



# Manifold specifications

## MN4GA/4GB Series

● Mounting rail model No.: N4GR-BAA length - P70

### Regarding the length (L2) of the mounting rail

- (1) Determine the rail length using the calculation method shown below.  
The obtained length is standard.
- (2) For the standard length, it is not necessary to write the length (L2) in the specifications.  
Indicate the length when using a non-standard length.

● How to determine the length of the mounting rail

$$\text{Manifold length (L1)} = (A \times \text{Qty. Valve Block}) + (B \times \text{Qty. Supply and exhaust Block}) + (C \times \text{Qty. Partition Block}) + D + E$$

$$\text{Mounting rail length (L2)} = L2' \times 12.5$$

A, B, C, D, and E each indicate the length (width) of each block.

$$L2': \frac{L1 + 40}{12.5} \rightarrow \text{Decimals rounded up}$$

$$\text{Rail mounting pitch (L3)} = L2 - 12.5$$

Block length (width) dimensions table (mm)

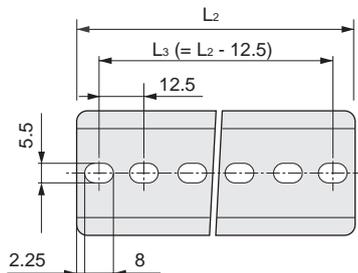
		MN4GA/B1	MN4GA/B2	MN4G1/2MIX		
				MN4GA/B1	MN4GA/B2	
A	Valve block	10.5	16	10.5	16	
B	Supply and exhaust block	16	18	16	18	
C	Partition block	10.5	10.5	10.5	10.5	
D	Individual wiring	41.2	46.2	43.7		
	Electrical block for reduced wiring	T10/T11	83.9	86.4	86.4	
		T10R/T11R	83.9	86.4	83.9	
		T30/T5*	69.4	71.9	71.9	
		T30R/T5*R	69.4	71.9	69.4	
		T6*	143.6	146.1	146.1	
		T7*	64.4	66.9	66.9	
T8*	64.4	66.9	66.9			
E	Mix block				16	

\* The end block is included in the electrical block.

● DIN rail length quick reference table

L1 · Manifold Length	Over 47.5 to	60 to	72.5 to	85 to	97.5 to	110 to	122.5 to	135 to	147.5 to	160 to	172.5 to	185 to	197.5 to	210 to	222.5 to	235 to	247.5 to	260 to	272.5 to	285 to	297.5 to	310 to	322.5 to	335 to	347.5 to	
	47.5 or less	60 or less	72.5	85	97.5	110	122.5	135	147.5	160	172.5	185	197.5	210	222.5	235	247.5	260	272.5	285	297.5	310	322.5	335	347.5	360
L2 · Rail Length	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	387.5	400
Pitch L3	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	375	387.5

Note 1: When L1 exceeds this table, calculate the length by referring to "How to calculate the length of the mounting rail".



- SCPD3
- SCM
- SSD2
- MDC2
- SMG
- LCM
- LCR
- LCG
- LCX
- STM
- STG
- STR2
- MRL2
- GRC
- Cylinder Switch
- MN3E  
MN4E
- 4GA/B
- M4GA/B
- MN4GA/B
- F.R. (module unit)
- Clean F.R
- Precision R
- Press gauge  
Diff. press gauge
- Electro-pneumatic R
- Speed controller
- Auxiliary valve
- Fitting/tube
- Clean air unit
- Pressure sensor
- Flow rate sensor
- Valve for air blow
- Ending

# MN4GA/4GB Series

## How to fill out the wiring specifications

This is not required with standard wiring or double wiring.

● Wiring specifications (example)

\* The following example has been filled out in accordance with the manifold specifications on the previous page.

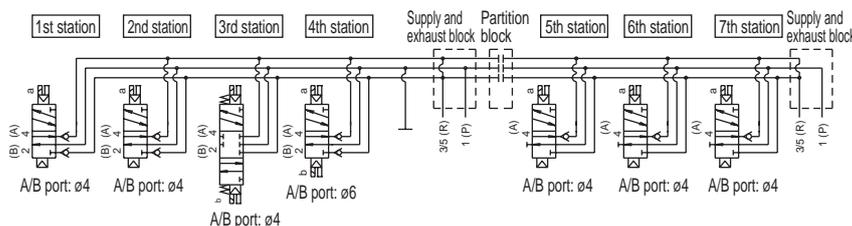
Connector pin No.				Valve No.																							
T50/T50R	T51/T51R	T52/T52R	T53/T53R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1	1	1	a																							
2	2	2	2		a																						
3	3	3	3				a																				
4	4	4	4				b																				
5	5	5	5					a																			
6	6	6	6					b																			
7	7	7	7			a																					
8	8	8	8			b																					
9 - Power supply	9	9	9	COM																							
10 + (COM) power supply	10	10	10	COM																							
11	11		11					a																			
12	12		12						a																		
13	13		13							a																	
14	14		14																								
15	15		15																								
16	16		16																								
17	17		17																								
18	18		18																								
19 - Power supply	19	COM	19																								
20 + (COM) power supply	20	COM	20																								
			21																								
			22																								
			23																								
			24																								
			25	COM																							
			26	COM																							

\* Please be aware that when the wiring method is T50/T50R, the polarity of COM will be + (plus).

