

4GA/B

M4GA/B

MN4GA/B

4GA/B  
(mstr)

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E  
MN4E

W4GA/B2

W4GB4

4TB

4L2-4/  
LMFOMN3SO  
MN4SO

4SA/B0

4KA/B

4KA/B  
(mstr)

4F

4F  
(mstr)PV5G  
GMFPV5  
GMF

PV5S-0

3QR  
3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*0EX

4F\*0E

HMV  
HSV2QV  
3QV

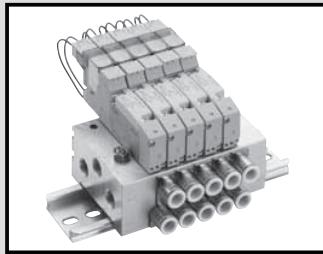
SKH

PCD

Silencer

TotAirSys  
(Total Air)TotAirSys  
(Gamma)

Ending



Individual wiring manifold  
Base piping  
Direct mount/DIN rail mount

# M3GB1/2 / M4GB1/2/3-(D) Series

● Cylinder bore size: φ20 to φ100

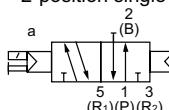


## JIS symbol

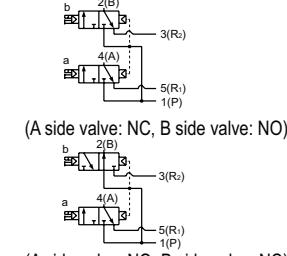
- 3-port valve  
2-position single NC



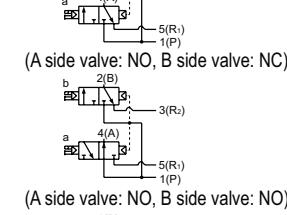
- 2-position single NO



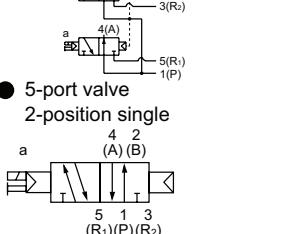
- Two 3-port valves integrated  
(A side valve: NC, B side valve: NC)



- (A side valve: NC, B side valve: NO)



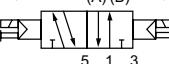
- (A side valve: NO, B side valve: NC)



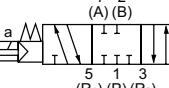
- 5-port valve  
2-position single



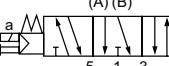
- 2-position double



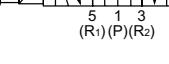
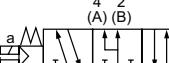
- 3-position All ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



## Manifold common specifications

Descriptions	Content				
Manifold	Integrated base				
Mounting method	Direct mount/DIN rail mount				
Supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)				
Pilot exhaust method	<table border="1"> <tr> <td>Internal pilot</td> <td>Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)</td> </tr> <tr> <td>External pilot</td> <td>Main valve/pilot valve individual exhaust</td> </tr> </table>	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)	External pilot	Main valve/pilot valve individual exhaust
Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)				
External pilot	Main valve/pilot valve individual exhaust				
Piping direction	Lateral direction from base				
Valve and operation	Pilot operated soft spool valve				
Working fluid	Compressed air				
Max. working pressure MPa	0.7 (≈100 psi, 7 bar)				
Min. working pressure MPa	0.2 (≈29 psi, 2 bar) (*3)				
Proof pressure MPa	1.05 (≈150 psi, 10.5 bar)				
Ambient temperature °C	-5 (23°F) to 55 (131°F) (no freezing)				
Fluid temperature °C	5 (41°F) to 55 (131°F)				
Manual override	Non-locking/locking common type (standard)				
Lubrication	(*1)				
Degree of protection	Dust-proof				
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) applies for DIN terminal box specifications. However, the specified outer diameter of the applicable 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.

## Electrical specifications

Descriptions	Content														
Rated voltage V	DC24 DC12 DC5 DC3 AC100 AC200														
Voltage fluctuation range	±10%														
Holding current A (*4)	<table border="1"> <tr> <td>Standard</td> <td>0.015 (0.017)</td> <td>0.030 (0.034)</td> <td>0.072 (0.082)</td> <td>0.120 (0.136)</td> <td>0.009 (0.009)</td> <td>0.006 (0.006)</td> </tr> <tr> <td>Low exoergic/energy circuit</td> <td>0.005</td> <td>0.010</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	Standard	0.015 (0.017)	0.030 (0.034)	0.072 (0.082)	0.120 (0.136)	0.009 (0.009)	0.006 (0.006)	Low exoergic/energy circuit	0.005	0.010	-	-	-	-
Standard	0.015 (0.017)	0.030 (0.034)	0.072 (0.082)	0.120 (0.136)	0.009 (0.009)	0.006 (0.006)									
Low exoergic/energy circuit	0.005	0.010	-	-	-	-									
Power consumption W (*4)	<table border="1"> <tr> <td>Standard</td> <td>0.35 (0.40)</td> <td>0.35 (0.40)</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Low exoergic/energy circuit</td> <td>0.1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	Standard	0.35 (0.40)	0.35 (0.40)	-	-	-	-	Low exoergic/energy circuit	0.1	-	-	-	-	-
Standard	0.35 (0.40)	0.35 (0.40)	-	-	-	-									
Low exoergic/energy circuit	0.1	-	-	-	-	-									
Apparent power VA (*5) (*5)	<table border="1"> <tr> <td>Standard</td> <td>-</td> <td>-</td> <td>-</td> <td>0.93 (0.98)</td> <td>1.40</td> <td>-</td> </tr> </table>	Standard	-	-	-	0.93 (0.98)	1.40	-							
Standard	-	-	-	0.93 (0.98)	1.40	-									
Thermal class	B														
Surge suppressor	Option														
Indicator	Lamp (option)														

\*4: Values in ( ) apply when lamp is included. In addition, the type with low exoergic/energy-saving circuit is only available with lamp.

\*5: 200 VAC is the value of DIN terminal box (with lamp).

## Individual specifications

Descriptions	M3GB1/M4GB1	M3GB2/M4GB2	M4GB3			
	Direct mount	DIN rail mount	Direct mount	DIN rail mount		
Max. station No.	Standard (Internal pilot)	20 stations 16 stations	20 stations 16 stations	20 stations 16 stations		
	External pilot	12 stations 12 stations				
Rc thread, M5	A/B Port	Barbed fitting φ1.8 Push-in fitting φ1.8, φ4, φ6, φ8 (*6) M5	Push-in fitting φ4, φ6, φ8 (*6) Rc1/8	Push-in fitting φ6, φ8, φ10 Rc1/4		
	P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8		
NPT thread, M5	A/B Port	Push-in fitting φ1/8", φ5/32" M5	Push-in fitting φ1/8", φ5/16" 1/8NPT (*6)	Push-in fitting φ5/16", φ3/8" 1/4NPT (*6)		
	P/R1/R2 port	1/8NPT	1/4NPT	3/8NPT (*6)		
G thread, M5	A/B Port	Push-in fitting φ4, φ6, φ8 M5	Push-in fitting φ4, φ6, φ8 G1/8	-		
	P/R1/R2 port	G1/8	G1/4	-		
Manifold base weight calculation formula (n: station No.) g	Standard 35n+61 External pilot 35n+106	36n+115 36n+114	71n+106 76n+135	73n+134 78n+166	113n+170 118n+194	115n+119 120n+223

Refer to "Cautions for Mounting the DIN Rail" (page 754), and select the manifold.

For 10 or over manifold station No. (5 stations for 4G3), use ports on both side for air supply and exhaust.

The manifold base weight is the value for screw specifications.

\*6: Available as custom order.

