

# Discontinue

Discrete valve  
Body piping

## 4GA4 Series

● Cylinder bore size: ø100 to ø140

P4  
Series



Pneumatic Valves  
Catalog No. CB-023SA



### Common specifications

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof [IP40 equivalent (DIN terminal box: IP65)]
Vibration resistance m/s <sup>2</sup>	50 or less
Shock resistance m/s <sup>2</sup>	300 or less
Atmosphere	Cannot be used in corrosive gas environments

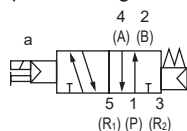
\*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

\*2: Avoid water drops or oil, etc., during use. IP65 (water jet proof) or equivalent applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

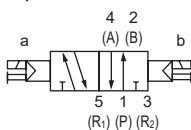
### JIS symbol

● 5-port valve

2-position single

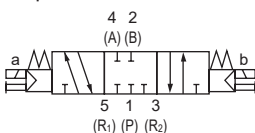


2-position double

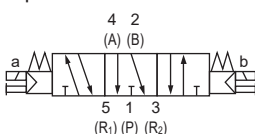


3-position

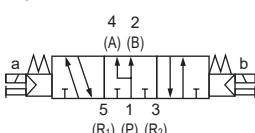
All ports closed



3-position A/B/R connection



3-position P/A/B connection



### Electrical specifications

Item	Description
Rated voltage V	AC 100 (50/60Hz)
	DC 110 (50/60Hz)
Voltage fluctuation range	
Starting current A	AC 100V 0.056/0.044
	AC 110V 0.051/0.040
	DC 12V -
	DC 24V -
Holding current A	AC 100V 0.028/0.022
	AC 110V 0.025/0.020
	DC 12V 0.079 (0.083)
	DC 24V 0.040 (0.042)
Power consumption W (*3)	AC 100V 1.8/1.4
	AC 110V (1.8/1.5)
	DC 12V 0.95 (1.0)
	DC 24V 0.95 (1.0)
Thermal class	
Surge suppressor	
Indicator	

\*3: Values in ( ) apply when lamp is included.

### Individual specifications

Item	4GA4
Port size	Push-in fitting ø8, ø10, ø12
	Rc3/8, G3/8, NPT3/8
Port P/R1/R2	Rc1/4, G1/4, NPT1/4

### Performance/characteristics by model

Item			4GA4	
			ON	OFF
Response time ms	2-position	Single	40 (40)	40 (52)
		Double	40 (52)	40 (52)
	3-position	A/B/R connection	60 (72)	60 (72)

Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality. ( ) shows AC value.

### Weight

Item			4GA4	
Weight g	2-position	Single	Grommet lead wire	310 (319)
			E-connector	313 (322)
			DIN terminal box	322 (331)
		Double	Grommet lead wire	371 (380)
			E-connector	377 (386)
			DIN terminal box	395 (404)
	3-position	All ports closed	Grommet lead wire	402 (411)
			E-connector	408 (417)
			DIN terminal box	426 (435)

( ) includes the mounting screw and gasket. Values for the E-connector include the socket assembly (with 300 mm lead wire). For the EJ-connector, add 16 g/connector to the E-connector weight.

### Flow characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
4GA4	2-position		8.1	0.40	8.0	0.31
	3-position	All ports closed	6.9	0.37	7.5	0.42
		A/B/R connection	6.8	0.40	8.7	0.37
		P/A/B connection	8.9	0.37	7.6	0.27

\*1: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

### Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 248.

### CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

**P4**  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

## 4GA4 Series

Discrete valve; Body piping

## How to order

**P4**  
Series

**A Model No.**

**4GA4**

**A** Model No.

### B Solenoid position

**C** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

**D** Electrical connections  
Refer to "Pneumatic  
Valves No.CB-023SA" for  
the circuit diagram with  
surge suppressor/lamp.

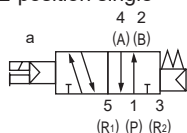
**E Option**

**F Voltage**

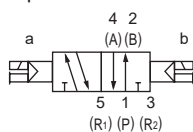
JIS symbol

- 5-port valve

2-position single

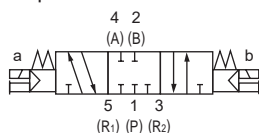


2-position double

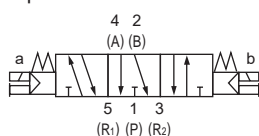


3-position

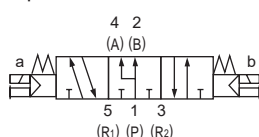
All ports closed



### 3-position A/B/R connection



### 3-position P/A/B connection



Code	Description	
<b>B Solenoid position</b>		
1	2-position single	●
2	2-position double	●
3	3-position all ports closed	●
4	3-position ABR connection	●
5	3-position PAB connection	●

C Port size		*1
Port	Port A/B	P/R Port Rc1/4
<b>C8</b>	ø8 push-in fitting	○
<b>C10</b>	ø10 push-in fitting	○
<b>C12</b>	ø12 push-in fitting	○
<b>10</b>	Rc3/8	●
<b>10G</b>	G3/8	●(*2)
<b>10 N</b>	NPT3/8	●(*3)

D Electrical connections		
Blank	Grommet lead wire	●
B	DIN terminal box (Pg7) with surge suppressor/lamp	●

E-connector (upward/lateral common)		
E0	Lead wire (300 mm)	●
E00	Lead wire (500 mm)	●
E01	Lead wire (1000 mm)	●
E02	Lead wire(2000 mm)	●
E03	Lead wire (3000 mm)	●
E2	Lead wire (300 mm) with surge suppressor/lamp	●
E20	Lead wire (500 mm) with surge suppressor/lamp	●
E21	Lead wire (1000 mm) with surge suppressor/lamp	●
E22	Lead wire (2000 mm) with surge suppressor/lamp	●
E23	Lead wire(3000 mm) with surge suppressor/lamp	●
E0N	Without lead wire (without socket)	●
E2N	Without lead wire (without socket) with surge suppressor/lamp	●
E3	Without lead wire (socket/terminal attached) with surge suppressor/lamp	●
E1	Without lead wire (socket/terminal attached)	●

EJ-connector (socket with cover, upward/lateral common)		
E01J	Lead wire (1000 mm)	●
E02J	Lead wire (2000 mm)	●
E03J	Lead wire(3000 mm)	●
E21J	Lead wire (1000 mm) with surge suppressor/lamp	●
E22J	Lead wire (2000 mm) with surge suppressor/lamp	●
E23J	Lead wire (3000 mm) with surge suppressor/lamp	●

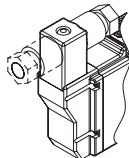
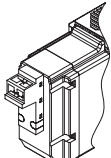
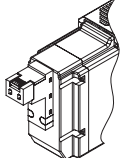
E Option		
Blank	No	●
A	Coolant proof	●
F	Port A/B filter built in	●

F Voltage		
1	100 VAC	●
3	24 VDC	●
4	12 VDC	●
5	110 VAC	●

## Precautions for model No. selection

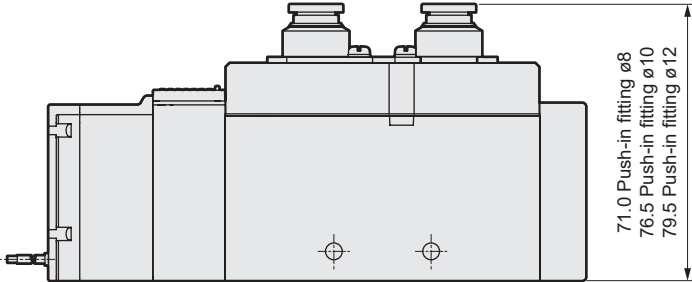
\*2: Port P/R is G1/4.

\*3: Port P/R is NPT1/4.

Electrical connections			
Discrete valve/individual wiring manifold			
Blank	Grommet lead wire	B	DIN terminal box
● Lead wire length 300mm			
E0* E2*	E-connector	E0*J E2*J	EJ type connector
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm		● Lead wire length 1000mm 2000mm 3000mm	
E0N E2N	E-connector Without socket		
E1 E3	E-connector With socket/terminal		

Dimensions

● 4GA4-P4



\* Fitting dimensions of P4 Series are different from the standard when mounted.  
For other dimensions, refer to the 4GA4 Series in "Pneumatic Valves (No. CB-023SA)".

