		a												
3	3	2	3	3			a											
4	4	15	4	4				a										
5	5	3	5	5					a									
6	6	16	⑥	6					ⓑ				Reserve cable					
7	7	4	7	7						a								
8	8	17	⑧	8						ⓑ			Reserve cable					
9	9	5	9 - power supply	9														
10	10	18	10 + power supply	10														
11	11	6	11	11							a							
12	12	19	12	12							b							
13	13	7	⑬	13								○						
14	14	20	⑭	14								○	Reserve cable					
COM	15	8	⑮	15								○						
COM	16	21	⑯	16								○						
	17	9	17	17									For the reserved cable after the last wiring, shift by one line and indicate.					
	18	22	18	18														
	19	10	19 - power supply	19														
	20	23	20 + power supply	20														
	21	11		21														

With standard wiring, two expansion cables are provided.

MN$^{3}_{4}$S0 DIN rail mount type Block manifold specifications

Issue / /

Your company name

Contact

Order No.

● Contact ● Quantity set ● Request date

Slip No.	Order No.

● Manifold model no.

MN$^{3}_{4}$S0 [ ] **0-** [ ] **-** [ ] [ ] **-** [ ] **-** [ ]

DIN rail mount type | Solenoid position | Port size | Manual override | Wiring method | Valve block station number | Voltage

When completing this form, select the type from the "Block part components" (pages 603 to 609).

Part name (Page)	Model no. \ Installation position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Quantity
Wiring block (Page 606, 607)	N4S0- [ ]																																
Valve block (Page 605)	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N3S0 [ ] 0- [ ] - [ ]																																
	N3S0 [ ] 0- [ ] - [ ]																																
Supply and exhaust block (Page 604)	N4S0-Q [ ] - [ ]																																
	N4S0-Q [ ] - [ ]																																
Partition block (Page 605)	N4S0-S [ ]																																
	N4S0-S [ ]																																
End block (Page 604)	N4S0-E [ ]																																
	N4S0-E [ ]																																

Mounting rail (Page 609)	L_2 = [ ] (How to calculate length; page 616)	Accessories							
		Blanking plug	GZP4-B		Silencer	SLW-H8		Cable with D-sub connector	N4T-CABLE-DO*-*
		Blanking plug	GZP6-B		Silencer	SLW-H6		Push-in joint tube remover (Standard)	☐ Not required (Check)
		Blanking plug	GZP8-B						

● Wiring specifications (not required for standard wiring. Complete these specifications when designating the wiring sequence and extra cables.)

Connector pin or gland No.					Valve No.																										
T10	T11	T30	T50	T	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
1	1	1	1	1																											
2	2	14	2	2																											
3	3	2	3	3																											
4	4	15	4	4																											
5	5	3	5	5																											
6	6	16	6	6																											
7	7	4	7	7																											
8	8	17	8	8																											
9	9	5	9 -power supply	9																											
10	10	18	10 +power supply	10																											
11	11	6	11	11																											
12	12	19	12	12																											
13	13	7	13	13																											
14	14	20	14	14																											
COM	15	8	15	15																											
COM	16	21	16	16																											
	17	9	17	17																											
	18	22	18	18																											
	19	10	19 -power supply	19																											
	20	23	20 +power supply	20																											
	21	11		21																											
	22	24		22																											
	23	12		23																											
	24	25		24																											
	COM	13COM		25																											
	COM			26																											

When T50 wiring is used, connector pin numbers 9, 10, 19, and 20 cannot be designated because they are used for external input power.

MT$^{3}_{4}$S0 Direct mount type Block manifold specifications

Issue / /

Your company name

Contact

Order No.

● Contact ● Quantity set ● Request date

Slip No.	Order No.

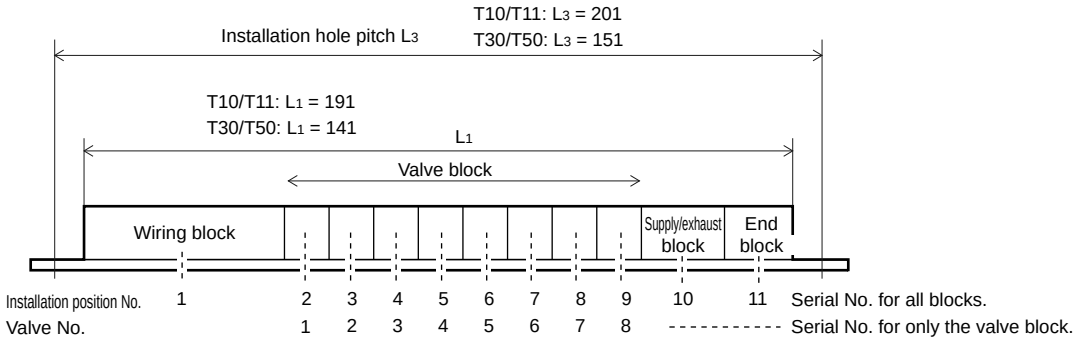
● Manifold model no.

MT$^{3}_{4}$S0 ☐ **0-** ☐ **-** ☐ **-** ☐ **- 8 -** ☐

Direct mount type / Solenoid position / Port size / Manual override / Wiring method / Valve block station number / Voltage

When completing this form, select the type from the "Block part components" (pages 603 to 609).