# M3GB1/2 / M4GB1/2/3 Series

Individual wiring manifold; base piping

## Flow characteristics

Model No.	Solenoid position	P→A/B		A/B→R1/R2		4GA/B M4GA/B MN4GA/B 4GA/B (mastr) 4GD/E M4GD/E MN4GD/E 4GA4/B4 MN3E MN4E W4GA/B2 W4GB4 4TB 4L2-4/ LMF0 MN3SO MN4SO 4SA/B0 4KA/B 4KA/B (mastr) 4F 4F (mastr) PV5G GMF PV5 GMF PV5S-0 3QR 3QB MV3QR 3MA/B0 3PA/B P/M/B NP/NAP/ NVP 4F*0EX 4F*0E HMV HSV 2QV 3QV SKH PCD Silencer TotAirSys (Total Air) TotAirSys (Gamma) Ending	
		C[dm <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b		
M3GB1 M4GB1	Two 3-port valves integrated	0.86	0.35	1.1(0.67)	0.22(0.23)		
	2-position	1.1	0.22	1.2(0.70)	0.20(0.10)		
	All ports closed	0.98	0.22	1.1 -	0.24 -		
	3-position ABR connection	0.97	0.35	1.3(0.68)	0.22(0.24)		
	PAB connection	1.1	0.38	1.1 -	0.21 -		
M3GB2 M4GB2	Two 3-port valves integrated	1.7	0.44	2.1(1.6)	0.32(0.30)		
	2-position	2.4	0.34	2.7(1.7)	0.24(0.31)		
	All ports closed	2.2	0.34	2.4 -	0.29 -		
	3-position ABR connection	2.2	0.34	2.8(1.8)	0.24(0.27)		
	PAB connection	2.4	0.29	2.4 -	0.29 -		
M4GB3	2-position	3.5	0.34	3.8(2.6)	0.11(0.27)		
	All ports closed	3.1	0.33	3.3 -	0.22 -		
	3-position ABR connection	3.0	0.30	3.8(2.7)	0.11(0.22)		
	PAB connection	3.6	0.36	3.3 -	0.28 -		

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

\*2: Values in ( ) are with the exhaust check valve.

Ozone-proof specifications / coolant proof specifications

Can be selected with "How to order" Item (E) option "A" on page 115.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

\*\* - Voltage - **P7\***

Specifications for rechargeable battery

(Catalog No. CC-1226A)

- For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

\*\* - Voltage - **P4**

CE marking specifications

\*\* - Voltage - **ST**

# M4GB1/2/3 Series

Individual wiring manifold; base piping

## How to order

Manifold model No.

**M 4GB1 1 0R - C6 - E2 H D - 3**

3-port manifold model No.

**M 3GB1 66 0R - C6 - E2 H D - 3**

● Single valve for mounting base

**4GB1 1 9R - 00 - E2 H - 3**

● 3-port discrete valve for mounting base

**3GB1 66 9R - 00 - E2 H - 3**

**B Solenoid position**

**A Model No.**

**C Port size**

\*3

\*4

**D Electrical connections**

**E Option**

**F Mount**

**G Station No.**

**H Voltage**

\* Be sure to fill in the "Manifold specifications sheet" (pages 206 to 220).

<b>A Model No.</b>		3GB1	3GB2	4GB1	4GB2	4GB3
--------------------	--	------	------	------	------	------

Code	Content	3GB1	3GB2	4GB1	4GB2	4GB3
<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			●	●	●
66	Two 3-port valves integrated *1/2	A valve side: Normally closed B valve side: Normally closed	●	●		
67		A valve side: Normally closed B valve side: Normally open	●	●		
76		A valve side: Normally open B valve side: Normally closed	●	●		
77		A valve side: Normally open B valve side: Normally open	●	●		
8	Mix manifold (when there are multiple solenoid positions)	●	●	●	●	●

Port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8	(2)	(2)		
CF	φ1.8 barbed fitting (compatible tube UP-9102-**)	(2)	(2)		
C18	φ1.8 push-in fitting (compatible tube UP-9402-**)	(2)	(2)		
C4	φ4 push-in fitting	(2)	(3)	(2)	(3)
C6	φ6 push-in fitting	(2)	(3)	(2)	(3)
C8	φ8 push-in fitting *5, *6	(2)	(3)	(2)	(3)
C10	φ10 push-in fitting *5, *6	(3)	(3)	(3)	(4)
CL18	φ1.8 radial push-in fitting upward (compatible tube UP-9402-**)		(2)		
CL4	Radial φ4 push-in fitting (upward)		(2)		
CL6	Radial φ6 push-in fitting (upward)		(2)	(3)	
CL8	Radial φ8 push-in fitting (upward)		(3)	(4)	
CL10	Radial φ10 push-in fitting (upward)		(4)		
CD18	φ1.8 radial push-in fitting downward (compatible tube UP-9402-**)	(2)	(2)		
CD4	Radial φ4 push-in fitting (downward)	(2)	(2)		
CD6	Radial φ6 push-in fitting (downward)	(2)	(3)	(2)	(3)
CD8	Radial φ8 push-in fitting (downward)	(3)	(3)	(4)	
CD10	Radial φ10 push-in fitting (downward)		(4)		
CX	Push-in fitting mix	(2)	(3)	(2)	(3)
M5	M5	(2)	(2)		
06	Rc1/8		(3)	(3)	
08	Rc1/4				(4)
Port	P/R1/R2 port (5) = 1/8NPT, (6) = 1/4NPT, (7) = 3/8NPT	(5)	(6)	(7)	
C3N	φ1/8" push-in fitting	(5)	(5)		
C4N	φ5/32" push-in fitting	(5)	(5)		
C6N	φ1/4" push-in fitting		(6)	(6)	
C8N	φ5/16" push-in fitting		(6)	(6)	(7)
C10N	φ3/8" push-in fitting				(7)
CL3N	φ1/8" radial push-in fitting (upward) *6		(5)		
CL4N	φ5/32" radial push-in fitting (upward) *6		(5)		
CL6N	φ1/4" radial push-in fitting (upward) *6		(6)		
CL8N	φ5/16" radial push-in fitting (upward) *6		(6)		
CXN	Push-in fitting mix	(5)	(6)	(5)	(7)
M5N	M5	(5)	(5)		
06N	1/8NPT		(6)	(6)	
08N	1/4NPT	*6			(7)
Port	P/R1/R2 port (8) = G1/8, (9) = G1/4	(8)	(9)	(8)	(9)
C4G	φ4 push-in fitting	(8)	(9)	(8)	(9)
C6G	φ6 push-in fitting	(8)	(9)	(8)	(9)
C8G	φ8 push-in fitting		(9)		(9)
CL4G	Radial φ4 push-in fitting (upward) *6		(8)		
CL6G	Radial φ6 push-in fitting (upward) *6		(8)	(9)	
CL8G	Radial φ8 push-in fitting (upward) *6		(9)		(9)
CXG	Push-in fitting mix	(8)	(9)	(8)	(9)
M5G	M5	(8)		(8)	
06G	G1/8			(9)	(9)
00	Discrete valve for mounting base	●	●	●	●

## Precautions for model No. selection

\*1: Select M4GB\*80R when mixing with 3, 5-port valves.

Further, select M3GB\*80R when mixing with masking plate.

\*2: Not compatible with combination with external pilot (K).

Dimensions are the same as those of the respective 2-position double solenoid.

\*3: CL\* radial push-in fitting is compatible only with the single solenoid manifold. Long elbow is for A port and short elbow for B port.

\*4: A and B ports are the same size for radial push-in fitting (upward) (downward).

\*5: 4G1 C8 and 4G2 C10 do not support push-in fitting mixing.

\*6: Custom order.