Pneumatic actuator	Pneumatic cylinders
	Hand/Chuck
Vacuum components	Related products
	Cylinder Switch
Pneumatic valves	
	Clean air components
Pneumatic auxiliary components	Speed controller
	Fitting
	Auxiliary valve
	Silencer
	Tube
Gas generator	
Fluid control components	
Electric actuator	Motor specification
	Motorless specifications

Discontinue

Discrete valve  
Base piping

## 4GB4 Series

● Cylinder bore size:ø125 to ø160

P4 compliant  
as standardPneumatic Valves  
Catalog No. CB-023SA

## Common specifications

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2 (*3)
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Pilot exhaust method	Internal pilot Main valve/pilot valve common exhaust External pilot Main valve/pilot valve individual exhaust
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof [IP40 equivalent (DIN terminal box: IP65)]
Vibration resistance m/s <sup>2</sup>	50 or less
Shock resistance m/s <sup>2</sup>	300 or less
Atmosphere	Cannot be used in corrosive gas environments

\*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

\*2: Avoid water drops or oil, etc., during use. IP65 (water jet proof) or equivalent applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

\*3: The working pressure range is 0 to 0.7MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

## Electrical specifications

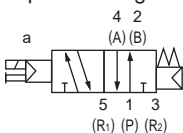
Item	Description
Rated voltage V	AC 100 (50/60Hz) 110 (50/60Hz)
	DC 12, 24
Voltage fluctuation range	±10%
Starting current A	AC 100V 0.056/0.044
	110V 0.051/0.040
	DC 12V -
	24V -
Holding current A	AC 100V 0.028/0.022
	110V 0.025/0.020
	DC 12V 0.079 (0.083)
	24V 0.040 (0.042)
Power consumption W (*4)	AC 100V 1.8/1.4
	110V (1.8/1.5)
	DC 12V 0.95 (1.0)
	24V
Thermal class	B
Surge suppressor	Option
Indicator	Lamp (option)

\*4: Values in ( ) apply when lamp is included.

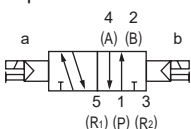
## JIS symbol

● 5-port valve

2-position single

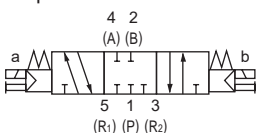


2-position double

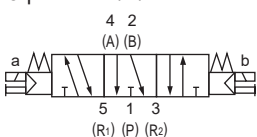


3-position

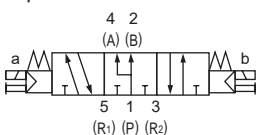
All ports closed



3-position A/B/R connection



3-position P/A/B connection



## Individual specifications

Item	4GB4
Port size	Port A/B Rc3/8, Rc1/2, G3/8, G1/2, NPT3/8, NPT1/2
	Port P/R1/R2 Rc3/8, Rc1/2, G3/8, G1/2, NPT3/8, NPT1/2

## Performance/characteristics by model

Item			4GB4	
			ON	OFF
Response time ms	2-position	Single	40 (40)	40 (52)
		Double	40 (52)	40 (52)
	3-position	A/B/R connection	60 (72)	60 (72)

Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality. ( ) shows AC value.

## Weight

Item			4GB4	
Weight g	2-position	Single	Grommet lead wire	563 (256)
			E-connector	566 (259)
			DIN terminal box	575 (268)
		Double	Grommet lead wire	620 (313)
			E-connector	626 (319)
			DIN terminal box	644 (337)
	3-position	All ports Block	Grommet lead wire	655 (348)
			E-connector	661 (354)
			DIN terminal box	679 (372)

Values in ( ) do not include the single sub-plate. Values for the E-connector include the socket assembly (with 300 mm lead wire). For the EJ-connector, add 16 g/connector to the E-connector weight.

## Flow characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
4GB4	2-position		11	0.19	13	0.19
	3-position	All ports closed	9.1	0.11	12	0.27
		A/B/R connection	9.2	0.11	15	0.22
		P/A/B connection	10	0.06	12	0.24

\*1: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

## Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 252.

## CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

P4  
SeriesPneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

## 4GB4 Series

Discrete valve; Base piping

P4  
Series

### How to order

**4GB4** **1** **0** - **10** - **E2** **3**

**A** Model No.

**B** Solenoid position

**C** Port size

**D** Electrical connections  
Refer to "Pneumatic Valves No.CB-023SA" for the circuit diagram with surge suppressor/lamp.

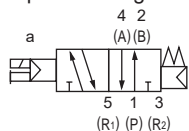
**E** Option

**F** Voltage

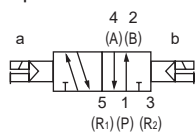
### JIS symbol

● 5-port valve

2-position single

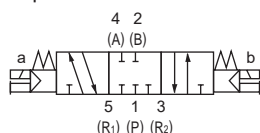


2-position double

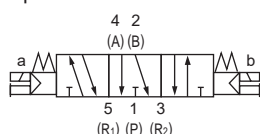


3-position

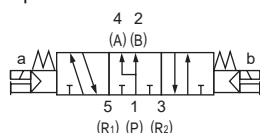
All ports closed



3-position A/B/R connection



3-position P/A/B connection



P4 compliant  
as standard

**A** Model No.

**4GB4**

Code	Description	
<b>B Solenoid position</b>		
1	2-position single	●
2	2-position double	●
3	3-position all ports closed	●
4	3-position ABR connection	●
5	3-position PAB connection	●

<b>C Port size</b>			
Port	Port A/B	P/R Port	
		Rc3/8	Rc1/2
10	Rc3/8	●	
15	Rc1/2		●
10G	G3/8	● (*1)	
15G	G1/2		● (*1)
10 N	NPT3/8	● (*2)	
15N	NPT1/2		● (*2)

<b>D Electrical connections</b>		
Blank	Grommet lead wire	●
B	DIN terminal box (Pg7) with surge suppressor/lamp	●

<b>E-connector (upward/lateral common)</b>		
E0	Lead wire (300 mm)	●
E00	Lead wire (500 mm)	●
E01	Lead wire (1000 mm)	●
E02	Lead wire (2000 mm)	●
E03	Lead wire (3000 mm)	●
E2	Lead wire (300 mm) with surge suppressor/lamp	●
E20	Lead wire (500 mm) with surge suppressor/lamp	●
E21	Lead wire (1000 mm) with surge suppressor/lamp	●
E22	Lead wire (2000 mm) with surge suppressor/lamp	●
E23	Lead wire (3000 mm) with surge suppressor/lamp	●
E0N	Without lead wire (without socket)	●
E2N	Without lead wire (without socket) with surge suppressor/lamp	●
E3	Without lead wire (socket/terminal attached) with surge suppressor/lamp	●
E1	Without lead wire (socket/terminal attached)	●

<b>EJ-connector (socket with cover, upward/lateral common)</b>		
E01J	Lead wire (1000 mm)	●
E02J	Lead wire (2000 mm)	●
E03J	Lead wire (3000 mm)	●
E21J	Lead wire (1000 mm) with surge suppressor/lamp	●
E22J	Lead wire (2000 mm) with surge suppressor/lamp	●
E23J	Lead wire (3000 mm) with surge suppressor/lamp	●

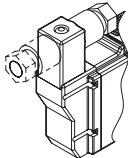
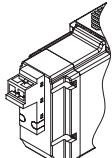
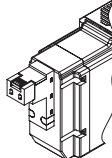
<b>E Option</b>		
Blank	No	●
K	External pilot	●
A	Coolant proof	●
F	Port A/B filter built in	●

<b>F Voltage</b>		
1	100 VAC	●
3	24 VDC	●
4	12 VDC	●
5	110 VAC	●

### ⚠ Precautions for model No. selection

\*1: Port P/R is G thread.

\*2: Port P/R is NPT thread.

Electrical connections			
Discrete valve/individual wiring manifold			
Blank	Grommet lead wire	B	DIN terminal box
● Lead wire length 300mm			
E0* E2*	E-connector	E0*J E2*J	EJ type connector
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm		● Lead wire length 1000mm 2000mm 3000mm	
E0N E2N	E-connector Without socket		
E1 E3	E-connector With socket/terminal		

P4  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications



# Discontinue

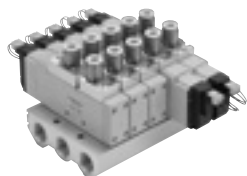
Individual wiring manifold  
Body piping  
Direct mount

## M4GA4 Series

● Cylinder bore size:ø100 to ø140



P4  
Series



Pneumatic Valves  
Catalog No. CB-023SA

### Manifold common specifications

Item	Description
Manifold	Integrated base
Mounting method	Direct mount
Air supply and exhaust method	Common supply/common exhaust
Pilot exhaust method	Internal pilot Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)
	External pilot Main valve/pilot valve individual exhaust
Piping direction	Valve top direction
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2 (*3)
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof [IP40 equivalent (DIN terminal box: IP65)]
Vibration resistance m/s <sup>2</sup>	50 or less
Shock resistance m/s <sup>2</sup>	300 or less
Atmosphere	Cannot be used in corrosive gas environments

\*1: Use turbine oil Class 1 ISOVG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

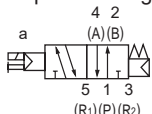
\*2: Avoid water drops or oil, etc., during use. IP65 (jet-proof) or equivalent applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

\*3: The working pressure range is 0 to 0.7MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

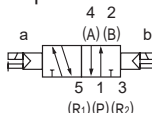
### JIS symbol

● 5-port valve

2-position single

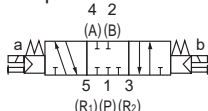


2-position double

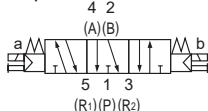


3-position

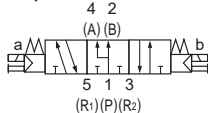
All ports closed



3-position A/B/R connection



3-position P/A/B connection



### Electrical specifications

Item	Description
Rated voltage V	AC 100 (50/60Hz) 110 (50/60Hz) DC 12, 24
Voltage fluctuation range	±10%
Starting current A	AC 100V 0.056/0.044 110V 0.051/0.040 DC 12V - 24V -
Holding current A	AC 100V 0.028/0.022 110V 0.025/0.020 DC 12V 0.079 (0.083) 24V 0.040 (0.042)
Power consumption W (*4)	AC 100V 1.8/1.4 110V (1.8/1.5) DC 12V 0.95 (1.0) 24V
Thermal class	B
Surge suppressor	Option
Indicator	Lamp (option)

\*4: Values in ( ) apply when lamp is included.

