

M4GA1 to 3/M4GB1 to 3 Series

How to fill out metal base M4G series manifold specifications sheet

● Manifold model No. (example)

M **4** **G^A_B** **1** **8** **OR-CX** - **T30** - **9** - **3** - **P70**

Solenoid valves

Solenoid position

Port size

Electrical connections

Terminal connector pin array

Station No.

Voltage

Clean-room specifications

Precautions for fitting mix CX

The A/B port fitting can be selected freely by indicating "CX" in the port size area.

Selectable cartridge fittings

4G1	CF, C18, C4, C6, C8, X (plug)
4G2	C4, C6, C8, C10, X (plug)
4G3	C6, C8, C10, X (plug)

* A/B port fitting mix with the body piping is not supported. 4G1 C8 and 4G2 C10 base piping are custom orders. Fitting mix CX supports only the combinations of C8 and X (plug) for 4G1 and C10 and X (plug) for 4G2.

Solenoid valve model No.	Fitting CX		Installation position																								Quantity	
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
4G ^A _B 1 9R-CX	C6	X	○	○																								2
4G ^A _B 1 9R-C6					○	○																						2
4G ^A _B 1 2 9R-C6							○	○																				2
4G ^A _B 1 5 9R-CX	C6	C4							○	○																		2
4G ^A _B 1 9R-																												
3G ^A _B 1 9R-																												
Masking plate 4G1R-MP(S)																												
Masking plate 4G1R-MP(D)																												1
Mounting rail L ₂ = <input type="text"/> * Write an integer multiple of 12.5.	Accessory	Blanking plug												Thread plug														
		PG-P2-B						GWP4-B						4G1R-M5P														
		GWP6-B						GWP8-B																				
		Cable with D sub-						4GR-CABLE-D0□-□						Push-in fitting tube remover (attached as standard) □ Not required (check the box)														

Indicate X for a plug

Fill in "CX" when changing the fitting combination

How to use base piping M4GB*10 as a 3-port valve

This can be used as the NO/NC by attaching a plug cartridge on one side of the A/B port. Indicate "X" in the fitting CX column.

Switching method	Plug mounting port
NC (Normally closed)	B
NO (Normally open)	A

For female thread specifications, indicate the required number of plugs in the "Thread plug" area at the end.

Female threads and cartridge fitting cannot be used together in one manifold set.

Elbow specifications

- The push-in L fitting (upward) is used only for the single solenoid manifold. Port A is a long elbow and port B a short elbow.
- A/B port sizes do not differ for elbow specifications.

* A reference circuit diagram for the above manifold (example) is shown on the next page.

From the manifold specifications sheets for each model, select and fill out the appropriate form.

- Individual wiring...M4G1^A_B (page 609), M4G2^A_B (page 610), M4G3^A_B (page 611)
- Reduced wiring
 - Common terminal block (T1*), D sub-connector (T30): M4G^A_B 1 (page 612), M4G^A_B 2 (page 613), M4G^A_B 3 (page 614)
 - Flat cable connector (T5*) : M4G^A_B 1 (page 615), M4G^A_B 2 (page 616), M4G^A_B 3 (page 617)
 - Serial transmission (T6G1) : M4G^A_B 1 (page 618), M4G^A_B 2 (page 619), M4G^A_B 3 (page 620)
 - Serial transmission (T8*) : M4G^A_B 1 (page 621), M4G^A_B 2 (page 622), M4G^A_B 3 (page 623)

*1: Select the silencer mounting after confirming the dimensions.

*2: Use SLW-8S for the M4GA2 DIN rail mount. Interference occurs if SLW-8A is used.

Place a check here if the tube remover (standard attached product) is not required.

M4GB1*OR-C8 does not come with a removal tool.

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

M4GA1 to 3/M4GB1 to 3 Series

How to fill out wiring specifications sheet

This is not required for standard wiring and double wiring.

● Wiring specifications (example)

Complete these specifications when specifying the wiring order and additional cables.

Connector pin No.		Mounting position																
T30/T30R	T50/T50R/T6*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	1	a																
14	2		a															
2	3			a														
15	4				a													
3	5					a												
16	6						a											
4	7							b										
17	8								a									
5	9 - power supply									a								
18	10 + (COM) power supply										b							
6	11									a								
19	12										b							
7	13											a						
20	14												b					
8	15													(a)				
21	16														(b)			
9	17																	
22	18																	
10	19 - power supply																	
23	20 + (COM) power supply																	
11	24																	
12	25																	
13 (COM)																		

Auxiliary cable wiring
Caution (1)

* When T50 wiring is used, the COM polarity is + (plus).

* When T50 wiring is used, connector pin No. 9, 10, 19, and 20 cannot be specified because they are used for the external input power supply.

* Wiring is sequential from connector pin No. 1 in standard wiring. Contact CKD for the special wiring order.