	A Model No.				
	3GB1	3GB2	4GB1	4GB2	4GB3
<b>D Electrical connections</b>					
Blank	Grommet lead wire (300 mm)	*17	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/lamp	*18	●	●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor	*18	●	●	●
E type connector (upward/lateral common)					
E0	Lead wire (300 mm)	*19	●	●	●
E00	Lead wire (500 mm)	*19	●	●	●
E01	Lead wire (1000 mm)	*19	●	●	●
E02	Lead wire (2000 mm)	*19	●	●	●
E03	Lead wire (3000 mm)	*19	●	●	●
E0N	Without lead wire (without socket)	*19	●	●	●
E1	Without lead wire (socket/terminal attached)	*19	●	●	●
E2	Lead wire (300 mm) with surge suppressor/indicator lamp	●	●	●	●
E20	Lead wire (500 mm) with surge suppressor/indicator lamp	●	●	●	●
E21	Lead wire (1000 mm) with surge suppressor/indicator lamp	●	●	●	●
E22	Lead wire (2000 mm) with surge suppressor/indicator lamp	●	●	●	●
E23	Lead wire (3000 mm) with surge suppressor/indicator lamp	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/indicator lamp	●	●	●	●
E3	Without lead wire (socket/terminal attached) with surge suppressor/indicator lamp	●	●	●	●
EJ type connector (socket with cover, upward/lateral common)					
E01J	Lead wire (1000 mm)	*19	●	●	●
E02J	Lead wire (2000 mm)	*19	●	●	●
E03J	Lead wire (3000 mm)	*19	●	●	●
E21J	Lead wire (1000 mm) with surge suppressor/indicator lamp	●	●	●	●
E22J	Lead wire (2000 mm) with surge suppressor/indicator lamp	●	●	●	●
E23J	Lead wire (3000 mm) with surge suppressor/indicator lamp	●	●	●	●
<b>E Option</b>					
Blank	Non-locking/locking common manual override	●	●	●	●
M	Non-locking manual override	●	●	●	●
H	With exhaust check valve	*7	●	●	●
K	External pilot	*8	●	●	●
A	Ozone/coolant proof	●	●	●	●
S	Surgeless	*9	●	●	●
E	Low exoergic/energy saving circuit	*9, *10	●	●	●
F	A/B port filter built in	*11	●	●	●
Z1	Air supply spacer	*12	●	●	●
Z2	In-stop valve spacer	*12, *13	●	●	●
Z3	Exhaust spacer	*12	●	●	●
Z6	Spacer pilot check valve	*12, *14	●	●	●
<b>F Mount</b>					
Blank	Direct mount	*15	●	●	●
D	DIN rail mount	●	●	●	●
<b>G Station No.</b>					
2	2 stations		●	●	●
to	to		●	●	●
20	Refer to page 112 for the max. station number per model.		●	●	●
<b>H Voltage</b>					
1	100 VAC (rectifier integrated)	●	●	●	●
2	200 VAC (rectifier integrated)	*16	●	●	●
3	24 VDC	●	●	●	●
4	12 VDC	●	●	●	●
7	3 VDC	○	○	○	○
8	5 VDC	○	○	○	○

is not available.

○ indicates a custom order.

\*7 : 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 751 for details on the exhaust check valve.

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

\*9 : E2\* type and E2\*J type connectors support 12/24 VDC only.

In addition, surgeless "S" and low exoergic/energy-saving circuit "E" cannot be selected together.

\*10: Surgeless specifications.

\*11: A filter is built into the P-port as standard.

\*12: Specify the spacer mounting position/quantity in manifold specifications sheet.

Stacking of spacers is not possible.

Combination with the masking plate is not supported.

Refer to pages 186 to 190 for details.

\*13: Not compatible with combination with external pilot (K).

\*14: Combination with radial push-in fittings (upward) is not supported.

\*15: The direct mount of M4GB1 cannot be changed to the DIN rail mount after purchasing.

\*16: DIN terminal box only is supported.

\*17: The grommet lead wire specifications are compatible with DC voltage only.

\*18: AC voltages and 12/24 VDC are supported. In addition, a lamp comes with the terminal box.

\*19: AC voltage is with a rectifier circuit.

## Electrical connections

### Discrete valve/individual wiring manifold

Blank

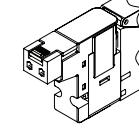
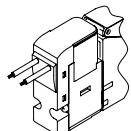
Grommet lead wire

E1 E type connector

E3 with socket/terminal

● Lead wire length

300 mm



E0

E2

E type connector

B DIN terminal box

● Lead wire length

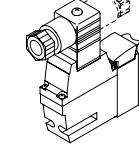
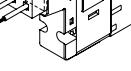
300 mm

500 mm

1000 mm

2000 mm

3000 mm



E0N

E type connector

BN DIN terminal box (without terminal box)

E0\*J

E2\*J

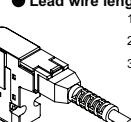
EJ type connector

● Lead wire length

1 m

2 m

3 m



4GA/B

M4GA/B

4GA/B (mastr)

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4

4TB

4L2-4/LMF0

MN3SO MN4SO

4SA/B0

4KA/B

4KA/B (mastr)

4F

4F (mastr)

PV5G GMF

PV5 GMF

PV5S-0

3QR 3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/NVP

4F\*0EX

4F\*0E

HMV HSV

2QV 3QV

SKH

PCD

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

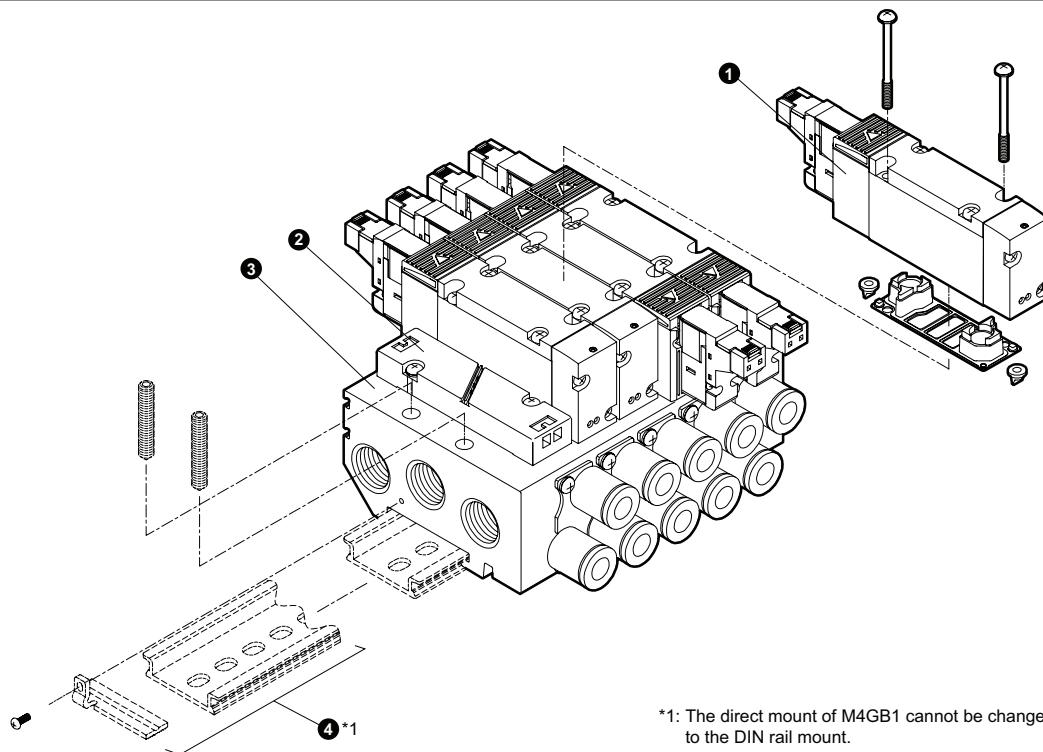
Ending

# M4GB1/2/3 Series

Individual wiring manifold; base piping

## Manifold components explanation and parts list

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F



\*1: The direct mount of M4GB1 cannot be changed to the DIN rail mount.