● Precaution regarding wiring specifications

- (1) Fill in and attach the form to the manifold specifications for those other than the standard wiring or double wiring. Separately consult us as products will be prepared on a made to order basis in such case.
- (2) The valve No. is determined by only counting the valve blocks in order from the left with the ports facing forward. Please be careful as this will differ from the numbers for the mounting positions.
- (3) As the connector pin No. and valve No. will differ for every reduced wiring method (T1\*/T30/T5\*/T6\*/T7\*/T8\*), fill out the form upon reviewing the precautions (pages 714 to 734) for each reduced wiring method.
- (4) Wiring (socket assembly) will be included in the valve blocks with masking plates. A side only for "-MPS". On both the A and B sides for "-MPD".
- (5) It is not possible to assemble a double solenoid or 3-position solenoid valve to "-MPS". Make arrangements for the valve block with solenoid valve and perform the task of expansion.
- (6) It is not possible to install spare wires for expansions of stations in advance. Wire the socket assembly of the solenoid valve for expansion of stations. Refer to page 736 for instructions on how to expand stations.

References circuit diagram Simplified circuit diagram of manifold model No. (example) from previous page



- \* Manifold stations are set in order from the left with the piping port facing forward. (The electrical blocks, supply and exhaust blocks, partition block, and end block are not included in the number of manifold stations)
- \* Select the model No. from block components (pages 683 to 698) and the page for model nos. of each of the specifications.
- \* The positions of arrangements are set in order from the left with the piping port facing forward.













SCPD3

SCM

SSD2

MDC2

SMG

LCM

LCR

LCG

LCX

STM

STG

STR2

MRL2

GRC

Cylinder Switch

MN3E  
MN4E

4GA/B

M4GA/B

MN4GA/B

F.R.(module unit)

Clean F.R

Precision R

Press gauge  
Diff. press gauge

Electro-pneumatic R

Speed controller

Auxiliary valve

Fitting/tube

Clean air unit

Pressure sensor

Flow rate sensor

Valve for air blow

Ending

## Common terminal block (T10/T11) wiring specifications

\* Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available on a made to order basis)  
\* This is not required with standard wiring/double wiring.

Connector pin No.		Valve No.																							
T10	T11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1																								
2	2																								
3	3																								
4	4																								
5	5																								
6	6																								
7	7																								
8	8																								
9	9																								
10	10																								
11	11																								
12	12																								
13	13																								
14	14																								
15	15																								
16	16																								
COM	17																								
COM	18																								
	19																								
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	21																								
	22																								
	23																								
	24																								
	COM																								
	COM																								

## D sub-connector (T30) wiring specifications

\* Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available on a made to order basis)  
\* This is not required with standard wiring/double wiring.

Connector pin No.		Valve No.																							
T30		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1																									
	14																								
2																									
	15																								
3																									
	16																								
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11																									
	24																								
12																									
	25																								
13 (COM)																									

## Flat cable connector (T50/T51/T52/T53) wiring specifications

\* Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available on a made to order basis)  
 \* This is not required with standard wiring/double wiring.

	Connector pin No.				Valve No.																							
	T50/T50R	T51/T51R	T52/T52R	T53/T53R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SCPD3	1	1	1	1																								
SCM	2	2	2	2																								
SSD2	3	3	3	3																								
MDC2	4	4	4	4																								
SMG	5	5	5	5																								
LCM	6	6	6	6																								
LCR	7	7	7	7																								
LCG	8	8	8	8																								
LCX	9 - power supply	9	9	COM	9																							
STM	10 + (COM) power supply	10	10	COM	10																							
STG	11	11		11																								
STR2	12	12		12																								
MRL2	13	13		13																								
GRC	14	14		14																								
Cylinder switch	15	15		15																								
MN3E MN4E	16	16		16																								
4GA/B	17	17		17																								
M4GA/B	18	18		18																								
MN4GA/B	19 - power supply	19	COM	19																								
	20 + (COM) power supply	20	COM	20																								
				21																								
				22																								
				23																								
				24																								
				25	COM																							
				26	COM																							

\* Please be aware that when the wiring method is T50/T50R, the polarity of COM will be + (plus).

## Serial transmission (T6G1/T7\*) wiring specifications

\* Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available on a made to order basis)  
 \* This is not required with standard wiring/double wiring.

	Serial transmission	Connector pin No.		Valve No.																											
		T6G1	T7*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16												
Precision R Press gauge Diff. press gauge Electro-pneumatic R Speed controller Auxiliary valve Fitting/tube Clean air unit	<b>Connector</b> T6G1: CC-Link 16 points	1	1																												
		2	2																												
		3	3																												
		4	4																												
		5	5																												
		6	6																												
		7	7																												
		8	8																												
		9	9																												
		10	COM	10																											
		11	11																												
		Pressure sensor Flow rate sensor Valve for air blow Ending	<b>Thin slot-insertion</b> T7D1: DeviceNet 16 points T7G1: CC-Link 16 points T7L1: SAVE NET 16 points T7S1:CompoNet 16 points (NPN) T7SP1:CompoNet 16 points (PNP)	13	13																										
14	14																														
15	15																														
16	16																														
17	17																														
18	18																														
19	19																														
20	COM			20																											

