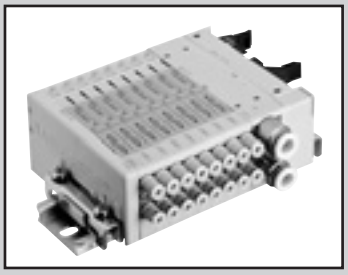


Reduced wiring block manifold pilot operated 3, 4-port valve

MN3E00/MN4E00 Series

Structure and material restriction

	Structure	Model No.
P7 Series	Exhaust treatment	– P70

Common specifications

Descriptions	
Manifold method	Block manifold
Manifold	Common supply/exhaust, check valve integrated (*1)
Working fluid	Compressed air
Valve and operation	Pilot operated soft spool valve
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2
Proof pressure MPa	1.05
Ambient temperature °C	5 to 55
Fluid temperature °C	5 to 55
Lubrication	Not required (*2)
Degree of protection	Dust proof
Vibration resistance m/s^2	50 or less
Shock resistance m/s^2	300 or less
Atmosphere	Containing corrosive gas is not permissible
Manual operating device	Locking/non-locking common or non-locking

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

Electrical specifications

Descriptions		
Rated voltage V		12, 24 VDC
Voltage fluctuation range		±10% (using serial transmission +10%, −5%)
Holding current A	24 VDC	0.017 (0.009) (*3)
	12 VDC	0.033 (0.018) (*3)
Power consumption W	24 VDC	0.4 (0.22) (*3)
	12 VDC	
Thermal class		B
Indicator		LED

*2: As this product is non-lubrication, adding oil may cause leakage of the grease initially sealed in, which may prevent the product from working at its maximum performance.
*3: Values shown in ( ) are for low-heat and energy saving circuit. When you use the valve block of low-heat and energy saving circuit, power supply is limited to the plus common.

Individual specifications

Item \ Port		3-port valve	4-port valve	Dual 3-port valve integrated (*1)
Port size	A/B port	ø1.8, ø3, ø4 push-in fitting, M3		
	P/R port	ø6, ø8 push-in fitting		
	External pilot port	ø6 push-in fitting		-

*1: The two 3-port valve integrated types use the main pressure to operate the valving element, and therefore cannot be used with the external pilot. Check for sufficient supply air flow that the supply pressure does not drop below the min. working pressure due to the operation of the connected load (air operated valve), etc.

Max. number of stations energized by manifold

● T3□/ T5□/ TM□/ T6G1

Item		MN3E00/MN4E00								
		T30(N)	T50	T51	T52	T53	TM1A	TM1C	TM52	T6G1
Max. No. stations	Standard wiring	24 stations	16 stations	18 stations	8 stations	24 stations	10 stations	5 stations	8 stations	16 stations
	Double wiring	12 stations	8 stations	9 stations	4 stations	12 stations	5 stations	2 stations	4 stations	8 stations
Max. No. of solenoids		24 points	16 points	18 points	8 points	24 points	10 points	5 points	8 points	16 points

● T7□

Item		MN3E00/MN4E00									
		T7D1	T7D2	T7G1	T7G2	T7N1	T7N2	T7EC□1	T7EC□2	T7EN1	T7EN2
Max. No. stations	Standard wiring	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations
	Double wiring	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations
Max. No. of solenoids		16 points	32 points	16 points	32 points	16 points	32 points	16 points	32 points	16 points	32 points

Performance/characteristics by model

Item \ Port		3-port valve	4-port valve	Two 3-port valves integrated
Response time (*1) ms	2-position Single	20 or less	20 or less	20 or less
	(*1) ms	20 or less	20 or less	-

*1: The response times are values with supply pressure of 0.5 MPa, without lubrication.

Flow characteristics

		P→A/B		A/B→R	
		C [dm³/(s·bar)]	b	C [dm³/(s·bar)]	b
3-port valve	2-position	0.30	0.20	0.32	0.24
4-port valve	2-position	0.30	0.20	0.32	0.24
Dual 3-port valve integrated	2-position	0.30	0.20	0.32	0.24

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≒ 5.0 × C. *2: Values for ø4 push-in fitting

Slave unit specifications

Item		T6G1 (*1)	T7D1 T7D2	T7G1 (*1) T7G2	T7N1 T7N2	T7EC□1 T7EC□2	T7EN1 T7EN2
Power supply voltage	Unit side	24 VDC ±10%	24 VDC ±10%				
	Valve side	24 VDC +10% −5%	24 VDC +10% −5%				
	Communication side	-	11 to 25 VDC	-			
Current consumption	Unit side	100 mA or less (When all points output ON)	T7D1: 60 mA or less T7D2: 85mA or less (When all points output ON)	T7G1: 65mA or less T7G2: 90mA or less (When all points output ON)	T7N1:40mA or less T7N2:50mA or less (When all points output ON)	120 mA or less (When all points output ON)	120 mA or less (When all points output ON)
	Valve side	15 mA or less (when all points are OFF)	15 mA or less (when all points are OFF)				
	Communication side	-	50 mA or less	-			
Output points		16 points	T7D1: 16 points T7D2: 32 points	T7G1: 16 points T7G2: 32 points	T7N1: 16 points T7N2: 32 points	T7EC□1: 16 points T7EC□2: 32 points	T7EN1: 16 points T7EN2: 32 points
Occupied number		1 station	T7D1: 2 bytes T7D2: 4 bytes	T7G1: 1 station T7G2: 1 station	T7N1: output 16 points T7N2: output 32 points	T7EC□1: 1 address T7EC□2: 1 address	T7EN1: 1 address T7EN2: 1 address

*1: CC-Link of Ver.1.10

Weight

Electrical block (g)		D sub-connector T30(N)	Flat cable connector T5*	Intermediate electrical block		Serial transmission		
				TM1*	TM52	T6G1	T7*	T7E**
		67	59	32	34	205	128	145
Supply and exhaust block (g)		Q/QZ	QK	QKZ	QX		QKX	
	Fitting Lateral	64	69	79	56		61	
	Fitting Facing up	90	94	98	62		66	
Valve block (g)		2-position single	2-position double	Dual 3-port valve integrated				
	Fitting Lateral	31.5	35.0	35.0				
	Fitting Facing up	37.5	41.0	41.0				
Dummy block (g)		MPS/MPD						
		20						
End block (g)		ER/EL						
		40						
DIN rail (g)		-						
		0.19 g/mm						

How to order manifold D sub/flat cable connector

* Refer to page 350 for serial transmission.

● Discrete valve block

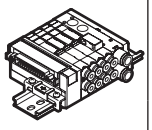
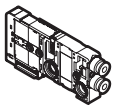
N 3 E00 1 0 - C3 - M D2 W EF —— 3 - P70

● Block manifold

MN 4 E00 1 0 - C3 - M T53 D2 E - 5 - 3 - P70

- MN: DIN rail mount
- 4: Valve
- 1: Solenoid position
- C3: Port size
- M: Manual operating device
- T53: Wiring method
- D2: Individual wiring
- E: Option
- 5: Station No.
- 3: Voltage
- P70: Clean room specifications

* Always indicate "Manifold specifications" (page 410).

Type	
Block manifold	Discrete valve block
	

Code	Content		Block manifold	Discrete valve block
A Valve				
3	3-port valve or two 3-port valves integrated		●	●
4	4-port valve or 3, 4-port valve mix		●	●
B Solenoid position (*10)				
1	3-port valve: Single NC self reset	(differential pressure spring return)	●	●
11	3-port valve: Single NO self reset	(differential pressure spring return)	●	●
2	3-port valve: Double NC self holding		●	●
21	3-port valve: Double NO self holding		●	●
66	Dual 3-port valve integrated (*1): A side valve: NC self reset	(differential pressure return)	●	●
66S	Dual 3-port valve integrated (*1): B side valve: NC self reset	(differential pressure spring return)	●	●
67	Dual 3-port valve integrated (*1): A side valve: NC self reset	(differential pressure return)	●	●
67S	Dual 3-port valve integrated (*1): B side valve: NO self reset	(differential pressure spring return)	●	●
76	Dual 3-port valve integrated (*1): A side valve: NO self reset	(differential pressure return)	●	●
76S	Dual 3-port valve integrated (*1): B side valve: NC self reset	(differential pressure spring return)	●	●
77	Dual 3-port valve integrated (*1): A side valve: NO self reset	(differential pressure return)	●	●
77S	Dual 3-port valve integrated (*1): B side valve: NO self reset	(differential pressure spring return)	●	●
1	4-port valve: 2-position single self reset	(differential pressure spring return)	●	●
2	4-port valve: 2-position double self hold		●	●
8	Mixed manifold		●	
C Port size				
C18	ø1.8 push-in fitting, Lateral (applicable tube UP-9402-**)		●	●
CL18	ø1.8 push-in fitting, Facing up (applicable tube UP-9402-**)		●	●
C3	ø3 push-in fitting, Lateral		●	●
CL3	ø3 push-in fitting, Facing up		●	●
C4	ø4 push-in fitting, Lateral		●	●
CL4	ø4 push-in fitting, Facing up		●	●
M3	M3 female thread (with non-rotation)		●	●
CX	Mix push-in fitting (*10)		●	
C3N	ø1/8" push-in fitting, Lateral		●	●
CL3N	ø1/8" push-in fitting, Facing up		●	●
C4N	ø5/32" push-in fitting, Lateral		●	●
CL4N	ø5/32" push-in fitting, Facing up		●	●
CXN	Mix push-in fitting (*10)		●	
D Manual operating device				
Blank	Non-locking/locking common (with manual cover)		●	●
M	Manual override for non-locking (with manual cover)		●	●
E Wiring method				
Refer to the following page about wiring method.			●	
F Terminal and connector pin wiring				
Blank	Standard wiring		●	●
W	Double wiring (*2, 3)		●	●
G Option				
Blank	None		●	●
E	Low-heat and energy saving circuit (*4, 5)		●	●
F	Port A/B filter integrated (*6)		●	●
H Station No.			(*9)	
1	1 station		●	
to	to			
24	24 stations (*7)			
I Voltage				
3	24 VDC		●	●
4	12 VDC		●	●

· For model No. of the cable with D sub-connector, refer to page 390.

⚠ Precautions for model No. selection

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

***2: Check the connector pin layout (example) given on pages 389 to 396 for the double wiring specifications.** When ordering a single valve block, the double wiring designation is limited to the 2-position single solenoid for the 4-port valve, and the 3-port valve.

*3: Double wiring is not available for discrete individual wiring valve block.

*4: Energizing is limited to the plus common.

*5: Individual wiring is not available for low exoergic/energy-saving circuit.

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

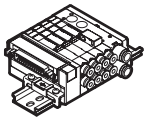
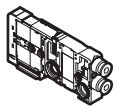
***7: This differs based on the specifications. Refer to page 344.**

***8: For specifications of the self reset, refer to the precautions on page 412.** To include a dummy block, select mix manifold.

*9: A dummy block is counted in the station No.

*10: A mix of metric fittings, M3 female threads, and inch fittings cannot be selected.

(Wiring method list)

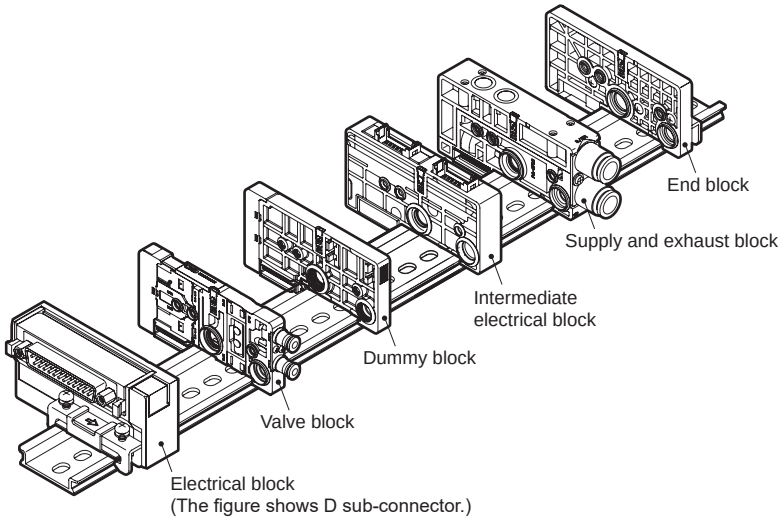
Code	Content		Type: Block manifold	Type: Discrete valve block
				
Ⓔ Wiring method				
T30(N)	25 pin D sub-connector, left		●	
T30(N)R	25 pin D sub-connector, right		●	
T50	20 pin flat cable connector, left (with power supply terminal) (*11)		●	
T50R	20 pin flat cable connector, right (with power supply terminal) (*11)		●	
T51	20 pin flat cable connector, left		●	
T51R	20 pin flat cable connector, right		●	
T52	10 pin flat cable connector, left		●	
T52R	10 pin flat cable connector, right		●	
T53	26 pin flat cable connector, left		●	
T53R	26 pin flat cable connector, right		●	
TM1A	Intermediate wiring block	RITS connector 6P × 2 (*12)	●	
TM1C	Intermediate wiring block	RITS connector 6P (*12)	●	
TM52	Intermediate wiring block	10 pin flat cable connector	●	
TX	Electrical block mix (*13, 14, 15)		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring	D connector 300 mm	●	●
D20	Individual wiring	D connector 500 mm	●	●
D21	Individual wiring	D connector 1000 mm	●	●
D22	Individual wiring	D connector 2000 mm	●	●
D23	Individual wiring	D connector 3000 mm	●	●
D2N	Individual wiring	D connector without socket	●	●
D3	Individual wiring	D connector with socket/terminal	●	●

*11: T50 and T50R with power supply terminal can be combined only with T50R and T50 respectively.
*12:RITS connector 6P (1473562-6) Tyco Electronics Japan G.K.
*13: Request 2 pcs in the manifold specifications sheet.Contact CKD for 3 pcs. or more.
*14: Individual wiring is not available for the TX wiring method.
*15: When selecting TX wiring method, the max. station No. is 24.
* Individual wiring: Individual wiring specification is available with valve blocks designated for it.

Ozone specifications

Ozone-proof specifications are available as standard.

Manifold components explanation and parts list



Example of main component model No.

(Refer to pages 378 to 387 for details.)

Parts name	Model No. (example)	Parts name	Model No. (example)
Electrical block	N4E0-T30-P70	Intermediate wiring block	N4E0-TM1A-P70
Valve block	N4E0020-C3-3-P70	Supply and exhaust block	N4E0-Q-8-P70
Dummy block	N4E0-MPD-P70	End block	N4E0-ER-P70

Related parts list

Parts name	Model No. (example)	Parts name	Model No. (example)
Cartridge push-in fitting and related parts	N4E00-JOINT-C18-P70	Cartridge push-in fitting and related parts	N4E00-JOINT-CPG-P70
	N4E00-JOINT-C3-P70		
	N4E00-JOINT-C4-P70		
	N4E00-JOINT-CL18-P70		
	N4E00-JOINT-CL3-P70		
	N4E00-JOINT-CL4-P70		
	N4E00-JOINT-C3N-P70		
	N4E00-JOINT-C4N-P70		
	N4E00-JOINT-CL3N-P70		
	N4E00-JOINT-CL4N-P70		

MEMO

How to order manifold Serial transmission

* Refer to page 346 for details on D sub-connector/flat cable connector.

● Discrete valve block

N 3 E00 1 0 - C3 - M D2 W EF — 3 - P70

● Block manifold

MN 4 E00 1 0 - C3 - M T6G1 D2 E - 5 - 3 - P70

- MN: DIN rail mount
- 4: Ⓐ Valve
- 1: Ⓑ Solenoid position
- C3: Ⓒ Port size
- M: Ⓓ Manual operating device
- T6G1: Ⓔ Wiring method (serial transmission)
- D2: Individual wiring
- EF: Ⓕ Terminal and connector pin wiring
- E: Ⓖ Option
- 5: Ⓗ Station No.
- 3: Ⓘ Voltage
- P70: Clean room specifications

* Always indicate "Manifold specifications" (page 410).

Code	Content		Type: Block manifold	Type: Discrete valve block
Ⓐ Valve				
3	3-port valve or two 3-port valves integrated		●	●
4	4-port valve or 3, 4-port valve mix		●	●
Ⓑ Solenoid position (*10)				
1	3-port valve	Single NC self reset	(differential pressure spring return)	●	●
11	3-port valve	Single NO self reset	(differential pressure spring return)	●	●
2	3-port valve	Double NC self holding		●	●
21	3-port valve	Double NO self holding		●	●
66	Dual 3-port valve integrated (*1)	A side valve: NC self reset	(differential pressure return)	●	●
66S	Dual 3-port valve integrated (*1)	B side valve: NC self reset	(differential pressure spring return)	●	●
67	Dual 3-port valve integrated (*1)	A side valve: NC self reset	(differential pressure return)	●	●
67S	Dual 3-port valve integrated (*1)	B side valve: NO self reset	(differential pressure spring return)	●	●
76	Dual 3-port valve integrated (*1)	A side valve: NO self reset	(differential pressure return)	●	●
76S	Dual 3-port valve integrated (*1)	B side valve: NC self reset	(differential pressure spring return)	●	●
77	Dual 3-port valve integrated (*1)	A side valve: NO self reset	(differential pressure return)	●	●
77S	Dual 3-port valve integrated (*1)	B side valve: NO self reset	(differential pressure spring return)	●	●
1	4-port valve	2-position single self reset	(differential pressure spring return)	●	●
2	4-port valve	2-position double self hold		●	●
8	Mixed manifold			●	
Ⓒ Port size					
C18	ø1.8 push-in fitting, Lateral (applicable tube UP-9402-**)			●	●
CL18	ø1.8 push-in fitting, Facing up (applicable tube UP-9402-**)			●	●
C3	ø3 push-in fitting, Lateral			●	●
CL3	ø3 push-in fitting, Facing up			●	●
C4	ø4 push-in fitting, Lateral			●	●
CL4	ø4 push-in fitting, Facing up			●	●
M3	M3 female thread (with non-rotation)			●	●
CX	Mix push-in fitting (*10)			●	
C3N	ø1/8" push-in fitting, Lateral			●	●
CL3N	ø1/8" push-in fitting, Facing up			●	●
C4N	ø5/32" push-in fitting, Lateral			●	●
CL4N	ø5/32" push-in fitting, Facing up			●	●
CXN	Mix push-in fitting (*10)			●	
Ⓓ Manual operating device					
Blank	Non-locking/locking common (with manual cover)			●	●
M	Manual override for non-locking (with manual cover)			●	●
Ⓔ Wiring method					
Refer to the following page about wiring method.				●	
Ⓕ Terminal and connector pin wiring					
Blank	Standard wiring			●	●
W	Double wiring (*2, 3)			●	●
Ⓖ Option					
Blank	None			●	●
E	Low-heat and energy saving circuit (*4, 5)			●	●
F	Port A/B filter integrated (*6)			●	●
Ⓗ Station No.					(*11)
1	1 station			●	
to	to				
32	32 stations (*7)				
Ⓘ Voltage					
3	24 VDC			●	●

⚠ Precautions for model No. selection

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

***2: Check the connector pin layout (example) given on pages 399 to 403 for the double wiring specifications.** When ordering a single valve block, the double wiring designation is limited to the 2-position single solenoid for the 4-port valve, and the 3-port valve.

*3: Double wiring is not available for a single unit of individual wiring valve block.

*4: Energizing is limited to the plus common.

*5: For a type of unit with a low-heat-generating/power-saving circuit built-in, individual wiring cannot be selected.

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

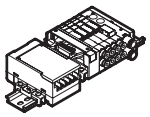
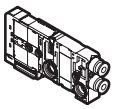
***7: This differs depending on the specifications. Refer to page 344.**

***8: For specifications of the self reset, refer to the precautions on page 412.** To include a dummy block, select mix manifold.

*9: A dummy block is counted in the station No.

*10: The combination of metric and inch fittings is not available.