Cautions for auxiliary wiring

(1) Reserved wire(s) is/are provided on the masking plate for the reduced wiring manifold. (Refer to page 596)

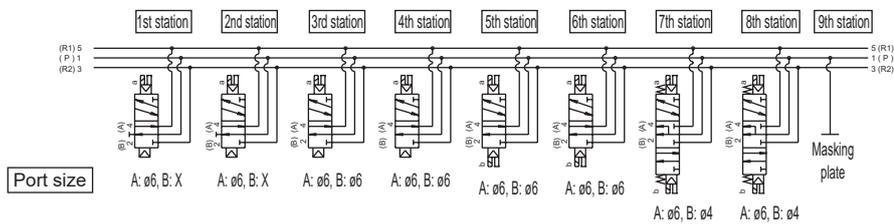
The number of auxiliary wires can be specified by selecting the masking plate in specifications.

4G*R - MP (S)...1

4G*R - MP (D)...2

Indicate (a) or (b) in manifold specifications for masking plate reserved wires.

References circuit diagram The simplified circuit diagram of the manifold model No. (example) on the previous page is shown below.



* Manifold stations are set in order from the left with the piping port facing toward you.

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

M4G1 serial transmission

M4G^A_B1-T6G1 Manifold specifications sheet

Issued _____ / ____ / ____
 Company _____
 Contact _____
 Order No. _____

● Contact _____ ● Quantity _____ set(s) ● Delivery date _____ / ____ / ____
 Slip No. _____ Order No. _____

● Manifold model No.
M **G^A_B1** **0R-** - **T6G1** **D** - - **3** -

Type of solenoid valve Solenoid position Port size Serial transmission Terminal connector pin layout Option Station No. Voltage Clean room specifications

Solenoid valve model No.	Fitting CX		Valve mounting position																Qty.
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
4G	1	9R-																	
4G	1	9R-																	
4G	1	9R-																	
4G	1	9R-																	
4G	1	9R-																	
3G	1	9R-																	
3G	1	9R-																	
Masking plate 4G1R-MP (S) -																			
Masking plate 4G1R-MP (D) -																			
Air supply spacer 4G1R-P-																			
Exhaust spacer 4G1R-R-																			
Mounting rail L ₂ = * Write an integer multiple of 12.5.	Accessories	Blanking plug												Threaded plug					
		PG-P2-B			GWP4-B			GWP6-B			GWP8-B			4G1R-M5P					
		Push-in fitting tube remover (standard) <input type="checkbox"/> Not required (check)																	

* C8 of M4GB1 is not provided with an extractor.

● Wiring specifications sheet (Not required for standard wiring/double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No.	Installation position																
	T6G1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10	COM																
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20	COM																

M4G2 serial transmission

M4G^A_B2-T6G1 Manifold specifications sheet

Issued / /
 Company _____
 Contact _____
 Order No. _____

● Contact ● Quantity set(s) ● Delivery date /
 Slip No. _____ Order No. _____

● Manifold model No.
M **G** ^A_B **2** **0R-** - **T6G1** **D-** - **3** -
 Solenoid valve Solenoid position Port size Serial transmission Terminal/connector pin array Option Station No. Voltage Clean room specifications

Solenoid valve model No.	Fitting CX		Valve mounting position																Qty.
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
4G 2 9R-																			
4G 2 9R-																			
4G 2 9R-																			
4G 2 9R-																			
4G 2 9R-																			
3G 2 9R-																			
3G 2 9R-																			
Masking plate 4G2R-MP (S) -																			
Masking plate 4G2R-MP (D) -																			
Air supply spacer 4G2R-P-																			
Exhaust spacer 4G2R-R-																			
Mounting rail L ₂ = <input type="text"/> * Write an integer multiple of 12.5.	Accessories	Blanking plug												Threaded plug					
		GWP4-B				GWP6-B				GWP8-B				GWP10-B				4G2R-06P	

● Wiring specifications sheet (Not required for standard wiring/double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No.		Installation position																
T6G1		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
T6G1: CC-Link 16 points	1																	
	2																	
	3																	
	4																	
	5																	
	6																	
	7																	
	8																	
	9																	
	10	COM																
	11																	
	12																	
	13																	
	14																	
	15																	
	16																	
	17																	
	18																	
	19																	
	20	COM																

- 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

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

M4G1 serial transmission thin

M4G^A_B1-T8 manifold specifications

Issue date / /
 Company
 Contact
 Purchase order No.

● Contact ● Quantity set(s) ● Request date /
 Slip No. Order No.

● Manifold model No.
M **G^A_B1** **0R-** **-** **-** **-** **3** **-** **-**
 Type of solenoid valve Solenoid position Port size Serial transmission Terminal connector pin layout Option Mount Station No. Voltage Clean room specifications

Solenoid valve model No.	Fitting CX		Valve mounting position																		Qty.		
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20
4G : 1 9R-																							
4G : 1 9R-																							
4G : 1 9R-																							
4G : 1 9R-																							
4G : 1 9R-																							
3G : 1 9R-																							
3G : 1 9R-																							
Masking plate 4G1R-MP(S)-																							
Masking plate 4G1R-MP(D)-																							
Air supply spacer 4G1R-P-																							
Exhaust spacer 4G1R-R-																							
Mounting rail L ₂ = * Write an integer multiple of 12.5.	Accessories	Blanking plug															Threaded plug						
		PG-P2-B			GWP4-B			GWP6-B			GWP8-B			4G1R-M5P									
		Push-in fitting tube remover (standard) <input type="checkbox"/> Not required (check)																					

* C8 of M4GB1 is not provided with an extractor.