## Main parts list

No.	Component name	Model No.	Content	Remarks
1	Discrete valve for mounting base	4GB □□9R -00- [Electrical connectors] [Option] - Voltage [Solenoid position] [Series flow rate size]	Single valve Gasket Mounting screws 2 PR check valve 2	Details on page 114
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 3G3/4G3 4G3R-MP	Masking plate Gasket Mounting screws 2	* 3G3/4G3 have two PR check valves.
3	Manifold base assembly	M4GB □R [Port size] - [Option] D - [Station No.] [Series flow rate size] [Mount]	Manifold base	Only 4G1 mount can be selected. Moreover, even if the "D" mounting is selected, the DIN rail kit will be handled separately.
4	DIN rail kit			Details on page 197

NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# M4GB1/2/3 Series

Individual wiring manifold; base piping

## Parts list

No.	Part name	Model No.	No.	Part name	Model No.		
-	Coil assembly	4GR-[Electrical connections]-□-COIL-[Voltage] Blank: Standard A: Ozone/coolant proof S: Surgeless E: Low energy/energy saving circuit Select from ① Electrical connections on page 115			φ1.8 barbed φ1.8 axial φ4 straight φ6 straight φ8 straight φ1.8 elbow φ4 elbow φ6 elbow φ1/8" straight φ5/32" straight φ1/8" elbow φ5/32" elbow Plug cartridge	4G1R-JOINT-CF 4G1R-JOINT-C18 4G1R-JOINT-C4 4G1R-JOINT-C6 4G1R-JOINT-C8 4G1R-JOINT-CL18,CLL18 4G1R-JOINT-CL4,CLL4 4G1R-JOINT-CL6,CLL6 4G1R-JOINT-C3N 4G1R-JOINT-C4N 4G1R-JOINT-CL3N,CLL3N 4G1R-JOINT-CL4N,CLL4N 4G1R-JOINT-CPG	4GA/B M4GA/B MN4GA/B 4GA/B (mastr)
-	E type connector socket assembly	4GR - SOCKET - ASSY -[electrical connections]-[voltage]			φ4 straight φ6 straight φ8 straight φ10 straight φ6 elbow φ8 elbow φ1/4" straight φ5/16" straight φ1/4" elbow φ5/16" elbow Plug cartridge	4G2R-JOINT-C4 4G2R-JOINT-C6 4G2R-JOINT-C8 4G2R-JOINT-C10 4G2R-JOINT-CL6,CLL6 4G2R-JOINT-CL8,CLL8 4G2R-JOINT-C6N 4G2R-JOINT-C8N 4G2R-JOINT-CL6N,CLL6N 4G2R-JOINT-CL8N,CLL8N 4G2R-JOINT-CPG	4GD/E M4GD/E MN4GD/E 4GA4/B4 MN3E MN4E W4GA/B2 W4GB4 4TB 4L2-4/ LMF0 MN3SO MN4SO 4SA/B0 4KA/B 4KA/B (mastr) 4F 4F (mastr) PV5G GMF PV5 GMF PV5S-0 3QR 3QB MV3QR 3MA/B0 3PA/B P/M/B NP/NAP/ NVP 4F*0EX 4F*0E HMV HSV 2QV 3QV SKH PCD Silencer TotAirSys (Total Air) TotAirSys (Gamma) Ending
-	EJ type connector socket assembly	4GR - SOCKET - ASSY -[electrical connections]			*1: Custom order. *2: Common product with the 4G3 φ10 straight.		

\*1: Custom order.

\*2: Common product with the 4G3 φ10 straight.

# M4GB1 Series

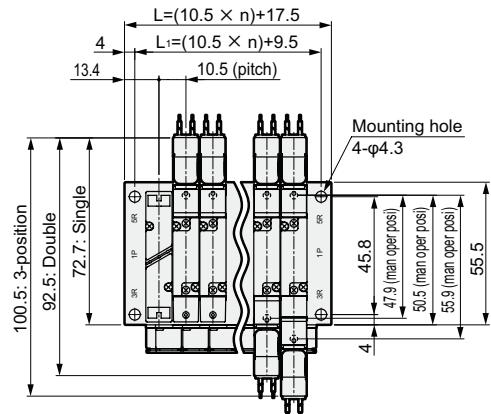
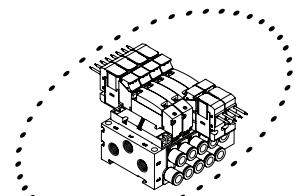
Individual wiring manifold; base piping

Dimensions 

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)

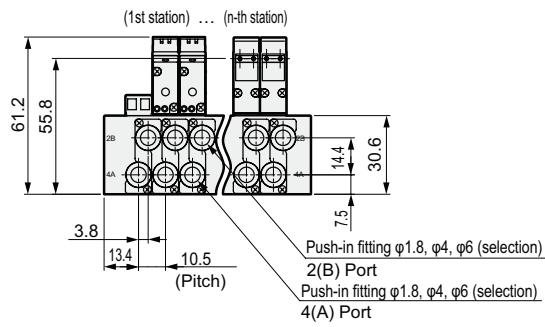
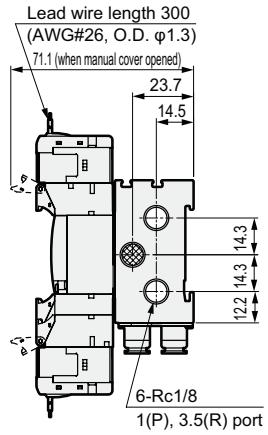
## M4GB1

- Direct mount installation
- Grommet lead wire (blank)

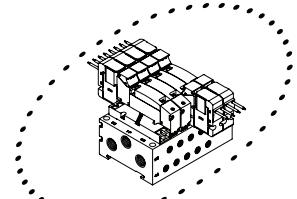


\*1: Dedicated for direct mounting.  
This cannot be changed to DIN rail specifications.

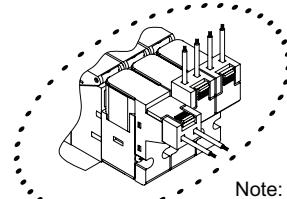
\*2: The two 3-port valve integrated has the same dimensions as the double.



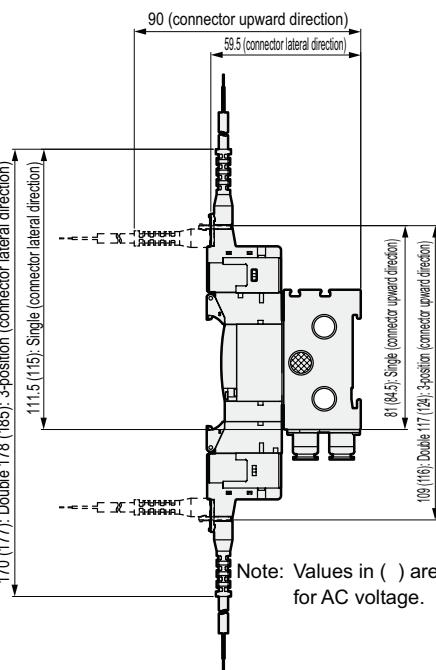
### ● M5 female thread (M5)



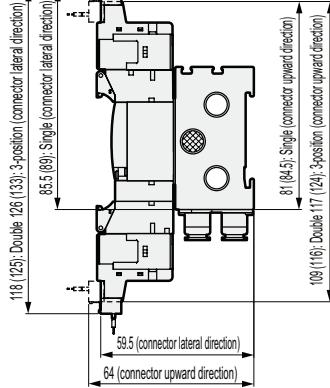
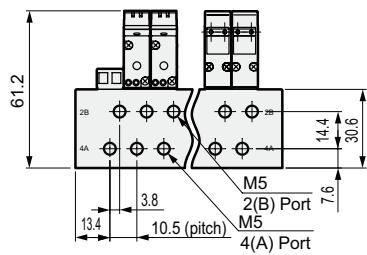
### ● E type connector (E)



### ● EJ type connector (E\*\*J)



Note: Values in ( ) are for AC voltage.



Note: Values in ( ) are for AC voltage.