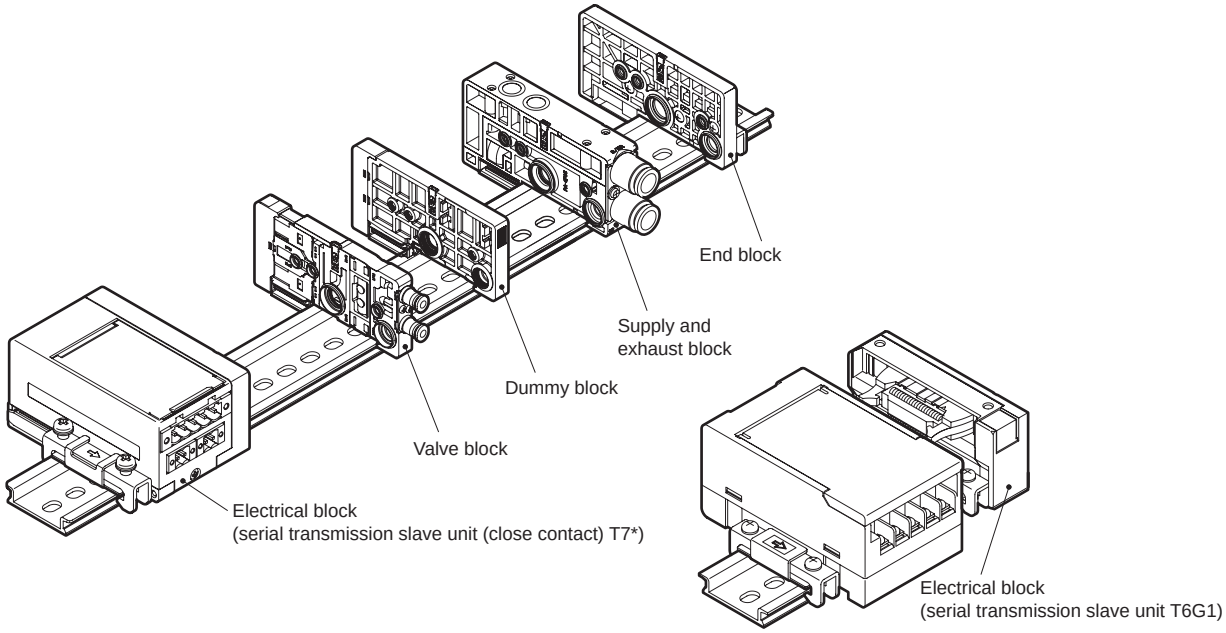
(Wiring method list)

Code	Content		Type: Block manifold	Type: Discrete valve block
				
E Wiring method				
T6G1	CC-Link 16 points		●	
T7D1	Close contact type DeviceNet 16 points		●	
T7D2	Close contact type DeviceNet 32 points		●	
T7G1	Close contact type CC-Link 16 points		●	
T7G2	Close contact type CC-Link 32 points		●	
T7N1	Close contact type S-LINK V 16 points		●	
T7N2	Close contact type S-LINK V 32 points		●	
T7EC1	Close contact EtherCAT 16 points (port side leadout)		●	
T7EC2	Close contact EtherCAT 32 points (port side leadout)		●	
T7ECT1	Close contact EtherCAT 16 points (wiring side leadout)		●	
T7ECT2	Close contact EtherCAT 32 points (wiring side leadout)		●	
T7EN1	Close contact EtherNet/IP 16 points		●	
T7EN2	Close contact EtherNet/IP 32 points		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring	D type connector 300 mm	●	●
D20		D type connector 500 mm	●	●
D21		D type connector 1000 mm	●	●
D22		D type connector 2000 mm	●	●
D23		D type connector 3000 mm	●	●
D2N		D type connector without socket	●	●
D3		D type connector with socket/terminal	●	●

Ozone specifications

Ozone-proof specifications are available as standard.

Manifold components explanation and parts list



Example of main component model No.

(Refer to pages 378 to 387 for details.)

Parts name	Model No. (example)	Parts name	Model No. (example)
Electrical block	N4E0-T7G2-P70	Supply and exhaust block	N4E0-Q-8-P70
Valve block	N4E0020-C3-3-P70	End block	N4E0-ER-P70
Dummy block	N4E0-MPD-P70		

Related parts list

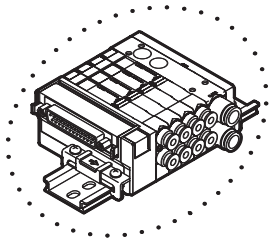
Parts name	Model No. (example)	Parts name	Model No. (example)
Cartridge push-in fitting and related parts	N4E00-JOINT-C18-P70	Cartridge push-in fitting and related parts	N4E00-JOINT-CPG-P70
	N4E00-JOINT-C3-P70		
	N4E00-JOINT-C4-P70		
	N4E00-JOINT-CL18-P70		
	N4E00-JOINT-CL3-P70		
	N4E00-JOINT-CL4-P70		
	N4E00-JOINT-C3N-P70		
	N4E00-JOINT-C4N-P70		
	N4E00-JOINT-CL3N-P70		
	N4E00-JOINT-CL4N-P70		

MEMO

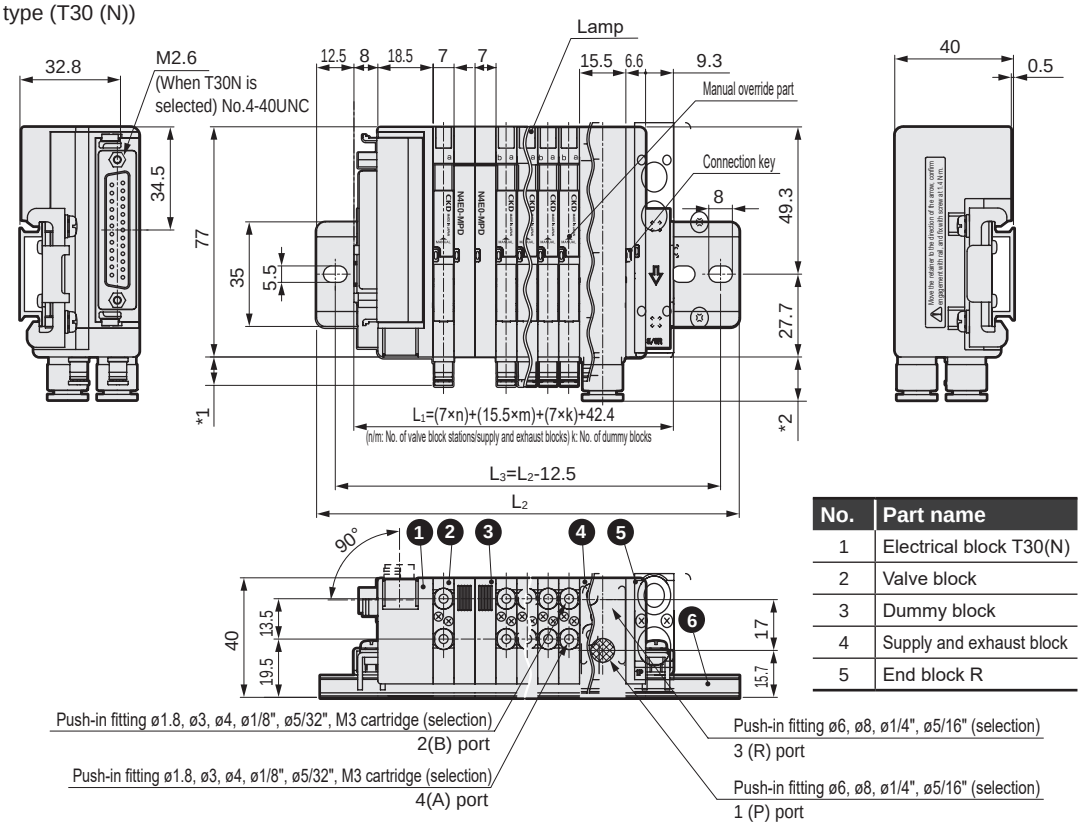
Dimensions

MN$^{3}_{4}$E00*-*-T30(N)*-*-*-P70

● D-sub-connector left side type (T30 (N))



* D sub-connector can be faced up or down.
* For how to switch the connector direction, refer to page 359.



(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

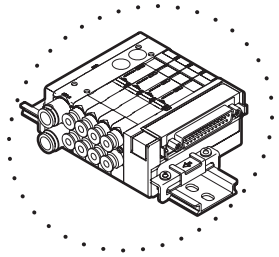
(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

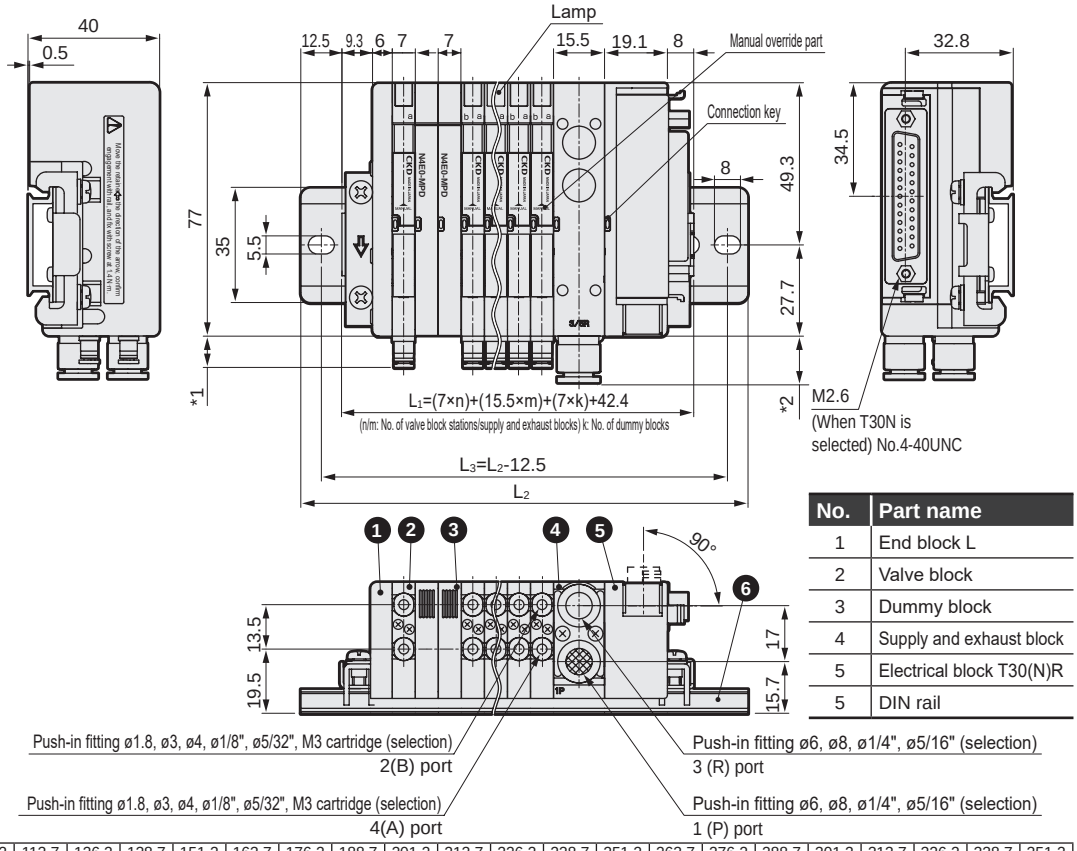
No.	Part name
1	Electrical block T30(N)
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R

* For dimensions of the radial push-in fitting (Facing up) for valve block and for supply and exhaust block, refer to page 359.

MN$^{3}_{4}$E00*-*-T30(N)R*-*-*-P70

● D sub-connector, right (T30(N)R)





(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

No.	Part name
1	End block L
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	Electrical block T30(N)R
5	DIN rail

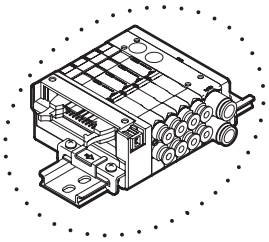
Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

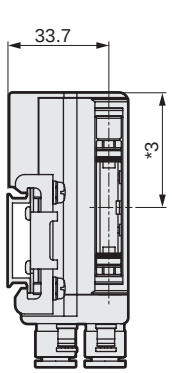
Dimensions

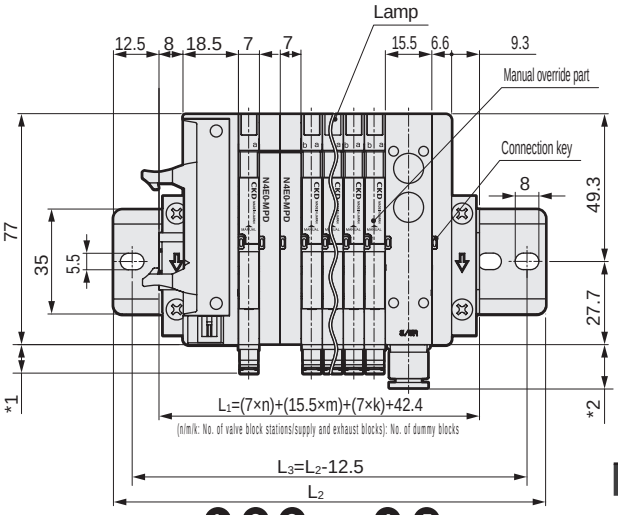
MN$^{3}_{4}$E00*-*-T50*-*-*-P70

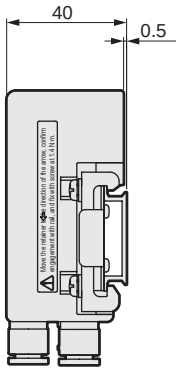
● Flat cable connector, left (T50)

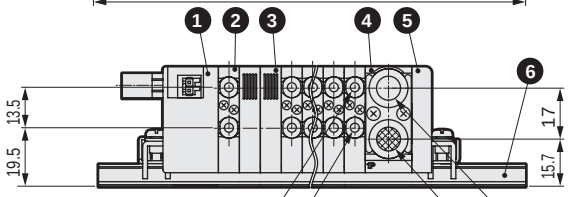
*** T51, T52 and T53 are also available. Dimensions are same as those of T50. *3 Refer to the connector dimensions.**











Push-in fitting ø1.8, ø3, ø4, ø1/8", ø5/32", M3 cartridge (selection)
2(B) port
Push-in fitting ø1.8, ø3, ø4, ø1/8", ø5/32", M3 cartridge (selection)
4(A) port
Push-in fitting ø6, ø8, ø1/4", ø5/16" (selection)
3 (R) port
Push-in fitting ø6, ø8, ø1/4", ø5/16" (selection)
1 (P) port

(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

(*2) Connector dimensions	
T50	38.3
T51	
T52	32.0
T53	34.5

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

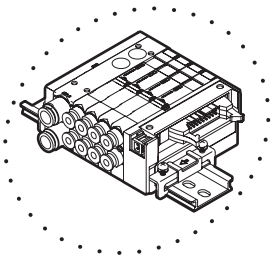
No.	Part name
1	Electrical block T50
2	Valve block
3	Dummy block5
4	Supply and exhaust block
5	End block R
6	DIN rail

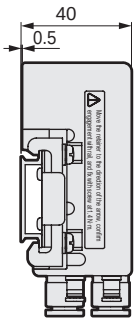
*** For dimensions of the radial push-in fitting (Facing up) for valve block and for supply and exhaust block, refer to page 359.**

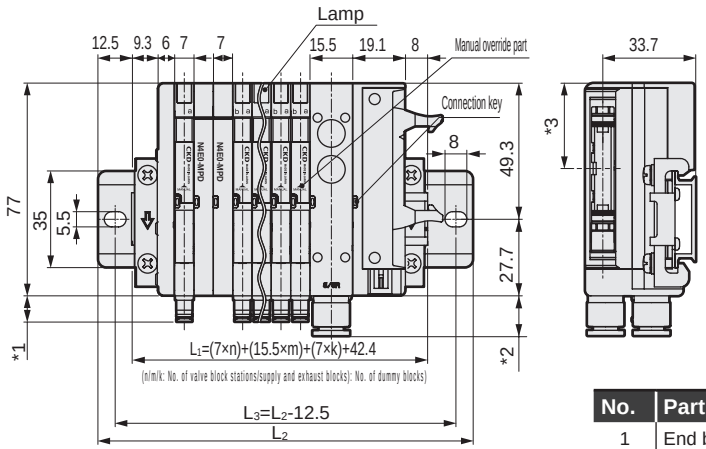
*** A power feed connector can be used with T50 to supply power to the PLC output unit. Refer to page 359 for how to connect the connector and refer to the wiring precautions on page 391 for how to wire.**

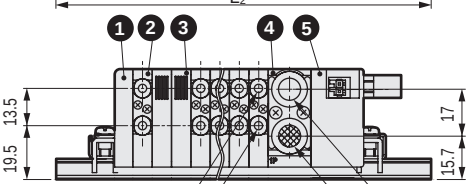
MN$^{3}_{4}$E00*-*-T50R*-*-*-P70

● Flat cable connector, right (T50R)









Push-in fitting ø1.8, ø3, ø4, ø1/8", ø5/32", M3 cartridge (selection)
2(B) port
Push-in fitting ø1.8, ø3, ø4, ø1/8", ø5/32", M3 cartridge (selection)
4(A) port
Push-in fitting ø6, ø8, ø1/4", ø5/16" (selection)
3 (R) port
Push-in fitting ø6, ø8, ø1/4", ø5/16" (selection)
1 (P) port

(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

(*2) Connector dimensions	
T50R	30.7
T51R	
T52R	37.1
T53R	34.5

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

No.	Part name
1	End block L
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	Electrical block T50R
6	DIN rail

Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

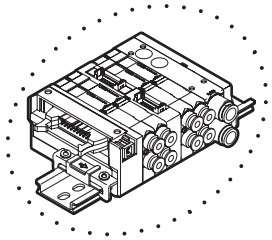
Dimensions

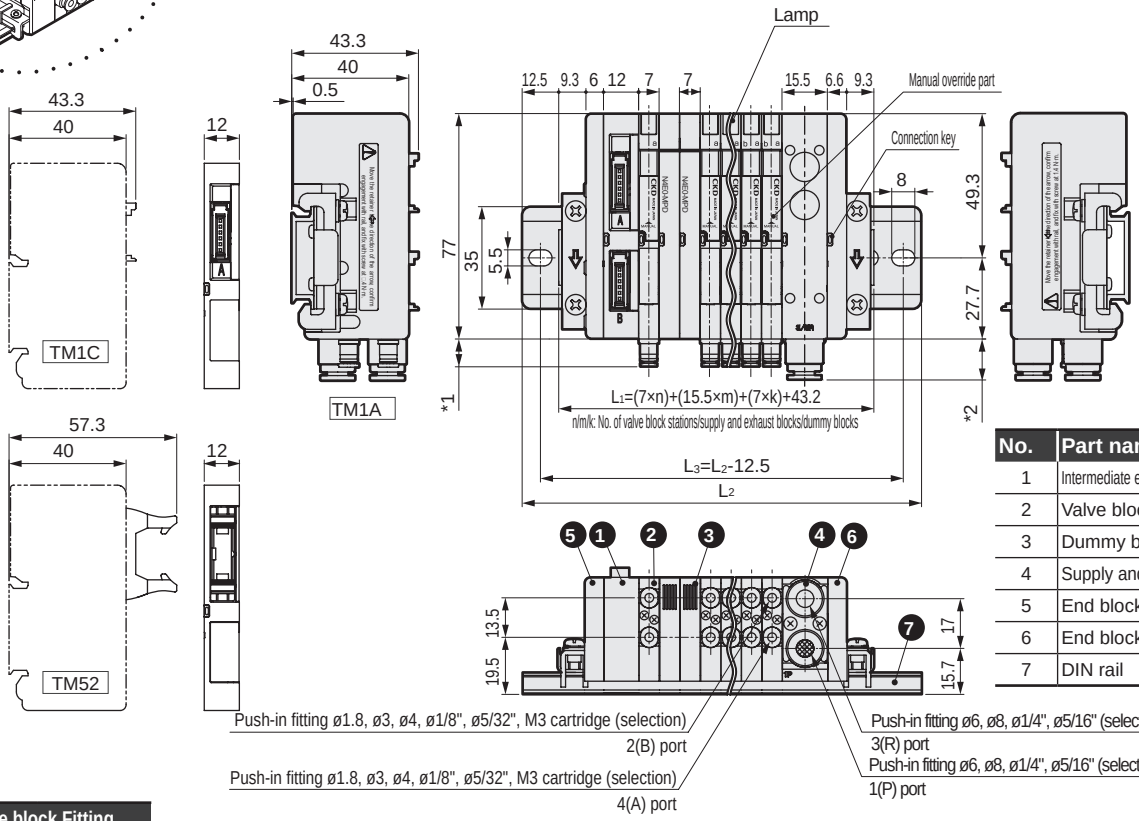
MN$^{3}_{4}$E00*-*-TM1$^{A}_{C}$ *-*-*-P70