● Wiring specification (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No.				Mounting position																			
T8*				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
T8G1	CC-Link	NPN	16points	1																			
T8G2			PNP	32points	2																		
T8GP1	PROFIBUS-DP	NPN	16points	3																			
T8GP2			PNP	32points	4																		
T8P1	EtherCAT	NPN	16points	5																			
T8P2			PNP	32points	6																		
T8PP1	EtherNet/IP	NPN	16points	7																			
T8PP2			PNP	32points	8																		
T8EC1	DeviceNet	NPN	16points	9																			
T8EC2			PNP	32points	10																		
T8ECP1	IEF Basic	NPN	16points	11																			
T8ECP2			PNP	32points	12																		
T8EN1	IE Field	NPN	16points	13																			
T8EN2			PNP	32points	14																		
T8ENP1	PROFINET	NPN	16points	15																			
T8ENP2			PNP	32points	16																		
T8D1	IO-Link	NPN	16points	17																			
T8D2			PNP	32points	18																		
T8DP1	IE Field	NPN	16points	19																			
T8DP2			PNP	32points	20																		
T8EB1	IE Field	NPN	16points	21																			
T8EB2			PNP	32points	22																		
T8EBP1	PROFINET	NPN	16points	23																			
T8EBP2			PNP	32points	24																		
T8EF1	IO-Link	NPN	16points	25																			
T8EF2			PNP	32points	26																		
T8EFP1	IO-Link	NPN	16points	27																			
T8EFP2			PNP	32points	28																		
T8EP1	IO-Link	NPN	16points	29																			
T8EP2			PNP	32points	30																		
T8EPP1	IO-Link	NPN	16points	31																			
T8EPP2			PNP	32points	32																		
T8KC1	IO-Link	NPN	16points																				
T8KC2			PNP	32points																			
T8KCP1	IO-Link	NPN	16points																				
T8KCP2			PNP	32points																			

M4G2 serial transmission thin

M4G^A_B2-T8 manifold specifications

Issue date / /

Company

Contact

Purchase order No.

● Contact ● Quantity set(s) ● Request date /

Slip No. Order No.

● Manifold model No.

M G^A_B 2 0R- - - - - - **3** -

Type of solenoid valve Solenoid position Port size Serial transmission Terminal connector pin layout Option Mount Station No. Voltage Clean room specifications

Solenoid valve model No.	Fitting CX		Valve mounting position																		Qty.		
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20
4G : 2 9R-																							
4G : 2 9R-																							
4G : 2 9R-																							
4G : 2 9R-																							
4G : 2 9R-																							
3G : 2 9R-																							
3G : 2 9R-																							
Masking plate 4G2R-MP(S)-																							
Masking plate 4G2R-MP(D)-																							
Air supply spacer 4G2R-P-																							
Exhaust spacer 4G2R-R-																							
Mounting rail L2 = <small>* Write an integer multiple of 12.5.</small>	Accessories	Blanking plug																		Threaded plug			
		GWP4-B	GWP6-B	GWP8-B	GWP10-B	4G2R-06P																	

● Wiring specification (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No.				Mounting position																			
T8*				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
T8G1	CC-Link	NPN	16points	1																			
T8G2			32points	2																			
T8GP1		PNP	16points	3																			
T8GP2			32points	4																			
T8P1	PROFIBUS-DP	NPN	16points	5																			
T8P2			32points	6																			
T8PP1		PNP	16points	7																			
T8PP2	32points		8																				
T8EC1	EtherCAT	NPN	16points	9																			
T8EC2			32points	10																			
T8ECP1		PNP	16points	11																			
T8ECP2	32points		12																				
T8EN1	EtherNet/IP	NPN	16points	13																			
T8EN2			32points	14																			
T8ENP1		PNP	16points	15																			
T8ENP2	32points		16																				
T8D1	DeviceNet	NPN	16points	17																			
T8D2			32points	18																			
T8DP1		PNP	16points	19																			
T8DP2	32points		20																				
T8EB1	CC-Link IEF Basic	NPN	16points	21																			
T8EB2			32points	22																			
T8EBP1		PNP	16points	23																			
T8EBP2	32points		24																				
T8EF1	CC-Link IE Field	NPN	16points	25																			
T8EF2			32points	26																			
T8EFP1		PNP	16points	27																			
T8EFP2	32points		28																				
T8EP1	PROFINET	NPN	16points	29																			
T8EP2			32points	30																			
T8EPP1		PNP	16points	31																			
T8EPP2	32points		32																				
T8KC1	IO-Link	NPN	16points																				
T8KC2			32points																				
T8KCP1		PNP	16points																				
T8KCP2	32points																						