### Individual specifications

Item	M4GA4
	Direct mount
Max. station No.	Standard (Internal pilot) 15 stations Supply and exhaust block specs. and external pilot 12 stations
Port size	Port A/B Push-in fitting ø8, ø10, ø12 Rc3/8, G3/8, NPT3/8 Port P/R1/R2 Rc1/2, G1/2, NPT1/2
Manifold base	Standard 150n+199
Weight calculation formula (n: station No.) g	External pilot 379n+617

For 5 or more manifold station No., use ports on both sides for air supply and exhaust.  
The manifold base weight is the value for screw specifications.

### Performance/characteristics by model

Item			M4GA4	
			ON	OFF
Response time ms	2-position	Single	40 (40)	40 (52)
		Double	40 (52)	40 (52)
	3-position	A/B/R connection	60 (72)	60 (72)

Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality. ( ) shows AC value.

## Flow characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
M4GA4	2-position		7.3	0.12	9.0	0.17
	3-position	All ports closed	6.4	0.15	8.2	0.22
		A/B/R connection	6.4	0.16	9.3	0.19
		P/A/B connection	8.0	0.08	8.3	0.22

\*1: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

## Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 256.

## CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

P4  
SeriesPneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

## M4GA4 Series

Individual wiring manifold; Body piping

P4  
Series

### How to order

Manifold model No.

**M** **4GA4** **1** **0** - **10** - **E2** **A** - **3** - **3** - **P4**

Discrete valve for integrated base

**4GA4** **1** **9** - **10** - **E2** **A** - **3** - **P4**

**A** Model No.

**B** Solenoid position

**C** Port size

**\*1**  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

**D** Electrical connections

**E** Option

**F** Station No.

**G** Voltage

**\*\*"Manifold specifications sheet" (Page 274).**

**A** Model No.

**4GA4**

Code	Description	
<b>B Solenoid position</b>		
<b>1</b>	2-position single	●
<b>2</b>	2-position double	●
<b>3</b>	3-position all ports closed	●
<b>4</b>	3-position ABR connection	●
<b>5</b>	3-position PAB connection	●
<b>8</b>	Mix manifold (when there are multiple solenoid positions)	●

<b>C Port size</b>		<b>*1</b>
Port	Port A/B	Port P/R1/R2 Rc1/2
<b>C8</b>	ø8 push-in fitting	○
<b>C10</b>	ø10 push-in fitting	○
<b>C12</b>	ø12 push-in fitting	○
<b>CX</b>	Push-in fitting mix (*2)	○
<b>10</b>	Rc3/8	●
<b>10G</b>	G3/8	●(*3)
<b>10 N</b>	NPT3/8	●(*4)

**D Electrical connections**  
Refer to the next page for electrical connections.

<b>E Option</b>		
<b>Blank</b>	No	●
<b>K</b>	External pilot (*5)	●
<b>A</b>	Coolant proof	●
<b>F</b>	Port A/B filter integrated (port P: Standard)	●
<b>Z1</b>	Air supply spacer (*6)(*7)	●
<b>Z3</b>	Exhaust spacer (*6)(*7)	●

<b>F Station No.</b>		
<b>2</b>	2 stations	●
<b>to</b>	to	
<b>15</b>	15 stations (The max. station number per bore size is Page 254.)	

<b>G Voltage</b>		
<b>1</b>	100 VAC	●
<b>3</b>	24 VDC	●
<b>4</b>	12 VDC	●
<b>5</b>	110 VAC	●

### ⚠ Precautions for model No. selection

\*2: Single valve4(A), 2(B)The push-in fitting cannot be mixed with the port.

\*3: Port P/R is G1/2.

\*4: Port P/R is NPT1/2.

\*5: Consult with CKD when using a vacuum with the external pilot (K).

**\*6: Specify the spacer mounting position/ quantity in the manifold specifications sheet. Refer to page 270 for details.**

\*7: Cannot be selected with discrete valve for integrated base.

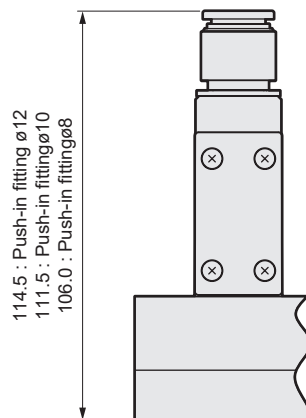
### [Electrical connections list]

		A Model No.
		4GA4
D Electrical connections		
Blank	Grommet lead wire (300 mm)	●
B	DIN terminal box (Pg7) With surge suppressor and indicator lamp	●
E-connector (upward/lateral common)		
E0	Lead wire (300 mm)	●
E00	Lead wire (500 mm)	●
E01	Lead wire (1000 mm)	●
E02	Lead wire (2000 mm)	●
E03	Lead wire (3000 mm)	●
E2	Lead wire (300 mm) With surge suppressor and indicator lamp	●
E20	Lead wire (500 mm) With surge suppressor and indicator lamp	●
E21	Lead wire (1000 mm) with surge suppressor/lamp	●
E22	Lead wire (2000 mm) with surge suppressor/lamp	●
E23	Lead wire (3000 mm) with surge suppressor/lamp	●
E0N	Without lead wire (without socket)	●
E2N	Without lead wire (without socket) With surge suppressor and indicator lamp	●
E3	Without lead wire (with socket/terminal) with surge suppressor/lamp	●
E1	Without lead wire (socket/terminal attached)	●
EJ-connector (socket with cover, upward/lateral common)		
E01J	Lead wire (1000 mm)	●
E02J	Lead wire (2000 mm)	●
E03J	Lead wire (3000 mm)	●
E21J	Lead wire (1000 mm) With surge suppressor and indicator lamp	●
E22J	Lead wire (2000 mm) With surge suppressor and indicator lamp	●
E23J	Lead wire (3000 mm) With surge suppressor and indicator lamp	●

Electrical connections			
Discrete valve/individual wiring manifold			
Blank	Grommet lead wire	B	DIN terminal box
● Lead wire length 300mm			
E0* E2*	E-connector	E0*J E2*J	EJ type connector
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm		● Lead wire length 1000mm 2000mm 3000mm	
E0N E2N	E-connector Without socket		
E1 E3	E-connector With socket/terminal		

### Dimensions

● M4GA4-P4



\* Fitting dimensions of P4 Series are different from the standard when mounted.  
For other dimensions, refer to the 4GA4 Series in "Pneumatic Valves (No. CB-023SA)".

Discontinue

Individual wiring manifold  
Base piping  
Direct mount

## M4GB4 Series

● Cylinder bore size:ø100 to ø140

P4  
SeriesPneumatic Valves  
Catalog No. CB-023SA

## Manifold common specifications

Item	Description
Manifold	Integrated base
Mounting method	Direct mount
Air supply and exhaust method	Common supply/common exhaust
Pilot exhaust	Internal pilot Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)
method	External pilot Main valve/pilot valve individual exhaust
Piping direction	Side direction of base
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2 (*3)
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof [IP40 equivalent (DIN terminal box: IP65)]
Vibration resistance m/s <sup>2</sup>	50 or less
Shock resistance m/s <sup>2</sup>	300 or less
Atmosphere	Cannot be used in corrosive gas environments

\*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

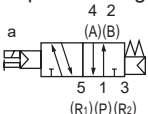
\*2: Avoid dripping water or oil, etc., during use. IP65 (jet-proof) or equivalent applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

\*3: The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

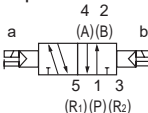
## JIS symbol

● 5-port valve

2-position single

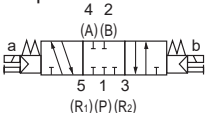


2-position double

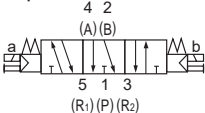


3-position

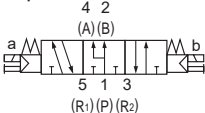
All ports closed



3-position A/B/R connection



3-position P/A/B connection



## Electrical specifications

Item	Description
Rated voltage V	AC 100 (50/60Hz) 110 (50/60Hz) DC 12, 24
Voltage fluctuation range	±10%
Starting current A	AC 100V 0.056/0.044 110V 0.051/0.040 DC 12V - 24V -
Holding current A	AC 100V 0.028/0.022 110V 0.025/0.020 DC 12V 0.079 (0.083) 24V 0.040 (0.042)
Power consumption W (*4)	AC 100V 1.8/1.4 110V (1.8/1.5) DC 12V 0.95 (1.0) 24V 0.95 (1.0)
Thermal class	B
Surge suppressor	Option
Indicator	Lamp (option)

\*4: Values in ( ) apply when lamp is included.

## Individual specifications

Item		M4GB4		
		Direct mount		
Pilot operated		Standard (Internal pilot)	External pilot (*3)	
Max. station No.		15 stations	12 stations	
Port size	Port A/B	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8 G1/4, G3/8 NPT1/4, NPT3/8	Rc1/2, G1/2, NPT1/2	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8, Rc1/2 G1/4, G3/8, G1/2 NPT1/4, NPT3/8, NPT1/2
	Port P/R1/R2	Rc3/8, G3/8, NPT3/8 (*1)	Rc1/2, G1/2, NPT1/2(*2)	
Manifold base		273n+329	391n+560	392n+555
Weight calculation formula (n: station No.)g				

Dimensions of port sizes (port P/R1/R2) Rc3/8 and Rc1/2 are different.