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

MN$^{3}_{4}$E00*-*-TM52*-*-*-P70

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





No.	Part name
1	Intermediate electrical block TM1A
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block L
6	End block R
7	DIN rail

(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

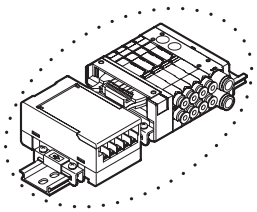
(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

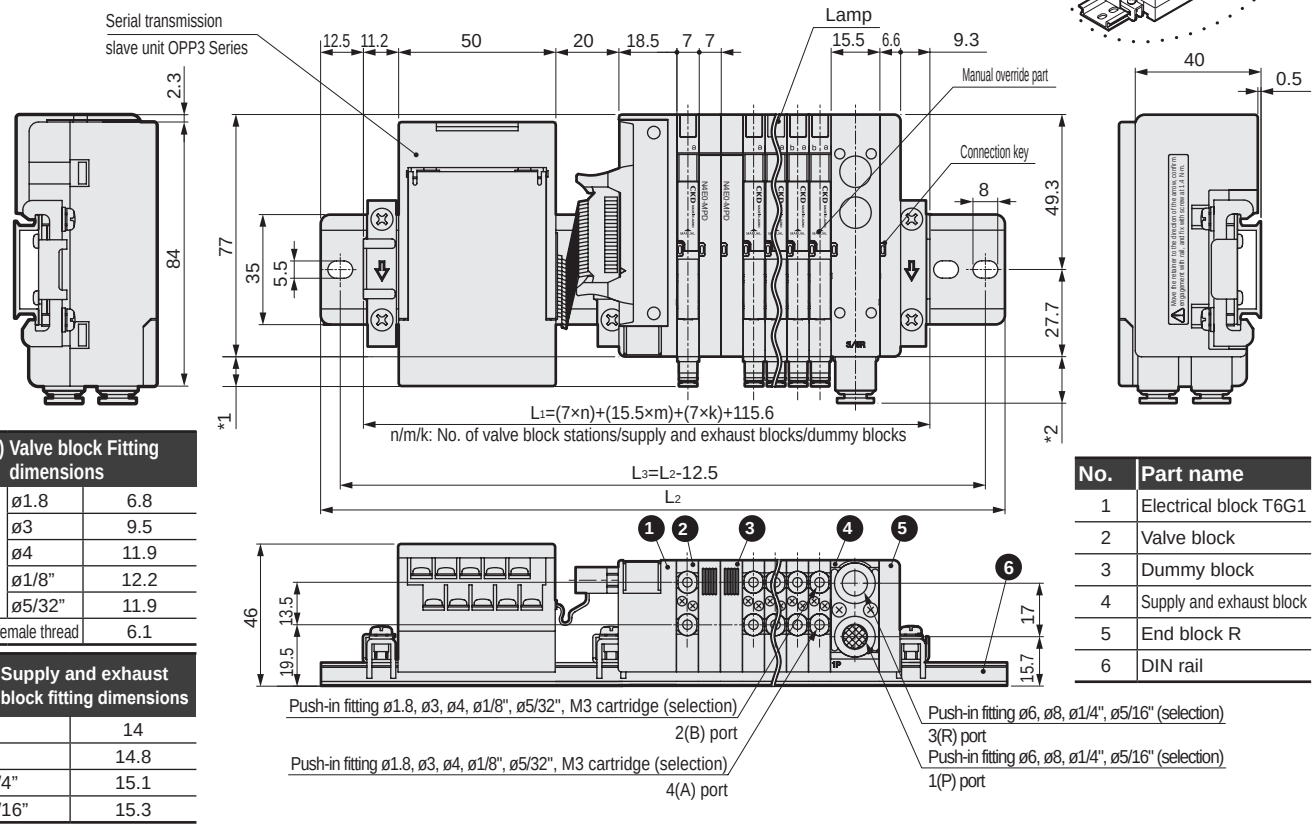
Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions

MN 3/4 E00*-*-T6G1-*-*-P70

● Serial transmission (T6G1)





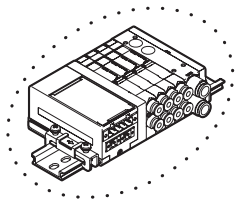
(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

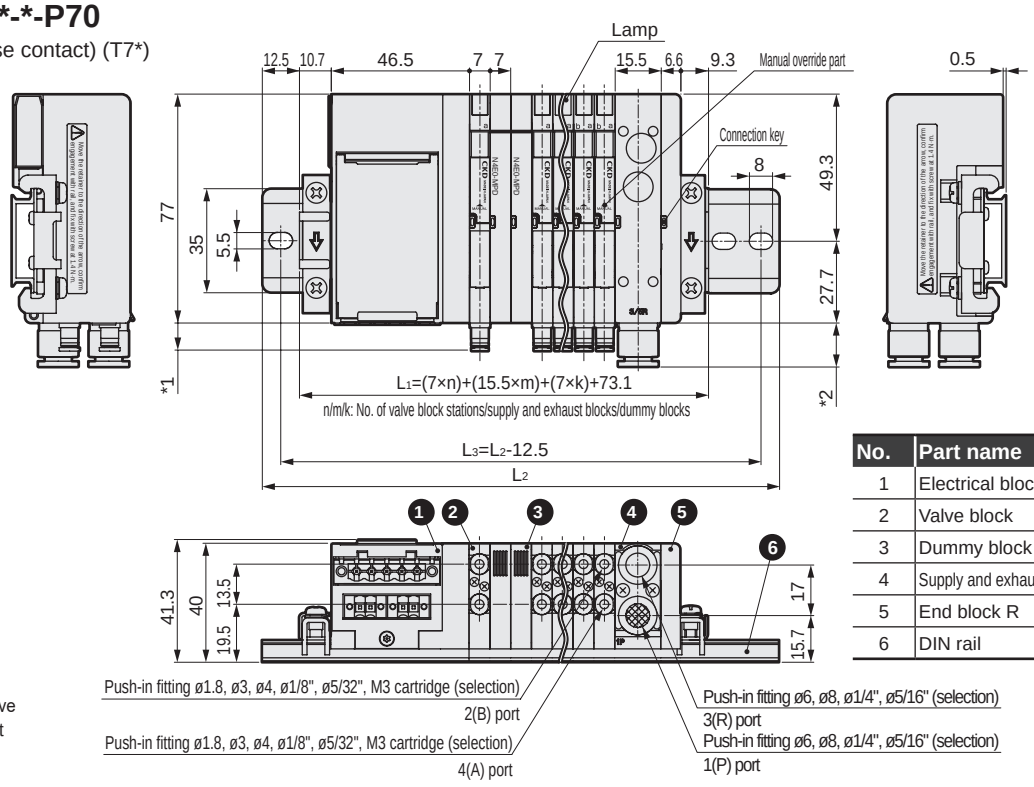
*2 Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

No.	Part name
1	Electrical block T6G1
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R
6	DIN rail

MN 3/4 E00*-*-T7**-*-*-P70

● Serial transmission (close contact) (T7*)





(*1) Valve block Fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

*2 Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

No.	Part name
1	Electrical block T7*
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R
6	DIN rail

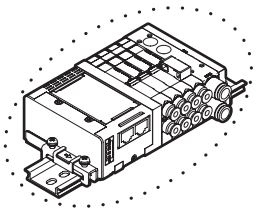
* For dimensions of the radial push-in fitting (Facing up) for valve block and for supply and exhaust block, refer to page 359.

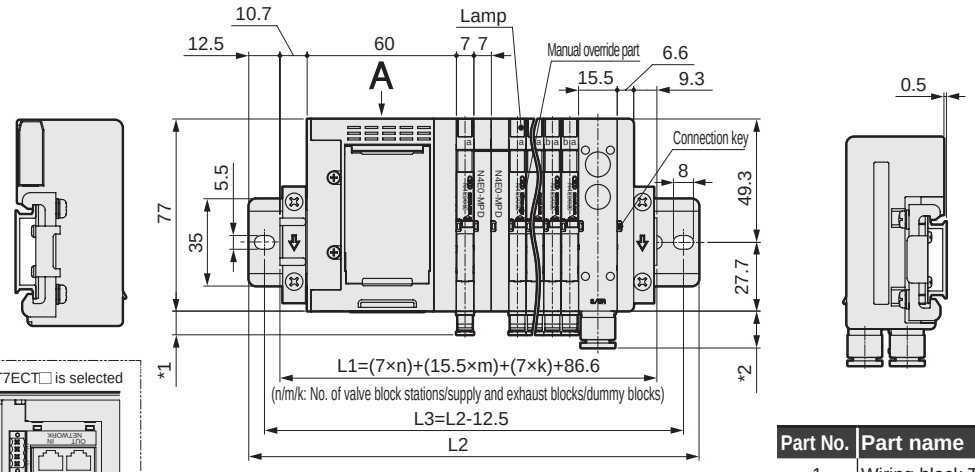
Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions

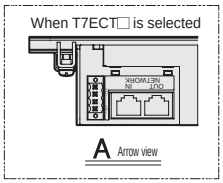
MN$\frac{3}{4}$E00*-*- T7**-*-*P70

● Serial transmission (T7EC□□)

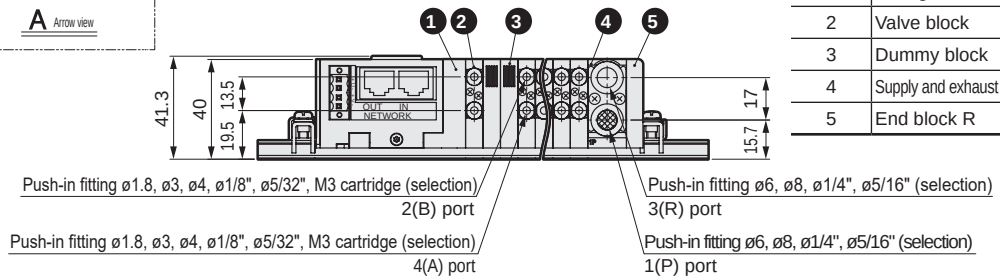




(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 Female thread		6.1



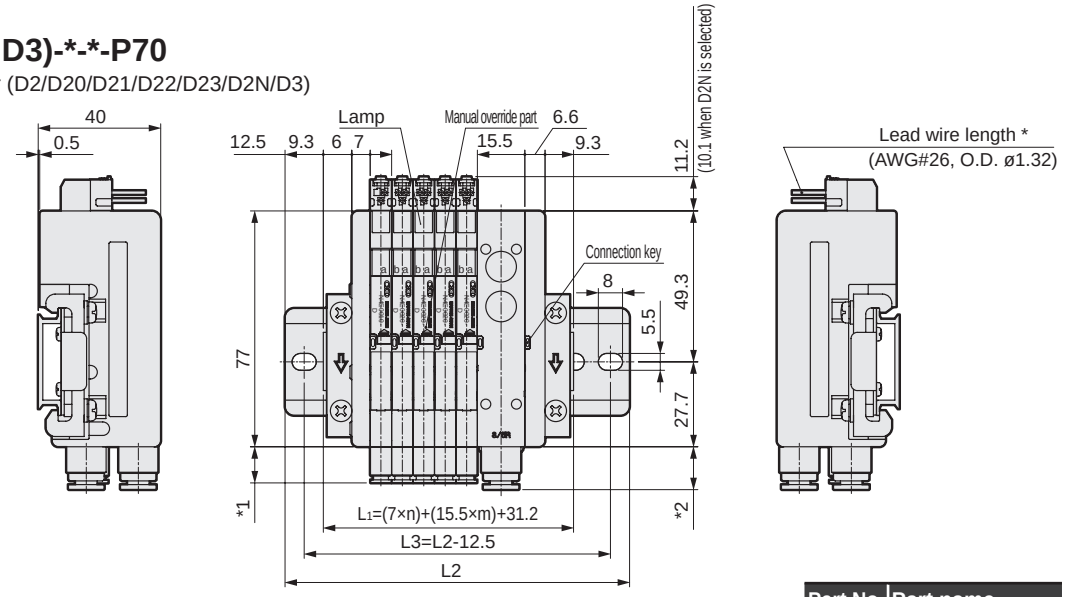
(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3



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

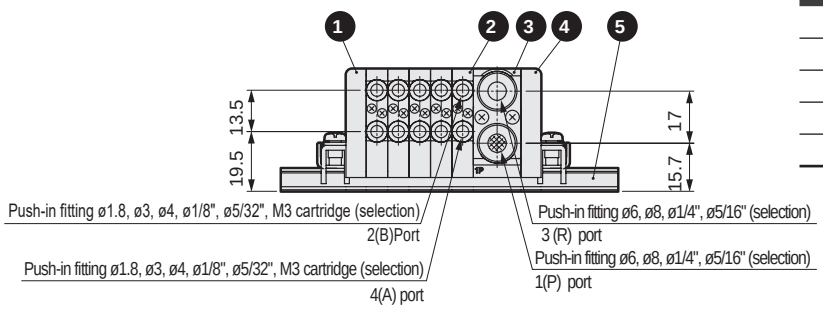
MN$\frac{3}{4}$E00*-*-(D2 to D3)-*-*-P70

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



(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	6.8
	ø3	9.5
	ø4	11.9
	ø1/8"	12.2
	ø5/32"	11.9
M3 female thread		6.1

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3



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

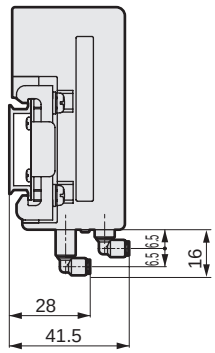
Manifold length L1 mm	63.7 or less	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	75	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

Dimensions

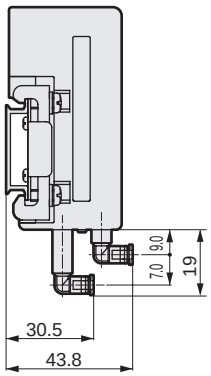
● Piping blocks (common for all)

For air fiber

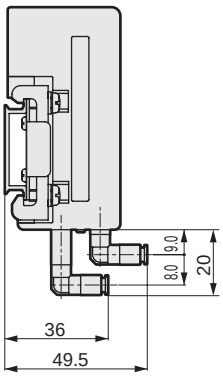
Push-in fitting (Facing up)
● ø1.8 (CL18)



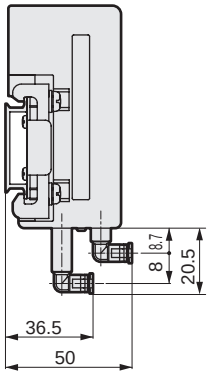
Push-in fitting (Facing up)
● ø3 (CL3)



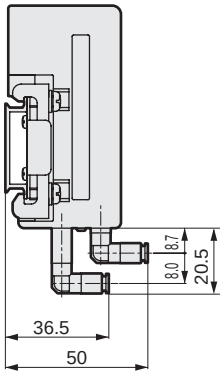
Push-in fitting (Facing up)
● ø4 (CL4)



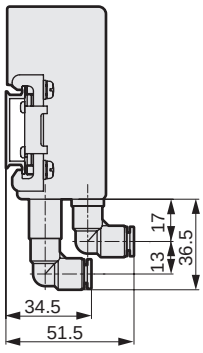
Push-in fitting (Facing up)
● ø1/8" (CL3N)



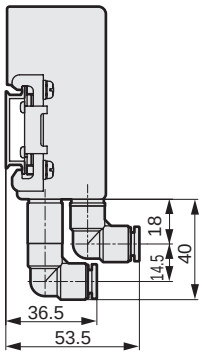
Push-in fitting (Facing up)
● ø5/32"(CL4N)



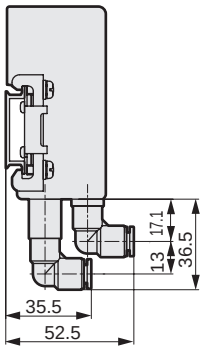
Supply and exhaust block
Radial push-in fitting (upward)
● ø6(CL6)



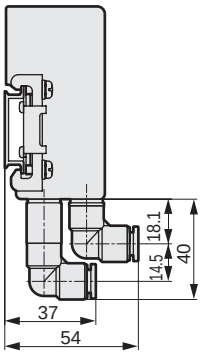
● ø8(CL8)



● ø1/4"(CL6N)

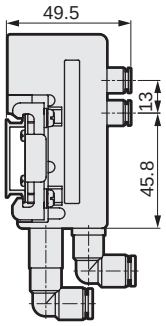


● ø5/16"(CL8N)

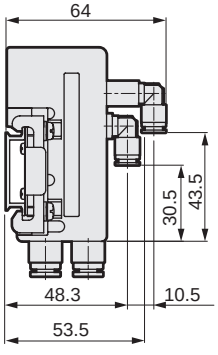


Supply and exhaust block for external pilot

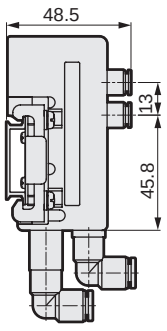
● Upward piping



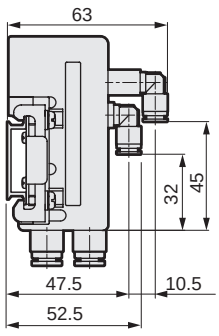
● Lateral piping



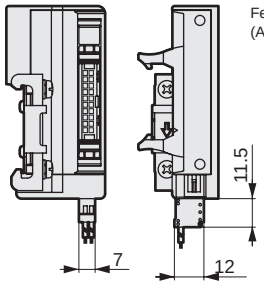
●Upward piping
(inch fitting specifications)



● Lateral piping
(inch fitting specifications)



● Dimensions with T50 power supply connector

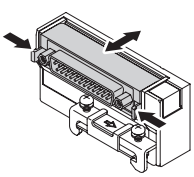


Feed connector
(Attached with product)

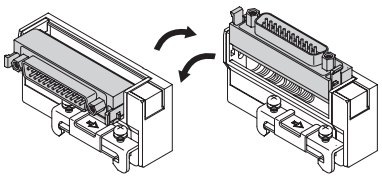
Applicable wire
AWG28-20

● D-sub-connector (T30 (N)/T30 (N)R): How to switch the connector direction

Usage in a horizontal state

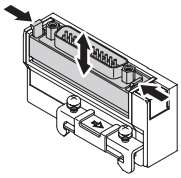


Hold the lever and pull the connector out horizontally. Push in the connector horizontally for storage. (Must be fixed.)

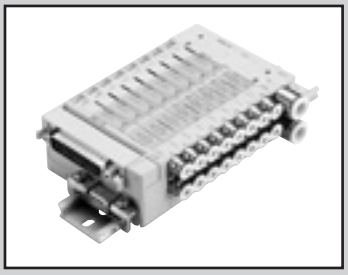


Rotate the connector. Fix the connector in the horizontal or vertical state during use.

Usage in a vertical state



Hold the lever and pull the connector out vertically.Push in the connector horizontally for storage. (Must be fixed.)



Reduced wiring block manifold
Pilot operated 3, 4-port valve

MN3E0/MN4E0 Series

Structure and material restriction

	Structure	Model No.
P7 Series	Exhaust treatment	– P70

Common specification

Item		Description
Manifold method		Block manifold
Manifold		Common supply/exhaust, check valve integrated *1
Working fluid		Compressed air
Valve and operation		Pilot operated soft spool valve
Max. working pressure	MPa	0.7
Min. working pressure	MPa	0.2
Proof pressure	MPa	1.05
Ambient temperature	°C	5 to 55
Fluid temperature	°C	5 to 55
Lubrication		Not required
Degree of protection		Dust proof
Vibration resistance	m/s^2	50 or less
Shock resistance	m/s^2	300 or less
Atmosphere		Containing corrosive gas is not permissible
Manual operating device		Locking/non-locking common or non-locking

*1: Check valve blocks back pressure from adjacent pneumatic devices, etc., However, the structure does not permit continuous pressure holding, so do not use for purposes other than blocking back pressure.