Part name (page)	Model no. \ Installation position	1	2	3	4	5	6	7	8	9	10	11	Qty.
Wiring block (page 607)	N4S0- ☐												
Valve block (page 605)	N4S0 ☐ 0- ☐ - ☐												
	N4S0 ☐ 0- ☐ - ☐												
	N4S0 ☐ 0- ☐ - ☐												
	N4S0 ☐ 0- ☐ - ☐												
	N4S0 ☐ 0- ☐ - ☐												
	N3S0 ☐ 0- ☐ - ☐												
	N3S0 ☐ 0- ☐ - ☐												
Supply/exhaust block (page 605)	N4S0-Q ☐ - ☐												
End block (page 605)	N4S0-E ☐												
Accessories (page 609)	Blanking plug GZP4-B ☐	Silencer SLW-H8 ☐					Cable with D-sub connector N4T-CABLE-DO*-*						
	Blanking plug GZP6-B ☐	Silencer SLW-H6 ☐					Push-in joint tube remover (Standard)					☐ Not required (Check)	
	Blanking plug GZP8-B ☐												



● Wiring specifications (not required for standard wiring)

Connector pin or gland No.					Valve No.							
T10	T11	T30	T50		1	2	3	4	5	6	7	8
1	1	1	1	1								
2	2	14	2	2								
3	3	2	3	3								
4	4	15	4	4								
5	5	3	5	5								
6	6	16	6	6								
7	7	4	7	7								
8	8	17	8	8								
9	9	5	9 -power supply	9								
10	10	18	10 +power supply	10								
11	11	6	11	11								
12	12	19	12	12								
13	13	7	13	13								
14	14	20	14	14								
COM	15	8	15	15								
COM	16	21	16	16								
	17	9	17	17								
	18	22	18	18								
	19	10	19 -power supply	19								
	20	23	20 +power supply	20								
	21	11		21								
	22	24		22								
	23	12		23								
	24	25		24								
	COM	13COM		25								
	COM			26								

When T50 wiring is used, connector pin numbers 9, 10, 19, and 20 cannot be designated because they are used for external input power.

Manifold specification sheet

MN4S0 DIN rail mount type Regulator block mounting block manifold specifications

Issue / /

Your company name

● Contact ● Quantity set ● Request date

Contact

Slip No.	Order No.

Order No.

● Manifold model no.

MN$^{3}_{4}$S0 [ ] 0- [ ] -R- [ ] - [ ] - [ ] - [ ]

DIN rail mount type / Solenoid position / Port size / Wiring method / Valve block station number / Voltage / Technical confirmation No.

When completing this form, select the type from the "Block part components" (pages 603 to 609).

Part name	Installation position / Model no.	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	Qty.
Wiring block (Page 606, 607)	N4S0- [ ]																																
Valve Block (Page 605)	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N4S0 [ ] 0- [ ] - [ ]																																
	N3S0 [ ] 0- [ ] - [ ]																																
	N3S0 [ ] 0- [ ] - [ ]																																
Supply and exhaust block (Page 604)	N4S0-Q [ ] - [ ]																																
	N4S0-Q [ ] - [ ]																																
Partition block (Page 605)	N4S0-S [ ]																																
	N4S0-S [ ]																																
End block (Page 604)	N4S0-E [ ]																																
	N4S0-E [ ]																																
Regulator Block (Page 608)	N4S0-RA- [ ] - [ ] -FL																																
	N4S0-RB- [ ] - [ ] -FL																																

Mounting rail (Page 609)	L_2 = [ ] mm (How to calculate length; page 616)	Accessories							
			Blanking plug	GZP4-B		Silencer	SLW-H6		Cable with D-sub connector	N4T-CABLE-DO*-*	
			Blanking plug	GZP6-B		Silencer	SLW-H8		Push-in joint tube remover (Standard)		☐ Not required (Check)
			Blanking plug	GZP8-B							

● Wiring specifications (not required for standard wiring. Complete these specifications when designating the wiring sequence and extra cables.)

Connector pin or gland No.					Valve No.																										
T10	T11	T30	T50	T	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
1	1	1	1	1																											
2	2	14	2	2																											
3	3	2	3	3																											
4	4	15	4	4																											
5	5	3	5	5																											
6	6	16	6	6																											
7	7	4	7	7																											
8	8	17	8	8																											
9	9	5	9 -power supply	9																											
10	10	18	10 +power supply	10																											
11	11	6	11	11																											
12	12	19	12	12																											
13	13	7	13	13																											
14	14	20	14	14																											
COM	15	8	15	15																											
COM	16	21	16	16																											
	17	9	17	17																											
	18	22	18	18																											
	19	10	19 -power supply	19																											
	20	23	20 +power supply	20																											
	21	11		21																											
	22	24		22																											
	23	12		23																											
	24	25		24																											
	COM	13 COM		25																											
	COM			26																											

(Notes)

(1) Indicate the manual override and wiring method with each block model.

(2) When T50 wiring is used, connector pin numbers 9, 10, 19, and 20 cannot be designated because they are used for external input power.

(3) Any specifications which do not have a Technical Confirmation Stamp are invalid. Always obtain the Technical Confirmation before placing the order.

Technical confirmation No.

Approval	Inspector	Contact