\*1: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc3/8.

\*2: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc1/2.

\*3: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of the external pilot (option code: K).

## Performance/characteristics by model

Item			M4GB4	
			ON	OFF
Response time ms	2-position	Single	40 (40)	40 (52)
		Double	40 (52)	40 (52)
	3-position	A/B/R connection	60 (72)	60 (72)

Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality.( ) shows AC value.

## Flow characteristics

Model No.	Port size P, R1, R2	Solenoid position	P → A/B		A/B → R1/R2	
			C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
M4GB4	(*1)Rc3/8 G3/8 NPT3/8	2-position	6.4	0.42	6.9	0.12
		3-position	All ports closed	6.0	0.37	0.12
			A/B/R connection	6.1	0.38	0.15
			P/A/B connection	6.0	0.37	0.13
	(*2)Rc1/2 G1/2 NPT1/2	2-position	8.3	0.23	9.0	0.21
		3-position	All ports closed	7.4	0.15	0.19
			A/B/R connection	7.5	0.15	0.21
			P/A/B connection	7.7	0.21	0.18

Dimensions of port sizes (port P/R1/R2) Rc3/8 and Rc1/2 are different.

\*1: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc3/8.

\*2: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc1/2.

\*3: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

## Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 260.

## CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

P4  
SeriesPneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controllerFitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

# M4GB4 Series

Individual wiring manifold; Base piping

P4  
Series

## How to order

Manifold model No.

**M** **4GB4** **1** **0** - **10** - **E2** **Q** - **3** - **3** - **P4**

Discrete valve for integrated base

**4GB4** **1** **9** - **00** - **E2** **A** - **3** - **P4**

**A** Model No.

**B** Solenoid position

**C** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

**D** Electrical connections

**E** Option

**F** Station No.

**G** Voltage

## ⚠ Precautions for model No. selection

\*2: Two types of bases are available. Dimensions differ by bore size of port P/R1/R2.

\*3: Refer to "Pneumatic Valves No.CB-023S" for a Dimensions of port size R c3/8.

\*4: Refer to "Pneumatic Valves No.CB-023SA" for a Dimensions of port size R c1/2.

\*5: Refer to "Pneumatic Valves No.CB-023SA" for the Dimensions of the external pilot (option code: K).

\*6: Port P/R is G thread.

\*7: Port P/R is NPT thread.

\*8: Consult with CKD when using a vacuum with the external pilot (K).

\*9: Specify the spacer mounting position/ quantity in the manifold specifications sheet. Refer to page 270 for details.

\*10: Cannot be selected with discrete valve for integrated base.

\*\*\*Manifold specifications sheet" (Page 274).

**A** Model No.

**4GB4**

Code	Description	
<b>B Solenoid position</b>		
1	2-position single	●
2	2-position double	●
3	3-position all ports closed	●
4	3-position ABR connection	●
5	3-position PAB connection	●
8	Mix manifold (when there are multiple solenoid positions)	●

<b>C Port size</b>		*1		
Port	Port A/B	Port P/R1/R2 (*2)		
		Option: Other than K		Option: K
		Rc3/8 (Note3)	Rc1/2 (*4)	Rc1/2 (*5)
<b>C8</b>	ø8 push-in fitting	○		○
<b>C10</b>	ø10 push-in fitting	○		○
<b>C12</b>	ø12 push-in fitting	○		○
<b>CX</b>	Push-in fitting mix	○		○
<b>08</b>	Rc1/4	●		●
<b>10</b>	Rc3/8	●		●
<b>15</b>	Rc1/2		●	●
<b>08G</b>	G1/4	●(*6)		●(*6)
<b>10G</b>	G3/8	●(*6)		●(*6)
<b>15G</b>	G1/2		●(*6)	●(*6)
<b>08 N</b>	NPT1/4	●(*7)		●(*7)
<b>10 N</b>	NPT3/8	●(*7)		●(*7)
<b>15N</b>	NPT1/2		●(*7)	●(*7)

**D Electrical connections**  
Refer to the next page for electrical connections.

<b>E Option</b>		
<b>Blank</b>	No	●
<b>K</b>	External pilot (*5)(*8)	●
<b>A</b>	Coolant proof	●
<b>F</b>	Port A/B filter integrated (port P: Standard)	●
<b>Z1</b>	Air supply spacer (*9)(*10)	●
<b>Z3</b>	Exhaust spacer (*9)(*10)	●

<b>F Station No.</b>		
<b>2</b>	2 stations	●
<b>to</b>	to	
<b>15</b>	Refer to page 258 for the max. station number per bore size.	

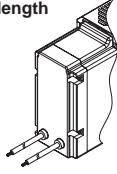
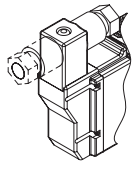
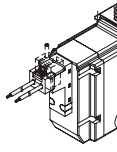
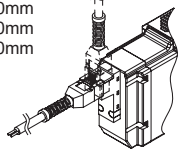
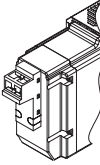
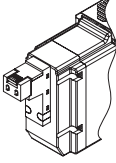
<b>G Voltage</b>		
<b>1</b>	100 VAC	●
<b>3</b>	24 VDC	●
<b>4</b>	12 VDC	●
<b>5</b>	110 VAC	●

○ indicates not available.



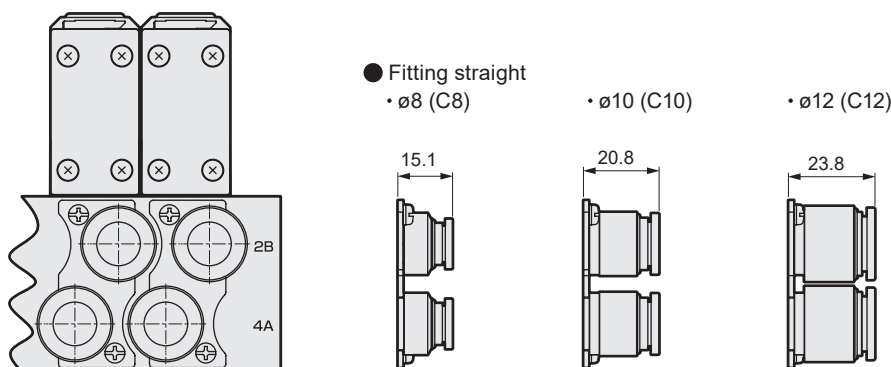
### [Electrical connections list]

		A Model No.
		4GB4
D Electrical connections		
Blank	Grommet lead wire (300 mm)	●
B	DIN terminal box (Pg7) With surge suppressor and indicator lamp	●
E-connector (upward/lateral common)		
E0	Lead wire (300 mm)	●
E00	Lead wire (500 mm)	●
E01	Lead wire (1000 mm)	●
E02	Lead wire (2000 mm)	●
E03	Lead wire (3000 mm)	●
E2	Lead wire (300 mm) With surge suppressor and indicator lamp	●
E20	Lead wire (500 mm) With surge suppressor and indicator lamp	●
E21	Lead wire (1000 mm) With surge suppressor and indicator lamp	●
E22	Lead wire (2000 mm) With surge suppressor and indicator lamp	●
E23	Lead wire (3000 mm) With surge suppressor and indicator lamp	●
E0N	Without lead wire (without socket)	●
E2N	Without lead wire (without socket) With surge suppressor and indicator lamp	●
E3	Without lead wire (socket/terminal attached) With surge suppressor and indicator lamp	●
E1	Without lead wire (socket/terminal attached)	●
EJ-connector (socket with cover, upward/lateral common)		
E01J	Lead wire (1000 mm)	●
E02J	Lead wire (2000 mm)	●
E03J	Lead wire (3000 mm)	●
E21J	Lead wire (1000 mm) With surge suppressor and indicator lamp	●
E22J	Lead wire (2000 mm) With surge suppressor and indicator lamp	●
E23J	Lead wire (3000 mm) With surge suppressor and indicator lamp	●

Electrical connections			
Discrete valve/individual wiring manifold			
Blank	Grommet lead wire	B	DIN terminal box
● Lead wire length 300mm			
E0* E2*	E-connector	E0*J E2*J	EJ type connector
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm		● Lead wire length 1000mm 2000mm 3000mm	
E0N E2N	E-connector Without socket		
			
E1 E3	E-connector With socket/terminal		
			

### Dimensions

#### ● M4GB4-P4



\* Fitting dimensions of P4 Series are different from the standard when mounted. For other dimensions, refer to the M4GB4 Series in "Pneumatic Valves (No. CB-023SA)".