Electrical specifications

Item			Description
Rated voltage	V		12, 24
Voltage fluctuation range			±10% (using serial transmission +10%, -5%)
Guaranteed current	A	24 VDC	0.025 (0.013) *2
		12 VDC	0.05 (0.025) *2
Power consumption	W	24 VDC	0.6 (0.3) *2
		12 VDC	
Thermal class			B
Surge suppressor			Option
Indicator			LED

*2: As this product has no-lubrication specifications, adding oil may cause leakage of the grease initially sealed in, which may prevent the product from operating at its maximum performance.
*3: Values shown in ( ) are for low exoergic/energy circuit type.As well, when using the valve block with individual power supply function (AUX), type with low exoergic/energy circuit, energizing is limited to the plus common.

Individual specifications

Item \ Port		3-port valve	4-port valve	Dual 3-port valve integrated *1
Port size	A/B port	ø1.8, ø4, ø6 push-in fitting, M5, fiber tube		
	P/R port	ø6, ø8 push-in fitting		
	External pilot port	ø6 push-in fitting		-

*1: The dual 3-port valves integrated type uses the main pressure to operate the valving element, and therefore cannot be used with the external pilot. Check for sufficient supply air flow that the supply pressure does not drop below the min. working pressure due to the operation of the connected load (air operated valve), etc.

Max. number of stations energized by manifold

● T3□/T5□/TM□/T6G1

Item		MN3E0/MN4E0								
		T30(N)	T50	T51	T52	T53	TM1A	TM1C	TM52	T6G1
Max. station No.	Standard wiring	24 stations	16 stations	18 stations	8 stations	24 stations	10 stations	5 stations	8 stations	16 stations
	Double wiring	12 stations	8 stations	9 stations	4 stations	12 stations	5 stations	2 stations	4 stations	8 stations
Max. number of solenoids		24 points	16 points	18 points	8 points	24 points	10 points	5 points	8 points	16 points

● T7□

Item		MN3E0/MN4E0									
		T7D1	T7D2	T7G1	T7G2	T7N1	T7N2	T7EC□1	T7EC□2	T7EN1	T7EN2
Max. station No.	Standard wiring	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations	16 stations	32 stations
	Double wiring	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations	8 stations	16 stations
Max. number of solenoids		16 points	32 points	16 points	32 points	16 points	32 points	16 points	32 points	16 points	32 points

Individual specifications/Characteristics

Item \ Port			3-port valve	4-port valve	Dual 3-port valve integrated *2
Response time *1 ms	2-position	Single	20 or less	20 or less	12 or less
		Double	12 or less	12 or less	-
	3-position		-	20 or less	-

*1: The response times are values with supply pressure of 0.5 MPa, without lubrication.

Flow characteristics

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

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.
*2: Value of ø4 push-in fitting

Slave unit specifications

Item		T6G1 (*1)	T7D1 (*2) T7D2	T7G1 (*1) T7G2	T7N1 T7N2	T7EC□1 T7EC□2	T7EN1 T7EN2
Power supply voltage	Unit side	24 VDC ±10%	24 VDC ±10%				
	Valve side	24 VDC +10% -5%	24 VDC +10% -5%				
	Communication side	-	11 to 25 VDC	-			
Current consumption	Unit side	100 mA or less (when all points output ON)	T7D1: 60 mA or less T7D2: 85 mA or less (when all points output ON)	T7G1: 65 mA or less T7G2: 90 mA or less (when all points output ON)	T7N1: 40 mA or less T7N2: 50 mA or less (when all points output ON)	120 mA or less (When all points output ON)	120 mA or less (When all points output ON)
	Valve side	15 mA or less (when all points are OFF)	15 mA or less (when all points are OFF)				
	Communication side	-	50 mA or less	-			
Output points		16 points	T7D1: 16 points T7D2: 32 points	T7G1: 16 points T7G2: 32 points	T7N1: 16 points T7N2: 32 points	T7EC□1: 16 points T7EC□2: 32 points	T7EN1: 16 points T7EN2: 32 points
Occupied number		1 station	T7D1: 2 bytes T7D2: 4 bytes	T7G1: 1 station T7G2: 1 station	T7N1: 16 output points T7N2: 32 output points	T7EC□1: 1 address T7EC□2: 1 address	T7EN1: 1 address T7EN2: 1 address

*1: CC-Link of Ver.1.10
*2: Contact CKD for information on the EDS file. (EDS file: A text file of parameters for communication with a master unit of another company.)

Weight

Electrical block (g)		D sub-connector T30(N)	Flat cable connector T5*	Intermediate electrical block			Serial transmission		
				TM1A	TM1C	TM52	T6G1	T7*	T7E**
		67	59	32	32	34	205	128	145
Supply and exhaust block (g)		Q/QZ	QK	QKZ		QX		QKX	
	Fitting Lateral	64	69	79		56		61	
	Fitting facing up	90	94	98		62		66	
Valve block (g)		2-position single	2-position double	3-position		Dual 3-port valve integrated			
	Fitting Lateral	47.5	52	53.5		52			
	Fitting facing up	54.5	59	60.5		59			
Dummy block (g)		MPS/MPD							
		20							
End block (g)		ER/EL							
		40							
DIN rail (g)		-							
		0.19 g/mm							

How to order manifold D sub/flat cable connector

* Refer to page 366 for Serial transmission.

● Discrete valve block

N 3 E0 66 0 - C4 - M D2 F —— 3 - P70

● Block manifold

M N 4 E0 1 0 - C4 - M T53 D2 W F - 5 - 3 - P70

- DIN rail mount
- A Valve
- B Solenoid position
- C Port size
- D Manual operating device
- E Wiring method
- F Terminal and connector pin wiring
- Individual wiring
- G Option
- H Station No.
- I Voltage
- Clean room specifications

* Always indicate "Manifold specifications" (page 410).

Code	Content		Type: Block manifold	Type: Discrete valve block
A Valve				
3	3-port valve or two 3-port valves integrated		●	●
4	4-port valve or 3, 4-port valve mix		●	●
B Solenoid position (*8)				
1	3-port valve	Single NC self reset (differential pressure spring return)	●	●
11	3-port valve	Single NO self reset (differential pressure spring return)	●	●
2	3-port valve	Double NC self holding	●	●
21	3-port valve	Double NO self holding	●	●
66	Dual 3-port valve integrated (*1)	A side valve: NC self reset (differential pressure return) / B side valve: NC self reset (differential pressure spring return)	●	●
66S	Dual 3-port valve integrated (*1)	A side valve: NC self reset (differential pressure spring return) / B side valve: NC self reset (differential pressure spring return)	●	●
67	Dual 3-port valve integrated (*1)	A side valve: NC self reset (differential pressure return) / B side valve: NO self reset (differential pressure spring return)	●	●
67S	Dual 3-port valve integrated (*1)	A side valve: NC self reset (differential pressure spring return) / B side valve: NO self reset (differential pressure spring return)	●	●
76	Dual 3-port valve integrated (*1)	A side valve: NO self reset (differential pressure return) / B side valve: NC self reset (differential pressure spring return)	●	●
76S	Dual 3-port valve integrated (*1)	A side valve: NO self reset (differential pressure spring return) / B side valve: NC self reset (differential pressure spring return)	●	●
77	Dual 3-port valve integrated (*1)	A side valve: NO self reset (differential pressure return) / B side valve: NO self reset (differential pressure spring return)	●	●
77S	Dual 3-port valve integrated (*1)	A side valve: NO self reset (differential pressure spring return) / B side valve: NO self reset (differential pressure spring return)	●	●
1	4-port valve	2-position single self reset (differential pressure spring return)	●	●
2	4-port valve	2-position double self hold	●	●
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	Mixed manifold		●	
C Port size				
CF	ø1.8 barbed fitting (applicable tube UP-9102-**)		●	●
C18	ø1.8 push-in fitting, Lateral (applicable tube UP-9402-**)		●	●
CL18	ø1.8 push-in fitting, Facing up (applicable tube UP-9402-**)		●	●
C4	ø4 push-in fitting, Lateral		●	●
CL4	ø4 push-in fitting, Facing up		●	●
C6	ø6 push-in fitting, Lateral		●	●
CL6	ø6 push-in fitting, Facing up		●	●
M5	M5 female thread (with non-rotation)		●	●
CX	Mix push-in fitting (*10)		●	●
C3N	ø1/8" push-in fitting, Lateral		●	●
C4N	ø5/32" push-in fitting, Lateral		●	●
CL3N	ø1/8" push-in fitting, Facing up		●	●
CL4N	ø5/32" push-in fitting, Facing up		●	●
CXN	Mix push-in fitting (*10)		●	●
D Manual operating device				
Blank	Locking/non-locking common (with manual cover)		●	●
M	Manual override for non-locking (with manual cover)		●	●
E Wiring method				
Refer to the following page about wiring method.			●	
F Terminal and connector pin wiring				
Blank	Standard wiring		●	●
W	Double wiring (*2, 3)		●	●
G Option				
Blank	None		●	●
E	Low-heat and energy saving circuit (*4)		●	●
U	Built-in individual power supply function (AUX) (*4, 5)		●	●
A	Ozone proof		●	●
F	Port A/B filter integrated (*6)		●	●
H Station No.				(*11)
1	1 station		●	
to	to			
24	24 stations (*7)			
I Voltage				
3	24 VDC		●	●
4	12 VDC		●	●

- For model No. of the cable with D sub-connector, refer to page 390.

⚠ Precautions for model No. selection

*1: The type with two 3-port valves integrated cannot be used with the external pilot.

***2: For double wiring specifications, refer to the connector pin layout (example) on pages 389 to 396.**
When ordering individual valve blocks, the double wiring designation is limited to the 2-position single solenoid for the 3-port valve and to the 2-position single solenoid for the 4-port valve.

*3: Double wiring is not available for a single unit of individual wiring valve block.

*4: Energizing is limited to the plus common. Also "E" and "U" cannot be selected at the same time.

*5: "U" is not available for individual wiring.

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

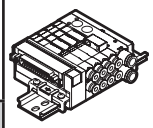
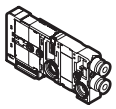
***7: Differs based on the specifications. Refer to page 360.**

***8: For specifications of the self reset, refer to the precautions on page 412.**
To include a dummy block, select mix manifold.

*9: A dummy block is counted in the station No.

*10: A mix of metric fittings, M5 female threads and inch fittings cannot be selected.

(Wiring method list)

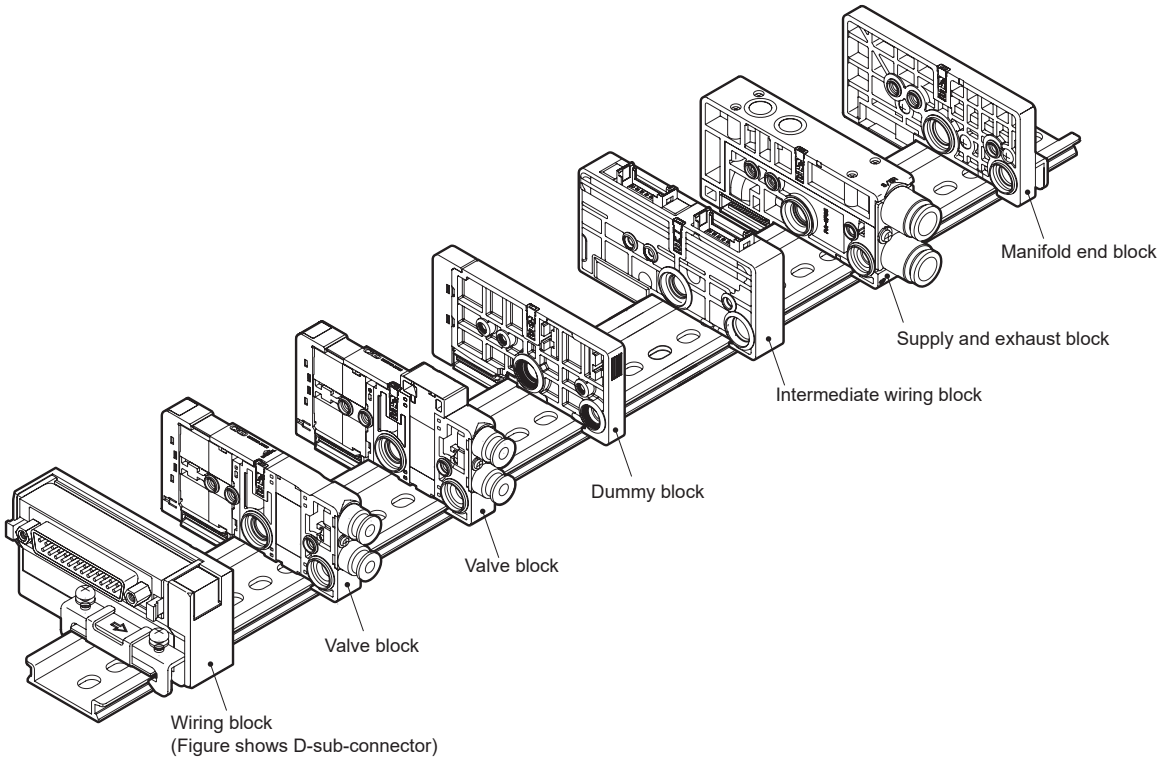
Code	Content		Type: Block manifold	Type: Discrete valve block
				
Ⓔ Wiring method				
T30(N)	25 pin D sub-connector, left		●	
T30(N)R	25 pin D sub-connector, right		●	
T50	20 pin flat cable connector, left (with power supply terminal) (*11)		●	
T50R	20 pin flat cable connector, right (with power supply terminal) (*11)		●	
T51	20 pin flat cable connector, left		●	
T51R	20 pin flat cable connector, right		●	
T52	10 pin flat cable connector, left		●	
T52R	10 pin flat cable connector, right		●	
T53	26 pin flat cable connector, left		●	
T53R	26 pin flat cable connector, right		●	
TM1A	Intermediate wiring block	RITS connector 6P × 2 (*12)	●	
TM1C	Intermediate wiring block	RITS connector 6P (*12)	●	
TM52	Intermediate wiring block	10 pin flat cable connector	●	
TX	Electrical block mix (*13, *14, *15)		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring	D-connector 300 mm	●	●
D20	Individual wiring	D-connector 500 mm	●	●
D21	Individual wiring	D connector 1000 mm	●	●
D22	Individual wiring	D connector 2000 mm	●	●
D23	Individual wiring	D connector 3000 mm	●	●
D2N	Individual wiring	D connector without socket	●	●
D3	Individual wiring	D connector with socket/terminal	●	●

*11: T50 and T50R with power supply terminal can be combined only with T50R and T50 respectively.
*12:RITS connector 6P (1473562-6) Tyco Electronics Japan G.K.
*13: Request 2 pcs in the manifold specifications sheet.Contact CKD for 3 pcs. or more.
*14: Individual wiring is not available for the TX wiring method.
*15: When selecting TX wiring method, the max. station No. is 24.
* Individual wiring: Individual wiring specification is available with valve blocks designated for it.

Ozone-proof specifications

Can be selected with "How to order" option "A" on pages 362 and 366.

Manifold configuration explanation and parts list



Example of main configuration parts model No.

(Refer to pages 378 to 387 for details)

Part name	Model No. (example)	Part name	Model No. (example)
Wiring block	N4E0-T30-P70	Intermediate wiring block	N4E0-TM1A-P70
Valve block	N4E020-C4-3-P70	Supply and exhaust block	N4E0-Q-8-P70
	N4E030-C4-3-P70	End block	N4E0-ER-P70
Dummy block	N4E0-MPD-P70		

Related parts list

Part name	Model No. (example)	Part name	Model No. (example)
Cartridge push-in fitting and related parts	N4E0-JOINT-C18-P70	Cartridge push-in fitting and related parts	N4E0-JOINT-CF-P70
	N4E0-JOINT-C4-P70		N4E0-JOINT-CPG-P70
	N4E0-JOINT-C6-P70		
	N4E0-JOINT-CL18-P70		
	N4E0-JOINT-CL4-P70		
	N4E0-JOINT-CL6-P70		
	N4E0-JOINT-C3N-P70		
	N4E0-JOINT-C4N-P70		
	N4E0-JOINT-CL3N-P70		
	N4E0-JOINT-CL4N-P70		

MEMO

How to order manifold Serial transmission

* Refer to page 362 for details on D sub-connector/flat cable connector.

● Discrete valve block

N 3 E0 66 0 - C4 - M D2 F — 3 - P70

● Block manifold

M N 4 E0 1 0 - C4 - M T6G1 D2 W F - 5 - 3 - P70

- DIN rail mount
- A Valve
- B Solenoid position
- C Port size
- D Manual operating device
- E Wiring method (serial transmission)
- F Terminal and connector pin wiring
- G Option
- H Station No.
- I Voltage
- Clean room specifications

* Always indicate "Manifold specifications" (page 410).

Code	Content	Type: Block manifold	Type: Discrete valve block
A Valve			
3	3-port valve or two 3-port valves integrated	●	●
4	4-port valve or 3, 4-port valve mix	●	●
B Solenoid position (*8)			
1	3-port valve: Single NC self reset (differential pressure spring return)	●	●
11	3-port valve: Single NO self reset (differential pressure spring return)	●	●
2	3-port valve: Double NC self holding	●	●
21	3-port valve: Double NO self holding	●	●
66	Dual 3-port valve integrated (*1): A side valve: NC self reset (differential pressure return)	●	●
66S	Dual 3-port valve integrated (*1): B side valve: NC self reset (differential pressure spring return)	●	●
67	Dual 3-port valve integrated (*1): A side valve: NC self reset (differential pressure return)	●	●
67S	Dual 3-port valve integrated (*1): B side valve: NO self reset (differential pressure spring return)	●	●
76	Dual 3-port valve integrated (*1): A side valve: NO self reset (differential pressure return)	●	●
76S	Dual 3-port valve integrated (*1): B side valve: NC self reset (differential pressure spring return)	●	●
77	Dual 3-port valve integrated (*1): A side valve: NO self reset (differential pressure return)	●	●
77S	Dual 3-port valve integrated (*1): B side valve: NO self reset (differential pressure spring return)	●	●
1	4-port valve: 2-position single self reset (differential pressure spring return)	●	●
2	4-port valve: 2-position double self hold	●	●
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	Mixed manifold	●	
C Port size			
CF	ø1.8 barbed fitting (applicable tube UP-9102-**)	●	●
C18	ø1.8 push-in fitting, Lateral (applicable tube UP-9402-**)	●	●
CL18	ø1.8 push-in fitting, Facing up (applicable tube UP-9402-**)	●	●
C4	ø4 push-in fitting, Lateral	●	●
CL4	ø4 push-in fitting, Facing up	●	●
C6	ø6 push-in fitting, Lateral	●	●
CL6	ø6 push-in fitting, Facing up	●	●
M5	M5 female thread (with non-rotation)	●	●
CX	Mix push-in fitting (*10)	●	●
C3N	ø1/8” push-in fitting, Lateral	●	●
C4N	ø5/32” push-in fitting, Lateral	●	●
CL3N	ø1/8” push-in fitting, Facing up	●	●
CL4N	ø5/32” push-in fitting, Facing up	●	●
CXN	Mix push-in fitting (*10)	●	●
D Manual operating device			
Blank	Locking/non-locking common (with manual cover)	●	●
M	Manual override for non-locking (with manual cover)	●	●
E Wiring method			
Refer to the following page about wiring method.		●	
F Terminal and connector pin wiring			
Blank	Standard wiring	●	●
W	Double wiring (*2, *3)	●	●
G Option			
Blank	None	●	●
E	Low-heat and energy saving circuit (*4)	●	●
U	Built-in individual power supply function (AUX) (*4, *5)	●	●
A	Ozone proof	●	●
F	Port A/B filter integrated (*6)	●	●
H Station No.			(*9)
1	1 station	●	
to	to		
32	32 stations (*7)		
I Voltage			
3	24 VDC	●	●

⚠ Precautions for model No. selection

*1: Dual 3-port valve integrated cannot be used with the external pilot.Contact CKD for the other working conditions.