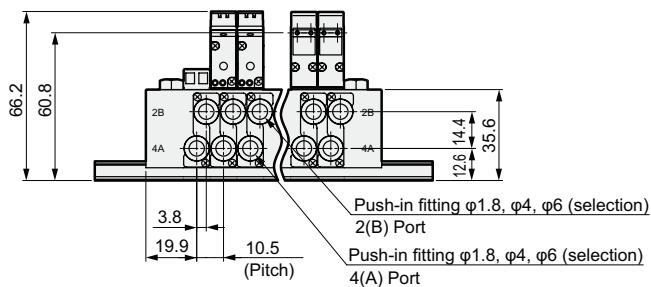
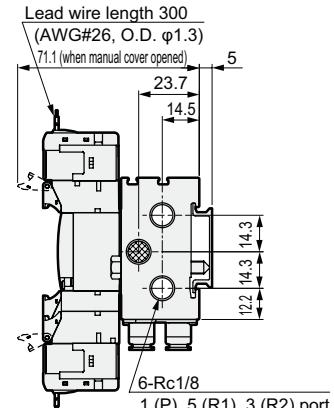
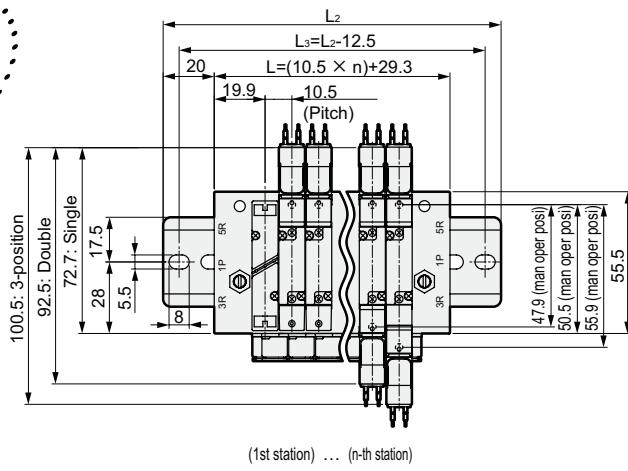
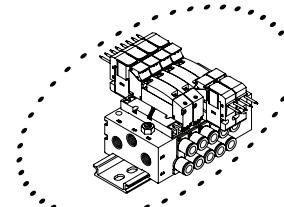
Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	38.5	49.0	59.5	70.0	80.5	91.0	101.5	112.0	122.5	133.0	143.5	154.0	164.5	175.0	185.5	196.0	206.5	217.0	227.5
L <sub>1</sub>	30.5	41.0	51.5	62.0	72.5	83.0	93.5	104.0	114.5	125.0	135.5	146.0	156.5	167.0	177.5	188.0	198.5	209.0	219.5

### Dimensions

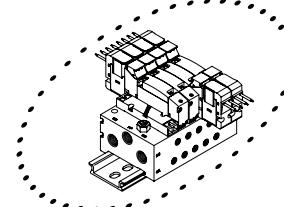


#### M4GB1

- DIN rail installation (D)  
Grommet lead wire (blank)

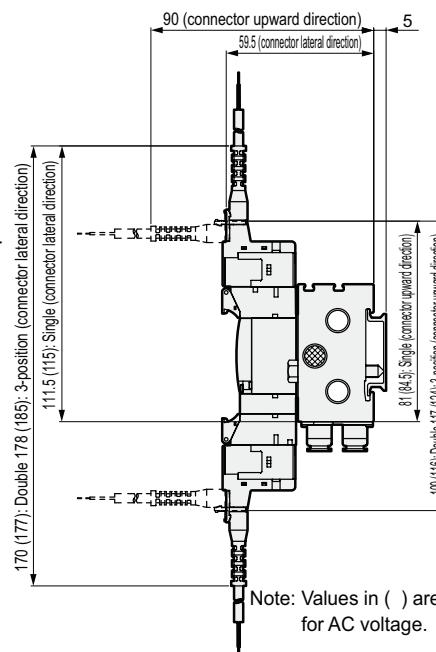
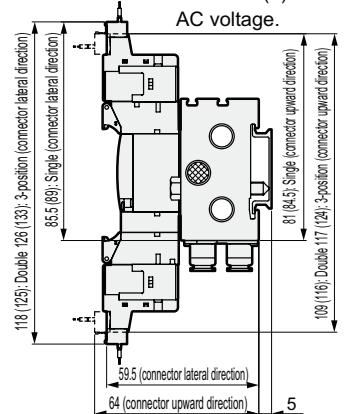
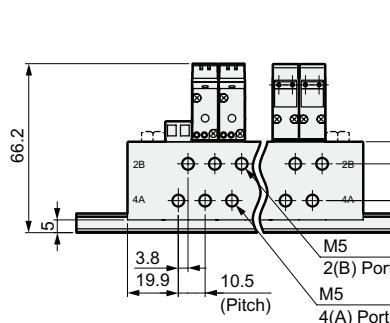


- DIN rail installation (D)  
M5 female thread (M5)



- DIN rail installation (D)  
E type connector (E)

- EJ type connector (E\*\*J)



Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3	165.8	176.3	186.8	197.3
L <sub>2</sub>	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5
L <sub>3</sub>	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5	200.0	212.5	225.0	225.0

4GA/B
M4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# M4GB1 Series

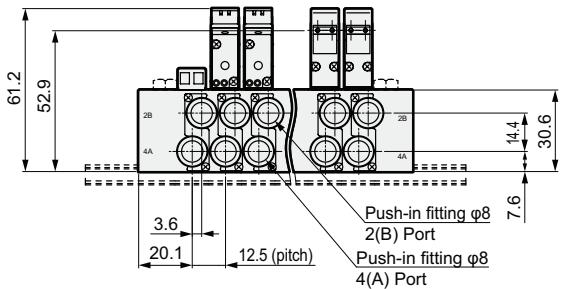
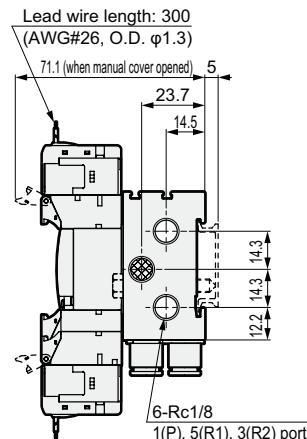
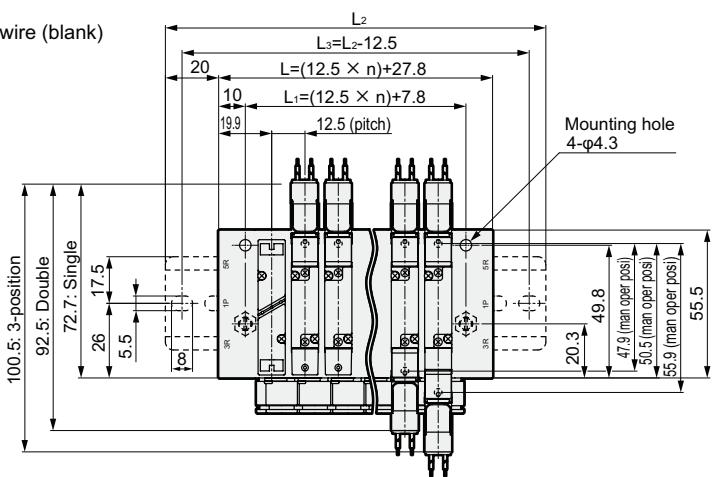
Individual wiring manifold; base piping

4GA/B
M4GA/B
MN4GA/B
4GA/B (mstr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (mstr)
4F
4F (mstr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