P4  
Series

Pneumatic actuator  
Pneumatic  
Chuck  
Hand/  
Chuck  
Related  
products  
Cylinder  
Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air  
components  
controller  
Speed  
controller  
Fitting  
Auxiliary  
valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor  
specification  
Motorless  
specifications



# Discontinue

Reduced wiring manifold (common terminal block/D-sub-connector/flat cable connector/serial transmission)

Body piping

Direct mount

## M4GA4-T\* Series

● Cylinder bore size:ø100 to ø140



P4  
Series

Pneumatic Valves  
Catalog No. CB-023SA

Pneumatic actuator

Vacuum components

Pneumatic valves

Pneumatic auxiliary components

Gas generator

Fluid control components

Electric actuator

Pneumatic cylinders

Hand/Chuck

Related products

Cylinder Switch

Speed controller

Fitting

Auxiliary valve

Silencer

Tube

Motor specification

Motor specification

Motor specification

Motor specification

Motor specification

Motor specification

Motor specification

Motor specification

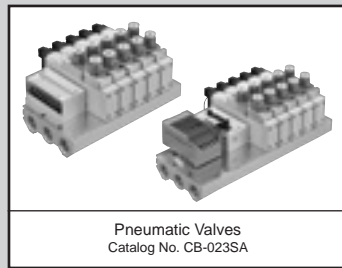
Motor specification

Motor specification

Motor specification

Motor specification

Motor specification



### Manifold common specifications

Item		Description
Manifold		Reduced wiring integrated base
Mounting method		Direct mount
Air supply and exhaust method		Common supply/common exhaust
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Valve top direction
Valve and operation		Pilot operated soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (*3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual override		Non-locking/locking common
Lubrication (*1)		Not required
Degree of protection (*2)		Dust-proof (IP40 equivalent)
Vibration resistance m/s <sup>2</sup>		50 or less
Shock resistance m/s <sup>2</sup>		300 or less
Atmosphere		Cannot be used in corrosive gas environments

### Electrical specifications

Item		Description
Rated voltage V	DC	12, 24
Voltage fluctuation range		±10%
Holding current A	12 VDC	0.083
	24 VDC	0.042
Power consumption W	12 VDC	1.0
	24 VDC	1.0
Thermal class		B
Surge suppressor		Varistor
Indicator		LED

\*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

\*2: Avoid water drops or oil, etc., during use.

\*3: The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

### Individual specifications

T1□, T30□, T5□

Item		M4GA4
		Direct mount
Max. station No.		11 stations
Port size	Port A/B	Push-in fitting ø8, ø10, ø12 Rc3/8, G3/8, NPT3/8
	Port P/R1/R2	Rc1/2, G1/2, NPT1/2
Manifold base		Standard 150n+530
Weight calculation formula (n: station No.) g		External pilot 379n+1122

T6G1

Item		M4GA4
		Direct mount
Max. station No.		8 stations
Port size	Port A/B	Push-in fitting ø8, ø10, ø12 Rc3/8, G3/8, NPT3/8
	Port P/R1/R2	Rc1/2, G1/2, NPT1/2
Manifold base		Standard 150n+1016
Weight calculation formula (n: station No.) g		External pilot 379n+2391

For 5 or more manifold station No., use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications. Note that the maximum number of stations in the manifold is also limited by the maximum number of solenoid points per wiring specification as shown on the right.

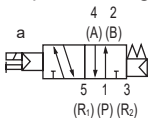
### Performance/characteristics by model

Item			M4GA4	
			ON	OFF
Response time ms	2-position	Single	40 (40)	40 (52)
		Double	40 (52)	40 (52)
	3-position	A/B/R connection	60 (72)	60 (72)

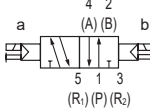
Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality. ( ) shows AC value.

### JIS symbol

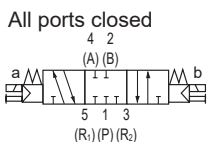
- 5-port valve
- 2-position single



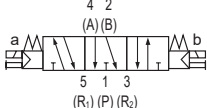
2-position double



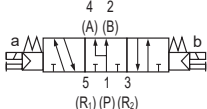
3-position



3-position A/B/R connection



3-position P/A/B connection

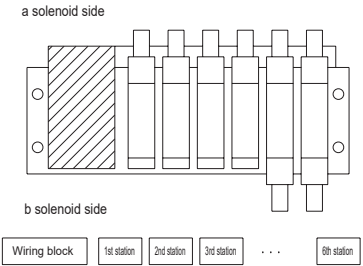
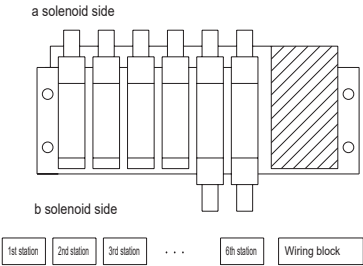
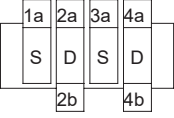


## Flow characteristics

Model No.	Solenoid position	P → A/B		A/B → R1/R2	
		C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
M4GA4	2-position	7.3	0.12	9.0	0.17
	3-position	All ports closed	6.4	8.2	0.22
		A/B/R connection	6.4	9.3	0.19
		P/A/B connection	8.0	8.3	0.22

\*1: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

## Wiring specifications

Descriptions	T10□ Common terminal block	T11□ Common terminal block	T30□ D-sub-connector	T50□ Flat cable 20-pin	T51□ Flat cable 20-pin	T52□ Flat cable 10-pin	T53□ Flat cable 26-pin																																			
Connector and terminal block specifications	M3 thread tightening Terminal count 18	Clamping Terminal count 26	D-sub-connectors 25 terminals	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 10-pin	MIL-C-83503 standard compliant Pressure welding socket 26-pin																																			
Max. number of solenoids	16 points	24 points	24 points	16 points	18 points	8 points	24 points																																			
Manifold internal wiring	Refer to "Pneumatic Valves No.CB-023SA" for details.																																									
Wiring block position Blank: Left side R: Right side	<b>Left side: T □</b>  			<b>Right side: T □ R</b>  																																						
Array method Blank: Standard sequential W: Double wiring	<b>(Example) For T50□</b> Manifold specifications  1st station   3rd station 2nd station   4th station			Standard wiring (sequential):Blank <table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>2a</td><td>2b</td><td>3a</td><td>4a</td><td>4b</td></tr></table>			Connector pin No.	1	2	3	4	5	6	Valve solenoid No.	1a	2a	2b	3a	4a	4b	Double wiring: W <table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>Blank</td><td>2a</td><td>2b</td><td>3a</td><td>Blank</td><td>4a</td><td>4b</td></tr></table>				Connector pin No.	1	2	3	4	5	6	7	8	Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a	4b
	Connector pin No.	1	2	3	4	5	6																																			
Valve solenoid No.	1a	2a	2b	3a	4a	4b																																				
Connector pin No.	1	2	3	4	5	6	7	8																																		
Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a	4b																																		

## Serial transmission slave unit specifications

Descriptions		T6G1
Network name		CC-Link ver. 1.10
Power supply voltage	Unit side	24 VDC ±10%
	Valve side	24 VDC +10%, -5%
	Communication side	-
Current consumption	Unit side	100 mA or less (when all output points are ON)
	Valve side	15 mA or less (when all output points are OFF)
	Communication side	-
No. of output points		16 points
Occupied number		1 station
Operation display		LED (power supply and communication status)

## Coolant proof specifications

Can be selected with "How to order" Item (F) option "A" on page 264.

## CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

# M4GA4-T\* Series

Reduced wiring manifolds; Body piping

P4  
Series

## How to order

Manifold model No.

**M** **4GA4** **1** **0** - **10** - **T10** **W** **A** - **3** - **3** - **P4**

Discrete valve for integrated base

**4GA4** **1** **9** - **10** - **A2N** **A** - **3** - **P4**

**A** Model No.

**B** Solenoid position

A2N indicates the A-connector (downward), with lamp/surge suppressor and no lead wire.

**C** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

**D** Reduced wiring connection

- Refer to "Pneumatic Valves No.CB-023SA" for the model No. of cables with D-sub-connector.
- Refer to "Pneumatic Valves No.CB-023SA" for the model No. of cables for flat cable connector.

**E** Terminal connector pin array method

## ⚠ Precautions for model No. selection

- \*2: The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- \*3: Port P/R is G1/2.
- \*4: Port P/R is NPT1/2.
- \*5: Blank...The wiring will be based on the type of valve mounted.  
W...All wired as double solenoid regardless of the type of valve used.
- \*6: When changing from a single valve for W wiring specifications to a double or 3-position valve, the A type connector socket assembly needs to be purchased separately.
- \*7: Consult with CKD when using a vacuum with the external pilot (K).
- \*8: Refer to "Pneumatic Valves No.CB-023SA" for the Dimensions of the external pilot (K).
- \*9: Specify the spacer mounting position/quantity in the manifold specifications sheet. Refer to page 270 for details.
- \*10: Cannot be selected with discrete valve for integrated base.

**F** Option

**G** Station No.

**H** Voltage

\*\*\*Manifold specifications sheet" (Pages 275 to 277).