***2: Refer to the connector pin layout (example) given on pages 399 to 403 for the double wiring specifications.** When ordering individual valve blocks, the double wiring designation is limited to the 2-position single solenoid for the 3-port valve and to the 2-position single solenoid for the 4-port valve.

*3: Double wiring is not available for discrete individual wiring valve block.

*4: Energizing is limited to the plus common. Also "E" and "U" cannot be selected at the same time.

*5: "U" is not available for individual wiring.

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

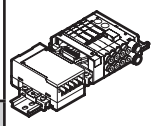
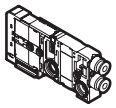
***7: Differs based on the specifications. Refer to page 360.**

***8: For specifications of the self reset, refer to the precautions on page 412.** To include a dummy block, select mix manifold.

*9: A dummy block is counted in the station No.

*10: A mix of metric fittings, M5 female threads and inch fittings cannot be selected.

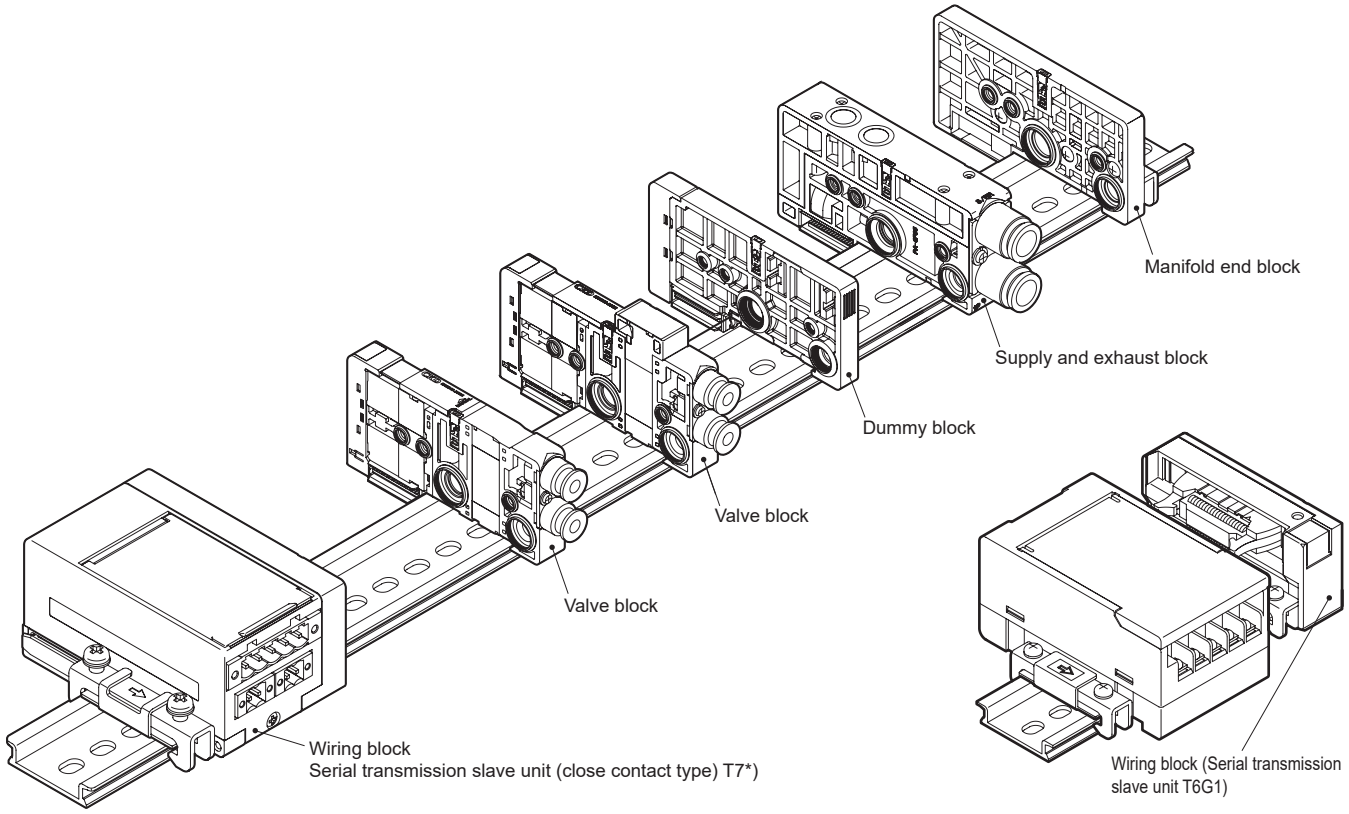
(Wiring method list)

Code	Content		Type: Block manifold	Type: Discrete valve block
				
Ⓔ Wiring method				
T6G1	CC-Link 16 points		●	
T7D1	Close contact, DeviceNet 16 points		●	
T7D2	Close contact, DeviceNet 32 points		●	
T7G1	Close contact, CC-Link 16 points		●	
T7G2	Close contact, CC-Link 32 points		●	
T7N1	Close contact, S-LINK V 16 points		●	
T7N2	Close contact, S-LINK V 32 points (*9)		●	
T7EC1	Close contact EtherCAT 16 points (port side leadout)		●	
T7EC2	Close contact EtherCAT 32 points (port side leadout)		●	
T7ECT1	Close contact EtherCAT 16 points (wiring side leadout)		●	
T7ECT2	Close contact EtherCAT 32 points (wiring side leadout)		●	
T7EN1	Close contact EtherNet/IP 16 points		●	
T7EN2	Close contact EtherNet/IP 32 points		●	
Blank	Valve block for reduced wiring			●
D2	Individual wiring	D connector lead wire length 300 mm	●	●
D20		D connector lead wire length 500 mm	●	●
D21		D connector lead wire length 1000 mm	●	●
D22		D connector lead wire length 2000 mm	●	●
D23		D connector lead wire length 3000 mm	●	●
D2N		D connector without lead wire without socket	●	●
D3		D connector without lead wire with socket/terminal	●	●

Ozone-proof specifications

Can be selected with "How to order" option "A" on pages 362 and 366.

Manifold configuration explanation and parts list



Example of main configuration parts model No.

(Refer to pages 378 to 387 for details)

Part name	Model No. (example)	Part name	Model No. (example)
Wiring block	N4E0-T7G2-P70	Intermediate wiring block	N4E0-TM1A-P70
Valve block	N4E020-C4-3-P70	Supply and exhaust block	N4E0-Q-8-P70
	N4E030-C4-3-P70	End block	N4E0-ER-P70

Related parts list

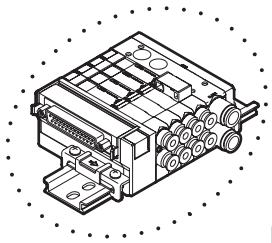
Part name	Model No. (example)	Part name	Model No. (example)
Cartridge push-in fitting and related parts	N4E0-JOINT-C18-P70	Cartridge push-in fitting and related parts	N4E0-JOINT-CF-P70
	N4E0-JOINT-C4-P70		N4E0-JOINT-CPG-P70
	N4E0-JOINT-C6-P70		
	N4E0-JOINT-CL18-P70		
	N4E0-JOINT-CL4-P70		
	N4E0-JOINT-CL6-P70		
	N4E0-JOINT-C3N-P70		
	N4E0-JOINT-C4N-P70		
	N4E0-JOINT-CL3N-P70		
	N4E0-JOINT-CL4N-P70		

MEMO

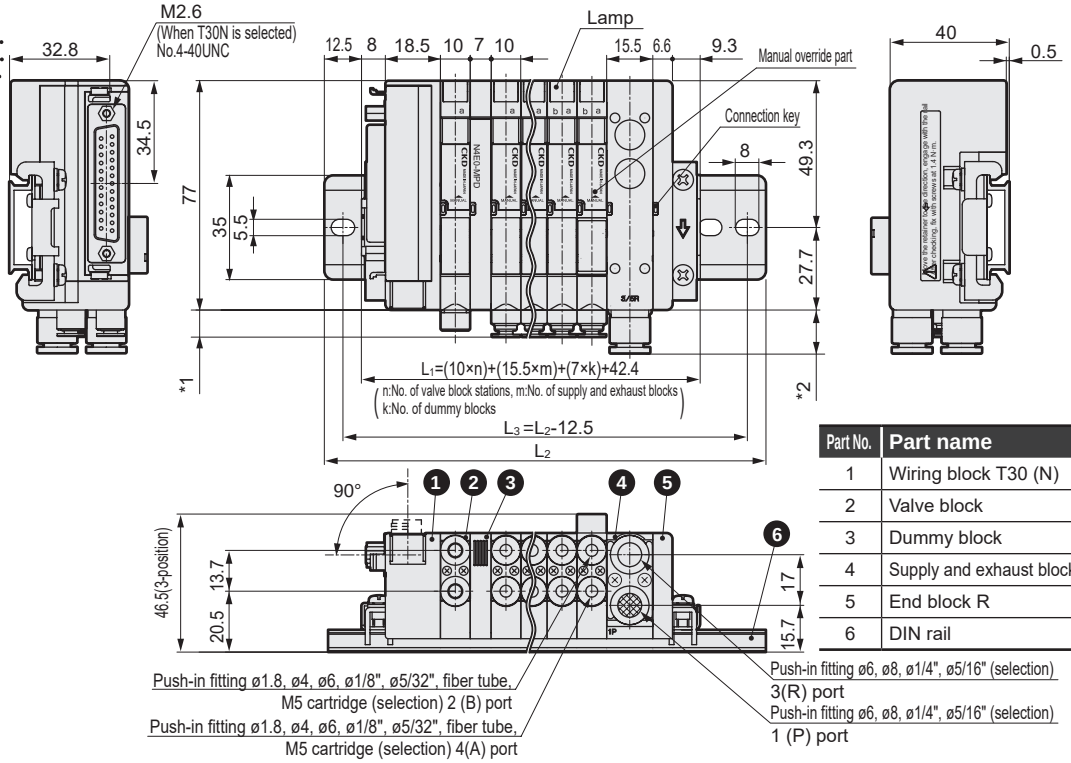
Dimensions

MN$^{3}_{4}$E0*-*-T30(N)*-*-*-P70

● D-sub-connector, left (T30(N))



* D sub-connector can be faced up or down.
* For how to switch the connector direction, refer to page 375.



(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

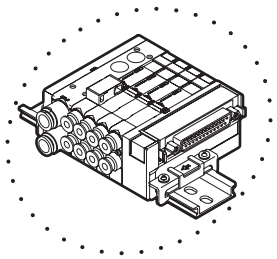
(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

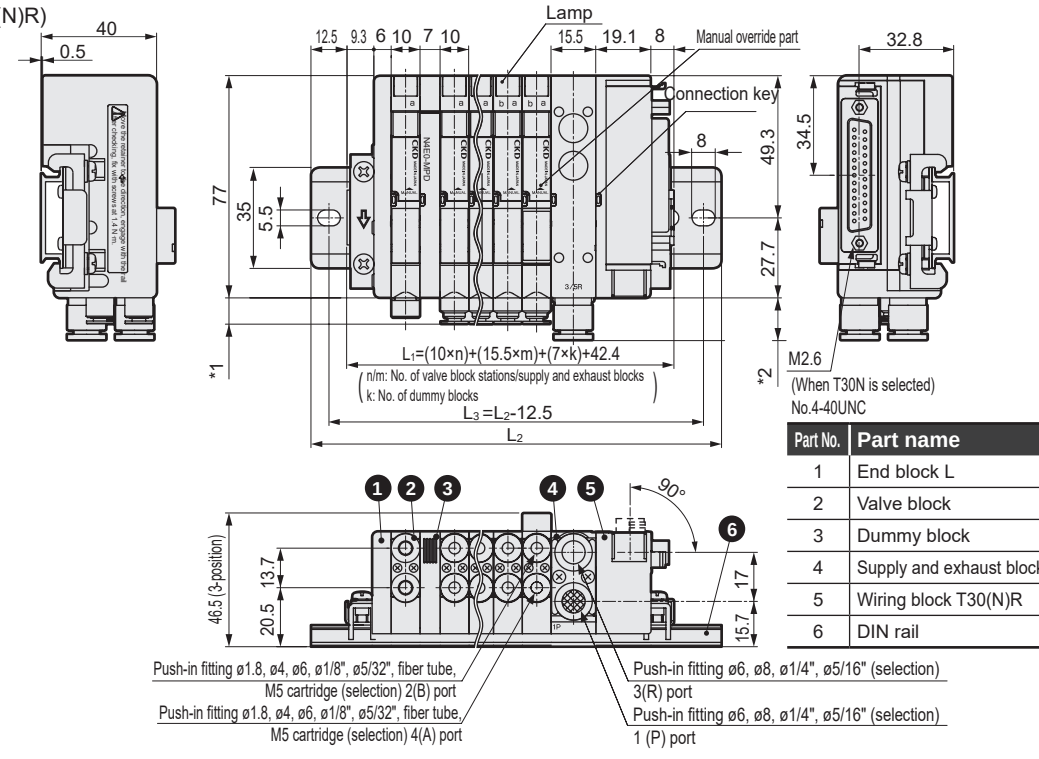
Part No.	Part name
1	Wiring block T30 (N)
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R
6	DIN rail

*** For dimensions of the radial push-in fitting (facing up) for valve block and for supply and exhaust block and the valve block with individual power supply function (AUX), refer to page 375.**

MN$^{3}_{4}$E0*-*-T30(N)R*-*-*-P70

● D-sub-connector, right (T30(N)R)





(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

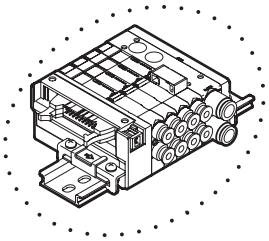
Part No.	Part name
1	End block L
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	Wiring block T30(N)R
6	DIN rail

Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

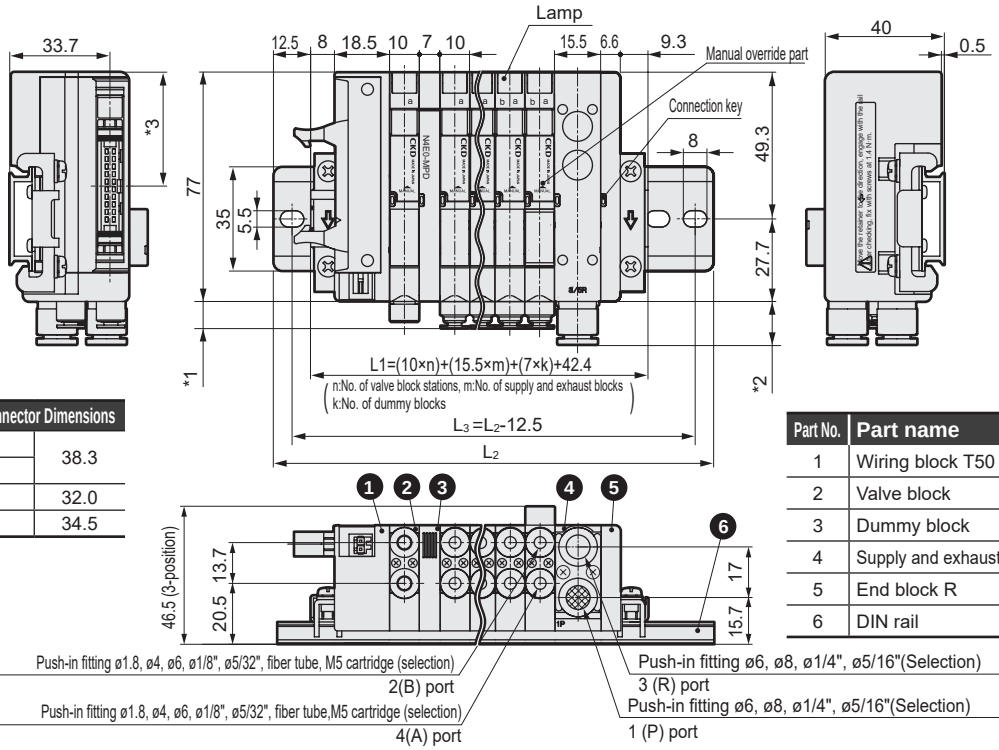
Dimensions

MN$^{3}_{4}$E0*-*-T50*-*-*-P70

● Flat cable connector, left (T50)



***T51, T52, and T53 are also available. Dimensions is the same as T50. For dimensions of the connector*3 Refer to the connector Dimensions.**



(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

*3 Connector Dimensions	
T50	38.3
T51	
T52	32.0
T53	34.5

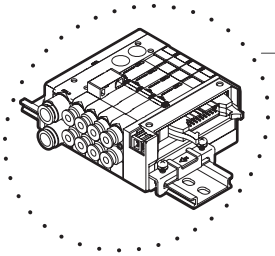
Part No.	Part name
1	Wiring block T50
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R
6	DIN rail

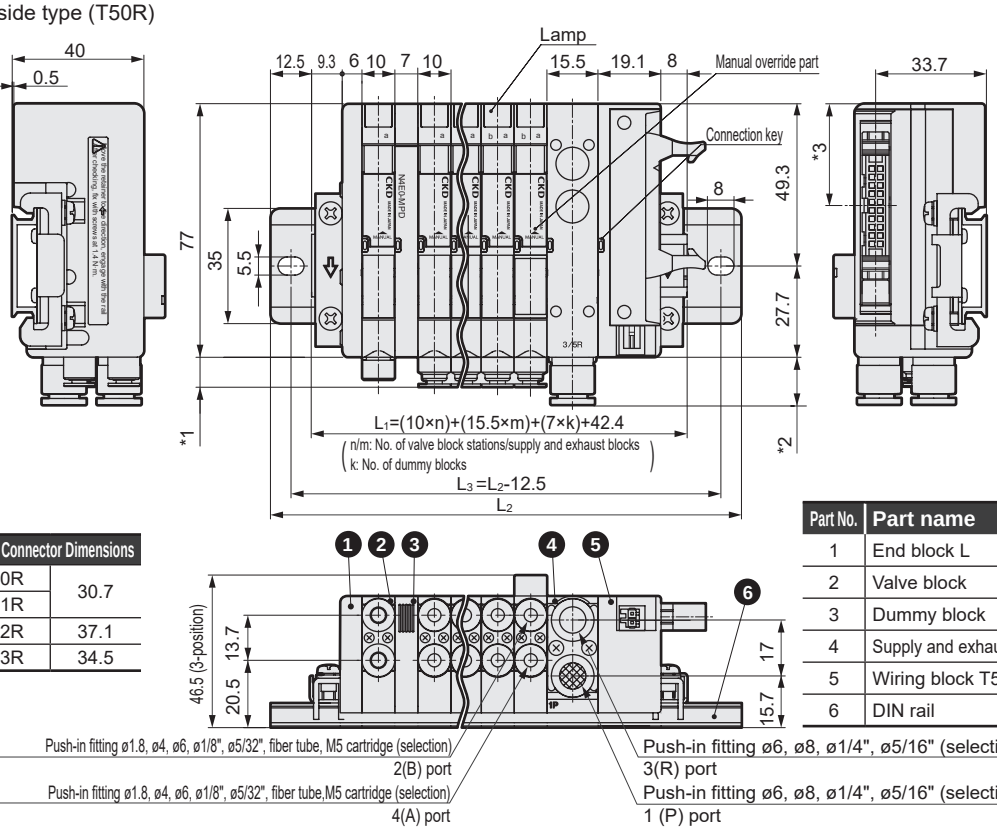
*** For dimensions of the radial push-in fitting (facing up) for valve block and for fiber tube and supply and exhaust block, refer to page 375.**

*** A power feed connector can be used with T50 to supply power to the PLC output unit. Refer to page 375 for how to connect the connector and refer to the wiring precautions on page 391 for how to wire.**

MN$^{3}_{4}$E0*-*-T50R*-*-*-P70

● Flat cable connector right-side type (T50R)