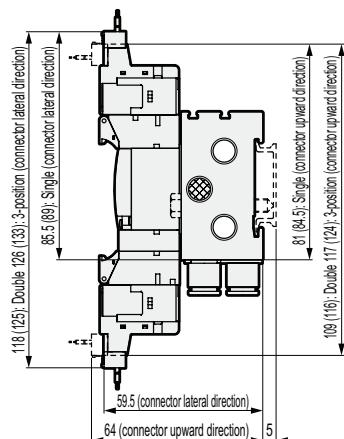
## Dimensions CAD

### M4GB1-C8

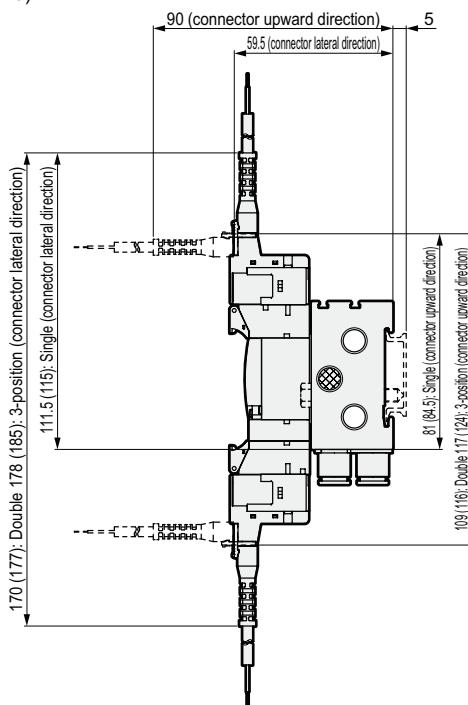
- Grommet lead wire (blank)



- E type connector (E)



- EJ type connector (E\*\*J)



Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	52.8	65.3	77.8	90.3	102.8	115.3	127.8	140.3	152.8	165.3	177.8	190.3	202.8	215.3	227.8	240.3	252.8	265.3	277.8
L <sub>1</sub>	32.8	45.3	57.8	70.3	82.8	95.3	107.8	120.3	132.8	145.3	157.8	170.3	182.8	195.3	207.8	220.3	232.8	245.3	257.8
L <sub>2</sub>	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0				
L <sub>3</sub>	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5				

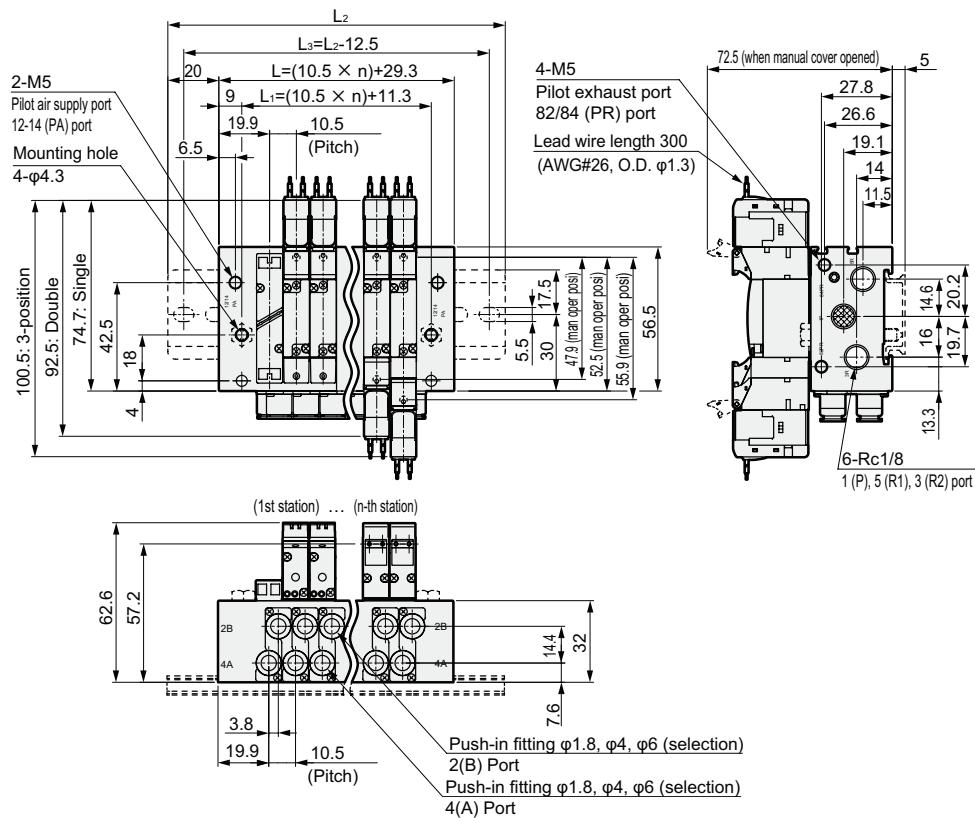
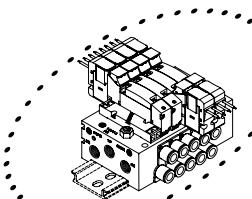
## Dimensions



### M4GB1

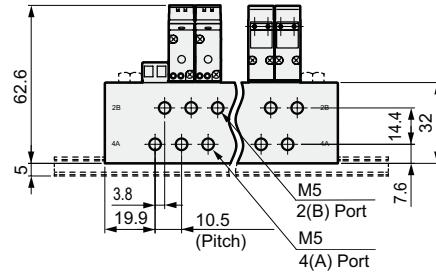
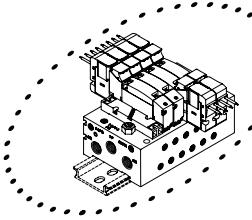
- External pilot (K)

Grommet lead wire (blank)



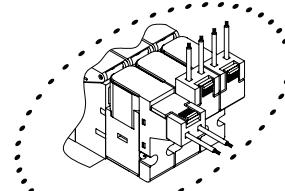
- External pilot (K)

M5 female thread (M5)

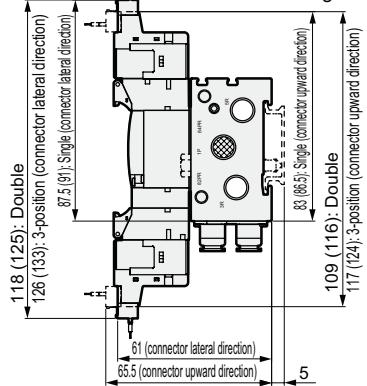


- External pilot (K)

E type connector (E)

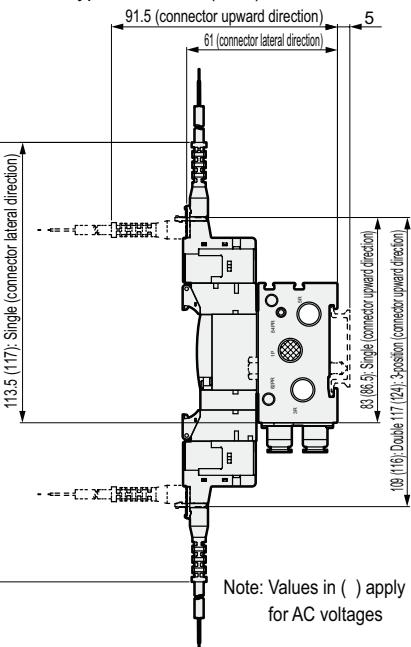


Note: Values in ( ) are for AC voltage.