**A** Model No.

**4GA4**

Code	Description	
<b>B Solenoid position</b>		
<b>1</b>	2-position single	●
<b>2</b>	2-position double	●
<b>3</b>	3-position all ports closed	●
<b>4</b>	3-position ABR connection	●
<b>5</b>	3-position PAB connection	●
<b>8</b>	Mix manifold (when there are multiple solenoid positions)	●

<b>C Port size</b>		*1
Port	Port A/B	Port P/R1/R2 Rc1/2
<b>C8</b>	ø8 push-in fitting	○
<b>C10</b>	ø10 push-in fitting	○
<b>C12</b>	ø12 push-in fitting	○
<b>CX</b>	Push-in fitting mix (*2)	○
<b>10</b>	Rc3/8	●
<b>10G</b>	G3/8	● (*3)
<b>10 N</b>	NPT3/8	● (*4)

<b>D Reduced wiring (lamp and surge suppressor provided as standard) 12/24 VDC</b>			
<b>T10</b>	Common terminal block (M3 thread)	Left-sided specs.	●
<b>T10R</b>		Right-sided specs.	●
<b>T11</b>	Common terminal block (clamping)	Left-sided specs.	●
<b>T11R</b>		Right-sided specs.	●
<b>T30</b>	D-sub-connector	Left-sided specs.	●
<b>T30R</b>		Right-sided specs.	●
<b>T50</b>	20-pin flat cable connector (with power supply terminal)	Left-sided specs.	●
<b>T50R</b>		Right-sided specs.	●
<b>T51</b>	20-pin flat cable connector (without power supply terminal)	Left-sided specs.	●
<b>T51R</b>		Right-sided specs.	●
<b>T52</b>	10-pin flat cable connector (without power supply terminal)	Left-sided specs.	●
<b>T52R</b>		Right-sided specs.	●
<b>T53</b>	26-pin flat cable connector (without power supply terminal)	Left-sided specs.	●
<b>T53R</b>		Right-sided specs.	●

<b>D Serial transmission (lamp/surge suppressor provided as standard) 24 VDC</b>		
<b>T6G1</b>	CC-Link 16 points	●

<b>E Terminal/connector pin array</b>		
<b>Blank</b>	Standard wiring (*5)	●
<b>W</b>	Double wiring (*5)(*6)	●

<b>F Option</b>		
<b>Blank</b>	No	●
<b>K</b>	External pilot (*7)(*8)	●
<b>A</b>	Coolant proof	●
<b>F</b>	Port A/B filter integrated (port P: Standard)	●
<b>Z1</b>	Air supply spacer (*9)(*10)	●
<b>Z3</b>	Exhaust spacer (*9)(*10)	●

<b>G Station No.</b>		
<b>2</b>	2 stations	●
<b>to</b>	to	
<b>11</b>	11 stations (Refer to page 262 for the max. station number per model)	

<b>H Voltage</b>		
<b>3</b>	24 VDC	●
<b>4</b>	12 VDC	●

MEMO

P4  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

# Discontinue

Reduced wiring manifold (common terminal block/D-sub-connector/  
flat cable connector/Serial transmission)

Base piping  
Direct mount

## M4GB4-T\* Series

● Cylinder bore size:ø100 to ø140



P4  
Series

Pneumatic Valves  
Catalog No. CB-023SA

### Manifold common specifications

Item		Description
Manifold		Reduced wiring integrated base
Mounting method		Direct mount
Air supply and exhaust method		Common supply/common exhaust
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Side direction of base
Valve and operation		Pilot operated soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (*3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual override		Non-locking/locking common
Lubrication (*1)		Not required
Degree of protection (*2)		Dust-proof (IP40 equivalent)
Vibration resistance m/s <sup>2</sup>		50 or less
Shock resistance m/s <sup>2</sup>		300 or less
Atmosphere		Cannot be used in corrosive gas environments

### Electrical specifications

Item		Description
Rated voltage V DC		12, 24
Voltage fluctuation range		±10%
Holding current A	12 VDC	0.083
	24 VDC	0.042
Power consumption W	12 VDC	1.0
	24 VDC	1.0
Thermal class		B
Surge suppressor		Varistor
Indicator		LED

\*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

\*2: Avoid water drops or oil, etc., during use.

\*3: The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

### Individual specifications

T1□, T30□, T5□

Item		M4GB4		
		Direct mount		
Pilot operated		Standard (Internal pilot)		External pilot (*3)
Max. station No.		11 stations		
Port size	Port A/B	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8 G1/4, G3/8 NPT1/4, NPT3/8	Rc1/2, G1/2, NPT1/2	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8, Rc1/2 G1/4, G3/8, G1/2 NPT1/4, NPT3/8, NPT1/2
	Port P/R1/R2	Rc3/8, G3/8, NPT3/8 (*1)	Rc1/2, G1/2, NPT1/2 (*2)	
Manifold base		292n+907	391n+1119	392n+1060
Weight calculation formula (n: station No.)g				

T6G1

Item		M4GB4		
		Direct mount		
Pilot operated		Standard (Internal pilot)		External pilot (*3)
Max. station No.		8 stations		
Port size	Port A/B	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8 G1/4, G3/8 NPT1/4, NPT3/8	Rc1/2, G1/2, NPT1/2	Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8, Rc1/2 G1/4, G3/8, G1/2 NPT1/4, NPT3/8, NPT1/2
	Port P/R1/R2	Rc3/8, G3/8, NPT3/8 (*1)	Rc1/2, G1/2, NPT1/2 (*2)	
Manifold base		292n+1864	391n+2432	392n+2329
Weight calculation formula (n: station No.) g				

For 5 or more manifold station No., use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications. Note that the maximum number of stations in the manifold is also limited by the maximum number of solenoid points per wiring specification as shown on the right. Dimensions of port sizes (port P/R1/R2) Rc3/8 and Rc1/2 are different.

\*1: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc3/8.

\*2: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc1/2.

\*3: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of the external pilot (option code: K).

### Performance/characteristics by model

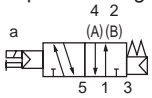
Item		M4GB4	
		ON	OFF
Response time ms	2-position Single	40 (40)	40 (52)
	Double	40 (52)	40 (52)
	3-position A/B/R connection	60 (72)	60 (72)

Values with lamp/surge suppressor are shown. The response times are values with working pressure of 0.5 MPa at 20°C, without lubrication. They depend on the pressure and the lubricant quality.( ) shows AC value.

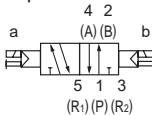
### JIS symbol

● 5-port valve

2-position single

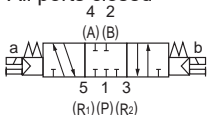


2-position double

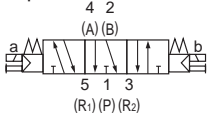


3-position

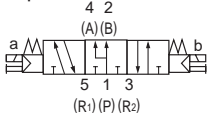
All ports closed



3-position A/B/R connection



3-position P/A/B connection



## Flow characteristics

Model No.	Port size P, R1, R2	Solenoid position	P → A/B		A/B → R1/R2	
			C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
M4GB4	(*1) Rc3/8 G3/8 NPT3/8	2-position	6.4	0.42	6.9	0.12
		3-position	All ports closed	6.0	0.37	0.12
			A/B/R connection	6.1	0.38	0.15
			P/A/B connection	6.0	0.37	0.13
	(*2) Rc1/2 G1/2 NPT1/2	2-position	8.3	0.23	9.0	0.21
		3-position	All ports closed	7.4	0.15	0.19
			A/B/R connection	7.5	0.15	0.21
			P/A/B connection	7.7	0.21	0.18

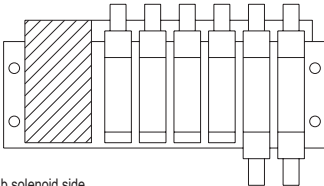
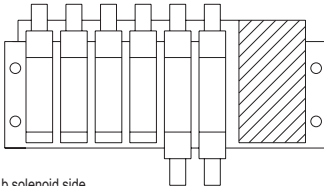
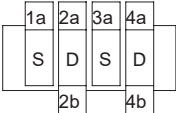
Dimensions of port sizes (port P/R1/R2) Rc3/8 and Rc1/2 are different.

\*1: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc3/8.

\*2: Refer to "Pneumatic Valves No.CB-023SA" for dimensions of port size Rc1/2.

\*3: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

## Wiring specifications

Descriptions	T10□ Common terminal block	T11□ Common terminal block	T30□ D-sub-connector	T50□ Flat cable 20-pin	T51□ Flat cable 20-pin	T52□ Flat cable 10-pin	T53□ Flat cable 26-pin																															
Connector and terminal block specifications	M3 thread tightening Terminal count 18	Clamping Terminal count 26	D-sub-connectors 25 terminals	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 10-pin	MIL-C-83503 standard compliant Pressure welding socket 26-pin																															
Max. number of solenoids	16 points	24 points	24 points	16 points	18 points	8 points	24 points																															
Manifold internal wiring	Refer to "Pneumatic Valves No.CB-023SA" for details.																																					
Wiring block position Blank: Left side R: Right side	<div><div><div>Left side: T □ a solenoid side</div><div></div><div>b solenoid side</div><div><div>Wiring block</div><div>1st station</div><div>2nd station</div><div>3rd station</div><div>...</div><div>6th station</div></div></div></div> <div><div><div>Right side: T □ R a solenoid side</div><div></div><div>b solenoid side</div><div><div>1st station</div><div>2nd station</div><div>3rd station</div><div>...</div><div>6th station</div><div>Wiring block</div></div></div></div>																																					
	<div><div><div>(Example) For T50□</div><div>Manifold specifications</div><div></div><div>1st station 3rd station 2nd station 4th station</div></div><div><div>Standard wiring (sequential): Blank</div><div><table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>2a</td><td>2b</td><td>3a</td><td>4a</td><td>4b</td></tr></table></div></div><div><div>Double wiring: W</div><div><table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>Blank</td><td>2a</td><td>2b</td><td>3a</td><td>Blank</td><td>4a</td><td>4b</td></tr></table></div></div></div>							Connector pin No.	1	2	3	4	5	6	Valve solenoid No.	1a	2a	2b	3a	4a	4b	Connector pin No.	1	2	3	4	5	6	7	8	Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a
Connector pin No.	1	2	3	4	5	6																																
Valve solenoid No.	1a	2a	2b	3a	4a	4b																																
Connector pin No.	1	2	3	4	5	6	7	8																														
Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a	4b																														
Array method Blank: Standard sequential W: Double wiring																																						

## Serial transmission slave unit specifications

Item		T6G1
Network name		CC-Link ver. 1.10
Power supply voltage	Unit side	24 VDC ±10%
	Valve side	24 VDC +10%, -5%
	Communication side	-
Current consumption	Unit side	100 mA or less (when all output points are ON)
	Valve side	15 mA or less (when all output points are OFF)
	Communication side	-
No. of output points		16 points
Occupied number		1 station
Operation display		LED (power supply and communication status)

## Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 268.

## CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".



# M4GB4-T\* Series

Reduced wiring manifolds; Base piping

P4  
Series

## How to order

Manifold model No.

**M** **4GB4** **1** **0** - **10** - **T30** **W** **A** - **3** - **3** - **P4**

Discrete valve for integrated base

**4GB4** **1** **9** - **00** - **A2N** **A** - **3** - **P4**

**A** Model No.

**B** Solenoid position

A2N indicates the A-connector (downward), with lamp/surge suppressor and no lead wire.

**H** Voltage

**C** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

**D** Reduced wiring connection

● Refer to "Pneumatic Valves No.CB-023SA" for the model No. of cables with D-sub-connector.

● Refer to "Pneumatic Valves No.CB-023SA" for the model No. of cables with D-sub-connector.

### ⚠ Precautions for model No. selection

\*2: Two types of bases are available. Dimensions differ by bore size of port P/R1/R2.

\*3: Refer to "Pneumatic Valves No.CB-023SA" for a Dimensions of port size R c3/8.

\*4: Refer to "Pneumatic Valves No.CB-023SA" for a Dimensions of port size R c1/2.

\*5: Refer to "Pneumatic Valves No.CB-023SA" for the Dimensions of the external pilot (K).

\*6: Port P/R is G thread.

\*7: Port P/R is NPT thread.

\*8: Blank... The wiring will be based on the type of valve mounted.

W...All wired as double solenoid regardless of the type of valve used.

\*9: When changing from a single valve for W wiring specifications to a double or 3-position valve, the A type connector socket assembly needs to be purchased separately.

\*10: Consult with CKD when using a vacuum with the external pilot (K).

\*11: Specify the spacer mounting position/quantity in the manifold specifications sheet. Refer to page 270 for details.

\*12: Cannot be selected with discrete valve for integrated base.

**E** Terminal/Connector pin array method

**F** Option

**G** Station No.

\*"Manifold specifications sheet" (Pages 275 to 277).

**A** Model No.

**4GB4**

Code	Description	
<b>B Solenoid position</b>		
<b>1</b>	2-position single	●
<b>2</b>	2-position double	●
<b>3</b>	3-position all ports closed	●
<b>4</b>	3-position ABR connection	●
<b>5</b>	3-position PAB connection	●
<b>8</b>	Mix manifold (when there are multiple solenoid positions)	●

<b>C Port size</b>		*1		
Port	Port A/B	Port P/R1/R2 (*2)		
		Option: Other than K		Option: K
		Rc3/8 (*3)	Rc1/2 (*4)	Rc1/2 (*5)
<b>C8</b>	ø8 push-in fitting	○	■	○
<b>C10</b>	ø10 push-in fitting	○	■	○
<b>C12</b>	ø12 push-in fitting	○	■	○
<b>CX</b>	Push-in fitting mix	○	■	○
<b>08</b>	Rc1/4	●	■	●
<b>10</b>	Rc3/8	●	■	●
<b>15</b>	Rc1/2	■	●	●
<b>08G</b>	G1/4	●(*6)	■	●(*6)
<b>10G</b>	G3/8	●(*6)	■	●(*6)
<b>15G</b>	G1/2	■	●(*6)	●(*6)
<b>08 N</b>	NPT1/4	●(*7)	■	●(*7)
<b>10 N</b>	NPT3/8	●(*7)	■	●(*7)
<b>15N</b>	NPT1/2	■	●(*7)	●(*7)

<b>D Reduced wiring (lamp and surge suppressor provided as standard) 12/24 VDC</b>		
<b>T10</b>	Common terminal block (M3 thread)	Left-sided specs. Right-sided specs. ●
<b>T10R</b>		●
<b>T11</b>	Common terminal block (clamping)	Left-sided specs. Right-sided specs. ●
<b>T11R</b>		●
<b>T30</b>	D-sub-connector	Left-sided specs. Right-sided specs. ●
<b>T30R</b>		●
<b>T50</b>	20-pin flat cable connector (with power supply terminal)	Left-sided specs. Right-sided specs. ●
<b>T50R</b>		●
<b>T51</b>	20-pin flat cable connector (without power supply terminal)	Left-sided specs. Right-sided specs. ●
<b>T51R</b>		●
<b>T52</b>	10-pin flat cable connector (without power supply terminal)	Left-sided specs. Right-sided specs. ●
<b>T52R</b>		●
<b>T53</b>	26-pin flat cable connector (without power supply terminal)	Left-sided specs. Right-sided specs. ●
<b>T53R</b>		●

<b>D Serial transmission (lamp/surge suppressor provided as standard) 24 VDC</b>		
<b>T6G1</b>	CC-Link 16 points	●

<b>E Terminal/connector pin array</b>		
<b>Blank</b>	Standard wiring (*8)	●
<b>W</b>	Double wiring (*8)(*9)	●

<b>F Option</b>		
<b>Blank</b>	No	●
<b>K</b>	External pilot (*5)(*10)	●
<b>A</b>	Coolant proof	●
<b>F</b>	Port A/B filter integrated (port P: Standard)	●
<b>Z1</b>	Air supply spacer (*11)(*12)	●
<b>Z3</b>	Exhaust spacer (*11)(*12)	●

<b>G Station No.</b>		
<b>2</b>	2 stations	●
<b>to</b>	to	
<b>11</b>	11 stations (Refer to page 266 for the max. station number per model)	

<b>H Voltage</b>		
<b>3</b>	24 VDC	●
<b>4</b>	12 VDC	●

■ indicates not available.

MEMO

P4  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

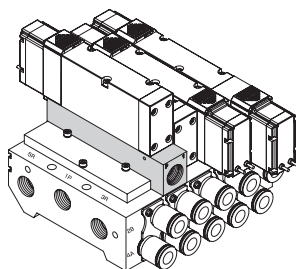


## M4GA4/M4GB4 Series

P4  
Series

### Related products

#### ● Air supply spacer



#### Specifications

Item		4GA4	4GB4
Flow characteristics	P → A/B	6.4	5.6 (*2)
C[dm <sup>3</sup> /(s·bar)]	(*1) A/B → R	8.0	6.6 (*2)
Weight	g	208	198

\*1: This is the value when a single solenoid is installed.

\*2: This is the value when installing to a manifold base port size Rc3/8.

\*3: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

#### How to order discrete units

**4GA4 - P - 10**

A Model No.

B Port size

P4 compliant  
as standard

A Valve model No.

Code	Description	4GA4	4GB4
B Port size			
10	Rc3/8	●	●
10G	G3/8	●	●
10 N	NPT3/8	●	●

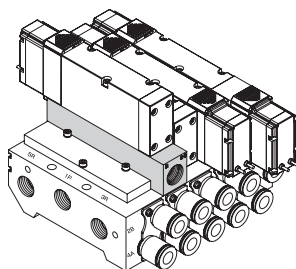
Attachments: 3 mounting screws, 2 O-rings, 1 body gasket

#### ⚠ Precautions for model No. selection

\*1: Specify the air supply spacer mounting position and quantity in manifold specifications sheets of each catalog.

\*2: Combination with the masking plate is not supported.

#### ● Exhaust spacer



#### Specifications

Item		4GA4	4GB4
Flow characteristics	P → A/B	6.3	5.4 (*2)
C[dm <sup>3</sup> /(s·bar)]	(*1) A/B → R	6.9	5.7 (*2)
Weight	g	206	197

\*1: This is the value when a single solenoid is installed.

\*2: This is the value when installing to a manifold base port size Rc3/8.

\*3: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

#### How to order discrete units

**4GA4 - R - 10**

A Model No.

B Port size

P4 compliant  
as standard

A Valve model No.

Code	Description	4GA4	4GB4
B Port size			
10	Rc3/8	●	●
10G	G3/8	●	●
10 N	NPT3/8	●	●

Attachments: 3 mounting screws, 2 O-rings, 1 body gasket

#### ⚠ Precautions for model No. selection

\*1: Specify the air supply spacer mounting position and quantity in manifold specifications sheets of each catalog.

\*2: Combination with the masking plate is not supported.

\*3: When mounting an exhaust spacer on the type A or type B manifold (port P Rc3/8 specifications), connect a push-in fitting.