(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

(*3) Connector Dimensions	
T50R	30.7
T51R	
T52R	37.1
T53R	34.5

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

Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

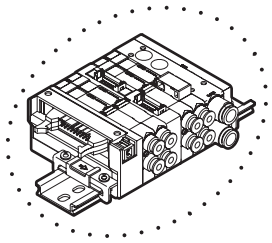
Dimensions

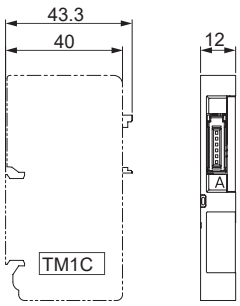
MN$^{3}_{4}$E0*-*-TM1$^{A}_{C}$*-*-*-P70

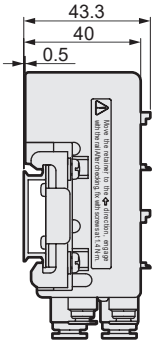
● RITS connector, intermediate wiring (TM)1 $^{A}_{C}$)

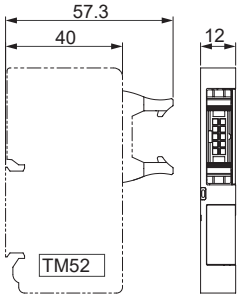
MN$^{3}_{4}$E0*-*-TM52*-*-*-P70

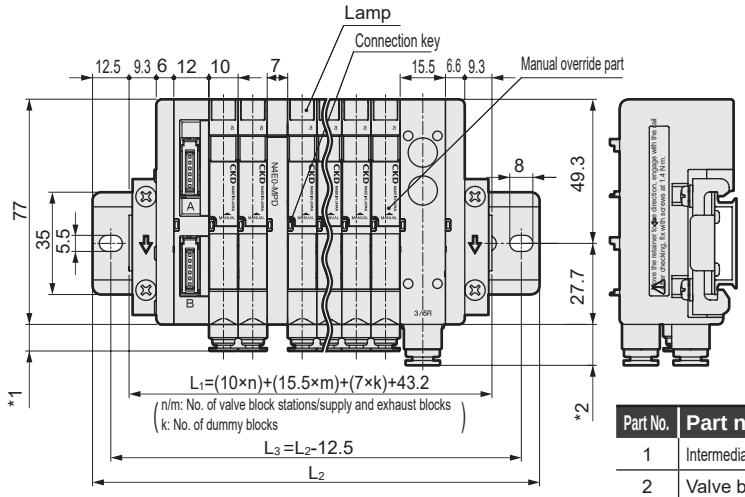
● 10-pin flat cable connector, intermediate wiring (TM52)

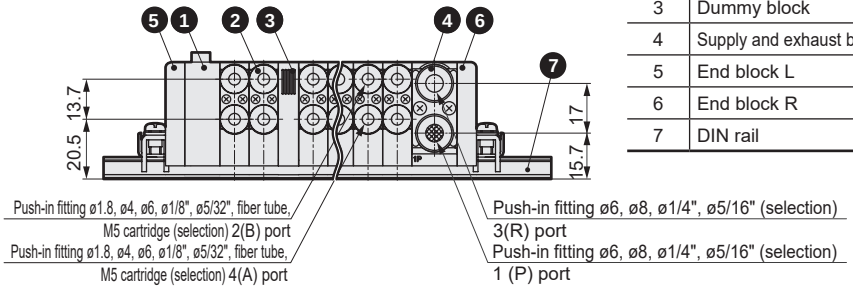












Part No.	Part name
1	Intermediate wiring block TM1A
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block L
6	End block R
7	DIN rail

(*1) Valve block fitting dimensions

Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply and exhaust block fitting dimensions

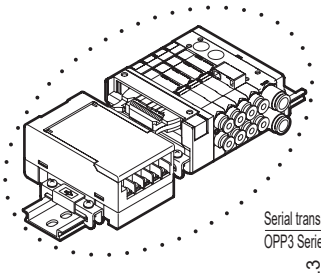
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

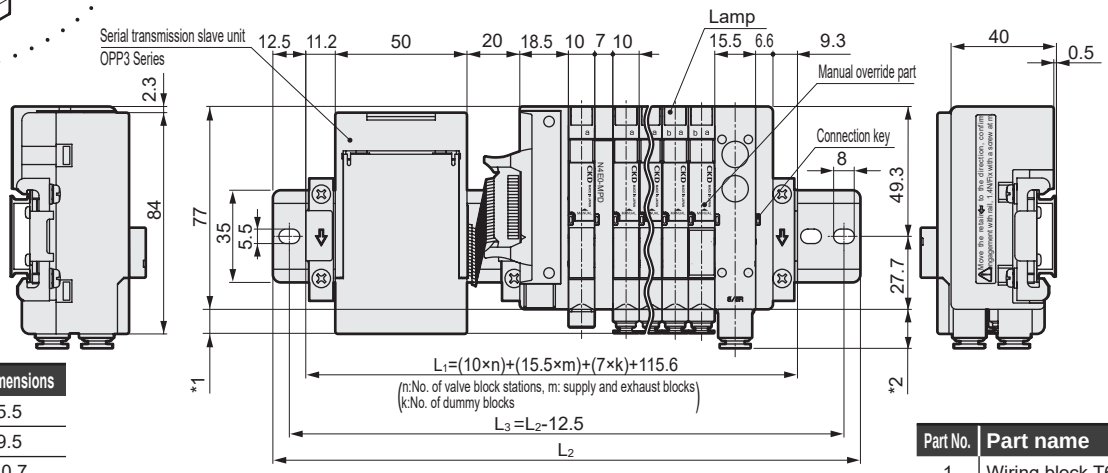
Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

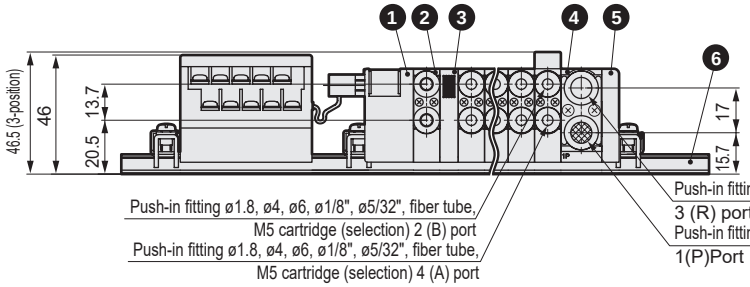
Dimensions

MN$^{3}_{4}$E0*-*-T6G1-*-*-P70

● Serial transmission (T6G1)







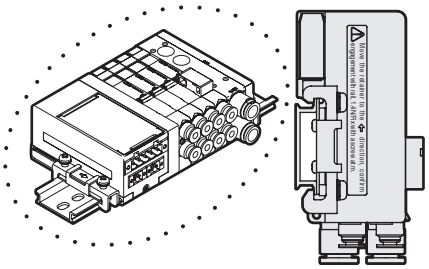
(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

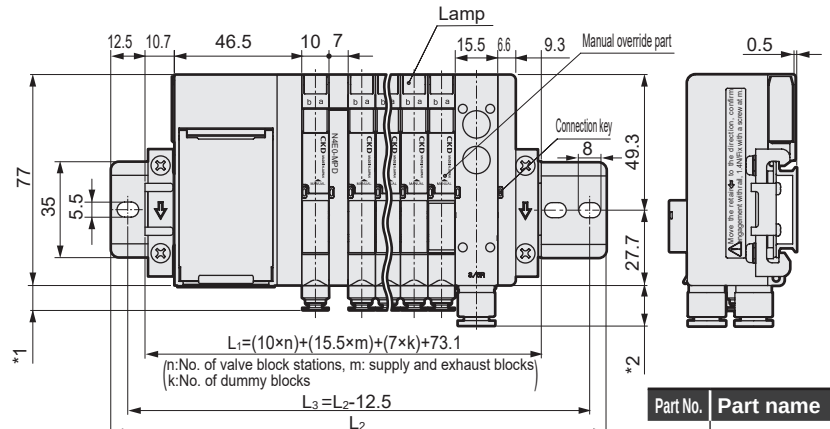
(*2) Supply and exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

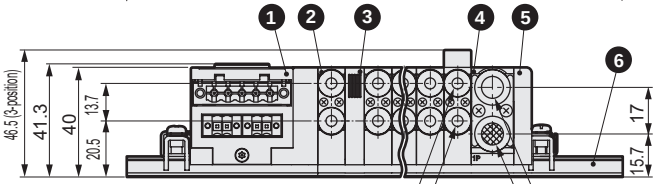
Part No.	Part name
1	Wiring block T6G1
2	Valve block
3	Dummy block
4	Supply and exhaust block
5	End block R
6	DIN rail

MN$^{3}_{4}$E0*-*-T7**-*-*-P70

● Serial transmission (close contact) (T7*)







(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply / exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

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

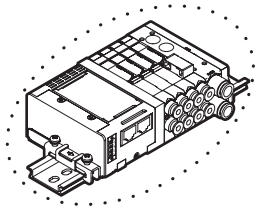
* For dimensions of the radial push-in fitting (facing up) for valve block and for fiber tube and supply and exhaust block, refer to page 375.

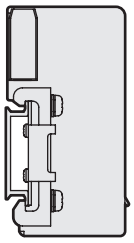
Manifold length L1 mm	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

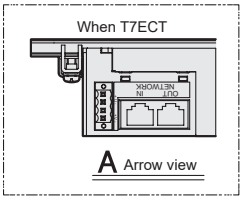
Dimensions

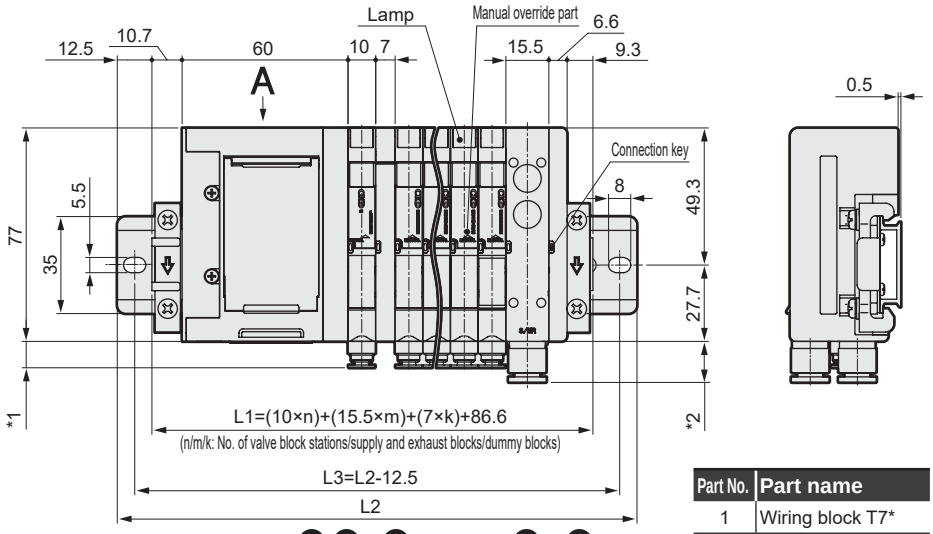
MN 3/4 E00*-*-T7**-*-*-P70

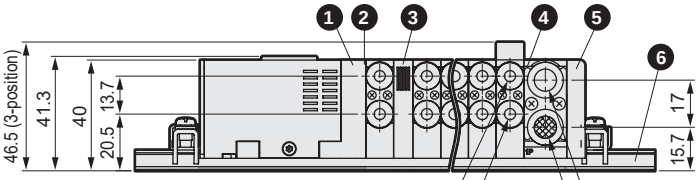
● Serial transmission (T7EC□□)











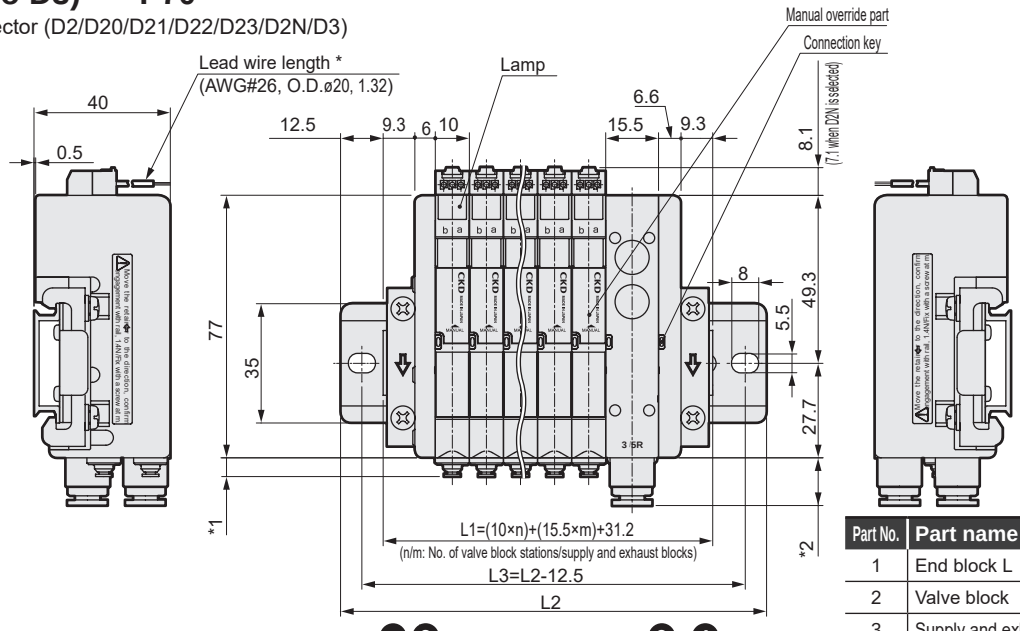
(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

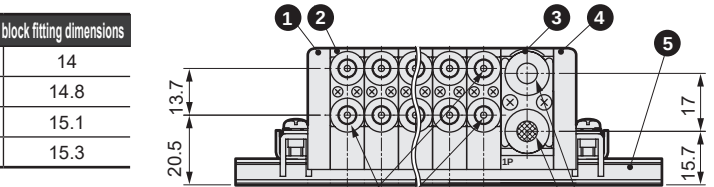
(*2) Supply / exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

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

MN 3/4 E0*-*- (D2 to D3)-*-*-P70

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





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

(*1) Valve block fitting dimensions		
Push-in fitting	ø1.8	5.5
	ø4	9.5
	ø6	10.7
	ø1/8"	10.0
	ø5/32"	9.6
Fiber tube		8.5
M5 female thread		6.9

(*2) Supply / exhaust block fitting dimensions	
ø6	14
ø8	14.8
ø1/4"	15.1
ø5/16"	15.3

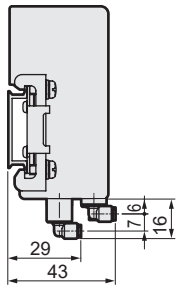
Part No.	Part name
1	End block L
2	Valve block
3	Supply and exhaust block
4	End block R
5	DIN rail

Manifold length L1 mm	63.7 or less	76.2 or less	88.7 or less	101.2 or less	113.7 or less	126.2 or less	138.7 or less	151.2 or less	163.7 or less	176.2 or less	188.7 or less	201.2 or less	213.7 or less	226.2 or less	238.7 or less	251.2 or less	263.7 or less	276.2 or less	288.7 or less	301.2 or less	313.7 or less	326.2 or less	338.7 or less	351.2 or less
Mounting rail length L2 mm	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375
Mounting rail pitch L3 mm	75	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5

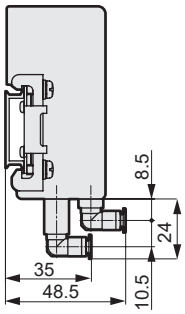
Dimensions

● Piping blocks (common for all types)

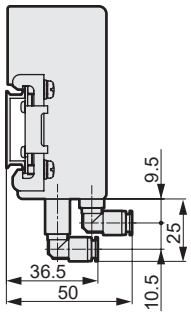
For fiber tube
Push-in fitting (upward)
● ø1.8 (CL18)



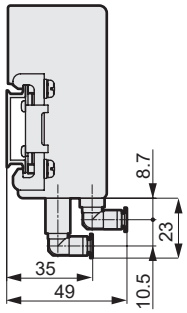
Valve block
Radial push-in fitting (upward)
● ø4 (CL4)



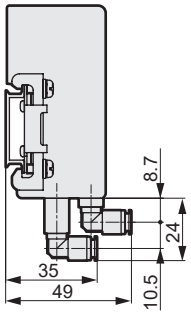
●ø6 (CL6)



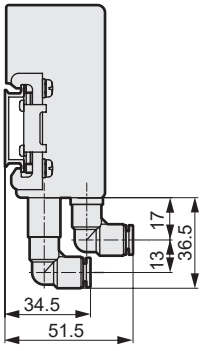
Valve block
Radial push-in fitting (upward)
● ø1/8" (CL3N)



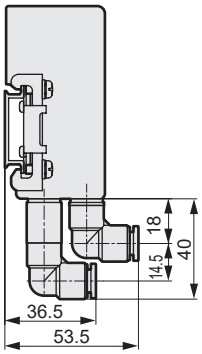
● ø5/32" (CL4N)



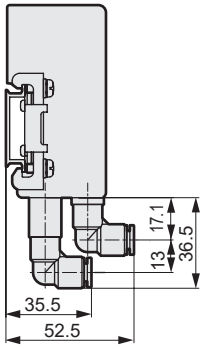
Supply and exhaust block
Radial push-in fitting (upward)
●ø6(CL6)



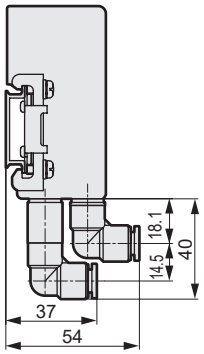
● ø8 (CL8)



Supply and exhaust block
Radial push-in fitting (upward)
● ø1/4" (CL6N)

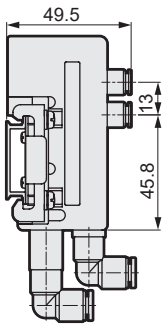


● ø5/16" (CL8N)

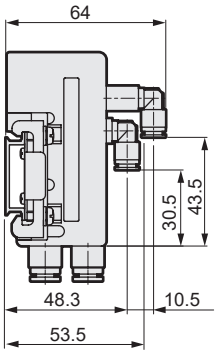


Supply and exhaust block for external pilot

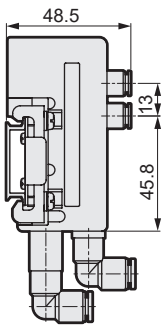
●Upward piping



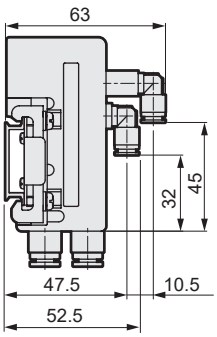
●Lateral piping



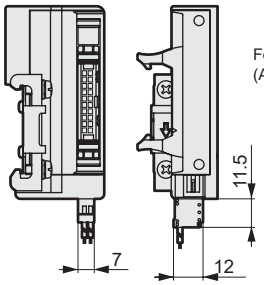
● Upward piping (inch fitting specification)



● Lateral piping (inch fitting specification)



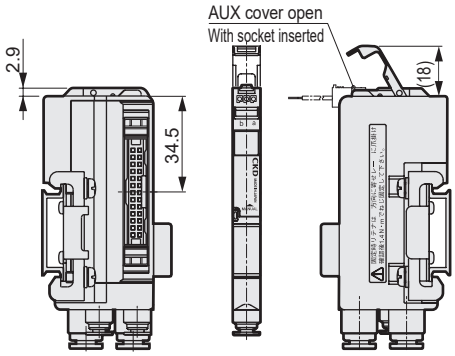
●Dimensions with T50 power supply connector



Feed connector
(Attached with product)

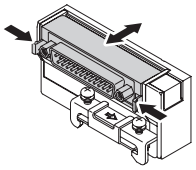
Applicable wire
AWG28-20

●Built-in individual power supply function (AUX)

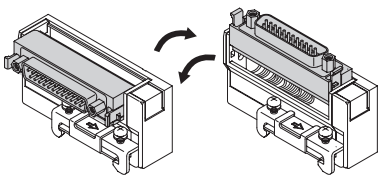


● D-sub-connector (T30/T30R): Connector section direction switching method

Usage in a horizontal state

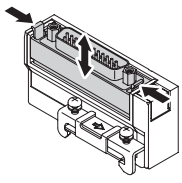


Hold the lever and pull the connector out horizontally. Push in the connector horizontally for storage. (Must be fixed.)