- External pilot (K)

EJ type connector (E\*\*J)



Stn No.	2	3	4	5	6	7	8	9	10	11	12
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3
L <sub>1</sub>	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L <sub>2</sub>	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L <sub>3</sub>	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

4GA/B
M4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5 GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# M4GB1 Series

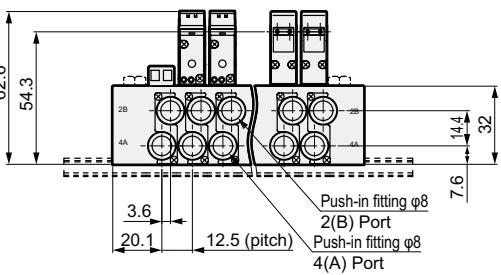
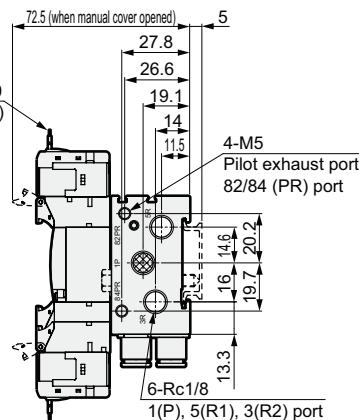
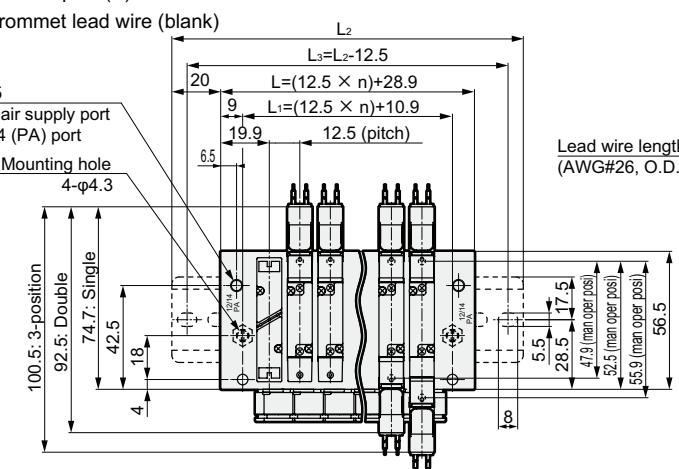
Individual wiring manifold; base piping

4GA/B
M4GA/B
MN4GA/B
4GA/B (masr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (masr)
4F
4F (masr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

## Dimensions

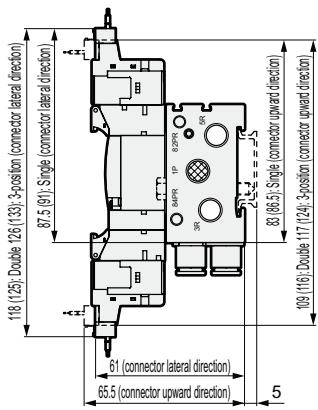
### M4GB1-C8-K

- External pilot (K)



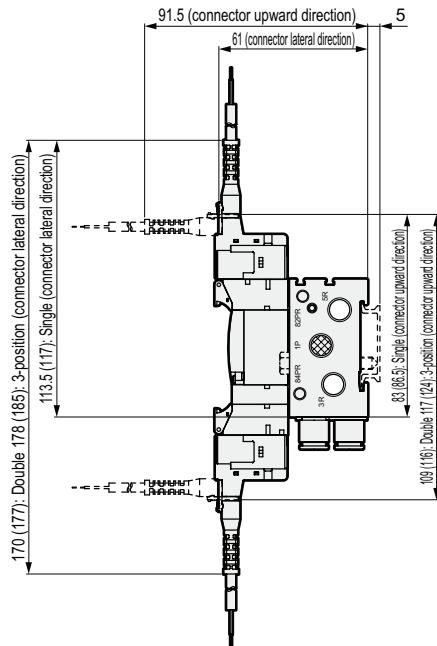
- External pilot (K)

E type connector (E)



- External pilot (K)

EJ type connector (E\*\*J)



Stn No.	2	3	4	5	6	7	8	9	10	11	12
L	53.9	66.4	78.9	91.4	103.9	116.4	128.9	141.4	153.9	166.4	178.9
L <sub>1</sub>	35.9	48.4	60.9	73.4	85.9	98.4	110.9	123.4	135.9	148.4	160.9
L <sub>2</sub>	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0
L <sub>3</sub>	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5

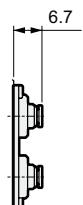
## Dimensions



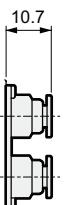
- Fitting straight
- $\varphi 1.8(\text{CF})$



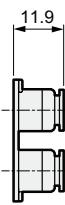
●  $\varphi 1.8(\text{C18})$



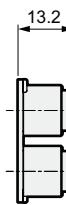
●  $\varphi 4(\text{C4})$



●  $\varphi 6(\text{C6})$



●  $\varphi 8(\text{C8})$



4GA/B

M4GA/B

MN4GA/B

4GA/B (mastr)

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

4TB

4L2-4/LMF0

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (mastr)

4F

4F (mastr)

PV5G

GMF

PV5

GMF

PV5S-0

3QR

3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/

NVP

4F\*0EX

4F\*0E

HMV

HSV

2QV

3QV

SKH

PCD

Silencer

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Ending

- Fitting straight, single plug

●  $\varphi 1.8(\text{CFNC})$

●  $\varphi 1.8(\text{C18NC})$

●  $\varphi 4(\text{C4NC})$

●  $\varphi 6(\text{C6NC})$

●  $\varphi 8(\text{C8NC})$

●  $\varphi 1.8(\text{CFNO})$

●  $\varphi 1.8(\text{C18NO})$

●  $\varphi 4(\text{C4NO})$

●  $\varphi 6(\text{C6NO})$

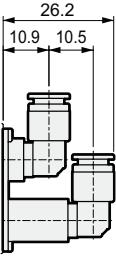
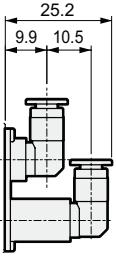
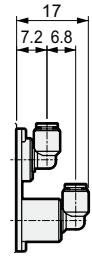
●  $\varphi 8(\text{C8NO})$

- L Fitting (upward)

●  $\varphi 1.8(\text{CL18})$

● 4(CL4)

●  $\varphi 6(\text{CL6})$

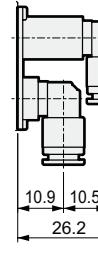
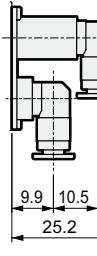
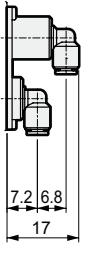


- L Fitting (downward)

●  $\varphi 1.8(\text{CD18})$

●  $\varphi 4(\text{CD4})$

●  $\varphi 6(\text{CD6})$



- L Fitting (upward), single plug

●  $\varphi 1.8(\text{CL18NC})$

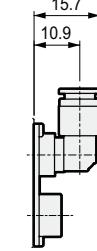
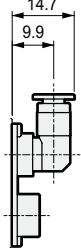
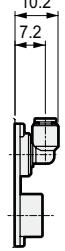
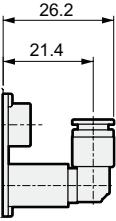
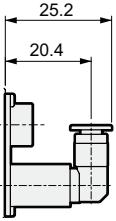
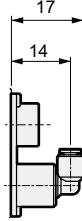
●  $\varphi 4(\text{CL4NC})$

●  $\varphi 6(\text{CL6NC})$

●  $\varphi 1.8(\text{CL18NO})$

●  $\varphi 4(\text{CL4NO})$

●  $\varphi 6(\text{CL6NO})$



- Push-in L Fitting (downward), single plug

●  $\varphi 1.8(\text{CD18NC})$

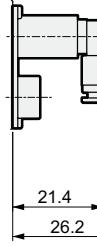
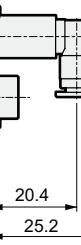
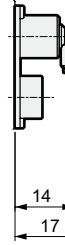
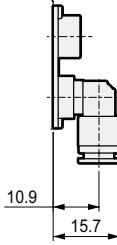
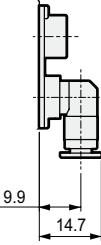
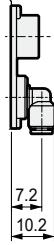
●  $\varphi 4(\text{CD4NC})$

●  $\varphi 6(\text{CD6NC})$

●  $\varphi 1.8(\text{CD18NO})$

●  $\varphi 4(\text{CD4NO})$

●  $\varphi 6(\text{CD6NO})$



# M4GB1 Series

Individual wiring manifold; base piping

4GA/B
<b>M4GA/B</b>
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
● Fitting straight ● $\varphi 1/8"$ (C3N)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMFO
MN3SO MN4SO
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