### Parts list

#### (1) Manifold sub-plate kit individual wiring

- 4GB4 sub-plate

**4G4** - **SUB** - **BASE** - **Port size** - **Option**  
(\*1)

P4 compliant  
as standard

**A** Option

Code	Description
<b>A Option</b>	
Blank	
K	External pilot
F	Port P/A/B filter integrated

\*1: Select from **●** port size on page 252.

#### (2) Manifold sub-plate kit individual wiring

- M4GA4 sub-plate

**M4GA4** - **00** - **Option** - **2**

P4 compliant  
as standard

**A** Port size

**B** Option

**C** Station No.

Code	Description
<b>A Port size</b>	
00	Rc thread
00N	NPT thread
00G	G thread
<b>B Option</b>	
Blank	
K	External pilot
<b>C Station No.</b>	
2	2 stations
to	to
15	Refer to the specifications on page 254 for the max. station number.

- M4GB4 sub-plate: Direct mount

**M4GB4** - **Port size** - **Option** - **2** - **P4**  
(\*1)

**A** Option

**B** Station No.

Code	Description
<b>A Option</b>	
Blank	
K	External pilot
F	Port A/B filter built in
<b>B Station No.</b>	
2	2 stations
to	to
15	Refer to the specifications on page 258 for the max. station number.

\*1: Select from **●** port size on page 260. Note that "CX" cannot be selected.

**P4**  
Series

Pneumatic actuator  
Pneumatic cylinder  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components  
Speed controller

Pneumatic auxiliary components  
Fitting  
Auxiliary valve

Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

● Manifold model No. (example)

**M4G<sup>A</sup><sub>B</sub>4** **8** **0-** **CX** - **T30** **9** - **3** - **P4**

Solenoid position      Port size      Reduced wiring      Terminal/Connector      Option      Station No.      Voltage

Solenoid position

Port size

Reduced wiring  
connection

Terminal/Connector  
pin array method

### Option

Station No.

Voltage

### Precautions for fitting mix CX

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

(Note) The M4GA4 type is not supported.

### Selectable cartridge fittings

4G4 : C8, C10, C12

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.

[illegible]

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

- Individual wiring...Page 274
- Reduced wiring
  - Common terminal block (T1\*), D-sub-connector (T30):Page 275
  - Flat cable connector (T5\*):Page 276
  - Serial transmission (T6G1):Page 277

## How to fill out wiring specifications sheet

Not required for standard wiring and double wiring.

● Wiring specifications sheet (example)

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

Connector pin No.		Installation 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	(b)																
3	5			a															
	16	6	(b)																
4	7			a															
	17	8		b															
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)																			

\*: Note that when the wiring method is T50 type, the COM polarity will be + (positive).

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

### Precautions regarding spare wiring

① With the T30/T50/T51 types, as it is possible for the unit to be equipped with spare wiring in advance to permit modification from a single Sol to a double Sol, consult CKD. Specify the position for expansion (modification area from single to double Sol). Mark a circle in the wiring specification column as an indication of spare wiring, while also filling in the a sol side/b sol side categories.

② Spare wiring will be installed on the masking plate. (Refer to Pneumatic Valves No.CB-023SA)

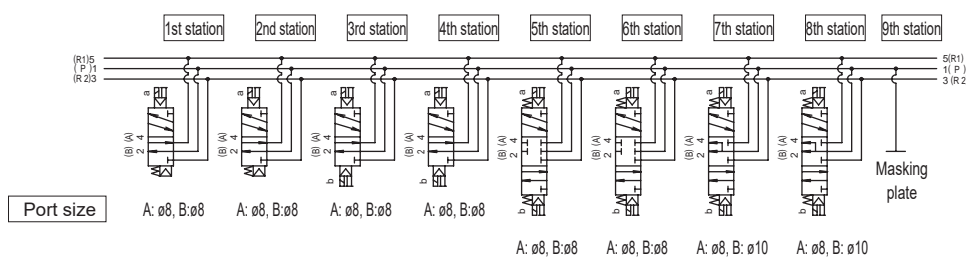
The number of wires for spare wiring can be specified by selecting the masking plate within the specifications.

(\* If there is no specification, the spare wiring will be two (MPD)

4G\*4-MP(S)...1 pc.

4G\*4-MP(D)...2 units

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



\* The manifold station numbers are set in order from the left with the piping port facing forward.

P4  
Series

Individual wiring

M4G<sup>A</sup><sub>B</sub> 4 Manifold specifications sheet

Date issued     /     /

Company

Contact

Order No.

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

Slip No.	Order No.
----------	-----------

● Manifold model No.

**M4G<sup>A</sup><sub>B</sub> 4**   **0-**   -   **-**   -   **-**   **-**   **P4**

Solenoid position                      Port size                      Electrical connections                      Option                      Station No.                      Voltage

Solenoid valve model No.		Fitting CX		Valve 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 <div><div></div>4<div></div>9-<div></div></div>																													
4G <div><div></div>4<div></div>9-<div></div></div>																													
4G <div><div></div>4<div></div>9-<div></div></div>																													
4G <div><div></div>4<div></div>9-<div></div></div>																													
4G <div><div></div>4<div></div>9-<div></div></div>																													
Masking plate 4G <div><div></div>4-MP</div>																													
Air supply spacer 4G <div><div></div>4-P-<div></div></div>																													
Exhaust spacer 4G <div><div></div>4-R-<div></div></div>																													
Mounting rail	L <sub>2</sub> = <div></div>	Included part	Blanking plug												Threaded plug														
			GWP 8-B			GWP 10-B			GWP 12-B			4G4-8 <div></div> P			4G4-10 <div></div> P			4G4-15 <div></div> P											

## Reduced wiring

### M4G<sup>A</sup><sub>B</sub>4-T1, 3 Manifold specifications sheet

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

Slip No.	Order No.
----------	-----------

● Manifold model No.

Date issued / /

Company

Contact

Order No.

**M4G<sup>A</sup><sub>B</sub> 4**  **0-**  -    -  -  - **P4**

Solenoid position      Port size      Reduced wiring connection      Terminal/Connector pin array method      Option      Station No.      Voltage

Solenoid valve model No.	Fitting CX		Valve 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 <div><div></div>4<div></div>9-<div></div></div>																											
4G <div><div></div>4<div></div>9-<div></div></div>																											
4G <div><div></div>4<div></div>9-<div></div></div>																											
4G <div><div></div>4<div></div>9-<div></div></div>																											
4G <div><div></div>4<div></div>9-<div></div></div>																											
Masking plate 4G <div><div></div>4-MP(S)</div>																											
Masking plate 4G <div><div></div>4-MP(D)</div>																											
Air supply spacer 4G <div><div></div>4-P-<div></div></div>																											
Exhaust spacer 4G <div><div></div>4-R-<div></div></div>																											
Included part			Blanking plug												Threaded plug												
			GWP 8-B				GWP 10-B				GWP 12-B				4G4-8 <div></div> P				4G4-10 <div></div> P				4G4-15 <div></div> P				
			Cable with D-sub-connector												N4T-CABLE-D <div></div> - <div></div>												

● 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																							
T10/T10R	T11/T11R	T30/T30R	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																								
2	2	14																								
3	3	2																								
4	4	15																								
5	5	3																								
6	6	16																								
7	7	4																								
8	8	17																								
9	9	5																								
10	10	18																								
11	11	6																								
12	12	19																								
13	13	7																								
14	14	20																								
COM	15	8																								
COM	16	21																								
	17	9																								
	18	22																								
	19	10																								
	20	23																								
	21	11																								
	22	24																								
	23	12																								
	24	25																								
	COM	13	(COM)																							
	COM																									

# Discontinue

**P4**  
Series

## Reduced wiring

# M4G<sub>B</sub><sup>A</sup>4-T5 Manifold specifications sheet

Date issued      /      /

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

Company \_\_\_\_\_

## Contact

Order No. \_\_\_\_\_

● Manifold model No.

**M4G<sup>A</sup><sub>B</sub> 4**  **0-**  -    -  -  -  - **P4**

Solenoid position      Port size      Reduced wiring      Terminal/Connector pin      Option      Station No.      Voltage

### Solenoid position

Port size

Reduced wiring  
connection

Terminal/Connector pin  
array method

Option

Station No.

## Voltage

## P4

[illegible]

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

[illegible]

\* Note that when T50 wiring is used, the COM polarity is + (plus).

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

## M4G<sub>B</sub>4-T6G1 Manifold specifications sheet

Date issued     /     /

- Contact      ● Quantity set(s)      ● Delivery date /

Slip No.	Order No.
----------	-----------

Company

## Contact

Order No.

● Manifold model No.

**M4G<sup>A</sup><sub>B</sub> 4**  **0-**  **- T6G1**   **-**  **-**  **- P4**

Solenoid position      Port size      Serial transmission      Terminal/Connector pin array method      Option      Station No.      Voltage

Solenoid valve model No.	Fitting CX		Valve 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□4□9-□																															
4G□4□9-□																															
4G□4□9-□																															
4G□4□9-□																															
4G□4□9-□																															
Masking plate 4G□4-MP(S)																															
Masking plate 4G□4-MP(D)																															
Air supply spacer 4G□4-P-□																															
Exhaust spacer 4G□4-R-□																															
	Included part		Blanking plug												Threaded plug																
			GWP 8-B					GWP 10-B					GWP 12-B					4G4-8□P					4G4-10□P					4G4-15□P			

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

[illegible]