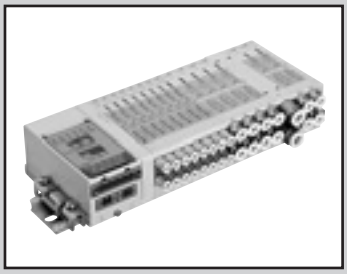


Rotate the connector. Fix the connector in the horizontal or vertical state during use.

Usage in a vertical state



Hold the lever and pull the connector out vertically.Push in the connector horizontally for storage.(Must be fixed.)



MN4E0 / MN4E00 Mix manifold

MN3EX0 / MN4EX0 Series

- Cylinder bore size: ø4 to ø32

RoHS

Structural and material restrictions

	Structure	Model No.
P7 Series	Exhaust port	– P70

Specifications

Common with all series. Refer to pages 344 and 360.

How to order

Block manifolds

MN 4 EX0 - C4 - M T53 E - 5 - 3

- DIN rail Mounting method
- A Valve type
- B Port size
- C Manual override
- D Wiring method
- E Terminal/connector pin array
- F Option
- G Station No.
- H Voltage

Code	Description
A Valve type	
3	3-port valve or two 3-port valves integrated
4	4-port valve or 3, 4-port valve mix
B Port size	
C18	ø1.8 push-in fitting lateral (compatible tube UP-9402)
CL18	ø1.8 push-in fitting upward (compatible tube UP-9402)
C4	ø4 push-in fitting lateral
CL4	ø4 push-in fitting upward
CX	Mix push-in fitting (*7)
C3N	ø1/8" push-in fitting lateral
CL3N	ø1/8" push-in fitting Top
C4N	ø5/32" push-in fitting lateral
CL4N	ø5/32" push-in fitting Top
CXN	Mix push-in fitting (*7)
C Manual override	
Blank	Manual override with manual cover (for locking/non-locking)
M	Manual override with manual cover (for non-locking)
D Wiring method	
Refer to the following page for the wiring method.	
E Terminal/connector pin array	
Blank	Standard wiring
W	Double wiring (*1)
F Option	
Blank	None
E	Low exoergic/energy circuit type (*2)(*3)
A	Ozone-proof product
F	Port A/B filter integrated (*4)
G Station No.	**(*6)**
1	1 stations
to	to
32	32 stations (*5)
H Voltage	
3	24 VDC
4	12 VDC

Precautions for model No. selection

***1: Refer to the connector pin array (example) on pages 389 to 403 for the double wiring specifications. When ordering individual valve blocks, the double wiring designation is limited to the 4-position single solenoid for the 2-port valve and to the 3-position single solenoid for the 2-port valve.**

*2: Energizing is limited to the plus common.

*3: Individual wiring is not available for low exoergic/energy circuit type.

*4: A filter (for preventing entry of foreign matter) is incorporated in the supply and exhaust block's port P.

***5: Differs depending on the specifications. Refer to pages 344 and 360.**

*6: A dummy block is counted in the station No.

*7: You cannot select a mix of metric and inch fittings.

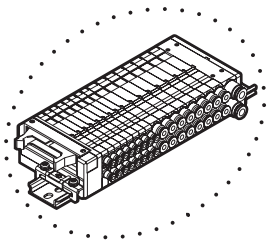
[Wiring method list]

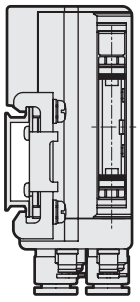
Code		Description
Ⓔ Wiring method		
TM1A		Intermediate wiring block RITS connector 6P x 2
TM1C		Intermediate wiring block RITS connector 6P
TM52		Intermediate wiring block 10-pin flat cable connector, 8 points compatible
T30(N)		25-pin D-sub-connector Left-sided spec.
T30(N)R		25-pin D-sub-connector Right-sided spec.
T50		20-pin flat cable connector Left-sided spec. (with power supply terminal)
T50R		20-pin flat cable connector Right-sided spec. (with power supply terminal)
T51		20-pin flat cable connector Left-sided spec.
T51R		20-pin flat cable connector Right-sided spec.
T52		10-pin flat cable connector Left-sided spec.
T52R		10-pin flat cable connector Right-sided spec.
T53		26-pin flat cable connector Left-sided spec.
T53R		26-pin flat cable connector Right-sided spec.
TX		Wiring block mix (*8))(*9)(*10)
T6G1		CC-Link 16 points
T7D1		Close contact type DeviceNet 16 points
T7D2		Close contact type DeviceNet 32 points
T7G1		Close contact type CC-Link 16 points
T7G2		Close contact type CC-Link 32 points
T7N1		Close contact type S-LINK V 16 points
T7N2		Close contact type S-LINK V 32 points
T7EC1		Close contact EtherCAT 16 points (port side leadout)
T7EC2		Close contact EtherCAT 32 points (port side leadout)
T7ECT1		Close contact EtherCAT 16 points (wiring side leadout)
T7ECT2		Close contact EtherCAT 32 points (wiring side leadout)
T7EN1		Close contact EtherNet/IP 16 points
T7EN2		Close contact EtherNet/IP 32 points
D2	*Individual wiring	D type connector Lead wire length 300 mm
D20		D type connector Lead wire length 500 mm
D21		D type connector Lead wire length 1000 mm
D22		D type connector Lead wire length 2000 mm
D23		D type connector Lead wire length 3000 mm
D2N		D type connector without lead wire without socket
D3		D type connector without lead wire with socket/terminal

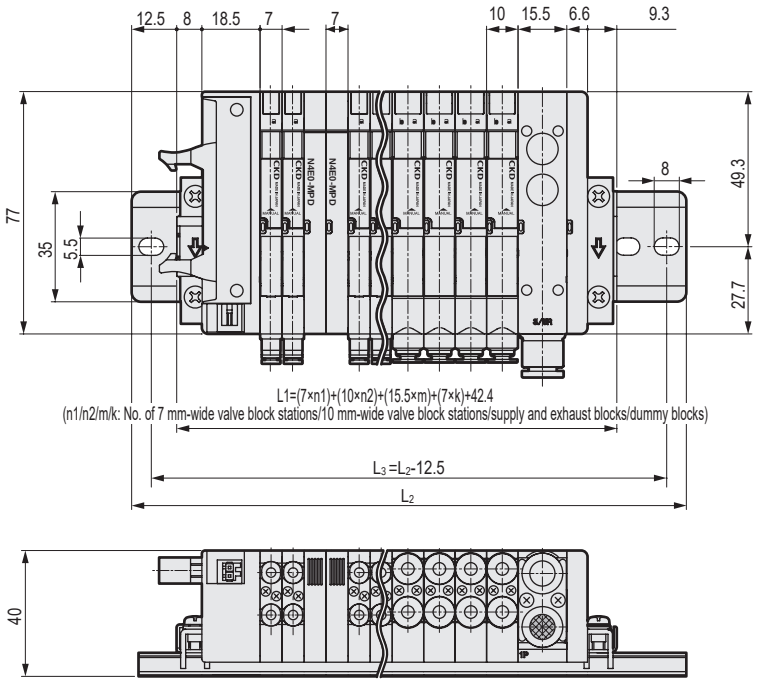
*8: Request 2 pcs in the manifold specifications sheet. Contact CKD for 3 pcs. or more.
*9: Individual wiring is not available for the TX wiring method.
*10: When selecting TX wiring method, the max. station No. is 24.
* Individual wiring: Individual wiring specification is available with valve blocks designated for it.

Mix block dimensions

MN$^{3}_{4}$EXO

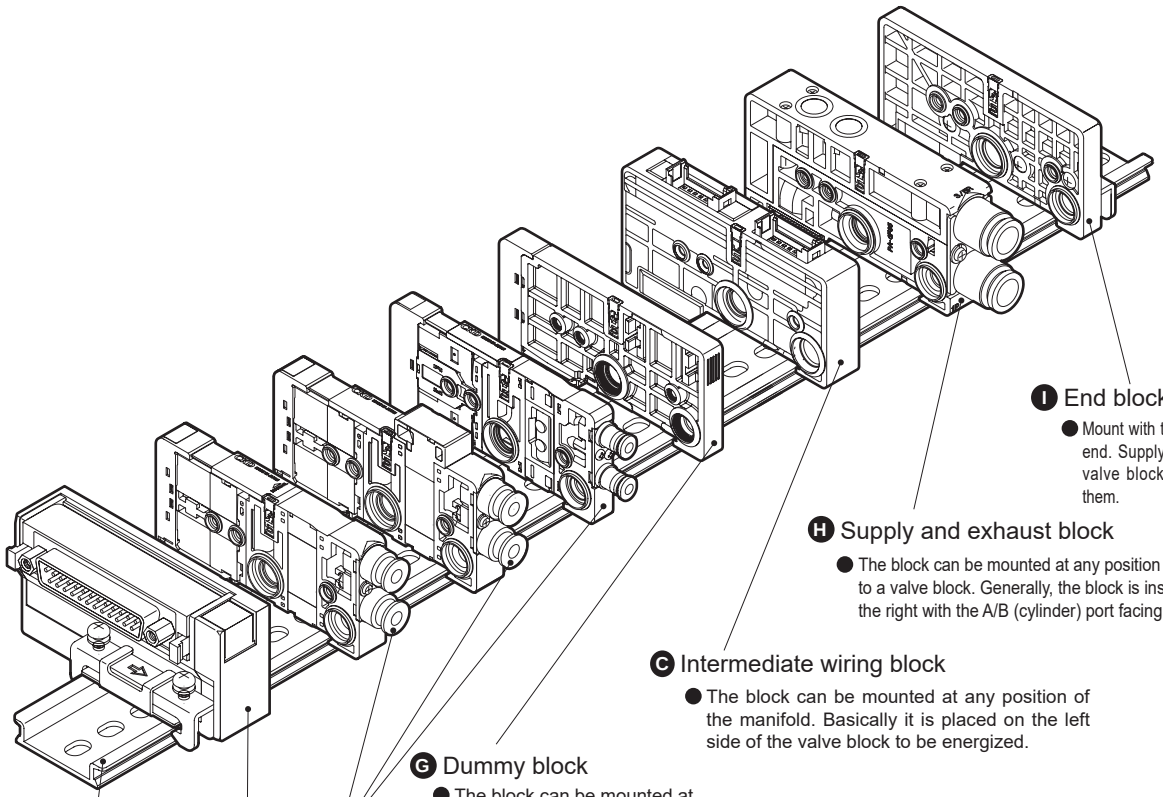






Block manifold: Block configuration

Free assembly enables multiple station expansion and maintenance.



I End block
- Mount with the wiring block on the left end. Supply and exhaust blocks and valve blocks are mounted between them.

H Supply and exhaust block
- The block can be mounted at any position adjacent to a valve block. Generally, the block is installed on the right with the A/B (cylinder) port facing forward.

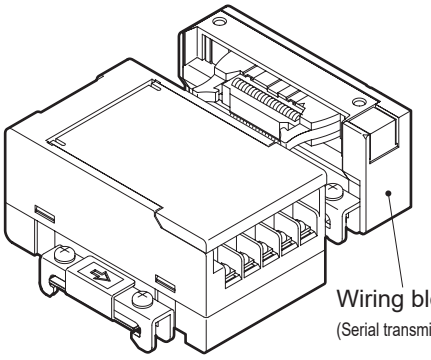
C Intermediate wiring block
- The block can be mounted at any position of the manifold. Basically it is placed on the left side of the valve block to be energized.

G Dummy block
- The block can be mounted at any position of the manifold.

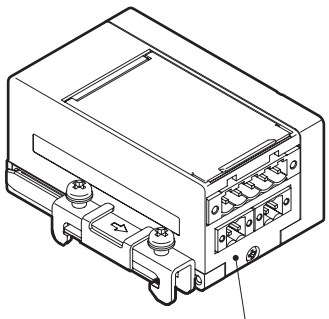
F Valve block (7 mm pitch, 10 mm pitch)
- The selected supply and exhaust block determines internal or external pilot operated. Valve block is the same for both types.

A B D E Wiring block
- Mount with the end block on the right end. Supply and exhaust blocks and valve blocks are mounted between them.

K Mounting rail



Wiring block
(Serial transmission slave unit)



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

Block manifold configuration

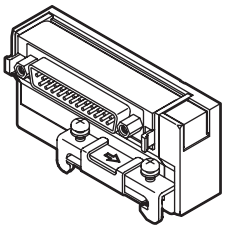
Electrical section

Piping section

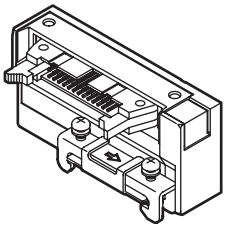
Related products

Electrical block

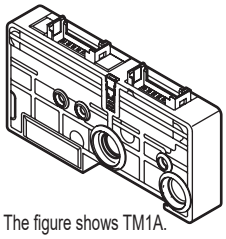
Ⓐ D sub-connector (T30(N)/T30(N)R)



Ⓑ Flat cable connector (T5*/T5*R)

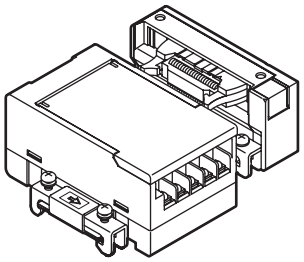


Ⓒ Intermediate electrical block (TM*)

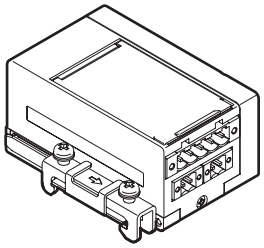


Note: The figure shows TM1A.

Ⓓ Serial transmission block (T6G1)



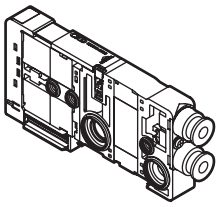
Ⓔ Serial transmission block (close contact) (T7*)



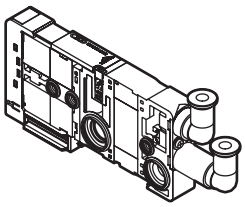
Piping block

Ⓕ Valve block

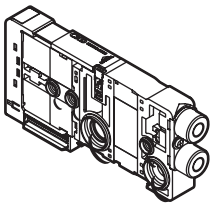
● Push-in fitting Lateral



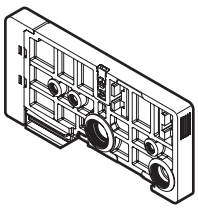
● Push-in fitting Upward



● Female thread (with non-rotation)

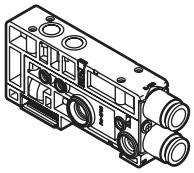


Ⓖ Dummy block (MP*)

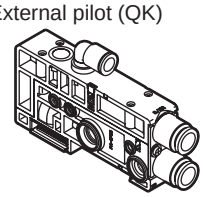


Ⓗ Supply and exhaust block

● Internal pilot (Q)

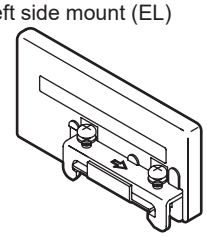


● External pilot (QK)

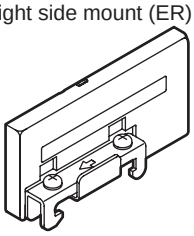


Ⓘ End block

Left side mount (EL)



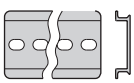
Right side mount (ER)



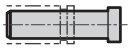
Related products

Ⓙ Related products

● Mounting rail

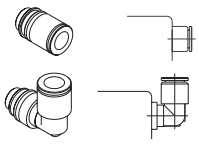


● Blanking plug

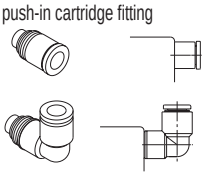


● Cable with D sub-connector

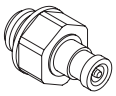
● Push-in cartridge fitting



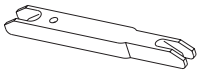
● Supply and exhaust block push-in cartridge fitting



● ø1.8 barbed threaded fitting



● Push-in fitting tube remover



● Power feed connector/replacement fuse for T50 power supply terminal

Electrical section

Electrical block

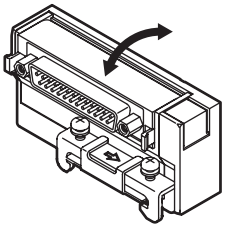
N4E0 - ( ) - P70

( ): Type of wiring block

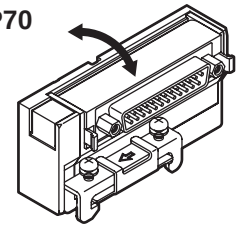
P70: Clean room specifications (clean room package)

Ⓐ D sub-connector (T30)

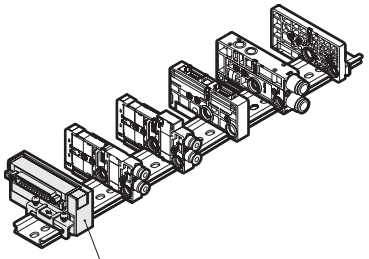
N4E0-T30-P70



N4E0-T30R-P70



* D sub-connector can be faced up or down.

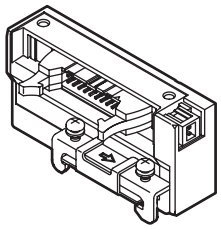


Ⓐ to Ⓔ Electrical block

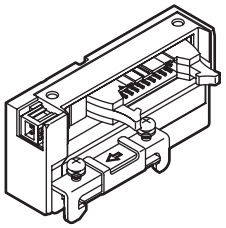
Ⓑ Flat cable connector (T5*)

● With power supply terminal

N4E0-T50-P70

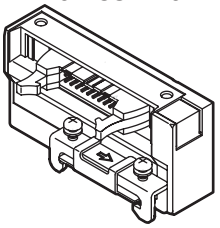


N4E0-T50R-P70

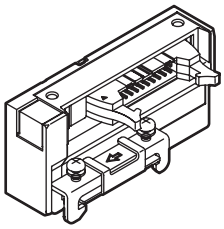


● Without power supply terminal

N4E0-T51-P70
N4E0-T52-P70
N4E0-T53-P70



N4E0-T51R-P70
N4E0-T52R-P70
N4E0-T53R-P70

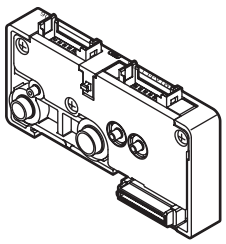


* The figure shows T51. T52 and T53 are different in the number of pins. (T51: 20 pins, T52: 10 pins, T53: 26 pins)

Ⓒ Intermediate electrical block

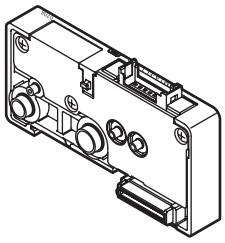
● RITS connector 6P × 2

N4E0-TMIA-P70



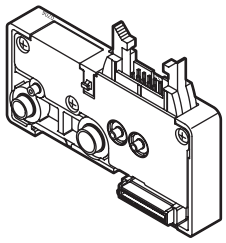
● RITS connector 6P

N4E0-TMIC-P70



● 10 pin flat cable connector

N4E0-TM52-P70

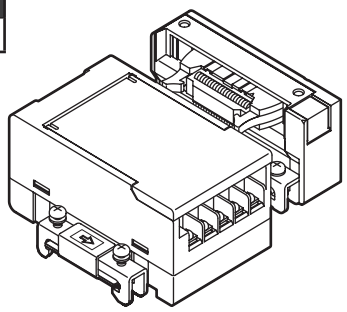


Ⓓ Serial transmission block (T6G1)

N4E0 - T6G1 - P70

Model No. Ⓐ Type

Code	Content
Ⓐ Type	
T6G1	CC-Link 16 points

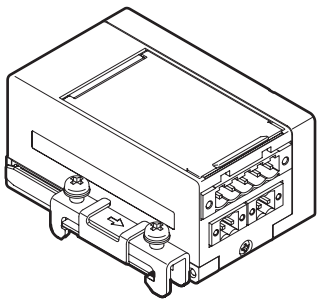


Ⓔ Serial transmission block (close contact) (T7*)

N4E0 - T7G2 - P70

Model No. Ⓐ Type

Code	Content
Ⓐ Type	
T7D1	DeviceNet 16 points
T7D2	DeviceNet 32 points
T7G1	CC-Link 16 points
T7G2	CC-Link 32 points
T7N1	S-LINK V 16 points
T7N2	S-LINK V 32 points
T7EC1	EtherCAT 16 points
T7EC2	EtherCAT 32 points
T7ECT1	EtherCAT 16 points
T7ECT2	EtherCAT 32 points
T7EN1	EtherNet/IP 16 points
T7EN2	EtherNet/IP 32 points



● Discrete serial transmission slave unit

4G - OPP3 - 1G - P70

Ⓐ Wiring method

Code	Description
Ⓐ Wiring method	
1G	CC-Link 16 points

*The slave unit is the same as the 4G Series.
Note that the model No. is "4G-*-*".