## Dimensions

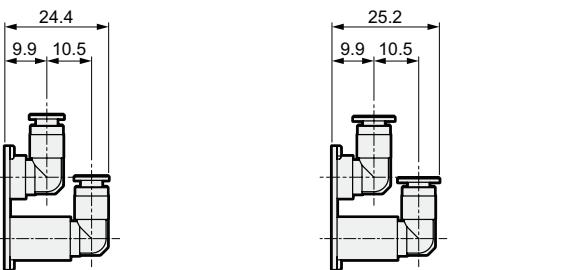
- Fitting straight
- $\varphi 5/32"$  (C4N)



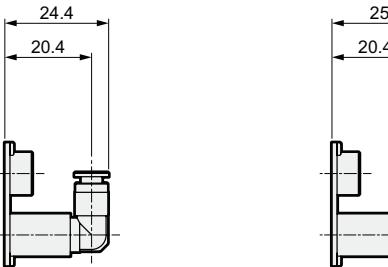
- Fitting straight, single plug
- $\varphi 1/8"$  (C3NCN)



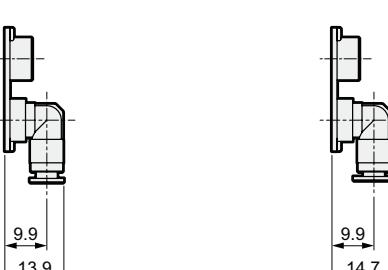
- L Fitting (upward)
- $\varphi 1/8"$  (CL3N)



- L Fitting (upward), single plug
- $\varphi 1/8"$  (CL3NCN)



- Push-in L Fitting (downward), single plug
- $\varphi 1/8"$  (CD3NCN)



- $\varphi 5/32"$  (C4NON)



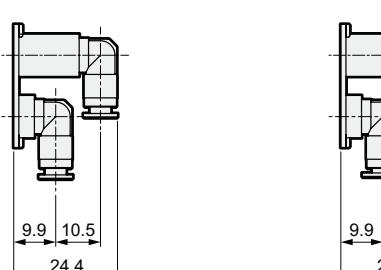
- $\varphi 1/8"$  (C3NON)

- $\varphi 5/32"$  (C4NON)



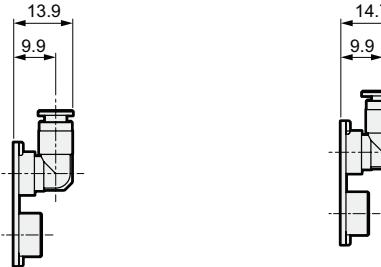
- $\varphi 1/8"$  (CD3N)

- $\varphi 5/32"$  (CD4N)



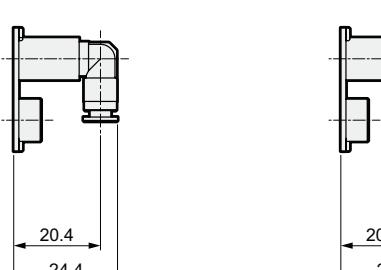
- $\varphi 1/8"$  (CL3NON)

- $\varphi 5/32"$  (CL4NON)



- $\varphi 1/8"$  (CD3NON)

- $\varphi 5/32"$  (CD4NON)



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# MEMO

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4GA/B
<b>M4GA/B</b>
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

# M4GB2 Series

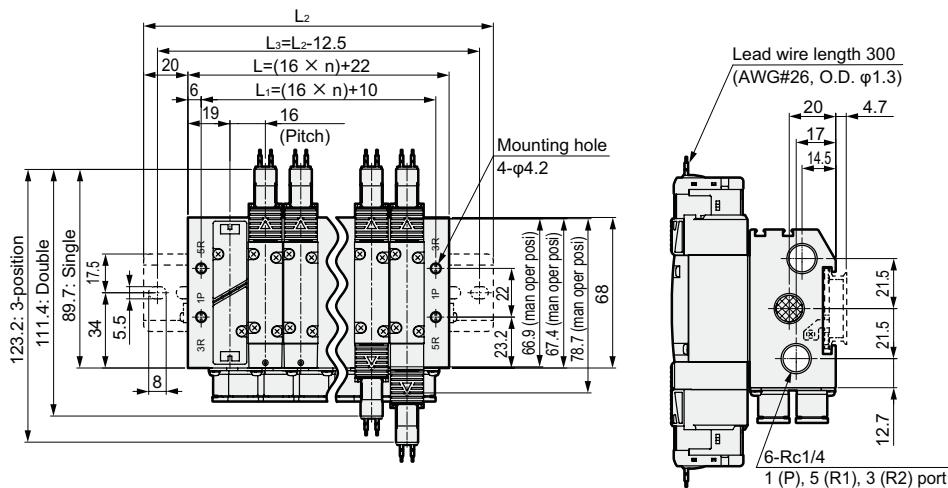
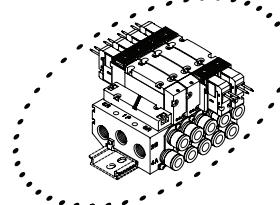
Individual wiring manifold; base piping

Dimensions 

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/ NVP
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

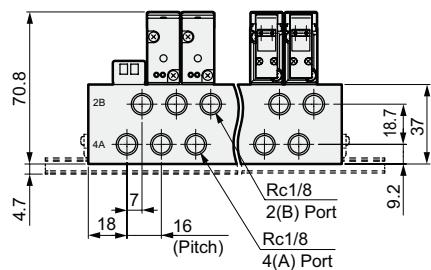
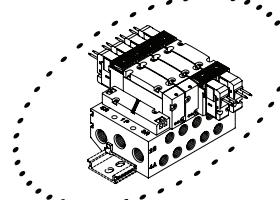
## M4GB2

- Grommet lead wire (blank)

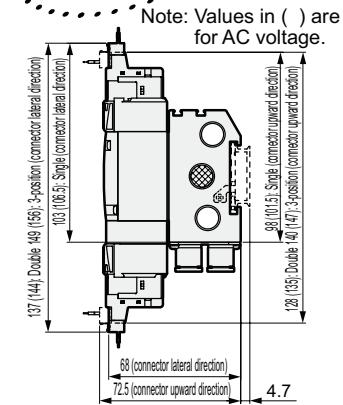
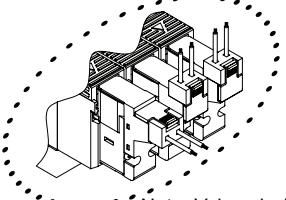


Note: The two 3-port valve integrated has the same dimensions as the double.

- Rc1/8 female thread (06)

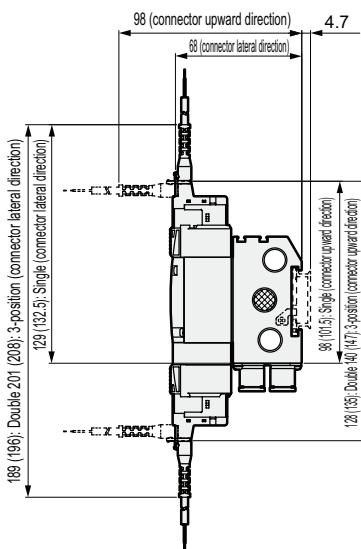


- E type connector (E)



- EJ type connector (E\*\*J)

Note: Values in ( ) are for AC voltage.



Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L <sub>1</sub>	42.0	58.0	74.0	90.0	106.0	122.0	138.0	154.0	170.0	186.0	202.0	218.0	234.0	250.0	266.0	282.0	298.0	314.0	330.0
L <sub>2</sub>	100.0	112.5	137.5	150.0	162.5	175.0	200.0	212.5	225.0	250.0	262.5	275.0	287.5	312.5	325.0				
L <sub>3</sub>	87.5	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	237.5	250.0	262.5	275.0	300.0	312.5				