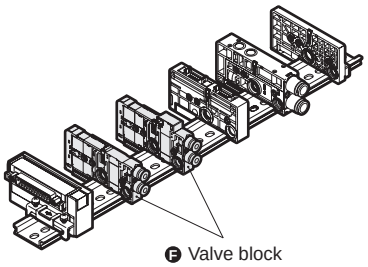
Piping section

Ⓕ Valve block

● Discrete valve block

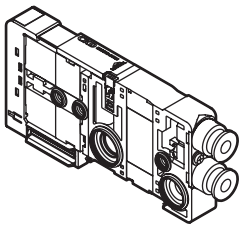
N 3 E 00 1 0 - C3 - M W EF - 3 - P70

Model No. / Ⓐ Valve / Ⓑ Solenoid position / Ⓒ Port size / Ⓓ Manual operating device / Ⓔ Wiring method / Ⓕ Terminal and connector pin wiring / Ⓖ Option / Ⓗ Voltage

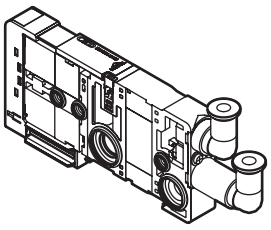


Code	Content		Model No. N3E00	N3E0	N4E00	N4E0
Ⓐ Valve/model No.						
N3E00	3-port valve or two 3-port valves integrated (7 mm pitch valve block)		●			
N3E0	3-port valve or two 3-port valves integrated (10 mm pitch valve block)			●		
N4E00	4-port valve (7 mm pitch valve block)				●	
N4E0	4-port valve (10 mm pitch valve block)					●
Ⓑ Solenoid position (*1)						
1	3-port valve	Single NC self reset (differential pressure spring return)	●	●		
11	3-port valve	Single NO self reset (differential pressure spring return)	●	●		
2	3-port valve	Double NC self holding	●	●		
21	3-port valve	Double NO self holding	●	●		
66	Dual 3-port valve integrated	A side valve: NC self reset (differential pressure return)	●	●		
66S	Dual 3-port valve integrated	B side valve: NC self reset (differential pressure spring return)	●	●		
67	Dual 3-port valve integrated	A side valve: NC self reset (differential pressure return)	●	●		
67S	Dual 3-port valve integrated	B side valve: NO self reset (differential pressure spring return)	●	●		
76	Dual 3-port valve integrated	A side valve: NO self reset (differential pressure return)	●	●		
76S	Dual 3-port valve integrated	B side valve: NC self reset (differential pressure spring return)	●	●		
77	Dual 3-port valve integrated	A side valve: NO self reset (differential pressure return)	●	●		
77S	Dual 3-port valve integrated	B side valve: NO self reset (differential pressure spring return)	●	●		
1	4-port valve	2-position single self reset (differential pressure spring return)			●	●
2	4-port valve	2-position double self hold			●	●
3	4-port valve	3-position all ports closed				●
4	4-port valve	3-position A/B/R connection				●
5	4-port valve	3-position P/A/B connection				●
Ⓒ Port size						
CF	ø1.8 push-in fitting, Lateral (applicable tube UP-9402, EH-5802)			●		●
C18	ø1.8 push-in fitting, Lateral (applicable tube UP-9402, EH-5802)		●	●	●	●
CL18	ø1.8 push-in fitting, facing up (applicable tube UP-9402, EH-5802)		●	●	●	●
C3	ø3 push-in fitting, Lateral		●		●	
CL3	ø3 push-in fitting, facing up		●		●	
C4	ø4 push-in fitting, Lateral		●	●	●	●
CL4	ø4 push-in fitting, facing up		●	●	●	●
C6	ø6 push-in fitting, Lateral			●		●
CL6	ø6 push-in fitting, facing up			●		●
M3	M3 female thread (with non-rotation)		●		●	
M5	M5 female thread (with non-rotation)			●		●
C3N	ø1/8" push-in fitting lateral		●	●	●	●
CL3N	ø1/8" push-in fitting upward		●	●	●	●
C4N	ø5/32" push-in fitting lateral		●	●	●	●
CL4N	ø5/32" push-in fitting upward		●	●	●	●
Ⓓ Manual operating device						
Blank	Non-locking/locking common (with manual cover)		●	●	●	●
M	Manual override for non-locking (with manual cover)		●	●	●	●
Ⓔ Wiring method						
Refer to the following page about wiring method.			●	●	●	●
Ⓕ Terminal and connector pin wiring						
Blank	Standard wiring		●	●	●	●
W	Double wiring (for reduced wiring) (*2, *3)		●	●	●	●
Ⓖ Option						
Blank	None		●	●	●	●
E	Low-heat and energy saving circuit (*4, *5)		●	●	●	●
U	Built-in individual power supply function (AUX) (*5, *6)			●		●
A	Ozone proof (*7)			●		●
F	Built-in port A/B filter		●	●	●	●
Ⓗ Voltage						
3	24 VDC		●	●	●	●
4	12 VDC		●	●	●	●

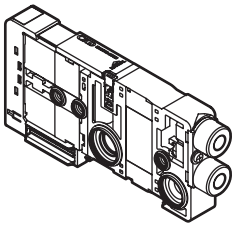
● Push-in fitting Lateral



● Push-in fitting facing up



● Female thread (with non-rotation)



***1: For specifications of the self reset, refer to the precautions on page 412.**

*2: Double wiring is available only for the 2-position single solenoid valve.

*3: Double wiring is not available for a single unit of individual wiring valve block.

*4: N3E00 and N4E00 individual wiring is not available for the low exoergic/reduced wiring circuit type.

*5: Energizing is limited to the plus common. Also, "E" and "U" cannot be selected together.

*6: "U" is not available for individual wiring.

*7: Supported as standard for N3E00 and N4E00.

(Wiring method list)

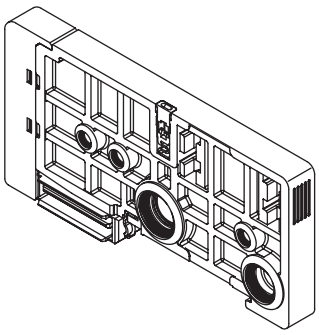
Code	Content		Model No. N3E00	N3E0	N4E00	N4E0
Ⓔ Wiring method						
Blank	Valve block for reduced wiring		●	●	●	●
D2	Individual wiring	D connector lead wire length 300 mm	●	●	●	●
D20		D connector lead wire length 500 mm	●	●	●	●
D21		D connector lead wire length 1000 mm	●	●	●	●
D22		D connector lead wire length 2000 mm	●	●	●	●
D23		D connector lead wire length 3000 mm	●	●	●	●
D2N		D connector without lead wire without socket	●	●	●	●
D3		D connector without lead wire with socket/terminal	●	●	●	●

Ⓖ Dummy block

N4E0 - MPD - P70

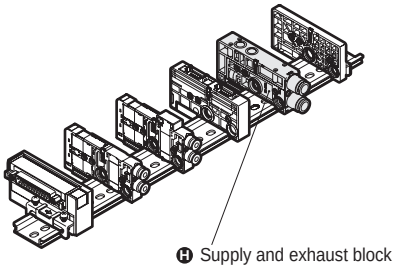
Ⓐ Type

Ⓐ Type	
MPS	Single wiring
MPD	Double wiring



Piping section

Ⓗ Supply and exhaust block



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

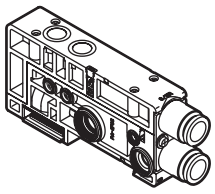
N4E0 - Q - 8 - SA - C - P70

Model No. Ⓐ Type Ⓑ Port size Ⓒ Option Ⓓ Wiring method

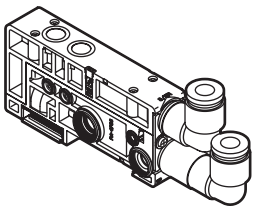
Ⓐ Type (*1)		Ⓑ Port size (port P/R) (*2)		Ⓒ Option (*3, *5)		Ⓓ Wiring method	
Q	Internal pilot	6	ø6 push-in fitting	Blank	Without partition	Blank	Internal wiring circuit selected
QK	External pilot	6L	ø6 push-in fitting Upward	S	P/R stop, PA/PR through	C	Without internal wiring circuit (*4)
QZ	Multi-pressure circuit (P, R only)	8	ø8 push-in fitting	SA	P/R/PA/PR locking		
QKZ	Multi-pressure circuit, external pilot (P, R, PA, PR separate)	8L	ø8 push-in fitting Upward				
		6N	ø1/4" push-in fitting				
		6LN	ø1/4" push-in fitting upward				
		8N	ø5/16" push-in fitting				
		8LN	ø5/16" push-in fitting upward				

*1: QZ cannot be used as discrete part. Use it with another type (Q/QK/QKZ).
*2: A filter for preventing entry of foreign matter is incorporated in P port.
*3: The manifold port is faced toward you to shield the flow path between the supply/exhaust block and the block on the right side. (Refer to the circuit diagram on page 410.)
Option Code
S: Blocks the 1 (P) and 3 (R) flow paths.
SA: Blocks the 1 (P), 3 (R), 12/14 (PA) and 82/84 (PR) flow paths.
*4: When using the wiring block with a [left + right] or [intermediate + right] combination, arrange the supply/exhaust block "without internal wiring circuit" between the left control station and the right control station.
*5: When the end block N4EO-ER is selected and the supply and exhaust block are installed adjacent to the left side, options S and SA cannot be selected.

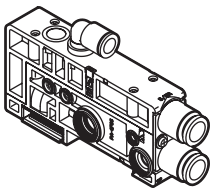
● Q-8(N)
QZ-8(N)



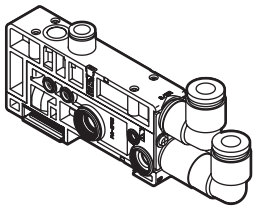
● Q-8L(N)
QZ-8L(N)



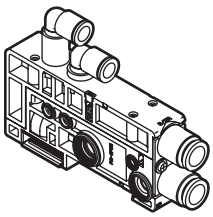
● QK-8(N)



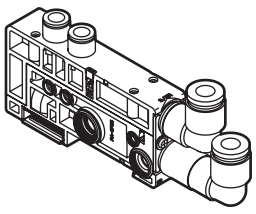
● QK-8L(N)



● QKZ-8(N)



● QKZ-8L(N)



Ⓘ End block

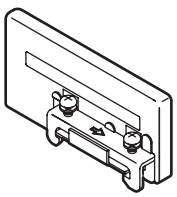
- Mount the block on the left or right side with the piping port facing forward.

N4E0 - ER - P70

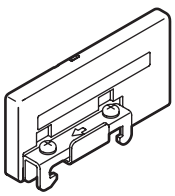
Model No. Ⓐ Type

Ⓐ Type	
EL	Left side mounting
ER	Right side mounting

● N4E0-EL

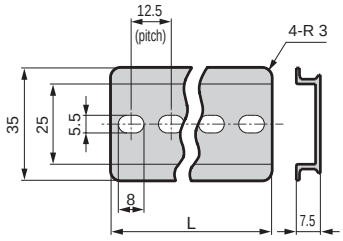


● N4E0-ER



J Related products

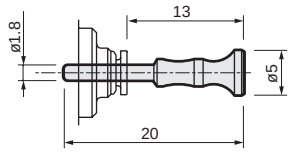
● Mounting rail
N4G-BAA [length]



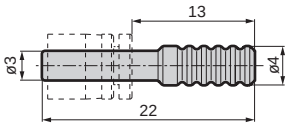
*Cannot be used with inch fitting specifications.

● Blanking plug (accessory)

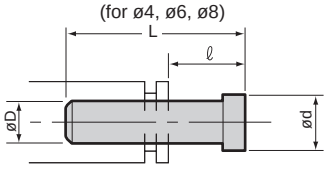
PG-P2-B (for ø1.8)



N4E00-JOINT-PP3MW (for ø3)



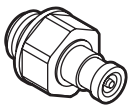
(for ø4, ø6, ø8)



Model No.	D	L	ℓ	d
GWP4-B	ø4	27	16	6
GWP6-B	ø6	29	17	8
GWP8-B	ø8	33	17.5	10

● ø1.8 barbed fitting (10 pcs./set)

N4E0 - JOINT - PTN2-M5



Code	Dimensions
PTN2-M3	Barbed fitting M3 screw-in
PTN2-M5	Barbed fitting M5 screw-in
PTN2-6	Barbed fitting R1/8

* Contact CKD separately regarding fiber tube.

● Push-in fitting tube remover

N4E0-EOT18-4 (for ø1.8, ø3, ø4)
N4S0-EOT4-6 (for ø3, ø4, ø6)

K Related products

● Push-in cartridge fitting

N4E00 - JOINT - C4 - P70

Dedicated for valve block.

Code	Dimensions
C18	ø1.8 push-in Cartridge fitting
C3	Push-in cartridge fitting for ø3 tube Cartridge fitting
C4	For ø4 tube Push-in cartridge fitting
CL18	ø1.8 short L type push-in Cartridge fitting
CL3	Short L type push-in cartridge fitting for ø3 tube Cartridge fitting
CL4	Short L type for ø4 tube Push-in cartridge fitting
CLL18	ø1.8 long L type push-in Cartridge fitting
CLL3	Long L type push-in cartridge fitting for ø3 tube Cartridge fitting
CLL4	Long L type for ø4 tube Push-in cartridge fitting
CPG	Plug cartridge
CP	Fitting fixing plate (with small machine screw for plate fixing)
CM3	M3 Cartridge fitting
CMB	M3 Plug cartridge (Rotation-stop plate for M3 fitting: CMP is necessary for fixing.)
CMP	Fitting rotation-stop plate for M3 (with small machine screw for plate fixing)
C3N	Push-in cartridge fitting for ø1/8" tube Cartridge fitting
C4N	For ø5/32" tube Push-in cartridge fitting
CL3N	Short L type push-in cartridge fitting for ø1/8" tube Cartridge fitting
CL4N	Short L type for ø5/32" tube Push-in cartridge fitting
CLL3N	Long L type push-in cartridge fitting for ø1/8" tube Cartridge fitting
CLL4N	Long L type for ø5/32" tube Push-in cartridge fitting

●Push-in cartridge fitting for supply and exhaust block

N4E0 - Q - JOINT - 8 - P70

For pilot pressure air supply (for PA), use the products for valve block shown above.

Code	Dimensions
6	For ø6 tube Push-in cartridge fitting
8	For ø8 tube Push-in cartridge fitting
6L	Short L type for ø6 tube Push-in cartridge fitting
8L	Short L type for ø8 tube Push-in cartridge fitting
6LL	Long L type for ø6 tube Push-in cartridge fitting
8LL	Long L type for ø8 tube Push-in cartridge fitting
6N	For ø1/4" tube Push-in cartridge fitting
8N	For ø5/16" tube Push-in cartridge fitting
6LN	Short L type for ø1/4" tube Push-in cartridge fitting
8LN	Short L type for ø5/16" tube Push-in cartridge fitting
6LLN	Long L type for ø1/4" tube Push-in cartridge fitting
8LLN	Long L type for ø5/16" tube Push-in cartridge fitting
P	Fitting fixing plate (with small machine screw for plate fixing)

N4E0 - JOINT - C4 - P70

Dedicated for valve block and supply/exhaust block port PA.
Cannot be used for ports P and R of supply and exhaust block.

Code	Dimensions
CF	ø1.8 barbed Cartridge fitting
C18	ø1.8 push-in Cartridge fitting
C4	For ø4 tube Push-in cartridge fitting
C6	For ø6 tube Push-in cartridge fitting
CL18	ø1.8 short L type push-in Cartridge fitting
CL4	Short L type for ø4 tube Push-in cartridge fitting
CL6	Short L type for ø6 tube Push-in cartridge fitting
CLL18	ø1.8 long L type push-in Cartridge fitting
CLL4	Long L type for ø4 tube Push-in cartridge fitting
CLL6	Long L type for ø6 tube Push-in cartridge fitting
CPG	Plug cartridge
CP	Fitting fixing plate (with small machine screw for plate fixing)
CM5	M5 cartridge fitting (Rotation-stop plate for M5 fitting: CMP is necessary for fixing.)
CMB	M5 plug cartridge (Rotation-stop plate for M5 fitting: CMP is necessary for fixing.)
CMP	Fitting rotation-stop plate for M5 (with small machine screw for plate fixing)
C3N	For ø1/8" tube Push-in cartridge fitting
C4N	For ø5/32" tube Push-in cartridge fitting
CL3N	Short L type for ø1/8" tube Push-in cartridge fitting
CL4N	Short L type for ø5/32" tube Push-in cartridge fitting
CLL3N	Long L type for ø1/8" tube Push-in cartridge fitting
CLL4N	Long L type for ø5/32" tube Push-in cartridge fitting

K Related products

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

N4E0 - SOCKET - D - 300 - P70

A Type *1 B Lead wire length

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

*1: The model No. without lead wire is 3M0-SOCKET-SET.
(3 contacts attached, applicable wire diameter: AWG#26 to 28)

N4E00 - SOCKET - D - 300 - P70

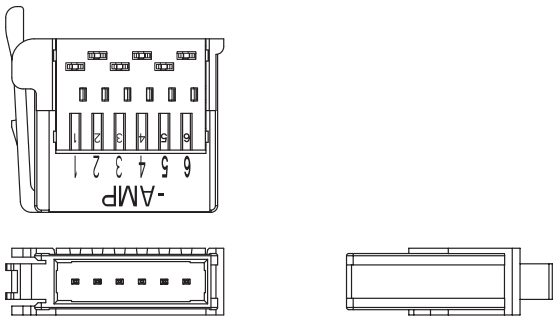
A Type *1 B Lead wire length

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

*1: The model No. without lead wire is N4E00-SOCKET-SET.
(3 contacts attached, applicable wire diameter: AWG#26 to 28)

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

N4E0-TM-CONNECTOR-P70 Tyco Electronics Japan G.K. RITS connector 6P (part No.: 1473562-6)



・Compatible wire (Tin-plated wire recommended)

Sheath finished O.D.	Ref. wire X-sectional area	No. of strands/diameter
mm	mm^2	No./mm
ø1.0 to 1.15	ø0.2 to 0.3	up to 60/0.08

For the detailed specifications of applicable wires, confirm with * below.
*Tyco Electronics Japan, LLC.
Product Information Center
TEL 044-844-8052
URL http://www.te.com/jpn-ja/about-te/our-company/te-japan.html
・Dedicated crimping tool 1729940-1

● Feed connector for power supply terminal for T50

N4E0-T50-CONNECTOR-P70

[Compatible wires AWG28-20 / 0.08 to 0.5mm^2
(Commercially available WAGO connector plug 733-102)]

● Replacement fuse for T50

4T9-LM16-P70

[LM16, Daito Comm. Apparatus Co., Ltd.]

● Communication connector for T7D

MSTB2.5/5 - STF - 5.08AUM

Phoenix Contact (Part No.: 5880008)

● Communication connector for T7G and T7N

BLZP5.08HC/05/180F SN OR BX Weidmüller Corp. (Part No.: 194412)

● Power supply connector for T7D, T7G, T7N

BL3.5/2F Weidmüller Corp. (Part No.: 160664)